

LAMPS FOR GENERAL LIGHTING SERVICE



B22



E27

Standard Lamps 130 Volts B22 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
400106	600106	130	25	B22	Frosted	60 x 106
400108	600108	130	40	B22	Frosted	60 x 106
400112	600112	130	60	B22	Frosted	60 x 106
400116	600116	130	75	B22	Frosted	60 x 106
400120	600120	130	100	B22	Frosted	60 x 106
400124	600124	130	150	B22	Frosted	65 x 120
400128		130	200	B22	Frosted	80 x 150
400132		130	300	B22	Frosted	90 x 177

Standard Lamps 130 Volts E27 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
400206	600206	130	25	E27	Frosted	60 x 108
400208	600208	130	40	E27	Frosted	60 x 108
400212	600212	130	60	E27	Frosted	60 x 108
400216	600216	130	75	E27	Frosted	60 x 108
400220	600220	130	100	E27	Frosted	60 x 108
400224	600224	130	150	E27	Frosted	65 x 124
400228	600228	130	200	E27	Frosted	80 x 162

LAMPS FOR GENERAL LIGHTING SERVICE



B22



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Standard Lamps 240 Volts B22 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
400304	600304	240	15	B22	Frosted	60 x 106
400306	600306	240	25	B22	Frosted	60 x 106
400308	600308	240	40	B22	Frosted	60 x 106
400312	600312	240	60	B22	Frosted	60 x 106
400316	600316	240	75	B22	Frosted	60 x 106
400320	600320	240	100	B22	Frosted	60 x 106
400324	600324	240	150	B22	Frosted	65 x 120
400328	600328	240	200	B22	Frosted	80 x 150

Standard Lamps 240 Volts E27 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
400404	600404	240	15	E27	Frosted	60 x 108
400406	600406	240	25	E27	Frosted	60 x 108
400408	600408	240	40	E27	Frosted	60 x 108
400412	600412	240	60	E27	Frosted	60 x 108
400416	600416	240	75	E27	Frosted	60 x 108
400420	600420	240	100	E27	Frosted	60 x 108
400424	600424	240	150	E27	Frosted	65 x 124
400428	600428	240	200	E27	Frosted	80 x 162

LAMPS FOR GENERAL LIGHTING SERVICE



B22



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Standard Lamps 130 Volts B22 Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
400506		130	25	B22	Clear	60 x 106
400508		130	40	B22	Clear	60 x 106
400512		130	60	B22	Clear	60 x 106
400516		130	75	B22	Clear	60 x 106
400520		130	100	B22	Clear	60 x 106

Standard Lamps 130 Volts E27 Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
400604		130	15	E27	Clear	60 x 108
400606		130	25	E27	Clear	60 x 108
400608		130	40	E27	Clear	60 x 108
400612		130	60	E27	Clear	60 x 108
400616		130	75	E27	Clear	60 x 108
400620		130	100	E27	Clear	60 x 108
400628		130	200	E27	Clear	80 x 162

LAMPS FOR GENERAL LIGHTING SERVICE



B22



E27

Standard Lamps 240 Volts B22 Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
400704		240	15	B22	Clear	60 x 106
400706		240	25	B22	Clear	60 x 106
400708		240	40	B22	Clear	60 x 106
400712		240	60	B22	Clear	60 x 106
400716		240	75	B22	Clear	60 x 106
400720		240	100	B22	Clear	60 x 106

Standard Lamps 240 Volts E27 Clear

CALEX						
Philips						
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
400804	600804	240	15	E27	Clear	60 x 108
400806	600806	240	25	E27	Clear	60 x 108
400808	600808	240	40	E27	Clear	60 x 108
400812	600812	240	60	E27	Clear	60 x 108
400816	600816	240	75	E27	Clear	60 x 108
400820	600820	240	100	E27	Clear	60 x 108
400824	600824	240	150	E27	Clear	65 x 124
400828	600828	240	200	E27	Clear	80 x 162
	600832	240	300	E27	Clear	90 x 189
400836		240	500	E27	Clear	110 x 245

LAMPS FOR GENERAL LIGHTING SERVICE



E40

Standard Lamps 130 Volts E40 Clear						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
400640		130	300	E40	Clear	110 x 220
400644		130	500	E40	Clear	110 x 220
400648		130	1000	E40	Clear	130 x 290

Standard Lamps 240 Volts E40 Clear						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
400840	600840	240	300	E40	Clear	110 x 220
400844	600844	240	500	E40	Clear	110 x 220
400848	600848	240	1000	E40	Clear	130 x 290

REINFORCED CONSTRUCTION LAMPS



B22

Reinforced Construction Lamps 130 Volts B22 Frosted						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
401106		130	25	B22	Frosted	60 x 106
401108		130	40	B22	Frosted	60 x 106
401112	601112	130	60	B22	Frosted	60 x 106
401120		130	100	B22	Frosted	60 x 106
401124		130	150	B22	Frosted	65 x 120
401128		130	200	B22	Frosted	80 x 150

Reinforced Construction Lamps 240 Volts B22 Frosted						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
401306		240	25	B22	Frosted	60 x 106
401308		240	40	B22	Frosted	60 x 106
401312	601312	240	60	B22	Frosted	60 x 106
401316		240	75	B22	Frosted	60 x 106
401320		240	100	B22	Frosted	60 x 106
401324		240	150	B22	Frosted	65 x 120
401328		240	200	B22	Frosted	80 x 150

REINFORCED CONSTRUCTION LAMPS



E27

Reinforced Construction Lamps 130 Volts E27 Frosted						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
401206		130	25	E27	Frosted	60 x 108
401208		130	40	E27	Frosted	60 x 108
401212	601212	130	60	E27	Frosted	60 x 108
401216		130	75	E27	Frosted	60 x 108
401220		130	100	E27	Frosted	60 x 108
401224		130	150	E27	Frosted	65 x 124
401228		130	200	E27	Frosted	80 x 162

Reinforced Construction Lamps 240 Volts E27 Frosted						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
401406	601406	240	25	E27	Frosted	60 x 108
401408	601408	240	40	E27	Frosted	60 x 108
401412	601412	240	60	E27	Frosted	60 x 108
401416		240	75	E27	Frosted	60 x 108
401420	601420	240	100	E27	Frosted	60 x 108
401424		240	150	E27	Frosted	65 x 124
401428		240	200	E27	Frosted	80 x 162

REINFORCED CONSTRUCTION LAMPS



B22



E27



Reinforced Construction Lamps B22 Clear						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
401508		130	40	B22	Clear	60 x 106
401512		130	60	B22	Clear	60 x 106
401520		130	100	B22	Clear	60 x 106
401708		240	40	B22	Clear	60 x 106
401712		240	60	B22	Clear	60 x 106
401720		240	100	B22	Clear	60 x 106

Reinforced Construction Lamps E27 Clear						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
401608		130	40	E27	Clear	60 x 108
401612		130	60	E27	Clear	60 x 108
401620		130	100	E27	Clear	60 x 108
401628		130	200	E27	Clear	80 x 162
401808		240	40	E27	Clear	60 x 108
401812		240	60	E27	Clear	60 x 108
401820		240	100	E27	Clear	60 x 108
401828		240	200	E27	Clear	80 x 162

LAMPS FOR GENERAL LIGHTING SERVICE LOW VOLTAGE



B22



B22

Low Voltage Lamps 12 - 24/28 Volt B22 Frosted and Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
402204		12	15	B22	Frosted	60 x 106
402206		12	25	B22	Frosted	60 x 106
402208		12	40	B22	Frosted	60 x 106
402212		12	60	B22	Frosted	60 x 106
402404		24/28	15	B22	Frosted	60 x 106
402406		24/28	25	B22	Frosted	60 x 106
402446		24/28	25	B22	Clear	60 x 106
402408		24/28	40	B22	Frosted	60 x 106
402448	602448	24/28	40	B22	Clear	60 x 106
402412		24/28	60	B22	Frosted	60 x 106
402452	602452	24/28	60	B22	Clear	60 x 106
402418		24/28	75	B22	Frosted	60 x 106
402420		24/28	100	B22	Frosted	60 x 106
402460		24/28	100	B22	Clear	60 x 106

LAMPS FOR GENERAL LIGHTING SERVICE LOW VOLTAGE



E27



E27

Low Voltage Lamps 12 - 24/28 Volt E27 Frosted and Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
402304		12	15	E27	Frosted	60 x 108
402306		12	25	E27	Frosted	60 x 108
	602346	12	25	E27	Clear	60 x 108
402308		12	40	E27	Frosted	60 x 108
	602348	12	40	E27	Clear	60 x 108
402312		12	60	E27	Frosted	60 x 108
402352	602352	12	60	E27	Clear	60 x 108
402502		24/28	10	E27	Frosted	60 x 108
402504		24/28	15	E27	Frosted	60 x 108
402544		24/28	15	E27	Clear	60 x 108
402506		24/28	25	E27	Frosted	60 x 108
402546	602546	24/28	25	E27	Clear	60 x 108
402508		24/28	40	E27	Frosted	60 x 108
402548	602548	24/28	40	E27	Clear	60 x 108
402512		24/28	60	E27	Frosted	60 x 108
402552	602552	24/28	60	E27	Clear	60 x 108
402518		24/28	75	E27	Frosted	60 x 108
402520		24/28	100	E27	Frosted	60 x 108
402560		24/28	100	E27	Clear	60 x 108

LAMPS FOR GENERAL LIGHTING SERVICE LOW VOLTAGE



B22

Low Voltage Lamps 42 - 65 Volt B22 Frosted						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
402606		42	25	B22	Frosted	60 x 106
402608		42	40	B22	Frosted	60 x 106
402612		42	60	B22	Frosted	60 x 106
402620		42	100	B22	Frosted	60 x 106
402804		50	15	B22	Frosted	60 x 106
402806		50	25	B22	Frosted	60 x 106
402808		50	40	B22	Frosted	60 x 106
402812		50	60	B22	Frosted	60 x 106
403004		65	15	B22	Frosted	60 x 106
403006		65	25	B22	Frosted	60 x 106

LAMPS FOR GENERAL LIGHTING SERVICE



E27



E27

Low Voltage Lamps 42 - 65 Volt E27 Frosted and Clear						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
402704		42	15	E27	Frosted	60 x 108
402706		42	25	E27	Frosted	60 x 108
	602706	42	25	E27	Clear	60 x 108
402708		42	40	E27	Frosted	60 x 108
	602708	42	40	E27	Clear	60 x 108
402712		42	60	E27	Frosted	60 x 108
402762	602712	42	60	E27	Clear	60 x 108
402720		42	100	E27	Frosted	60 x 108
402724		42	150	E27	Frosted	80 x 148
402728		42	200	E27	Clear	80 x 148
402908		50	40	E27	Frosted	60 x 108
402912		50	60	E27	Frosted	60 x 108
402924		50	150	E27	Frosted	80 x 148
402928		50	200	E27	Frosted	80 x 148
403104		65	15	E27	Frosted	60 x 108
403106		65	25	E27	Frosted	60 x 108
403108		65	40	E27	Frosted	60 x 108

SPHERICAL LAMPS



Frosted Ba15d



Clear Ba15d

Spherical Lamps Ba15d Frosted

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
406204		65	15	Ba15d	Frosted	40 x 60
406306		240	25	Ba15d	Frosted	45 x 70
406308		240	40	Ba15d	Frosted	45 x 70

Spherical Lamps Ba15d Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
406406		28	25	Ba15d	Clear	40 x 60
406502		85	10	Ba15d	Clear	40 x 60
406506		86	25	Ba15d	Clear	40 x 60

SPHERICAL LAMPS



Frosted B22



Clear B22

Spherical Lamps B22 Frosted						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
406608		24	40	B22	Frosted	45 x 70
406708		28	40	B22	Frosted	45 x 70
406804		48	15	B22	Frosted	45 x 70
406904		130	15	B22	Frosted	45 x 70
406906		130	25	B22	Frosted	45 x 70
406908		130	40	B22	Frosted	45 x 70
407004		240	15	B22	Frosted	45 x 70
407006	607006	240	25	B22	Frosted	45 x 70
407008	607008	240	40	B22	Frosted	45 x 70
407012		240	60	B22	Frosted	45 x 70

Spherical Lamps B22 Clear						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
407104		24	15	B22	Clear	40 x 60
407106		24	25	B22	Clear	40 x 60
407206		85	25	B22	Clear	40 x 60
407208		85	40	B22	Clear	40 x 60
407312		240	60	B22	Clear	45 x 70

SPHERICAL LAMPS



Frosted E14



Clear E14



Frosted-tip E14



Clear-tip E27

Spherical Lamps E14 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
407404		24	15	E14	Frosted	45 x 70
407406		24	25	E14	Frosted	45 x 70
407408		24	40	E14	Frosted	45 x 70
407506		130	25	E14	Frosted	45 x 75
407508		130	40	E14	Frosted	45 x 75
407600		240	7	E14	Frosted	45 x 75
407604	607604	240	15	E14	Frosted	45 x 75
407606	607606	240	25	E14	Frosted	45 x 75
407608	607608	240	40	E14	Frosted	45 x 75
407612		240	60	E14	Frosted	45 x 75

Spherical Lamps E14 Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
407656		130	25	E14	Clear	45 x 75
407658		130	40	E14	Clear	45 x 75
407700		240	7	E14	Clear	45 x 75
407704	607704	240	15	E14	Clear	45 x 75
407706	607706	240	25	E14	Clear	45 x 75
407708	607708	240	40	E14	Clear	45 x 75
407712		240	60	E14	Clear	45 x 75

Spherical-tip Lamps Frosted and Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
407806		230	25	E14	Frosted	45 x 104
407816		230	25	E27	Frosted	45 x 100
407906		230	25	E14	Clear	45 x 104
407916		230	25	E27	Clear	45 x 100

SPHERICAL LAMPS



Frosted E27



Clear E27

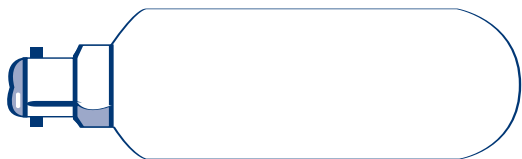
Spherical Lamps E27 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
408004		12	15	E27	Frosted	45 x 70
408104		24	15	E27	Frosted	45 x 70
408106		24	25	E27	Frosted	45 x 70
408108		24	40	E27	Frosted	45 x 70
408204		42	15	E27	Frosted	45 x 70
408306		65	25	E27	Frosted	40 x 60
408404		130	15	E27	Frosted	45 x 70
408406		130	25	E27	Frosted	45 x 70
408408		130	40	E27	Frosted	45 x 70
408500		240	7	E27	Frosted	45 x 70
408504	608504	240	15	E27	Frosted	45 x 70
408506	608506	240	25	E27	Frosted	45 x 70
408508	608508	240	40	E27	Frosted	45 x 70
408512	608512	240	60	E27	Frosted	45 x 70

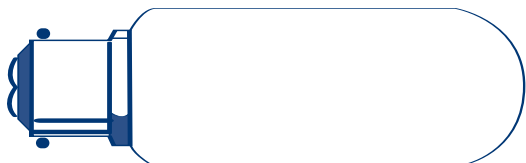
Spherical Lamps E27 Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
408604		24	15	E27	Clear	40 x 60
408606		24	25	E27	Clear	45 x 70
408608		24	40	E27	Clear	45 x 70
408756		130	25	E27	Clear	45 x 70
408758		130	40	E27	Clear	45 x 70
408800		240	7	E27	Clear	45 x 70
408804	608804	240	15	E27	Clear	45 x 70
408806	608806	240	25	E27	Clear	45 x 70
408808	608808	240	40	E27	Clear	45 x 70
408812	608812	240	60	E27	Clear	45 x 70

TUBULAR LAMPS



Ba15d

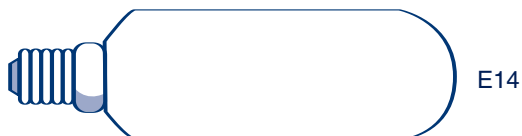


B22

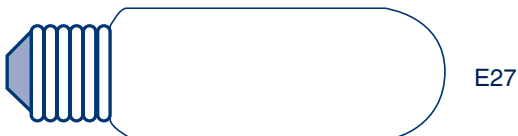
Tubular Lamps Ba15d Frosted and Clear						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
410008		24	40	Ba15d	Clear	25 x 70
410108		110	40	Ba15d	Frosted	25 x 67
	610202	230	10	Ba15d	Clear	17 x 53
410208		240	40	Ba15d	Clear	30 x 90

Tubular Lamps B22 Frosted and Clear						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
410300		110/140	5/15	B22	Clear	30 x 60
410406		130	25	B22	Frosted	30 x 90
410408		130	40	B22	Frosted	30 x 90
410500		240	5/7	B22	Clear	27 x 60
410606		240	25	B22	Frosted	30 x 90
410608		240	40	B22	Frosted	30 x 90

TUBULAR LAMPS



E14



E27

Tubular Lamps E14 Frosted and Clear						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
	610700	24/30	5/7	E14	Clear	14 x 54
410706		24	25	E14	Clear	20 x 82
410804		130	15	E14	Clear	22 x 60
410906		130	25	E14	Frosted	30 x 90
410908		130	40	E14	Frosted	30 x 90
410996		240	7	E14	Frosted	17 x 54
411000	611000	240	7	E14	Clear	17 x 54
	611002	240	10	E14	Clear	17 x 54
411006		240	25	E14	Frosted	30 x 90
	611106	230	25	E14	Clear	29 x 94
411106		240	25	E14	Clear	20 x 115
411008		240	40	E14	Frosted	30 x 90
	611008	230	40	E14	Frosted	29 x 94
	611108	230	40	E14	Clear	29 x 94
		for rotating beacon				
411108		240	40	E14	Clear	25 x 70
		for cooker head				
	611110	230	40	E14	Clear	25 x 86

Tubular Lamps E27 Frosted and Clear						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
411206		130	25	E27	Frosted	30 x 90
411208		130	40	E27	Frosted	30 x 90
411306		240	25	E27	Frosted	30 x 90
	611306	230	25	E27	Clear	29 x 99
411308		240	40	E27	Frosted	30 x 90
	611308	230	40	E27	Clear	29 x 99

PILOT/PYGMY LAMPS



Ba15d



B22

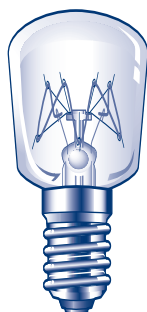
Pilot Lamps Ba15d Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
412206		24	15	BA15d	Clear	22 x 55
412210		24	25	BA15d	Clear	28 x 60
412214		24	40	BA15d	Clear	28 x 60
412218		28	15	BA15d	Clear	26 x 54
412236		50	15	BA15d	Clear	26 x 54
412246		130	15	BA15d	Clear	22 x 55
412250		130	25	BA15d	Clear	28 x 60
412266	612266	240	15	BA15d	Clear	22 x 55
412270	612270	240	25	BA15d	Clear	22 x 55

Pilot Lamps B22 Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
412302		24	10	B22	Clear	28 x 60
412306		24	15	B22	Clear	28 x 60
412310		24	25	B22	Clear	28 x 60
412342		130	10	B22	Clear	28 x 60
412346		130	15	B22	Clear	28 x 60
412350		130	25	B22	Clear	28 x 60
412366	612366	240	15	B22	Clear	28 x 60
412370		240	25	B22	Clear	28 x 60

PILOT/PYGMY LAMPS



E14



E27

Pilot Lamps E14 Frosted and Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
412406		12	15	E14	Clear	28 x 60
412410		12	25	E14	Clear	28 x 64
412426		24	15	E14	Clear	28 x 64
412430		24	25	E14	Clear	28 x 64
412434		24	40	E14	Clear	28 x 64
412456		50	15	E14	Clear	28 x 64
412466		130	15	E14	Clear	22 x 60
412470		130	25	E14	Clear	28 x 64
412474		130	40	E14	Clear	28 x 64
412486	612486	240	15	E14	Clear	26 x 58
412506	612506	240	15	E14	Frosted	26 x 58
412490	612490	240	25	E14	Clear	26 x 58
412510	612510	240	25	E14	Frosted	26 x 58
		for refrigerator				
	612494	240	15	E14	Clear	26 x 58

Pilot Lamps E27 Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
412606		12	15	E27	Clear	30 x 60
412626		24	15	E27	Clear	30 x 60
412630		24	25	E27	Clear	30 x 60
412656		60	15	E27	Clear	30 x 60
412666		130	15	E27	Clear	30 x 60
412670		130	25	E27	Clear	30 x 60
412686	612686	240	15	E27	Clear	30 x 60
412690		240	25	E27	Clear	30 x 60

CANDLE LAMPS



Frosted Ba15d



Frosted/Clear B22



Frosted E14

Candle Lamps Ba15d Frosted

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
413206		230	25	BA15d	Frosted	35 x 98
413210		230	40	BA15d	Frosted	35 x 98

Candle Lamps B22 Frosted and Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
413236		230	25	B22	Frosted	35 x 100
413240		230	40	B22	Frosted	35 x 100
413260		230	40	B22	Clear	35 x 100

Candle Lamps E14 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
413286		26	25	E14	Frosted	35 x 100
413290		26	40	E14	Frosted	35 x 100
413316		130	25	E14	Frosted	35 x 100
413320		130	40	E14	Frosted	35 x 100
413336	613336	240	15	E14	Frosted	35 x 100
413340	613340	240	25	E14	Frosted	35 x 100
413344	613344	240	40	E14	Frosted	35 x 100
413348	613348	240	60	E14	Frosted	35 x 100

CANDLE LAMPS



Clear E14



Frosted E27



Clear E27

Candle Lamps E14 Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
413350		130	25	E14	Clear	35 x 100
413354		130	40	E14	Clear	35 x 100
413366	613366	240	15	E14	Clear	35 x 100
413370	613370	240	25	E14	Clear	35 x 100
413374	613374	240	40	E14	Clear	35 x 100
413378	613378	240	60	E14	Clear	35 x 100

Candle Lamps E27 Frosted

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
413396		130	25	E27	Frosted	35 x 100
413400		130	40	E27	Frosted	35 x 100
413406		240	25	E27	Frosted	35 x 100
413410		240	40	E27	Frosted	35 x 100
413414		240	60	E27	Frosted	35 x 100

Candle Lamps E27 Clear

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
413420		130	25	E27	Clear	35 x 100
413426		130	40	E27	Clear	35 x 100
413434		240	25	E27	Clear	35 x 100
413438		240	40	E27	Clear	35 x 100
413442		240	60	E27	Clear	35 x 100

CANDLE LAMPS



Frosted/Clear - Twisted E14



Frosted/Clear - Tip E14

Candle - twisted Lamps E14 Frosted

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
413506		240	25	E14	Frosted	35 x 100
413510		240	40	E14	Frosted	35 x 100
413514		240	60	E14	Frosted	35 x 100

Candle - twisted Lamps E14 Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
413556	613556	240	15	E14	Clear	35 x 100
413560	613560	240	25	E14	Clear	35 x 100
413564	613564	240	40	E14	Clear	35 x 100
413568		240	60	E14	Clear	35 x 100

Candle - tip Lamps E14 Frosted

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
413606	613606	230	15	E14	Frosted	35 x 126
413610	613610	230	25	E14	Frosted	35 x 126
413614		230	40	E14	Frosted	35 x 126

CANDLE LAMPS

Pyramide
E14

Special Decorative Candle Lamps					
CALEX					
Cat. no.	Voltage	Watts	Cap	Type	d x l mm
439632	230	3	E14	Candle Flicker Flame	35 x 100
439636	230	3	E14	Tip Candle Flicker Flame	35 x 126
439642	230	3	E27	Candle Flicker Flame	35 x 100
439648	230	3	E14	Candle Imitation Star	35 x 100
439612	240	3	E14	Pyramide Candle	32 x 110

COLORENTA LAMPS



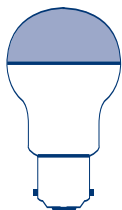
E14



E27

Linear Decorative Lamps						
CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
613712		230	25	E14	Clear	21 x 118
413724		230	25	E27	Opal	30 x 164
413728		230	40	E27	Opal	30 x 309

BOWL (CROWN) REFLECTOR LAMPS



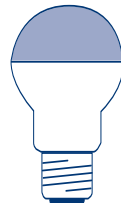
B22



E14



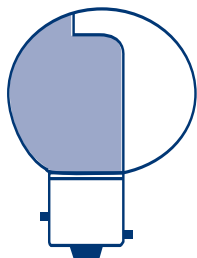
E27 R60



E27 A65

Bowl (Crown) Reflector Lamps						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Type	d x l mm
414112		230/240	60	B22	A60	60 x 108
414120		230/240	100	B22	A65	65 x 124
414214	614214	230	25	E14	PC45	45 x 77
414218	614218	230	40	E14	PC45	45 x 77
		Spotline type				
414318	614318	230	40	E27	R60	60 x 104
414322	614322	230	60	E27	R60	60 x 104
	614346	230	100	E27	A65	65 x 124

INDOOR REFLECTOR LAMPS



Grimes Bay15s



R39 Ba15s



E14

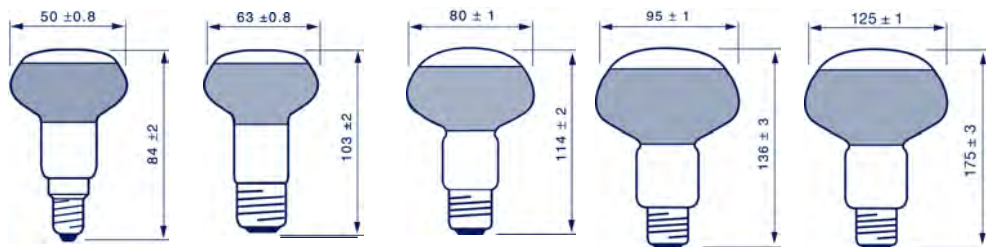


E27

Reflector Lamps Standard

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Type	d x l mm
414508		28	40	Bay15s	Grimes	38 x 58
414524		28	20	Ba15s	R39	39 x 63
414538	614538	230	30	E14	R39	39 x 67
414606		24	25	E14	R50	50 x 86
414616		130	25	E14	R50	50 x 86
414618		130	40	E14	R50	50 x 86
414626		240	25	E14	R50	50 x 86
414628		240	40	E14	R50	50 x 86
414708		24	40	E27	R63	63 x 102
414714		130	25	E27	R63	63 x 102
414718		130	40	E27	R63	63 x 102
414720		130	60	E27	R63	63 x 102
414728		240	40	E27	R63	63 x 102
414730		240	60	E27	R63	63 x 102
414808		240	40	E27	R80	80 x 112
414810		240	60	E27	R80	80 x 112
414812		240	75	E27	R80	80 x 112
414814		240	100	E27	R80	80 x 112
414912		240	75	E27	R95	95 x 135
414914		240	100	E27	R95	95 x 135
414916		240	150	E27	R95	95 x 135

INDOOR REFLECTOR LAMPS



R50 spotline

R63 spotline

R80 spotline

R95 spotline

R125 spotline

Philips Reflector Lamps Spotline R50

Philips						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
614626		230	25	E14	50 x 84	R50
614628		230	40	E14	50 x 84	R50

Philips Reflector Lamps Spotline R63

Philips						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
614724		230	25	E27	63 x 103	R63
614728		230	40	E27	63 x 103	R63
614730		230	60	E27	63 x 103	R63

Philips Reflector Lamps Spotline R80

Philips						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
614808		230	40	E27	80 x 114	R80
614810		230	60	E27	80 x 114	R80
614812		230	75	E27	80 x 114	R80
614814		230	100	E27	80 x 114	R80

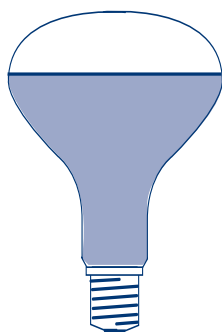
Philips Reflector Lamps Spotline R95

Philips						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
614912		230	75	E27	95 x 136	R95
614914		230	100	E27	95 x 136	R95
614916		230	150	E27	95 x 136	R95

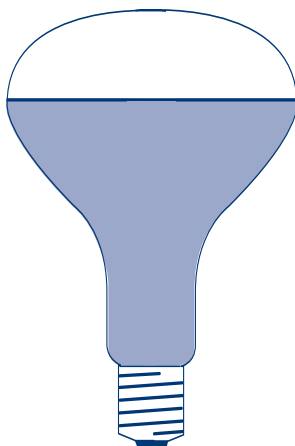
Philips Reflector Lamps Spotline R125

Philips						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
614952		230	150	E27	125 x 175	R125

JAPANESE OUTDOOR REFLECTOR LAMPS



E26-Flood

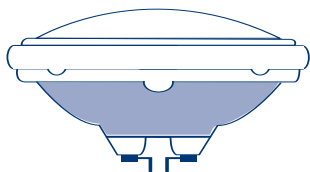


E39-Flood

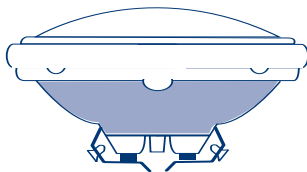
Japanese Outdoor Reflector Lamps 125V						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
415214		125	100	E26	120 x 159	RF-H
415218		125	200	E26	120 x 159	RF-H
415222		125	300	E39	135 x 207	RF-H
415228		125	500	E39	160 x 238	RF-H
415232		125	900	E39	180 x 315	RF-H

Japanese Outdoor Reflector Lamps 220V						
Cat. no.		Voltage	Watts	Cap	d x l mm	Type
415414		220	100	E26	120 x 159	RF-H
415418		220	200	E26	120 x 159	RF-H
415422		220	300	E39	135 x 207	RF-H
415428		220	500	E39	160 x 238	RF-H
415432		220	1000	E39	180 x 315	RF-H

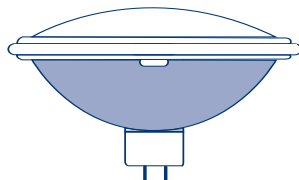
SEALED BEAM LAMPS



PAR-Japanese



PAR36



PAR56

PAR-Japanese type

Cat. no.		Voltage	Watts	Cap	d x l mm	
416102		24	60/40	3-lugs	145 x 103	
416106		24	100/75	3-lugs	145 x 103	
416112		24	75/55	3-lugs	178 x 138	

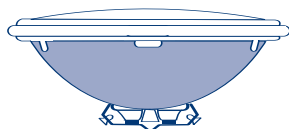
PAR36 Sealed Beam Lamps

Cat. no.	Voltage	Watts		GE Type	Cap	d x l mm
416210	4,7	2,35	Beamgun	4546	Screw	114 x 70
416310	6,4	35	Spotlamp	4515	Screw	114 x 70
416366	12	35	Tractor	4411	Screw	114 x 70
416382	12	50	Halogen	H7604	Screw	114 x 70
416446	28	50	Spotlight	4505	Screw	114 x 70
416468	28	100	Air.Nav.	4594	Screw	114 x 70

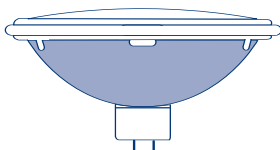
PAR56 Sealed Beam Lamps

Cat. no.	Philips Cat. no.	Voltage	Watts	Type	Cap	d x l mm
416518		12	300	wide flood	Screw	179 x 128
416530		30	200	GE6045	Screw	178 x 114
416556		120	300	wide flood	Gx16d	179 x 128
416584	616584	230	300	spot	Gx16d	179 x 128
416588	616588	230	300	wide flood	Gx16d	179 x 128

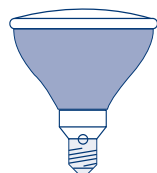
SEALED BEAM/PRESSED-GLAS REFLECTOR LAMPS



PAR64 - screw



PAR64 - Gx16d



PAR38

PAR64 Sealed Beam Lamps

Cat. no.	Voltage	Watts	Code	Type	Cap	d x l mm
416612	28	250	GE4552		Screw	230 x 95
416626	120	500		med flood	Gx16d	230 x 150
416642	220	500	CP86	vn spot	Gx16d	230 x 150
416646	220	500	CP87	n spot	Gx16d	230 x 150
416650	220	500	CP88	med flood	Gx16d	203 x 150
416672	220	1000	CP60	EXC	Gx16d	203 x 150
416676	220	1000	CP61	EXD	Gx16d	203 x 150
416680	220	1000	CP62	EXE	Gx16d	203 x 150

Calex PAR38 Pressed-glas ReflectorLamps

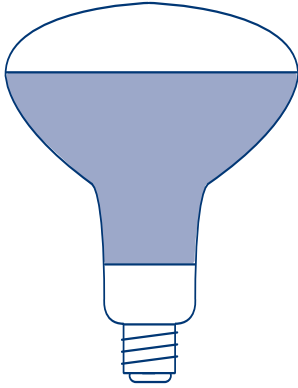
CALEX						
Cat. no.	Voltage	Watts	Cap		Type	d x l mm
416768	230	60	E27	par38	spot	121 x 134
416772	230	80	E27	par38	spot	121 x 134
416782	230	60	E27	par38	flood	121 x 134
416786	230	80	E27	par38	flood	121 x 134

Philips PAR38 Pressed-glas Reflector Lamps

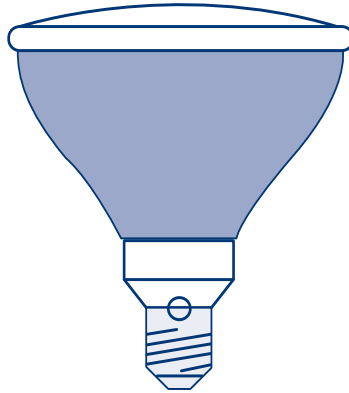
Philips						
Cat. no.	Voltage	Watts	Cap		Type	d x l mm
616744	24	120	E27	par38	spot	121 x 134
616754	125/130	120	E27	par38	spot	121 x 134
616756	125/130	120	E27	par38	flood	121 x 134
616768	230	60	E27	par38	spot	121 x 134
616772	230	80	E27	par38	spot	121 x 134
616776	230	120	E27	par38	spot	121 x 134
616782	230	60	E27	par38	flood	121 x 134
616786	230	80	E27	par38	flood	121 x 134
616792	230	120	E27	par38	flood	121 x 134
616796	230	120	E27	par38	flood	121 x 134

coolbeam type

HEATING LAMPS



R125-E27



PAR38

Infrared Heating Lamps						
Cat. no.	Philips Cat. no.	Voltage	Watts	Cap		d x l mm
417104		125	250	E27	hardglass	125 x 185
417112		125	350	E27	hardglass	125 x 185
417204		220	275	E27	hardglass	125 x 185
417212		220	375	E27	hardglass	125 x 185
417218		220	500	E27	hardglass	125 x 195
		soft glass type				
	618112	230	150	E27	red	125 x 179
	618118	230	150	E27	satın	125 x 179
	618122	230	250	E27	red	125 x 179
	618128	230	250	E27	satın	125 x 179
		hard glass type				
	618132	230	250	E27	clear	125 x 175
	618140	230	375	E27	satın	125 x 175
		par38 type				
	618142	230	100	E27	par red	122 x 133
	618148	230	100	E27	par clear	122 x 133
	618152	230	175	E27	par red	122 x 133
	618158	230	175	E27	par clear	122 x 133

DAYLIGHT-BLUE LAMPS



B22



E27



E27-R

Daylight-blue Standard Lamp B22

Cat. no.		Voltage	Watts	Cap	d x l mm	
420120		110	100	B22	60 x 106	
420206		240	25	B22	60 x 106	
420212		240	60	B22	60 x 106	

Daylight-blue Standard Lamp E27

Cat. no.		Voltage	Watts	Cap	d x l mm	
420312		110	60	E27	60 x 108	
420320		110	100	E27	60 x 108	
	620416	230	60	E27	60 x 108	
420420	620420	240	100	E27	60 x 108	

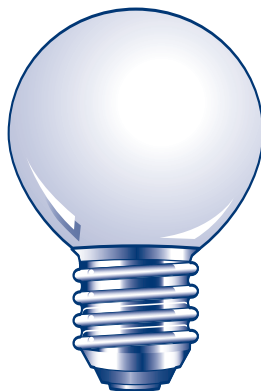
Grow Reflector Lamps

Cat. no.		Voltage	Watts	Cap	d x l mm	Type
420510		230	60	E27	60 x 103	R63*
420516		240	75	E27	95 x 130	R95
		*Neodymium				

NIGHTLIGHTS



Frosted E14



Frosted E27



Clear E27

Nightlights Lamps Spherical-type						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
	628224	220/250	7	E14	Frosted	45 x 73
	628236	220/250	7	E27	Frosted	45 x 73
407600		240	7	E14	Frosted	45 x 75
407700		240	7	E14	Clear	45 x 75
408500		240	7	E27	Frosted	45 x 73
408800		240	7	E27	Clear	45 x 73

Eurolight Nightlight with light sensor						
	Cat. no.	Voltage	Watts	Cap	Colour	
	430120	230	7	plug-in	Clear	
	sparelamp for above					
	430130	230	7	E14	blister 3pcs	

OVEN LAMPS



E14



E14



E27



E27

Oven Lamps 300° Celsius Clear

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
432110	632110	230/240	15	E14	pilot model	22 x 49
	632114	230/240	25	E14	pilot model	22 x 49
432120		130	25	E27	ball model	45 x 73
432126	632126	240	40	E14	ball model	45 x 78
432136		240	40	E27	ball model	45 x 73
432142		130	40	E27	gls model	60 x 108
432148	632148	230	60	E27	gls model	60 x 108

SEWING MACHINE LAMPS



Ba15d



E14

Sewing machine lamps with reinforced filament

Philips						
Cat. no.		Voltage	Watts	Cap		d x l mm
633120		230	20	Ba15d	Clear	22 x 43
633130		230/240	20	E14	Clear	22 x 43

COLOURED LAMPS



B22

Coloured Standard Lamps B22						
CALEX						
Cat. no.		Voltage	Watts	Cap	Colour	d x l mm
435202		240	25	B22	Blue	60 x 106
435204		240	25	B22	Yellow	60 x 106
435206		240	25	B22	Green	60 x 106
435208		240	25	B22	Orange	60 x 106
435210		240	25	B22	Red	60 x 106
435302		240	40	B22	Blue	60 x 106
435304		240	40	B22	Yellow	60 x 106
435306		240	40	B22	Green	60 x 106
435310		240	40	B22	Red	60 x 106
		Fireglow type				
435410		240	60	B22	Red	60 x 106

COLOURED LAMPS



E27

Coloured Standard Lamps E27						
CALEX	Philips					
Cat. no.	Cat. no	Voltage	Watts	Cap		d x l mm
435602	635602	240	15	E27	Blue	60 x 108
435604	635604	240	15	E27	Yellow	60 x 108
435606	635606	240	15	E27	Green	60 x 108
435608	635608	240	15	E27	Orange	60 x 108
435610	635610	240	15	E27	Red	60 x 108
435702		240	25	E27	Blue	60 x 108
435704		240	25	E27	Yellow	60 x 108
435706		240	25	E27	Green	60 x 108
435708		240	25	E27	Orange	60 x 108
435710		240	25	E27	Red	60 x 108
435802		240	40	E27	Blue	60 x 108
435804		240	40	E27	Yellow	60 x 108
435806		240	40	E27	Green	60 x 108
435808		240	40	E27	Orange	60 x 108
435810		240	40	E27	Red	60 x 108
435852		240	60	E27	Blue	60 x 108
435854		240	60	E27	Yellow	60 x 108
435856		240	60	E27	Green	60 x 108
435858		240	60	E27	Orange	60 x 108
435860		240	60	E27	Red	60 x 108
Fireglow type						
435872		240	60	E27	Red	60 x 108

COLOURED LAMPS



E27

Coloured Spherical Lamps E27						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
436102	636102	240	15	E27	Blue	45 x 73
436104	636104	240	15	E27	Yellow	45 x 73
436106	636106	240	15	E27	Green	45 x 73
436108	636108	240	15	E27	Orange	45 x 73
436110	636110	240	15	E27	Red	45 x 73
436202		240	25	E27	Blue	45 x 73
436204		240	25	E27	Yellow	45 x 73
436206		240	25	E27	Green	45 x 73
436208		240	25	E27	Orange	45 x 73
436210		240	25	E27	Red	45 x 73
5 Different Colours Spherical Lamps E27						
436122		240	15	E27	5 colours	45 x 73

COLOURED LAMPS



E14



R50 spotlight



R63 spotlight

Coloured Candle-Tip Lamps E14

CALEX						
Cat. no.		Voltage	Watts	Cap		d x l mm
436410		230	25	E14	Blue	35 x 126
436412		230	25	E14	Yellow	35 x 126
436414		230	25	E14	Green	35 x 126
436416		230	25	E14	Orange	35 x 126
436418		230	25	E14	Red	35 x 126

Philips Coloured Reflector Lamps R50 Spotline

Philips						
Cat. no.		Voltage	Watts	Cap		d x l mm
636282		230	40	E14	Blue	R50 x 87
636284		230	40	E14	Yellow	R50 x 87
636286		230	40	E14	Green	R50 x 87
636288		230	40	E14	Red	R50 x 87

Philips Coloured Reflector Lamps R63 Spotline

Philips						
Cat. no.		Voltage	Watts	Cap	Colour	d x l mm
636302		230	40	E27	Blue	R63 x 103
636304		230	40	E27	Yellow	R63 x 103
636306		230	40	E27	Green	R63 x 103
636310		230	40	E27	Red	R63 x 103

COLOURED LAMPS



R80 spotlight



Par38

Philips Coloured Reflector Lamps R80 Spotlight

Philips Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
636332	230	60	E27	Blue	R80 x 114
636334	230	60	E27	Yellow	R80 x 114
636336	230	60	E27	Green	R80 x 114
636340	230	60	E27	Red	R80 x 114
636342	230	60	E27	Purple	R80 x 114

Philips Coloured Pressed-glass Reflector Lamps PAR38

Philips Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
636402	230	80	E27	Blue	121 x 134
636404	230	80	E27	Yellow	121 x 134
636406	230	80	E27	Green	121 x 134
636410	230	80	E27	Red	121 x 134

SOFTLINE/SOFTONE LAMPS



E27



E14

Softline Standard-Lamps E27				Calex = T60	Phillips = T55	
CALEX	Phillips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
437204		230	15	E27	soft white	60 x 106
437206	637206	230	25	E27	soft white	60 x 106
437208	637208	230	40	E27	soft white	60 x 106
437212	637212	230	60	E27	soft white	60 x 106
437216	637216	230	75	E27	soft white	60 x 106
437220	637220	230	100	E27	soft white	60 x 106
	637238	230	40	E27	terracotta	55 x 95
	637248	230	60	E27	blue	55 x 95
	637252	230	60	E27	pink	55 x 95
	637256	230	60	E27	terracotta	55 x 95
	637260	230	60	E27	yellow	55 x 95
	637264	230	60	E27	orange	55 x 95

Softline Candle-Lamps E14						
CALEX	Phillips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
437304		230	15	E14	soft white	35 x 100
437306	637306	230	25	E14	soft white	35 x 100
437308	637308	230	40	E14	soft white	35 x 100
437312	637312	230	60	E14	soft white	35 x 100
	637332	230	25	E14	terracotta	35 x 100
	637352	230	40	E14	terracotta	35 x 100
	637356	230	40	E14	pink	35 x 100
	637360	230	40	E14	orange	35 x 100

SOFTLINE/SOFTONE LAMPS



E14



E27



E14

Softline Spherical-Lamps E14

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
437404		230	15	E14	soft white	45 x 77
437406	637406	230	25	E14	soft white	45 x 77
437408	637408	230	40	E14	soft white	45 x 77
437412	637412	230	60	E14	soft white	45 x 77
	637432	230	25	E14	terracotta	45 x 77
	637448	230	40	E14	Jade	45 x 77
	637452	230	40	E14	soft pink	45 x 77
	637456	230	40	E14	terracotta	45 x 77
	637460	230	40	E14	warm yellow	45 x 77

Softline Spherical-Lamps E27

CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
437504		230	15	E27	soft white	45 x 72
437506	637506	230	25	E27	soft white	45 x 72
437508	637508	230	40	E27	soft white	45 x 72
437512	637512	230	60	E27	soft white	45 x 72
	637532	230	25	E27	terracotta	45 x 72
	637548	230	40	E27	Jade	45 x 72
	637552	230	40	E27	soft pink	45 x 72
	637556	230	40	E27	terracotta	45 x 72
	637560	230	40	E27	warm yellow	45 x 72
	637564	230	40	E27	orange	45 x 72

Softline Pilot Lamp E14

CALEX						
Cat. no.		Voltage	Watts	Cap	Colour	d x l mm
437704		230	15	E14	soft white	25 x 55
437706		230	25	E14	soft white	25 x 55

GLOBE AND SUPERLUX LAMPS



Globe E27



Superlux E27

Globe-Lamps E27						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
	637810	230	40	E27	soft white	80 x 123
	637816	230	60	E27	soft white	80 x 123
437812	637812	240	40	E27	soft white	95 x 140
	637818	230	60	E27	soft white	95 x 140
	637830	230	100	E27	soft white	95 x 140
	637824	230	60	E27	soft white	120 x 168
	637832	230	100	E27	soft white	120 x 168
437840		240	40	E27	clear	95 x 140

Philips Superlux Krypton Lamps Mushroom-shaped with satin-white Window						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
437862	637862	230	25	E27		50 x 92
437866	637866	230	40	E27		50 x 92
437870	637870	230	60	E27		50 x 92
437874	637874	230	75	E27		60 x 105
437878	637878	230	100	E27		60 x 105
	637882	230	150	E27		75 x 126
	637886	230	200	E27		75 x 126

FLAME LAMPS



E27



E14

Flame Standard Lamps E27				Calex = T60	Phillips = T55	
CALEX	Phillips					
Cat. no.	Cat. no.		Voltage	Watts	Cap	d x l mm
438206	638206		230	25	E27	60 x 106
438208	638208		230	40	E27	60 x 106
438212	638212		230	60	E27	60 x 106
438216	638216		230	75	E27	60 x 106
438220			230	100	E27	60 x 106

Flame Candle Lamps E14						
CALEX	Phillips					
Cat. no.	Cat. no.		Voltage	Watts	Cap	d x l mm
438304	638304		230	15	E14	35 x 99
438306	638306		230	25	E14	35 x 99
438308	638308		230	40	E14	35 x 99

FLAME LAMPS



E14



E27



E14

Flame Spherical Lamps E14

CALEX	Philips					
Cat. no.	Cat. no.		Voltage	Watts	Cap	d x l mm
438404	638404		230	15	E14	45 x 77
438406	638406		230	25	E14	45 x 77
438408	638408		230	40	E14	45 x 77

Flame Spherical Lamps E27

CALEX	Philips					
Cat. no.	Cat. no.		Voltage	Watts	Cap	d x l mm
438504	638504		230	15	E27	45 x 72
438506	638506		230	25	E27	45 x 72
438508	638508		230	40	E27	45 x 72

Flame Pilot Lamp E14

CALEX	Philips					
Cat. no.	Cat. no.		Voltage	Watts	Cap	d x l mm
438704	638704		230	15	E14	25 x 55
438706			230	25	E14	25 x 55

GOLDLINE LAMPS



E14



Twisted E14



Tip E14



E14



E27

Goldline Candle Lamps E14

CALEX	Philips				
Cat. no.	Cat. no.	Voltage	Watts	Cap	d x l mm
438904	638904	230	15	E14	35 x 100
438906	638906	230	25	E14	35 x 100
	638912	230	40	E14	35 x 100

Goldline Candle - twisted Lamps E14

CALEX	Philips				
Cat. no.	Cat. no.	Voltage	Watts	Cap	d x l mm
438924	638924	230	15	E14	35 x 100
438926	638926	230	25	E14	35 x 100

Goldline Candle - tip Lamps E14

CALEX	Philips				
Cat. no.	Cat. no.	Voltage	Watts	Cap	d x l mm
438944	638944	230	15	E14	35 x 126
438946	638946	230	25	E14	35 x 126

Goldline Spherical Lamps E14 - E27

CALEX	Philips				
Cat. no.	Cat. no.	Voltage	Watts	Cap	d x l mm
	638964	230	15	E14	45 x 75
438966	638966	230	25	E14	45 x 75
438968	638968	230	40	E14	45 x 75
438976	638976	230	25	E27	45 x 70
438978	638978	230	40	E27	45 x 70

GOLDLINE FILAMENTLAMPS



Candle



Twisted Candle



Tip Candle



Spherical



Standard



Tube



Globe



Rustic

Goldline Filamentlamps					
CALEX					
Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
442212	230	25	E14	Candle	35 x 100
442218	230	25	E14	Twisted Candle	35 x 100
442206	230	25	E14	Tip Candle	35 x 126
442306	230	25	E14	Spherical	60 x 80
442106	230	35	E27	Standard	60 x 106
442150	230	35	E27	Tube	45 x 126
442156	230	35	E27	Globe	80 x 122
442162	230	35	E27	Rustic	64 x 140

DECORATIVE LAMPS



Glow Filament Rustic Lamp				
CALEX				
Cat. no.	Voltage	Watts	Cap	d x l mm
439424	230	40	E27	64 x 140



Glow Filament Standard Lamps				
CALEX				
Cat. no.	Voltage	Watts	Cap	d x l mm
439208	230	40	E27	60 x 108
439212	230	60	E27	60 x 108



Glow Filament Spherical Lamps				
CALEX				
Cat. no.	Voltage	Watts	Cap	d x l mm
439306	230	25	E27	45 x 73



Deco Spiral Globe-type Lamp "Gold"				
Philips				
Cat. no.	Voltage	Watts	Cap	d x l mm
639412	230	35	E27	80 x 123



Deco Spiral Tube-type Lamp "Gold"				
Philips				
Cat. no.	Voltage	Watts	Cap	d x l mm
639422	230	35	E27	45 x 130

LINESTRA LAMPS



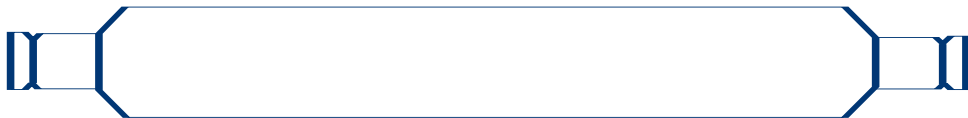
1 x S14d



2 x S14s

Linestra Lamps						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
440102	640102	230	35	1xS14d		30 x 300
440104	640104	230	60	1xS14d		30 x 500
	640202	130	35	2xS14s		30 x 300
	640204	130	60	2xS14s		30 x 500
440302	640302	230	35	2xS14s		30 x 300
440304	640304	230	60	2xS14s		30 x 500
	640308	230	120	2xS14s		30 x 1000

STRIPLITE

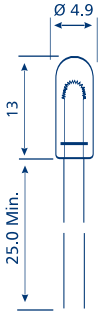


Striplite

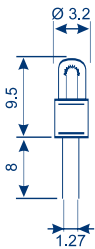
Striplite Lamps Clear						
Cat. no.		Voltage	Watts	Cap		d x l mm
441120		110	60	S15	Clear	25 x 221
441220		240	30	S15	Clear	25 x 221
441230		240	30	S15	Clear	25 x 284
441250		240	60	S15	Clear	25 x 221
441260		240	60	S15	Clear	25 x 284

Striplite Lamps Opal						
Cat. no.	Philips Cat. no.	Voltage	Watts	Cap		d x l mm
441326		110	60	S15	Opal	25 x 284
441348		240	60	S15	Opal	25 x 284
	641340	230	40	S19	Opal	37 x 311
	641352	230	60	S19	Opal	37 x 311

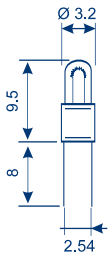
SUBMINIATURE LAMPS



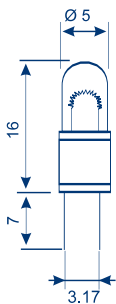
Wire Ended T1 1/2				
Cat. no.	Voltage	mA		d x l mm
			l = without wire	
460160	12	100		4.9 x 13
460190	28	40		4.9 x 13



Bi-Pin T1		Pin distance 1.27		
Cat. no.	Voltage	mA		d x l mm
			l = without pin	
460210	12	30		3.2 x 9.5
460240	28	40		3.2 x 9.5



Bi-Pin T1		Pin distance 2.54		
Cat. no.	Voltage	mA		d x l mm
			l = without pin	
460270	12	60		3.2 x 9.5
460300	28	24		3.2 x 9.5
460310	28	40		3.2 x 9.5
460316	36	20		3.2 x 9.5



Bi-Pin T1 3/4		Pin distance 3.17		
Cat. no.	Voltage	mA		d x l mm
			l = without pin	
460340	12	60		5 x 16
460360	14	80		5 x 16
460364	14	100		5 x 16
460380	28	40		5 x 16
460390	32	33		5 x 16

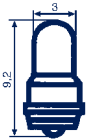
SUBMINIATURE LAMPS



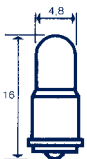
Bi-Pin T1 3/4 (Relampable)			Pin distance 5.5	
Cat. no.	Voltage	mA		d x l mm
l = without pin				
460420	28	40		6 x 16
460440	32	33		6 x 16



Bi-Pin GE			Pin distance 5.5	
Cat. no.	Voltage	mA		d x l mm
l = without pin				
460460	6,3	150		11 x 16.5

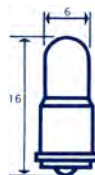


Midget Flanged T1			Flange Ø 4.6 mm	
Cat. no.	Voltage	mA		d x l mm
460520	5	21		3 x 9.2
460527	12	60		3 x 9.2
460550	28	24		3 x 9.2
460560	28	40		3 x 9.2



Midget Flanged T1 1/4			Flange Ø 4.8 mm	
Cat. no.	Voltage	mA		d x l mm
460600	28	25		4.8 x 16

SUBMINIATURE LAMPS



Midget Flanged T1 3/4			Flange Ø 6.2 mm	
Cat. no.	Voltage	mA	Type	d x l mm
460660	1,35	60	698	6 x 16
460670	2,5	35		6 x 16
460680	6	100		6 x 16
460688	6	200	328	6 x 16
460700	12	100		6 x 16
460710	14	40		6 x 16
460716	14	80	370	6 x 16
460718	14	100		6 x 16
460730	18	40		6 x 16
460740	28	25	327	6 x 16
460746	28	40		6 x 16
460748	28	40		6 x 16
460760	32	33	387	6 x 16
460770	36	30		6 x 16
460780	48	20		6 x 16
460784	48	25		6 x 16
460788	48	30		6 x 16
460800	60	20		6 x 16



Midget Grooved T1 3/4				
Cat. no.	Voltage	mA	Type	d x l mm
460860	2,5	350	266	6 x 16
460880	6	200	337	6 x 16
460900	12	40	7354	6 x 16
460920	14	30		6 x 16
460926	14	50		6 x 16
460932	14	80	388	6 x 16
460950	28	25		6 x 16
460954	28	40		6 x 16
460970	30	40		6 x 16
460990	36	30		6 x 16
461000	48	30		6 x 16
461010	60	20		6 x 16



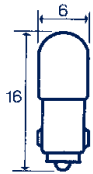
Midget Grooved T7				
Cat. no.	Voltage	mA		d x l mm
460820	15	20		6,7 x 22
460840	30	30		6,7 x 22

SUBMINIATURE LAMPS



Midget Trap T1 3/4

Cat. no.	Voltage	mA		d x l mm
461046	6	60		6 x 17
461050	6	100		6 x 17
461056	12	50		6 x 17
461060	14	50		6 x 17
461064	18	33		6 x 17
461068	18	50		6 x 17
461072	24	25		6 x 17
461076	28	21		6 x 17
461080	28	40		6 x 17



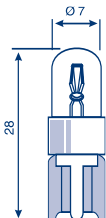
Midget Bayonet Ba5s

Cat. no.	Voltage	mA		d x l mm
461120	14	80		6 x 16
461150	28	40		6 x 16
461170	32	30		6 x 16
461190	36	25		6 x 16
461220	60	20		6 x 16



Midget Edison E5.5

Cat. no.	Voltage	mA		d x l mm
461250	6	40		5 x 16
461256	6	60		5 x 16
461260	6	80		5 x 16
461266	6	200		5 x 16
461280	12	50		5 x 16
461286	12	100		5 x 16
461300	14	40		5 x 16
461304	14	50		5 x 16
461310	14	80		5 x 16
461330	28	40		5 x 16



Cross Base F9

Cat. no.	Voltage	mA		d x l mm
461360	12	120		7 x 28
461380	24	40		7 x 28
461410	60	20		7 x 28

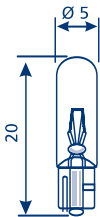
SUBMINIATURE LAMPS



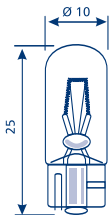
H' Shape Lamp			
Cat. no.	Voltage		d x l mm
461430	28	Terasaki OL-4089	6 x 20



NH' Shape Lamp				
Cat. no.	Voltage	mA		d x l mm
461450	28	22		4.85 x 21



Wedge Base T5 W2 x 4,6D				
Cat. no.	Voltage	mA	Watts	d x l mm
461510	6	20	1,2	5 x 20
461520	6/7	30		5 x 20
461540	12	100	1,2	5 x 20
461556	14	80	1,12	5 x 20
461568	12/15	50		5 x 20
461580	24	50	1,2	5 x 20
461590	24/28	30		5 x 20



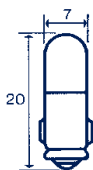
Wedge Base T10 W2,1 x 9,5D				
Cat. no.	Voltage	mA	Watts	d x l mm
461620	6,3	250	1,6	10 x 25
461628	6,3	500	3,1	10 x 25
461640	12	100	1,2	10 x 25
461648	12	183	2,2	10 x 25
461656	12	400	5	10 x 25
461670	12/15		2	10 x 25
461676	12/15		3	10 x 25
461690	24	125	3	10 x 25
461700	24/28		2	10 x 25
461710	28	170	5	10 x 25

MINIATURE INDICATOR LAMPS

Clear

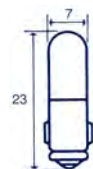
also all colours available

hand painted



Bayonet Ba7s 7 x 20 mm

Cat. no.	Voltage	mA	Watts	d x l mm
462116	6	40	0,24	7 x 20
462120	6	50	0,3	7 x 20
462126	6	100	0,6	7 x 20
462132	6	180	1	7 x 20
462152	12	25	0,3	7 x 20
462156	12	50	0,6	7 x 20
462162	12	100	1,2	7 x 20
462166	12	170	2	7 x 20
462186	24	50	1,2	7 x 20
462190	24	80	2	7 x 20
462194	24	125	3	7 x 20
462214	30	40	1,2	7 x 20
462216	30	50	1,5	7 x 20
462220	30	70	2,1	7 x 20
462236	36	50	1,8	7 x 20
462252	48	20	1	7 x 20
462256	48	40	1,92	7 x 20
462260	48	50	2,4	7 x 20
462282	60	20	1,2	7 x 20



Bayonet Ba7s 7 x 23 mm

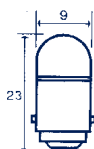
Cat. no.	Voltage	mA	Watts	d x l mm
462316	6	40	0,24	7 x 23
462320	6	50	0,3	7 x 23
462326	6	100	0,6	7 x 23
462330	6	200	1,2	7 x 23
462346	12	50	0,6	7 x 23
462350	12	100	1,2	7 x 23
462356	12	170	2	7 x 23
462394	24	25	0,6	7 x 23
462398	24	50	1,2	7 x 23
462406	24	100	2	7 x 23
462410	24	125	3	7 x 23
462426	28	50	1,4	7 x 23
462446	30	50	1,5	7 x 23
462452	30	100	3	7 x 23
462476	36	50	1,8	7 x 23
462504	48	30	1,44	7 x 23
462508	48	20	4,8	7 x 23
462512	60	20	1,2	7 x 23

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



Bayonet Ba9s 9 x 23 mm				
Cat. no.	Voltage	mA	Watts	d x l mm
463116	2,5	500	1,25	9 x 23
463126	4	250	1	9 x 23
463154	6	100	0,6	9 x 23
463160	6	200	1,2	9 x 23
463168	6	333	2	9 x 23
463176	6	500	3	9 x 23
463182	6	666	4	9 x 23
463188	6	840	5	9 x 23
463208	6,3	150	0,95	9 x 23
463226	12	50	0,6	9 x 23
463230	12	80	0,96	9 x 23
463232	12	100	1,2	9 x 23
463236	12	120	1,44	9 x 23
463240	12	165	2	9 x 23
463248	12	250	3	9 x 23
463276	24	50	1,2	9 x 23
463280	24	80	2	9 x 23
463284	24	100	2,4	9 x 23
463288	24	125	3	9 x 23
463292	24	165	4	9 x 23
463306	28	40	1,1	9 x 23
463326	30	50	1,5	9 x 23
463330	30	65	2	9 x 23
463338	30	100	3	9 x 23
463356	36	55	2	9 x 23
463376	42	45	2	9 x 23
463394	48	40	2	9 x 23
463398	48	60	3	9 x 23
463414	60	20	1,2	9 x 23
463418	60	50	3	9 x 23
463444	130	20	2,6	9 x 23
463474	240	10	2,4	9 x 23

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



Bayonet Ba9s 10 x 28 mm				
Cat. no.	Voltage	mA	Watts	d x l mm
463516	1,2	50	0,06	10 x 28
463536	2	60	0,12	10 x 28
463544	2,5	300	0,75	10 x 28
463554	4	300	1,2	10 x 28
463564	5	300	1,5	10 x 28
463588	6	180	1,1	10 x 28
463596	6	350	2	10 x 28
463602	6	500	3	10 x 28
463608	6	1000	6	10 x 28
463628	6,3	150	1	10 x 28
463634	6,3	250	1,6	10 x 28
463644	6,5	300	1,95	10 x 28
463654	7	300	2,1	10 x 28
463664	6/8	250	1,75	10 x 28
463674	8	100	0,8	10 x 28
463698	12	100	1,2	10 x 28
463706	12	165	2	10 x 28
463712	12	200	2,4	10 x 28
463718	12	250	3	10 x 28
463726	12	330	4	10 x 28
463748	14	200	2,8	10 x 28
463766	18	110	1,98	10 x 28
463784	24	20	0,48	10 x 28
463788	24	40	1	10 x 28
463792	24	50	1,2	10 x 28
463796	24	80	2	10 x 28
463800	24	100	2,4	10 x 28
463804	24	125	3	10 x 28
463808	24	165	4	10 x 28
			continue on next page	

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



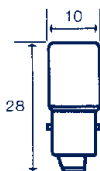
Bayonet Ba9s 10 x 28 mm				
Cat. no.	Voltage	mA	continuation	
			Watts	d x l mm
463816	24	208	5	10 x 28
463834	28	40	1,1	10 x 28
463838	28	50	1,4	10 x 28
463842	28	80	2,2	10 x 28
463846	28	100	3	10 x 28
463852	28	170	5	10 x 28
463888	24/30	80	2	10 x 28
463906	30	40	1,1	10 x 28
463910	30	50	1,4	10 x 28
463914	30	70	2	10 x 28
463918	30	100	3	10 x 28
463956	36	55	2	10 x 28
463960	36	85	3	10 x 28
463986	42	50	2	10 x 28
463992	42	120	5	10 x 28
464016	48	25	1,2	10 x 28
464020	48	40	2	10 x 28
464024	48	60	3	10 x 28
464042	60	20	1,2	10 x 28
464046	60	33	2	10 x 28
464050	60	50	3	10 x 28
464076	120	50	5	10 x 28
464086	130	20	2,6	10 x 28
464104	160	20	3,2	10 x 28
464124	230	11	2,6	10 x 28
464128	230	13	3	10 x 28
464132	230	17	4	10 x 28

MINIATURE INDICATOR LAMPS

Clear

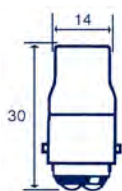
also all colours available

hand painted



Bayonet Ba10s 10 x 28 mm

Cat. no.	Voltage	mA	Watts	d x l mm
464516	6	500	3	10 x 28
464524	12	250	3	10 x 28
464532	24	125	3	10 x 28
464540	30	100	3	10 x 28
464548	48	62	3	10 x 28
464556	60	50	3	10 x 28



Bayonet Ba15d 14 x 30 mm

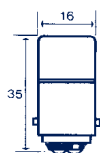
Cat. no.	Voltage		Watts	d x l mm
464624	12		3	14 x 30
464642	24		2	14 x 30
464644	24		3	14 x 30
464648	24		5	14 x 30
464692	60		1,2	14 x 30
464696	60		3	14 x 30
464714	130		2,6	14 x 30
464734	220		3	14 x 30

MINIATURE INDICATOR LAMPS

Clear

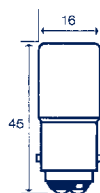
also all colours available

hand painted



Bayonet Ba15d 16 x 35 mm

Cat. no.	Voltage		Watts	d x l mm
464816	6		2	16 x 35
464820	6		5	16 x 35
464846	12		2	16 x 35
464850	12		5	16 x 35
464876	24		3	16 x 35
464880	24		5	16 x 35
464906	24/30		5/7	16 x 35
464924	30		3	16 x 35
464928	30		5	16 x 35
464944	36		3	16 x 35
464948	36		5	16 x 35
464964	48		3	16 x 35
464968	48		5	16 x 35
464988	60		5	16 x 35
464998	85		10	16 x 35
465012	110		6	16 x 35
465022	110/140		2/4	16 x 35
465034	160		5	16 x 35
465044	240		5	16 x 35
465056	220/260		5/7	16 x 35
465062	220/260		6/10	16 x 35



Bayonet Ba15d 16 x 45 mm

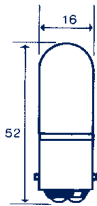
Cat. no.	Voltage		Watts	d x l mm
465218	12		10	16 x 45
465224	12		15	16 x 45
465242	36		5	16 x 45
465276	110/140		5/7	16 x 45
465294	240		10	16 x 45
465298	240		15	16 x 45
465306	260		5	16 x 45

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



Bayonet Ba15d 16 x 52 mm

Cat. no.	Voltage		Watts	d x l mm
465416	6		4	16 x 52
465438	12		5	16 x 52
465468	24		5	16 x 52
465478	24/30		3/5	16 x 52
465482	24/30		6/10	16 x 52
465508	42		5	16 x 52
465528	48		5	16 x 52
465538	48/60		3/5	16 x 52
465548	60		5	16 x 52
465552	60		10	16 x 52
465564	65/95		6/10	16 x 52
465576	110/140		5/7	16 x 52
465582	110/140		6/10	16 x 52
465608	220/260		3/5	16 x 52
465612	220/260		5/7	16 x 52
465616	220/260		6/10	16 x 52
465620	220/260		10/15	16 x 52
465636	380		10	16 x 52

Bayonet Ba15d 20 x 48 mm

Cat. no.	Voltage		Watts	d x l mm
465652	220/260		6/10	20 x 48

Bayonet Ba15s 19 x 48 mm

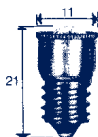
Cat. no.	Voltage		Watts	d x l mm
465672	220		10	19 x 48

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



Edison E10 11 x 23 mm Shell-type

Cat. no.	Voltage		Watts	d x l mm
466116	24		3	11 x 21



Edison E10 10 x 23 mm

Cat. no.	Voltage	mA	Watts	d x l mm
466226	6	80	0,5	9 x 23
466234	6	333	2	9 x 23
466238	6	500	3	9 x 23
466256	12	50	0,6	9 x 23
466262	12	100	1,2	9 x 23
466266	12	165	2	9 x 23
466272	12	250	3	9 x 23
466316	24	50	1,2	9 x 23
466320	24	80	2	9 x 23
466326	24	125	3	9 x 23
466346	30	65	2	9 x 23
466352	30	100	3	9 x 23
466360	36	83	3	9 x 23
466372	42	48	2	9 x 23
466384	48	50	2,4	9 x 23
466396	48/60	50		9 x 23
466406	60	20	1,2	9 x 23
466416	130	20	2,6	9 x 23
466426	220	14	3	9 x 23

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



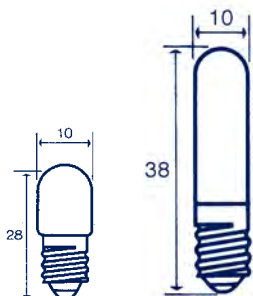
Edison E10 10 x 28 mm				
Cat. no.	Voltage	mA	Watts	d x l mm
466612	2,5	100	0,25	10 x 28
466616	2,5	500	1,25	10 x 28
466620	2,5	1000	2,5	10 x 28
466626	3,5	200	0,7	10 x 28
466632	4	300	1,2	10 x 28
466636	4	600	2,4	10 x 28
466652	6	100	0,6	10 x 28
466658	6	250	1,5	10 x 28
466662	6	333	2	10 x 28
466670	6	830	5	10 x 28
466682	6,3	320	2	10 x 28
466694	6/7		1	10 x 28
466710	7	300	2,1	10 x 28
466726	10	50	0,5	10 x 28
466742	12	100	1,2	10 x 28
466746	12	165	2	10 x 28
466750	12	183	2,2	10 x 28
466754	12	250	3	10 x 28
466758	12	415	5	10 x 28
466772	18	110	2	10 x 28
466786	24	50	1,2	10 x 28
466790	24	80	2	10 x 28
466794	24	100	2,4	10 x 28
466798	24	125	3	10 x 28
466802	24	170	4	10 x 28
466806	24	210	5	10 x 28
			continue on next page	

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



Edison E10 10 x 28 mm

Cat. no.	Voltage	mA	continuation	
			Watts	d x l mm
466822	24/30		2	10 x 28
466832	28	70	2	10 x 28
466842	30	40	1,2	10 x 28
466846	30	50	1,5	10 x 28
466850	30	65	2	10 x 28
466854	30	100	3	10 x 28
466866	36	55	2	10 x 28
466876	42	70	3	10 x 28
466892	48	50	2,4	10 x 28
466896	48	60	3	10 x 28
466900	48	80	4	10 x 28
466922	48/60		3	10 x 28
466926	48/60		4	10 x 28
466936	60	20	1,2	10 x 28
466940	60	33	2	10 x 28
466944	60	50	3	10 x 28
466948	60	85	5	10 x 28
466962	130	20	2,6	10 x 28
466972	160	20	3,2	10 x 28
466986	230	13	3	10 x 28
466990	230	18	4	10 x 28

Edison E10 10 x 38 mm

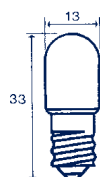
Cat. no.	Voltage	mA	Watts	d x l mm
467012	30	67	2	10 x 38
467024	130	30	4	10 x 38

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



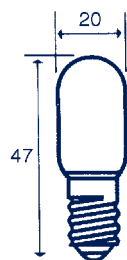
Edison E12 13 x 33 mm

Cat. no.	Voltage	mA	Watts	d x l mm
467334	6,3	310	2	13 x 33
467344	12	167	2	13 x 33
467354	18	110	2	13 x 33
467364	24	110	3	13 x 33
467374	28	70	2	13 x 33
467384	30	65	2	13 x 33
467388	30	167	5	13 x 33
467394	48	63	3	13 x 33
467404	60	34	2	13 x 33
467414	110	19	2	13 x 33
467418	110	27	3	13 x 33
467424	130	46	6	13 x 33
467434	220	23	5	13 x 33



Edison E12 15 x 45 mm

Cat. no.	Voltage	mA	Watts	d x l mm
467512	12	250	3	15 x 45
467522	24	110	3	15 x 45
467524	24	200	5	15 x 45
467532	28	110	3	15 x 45
467546	30	167	5	15 x 45
467552	48	100	5	15 x 45
467562	130	40	5,2	15 x 45
467582	240	25	6	15 x 45



Edison E12 20 x 47 mm

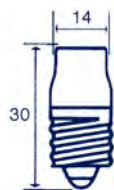
Cat. no.	Voltage	mA	Watts	d x l mm
467626	28	110	3	20 x 47
467646	60	100	6	20 x 47
467666	115	87	10	20 x 47
467676	130	154	20	20 x 47
467686	240	42	10	20 x 47

MINIATURE INDICATOR LAMPS

Clear

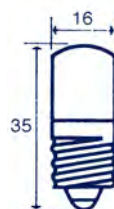
also all colours available

hand painted



Edison E14 14 x 30 mm

Cat. no.	Voltage	mA	Watts	d x l mm
468022	6	180	1,1	14 x 30
468028	6	850	5	14 x 30
468042	12	165	2	14 x 30
468062	24	80	2	14 x 30
468068	24	210	5	14 x 30
468082	36	55	2	14 x 30
468102	48	60	3	14 x 30
468114	48/60		1,2	14 x 30
468122	60	50	3	14 x 30
468128	60	80	5	14 x 30
468162	220	14	3	14 x 30
468182	220/260		5/7	14 x 30



Edison E14 16 x 35 mm

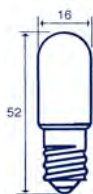
Cat. no.	Voltage	mA	Watts	d x l mm
468224	6		2	16 x 35
468244	12		3	16 x 35
468248	12		5	16 x 35
468264	24		2	16 x 35
468266	24		3	16 x 35
468270	24		5	16 x 35
468282	24/30		3/5	16 x 35
468302	30		3	16 x 35
468306	30		5	16 x 35
468312	36		3	16 x 35
468316	36		5	16 x 35
468332	48		3	16 x 35
468336	48		5	16 x 35
468356	60		5	16 x 35
468366	80		5	16 x 35
468370	110/140		3/5	16 x 35
468376	160		5	16 x 35
468396	220/260		5/7	16 x 35
468416	260		5	16 x 35

MINIATURE INDICATOR LAMPS

Clear

also all colours available

hand painted



Edison E14 16 x 52 mm

Cat. no.	Voltage		Watts	d x l mm
468624	6		5	16 x 52
468642	12		3	16 x 52
468646	12		5	16 x 52
468650	12		10	16 x 52
468652	12		15	16 x 52
468672	24		5	16 x 52
468680	24		10	16 x 52
468684	24		15	16 x 52
468702	24/30		3/5	16 x 52
468708	24/30		6/10	16 x 52
468726	36		5	16 x 52
468742	48/60		3/5	16 x 52
468754	60		5	16 x 52
468758	60		8	16 x 52
468762	60		10	16 x 52
468772	65/95		6/10	16 x 52
468784	130		5	16 x 52
468794	110/140		5/7	16 x 52
468798	110/140		6/10	16 x 52
468814	240		10	16 x 52
468818	240		15	16 x 52
468834	220/260		5/7	16 x 52
468848	220/260		6/10	16 x 52
468862	380		10	16 x 52



Puller for Indicator lamp

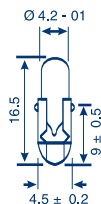
Cat. no.	
468906	Puller for Indicator lamps
471800	Puller for Telephone lamps

TELEPHONE INDICATOR LAMPS

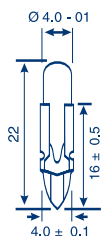
Clear

also all colours available

hand painted



Telephone Lamps T4,5 x 16 mm				
Cat. no.	Voltage	mA	Cap	d x l mm
470210	6	20	T-4,5	4,5 x 16
470216	6	40	T-4,5	4,5 x 16
470218	6	50	T-4,5	4,5 x 16
470230	12	20	T-4,5	4,5 x 16
470236	12	40	T-4,5	4,5 x 16
470238	12	50	T-4,5	4,5 x 16
470242	12	100	T-4,5	4,5 x 16
470250	24	20	T-4,5	4,5 x 16
470256	24	40	T-4,5	4,5 x 16
470258	24	50	T-4,5	4,5 x 16
470270	28	20	T-4,5	4,5 x 16
470290	30	20	T-4,5	4,5 x 16
470296	30	40	T-4,5	4,5 x 16
470312	32	33	T-4,5	4,5 x 16
470332	36	20	T-4,5	4,5 x 16
470352	48	20	T-4,5	4,5 x 16
470372	60	20	T-4,5	4,5 x 16



Telephone Lamps T4,6 x 22 mm				
Cat. no.	Voltage	mA	Cap	d x l mm
470510	6	20	T-4,6	4,6 x 22
470516	6	40	T-4,6	4,6 x 22
470518	6	50	T-4,6	4,6 x 22
470524	6	200	T-4,6	4,6 x 22
470540	12	20	T-4,6	4,6 x 22
470546	12	40	T-4,6	4,6 x 22
470552	12	100	T-4,6	4,6 x 22
470570	24	20	T-4,6	4,6 x 22
470576	24	40	T-4,6	4,6 x 22
470578	24	50	T-4,6	4,6 x 22

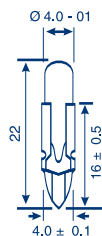
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TELEPHONE INDICATOR LAMPS

Clear

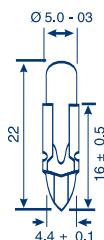
also all colours available

hand painted



Telephone Lamps T4,6 x 22 mm

Cat. no.	Voltage	mA	continuation	
			Cap	d x l mm
470596	28	40	T-4,6	4,6 x 22
470598	28	50	T-4,6	4,6 x 22
470610	30	20	T-4,6	4,6 x 22
470616	30	40	T-4,6	4,6 x 22
470618	30	50	T-4,6	4,6 x 22
470630	36	20	T-4,6	4,6 x 22
470650	48	20	T-4,6	4,6 x 22
470670	60	20	T-4,6	4,6 x 22



Telephone Lamps T5,5K x 22 mm

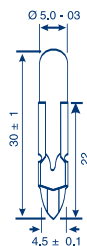
Cat. no.	Voltage	mA	Cap	d x l mm
470816	6	40	T-5,5K	5,5 x 22
470826	6	200	T-5,5K	5,5 x 22
470840	12	20	T-5,5K	5,5 x 22
470848	12	50	T-5,5K	5,5 x 22
470854	12	100	T-5,5K	5,5 x 22
470870	24	20	T-5,5K	5,5 x 22
470876	24	40	T-5,5K	5,5 x 22
470878	24	50	T-5,5K	5,5 x 22
470896	28	40	T-5,5K	5,5 x 22
470898	28	50	T-5,5K	5,5 x 22
470910	30	20	T-5,5K	5,5 x 22
470916	30	40	T-5,5K	5,5 x 22
470918	30	50	T-5,5K	5,5 x 22
470930	36	20	T-5,5K	5,5 x 22
470936	36	40	T-5,5K	5,5 x 22
470950	48	20	T-5,5K	5,5 x 22
470952	48	30	T-5,5K	5,5 x 22
470960	60	20	T-5,5K	5,5 x 22

TELEPHONE INDICATOR LAMPS

Clear

also all colours available

hand painted



Telephone Lamps T5,5 x 30 mm

Cat. no.	Voltage	mA	Cap	d x l mm
471020	6	20	T-5,5	5,5 x 30
471026	6	40	T-5,5	5,5 x 30
471028	6	50	T-5,5	5,5 x 30
471036	6	200	T-5,5	5,5 x 30
471050	12	20	T-5,5	5,5 x 30
471056	12	40	T-5,5	5,5 x 30
471058	12	50	T-5,5	5,5 x 30
471062	12	100	T-5,5	5,5 x 30
471082	18	25	T-5,5	5,5 x 30
471090	24	20	T-5,5	5,5 x 30
471092	24	25	T-5,5	5,5 x 30
471094	24	30	T-5,5	5,5 x 30
471296	24	40	T-5,5	5,5 x 30
471098	24	50	T-5,5	5,5 x 30
471100	24	80	T-5,5	5,5 x 30
471126	28	40	T-5,5	5,5 x 30
471128	28	50	T-5,5	5,5 x 30
471140	30	20	T-5,5	5,5 x 30
471142	30	30	T-5,5	5,5 x 30
471146	30	40	T-5,5	5,5 x 30
471148	30	50	T-5,5	5,5 x 30
471162	32	33	T-5,5	5,5 x 30
471180	36	20	T-5,5	5,5 x 30
471186	36	40	T-5,5	5,5 x 30
471188	36	50	T-5,5	5,5 x 30
471190	48	20	T-5,5	5,5 x 30
471192	48	25	T-5,5	5,5 x 30
471196	48	40	T-5,5	5,5 x 30

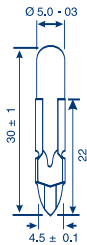
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TELEPHONE INDICATOR LAMPS

Clear

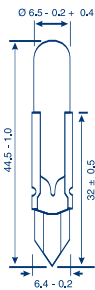
also all colours available

hand painted



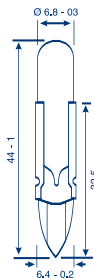
Telephone Lamps T5,5 x 30 mm

Cat. no.	Voltage	mA	continuation	
			Cap	d x l mm
471210	60	20	T-5,5	5,5 x 30
471214	60	30	T-5,5	5,5 x 30
471216	60	40	T-5,5	5,5 x 30
471218	60	50	T-5,5	5,5 x 30
471230	70	20	T-5,5	5,5 x 30
471236	70	40	T-5,5	5,5 x 30



Telephone Lamps T6,5 x 44 mm French

Cat. no.	Voltage	mA	Cap	d x l mm
471256	6	40	T-6,5	6,5 x 44
471268	12	50	T-6,5	6,5 x 44
471276	24	40	T-6,5	6,5 x 44
471286	30	40	T-6,5	6,5 x 44
471290	36	20	T-6,5	6,5 x 44
471300	60	20	T-6,5	6,5 x 44
471306	60	40	T-6,5	6,5 x 44



Telephone Lamps T6,8 x 44 mm

Cat. no.	Voltage	mA	Cap	d x l mm
471410	6	20	T-6,8	6,8 x 44
471416	6	40	T-6,8	6,8 x 44
471418	6	50	T-6,8	6,8 x 44
471420	6	60	T-6,8	6,8 x 44
471436	6	200	T-6,8	6,8 x 44
471440	12	20	T-6,8	6,8 x 44
471446	12	40	T-6,8	6,8 x 44
471448	12	50	T-6,8	6,8 x 44
471452	12	100	T-6,8	6,8 x 44

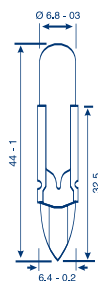
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TELEPHONE INDICATOR LAMPS

Clear

also all colours available

hand painted



Telephone Lamps T6,8 x 44 mm

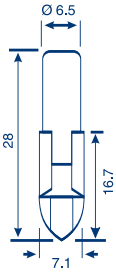
Cat. no.	Voltage	mA	continuation	
			Cap	d x l mm
471460	24	20	T-6,8	6,8 x 44
471462	24	25	T-6,8	6,8 x 44
471464	24	35	T-6,8	6,8 x 44
471466	24	40	T-6,8	6,8 x 44
471468	24	50	T-6,8	6,8 x 44
471470	24	80	T-6,8	6,8 x 44
471472	24	100	T-6,8	6,8 x 44
471482	28	25	T-6,8	6,8 x 44
471486	28	40	T-6,8	6,8 x 44
471488	28	45	T-6,8	6,8 x 44
471490	28	50	T-6,8	6,8 x 44
471492	28	80	T-6,8	6,8 x 44
471510	30	20	T-6,8	6,8 x 44
471512	30	25	T-6,8	6,8 x 44
471516	30	40	T-6,8	6,8 x 44
471518	30	50	T-6,8	6,8 x 44
471530	36	20	T-6,8	6,8 x 44
471536	36	40	T-6,8	6,8 x 44
471538	36	50	T-6,8	6,8 x 44
471556	38	40	T-6,8	6,8 x 44
471560	48	20	T-6,8	6,8 x 44
471562	48	25	T-6,8	6,8 x 44
471566	48	40	T-6,8	6,8 x 44
471568	48	50	T-6,8	6,8 x 44
471580	60	20	T-6,8	6,8 x 44
471586	60	40	T-6,8	6,8 x 44
471588	60	50	T-6,8	6,8 x 44
471600	70	20	T-6,8	6,8 x 44
471606	70	40	T-6,8	6,8 x 44

TELEPHONE INDICATOR LAMPS

Clear

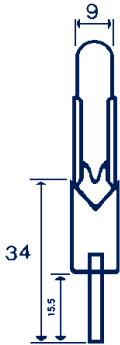
also all colours available

hand painted



Telephone Lamps PSB T7,2 x 28 mm

Cat. no.	Voltage	mA	Cap	d x l mm
471708	6	140	T-7,2	7,2 x 28
471718	12	170	T-7,2	7,2 x 28
471728	24	73	T-7,2	7,2 x 28
471738	28	40	T-7,2	7,2 x 28
471748	48	53	T-7,2	7,2 x 28
471758	60	50	T-7,2	7,2 x 28
471768	120	25	T-7,2	7,2 x 28



Telephone Lamps T9 x 65 mm

Cat. no.	Voltage	mA	Cap	d x l mm
471788	24	80	T-9	9 x 65
471792	24	125	T-9	9 x 65

Puller for Telephone Indicator lamp



Cat. no.	
471800	Puller for Telephone lamps

SINGLE-LED LAMPS



Single-led Lamp Bi-pin T1 3/4				
Cat. no.	Voltage		Colour	d x l mm
			I = without pin	
475110	6	DC	red	6 x 16
475114	6	DC	green	6 x 16
475118	6	DC	yellow	6 x 16
475130	12	DC	red	6 x 16
475134	12	DC	green	6 x 16
475138	12	DC	yellow	6 x 16
475150	24	DC	red	6 x 16
475154	24	DC	green	6 x 16
475158	24	DC	yellow	6 x 16
475170	28	DC	red	6 x 16
475174	28	DC	green	6 x 16
475178	28	DC	yellow	6 x 16



Single-led Lamp Midget Flanged T1 3/4				
Cat. no.	Voltage		Colour	d x l mm
475210	6	DC	red	6 x 16
475214	6	DC	green	6 x 16
475218	6	DC	yellow	6 x 16
475230	12	DC	red	6 x 16
475234	12	DC	green	6 x 16
475238	12	DC	yellow	6 x 16
475250	24	DC	red	6 x 16
475254	24	DC	green	6 x 16
475258	24	DC	yellow	6 x 16
475270	28	DC	red	6 x 16
475274	28	DC	green	6 x 16
475278	28	DC	yellow	6 x 16

SINGLE-LED LAMPS



Single-led Lamp Midget Grooved T1 3/4				
Cat. no.	Voltage		Colour	d x l mm
475310	6	DC	red	6 x 16
475314	6	DC	green	6 x 16
475318	6	DC	yellow	6 x 16
475330	12	DC	red	6 x 16
475334	12	DC	green	6 x 16
475338	12	DC	yellow	6 x 16
475350	24	DC	red	6 x 16
475354	24	DC	green	6 x 16
475358	24	DC	yellow	6 x 16
475370	28	DC	red	6 x 16
475374	28	DC	green	6 x 16
475378	28	DC	yellow	6 x 16

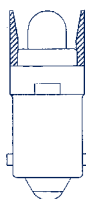


Single-led Lamp Wedge Base T5 W2 x 4,6d				
Cat. no.	Voltage		Colour	d x l mm
475410	6	DC	red	5 x 20
475414	6	DC	green	5 x 20
475418	6	DC	yellow	5 x 20
475430	12	DC	red	5 x 20
475434	12	DC	green	5 x 20
475438	12	DC	yellow	5 x 20
475450	24	DC	red	5 x 20
475454	24	DC	green	5 x 20
475458	24	DC	yellow	5 x 20

SINGLE-LED LAMPS



Single-led Lamp Bayonet Ba7s				
Cat. no.	Voltage		Colour	d x l mm
475510	6	AC/DC	red	7 x 18
475514	6	AC/DC	green	7 x 18
475518	6	AC/DC	yellow	7 x 18
475530	12	AC/DC	red	7 x 18
475534	12	AC/DC	green	7 x 18
475538	12	AC/DC	yellow	7 x 18
475550	24	AC/DC	red	7 x 18
475554	24	AC/DC	green	7 x 18
475558	24	AC/DC	yellow	7 x 18
475570	28	AC/DC	red	7 x 18
475574	28	AC/DC	green	7 x 18
475578	28	AC/DC	yellow	7 x 18



Single-led Lamp Bayonet Ba9s				
Cat. no.	Voltage		Colour	d x l mm
475610	6	AC/DC	red	10 x 25
475614	6	AC/DC	green	10 x 25
475618	6	AC/DC	yellow	10 x 25
475630	12	AC/DC	red	10 x 25
475634	12	AC/DC	green	10 x 25
475638	12	AC/DC	yellow	10 x 25
475650	24	AC/DC	red	10 x 25
475654	24	AC/DC	green	10 x 25
475658	24	AC/DC	yellow	10 x 25
475670	28	AC/DC	red	10 x 25
475674	28	AC/DC	green	10 x 25
475678	28	AC/DC	yellow	10 x 25

SINGLE-LED LAMPS

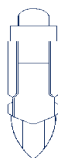


Single-led Lamp Edison E10				
Cat. no.	Voltage		Colour	d x l mm
475710	6	AC/DC	red	10 x 25
475714	6	AC/DC	green	10 x 25
475718	6	AC/DC	yellow	10 x 25
475730	12	AC/DC	red	10 x 25
475734	12	AC/DC	green	10 x 25
475738	12	AC/DC	yellow	10 x 25
475750	24	AC/DC	red	10 x 25
475754	24	AC/DC	green	10 x 25
475758	24	AC/DC	yellow	10 x 25
475770	28	AC/DC	red	10 x 25
475774	28	AC/DC	green	10 x 25
475778	28	AC/DC	yellow	10 x 25



Single-led Lamp Edison E12				
Cat. no.	Voltage		Colour	d x l mm
475810	6	AC/DC	red	13 x 26
475814	6	AC/DC	green	13 x 26
475818	6	AC/DC	yellow	13 x 26
475830	12	AC/DC	red	13 x 26
475834	12	AC/DC	green	13 x 26
475838	12	AC/DC	yellow	13 x 26
475850	24	AC/DC	red	13 x 26
475854	24	AC/DC	green	13 x 26
475858	24	AC/DC	yellow	13 x 26

SINGLE-LED LAMPS

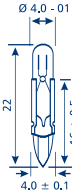


Single-led Lamp Telephone-type T5,5				
Cat. no.	Voltage		Colour	d x l mm
475910	6	AC/DC	red	T-5,5 x 22
475914	6	AC/DC	green	T-5,5 x 22
475918	6	AC/DC	yellow	T-5,5 x 22
475930	12	AC/DC	red	T-5,5 x 22
475934	12	AC/DC	green	T-5,5 x 22
475938	12	AC/DC	yellow	T-5,5 x 22
475950	24	AC/DC	red	T-5,5 x 22
475954	24	AC/DC	green	T-5,5 x 22
475958	24	AC/DC	yellow	T-5,5 x 22
475970	28	AC/DC	red	T-5,5 x 22
475974	28	AC/DC	green	T-5,5 x 22
475978	28	AC/DC	yellow	T-5,5 x 22



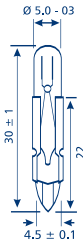
Single-led Lamp Telephone-type T6,8				
Cat. no.	Voltage		Colour	d x l mm
476010	6	AC/DC	red	T-6,8 x 44
476014	6	AC/DC	green	T-6,8 x 44
476018	6	AC/DC	yellow	T-6,8 x 44
476030	12	AC/DC	red	T-6,8 x 44
476034	12	AC/DC	green	T-6,8 x 44
476038	12	AC/DC	yellow	T-6,8 x 44
476050	24	AC/DC	red	T-6,8 x 44
476054	24	AC/DC	green	T-6,8 x 44
476058	24	AC/DC	yellow	T-6,8 x 44
476070	28	AC/DC	red	T-6,8 x 44
476074	28	AC/DC	green	T-6,8 x 44
476078	28	AC/DC	yellow	T-6,8 x 44

NEON INDICATOR LAMPS



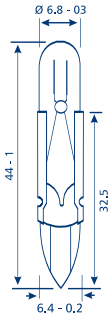
Neon Telephone-type T4,6 x 22 mm

Cat. no.	Voltage		Colour	d x l mm
477110	110	glass	clear	T-4,6 x 22
477115	220	glass	clear	T-4,6 x 22



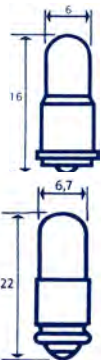
Neon Telephone-type T5,5 x 30 mm

Cat. no.	Voltage		Colour	d x l mm
477130	110	glass	clear	T-5,5 x 30
477135	220	glass	clear	T-5,5 x 30



Neon Telephone-type T6,8 x 44 mm

Cat. no.	Voltage		Colour	d x l mm
477150	110	glass	clear	T-6,8 x 44
477155	220	glass	clear	T-6,8 x 44



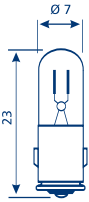
Neon Midget Flanged T1 3/4

Cat. no.	Voltage		Colour	d x l mm
477170	110	glass	clear	6 x 16
477175	220	glass	clear	6 x 16

Neon Midget Grooved T1 3/4

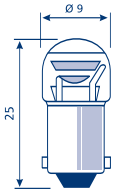
Cat. no.	Voltage		Colour	d x l mm
477190	110	glass	clear	6 x 16
477195	220	glass	clear	6 x 16

NEON INDICATOR LAMPS



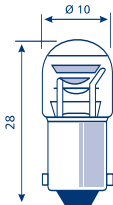
Neon Lamp Bayonet Ba7s 7 x 23 mm

Cat. no.	Voltage		Colour	d x l mm
477210	110	glass	clear	7 x 23
477215	220	glass	clear	7 x 23
477220	380	glass	clear	7 x 23



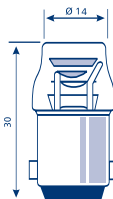
Neon Lamp Bayonet Ba9s 9 x 25 mm

Cat. no.	Voltage		Colour	d x l mm
477230	110	pvc	clear	9 x 25
477235	220	pvc	clear	9 x 25
477240	220	glass	clear	9 x 25
477245	380	pvc	clear	9 x 25



Neon Lamp Bayonet Ba9s 10 x 28 mm

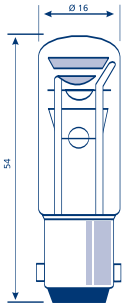
Cat. no.	Voltage		Colour	d x l mm
477250	110	pvc	clear	10 x 28
477255	220	pvc	clear	10 x 28
477260	220	glass	clear	10 x 28
477265	220	glass	green	10 x 28
477270	380	pvc	clear	10 x 28



Neon Lamp Bayonet Ba15d 14 x 30 mm

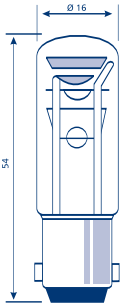
Cat. no.	Voltage		Colour	d x l mm
477310	110	glass	clear	14 x 30
477315	220	pvc	clear	14 x 30
477320	220	glass	clear	14 x 30
477325	380	pvc	clear	14 x 30

NEON INDICATOR LAMPS



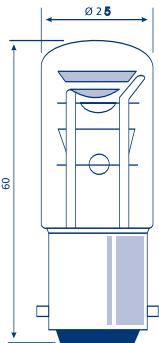
Neon Lamp Bayonet Ba15d 16 x 54 mm

Cat. no.	Voltage		Colour	d x l mm
477410	110	pvc	clear	16 x 54
477415	220	pvc	clear	16 x 54
477420	380	pvc	clear	16 x 54
477425	500	pvc	clear	16 x 54



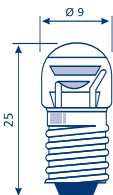
Neon Lamp Bayonet Ba15s 16 x 54 mm

Cat. no.	Voltage		Colour	d x l mm
477470	220	glass	clear	16 x 54



Neon Lamp Bayonet B22d 25 x 60 mm

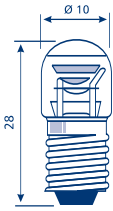
Cat. no.	Voltage		Colour	d x l mm
477510	110	glass	clear	25 x 60
477515	220	glass	clear	25 x 60
477520	380	glass	clear	25 x 60



Neon Lamp Edison E10 9 x 25 mm

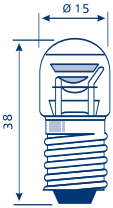
Cat. no.	Voltage		Colour	d x l mm
477540	110	pvc	clear	9 x 25
477545	220	pvc	clear	9 x 25
477550	380	pvc	clear	9 x 25

NEON INDICATOR LAMPS



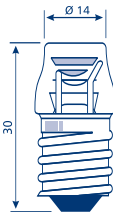
Neon Lamp Edison E10 10 x 28 mm

Cat. no.	Voltage		Colour	d x l mm
477570	110	pvc	clear	10 x 28
477575	220	pvc	clear	10 x 28
477580	220	pvc	green	10 x 28
477595	380	pvc	clear	10 x 28



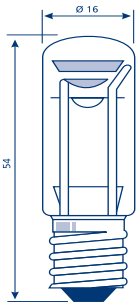
Neon Lamp Edison E12 15 x 38 mm

Cat. no.	Voltage		Colour	d x l mm
477610	110	glass	clear	15 x 38
477615	220	glass	clear	15 x 38



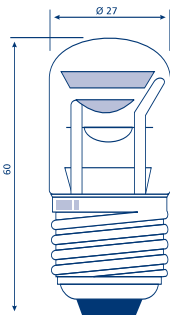
Neon Lamp Edison E14 14 x 30 mm

Cat. no.	Voltage		Colour	d x l mm
477660	110	pvc	clear	14 x 30
477665	220	pvc	clear	14 x 30
477685	380	glass	clear	14 x 30



Neon Lamp Edison E14 16 x 54 mm

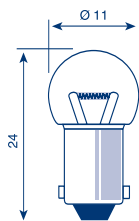
Cat. no.	Voltage		Colour	d x l mm
477710	110	pvc	clear	16 x 54
477715	220	pvc	clear	16 x 54
477725	380	glass	clear	16 x 54



Neon Lamp Edison E27 27 x 60 mm

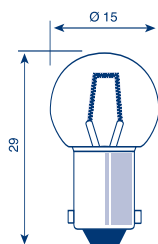
Cat. no.	Voltage		Colour	d x l mm
477740	220	glass	clear	27 x 60

INDICATOR / SPHERICAL LAMPS



Spherical Lamps Ba9s 11 x 24 mm

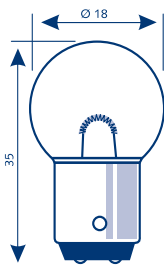
Cat. no.	Voltage	mA	Watts	d x l mm
480212	2,4	1250	3	11 x 24
480218	4	300	1,2	11 x 24
480224	6	50	0,3	11 x 24
480230	6	100	0,6	11 x 24
480236	6	180	1,1	11 x 24
480242	6	250	2,1	11 x 24
480312	12	100	1,2	11 x 24
480318	12	180	2	11 x 24
480328	18	100	1,8	11 x 24
480338	24	50	1,2	11 x 24
480344	24	125	3	11 x 24
480354	30	40	1,2	11 x 24



Spherical Lamps Ba9s 15 x 29 mm

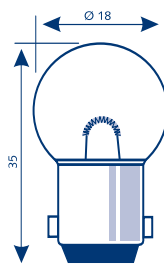
Cat. no.	Voltage	mA	Watts	d x l mm
480412	2,5	500	1,25	15 x 29
480418	2,5	1000	2,5	15 x 29
480428	6	500	3	15 x 29
480438	7	410	2,8	15 x 29
480448	12	400	5	15 x 29
480458	24	125	3	15 x 29
480464	24	208	5	15 x 29
480474	30	165	3	15 x 29

INDICATOR / SPHERICAL LAMPS



Spherical Lamps Ba15d 18 x 35 mm

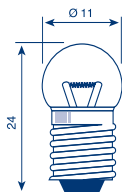
Cat. no.	Voltage	mA	Watts	d x l mm
480508	2,5	700	1,75	18 x 35
480526	6		3	18 x 35
480532	6		5	18 x 35
480538	6		10	18 x 35
480544	6		15	18 x 35
480554	12		5	18 x 35
480560	12		10	18 x 35
480566	12		15	18 x 35
480576	24		5	18 x 35
480582	24		10	18 x 35
480588	24		15	18 x 35
480594	24		25	25 x 48
480598	130		5	25 x 48



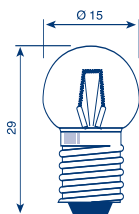
Spherical Lamps Ba15s 18 x 35 mm

Cat. no.	Voltage		Watts	d x l mm
480612	6		3	18 x 35
480618	6		5	18 x 35
480624	6		10	18 x 35
480630	6		15	18 x 35
480640	12		5	18 x 35
480646	12		10	18 x 35
480652	12		15	18 x 35
480662	24		5	18 x 35
480668	24		10	18 x 35
480674	24		15	18 x 35

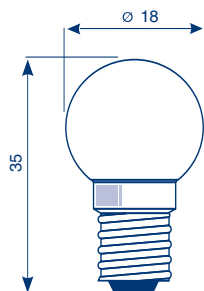
INDICATOR / SPHERICAL LAMPS



Spherical Lamps E10 11 x 24 mm				
Cat. no.	Voltage	mA	Watts	d x l mm
480712	1,5	150	0,22	11 x 24
480722	2,5	200	0,5	11 x 24
480732	3,8	300	1,14	11 x 24
480742	4	400	1,6	11 x 24
480752	6	50	0,3	11 x 24
480758	6	100	0,6	11 x 24
480764	6	333	2	11 x 24
480774	12	100	1,2	11 x 24
480780	12	250	3	11 x 24
480790	14	60	0,84	11 x 24
480800	18	100	1,8	11 x 24
480810	24	50	1,2	11 x 24
480816	24	85	2	11 x 24
480822	24	125	3	11 x 24
480832	28	50	1,4	11 x 24
480842	30	100	3	11 x 24



Spherical Lamps E10 15 x 29 mm				
Cat. no.	Voltage	mA	Watts	d x l mm
480912	2,5	500	1,25	15 x 29
480918	4	600	2,4	15 x 29
480922	4	1000	4	15 x 29
480930	6	400	2,4	15 x 29
480932	6	500	3	15 x 29
480942	12	250	3	15 x 29
480952	24	210	5	15 x 29
480962	30	165	5	15 x 29
480974	48	100	5	15 x 29



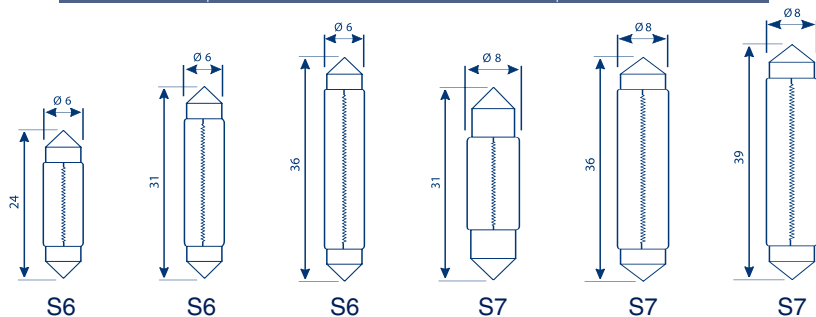
Spherical Lamps E14 18 x 35 mm				
Cat. no.	Voltage		Watts	d x l mm
480982	24		5	18 x 35
480992	60		5	18 x 35

TORPEDO / FESTOON LAMPS

Clear

also all colours available

hand painted



Festoon Lamp S6

Cat. no.	Voltage	Watts	Cap	d x l mm
481210	24	3	S6	6 x 24
481218	26	1	S6	6 x 24
481226	28	2	S6	6 x 24
481240	24	1,2	S6	6 x 26
481270	60	3	S6	6 x 31
481300	24	3	S6	6 x 36
481308	36	3	S6	6 x 36

Festoon Lamp S7

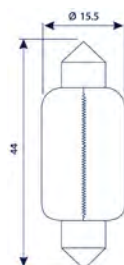
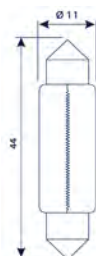
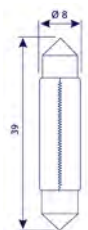
Cat. no.	Voltage	Watts	Cap	d x l mm
481400	15	3	S7	8 x 28
481430	6	3	S7	8 x 31
481438	12	3	S7	8 x 31
481446	24	3	S7	8 x 31
481454	60	3	S7	8 x 31
481484	6	3	S7	8 x 36
481492	12	3	S7	8 x 36
481500	24	3	S7	8 x 36
481508	36	3	S7	8 x 36
481538	12	3	S7	8 x 39
481546	24	5	S7	8 x 39

TORPEDO / FESTOON LAMPS

Clear

also all colours available

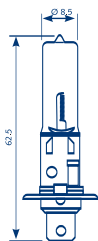
hand painted



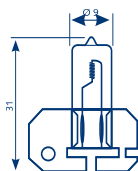
Festoon Lamp S8,5

Cat. no.	Voltage	Watts	Cap	d x l mm
481576	6	5	S8,5	11 x 39
481584	12	5	S8,5	11 x 39
481592	12	10	S8,5	11 x 39
481600	12	15	S8,5	11 x 39
481608	24	3	S8,5	11 x 39
481616	24	5	S8,5	11 x 39
481624	30	3	S8,5	11 x 39
481632	36	3	S8,5	11 x 39
481640	60	3	S8,5	11 x 39
481670	12	5	S8,5	11 x 42
481678	24	5	S8,5	11 x 42
481708	6	10	S8,5	11 x 44
481716	12	5	S8,5	11 x 44
481724	12	10	S8,5	11 x 44
481732	24	3	S8,5	11 x 44
481740	24	5	S8,5	11 x 44
481748	24	10	S8,5	11 x 44
481756	60	5	S8,5	11 x 44
481786	6	15	S8,5	15 x 44
481794	12	10	S8,5	15 x 44
481802	12	15	S8,5	15 x 44
481810	24	3	S8,5	15 x 44
481818	24	5	S8,5	15 x 44
481826	24	15	S8,5	15 x 44
481834	24	18	S8,5	15 x 44
481842	60	3	S8,5	15 x 44
481850	60	5	S8,5	15 x 44

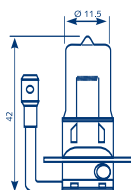
CAR LAMPS



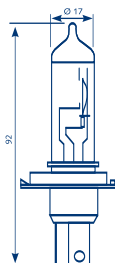
Car Lamp Halogen H1				
Cat. no.	Voltage	Watts	Cap	d x l mm
483204	12	55	P14,5S	9 x 59
483212	24	70	P14,5S	9 x 59



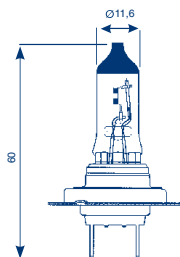
Car Lamp Halogen H2				
Cat. no.	Voltage	Watts	Cap	d x l mm
483224	12	55	X511	9 x 31
483232	24	70	X511	9 x 31



Car Lamp Halogen H3				
Cat. no.	Voltage	Watts	Cap	d x l mm
483244	6	55	PK22S	11 x 42
483252	12	55	PK22S	11 x 42
483260	24	70	PK22S	11 x 42

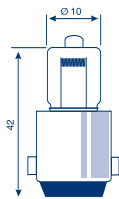


Car Lamp Halogen H4				
Cat. no.	Voltage	Watts	Cap	d x l mm
483274	12	60/55	P43T	17 x 75
483282	12	100/90	P43T	17 x 75
483290	24	75/70	P43T	17 x 75



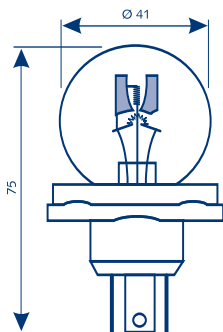
Car Lamp Halogen H7				
Cat. no.	Voltage	Watts	Cap	d x l mm
483304	12	55	PX26D	11,6 x 60
483312	24	70	PX26D	11,6 x 60

CAR LAMPS



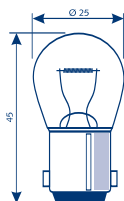
Car Lamp Halogen Ba15s

Cat. no.	Voltage	Watts	Cap	d x l mm
483370	12	55	Ba15s	10 x 42
483376	24	70	Ba15s	10 x 42



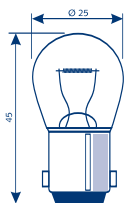
Car Lamp P45T

Cat. no.	Voltage	Watts	Cap	d x l mm
483424	12	45/40	P45T	41 x 75
483432	24	55/50	P45T	41 x 75



Car Lamp Ba15d

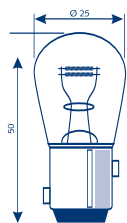
Cat. no.	Voltage	Watts	Cap	d x l mm
483512	6	21	Ba15d	25 x 47
483530	12	21	Ba15d	25 x 47
483538	12	35	Ba15d	25 x 47
483550	24	21	Ba15d	25 x 47
483562	24	45	Ba15d	35 x 60
483580	32	25	Ba15d	25 x 47



Car Lamp Ba15s

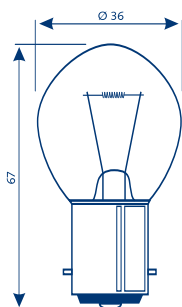
Cat. no.	Voltage	Watts	Cap	d x l mm
483626	12	15	Ba15s	25 x 47
483630	12	21	Ba15s	25 x 47
483638	12	35	Ba15s	35 x 60
483644	12	45	Ba15s	35 x 60
483650	24	21	Ba15s	25 x 47
483654	24	25	Ba15s	25 x 47
483662	24	45	Ba15s	35 x 60
483670	28	26	Ba15s	25 x 47
483686	40	8	Ba15s	25 x 47
483692	45	15	Ba15s	25 x 47

CAR LAMPS



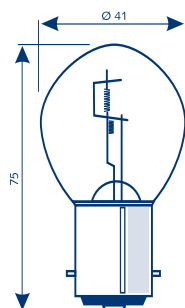
Car Lamp Bay15d

Cat. no.	Voltage	Watts	Cap	d x l mm
483812	6	21/5	Bay15d	25 x 47
483820	12	21/5	Bay15d	25 x 47
483828	24	21/5	Bay15d	25 x 47



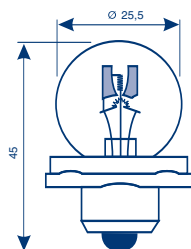
Car Lamp Ba20s

Cat. no.	Voltage	Watts	Cap	d x l mm
483924	12	35	Ba20s	36 x 67
483934	24	35	Ba20s	36 x 67
483940	24	45	Ba20s	36 x 67
483946	24	50	Ba20s	36 x 67



Car Lamp Ba20d

Cat. no.	Voltage	Watts	Cap	d x l mm
483982	12	45/40	Ba20d	36 x 70
483990	24	45/40	Ba20d	36 x 70



Car Lamp P26s

Cat. no.	Voltage	Watts	Cap	d x l mm
484024	6	15	P26s	25,5 x 45
484032	12	15	P26s	25,5 x 45

CAR LAMPS



Car Lamp replacement lamp-sets		
Cat. no.	Voltage	
484112	12	Duplo P45T set
484124	24	Duplo P45T set
484212	12	Halogen H4 set
484224	24	Halogen H4 set

LOW VOLTAGE VESSEL LAMPS

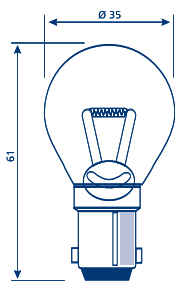


Fig. 1

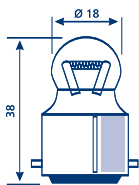


Fig. 2

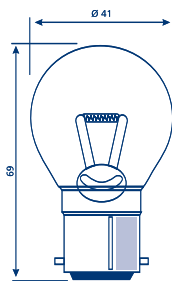
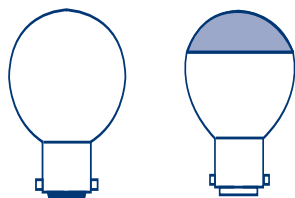


Fig. 3

Vessel Lamps Clear

Cat. no.	Philips Cat. no.	Voltage	Watts	Cap	d x l mm	Fig.
	643102	24	25	Ba15d	35 x 60	1
485112		12	5	B22	18 x 38	2
485124		12	10	B22	18 x 38	2
485136		12	10	B22	40 x 61	3
485160		24	5	B22	18 x 38	2
485172		24	10	B22	18 x 38	2
485180		24	5	B22	40 x 61	3
	643114	24	10	B22	40 x 61	3
407104	643120	24	15	B22	40 x 61	3
407106		24	25	B22	40 x 61	3

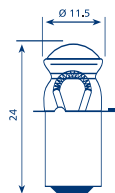
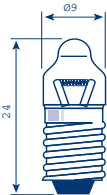
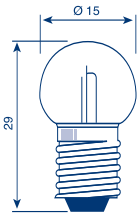
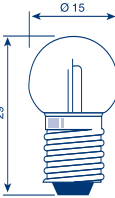
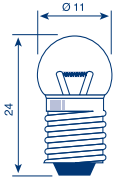
SPOTLIGHT LAMPS



Philips Spotlight Lamps

Philips Cat. no.		Voltage	Watts	Cap	d x l mm	
643226		24	35	Ba15d	35 x 60	Clear
643232		24	35	Ba15d	35 x 60	Top-mirror

FLASHLIGHT LAMPS



Flashlight Lamps E10

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490116	2,5	300	E10		11 x 24
490124	3,8	300	E10		11 x 24
490132	4	550	E10	Xenon	15 x 29
490140	4,8	300	E10		11 x 24
490148	6	50	E10	FA	11 x 24
490156	6	450	E10	FV	15 x 29

Flashlight Lamps E10 Flashing-type

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490216	2,5	300	E10	Flashing	15 x 29
490240	4,8	400	E10	Flashing	15 x 29
490256	6	500	E10	Flashing	15 x 29

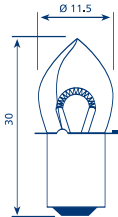
Flashlight Lamps Lens-end E10

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490312	1,1	220	E10	Lens-end	9 x 24
490314	2,2	400	E10	Lens-end	9 x 24
490316	2,5	300	E10	Lens-end	9 x 24
490324	3,7	300	E10	Lens-end	9 x 24
490334	4,5	300	E10	Lens-end	9 x 24

Flashlight Lamps Lens-end P13,5s

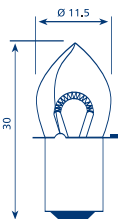
Cat. no.	Voltage	mA	Cap	Type	d x l mm
490358	2,5	300	P13,5s	Lens-end	11 x 24
490366	3,7	300	P13,5s	Lens-end	11 x 24

FLASHLIGHT LAMPS



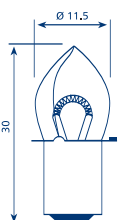
Flashlight Prefocus Lamps P13,5s

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490416	2,4	500	P13,5s	PR2	11 x 30
490418	2,5	300	P13,5s	PR6	11 x 30
490424	3,6	500	P13,5s	PR3	11 x 30
490426	3,7	300	P13,5s	PR7	11 x 30
490434	4,8	500	P13,5s	PR13	11 x 30
490442	6	500	P13,5s	PR12	11 x 30
490450	7,2	500	P13,5s	PR18	11 x 30
490458	9	500	P13,5s	PR20	11 x 30



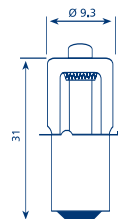
Flashlight Prefocus Lamps P13,5s Krypton

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490516	2,4	750	P13,5s	KPR-102	11 x 30
490524	3,6	750	P13,5s	KPR-103	11 x 30
490526	3,6	1000	P13,5s		11 x 30
490534	4,8	750	P13,5s	KPR-113	11 x 30
490542	6	500	P13,5s	KPR-112	11 x 30
490550	7,2	500	P13,5s	KPR-118	11 x 30



Flashlight Prefocus Lamps P13,5s Xenon

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490666	2,4	1300	P13,5s	XPR-2	11 x 30
490674	3,6	850	P13,5s	XPR-3	11 x 30
490684	4,8	850	P13,5s	XPR-13	11 x 30
490690	6	850	P13,5s	XPR-12	11 x 30



Flashlight Lamps PX13,5s Halogen

Cat. no.	Voltage	mA	Cap	Type	d x l mm
490616	2,8	850	PX13,5s	HPR-52	9 x 31
490624	3,75	750	PX13,5s	HPR-41	9 x 31
490628	4	850	PX13,5s	HPR-53	9 x 31
490630	4	1000	PX13,5s	HMP-09	9 x 31
490634	4,8	500	PX13,5s	HPR-62	9 x 31
490640	6	670	PX13,5s		9 x 31
490650	7,2	850	PX13,5s		9 x 31

FLASHLIGHT LAMPS



Flashlight Lamps for MAG-LITE				
Cat. no.	Voltage		Cap	Type
490516	2,4	for Mag-lite 2C & 2D	P13,5s	KPR-102
490524	2,6	for Mag-lite 3C & 3D	P13,5s	KPR-103
490534	4,8	for Mag-lite 4C & 4D	P13,5s	KPR-113
490542	6	for Mag-lite 5C & 5D	P13,5s	KPR-112
490550	7,2	for Mag-lite 6C & 6D	P13,5s	KPR-118
490716	1,2	for Solitaire Mag-lite AAA	Bi-pin	LK3A001
490732	2,4	for Micro AAA& Mini AAMag-lite AA	Bi-pin	LM2A001
490740	6	for Mag charger halogen	Bi-pin	LR0001

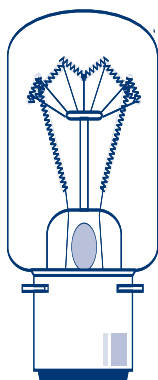
PELI PRODUCTS

Flashlight Lamps for PELICAN LANTARN		
Cat. no.		Type
490816	Lampmodule for MityLite 1900/1950	1904
490820	Lampmodule for MityLite 2AA and Plus 2AA 2300/2340	2304
490818	Lampmodule for Super PeliLite and Pocket SabreLite 1800/1820	1804
490824	Lampmodule for Super SabreLite 2000	2004
490826	Lampmodule for Super SabreLite 2000Z1	2004Z1
490832	Xenon Lampmodule for VersaBrite 2250	2204
490836	Xenon Lampmodule for StealthLite 2400/2450	2404
490842	Lampmodule for Heads-Up 2620	2624
490844	Lampmodule for Heads-Up 2640	2624
490846	Lampmodule for Heads-Up 2660	2624
490856	Xenon Lampmodule for Black Knight M9/7050	7054
490864	Xenon Lampmodule for Black Knight M11/8050	8054

NAVIGATION LAMPS



Bay15d

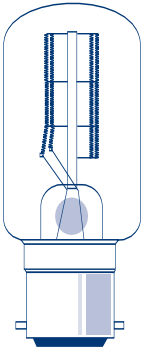


P28s

Navigation Lamps Bay15d						
CALEX	Cheap					
Cat. no.	Cat. No.	Voltage	Cd	Watts	d x l mm	approved
500120		12	12-20	10	25 x 70	
500128		12	40	25	25 x 70	
500136		24	12-20	10	25 x 70	
500144		24	40	25	25 x 70	D.G.S.M.
	500146	28	40	25	25 x 70	
500152		110	40	25	45 x 70	
500160		220	40	25	45 x 70	
500164		220	40	25	25 x 70	

Navigation Lamps P28s						
CALEX	Cheap					
Cat. no.	Cat. No.	Voltage	Cd	Watts	d x l mm	approved
500232		24	60	40	38 x 108	D.G.S.M.
500242		48	60	65	38 x 108	
500252		115	60	60	38 x 108	D.G.S.M.
	500258	230	60	65	38 x 108	
500262		230	60	65	38 x 108	D.G.S.M.

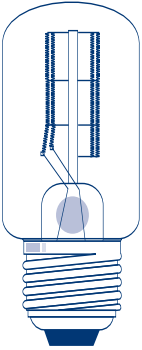
NAVIGATION LAMPS



Navigation Lamps B22d						
CALEX	Cheap			Approx.		
Cat. no.	Cat. no.	Voltage	Cd	Watts	d x l mm	
500312	501312	24	13	40	38 x 100	
500318	501318	24	26	60	38 x 100	
500324		24	35		38 x 100	
500330		24	50	50	38 x 100	
500336	501336	24	65	80	38 x 110	
500342		48	65	80	38 x 110	
500348	501348	110	13	40	38 x 100	
500354	501354	110	26	60	38 x 100	
500360	501360	110	65	80	38 x 110	
500378	501378	220	13	40	38 x 100	
500384	501384	220	26	60	38 x 100	
500390		220	50		38 x 100	
500396	501396	220	65	80	38 x 110	

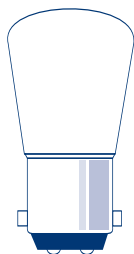
Navigation Lamps B22d						
Cat. no.	Cheap			Approx.		
Cat. no.	Cat. no.	Voltage	Cd	Watts	d x l mm	
500366		110		40	58 x 122	squirrelcage
500372		110		60	63 x 142	squirrelcage
500426		220		40	58 x 122	squirrelcage
500428		220		60	63 x 142	squirrelcage
500436	500402	220	35	55	38 x 110	Soren Madsen
500438	500408	220	65	85	45 x 128	Soren Madsen

NAVIGATION LAMPS



Navigation Lamps E27						
CALEX	Cheap			Approx.		
Cat. no.	Cat. no.	Voltage	Cd	Watts		d x l mm
500512	501512	24	13	40		38 x 100
500518	501518	24	26	60		38 x 100
500548	501548	110	13	40		38 x 100
500554	501554	110	26	60		38 x 100
500560	501560	110	65	80		38 x 110
500578	501578	220	13	40		38 x 100
500584	501584	220	26	60		38 x 100
500596	501596	220	65	80		38 x 110

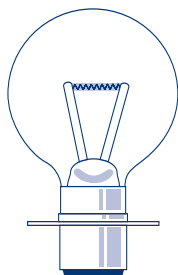
CURRENT INDICATOR LAMPS



For use in series with navigation lamps

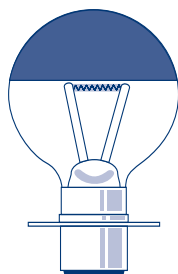
Cat. no.	Ampere	Cap	d x l mm
503120	0,09-0,15	B22d	27 x 54
503124	0,13-0,22	B22d	27 x 54
503128	0,18-0,31	B22d	27 x 54
503132	0,28-0,45	B22d	27 x 54
503136	0,40-0,65	B22d	27 x 54
503140	0,58-0,95	B22d	27 x 54
503144	0,85-1,40	B22d	27 x 54
503148	0,90-1,00	B22d	27 x 54
503152	1,25-2,00	B22d	27 x 54
503156	1,80-3,00	B22d	27 x 54
503220	0,09-0,15	E14	16 x 54
503224	0,13-0,22	E14	16 x 54
503228	0,18-0,31	E14	16 x 54
503232	0,28-0,45	E14	16 x 54
503236	0,40-0,65	E14	16 x 54
503240	0,58-0,95	E14	16 x 54
503244	0,85-1,40	E14	16 x 54
503252	1,25-2,00	E14	16 x 54
503256	1,80-3,00	E14	16 x 54
503260	2,70-4,50	E14	16 x 54
503320	0,09-0,15	E27	27 x 54
503324	0,13-0,22	E27	27 x 54
503328	0,18-0,31	E27	27 x 54
503332	0,28-0,45	E27	27 x 54
503336	0,40-0,65	E27	27 x 54
503340	0,58-0,95	E27	27 x 54
503344	0,85-1,40	E27	27 x 54

ALDIS / NIFE SIGNALLING LAMPS



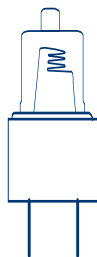
Aldis Lamp Clear P15d

Cat. no.	Ampere	Watts	d x l mm
504210	12	25	40 x 60



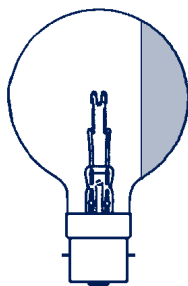
Aldis Lamp Top-mirror P15d

Cat. no.	Ampere	Watts	d x l mm
504250	12	60	40 x 60
504258	24	60	40 x 60



Aldis Lamp Halogen G6,35 for Sanshin

Cat. no.	Ampere	Watts	d x l mm
504270	12	60	10 x 44
504278	24	60	10 x 44



Nife Signalling Lamps Ba20d with side-mirror

Cat. no.	Ampere	Watts	d x l mm
504310	12	100	60 x 85
504318	24	100	60 x 85
504326	110	100	60 x 85
504334	220	100	60 x 85

GYRO COMPASS / REPEATER LAMPS



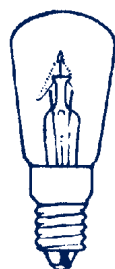
Ball-lamp E14				
Cat. no.	Voltage	Watts		d x l mm
505110	24	3	frosted	18 x 35



Ball-lamp Anschütz Ba15s				
Cat. no.	Voltage	Watts		d x l mm
505132	3	3	clear	18 x 35
505136	3	3	black-top	18 x 35



Sperry-lamps E10 clear/red				
Cat. no.	Voltage	Watts		d x l mm
505152	45	8	clear	16 x 45
505156	45	8	red	16 x 45
505162	70	8	clear	16 x 45
505166	70	8	red	16 x 45



Sallog-lamp M3,5				
Cat. no.	Voltage	Watts		d x l mm
505172	60	7	clear	10 x 48



HALOGEN LAMPS



Halogen Lamps with double-ended R7s						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
510120		30	375	R7s		11 x 78
510132		28	200	R7s		11 x 118
510140		42	300	R7s		11 x 118
510148		42	400	R7s		11 x 118
510156		42	500	R7s		11 x 118
510240		130	300	R7s		11 x 118
510248		130	500	R7s		11 x 118
510272		130	1000	R7s		11 x 189
510288		130	1500	R7s		11 x 254
510300	650300	240	60	R7s		11 x 78
510308	650308	240	100	R7s		11 x 78
510316	650316	240	150	R7s		11 x 78
510324	650324	240	200	R7s		11 x 78
510408		240	100	R7s		11 x 118
510416	650416	240	150	R7s		11 x 118
510424	650424	240	200	R7s		11 x 118
510440	650440	240	300	R7s		11 x 118
510448	650448	240	500	R7s		11 x 118
						continue on next page

HALOGEN LAMPS



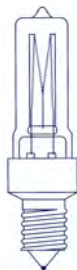
Halogen Lamps with double-ended R7s/FA4						
CALEX	Philips				continuation	
Cat. no.	Cat. no.	Voltage	Watts	Cap		d x l mm
510456		240	500	R7s		11 x 189
510464	650464	240	750	R7s		11 x 189
510472	650472	240	1000	R7s		11 x 189
510480		240	1000	R7s		11 x 254
510488	650488	240	1500	R7s		11 x 254
510496		240	2000	R7s		11 x 334
510604	650604	240	2000	FA4		11 x 335

REINFORCED HALOGEN LAMPS



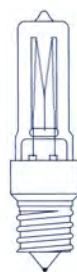
Reinforced Halogen Lamps with double-ended R7s					
Cat. no.	Voltage	Watts	Cap	d x l mm	
510700	240	60	R7s	11 x 78	
510708	240	100	R7s	11 x 78	
510716	240	150	R7s	11 x 78	
510808	240	100	R7s	11 x 118	
510816	240	150	R7s	11 x 118	
510824	240	200	R7s	11 x 118	
510840	240	300	R7s	11 x 118	
510848	240	500	R7s	11 x 118	
510872	240	1000	R7s	11 x 189	
510888	240	1500	R7s	11 x 254	

HALOGEN LAMPS



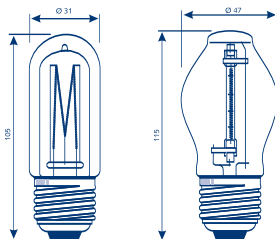
Halogen Lamps E11

CALEX				
Cat. no.	Voltage	Watts	Cap	d x l mm
512120	110/130	100	E11 x 24	10 x 63
512128	110/130	150	E11 x 18	12 x 68
512136	110/130	250	E11 x 18	12 x 80
512144	110/130	500	E11 x 18	14 x 87
512150	220/240	250	E11 x 18	12 x 80
512158	220/240	500	E11 x 18	14 x 87



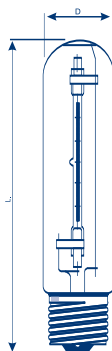
Halogen Lamps E14

CALEX				
Cat. no.	Voltage	Watts	Cap	d x l mm
512180	220/240	100	E14 x 18	14 x 75
512188	220/240	150	E14 x 18	14 x 75
512196	220/240	250	E14 x 18	14 x 75



Halogen Lamps Double envelope (Iode) E27

CALEX				
Cat. no.	Voltage	Watts	Cap	d x l mm
512212	110/130	250	E27	31 x 105
512232	220/230	100	E27	47 x 115
512240	220/230	150	E27	47 x 115
512248	220/230	250	E27	31 x 105



Halogen Lamps Double envelope (Iode) E40

CALEX	Philips			
Cat. no.	Cat. no.	Voltage	Watts	d x l mm
512318		110/130	500	42 x 200
512324		110/130	1000	42 x 260
512346	652346	220/230	500	42 x 200
512354	652354	220/230	1000	42 x 260
	652362	220/230	2000	38 x 295

HALOGEN LAMPS



G9



Ba15d



E27

Halopin Lamps G9						
CALEX	Osram	Osram				
Cat. no.	Cat. no.	Type. no.	Voltage	Watts		d x l mm
512430	820430	66625H	230	25	clear	14 x 51
512436	820436	66640H	230	40	clear	14 x 51
512530	820530	66625M	230	25	frosted	14 x 51
512536	820536	66640M	230	40	frosted	14 x 51
512442			230	50	frosted	14 x 51

Philips Halotone Lamps Ba15d						
Cat. no.	Philips					
Cat. no.	Type. no.		Voltage	Watts		d x l mm
652524	12120		230	75	clear	16 x 86
652530	12119		230	100	clear	16 x 86
652536	12118		230	150	clear	16 x 86
652544	12123		230	75	frosted	16 x 86
652550	12122		230	100	frosted	16 x 86
652556	12121		230	150	frosted	16 x 86

Philips Halotone Lamps E27						
Cat. no.	Philips					
Cat. no.	Type. no.		Voltage	Watts		d x l mm
652582	13947		230	60	clear	47 x 109
652584	13645		230	100	clear	47 x 109
652586	13649		230	150	clear	47 x 109
652588	13949		230	60	opal	47 x 109
652590	13646		230	100	opal	47 x 109
652592	13650		230	150	opal	47 x 109

HALOGEN LAMPS



Halogen Lamps with GZ/GU10 base						
CALEX	Philips					
Cat. no.	Cat. no.	Voltage	Watts	Beam spread	Type	Cap
513080		130	35	38°	alumin.	GU10
513096		130	50	38°	alumin.	GU10
513106		230	20	38°	alumin.	GU10
513146		230	35	38°	alumin.	GU10
	653170	230	50	25°	dichroic	GZ10
	653176	230	50	50°	dichroic	GZ10
	653210	230	50	20°	alumin.	GU10
513216		230	50	38°	alumin.	GU10
	653216	230	50	40°	alumin.	GU10
513228			75	38°	alumin.	GU10



Philips Halogen Reflector Lamps E27						
Philips	MasterPAR electronic			Beam spread		
Cat. no.		Voltage	Watts			d x l mm
653240		230	20	10°		64 x 86
653246		230	20	25°		64 x 86

HALOGEN LAMPS



PAR16



PAR20

Halogen Lamps E14 PAR16 50 x 85 mm

CALEX	Philips				Beam	
Cat. no.	Cat. no.		Voltage	Watts	spread	Type
513234			130	35	30°	flood
513254			130	50	30°	flood
513270			230	35	10°	spot
513274			230	35	30°	flood
	653274		230	40	25°	flood

Halogen Lamps E27 PAR20 65 x 88 mm

CALEX	Philips	Sylvania			Beam	
Cat. no.	Cat. no.	Cat. no.	Voltage	Watts	spread	Type
513324			230	35	10°	spot
513328			230	35	30°	flood
513336	653336	853336	230	50	10°	spot
513340	653340	853340	230	50	30°	flood
513348			230	75	10°	spot
513352			230	75	30°	flood

HALOGEN LAMPS



PAR30S



PAR38

Halogen Lamps E27 PAR30S 97 x 88 mm

CALEX	Philips	Sylvania			Beam	
Cat. no.	Cat. no.	Cat. no.	Voltage	Watts	spread	Type
513426			230	50	10°	spot
513430			230	50	30°	flood
513438	653438	853438	230	75	10°	spot
513442	653442	853442	230	75	30°	flood
513450		853450	230	100	10°	spot
513454	653454	853454	230	100	30°	flood

Halogen Lamps E27 PAR38 122 x 136 mm

CALEX	Philips	Sylvania			Beam	
Cat. no.	Cat. no.	Cat. no.	Voltage	Watts	spread	Type
513520	653520	853520	230	75	10°	spot
513524	653524	853524	230	75	30°	flood
513532	653532	853532	230	100	10°	spot
513536	653536	853536	230	100	30°	flood
513544			230	150	10°	spot
513548			230	150	30°	flood

HALOGEN LAMPS



G4



GY6,35

Halogen Burner G4 9 x 33 mm

CALEX Cat. no.	Philips Cat. no.	Philips Type no.	Voltage	Watts	Cap	Type
514120			6	10	G4	axial
514128			6	20	G4	axial
514130	654130	13283	12	5	G4	transversal
514136	654136	13284	12	10	G4	axial
514140			12	10	G4	axial*
514144	654144	13078	12	20	G4	axial
514448	654148	13691	12	20	G4	axial*
514212			24	5	G4	axial
514228			24	10	G4	axial
514234			24	15	G4	axial
514240	654240	13091	24	20	G4	axial
	*Frosted					

Halogen Burner GY6,35 12 x 44 mm

CALEX Cat. no.	Philips Cat. no.	Philips Type no.	Voltage	Watts	Cap	Filament
	654286	13104	12	20	GY6,35	axial
	654288	13756	12	20	GY6,35	axial*
514292	654292	13103	12	35	GY6,35	axial
514294	654294	13755	12	35	GY6,35	axial*
514310	654310	13102	12	50	GY6,35	axial
514312	654312	13754	12	50	GY6,35	axial*
	654316	13101	12	75	GY6,35	axial
	654328	13083	12	100	GY6,35	transversal
514336	654336	13100	12	100	GY6,35	axial
514378			24	35	GY6,35	axial
514386	654386	13090	24	50	GY6,35	axial
514394			24	75	GY6,35	axial
514402	654402	13089	24	100	GY6,35	axial
514410			24	150	GY6,35	axial
	*Frosted					

HALOGEN LAMPS



MR11



MR16

Halogen Reflector Lamps GZ/GU4 MR11 Ø35 mm Closed						
CALEX	Philips	Philips			Beam	ANSI
Cat. no.	Cat. no.	Type no.	Voltage	Watts	spread	code
515512			6	5	30°	
514630	654630	14624	12	20	10°	FTB
514636	654636	14625	12	20	30°	FTD
514650	654650	14626	12	35	10°	FTE
514656	654656	14627	12	35	30°	FTH
515210			28	20	30°	
515214			28	35	30°	

Halogen Reflector Lamps GU/GX5,3 MR16 Ø50 mm Closed						
CALEX	Philips	Philips			Beam	ANSI
Cat. no.	Cat. no.	Type no.	Voltage	Watts	spread	code
515298	655298	14610	12	20	10°	ESX
515304	655304	14611	12	20	24°	BBF
515310	655310	14612	12	20	36°	BAB
	655314	14613	12	20	60°	
515318	655318	14614	12	35	10°	FRB
515324	655324	14615	12	35	24°	FRA
515330	655330	14616	12	35	36°	FMW
	655334	14617	12	35	60°	
515338	655338	14618	12	50	10°	EXT
515344	655344	14619	12	50	24°	EXZ
515350	655350	14620	12	50	36°	EXN
	655356	14621	12	50	60°	FNV
515420			24	20	36°	
515430			24	35	36°	
515440			24	50	36°	
515452			28	20	36°	

HALOGEN LAMPS



Philips Halogen Reflector Lamps GU/GX5,3 MR16 Ø50 mm Closed

Philips	Philips Masterline ES				Beam	
Cat. no.	Type no.		Voltage	Watts	spread	
655506	18132		12	20	8°	
655512	18133		12	20	36°	
655518	18134		12	30	8°	
655524	18135		12	30	24°	
655530	14536		12	30	36°	
655536	18137		12	30	60°	
655540	18138		12	35	8°	
655546	18139		12	35	24°	
655552	18140		12	35	36°	
655558	18141		12	35	60°	
655564	18142		12	45	8°	
655570	18143		12	45	24°	
655576	18144		12	45	36°	
655582	18145		12	45	60°	



Philips Halogen Reflector Lamps GU/GX5,3 MR16 Ø50 mm Closed

Philips	Philips Diamondline				Beam	
Cat. no.	Type no.		Voltage	Watts	spread	
655604	14656		12	35	10°	
655608	14658		12	35	24°	
655612	14659		12	35	36°	
655616	14668		12	50	10°	
655620	14670		12	50	24°	
655624	14671		12	50	36°	

HALOGEN LAMPS



G53



Ba15d-38mm



Ba15d-58mm

Philips Halogen Lamps G53 Ø111 mm Closed

Philips Cat. no.	Philips Aluline Pro 111 Type no.		Voltage	Watts	Beam spread	
655760	14634		12	50	8°	
655766	14635		12	50	24°	
655772	14641		12	75	8°	
655778	14642		12	75	24°	
655784	14644		12	100	8°	
655790	14645		12	100	24°	

Philips Halogen Reflector Lamps Ba15d Ø38 mm Closed

Philips Cat. no.	Philips Type no.	Voltage	Watts	Beam spread		ANSI code
655820	6424	6	15	6°	clear	BGA
655850	6433	12	20	6°	clear	GBD
655856	6434	12	20	18°	clear	GBE
655862	6435	12	20	32°	clear	GBF
655858	6434FR	12	20	18°	frosted	
655864	6435FR	12	20	32°	frosted	

Philips Halogen Reflector Lamps Ba15d Ø58 mm Closed

Philips Cat. no.	Philips Type no.	Voltage	Watts	spread	Beam	ANSI code
655920	6425	6	15	4°	clear	GBB
655926	6426	6	15	14°	clear	GBC
655932	6429	6	35	6°	clear	GBG
655938	6430	6	35	14°	clear	GBH
655950	6438	12	50	10°	clear	GBJ
655956	6439	12	50	25°	clear	GBK
655958	6439FR	12	50	22°	frosted	

HALOGEN LAMPS



R7s

Philips Halogen Lamps with double-ended R7s

Philips Cat. no.	Accentline - cheap alternative		Voltage	Watts	Cap	d x l mm
656112	200T3QC		230	300	R7s	11 x 118
656120	300T3QC		230	300	R7s	11 x 118
656128	500T3QC		230	500	R7s	11 x 118



G4

GY6.35

Philips Halogen Burner G4/GY6.35

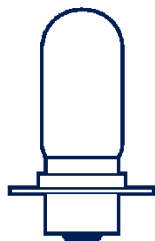
Philips Cat. no.	Accentline - cheap alternative		Voltage	Watts	Cap	d x l mm
656220	14565		12	10	G4	9 x 31
656230	14566		12	20	G4	9 x 31
656240	14567		12	50	GY6.35	12 x 44



Philips Halogen Reflector Lamps GU/GX5.3 MR16 Ø50 mm Closed

Philips Cat. no.	Accentline - cheap alternative		Voltage	Watts	Beam spread	ANSI code
656312	14595 w	18082	12	20	10°	ESX
656320	14596 w	18079	12	20	36°	BAB
656332	14597 w	18083	12	35	10°	FRB
656340	14598 w	18080	12	35	36°	FMW
656352	14599 w	18084	12	20	10°	EXT
656360	14600 w	18081	12	50	36°	EXN

PROJECTION / SEARCHLIGHT LAMPS



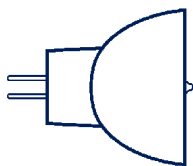
Exciter Lamps P15s				
Cat. no.	Voltage	Ampere	ANSI code	d x l mm
520130	4	0,75	BRS	16 x 55
520142	10	5	BXN	25 x 75
520150	12	0,55		25 x 49
520156	12	1,15		25 x 49
520162	12	1,35		25 x 49
520170	12	2		25 x 49
520178	12	2,03		25 x 49
520186	12	3,05		35 x 60



Lamps for Smoke-indicators				
Cat. no.	Voltage	Ampere	Cap	d x l mm
Clear				
520240	110	50	Ba15d	25 x 75
520248	110	50	Ba15s	25 x 75
Black-top				
520256	110	50	Ba15s	25 x 75
520264	110	50	P15s	25 x 75

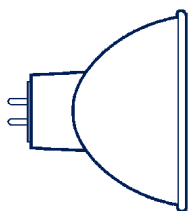


PROJECTION / SEARCHLIGHT LAMPS



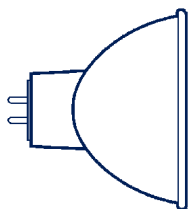
Halogen Projection Reflector Lamps GZ4 Ø35 mm

Cat. no.	Voltage	Watts		ANSI code
520312	13,8	25		FKZ
520324	14	35		



Halogen Projection Reflector Lamps GY5.3 Ø50 mm

Cat. no.	Voltage	Watts		ANSI code
520348	36	340		ERV
520360	82	250		EVW
520372	82	360		ENX
520384	82	410		FXL



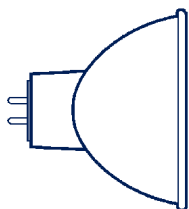
Halogen Projection Reflector Lamps GX5.3 MR16 Ø50 mm

Cat. no.	Voltage	Watts		ANSI code
520408	13,8	50		EPZ/DJT
520420	13,8	85		DED
520432	14,5	90		EPX/EPV
520444	19	80		DDM
520456	20	150		DDL
520468	21	80		DDS
520480	21	150		EKE
520492	21	150		ELD/EJN
520504	21	150		EJM
520516	24	200		EJL
520528	24	200		EWf
520540	24	250		ELC
520552	82	250		EXY
520564	82	300		FHS
520576	82	300		EXR
520588	82	300		EXW

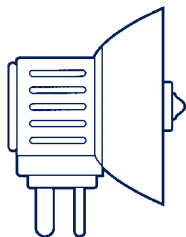
PROJECTION / SEARCHLIGHT LAMPS



Halogen Projection/Searchlight Lamps G6.35				
Cat. no.	Voltage	Watts	ANSI code	d x l mm
520612	12	50	BRL	12 x 44
520624	15	150	EVB/BRJ	12 x 44
520636	24	100		12 x 44
520648	24	150	FCS	14 x 50
520660	24	150	FDV	14 x 50
520672	24	250		13 x 53
520684	24	250	EHJ	14 x 55
520696	24	275	FNT	14 x 55
520708	36	400	EVD	18 x 60
520732	240	300	DRA	18 x 50



Halogen Projection Reflector Lamps GZ6.35 Ø50 mm				
Cat. no.	Voltage	Watts		ANSI code
520756	8	80		EFM
520768	12	75		EFN
520780	12	100		EFP
520792	15	150		EFR



Halogen Projection Reflector Lamps GX7.92 Ø50 mm				
Cat. no.	Voltage	Watts		ANSI code
520816	16	50		ELS
520828	24	250		EMM/EKS

PROJECTION / SEARCHLIGHT LAMPS



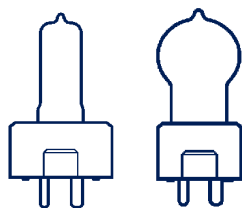
Halogen Searchlight Lamps G9.5				
Cat. no.	Voltage	Watts	Type	d x l mm
520852	240	1000	CP77	22 x 101



Halogen Searchlight Lamps GX9.5				
Cat. no.	Voltage	Watts	Type	d x l mm
520876	120	1000	T11	35 x 105
520888	240	650	T12	23 x 105
520900	230	1000	T11	35 x 105

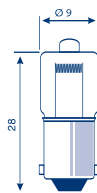


Halogen Projection/Searchlight Lamps GY9.5				
Cat. no.	Voltage	Watts	ANSI Code	d x l mm
521008	120	600	BHC/DYS	22 x 63
520936	240	400	FSY	22 x 75
520948	240	500	FRJ	23 x 85
520960	220	800		22 x 86
520972	230	900	DZJ	22 x 87



Halogen Projection/Searchlight Lamps GZ9.5				
Cat. no.	Voltage	Watts	ANSI Code	d x l mm
520996	12	100	FDT	12 x 57
521002	24	150	FDS/DZE	13 x 60
521020	240	650	DYR	22 x 60

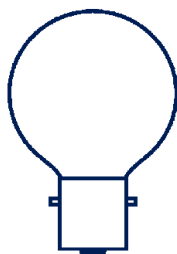
PROJECTION / SEARCHLIGHT LAMPS



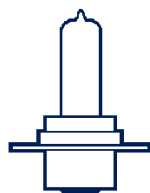
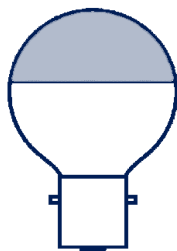
Halogen Lamps Ba9s				
Cat. no.	Voltage	Watts	Cap	d x l mm
521112	6	20	Ba9s	9 x 28
521124	12	5	Ba9s	9 x 28



Halogen Lamps Ba15d				
Cat. no.	Voltage	Watts	Cap	d x l mm
521148	24	150	Ba15d	13 x 62



Searchlight Lamps Ba20d				
Cat. no.	Voltage	Watts	ANSI code	d x l mm
Clear				
521172	24	100		50 x 71
521184	220	100		60 x 83
Top-mirror				
521196	24	100	EKV	50 x 71



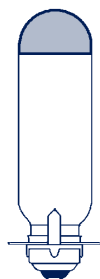
CALEX Halogen Searchlight Lamps P22s/P36s				
Cat. no.	Voltage	Watts		d x l mm
521208	12	55		10 x 52

PROJECTION / SEARCHLIGHT LAMPS



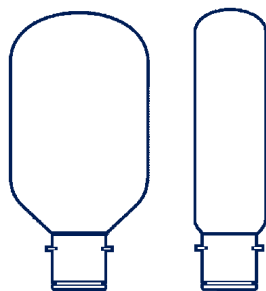
Projection Lamps with Black-top P28s

Cat. no.	Voltage	Watts	ANSI code	d x l mm
521232	120	500		33 x 126
521244	120	750	DDB/DDW	38 x 140
521256	120	1000	DFT	38 x 140



Projection Lamps with Black-top Type BH

Cat. no.	Voltage	Watts	Type	d x l mm
521280	120	1000	BH	38 x 138
521292	220	1000	BH	38 x 138



Searchlight Lamps P28s

Cat. no.	Voltage	Watts	Type	d x l mm
521316	120	500	DMX	64 x 135
521328	120	750	DDB	38 x 140
521340	240	500	375C	64 x 142
521352	240	750	6153C	38 x 140



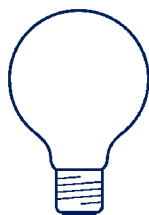
Halogen Searchlight Lamps P28s

Cat. no.	Voltage	Watts	ANSI code	d x l mm
521376	220	500	FKF	23 x 120
521388	220	650	FKL	22 x 112
521400	220	1000	FKD	35 x 123

PROJECTION / SEARCHLIGHT LAMPS



Searchlight Lamps P40s				
Cat. no.	Voltage	Watts	ANSI code	d x l mm
521424	24	400		64 x 230
521536	110	1000	DPW	64 x 230
521548	240	1000	DPW	64 x 240



Searchlight Lamps E27				
Cat. no.	Voltage	Watts	Type	d x l mm
521572	110	250	123E	81 x 120
521584	110	500	DMS	66 x 135
521596	220	250	123E	81 x 120
521608	220	500	375E	66 x 135



Searchlight Lamps E40				
Cat. no.	Voltage	Watts	Type	d x l mm
521632	24	250	H566B	39 x 109
521644	230	1000	531B	135 x 200
521656	230	1000	A1/57	66 x 240
521668	230	2000	H371B	75 x 222

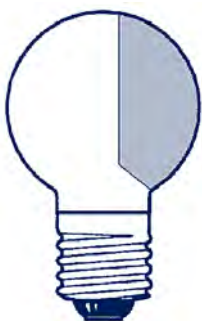


PROJECTION / SEARCHLIGHT LAMPS



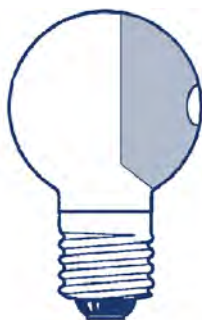
Searchlight Lamps with Top-mirror E40

Cat. no.	Voltage	Watts	Type	d x l mm
521692	24	250	566Bkv	81 x 130
521704	24	500	570Bkv	110 x 165
521716	110	500	Japanese	110 x 165
521728	110	1000	Japanese	125 x 177
521740	220	500	Japanese	125 x 170
521752	220	1000	Japanese	125 x 170
521764	220	2000	Japanese	150 x 220



Searchlight Lamps with Side-mirror E40

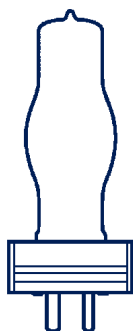
Cat. no.	Voltage	Watts	Type	d x l mm
521788	110	500	Japanese	125 x 165
521800	230	1000	Japanese	125 x 175
521812	230	1000	13129G/01	125 x 190



Searchlight Lamps with Side-mirror and hole E40

Cat. no.	Voltage	Watts	Type	d x l mm
521836	110	1000	Japanese	110 x 170
521848	220	1000	Japanese	110 x 170
521860	220	2000	Japanese	150 x 245

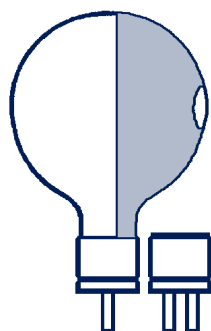
PROJECTION / SEARCHLIGHT LAMPS



Halogen Searchlight Lamps GY16				
Cat. no.	Voltage	Watts	Type	d x l mm
521872	120	2000	CP43/72	40 x 145
521884	230	2000	CP43/72	40 x 145



Halogen Searchlight Lamps G38				
Cat. no.	Voltage	Watts	Type	d x l mm
521908	120	2000	CP41/73	40 x 210
521920	120	3000	HX48	40 x 215
521932	230	2000	CP41/73	40 x 210
521944	240	3000	HX48	50 x 215



Searchlight Lamps with Side-mirror and hole G19/54				
Cat. no.	Voltage	Watts	Type	d x l mm
521968	115	2000	Japanese	150 x 260
521980	115	3000	Japanese	200 x 335
521992	220	2000	Japanese	150 x 260
522004	220	3000	Japanese	200 x 335

JAPANESE MERCURY AND SODIUM LAMPS



HF/NH



HRF/NHR



NHT

High-pressure Mercury-lamps, operating with ballast, Japanese type

Cat. no.	Type	Watts	Cap	d x l mm
550220	HF	100	E26	70 x 175
550228	HF	200	E39	90 x 240
550236	HF	250	E39	90 x 240
550244	HF	300	E39	116 x 290
550252	HF	400	E39	116 x 290
550260	HF	700	E39	150 x 370

High-pressure Mercury-lamps, operating with ballast, Japanese type with reflector

Cat. no.	Type	Watts	Cap	d x l mm
550290	HRF	200	E39	165 x 305
550298	HRF	300	E39	180 x 315
550306	HRF	400	E39	180 x 315
550314	HRF	700	E39	180 x 315
550316	HRF	700	E39	280 x 420
550324	HRF	1000	E39	280 x 420

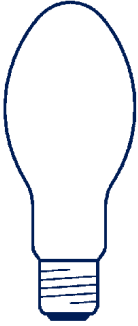
High-pressure Sodium-lamps, operating with ballast, Japanese type Clear

Cat. no.	Type	Watts	Cap	d x l mm
550350	NH	700	E39	150 x 375
550380	NHT	700	E39	55 x 330

High-pressure Sodium-lamps, operating with ballast, Japanese type with reflector

Cat. no.	Type	Watts	Cap	d x l mm
550410	NHR	400	E39	180 x 320

MERCURY LAMPS



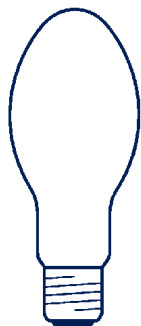
Calex High-pressure Mercury-lamps, operating with ballast

CALEX	HPM gives white light					
Cat. no.		Type		Watts	Cap	d x l mm
550516		HPM		50	E27	54 x 140
550524		HPM		80	E27	70 x 165
550532		HPM		125	E27	80 x 185
550540		HPM		250	E40	90 x 226
550548		HPM		400	E40	120 x 275

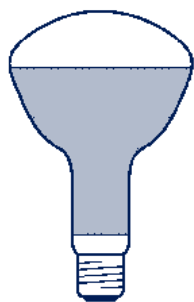
Philips High-pressure Mercury-lamps, operating with ballast

Philips	HPL-N gives white light					
Cat. no.		Type		Watts	Cap	d x l mm
660516		HPLN		50	E27	56 x 129
660518		HPLN		80	B22	71 x 153
660520		HPLN		80	B22d3	71 x 153
660524		HPLN		80	E27	71 x 155
660532		HPLN		125	E27	76 x 177
660536		HPLN		125	E40	76 x 177
660540		HPLN		250	E40	91 x 226
660548		HPLN		400	E40	122 x 290
660556		HPLN		700	E40	142 x 328
660564		HPLN		1000	E40	165 x 399

MERCURY LAMPS

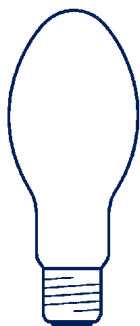


Philips High-pressure Mercury-lamps, operating with ballast						
Philips Cat. no.	HPL-Comfort gives warm light			Watts	Cap	d x l mm
		Type				
660710		HPLCOM		50	E27	56 x 129
660716		HPLCOM		80	E27	71 x 155
660722		HPLCOM		125	E27	76 x 155
660728		HPLCOM		250	E40	91 x 226
660734		HPLCOM		400	E40	122 x 290



Philips High-pressure Mercury-lamps with reflector, operating with ballast						
Philips Cat. no.		Type		Watts	Cap	d x l mm
660812		HPLRN		125	E27	127 x 187
660818		HPLRN		125	E40	163 x 260
660824		HPLRN		250	E40	163 x 260
660830		HPLRN		400	E40	179 x 300

METAL HALIDE LAMPS



MH/HPI



MH-T/HPI-T

Calex High-pressure Metal Halide-lamps, operating with ballast

CALEX						
Cat. no.	Type		Watts	Cap		d x l mm
551040	MH		250	E40	clear	90 x 225
551080	MH		400	E40	clear	120 x 284
551104	MH-T		250	E40	clear	47 x 205
551110	MH-T		400	E40	clear	47 x 265
551116	MH-T		1000	E40	clear	66 x 370

Philips High-pressure Metal Halide-lamps, operating with ballast

Philips	BU=Base up	S=Internal starter	P=Protection coating		
Cat. no.	Type	Watts	Cap		d x l mm
661040	HPIPLUS-BU	250	E40	opal	91 x 226
661044	HPIPLUS-BUP	250	E40	opal	91 x 226
661056	HPIPLUS-BU	400	E40	opal	122 x 290
661062	HPIPLUS-BUP	400	E40	opal	122 x 290
661068	HPIPLUS-BUS	400	E40	opal	122 x 290
661074	HPIPLUS-BUSP	400	E40	opal	122 x 290
661080	HPI	400	E40	opal	122 x 290
661104	HPI-T	250	E40	clear	47 x 257
661110	HPI-T	400	E40	clear	47 x 283
661116	HPI-T	1000	E40	clear	66 x 382
661122	HPI-T220V	2000	E40	clear	102 x 430
661128	HPI-T380V	2000	E40	clear	102 x 430

SODIUM LAMPS



HPS/SON



HPS-T/SON-T

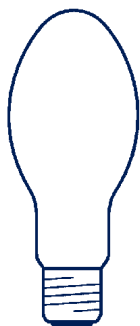
Calex High-pressure Sodium-lamps, operating with ballast

CALEX	Conventional versions					
Cat. no.	Type		Watts	Cap		d x l mm
552054	HPS		250	E40	clear	90 x 230
552060	HPS		400	E40	clear	119 x 284
552112	HPS-T		150	E40	clear	47 x 201
552118	HPS-T		250	E40	clear	47 x 243
552124	HPS-T		400	E40	clear	47 x 272
552130	HPS-T		1000	E40	clear	66 x 375

Philips High-pressure Sodium-lamps, operating with ballast

Philips	Conventional versions					
Cat. no.	Type		Watts	Cap		d x l mm
662024	SON-I		50	E27	opal	71 x 156
662030	SON-E		50	E27	opal	71 x 156
662036	SON-I		70	E27	opal	71 x 156
662042	SON-E		70	E27	opal	71 x 156
662048	SON		150	E40	opal	91 x 226
662054	SON		250	E40	opal	91 x 226
662060	SON		400	E40	opal	122 x 290
662066	SON		1000	E40	opal	166 x 400
662112	SON-T		150	E40	clear	47 x 211
662118	SON-T		250	E40	clear	47 x 257
662124	SON-T		400	E40	clear	47 x 283
662130	SON-T		1000	E40	clear	66 x 390
662162	SON-T	HG-FREE	100	E40	clear	47 x 211
662166	SON-T	HG-FREE	150	E40	clear	47 x 211
662170	SON-T	HG-FREE	250	E40	clear	47 x 257
662174	SON-T	HG-FREE	400	E40	clear	47 x 283

SODIUM LAMPS



SON



SON-T

Philips High-pressure Sodium-lamps, operating with ballast

Philips Cat. no.	Special colours Type	Watts	Cap		d x l mm
662320	SON PLUS	100	E40	opal	76 x 186
662326	SON PLUS	150	E40	opal	91 x 226
662332	SON PLUS	250	E40	opal	91 x 226
662338	SON PLUS	400	E40	opal	122 x 290
662426	SON COM	150	E40	opal	91 x 226
662432	SON COM	250	E40	opal	91 x 226
662438	SON COM	400	E40	opal	122 x 290
662530	SON-H	220	E40	opal	91 x 226
662536	SON-H	350	E40	opal	122 x 290
662708	SON-T PLUS	50	E27	clear	38 x 156
662714	SON-T PLUS	70	E27	clear	38 x 156
662720	SON-T PLUS	100	E40	clear	47 x 211
662726	SON-T PLUS	150	E40	clear	47 x 211
662732	SON-T PLUS	250	E40	clear	47 x 257
662738	SON-T PLUS	400	E40	clear	47 x 283
662744	SON-T PLUS	600	E40	clear	47 x 283
662826	SON-T COM	150	E40	clear	47 x 211
662832	SON-T COM	250	E40	clear	47 x 257
662838	SON-T COM	400	E40	clear	47 x 283
662926	SON-T DECO	150	E40	clear	47 x 211
662932	SON-T DECO	250	E40	clear	47 x 257
662938	SON-T DECO	400	E40	clear	47 x 283
662978	SON-T AGRO	400	E40	clear	47 x 283

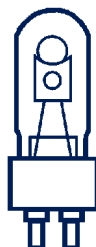
METAL HALIDE LAMPS



Rx7s



Fc2



G12

Philips Low-wattage Metal Halide-lamps, operating with ballast

Philips Cat. no.	Type		Watts	Cap		d x l mm
664020	MHN-TD		70	Rx7s		21 x 118
664028	MHN-TD		150	Rx7s		24 x 136
664036	MHN-TD		250	Fc2		25 x 163
664060	MHW-TD		70	Rx7s		21 x 118
664068	MHW-TD		150	Rx7s		24 x 136

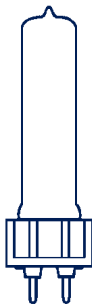
Osram Low-wattage Metal Halide-lamps, operating with ballast

Osram Cat. no.	Type	Watts	Cap		d x l mm
834036	HQITS250NDL	250	Fc2		25 x 163
834076	HQITS250WDL	250	Fc2		25 x 163
834560	HQIT70NDL	75	G12		25 x 84
834568	HQIT150NDL	150	G12		25 x 84
834580	HQIT70WDL	75	G12		25 x 84
834588	HQIT150WDL	150	G12		25 x 84
834600	HQITS70NDL	75	Rx7s		20 x 118
834608	HQITS150NDL	150	Rx7s-24		24 x 136
834620	HQITS70WDL	75	Rx7s		20 x 118
834628	HQITS150WDL	150	Rx7s-24		24 x 136

MASTERCOLOUR H.I.D. LAMPS



E27



G12



Rx7s



G8.5

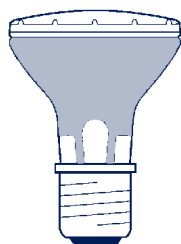


PG12-2

Mastercolour H.I.D. Lamps, operating with ballast

Philips Cat. no.	Type		Watts	Colour	Cap	d x l mm
664516	CDM-TT		70	830	E27	32 x 156
664528	CDM-TT		150	830	E40	47 x 211
664552	CDM-T		35	830	G12	20 x 101
664560	CDM-T		70	830	G12	20 x 101
664568	CDM-T		150	830	G12	20 x 110
664580	CDM-T		70	942	G12	20 x 101
664588	CDM-T		150	942	G12	20 x 110
664600	CDM-TD		70	830	Rx7s	21 x 118
664608	CDM-TD		150	830	Rx7s-24	24 x 136
664620	CDM-TD		70	942	Rx7s	21 x 118
664628	CDM-TD		150	942	Rx7s-24	24 x 136
664632	CDM-TC		35	830	G8.5	14 x 85
664638	CDM-TC		70	830	G8.5	14 x 85
664648	CDM-TP		70	830	PG12-2	32 x 149
664654	CDM-TP		150	830	PGX12-2	32 x 149
664660	CDM-TP		70	942	PG12-2	32 x 149
664668	CDM-TP		150	942	PGX12-2	32 x 149

METAL HALIDE AND SODIUM LAMPS



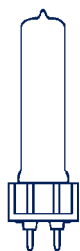
PAR20



PAR30

Mastercolour Metal Halide-lamps, operating with ballast

Pressed-glass type						
Philips						
Cat. no.	Type		Watts	Beam spread	Cap	d x l mm
664702	CDM-R	PAR20	35	10°	E27	65 x 95
664708	CDM-R	PAR20	35	30°	E27	65 x 95
664722	CDM-R	PAR30	35	10°	E27	97 x 123
664728	CDM-R	PAR30	35	30°	E27	97 x 123
664742	CDM-R	PAR30	70	10°	E27	97 x 123
664748	CDM-R	PAR30	70	40°	E27	97 x 123



SDW-TG

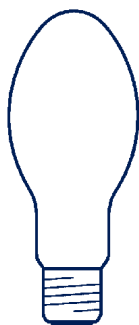


SDW-T

Philips High-pressure Sodium-lamps, operating with ballast

Philips						
Cat. no.	Type		Watts	Cap	d x l mm	
664772	SDW-TG		50	GX12-1	20 x 103	
664778	SDW-TG		100	GX12-1	20 x 110	
664812	SDW-T		35	PG12-1	14 x 149	
664818	SDW-T		50	PG12-1	17 x 149	
664824	SDW-T		100	PG12-1	20 x 149	

MERCURY VAPOUR BLENDED LAMPS



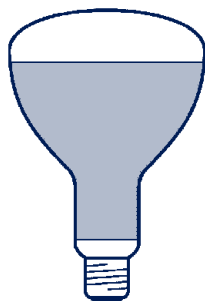
Calex Blended-light Lamps, self ballasted

CALEX	Only for AC					
Cat. no.	Type		Voltage	Watts	Cap	d x l mm
555220	BHF		110/120	100	E27	70 x 153
555224	BHF		110/120	160	E27	75 x 175
555238	BHF		110/120	300	E39	90 x 225
555242	BHF		110/120	500	E39	120 x 265
555248	BHF		110/120	750	E39	150 x 370
555324	BHF		220/240	160	E27	80 x 190
555336	BHF		220/240	250	E40	90 x 228
555338	BHF		220/240	300	E39	90 x 225
555342	BHF		220/240	500	E40	120 x 282

Philips Blended-light Lamps, self ballasted

Philips	Only for AC					
Cat. no.	Type		Voltage	Watts	Cap	d x l mm
665312	ML		220/230	160	B22	75 x 166
665318	ML		220/230	100	E27	70 x 151
665324	ML		220/230	160	E27	75 x 168
665330	ML		220/230	250	E27	90 x 211
665336	ML		220/230	250	E40	90 x 224
665342	ML		220/230	500	E40	120 x 282

MERCURY VAPOUR BLENDED LAMPS



Calex Blended-light Lamps with reflector, self ballasted

CALEX	Only for AC					
Cat. no.	Type		Voltage	Watts	Cap	d x l mm
555624	BHRF		110/120	160	E27	120 x 160
555630	BHRF		110/120	275	E27	140 x 208
555638	BHRF		110/120	300	E39	160 x 252
555642	BHRF		110/120	500	E39	181 x 252
555648	BHRF		110/120	750	E39	200 x 385
555724	BHRF		220/230	160	E27	120 x 160
555736	BHRF		220/230	275	E39	131 x 112
555742	BHRF		220/230	500	E39	181 x 252
555748	BHRF		220/230	750	E39	200 x 385

Philips Blended-light Lamps with reflector, self ballasted

Philips	Only for AC					
Cat. no.	Type		Voltage	Watts	Cap	d x l mm
665724	MLR		220/230	160	E27	127 x 187

UV GERMICIDAL LAMPS FOR STERILIZATION PURPOSES



E27



PLS



PLL



G5



G13



PIN

UV Germicidal Tubes

Cat. no.	Philips Cat. no.	Watts	Cap	Type	d x l mm
568036	668036	4	G5	TUV 4W	15 x 136
568040	668040	6	G5	TUV 6WTL	15 x 212
568044	668044	8	G5	TUV 8W	15 x 288
568048		10	G13	GL 10	25 x 330
568052	668052	15	G13	TUV 15W	26 x 437
568056	668056	30	G13	TUV 30W	26 x 894
	668060	36	G13	TUV 36W	26 x 1200
568064		39	pin	G36T5L	19 x 846
	668068	55	G13	TUV 55W HO	28 x 895
	668072	115	G13	TUV 115W VHO	40 x 1200

Philips UV Germicidal Lamps

Philips Cat. no.		Watts	Cap	Type	d x l mm
668110		6	E27	TUV 6WE27	27 x 155
668118		5	G23	TUV PLS5W	13/28 x 105
668122		9	G23	TUV PLS9W	13/28 x 167
668126		11	G23	TUV PLS11W	13/28 x 236
668132		18	2G11	TUV PLL18W	18/38 x 227
668140		36	2G11	TUV PLL36W	18/38 x 417

TRAFFIC SIGNALLING LAMPS

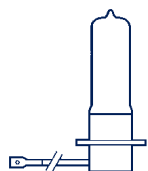


Fig. 1



Fig. 2



Fig. 3

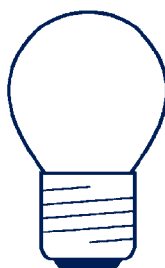


Fig. 4

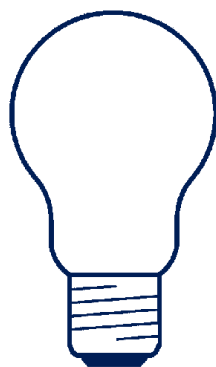


Fig. 5

Philips Halogen Traffic-signalling Lamps

Philips Cat. no.	Type	Voltage	Watts	Cap	d x l mm	Fig.
668524	6611	10	35	PKx22s	12 x 42	1
668530	13526	10	50	PKx22s	12 x 42	1
668536	13911	42	67	PKx22s	12 x 42	1
668554	6613	10	35	Ba15d	12 x 50	2
668560	13557	10	50	Ba15d	12 x 50	2
668566	13557KIT	10	50	Ba15d	12 x 50	2

Philips Traffic-signalling Lamps

Philips Cat. no.	Type	Voltage	Watts	Cap	d x l mm	Fig.
668584	13575	40	25	Ba20d	36 x 67	3
668590	13576	40	40	Ba20d	36 x 67	3
668596	13577	40	60	Ba20d	36 x 67	3
668624	6998	230	25	E27	45 x 70	4
668630	6944	230	40	E27	60 x 105	5
668636	6945	230	60	E27	60 x 105	5
668642	6943	230	75	E27	60 x 105	5
668648	6939	230	100	E27	60 x 105	5

AIRFIELD LIGHTING LAMPS

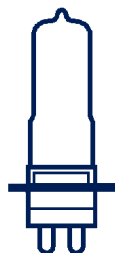


Fig. 1

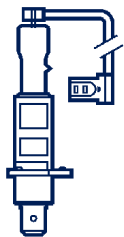


Fig. 2



Fig. 3

Philips Halogen Airfield-lighting Lamps

Philips Cat. no.	Type	Voltage	Ampere	Cap	d x l mm	Fig.
668912	6283	200	6,6	PG22	12 x 54	1
668924	6371C	100	6,6	Pk18d	9 x 60	2
668942	6312	100	6,6	Pk30d	14 x 63	3
668948	6313	200	6,6	Pk30d	14 x 65	3



Medical lamps and lamps for special purposes **on request**

ENERGY SAVING LAMPS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Calex Compact Fluorescent-lamps 2700°K, used without ballast

CALEX						
Cat. no.	Voltage	Watts	Cap	Type	d x l mm	Fig.
580216	130V AC	7	E14	T4-2U	40 x 120	1
580222	130V AC	9	E14	T4-2U	40 x 135	1
580228	130V AC	11	E14	T4-2U	40 x 140	1
580246	130V AC	5	E27	T4-2U	40 x 120	2
580258	130V AC	9	E27	T4-2U	40 x 135	2
580264	130V AC	11	E27	T4-2U	40 x 140	2
580270	130V AC	15	E27	T4-3U	48 x 133	4
580276	130V AC	20	E27	T4-3U	48 x 155	4
580282	130V AC	23	E27	T4-3U	48 x 160	4
580296	240V AC	9	B22	T4-2U	40 x 135	3
580310	240V AC	5	E14	T4-2U	40 x 120	1
580316	240V AC	7	E14	T4-2U	40 x 125	1
580322	240V AC	9	E14	T4-2U	40 x 135	1
580328	240V AC	11	E14	T4-2U	40 x 140	1
580344	240V AC	5	E27	T4-2U	40 x 120	2
580352	240V AC	7	E27	T4-2U	40 x 125	2
580358	240V AC	9	E27	T4-2U	40 x 135	2
580364	240V AC	11	E27	T4-2U	40 x 140	2
580370	240V AC	15	E27	T4-3U	48 x 133	4
580376	240V AC	20	E27	T4-3U	48 x 155	4
580382	240V AC	23	E27	T4-3U	48 x 160	4

ENERGY SAVING LAMPS



Calex Energy Saving Lamps 6200°K Daylight, used without ballast						
CALEX						
Cat. no.	Voltage	Watts	Cap	Type	d x l mm	Fig.
580082	130V AC	7	E14	T4-2U	40 x 125	1
580088	130V AC	9	E14	T4-2U	40 x 135	1
580094	130V AC	11	E14	T4-2U	40 x 140	1
580100	130V AC	5	E27	T4-2U	40 x 120	2
580106	130V AC	7	E27	T4-2U	40 x 125	2
580112	130V AC	9	E27	T4-2U	40 x 135	2
580118	130V AC	11	E27	T4-2U	40 x 140	2
580124	130V AC	15	E27	T4-3U	48 x 133	3
580130	130V AC	20	E27	T4-3U	48 x 155	3
580136	130V AC	23	B27	T4-2U	48 x 160	3
580160	230V AC	9	E14	T4-2U	40 x 135	1
580166	230V AC	11	E14	T4-2U	40 x 140	1
580172	230V AC	5	E27	T4-2U	40 x 120	2
580178	230V AC	7	E27	T4-2U	40 x 125	2
580184	230V AC	9	E27	T4-2U	40 x 135	2
580190	230V AC	11	E27	T4-2U	40 x 140	2
580196	230V AC	15	E27	T4-2U	40 x 133	3
580202	230V AC	20	E27	T4-3U	48 x 155	3
580208	230V AC	23	E27	T4-3U	48 x 160	3

ENERGY SAVING LAMPS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Calex Energy Saving Mini-Link Lamps 2700°K Warm white, used without ballast

CALEX						
Cat. no.	Voltage	Watts	Cap	Type	d x l mm	Fig.
575310	230V AC	5	E14	T3-2U	40 x 115	1
575316	230V AC	7	E14	T3-2U	40 x 115	1
575344	230V AC	5	E27	T3-2U	40 x 115	2
575352	230V AC	7	E27	T3-2U	40 x 115	2
575358	230V AC	9	E27	T3-2U	40 x 116	2
575364	230V AC	11	E27	T3-2U	40 x 125	2
575370	230V AC	15	E27	T3-3U	48 x 130	3
575376	230V AC	20	E27	T3-3U	48 x 135	3
575382	230V AC	23	E27	T3-3U	48 x 135	3

Calex Energy Savings Candle Lamps, used without ballast

CALEX						
Cat. no.	Voltage	Watts	Cap	Colour	d x l mm	Fig.
580404	230V AC	3	E14	Softline*	43 x 114	4
580416	230V AC	7	E14	Softline*	43 x 136	4
580440	230V AC	3	E27	Softline*	43 x 114	5
580458	230V AC	7	E27	Softline*	43 x 136	5
580504	230V AC	3	E14	Flame	43 x 114	4
580516	230V AC	7	E14	Flame	43 x 136	4
580540	230V AC	3	E27	Flame	43 x 114	5
580558	230V AC	7	E27	Flame	43 x 136	5

*Colour temperature 2700°K Warm white

ENERGY SAVING LAMPS



E14



E27



GLS Lamp

Calex Energy Saving Globe Lamps, used without ballast

CALEX					
Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
580710	220-240V AC	5	E14	Softline*	60/41 x 113
580716	220-240V AC	7	E14	Softline*	60/41 x 113
580722	220-240V AC	11	E14	Softline*	60/41 x 113
580746	220-240V AC	5	E27	Softline*	60/41 x 113
580752	220-240V AC	7	E27	Softline*	60/41 x 113
580758	220-240V AC	9	E27	Softline*	60/41 x 113
580764	220-240V AC	11	E27	Softline*	60/41 x 113
580776	220-240V AC	20	E27	Softline*	100/51 x 155
580782	220-240V AC	23	E27	Softline*	100/51 x 155
580810	220-240V AC	5	E14	Flame	60/41 x 113
580846	220-240V AC	5	E27	Flame	60/41 x 113
580852	220-240V AC	7	E27	Flame	60/41 x 113
580858	220-240V AC	9	E27	Flame	60/41 x 113
580888	220-240V AC	11	E14	Daylight	60/41 x 113
580898	220-240V AC	9	E27	Daylight	60/41 x 113
580904	220-240V AC	11	E27	Daylight	60/41 x 113
580910	220-240V AC	15	E27	Daylight	90/51 x 140
580916	220-240V AC	20	E27	Daylight	100/51 x 155
580922	220-240V AC	23	E27	Daylight	100/51 x 155

Calex Energy Saving GLS Lamps, used without ballast

CALEX					
Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
581210	230	9	E27	Softline*	60 x 112
581216	230	11	E27	Softline*	60 x 112
581310	230	9	E27	Flame	60 x 112
581316	230	11	E27	Flame	60 x 112
581416	230	11	E27	Daylight	60 x 112

*Colour temperature 2700°K Warm white

ENERGY SAVING LAMPS



P45



T45



T30



B37



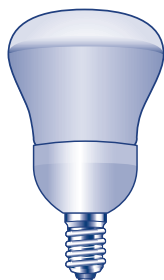
BXS37

Calex Energy Saving Ultra Slim Spherical Lamps, used without ballast

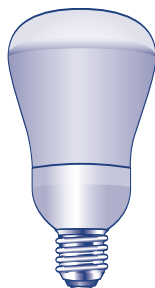
CALEX						
Cat. no.	Voltage	Watts	Cap	Type	d x l mm	Fig.
575420	230	5	E14	P45	Softline*	45 x 91
575422	230	7	E14	P45	Softline*	45 x 91
575444	230	5	E27	P45	Softline*	45 x 91
575446	230	7	E27	P45	Softline*	45 x 91
572106	230	5	E14	T45	Softline*	45 x 78
572108	230	7	E14	T45	Softline*	45 x 78
572110	230	9	E14	T45	Softline*	45 x 91
572116	230	5	E27	T45	Softline*	45 x 78
572118	230	7	E27	T45	Softline*	45 x 78
572120	230	9	E27	T45	Softline*	45 x 91
572156	230	7	E14	T30	Softline*	30 x 130
572180	230	5	E14	B37	Softline*	37 x 98
572184	230	7	E14	B37	Softline*	37 x 98
572192	230	5	E14	BXS37	Softline*	37 x 125
572196	230	7	E14	BXS37	Softline*	37 x 125
575470	230	5	E14	P45	Flame	45 x 91
575472	230	7	E14	P45	Flame	45 x 91
575494	230	5	E27	P45	Flame	45 x 91
575496	230	7	E27	P45	Flame	45 x 91
572306	230	5	E14	T45	Flame	45 x 78
572308	230	7	E14	T45	Flame	45 x 78
572310	230	9	E14	T45	Flame	45 x 91
572316	230	5	E27	T45	Flame	45 x 78
572318	230	7	E27	T45	Flame	45 x 78
572320	230	9	E27	T45	Flame	45 x 91
572380	230	5	E14	B37	Flame	37 x 98
572384	230	7	E14	B37	Flame	37 x 98
572392	230	5	E14	BXS37	Flame	37 x 125

*Colour temperature 2700°K Warm white

ENERGY SAVING LAMPS



R50



R63



PAR38



T4-2U



Globe

Calex Energy Saving Reflector Lamps, 2700°K Warm white, used without ballast

CALEX					
Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
573260	230	5	E14	R50	50 x 112
573268	230	7	E14	R50	50 x 112
573280	230	9	E27	R63	63 x 119
573288	230	11	E27	R63	63 x 119

Calex Energy Saving Pressed-Glass Reflector Lamps, used without ballast

CALEX					
Cat. no.	Voltage	Watts	Cap	Colour	d x l mm
583120	230	20	E27	Par38	121 x 136

Calex Energy Saving Lamps with Sensor, used without ballast

CALEX						
Cat. no.	Voltage	Watts	Cap	Type	Colour	d x l mm
582080	230	9	E27	T4-2U	Softline*	40 x 134
582086	230	11	E27	T4-2U	Softline*	40 x 141
582150	230	9	E27	Globe	Softline*	60/41 x 118
582156	230	11	E27	Globe	Softline*	60/41 x 125
582190	230	9	E27	Globe	Flame	60/41 x 118

*Colour temperature 2700°K Warm white

ENERGY SAVING LAMPS



Globe



Candle



E14



GU10

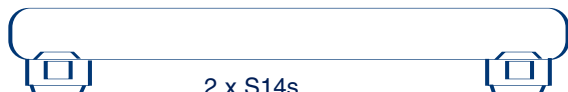
Calex Energy Saving Lamps Dimmable Types, used without ballast

CALEX						
Cat. no.	Voltage	Watts	Cap	Type	Colour	d x l mm
582240	230	9	E27	Globe	Softline*	70/51 x 128
582260	230	9	E27	Globe	Flame	70/51 x 128
582310	230	7	E14	Candle	Softline*	49 x 150
582350	230	7	E27	Candle	Softline*	49 x 150

*Colour temperature 2700°K Warm white

Calex Energy Saving ESL Lamps, used without ballast

CALEX					
Cat. no.	Voltage	Watts	Cap		d x l mm
573356	230	7	E14		50 x 88
573440	230	7	GU10		50 x 58



2 x S14s

Calex Energy Saving Linestra Tube 2700°K Warm white, used without ballast

CALEX					
Cat. no.	Voltage	Watts	Cap		d x l mm
583700	230-240	8	2xS14s		30 x 300
583712	230-240	13	2xS14s		30 x 500

ENERGY SAVING LAMPS



E14



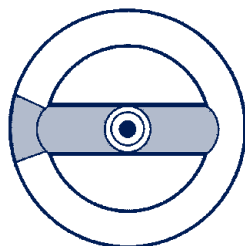
E27



E27

Osram Compact Fluorescent-lamps, used without ballast 240V AC

Osram Cat. no.	Type	Voltage	Watts	Cap		d x l mm
840304	DEL314	240V AC	3	E14		30 x 115
840310	DEL514	240V AC	5	E14		36 x 124
840316	DEL714	240V AC	7	E14		45 x 134
840328	DEL1114	240V AC	11	E14		45 x 143
840344	DEL527	240V AC	5	E27		36 x 121
840352	DEL727	240V AC	7	E27		45 x 129
840364	DEL1127	240V AC	11	E27		45 x 138
840370	DEL1527	240V AC	15	E27		52 x 140
840376	DEL2027	240V AC	20	E27		52 x 154
840382	DEL2327	240V AC	23	E27		58 x 173



Osram Circolux Fluorescent-lamps, used without ballast 240V AC

Osram Cat. no.	Type	Voltage	Watts	Cap		d x l mm
841136	CEL18	240V AC	18	E27		169 x 101
841140	CEL28	240V AC	28	E27		216 x 101

ENERGY SAVING LAMPS



Fig.1



Fig. 2



Fig.3



Fig.4



Fig.5

Philips Compact Fluorescent-lamps, used without ballast 240V AC

Philips Cat. no.	Professional Type	Watts	Cap	d x l mm	Fig.
680310	PLE 5WE14	5	E14	40 x 115	1
680322	PLE 8WE14	8	E14	40 x 121	1
680328	PLE 11WE14	11	E14	40 x 144	1
680344	PLE 5WE27	5	E27	48 x 115	2
680358	PLE 8WE27	8	E27	48 x 120	2
680364	PLE 11WE27	11	E27	48 x 143	2
680370	PLE 15WE27	15	E27	48 x 126	3
680376	PLE 20WE27	20	E27	48 x 137	3
680382	PLE 23WE27	23	E27	48 x 152	3
680388	PLE 27WE27	27	E27	48 x 174	3
680562	PLE 12	12	E27	48 x 119	4
680564	PLE 16	16	E27	48 x 127	4
680568	PLE 20	20	E27	48 x 144	4
680572	PLE 23	23	E27	48 x 155	4
680622	AMB 9	9	E27	66 x 128	5
680628	AMB 12	12	E27	66 x 137	5
680634	AMB 16	16	E27	66 x 137	5
680640	AMB 20	20	E27	76 x 163	5
680646	AMB 23	23	E27	76 x 163	5

ENERGY SAVING LAMPS



Fig. 1



Fig. 2



Fig. 3

Philips Compact Fluorescent-lamps, used without ballast 240V AC

Philips Cat. no.	Softone Type	Watts	Cap	d x l mm	Fig.
680412	SLIM5WE14	5	E14	45 x 128	1
680422	SLIM8WE14	8	E14	45 x 128	1
680432	SLIM5WE27	5	E27	45 x 126	2
680442	SLIM8WE27	8	E27	45 x 126	2
680472	SOFT8Y5W	5	E27	61 x 114	3
680476	SOFT8Y8W	8	E27	61 x 114	3
680480	SOFT8Y12W	12	E27	61 x 114	3
680484	SOFT8Y16W	16	E27	61 x 114	3
680488	SOFT8Y20W	20	E27	66 x 129	3



Fig. 1



Fig. 2

Philips Compact Fluorescent-lamps, used without ballast 240V AC

Philips Cat. no.	Genie Type	Watts	Cap	d x l mm	Fig.
680512	GENIE5WE14	5	E14	38 x 109	1
680516	GENIE8WE14	8	E14	44 x 112	1
680518	GENIE11WE14	11	E14	44 x 122	1
680524	GENIE5WE27	5	E27	38 x 107	2
680528	GENIE8WE27	8	E27	44 x 107	2
680532	GENIE11WE27	11	E27	44 x 117	2
680536	GENIE14WE27	14	E27	44 x 132	2
680540	GENIE18WE27	18	E27	48 x 135	2

ENERGY SAVING LAMPS



Fig. 1



Fig. 2



Fig. 3

Philips Fluorescent-lamps, used without ballast 240V AC

Philips Cat. no.	Type	Watts	Cap	d x l mm	Fig.
681066	SLE12W	12	E27	50 x 153	1
681072	SLE16W	16	E27	50 x 153	1
681076	SLE20W	20	E27	50 x 153	1

Philips Fluorescent-lamps, used without ballast 240V AC

Philips Cat. no.	Type	Watts	Cap	d x l mm	Fig.
681162	EXE 9	9	E27	50 x 134	2
681166	EXE 12	12	E27	50 x 154	2
681172	EXE 16	16	E27	50 x 154	2

Philips Fluorescent-lamps, used without ballast 240V AC

Philips Cat. no.	Type	Watts	Cap	d x l mm	Fig.
681264	Globe 12	12	E27	94 x 153	3
681272	Globe 16	16	E27	121 x 182	3
681276	Globe 20	20	E27	121 x 182	3

ENERGY EFFECTIVE LAMPS



Philips PL-S Lamps 2-pins, used with ballast

Cat. no.	Philips	Watts	Colour	Cap	d x l mm
	Type		°K		
685210	PLS5W827	5	2700	G23	27 x 108
685220	PLS7W827	7	2700	G23	27 x 138
685222	PLS7W830	7	3000	G23	27 x 138
685224	PLS7W840	7	4000	G23	27 x 138
685230	PLS9W827	9	2700	G23	27 x 168
685232	PLS9W830	9	3000	G23	27 x 168
685234	PLS9W840	9	4000	G23	27 x 168
685240	PLS11W827	11	2700	G23	27 x 238
685242	PLS11W830	11	3000	G23	27 x 238
685244	PLS11W840	11	4000	G23	27 x 238

ENERGY EFFECTIVE LAMPS



Philips PL-C Lamps 2-pins, used with ballast

Cat. no.	Philips Type	Watts	Colour °K	Cap	d x l mm
685510	PLC10W827	10	2700	G24d-1	28 x 118
685512	PLC10W830	10	3000	G24d-1	28 x 118
685514	PLC10W840	10	4000	G24d-1	28 x 118
685520	PLC13W827	13	2700	G24d-1	28 x 140
685522	PLC13W830	13	3000	G24d-1	28 x 140
685524	PLC13W840	13	4000	G24d-1	28 x 140
685530	PLC18W827	18	2700	G24d-2	28 x 152
685532	PLC18W830	18	3000	G24d-2	28 x 152
685534	PLC18W840	18	4000	G24d-2	28 x 152
685540	PLC26W827	26	2700	G24d-3	28 x 173
685542	PLC26W830	26	3000	G24d-3	28 x 173
685544	PLC26W840	26	4000	G24d-3	28 x 173

ENERGY EFFECTIVE LAMPS



PLS4P



PLC4P

Philips PL-S Lamps 4-pins, used with ballast

Cat. no.	Philips Type	Watts	Colour °K	Cap	d x l mm
685310	PLS5W827 4P	5	2700	2G7	13/28 x 85
685314	PLS5W840 4P	5	4000	2G7	13/28 x 85
685320	PLS7W827 4P	7	2700	2G7	13/28 x 115
685322	PLS7W830 4P	7	3000	2G7	13/28 x 115
685324	PLS7W840 4P	7	4000	2G7	13/28 x 115
685330	PLS9W827 4P	9	2700	2G7	13/28 x 145
685332	PLS9W830 4P	9	3000	2G7	13/28 x 145
685334	PLS9W840 4P	9	4000	2G7	13/28 x 145
685340	PLS11W827 4P	11	2700	2G7	13/28 x 215
685342	PLS11W830 4P	11	3000	2G7	13/28 x 215
685344	PLS11W840 4P	11	4000	2G7	13/28 x 215

Philips PL-C Lamps 4-pins, used with ballast

Cat. no.	Philips Type	Watts	Colour °K	Cap	d x l mm
685610	PLC10W827 4P	10	2700	G24q-1	28 x 110
685612	PLC10W830 4P	10	3000	G24q-1	28 x 110
685614	PLC10W840 4P	10	4000	G24q-1	28 x 110
685620	PLC13W827 4P	13	2700	G24q-1	28 x 132
685622	PLC13W830 4P	13	3000	G24q-1	28 x 132
685624	PLC13W840 4P	13	4000	G24q-1	28 x 132
685630	PLC18W827 4P	18	2700	G24q-2	28 x 144
685632	PLC18W830 4P	18	3000	G24q-2	28 x 144
685634	PLC18W840 4P	18	4000	G24q-2	28 x 144
685640	PLC26W827 4P	26	2700	G24q-3	28 x 165
685642	PLC26W830 4P	26	3000	G24q-3	28 x 165
685644	PLC26W840 4P	26	4000	G24q-3	28 x 165

ENERGY EFFECTIVE LAMPS



Philips PL-L Lamps 4-pins, used with ballast

Cat. no.	Philips Type	Watts	Colour °K	Cap	d x l mm
685710	PLL18W827	18	2700	2G11	18/38 x 225
685712	PLL18W830	18	3000	2G11	18/38 x 225
685714	PLL18W840	18	4000	2G11	18/38 x 225
685720	PLL24W827	24	2700	2G11	18/38 x 320
685722	PLL24W830	24	3000	2G11	18/38 x 320
685724	PLL24W840	24	4000	2G11	18/38 x 320
685730	PLL36W827	36	2700	2G11	18/38 x 415
685732	PLL36W830	36	3000	2G11	18/38 x 415
685734	PLL36W840	36	4000	2G11	18/38 x 415
685786	PLL36W930	36	3000	2G11	18/38 x 415
685742	PLL40W830	40	3000	2G11	18/38 x 542
685744	PLL40W840	40	4000	2G11	18/38 x 542
685752	PLL55W830	55	3000	2G11	18/38 x 542
685754	PLL55W840	55	4000	2G11	18/38 x 542

ENERGY EFFECTIVE LAMPS



PL-T2P



PL-T4P

Philips PL-T Lamps 2-pins, used with ballast

Cat. no.	Philips Type	Watts	Colour °K	Cap	d x l mm
685810	PLT18W827	18	2700	GX24d-2	45 x 124
685812	PLT18W830	18	3000	GX24d-2	45 x 124
685814	PLT18W840	18	4000	GX24d-2	45 x 124
685820	PLT26W827	26	2700	GX24d-3	45 x 134
685822	PLT26W830	26	3000	GX24d-3	45 x 134
685824	PLT26W840	26	4000	GX24d-3	45 x 134

Philips PL-T Lamps 4-pins, used with ballast

Cat. no.	Philips Type	Watts	Colour °K	Cap	d x l mm
685910	PLT18W827 4P	18	2700	GX24q-2	45 x 116
685912	PLT18W830 4P	18	3000	GX24q-2	45 x 116
685914	PLT18W840 4P	18	4000	GX24q-2	45 x 116
685920	PLT26W827 4P	26	2700	GX24q-3	45 x 126
685922	PLT26W830 4P	26	3000	GX24q-3	45 x 126
685924	PLT26W840 4P	26	4000	GX24q-3	45 x 126
685930	PLT32W827 4P	32	2700	GX24q-3	45 x 141
685932	PLT32W830 4P	32	3000	GX24q-3	45 x 141
685934	PLT32W840 4P	32	4000	GX24q-3	45 x 141
685940	PLT42W827 4P	42	2700	GX24q-4	45 x 158
685942	PLT42W830 4P	42	3000	GX24q-4	45 x 158
685944	PLT42W840 4P	42	4000	GX24q-4	45 x 158

FLUORESCENT LAMPS



TL-D Standard Colours with G13 base

CALEX	Philips		Colour	Colour		T8
Cat. no.	Cat. no.	Watts	°K	Code	Colour	d x l mm
	690120	14	4100	33	cool white	26 x 360
590144		15	2900	32	warm white	26 x 437
590152	690152	15	4100	33	cool white	26 x 437
590160	690160	15	6200	54	daylight	26 x 437
	690184	16	4100	33	cool white	26 x 720
	690200	18	2900	29	warm white	26 x 590
590208	690208	18	4100	33	cool white	26 x 590
590216	690216	18	6200	54	daylight	26 x 590
	690240	23	4100	33	cool white	26 x 970
	690248	23	6200	54	daylight	26 x 970
	690272	30	4100	33	cool white	26 x 894
	690280	30	6200	54	daylight	26 x 894
	690328	36	2900	29	warm white	26 x 1200
590336	690336	36	4100	33	cool white	26 x 1200
590344	690344	36	6200	54	daylight	26 x 1200
	690352	36-1	4100	33	cool white	26 x 970
	690364	38	4100	33	cool white	26 x 1047
	690372	58	2900	29	warm white	26 x 1500
590380	690380	58	4100	33	cool white	26 x 1500
	690388	58	6200	54	daylight	26 x 1500

FLUORESCENT LAMPS



Special Japanese Fluorescent-lamps with G13 base

CALEX		Colour	Colour			T8/T10
Cat. no.	Watts	°K	Code	Type	Colour	d x l mm
590424	10	4100	33		cool white	26 x 330
590432	10	6200	54		daylight	26 x 330
590456	20	4100	33		cool white	32 x 580
590464	20	6200	54		daylight	32 x 580
590472	20	4100	33	Rapid Start	cool white	32 x 580
590480	20	4100	33		cool white	32 x 590
590488	30	6200	54		daylight	32 x 630
590496	40	4100	33	Rapid Start	cool white	32 x 1200



Miniature TL with G5 base

CALEX	Philips		Colour	Colour		T5
Cat. no.	Cat. no.	Watts	°K	Code	Colour	d x l mm
590724	690724	4	4100	33	cool white	16 x 136
590736	690736	6	2900	29	warm white	16 x 212
590744	690744	6	4100	33	cool white	16 x 212
	690748	8	2900	29	warm white	16 x 288
590756	690756	8	4100	33	cool white	16 x 288
		High Quality				
	690758	8	4100	33	cool white	16 x 288
590764		8	6200	54	daylight	16 x 288
	690776	8	2700	827	extra warm	16 x 288
	690784	8	3000	830	warm white	16 x 288
	690792	8	4000	840	extra white	16 x 288
	690812	13	2900	29	warm white	16 x 517
590820	690820	13	4100	33	cool white	16 x 517
	690840	13	2700	827	extra warm	16 x 517
	690848	13	3000	830	warm white	16 x 517
	690856	13	4000	840	extra white	16 x 517

FLUORESCENT LAMPS



Philips TL-D 80 Colours New Generation with G13 base					
Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T8 d x l mm
691020	15	2700	827	extra warm white	26 x 437
691024	15	3000	830	warm white	26 x 437
691028	15	4000	840	extra white	26 x 437
691040	18	2700	827	extra warm white	26 x 590
691044	18	3000	830	warm white	26 x 590
691048	18	4000	840	extra white	26 x 590
691052	18	6500	865	daylight de luxe	26 x 590
691064	23	3000	830	warm white	26 x 970
691068	23	4000	840	extra white	26 x 970
691080	30	2700	827	extra warm white	26 x 894
691084	30	3000	830	warm white	26 x 894
691088	30	4000	840	extra white	26 x 894
691100	36	2700	827	extra warm white	26 x 1200
691104	36	3000	830	warm white	26 x 1200
691108	36	4000	840	extra white	26 x 1200
691112	36	6500	865	daylight de luxe	26 x 1200
691124	36-1	3000	830	warm white	26 x 970
691128	36-1	4000	840	extra white	26 x 970
691144	38	3000	830	warm white	26 x 1047
691148	38	4000	840	extra white	26 x 1047
691160	58	2700	827	extra warm white	26 x 1500
691164	58	3000	830	warm white	26 x 1500
691168	58	4000	840	extra white	26 x 1500
691172	58	6500	865	daylight de luxe	26 x 1500

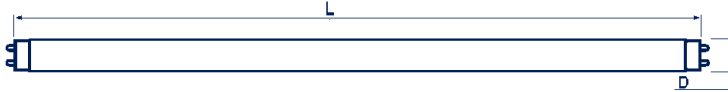
FLUORESCENT LAMPS



Philips TL-D 90 de Luxe Colours New Generation with G13 base					
Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T8 d x l mm
691512	15	5300	950	cool de luxe	26 x 437
691544	18	3000	930	warm de luxe	26 x 590
691548	18	3800	940	white de luxe	26 x 590
691552	18	5300	950	cool de luxe	26 x 590
691556	18	6500	965	very cool de luxe	26 x 590
691564	30	3000	930	warm de luxe	26 x 894
691572	30	5300	950	cool de luxe	26 x 894
691576	30	6500	965	very cool de luxe	26 x 894
691584	36	3000	930	warm de luxe	26 x 1200
691588	36	3800	940	white de luxe	26 x 1200
691592	36	5300	950	cool de luxe	26 x 1200
691596	36	6500	965	very cool de luxe	26 x 1200
691604	58	3000	930	warm de luxe	26 x 1500
691608	58	3800	940	white de luxe	26 x 1500
691612	58	5300	950	cool de luxe	26 x 1500
691616	58	6500	965	very cool de luxe	26 x 1500

Philips TL-D HF High Frequency Fluorescent Lamps with G13 base					
Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T8 d x l mm
692024	16	3000	830	warm white	26 x 590
692028	16	4000	840	extra white	26 x 590
692044	32	3000	830	warm white	26 x 1200
692048	32	4000	840	extra white	26 x 1200
692064	50	3000	830	warm white	26 x 1500
692068	50	4000	840	extra white	26 x 1500

FLUORESCENT LAMPS



Philips TL-5 High Efficiency lamps/High Output lamps					
Philips Cat. no.	Type	Watts	Colour °K	Colour Code	T5 d x l mm
692520	TL5 14W 827 HE	14	2700	827	16 x 549
692524	TL5 14W 830 HE	14	3000	830	16 x 549
692528	TL5 14W 840 HE	14	4000	840	16 x 549
692540	TL5 21W 827 HE	21	2700	827	16 x 849
692544	TL5 21W 830 HE	21	3000	830	16 x 849
692548	TL5 21W 840 HE	21	4000	840	16 x 849
692550	TL5 24W 827 HE	24	2700	827	16 x 549
692554	TL5 24W 830 HE	24	3000	830	16 x 549
692558	TL5 24W 840 HE	24	4000	840	16 x 549
692560	TL5 28W 827 HE	28	2700	827	16 x 1149
692564	TL5 28W 830 HE	28	3000	830	16 x 1149
692568	TL5 28W 840 HE	28	4000	840	16 x 1149
692580	TL5 35W 827 HE	35	2700	827	16 x 1449
692584	TL5 35W 830 HE	35	3000	830	16 x 1449
692588	TL5 35W 840 HE	35	4000	840	16 x 1449
692590	TL5 39W 827 HO	39	2700	827	16 x 849
692594	TL5 39W 830 HO	39	3000	830	16 x 849
692598	TL5 39W 840 HO	39	4000	840	16 x 849
692600	TL5 49W 827 HO	49	2700	827	16 x 1449
692604	TL5 49W 830 HO	49	3000	830	16 x 1449
692608	TL5 49W 840 HO	49	4000	840	16 x 1449
692620	TL5 54W 827 HO	54	2700	827	16 x 1149
692624	TL5 54W 830 HO	54	3000	830	16 x 1149
692628	TL5 54W 840 HO	54	4000	840	16 x 1149

FLUORESCENT LAMPS



Philips TL-D Reflex Fluorescent Lamps with G13 base

With internal reflector of 200 degrees, leaving a 'window' of 160 degrees

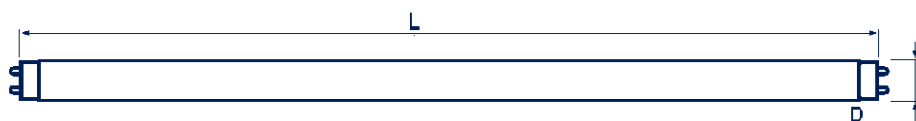
Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T8 d x l mm
693024	18	3000	830	warm white	26 x 590
693028	18	4000	840	extra white	26 x 590
693064	36	3000	830	warm white	26 x 1200
693068	36	4000	840	extra white	26 x 1200
693084	58	3000	830	warm white	26 x 1500
693088	58	4000	840	extra white	26 x 1500

Philips TL-D Secura Fluorescent Lamps with G13 base

Provided with a protective coating which keeps glass and other lamp components together

Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T8 d x l mm
693224	18	3000	830	warm white	26 x 590
693228	18	4000	840	extra white	26 x 590
693264	36	3000	830	warm white	26 x 1200
693268	36	4000	840	extra white	26 x 1200
693284	58	3000	830	warm white	26 x 1500
693288	58	4000	840	extra white	26 x 1500

FLUORESCENT LAMPS



Philips TL-RS Rapid Start Fluorescent Lamps with G13 base

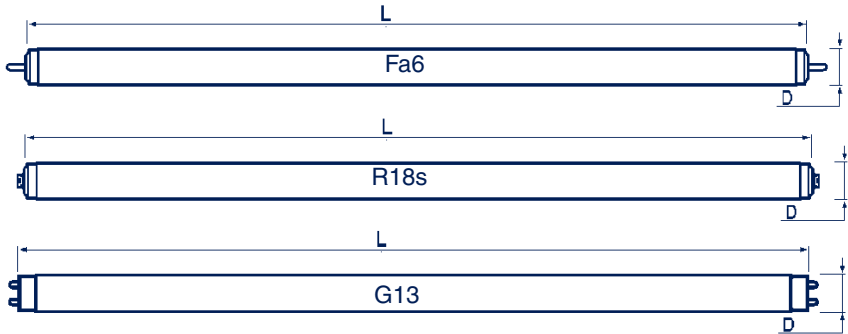
Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T12 d x l mm
693512	20	4100	33	cool white	38 x 590
693518	20	6200	54	daylight	38 x 590
693536	40	4100	33	cool white	38 x 1200
693542	40	6200	54	daylight	38 x 1200
693560	65	4100	33	cool white	38 x 1500
693566	65	6200	54	daylight	38 x 1500

Philips TL-M RS Rapid Start Fluorescent Lamps with G13 base

These lamps start without earth connection, in moist atmosphere and down to -15 C preheat, starterless ignition

Cat. no.	Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T12 d x l mm
	693824	20	4100	33	cool white	38 x 590
	693830	20	6200	54	daylight	38 x 590
	693842	20	3000	830	warm white	38 x 590
	693848	20	4000	840	extra white	38 x 590
593850		40	4100	33	cool white	38 x 590
	693858	40	2900	29	warm white	38 x 1200
	693864	40	4100	33	cool white	38 x 1200
	693870	40	6200	54	daylight	38 x 1200
	693882	40	3000	830	warm white	38 x 1200
	693888	40	4000	840	extra white	38 x 1200
	693904	65	4100	33	cool white	38 x 1500
	693922	65	3000	830	warm white	38 x 1500
	693928	65	4000	840	extra white	38 x 1500
	693944	115	4100	33	cool white	38 x 1200
	693964	140	4100	33	cool white	38 x 1500

FLUORESCENT LAMPS



Philips TLX-XL Fluorescent Lamps with Fa6 base

Used in flameproof and increased safety luminaires

Philips Cat. no.	Watt	Colour °K	Colour Code	Colour	T12 d x l mm
694112	15	4100	33	cool white	38 x 422
694124	20	4100	33	cool white	38 x 574
694136	40	4100	33	cool white	38 x 1184
694148	65	4100	33	cool white	38 x 1484

Philips TL-S Fluorescent Lamps with R18s base

Specifically designed for public lighting

Philips Cat. no.	Watts	Colour °K	Colour Code	Colour	T12 d x l mm
694318	20	2900	29	warm white	38 x 590
694324	20	4100	33	cool white	38 x 590
694328	20	3000	830	warm white	38 x 590
694336	40	4100	33	cool white	38 x 1200

Philips TL-D Coloured Fluorescent Lamps with G13 base

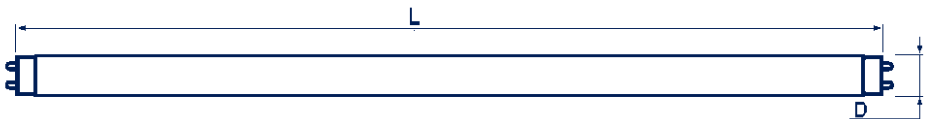
Philips Cat. no.	Watts		Colour Code	Colour	T8 d x l mm
694512	18		15	red	26 x 590
694516	18		16	yellow	26 x 590
694520	18		17	green	26 x 590
694524	18		18	blue	26 x 590
694532	36		15	red	26 x 1200
694536	36		16	yellow	26 x 1200
694540	36		17	green	26 x 1200
694544	36		18	blue	26 x 1200

FLUORESCENT LAMPS



Blacklight blue Fluorescent-lamps

	Philips			Like		
Cat. no.	Cat. no	Type	Watts	Philips	Cap	d x l mm
594612	694612	TL	4	08	G5	16 x 140
594624	694624	TL	6	08	G5	16 x 212
594636	694636	TL	8	08	G5	16 x 288
	694654	TLD	18	08	G13	26 x 590
	694666	TLD	36	08	G13	26 x 1200
	694680	PLS	9	08	G23	13/28 x 167

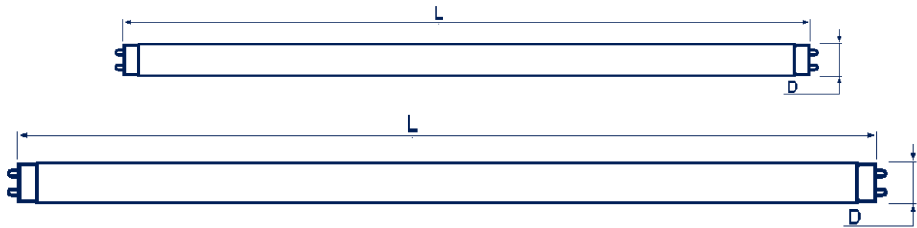


Philips Special Fluorescent Lamps Colour 03 with G13 base

Applications: Phototherapy, Diazo copying and Sea-water aquariums

Philips			Colour		
Cat. no.	Type	Watts	Code	Cap	d x l mm
694812	TL 20W 03T	20	03	G13	38 x 590
694818	TLDK 30W 03	30	03	G13	26 x 437
694824	TLK 40W 03	40	03	G13	38 x 590
694830	TL 40W 03	40	03	G13	38 x 1200
694836	TL 140W 03	140	03	G13	38 x 1500

FLUORESCENT LAMPS



Philips Special Fluorescent Lamps Colour 05 with G5/G13 base

Applications: Diazo copying , (photo)chemical processes and Insect traps

Philips Cat. no.	Type	Watts	Colour Code	Cap	d x l mm
694912	TL 4W 05	4	05	G5	16 x 136
694918	TL 6W 05	6	05	G5	16 x 212
694924	TL 8W 05	8	05	G5	16 x 288
694930	TLD 15W 05	15	05	G13	26 x 437
694936	TL 20W 05	20	05	G13	38 x 590
694942	TLDK 30W 05	30	05	G13	26 x 437
694948	TLK 40W 05	40	05	G13	38 x 590
694954	TLL 40W 05	40	05	G13	38 x 1200
694960	TL 65/80W 05	65/80	05	G13	38 x 1500

Special Fluorescent Lamps Gro-lux or Aquarelle with G5/G13 base

Applications: Flora and Fresh-water aquariums

Sylvania Cat. no.	Philips Cat. no.	Watts	Sylvania Type	Philips Code	Cap	d x l mm
855022		8	Gro-lux		G5	16 x 288
855026		13	Gro-lux		G5	16 x 516
855030		14	Gro-lux		G13	26 x 360
855034	695034	15	Gro-lux	89	G13	26 x 437
855038	695038	18	Gro-lux	89	G13	26 x 590
855042		25	Gro-lux		G13	26 x 750
855046	695046	30	Gro-lux	89	G13	26 x 895
855050	695050	36	Gro-lux	89	G13	25 x 1200
855054	695054	38	Gro-lux	89	G13	26 x 1047
855058	695058	58	Gro-lux	89	G13	26 x 1500

FLUORESCENT LAMPS



Philips Special Fluorescent Lamps Colour 03 with G13 base

“Aquacoral” Applications: Sea-water aquariums

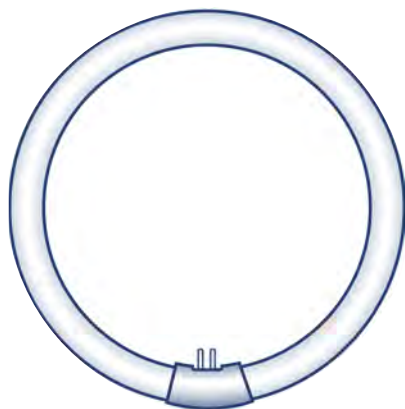
Philips			Colour		
Cat. no.	Type	Watts	Code	Cap	d x l mm
695112	TLD 15W03 AC	15	03	G13	26 x 437
696118	TL 20W03 AC	20	03	G13	38 x 590
695124	TLD 30W03 AC	30	03	G13	26 x 895
695130	TL 40W03 AC	40	03	G13	38 x 1200

Philips Special Fluorescent Lamps Colour 79 with G13 base

Applications: Butcher's shops

Philips		Colour	Colour		
Cat. no.	Watts	°K	Code	Cap	d x l mm
695212	18	3800	79	G13	26 x 590
695218	30	3800	79	G13	26 x 895
695224	36	3800	79	G13	26 x 1200
695230	58	3800	79	G13	26x 1500

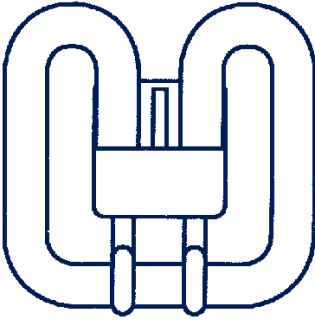
CIRCULAR FLUORESCENT LAMPS



Circular Fluorescent-lamps with G10q base

CALEX Cat. no.	Philips Cat. no.	Watts	Colour °K	Type	Colour	d x od mm
596026		20	6200	Japanese	daylight	29 x 165
596038		20	4100	Japanese	cool white	29 x 206
596050	696050	22	4100	33	cool white	29 x 216
596066		30	3500	Japanese	white	32 x 229
	696076	32	2900	29	warm white	29 x 311
596080	696080	32	4100	33	cool white	29 x 311
596084	696084	32	6200	54	daylight	29 x 311
	696088	32	2700	827	extra warm	29 x 311
	696092	32	3000	830	warm white	29 x 311
	696096	32	4000	840	extra white	29 x 311
	696106	40	2900	29	warm white	29 x 413
596110	696110	40	4100	33	cool white	29 x 413
	696114	40	6200	54	daylight	29 x 413
	696118	40	2700	827	extra warm	29 x 413
	696122	40	3000	830	warm white	29 x 413
	696126	40	4000	840	extra white	29 x 413
	Rapid-start					
	696138	40	2900	29RS	warm white	29 x 413
	696142	40	4100	33RS	cool white	29 x 413

2D FLUORESCENT LAMPS



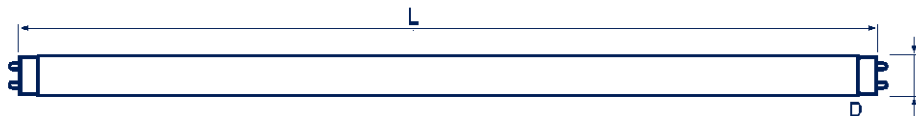
2D Fluorescent Lamps with GR8-2pin base

[illegible]

2D Fluorescent Lamps with GR10q-4pin base

		Colour	Like			
Cat. no.	Watts	°K	Philips	Pins	Cap	w x h
597202	10	2700	827	4-pin	GR10q-4p	91 x 94
597212	16	2700	827	4-pin	GR10q-4p	140 x 140
597224	21	2700	827	4-pin	GR10q-4p	140 x 140
597236	28	2700	827	4-pin	GR10q-4p	205 x 205
597240	28	3500	835	4-pin	GR10q-4p	205 x 205
597248	38	2700	827	4-pin	GR10q-4p	205 x 205

UV-A / CLEOSUNTANNING LAMPS



Philips Special Fluorescent Lamps with G5/G13 base

“CLEO Performance” Applications: Cosmetic tanning

Philips				
Cat. no.	Watts	Type	Cap	d x l mm
699254	15	CLEO 15W	G5	16 x 288
699274	40	CLEO PERF UVA	G13	38 x 590
699284	80	CLEO PERF UVA	G13	38 x 1500
699296	100	CLEO PERF UVA	G13	38 x 1764

Philips Special Fluorescent Lamps with G13 base

With internal reflector of 200 degrees

“CLEO Performance” Applications: Cosmetic tanning

Philips				
Cat. no.	Watts	Type	Cap	d x l mm
699374	40	CLEO PERF RUVA	G13	38 x 590
699384	80	CLEO PERF RUVA	G13	38 x 1500
699396	100	CLEO PERF RUVA	G13	38 x 1764



Philips Special H.I.D. Lamps CLEO HPA with Rx7s base

Applications: Cosmetic tanning

Philips				
Cat. no.	Watts	Type	Cap	d x l mm
699442	400	HPA 400 S	Rx7s	22 x 118
699450	400	HPA 400/30 S	Rx7s	22 x 104

STARTER FOR FL/PL

Fig. 1



Fig. 2



Starters for FL-tubes and PL lamps					
Cat. no.	Brand	Type	Applications	Cap	Fig.
100410	Calex	FS-2	Single 4, 6, 8W 130/240V	P-21	1
			Series 4-22W 130/240V		
100416	Calex	FS-U	Single 4-13W 240V	P-21	1
			15-80W 130/240V		
100426	Japanese	FG7P	4, 6, 8, 10W 130/240V	P-21	1
100432	Japanese	FG1P	15, 20, 30W 130/240V	P-21	1
100438	Japanese	FG4P	40W 130/240V	P-21	1
100450	Japanese	FG7E	4, 6, 8, 10W 130/240V	E17	2
100456	Japanese	FG1E	15, 18, 20, 30W 130/240V	E17	2
100610	Philips	S2	Single 4, 6, 8W 240V 4-22W 130V	P-21	1
			Series 4-22W 240V		
100616	Philips	S10	Single 4-65W 240V	P-21	1
100620	Philips	S11	Single 80-100W 240V	P-21	1
100624	Philips	S12	Single 115-140W 240V	P-21	1
100630	Philips	S2-E	Electronic 18-22W 240V	P-21	1
100636	Philips	S10-E	Electronic 30-65W 240V	P-21	1
100810	Osram	ST151	Single 4, 6, 8W 240V 4-22W 130V	P-21	1
			Series 4-22W 240V		
100814	Osram	ST173	Single 15-32W 240V	P-21	1
100816	Osram	ST111	Single 4-80W 240V	P-21	1
100824	Osram	ST191	Single 100, 115, 140W 240V	P-21	1
100830	Osram	ST172	Electronic 18-22W 240V	P-21	1
100836	Osram	ST171	Electronic 30-65W 240V	P-21	1

STARTER AND CAPACITORS FOR FL/PL



Start relays for DC-fluorescent lamps				
Cat. no.	Voltage	Watts	for FL Tube	Type
100510	110	20-40	TL'C'	103629
100514	220	20-40	TL'R'	103630

Fig. 1

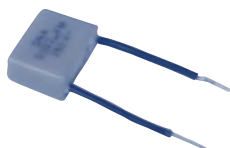
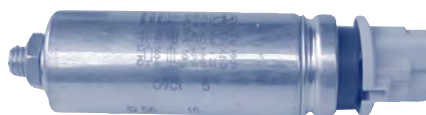


Fig. 2



Capacitors for fluorescent lighting			
Cat. no.	μF	Applications	Fig.
100524	0,01	Filter capacitor axial-type	1
100530	2,5	FL 18 till 22W & PL 18/26W	2
100534	2,9	FL 30W	2
100538	3,5	FL 32 till 40W & PL 36W	2
100542	5,7	FL 58 till 65W	2

ELECTRONIC BALLAST FOR FL/PL

Fig. 1

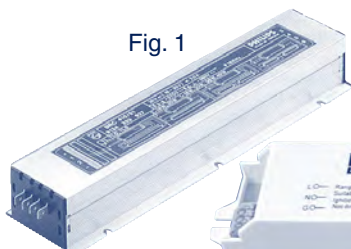


Fig. 2



Fig. 3



Electronic DC ballast for FL/PL

Cat. no.	Voltage	Range	Applications	Fig.
101010	24V DC	18-32V	FL 6, 8, 13W, PL 4-pins 7, 9, 13W	1
101016	24V DC	18-32V	FL 18W, PLL 18W	1
101022	24V DC	18-32V	FL 1 x 18/20/36/40W, 2 x 18/20W	1
			PL 1 x 18/24/40W, 2 x 18W	
101028	110V DC	80-135V	FL 1 x 18/20/36/40W, 2 x 18/20W	1
			PL 1 x 18/24/40W, 2 x 18W	

Electronic AC ballast for FL/PL

Cat. no.	Voltage	Hz	Applications	Fig.
101042	110-127	50-60	PL 1 x 9/11W	2
101048	110-127	50-60	FL 1 x 10W	3
101054	110-127	50-60	FL 1 x 15W	3
101060	110-127	50-60	FL 1 x 18/20W	3
101066	110-127	50-60	FL 2 x 18/20W	3
101072	110-127	50-60	FL 1 x 36/40W	3
101078	110-127	50-60	FL 2 x 36/40W	3
101084	110-127	50-60	FL 1 x 58/65W	3
101142	220-240	50-60	PL 1 x 9/11W	2
101148	220-240	50-60	FL 1 x 10W	3
101154	220-240	50-60	FL 1 x 15W	3
101160	220-240	50-60	FL 1 x 18/20W	3
101166	220-240	50-60	FL 2 x 18/20W	3
101172	220-240	50-60	FL 1 x 36/40W	3
101178	220-240	50-60	FL 2 x 36/40W	3
101184	220-240	50-60	FL 1 x 58/65W	3

BALLAST FOR FL/PL

Fig. 1



Fig. 3

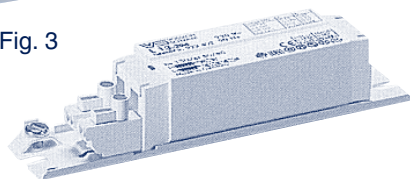


Fig. 2

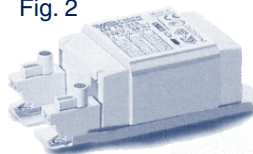
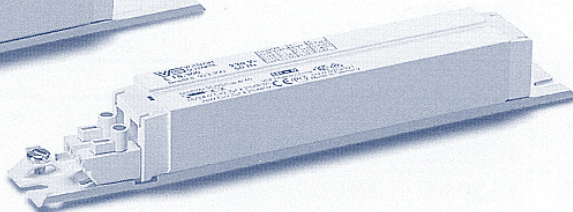
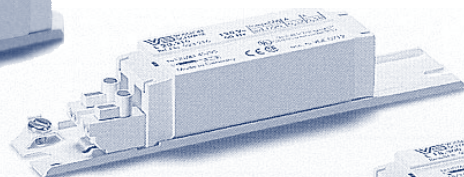


Fig. 4



Electronic AC/DC Rapid-start ballast for FL

Cat. no.	Voltage	Hz	Applications	Size L x W x H mm	Fig.
101206	230-240V AC/DC	0/50-60	1 x 18/20W	359 x 30 x 30	1
101212	230-240V AC/DC	0/50-60	2 x 18/20W	423 x 30 x 30	1
101218	230-240V AC/DC	0/50-60	1 x 36/40W	359 x 30 x 30	1
101224	230-240V AC/DC	0/50-60	2 x 36/40W	423 x 30 x 30	1
101230	230-240V AC/DC	0/50-60	1 x 58/65W	359 x 30 x 30	1

Ballast 110V 60Hz for FL/PL

Cat. no.	Voltage	Hz	Applications	Fig.
101312	110	60	PL 5, 7, 9, 11W	2
101324	110	60	FL 4, 6, 8W	3
101328	110	60	FL 10W	4
101336	110	60	FL 15W	4
101342	110	60	FL 18/20W	4
101366	110	60	FL 1 x 36/40W 2 x 18/20W	4
101378	110	60	FL 1 x 58/65W	4

BALLAST FOR FL/PL

Fig. 1

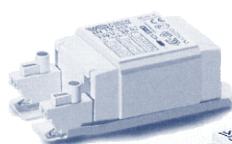


Fig. 2

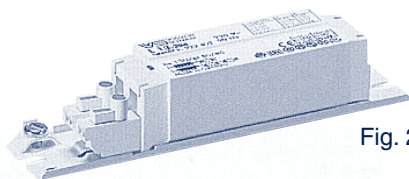
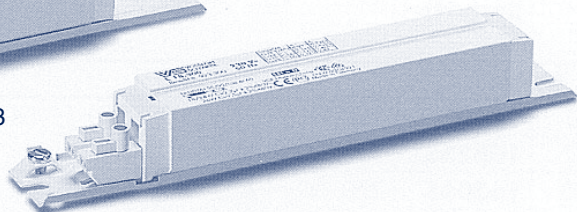
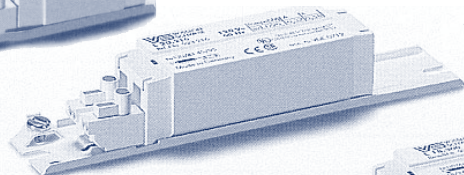


Fig. 3



Ballast 230V 50Hz for FL/PL

Cat. no.	Voltage	Hz	Applications		Fig.
101412	230	50	PL 5, 7, 9, 11W		1
101424	230	50	FL 4, 6, 8W		2
101430	230	50	FL 13W		2
101436	230	50	FL 15W		3
101442	230	50	FL 18/20W		3
101448	230	50	FL 18/20W	Philips	3
101454	230	50	FL 30W		3
101460	230	50	FL 32W		3
101466	230	50	FL 1 x 36/40W 2 x 18/20W		3
101472	230	50	FL 1 x 36/40W 2 x 18/20W	Philips	3
101478	230	50	FL 1 x 58/65W		3
101484	230	50	FL 1 x 58/65W	Philips	3

Ballast 220V 60Hz for FL/PL

Cat. no.	Voltage	Hz	Applications		Fig.
101512	220	60	PL 5, 7, 9, 11W		1
101524	220	60	FL 4, 6, 8W		2
101536	220	60	FL 15W		3
101542	220	60	FL 18/20W		3
101560	220	60	FL 32W		3
101566	220	60	FL 1 x 36/40W 2 x 18/20W		3
101578	220	60	FL 1 x 58/65W		3

IGNITORS FOR DISCHARGE LAMPS



Fig. 1

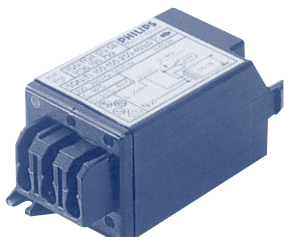


Fig. 2

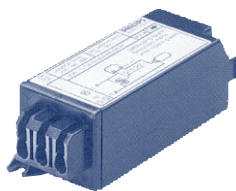


Fig. 3



Fig. 4

Serial ignitors for HS, HI lamps

Cat. no.		Type	Applications	Fig.
101636		Z400	HPS(T) 100-400W, MH(T) 70-400W	1
101642		Z1000	HPS(T) 250-1000W, MH(T) 250-1000W	1

Ignitors for HS, HI lamps

Cat. no.	Brand	Type	Applications	Fig.
101666	Philips	SN57	SON(T) 50-70W	2
101672	Philips	SN58	SON(T) 100-400W, CDM(T) 35-150W, MHN 250W	2
101678	Philips	SN61	SON(T) 1000W	2
101684	Philips	SN57T5	SON(T) 50-70W	3
101690	Philips	SN58T5	SON(T) 100-400W	3
101696	Philips	SN58T15	CDM(T) 35-150W, MHN 250W	3
101712	Osram	STE501		4
101718	Osram	SE600		4

Ignitors for HI lamps

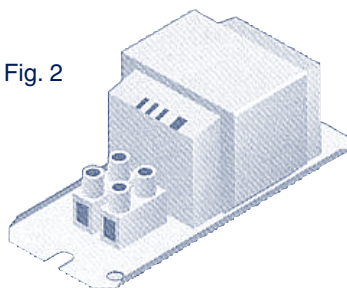
Cat. no.	Brand	Type	Applications	Fig.
101760	Philips	SI51	HPI(T) 250-400W	3
101766	Philips	SI52	HPI(T) 1000-2000W 230V	3
101772	Philips	SI54	HPI(T) 2000W 400V	3

CAPACITORS/FILTERS FOR DISCHARGE LAMPS

Fig. 1



Fig. 2



Capacitors for HPM, HPS(T), MH(T)			
Cat. no.	μF	Applications	Fig.
101812	6	HPS 35W, MH 35W	1
101818	8	HPM 50/80W	1
101824	10	HPM 125W, HPS 50W	1
101830	12	HPS 70/100W, MH 70W	1
101836	20	HPM 250W, HPS 150/250W, MH 150/250W	1
101842	25	HPM 400W, HPS 400W	1

Filters for HPM, HPS(T), MH(T)			
Cat. no.	Type	Applications	Fig.
101872	FIL10230	HPM 125W, HPS 50W	2
101878	FIL12230	HPS 70/100W, MH 70W	2
101884	FIL20230	HPM 250W, HPS 150/250W, MH 150/250W	2
101890	FIL25230	HPM 400W, HPS 400W	2

BALLAST FOR MERCURY VAPOUR LAMPS

Fig. 1



Fig. 2

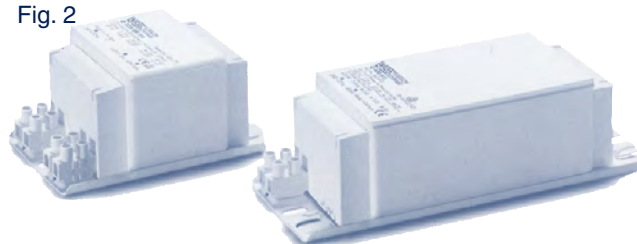


Fig. 3



Ballast for mercury vapour lamps 110V 60Hz

Cat. no.	Voltage	Hz	Applications		Fig.
101930	110	60	HPM 125W		1
101936	110	60	HPM/MH 250W		2
101948	110	60	HF/HRF 300W	Japanese	3
101954	110	60	HPM/MH 400W		2
101960	110	60	HF/HRF 400W	Japanese	3
101966	110	60	HF/HRF 700W	Japanese	3

Ballast for mercury vapour lamps 230V 50Hz

Cat. no.	Voltage	Hz	Applications		Fig.
102012	230	50	HPM 50W		1
102018	230	50	HPM 80W		1
102024	230	50	HPM 125W		1
102030	230	50	HPM/MH 250W		2
102036	230	50	HPM/MH 250W	Philips	2
102042	230	50	HPM/MH 400W		2
102048	230	50	HPM/MH 400W	Philips	2
102054	230	50	HPM 700W		2
102060	230	50	MH 1000W	Philips	2

BALLAST FOR MERCURY VAPOUR LAMPS

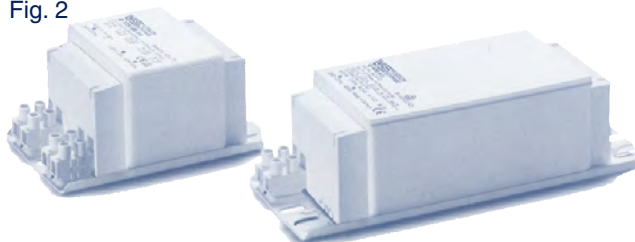
Fig. 1



Fig. 3



Fig. 2



Ballast for mercury vapour lamps 220V 60Hz

Cat. no.	Voltage	Hz	Applications		Fig.
102112	220	60	HPM 50W		1
102118	220	60	HPM 80W		1
102124	220	60	HPM 125W		1
102130	220	60	HPM/MH 250W		2
102136	220	60	HPM/MH 250W	Philips	2
102142	220	60	HF/HRF 300W	Japanese	3
102148	220	60	HPM/MH 400W		2
102154	220	60	HPM/MH 400W	Philips	2
102160	220	60	HF/HRF 400W	Japanese	3
102166	220	60	HPM 700W		2
102172	220	60	HF/HRF 700W	Japanese	3
102178	220	60	MH 1000W		2

Ballast for high-pressure sodium lamps 110V 60Hz

Cat. no.	Voltage	Hz	Applications	Fig.
102230	110	60	HPS(T)/NH(F/T/R) 250W	2
102254	110	60	HPS(T)/NH(F/T/R) 400W	2

BALLAST FOR HIGH-PRESSURE SODIUM LAMPS

Fig. 1



Fig. 2

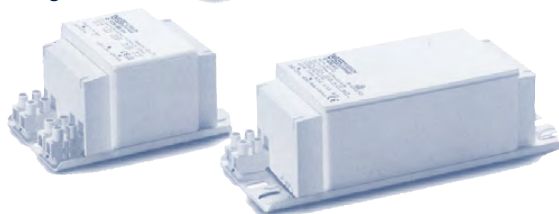


Fig. 3



Ballast for high-pressure sodium lamps 230V 50Hz					
Cat. no.	Voltage	Hz	Applications		Fig.
102312	230	50	HPS 50W		1
102318	230	50	HPS 70W		1
102324	230	50	HPS 100W		1
102330	230	50	HPS(T) 150W		1
102336	230	50	HPS(T) 250W		2
102342	230	50	HPS(T) 250W	Philips	2
102348	230	50	HPS(T) 400W		2
102354	230	50	HPS(T) 400W	Philips	2
102366	230	50	HPS(T) 1000W		2

Ballast for high-pressure sodium lamps 220V 60Hz					
Cat. no.	Voltage	Hz	Applications		Fig.
102412	220	60	HPS 50W		1
102418	220	60	HPS 70W		1
102424	220	60	HPS 100W		1
102430	220	60	HPS(T) 150W		1
102436	220	60	HPS(T) 250W		2
102442	220	60	HPS(T) 250W	Philips	2
102448	220	60	HPS(T) 400W		2
102454	220	60	HPS(T) 400W	Philips	2
102460	220	60	NH(T/R) 700W	Japanese	3
102466	220	60	HPS(T) 1000W	Philips	2

LAMPHOLDERS FOR PL LAMPS

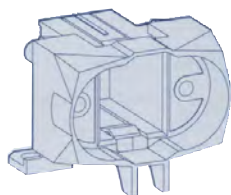


Fig. 1

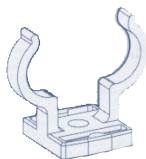


Fig. 2

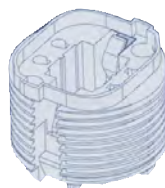


Fig. 3



Fig. 4

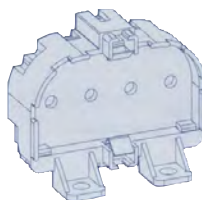


Fig. 5

Lampholders for PL lamps

Cat. no.	Description	Cap	Fig.
102512	PL-S/Dulux-S for horizontal mounting	G23	1
102518	Lamp support for PL-S/Dulux-S		2
102524	PL-S/Dulux-S for vertical mounting	G23	3
102530	PL-C/Dulux-D 10/13W 2-pins	G24d1	4
102536	PL-C/Dulux-D 18W 2-pins	G24d2	5
102542	PL-C/Dulux-D 26W 2-pins	G24d3	6
102548	PL-C/Dulux-D 10/13W 4-pins	G24q1	7
102554	PL-C/Dulux-D 18W 4-pins	G24q2	8
102560	PL-C/Dulux-D 26/32W 4-pins	G24q3	9
102566	Cap with M10 thread for figure 3 till 9		10
102572	PL-L/Dulux-L 18 till 55W	G11	11
102578	Lamp support for PL-L/Dulux-L		12

LAMP HOLDERS FOR FLUORESCENT LAMPS

Lamp holders for fluorescent lamps			
Cat. no.	Description	Type	Fig.
102716	For FL lamps 4, 6, 8, 13 Watts		1
102724	Round		2
102732	Round with spring adjustment		3
102740	Universal without starterholder		4
102748	Universal with starterholder		5
102756	Mellert without starterholder	1853B	6
102764	Mellert with starterholder	1853A	7
102772	Vossloh without starterholder	V10	8
102780	Vossloh with starterholder	V10	9
102788	Vossloh round on holder	48502	10
102796	Vossloh without starterholder	04807	11
102804	Vossloh with starterholder	04806	12
102812	Vossloh with spring adjustment	47106	13
102820	Vossloh round	101806	14
102828	Vossloh round with spring adjustment	101812	15
102836	Elwis push-through	28501	16
102844	Glamox 2x lampholder on metal plate	68 E2	17
102852	Philips push-trough	H01-005	18
102860	Philips rotary-lock	H03	19
102868	Philips rotary-lock	H04	20
102876	Japanese spring loaded		21
102884	Japanese spring loaded with wire on plate	KL-238	22
102892	Japanese spring loaded on sledge	T11WS	23
102900	Japanese spring loaded on sledge	T09	24
102908	Watertight for ø38mm FL lamps back-conn.	Poland	25
102916	Watertight for ø26mm FL lamps		26
102924	Watertight for ø38mm FL lamps		26
102932	Japanese watertight for ø26mm FL lamps	WT13	27
102940	Japanese watertight for ø32mm FL lamps	WT3	28
102948	Set for circle FL lamps		29

For figure see next page

LAMPHOLDERS FOR FLUORESCENT LAMPS

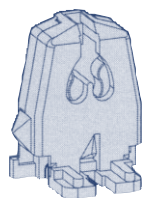


Fig. 1

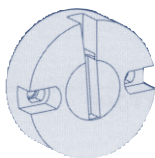


Fig. 2

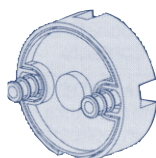


Fig. 3

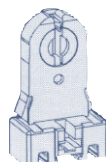


Fig. 4

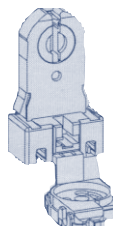


Fig. 5



Fig. 6



Fig. 7

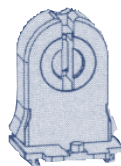


Fig. 8

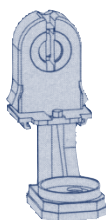


Fig. 9

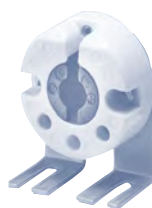


Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14

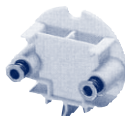


Fig. 15

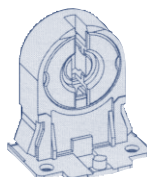


Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20



Fig. 21



Fig. 22



Fig. 23



Fig. 24



Fig. 25



Fig. 26



Fig. 27



Fig. 28

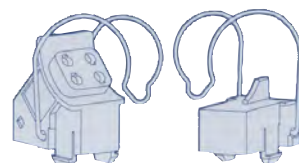


Fig. 29

BASES FOR STARTERS/RELAYS

Fig. 1

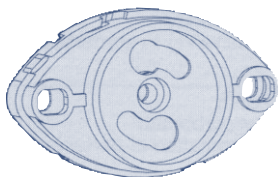


Fig. 2

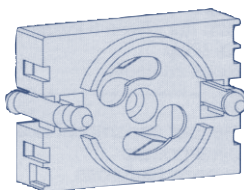


Fig. 3



Bases for starters/relays			
Cat. no.	Description	Type	Fig.
103006	Base for 2-pol starters	H06	1
103012	Base for 2-pol starters with mounting pins		2
103018	Base for 4-pol relays		3

FLUORESCENT LIGHTING



Non watertight fluo-fixtures, for indoor use

Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H)mm
104012	110	60	1 x 8	318 x 38 x 59
104024	110	60	1 x 15	470 x 38 x 70
104030	110	60	1 x 18	623 x 38 x 70
104036	110	60	2 x 18	623 x 134 x 50
104060	110	60	1 x 36	1232 x 38 x 70
104066	110	60	2 x 36	1232 x 134 x 50
104072	110	60	1 x 58	1532 x 38 x 70
104078	110	60	2 x 58	1532 x 134 x 50
104112	230	50	1 x 8	318 x 38 x 59
104124	230	50	1 x 15	470 x 38 x 70
104130	230	50	1 x 18	623 x 38 x 70
104136	230	50	2 x 18	623 x 134 x 50
104154	230	50	1 x 30	927 x 38 x 70
104160	230	50	1 x 36	1232 x 38 x 70
104166	230	50	2 x 36	1232 x 134 x 50
104172	230	50	1 x 58	1532 x 38 x 70
104178	230	50	2 x 58	1532 x 134 x 50
104212	220	60	1 x 8	318 x 38 x 59
104224	220	60	1 x 15	470 x 38 x 70
104230	220	60	1 x 18	623 x 38 x 70
104236	220	60	2 x 18	623 x 134 x 50
104260	220	60	1 x 36	1232 x 38 x 70
104266	220	60	2 x 36	1232 x 134 x 50
104272	220	60	1 x 58	1532 x 38 x 70
104278	220	60	2 x 58	1532 x 134 x 50

FLUORESCENT LIGHTING

Freetec® T4 fixtures including:

- On/off switch
- T4 fluorescent tube
- Power cable 1,5 mtr.
- Mounting clips 4 pcs.
- Aluminium reflector

For shades and accessories see next page.



Freetec T4 linkable fluo-fixtures with daylight (6200°K) FL-lamp				
Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H)mm
105012	110-130	50-60	6	275 x 20 x 43
105018	110-130	50-60	10	395 x 20 x 43
105024	110-130	50-60	16	520 x 20 x 43
105030	110-130	50-60	20	620 x 20 x 43

Freetec T4 linkable fluo-fixtures with cool white (4200°K) FL-lamp				
Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H)mm
105512	220-240	50-60	6	275 x 20 x 43
105518	220-240	50-60	10	395 x 20 x 43
105524	220-240	50-60	16	520 x 20 x 43
105530	220-240	50-60	20	620 x 20 x 43

Freetec T4 linkable fluo-fixtures with warm white (2700°K) FL-lamp				
Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H)mm
105612	220-240	50-60	6	275 x 20 x 43
105618	220-240	50-60	10	395 x 20 x 43
105624	220-240	50-60	16	520 x 20 x 43
105630	220-240	50-60	20	620 x 20 x 43

FLUORESCENT LIGHTING

Freetec prismatic shade

Cat. no.	Watts
107012	6
107018	10
107024	16
107030	20

Freetec opal shade

Cat. no.	Watts
107112	6
107118	10
107124	16
107130	20

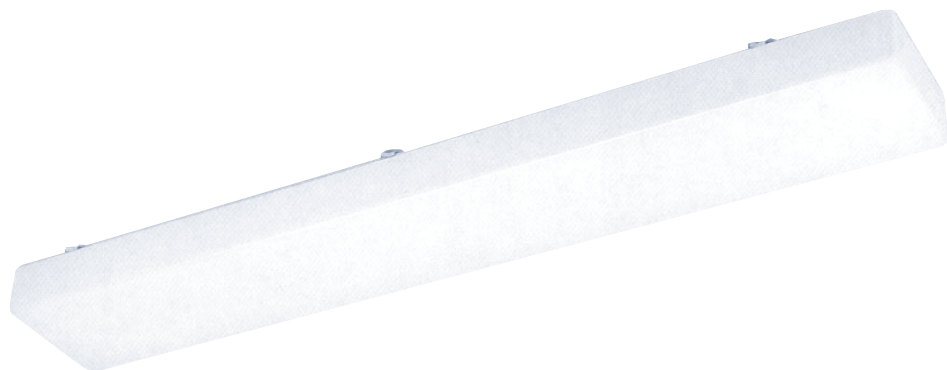
Freetec Linkable cable

Cat. no.	Mtr.	Description
107206	0,3	PVC cable 2 x 0,75 mm ²
107212	0,5	PVC cable 2 x 0,75 mm ²
107218	1,0	PVC cable 2 x 0,75 mm ²
107224	1,5	PVC cable 2 x 0,75 mm ²
107230	2,0	PVC cable 2 x 0,75 mm ²

Freetec spare T4 fluorescent lamps

Cat. no.	Watts	°K	Colour	d x l mm
107312	6	4200	cool white	12 x 218
107318	10	4200	cool white	12 x 340
107324	16	4200	cool white	12 x 465
107330	20	4200	cool white	12 x 566
107412	6	6200	daylight	12 x 218
107418	10	6200	daylight	12 x 340
107424	16	6200	daylight	12 x 465
107430	20	6200	daylight	12 x 566
107512	6	2700	warm white	12 x 218
107518	10	2700	warm white	12 x 340
107524	16	2700	warm white	12 x 465
107530	20	2700	warm white	12 x 566

FLUORESCENT LIGHTING



Non watertight fluo-fixtures with opal shade, for indoor use.

Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H) mm	
108012	12	DC	1 x 8	370 x 65 x 45	with switch
108112	24	DC	1 x 8	483 x 45 x 36	with switch
108118	24	DC	1 x 13	712 x 45 x 36	with switch
108212	110	60	1 x 8	378 x 43 x 76	with switch
108230	110	60	1 x 18	655 x 103 x 108	
108236	110	60	2 x 18	655 x 190 x 95	
108260	110	60	1 x 36	1260 x 103 x 108	
108266	110	60	2 x 36	1260 x 190 x 95	
108312	230	50	1 x 8	378 x 43 x 76	with switch
108330	230	50	1 x 18	655 x 103 x 108	
108336	230	50	2 x 18	655 x 190 x 95	
108360	230	50	1 x 36	1260 x 103 x 108	
108366	230	50	2 x 36	1260 x 190 x 95	
108412	220	60	1 x 8	378 x 43 x 76	with switch
108430	220	60	1 x 18	655 x 103 x 108	
108436	220	60	2 x 18	655 x 190 x 95	
108460	220	60	1 x 36	1260 x 103 x 108	
108466	220	60	2 x 36	1260 x 190 x 95	

FLUORESCENT LIGHTING

Fig. 1



Fig. 2



Fig. 3



Non watertight Circle fluo-fixtures with opal shade, for indoor use.

Cat. no.	Voltage	Hz	Watts	Dimensions (dia x H) mm	Fig.
108612	110	60	1 x 22	ø 250 x 85	1
108618	110	60	1 x 32	ø 350 x 85	1
108624	110	60	1 x 40	ø 450 x 85	1
108648	230	50	1 x 22	ø 250 x 85	1
108654	230	50	1 x 32	ø 350 x 85	1
108660	230	50	1 x 40	ø 450 x 85	1
108684	220	60	1 x 22	ø 250 x 85	1
108690	220	60	1 x 32	ø 350 x 85	1
108696	220	60	1 x 40	ø 450 x 85	1

Watertight security and orientation light.

Cat. no.	Voltage	Hz	Watts	Description	Fig.
108812	230	50	9	Black, with PL-lamp and photocell IP23	2
108824	230	50	9	White, with PL-lamp and photocell IP54	3
108830				Spare shade for Fig. 2	
108836				Spare shade for Fig. 3	



Housing: impact resisting polycarbonate grey RAL-7035

Diffuser: prismatic transparent impact resisting polycarbonate

Seal: neoprene

Diffuser closing clips: stainless steel

Watertight fluo-fixtures 24, 110, 220V DC with shade IP65.

Cat. no.	Voltage		Watts	Dimensions (L x W x H) mm
109030	24	DC	1 x 18	680 x 135 x 112
109036	24	DC	2 x 18	680 x 195 x 112
109060	24	DC	1 x 36	1290 x 135 x 112
109066	24	DC	2 x 36	1290 x 195 x 112
109130	110	DC	1 x 18	680 x 135 x 112
109136	110	DC	2 x 18	680 x 195 x 112
109230	220	DC	1 x 18	680 x 135 x 112
109236	220	DC	2 x 18	680 x 195 x 112
109260	220	DC	1 x 36	1290 x 135 x 112
109266	220	DC	2 x 36	1290 x 195 x 112

FLUORESCENT LIGHTING



Fig. 1



Fig. 2

Housing: glassfibre polyester

Diffuser: transparent methacrylic

Watertight fluo-fixtures with shade IP65.

Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H) mm	Fig.
109512	110	60	1 x 8	345 x 105 x 74	1
109530	110	60	1 x 18	666 x 100 x 108	2
109536	110	60	2 x 18	666 x 170 x 108	2
109560	110	60	1 x 36	1276 x 100 x 108	2
109566	110	60	2 x 36	1276 x 170 x 108	2
109572	110	60	1 x 58	1576 x 100 x 108	2
109578	110	60	2 x 58	1576 x 170 x 108	2
109612	230	50	1 x 8	345 x 105 x 74	1
109630	230	50	1 x 18	666 x 100 x 108	2
109636	230	50	2 x 18	666 x 170 x 108	2
109660	230	50	1 x 36	1276 x 100 x 108	2
109666	230	50	2 x 36	1276 x 170 x 108	2
109672	230	50	1 x 58	1576 x 100 x 108	2
109678	230	50	2 x 58	1576 x 170 x 108	2
109712	220	60	1 x 8	345 x 105 x 74	1
109730	220	60	1 x 18	666 x 100 x 108	2
109736	220	60	2 x 18	666 x 170 x 108	2
109760	220	60	1 x 36	1276 x 100 x 108	2
109766	220	60	2 x 36	1276 x 170 x 108	2
109772	220	60	1 x 58	1576 x 100 x 108	2
109778	220	60	2 x 58	1576 x 170 x 108	2



Housing: impact resisting polycarbonate grey RAL-7035

Diffuser: prismatic transparent impact resisting polycarbonate

Seal: neoprene

Diffuser closing clips: stainless steel

Watertight fluo-fixtures with shade IP65.

Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H) mm
109830	110	60	1 x 18	680 x 135 x 112
109836	110	60	2 x 18	680 x 195 x 112
109860	110	60	1 x 36	1290 x 135 x 112
109866	110	60	2 x 36	1290 x 195 x 112
109930	230	50	1 x 18	680 x 135 x 112
109936	230	50	2 x 18	680 x 195 x 112
109960	230	50	1 x 36	1290 x 135 x 112
109966	230	50	2 x 36	1290 x 195 x 112
110030	220	60	1 x 18	680 x 135 x 112
110036	220	60	2 x 18	680 x 195 x 112
110060	220	60	1 x 36	1290 x 135 x 112
110066	220	60	2 x 36	1290 x 195 x 112

FLUORESCENT LIGHTING



Housing: zinc coated steel deep drawn, seamless

Diffuser: impact resisting polycarbonate

Seal: neoprene

Diffuser closing clips: stainless steel

Watertight fluo-fixtures with shade IP67.

Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H) mm
110136	220	60	2 x 18	692 x 193 x 134
110142	220	60	2 x 36	1340 x 150 x 134



Housing: stainless steel

Diffuser: impact resisting polycarbonate

Seal: neoprene

Diffuser closing clips: stainless steel

Watertight fluo-fixtures with shade IP66/67.

Cat. no.	Voltage	Hz	Watts	Dimensions (L x W x H) mm
110166	220	60	2 x 18	725 x 165 x 128
110172	220	60	2 x 36	1334 x 165 x 128

SPARE PARTS FOR FLUORESCENT LIGHTING

Shade for fluo-fixtures.

Cat. no.	Watts	Description
Diffuser: transparent methacrylic		
110230	1 x 18	Shade for watertight fixture see page 181
110236	2 x 18	Shade for watertight fixture see page 181
110260	1 x 36	Shade for watertight fixture see page 181
110266	2 x 36	Shade for watertight fixture see page 181
110272	1 x 58	Shade for watertight fixture see page 181
110278	2 x 58	Shade for watertight fixture see page 181
Diffuser: impact resisting polycarbonate with s.s. spare clamps		
110330	1 x 18	Shade for watertight fixture see page 180-182
110336	2 x 18	Shade for watertight fixture see page 180-182
110360	1 x 36	Shade for watertight fixture see page 180-182
110366	2 x 36	Shade for watertight fixture see page 180-182
110412	1/2 x 18/20*	Shade for Aqua Signal 1044 clear
110424	1/2 x 36/40*	Shade for Aqua Signal 1044 clear
110460	1/2 x 18/20*	Shade for Aqua Signal 1044 opal
110472	1/2 x 36/40*	Shade for Aqua Signal 1044 opal
		* Also suitable for 1 x 115 W

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Shade clamps for fluo-fixtures.

Cat. no.		Description	Fig.
110506	PVC	Shade clamps for fixture see page 181	1
110512	S.S.	Shade clamps for fixture see page 181	2
110518	S.S.	Shade clamps for fixture see page 180-182	3
110524	S.S.	Shade clamps for Aqua Signal 1044	4
110530	S.S.	Shade clamps for Aqua Signal old 1044	5

COLOURED COVER FOR FLUORESCENT TUBE



Coloured Cover for Fluorescent Tube

Cat. no.	Watts	Colour	d x l mm
110612	8	blue	16 x 288 mm
110618	8	yellow	16 x 288 mm
110624	8	green	16 x 288 mm
110636	8	red	16 x 288 mm
110648	18	blue	26 x 590 mm
110654	18	yellow	26 x 590 mm
110660	18	green	26 x 590 mm
110666	18	orange	26 x 590 mm
110672	18	red	26 x 590 mm
110684	36	blue	26 x 1200 mm
110690	36	yellow	26 x 1200 mm
110696	36	green	26 x 1200 mm
110702	36	orange	26 x 1200 mm
110708	36	red	26 x 1200 mm
110720	58	blue	26 x 1500 mm
110726	58	yellow	26 x 1500 mm
110732	58	green	26 x 1500 mm
110738	58	orange	26 x 1500 mm
110744	58	red	26 x 1500 mm

WATERTIGHT LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Bulbeyes for incandescent lamps

Cat. no.	Max. Watts	Cap	Description	IP	Fig.
111006	60	B22	Oval, PVC with guard -O	43	1
111012	60	B22	Oval, light metal with guard -O	43	1
111018	60	B22	Oval, brass with guard -O-	54	2
111024	100	B22	Oval, light metal with guard -O	43	1
111054	60	E27	Oval, PVC with guard -O	43	1
111060	60	E27	Oval, light metal with guard -O	43	1
111066	60	E27	Oval, brass with guard -O-	54	2
111072	100	E27	Oval, light metal with guard -O	43	1
111112	60	B22	Round, synthetic with guard O=	56	3
111124	100	B22	Round, brass with guard O=	56	4
111160	60	E27	Round, synthetic with guard O=	56	3
111172	100	E27	Round, brass with guard O=	56	4



Fig. 1



Fig. 2

Round globes for Bulleyes

Cat. no.	Max. Watts	Description	Fig.
111212	60	Glass globe for cat.no. 111112/ 111160	1
111224	100	Glass globe for cat.no. 111124/ 111172	1

Rubber gasket for Round bulleyes

Cat. no.	Description	Fig.
111260	Rubber gasket for glass cat.no. 111112/111160	2



Fig. 1



Fig. 2

Mignon well glass fittings (European) for incandescent lamps IP56

- Housing of cast brass
- Clear glass globe and cast brass screw guard
- Also available in coloured glass globe see page 192

Cat. no.	Max. Watts	Cap	Description	Fig.
111506	40	Ba15d	Well glass fitting O-	1
111512	40	Ba15d	Well glass fitting O=	1
111518	40	Ba15d	Well glass fitting with top entry G3/8"	2
111554	40	E14	Well glass fitting O-	1
111560	40	E14	Well glass fitting O=	1
111566	40	E14	Well glass fitting with top entry G3/8"	2

WATERTIGHT LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Well glass fittings (European) for incandescent lamps IP56

- Housing of cast brass
- Clear glass globe and cast brass screw guard
- Also available in coloured glass globe see page 192

Cat. no.	Max. Watts	Cap	Description	Fig.
111606	60	B22	With 1 gland entry 0-	1
111612	60	B22	With 2 glands entry 0=	1
111618	60	B22	With 2 glands entry -0-	1
111624	60	B22	With top entry G3/4"	2
111630	60	B22	Side entry through wall-mounting flange	3
111636	60	B22	Suitable for wall-mounting 2 gland entry 0=	4
111648	60	E27	With 1 gland entry 0-	1
111654	60	E27	With 2 glands entry 0=	1
111660	60	E27	With 2 glands entry -0-	1
111666	60	E27	With top entry G3/4"	2
111672	60	E27	Side entry through wall-mounting flange	3
111678	60	E27	Suitable for wall-mounting 2 gland entry 0=	4

WATERTIGHT LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Well glass fittings (Japanese) for incandescent lamps

- Clear glass globe and screw guard

- Also available in coloured glass globe see page 194

Cat. no.	Max. Watts	Cap	Description	Type	Fig.
111806	20	Ba15d	Japanese, gland entry -0-	SAO-57	1
111812	20	Ba15d	Japanese, gland entry 0=	SAO-80	2
111818	20	Ba15d	Japanese, wall-mounting	SAO-80	3
111824	60	B22	Japanese, gland entry 0=	SAO-90	4
111830	60	B22	Japanese, wall-mounting	SAO-90	5
111906	20	E12	Japanese, gland entry -0-	SAO-57	1
111912	20	E12	Japanese, gland entry 0=	SAO-80	2
111918	20	E12	Japanese, wall-mounting	SAO-80	3
111924	60	E27	Japanese, gland entry 0=	SAO-90	4
111930	60	E27	Japanese, wall-mounting	SAO-90	5
111936	100	E27	Japanese, gland entry 0=	SAO-120	4
111948	200	E27	Japanese, gland entry 0=	SAO-135	4

WATERTIGHT LIGHTING FIXTURES PARTS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Guards for well glass fittings

Cat. no.	Description	For fixture on page	Fig.
112012	Guard/glass globe for German well glass fitting		1
112024	Guard for mignon well glass fitting, type 1020	188	2
112030	Guard for standard well glass fitting, type 1021	189	2
117484	Guard for rubber portable lamp	216	3
112060	Guard for Jap. well glass fitting, type SAO-57, PVC	190	4
112066	Guard for Jap. well glass fitting, type SAO-80, PVC	190	4
112072	Guard for Jap. well glass fitting, type SAO-90, PVC	190	4
112074	Guard for Jap. well glass fitting, type SAO-90, metal		5
112078	Guard for Jap. well glass fitting, type SAO-120, metal	190	5

Rubber gaskets for well glass fittings

Cat. no.	Description	For fixture on page
112106	Upper rubber gasket 60 x 50 x 1 mm, type 1020	188
112112	Lower rubber gasket 66 x 50 x 2 mm, type 1020	188
112118	Upper rubber gasket 88 x 76 x 1 mm, type 1021	189
112124	Lower rubber gasket 94 x 76 x 2 mm, type 1021	189
112130	Lower rubber gasket 80 x 70 x 4 mm, type SAO-90	190

WATERTIGHT LIGHTING FIXTURES GLOBES



Fig. 1



Fig. 2



Fig. 3

Spare glass globe for well glass fitting, flange type

Cat. no.	Description	Outside d x l mm	Colour	Fig.
112206	Dutch Mignon, type 1020	56 x 100	Clear	1
112210	Dutch Mignon, type 1020	56 x 100	Red	1
112212	Dutch Mignon, type 1020	56 x 100	Green	1
112214	Dutch Mignon, type 1020	56 x 100	Blue	1
112216	Dutch Mignon, type 1020	56 x 100	Yellow	1
112218	Dutch Mignon, type 1020	56 x 100	Orange	1
117478	For rubber portable lamp	80 x 102	Clear	2
112242	Dutch Standard, type 1021	88 x 165	Clear	3
112244	Dutch Standard, type 1021	88 x 165	Opal	3
112246	Dutch Standard, type 1021	88 x 165	Red	3
112248	Dutch Standard, type 1021	88 x 165	Green	3
112250	Dutch Standard, type 1021	88 x 165	Blue	3
112252	Dutch Standard, type 1021	88 x 165	Yellow	3
112254	Dutch Standard, type 1021	88 x 165	Orange	3

WATERTIGHT LIGHTING FIXTURES GLOBES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Spare glass globe for well glass fitting, flange type

Cat. no.	Description	Outside d x l mm	Colour	Fig.
112272	Swedish, type 2108	93 x 150	Clear	1
112274	Swedish, type 2108	93 x 150	Red	1
112276	Swedish, type 2108	93 x 150	Green	1
112284	German, type 399	94 x 115	Clear	2
112286	German, type 399	94 x 115	Red	2
112288	German, type 399	94 x 115	Green	2
121612	For Explosionproof handlamp	100 x 142	Clear	3
112306	Japanese, type FAO-90	105 x 150	Clear	4
112308	Japanese, type FAO-90	105 x 150	Red	4
112310	Japanese, type FAO-90	105 x 150	Green	4
112312	Japanese, type FAO-90	105 x 150	Blue	4

WATERTIGHT LIGHTING FIXTURES GLOBES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Spare glass globe for well glass fitting, screw type

Cat. no.	Description	Outside d x l mm	Colour	dia screw	Fig.
112318	Japanese, type SAO-57	57 x 75	Clear	60	1
112330	Japanese, type SAO-80	80 x 90	Clear	84	1
112342	Japanese, type SAO-90	82 x 150	Clear	84	1
112344	Japanese, type SAO-90	82 x 150	Red	84	1
112346	Japanese, type SAO-90	82 x 150	Green	84	1
112348	Japanese, type SAO-90	82 x 150	Blue	84	1
112360	German, type 154/PVC	100 x 115	Clear	100	2
112372	German, type 154/Glass	100 x 115	Clear	100	3
112384	German, type 155	124 x 115	Opal	100	4
112406	Japanese, type SAO-120	120 x 175	Clear	123	1
112408	Japanese, type SAO-120	120 x 175	Red	123	1
112410	Japanese, type SAO-120	120 x 175	Green	123	1
112412	Japanese, type SAO-120	120 x 175	Blue	123	1
112424	Japanese, type SAO-135	135 x 225	Clear	123	1
112426	Japanese, type SAO-135	135 x 225	Red	123	1
112428	Japanese, type SAO-135	135 x 225	Green	123	1
112430	Japanese, type SAO-135	135 x 225	Blue	123	1

HALOGEN FLOODLIGHTS

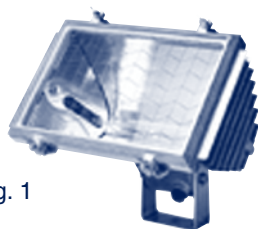


Fig. 1



Fig. 2

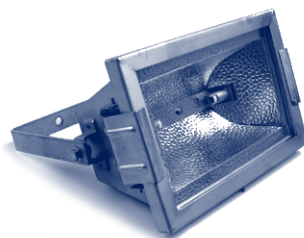


Fig. 3

Halogen floodlight fixtures R7s, light metal

Cat. no.	Max. Watts	Brand	Description	Cap	IP	Fig.
113018	150	Philips	For halogen lamp 78 mm	R7s	44	1
113030	500		For halogen lamp 118 mm	R7s	44	1
113042	500		For halogen lamp 118 mm	R7s	55	1
113054	1000		For halogen lamp 189 mm	R7s	44	1
113066	1000	Philips	For halogen lamp 189 mm	R7s	55	1
113078	1500		For halogen lamp 254 mm	R7s	55	1
113090	2000		For halogen lamp 334 mm	R7s	55	1

Sylvania Halogen floodlight fixtures R7s, aluminium Frame with a protective glassplane reinforced glass with wires

Cat. no.	Max. Watts	Description	Cap	IP	Fig.
113106	500	For halogen lamp 118 mm	R7s	54	2
113110	1000	For halogen lamp 189 mm	R7s	54	2
113114	1500	For halogen lamp 254 mm	R7s	54	2

Halogen floodlight fixtures R7s, stainless steel

Cat. no.	Max. Watts	Description	Cap	IP	Fig.
113128	500	For halogen lamp 118 mm	R7s	67	3
113136	1000	For halogen lamp 189 mm	R7s	67	3

HALOGEN FLOODLIGHTS

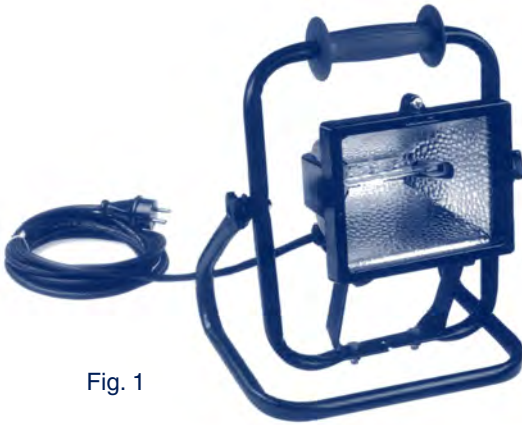


Fig. 1

Halogen floodlight fixtures, light metal with floor base

Cat. no.	Max. Watts	Description	IP	Fig.
113148	300	For halogen lamp 118 mm with 5 mtr cable	54	1
113160	1000	For halogen lamp 189 mm with 5 mtr cable	54	1

Halogen floodlight fixtures E40, stainless steel

Cat. no.	Max. Watts	Description	Cap	IP	Fig.
113184	500	For double envelope lamp	E40	67	3
113196	1000	For double envelope lamp	E40	67	3

Glasses for halogen floodlight fixtures

Cat. no.	Description	for floodlight Cat.no.
113212	Glass 178 x 140 x 5 mm	113030
113224	Glass 180 x 140 x 5 mm	113042
113236	Glass 268 x 195 x 5 mm	113054
113248	Glass 265 x 175 x 5 mm	old 113054

WATERTIGHT LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3

Cargo clusters with wire guard and suspension hook

Cat. no.	Description	Fig.
113512	For 5-lamps max. 75W with lampholder B22	1
113520	For 5-lamps max. 75W with lampholder B22 and internal wiring	1
113528	For 5-lamps max. 75W with lampholder E27	1
113536	For 5-lamps max. 75W with lampholder E27 and internal wiring	1
113572	For 1-lamp max. 200W with lampholder B22	2
113580	For 1-lamp max. 200W with lampholder E27	2
113600	For 1-lamp max. 500W with lampholder E40	3

WATERTIGHT LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3

Uni-economy/20 full rubber fixture, complete with macrolon shade			
- With lampholder E27			
- GLS-lamps maximum 200 Watts			
Cat. no.	Description	IP	Fig.
113624	Fixture with metal hook, suitable for serial mounting	55	1
113632	Fixture floor stand with reel, without cable	54	2
113640	Fixture floor stand with reel and two receptacle with earth, without cable	44	3
113648	Spare macrolon shade for above		

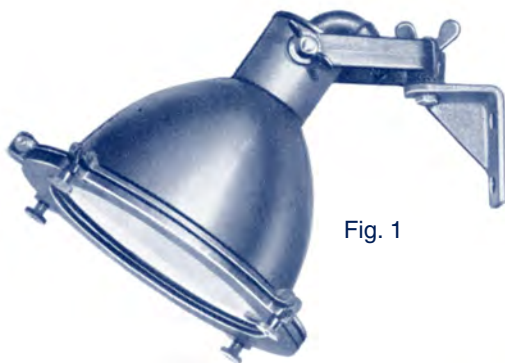


Fig. 1

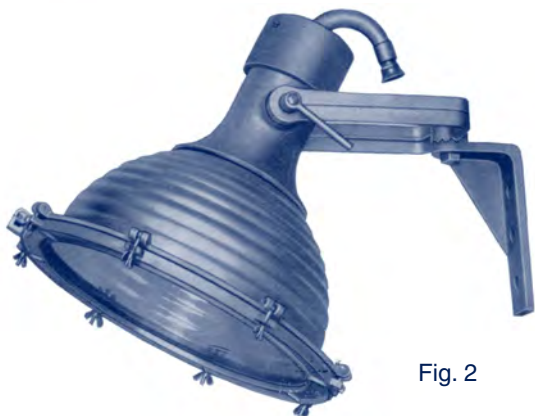


Fig. 2

Floodlights

Brass casing, and fork-shaped holder. Bracket made of cast iron.

Reflector: Cu, chromium-plated on inside and outside.

Lampholder: E40

Cat. no.	Description	Fig.
113672	With lampholder B22, for incandescent lamp 200W max. or high-pressure mercury vapour lamp125W	1
113680	With lampholder E27, for incandescent lamp 200W max. or high-pressure mercury vapour lamp125W	1
113700	With lampholder E40, for incandescent lamp, up to 1000W or high-pressure mercury vapour lamp, up to 400W or high-pressure sodium vapour lamp, up to 400W	2

WATERTIGHT LIGHTING FIXTURES JAPANESE



Fig. 1



Fig. 2



Fig. 3

Japanese lighting fixture for reflector and mercury lamps

Cat. no.	Description	Mounting	Fig.
113706	E26, for reflector lamps 100/150/200W	Flange base	1
113712	E39, for reflector lamps 300/500W	Flange base	1
113718	E39, for HRF mercury lamps 300/400W	Flange base	1
113724	E39, for HRF mercury lamps 700/1000W	Flange base	1
113736	E26, for reflector lamps 100/150/200W	Screw clamp	2
113742	E39, for reflector lamps 300/500W	Screw clamp	2
113748	E39, for HRF mercury lamps 300/400W	Screw clamp	2
113754	E39, for HRF mercury lamps 700/1000W	Screw clamp	2

Japanese flood lighting fixture, vibration-proof

Cat. no.	Description	Beam angle	Fig.
113766	E39, for mercury lamp HF 700/1000W or high-pressure sodium lamp NH 700/1000W	Narrow 20°	3
113772	E39, for mercury lamp HF 700/1000W or high-pressure sodium lamp NH 700/1000W	Wide 55°	3

WATERTIGHT LIGHTING FIXTURES JAPANESE



Fig. 1



Fig. 2



Fig. 3

Japanese boat deck lights for Sealed Beam Lamp

Cat. no.	Description	Mounting	Fig.
113806	PAR, with sealed beam lamp 24V 60W	Flange base	1

Japanese boat deck lights water and vibration proof

Cat. no.	Description	Mounting	Fig.
113818	E39, for incandescent lamp 500W	Flange base	2

Japanese marine floodlight projector water and vibration proof

Cat. no.	Description	Mounting	Fig.
113830	E39, for search light lamp with top-mirror	Flange base	3

WATERTIGHT HIGH-PRESSURE FLOODLIGHT FIXTURES

GEWISS



Fig. 1

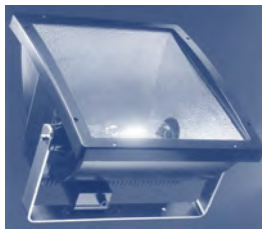


Fig. 2

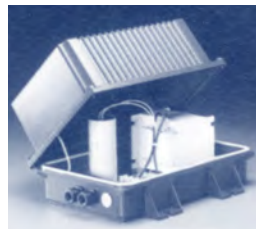


Fig. 3

Floodlight for high-pressure lamps, complete with ballast etc.

Cat. no.	Voltage	Hz	Watts	Description	IP	Fig.
113912	110	60	400	E40, for HPS(T)	66	1
113920	230	50	400	E40, for MH(T)/HPS(T)	66	1
113928	220	60	400	E40, for MH(T)/HPS(T)	66	1

Floodlight for high-pressure sodium lamps, without ballast

Cat. no.			Watts	Description	IP	Fig.
113954			1000	E40, for HPS(T)	66	2

Gearbox for above Floodlight, complete with ballast

Cat. no.	Voltage	Hz	Watts	Description	IP	Fig.
113966	230	50	1000	For MH(T)/HPS(T)	65	3
113974	220	60	1000	For MH(T)/HPS(T)	65	3

Spare parts for high-pressure floodlight fixtures

Cat. no.				Description	for floodlight Cat. no.
113992				Glass 390 x 300 mm	113920/113928
113994				Protective wire guard	113920/113928
113998				Glass 615 x 550 mm	113954

HIGH-PRESSURE LIGHTING FIXTURES

GEWISS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

High bay reflectors for high-pressure mercury lamps, complete with ballast

Cat. no.	Voltage	Hz	Watts	Description	IP	Fig.
114012	230	50	125	E27, for HPM	23	1
114020	230	50	250	E40, for HPM	23	1
114028	230	50	400	E40, for HPM	23	1

Watertight High bay reflectors with polycarbonate bowl for high-pressure mercury lamp, complete with ballast

Cat. no.	Voltage	Hz	Watts	Description	IP	Fig.
114056	230	50	250	E40, for HPM	65	2
114064	230	50	400	E40, for HPM	65	2
114076	220	60	250	E40, for HPM	65	2
114082	220	60	400	E40, for HPM	65	2

Road lighting fixtures for high-pressure mercury lamps, complete with ballast

Cat. no.	Voltage	Hz	Watts	Description	IP	Fig.
114106	230	50	125	E27, for HPM	23/54	3
				Pole fixing ø42-60 mm		
114130				Fixing bracket for above		4

DAYLIGHT SIGNALLING LIGHTS



Fig. 1



Fig. 2



Fig. 3

Signalling lights and accessories		
Cat. no.	Description	Fig.
115106	Francis long range day and night handsignalling lamp for 12V or 24V 60W P15d lamp with red and green colour filter in wooden carrying case.	1
115112	Sanshin long range day and night handsignalling lamp for 24V 60W halogen lamp with red and green colour filter in metal carrying case	2
115206	Wooden carrying case with lead-acid batteries 12Volt with receptacle 3-pole	3
115212	Wooden carrying case with lead-acid batteries 24Volt with receptacle 3-pole	3
185718	Chrome receptacle 3-pole	
185742	Chrome plug 3-pole	
115224	Battery charger 110/220V - 6/12/24Volt with plug 3-pole, for Cat. no. 115206 / 115212	

WATERTIGHT SEARCHLIGHTS



Fig. 1



Fig. 2



Fig. 3

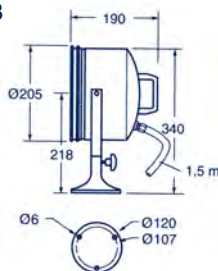
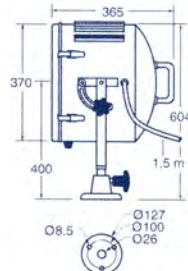


Fig. 4



Watertight portable Searchlight with 3 mtr cable and SOLAS approval						
Cat. no.	Voltage	Watts	Description		IP	Fig.
115306	12	50	With PAR36 halogen lamp		68	1
115310	24	50	With PAR36 lamp		68	1
115314			Slip-on holder for above			2

Searchlight - Deck mounted ø 200 mm						
Cat. no.	Voltage	Watts	Description	Range	IP	Fig.
115412	28	250	With PAR64 lamp	630 m	34	3
115418	110	1000	With PAR64 lamp	630 m	34	3
115424	220	1000	With PAR64 lamp	540 m	34	3
Extended version on request						

Watertight Searchlight - Deck mounted ø 340 mm						
Cat. no.	Voltage	Watts	Description	Range	IP	Fig.
115448	24	250	With halogen lamp G6.35	904 m	56	4
115454	110	1000	With halogen lamp GX9.5	974 m	56	4
115460	220	1000	With halogen lamp GX9.5	1104 m	56	4
Extended version on request						

WATERTIGHT SEARCHLIGHTS



Fig. 1

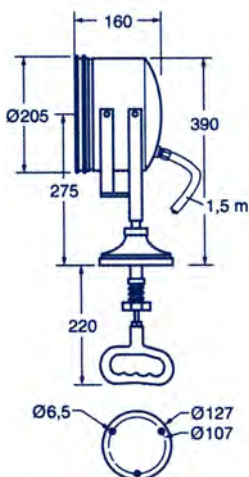
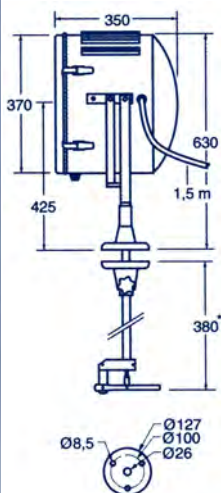


Fig. 2



Searchlight - Cabin control mounted $\varnothing$ 200 mm

Cat. no.	Voltage	Watts	Description	Range	IP	Fig.
115512	28	250	With PAR64 lamp	630 m	34	1
115518	110	1000	With PAR64 lamp	630 m	34	1
115524	220	1000	With PAR64 lamp	540 m	34	1
Extended version on request						

Watertight Searchlight - Cabin control mounted $\varnothing$ 340 mm

Cat. no.	Voltage	Watts	Description	Range	IP	Fig.
115548	24	250	With halogen lamp G6.35	904 m	56	2
115554	110	1000	With halogen lamp GX9.5	974 m	56	2
115560	220	1000	With halogen lamp GX9.5	1104 m	56	2
Extended version on request						

WATERTIGHT SEARCHLIGHTS SUEZ CANAL



Fig. 1



Fig. 2



Fig. 3

Watertight Searchlight Suez Canal

Application: Vessels transiting the Suez Canal.

Approvals: Certified by Lloyds Register of Shipping to Suez Canal Authority Specifications.

Cat. no.	Description	Watts	IP	Fig.
115590	Suez canal searchlight with lampholder GY16	2000	67	1
115596	Suez canal searchlight with lampholder G38	3000	67	1

Spare lamps for Suez Canal Searchlight

Cat. no.	Voltage	Watts	Type	Cap	Fig.
521872	120	2000	CP43/72	GY16	2
521908	120	2000	CP41/73	G38	3
521920	120	3000	HX48	G38	3
521884	230	2000	CP43/72	GY16	2
521932	230	2000	CP41/73	G38	3
521944	240	3000	HX48	G38	3

NAVIGATION LIGHTS - SINGLE



Application range : Vessels of 20 metres in length and above.
Approval : COLREG '72
Protection class : IP56, dust- and waterproof
Lampholder : P28s

Single type Sectional

Cat. no.	Type	Colour	Section	Min. Visibility
115806	Starboard	Green	112,5°	3 N.miles
115812	Port	Red	112,5°	3 N.miles
115818	Masthead	Clear	225°	6 N.miles
115824	Stern*	Smoky	135°	3 N.miles
115830	Suez	Red	135°	-----
115836	Towing	Yellow	135°	3 N.miles

* The Stern lantern can also be used as Elbe lantern

Single type All round

Cat. no.	Type	Colour	Section	Min. Visibility
115848	Anchor	Smoky	360°	3 N.miles
115854	Manoeuvring	Clear	360°	5 N.miles
115860	Not Under Command	Red	360°	3 N.miles
115866	Fishing	Green	360°	3 N.miles
115872	Kiel Canal	Yellow	360°	3 N.miles
115878	Hoistable	Smoky	360°	3 N.miles
115884	Hoistable	Red	360°	3 N.miles
115890	Hoistable	Green	360°	3 N.miles

NAVIGATION LIGHTS - DUPLEX



Application range : Vessels of 20 metres in length and above.
Approval : COLREG '72
Protection class : IP56, dust- and waterproof
Lampholder : P28s

Duplex type Sectional

Cat. no.	Type	Colour	Section	Min. Visibility
115906	Starboard	Green	112,5°	3 N.miles
115912	Port	Red	112,5°	3 N.miles
115918	Masthead	Clear	225°	6 N.miles
115924	Stern	Clear	135°	3 N.miles
115936	Towing	Yellow	135°	3 N.miles

Duplex type All round

Cat. no.	Type	Colour	Section	Min. Visibility
115948	Anchor	Smoky	360°	3 N.miles
115960	Not Under Command	Red	360°	3 N.miles
115966	Fishing	Green	360°	3 N.miles

Direction light with Bay15d lampholder

Cat. no.	Type	Colour	Section	Min. Visibility
115986	Panama/Suez/Kiel	Blue	60°	----

NAVIGATION LIGHTS SPARE PARTS

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

Spare parts for navigation lights

Cat. no.	Description	Part. no.	Fig.
116010	Top part complete	70998000	1
116014	Middle part with cable	70990050	2
116018	Base part with cable	70993000	3
116022	Gasket 159 x 121 x 2 mm	70990060	4
116026	Gasket 183 x 144 x 2 mm	70990055	5
116030	Mounting ring - small	70990045	6
116034	Mounting ring - large	70990040	7
116038	Screen Side lights	70990210	8
116042	Screen Masthead	70990220	8
116046	Screen Stern and Towing	70990230	8
116050	Lens Red	70997001	9
116054	Lens Green	70997001	9
116058	Lens Cristal clear, for masthead/manoeuvring	70997003	9
116062	Lens Smoky, for stern and anchor	70997004	9
116066	Lens Yellow	70997005	9
116070	Lampholder P28s with bridge c/w plug	70992001	10
116074	Handle for hoisting	70999900	11
500232	Navigation Lamp 24V 40W 60cd P28s	70990330	
500252	Navigation Lamp 115V 60W 60cd P28s	70990320	
500262	Navigation Lamp 230V 65W 60cd P28s	70990310	

FLASHING LIGHTS



Flashing Light IP68 with XENON lamp, Stainless Steel

Cat. no.	Voltage	Colour
116312	24V DC	Glass, cristal clear
116318	24V DC	Glass, red
116324	24V DC	Glass, green
116330	24V DC	Glass, yellow
116336	24V DC	Glass, blue
116342	110V AC	Glass, cristal clear
116348	110V AC	Glass, red
116354	110V AC	Glass, green
116360	110V AC	Glass, yellow
116366	110V AC	Glass, blue
116372	220V AC	Glass, cristal clear
116378	220V AC	Glass, red
116384	220V AC	Glass, green
116390	220V AC	Glass, yellow
116396	220V AC	Glass, blue

Xenon unit for Flashing Light

Cat. no.	Voltage	Wattage/second
116408	24V DC	6
116412	110V AC	16
116416	220V AC	16

INDOOR LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3

Ceiling or wall lighting fixtures for surface-mounting without globe

Cat. no.		Watts	Colour	Lampholder	Description	Fig.
117012		40	White	B22	Straight	1
117018		40	White	B22	Slant	2
117024		60	White	B22	Straight	1
117030		60	White	B22	Slant	2
117036		40	White	E27	Straight	1
117042		40	White	E27	Slant	2
117048		60	White	E27	Straight	1
117054		60	White	E27	Slant	2
117060		100	White	E27	Straight	1

Globes for ceiling or wall lighting fixtures

Cat. no.		Description	dia x l mm	Screw dia mm	Fig.
117072		Globe 40W	ø130 x 130	75	3
117078		Globe 60W	ø145 x 145	85	3
117084		Globe 100W	ø180 x 180	98	3

INDOOR LIGHTING FIXTURES



Indoor luminaires					
Cat. no.		dia x l mm	Lampholder	Max. Watts	IP
117102		ø180 x 100	B22	60	44
117108		ø230 x 120	B22	100	44
117114		ø300 x 120	2x B22	2x 60	20
117120		ø180 x 100	E27	60	44
117126		ø230 x 120	E27	100	44
117132		ø300 x 120	2x E27	2x 60	20



Fig. 1



Fig. 2

Fixtures for Linestra / Philinea lamps			
Cat. no.		Description	Fig.
117180		Linestra lampholder 1-pol type S14s	1
117184		Linestra lampholder 2-pol type S14d	1
117190		Linestra fixture 35W with switch 300 x 30 mm	2
117202		Linestra fixture 60W with switch 500 x 30 mm	2

INDOOR LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Berth lights

Cat. no.	Description	Fig.
117260	B22, metal with switch and receptacle 2x flat	1
117266	B22, stainless steel with switch	2
117280	E27, metal with switch and receptacle 2x flat	1
117286	E27, stainless steel with switch	2
117292	Spare switch for 117260 / 117280	3
117298	Spare switch for 117266 / 117286	4

Mirror light

Cat. no.	Description	Fig.
117310	Mirror light 2 lampholders E14 2x 40W with switch	5

Wall-lamp

Cat. no.	Description	Fig.
117322	Wall-lamp with lampholder E27 and switch	6

INDOOR LIGHTING FIXTURES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 6

Machine, chartroom and desk fixture		
Cat. no.	Description	Fig.
117334	Magnifying with table clamp, for 40W E14 bulb	1
117346	Chartroom fixture B22, elbow-hinge type desk and wall mounting	2
117352	Chartroom fixture E27, elbow-hinge type desk and wall mounting	2
117364	Chartroom fixture B22, harmonica type wall mounting	3
117370	Chartroom fixture E27, harmonica type wall mounting	3
117382	Desk/computer fixture 220V 60Hz with PL-lamp 11W, desk and wall mounting	4
117388	Desk lamp with flexible arm desk-type E27	6

PORTABLE HANDLAMPS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Portable handlamps watertight

Cat. no.	Description	Fig.
117406	Rubber handlamp B22 with glass and guard	1
117412	Rubber handlamp B22 complete with 15 mtr cable and plug	1
117424	Rubber handlamp E27 with glass and guard	1
117430	Rubber handlamp E27 complete with 15 mtr cable and plug	1
117442	Japanese handlamp B22 with glass SAO90 and guard	2
117448	Japanese handlamp E27 with glass SAO90 and guard	2
117460	Gripper handlamp B22 with guard	3
117466	Gripper handlamp E27 with guard	3
117470	Inspection Light with flexible arm and mirror	4
117478	Spare glass for rubber handlamp Fig. 1-2	5
117484	Spare guard for rubber handlamp Fig. 1-2	6

PORTABLE FLUORESCENT HANDLAMPS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Portable fluorescent handlamps

Cat. no.	Description	Fig.
117506	Fluorescent handlamp 12V DC TL 8W with 5 mtr cable	1
117512	Fluorescent handlamp 24V DC TL 8W with 5 mtr cable	1
117518	Fluorescent handlamp 42V AC PL 11W with 10 mtr cable	2
117524	Fluorescent handlamp 110V AC TL 15W with 5 mtr cable	1
117530	Fluorescent handlamp 220V AC TL 8W with 5 mtr cable	1
117542	Fluorescent handlamp 220V AC PL 18W with 5 mtr cable	3
117566	Goliath working fixture 220V AC TL-2D lamp 38W with ground stand and hook	4

LAMP HOLDERS BAYONET



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

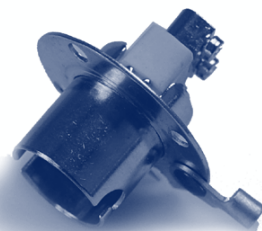


Fig. 6

Bayonet lampholder Ba7s - Ba9s - Ba15d - Bay15d

Cat. no.	Lampholder	Description	Fig.
118012	Ba7s	Plug-in type 1-pol	1
118018	Ba9s	Plug-in type 1-pol	1
118106	Ba15d	Brass, with M10 inside thread	2
118112	Ba15d	Brass, with backplate	3
118118	Ba15d	Brass, with 2 mounting lugs	4
118124	Ba15d	Bakelite, Japanese flanged type FB-15	5
118136	Bay15d	Metal, for navigation lamps	6

LAMPHOLDERS BAYONET



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13

Bayonet lampholder B22

Cat. no.	Lampholder	Description	Fig.
118206	B22	Brass, with M10 inside thread	1
118212	B22	Bakelite, with M10 inside thread	2
118218	B22	Brass, with R 3/8" inside thread	1
118224	B22	Brass, with backplate	3
118230	B22	Brass, with 2 mounting lugs	4
118236	B22	Brass, with 3 mounting lugs	5
118242	B22	Porcelain, back connection Lindner type	6
118248	B22	Porcelain, for DKN fixture	7
118254	B22	Porcelain, for portable handlamp	8
118260	B22	Porcelain, for gripper portable handlamp	9
118266	B22	Porcelain, Japanese flanged type FB-22	10
118272	B22	Porcelain, Japanese tubular type TB-22	11
118278	B22	Bakelite, Japanese with brim GE-22	12
118284	B22	Bakelite, for illumination cable 13 mm	13

LAMPHOLDERS SCREW



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Screw lampholder E10 - E12 - E14

Cat. no.	Lampholder	Description	Fig.
118306	E10	Bakelite, with backplate	1
118330	E12	Bakelite, Japanese flanged type FE-12	2
118354	E14	Brass, with M10 inside thread	3
118360	E14	Bakelite, with M10 inside thread	4
118366	E14	Brass, with 2 mounting lugs	5
118372	E14	Bakelite, with backplate	6

LAMP HOLDERS SCREW



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Screw lampholder E26 - E27

Cat. no.	Lampholder	Description	Fig.
118406	E27	Brass, with M10 inside thread	1
118412	E27	Bakelite, with M10 inside thread	2
118418	E27	Bakelite, with M10 inside thread and ring	3
118430	E27	Porcelain, with M10 inside thread	4
118436	E27	Brass, with R 3/8" inside thread	1
118442	E27	Bakelite, with R 3/8" inside thread	2
118448	E27	Porcelain, with R 3/8" inside thread	4
118454	E27	Brass, with 2 mounting lugs	5
118460	E27	Brass, with 3 mounting lugs	6

LAMP HOLDERS SCREW



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12

Screw lampholder E26 - E27

Cat. no.	Lampholder	Description	Fig.
118466	E27	Porcelain, back connection Dutch type	1
118472	E27	Porcelain, back connection Lindner type	2
118478	E27	Porcelain, for DKN fixture	3
118484	E27	Porcelain, for portable handlamp	4
118490	E27	Porcelain, for gripper portable handlamp	5
118496	E27	Porcelain, Japanese flanged type FE-26	6
118502	E27	Porcelain, Japanese tubular type TE-26	7
118508	E27	Bakelite, Japanese with brim GE-26	8
118514	E27	Bakelite, for illumination cable 13 mm	9
118520	E27	Bakelite, American with back connection	10
118526	E27	Bakelite, American for 2-plugs flat pins	11
118532	E27	Rubber, waterproof with 2-wires	12

LAMP HOLDERS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Screw lampholder E39 - E40

Cat. no.	Lampholder	Description	Fig.
118606	E39	Brass, Japanese flanged type FE-39	1
118618	E39	Porcelain, Japanese tubular type TE-39	2
118630	E40	Brass, with R 3/8" inside thread	3
118636	E40	Porcelain, with R 3/8" inside thread	4
118648	E40	Porcelain, back connection for Ex fixtures	5
118654	E40	Porcelain, back connection for Ex fixtures	6

Lampholder P15d - P15s - P28s

Cat. no.	Lampholder	Description	Fig.
118706	P15d	For aldis daylight signalling lamp	7
118712	P15s	Bakelite, with wire	8
118718	P28s	Bakelite, back connection for navigation lights	9

REDUCING LAMPHOLDERS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



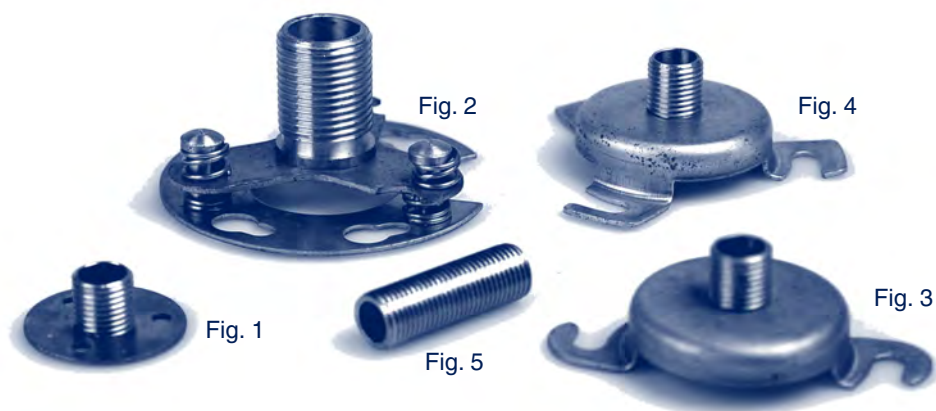
Fig. 6



Fig. 7

Adaptor lampholders

Cat. no.	Lampholder	Description	Fig.
118806	E17	For lamp E14	1
118812	B22	For lamp E27	2
118818	E27	For lamp B22	3
118824	E27	For lamp E14	4
118830	E27	For lamp E40	5
118836	E39	For lamp E27	6
118842	E40	For lamp E27	7



Lampholder accessories			
Cat. no.		Description	Fig.
118906		Brass, back connection plate with M10 thread	1
118912		Brass, back connection plate with R 3/8" thread on swing base	2
118918		Brass, 2 mounting lugs with M10 thread	3
118924		Brass, 3 mounting lugs with M10 thread	4
118930		Brass, nipple M10 thread length 15 mm	5
118936		Brass, nipple M10 thread length 30 mm	5
118942		Brass, nipple R 3/8" thread length 30 mm	5

LAMPHOLDERS FOR HALOGEN

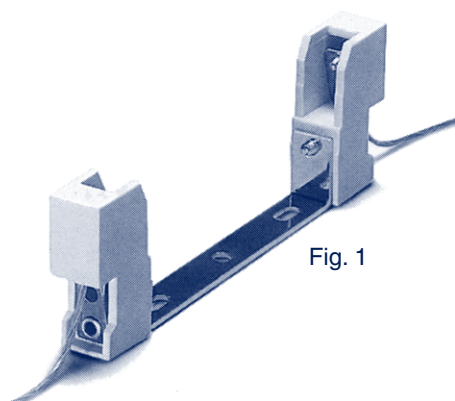


Fig. 1

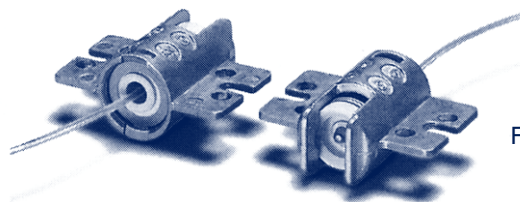


Fig. 2

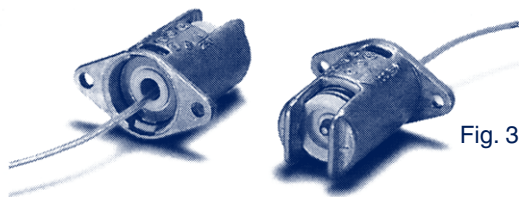


Fig. 3

Lampholders for halogen lamps

Cat. no.	Lampholder	Description	Fig.
118980	R7s	Set for max. 500W fixture	1
118986	R7s	For max. 1000W, with side connection with heat resistant cable	2
118992	R7s	For max. 2000W, with back connection and heat resistant cable	3

LAMP HOLDERS FOR SEARCHLIGHT AND PROJECTION LAMPS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Lampholders for halogen, searchlight and projection lamps

Cat. no.	Lampholder	Type	Fig.
119006	GU-10		1
119018	G4 - G5.3 - G6.35		2
119030	G5.3 - GU/GX5.3	886	3
119042	G/GX/GY/GZ6.35	899	4
119054	G/GX/GY/GZ6.35	903	5
119066	GX9.5	995	6
119078	GY9.5	997	7
119090	GY9.5	985	8
119102	GY16	996	9
119114	GX16d	982	10
119126	G-38	938	11

EXPLOSION PROOF EQUIPMENT



Ceag Ex Fluorescent Fittings with electronic ballast for G13 Bi-pin FL-lamp

Type of protection: EEx s ed IIC T4 for zone 1, zone 2 and zone 21 - IP66

Cat. no.	Wattage	Description
121200	2 x 18	110-254V 47-63Hz and 110-230V DC Dimensions: 760 x 188 x 130mm
121212	2 x 36	110-254V 47-63Hz and 110-230V DC Dimensions: 1360 x 188 x 130mm



Ex Fluorescent Fittings with electronic ballast for G13 Bi-pin FL-lamps

Type of protection: EEx nR 11 T5/T6 for zone 2 - IP65/67

Cat. no.	Wattage	Description
121300	2 x 18	220-240V 50/60Hz Dimensions: 703 x 173 x 114mm
121312	2 x 36	220-240V 50/60Hz Dimensions: 1313 x 209 x 147mm

EXPLOSION PROOF EQUIPMENT



Fig. 1

Fig. 2



Fig. 3



Ex rubber portable handlamp max. 60W

Type of protection: E Ex e II T2-T4 for zone 1 and zone 2 - IP65

Cat. no.	Description	Fig.
121600	Ex rubber portable handlamp E27	1
121612	Spare glass for portable handlamp	
121618	Spare lampholder for portable handlamp E27	

Ex Brass light for incandescent lamp max. 60W

Type of protection: E Ex ed ICI T3 - IP56

Cat. no.	Description	Gland position	Fig.
121700	Ex Brass well glass fitting E27	0-	2
121706	Ex Brass well glass fitting E27	0=	2
121712	Ex Brass well glass fitting E27	-0-	2
121724	Spare glass for Ex Brass light		
121730	Spare lampholder E27 for Ex Brass light		

Ex Hanging Lamp

Type of protection: E Ex de IIC T4 + T5 - IP65

Cat. no.	Description	Gland position	Fig.
121772	Ex Fixture E27 up to 200W	-0-	3
121790	Spare glass with wire-guard		
121796	Spare lampholder E27		

EXPLOSION PROOF EQUIPMENT



Fig. 1

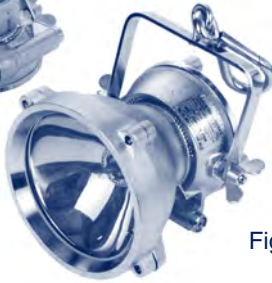


Fig. 2



Fig. 3

Wolf Ex Airturbo Safety lamps

Type of protection: Ex s II T6 for zone 1 and zone 2

Light source: Halogen filament bulb 12V 55W

Cat. no.	Description	Fig.
121836	Safety bay lamp All-around 360° illumination	1
121842	Safety flood lamp	2

Wolf Ex Airturbo Safety lamps

Type of protection: Ex s II T4 for zone 1 and zone 2

Light source: Halogen filament bulb 24V 250W

Cat. no.	Description	Fig.
121854	Safety bay lamp All-around 360° illumination	1
121860	Safety flood lamp	2

Friwo Ex Air-powered lamps

Type of protection: Ex f G 5

Light source: HPM 80W

Cat. no.	Description	Fig.
121872	Safety bay lamp All-around 360° illumination	3

EXPLOSION PROOF EQUIPMENT



Fig. 1



Fig. 2



Fig. 3

Ex Halogen Floodlight		
Type of protection: Ex N II T2 and T3 - IP66/67		
Cat. no.	Description	Fig.
121900	Ex Halogen floodlight E40 for Double envelope Halogen lamp 500W T3	1
121912	Ex Halogen floodlight E40 for Double envelope Halogen lamp 1000W T2	1

Ex Floodlight		
Type of protection: EEx D IIC T3 + T4 - IP55		
Cat. no.	Description	Fig.
122000	Ex Floodlight E40 for HPM, MH, HPS 250/400W or Blended lamp 500W or GLS 300/500W	2

For ballast unit see next page

Ex Floodlight with incorporated ballast		
Type of protection: Ex nR II T3 - IP67		
Cat. no.	Description	Fig.
122100	Ex Floodlight E40 for HPS-T 400W including ballast 220V 60Hz	3

EXPLOSION PROOF EQUIPMENT



Fig. 1



Fig. 2



Fig. 3

Ex Floodlight, separate ballast required		
Type of protection: Ex nR II T3 - IP67		
Cat. no.	Description	Fig.
122200	Ex Floodlight E40 for 1 x HPS-T/MH-T 400W	1
122212	Ex Floodlight E40 for 2 x HPS-T/MH-T 400W	2

Ex Ballast unit for Floodlights		
Type of protection: Ex nR II T5 - IP67		
Cat. no.	Description	Fig.
122226	Ex Ballast for 1 x HPM/MH/HPS, 250W 220V 60Hz	3
122232	Ex Ballast for 1 x HPM/MH, 400W 220V 60Hz	3
122236	Ex Ballast for 1 x HPS, 400W 220V 60Hz	3
122248	Ex Ballast for 2 x HPS, 400W 220V 60Hz	3

EXPLOSION PROOF EQUIPMENT



Fig. 1



Fig. 2

Ex Brass Receptacle and Plugs

Type of protection: EEx de IIC T6 - IP56 ATEX

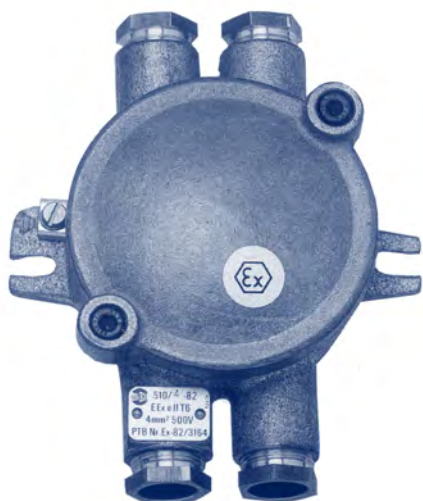
Cat. no.	Description	Gland position	Fig.
122306	Ex Receptacle 16A 2 pole + earth 6H	-O	1
122312	Ex Receptacle 16A 2 pole + earth 6H	O-	1
122318	Ex Receptacle 16A 2 pole + earth 6H	-O-	1
122330	Ex Plug 16A 2 pole + earth 6H		2
122342	Ex Socket insert 16A 2 pole + earth 6H		
122348	Ex Plug interior 16A 2 pole + earth 6H		



Ex Brass Rotary Switch

Type of protection: EEx de IIC T6 - IP56 ATEX

Cat. no.	Description	Gland position
122406	Ex Rotary Switch 2 pole 16A/660V AC	O-
122412	Ex Rotary Switch 2 pole 16A/660V AC	O=
122418	Ex Rotary Switch 2 pole 16A/660V AC	-O-
122430	Ex Rotary Switch interior 2 pole	



Ex Brass Junction box

Type of protection: EEx e II T6 - IP56 ATEX

Cat. no.	Description	Gland position
122500	Ex Junction box max. 500V	-O-
122506	Ex Junction box max. 500V	=O
122512	Ex Junction box max. 500V	-O=
122518	Ex Junction box max. 500V	=O=
122530	Ex Terminal block interior	



Ex Flashing Beacons

Type of protection: EEx d IIC T6 - IP66

Cat. no.	Description
122606	Ex Flashing Beacon Yellow 24V AC/DC with sealed cable 2 mtr including wall-mounting bracket
122618	Ex Flashing Beacon Yellow 115V AC/DC with sealed cable 2 mtr including wall-mounting bracket
122630	Ex Flashing Beacon Yellow 230V 50/60Hz with sealed cable 2 mtr including wall-mounting bracket
Also available in red, orange, green, blue and clear	



Ex Rotating Beacons

Type of protection: EEx de IIC T6 - IP65

Cat. no.	Description
122706	Ex Rotating Beacon Yellow 24V DC
122718	Ex Rotating Beacon Yellow 110V 50/60Hz
122730	Ex Rotating Beacon Yellow 230V 50/60Hz
Also available in red, blue and clear	

**Ex Bells****Sound pressure level: approx. 107 dB(A) at 1 metre****Type of protection: EEx de IIB T6 - IP54**

Cat. no.	Description
122806	Ex Bell 24V DC
122812	Ex Bell 120V 60Hz
122824	Ex Bell 230V 50Hz
122830	Ex Bell 240V 60Hz

**Ex Signal Horn****Sound pressure level: approx. 107 dB(A) at 1 metre****Type of protection: EEx de I/IIB T6 - IP54**

Cat. no.	Description
122848	Ex Signal Horn 24V DC
122854	Ex Signal Horn 24V 50Hz
122866	Ex Signal Horn 120V 60Hz
122872	Ex Signal Horn 230V 50Hz
122878	Ex Signal Horn 240V 60Hz



Ex Motor driven Siren

Sound pressure level: approx. 109 dB(A) at 1 metre

Type of protection: EEx de IIB T6 - IP66

Cat. no.	Description
122906	Ex Motor driven Siren 12V AC/DC
122912	Ex Motor driven Siren 24V AC/DC
122918	Ex Motor driven Siren 110V AC/DC
122924	Ex Motor driven Siren 230V AC/DC



Ex Sounder

Fully programmable choice of any tone for any stage of request

Sound pressure level: approx. 110 dB(A) at 1 metre

Type of protection: Ex d IIC T4 - IP67

Cat. no.	Description
122948	Ex Flameproof Sounder 110/230V 50/60Hz

BRIGHT STAR FLASHLIGHTS

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Bright Star flashlights

Cat. no.	Description	Type	Cells	Fig.
125106	Standard industrial type	2618	2 x R20	1
125112	Standard industrial type	2625	3 x R20	1
125126	Standard industrial type with magnet	2618ML	2 x R20	1
125146	Safety Approved type	2217	2 x R20	2
125158	Safety Approved type	2224	3 x R20	2
125164	Safety Approved type with right angle	2220	2 x R20	3
125176	Ex Approved type with key, ATEX (Zone 1)	2317C	2 x R20	4



Spare parts for Bright Star flashlights

Cat. no.	Description	Type
125306	Glass lens for 2618/25-1918/25-1819/26-2117/24-2517/24-2617/24	SP-001
125318	Glass lens for 2317C/24C	SP-005
125356	Reflector for 2618/25-1918/25-2117/24-2217	SP-008
125362	Reflector for 1618/25-1618ML-2317C/24C	SP-012
125406	Lampholder for 2317C	SP-056
125412	Lampholder for 2618/25-1918/25-1819/26-2117/24-2217/24-2517/24-2617/24	SP-058
125412	Lampholder for 1918/25-1819/26-2117/24-2217/24	X32
125418	Head assembly for 1918-2618 with PR-2	SP-060
125456	Head assembly for 2117-2217 with PR-2	SP-068
125462	Head assembly for 2124-2224 with PR-3	SP-069

RESPONDER FLASHLIGHTS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Responder by Koehler-Bright Star

Cat. no.	Description	Type	Cells	Fig.
126118	Submersible Pocketlight Orange, ATEX (Zone 1)	19301	2 x LR03 *	1
126142	Submersible Pocketlight Orange, ATEX (Zone 1)	200301	2 x R6	2
126154	Submersible Light Orange, ATEX (Zone 1)	200401	4 x R6	3
126166	Submersible Light Orange, ATEX (Zone 1)	200201	2 x R14	4
126178	Submersible Light Orange	19101	3 x R14	5
	* Including			

Spare parts for Responder

Cat. no.	Description
126318	Xenon lampmodule for type 19301/19202

PELI FLASHLIGHTS



Fig. 1



Fig. 3



Fig. 4



Fig. 9



Fig. 2



Fig. 5



Fig. 6



Fig. 8



Fig. 7

Pelican flashlights with ATEX

Cat. no.	Description	Type	Cells	Fig.
127012	MityLite Laser spot Xenon, Zone 2	1900	2 x LR03*	1
127010	MityLite Laser spot Xenon, Mini system in Box, Zone 2	1950	2 x LR03*	2
127014	MityLite 2AA Laser spot Xenon, Zone 2	2300	2 x R6*	3
127016	MityLite Plus 2AA Laser spot Xenon, Zone 2	2340	2 x R6	4
127018	Super PeliLite spot Xenon, Zone 2	1800	2 x R14	5
127020	Pocket SabreLite spot Xenon, Zone 2	1820	2 x R14	6
127024	Super SabreLite Laser spot Xenon, Zone 2	2000	3 x R14	7
127028	Super SabreLite Laser spot Xenon, Zone 1	2000Z1	3 x R14	7
127036	VersaBrite Six lights in one Xenon, Zone 2	2250	2 x R6*	8
127048	StealthLite Laser spot Xenon, Zone 2	2400	4 x R6*	9
* Including				

Pelican Head Lamps with ATEX (Zone 2)

Cat. no.	Description	Type	Cells	Fig.
127132	Heads Up Lite with Xenon/3 LEDs	2620	3 x LR03*	10
127134	Heads Up Lite with Halogen/3 LEDs	2640	4 x R6*	10
127136	Heads Up Lite with Xenon/3 LEDs	2660	4 x R20	10
* Including				

PELI FLASHLIGHTS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Pelican flashlights rechargeable wall-mounting 220 Volt

Cat. no.	Description	Type	Cells	Fig.
127100	StealthLite rechargeable, NimH* or 4AA	2450	ø47 x 165 cm	1
127104	StealthLite rechargeable with LED, NimH* or 4AA	2460	ø47 x 178 cm	2
127112	Black Knight rechargeable M9, NiCad* 3C	7050	ø42 x 183 cm	3
127118	Black Knight rechargeable M11, NiCad* 4C	8050	ø50 x 284 cm	4
	* Including			

Flashlight Lamps for Pelican flashlights

Cat. no.	Type
490816	Lampmodule for MityLite 1900/1950
490820	Lampmodule for MityLite 2AA and Plus 2AA 2300/2340
490818	Lampmodule for Super PeliLite and Pocket SabreLite 1800/1820
490824	Lampmodule for Super SabreLite 2000
490826	Lampmodule for Super SabreLite 2000Z1
490832	Lampmodule for VersaBrite 2250
490836	Lampmodule for StealthLite 2400/2450
490842	Lampmodule for Heads-Up 2620
490844	Lampmodule for Heads-Up 2640
490846	Lampmodule for Heads-Up 2660
490856	Lampmodule for Black Knight M9/7050
490864	Lampmodule for Black Knight M11/8050

MAG-LITE FLASHLIGHTS

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Mag-lite flashlights

Cat. no.	Description	Type	Cells	Fig.
127512	Solitaire Mag-lite	K3A012	1 x LR03 *	1
127524	Micro Mag-lite	M3A012	2 x LR03 *	2
127536	Mini Mag-lite	M2A012	2 x R6 *	3
127540	2C Mag-lite	S2C010	2 x R14	4
127542	3C Mag-lite	S3C010	3 x R14	4
127548	2D Mag-lite	S2D010	2 x R20	5
127560	3D Mag-lite	S3D010	3 x R20	5
127564	4D Mag-lite	S4D010	3 x R20	5
	* Including			

Mag-lite flashlights rechargeable wall-mounting

Cat. no.	Description	Type	Cells	Fig.
127606	Mag Charger 220V-12V	RX4019	Pack-6V *	6
127612	Spare battery pack 6V	ARXX075		
127618	Spare adaptor 220V	ARXX055		
127620	Car plug 12V	ARXX045		
	* Including			

MAG-LITE FLASHLIGHTS



Fig. 2



Fig. 4



Fig. 3

Mag-lite flashlights with LED

Cat. no.	Description	Type	Cells	Fig.
127672	Mini Mag-lite with LED	OM2ALED	2 x R6*	1
127690	2D Mag-lite with LED	S2DLED	2 x R20	2
127692	3D Mag-lite with LED	S3DLED	3 x R20	2
127694	4D Mag-lite with LED	S4DLED	4 x R20	2
	* Including			

Mag-lite Upgrade from Krypton to LED

Cat. no.	Description	Type
127708	Upgrade LED for 2 C/D	ML LED 2D
127710	Upgrade LED for 3 C/D	ML LED 3D
127712	Upgrade LED for 4 C/D	ML LED 4D
	* Including	

Mag-lite Accessories

Cat. no.	Description	Type	Fig.
127910	Snap-in holder for D-type, set 2 pcs.	ASXD026	3
127924	Belt holder for D-type	ASXD056	4

Flashlight lamps for Mag-lite

Cat. no.	Voltage	Description	Cap	Type
490716	2,4	for Solitaire Mag-lite AAA, blister 2 pcs.	Bi-pin	LK3A001
490732	2,4	for Micro AAA & Mini Mag-lite AA, blister 2 pcs.	Bi-pin	LM2A001
490516	2,4	for 2D Mag-lite	P13,5s	KPR-102
490524	3,6	for 3D Mag-lite	P13,5s	KPR-103
490534	4,8	for 4D Mag-lite	P13,5s	KPR-113
490740	6	for Mag charger halogen	Bi-pin	LR00001

FLASHLIGHTS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

Flashlights			
Cat. no.	Description	Cells	Fig.
128012	Pencil type flashlight including batteries	2 x LR03	1
128024	Pencil type flashlight	2 x R6	2
128036	Halogen flashlight 2-cells	2 x R20	3
128042	Halogen flashlight 3-cells	3 x R20	3
128054	Rubber flashlight 2-cells with krypton lamp	2 x R20	4
128060	Rubber flashlight 3-cells with krypton lamp	3 x R20	4
128072	Metal flashlight 2-cells with magnet	2 x R20	5
128108	Metal flashlight for 4,5V batteries	1 x 3R12	6
128114	Flashlight disposable-type	1 x 3R12	7

Flashlight rechargeable			
Cat. no.	Description	Voltage	Fig.
128174	Rechargeable flashlight plug-in type	110/220	8

HANDLAMPS



Fig. 1



Fig. 2



Fig. 3

Handlamps			
Cat. no.	Description	Cells	Fig.
128506	PVC handlamp floating 4-cells with krypton lamp	4 x R20	1
128530	AmperLite handlamp floating 6-cells with red lens and shoulder strap	6 x R20	2

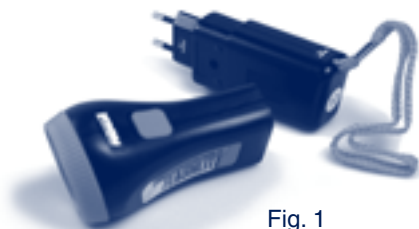


Fig. 1



Fig. 2

Handlamps rechargeable		
Cat. no.	Description	Fig.
128606	Rechargeable handlamp plug-in type 110/220V	1
128618	Rechargeable handlamp with rechargeable battery type 4R25 12/24V DC, 110/220V AC	2

HANDLAMPS



Fig. 1



Fig. 2

Bright Star handlamps

Cat. no.	Description	Type	Cells	Fig.
128806	Safety Approved lantern	2206	1 x 4R25	1
128812	Safety Approved lantern with adj. pivot head	2208	2 x 4R25	2



Responder handlamp

Cat. no.	Description	Type	Cells
128906	Right Angle lantern Yellow	500302	4 x R14



Fig. 1



Fig. 2

Pelican handlamps

Cat. no.	Description	Type	Cells	Fig.
129006	LaserPro 4D, ATEX(Zone 2)	6000	4 x R20	1
129018	Black Knight LaserPro M13 rechargeable lantern 220V wall-mounting	6050	Pack*	2
	* Including			

EXPLOSION PROOF FLASHLIGHTS



Fig. 1



Fig. 2

Ceag explosion proof flashlights

Type of protection: EEx e ib IIC ATEX

Cat. no.	Description	Type	Cells	Fig.
129106	Stabex flashlight Eex T5	mini	2 x R6	1
129112	Stabex flashlight Eex T4	HF	2 x R20	2



Wolf explosion proof flashlights

Type of protection: EEx e ib IIC ATEX

Cat. no.	Description	Type	Cells	Fig.
129160	Wolf flashlight, straight head, T6	TS-26	2 x R20	1
129166	Wolf flashlight, right angle head, T6	TR-26	2 x R20	2
129172	Wolf flashlight, straight head, T4	T-3DC	3 x R20	1
129178	Wolf flashlight, right angle head, T4	T-3DC RA	3 x R20	2

EXPLOSION PROOF HANDLAMPS



Fig. 1



Fig. 2



Fig. 3

Wolf Safety explosion proof handlamps with ATEX

Type of protection: II 2 GD EEx e ib IIC T4/Ex e ib I/IIC T4

Cat. no.	Description	Type	Cells	Fig.
129308	WolfLite EEx T4 lantern	H-4DCA	4 x R20	1
129320	WolfLite EEx T4 rechargeable lantern	H-251A	Pack *	1
129330	WolfLite charger 110/220V free standing or wall-mounting	C-251HV		2
	* Including			

Spare parts for WolfLite 251 Mk2 explosion proof handlamp

Cat. no.	Description	Type
129348	Spare rechargeable battery 4V 5Ah	H-66
490624	Bulb 3,75V 0,75A Halogen (H-251A)	H-69
490635	Bulb 4,8V 0,5A Halogen (H-4DCA)	H-142
129354	Magnet switch complete	H-03
129366	Reed switch	H-09
129378	Fuse contact	H-12
129384	Battery contact	H-13
129390	Glass disc	H-19

EXPLOSION PROOF HANDLAMPS



Fig. 1



Fig. 2



Fig. 3

Wolf Safety explosion proof handlamps

Type of protection: EEx e ib IIB T4/EEx e s IIC T3

Cat. no.	Description	Type	Cells	Fig.
129306	Wolflite EEx T4 lantern	H-4DC	4 x R20	1
129318	Wolflite EEx T3 rechargeable lantern	H-251Mk2	Pack *	1
129330	Wolflite charger 110/220V free standing or wall-mounting	C-251HV		2
	* Including			

Spare parts for Wolflite 251 Mk2 explosion proof handlamp

Cat. no.	Description	Type
129348	Spare rechargeable battery 4V 5Ah	H-16E
490526	Bulb 3,6V 1A krypton	H-26
129354	Magnet switch complete	H-03
129360	Lock screw	H-08
129366	Reed switch	H-09
129372	Fuse for handlantern and charger	H-10
129378	Fuse contact	H-12
129384	Battery contact	H-13
129390	Glass disc	H-19
129396	Reflector c/w bulb and fittings	H-30A

EXPLOSION PROOF HANDLAMPS



Fig. 1



Fig. 2



Fig. 3

Ceag explosion proof handlamps

Type of protection: EEx e ib IIC T4 ATEX

Cat. no.	Description	Type	Cells	Fig.
129460	Ceag Eex T4 lantern	HE-8-EURO	3 x R20	1
129472	Ceag Eex T4 rechargeable lantern	HE-8-N-EN	Pack	2
129484	Ceag Charger 220/250V	LG-483		3



Fig. 1



Fig. 2



Fig. 3

Oldham Mining and Industrial Safety Handlamp and Cap lamps

Type of protection: EEx I and EEx e ib IIC

Cat. no.	Description	Type	Fig.
129706	Rechargeable Handlamp GT5L	M253861	1
129730	Rechargeable Cap lamp GT5	M258661	2
129742	Battery charger 110/240V	M656201	3

Spare parts for Wheat Safety-Approved lamps

Cat. no.	Description
129754	Spare lead acid battery T5, 4V16Ah
129766	Hexagon key 2,5 mm
129768	Hexagon key 3,0 mm
129630	Spare main lamphalogen 4.0V 1.0A
480742	Spare auxiliary lamp 4.0V 0.4A

LEAD ACID BATTERIES



Lead acid batteries						
Cat. no.	V	Ah	Dimensions L x W x H/Th mm	Code	Pole pos.	Pole type
130206	2,4	6,5	78 x 59 x 91/101 mm	for Ceag		
130324	6	66	175 x 173 x 164/185 mm	066.12	0	1
130330	6	77	215 x 169 x 167/190 mm	077.15	0	1
130336	6	91	225 x 175 x 195/220 mm	084.11	0	1
130342	6	105	262 x 176 x 219/240 mm	105.13	0	1
130348	6	120	296 x 175 x 219/240 mm	112.11	0	1
130354	6	120	490 x 102 x 198/220 mm	112.13	3	1
130360	6	135	318 x 180 x 219/240 mm	135.12	0	1
130366	6	160	329 x 175 x 220/240 mm	160.22	0	1
130372	6	220	395 x 170 x 235/235 mm	220.13	0	20
130378	6	242	347 x 173 x 264/285 mm	242.11	0	1
130384	6	320	510 x 220 x 220/240 mm	320.11	0	1
130390	6	400	518 x 270 x 215/240 mm	400.12	0	20
130512	12	12	136 x 81 x 162/162 mm	512.11	1	4
130518	12	14	133 x 90 x 160/160 mm	514.11	1	4
130524	12	18	183 x 126 x 168/168 mm	518.14	0	4
130530	12	28	184 x 125 x 160/174 mm	528.05	0	1
130536	12	35	197 x 129 x 205/225 mm	535.20	0	3
130542	12	38	243 x 135 x 180/200 mm	538.90	1	1
130548	12	40	218 x 133 x 205/225 mm	540.38	0	1
130554	12	44	208 x 175 x 190/190 mm	544.59	0	1
130560	12	44	208 x 175 x 190/190 mm	544.64	1	1

For explanation concerning pole pos. and pole type see page 536

LEAD ACID BATTERIES



Lead acid batteries						
Cat. no.	V	Ah	Dimensions L x W x H/Th mm	Code	Pole pos.	Pole type
130566	12	55	243 x 175 x 190/190 mm	555.59	0	1
130572	12	55	243 x 175 x 190/190 mm	555.65	1	1
130578	12	60	266 x 175 x 200/225 mm	560.49	1	1
130584	12	60	230 x 170 x 200/225 mm	560.68	0	1
130590	12	66	278 x 175 x 190/190 mm	566.33	1	1
130596	12	66	278 x 175 x 190/190 mm	566.38	0	1
130602	12	70	266 x 175 x 200/225 mm	570.24	1	1
130608	12	70	266 x 175 x 200/225 mm	570.29	0	1
130614	12	85	302 x 175 x 200/225 mm	585.13	0	1
130620	12	85	302 x 175 x 200/225 mm	585.14	1	1
130626	12	88	348 x 175 x 175/175 mm	588.15	0	1
130632	12	88	348 x 175 x 190/190 mm	588.21	1	1
130638	12	88	348 x 175 x 190/190 mm	588.27	0	1
130644	12	100	326 x 175 x 195/215 mm	600.32	0	1
130650	12	100	402 x 175 x 205/230 mm	600.26	0	1
130656	12	105	342 x 175 x 215/240 mm	605.28	0	1
130662	12	120	514 x 189 x 195/220 mm	620.34	3	1
130668	12	143	514 x 220 x 195/220 mm	643.17	3	1
130674	12	165	514 x 220 x 195/220 mm	665.14	3	1
130680	12	180	514 x 220 x 195/220 mm	680.22	3	1
130686	12	200	514 x 275 x 215/240 mm	700.27	3	1
130692	12	230	514 x 275 x 215/240 mm	730.11	3	1

For explanation concerning pole pos. and pole type see page 536

LEAD ACID BATTERIES



Maintenance-free Lead-acid batteries

Cat. no.	V	Ah	Dimensions L x W x H/Th mm	Pole pos.	Pole type
130824	12	44	209 x 175 x 175/175 mm	0	1
130830	12	54	243 x 175 x 175/175 mm	0	1
130842	12	75	278 x 175 x 175/175 mm	0	1
130848	12	100	354 x 175 x 190/190 mm	0	1
130854	12	102	330 x 170 x 220/240 mm	0	1
130860	12	120	505 x 182 x 213/234 mm	3	1
130872	12	165	508 x 215 x 213/234 mm	3	1
130878	12	200	512 x 277 x 220/241 mm	3	1

For explanation concerning pole pos. and pole type see page 536



Maintenance-free Sealed Lead-acid batteries

Cat. no.	V	Ah	Dimensions L x W x H/Th mm	Code
131012	6	2,8	134 x 34 x 60/66 mm	NP2.8-6
131024	6	10	151 x 50 x 94/100 mm	NP10-6
131112	12	1,2	98 x 48 x 51/57 mm	NP1.2-12
131124	12	2,1	178 x 34 x 60/66 mm	NP2.1-12
131130	12	2,8	134 x 67 60/66 mm	NP2.8-12
131142	12	4	90 x 70 x 102/110 mm	NP4-12
131154	12	7	151 x 65 x 94/100 mm	NP7-12
131178	12	24	166 x 175 x 125/125 mm	NP24-12

LEAD ACID BATTERIES



Lead-acid Marine Batteries

Cat. no.	V	Ah	Dimensions L x W x H/Th mm
131356	2	200	93 x 158 x 328/358 mm
131362	2	300	125 x 158 x 328/358 mm
131368	2	400	137 x 198 x 337/367 mm

NICKEL CADMIUM ACCUMULATOR



Nickel Cadmium Accumulator				
Cat. no.	V	Ah	Dimensions L x W x H/Th mm	Code
131406	1,2	11	41 x 115 x 180 mm	LP 11
131412	1,2	17	55 x 115 x 232 mm	LP 17
131418	1,2	28	55 x 115 x 232 mm	LP 28
131424	1,2	37	64 x 115 x 232 mm	LP 37
131430	1,2	46	75 x 115 x 232 mm	LP 46
131436	1,2	56	75 x 115 x 232 mm	LP 56
131442	1,2	65	75 x 115 x 232 mm	LP 65
131448	1,2	80	58 x 139 x 401 mm	LP 80
131454	1,2	95	58 x 139 x 401 mm	LP 95
131460	1,2	105	58 x 139 x 401 mm	LP 105
131466	1,2	135	75 x 139 x 401 mm	LP 135
131472	1,2	165	103 x 165 x 401 mm	LP 165
131478	1,2	200	103 x 165 x 401 mm	LP 200
131484	1,2	230	103 x 165 x 401 mm	LP 230
131490	1,2	265	103 x 165 x 401 mm	LP 265
131496	1,2	300	128 x 165 x 401 mm	LP 300
131502	1,2	330	128 x 165 x 401 mm	LP 330
131508	1,2	365	156 x 165 x 401 mm	LP 365
131514	1,2	400	156 x 165 x 401 mm	LP 400
131520	1,2	430	156 x 165 x 401 mm	LP 430

BATTERIES ACCESSORIES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Connectors for batteries

Cat. no.	Description	Fig.
131606	Barrel (+) with bolt for round poles	1
131612	Barrel (-) with bolt for round poles	1
131624	Barrel (+) for two cables, with bolt for round poles	2
131630	Barrel (-) for two cables, with bolt for round poles	2
131654	Insulated Battery clips 40 Amp length 80mm red	3
131660	Insulated Battery clips 40 Amp length 80mm black	3
131672	Insulated Battery clips 60 Amp length 140mm red	3
131678	Insulated Battery clips 60 Amp length 140mm black	3
131690	Insulated Battery clips 400 Amp length 195mm red	4
131696	Insulated Battery clips 400 Amp length 195mm black	4
131708	Cable set for starting 2.5 mtr	5



Fig. 1

Chargers for batteries

Cat. no.	Input		Output		Fig.
	Voltage	Hz	Voltage	Amps	
131824	115	50/60	12-24	12	1
131850	230	50/60	6-12	8	1
131856	230	50/60	12-24	12	1
131868	230	50/60	12-24	30	1

BATTERIES ACCESSORIES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Accessories for batteries

Cat. no.	Description	Fig.
131912	Hydrometer for lead-acid batteries	1
131918	Hydrometer for alkaline batteries	1
131924	Battery syringe	2
131936	Automatic battery filler	3
131948	Vaseline, can of 1 kg	4
131960	Battery cell tester 20/100/200 Amp	5
131966	Anti-freeze tester	6



Liquids for batteries

Cat. no.	Description
131972	Demineralized water, can of 5 ltr
131984	Sulphuric acid gravity 1.28, can of 5 ltr
131990	Sulphuric acid gravity 1.28, can of 20 ltr
131996	Electrolyte for alkaline batteries gravity 1.20, can of 10 ltr

DRY BATTERIES



Hi-Watt Standard batteries

Cat. no.	Voltage	I.E.C. code	Dimensions	Type
132318	1,5	R6	ø 14,5 x 50,5 mm	R6M
132324	1,5	R14	ø 26 x 50 mm	R14M
132330	1,5	R20	ø 34,2 x 61,5 mm	R20M
132360	9	6F22	26,5 x 17,5 x 48,5 mm	6F22M



Philips Standard batteries

Cat. no.	Voltage	I.E.C. code	Dimensions	Type
132712	1,5	R03	ø 10,5 x 44,5 mm	R3LL
132718	1,5	R6	ø 14,5 x 50,5 mm	R6LL
132724	1,5	R14	ø 26 x 50 mm	R14LL
132730	1,5	R20	ø 34,2 x 61,5 mm	R20LL
132736	4,5	3R14	ø 62 x 22 x 67 mm	3R12LL
132760	9	6F22	26,5 x 17,5 x 48,5 mm	6F22LL

ALKALINE DRY BATTERIES



Hi-Watt Alkaline batteries

Cat. no.	Voltage	I.E.C. code	Dimensions	Type
133006	1,5	LR1	ø 12 x 30,2 mm	LR1
133012	1,5	LR03	ø 10,5 x 44,5 mm	LR03
133018	1,5	LR6	ø 14,5 x 50,5 mm	LR6
133024	1,5	LR14	ø 26 x 50 mm	LR14
133030	1,5	LR20	ø 34,2 x 61,5 mm	LR20
133060	9	6LR61	26,5 x 17,5 x 48,5 mm	6LR61
133066	12		ø 10 x 28,5 mm	23A



Varta Alkaline batteries

Cat. no.	Voltage	I.E.C. code	Dimensions	Type
133212	1,5	LR03	ø 10,5 x 44,5 mm	8003
133218	1,5	LR6	ø 14,5 x 50,5 mm	8006
133224	1,5	LR14	ø 26 x 50 mm	8014
133230	1,5	LR20	ø 34,2 x 61,5 mm	8020
133260	9	6LR61	26,5 x 17,5 x 48,5 mm	8022

ALKALINE DRY BATTERIES



Philips Alkaline batteries

Cat. no.	Voltage	I.E.C. code	Dimensions	Type
133412	1,5	LR03	ø 10,5 x 44,5 mm	LR03PW
133418	1,5	LR6	ø 14,5 x 50,5 mm	LR6PW
133424	1,5	LR14	ø 26 x 50 mm	LR14PW
133430	1,5	LR20	ø 34,2 x 61,5 mm	LR20PW
133460	9	6LR61	26,5 x 17,5 x 48,5 mm	6LR61PW



Duracell Procell Alkaline batteries

Cat. no.	Voltage	I.E.C. code	Dimensions	Type
133606	1,5	LR1	ø 12 x 30,2 mm	MN 9100
133612	1,5	LR03	ø 10,5 x 44,5 mm	PC 2400
133618	1,5	LR6	ø 14,5 x 50,5 mm	PC 1500
133624	1,5	LR14	ø 26 x 50 mm	PC 1400
133630	1,5	LR20	ø 34,2 x 61,5 mm	PC 1300
133636	4,5	3LR12	62 x 22 x 67 mm	PC 1203
133642	6	4LR61	48 x 9 x 35 mm	Size J - 7k67
133648	6	4R25	67 x 67 x 108 mm	PC 908
133654	6	4R25S	67 x 67 x 105 mm	PC 915
133660	9	6LR61	26,5 x 17,5 x 48,5 mm	PC 1604

DRY BATTERIES FOR GENERAL USE



Batteries for general use				
Cat. no.	Voltage	I.E.C. code	Dimensions	Type
134012	1,5	R40	ø 64 x 155 mm	Oxygen/air
134018	3	2R10	ø 21 x 75 mm	Duplex
134024	4,5	3R12	62 x 22 x 67 mm	Lantern battery
134048	6	4R25	67 x 67 x 108 mm	Spring
134054	6	4R25S	67 x 67 x 105 mm	Screw
134066	6	4R25-2	135 x 72 x 125 mm	Screw
132360	9	6F22	26,5 x 17,5 x 48,5 mm	PP3
134072	9	6F24	ø 25,5 x 50 mm	PP4
134078	9	6F50-2	37 x 34 x 70 mm	PP6
134084	9	6F90	46 x 46 x 62 mm	PP7
134090	9	6F100	66 x 52 x 81 mm	PP9
134096	9	6R25	101 x 67 x 106 mm	Fanal
133066	12		ø 10 x 28,5 mm	23A
134108	12		135 x 71 x 72 mm	Brightstar 125
134120	15	10F15	16 x 15 x 35 mm	B154
134126	15	10F20	27 x 16 x 37 mm	B121
134132	22,5	15F20	27 x 16 x 50 mm	B122

BUTTON CELL BATTERIES



Button cells					
Cat. no.	Voltage	I.E.C. code	Dimensions	J.I.S. code	Duracell code
134506	1,35	SR63	ø 5,8 x 2,15 mm	---	D379
134512	1,55	SR65	ø 6,8 x 1,65 mm	---	D321
134518	1,55	SR60	ø 6,8 x 2,15 mm	SG1	D364
134524	1,55	SR66	ø 6,8 x 2,60 mm	---	D377
134530	1,55	SR68	ø 7,9 x 2,15 mm	SG11	D361
134536	1,55	SR59	ø 7,9 x 2,60 mm	SG2	D396
134542		--	ø 7,9 x 3,10 mm	---	D329
134548	1,55	SR41	ø 7,9 x 3,60 mm	SG3	D392
134554	1,55	SR48	ø 7,9 x 5,40 mm	SG5	D393
134560	1,55	SR68	ø 9,5 x 1,65 mm	---	D373
134566	1,55	SR69	ø 9,5 x 2,15 mm	SG6	D370
134572	1,55	SR57	ø 9,5 x 2,70 mm	SG7	D399
134578	1,55	SR45	ø 9,5 x 3,60 mm	---	D394
134584	1,55	SR55	ø 11,6 x 2,15 mm	SG8	D391
134590	1,5	SR54	ø 11,6 x 3,10 mm	SG10	D389
134596	1,5	SR42	ø 11,6 x 3,60 mm	---	D350
134602	1,5	SR43	ø 11,6 x 4,20 mm	SG12	D386
134608	1,5	SR44	ø 11,6 x 5,35 mm	SG13	D357
134620	1,35	MR44	ø 11,6 x 5,40 mm	---	PX676
134632	1,5	MR9	ø 15,7 x 6,10 mm	---	PX625
134644	1,35	MR1	ø 29 x 12 mm	---	RM401R

Lithium Button cells					
Cat. no.	Voltage	I.E.C. code	Dimensions	J.I.S. code	Duracell code
134802	3,0	CR1216	ø 12,5 x 1,60 mm	---	DL1216
134806	3,0	CR1220	ø 12,5 x 2,00 mm	---	DL1220
134812	3,0	CR1616	ø 16,0 x 1,60 mm	---	DL1616
134818	3,0	CR1620	ø 16,0 x 2,00 mm	---	DL1620
134824	3,0	CR2016	ø 20,0 x 1,60 mm	---	DL2016
134830	3,0	CR2025	ø 20,0 x 2,50 mm	---	DL2025
134836	3,0	CR2032	ø 20,0 x 3,20 mm	---	DL2032
134842	3,0	CR2325	ø 23,0 x 2,50 mm	---	DL2325
134848	3,0	CR2430	ø 24,5 x 3,00 mm	---	DL2430

LITHIUM BATTERIES



Lithium Batteries			
Cat. no.	Voltage	Type	Dimensions
134906	3,6	SL-760/AA	ø 14,5 x 50,5 mm
134912	3,6	SL-770/C	ø 26 x 50 mm
134918	3,6	SL-780/D	ø 34 x 61 mm



Lithium Photo Batteries			
Cat. no.	Voltage	Type	Dimensions
135012	3	CR2	ø 15,6 x 27 mm
135018	3	CR-123A	ø 17,1 x 34,5 mm
135024	6	CR-P2P	34 x 19,5 x 36 mm
135030	6	2-CR5m	34 x 17 x 45 mm

NICKEL-CADMIUM AND NICKEL-METAL HYDRIDE BATTERIES



Rechargeable Nickel-cadmium batteries				
Cat. no.	Voltage	mAh	Type	Dimensions
135106	1,2	150	R1	ø 12 x 30,2 mm
135112	1,2	250	R03	ø 10,5 x 44,5 mm
135118	1,2	500	R6	ø 14,5 x 50,5 mm
135124	1,2	1800	R14	ø 26 x 50 mm
135130	1,2	4000	R20	ø 34,2 x 61,5 mm
135148	4,8	1200	4R25	66 x 66 x 108 mm
135160	8,4	100	6F22	26,5 x 17,5 x 48,5 mm



Rechargeable Nickel-metal Hydride batteries				
Cat. no.	Voltage	mAh	Type	Dimensions
135212	1,2	700	R03	ø 10,5 x 44,5 mm
135216	1,2	1200	R6	ø 14,5 x 50,5 mm
135218	1,2	2000	R6	ø 14,5 x 50,5 mm
135220	1,2	2500	R6	ø 14,5 x 50,5 mm
135224	1,2	4000	R14	ø 26 x 50 mm
135230	1,2	5000	R20	ø 34,2 x 61,5 mm
135234	1,2	8000	R20	ø 34,2 x 61,5 mm
135260	9	160	6F22	26,5 x 17,5 x 48,5 mm

CHARGERS FOR NI-CAD / NI-MH AND ACCESSORIES



Fig. 1



Fig. 2

Charger for Nickel-cadmium and Nickel-metal Hydride

Cat. no.	Input Voltage	Description	Fig.
135512	110/220V	Battery charger for 4x Ni-Cad AAA / AA / C / D or 1x 6F22	1
135524	220V	Battery charger for 4x Ni-Cad AAA / AA / C / D or 1x 6F22	1
135536	220V	Battery charger Plug-in for 4x Ni-Cad AAA / AA or 2x 6F22	2
135542	220V	Battery charger for 4x Ni-Mh AAA / AA / C / D or 2x 6F22	1



Battery holder

Cat. no.	Description
135572	Battery holder for 4x R20 with spring

SINGLE CORE CABLE

VMDS - Insulated flexible switchboard cable



Conductor: Flexible electrolytic copper
Insulation: Vinyl - PVC
Rated Voltage: 300/500V
Test Voltage: 2000V

Cat. no.	Number of conductors x mm ²	Colour	Outside dia mm
140106	1 x 0,50 mm ²	Black	2,2
140112	1 x 0,50 mm ²	Blue	2,2
140118	1 x 0,50 mm ²	Brown	2,2
140124	1 x 0,50 mm ²	Green	2,2
140130	1 x 0,50 mm ²	Grey	2,2
140136	1 x 0,50 mm ²	Red	2,2
140142	1 x 0,50 mm ²	Violet	2,2
140148	1 x 0,50 mm ²	White	2,2
140154	1 x 0,50 mm ²	Yellow	2,2
140160	1 x 0,50 mm ²	Yell/Green	2,2
140206	1 x 0,75 mm ²	Black	2,3
140212	1 x 0,75 mm ²	Blue	2,3
140218	1 x 0,75 mm ²	Brown	2,3
140224	1 x 0,75 mm ²	Green	2,3
140230	1 x 0,75 mm ²	Grey	2,3
140236	1 x 0,75 mm ²	Red	2,3
140242	1 x 0,75 mm ²	Violet	2,3
140248	1 x 0,75 mm ²	White	2,3
140254	1 x 0,75 mm ²	Yellow	2,3
140260	1 x 0,75 mm ²	Yell/Green	2,3
140306	1 x 1,00 mm ²	Black	2,5
140312	1 x 1,00 mm ²	Blue	2,5
140318	1 x 1,00 mm ²	Brown	2,5
140324	1 x 1,00 mm ²	Green	2,5
140330	1 x 1,00 mm ²	Grey	2,5
140336	1 x 1,00 mm ²	Red	2,5
140342	1 x 1,00 mm ²	Violet	2,5
140348	1 x 1,00 mm ²	White	2,5
140354	1 x 1,00 mm ²	Yellow	2,5
140360	1 x 1,00 mm ²	Yell/Green	2,5

SINGLE CORE CABLE

VMD - Insulated flexible switchboard cable



Conductor: Flexible electrolytic copper
Insulation: Vinyl - PVC
Rated Voltage: 450/750V
Test Voltage: 2500V

Cat. no.	Number of conductors x mm ²	Colour	Outside dia mm
140406	1 x 1,50 mm ²	Black	3,0
140412	1 x 1,50 mm ²	Blue	3,0
140418	1 x 1,50 mm ²	Brown	3,0
140424	1 x 1,50 mm ²	Green	3,0
140430	1 x 1,50 mm ²	Grey	3,0
140436	1 x 1,50 mm ²	Red	3,0
140442	1 x 1,50 mm ²	Violet	3,0
140448	1 x 1,50 mm ²	White	3,0
140454	1 x 1,50 mm ²	Yellow	3,0
140460	1 x 1,50 mm ²	Yell/Green	3,0
140506	1 x 2,50 mm ²	Black	3,6
140512	1 x 2,50 mm ²	Blue	3,6
140518	1 x 2,50 mm ²	Brown	3,6
140524	1 x 2,50 mm ²	Green	3,6
140530	1 x 2,50 mm ²	Grey	3,6
140536	1 x 2,50 mm ²	Red	3,6
140548	1 x 2,50 mm ²	White	3,6
140554	1 x 2,50 mm ²	Yellow	3,6
140560	1 x 2,50 mm ²	Yell/Green	3,6
140606	1 x 4,00 mm ²	Black	4,2
140630	1 x 4,00 mm ²	Yell/Green	4,2
140656	1 x 6,00 mm ²	Black	4,8
140680	1 x 6,00 mm ²	Yell/Green	4,8
140706	1 x 10,00 mm ²	Black	6,3
140718	1 x 16,00 mm ²	Black	7,4
140730	1 x 25,00 mm ²	Black	9,1
140742	1 x 35,00 mm ²	Black	10,7
140754	1 x 50,00 mm ²	Black	12,7
140766	1 x 70,00 mm ²	Black	14,8
140778	1 x 95,00 mm ²	Black	17,0

MASSIVE SINGLE CORE CABLE

VMD/VD - Insulated wire, solid core			
	Conductor:	Plain copper	
	Insulation:	Vinyl - PVC	
	Rated Voltage:	450/750V	
	Test Voltage:	2500V	
	Cat. no.	Number of conductors x mm ²	Outside dia mm
	141112	1 x 0,75 mm ²	2,2
	141172	1 x 1 mm ²	2,4
	141184	1 x 1,5 mm ²	2,7
	141206	1 x 2,5 mm ²	3,3
	141218	1 x 2,5 mm ²	3,3
	141230	1 x 2,5 mm ²	3,3
	141254	1 x 4 mm ²	3,9
	141266	1 x 6 mm ²	4,4
	141278	1 x 10 mm ²	5,6

CABLE PARALLEL TWIN

VTS - PVC insulated parallel flexible cable			
	Conductor:	Flexible electrolytic copper	
	Insulation:	Vinyl - PVC	
	Rated Voltage:	200/300V	
	Test Voltage:	2000V	
	Cat. no.	Number of conductors x mm ²	Outside size mm
	141312	2 x 0,75 mm ²	6 x 2,9
	141318	2 x 0,75 mm ²	6 x 2,9
	141324	2 x 0,75 mm ²	6 x 2,9
	141330	2 x 0,75 mm ²	6 x 2,9
	141336	2 x 0,75 mm ²	6 x 2,9

CABLE PVC - GENERAL PUROPOSE

VMVL - PVC insulated parallel flexible cable



Conductor: Flexible electrolytic copper

Insulation: Vinyl - PVC

Rated Voltage: 300/500V

Test Voltage: 2000V

Cat. no.	Number of conductors x mm ²	Colour	Outside size mm
141406	2 x 0,75 mm ²	White	6,5
141506	2 x 0,75 mm ²	Black	6,5
141410	2 x 1 mm ²	White	7,0
141510	2 x 1 mm ²	Black	7,0
141414	2 x 1,5 mm ²	White	8,0
141514	2 x 1,5 mm ²	Black	8,0
141418	2 x 2,5 mm ²	White	9,5
141518	2 x 2,5 mm ²	Black	9,5
141422	3 x 0,75 mm ²	White	7,0
141522	3 x 0,75 mm ²	Black	7,0
141426	3 x 1 mm ²	White	7,5
141526	3 x 1 mm ²	Black	7,5
141430	3 x 1,5 mm ²	White	8,5
141530	3 x 1,5 mm ²	Black	8,5
141434	3 x 2,5 mm ²	White	10,5
141534	3 x 2,5 mm ²	Black	10,5
141438	4 x 0,75 mm ²	White	7,5
141538	4 x 0,75 mm ²	Black	7,5
141442	4 x 1 mm ²	White	8,0
141542	4 x 1 mm ²	Black	8,0
141446	4 x 1,5 mm ²	White	9,5
141546	4 x 1,5 mm ²	Black	9,5
141450	4 x 2,5 mm ²	White	11,5
141550	4 x 2,5 mm ²	Black	11,5
141454	5 x 1,5 mm ²	White	10,5
141458	5 x 2,5 mm ²	White	12,5
141470	7 x 1,5 mm ²	White	12,0

FLEXIBLE PVC CONTROL CABLE

LIYY - PVC control cable, flexible



Conductor: Stranded conductivity copper
Insulation: Vinyl - PVC, colour grey
Rated Voltage: 300/500V
Test Voltage: 2000V

Cat. no.	Number of conductors x mm ²	Outside dia mm
142106	2 x 0,5 mm ²	5,0
142110	3 x 0,5 mm ²	5,3
142114	4 x 0,5 mm ²	5,9
142118	6 x 0,5 mm ²	7,0
142122	8 x 0,5 mm ²	8,0
142126	10 x 0,5 mm ²	10,0
142130	12 x 0,5 mm ²	10,3
142134	18 x 0,5 mm ²	12,4
142138	20 x 0,5 mm ²	12,8
142142	25 x 0,5 mm ²	14,8
142206	2 x 1,0 mm ²	6,0
142210	3 x 1,0 mm ²	6,4
142214	4 x 1,0 mm ²	6,9
142218	5 x 1,0 mm ²	7,5
142222	8 x 1,0 mm ²	8,9
142230	12 x 1,0 mm ²	11,4
142234	18 x 1,0 mm ²	13,6
142242	25 x 1,0 mm ²	16,0
142246	34 x 1,0 mm ²	17,9
142250	42 x 1,0 mm ²	19,8
142254	50 x 1,0 mm ²	23,4
142306	2 x 1,5 mm ²	7,0
142310	3 x 1,5 mm ²	7,4
142314	4 x 1,5 mm ²	8,1
142318	5 x 1,5 mm ²	9,1
142322	7 x 1,5 mm ²	10,1
142330	12 x 1,5 mm ²	13,8
142334	18 x 1,5 mm ²	16,3
142338	21 x 1,5 mm ²	17,3

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FLEXIBLE PVC CONTROL CABLE

Continuation - LIYY - PVC control cable, flexible



Cat. no.	Number of conductors x mm ²	Outside dia mm
142342	25 x 1,5 mm ²	19,8
142346	34 x 1,5 mm ²	21,7
142350	42 x 1,5 mm ²	23,1
142354	50 x 1,5 mm ²	27,9
142410	3 x 2,5 mm ²	9,6
142414	4 x 2,5 mm ²	10,7
142418	5 x 2,5 mm ²	11,9
142422	7 x 2,5 mm ²	13,3
142430	12 x 2,5 mm ²	18,2
142434	18 x 2,5 mm ²	20,5
142442	25 x 2,5 mm ²	25,2

LIYCY - PVC control cable with copper screen, flexible



Conductor:	Stranded conductivity copper
Insulation:	Vinyl - PVC, colour grey
Armour:	Copper wire braiding
Rated Voltage:	300/500V
Test Voltage:	3000V

Cat. no.	Number of conductors x mm ²	Outside dia mm
142606	2 x 0,75 mm ²	6,8
142614	4 x 0,75 mm ²	7,7
142618	6 x 0,75 mm ²	8,8
142630	12 x 0,75 mm ²	11,4
142634	18 x 0,75 mm ²	13,0
142706	2 x 1,0 mm ²	7,2
142710	3 x 1,0 mm ²	7,6
142714	4 x 1,0 mm ²	8,1
142718	5 x 1,0 mm ²	8,8
142722	7 x 1,0 mm ²	9,6
142730	12 x 1,0 mm ²	12,1

continue on next page

FLEXIBLE PVC CONTROL CABLE

Continuation - LIYCY - PVC control cable with copper screen, flexible



Cat. no.	Number of conductors x mm ²	Outside dia mm
142734	18 x 1,0 mm ²	14,0
142742	24 x 1,0 mm ²	16,4
142750	42 x 1,0 mm ²	19,5
142754	50 x 1,0 mm ²	23,8
142758	61 x 1,0 mm ²	27,3
142762	80 x 1,0 mm ²	32,7
142806	2 x 1,5 mm ²	8,2
142810	3 x 1,5 mm ²	8,7
142814	4 x 1,5 mm ²	9,5
142818	5 x 1,5 mm ²	10,3
142822	7 x 1,5 mm ²	11,1
142830	12 x 1,5 mm ²	14,3
142834	18 x 1,5 mm ²	16,7
142838	20 x 1,5 mm ²	17,7
142842	25 x 1,5 mm ²	19,8
142846	34 x 1,5 mm ²	21,4
142850	42 x 1,5 mm ²	23,4
142854	50 x 1,5 mm ²	28,7
142858	61 x 1,5 mm ²	29,1
142862	80 x 1,5 mm ²	34,8
142910	3 x 2,5 mm ²	8,9
142914	4 x 2,5 mm ²	9,9
142918	5 x 2,5 mm ²	11,0
142922	7 x 2,5 mm ²	11,9
142930	12 x 2,5 mm ²	15,8

YMK mb - Unarmoured PVC sheathed, not for using on vessels



Conductor: Plain copper

Insulation: Vinyl - PVC

Rated Voltage: 450/750V

Test Voltage: 2500V

Cat. no.	Number of conductors x mm ²	Outside dia mm
143024	1 x 6 mm ²	7,0
143028	1 x 10 mm ²	8,5
143032	1 x 16 mm ²	9,5
143036	1 x 25 mm ²	11,0
143112	2 x 1,5 mm ²	10,0
143116	2 x 2,5 mm ²	10,5
143120	2 x 4 mm ²	11,5
143124	2 x 6 mm ²	12,5
143128	2 x 10 mm ²	16,0
143212	3 x 1,5 mm ²	10,0
143216	3 x 2,5 mm ²	11,5
143220	3 x 4 mm ²	12,0
143224	3 x 6 mm ²	13,0
143228	3 x 10 mm ²	17,0
143312	4 x 1,5 mm ²	11,0
143316	4 x 2,5 mm ²	12,0
143320	4 x 4 mm ²	13,0
143324	4 x 6 mm ²	14,0
143328	4 x 10 mm ²	18,0
143412	5 x 1,5 mm ²	11,5
143416	5 x 2,5 mm ²	12,5
143420	5 x 4 mm ²	14,0
143424	5 x 6 mm ²	15,5
143428	5 x 10 mm ²	20,0

YMKV-AS mb - Armoured PVC sheathed, not for using on vessels



Conductor: Plain copper
Insulation: Vinyl - PVC
Armour: Galvanized steel wire braiding
Rated Voltage: 600/1000V
Test Voltage: 3500V

Cat. no.	Number of conductors x mm ²	Outside dia mm
144112	2 x 1,5 mm ²	12,5
144116	2 x 2,5 mm ²	13,5
144120	2 x 4 mm ²	14,5
144124	2 x 6 mm ²	15,5
144128	2 x 10 mm ²	20,0
144212	3 x 1,5 mm ²	13,0
144216	3 x 2,5 mm ²	14,0
144220	3 x 4 mm ²	15,0
144224	3 x 6 mm ²	16,0
144228	3 x 10 mm ²	21,0
144312	4 x 1,5 mm ²	14,0
144316	4 x 2,5 mm ²	14,5
144320	4 x 4 mm ²	16,0
144324	4 x 6 mm ²	17,0
144328	4 x 10 mm ²	22,0
144412	5 x 1,5 mm ²	15,0
144416	5 x 2,5 mm ²	16,0
144420	5 x 4 mm ²	17,0
144424	5 x 6 mm ²	18,5

CABLE RUBBER - GENERAL PURPOSE

RWPK / HO5RR-F - Rubber sheathed flexible cord



Conductor: Flexible tinned electrolytic copper

Insulation: Rubber

Rated Voltage: 300/500V

Test Voltage: 2000V

Cat. no.	Number of conductors x mm ²	Outside dia mm
145012	2 x 0,75 mm ²	6,5
145016	2 x 1 mm ²	7,0
145020	2 x 1,5 mm ²	8,5
145024	2 x 2,5 mm ²	10,0
145062	3 x 0,75 mm ²	7,0
145066	3 x 1 mm ²	7,5
145070	3 x 1,5 mm ²	9,0
145074	3 x 2,5 mm ²	10,5
145116	4 x 1 mm ²	8,0
145120	4 x 1,5 mm ²	10,0
145124	4 x 2,5 mm ²	12,0
145170	5 x 1,5 mm ²	11,0
145174	5 x 2,5 mm ²	13,0

Rubber sheathed flexible parallel illumination cable



Conductor: Flexible tinned electrolytic copper

Insulation: Rubber

Rated Voltage: 300/500V

Test Voltage: 2000V

Cat. no.	Number of conductors x mm ²	Outside dia mm
145220	2 x 1,5 mm ²	13 x 5
145224	2 x 2,5 mm ²	13 x 5

for lampholders see page 227 - 230

CABLE NEOPRENE RUBBER - GENERAL PURPOSE

NWPK / HO7RN-F - Neoprene rubber sheathed flexible cord



Conductor: Flexible tinned electrolytic copper
Insulation: Rubber
Rated Voltage: 450/750V
Test Voltage: 2500V

Cat. no.	Number of conductors x mm ²	Outside dia mm
145316	2 x 1 mm ²	8,5
145320	2 x 1,5 mm ²	9,5
145324	2 x 2,5 mm ²	11,5
145328	2 x 4 mm ²	13,0
145332	2 x 6 mm ²	14,5
145336	2 x 10 mm ²	21,0
145340	2 x 16 mm ²	24,0
145416	3 x 1 mm ²	9,5
145420	3 x 1,5 mm ²	10,5
145424	3 x 2,5 mm ²	12,0
145428	3 x 4 mm ²	14,0
145432	3 x 6 mm ²	15,5
145436	3 x 10 mm ²	22,0
145440	3 x 16 mm ²	25,0
145444	3 x 25 mm ²	31,0
145448	3 x 35 mm ²	35,0
145452	3 x 50 mm ²	41,0
145456	3 x 70 mm ²	46,0
145460	3 x 95 mm ²	52,0
145464	3 x 120 mm ²	56,0

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CABLE NEOPRENE RUBBER - GENERAL PURPOSE

Continuation - NWPK / HO7RN-F - Neoprene rubber flexible cord



Cat. no.	Number of conductors x mm ²	Outside dia mm
145516	4 x 1 mm ²	10,0
145520	4 x 1,5 mm ²	11,0
145524	4 x 2,5 mm ²	13,0
145528	4 x 4 mm ²	15,5
145532	4 x 6 mm ²	17,5
145536	4 x 10 mm ²	25,0
145540	4 x 16 mm ²	28,0
145544	4 x 25 mm ²	34,0
145548	4 x 35 mm ²	39,0
145552	4 x 50 mm ²	45,0
145556	4 x 70 mm ²	51,0
145560	4 x 95 mm ²	58,0
145564	4 x 120 mm ²	63,0
145620	5 x 1,5 mm ²	12,5
145624	5 x 2,5 mm ²	14,5
145628	5 x 4 mm ²	17,0
145632	5 x 6 mm ²	19,5
145636	5 x 10 mm ²	27,0
145640	5 x 16 mm ²	31,0
145644	5 x 25 mm ²	38,0
145720	7 x 1,5 mm ²	15,0
145724	7 x 2,5 mm ²	17,5
145770	9 x 1,5 mm ²	17,5
145774	9 x 2,5 mm ²	20,0
145820	12 x 1,5 mm ²	18,5
145824	12 x 2,5 mm ²	22,0
145870	18 x 1,5 mm ²	21,0

QWPK - Polyurethan (Purflex) cable



Conductor: Flexible tinned electrolytic copper

Insulation: Polyurethan, colour yellow

Rated Voltage: 300/500V

Test Voltage: 2500V

Cat. no.	Number of conductors x mm ²	Outside dia mm
146016	2 x 1 mm ²	7,2
146020	2 x 1,5 mm ²	8,7
146024	2 x 2,5 mm ²	10,2
146066	3 x 1 mm ²	7,6
146070	3 x 1,5 mm ²	9,2
146074	3 x 2,5 mm ²	10,8
146078	3 x 4 mm ²	12,7
146116	4 x 1 mm ²	8,2
146120	4 x 1,5 mm ²	10,2
146124	4 x 2,5 mm ²	12,1
146128	4 x 4 mm ²	14,0
146132	4 x 6 mm ²	15,9
146166	5 x 1 mm ²	9,1
146170	5 x 1,5 mm ²	11,1
146174	5 x 2,5 mm ²	13,4
146178	5 x 4 mm ²	15,6
146182	5 x 6 mm ²	17,4

CABLE HEAT RESISTANT

Silicone-Mineral Fibre - Heat resistant insulated flexible cable (+400 °C)			
	Conductor:	Flexible tinned electrolytic copper	
	Insulation:	Silicone-coated mineral fibre braid	
	Rated Voltage:	300/500V	
	Test Voltage:	2000V	
	Cat. no.	Number of conductors x mm²	Outside dia mm
	147020	1 x 1,5 mm ²	3,4
	147024	1 x 2,5 mm ²	4,0
	147028	1 x 4 mm ²	4,5

SIF / SIHF - Heat resistant insulated flexible cable (+180 °C)			
	Conductor:	Flexible tinned electrolytic copper	
	Insulation:	Silicone	
	Rated Voltage:	300/500V	
	Test Voltage:	2000V	
	Cat. no.	Number of conductors x mm²	Outside dia mm
	147108	1 x 0,5 mm ²	2,1
	147112	1 x 0,75 mm ²	2,4
	147116	1 x 1 mm ²	2,5
	147120	1 x 1,5 mm ²	2,8
	147124	1 x 2,5 mm ²	3,4
	147128	1 x 4 mm ²	4,2
	147132	1 x 6 mm ²	5,2
	147136	1 x 10 mm ²	6,8
	147140	1 x 16 mm ²	8,4
	147144	1 x 25 mm ²	10,3
	147212	2 x 0,75 mm ²	6,4
	147216	2 x 1 mm ²	6,7
	147220	2 x 1,5 mm ²	7,6
	147224	2 x 2,5 mm ²	9,2
	147228	2 x 4 mm ²	10,8

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CABLE HEAT RESISTANT

Continuation - SIHF - Heat resistant insulated flexible cable (+180 °C)

	Cat. no.	Number of conductors x mm ²	Outside dia mm
	147262	3 x 0,75 mm ²	6,8
	147266	3 x 1 mm ²	7,5
	147270	3 x 1,5 mm ²	8,0
	147274	3 x 2,5 mm ²	9,7
	147278	3 x 4 mm ²	11,5
	147282	3 x 6 mm ²	14,2
	147320	4 x 1,5 mm ²	8,8
	147324	4 x 2,5 mm ²	10,6
	147328	4 x 4 mm ²	13,1
	147332	4 x 6 mm ²	16,2
	147370	5 x 1,5 mm ²	9,6
	147374	5 x 2,5 mm ²	11,6
	147378	5 x 4 mm ²	14,4
	147382	5 x 6 mm ²	17,7

SIHFP - Armoured heat resistant insulated flexible cable (+180 °C)

	Conductor: Flexible tinned electrolytic copper		
	Insulation: Silicone		
	Armour: Galvanized steel wire braiding		
	Rated Voltage: 300/500V		
	Test Voltage: 2000V		
	Cat. no.	Number of conductors x mm²	Outside dia mm
	147420	2 x 1,5 mm ²	8,6
	147470	3 x 1,5 mm ²	9,2

RUBBER WELDING CABLE

Rubber welding cable				
	Conductor: Very flexible plain electrolytic copper			
	Insulation: Rubber			
	Rated Voltage: 100/100V			
	Test Voltage: 1000V			
	Cat. no.	Number of conductors x mm²	Current rating	Outside dia mm
	147512	1 x 16 mm ²	135 Amp	10,5
	147516	1 x 25 mm ²	180 Amp	12,0
	147520	1 x 35 mm ²	225 Amp	13,0
	147524	1 x 50 mm ²	285 Amp	15,0
	147528	1 x 70 mm ²	355 Amp	17,5
	147532	1 x 95 mm ²	430 Amp	20,0
	147536	1 x 120 mm ²	500 Amp	22,0

MARINE SWITCHBOARD CABLE

Shipboard and offshore switchboard wire, halogen-free			
	Conductor: Stranded annealed copper		
	Insulation: Vinyl - PVC		
	Rated Voltage: 600/1000V (1,2kV)		
	Test Voltage: 2500V		
	Approved by: Major shipping authorities		
	Cat. no.	Number of conductors x mm²	Outside dia mm
	148008	1 x 0,75 mm ²	2,8
	148012	1 x 1 mm ²	3,0
	148016	1 x 1,5 mm ²	3,2
	148020	1 x 2,5 mm ²	3,8
	148024	1 x 4 mm ²	4,4
	148028	1 x 6 mm ²	5,4
	148032	1 x 10 mm ²	6,6
	148036	1 x 16 mm ²	6,8
	148040	1 x 25 mm ²	8,6
	148044	1 x 35 mm ²	10,2
	148048	1 x 50 mm ²	12,2
	148052	1 x 70 mm ²	14,4

MARINE INSTRUMENTATION CABLE

Marine instrumentation and communication cable, halogen-free

Conductor: Stranded annealed copper

Insulation: Vinyl - PVC

Armour: Copper wire braiding

Rated Voltage: 0,5 mm² 60V
0,75 mm² 250V

Test Voltage: 1500V

Approved by: Major shipping authorities



Cat. no.	Number of conductors x mm ²	Outside dia mm
148108	1 x 2 x 0,5 mm ²	7,5
148112	1 x 4 x 0,5 mm ²	8,5
148116	4 x 2 x 0,5 mm ²	11,5
148120	7 x 2 x 0,5 mm ²	13,5
148124	8 x 2 x 0,5 mm ²	14,5
148128	10 x 2 x 0,5 mm ²	16,5
148132	14 x 2 x 0,5 mm ²	18,0
148136	19 x 2 x 0,5 mm ²	20,5
148140	24 x 2 x 0,5 mm ²	23,0
148158	1 x 2 x 0,75 mm ²	8,5
148162	1 x 4 x 0,75 mm ²	9,5
148166	2 x 2 x 0,75 mm ²	12,5
148170	4 x 2 x 0,75 mm ²	14,0
148174	6 x 2 x 0,75 mm ²	16,5
148178	7 x 2 x 0,75 mm ²	17,0
148182	8 x 2 x 0,75 mm ²	18,5
148186	10 x 2 x 0,75 mm ²	20,5
148190	14 x 2 x 0,75 mm ²	23,0
148194	19 x 2 x 0,75 mm ²	27,0
148198	24 x 2 x 0,75 mm ²	29,0

Unarmoured Marine power and control cable, halogen-free



Conductor: Stranded annealed copper

Insulation: Vinyl - PVC

Rated Voltage: 600/1000V

Test Voltage: 3500V

Approved by: Major shipping authorities

Cat. no.	Number of conductors x mm ²	Outside dia mm
148224	1 x 4 mm ²	7,0
148228	1 x 6 mm ²	7,5
148232	1 x 10 mm ²	8,5
148236	1 x 16 mm ²	10,0
148240	1 x 25 mm ²	11,0
148244	1 x 35 mm ²	13,0
148248	1 x 50 mm ²	15,0
148252	1 x 70 mm ²	17,0
148256	1 x 95 mm ²	19,0
148260	1 x 120 mm ²	20,5
148264	1 x 150 mm ²	22,5
148268	1 x 185 mm ²	25,0
148272	1 x 240 mm ²	30,0
148316	2 x 1,5 mm ²	9,5
148320	2 x 2,5 mm ²	10,5
148324	2 x 4 mm ²	12,0
148328	2 x 6 mm ²	15,0
148332	2 x 10 mm ²	17,5
148336	2 x 16 mm ²	20,0
148340	2 x 25 mm ²	25,0
148416	3 x 1,5 mm ²	10,0
148420	3 x 2,5 mm ²	11,0
148424	3 x 4 mm ²	12,5
148428	3 x 6 mm ²	14,0
148432	3 x 10 mm ²	16,0
148436	3 x 16 mm ²	18,5
148440	3 x 25 mm ²	22,0
148444	3 x 35 mm ²	25,0

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Continuation: Unarmoured Marine power and control cable



Cat. no.	Number of conductors x mm ²	Outside dia mm
148448	3 x 50 mm ²	29,5
148452	3 x 70 mm ²	34,0
148456	3 x 95 mm ²	38,0
148460	3 x 120 mm ²	42,0
148464	3 x 150 mm ²	46,5
148468	3 x 185 mm ²	57,0
148472	3 x 240 mm ²	65,0
148516	4 x 1,5 mm ²	11,0
148520	4 x 2,5 mm ²	12,5
148524	4 x 4 mm ²	13,5
148528	4 x 6 mm ²	15,5
148532	4 x 10 mm ²	18,0
148536	4 x 16 mm ²	20,5
148616	5 x 1,5 mm ²	12,5
148620	5 x 2,5 mm ²	13,5
148666	6 x 1,5 mm ²	13,0
148686	7 x 1,5 mm ²	13,5
148706	8 x 1,5 mm ²	16,5
148716	10 x 1,5 mm ²	19,0
148726	12 x 1,5 mm ²	19,5
148736	16 x 1,5 mm ²	21,0
148746	19 x 1,5 mm ²	22,0
148766	27 x 1,5 mm ²	27,5

ARMoured MARINE CABLE

Armoured Marine power and control cable, halogen-free

Conductor: Stranded annealed copper
Insulation: Vinyl - PVC
Armour: Copper wire braiding
Rated Voltage: 600/1000V
Test Voltage: 3500V
Approved by: Major shipping authorities



Cat. no.	Number of conductors x mm ²	Outside dia mm
149224	1 x 4 mm ²	8,5
149228	1 x 6 mm ²	9,0
149232	1 x 10 mm ²	10,0
149236	1 x 16 mm ²	11,0
149240	1 x 25 mm ²	13,0
149244	1 x 35 mm ²	15,5
149248	1 x 50 mm ²	16,5
149252	1 x 70 mm ²	18,5
149256	1 x 95 mm ²	20,5
149260	1 x 120 mm ²	22,0
149264	1 x 150 mm ²	24,0
149268	1 x 185 mm ²	26,5
149272	1 x 240 mm ²	31,0
149316	2 x 1,5 mm ²	11,0
149320	2 x 2,5 mm ²	12,0
149324	2 x 4 mm ²	13,5
149328	2 x 6 mm ²	17,0
149332	2 x 10 mm ²	19,5
149336	2 x 16 mm ²	22,0
149340	2 x 25 mm ²	26,0
149344	2 x 35 mm ²	29,0
149416	3 x 1,5 mm ²	12,0
149420	3 x 2,5 mm ²	13,0
149424	3 x 4 mm ²	14,5
149428	3 x 6 mm ²	16,0
149432	3 x 10 mm ²	18,0
149436	3 x 16 mm ²	20,5

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ARMoured MARINE CABLE

Continuation: Armoured Marine power and control cable



Cat. no.	Number of conductors x mm ²	Outside dia mm
149440	3 x 25 mm ²	24,0
149444	3 x 35 mm ²	27,0
149448	3 x 50 mm ²	31,0
149452	3 x 70 mm ²	36,5
149456	3 x 95 mm ²	40,5
149460	3 x 120 mm ²	44,0
149464	3 x 150 mm ²	49,0
149468	3 x 185 mm ²	59,0
149472	3 x 240 mm ²	67,0
149516	4 x 1,5 mm ²	13,0
149520	4 x 2,5 mm ²	14,5
149524	4 x 4 mm ²	16,0
149528	4 x 6 mm ²	17,5
149532	4 x 10 mm ²	20,0
149536	4 x 16 mm ²	23,0
149540	4 x 25 mm ²	26,5
149616	5 x 1,5 mm ²	14,5
149620	5 x 2,5 mm ²	15,5
149666	6 x 1,5 mm ²	15,0
149686	7 x 1,5 mm ²	15,5
149706	8 x 1,5 mm ²	16,0
149716	10 x 1,5 mm ²	19,5
149726	12 x 1,5 mm ²	20,0
149736	16 x 1,5 mm ²	22,0
149746	19 x 1,5 mm ²	23,5
149766	27 x 1,5 mm ²	28,0

COAXIAL CABLE

Coaxial cable					
					
	Cat. no.	Type	Ohm	Colour	Outside dia mm
	150024	RG-58C/U	50	Black	4,95
	150036	RG-59B/U	75	Black	6,2
	150048	RG-213/U	50	Black	10,3
	150060	RG-214/U	50	Black	10,8
	150112	Brass/Brass	75	White	5,5
	150118	Silver/Silver	75	White	6,0
	150130	Coax-12	75	Grey	7,5

IGNITION CABLE

High voltage cable, test voltage 6000V			
			
	Cat. no.	Number of conductors x mm ²	Outside dia mm
	150212	1 x 1,5 mm ²	7

YARN WRAPPED CABLE

Flexible yarn wrapped cable			
			
	Cat. no.	Number of conductors x mm ²	Outside dia mm
	150312	3 x 0,75 mm ²	6,5
	150316	3 x 1 mm ²	7,0

SIGNAL AND COMMUNICATION CABLE

Signal cable



Conductor: Plain copper

Insulation: Vinyl - PVC

Rated Voltage: 300V

Test Voltage: 1500V

		Outside dia mm
Cat. no.	Number of conductors x mm ²	
150412	2 x 0,8 mm ²	3,9
150416	3 x 0,8 mm ²	4,1
150420	4 x 0,8 mm ²	4,6
150424	6 x 0,8 mm ²	5,4
150428	8 x 0,8 mm ²	6,3
150432	10 x 0,8 mm ²	7,1
150436	12 x 0,8 mm ²	7,3
150440	16 x 0,8 mm ²	8,1
150444	20 x 0,8 mm ²	9,2
150448	24 x 0,8 mm ²	10,1

Communication cable, PTT-norm 88



Conductor: Plain copper

Insulation: Vinyl - PVC

Rated Voltage: 90V

Test Voltage: 1000V

		Outside dia mm
Cat. no.	Number of conductors x mm ²	
150512	1 x 4 x 0,5 mm ² + 0,5 mm ²	4,4

Modulair Telephone cable



			Outside dia mm
Cat. no.	Number of conductors x mm ²	Colour	
150562	4 x 0,075 mm ²	Black	5 x 2,5
150568	4 x 0,075 mm ²	White	5 x 2,5

DATA CABLE

Data cable, UTP Cat-5e

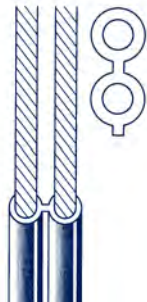
	Conductor: Plain copper		
	Insulation: Vinyl - PVC		
	Cat. no.	Number of conductors x mm²	Outside dia mm
	150580	4 x 2 x 0,5 mm ²	4,9

Data cable with armour, FTP Cat-5e

	Conductor: Plain copper		
	Insulation: Vinyl - PVC		
	Screen: Aluminium, polyester		
	Cat. no.	Number of conductors x mm²	Outside dia mm
	150590	4 x 2 x 0,5 mm ²	6,0

LOUDSPEAKER CABLE

Loudspeaker cable



Conductor:		Flexible electrolytic copper	
Insulation:		Vinyl - PVC	
Test Voltage:		1000V	
Cat. no.	Number of conductors x mm²	Colour	Size mm
150612	2 x 0,35 mm ²	Grey	3,8 x 1,9
150618	2 x 0,35 mm ²	Black	3,8 x 1,9
150624	2 x 0,35 mm ²	White	3,8 x 1,9
150636	2 x 1,5 mm ²	Black/Red	6,5 x 3,2
150642	2 x 2,5 mm ²	Black/Red	7,3 x 3,4

CABLE MOUNTING MATERIAL

Selflocking Cable ties, Colourless



Cat. no.	Dimensions
151112	100 x 2,6 mm
151124	150 x 3,6 mm
151136	200 x 2,6 mm
151148	300 x 3,6 mm
151160	300 x 4,8 mm
151172	360 x 4,8 mm
151184	450 x 8,0 mm
151196	760 x 9,0 mm

Selflocking Cable ties, Legrand type Colson™ - Black UV resistant



Cat. no.	Dimensions	Type
151212	185 x 9,0 mm	319 13
151216	262 x 9,0 mm	319 16
151218	357 x 9,0 mm	319 19
151224	750 x 9,0 mm	319 21

Selflocking Cable ties, Thomas & Betts type TY-RAP® - Colourless



Cat. no.	Dimensions	Type
151306	92 x 2,4 mm	TY-23M
151312	200 x 2,4 mm	TY-232M
151318	356 x 2,4 mm	TY-234M
151324	140 x 3,6 mm	TY-24M
151330	208 x 3,6 mm	TY-232M
151336	281 x 3,6 mm	TY-26M
151342	286 x 3,6 mm	TY-244M
151348	186 x 4,8 mm	TY-25M
151354	293 x 4,8 mm	TY-253M
151360	360 x 4,8 mm	TY-28M
151366	223 x 7,6 mm	TY-272M
151372	338 x 7,6 mm	TY-27M
151378	762 x 7,6 mm	TY-29M

CABLE MOUNTING MATERIAL

Selflocking Cable ties, Thomas & Betts type TY-RAP® - Black UV resistant

	Cat. no.	Dimensions	Type
	151406	92 x 2,4 mm	TY-23MX
	151412	200 x 2,4 mm	TY-232MX
	151418	356 x 2,4 mm	TY-234MX
	151424	140 x 3,6 mm	TY-24MX
	151430	208 x 3,6 mm	TY-232MX
	151436	281 x 3,6 mm	TY-26MX
	151442	386 x 3,6 mm	TY-244MX
	151448	186 x 4,8 mm	TY-25MX
	151454	293 x 4,8 mm	TY-253MX
	151460	360 x 4,8 mm	TY-28MX
	151466	223 x 7,6 mm	TY-272MX
	151472	338 x 7,6 mm	TY-27MX
	151478	762 x 7,6 mm	TY-29MX

Selflocking Cable ties, Stainless steel - Uncoated

	Cat. no.	Dimensions	Type
	151524	300 x 7,0 mm	AE 603
	151530	450 x 7,0 mm	AE 604

Selflocking Cable ties, Stainless steel - Coated

	Cat. no.	Dimensions	Type
	151550	300 x 7,0 mm	AE 613
	151556	450 x 7,0 mm	AE 614

Tools for selflocking cable straps

	Cat. no.	Description	Type
	151612	Tool for cable ties till 4,8 mm	YYT-6
	151624	Tool for cable ties till 7,6 mm	KR6.8
	151636	Tool for Colson cable ties	319 92

CABLE MOUNTING MATERIAL

Adhesive bases for selflocking cable ties

	Cat. no.		Dimensions	For ties max.
	151706	Round	ø 20 mm	3,6 mm
	151712	Round	ø 28 mm	4,8 mm
	151718	Square	20 x 20 mm	3,6 mm
	151724	Square	29 x 29 mm	4,8 mm

Screw mounting bases for selflocking cable ties

	Cat. no.		Dimensions	For ties max.
	151730		17,0 x 11,1 mm	4,8 mm
	151736		23,4 x 14,2 mm	7,6 mm

PVC cable clips with nail

	Cat. no.		Cable size	For
	151804		4 mm	Round cable
	151808		5 mm	Round cable
	151812		5 mm	Flat cable
	151816		6 mm	Round cable
	151820		7 mm	Round cable
	151824		8 mm	Round cable
	151828		9 mm	Round cable
	151832		10 mm	Round cable
	151836		11 mm	Round cable
	151840		12 mm	Round cable
	151844		14 mm	Round cable
	151848		16 mm	Round cable

PVC cable clips, self adhesive

	Cat. no.		Cable size	For
	151866		5 mm	Flat cable

CABLE / TUBE MOUNTING MATERIAL

Cable saddles, galvanized with 7 mm hole

	Cat. no.		Cable size	
	151912		8 mm	
	151918		10 mm	
	151924		12 mm	
	151930		14 mm	
	151936		16 mm	
	151942		18 mm	
	151948		20 mm	
	151954		22 mm	

Saddles for tube

	Cat. no.		Tube size	
	152006		5/8" - 16 mm	Steel
	152010		5/8" - 16 mm	PVC
	152014		3/4" - 19 mm	Steel

SOM-cable saddles PVC

	Cat. no.		Cable size	Colour
	152028		6 - 17 mm	Grey
	152032		15 - 25 mm	Grey
	152036		18 - 30 mm	Grey
	152040		24 - 34 mm	Grey

OBO-push saddles PVC

	Cat. no.		Cable or Tube size	Colour
	152052		12 - 20 mm	Grey
	152056		12 - 20 mm	White

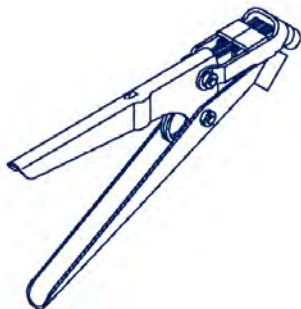
MOUNTING MATERIAL

Spiral cable wrapping, colourless

	Cat. no.	Diameter mm	Box of mtr
	152108	ø 5 till 50 mm	30
	152112	ø 10 till 100 mm	15

Assembling strap, rolls of 10 mtr

	Cat. no.	Description	Size
	152208	Galvanised	12 mm
	152214	Galvanised	17 mm
	152220	Galvanised / PVC coated	12 mm
	152226	Galvanised / PVC coated	19 mm
	152232	Copper	12 mm
	152238	Copper	17 mm



Slotted strap, roll of 25 mtr

Cat. no.	Description	Size
152306	Galvanised / PVC coated	17 x 1,0 mm
152312	Locks for above	
152318	Tool for above	

CABLE GLANDS, NICKEL PLATED BRASS

Cable glands IP54, nickel plated brass with short thread



Cat. no.	Thread	For cable	Thread length
153106	PG 7	6 - 8 mm	5 mm
153112	PG 9	8 - 10 mm	6 mm
153118	PG 11	10 - 12 mm	5 mm
153124	PG 13,5	12 - 14 mm	6,5 mm
153130	PG 16	14 - 16 mm	6,5 mm
153136	PG 21	19 - 21 mm	7 mm
153142	PG 29	26 - 28 mm	8 mm
153148	PG 36	33 - 35 mm	9 mm
153154	PG 42	39 - 41 mm	10 mm
153160	PG 48	43 - 45 mm	10 mm
153206	M12 x 1,5	5 - 7 mm	5 mm
153212	M16 x 1,5	6 - 8 mm	5 mm
153218	M20 x 1,5	8 - 10 mm	6 mm
153224	M20 x 1,5	10 - 12 mm	6 mm
153230	M20 x 1,5	12 - 14 mm	6 mm
153236	M25 x 1,5	15 - 17 mm	7 mm
153242	M32 x 1,5	24 - 26 mm	8 mm
153248	M40 x 1,5	33 - 35 mm	8 mm
153254	M50 x 1,5	41 - 43 mm	9 mm
153260	M63 x 1,5	45 - 47 mm	10 mm
153304	R 1/4"	6 - 8 mm	5 mm
153312	R 1/2"	12 - 14 mm	6,5 mm
153318	R 5/8"	14 - 16 mm	6,5 mm
153324	R 3/4"	16 - 18 mm	7 mm
153330	R 1"	21 - 23 mm	7 mm
153336	R 1 1/4"	28 - 30 mm	8,5 mm
153342	R 2"	45 - 47 mm	10 mm
153348	R 2 1/2"	46 - 48 mm	12 mm

CABLE GLANDS, NICKEL PLATED BRASS

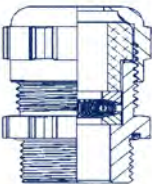
Cable glands IP54, nickel plated brass with long thread



Cat. no.	Thread	For cable	Thread length
153406	PG 7	6 - 8 mm	15 mm
153412	PG 9	8 - 10 mm	15 mm
153418	PG 11	10 - 12 mm	15 mm
153424	PG 13,5	12 - 14 mm	15 mm
153430	PG 16	14 - 16 mm	15 mm
153436	PG 21	19 - 21 mm	15 mm
153442	PG 29	26 - 28 mm	15 mm
153448	PG 36	33 - 35 mm	15 mm
153454	PG 42	39 - 41 mm	15 mm
153460	PG 48	43 - 45 mm	15 mm
153506	M12 x 1,5	5 - 7 mm	10 mm
153512	M16 x 1,5	6 - 8 mm	10 mm
153518	M20 x 1,5	8 - 10 mm	10 mm
153524	M20 x 1,5	10 - 12 mm	10 mm
153530	M20 x 1,5	12 - 14 mm	10 mm
153536	M25 x 1,5	15 - 17 mm	12 mm
153542	M32 x 1,5	24 - 26 mm	12 mm
153548	M40 x 1,5	33 - 35 mm	14 mm
153554	M50 x 1,5	41 - 43 mm	14 mm
153560	M63 x 1,5	45 - 47 mm	14 mm
153606	R 3/8"	10 - 12 mm	15 mm
153612	R 1/2"	12 - 14 mm	15 mm
153618	R 5/8"	14 - 16 mm	15 mm
153624	R 3/4"	16 - 18 mm	15 mm
153630	R 1"	21 - 23 mm	15 mm
153636	R 1 1/4"	28 - 30 mm	15 mm
153642	R 1 1/2"	33 - 35 mm	15 mm
153648	R 2 1/2"	46 - 48 mm	20 mm

CABLE GLANDS, NICKEL PLATED BRASS

Cable glands IP68 Uni-tight, nickel plated brass

	Cat. no.	Thread	For cable	Thread length
	153812	PG 9	6,5 - 9,5 mm	6 mm
	153818	PG 11	7,0 - 10,5 mm	6 mm
	153824	PG 13,5	9,0 - 13,0 mm	6,5 mm
	153830	PG 16	11,5 - 15,5 mm	6,5 mm
	153836	PG 21	14,0 - 18,0 mm	7 mm
	153842	PG 29	20,0 - 25,0 mm	8 mm

Lock nuts, nickel plated brass

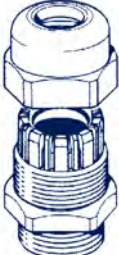
	Cat. no.	Thread	
	153906	PG 7	
	153912	PG 9	
	153918	PG 11	
	153924	PG 13,5	
	153930	PG 16	
	153936	PG 21	
	153942	PG 29	
	153948	PG 36	
	153954	PG 42	
	153960	PG 48	
	154006	M12 x 1,5	
	154012	M16 x 1,5	
	154016	M20 x 1,5	
	154036	M25 x 1,5	
	154044	M32 x 1,5	
	154052	M40 x 1,5	
	154060	M50 x 1,5	
	154068	M63 x 1,5	
	154104	R 1/4"	
	154106	R 3/8"	
	154112	R 1/2"	
	154118	R 5/8"	
	154124	R 3/4"	
	154130	R 1"	
	154136	R 1 1/4"	
	154142	R 1 1/2"	
	154148	R 2"	
	154154	R 2 1/2"	

CABLE GLANDS, NYLON

Cable glands, nylon

	Cat. no.	Thread	For cable	Thread length
	154206	PG 7	3,5 - 6 mm	7,5 mm
	154212	PG 9	4,5 - 7 mm	8 mm
	154218	PG 11	6 - 9 mm	8 mm
	154224	PG 13,5	9 - 12 mm	9 mm
	154324	PG 13,5	9 - 12 mm	15 mm
	154230	PG 16	11 - 14 mm	10 mm
	154330	PG 16	11 - 14 mm	15 mm
	154236	PG 21	14 - 18 mm	11 mm
	154242	PG 29	18 - 25 mm	11 mm
	154248	PG 36	25 - 32 mm	13 mm
	154254	PG 42	30 - 38 mm	13 mm
	154260	PG 48	34 - 42 mm	15 mm

Cable glands IP68 Compression type, nylon

	Cat. no.	Thread	For cable	Thread length
	154512	PG 9	6,5 - 9,5 mm	6 mm
	154518	PG 11	7,0 - 10,5 mm	6 mm
	154524	PG 13,5	9,0 - 13,0 mm	6,5 mm
	154530	PG 16	11,5 - 15,5 mm	6,5 mm
	154536	PG 21	14,0 - 18,0 mm	7 mm
	154542	PG 29	20,0 - 25,0 mm	8 mm

Lock nuts, nylon

	Cat. no.	Thread	
	154706	PG 7	
	154712	PG 9	
	154718	PG 11	
	154724	PG 13,5	
	154730	PG 16	
	154736	PG 21	
	154742	PG 29	
	154748	PG 36	
	154754	PG 42	
	154760	PG 48	

Stopping plugs, nickel plated brass

	Cat. no.		Thread	
	154906		PG 7	
	154912		PG 9	
	154918		PG 11	
	154924		PG 13,5	
	154930		PG 16	
	154936		PG 21	
	154942		PG 29	
	154948		PG 36	
	154954		PG 42	
	154960		PG 48	
	155006		R 3/8"	
	155012		R 1/2"	
	155024		R 3/4"	
	155030		R 1"	

Stopping plugs, nylon

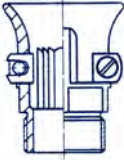
	Cat. no.		Thread	
	155106		PG 7	
	155112		PG 9	
	155118		PG 11	
	155124		PG 13,5	
	155130		PG 16	
	155136		PG 21	
	155142		PG 29	
	155148		PG 36	
	155154		PG 42	
	155160		PG 48	
	155172		R 5/8"	

CABLE GLANDS, ACCESSORIES

Japanese cable gland, nickel plated brass

	Cat. no.	Thread	Description
	155218	R 3/4"	For switch, socket and plug

Cable gland, nylon with stress relief

	Cat. no.	Thread	Description
	155236	M24 x 1,5	For floodlights

Reducing ring, nickel plated brass

	Cat. no.	Outside thread	Inside thread
	155412	PG 9	PG 7
	155418	PG 11	PG 9
	155424	PG 13,5	PG 9
	155430	PG 13,5	PG 11
	155436	PG 16	PG 9
	155442	PG 16	PG 11
	155448	PG 16	PG 13,5
	155454	PG 21	PG 13,5
	155460	PG 21	PG 16
	155466	PG 29	PG 21
	155472	PG 36	PG 29

Enlargement ring, nickel plated brass

	Cat. no.	Outside thread	Inside thread
	155512	PG 9	PG 11
	155518	PG 11	PG 13,5
	155524	PG 11	PG 16
	155530	PG 13,5	PG 16
	155536	PG 13,5	PG 21
	155542	PG 16	PG 21
	155548	PG 21	PG 29
	155554	PG 29	PG 36

CABLE SHOES

Insulated solderless Ring-terminals



Cat. no.	Wire range	Bolt hole	Colour
160012	0,25 - 1,65 mm ²	M3	red
160018	0,25 - 1,65 mm ²	M4	red
160024	0,25 - 1,65 mm ²	M5	red
160030	0,25 - 1,65 mm ²	M6	red
160036	0,25 - 1,65 mm ²	M8	red
160062	1,04 - 2,63 mm ²	M3	blue
160068	1,04 - 2,63 mm ²	M4	blue
160074	1,04 - 2,63 mm ²	M5	blue
160080	1,04 - 2,63 mm ²	M6	blue
160086	1,04 - 2,63 mm ²	M8	blue
160092	1,04 - 2,63 mm ²	M10	blue
160112	2,63 - 6,64 mm ²	M4	yellow
160118	2,63 - 6,64 mm ²	M5	yellow
160124	2,63 - 6,64 mm ²	M6	yellow
160130	2,63 - 6,64 mm ²	M8	yellow
160136	2,63 - 6,64 mm ²	M10	yellow

Insulated solderless Spade-terminals



Cat. no.	Wire range	Bolt hole	Colour
160162	0,25 - 1,65 mm ²	M3	red
160163	0,25 - 1,65 mm ²	M4	red
160164	0,25 - 1,65 mm ²	M5	red
160212	1,04 - 2,63 mm ²	M3	blue
160218	1,04 - 2,63 mm ²	M4	blue
160224	1,04 - 2,63 mm ²	M5	blue
160230	1,04 - 2,63 mm ²	M6	blue
160262	2,63 - 6,64 mm ²	M4	yellow
160268	2,63 - 6,64 mm ²	M5	yellow
160274	2,63 - 6,64 mm ²	M6	yellow
160280	2,63 - 6,64 mm ²	M8	yellow

CABLE SHOES

Insulated solderless Hook-terminals

	Cat. no.	Wire range	Bolt hole	Colour
	160312	0,25 - 1,65 mm ²	M4	red
	160318	1,04 - 2,63 mm ²	M4	blue
	160324	2,63 - 6,64 mm ²	M5	yellow

Insulated solderless Pin-terminals

	Cat. no.	Wire range		Colour
	160362	0,25 - 1,65 mm ²		red
	160368	1,04 - 2,63 mm ²		blue
	160374	2,63 - 6,64 mm ²		yellow

Insulated solderless Butt Splice-connectors

	Cat. no.	Wire range		Colour
	160412	0,25 - 1,65 mm ²		red
	160418	1,04 - 2,63 mm ²		blue
	160424	2,63 - 6,64 mm ²		yellow

Insulated solderless Receptable Disconnect

	Cat. no.	Wire range	ø Hole	Colour
	160462	0,25 - 1,65 mm ²	3,96	red
	160468	1,04 - 2,63 mm ²	3,96	blue
	160474	1,04 - 2,63 mm ²	4,96	blue
	160480	2,63 - 6,64 mm ²	5,00	yellow

Insulated solderless Bullet Disconnect

	Cat. no.	Wire range	ø Pen	Colour
	160512	0,25 - 1,65 mm ²	3,96	red
	160518	1,04 - 2,63 mm ²	3,96	blue
	160524	1,04 - 2,63 mm ²	4,96	blue
	160530	2,63 - 6,64 mm ²	5,00	yellow

CABLE SHOES

Insulated solderless Female Disconnect

	Cat. no.	Wire range	Size	Colour
	160562	0,25 - 1,65 mm ²	2,8 x 0,5	red
	160568	0,25 - 1,65 mm ²	4,8 x 0,8	red
	160574	0,25 - 1,65 mm ²	6,3 x 0,8	red
	160612	1,04 - 2,63 mm ²	4,8 x 0,8	blue
	160618	1,04 - 2,63 mm ²	6,3 x 0,8	blue
	160662	2,63 - 6,64 mm ²	6,3 x 0,8	yellow
	160668	2,63 - 6,64 mm ²	9,5 x 1,2	yellow

Insulated solderless Male Disconnect

	Cat. no.	Wire range	Size	Colour
	160712	0,25 - 1,65 mm ²	6,3 x 0,8	red
	160718	1,04 - 2,63 mm ²	6,3 x 0,8	blue
	160724	2,63 - 6,64 mm ²	6,3 x 0,8	yellow

Insulated solderless Fully-insulated Female Disconnect

	Cat. no.	Wire range	Size	Colour
	160762	0,25 - 1,65 mm ²	6,3 x 0,8	red
	160768	1,04 - 2,63 mm ²	6,3 x 0,8	blue
	160774	2,63 - 6,64 mm ²	6,3 x 0,8	yellow

Insulated solderless Piggy Back Disconnect

	Cat. no.	Wire range	Size	Colour
	160812	0,25 - 1,65 mm ²	6,3 x 0,8	red
	160818	1,04 - 2,63 mm ²	6,3 x 0,8	blue
	160824	2,63 - 6,64 mm ²	6,3 x 0,8	yellow

Insulated Cable-connectors Self-stripping

	Cat. no.	Wire range		Colour
	161012	0,5 - 0,75 mm ²		red
	161018	0,7 - 2,0 mm ²		blue
	161024	3,0 - 4,5 mm ²		yellow

CABLE SHOES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Accessories for Insulated Cable-terminals

Cat. no.	Description	Fig.
161106	Box, containing a small assorted insulated terminals including crimping tool	1
161112	Box, containing a large assorted insulated terminals including crimping tool	2
161206	Crimping tool 0,75 - 6,00 mm ²	3
161212	Crimping tool 0,50 - 6,00 mm ² (heavy duty)	3
161218	Crimping tool ratchet-type 0,50 - 6,00 mm ²	4

CABLE SHOES

Non-insulated Cord-end Sleeves

	Cat. no.	Wire range	Qty bag	
	161406	0,50 mm ²	100pcs	
	161410	0,75 mm ²	100pcs	
	161414	1,00 mm ²	100pcs	
	161418	1,50 mm ²	100pcs	
	161422	2,50 mm ²	100pcs	
	161426	4,00 mm ²	100pcs	
	161430	6,00 mm ²	100pcs	
	161434	10,00 mm ²	100pcs	
	161438	16,00 mm ²	100pcs	

Insulated Cord-end Sleeves

	Cat. no.	Wire range	Qty bag	Colour
	161506	0,50 mm ²	100pcs	white
	161510	0,75 mm ²	100pcs	blue
	161514	1,00 mm ²	100pcs	red
	161518	1,50 mm ²	100pcs	black
	161522	2,50 mm ²	100pcs	grey
	161526	4,00 mm ²	100pcs	orange
	161530	6,00 mm ²	100pcs	green
	161534	10,00 mm ²	100pcs	brown
	161538	16,00 mm ²	100pcs	ivory

Insulated Cord-end Sleeves Kit

	Cat. no.	Description
	161580	Box, containing insulated Cord-end sleeves
		50pcs 0,5 mm ² - 100pcs 0,75 mm ² /1,00 mm ² /1,50 mm ² 50pcs 2,5 mm ²

Crimping-tool for Cord-end Sleeves

	Cat. no.	Description
	161592	Tool for Cord-end Sleeves 0,5 - 16,0 mm ²

Non-insulated Crimp Ring-terminals

	Cat. no.	Wire range	Bolt hole
	161606	1,5 mm ²	M3
	161610	1,5 mm ²	M4
	161614	1,5 mm ²	M5
	161618	2,5 mm ²	M4
	161622	2,5 mm ²	M5
	161626	2,5 mm ²	M6
	161630	2,5 mm ²	M8
	161634	6,00 mm ²	M4
	161638	6,00 mm ²	M5
	161642	6,00 mm ²	M6
	161646	6,00 mm ²	M8
	161650	6,00 mm ²	M10
	161654	10,00 mm ²	M6
	161658	10,00 mm ²	M8
	161662	10,00 mm ²	M10
	161666	16,00 mm ²	M6
	161670	16,00 mm ²	M8
	161674	16,00 mm ²	M10
	161678	16,00 mm ²	M12
	161682	25,00 mm ²	M6
	161686	25,00 mm ²	M8
	161690	25,00 mm ²	M10
	161694	25,00 mm ²	M12
	161698	35,00 mm ²	M6
	161702	35,00 mm ²	M8
	161706	35,00 mm ²	M10
	161710	35,00 mm ²	M12

continue on next page

Continuation Non-insulated Crimp Ring-terminals

	Cat. no.	Wire range	Bolt hole
	161714	50,0 mm ²	M6
	161718	50,0 mm ²	M8
	161722	50,0 mm ²	M10
	161726	50,0 mm ²	M12
	161730	50,0 mm ²	M14
	161734	70,0 mm ²	M8
	161738	70,0 mm ²	M10
	161742	70,0 mm ²	M12
	161746	70,0 mm ²	M14
	161750	70,0 mm ²	M16
	161754	95,0 mm ²	M10
	161758	95,0 mm ²	M12
	161762	95,0 mm ²	M14
	161766	95,0 mm ²	M16
	161770	120,00 mm ²	M10
	161774	120,00 mm ²	M12
	161778	120,00 mm ²	M14
	161782	120,00 mm ²	M16
	161786	150,00 mm ²	M12
	161790	150,00 mm ²	M14
	161794	150,00 mm ²	M16
	161798	185,00 mm ²	M16
	161802	240,00 mm ²	M16
	161806	300,00 mm ²	M16

CABLE SHOES ACCESSORIES

Non-insulated Crimp Connectors

	Cat. no.	Wire range	
	161908	4,0 mm ²	
	161912	6,0 mm ²	
	161916	10,0 mm ²	
	161920	16,0 mm ²	
	161924	25,0 mm ²	
	161928	35,0 mm ²	
	161932	50,0 mm ²	
	161936	70,0 mm ²	
	161940	95,0 mm ²	
	161944	120,0 mm ²	
	161948	150,0 mm ²	
	161952	185,0 mm ²	
	161956	240,0 mm ²	
	161960	300,0 mm ²	



Fig. 1

Fig. 2



Fig. 3



Fig. 4



Tools for Non-insulated Crimp Cable-terminals

Cat. no.	Description	Fig.
162012	Crimping tool 0,75 - 16,00 mm ²	1
162018	Crimping tool 6,0 - 50,0 mm ²	2
162024	Crimping tool 10,0 - 120,0 mm ²	3
162030	Crimping tool 50,0 - 120,0 mm ²	4
162036	Crimping tool 120,0 - 240,0 mm ²	4



Fig. 1



Fig. 2

Hydraulic Crimp Tool for Non-insulated Crimp Cable-terminals

Cat. no.	Description	Fig.
162112	Hydraulic Crimping tool without insert	1
162118	Insert 6,00 mm ² for hydraulic Crimping tool	2
162122	Insert 10,00 mm ² for hydraulic Crimping tool	2
162126	Insert 16,00 mm ² for hydraulic Crimping tool	2
162130	Insert 25,00 mm ² for hydraulic Crimping tool	2
162134	Insert 35,00 mm ² for hydraulic Crimping tool	2
162138	Insert 50,00 mm ² for hydraulic Crimping tool	2
162142	Insert 70,00 mm ² for hydraulic Crimping tool	2
162146	Insert 95,00 mm ² for hydraulic Crimping tool	2
162150	Insert 120,00 mm ² for hydraulic Crimping tool	2

CABLE CONNECTION MATERIAL

Nylon terminal connectors (seperable)

	Cat. no.	Wire range	Poles
	163112	4 mm ²	12
	163118	6 mm ²	12
	163124	10 mm ²	12
	163130	16-25 mm ²	12

Porcelain connectors

	Cat. no.	Wire range	Poles
	163272	4 mm ²	1
	163278	4 mm ²	2
	163284	4 mm ²	3

Terminal blocks, 3-pole

	Cat. no.	Amperes	Size mm
	163306	35	56 x 31 x 19 mm
	163312	60	96 x 51 x 39 mm
	163318	100	123 x 65 x 39 mm
	163324	200	160 x 81 x 48 mm

Wire connectors

	Cat. no.	Wire range	Type
	163406	2 - 4,5 mm ²	screw
	163414	3 - 12,5 mm ²	screw
	163422	12 - 24 mm ²	screw
	163512	2 x 2,5 mm ²	plug-in
	163516	3 x 2,5 mm ²	plug-in
	163520	4 x 2,5 mm ²	plug-in
	163524	5 x 2,5 mm ²	plug-in
	163528	8 x 2,5 mm ²	plug-in

CABLE CONNECTION MATERIAL

Aligator clips

	Cat. no.	Description	Size mm
	163612	Red, insulated	35 mm
	163616	Black, insulated	35 mm
	163622	Red, insulated	50 mm
	163626	Black, insulated	50 mm
	163632	Red, insulated	80 mm
	163636	Black, insulated	80 mm
	163672	Red, non-insulated	60 mm
	163676	Black, non-insulated	60 mm
	163682	Red, non-insulated	80 mm
	163686	Black, non-insulated	80 mm

Welding cable connector, male and female

	Cat. no.	Description	mm ²
	164012	male / female	25 mm ²
	164018	male / female	35 mm ²
	164024	male / female	50/70 mm ²
	164030	male / female	95 mm ²
	164036	male / female	120 mm ²

Electrode holder

	Cat. no.	Description	Type
	164112	Electrode holder 300 Amp.	Grip-Type
	164124	Electrode holder 400 Amp.	Angle-Type

Earth clamp

	Cat. no.	Description
	164172	Earth connection-clamp for welding

RAIL MOUNTED TERMINALS

Terminal blocks 2,5 till 35 mm² for TS32 and TS35 rail

Terminal blocks 70 / 95 mm² only for TS32 rail

	Cat. no.	mm ²	Type	Thickness
	165012	2,5 mm ²	SAK 2.5 EN	6,0 mm
	165018	4 mm ²	SAK 4 EN	6,5 mm
	165024	6 mm ²	SAK 6 EN	8,0 mm
	165030	10 mm ²	SAK 10 EN	10,0 mm
	165036	16 mm ²	SAK 16 EN	12,0 mm
	165042	35 mm ²	SAK 35 EN	16,0 mm
	165048	70 mm ²	SAK 70	22,0 mm
	165054	95 mm ²	SAK 95	28,0 mm

End barrier

	Cat. no.		For	Thickness
	165112		SAK 2.5 EN	1,5 mm
	165118		SAK 4/6/10 EN	1,5 mm
	165124		SAK 16 EN	3,0 mm
	165130		SAK 35 EN	3,0 mm
	165136		SAK 70	4,0 mm
	165142		SAK 95	3,0 mm

Inter barrier

	Cat. no.		For	Thickness
	165162		SAK 2.5 EN	1,5 mm
	165168		SAK 4/6/10 EN	1,5 mm
	165130		SAK 16 EN	3,0 mm
	165180		SAK 35 EN	3,0 mm

Line up connector for SAK 2,5 till 10 EN

	Cat. no.		For	Type
	165212		SAK 2.5 EN	Q10
	165218		SAK 4 EN	Q10
	165224		SAK 6 EN	Q10
	165230		SAK 10 EN	Q10

RAIL MOUNTED TERMINALS

Stack Terminal blocks 4 mm² for TS32 rail

	Cat. no.	mm ²	Type	Thickness
	165262	4 mm ²	DK 4 Q	6,0 mm

End barrier for DK 4 Q

	Cat. no.		For	Thickness
	165274		DK 4 Q	1,5 mm

Fuse Terminal blocks for glass fuses 20 x 5 mm

	Cat. no.	mm ²	Type	Thickness
	for TS32 and TS35 rail			
	165306	4 mm ²	ASK 1	8,0 mm
	for TS32 rail			
	165312	10 mm ²	SAKS 1	13,0 mm

End barrier for ASK 1 / SAKS 1

	Cat. no.		For	Thickness
	165324		ASK 1	1,5 mm
	165330		SAKS 1	2,5 mm

End brackets

	Cat. no.		For	Type
	165342		TS32 rail	EWK 1
	165348		TS35 rail	EW 35

Mounting rails

	Cat. no.	Description	Type
	165512	Mounting rail length of 1 mtr	TS32
	165524	DIN mounting rail length of 1 mtr	TS35

CODE MARKERS

Code markers for Terminal blocks

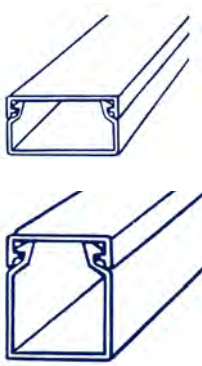
	Cat. no.	Description
	165612	Markers 1 - 50
	165618	Markers 51 - 100

Code markers

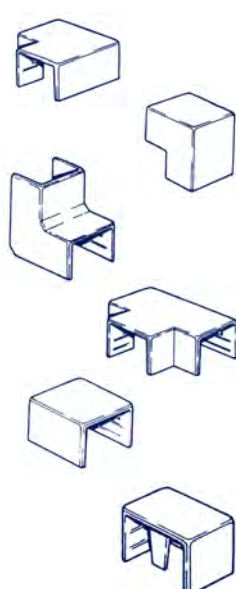
	Cat. no.	Description
	165706	Sheets, 0 till 9
	165712	Sheets, 1 till 34
	165718	Sheets, A till Z
	165726	Booklet, 0 till 9
	165732	Booklet, A till Z
	165752	Marking tape dispenser 0 till 9

CABLE TRUNKING

PVC Cable trunking, length of 2 meters

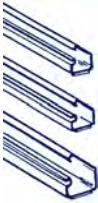
	Cat. no.		Size W x H mm	Colour
	166212		15 x 17 mm	White
	166218		25 x 17 mm	White
	166224		25 x 25 mm	White
	166230		25 x 40 mm	White
	166236		40 x 25 mm	White
	166242		40 x 40 mm	White
	166248		40 x 60 mm	White
	166254		60 x 40 mm	White
	166260		60 x 60 mm	White
	166266		80 x 60 mm	White
	166272		100 x 60 mm	White

PVC Cable trunking Fittings, White

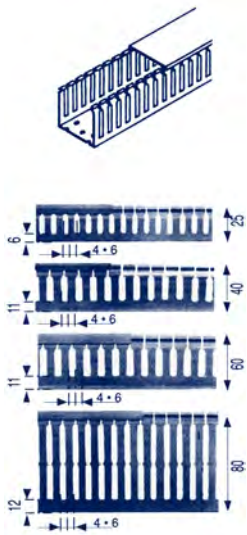
	Cat. no.	Description	For trunking Size W x H mm
	166506	Flat Angle	25 x 17 mm
	166508	Flat Angle	40 x 25 mm
	166510	External Angle	25 x 17 mm
	166512	External Angle	40 x 25 mm
	166514	Internal Angle	25 x 17 mm
	166516	Internal Angle	40 x 25 mm
	166518	Flat Tee	25 x 17 mm
	166520	Flat Tee	40 x 25 mm
	166522	Coupling	25 x 17 mm
	166524	Coupling	40 x 25 mm
	166526	Stop End	25 x 17 mm
	166528	Stop End	40 x 25 mm

CABLE TRUNKING

Adhesive mini pvc cable trunking, length of 2 meters

	Cat. no.		Size W x H mm	Colour
	166612		10 x 5 mm	White
	166618		10 x 10 mm	White
	166624		15 x 10 mm	White
	166630		20 x 10 mm	White

PVC Cable trunking open slotted with break-out webs, length of 2 meters

	Cat. no.		Size W x H mm	Colour
	166812		25 x 25 mm	Grey
	166816		25 x 40 mm	Grey
	166820		25 x 60 mm	Grey
	166824		25 x 80 mm	Grey
	166828		40 x 25 mm	Grey
	166832		40 x 40 mm	Grey
	166836		40 x 60 mm	Grey
	166840		40 x 80 mm	Grey
	166844		60 x 40 mm	Grey
	166848		60 x 60 mm	Grey
	166852		60 x 80 mm	Grey
	166856		80 x 40 mm	Grey
	166860		80 x 60 mm	Grey
	166864		80 x 80 mm	Grey
	166868		120 x 40 mm	Grey
	166872		120 x 60 mm	Grey
	166876		120 x 80 mm	Grey

CABLE TRAY AND LADDERTRAY

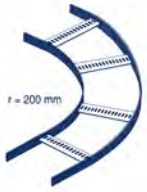
Cable tray, galvanized, length of 2 meters

	Cat. no.		Width	Height
	166912		50 mm	15 mm
	166918		75 mm	15 mm
	166924		100 mm	15 mm
	166930		150 mm	15 mm
	166936		200 mm	15 mm
	166942		250 mm	15 mm
	166948		300 mm	15 mm

Laddertray, galvanized, length of 3 meters

	Cat. no.		Width	Height
	167012		100 mm	30 mm
	167018		150 mm	30 mm
	167024		200 mm	30 mm
	167030		300 mm	30 mm

Flat Elbow 90° for Laddertray, galvanized

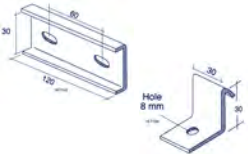
	Cat. no.		Width	Height
	167042		100 mm	30 mm
	167048		150 mm	30 mm
	167054		200 mm	30 mm
	167060		300 mm	30 mm

LADDERTRAY

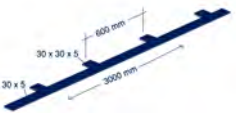
Riser or faller 90° for Laddertray, galvanized

	Cat. no.		Width	Height
	167072		100 mm	30 mm
	167078		150 mm	30 mm
	167084		200 mm	30 mm
	167090		300 mm	30 mm

Accessories for Laddertray, galvanized

	Cat. no.	Discription
	167102	Splice connector and coupling set
	167108	Fixing clamp

Flat bar with welding strips, galvanized, length of 3 meters

	Cat. no.	Discription
	167120	Flat bar 30 x 5 mm with welding strips

JUNCTION BOXES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

PVC, junction box

Cat. no.	Dimensions	Description	Fig.
167512	ø55 x 24 mm	with 4 terminals 2,5 mm ²	1
167518	85 x 85 x 45 mm	with 7 knockouts for glands PG16	2
167524	85 x 85 x 51 mm	with 8 knockouts for glands PG16 including 3 cable glands	3
154230		Cable gland PG16 nylon for above	4



Brass, junction box with 4 terminals 2,5 mm² IP56

Cat. no.	Gland position	Cable gland
167606	0-	1x G 5/8"
167612	-0-	2x G 5/8"
167618	0=	2x G 5/8"
167624	-0=	3x G 5/8"
167630	=0=	4x G 5/8"
167636	T	3x G 5/8"
167642	+	4x G 5/8"
167648	Insert voor above junction box 4 x 2,5 mm ²	

JUNCTION BOXES



Brass, junction box empty and undrilled IP56			
Cat. no.		Inside dimensions H x W x D mm	Outside dimensions H x W x D mm
167656		70 x 70 x 50 mm	85 x 85 x 59 mm
167662		90 x 90 x 55 mm	106 x 116 x 69 mm
167668		100 x 120 x 70 mm	114 x 146 x 81 mm
167674		140 x 180 x 85 mm	160 x 196.5 x 97 mm
167680		140 x 180 x 115 mm	160 x 196.5 x 126 mm
167686		200 x 250 x 100 mm	217 x 267 x 120 mm
167692		200 x 250 x 140 mm	217 x 267 x 160 mm

JUNCTION BOXES



Fig. 1



Fig. 2

Polycarbonate, junction box empty and undrilled IP65

Cat. no.	Dimensions H x W x D mm	Fig.
167712	52 x 50 x 35 mm	1
167718	65 x 50 x 35 mm	1
167724	82 x 80 x 55 mm	1
167730	82 x 80 x 85 mm	1
167736	120 x 80 x 55 mm	1
167742	160 x 80 x 55 mm	1
167748	122 x 120 x 55 mm	1
167754	122 x 120 x 85 mm	1
167760	160 x 120 x 90 mm	1
167766	200 x 120 x 75 mm	1
167772	240 x 120 x 100 mm	1
167778	240 x 160 x 90 mm	1

Chassis plates voor above

Cat. no.	Dimensions H x W mm	Fig.
167806	52 x 50 mm	2
167810	65 x 50 mm	2
167814	82 x 80 mm	2
167818	120 x 80 mm	2
167822	160 x 80 mm	2
167826	122 x 120 mm	2
167830	160 x 120 mm	2
167834	200 x 120 mm	2
167838	240 x 120 mm	2
167842	240 x 160 mm	2

ENCLOSURES



Fig. 1



Fig. 2



Fig. 3

Reinforced polyester rear panels with opaque lid IP65

Cat. no.	Dimensions H x W x D mm	Fig.
167906	270 x 180 x 170 mm	1
167912	270 x 270 x 170 mm	1
167918	360 x 180 x 170 mm	1
167924	360 x 270 x 170 mm	1
167930	360 x 360 x 170 mm	1
167936	540 x 270 x 170 mm	1
167942	540 x 360 x 170 mm	1
167948	540 x 540 x 170 mm	1

Chassis plates voor above enclosures

Cat. no.	Dimensions H x W mm	For Cat. no.	Fig.
167956	270 x 180 mm	167906	2
167962	270 x 270 mm	167912	2
167968	360 x 180 mm	167918	2
167974	360 x 270 mm	167924	2
167980	360 x 360 mm	167930	2
167986	540 x 270 mm	167936	2
167992	540 x 360 mm	167942	2
167998	540 x 540 mm	167948	2

Fastening lugs voor above enclosures

Cat. no.	Description	Fig.
168006	Mounting lugs	3

ENCLOSURES



Fig. 1

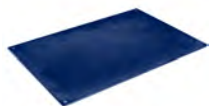


Fig. 2



Fig. 3



Fig. 4

Heat-moulded polyester enclosures with door IP65

Cat. no.	Dimensions H x W x D mm	Fig.
168112	300 x 250 x 140 mm	1
168118	400 x 300 x 200 mm	1
168124	400 x 400 x 200 mm	1
168130	500 x 400 x 200 mm	1
168136	600 x 400 x 230 mm	1
168142	600 x 500 x 230 mm	1
168148	800 x 600 x 300 mm	1

Chassis plates voor above enclosures

Cat. no.	Dimensions H x W mm	For Cat. no.	Fig.
168162	300 x 250 mm	168112	2
168168	400 x 300 mm	168118	2
168174	400 x 400 mm	168124	2
168180	500 x 400 mm	168130	2
168186	600 x 400 mm	168136	2
168192	600 x 500 mm	168142	2
168198	800 x 600 mm	168148	2

Accessoires voor above enclosures

Cat. no.	Description	Fig.
168206	Mounting lugs	3
168212	Lock by handle and key	4

ENCLOSURES



Sheet steel enclosures with door IP55, including chassis plate

Cat. no.	Dimensions H x W x D mm
168262	300 x 300 x 150 mm
168268	400 x 300 x 200 mm
168274	400 x 400 x 200 mm
168280	500 x 400 x 200 mm
168286	600 x 400 x 250 mm
168292	600 x 600 x 250 mm
168298	800 x 600 x 300 mm

Fig. 3



Fig. 1



Fig. 2



Fig. 4

Accessoires voor above enclosures

Cat. no.	Description	Fig.
168306	Mounting lugs, set of 4 pcs	1
168312	Lock by handle and key	2
168318	Inset for lock by handle	3
168352	Universal master key	4

INSULATION MATERIALS

PVC electrical insulation tape, 15 mm wide, rolls of 10 meters

	Cat. no.		Colour	
	170112		transparent	
	170124		yellow/green	

PVC electrical insulation tape, 19 mm wide, rolls of 10 meters

	Cat. no.		Colour	
	170204		red	
	170210		blue	
	170216		black	
	170222		green	
	170228		yellow	
	170234		white	
	170240		brown	
	170246		grey	

PVC electrical insulation tape, 19 mm wide, rolls of 20 meters

	Cat. no.		Colour	
	170254		red	
	170260		blue	
	170266		black	
	170272		green	
	170278		yellow	
	170284		white	
	170290		brown	
	170296		grey	

INSULATION MATERIALS

PVC electrical insulation tape, 25 mm wide, rolls of 20 meters

	Cat. no.		Colour	
	170304		red	
	170310		blue	
	170316		black	
	170322		green	
	170328		yellow	
	170334		white	
	170346		grey	

PVC electrical insulation tape, 50 mm wide, rolls of 20 meters

	Cat. no.		Colour	
	170354		red	
	170360		blue	
	170366		black	
	170372		green	
	170378		yellow	
	170384		white	
	170396		grey	

PVC electrical insulation tape, 100 mm wide, rolls of 20 meters

	Cat. no.		Colour	
	170404		red	
	170410		blue	
	170416		black	
	170422		green	
	170428		yellow	
	170434		white	
	170466		grey	

INSULATION MATERIALS

Rubber tape

	Cat. no.		Description
	170506		Self-vulcanizing rubber tape,
			19 mm, roll of 3,5 meters

Cotton tapes

	Cat. no.		Description
	170556		White Cotton tape,
			15 mm, roll of 50 meters
	170562		White Cotton tape,
			20 mm, roll of 50 meters
	170568		White Cotton tape,
			25 mm, roll of 100 meters

Tar tape

	Cat. no.		Description
	170580		Tar tape,
			25 mm, roll of 25 meters

Empire tapes

	Cat. no.		Description
	170606		Varnished cambric/empire tape,
			15 mm, roll of 50 meters
	170612		Varnished cambric/empire tape,
			20 mm, roll of 50 meters
	170618		Varnished cambric/empire tape,
			25 mm, roll of 50 meters

Teflon tape

	Cat. no.		Description
	170656		Seal teflon tape,
			12 mm, roll of 12 meters

INSULATION MATERIALS

Scotch tape

	Scotch tape		
	Cat. no.	Type	Description
	171112	22	Heavy Duty vinyl electrical tape, 19 mm, roll of 33 meters
	171118	22	Heavy Duty vinyl electrical tape, 38 mm, roll of 33 meters
	171124	23	Self-bonding electrical tape, 19 mm, roll of 9,1 meters
	171130	23	Self-bonding electrical tape, 25 mm, roll of 9,1 meters
	171136	23	Self-bonding electrical tape, 38 mm, roll of 9,1 meters
	171142	24	Shielding tape, Copper Nickel Plate, 25 mm, roll of 4,5 meters
	171148	27	High temperature glass tape, 12 mm, roll of 20 meters
	171154	33	Vinyl plastic tape, black 19 mm, roll of 20 meters
	171160	33	Vinyl plastic tape, black 25 mm, roll of 33 meters
	171168	33	Vinyl plastic tape, black 38 mm, roll of 33 meters
	171174	35	Vinyl plastic tape, red 19 mm, roll of 33 meters
	171180	35	Vinyl plastic tape, blue 19 mm, roll of 33 meters
	171186	35	Vinyl plastic tape, green 19 mm, roll of 33 meters
	171192	35	Vinyl plastic tape, yellow 19 mm, roll of 33 meters
	171198	35	Vinyl plastic tape, white 19 mm, roll of 33 meters
	171204	35	Vinyl plastic tape, brown 19 mm, roll of 33 meters
	171210	35	Vinyl plastic tape, grey 19 mm, roll of 33 meters
	171216		Vinyl plastic tape, yellow/green 19 mm, roll of 20 meters

continue on next page

Scotch tapes

	Cat. no.	Type	Description
	171222	70	Silicone rubber tape, 25 mm, roll of 9,1 meters
	171228	88	All Weather vinyl tape, black 19 mm, roll of 20 meters
	171234	Scotchfill	Putty rubber insulation 38 mm, roll of 1,5 meters

Electrical duct seal/putty for watertight mounting

	Cat. no.		Description
	171306		Duct Seal, sack of 0,5 kg
	171312		Putty, bucket of 1 kg

Scotch Gella, removable

	Cat. no.	Type	Description
	171406	4442E	Gella resin unipak E, 292 cc
	171412	4442C	Gella resin unipak C, 385 cc
	171418	4442D	Gella resin unipak D, 659 cc

Scotch Scotchcast polytherurethane resin

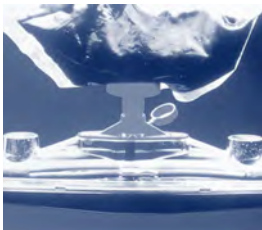
	Cat. no.	Type	Description
	171456	1471B	Scotchcast resin unipak B, 198 cc
	171462	1471C	Scotchcast resin unipak C, 387 cc
	171468	1471D	Scotchcast resin unipak D, 540 cc

Scotch Scotchcast epoxy resin

	Cat. no.	Type	Description
	171506	4A	Scotchcast resin unipak A, 85 cc
	171512	4B	Scotchcast resin unipak B, 197 cc
	171518	4C	Scotchcast resin unipak C, 394 cc

INSULATION MATERIALS

Cable Joins with resin

	Cat. no.		Cable dia mm	
	171706		8 - 22 mm	
	171710		14 - 30 mm	
	171714		23 - 35 mm	
	171718		28 - 47 mm	
	171722		33 - 55 mm	
	171726		45 - 70 mm	

Cable Joins, cold shrink, rubber splice

	Cat. no.		Cable dia mm	length
	171756		9.9 - 20,3 mm	178 mm
	171762		13,0 - 25,4 mm	229 mm
	171768		24,1 - 48,3 mm	305 mm
	171774		32,5 - 63,5 mm	457 mm

Electrician gloves

	Cat. no.		Description
	171812		Electrician rubber gloves 1.000 Volt 5 kV tested
	171818		Electrician rubber gloves 7.500 Volt 5 kV tested

Silicagel, used for dehumidifying

	Cat. no.		Description
	172012		Silicagel, bag of 0,5 kg

Binding wire

	Cat. no.		Description
	172024		Binding wire, ø 1,0 mm impregnated balls of 200 grams

INSULATION MATERIALS

Sleeving, PVC Tube

	Cat. no.		Diameter mm	Colour
	172506		ø 1 mm	black
	172514		ø 2 mm	black
	172518		ø 2 mm	yellow/green
	172522		ø 3 mm	black
	172530		ø 4 mm	black
	172534		ø 4 mm	yellow/green
	172538		ø 5 mm	black
	172546		ø 6 mm	black
	172550		ø 6 mm	yellow/green
	172558		ø 7 mm	black
	172566		ø 8 mm	black
	172570		ø 8 mm	yellow/green
	172574		ø 9 mm	black
	172582		ø 10 mm	black
	172590		ø 10 mm	yellow/green
	172606		ø 12 mm	black
	172622		ø 14 mm	black
	172638		ø 16 mm	black
	172654		ø 18 mm	black
	172670		ø 20 mm	black

Sleeving, cambric / empire Tube

	Cat. no.		Diameter mm	
	172806		ø 1 mm	
	172810		ø 2 mm	
	172814		ø 3 mm	
	172818		ø 4 mm	
	172822		ø 5 mm	
	172826		ø 6 mm	
	172830		ø 7 mm	
	172834		ø 8 mm	

INSULATION MATERIALS

Sleeving, Glass Tube, for high temperature

	Cat. no.		Diameter mm	
	172906		ø 1 mm	
	172910		ø 2 mm	
	172914		ø 3 mm	
	172918		ø 4 mm	
	172922		ø 5 mm	
	172926		ø 6 mm	
	172930		ø 7 mm	
	172934		ø 8 mm	
	172942		ø 10 mm	
	172950		ø 12 mm	
	172960		ø 16 mm	
	172972		ø 25 mm	

Porcelain insulation beads, bags of 100 grams

	Cat. no.		Outside dia	Inside dia
	173012		ø 6,5 mm	ø 3,3 mm
	173018		ø 9,3 mm	ø 5,0 mm
	173024		ø 10,5 mm	ø 6,7 mm

Metal protection tubing with PVC coating

	Cat. no.		Outside dia	Inside dia
	173112		ø 14 mm	ø 11 mm
	173118		ø 17 mm	ø 13 mm
	173124		ø 19 mm	ø 15 mm
	173130		ø 21 mm	ø 17 mm
	173136		ø 27 mm	ø 21 mm

INSULATION MATERIALS

Heat Shrinkable Tubing, colour black

	Cat. no.		Diameter	Shrinking to
	173206		ø 2,4 mm	ø 1,2 mm
	173210		ø 3,2 mm	ø 1,6 mm
	173214		ø 4,8 mm	ø 2,4 mm
	173218		ø 6,4 mm	ø 3,2 mm
	173222		ø 9,5 mm	ø 4,8 mm
	173226		ø 12,7 mm	ø 6,4 mm
	173230		ø 19,1 mm	ø 9,5 mm
	173234		ø 25,4 mm	ø 12,7 mm
	173238		ø 31,8 mm	ø 15,9 mm
	173242		ø 38,1 mm	ø 19,1 mm
	173246		ø 51,0 mm	ø 25,4 mm
	173250		ø 64,0 mm	ø 32,0 mm
	173254		ø 76,0 mm	ø 38,0 mm
	173258		ø 88,0 mm	ø 44,0 mm
	173262		ø 102,0 mm	ø 51,0 mm

Heat Shrinkable Kit, variety of types, diameters and colours

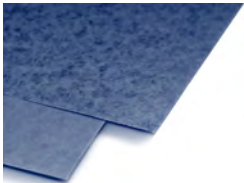
	Cat. no.		Description
	173274		Box, containing assorted Heat Shrinkable Tubes 35 - 100 mm long
			dia size ø 1,6 till ø 13,0 mm

Heat Shrinkable Tubing with glue, colour black, lenght of 1 meter

	Cat. no.		Diameter	Shrinking to
	173312		ø 8,0 mm	ø 2,0 mm
	173316		ø 12,0 mm	ø 3,0 mm
	173320		ø 22,0 mm	ø 6,0 mm
	173324		ø 34,0 mm	ø 7,0 mm
	173328		ø 40,0 mm	ø 12,0 mm
	173332		ø 56,0 mm	ø 17,0 mm
	173336		ø 72,0 mm	ø 22,0 mm
	173340		ø 92,0 mm	ø 26,0 mm
	173344		ø 120,0 mm	ø 35,0 mm

INSULATION MATERIALS

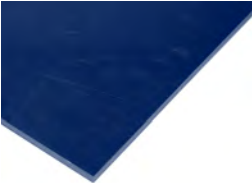
Prespane insulating sheets

	Cat. no.	Thickness	Estimate Sheet size
	173612	ø 0,1 mm	500 x 350 mm
	173618	ø 0,2 mm	700 x 500 mm
	173624	ø 0,3 mm	700 x 500 mm
	173630	ø 0,4 mm	700 x 500 mm
	173636	ø 0,5 mm	700 x 500 mm
	173642	ø 0,6 mm	700 x 500 mm
	173648	ø 1,0 mm	700 x 500 mm
	173654	ø 1,5 mm	700 x 500 mm
	173660	ø 3,0 mm	700 x 500 mm

Plastic insulating paper (Mylar)

	Cat. no.	Thickness	Estimate Sheet size
	173712	ø 0,19 mm	500 x 500 mm
	173724	ø 0,25 mm	500 x 500 mm

Phenol-impregnated pressed sheets (Pertinax)

	Cat. no.	Thickness	Estimate Sheet size
	173806	1 mm	500 x 500 mm
	173812	2 mm	500 x 500 mm
	173818	3 mm	500 x 500 mm
	173824	4 mm	500 x 500 mm
	173830	5 mm	500 x 500 mm
	173836	6 mm	500 x 500 mm
	173842	8 mm	500 x 500 mm
	173848	10 mm	500 x 500 mm
	173854	12 mm	500 x 500 mm
	173860	15 mm	500 x 500 mm
	173866	20 mm	500 x 500 mm
	173872	25 mm	500 x 500 mm

INSULATION MATERIALS

Micanite sheet



Cat. no.	Thickness	Estimate Sheet size
173912	1 mm	1000 x 600 mm

Round Celleron bar, approx length 1 meter



Cat. no.	Diameter mm
174012	ø 10 mm
174018	ø 12 mm
174024	ø 15 mm
174030	ø 20 mm
174036	ø 25 mm
174042	ø 30 mm
174048	ø 50 mm
174054	ø 40 mm
174060	ø 60 mm
174066	ø 65 mm
174072	ø 70 mm
174078	ø 80 mm
174084	ø 90 mm
174090	ø 100 mm

INSULATION MATERIALS

Insulating varnish in spraytin (urethane)

	Cat. no.	Description	Contents
	175112	Red, air drying insulation spray	300 ml
	175118	Clear, air drying insulation spray	300 ml
	175124	Black, air drying insulation spray	400 ml

CRC insulating varnish in spraytin (urethane)

	Cat. no.	Description	Contents
	175162	Red, air drying insulation spray	300 ml
	175168	Clear, air drying insulation spray	300 ml

Insulating varnish in can

	Cat. no.	Description	Contents
	175184	Red, air drying insulation varnish	Tin of 1 ltrs
	175190	Red, air drying insulation varnish	Can of 5 ltrs
	175196	Clear, air drying insulation varnish	Tin of 1 ltrs

Thinner

	Cat. no.	Description	Contents
	175230	Thinner, for insulation varnish	bottle of 1 ltrs

ELECTRO CLEANER

Electro cleaner

	Cat. no.	Description	Contents
	175260	Electro cleaner, for cleaning all electrical equipment and motors	can of 20 ltrs
	175272	CRC Electro cleaner, the same as above only quick dry	can of 20 ltrs

AEROSOLS

WD-40

	Cat. no.	Description	Contents
	175312	WD-40, lubricates, penetrates, protects, and loosens corrosion	200 ml
	175318	same as above only 400 ml	400 ml



CRC products

Cat. no.	Description	Specification	Contents
175412	2-26	Multi-purpose maintenance for electrical equipment. <i>Cleans, lubricates, protects, penetrates, and loosens corrosion</i>	200 ml
175424	3-36	Multi-purpose lubricant and corrosion inhibitor. <i>Multi-purpose lubricant, penetrant and corrosion inhibitor</i>	300 ml
175436	5-56	Multi-purpose service spray. <i>Penetrates quickly, even into the finest pores and cracks of the surface</i>	200 ml
175448	6-66	Marine maintenance spray. <i>Lubricates, protects, penetrates, and loosens corrosion</i>	300 ml
175460	Co Contact	Effective precision cleaner. <i>Fast cleaning action for removal of flux traces, light oils, finger prints and other contaminants</i>	200 ml
175466	Co Contact	Same as above only 300 ml.	300 ml
175472	Lectra Clean II	Electric motor and equipment cleaner/degreaser. <i>Controlled evaporation for enhanced cleaning action</i>	200 ml
175478	Lectra Clean II	Same as above only 500 ml.	500 ml

continue on next page

AEROSOLS



continuation

CRC products			
Cat. no.	Description	Specification	Contents
175484	Quickleen	Quick dry non-chlorinated cleaner. <i>Quickly dissolves grease, oil, lubricants, tar and adhesives</i>	500 ml
175496	Brakleen	Powerful cleaner/degreaser for brake and clutch parts. <i>Effectively removes brake fluid, grease, oil and hardened deposits</i>	300 ml
175508	Silicone	Multi-use synthetic lubricant. <i>Forms a colourless, non-hardening film</i>	400 ml
175520	Minus 50	Coolant for electrical and electronic use. <i>Protects heat sensitive components from high temperatures during soldering and desoldering</i>	200 ml
175532	SP 400 Soft Seal	Long-term outdoor and indoor corrosion inhibitor. <i>Long-term protection (up to 1 year) for all metals during shipment or extended storage</i>	300 ml
175544	Dust Free	High pressure dust remover. <i>Essential for all cleaning operations where liquid solvents are inappropriate</i>	200 ml
175556	Anti-spatter	Welding spatter prevention and release. <i>Extended nozzle life</i>	500 ml
175568	Zinc	High performance zinc-rich coating. <i>Excellent corrosion resistance through cathodic protection</i>	400 ml
175574	Motor Starter	Start-spray engine igniter. <i>Insures quick engine starts at low temperatures</i>	200 ml



Fig. 1



Fig. 2



Fig. 3

Mini switches, flush mounting

Cat. no.	Description	Finish	Fig.
176112	Push button switch, 1-pole 2 Amp.	white	1
176118	Push button switch, 2-pole 2 Amp.	white	1
176130	Pull-cord switch, 1-pole 2 Amp.	black	2
176136	Momentary push button switch, 2-pole 6 Amp.	black	3



Fig. 1

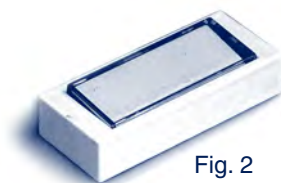


Fig. 2

Cord switches / Bell push-button switch

Cat. no.	Description	Finish	Fig.
176148	Cord push button switch, 1-pole	white	1
176154	Cord push button switch, 2-pole	white	1
176166	Bell push button switch, impuls	white	2

WIRING ACCESSORIES



Fig. 1



Fig. 2



Fig. 3

Tumble switches, panel mounting

Cat. no.	Contact	Knob Position	250V AC	Finish	Fig.
176212	1-pole	on / off	3 Amp.	chrome	2
176220	2-poles	on / off	3 Amp.	chrome	1
176228	2-poles	on / off	3 Amp.	chrome	2
176236	2-poles	on / off	10 Amp.	chrome	3
176244	1-pole	on / on	3 Amp.	chrome	1
176252	2-poles	on / on	3 Amp.	chrome	1
176260	2-poles	on / on	3 Amp.	chrome	2
176268	1-pole	on / off / on	3 Amp.	chrome	1
176276	2-poles	on / off / on	10 Amp.	chrome	3



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Dimmer switches for chartroom and domestic use. Only for AC voltage

Cat. no.	Description	Max. wattage	Colour	Fig.
176312	Flush mounting	300	white	1
176318	Flush mounting	500	white	1
176330	Surface mounting	300	white	2
176336	Surface mounting	500	white	2
176348	Cord-type	100	white	3
176354	Plug-type	300	white	4

WIRING ACCESSORIES



Fig. 1



Fig. 2



Fig. 3

Cabin switches, surface mounting

Cat. no.	Description	Colour	Fig.
176412	Switch, on / off 10 Amp. Single-pole	white	1
176418	Switch, on / off 10 Amp. Double-pole	white	1
176424	Switch, on / off 10 Amp. Two-way	white	1
176430	Switch, on / off 10 Amp. Two-circuit	white	2
176436	Switch pull-type, on / off 10 Amp. Two-way	white	3



Fig. 1



Fig. 2



Fig. 3

Cabin switches, flush mounting

Cat. no.	Description	Colour	Fig.
176462	Switch, on / off 10 Amp. Single-pole	white	1
176468	Switch, on / off 10 Amp. Double-pole	white	1
176474	Switch, on / off 10 Amp. Two-way	white	1
176480	Switch, on / off 10 Amp. Two-circuit	white	2
176486	Switch pull-type, on / off 10 Amp. Two-way	white	3

WIRING ACCESSORIES



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Watertight switches, surface mounting

Cat. no.	Description	Colour	Fig.
176506	Switch, on / off 10 Amp. Double-pole	grey	1
176512	Switch, on / off 10 Amp. Two-way	grey	1
176518	Switch, on / off 10 Amp. Two-circuit	grey	2
176536	Switch, light / dark 10 Amp. Single-pole	grey	3
176548	Switch pull-type, on / off 16 Amp. Double-pole with lamp for washing machine	white	4



Fig. 1



Fig. 2

Timer switch and accessories

Cat. no.	Description	Colour	Fig.
176572	Timer switch for receptacle 24 hours	white	1
176596	Pull-cord for switch pull-type		2

WIRING ACCESSORIES - EUROPEAN



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

European receptacles, for surface mounting

Cat. no.	Description	Earth	Colour	Fig.
177112	Socket 2-pole for 1-plug	no	white	1
177118	Socket 2-pole for 2-plugs	no	white	2
177124	Socket 2-pole for 3-plugs, straight	no	white	3
177130	Socket 2-pole for 4-plugs, square	no	white	4
177162	Socket 2-pole for 1-plug	yes	white	5
177168	Socket 2-pole for 1-plug, rubber	yes	white	6
177174	Socket 2-pole for 2-plugs	yes	white	7
177180	Socket 2-pole for 3-plugs, straight	yes	white	8
177186	Socket 2-pole for 4-plugs, straight	yes	white	9
177192	Socket 2-pole for 4-plugs, square	yes	white	10

WIRING ACCESSORIES - EUROPEAN



Fig. 1



Fig. 2



Fig. 3



Fig. 4

European receptacles, for flush mounting

Cat. no.	Description	Earth	Colour	Fig.
177212	Socket 2-pole for 1-plug	no	white	1
177218	Socket 2-pole for 2-plugs	no	white	2
177224	Socket 2-pole for 1-plug	yes	white	3
177230	Socket 2-pole for 2-plugs	yes	white	4



Fig. 1



Fig. 2

European receptacles with switch, for surface mounting

Cat. no.	Description	Earth	Colour	Fig.
177412	Switch-socket, two-way switch	no	white	1
177418	Switch-socket, two-circuit switch	no	white	2
177430	Switch-socket, two-way switch	yes	white	1
177436	Switch-socket, two-circuit switch	yes	white	2

WIRING ACCESSORIES - EUROPEAN



Fig. 1



Fig. 2



Fig. 3

European watertight receptacles, for surface mounting

Cat. no.	Description	Earth	Colour	Fig.
177612	Socket 2-pole for 1-plug	yes	grey	1
177618	Socket 2-pole for 2-plugs	yes	grey	2
177624	Switch-socket, two-way switch	yes	grey	3

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



European male plugs

Cat. no.	Description	Earth	Colour	Fig.
177812	Plug 2-pole	no	white	1
177818	Plug 2-pole	yes	white	2
177824	Plug 2-pole, with side inlet	yes	white	3
177830	Plug 2-pole, with switch	yes	white	4
177836	Plug 2-pole, PVC	yes	white	5
177842	Plug 2-pole, Rubber	yes	black	6
177848	Plug 2-pole, Rubber for illumination cable	yes	black	7

WIRING ACCESSORIES - EUROPEAN



Fig. 1



Fig. 2



Fig. 3



Fig. 4

European female plugs

Cat. no.	Description	Earth	Colour	Fig.
177912	Coupling 2-pole	no	white	1
177918	Coupling 2-pole	yes	white	2
177936	Coupling 2-pole, PVC	yes	white	3
177942	Coupling 2-pole, Rubber	yes	black	4



Fig. 1



Fig. 2

Multiway plugs

Cat. no.	Description	Earth	Colour	Fig.
177962	3-way plug 2-pole	no	white	1
177970	3-way plug 2-pole	yes	white	2



Fig. 1



Fig. 2

Distribution sockets without cable

Cat. no.	Description	Earth	Colour	Fig.
178012	Socket watertight for 3-plugs	yes	blue	1
178024	Socket watertight for 3-plugs, Rubber	yes	black	2



Fig. 1



Fig. 2



Fig. 3

Distribution sockets with cable				
Cat. no.	Description	Earth	Colour	Fig.
178112	Socket 3-way with 1,5 mtr cable	no	white	1
178118	Socket 4-way with 1,5 mtr cable	no	white	1
178162	Socket 3-way with 1,5 mtr cable	yes	white	2
178168	Socket 3-way with 3 mtr cable	yes	white	2
178174	Socket 3-way with 5 mtr cable	yes	white	2
178180	Socket 4-way with 1,5 mtr cable	yes	white	2
178186	Socket 4-way with 3 mtr cable	yes	white	2
178192	Socket 4-way with 5 mtr cable	yes	white	2
178198	Socket 6-way with 1,5 mtr cable	yes	white	2
178204	Socket 6-way with 3 mtr cable	yes	white	2
178210	Socket 6-way with 5 mtr cable	yes	white	2
178216	Socket 8-way 4x earth-plug 4x flat-plug with 3 mtr cable	yes	white	3
178222	Socket 8-way 4x earth-plug 4x flat-plug with 5 mtr cable	yes	white	3

WIRING ACCESSORIES - EUROPEAN



Distribution sockets / switch with cable			
Cat. no.	Description	Earth	Colour
178262	Socket / switch 4-way with 1,5 mtr cable	yes	white
178268	Socket / switch 5-way with 1,5 mtr cable	yes	white
178274	Socket / switch 6-way with 1,5 mtr cable	yes	white
178280	Socket / switch 6-way with 3 mtr cable	yes	white
178286	Socket / switch 6-way with 5 mtr cable	yes	white



Distribution sockets with thermal overload / switch with cable			
Cat. no.	Description	Earth	Colour
178312	Socket / switch 6-way with 1,5 mtr cable	yes	white
178318	Socket / switch 6-way with Glass Fuse and 1,5 mtr cable	yes	black/aluminium



Cable drums

Cat. no.	Description
178350	Cable drum 4-way without cable
178356	Cable drum 4-way with 25 mtr pvc cable 3 x 1.5 mm ² and plug with earth
178362	Cable drum 4-way with 50 mtr pvc cable 3 x 1.5 mm ² and plug with earth
178368	Cable drum 4-way with 25 mtr rubber cable 3 x 1.5 mm ² and plug with earth
178374	Cable drum 4-way with 50 mtr rubber cable 3 x 1.5 mm ² and plug with earth



Fig. 1



Fig. 2



Fig. 3

Perilex material, indoor

Cat. no.	Description	Colour	Fig.
178406	Receptacle 16 Amp. 5-poles, surface mounting	white	1
178412	Receptacle 25 Amp. 5-poles, surface mounting	white	1
178418	Receptacle 16 Amp. 5-poles, flush mounting	white	2
178424	Receptacle 25 Amp. 5-poles, flush mounting	white	2
178430	Plug 16 Amp. 5-poles	white	3
178436	Plug 16 Amp. 5-poles	white	3

WIRING ACCESSORIES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Appliance and reducing plugs, indoor

Cat. no.	Description	Fig.
178506	Appliance plug 2-pole with earth "old type"	1
178512	Appliance plug 2-pole with earth "CEE type"	2
178518	Reducing plug with flat pins, American to Europe	3
178524	Reducing plug with round pins, Europe to American	4
178530	Reducing plug with 2x flat + U, American / Japanese to European + earth	5
178536	Reducing plug with Belgian pin earth, Belgian to European + earth	6
178542	Reducing plug with Belgian pin earth, European earth, Belgian / European to American / Japanese 2x flat + U	7
178548	Reducing plug with Multiway 13 Amp., English to European / American / Japanese	8
178554	Reducing plug with European / earth, European to English	9

WIRING ACCESSORIES - BELGIAN STANDARD



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

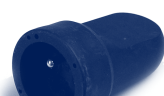


Fig. 10



Fig. 11



Fig. 12

Belgian wiring accessories, indoor

Cat. no.	Description	Fig.
178606	Receptacles with earth pen for 1-plug, surface mounting	1
178612	Receptacles with earth pen for 2-plugs, surface mounting	2
178618	Socket with earth pen for 4-plugs, surface mounting	3
178624	Socket with earth pen for 4-plugs with cable and plug	4
178630	Receptacles with earth pen for 1-plug, flush mounting	1
178636	Receptacles with earth pen for 2-plugs, flush mounting	2
178642	Switch-socket with earth pen, surface mounting	5
178648	Switch-socket with earth pen, flush mounting	5
178654	Plug male with earth socket	6
178660	Plug male with earth socket, PVC	7
178666	Plug female with earth pen, PVC	8
178672	Plug male with earth pen Rubber	9
178678	Plug female with earth pen, Rubber	10
178684	Plug male flat-type	11
178690	Plug female flat-type	12



German HNA wiring accessories, indoor	
Cat. no.	Description
178812	Receptacle with 3-pole flat pins, surface
178818	Receptacle with 3-pole flat pins, flush
178830	Plug with 3-pole flat pins

WIRING ACCESSORIES - BRITISH STANDARD



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14

British wiring accessories, indoor

Cat. no.	Description	Fig.
179012	Receptacle 15 Amp. with 3-pole, surface mounting	1
179018	Receptacle 5 Amp. with 3-pole, flush mounting	2
179024	Receptacle 13 Amp. with 3-pole, flush mounting	3
179030	Switch-socket 13 Amp. with 3-pole, surface mounting	4
179036	Switch-socket 5 Amp. with 3-pole, flush mounting	5
179042	Switch-socket 13 Amp. with 3-pole, flush mounting	6
179048	Switch-socket 15 Amp. with 3-pole, flush mounting	7
179060	Switch 1-pole, flush mounting	8
179072	Surface mounting box 1-gang for flush material	9
179078	Surface mounting box 2-gang for flush material	10
179112	Plug 5 Amp. with 3-pole, round pins	11
179118	Plug 13 Amp. with 3-pole, fused, flat pins	12
179124	Plug 15 Amp. with 3-pole, round pins	13
178548	Multiway Plug 13 Amp. with 3-pole fused, flat pins	14

Japanese wiring accessories, indoor		
Cat. no.	Description	Fig.
179212	Receptacle surface with 2x flat pins, for 4-plugs	1
179218	Receptacle surface with 2x flat + U pins, square	2
179224	Receptacle surface with 2x flat + U pins, round	3
179230	Receptacle surface with 2x flat + U pins, for 2-plugs	4
179236	Receptacle surface with 3 x flat pins, round	5
179242	Receptacle flush with 2x flat + U pins, for 1-plug "Ivory"	6
179248	Receptacle flush with 2x flat + U pins, for 2-plugs "Ivory"	7
179254	Receptacle flush with 2x flat + U pins, for 1-plug "Stainless Steel"	6
179260	Receptacle flush with 2x flat + U pins, for 2-plugs "Stainless Steel"	7
179312	Switch surface 2-pole 5 Amp. 1 T2	8
179318	Switch surface 2-pole 10 Amp. 2 T2	9
179324	Surface mounting box for 1 T2	10
179330	Switch flush with toggle single-type	11
179336	Switch flush with toggle double-type	11
179412	Plug with 2x flat pins	12
179418	Plug with 2x flat + U pins	13
179424	Plug with 2x flat + U pins, Rubber male	14
179430	Plug with 2x flat + U pins, Rubber female	15
179436	Cable Connector with 2x flat + U pins, Rubber male/female	16
179442	Plug with 3x flat pins	17

For figure see next page

WIRING ACCESSORIES - JAPANESE STANDARD



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17

WIRING ACCESSORIES - AMERICAN STANDARD



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

American wiring accessories, indoor

Cat. no.	Description	Fig.
179512	Receptacle surface for 2x flat or 2x round pins, for 1-plug	1
179212	Receptacle surface with 2x flat pins, for 4-plugs	2
179230	Receptacle surface with 2x flat + U pins, for 2-plugs	3
179612	Plug with 2x flat pins, white	4
179412	Plug with 2x flat pins, black male	5
179624	Plug with 2x flat pins, black female	6
179630	3-way Plug with 2x flat pins	7
179418	Plug with 2x flat + U pins	8
179424	Plug with 2x flat + U pins, Rubber male	9
179430	Plug with 2x flat + U pins, Rubber female	10



Plug



Couplings



Receptacle

Cee-norm IP44

Plug Cat. no.	Couplings Cat. no.	Receptacle Cat. no.	Voltage	Poles	Ampere	Hour
180112	180312	180512	24	2P	16	--
180118	180318	180518	24	3P	16	--
180124	180324	180524	42	2P	16	12H
180130	180330	180530	42	3P	16	12H
180136	180336	180536	110	3P	16	4H
180142	180342	180542	110	4P	16	4H
180148	180348	180548	110	3P	32	4H
180154	180354	180554	110	4P	32	4H
180160	180360	180560	220	3P	16	6H
180166	180366	180566	220	4P	16	9H
180172	180372	180572	220	5P	16	9H
180178	180378	180578	220	3P	32	6H
180184	180384	180584	220	4P	32	9H
180202	180402	180602	380/415	3P	16	9H
180208	180408	180608	380/415	4P	16	6H
180214	180414	180614	380/415	5P	16	6H
180220	180420	180620	380/415	3P	32	9H
180226	180426	180626	380/415	4P	32	6H
180232	180432	180632	380/415	5P	32	6H

CEEFORM WIRING ACCESSORIES



Couplings



Plug



Receptacle

Cee-norm IP67

Plug Cat. no.	Couplings Cat. no.	Receptacle Cat. no.	Voltage	Poles	Ampere	Hour
181190	181390	181590	220	3P	63	6H
181196	181396	181596	220	4P	63	9H
181202	181402	181602	380/415	3P	16	9H
181208	181408	181608	380/415	4P	16	6H
181214	181414	181614	380/415	5P	16	6H
181220	181420	181620	380/415	3P	32	9H
181226	181426	181626	380/415	4P	32	6H
181232	181432	181632	380/415	5P	32	6H
181238	181438	181638	380/415	3P	63	9H
181244	181444	181644	380/415	4P	63	6H
181250	181450	181650	380/415	5P	63	6H
181256	181456	181656	380/415	4P	125	6H
181262	181462	181662	380/415	5P	125	6H

CEEFORM WIRING ACCESSORIES



Cee-norm receptacle flush mounting appliance 10° IP44

Cat. no.		Voltage	Poles	Ampere	Flange	Hour
180760		220	3P	16	85x75 mm	6H
180778		220	3P	32	95x80 mm	6H
180808		380/415	4P	16	85x75 mm	6H
180814		380/415	5P	16	85x75 mm	6H
180826		380/415	4P	32	95x80 mm	6H
180832		380/415	5P	32	95x80 mm	6H



IP44



IP67

Cee-norm appliance receptacle with pins

IP44 Cat. no.	IP67 Cat. no.		Voltage	Poles	Ampere	Hour
180960			220	3P	16	6H
180978			220	3P	32	6H
	181990		220	3P	63	6H
180008			380/415	4P	16	6H
180014			380/415	5P	16	6H
180026			380/415	4P	32	6H
180032			380/415	5P	32	6H
	182044		380/415	4P	63	6H
	182050		380/415	5P	63	6H
	182056		380/415	4P	125	6H
	182062		380/415	5P	125	6H

CEEFORM WIRING ACCESSORIES FOR REEFER CONTAINER



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Cee-norm wiring accessories for container use 32 Amp. 3-pole with earth 3 Hour

Cat. no.	Description	Fig.
182108	Male plug IP67	1
182116	Female couplings IP67	2
182124	Receptacle surface mounting with switch IP55	3
182132	Receptacle flush mounting IP67	4
182140	Switch interior 32 Amp.	5

Fig. 1

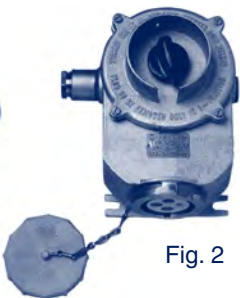


Fig. 2



Fig. 3



Fig. 4



Fig. 5

Brass casing Cee-norm wiring accessories for container use 32 Amp. 3-pole with earth 3 Hour

Cat. no.	Description	Fig.
182208	Brass male plug IP56	1
182216	Brass receptacle with switch IP56 0-	2
182224	Brass receptacle with switch IP56 0=	2
182232	Brass receptacle with switch IP56 -0-	2
182240	Steatite male plug interior	3
182248	Steatite female socket interior	4
182256	Switch interior 32 Amp.	5

WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Concentric wiring accessories

Cat. no.	Description	Gland position	Fig.
183112	Receptacle 2-pole 10A max 50V, cast brass	0-	1
183118	Receptacle 2-pole 10A max 50V, cast brass	0=	1
183124	Receptacle 2-pole 10A max 50V, cast brass	-0-	1
183148	Receptacle 2-pole 10A max 50V, cast brass	0-	2
183154	Receptacle 2-pole 10A max 50V, cast brass	0=	2
183160	Receptacle 2-pole 10A max 50V, cast brass	-0-	2
183172	Male plug 2-pole 10A max 50V, PVC		3
183176	Female plug 2-pole 10A max 50V, PVC		4
183182	Socket interior 2-pole 10A max 50V for figure 1		5
183188	Socket interior 2-pole 10A max 50V for figure 2		6
183194	Plug interior 2-pole 10A max 50V		7



Fig. 1



Fig. 2



Fig. 3



Fig. 4

HNA German wiring accessories IP56

Cat. no.	Description	Pole	Gland position	Fig.
183312	Receptacle 16A, cast brass	2P + Earth	0-	1
183318	Receptacle 16A, cast brass	2P + Earth	-0	1
183324	Receptacle 16A, cast brass	2P + Earth	0=	1
183330	Receptacle 16A, cast brass	2P + Earth	=0	1
183336	Receptacle 16A, cast brass	2P + Earth	-0-	1
183362	Socket with switch, cast brass	2P + Earth	0-	2
183368	Socket with switch, cast brass	2P + Earth	-0	2
183374	Socket with switch, cast brass	2P + Earth	0=	2
183380	Socket with switch, synthenic resin	2P + Earth	0=	2
183386	Socket with switch, cast brass	2P + Earth	=0	2
183392	Socket with switch, synthenic resin	2P + Earth	=0	2
183398	Socket with switch, cast brass	2P + Earth	-0-	2
183412	Switch 10A, cast brass	2-pole	0-	3
183418	Switch 10A, cast brass	2-pole	0=	3
183424	Switch 10A, synthetic resin	2-pole	0=	3
183430	Switch 10A, cast brass	2-pole	-0-	3
183512	Push-button switch 10A, cast brass	NO/NC	0-	4
183518	Push-button switch 10A, cast brass	NO/NC	0=	4
183524	Push-button switch 10A, cast brass	NO/NC	-0-	4

GERMAN WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

HNA German wiring accessories IP56

Cat. no.	Description	Pole	Gland position	Fig.
183562	Socket for testpanel, cast brass	2P + Earth	---	1
183568	Socket for 2-plugs, cast brass	2P + Earth	-00-	2
183574	Socket for 3-plugs, cast brass	2P + Earth	-000-	3
183612	Male plug 110V, cast brass	2P + Earth	---	4
183618	Male plug 110V, synthetic resin	2P + Earth	---	5
183624	Male plug 220V, cast brass	2P + Earth	---	4
183630	Male plug 220V, synthetic resin	2P + Earth	---	5
183636	Female plug 220V, cast brass	2P + Earth	---	6
183642	Female plug 220V, synthetic resin	2P + Earth	---	7

GERMAN WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2

HNA German lockable wiring accessories IP56

Cat. no.	Description	Pole	Gland position	Fig.
183662	Socket with switch, cast brass	2P + Earth	0-	1
183668	Socket with switch, cast brass	2P + Earth	-0	1
183674	Socket with switch, cast brass	2P + Earth	-0-	1
183680	Male plug 220V, cast brass	2P + Earth	---	2



Fig. 1



Fig. 2



Fig. 3

HNA German telephone and microphone wiring accessories IP56

Cat. no.	Description	Pole	Gland position	Fig.
183712	Receptacle max 50V, cast brass	4-pole	0-	1
183718	Receptacle max 50V, cast brass	4-pole	-0	1
183724	Male plug max 50V, cast brass	4-pole	---	2
183730	Female plug max 50V, cast brass	4-pole	---	3

GERMAN WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Spare parts for HNA German wiring accessories

Cat. no.	Description	Pole	Fig.
183862	Switch interior	2-pole	1
183868	Switch interior	two-way	1
183874	Knob for above	---	2
183880	Plug interior 42V	2-pole + Earth	3
183886	Plug interior 110V	2-pole + Earth	3
183892	Plug interior 220V	2-pole + Earth	3
183898	Plug interior 50V	4-pole + Earth	3
183904	Socket interior 42V	2-pole + Earth	4
183910	Socket interior 110V	2-pole + Earth	4
183916	Socket interior 220V	2-pole + Earth	4
183922	Socket interior 50V	4-pole + Earth	4



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Spare parts for HNA German wiring accessories

Cat. no.	Description	Fig.
183962	Wrench for HNA interior	1
183968	PVC threaded ring R 1 3/8" for HNA interior	2
183974	Brass threaded ring R 1 3/8" for HNA interior	2
183980	Conical sealing ring for HNA interior	3
183986	Yellow lock-ring for HNA plug	4
183992	Plastic screw cap R 1 3/4" with chain	5
183998	Brass screw cap R 1 3/4" with chain	5



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

Japanese wiring accessories IP56

Cat. no.	Description	Pole	Gland position	Fig.
184312	Male receptacle 15A, synthetic resin	2P + Earth	0=	1
184318	Male receptacle 15A, cast iron	2P + Earth	0=	1
184324	Female receptacle 20A, cast iron	2P + Earth	0=	2
184336	Male receptacle 15A, synthetic resin	3P + Earth	0=	3
184348	Male socket for 2-plugs, synthetic resin	2P + Earth	0=	4
184354	Male socket for 2-plugs, cast iron	2P + Earth	0=	4
184360	Male socket for 3-plugs, cast iron	2P + Earth	0=	5
184372	Male socket for 1-plug, with switch synthetic resin	2P + Earth	0=	6
184378	Male socket for 1-plug, with switch cast iron	2P + Earth	0=	6
184390	Female socket for 1-plug, cast iron cast iron	2P + Earth	0=	7
184402	Male socket for 2-plug, with 2-switches, synthetic resin	2P + Earth	0=	8
184418	Switch 16A, synthetic resin	2-pole	0=	9



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

Japanese wiring accessories

Cat. no.	Description	Pole	Fig.
184462	Female plug 15A straight, synthetic resin	2-pole + Earth	1
184468	Female plug 15A straight, metal	2-pole + Earth	1
184474	Female plug 15A angle, synthetic resin	2-pole + Earth	2
184480	Female plug 15A angle, metal	2-pole + Earth	2
184492	Male plug 10A straight, metal	2-pole + Earth	3
184498	Male plug 10A angle, metal	2-pole + Earth	4
184510	Female plug 15A straight, synthetic resin	3-pole + Earth	5
184516	Female plug 15A angle, synthetic resin	3-pole + Earth	6



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10

Spare parts for Japanese wiring accessories

Cat. no.	Description	Pole	Fig.
184542	Male socket interior	2-pole + Earth	1
184548	Female socket interior 'USCG'	2-pole + Earth	2
184554	Male socket interior	3-pole + Earth	3
184560	Female plug interior	2-pole + Earth	4
184566	Male plug interior 'USCG'	2-pole + Earth	5
184572	Female plug interior	3-pole + Earth	6
184578	Switch interior	2-pole	7
184584	Switch interior 'USCG'	2-pole	8
184590	Knob voor Japanese switch	---	9
184596	PVC screw cap for socket	---	10

SWEDISH WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Swedish wiring accessories

Cat. no.	Description	Pole	Gland position	Fig.
185112	Receptacle 10A, cast brass	2-pole	0-	1
185118	Receptacle 10A, cast brass	2-pole	-0	1
185124	Receptacle 10A, cast brass	2-pole	-0-	1
185136	Receptacle 10A, cast brass	2P + Earth	0-	2
185148	Receptacle 10A, cast brass	2P + Earth	-0	2
185154	Receptacle 10A, cast brass	2P + Earth	-0-	2
185166	Socket with switch, cast brass	2P + Earth	0-	3
185172	Socket with switch, cast brass	2P + Earth	-0	3
185178	Socket with switch, cast brass	2P + Earth	-0-	3
185212	Male-plug, cast brass	2-pole	---	4
185218	Male-plug, cast brass	2P + Earth	---	5



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Spare parts for Swedish wiring accessories

Cat. no.	Description	Pole	Fig.
185230	Socket interior	2-pole	1
185236	Socket interior	2P + Earth	2
185248	Plug interior	2-pole	3
185254	Plug interior	2P + Earth	4
185256	Inset earth-socket	---	
185262	Inset earth-pin	---	

ENGLISH WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1

English 'GEC type' wiring accessories			
Cat. no.	Description	Pole	Fig.
185512	Receptacle 5A, cast iron	2P + Earth	1



Fig. 2

English 'McGeoch type' wiring accessories			
Cat. no.	Description	Pole	Fig.
185560	Male-plug 15A, cast brass	2P + Earth	2



Fig. 1



Fig. 2

English 'Sunderland Forge type' wiring accessories			
Cat. no.	Description	Pole	Fig.
185584	Male-plug 5A 'Junior', bakelite	2P + Earth	1
185590	Male-plug 15A, 'Senior', bakelite	2P + Earth	2

ENGLISH WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2

English 'Niphan type' wiring accessories

Cat. no.	Description	Pole	Fig.
185712	Receptacle 3A, Chrome brass	2-poles	1
185718	Receptacle 3A, Chrome brass	3-poles	1
185724	Receptacle 3A, Chrome brass	4-poles	1
185736	Male-plug 3A, Chrome brass	2-poles	2
185742	Male-plug 3A, Chrome brass	3-poles	2
185748	Male-plug 3A, Chrome brass	4-poles	2

ITALIAN WATERTIGHT WIRING ACCESSORIES MARINE USE



Fig. 1



Fig. 2

Italian wiring accessories

Cat. no.	Description	Pole	Fig.
185912	Receptacle 10A, cast iron	2P + Earth	1
185924	Male-plug 10A, cast brass	2P + Earth	2

MICRO SWITCHES

Miniature micro switches, with single pole change-over contact				
Cat. no.	Description	Type	Amp.	Fig.
186012	Pin plunger, solder terminal	1 SX1-T	5	1
186024	Pin plunger, screw terminal	KH-9012-PB(B)	15	2
186036	Pin plunger, solder terminal	KH-9012-PB(C)	15	3
186048	Hinge roller short lever, solder terminal	KH-9012-HR(S)C	15	4
186060	Hinge long lever, solder terminal	KH-9012-HL(L)C	15	5

General micro switches, with single pole change-over contact				
Cat. no.	Description	Type	Amp.	Fig.
186084	Pin plunger type	BZ-2R-A2	15	6
186096	Spring short plunger type	KH-9015-PB(S)	15	7
186108	Panel mounting plunger type	KH-9015-PB(L)	15	8
186120	Hinger roller long lever type	KH-9015-HR(L)	15	9
186132	Hinger roller short lever type	KH-9015-HR(S)	15	10
186144	Hinger long lever type	KH-9015-HL(L)	15	11

Enclosed micro switches, with single pole change-over contact				
Cat. no.	Description	Type	Amp.	Fig.
186168	Pin plunger type	14CE1-1	5	12
186170	Roller plunger type	14CE2-1	5	13
186182	Pin plunger type	BZE7-2RN-PG	15	14
186196	Roller lever type	BZE7-2RN2-PG	15	15
186208	Roller plunger type	BZE7-2RQ9-PG	15	16

For figure see next page

MICRO SWITCHES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15



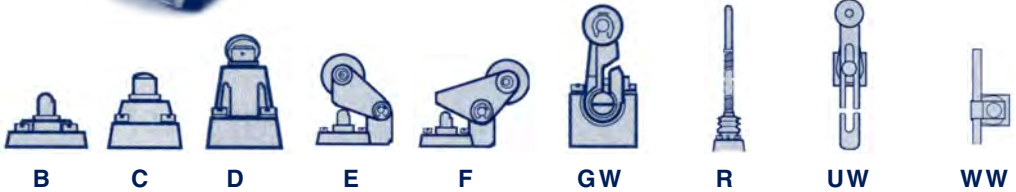
Fig. 16

LIMIT SWITCHES

Fig. 1



Fig. 2



Metal Enclosed position switches, with NO/NC contact 10A Narrow housing 40 x 75 mm IP67 with 1 x M20 entry

Cat. no.	Description	Type	Fig.
186312	Plunger type	3SE2120-1B	1-B
186318	Overtravel plunger type	3SE2120-1C	1-C
186324	Roller plunger type	3SE2120-1D	1-D
186330	Roller lever type	3SE2120-1E	1-E
186336	Angular roller lever type	3SE2120-1F	1-F
186342	Roller crank type, fine adjustment	3SE2120-1GW	1-GW
186348	Spring rod type	3SE2120-1R	1-R
186354	Roller crank type, adjustable length	3SE2120-1UW	1-UW
186360	Moulded-plastic rod type	3SE2120-1WW	1-WW

Metal Enclosed position switches, with NO/NC contact 10A Wide housing 56 x 67,5 mm IP67 with 3 x M20 entry

Cat. no.	Description	Type	Fig.
186412	Plunger type	3SE2100-1B	2-B
186418	Overtravel plunger type	3SE2100-1C	2-C
186424	Roller plunger type	3SE2100-1D	2-D
186430	Roller lever type	3SE2100-1E	2-E
186436	Angular roller lever type	3SE2100-1F	2-F
186442	Roller crank type, fine adjustment	3SE2100-1GW	2-GW
186448	Spring rod type	3SE2100-1R	2-R
186454	Roller crank type, adjustable length	3SE2100-1UW	2-UW
186460	Moulded-plastic rod type	3SE2100-1WW	2-WW

LIMIT SWITCH FOR DAVITS



**Heavy duty Metal Enclosed position switches 25A, IP65
with 4 x PG16 entry**

Cat. no.	Description
186512	Roller lever type, heavy duty with auxilairy contacts 3xNO - 3xNC size housing 154 x 135 mm Special use for Davits (lifeboats crane)

LEVER SWITCH FOR BOILERS



Lever switch

Cat. no.	Description
186562	Igema lever switch 4-poles for boiler

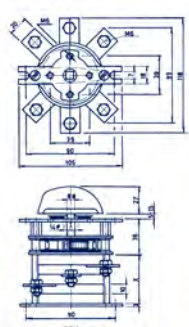
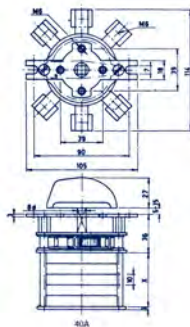
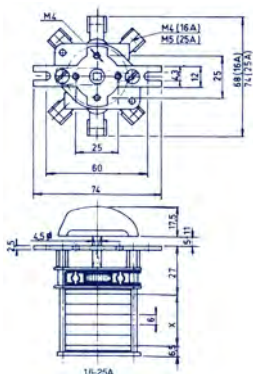
LEVER SWITCHES



Lever on/off switch in watertight enclosure IP54 with PG16 entries

Cat. no.	Description
187112	On/off lever switch, 3-pole 16A
187124	On/off lever switch, 4-pole 16A
187136	On/off lever switch, 3-pole 25A
187148	On/off lever switch, 4-pole 25A
187160	On/off lever switch, 3-pole 50A
187172	On/off lever switch, 4-pole 50A
187184	On/off lever switch, 3-pole 80A
187196	On/off lever switch, 4-pole 80A

ROTARY SWITCHES



Rotary switches, panel mounting 440V AC

Cat. no.	Type	Amp.	Positions	Poles	X=mm
188112	on/off	16	0 - 1- 0 - 1	1	12
188118	on/off	25	0 - 1- 0 - 1	1	12
188124	on/off	40	0 - 1- 0 - 1	1	20
188130	on/off	63	0 - 1- 0 - 1	1	30
188136	on/off	16	0 - 1- 0 - 1	2	18
188142	on/off	25	0 - 1- 0 - 1	2	18
188148	on/off	40	0 - 1- 0 - 1	2	30
188154	on/off	63	0 - 1- 0 - 1	2	40
188160	on/off	16	0 - 1- 0 - 1	3	24
188166	on/off	25	0 - 1- 0 - 1	3	24
188172	on/off	40	0 - 1- 0 - 1	3	40
188178	on/off	63	0 - 1- 0 - 1	3	50
188184	on/off	16	0 - 1- 0 - 1	4	30
188190	on/off	25	0 - 1- 0 - 1	4	30
188196	on/off	40	0 - 1- 0 - 1	4	50
188202	on/off	63	0 - 1- 0 - 1	4	60
188208	on/off	16	0 - 1- 0 - 1	5	36
188214	on/off	25	0 - 1- 0 - 1	5	36
188220	on/off	40	0 - 1- 0 - 1	5	60
188226	on/off	16	0 - 1- 0 - 1	6	42
188232	on/off	25	0 - 1- 0 - 1	6	42
188238	on/off	40	0 - 1- 0 - 1	6	70
188244	on/off	16	0 - 1- 0 - 1	7	48
188250	on/off	25	0 - 1- 0 - 1	7	48
188256	on/off	16	0 - 1- 0 - 1	8	54
188262	on/off	25	0 - 1- 0 - 1	8	54

ROTARY HEATER SWITCHES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Galley rotary heater switches

Cat. no.	Type	Positions	Amp.	Poles	Fig.
188312	VBC 125J	0 - 1 - 2 - 3	16	2	1
188324	BC 125J	0 - 1 - 2 - 3	16	2	1
188336	RP 125J90	0 - 1 - 2 - 3	16	2	2
188360	Beha	0 - 1 - 2 - 3	25	3	3
188372	Spare knob for Beha				
188396	Ego	0 - 1 - 2 - 3	16	2	4
188408	Ego	0 - 1 - 2 - 3	32	3	5
188420	Spare knob for Ego				



Oven rotary switches with capilair

Cat. no.	Description	Amp.	Poles
188444	Oven switch with capilair	16	3

PILOT LIGHTS

Pilot lights with round lens, bore $\varnothing$ 7.0 mm
Integral filament lamp 24 Volt 0,84 Watt

	Cat. no.	Colour	Bore size mm	Depth size mm
	200112	clear	7.0	27.5
	200118	red	7.0	27.5
	200124	yellow	7.0	27.5
	200130	green	7.0	27.5

Pilot lights with round lens, bore $\varnothing$ 10.0 mm
Integral filament lamp 24-28 Volt 1,2 Watt

	Cat. no.	Colour	Bore size mm	Depth size mm
	200212	clear	10.0	30.0
	200218	red	10.0	30.0
	200224	yellow	10.0	30.0
	200230	green	10.0	30.0
	200236	blue	10.0	30.0

Pilot lights with square lens, bore $\varnothing$ 10.0 mm
Integral filament lamp 24-28 Volt 1,2 Watt

	Cat. no.	Colour	Bore size mm	Depth size mm
	200312	clear	10.0	30.0
	200318	red	10.0	30.0
	200324	yellow	10.0	30.0
	200330	green	10.0	30.0
	200336	blue	10.0	30.0

PILOT LIGHTS

Pilot lights with E10 base, bore ø 16.4 mm

			Bore size mm	Depth size mm
	Cat. no.	Colour		
	200412	clear	16.4	33.0
	200418	red	16.4	33.0
	200430	green	16.4	33.0

Pilot lights with E14 base, bore ø 22.3 mm

			Bore size mm	Depth size mm
	Cat. no.	Colour		
	200500	clear	22.3	46
	200502	red	22.3	46
	200504	green	22.3	46

Pilot lights elements, bore ø 22 mm

	Cat. no.	Description
	201112	Lens white
	201118	Lens green
	201124	Lens red
	201130	Lens yellow
	201136	Lens blue

Fixing adapter with lampholder Ba9s

	Cat. no.	Description
	201212	Lampholder/fixing adapter <250V
	201218	Lampholder/fixing adapter with transformer 110...120V 50/60Hz / 6V lamp (included)
	201224	Lampholder/fixing adapter with transformer 230...240V 50/60Hz / 6V lamp (included)
	201230	Lampholder/fixing adapter with transformer 400V 50Hz / 6V lamp (included)
	201236	Lampholder/fixing adapter with transformer 440...480V 60Hz / 6V lamp (included)

PUSHBUTTON / SELECTOR SWITCHES

Pushbutton switch elements, bore ø 22 mm

	Cat. no.	Description
	201312	Button white
	201318	Button black
	201324	Button green
	201330	Button red
	201336	Button yellow
	201342	Button blue

Double Pushbutton switch element, bore ø 22 mm

	Cat. no.	Description
	201362	Double push-button green/red

Emergency-stop switch elements, bore ø 22 mm

	Cat. no.	Description
	201384	Red mushroom head ø 40 mm, spring-return
	201390	Red mushroom head ø 40 mm, push-lock turn-reset

Selector switch elements, bore ø 22 mm

	Cat. no.	Description
	201412	Thumb-grip handle stay-put, 0 - 1
	201418	Thumb-grip handle stay-put, 1 - 0 - 2
	201462	Key-operated stay-put, 0 - 1
	201468	Key-operated stay-put, 1 - 0 - 2
	201482	Toggle-lever stay-put, 0 - 1

For fixing adapters and contact elements, see next page

PUSHBUTTON / SELECTOR SWITCHES

Fixing adaptor with contact elements

	Cat. no.	Description	NO	NC
	201512	Adaptor with contact elements	1	
	201518	Adaptor with contact elements		1
	201524	Adaptor with contact elements	2	
	201530	Adaptor with contact elements		2
	201536	Adaptor with contact elements	1	1

Contact elements

	Cat. no.	Description	NO	NC
	201560	Contact element	1	
	201566	Contact element		1
	201572	Contact element	2	
	201578	Contact element		2
	201584	Contact element	1	1

Fixing adaptor

	Cat. no.	Description
	201596	Fixing adaptor for contact elements

ILLUMINATED PUSHBUTTON SWITCHES

Illuminated pushbutton switch elements, bore $\varnothing$ 22 mm



Cat. no.	Description
201612	Button / Lens white
201618	Button / Lens green
201624	Button / Lens red
201630	Button / Lens yellow
201636	Button / Lens blue



Fixing adapter with lampholder Ba9s and contacts

Cat. no.	Description	Type contact	
		NO	NC
201662	Lampholder/fixing adapter <250V	1	1
201668	Lampholder/fixing adapter with transformer 110...120V 50/60Hz / 6V lamp (included)	1	1
201674	Lampholder/fixing adapter with transformer 230...240V 50/60Hz / 6V lamp (included)	1	1
201680	Lampholder/fixing adapter with transformer 400V 50Hz / 6V lamp (included)	1	1
201686	Lampholder/fixing adapter with transformer 440...480V 60Hz / 6V lamp (included)	1	

Extra Contact elements



Cat. no.	Description	NO	NC
201560	Contact element	1	
201566	Contact element		1

CONTROL STATIONS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Assembled control stations IP65

Cat. no.	Description	Type	Contacts	Fig.
203112	Control station 1 pushbutton	I	NO	1
203124	Control station 2 pushbutton	I / O	NO / NC	2
203136	Control station 3 pushbutton	I / O / II	NO / NC / NO	3
203148	Control station emergency stop with red mushroom head, push lock turn reset	red	NC	4



Assembled pendant control stations IP65

Cat. no.	Description	Contacts per button
203212	2 buttons for control circuits	1 x NO - 10A
203218	4 buttons for control circuits	1 x NO / 1 x NC - 10A
203224	6 buttons for control circuits	1 x NO / 1 x NC - 10A
203230	8 buttons for control circuits	1 x NO / 1 x NC - 10A
203312	2 buttons for power circuits	2 x NO / 2,2kW 380V
203318	4 buttons for power circuits	2 x NO / 2,2kW 380V
203324	6 buttons for power circuits	2 x NO / 2,2kW 380V

PLUG-IN RELAYS

Plug-in relays with change over contacts 10 Amp., with round pins 2 poles, 8 pins AC voltage

	Cat. no.		Coil voltage
	210112		6V AC 50/60Hz
	210118		12V AC 50/60Hz
	210124		24V AC 50/60Hz
	210142		110V AC 50/60Hz
	210148		220V AC 50/60Hz

Plug-in relays with change over contacts 10 Amp., with round pins 3 poles, 11 pins AC voltage

	Cat. no.		Coil voltage
	210212		6V AC 50/60Hz
	210218		12V AC 50/60Hz
	210224		24V AC 50/60Hz
	210242		110V AC 50/60Hz
	210248		220V AC 50/60Hz

Plug-in relays with change over contacts 10 Amp., with round pins 2 poles, 8 pins DC voltage

	Cat. no.		Coil voltage
	210312		6V DC
	210318		12V DC
	210324		24V DC
	210342		110V DC
	210348		220V DC

Plug-in relays with change over contacts 10 Amp., with round pins 3 poles, 11 pins DC voltage

	Cat. no.		Coil voltage
	210412		6V DC
	210418		12V DC
	210424		24V DC
	210442		110V DC
	210448		220V DC

PLUG-IN RELAYS

Mini plug-in relays with change over contacts 3 Amp., 4 poles, 14 pins

	Cat. no.		Coil voltage
	210618		12V DC
	210624		24V DC
	210648		24V AC 50/60Hz
	210660		110V AC 50/60Hz
	210672		220V AC 50/60Hz

Plug-in relays with change over contacts, with round pins 2 poles, 8 pins for navigation lamps

	Cat. no.		For lamp
	210724		24V 40W DC
	210736		110V 60W AC
	210748		220V 65W AC



Fig. 1



Fig. 2

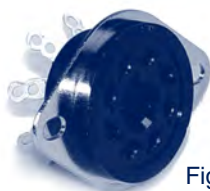


Fig. 3



Fig. 4



Fig. 5

Sockets for plug-in relays

Cat. no.	Description	Fig.
210812	Surface and rail-mounting 8-pins	1
210824	Surface and rail-mounting 11-pins	2
210836	Flush mounting 8-pins	3
210848	Flush mounting 11-pins	4
210860	Rail mounting 14-pins	5

AUXILIARY RELAYS - TELEMECANIQUE



Auxiliary relays with AC coil voltages					
Cat. no.	Type	Rating current 380V	Coil voltage	Auxiliary poles	
				NO	NC
215112	CAD-50F7	10A	110V 50/60Hz	5	0
215118	CAD-50P7	10A	230V 50/60Hz	5	0
215124	CAD-50V7	10A	400V 50/60Hz	5	0
215130	CAD-50R7	10A	440V 50/60Hz	5	0
215162	CAD-32F7	10A	110V 50/60Hz	3	2
215166	CAD-32P7	10A	230V 50/60Hz	3	2
215172	CAD-32V7	10A	400V 50/60Hz	3	2
215178	CAD-32R7	10A	440V 50/60Hz	3	2



Auxiliary relays with DC coil voltages					
Cat. no.	Type	Rating current 380V	Coil voltage	Auxiliary poles	
				NO	NC
215206	CAD-50BD	10A	24V DC	5	0
215218	CAD-32BD	10A	24V DC	3	2

For auxiliary contact blocks see page 403

CONTACTORS TELEMECANIQUE



Contactors 3-pole till 18,5kW with AC coil voltages

Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
215318	LC1-D09F7	9	4	110V 50/60Hz	1	1
215324	LC1-D09P7	9	4	230V 50/60Hz	1	1
215330	LC1-D09V7	9	4	400V 50/60Hz	1	1
215336	LC1-D09R7	9	4	440V 50/60Hz	1	1
215366	LC1-D12F7	12	5,5	110V 50/60Hz	1	1
215372	LC1-D12P7	12	5,5	230V 50/60Hz	1	1
215378	LC1-D12V7	12	5,5	400V 50/60Hz	1	1
215384	LC1-D12R7	12	5,5	440V 50/60Hz	1	1
215418	LC1-D18F7	18	7,5	110V 50/60Hz	1	1
215424	LC1-D18P7	18	7,5	230V 50/60Hz	1	1
215430	LC1-D18V7	18	7,5	400V 50/60Hz	1	1
215436	LC1-D18R7	18	7,5	440V 50/60Hz	1	1
215466	LC1-D25F7	25	11	110V 50/60Hz	1	1
215472	LC1-D25P7	25	11	230V 50/60Hz	1	1
215478	LC1-D25V7	25	11	400V 50/60Hz	1	1
215484	LC1-D25R7	25	11	440V 50/60Hz	1	1
215518	LC1-D32F7	32	15	110V 50/60Hz	1	1
215524	LC1-D32P7	32	15	230V 50/60Hz	1	1
215530	LC1-D32V7	32	15	400V 50/60Hz	1	1
215536	LC1-D32R7	32	15	440V 50/60Hz	1	1
215566	LC1-D38F7	38	18,5	110V 50/60Hz	1	1
215572	LC1-D38P7	38	18,5	230V 50/60Hz	1	1
215578	LC1-D38V7	38	18,5	400V 50/60Hz	1	1
215584	LC1-D38R7	38	18,5	440V 50/60Hz	1	1

For auxiliary contact blocks see page 403



Contactors 3-pole till 45kW with AC coil voltages

Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
215618	LC1-D40F7	40	18,5	110V 50/60Hz	1	1
215624	LC1-D40P7	40	18,5	230V 50/60Hz	1	1
215630	LC1-D40V7	40	18,5	400V 50/60Hz	1	1
215636	LC1-D40R7	40	18,5	440V 50/60Hz	1	1
215666	LC1-D50F7	50	22	110V 50/60Hz	1	1
215672	LC1-D50P7	50	22	230V 50/60Hz	1	1
215678	LC1-D50V7	50	22	400V 50/60Hz	1	1
215684	LC1-D50R7	50	22	440V 50/60Hz	1	1
215718	LC1-D65F7	65	30	110V 50/60Hz	1	1
215724	LC1-D65P7	65	30	230V 50/60Hz	1	1
215730	LC1-D65V7	65	30	400V 50/60Hz	1	1
215736	LC1-D65R7	65	30	440V 50/60Hz	1	1
215766	LC1-D80F7	80	37	110V 50/60Hz	1	1
215772	LC1-D80P7	80	37	230V 50/60Hz	1	1
215778	LC1-D80V7	80	37	400V 50/60Hz	1	1
215784	LC1-D80R7	80	37	440V 50/60Hz	1	1
215818	LC1-D95F7	95	45	110V 50/60Hz	1	1
215824	LC1-D95P7	95	45	230V 50/60Hz	1	1
215830	LC1-D95V7	95	45	400V 50/60Hz	1	1
215836	LC1-D95R7	95	45	440V 50/60Hz	1	1

For auxiliary contact blocks see page 403

CONTACTORS TELEMECANIQUE



Contactors 3-pole till 75kW with AC coil voltages

Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
215866	LC1-D115F7	115	55	110V 50/60Hz	1	1
215872	LC1-D115P7	115	55	230V 50/60Hz	1	1
215878	LC1-D115V7	115	55	400V 50/60Hz	1	1
215884	LC1-D115R7	115	55	440V 50/60Hz	1	1
215918	LC1-D150F7	150	75	110V 50/60Hz	1	1
215924	LC1-D150P7	150	75	230V 50/60Hz	1	1
215930	LC1-D150V7	150	75	400V 50/60Hz	1	1
215936	LC1-D150R7	150	75	440V 50/60Hz	1	1

Contactors 3-pole till 110kW without coil

Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
216018	LC1-F185	185	90	see below	0	0
216024	LC1-F225	225	110	see below	0	0

Coils for contactors LC1-F185 and LC1-F225

216036	LX1-FG024			24V 50Hz		
216042	LX1-FG110			110V 60Hz		
216048	LX1-FG220			220/230V 50Hz		
216054	LX1-FG184			220V 60Hz		
216060	LX1-FG380			380/400V 50Hz		
216066	LX1-FG360			440V 60Hz		

For auxiliary contact blocks see page 403

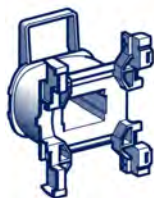
Contactors 3-pole till 160kW without coil						
Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
216118	LC1-F265	265	132	see below	0	0
216124	LC1-F330	330	160	see below	0	0
Coils 40 till 400Hz for contactors LC1-F265 and LC1-F330						
216142	LX1-FH1102			110/115V		
216148	LX1-FH2202			220/230V		
216160	LX1-FH3802			380/415V		
216166	LX1-FH4402			440V		

Contactors 3-pole till 200kW without coil						
Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
216218	LC1-F400	400	200	see below	0	0
Coils 40 till 400Hz for contactors LC1-F400						
216242	LX1-FJ110			110/120V		
216248	LX1-FJ220			220/230V		
216260	LX1-FJ380			380/400V		
216266	LX1-FJ415			415/480V		

Contactors 3-pole till 200kW without coil						
Cat. no.	Type	Rating 3-ph. 400V		Coil voltage	Auxiliary poles	
		Amp.	kW		NO	NC
216318	LC1-F500	500	250	see below	0	0
Coils 40 till 400Hz for contactors LC1-F500						
216342	LX1-FK110			110/120V		
216348	LX1-FK220			220/230V		
216360	LX1-FK380			380/400V		
216366	LX1-FK415			415/480V		

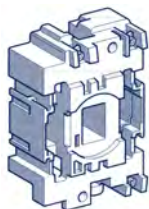
For auxiliary contact blocks see page 403

Coils for contactors LC1-D09.....D38, and for auxiliary relays CAD



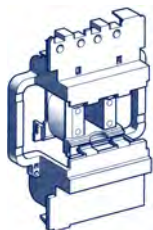
Cat. no.	Type	Coil voltage
216412	LXD-1B7	24V 50/60Hz
216424	LXD-1F7	110V 50/60Hz
216430	LXD-1P7	230V 50/60Hz
216436	LXD-1V7	400V 50/60Hz
216442	LXD-1R7	440V 50/60Hz

Coils for contactors LC1-D40.....D95



Cat. no.	Type	Coil voltage
216460	LX1-D6B7	24V 50/60Hz
216424	LX1-D6F7	110V 50/60Hz
216478	LX1-D6P7	230V 50/60Hz
216484	LX1-D6V7	400V 50/60Hz
216490	LX1-D6R7	440V 50/60Hz

Coils for contactors LC1-D115, D150



Cat. no.	Type	Coil voltage
216512	LX1-D8B7	24V 50/60Hz
216524	LX1-D8F7	110V 50/60Hz
216530	LX1-D8P7	230V 50/60Hz
216536	LX1-D8V7	400V 50/60Hz
216542	LX1-D8R7	440V 50/60Hz

THERMAL OVERLOAD RELAYS - TELEMECANIQUE



Thermal overload relays

Cat. no.	Type	Setting range	For contactor
217112	LRD-01	0,10 - 0,16 A	D09...D38
217118	LRD-02	0,16 - 0,25 A	D09...D38
217124	LRD-03	0,25 - 0,40 A	D09...D38
217130	LRD-04	0,40 - 0,63 A	D09...D38
217136	LRD-05	0,63 - 1 A	D09...D38
217142	LRD-06	1 - 1,6 A	D09...D38
217148	LRD-07	1,6 - 2,5 A	D09...D38
217154	LRD-08	2,5 - 4 A	D09...D38
217160	LRD-10	4 - 6 A	D09...D38
217166	LRD-12	5,5 - 8 A	D09...D38
217172	LRD-14	7 - 10 A	D09...D38
217178	LRD-16	9 - 13 A	D12...D38
217184	LRD-21	12 - 18 A	D18...D38
217190	LRD-22	16 - 24 A	D25...D38
217196	LRD-32	23 - 32 A	D25...D38
217202	LRD-35	30 - 38 A	D32 and D38
217208	LRD-3322	17 - 25 A	D40...D95
217214	LRD-3353	23 - 32 A	D40...D95
217220	LRD-3355	30 - 40 A	D40...D95
217226	LRD-3357	37 - 50 A	D40...D95
217232	LRD-3359	48 - 65 A	D50...D95
217238	LRD-3361	55 - 70 A	D50...D95
217244	LRD-3363	63 - 80 A	D65...D95
217250	LRD-3365	80 - 104 A	D80 and D95

THERMAL OVERLOAD RELAYS - TELEMECANIQUE



Thermal overload relays

Cat. no.	Type	Setting range	For contactor
217312	LRD-4365	80 - 14 A	D115 and D150
217318	LRD-4367	95 - 120 A	D115 and D150
217324	LRD-4369	110 - 140 A	D150
217348	LR9-F5371	132 - 220 A	seperate mount.
217354	LR9-F5372	200 - 330 A	seperate mount.
217360	LR9-F5373	300 - 500 A	seperate mount.



Supports for separte mounting of thermal overload relays

Cat. no.	Type	Application
217412	LAD-7B10	For overload relay LRD-01 ... 35 and LR3-D01 ... D35
217418	LA7-D1064	For overload relay LR2-D13
217424	LA7-D2064	For overload relay LR2-D23
217430	LA7-D3064	For overload relay LRD-3 ..., LR3-D3 ..., LR2-D33



**Auxiliary contact blocks, for contactor LC1-D, LC1-F and auxiliary relays CAD.
front mounting**

Cat. no.	Type	Description	Auxiliary poles	
			NO	NC
217512	LAD-N10	Auxiliary contact block	1	0
217518	LAD-N01	Auxiliary contact block	0	1
217524	LAD-N11	Auxiliary contact block	1	1
217530	LAD-N22	Auxiliary contact block	2	2
217536	LAD-N31	Auxiliary contact block	3	1
217542	LAD-N13	Auxiliary contact block	1	3
217548	LAD-N40	Auxiliary contact block	4	0
217554	LAD-N04	Auxiliary contact block	0	4

**Auxiliary contact blocks, for contactor LC1-D, and auxiliary relays CAD,
side mounting**

Cat. no.	Type	Description	Auxiliary poles	
			NO	NC
217578	LAD-8N11	Auxiliary contact block	1	1
217584	LAD-8N20	Auxiliary contact block	2	0

**Pneumatic time delay contact blocks, for contactor LC1-D, LC1-F and
auxiliary relays CAD**

Cat. no.	Type	Description	Auxiliary poles	
			NO	NC
217612	LAD-T2	on-delay 0,1 till 30 seconds	1	1
217624	LAD-T4	on-delay 10 till 180 seconds	1	1
217636	LAD-R2	off-delay 0,1 till 30 seconds	1	1
217648	LAD-R4	off-delay 10 till 180 seconds	1	1

TIME RELAYS

Electronic time relays “multifunctional” with change-over contact

	Cat. no.	Description
	225112	Timer 0,05 sec till 10 days 8A/250V 2000VA 24V AC/DC 110-240V AC

MOTOR-PROTECTIVE CIRCUIT-BREAKER

Motor-protective circuit-breaker, with thermal overload

  	Cat. no.	Current setting range
	226112	0,10 - 0,16 A
	226118	0,16 - 0,25 A
	226124	0,24 - 0,40 A
	226130	0,40 - 0,63 A
	226136	0,63 - 1,00 A
	226142	9,00 - 1,60 A
	226148	1,60 - 2,50 A
	226154	2,50 - 4,00 A
	226160	4,00 - 6,30 A
	226166	6,30 - 10,00 A
	226172	10,00 - 16,00 A
	226178	16,00 - 20,00 A
	226184	20,00 - 25,00 A
	226196	Auxiliary contact 1xNO - 1xNC for above
	226208	Enclosure IP55 with internal earth terminal, for above

TRANSFORMERS



Transformers, single phase

Cat. no.	Pr. Voltage	Sec. Voltage	VA
230118	110	24	100
230224	230	12	160
230312	230	24	50
230318	230	24	100
230324	230	24	160
230330	230	24	250
230342	230	24	500
230418	230	42	100
230424	230	42	160
230430	230	42	250
230442	230	42	500
230512	230 - 400	115 - 230	63
230518	230 - 400	115 - 230	100
230524	230 - 400	115 - 230	160
230530	230 - 400 - 460	115 - 230	250
230536	230 - 400 - 460	115 - 230	400
230548	230 - 400 - 460	115 - 230	630
230560	230 - 400 - 460	115 - 230	1000
230618	400 - 440	24	100
230624	400 - 440	24	160
230630	400 - 440	24	250
230718	400 - 440	42	100
230724	400 - 440	42	160
230730	400 - 440	42	250
230812	400 - 440	115 - 230	50
230818	400 - 440	115 - 230	100

TRANSFORMERS



Transformers, single phase, in case complete with receptacle and plug

Cat. no.	Pr. Voltage	Sec. Voltage	VA
232108	110 or 220	220 or 110	85
232112	110 or 220	220 or 110	100
232118	110 or 220	220 or 110	200
232124	110 or 220	220 or 110	350
232130	110 or 220	220 or 110	500
232136	110 or 220	220 or 110	1000
232142	110 or 220	220 or 110	1500
232148	110 or 220	220 or 110	2500



Electronic transformers for low-voltage halogen lamps

Cat. no.	Pr. Voltage	Sec. Voltage	VA
233212	130V 50/60Hz	11,5V	60
233312	230V 50/60Hz	11,5V	60
233318	230V 50/60Hz	11,5V	105
233324	230V 50/60Hz	11,5V	150
233330	230V 50/60Hz	11,5V	210

TRANSFORMER - ADAPTOR



Foreign voltage converter & Adaptor set

Cat. no.	Pr. Voltage	Sec. Voltage	VA
233512	220V AC	110V AC	50 - 1600



Adaptor used for calculators, audio etc., with 5-way plug

Cat. no.	Pr. Voltage	Sec. Voltage	mA
233812	110/220V AC	1,5 - 3 - 4,5 - 6 - 9 - 12V DC	300
233824	230V AC	3 - 4,5 - 6 - 7,5 - 9 - 12V DC	300
233836	230V AC	1,5 - 3 - 4,5 - 6 - 7,5 - 9 - 12V DC	1000



Power supply

Cat. no.	Pr. Voltage	Sec. Voltage	VA
233912	220 - 240V AC	13,8V DC	5/7

ALARM EQUIPMENT

Bells

	Cat. no.	Voltage	Gong diameter
	240112	Battery operation - 2 x R20	---
	240124	3-8V AC/DC	ø 70 mm
	240136	110-220V AC	ø 70 mm

Industrial marine bells, watertight when used with connection box

 	Cat. no.	Voltage	Gong diameter
	240212	12V DC	ø 150 mm
	240218	24/48V DC	ø 150 mm
	240224	24V AC	ø 150 mm
	240230	110V AC	ø 150 mm
	240236	220V AC	ø 150 mm
	240248	Watertight connection box for above bells	

Japanese marine bells with pilot lamp, watertight

	Cat. no.	Voltage	Gong diameter
	240318	24V DC	ø 120 mm
	240330	110V AC	ø 120 mm
	240336	220V AC	ø 120 mm

ALARM EQUIPMENT

Buzzers electronic, surface mounting

	Cat. no.	Voltage	Size
	240512	3-28V DC	ø 42 x 16 mm
	240518	12-30V AC/DC	ø 70 x 68 mm
	240530	110-240V AC	ø 70 x 68 mm

Buzzers electronic, flush mounting

	Cat. no.	Voltage	Size
	240618	12-30V AC/DC	ø 28 mm
	240630	110-240V AC	ø 28 mm

Buzzers Japanese with pilot lamp, watertight

	Cat. no.	Voltage	
	240718	24V DC	
	240730	110V AC	
	240736	220V AC	

ALARM EQUIPMENT

Hooters IP54, for indoor use

	Cat. no.	Voltage	Audibility 1 mtr
	240818	24V DC	110 dB
	240824	24V AC	105 dB
	240830	110V AC	105 dB
	240836	220V AC	105 dB

Hooters IP43, for indoor use

	Cat. no.	Voltage	Audibility 1 mtr
	240912	12V DC	92 dB
	240918	24V DC	92 dB
	240930	110V AC	92 dB
	240936	220V AC	92 dB

Hooters IP55, for outdoor use

	Cat. no.	Voltage	Audibility 1 mtr
	241218	24V DC	108 dB
	241224	24V AC	108 dB
	241230	110V AC	108 dB
	241236	220V AC	108 dB

Hooters with warning light IP33, for indoor use

	Cat. no.	Voltage	Colour	Audibility 1 mtr
	241412	12V DC	Amber	92 dB
	241418	24V DC	Amber	92 dB
	241430	110V AC	Amber	92 dB
	241436	220V AC	Amber	92 dB

ALARM EQUIPMENT

Motor driven sirene, metal, approx. 98 dB at 1 metre

	Cat. no.	Voltage
	241812	12V AC/DC
	241818	24V AC/DC
	241830	110V AC/DC
	241836	220V AC/DC

Motor driven sirene, metal, approx. 103 dB at 1 metre

	Cat. no.	Voltage
	241912	12V AC/DC
	241918	24V AC/DC
	241930	110V AC/DC
	241936	220V AC/DC

Motor driven sirene, mushroom type, approx. 106 dB at 1 metre

	Cat. no.	Voltage
	242118	24V AC/DC
	242130	110V AC/DC
	242136	220V AC/DC

ALARM EQUIPMENT

Rotating beacons



Cat. no.	Voltage	Colour
243112	12V DC	Amber
243118	12V DC	Red
243124	12V DC	Blue
243130	24V DC	Amber
243136	24V DC	Red
243142	24V DC	Blue
243148	24V AC	Amber
243154	24V AC	Red
243160	24V AC	Blue
243166	110V AC	Amber
243172	110V AC	Red
243178	110V AC	Blue
243184	220V AC	Amber
243190	220V AC	Red
243196	220V AC	Blue

Globes for above rotating beacons



Cat. no.	Colour
243212	Amber
243218	Red
243224	Blue

Rotating beacons, simple type



Cat. no.	Voltage	Colour
243324	220V AC	Amber
243330	220V AC	Red

Globes for above rotating beacons, simple type



Cat. no.	Colour
243412	Amber
243418	Red
243424	Blue
243430	Green

ANTENNA ACCESSORIES



Fig. 1



Fig. 2

Multirange omni-directional wideband receiving antenna

Cat. no.	Description	Frequency range	Fig.
250312	FTE antenna type AV15N for marine use, with amplifier 12/24V DC - 110/220V AC Including 20 mtr. Coaxial cable Size $\varnothing$ 540 x 360 mm	AM-VHF-FM-UHF 0,15 - 860 Mhz	1
250360	FTE amplifier type LBS30-12P 28dB 12/24V DC - 110/220V AC		2



Fig. 1

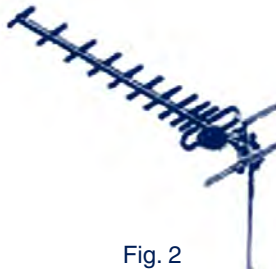


Fig. 2



Fig. 3

Outdoor/Indoor antennas

Cat. no.	Description	Frequency range	Fig.
250812	Outdoor screened-antenna	UHF	1
250824	Outdoor dipole-antenna	VHF - UHF	2
250836	Indoor amplified antenna 360° rotatable, 12V DC - 110/220V AC	VHF - UHF	3

ANTENNA ACCESSORIES

Coaxial cable

	Cat. no.	Type	Ohm	Colour	Outside dia mm
	150024	RG-58C/U	50	Black	4,95
	150036	RG-59B/U	75	Black	6,2
	150048	RG-213/U	50	Black	10,3
	150060	RG-214/U	50	Black	10,8
	150112	Brass/Brass	75	White	5,5
	150118	Silver/Silver	75	White	6,0
	150130	Coax-12	75	Grey	7,5



Fig. 1



Fig. 2



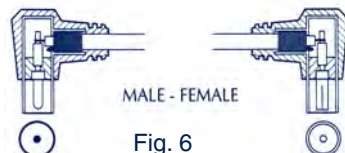
Fig. 3



Fig. 4



Fig. 5



MALE - FEMALE

Fig. 6

Antenna accessories

Cat. no.	Description	Fig.
255112	Domestic coaxial plug straight, male	1
255118	Domestic coaxial plug straight, female	1
255124	Domestic coaxial plug right angle, male	2
255130	Domestic coaxial plug right angle, female	2
255142	Domestic coaxial coupler	3
255166	Domestic splitter triangle version, 1x male - 2x female	4
255172	Domestic splitter triangle version, 1x female - 2x male	4
255178	Domestic metal splitter T version, 1x male - 2x female	5
255184	Domestic metal splitter T version, 1x female - 2x male	5
255312	Coaxial lead with right angle connectors male/female 1,5 mtr	6
255318	Coaxial lead with right angle connectors male/female 2,5 mtr	6
255324	Coaxial lead with right angle connectors male/female 5 mtr	6
255330	Coaxial lead with right angle connectors male/female 7,5 mtr	6
255336	Coaxial lead with right angle connectors male/female 10 mtr	6

ANTENNA ACCESSORIES



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

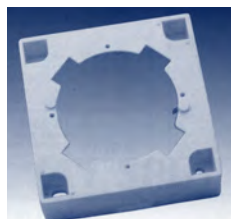


Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11

Antenna accessories

Cat. no.	Description	Fig.
255612	Junctionbox 75 Ohm 4-way coaxial	1
255618	Coaxial cable selector switch TV/Video	2
255624	Amplifier 75 Ohm input 110/220V for 2 TV's/Radio's	3
255630	Amplifier 75 Ohm input 220V for 2 TV's/ Radio's	4
255712	Receptacle 75 Ohm for TV/Radio with end connection, flush mounting without front plate	5
255718	Receptacle 75 Ohm for TV/Radio with tap-off connection, flush mounting without front plate	5
255724	Front plate for coaxial receptacle TV/Radio	6
255730	Surface mounting edge for coaxial receptacle TV/Radio	7
255812	F-connector plug for coaxial cable "Coax-12"	8
255818	Coaxial splitter 2-way for F-connectors	9
255830	Coaxial splitter 6-way for F-connectors	10
255854	End resistor for above splitters when outlet is not in use	11

ANTENNA ACCESSORIES



Fig. 1



Fig. 2

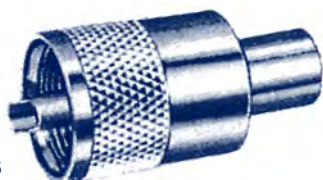


Fig. 3



Fig. 4



Fig. 5



Fig. 6

Antenna accessories

Cat. no.	Description	Fig.
255912	BNC coaxial connector male, for RG-58 cable	1
255918	BNC coaxial connector female, for RG-58 cable	2
255924	BNC coaxial connector male, for RG-59 cable	1
255930	BNC coaxial connector female, for RG-59 cable	2
255936	UHF coaxial connector male type PL259, for RG-58 cable	3
255942	UHF coaxial connector male type PL259, for RG-213 cable	3
255948	UHF coaxial connector female/female type PL258	4
255954	UHF coaxial T adaptor, 1x male 2x female	5
255960	UHF coaxial chassis socket	6

ANTENNA ACCESSORIES



Fig. 1



Fig. 2



Fig. 3

Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Antenna accessories		
Cat. no.	Description	Fig.
257112	Antenna wire $\varnothing$ 3,6m, 7 x 7 x 0,4mm for receiving	1
257118	Antenna wire $\varnothing$ 6,3m, 7 x 7 x 0,7mm for transmitting	1
257124	Antenna wire connector clamp for cable 7 x 7 x 0,4mm	2
257130	Antenna wire connector clamp for cable 7 x 7 x 0,7mm	2
257136	Thimble for antenna wire 7 x 7 x 0,4mm	3
257142	Thimble for antenna wire 7 x 7 x 0,7mm	3
257148	Grommet for antenna wire 7 x 7 x 0,4mm	4
257154	Grommet for antenna wire 7 x 7 x 0,7mm	4
257160	Weaklink for antenna wire 7 x 7 x 0,4mm, prevents antenna from breaking	5
257166	Weaklink for antenna wire 7 x 7 x 0,7mm, prevents antenna from breaking	5
257172	Galvanized shackle 3/8"	6
257178	Polyethylene insulator 300 x 50mm complete with shackles	7
257184	Polyethylene insulator 500 x 50mm complete with shackles	7
257190	Porcelain insulator 190mm	8
257196	Porcelain insulator 265mm	8

BANANA WIRING ACCESSORIES



Fig. 2



Fig. 2



Fig. 3

Antenna accessories

Cat. no.	Description	Fig.
260212	Banana plug, male, colour red	1
260218	Banana plug, male, colour black	1
260224	Banana plug, male, colour blue	1
260230	Banana plug, male, colour yellow	1
260236	Banana plug, male, colour white	1
260260	Banana plug, female, colour red	2
260266	Banana plug, female, colour black	2
260290	Banana chassis socket, colour red	3
260296	Banana chassis socket, colour black	3

COMMUNICATION EQUIPMENT



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6

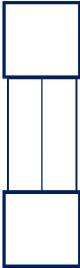


Fig. 7

Antenna accessories

Cat. no.	Description	Fig.
265112	Watertight loudspeaker 30W 8 Ohm	1
265160	Watertight microphone 600 Ohm	2
265172	Microphone/Loudspeaker plug 5-poles	3
265300	Transistor megaphone 16 W with whistle	4
265412	Jack-plug $\varnothing$ 3,5mm mono	5
265418	Jack-plug $\varnothing$ 3,5mm stereo	5
265430	Jack-plug $\varnothing$ 6,3mm mono	6
265436	Jack-plug $\varnothing$ 6,3mm stereo	6
265612	Scart cable 21-pin length 1,5 mtr	7

FUSES

Glass fuses, 250 Volt, dimensions 15 x 5 mm			
	Quick-act.		
	Cat. no.	Time-lag	
		Cat. no.	Ampere
	280118	---	0,1
	280126	---	0,16
	280134	---	0,25
	280138	---	0,315
	280142	---	0,4
	280146	---	0,5
	280150	---	0,63
	280162	---	0,8
	280166	---	1
	280170	---	1,25
	280174	---	1,6
	280178	---	2
	280182	---	2,5
	280186	---	3,15
	280190	---	4
	280194	---	5
	280198	---	6,3

FUSES

Glass fuses, 250 Volt, dimensions 20 x 5 mm



Quick-act. Cat. no.	Time-lag Cat. no.	Ampere
---	280702	0,032
280506	280706	0,05
280510	280710	0,063
280514	280714	0,08
280518	---	0,1
280522	280722	0,125
280526	280726	0,16
280530	280730	0,2
280534	280734	0,25
280538	280738	0,315
280542	280742	0,4
280546	280746	0,5
280550	280750	0,63
280554	---	0,71
280562	280762	0,8
280566	280766	1
280570	280770	1,25
280574	280774	1,6
280578	280778	2
280582	280782	2,5
280586	280786	3,15
280590	280790	4
280594	280794	5
280598	280798	6,3
280610	280810	8
280618	280818	10
280622	---	12,5
280626	280826	16
280630	---	20

FUSES

Glass fuses, 250 Volt, dimensions 25 x 5 mm



Quick-act. Cat. no.	Time-lag Cat. no.	Ampere
280918	281118	0,1
280922	281122	0,125
280926	281126	0,16
280930	281130	0,2
280934	281134	0,25
280938	281138	0,315
280942	281142	0,4
280946	281146	0,5
280950	281150	0,63
280962	281162	0,8
280966	281166	1
280970	281170	1,25
280974	281174	1,6
280978	281178	2
280982	281182	2,5
280986	281186	3,15
280990	281190	4
280994	281194	5
280998	281198	6,3
281010	281210	8
281018	281218	10
281026	---	15

FUSES

Glass fuses, 250 Volt, dimensions 32 x 6,3 mm



Quick-act. Cat. no.	Time-lag Cat. no.	Ampere
281306	---	0,05
281318	281518	0,1
281322	281522	0,125
281326	281526	0,15
281330	281530	0,2
281334	281534	0,25
281338	281538	0,315
281342	281542	0,4
281346	281546	0,5
281350	281550	0,63
281354	281554	0,7
---	281558	0,75
281362	281562	0,8
281366	281566	1
281370	281570	1,25
281374	281574	1,6
281378	281578	2
281382	281582	2,5
281386	281586	3,15
281390	281590	4
281394	281594	5
281398	281598	6,3
281402	281602	7
281406	---	7,5
281410	281610	8
---	281614	9
281418	281618	10
281422	281622	12
281426	281626	15
281430	---	20
281434	---	25
281438	---	30
281442	---	35
281446	---	40

FUSES



Assortment box with 18 types of glass fuses, 0,1 till 10 Ampere

Cat. no.	Dimensions	Characteristic	Containing
281812	20 x 5 mm	Quick-acting	18 x 20 pcs
281818	20 x 5 mm	Time-lag	18 x 20 pcs
281830	25 x 5 mm	Quick-acting	18 x 20 pcs
281836	25 x 5 mm	Time-lag	18 x 20 pcs
281848	32 x 6,3 mm	Quick-acting	18 x 20 pcs
281854	32 x 6,3 mm	Time-lag	18 x 20 pcs

Porcelain fuses with indicator, 250 Volt, dimensions 25 x 5 mm

	Quick-act. Cat. no.	Reduced Time-lag Cat. no.	Ampere
	---	282018	0,1
	---	282030	0,2
	---	282034	0,25
	---	282042	0,4
	---	282046	0,5
	---	282066	1
	282174	---	1,6
	282178	---	2
	282182	---	2,5
	282186	---	3,15
	282190	---	4
	282194	---	5
	282198	---	6,3
	282218	---	10

FUSES



Fig. 1



Fig. 2

Bases for glass fuses			
Cat. no.	For fuses	Description	Fig.
282512	20 x 5 mm	Panel mounting, bore 13 mm	1
282524	25 x 5 mm	Panel mounting, bore 18 mm	1
282536	32 x 6,3 mm	Panel mounting, bore 13 mm	1
282560	20 x 5 mm	Connection between 2-wires	2

High voltage glass fuses, 3 kV, dimensions 85 x 8 mm		
	Cat. no.	Ampere
	283012	0,5
	283018	0,63
	283024	0,8
	283030	1
	283036	1,6
	283042	2

FUSES

Porcelain fuses, 400 Volt, dimensions 8 x 32 mm



Quick-act. gL/gG Cat. no.	Time-lag aM Cat. no.	Ampere
---	283614	2
---	283618	4
---	283622	6
---	283626	8
---	283630	10
---	283634	12
---	283638	16

Porcelain fuses, 500 Volt, dimensions 10 x 38 mm



Quick-act. gL/gG Cat. no.	Time-lag aM Cat. no.	Ampere
283706	283806	0,5
283710	283810	1
283714	283814	2
283718	283818	4
283722	283822	6
283726	283826	8
283730	283830	10
283734	283834	12
283738	283838	16
283742	283842	20
283746	283846	25
283750	283850	32

FUSES

Porcelain fuses, 500 Volt, dimensions 14 x 51 mm

	Quick-act. gL/gG Cat. no.		Time-lag aM Cat. no.	Ampere
	---		284010	1
	283914		284014	2
	283918		284018	4
	283922		284022	6
	283926		284026	8
	283930		284030	10
	283934		284034	12
	283938		284038	16
	283942		284042	20
	283946		284046	25
	283950		284050	32
	283954		284054	40
	283958		284058	50

Porcelain fuses, 500 Volt, dimensions 22 x 58 mm

	Quick-act. gL/gG Cat. no.		Time-lag aM Cat. no.	Ampere
	284118		---	4
	284122		---	6
	284126		---	8
	284130		284230	10
	284134		---	12
	284138		284238	16
	284142		284242	20
	284146		284246	25
	284150		284250	32
	284154		284254	40
	284158		284258	50
	284162		284262	63
	284166		284266	80
	284170		284270	100
	---		284274	125

FUSES

Diazed fuses, 500 Volt, dimensions 22 x 50 mm

	Quick-act.		Slow-act.		
	Cat. no.		Cat. no.		Ampere
	285014		285214		2
	285018		285218		4
	285022		285222		6
	285030		285230		10
	285038		285238		16
	285042		285242		20
	285046		285246		25
					Type
					D2
					D2
					D2
					D2
					D2
					D2
					D2

Diazed fuses, 500 Volt, dimensions 27 x 50 mm

	Quick-act.		Slow-act.		
	Cat. no.		Cat. no.		Ampere
	285050		285250		35
	285058		285258		50
	285062		285262		63
					Type
					D3
					D3
					D3

Diazed fuses, 500 Volt, slow-acting

	Cat. no.		Ampere	Type	Dimensions
	285266		80	D4	37 x 63 mm
	285270		100	D4	37 x 63 mm
	285274		125	D5	51 x 66 mm
	285278		160	D5	51 x 66 mm
	285282		200	D5	51 x 66 mm

FUSES

Diazed fuses, 500 Volt, super quick-acting

 	Cat. no.	Ampere	Type	Dimensions
	285414	2	D2	22 x 50 mm
	285418	4	D2	22 x 50 mm
	285422	6	D2	22 x 50 mm
	285430	10	D2	22 x 50 mm
	285438	16	D2	22 x 50 mm
	285442	20	D2	22 x 50 mm
	285446	25	D2	22 x 50 mm
	285450	35	D3	27 x 50 mm
	285458	50	D3	27 x 50 mm
	285462	63	D3	27 x 50 mm

Bottom screws for Diazed fuses

 	Cat. no.	Ampere	Type	Colour
	285614	2	D2	pink
	285618	4	D2	brown
	285622	6	D2	green
	285630	10	D2	red
	285638	16	D2	grey
	285642	20	D2	blue
	285646	25	D2	yellow
	285650	35	D3	black
	285658	50	D3	white
	285662	63	D3	copper
	285712	Bottom screw wrench for D2 and D3		

FUSES

Fuse base for Diazed fuses

	Cat. no.		Ampere	Type	Mounting
	285912		2 - 25	D2	base-mounting
	285918		2 - 25	D2	snap-on mounting
	285930		35 - 63	D3	base-mounting
	285942		35 - 63	D3	snap-on mounting

Fuse screw caps for Diazed fuses

	Cat. no.		Ampere	Type	Thread
	286012		2 - 25	K2	E27
	286018		35 - 63	K3	E33
	286024		80 - 100	K4	R 1-1/4"
	286030		125 - 200	K5	R2
	286112	Reducing ring for K2 fuse to K3 cap			

Protection cover for Diazed fuse base

	Cat. no.		Ampere	Type
	286212		2 - 25	D2

Protection ring for Diazed fuse base

	Cat. no.		Ampere	Thread
	286248		2 - 25	E27

FUSES

Screw-in circuit breakers 380V AC / 250V DC

	Cat. no.		Ampere	Thread
	286322		6	E27
	286330		10	E27
	286338		16	E27
	286342		20	E27
	286346		25	E27

Cartridge fuses, 750 Volt

	Cat. no.		Ampere	Dimensions
	286514		2	27 x 70 mm
	286518		4	27 x 70 mm
	286522		6	27 x 70 mm
	286530		10	27 x 70 mm
	286538		16	27 x 70 mm
	286542		20	27 x 70 mm
	286546		25	27 x 70 mm
	286550		35	27 x 70 mm
	286558		50	27 x 70 mm
	286562		63	27 x 70 mm

FUSES

NDZ fuses, 500 Volt, dimensions 13 x 50 mm

	Quick-act.		Slow-act.		
	Cat. no.		Cat. no.	Ampere	Type
	287014		287114	2	D1
	287018		287118	4	D1
	287022		287122	6	D1
	287030		287130	10	D1
	287038		287138	16	D1
	287042		287142	20	D1
	287046		287146	25	D1

Fuse base for NDZ fuses

	Cat. no.		Ampere	Type	Mounting
	287172		2 - 25	D1	base-mounting

Fuse screw caps for NDZ fuses

	Cat. no.		Ampere	Type	Thread
	287184		2 - 25	K1	E16

FUSES

Neozed fuses, 380 Volt

	Cat. no.		Ampere	Type	Dimensions
	287414		2	D01	11 x 36 mm
	287418		4	D01	11 x 36 mm
	287422		6	D01	11 x 36 mm
	287430		10	D01	11 x 36 mm
	287438		16	D01	11 x 36 mm
	287442		20	D02	15 x 36 mm
	287446		25	D02	15 x 36 mm
	287450		35	D02	15 x 36 mm
	287458		50	D02	15 x 36 mm
	287462		63	D02	15 x 36 mm

Base for Neozed fuses

	Cat. no.		Ampere	Type	Mounting
	287512		2 - 16	D01	base-mounting
	287518		20 - 63	D02	base-mounting

Screw caps for Neozed fuses

	Cat. no.		Ampere	Type	Thread
	287530		2 - 16	K01	E14
	287536		20 - 63	K02	E18

FUSES

Knife blade fuses gL/gG, 500 Volt, Din-size 00				
	Cat. no.		Ampere	Overall length
	288004		6	78 mm
	288008		10	78 mm
	288012		16	78 mm
	288016		20	78 mm
	288020		25	78 mm
	288024		35	78 mm
	288028		50	78 mm
	288032		63	78 mm
	288036		80	78 mm
	288040		100	78 mm
	288044		125	78 mm
	288048		160	78 mm

Knife blade fuses gL/gG, 500 Volt, Din-size 0				
	Cat. no.		Ampere	Overall length
	288204		6	125 mm
	288208		10	125 mm
	288212		16	125 mm
	288216		20	125 mm
	288220		25	125 mm
	288224		35	125 mm
	288228		50	125 mm
	288232		63	125 mm
	288236		80	125 mm
	288240		100	125 mm
	288244		125	125 mm
	288248		160	125 mm

FUSES

Knife blade fuses gL/gG, 500 Volt, Din-size 1

	Cat. no.		Ampere	Overall length
	288424		35	135 mm
	288428		50	135 mm
	288432		63	135 mm
	288436		80	135 mm
	288440		100	135 mm
	288444		125	135 mm
	288448		160	135 mm
	288452		200	135 mm
	288456		250	135 mm

Knife blade fuses gL/gG, 500 Volt, Din-size 2

	Cat. no.		Ampere	Overall length
	288636		80	150 mm
	288640		100	150 mm
	288644		125	150 mm
	288648		160	150 mm
	288652		200	150 mm
	288656		250	150 mm
	288664		315	150 mm
	288668		355	150 mm
	288672		400	150 mm

FUSES

Knife blade fuses gL/gG, 500 Volt, Din-size 3

	Cat. no.		Ampere	Overall length
	288872		400	150 mm
	288876		425	150 mm
	288880		500	150 mm
	288884		630	150 mm

Knife blade fuses gL/gG, 500 Volt, Din-size 4

	Cat. no.		Ampere	Overall length
	289088		800	200 mm
	289092		1000	200 mm

Base for Knife blade fuses, single pole

	Cat. no.		Ampere	DIN-size	Mounting
	289224		160	00	base-mounting
	289240		250	0-1	base-mounting
	289248		400	2	base-mounting
	289254		630	3	base-mounting

Base for Knife blade fuses, triple pole

	Cat. no.		Ampere	DIN-size	Mounting
	289324		160	00	base-mounting
	289340		250	0-1	base-mounting
	289348		400	2	base-mounting

Puller for knife blade fuses

	Cat. no.		Description
	289372		Puller for knife blade fuses with insulated handle for fuses DIN 00 till 3

FUSES

Fuse element for Japanese Cello-Lite glass holder

	Fuse element for Japanese Cello-Lite glass holder			
	Cat. no.	Ampere	Type	Dimensions without blades
	290106	1	NC-1	9 x 42 mm
	290110	2	NC-1	9 x 42 mm
	290114	3	NC-1	9 x 42 mm
	290118	5	NC-1	9 x 42 mm
	290122	10	NC-1	9 x 42 mm
	290126	15	NC-1	9 x 42 mm
	290130	20	NC-1	9 x 42 mm
	290134	25	NC-1	9 x 42 mm
	290138	30	NC-1	9 x 42 mm
	290142	40	NC-2	12 x 65 mm
	290146	50	NC-2	12 x 65 mm
	290150	60	NC-2	12 x 65 mm
	290214	3	NS-1	12 x 117 mm
	290218	5	NS-1	12 x 117 mm
	290222	10	NS-1	12 x 117 mm
	290226	15	NS-1	12 x 117 mm
	290230	20	NS-1	12 x 117 mm
	290234	30	NS-1	12 x 117 mm
	290258	75	NB-3	17 x 83 mm
	290266	100	NB-3	17 x 83 mm
	290274	125	NB-4	28 x 89 mm
	290278	150	NB-4	28 x 89 mm
	290282	175	NB-4	28 x 89 mm
	290286	200	NB-4	28 x 89 mm

FUSES

Glass holder for Japanese Cello-Lite element

	Cat. no.	Ampere	Type	Dimensions
	290312	1 - 30	NC-1	15 x 50 mm
	290318	40 - 50	NC-2	20 x 75 mm
	290324	3 - 30	NS-1	20 x 126 mm
	290330	75 - 100	NB-3	30 x 100/150 mm
	290336	125 - 200	NB-4	40 x 110/180 mm

Japanese Cello-Lite case & element complete

	Cat. no.	Ampere	Type	Dimensions
	290506	1	NC-1	15 x 50 mm
	290514	3	NC-1	15 x 50 mm
	290518	5	NC-1	15 x 50 mm
	290522	10	NC-1	15 x 50 mm
	290526	15	NC-1	15 x 50 mm
	290530	20	NC-1	15 x 50 mm
	290534	25	NC-1	15 x 50 mm
	290538	30	NC-1	15 x 50 mm
	290542	40	NC-2	20 x 75 mm
	290546	50	NC-2	20 x 75 mm
	290550	60	NC-2	20 x 75 mm
	290658	75	NB-3	30 x 100/150 mm
	290666	100	NB-3	30 x 100/150 mm
	290674	125	NB-4	40 x 110/180 mm
	290678	150	NB-4	40 x 110/180 mm
	290682	175	NB-4	40 x 110/180 mm
	290686	200	NB-4	40 x 110/180 mm

FUSES

Japanese Cello-Lite cartridge fuses

	Cat. no.	Ampere	Type	Dimensions
	290806	1	UC-1	15 x 50 mm
	290814	3	UC-1	15 x 50 mm
	290818	5	UC-1	15 x 50 mm
	290822	10	UC-1	15 x 50 mm
	290826	15	UC-1	15 x 50 mm
	290830	20	UC-1	15 x 50 mm
	290834	25	UC-1	15 x 50 mm
	290838	30	UC-1	15 x 50 mm
	290842	40	UC-2	20 x 75 mm
	290846	50	UC-2	20 x 75 mm
	290850	60	UC-2	20 x 75 mm
	290958	75	UB-3	30 x 95/140 mm
	290966	100	UB-3	30 x 95/140 mm
	290974	125	UB-4	42 x 110/180 mm
	290978	150	UB-4	42 x 110/180 mm
	290982	175	UB-4	42 x 110/180 mm
	290986	200	UB-4	42 x 110/180 mm

Bases for Japanese Cello-Lite fuses

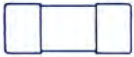
	Cat. no.	Ampere	For fuses
	291012	1 - 30	NC-1 / UC-1
	291024	35 - 60	NC-2 / UC-2

Fuse pullers

	Cat. no.	Description
	291612	Nylon resin - Scissor type
	291624	Phenol resin - Butterfly type

FUSES

British porcelain fuses



Cat. no.	Ampere	Dimensions
293112	5	6 x 25 mm
293120	10	6 x 25 mm
293124	13	6 x 25 mm
293128	15	6 x 25 mm

British HRC cartridge fuses 415 Volt, type NIT



Cat. no.	Ampere	Dimensions	Fixing centre
293208	2	14 x 55 mm	44,5 mm
293212	4	14 x 55 mm	44,5 mm
293216	6	14 x 55 mm	44,5 mm
293220	10	14 x 55 mm	44,5 mm
293224	16	14 x 55 mm	44,5 mm
293228	20	14 x 55 mm	44,5 mm
293232	25	14 x 55 mm	44,5 mm
293236	32	14 x 55 mm	44,5 mm

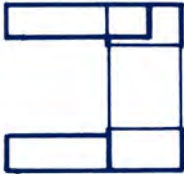
British HRC cartridge fuses 415 Volt, type NS



Cat. no.	Ampere	Dimensions	Fixing centre
293308	2	14 x 60 mm	blade
293312	4	14 x 60 mm	blade
293316	6	14 x 60 mm	blade
293320	10	14 x 60 mm	blade
293324	16	14 x 60 mm	blade
293328	20	14 x 60 mm	blade

FUSES

British HRC cartridge fuses 415 Volt, type OP

	Cat. no.	Ampere	Dimensions	Fixing centre
	293408	2	14 x 32 mm	blade
	293412	4	14 x 32 mm	blade
	293416	6	14 x 32 mm	blade
	293420	10	14 x 32 mm	blade
	293424	16	14 x 32 mm	blade
	293428	20	14 x 32 mm	blade
	293432	25	14 x 32 mm	blade
	293436	32	14 x 32 mm	blade

British HRC cartridge fuses 240 Volt, type SS

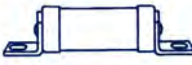
	Cat. no.	Ampere	Dimensions	Fixing centre
	293508	2	14 x 51 mm	blade
	293512	4	14 x 51 mm	blade
	293516	6	14 x 51 mm	blade
	293520	10	14 x 51 mm	blade
	293524	15	14 x 51 mm	blade
	293528	20	14 x 51 mm	blade
	293532	25	14 x 51 mm	blade

British HRC cartridge fuses 415 Volt, type TIA

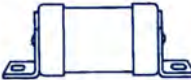
	Cat. no.	Ampere	Dimensions	Fixing centre
	293608	2	21 x 86 mm	73 mm
	293612	4	21 x 86 mm	73 mm
	293616	6	21 x 86 mm	73 mm
	293620	10	21 x 86 mm	73 mm
	293624	16	21 x 86 mm	73 mm
	293628	20	21 x 86 mm	73 mm
	293632	25	21 x 86 mm	73 mm
	293636	32	21 x 86 mm	73 mm

FUSES

British HRC cartridge fuses 415 Volt, type TIS

	Cat. no.	Ampere	Dimensions	Fixing centre
	293740	35	21 x 86 mm	73 mm
	293744	40	21 x 86 mm	73 mm
	293748	50	21 x 86 mm	73 mm
	293752	63	21 x 86 mm	73 mm

British HRC cartridge fuses 415 Volt, type TCP

	Cat. no.	Ampere	Dimensions	Fixing centre
	293848	50	36 x 110 mm	94 mm
	293852	60	36 x 110 mm	94 mm
	293856	80	36 x 110 mm	94 mm
	293860	100	36 x 110 mm	94 mm

British HRC cartridge fuses 415 Volt, type TFP

	Cat. no.	Ampere	Dimensions	Fixing centre
	294064	125	41 x 110 mm	94 mm
	294068	160	41 x 110 mm	94 mm

British HRC cartridge fuses 415 Volt, type TF

	Cat. no.	Ampere	Dimensions	Fixing centre
	294164	125	30 x 137 mm	111 mm
	294168	160	30 x 137 mm	111 mm
	294172	200	30 x 137 mm	111 mm

Fuse holders for British HRC cartridge fuses

	Cat. no.	Ampere	Suitable type fuses
	294512	20	NIT
	294524	32	TIA
	294536	63	TIA - TIS

FUSES

Belgian mini fuses 220/380 Volt

	Cat. no.	Ampere	Colour
	295012	2	orange
	295016	4	orange
	295020	6	orange
	295024	10	orange
	295028	16	grey
	295032	20	blue
	295036	25	brown
	295040	32	brown
	295044	40	green
	295048	50	green

Calibration element for mini fuses

	Cat. no.	Ampere	mm ²	Colour
	295112	2 - 4 - 6 - 10	1,5	orange
	295116	16	2,5	grey
	295120	20	4	blue
	295124	25 - 32	6	brown
	295128	40 - 50	10	green

Belgian mini circuit breaker 220/380 Volt

	Cat. no.	Ampere	Colour
	295212	2	orange
	295216	4	orange
	295220	6	orange
	295224	10	orange
	295228	16	orange
	295232	20	grey
	295236	25	blue
	295240	32	brown
	295244	40	brown

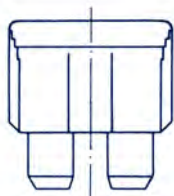
FUSES

Car fuses, 6 x 25,4 mm



Cat. no.	Ampere	Colour
295416	5	yellow
295424	8	white
295432	16	red
295440	25	blue

Car fuses, plug-in type



Cat. no.	Ampere	Colour
295512	1	smoky
295516	2	smoky
295520	3	violet
295524	4	pink
295528	5	amber
295532	7,5	brown
295536	10	red
295540	15	blue
295544	20	yellow
295548	25	transparent
295552	30	green

FUSES



Fuse wire, rolls of approx. 500 gram		
Cat. no.	Ampere	
295806	1	
295812	3	
295818	5	
295824	10	
295830	15	
295836	20	
295842	25	
295848	30	
295854	40	
295860	50	
295866	60	
295872	80	
295878	100	
295884	125	
295890	160	
295896	200	

CIRCUIT BREAKERS

Circuit breakers 6kA, 1-pole

	Cat. no.	Ampere	Characteristic
	296214	6	B (L)
	296220	10	B (L)
	296226	16	B (L)
	296232	20	B (L)
	296238	25	B (L)
	296244	32	B (L)

Circuit breakers 6kA, 2-pole

	Cat. no.	Ampere	Characteristic
	296314	6	B (L)
	296320	10	B (L)
	296326	16	B (L)
	296332	20	B (L)
	296338	25	B (L)
	296344	32	B (L)

Circuit breakers 6kA, 3-pole

	Cat. no.	Ampere	Characteristic
	296414	6	B (L)
	296420	10	B (L)
	296426	16	B (L)
	296432	20	B (L)
	296438	25	B (L)
	296444	32	B (L)

CIRCUIT BREAKERS

Circuit breakers 6kA, 1-pole

	Cat. no.	Ampere	Characteristic
	296714	6	C (G)
	296720	10	C (G)
	296726	16	C (G)
	296732	20	C (G)
	296738	25	C (G)
	296744	32	C (G)

Circuit breakers 6kA, 2-pole

	Cat. no.	Ampere	Characteristic
	296804	1	C (G)
	296808	2	C (G)
	296812	4	C (G)
	296814	6	C (G)
	296820	10	C (G)
	296826	16	C (G)
	296832	20	C (G)
	296838	25	C (G)
	296844	32	C (G)

Circuit breakers 6kA, 3-pole

	Cat. no.	Ampere	Characteristic
	296914	6	C (G)
	296920	10	C (G)
	296926	16	C (G)
	296932	20	C (G)
	296938	25	C (G)
	296944	32	C (G)
	296950	40	C (G)
	296956	50	C (G)
	296962	63	C (G)



Enclosure IP55 with transparent hinged cover for circuit breakers		
Including mounting rail		
Cat. no.	Number of module	Dimensions (H x W x D mm)
297412	3	135 x 74 x 97 mm
297418	6	170 x 135 x 112 mm
297424	10	168 x 220 x 112,5 mm
297436	16	270 x 340 x 138 mm

POWER SWITCH / CIRCUIT BREAKER



**Merlin Gerin Power switch / Circuit breaker frame, 3-pole
without protection unit**

Cat. no.	max. Ampere	kA	Type	Dimensions (H x W x D mm)
298208	100	25	NS 100N	160 x 105 x 111 mm
298216	100	70	NS 100H	160 x 105 x 111 mm
298224	100	100	NS 100L	160 x 105 x 111 mm
298240	160	25	NS 160N	160 x 105 x 111 mm
298248	160	70	NS 160H	160 x 105 x 111 mm
298256	160	100	NS 160L	160 x 105 x 111 mm
298272	250	25	NS 250N	160 x 105 x 126 mm
298280	250	70	NS 250H	160 x 105 x 126 mm
298288	250	100	NS 250L	160 x 105 x 126 mm

Protection unit for above Power switch / Circuit breaker

Standard thermal-magnetic trip type

Cat. no.	Setting range	Type	For Cat. no.
298412	25,6 - 32 A	TM 32D	29003 / 30403
298418	32 - 40 A	TM 40D	29003 / 30403
298424	40 - 50 A	TM 50D	29003 / 30403
298430	50 - 63 A	TM 63D	29003 / 30403
298436	63 - 80 A	TM 80D	29003 / 30403
298442	80 - 100 A	TM 100D	29003 / 30403
298448	100 - 125 A	TM 125D	30403 / 31403
298454	128 - 160 A	TM 160D	30403 / 31403
298460	160 - 200 A	TM 200D	31403
298466	200 - 250 A	TM 250D	31403

POWER SWITCH / CIRCUIT BREAKER

Protection unit for above Power switch / Circuit breaker

Electronic trip type, special for generators

Cat. no.	Setting range	Type	For Cat. no.
298512	16 - 40 A	STR22GE	29003 / 30403
298518	40 - 100 A	STR22GE	29003 / 30403
298524	64 - 160 A	STR22GE	30403 / 31403
298530	100 - 250 A	STR22GE	31403

Overcurrent Switch-off coil for Power switch / Circuit breaker

	Cat. no.	Coil voltage	Type
	298612	24V DC	MX
	298618	24V 50/60Hz	MX
	298624	100/130V 50/60Hz	MX
	298630	200/240V 50/60Hz	MX
	298636	380/440V 50/60Hz	MX

Undervoltage Switch-off coil for Power switch / Circuit breaker

	Cat. no.	Coil voltage	Type
	298660	24V DC	MN
	298666	24V 50/60Hz	MN
	298672	100/130V 50/60Hz	MN
	298678	200/240V 50/60Hz	MN
	298684	380/440V 50/60Hz	MN

Auxiliary contact for Power switch / Circuit breaker

	Cat. no.	Type
	298712	OF-SD-SDE-SDV

Clamp meters with case

	Cat. no.	Description
	305112	Digital clamp-meter / multimeter
		AC Current: 0 - 200 A
		0 - 600 A
		AC Volts: 0 - 200 V
		0 - 600 V
		Resistance: 2000 Ω Frequency: 5 MHz
	Cat. no.	Description
	305172	Digital clamp-meter / multimeter
		AC Current: 0 - 200 A
		0 - 1500 A
		DC Current: 0 - 200 A
		0 - 1500 A
		AC Volts: 0 - 200 V 0 - 600 V
		Resistance: 1500 Ω
	Cat. no.	Description
	305212	Analogue clamp-meter / multimeter "Kaise"
		AC Current: 0 - 15 A
		0 - 60 A
		0 - 150 A
		0 - 300 A
		0 - 600 A
		0 - 1200 A
		AC Volts: 0 - 150 V 0 - 300 V 0 - 600 V
		Resistance: 20 K Ω

For Fluke clamp-meters see page 466 - 467

MEASURING INSTRUMENTS

Multimeters

	Cat. no.	Description
	305512	Digital multimeter "pocket-type"
		DC Volts: 0 - 1000 V
		AC Volts: 0 - 750 V
		AC Amp.: 200 μ A - 10 A
		Resistance: 2 M Ω
	Cat. no.	Description
	305536	Digital multimeter with Holster
		DC Volts: 0 - 1000 V
		AC Volts: 0 - 750 V
		AC Amp.: 200 μ A - 10 A
		Resistance: 20 M Ω
	Cat. no.	Description
	305560	Analogue multimeter with case
		DC Volts: 0 - 1000 V
		AC Volts: 0 - 1000 V
		DC Amp.: 0 - 250 mA
		AC Amp.: 0 - 10 A
		Resistance: 10 M Ω

Multimeter IP65, with shock-proof housing Including certificate of verification

	Cat. no.	Description
	305584	Analogue multimeter with clamp-meter
		DC Volts: 0 - 1500 V
		AC Volts: 0 - 1500 V
		DC Amp.: 50 μ A - 10 A
		AC Amp.: with clamp-meter 0 - 200 A
		Resistance: 20 K Ω
		Diode test

For Fluke multimeters see page 456 - 460

MEASURING INSTRUMENTS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Electrical voltage testers

Cat. no.	Description	Fig.
305912	Voltage tester with 3-stage LED-display. Display: 120, 220, 380V AC/DC	1
305924	Electronic voltage tester dust and water proof, 6-stage LED-display. Display: 6, 12, 50, 120, 230, 400V AC/DC	2
305936	Duspol voltage tester with analogue display: 110 - 750V AC/DC	3
305948	Circuit tester for testing electrical circuits from 90 to 600V AC/DC	4
305960	Voltage testing screwdriver type "small" 140 mm, 220 - 250V	5
305966	Voltage testing screwdriver type "Large" 190 mm, 220 - 250V	5
305972	Japanese spark testing screwdriver set. Low-voltage 6's, 100 - 500V AC, 100 - 350V DC	6
305980	Japanese spark testing screwdriver set. High-voltage 6's, 2.500 - 19.000V AC	6
305984	Volt stick 220 - 240V AC, Easy to use. Just touch the tip to an outlet or cord	7

For Fluke electrical testers see page 464

MEASURING INSTRUMENTS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Steinel Electrical voltage testers

Cat. no.	Description	Fig.
306118	Volt-Check 3, electronic voltage tester Display: 6, 50, 120/400V AC/DC	1
306130	Profi-Check 3, electronic voltage tester Display: 12, 24, 50V AC/DC 110, 230, 400V AC 120, 300, 500V DC	2
306142	Master-Check 1A, electronic voltage tester Display: 12, 24, 50, 120, 230, 400V AC/DC	3
306148	Master-Check 2, electrical voltage tester Display: 6, 12, 24, 50, 120, 230, 400V AC/DC	4
306160	Multi-Check 3, electrical voltage tester with phase and diode test Display: 6, 50, 120/400V AC/DC	5
306172	Combi-Check 1.2, electrical voltage tester with phase and diode test Display: 6, 12, 24, 50, 120, 230, 400, 690V AC/DC	6
306184	Digi-Check 3, electrical voltage tester with digital display 0 - 999V AC/DC	7

For Fluke electrical testers see page 464

MEASURING INSTRUMENTS



Fig. 1



Fig. 2



Fig. 3

Electronic insulation testers (Megger-testers)

Cat. no.	Description	Fig.
306312	Analogue insulation tester with case 2000 MΩ / 1000 V	1
306324	Analogue insulation tester with case "Kaise" 1000 MΩ / 500 V - 2000 MΩ / 1000 V	2
306336	Digital insulation tester in heavy duty case 200 MΩ / 250 V - 200 MΩ / 500 V - 2000 MΩ / 1000 V	3

Rotary field direction indicator

	Cat. no.	Description
	306512	Phase sequence indicator in soft case

Magnetic field indicator

	Cat. no.	Description
	306572	Magnet Stick, for testing relay coils, solenoid valves and hydraulic or pneumatic systems

MEASURING INSTRUMENTS

Accessories for measuring instruments

	Cat. no.	Description	
	306712	Universal test lead 50 cm, red	
	306718	Universal test lead 50 cm, black	
	306730	Universal test lead 100 cm, red	
	306736	Universal test lead 100 cm, black	
	306748	Universal test lead 150 cm, red	
	306754	Universal test lead 150 cm, black	
	306812	Probe for test lead, red	
	306818	Probe for test lead, black	
	163632	Jaw alligator clips for test lead, red	
	163636	Jaw alligator clips for test lead, black	
	306912	Pin-grabber test clips, red	
	306918	Pin-grabber test clips, black	
	306960	Test lead set "small"	
		Includes: 2x test lead 70 cm, red/blue	
		1x probe, blue	
		1x Alligator clip	
	306972	Test lead set "big"	
		Includes: 2x test lead 70 cm, red/blue	
		2x test lead 170 cm, red/blue	
		2x probe, red/blue	
		2x Alligator clip	
		2x Spade lugs	
		2x Flat pin	
		2x Insulated stop, red/blue	
		6x Insulated stop with hole, red/blue	

For Fluke accessories see page 473 - 479

Fluke Digital 110 Series Multimeters

Cat. no.	Description
310212	Fluke 110
310218	Fluke 111
310224	Fluke 112



Included accessories

TL75 test leads, holster, installed 9V battery

a Features	110	111	112
True-RMS measurements	AC	AC	AC
Digital display counts, update 4 times per sec.	6000	6000	6000
Display backlight			
Analog bargraph/segments, updates 40x p/sec.	33-segm.	33-segm.	33-segm.
Auto and manual ranging	*	*	*
Display hold	*	*	*
Min-Max-Average recording mode with alert	*	*	*
Audible continuity and diode test	*	*	*
Test lead alert	*	*	*
Unsafe voltage alert warns for above 30 Volt	*	*	*
Compact case with removable holster	*	*	*

			Best accuracy		
Function	Maximum	Max. resolution	110	111	112
V DC	600 V	1 mV	±(0.7%+2)	±(0.7%+2)	±(0.7%+2)
V AC	600 V	1 mV	±(1.0%+3)	±(1.0%+3)	±(1.0%+3)
A DC	10 A	1 mA		±(1.0%+3)	±(1.0%+3)
A AC	10 A	0.01 A		±(1.5%+3)	±(1.5%+3)
Resistance	40 MΩ	0.1 Ω	±(0.9%+1)	±(0.9%+1)	±(0.9%+1)
Capacitance	10000 µF	1 nF	±(1.9%+2)	±(1.9%+2)	±(1.9%+2)
Frequency	50 kHz	0.01 Hz	±(0.1%+2)	±(0.1%+2)	±(0.1%+2)

Fluke Analog/Digital 73/77 Series III Multimeters

Cat. no.	Description
310312	Fluke 73 III
310324	Fluke 77 III


Included accessories

Each model includes TL75 test leads, 9V battery (installed) and C70Y holster.

Features

	73 III	77 III
Digital display counts	3200	3200
Analog bargraph/segments	31	31
Diode test/fast continuity beeper	*	*
Auto and manual ranger	*	*
Automatic Touch Hold®	*	*
With integrated holster		*
With removable holster	*	
Sleep mode	*	*

Best accuracy

Function	Maximum	Max. resolution	73 III	77 III
V DC	600 V	0.1 mV	±(0.3%+1)	
V DC	1000 V	0.1 mV		±(0.3%+1)
V AC	600 V	1 mV	±(2.0%+2)	
V AC	1000 V	1 mV		±(2.0%+2)
A DC	10 A	0.01 mA	±(1.5%+2)	±(1.5%+2)
A AC	10 A	0.01 mA	±(2.5%+2)	±(2.5%+2)
Resistance	32 MΩ	0.1 Ω	±(0.5%+1)	±(0.5%+1)

Fluke Analog/Digital 170 Series Multimeters

Cat. no.	Description
310360	Fluke 175
310366	Fluke 177
310372	Fluke 179


Included accessories

TL75 test leads, installed 9V battery. The 179 also includes the 80 BK temperature probe

Features	175	177	179
True-RMS measurements	AC	AC	AC
Digital display counts, update 4 times per sec.	6000	6000	6000
Analog bargraph/segments, updates 40x p/sec.	33-segm.	33-segm.	33-segm.
Auto and manual ranging	*	*	*
Display Hold and Auto Hold	*	*	*
Min-Max-Average recording mode with alert	*	*	*
Temperature readings			*
Audible continuity and diode test	*	*	*
Test lead alert	*	*	*
Unsafe voltage alert warns for above 30 Volt	*	*	*
Audible continuity and diode test	*	*	*
Ergonomic case with integrated holster	*	*	*

			Best accuracy		
Function	Maximum	Max. resolution	175	177	179
V DC	1000 V	0.1 mV	±(0.15%+2)	±(0.09%+2)	±(0.09%+2)
V AC	1000 V	0.1 mV	±(1.0%+3)	±(1.0%+3)	±(1.0%+3)
A DC	10 A	0.01 mA	±(1.0%+3)	±(1.0%+3)	±(1.0%+3)
A AC	10 A	0.01 mA	±(1.5%+3)	±(1.5%+3)	±(1.5%+3)
Resistance	50 MΩ	0.1 Ω	±(0.9%+1)	±(0.9%+1)	±(0.9%+1)
Capacitance	10000 μF	1 nF	±(1.2%+2)	±(1.2%+2)	±(1.2%+2)
Frequency	100 kHz	0.01 Hz	±(0.1%+1)	±(0.1%+1)	±(0.1%+1)
Temperature	-40°C/+400°C	0.1°C			±(1.0%+10)

Fluke Analog/Digital 183/185 Multimeters

Cat. no.	Description
310412	Fluke 183
310418	Fluke 185



Included accessories

Each model includes TL75 silicone test leads and two AC70 alligator clips (except for 185), 4 AA batteries.

Features

	183	185
True-RMS measurements	AC, AC+DC	
Bandwidth (voltage/current)	20 kHz / 5 kHz	
Digital display counts (default/selectable)	5000/50000	
Extra large multiple display with large digits and backlight	*	*
Analog bargraph/segments	20-segments	
Min-Max-Average recording with relative time stamp	*	*
Fast Min-Max recording	1 msec.	
Touch hold® and Relative modes for reference and offset measurements	*	*
Temperature measurements in °C and °F using K-type thermocouple + adapter		*
Audible continuity and diode test	*	*
Duty cycle measurements	*	*
PC interface for data exchange and closed case calibration	*	*
Readings memory (memory locations)	10	30
Easy battery exchange without opening the complete case	*	*
Removable protective holster	*	*

Best accuracy

Function	Maximum	Max. resolution	183	185
V DC	1000 V	10 µV	±(0.07%+1)	±(0.05%+1)
V AC	1000 V	10 µV	±(0.6%+2)	±(0.4%+2)
A DC	10 A	0.01 µA	±(0.2%+2)	±(0.2%+2)
A AC	10 A	0.01 µA	±(0.6%+2)	±(0.6%+2)
Resistance	50 MΩ	0.01 Ω	±(0.1%+2)	±(0.1%+2)
Capacitance	50000 µF	0.001 nF	±(1.0%+3)	±(1.0%+3)
Frequency	1 MHz	0.001 Hz	±(0.002%+1)	±(0.002%+1)
Temperature	-50°C/+980°C	0.1°C		±1°C
dBm and dBV	-74/+60 dB	0.01 dB		±0.1 dB

Fluke Analog/Digital 187/189 Multimeters

Cat. no.	Description
310430	Fluke 187
310436	Fluke 189



Included accessories

Each model includes TL71 silicone test leads and two AC70 alligator clips, 4 AA batteries.

Features

	187	189
True-RMS measurements	AC, AC+DC	
Bandwidth (voltage/current)	100 kHz / 100 kHz	
Digital display counts (default/selectable)	50000/5000	
Extra large multiple display with large digits and backlight 4 times p/sec	*	*
Analog bargraph/segments	51-segments	
Min-Max-Average recording with relative time stamp	*	*
Fast Min-Max recording	250 μ sec.	
Touch hold® and Relative modes for reference and offset measurements	*	*
Temperature measurements in °C and °F using K-type thermocouple + adapter	*	*
Audible continuity and diode test	*	*
Duty cycle and pulse width measurements	*	*
PC interface for data exchange and closed case calibration	*	*
Memory for storing up to 3 days		*
Readings memory (memory locations)		100
Easy battery exchange without opening the complete case	*	*
Ergonomic case with integrated protective holster	*	*

Best accuracy

Function	Maximum	Max. resolution	187 and 189
V DC	1000 V	1 μ V	$\pm(0.025\%+5)$
V AC	1000 V	1 μ V	$\pm(0.4\%+40)$
A DC	10 A	0.01 μ A	$\pm(0.15\%+2)$
A AC	10 A	0.01 μ A	$\pm(0.75\%+5)$
Resistance	500 M Ω	0.01 Ω	$\pm(0.05\%+2)$
Conductance	50 nS	0.01 nS	$\pm(1.0\%+10)$
Capacitance	50000 μ F	0.001 nF	$\pm(1.0\%+5)$
Frequency	1 MHz	0.01 Hz	$\pm(0.005\%+1)$
Temperature	-200°C/+1350°C	0.1°C	$\pm(1\%+1^\circ\text{C})$
dBm and dBV	-52/+60 dB	0.01 dB	± 0.1 dB

Fluke Graphical Multimeter 860 Series	
Cat. no.	Description
310512	Fluke 867B



Included accessories
Each model includes TL71 silicone test leads. BP7217 Battery Pack and BE860 Battery Eliminator.

Features	867B
Digital display counts	30 000
True-RMS measurements	*
High impedance input	*
Resistance/conductance/capacitance/continuity	*
Min/Max/Avg with time stamp	*
Relative mode	*
dB	*
Logic activity	*
Component test	*
Bright backlight	*
Rechargeable batteries/line adaptor	*
Waveform memory	*

Function	Range & Resolution	Best accuracy
V DC	300.00 mV - 1000.0 V	$\pm(0.025\%+2)$
V AC	300.00 mV - 1000.0 V	$\pm(0.5\%+4)$
A DC	300.0 μ A - 10.000 A	$\pm(0.05\%+15)$
A AC	300.0 μ A - 10.000 A	$\pm(0.75\%+10)$
Resistance	till 30.000 M Ω	$\pm(0.7\%+2)$
Capacitance	10.000 pF - 10.000 μ F	$\pm(1.9\%+2)$
dB/dBm	2 - 1200 Ohm References	± 0.5 dB
Frequency	till 10.0000 MHz	$\pm(0.05\%+1)$
Meter AC bandwidth		300 kHz

Fluke Analog/Digital Multimeter 27 Extra Rugged	
Cat. no.	Description
310560	Fluke 27



Included accessories
Includes TL75 test leads and two AC70 alligator clips, 9V battery (installed).

Features	27
Digital display counts	3200
Analog bar graph/segments	31
Touch Hold®	*
Rugged, O-ring sealed case	*
Separate, sealed battery/fuse door	*
Operates from -15°C to +55°C and 95% relative humidity	*
Meets military shock, vibration and water resistance	*
Min/Max relative mode	*
Audible continuity/diode test	*
Superior EMI shielding	*

Function	Range & Resolution	Best accuracy
V DC	320.0 mV - 1000 V	±(0.1%+1)
V AC	320.0 mV - 1000 V	±(0.5%+3)
A DC	320.0 µA - 10 A	±(0.75%+2)
A AC	320.0 µA - 10 A	±(1.5%+2)
Resistance	till 32.00 MΩ	±(0.2%+1)
Conductance	32.00 nS	±(2%+10)

Fluke Dual Display Multimeter 45	
Cat. no.	Description
310590	Fluke 45



Included accessories
Line cord 90 to 264 V 50/60Hz, TL70A test leads.

Features
Multifunction vacuum fluorescent dual display
True-RMS voltage and current measurement, including AC + DC
0,05% DC current accuracy for 4-20 mA current loop service
Standard RS-232 interface
Optional IEEE-488,2 interface
Frequency measurement to 1 MHz
dB measurements
Min/Max mode
RELATIVE mode
COMPARE (Hi/Low/Pass) for quick in-tolerance tests
Closed case calibration
Optional: rack-mount kit
Touch Hold®
Diode test/continuity

Function	Range	Best accuracy	Resolution
V DC	300 mV - 1000 V	$\pm(0.025\%+2)$	1 μ V - 0.01 V
V AC	300 mV - 750 V	$\pm(0.2\%+10)$	1 μ V - 0.01 V
dBm, 600 Ω ref.	-34 - +60 dBm	$\pm(0.08 \text{ dBm})$	0.01 dB - 0.1 dB
A DC	30 mA - 10 A	$\pm(0.05\%+2)$	0.1 μ A - 10 mA
A AC (True-RMS)	10 mA - 10 A	$\pm(0.5\%+10)$	0.1 μ A - 10 mA
Resistance	300 Ω - 100 m Ω	$\pm(0.05\%+2)$	0.01 Ω - 1 M Ω
Frequency	5 Hz -> 1 MHz	$\pm(0.05\%+1)$	0.01 Hz - 1 kHz

Fluke T Series Electrical Testers	
Cat. no.	Description
310660	Fluke T3
310684	Fluke T5-600
310690	Fluke T5-1000



T3



T5

Features	T3	T5-600	T5-1000
DC Volts, 6, 12, 24, 36, 48, 110, 220 V	*		
AC Volts, 12, 24, 36, 48, 110, 230, 400, 690 V	*		
AC/DC Volts, 600 V		*	
AC/DC Volts, 1000 V			*
AC Current, 100 A (OpenJaw™)		*	*
Continuity beeper	*	*	*

Fluke VoltAlert™	
Cat. no.	Description
310760	Fluke 1AC



Features	1 AC
AC Volts, 200-600 V	*
Fits in shirt pocket for convenience	*
All outer surfaces are non-conductive for safety	*
Detects voltage without metallic contact	*
Two AAA alkaline batteries	*

Fluke 7 Series Electrical Testers	
Cat. no.	Description
310790	Fluke 7-300
310796	Fluke 7-600



Included accessories
Each model includes TL75 test leads, 9V battery (installed).

Features	7-300	7-600
4000Count digital display	*	*
Continuity beeper	*	*
Automatic selection	*	*

		Best accuracy	
Function	Range & Resolution	7-300	7-600
DC Volts	40.00 V, 300 V	$\pm(1.5\%+1)$	N/A
DC Volts	40.00 V, 400.0 V, 600 V	N/A	$\pm(1.5\%+1)$
AC Volts	40.00 V, 300 V	$\pm(2.9\%+3)$	N/A
AC Volts	40.00 V, 400.0 V, 600 V	N/A	$\pm(2.9\%+3)$
Ohms	400.0 Ω	$\pm(1.5\%+2)$	$\pm(1.5\%+2)$

Fluke 320 Series Mid-size Clamp Meters	
Cat. no.	Description
311112	Fluke 321
311118	Fluke 322



321



322

Included accessories
TL75 test leads, soft carrying case and (2) AAA alkaline batteries.

Features	321	322
True-RMS responding		
Average AC responding	*	*
AC Current	0-400 A	0-40.00 A 0-400.0 A
AC Volts	0-400.0 V 0-600 V	0-400.0 V 0-600 V
DC Volts		0-400.0 V
Ohm	0-400.0 Ω	0-400.0 Ω
Display hold	*	*
Continuity beeper	<30 Ω	<30 Ω
Jaw opening	25 mm	25 mm

Fluke 330 Series Clamp Meters

Cat. no.	Description
311130	Fluke 333
311136	Fluke 334
311142	Fluke 335
311148	Fluke 336
311154	Fluke 337


333
334
335
336
337
Included accessories

TL75 test leads, soft carrying case
and (2) AA alkaline batteries.

Features	333	334	335	336	337
True-RMS responding			*	*	*
Average AC responding	*	*			
AC Current	0-400.0 A	0-600.0 A	0-600.0 A	0-600.0 A	0-999.9 A
DC Current	---	---	---	0-600.0 A	0-999.9 A
AC Volts	0-600.0 V	0-600.0 V	0-600.0 V	0-600.0 V	0-600.0 V
DC Volts	0-600.0 V	0-600.0 V	0-600.0 V	0-600.0 V	0-600.0 V
Ohm	0-600.0 Ω	0-600.0 Ω	0-600.0 Ω	0-600.0 Ω	0-600.0 Ω
		601-6000 Ω	601-6000 Ω	601-6000 Ω	601-6000 Ω
Backlight		*	*	*	*
Display hold	*	*	*	*	*
Continuity beeper	<30 Ω	<30 Ω	<30 Ω	<30 Ω	<30 Ω
Min/Max					*
Jaw opening	30 mm	30 mm	30 mm	42 mm	42 mm

Fluke 1520 MegOhmMeter	
Cat. no.	Description
311312	Fluke 1520



Included accessories
TL27 heavy duty test leads, TP74 lantern tip test probes, AC86 large jaw alligator clips, protective holster with hand strap, carrying case.

Specifications			
Function	Range	Accuracy	Resolution
Insulation resistance			
Auto ranges	4.000 MΩ, 40.00 MΩ 400.0 MΩ, 4000 MΩ	To 100 MΩ: 2%+2 counts over 100 MΩ: 10%+2 counts+1%/GΩ +20%, -0%	0.001 MΩ to 10MΩ
Test voltages	250V, 500 V, 1000V		
Max. measurement current	1 mA		
Audible/visible voltagewarning	>30 V AC or DC		
Lo-Ohms			
Resistance	0 to 40.00 Ω	2% + 2 counts	0.01 Ω
Analog bar graph	0 to 100 Ω		
Audible/visible voltagewarning	>30 V AC or DC		
Resistance			
Resistance	4 kΩ	2% + 2 counts	1 Ω
Analog bar graph	0 to 10 kΩ		
Voltage			
Voltage	0 to 600V AC (50/60Hz)	2% + 2 counts	1 V

Fluke 123 Industrial ScopeMeter®	
Cat. no.	Description
311512	Fluke 123



**Connect
and
View**



FLUKE®

Included accessories
Comes complete with PM8907 line adaptor/charger, STL120 shielded test leads set, AC120 alligator clips, HC120 hook clips, BB120 shielded BNC adaptor, user's manual and BP120 rechargeable battery pack.

Features
Connect-and-view triggering
Video triggering with line count
Dual input trendplot
Memory for two screens and ten setups
Meter measurements: VAC RMS, VAC+DC, VDC, Ohms, continuity, diode, amps, temperature (°C, °F)
Capacitance and frequency measurements
Rugged, dust and drip proof case

Oscilloscope Specifications	123
Bandwidth	20 MHz
Maximum real time sample rate	25 MS/s
Inputs and digitizers	2
Timebase range	20 ns/div - 1 min/div
Input sensitivity	5 mV - 500V/div
Maximum record length	512 min/max points per input
Glitch capture	40 nsec
Scope measurements	26 automatic
True-RMS multimeter	5000 count, dual input

General Specifications	123
Line power	Adaptor/Batt. charger 220 V included
Battery power	5 hours NiCad
Size (H x W x D)	232 x 115 x 50 mm



Fluke 787 ProcessMeter	
Cat. no.	Description
311612	Fluke 787



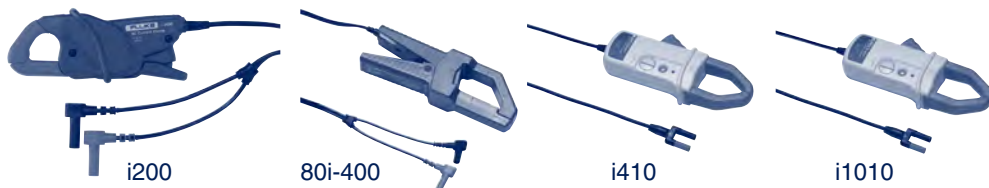
Included accessories
C81Y Holster with Flex-Stand, TL75 Test Lead Set plus AC70A Alligator clips, one 9V battery.

Features
DMM and loop calibrator in one tool
Precision 1000V, 440 mA digital multimeter
DC current source/loop calibrator
Clear LCD with backlight; 4000 counts (30 000 counts for DC current)
Externally accessible battery for easy battery changes
1000 V overload protection on V, Ohms, frequency
Meets 1000 volt EN61010-1 CAT III standards
Min/Max/Average/Hold/Relative modes

Specifications		787	
Voltage measurement			
Range	0-1000 V AC or DC		
Resolution	0.1 mV to 1.0 V		
Accuracy	0.1% Rgd + 1 LSWD (VDC)		
Current measurements			
Range	0-1 A	0-30 mA	
Resolution	1 mA	0.001 mA	
Accuracy	0.2% + 2 LSD	0.05% + 2 LSB	
Current sourcing			
Range	0-20 mA or 4-20 mA		
Accuracy	0.05% of span		
Drive capability	500 Ω @ 24 mA		
Resistance measurement	to 40 MΩ, 0.2% + 1 LSD		
Frequency	to 19.999 kHz 0.005% + 1 LSD		
Diode test	2.4 V shows diode voltage drop		
Continuity	Beeps for resistance <100 Ohms		
Battery life	50 hrs typical, 12 hrs sourcing 12 mA		

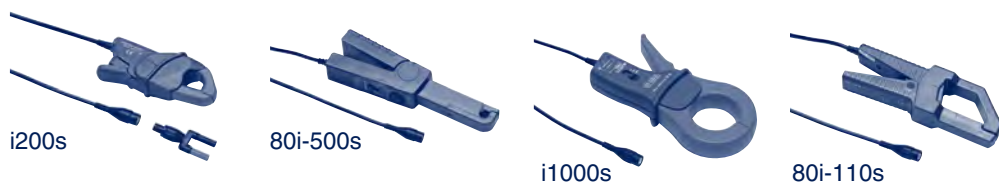
Fluke Current Clamps

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Current clamps for Digital Multimeters

Cat. no.	Type	AC Current	DC Current	Dia Hole
311812	i200	0.5 A to 240 A	---	20 mm
311818	80i-400	1 A to 400 A	---	30 mm
311824	i410	1-400 A	1-400 A	30 mm
311830	i1010	1-600 A	1-1000 A	30 mm



Current clamps for Digital ScopeMeter

Cat. no.	Type	AC Current	DC Current	Dia Hole
311912	i200s	0.5 A to 240 A	---	20 mm
311918	80i-500s	1 A to 500 A	---	30 mm
311924	i1000s	0.1 A to 1000 A	---	54 mm
311930	80i-110s	0-100 A	0-100 A	11,8 mm

Fluke High Voltage Probes

FLUKE®



80K-6



80K-40

High voltage probe

Cat. no.	Type	Voltage range
312012	80K-6	0 to 6 kV, DC or peak AC
312018	80K-40	1 to 40 kV, DC or peak AC

Fluke High Frequency Probe



High frequency probe

Cat. no.	Type	Frequency range
312112	85RF	100 kHz to 500 MHz

Fluke Test Leads, Probes Sets

FLUKE®



TL71



TL74

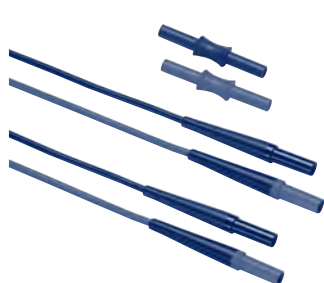


TL75

Test leads & probes sets

Cat. no.	Type	Description
312512	TL71	Premium test lead set for 187/189 DMMs
312518	TL74	4 mm Diameter test lead
312524	TL75	Test lead set for general purpose measurements

Fluke Modular Leads

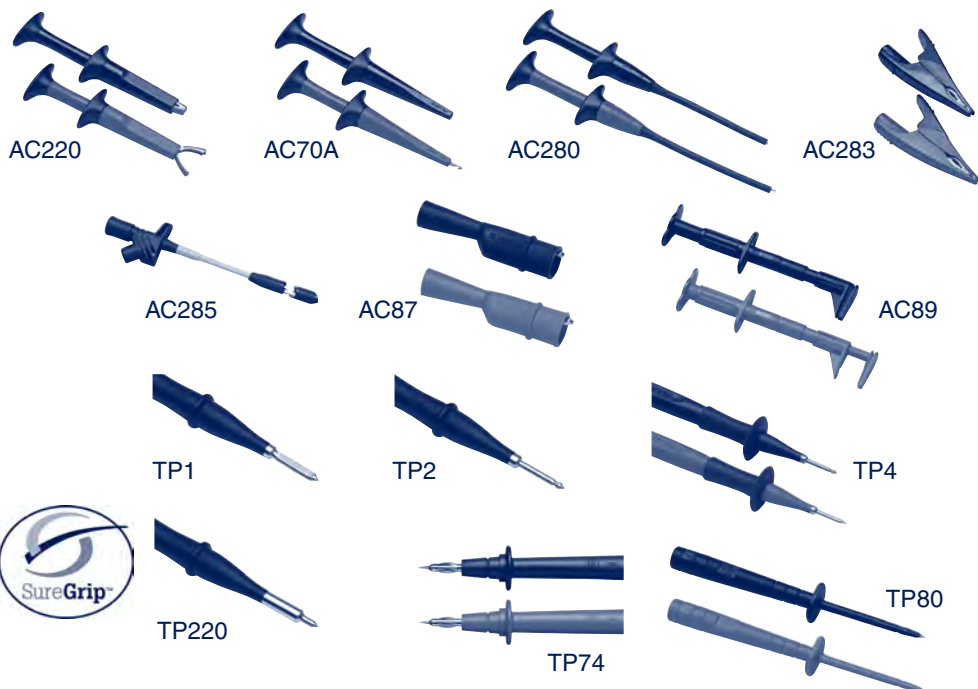


Modular leads

Cat. no.	Type	Description
312572	TL221	Extension lead set 1.5 m
312578	TL222	Test leads with right angle connectors on both ends.
312584	TL224	Test leads with right angle connectors on one end and straight connector on the other.

Fluke Probes & Clips

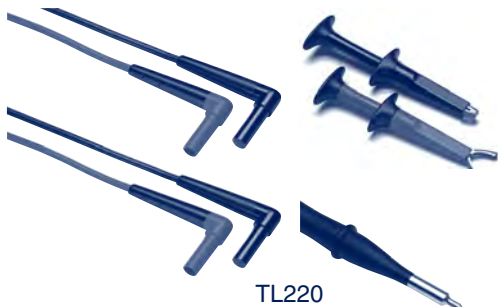
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Modular probes & clips

Cat. no.	Type	Description
312624	AC220	Heavy duty alligator clips, one pair (red, black)
312630	AC72	Alligator clips, one pair (red, black)
312636	AC280	Heavy duty hook-style test clips, one pair (red, black)
312642	AC283	Heavy duty pin-grabber test clips, one pair (red, black)
312648	AC285	Large jaw alligator clips, one pair (red, black)
312654	AC87	Heavy duty bus bar clips
312660	AC89	Heavy duty insulation piercing test clip, red
312724	TP1	Slim test probe, flat blade, one pair (red, black)
312730	TP2	Slim test probe, 2mm blade, one pair (red, black)
312742	TP4	Slim test probe, 4mm blade, one pair (red, black)
312754	TP220	Industrial test probes, one pair (red, black)
312760	TP74	Lantern tip test probes, one pair (red, black)
312766	TP80	Electronic test probes, one pair (red, black)

Fluke Kits



Kits		
Cat. no.	Type	Description
312812	TL220	Industrial test lead set, one pair each of TL222 test leads, AC220 alligator clips, TP220 test probes.
312824	TL223	Electrical test lead set, one pair each of TL222 test leads, AC220 alligator clips, TP1 1mm Slim-Reach™.
312848	TL80A	Basic electronic test lead set, one pair test lead set, alligator clip and probe tip extender in C75 soft case.
312854	TL81A	Deluxe Electronic test lead set, one pair test lead set, modular test lead, test probe, hook-style and pinch style clip, alligator clips, IC probe tip adapter and spade lugs in Quadfold soft case.

Fluke Soft Cases

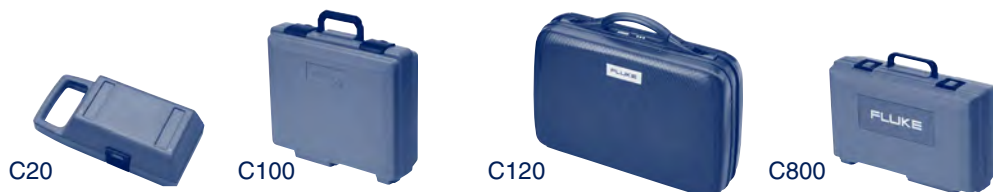
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Soft cases		
Cat. no.	Type	Description
312912	C12A	Soft case for 7-300/600, 10/11/12/12B, 16.
312918	C25	Soft case for 27, 20/70-III, 8060/62A, 83/85/87-III, 87/89-IV, 187/189, 50S/D, 51/52/53/54-II.
312924	C50	Soft case for 27, 70/73-III, 50SD, 51/52/53/54-II.
312930	C75	Soft case for 7-300/600, 10/11/12/12B, 16.
312936	C90	Soft case for 20/70-III, 8060/62A, 83/85/87-III, 50S/D.
312948	C781	Soft case for 860 series.
312954	C789	Meter & accessory case.

Fluke Hard Cases

FLUKE®



Hard cases		
Cat. no.	Type	Description
313024	C20	Hard case for 27.
313030	C100	Hard case for 7-300/600, 10/11/12/12B, 16, 27, 20/70-III, 8060/62A, 83/85/87-III, 87/89-IV, 187/189, 50S/D
313042	C120	Hard case for 123.
313054	C800	Hard case for 7-300/600, 10/11/12/12B, 16, 20/70-III 8060/62A, 83/85/87-III

Fluke Holsters

FLUKE®



Holsters		
Cat. no.	Type	Description
313124	C10	Holster for 7-300/600, 10/11/12/12B, 16.
313136	C70Y	Holster for 70/73-III
313142	C81Y	Holster for 83/85-III
313184	H3	Holster for clamp meter 333/334/335/336/337.
313196	H5	Holster for electrical tester T3, T5-600/1000.

Fluke 620 LAN CableMeter®	
Cat. no.	Description
313312	Fluke 620

FLUKE®



Included accessoires
One cable identifier (#1), soft carrying case, user manual, quick reference card, warranty registration card, one patch cord (RJ45-to-RJ45 EIA/TIA 4 pair cat 5), and one RJ45-to-RJ45 female coupler.

Features
One person verifies each connection as he goes
Test all LAN cable types: UTP, STP, FTP, Coax
Two, three, or four wire pairs in twisted pair cables
Detects wiring problems: open, short, crossed-, reversed-, split pair
Locates wiring/connection errors (distance to the open or short)
Measures cable length
Ease-of-use: single rotary knob to select the test
Portable, long battery life (50 hours)

Specifications	
Length range	1 to 999 ft. or .5 to 300m
Resolution	1 foot or .5m
Accuracy	5% ± 3 ft. Or 5% ± 1m
Power	Two AA penlites

FLUKE®



Fluke 65 Infrared Thermometer	
Cat. no.	Description
313412	Fluke 65

Included accessories
C50 soft carrying case and 2 AA batteries

Features
User selectable C or F
Read hold
MIN/Max record
Laser targeting
Automatic backlite display
Temperature memory

Specifications	
Range	-40 to 500 °C (-40 to 932 °F)
Response time	Less than 1 second
Resolution	0,1° up to 200 °C, 1° over 200°
Repeatability	± 1 or ± 1%, whichever is greater
Accuracy	Below 0 °C ± 5 °C (32 °F ± 9 °F)
	Above 0 °C ± 2 °C (32 °F ± 4 °F)
	Above 100 °C ± 2% of reading (212 °F) (With instrument stable at 23 °C ± 3 °C)
Optical resolution	8:1 Distance to spot size ratio
Emissivity	Fixed at 0.95
Target distance	Minimum 200 mm (spot 25 mm)

Fluke 50S and 50D Thermometers	
Cat. no.	Description
313472	Fluke 50S
313484	Fluke 50D



50S



50D

FLUKE®

Included accessories
50S: One K-type bead probe thermocouple, C70Y holster.
50D: Two K-type bead probe thermocouple, C70Y holster.

Optional accessories see page 474

Features	50S	50D
User selectable °C or °F	*	*
1°C or 0.1 °C ((1 °F or 0.2 °F) Resolution - internal jumper	*	*
J- or K-type thermocouples	*	*
Single thermocouple input	*	
Dual thermocouple input		*
Wide variety of interchangeable thermocouple probes	*	*
READ hold	*	*
Self test	*	*
Differential temperature (T1-T2)		*
SCAN function (T1, T2, T1-T2, ..)		*
Min/Max record		*

Specifications		
Temperature range K-type	-200 °C to 1370 °C (-328 °F to 2498 °F)	
Temperature accuracy K-type	± [0.1% + 0.7 °C (1.3 °F)]	

Fluke 50 Series II Thermometers

Cat. no.	Description
313512	Fluke 51-II
313518	Fluke 52-II
313524	Fluke 53-II
313530	Fluke 54-II



51 II



52 II



53 II



54 II

Included accessoires

- Impact absorbing holster
- One bead probe thermocouple (51+53)
- Two bead probe thermocouple (52+54)

FLUKE®

Optional accessoires see page 474

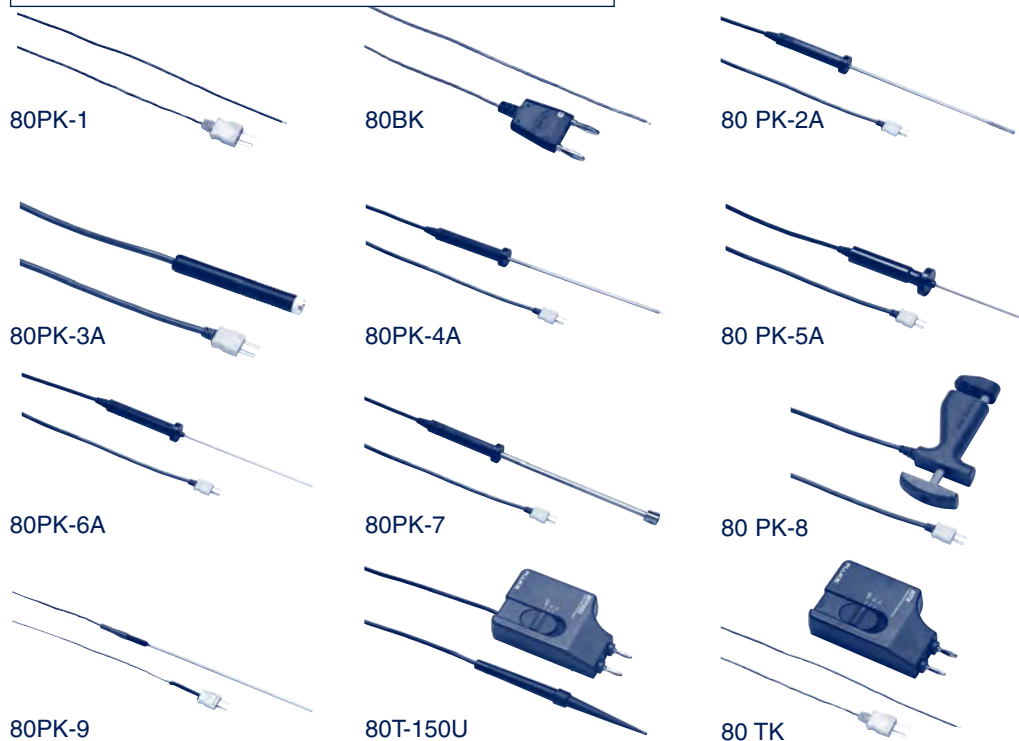
Features	51- II	52- II	53- II	54- II
Thermocouple types	J,K,T,E	J,K,T,E	J,K,T,E, N,R or S	J,K,T,E, N,R or S
Number of inputs	Single	Dual	Single	Dual
Time stamp	Relative time	Relative time	Time of day	Time of day
Readout in °C, °F, or Kelvin (K)	*	*	*	*
Splash/dust resistant	*	*	*	*
Dual display with backlight	*	*	*	*
MIN/MAX?AVG recording	*	*	*	*
(T1-T2) True differential		*		
Data logging up to 500 points			*	*
IR data port for interface to PC			*	*
Compatible with optional software			*	*

Specifications

Temperature range K-type	-200 °C to 1372 °C (-328 °F to 2501 °F)
Above -100 °C (-148 °F)	
Temperature accuracy K-type	± [0.05% + 0.3 °C (0.5 °F)]
Below -100 °C (-148 °F)	
Temperature accuracy K-type	± [0.05% + 0.3 °C (0.5 °F)]

Fluke Temperature Accessories

FLUKE®



Contact Temperature Probes

Cat. no.	Type	Description	Measurement range
313612	80PK-1	Bead probe	-40 to 260 °C
313618	80BK	Low-cost integr. DMM probe	-40 to 1090 °C
313624	80PK-2A	Immersion probe	-196 to 1090 °C
313630	80PK-3A	Surface probe	0 to 260 °C
313636	80PK-4A	Air probe	-196 to 816 °C
313642	80PK-5A	Piercing probe	-196 to 816 °C
313648	80PK-6A	Exposed probe	-196 to 816 °C
313654	80PK-7	Industrial surface probe	-127 to 600 °C
313660	80PK-8	Pipe clamp probe 6.4 - 34.9 mm	-29 to 149 °C
313666	80PK-9	General purpose probe	-40 to 260 °C
313712	80T-150U	Compatible with Fluke DMM	-50 to 150 °C
313724	80TK	Compatible with Fluke DMM	-50 to 1000 °C

Fluke Temperature Accessories



80PK-IR

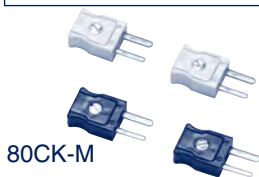


80T-IR

Non-Contact Infrared Temperature Probes

Cat. no.	Type	Description	Measurement range
313772	80PK-IR	Infrared probe	-18 to 260 °C
313784	80T-IR	Compatible with Fluke DMM	-18 to 260 °C

Other Temperature Accessories



80CK-M

80AK

Non-Contact Infrared Temperature Probes

Cat. no.	Type	Description
313812	80CK-M	Mini-Connectors
313824	80AK	Adapts Type-K mini-connector to dual banana plug

Fluke Pressure Module



PV350

Pressure Vacuum Module

Cat. no.	Type	Description	Measurement range
313912	PV350	Compatible with Fluke DMM	to 260 psig (3447 kPa)

FIRE ALARM EQUIPMENT

Smoke alarm

	Cat. no.	Description
	320112	Smoke alarm unit, including 9 volt battery, battery operated stand alone
	320160	Aersol smoke detector spray



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Testing equipment for smoke detector units, maker Cerberus

Cat. no.	Description	Type	Fig.
320212	Testing unit with stick 1,5 mtr	RE6+VR10	1+4
320218	Testing unit for REF7 gas	RE6	1
320224	Testing gas REF7 250ml	REF7	2
320230	Testing unit for thermal detector 110/220V	RE6T	3
320236	Holding rod 1,5 mtr with snap-lock	VR10	4
320242	First extension pipe 1,5 mtr	VR11	4
320248	Second extension pipe 1,5 mtr	VR12	4
320254	Third extension pipe 1,5 mtr	VR13	4

SOLDERING IRONS



Fig. 1



Fig. 2



Fig. 3

Soldering irons				
Cat. no.	Voltage	Watts	Description	Fig.
321112	110V AC/DC	25	pen type	1
321124	110V AC/DC	40	pen type	1
321136	110V AC/DC	80	pen type	1
321152	110V AC/DC	150	pen type	1
321160	110V AC/DC	200	hammer type	2
321166	110V AC/DC	300	hammer type	2
321172	110V AC/DC	500	hammer type	2
321312	220V AC/DC	25	pen type	1
321318	220V AC/DC	30	pen type	1
321330	220V AC/DC	60	pen type	1
321342	220V AC/DC	100	pen type	1
321360	220V AC/DC	200	hammer type	2
321366	220V AC/DC	300	hammer type	2
321372	220V AC/DC	500	hammer type	2
321512	110-120V AC	100	gun type	3
321536	220-240V AC	100	gun type	3

SOLDERING IRONS AND ACCESSOIRES



Fig. 1



Fig. 2

Soldering irons

Cat. no.	Description	Voltage	Fig.
321624	Temperature controlled soldering station	220V AC	1
321712	Cordless soldering iron	110V AC	2
321724	Cordless soldering iron	220V AC	2



Fig. 1



Fig. 3



Fig. 5



Fig. 6



Fig. 7



Fig. 2

Fig. 4

Fig. 8

Soldering accessoires

Cat. no.	Description	Fig.
322112	Desoldering gun	1
322118	Spare nozzle for desoldering gun	2
322172	Desoldering braid 0.75mm, length of 1.5mtr	3
322196	Soldering stand with cleaning sponge	4
322312	Resin cored soldering wire 40/60 1,0 mm, rolls of 100g	5
322324	Resin cored soldering wire 40/60 1,5 mm, rolls of 500g	5
322336	Soldering bar 40/60, bar of 110g	6
322360	Soldering paste (purine), can of 75g	7
322372	Soldering liquid (S-39), can of 320ml	8

HAND TOOLS



Fig. 1



Fig. 2



Fig. 3

Insulated wire stripping pliers

Cat. no.	Description	Range mm ²	Fig.
325112	Wire stripping pliers	0.5 - 4.0	1
325124	Automatic wire stripping pliers	0.2 - 6.0	2
325136	Semi-automatic wire stripping pliers	0.5 - 2.0	3



Fig. 1



Fig. 2



Fig. 3



Fig. 3

Electrician's knives/scissors

Cat. no.	Description	Total Length mm	Fig.
325312	Electrician's wooden cable knife	190	1
325324	Electrician's Jokari cable knife		2
325336	Electrician's Cossanoy cable knife		3
325348	Electrician's scissors		4

HAND TOOLS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Insulated pliers and cutters

Cat. no.	Description	Total Length mm	Fig.
325512	Combination pliers	185	1
325524	Flat nose pliers	160	2
325536	Round nose pliers	160	3
325548	Long nose pliers	200	4
325560	Bent nose pliers	200	5
325572	Side cutting pliers	165	6
325584	Waterpump pliers	300	7



Fig. 1



Fig. 2

Screwdrivers

Cat. no.	Description	Lenght mm	Total Length mm	Fig.
325712	Screwdriver flat blade 2.5 mm	75	155	1
325718	Screwdriver flat blade 3.0 mm	100	180	1
325724	Screwdriver flat blade 4.0 mm	100	190	1
325730	Screwdriver flat blade 5.5 mm	125	225	1
325736	Screwdriver flat blade 6.5 mm	150	250	1
325742	Screwdriver flat blade 8.0 mm	175	285	1
325812	Screwdriver Phillips/crosspoint no. 0	60	130	2
325818	Screwdriver Phillips/crosspoint no. 1	80	170	2
325824	Screwdriver Phillips/crosspoint no. 2	100	200	2

SAFETY HAND TOOLS



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7

Safety Insulated Electrician pliers and cutters, 1000V tested

Cat. no.	Description	Total Length mm	Fig.
326012	Combination pliers	185	1
326024	Flat nose pliers	160	2
326036	Round nose pliers	160	3
326048	Long nose pliers	200	4
326060	Bent nose pliers	200	5
326072	Side cutting pliers	165	6
326084	Waterpump pliers	300	7

SAFETY HAND TOOLS



Fig. 1



Fig. 2

Safety Insulated Electrician screwdrivers, 1000V tested

Cat. no.	Description	Lenght mm	Total Length mm	Fig.
326212	Screwdriver flat blade 2.5 mm	75	155	1
326218	Screwdriver flat blade 3.0 mm	100	180	1
326224	Screwdriver flat blade 4.0 mm	100	190	1
326230	Screwdriver flat blade 5.5 mm	125	225	1
326236	Screwdriver flat blade 6.5 mm	150	250	1
326242	Screwdriver flat blade 8.0 mm	175	285	1
326312	Screwdriver Phillips/crosspoint no. 0	60	130	2
326318	Screwdriver Phillips/crosspoint no. 1	80	170	2
326324	Screwdriver Phillips/crosspoint no. 2	100	200	2



Fig. 3

Safety Insulated Electrician's tool kit, 1000V tested

Cat. no.	Description	Fig.
326412	Insulated electrician's tool kit complete with tool wallet Kit contents: 4 pliers, 6 screwdrivers	3

POWER TOOLS, ELECTRIC



Fig. 1



Fig. 2



Fig. 5



Fig. 3



Fig. 4



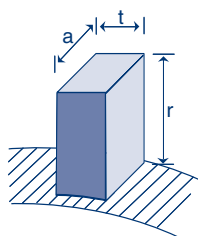
Fig. 6

Power tools electric

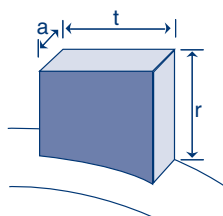
Cat. no.	Description	Voltage	Capacity	Fig.
328112	Drill 2-speed	110V AC 50/60Hz	10 mm	1
328124	Drill 2-speed	110V AC 50/60Hz	13 mm	1
328160	Cordless drill 9,6V	110V AC 50/60Hz	10 mm	2
328212	Angle grinder	110V AC 50/60Hz	ø 125 mm	3
328224	Angle grinder	110V AC 50/60Hz	ø 178 mm	4
328260	Jig saw	110V AC 50/60Hz	75 mm	6
328312	Drill 2-speed	230V AC 50/60Hz	10 mm	1
328324	Drill 2-speed	230V AC 50/60Hz	13 mm	1
328360	Cordless drill 9,6V	230V AC 50/60Hz	10 mm	2
328412	Angle grinder	230V AC 50/60Hz	ø 125 mm	3
328424	Angle grinder	230V AC 50/60Hz	ø 178 mm	4
328460	Jig saw	230V AC 50/60Hz	60 mm	5

CARBON BRUSHES

For quick supply of carbon brushes we need some information:



commutator



slip ring

Size

Internationally the dimensions are indicated **t x a x r** (mm)
t = stands for the size opposite the commutator/slip ring surface.

a = stands for the width measured in the shaft direction.

r = stands for the radial direction size or the height.

In short you can also give the depth **x** width **x** height and advise whether the brushes are for use with commutator or slip-ring.

Carbon Grade:

See next pages.....

Cable (shunt) length:

You might indicate the visible length, in critical circumstances, however, we advise you to give the length measured to the centre of the terminal.

As mention cable should be insulated or not.

Terminal Type:

Available according the drawing on page..., with several mounting holes for instance: bolt M4 etc.

CARBON BRUSHES



CARBON BRUSHES

Every carbon brush has an engraved quality indication.

Graphite grades

Grade group A: Natural Graphite

	Quality: grey coloured, soft grade. Suitable: steel slip rings for high speed. Appears as: G4, G6, G160, RE50, TG111, TD931, 634, LFC3A, etc.
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Grade group B: Electro Graphite

	Quality: grey coloured, soft grade. Suitable: slip rings and on commutators when low loads occur. Appears as: EH3, G158, RE54, RE92, EG34D, EG389, E43, E46, EGO, EG260, AY, etc.
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Grade group C: Electro Graphite

	Quality: black, relatively hard grade, good commutating. Suitable: big and medium-sized DC generators Appears as: G151, G162, EH66, 6677, RE59W, RE60, EG367, SA35, SA45, E49, E50, etc.
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Grade group D: Electro Graphite

	Quality: black coloured, hard grade. Suitable: general purpose DC motor and generator grades for high load applications. Appears as: G157, EH34, EG98B, 255, E27, etc.
--	---

Grade group E: Special Graphite

	Quality: high commutating. Suitable: AC commutator motors and small DC motors. Appears as: G124, G130, RX88, RX90, RX91, BG469, BG530, IM02, IM102, IM23, F45, F46, etc.
--	---

CARBON BRUSHES

Every carbon brush has an engraved quality indication.

Graphite grades

Grade group F: Amorphous Carbon

	Quality: high polish ability. Suitable: small fractional HP motors. Appears as: H2, H4, H8, RH30, D450, AA, A, C4, etc.
--	--

Grade group G: Metal Graphite

	Quality: copper grade between 60-75%. Suitable: slip rings. Appears as: M65, M70, MH63, RC73, 3316, CG6535, CG75, MK65, CM5H, A12S, C39, etc.
--	--

Grade group H: Metal Graphite

	Quality: high copper grade. Suitable: slip rings high loads. Appears as: M87, M195, M291, RC87, RC95, CM0, CM1, B91, B101, C151 etc.
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Grade group I: Silver Graphite

	Quality: high conductivity. Suitable: tacho dynamo, shaft earthing. Appears as: A50, A80, A90. CAG, AG20, etc.
--	---

Carbon Brushes

Cat. no.	Dimensions mm	Graphite	Model	Term.	Remarks
330112	3,5 x 3,5 x 12,5	I	E 6 (2x)	B-3	Tacho
330116	3,5 x 5 x 14	I	E 6 (2x)	B-3	Tacho
330120	5 x 5 x 7	E	KVE		Makita
330124	5 x 5 x 18	F	KVE		Bosch
330128	5 x 6 x 11	E	KVE		Tacho
330132	5 x 6,4 x 13	G	E 3	A-3	Siemens 110.500
330136	5 x 8 x 12	E	KVE		Makita

continue on next page

CARBON BRUSHES

Continuation: Carbon Brushes

Cat. no.	Dimensions mm	Graphite	Model	Term.	Remarks
330140	5 x 5 x 15	F	KVE		Bosch/AEG
330144	6 x 6 x 23	F	KVE		Siemens 802
330148	6 x 9 x 25	C	KVE		Electrolux
330152	6 x 10 x 18,5	E	KVE		Makita
330156	6 x 13 x 25	C	KVE		Bosch/Flex
330160	6,3 x 6,3 x 17	F	KVE		D & D/Bosch
330164	6,3 x 8 x 20	D	E 6	B-3	AEG
330168	6,4 x 6,4 x 20	C	E 14	A-4	Bosch
330172	6,4 x 6,4 x 20	I	E 9	A-4	Siemens Tacho
330176	6,4 x 12,5 x 24	C	KVE		AEG
330180	6,4 x 16 x 22	F	E 29/1 kabel	A-4	Bosch
330184	6,5 x 7,5 x 13,5	E	KVE		Hitachi
330188	6,5 x 7,5 x 18	E	KVE		Hitachi
330192	6,5 x 13,5 x 18	E	KVE		Makita
330196	6,5 x 13,5 x 22	E	KVE		Makita
330200	7 x 11 x 18,5	E	KVE		Hitachi
330204	7 x 11 x 31,7	C	KVE		Miele
330208	7 x 13 x 18,5	E	KVE		Hitachi
330212	7 x 15 x 18,5	E	KVE		Hitachi
330216	7 x 17 x 18,5	E	KVE		Hitachi
330220	8 x 10 x 25	B	E 6	A-4	AEG
330224	8 x 12,5 x 25	C	E 6	A-4	Siemens/Hansa
330228	8 x 16 x 25	B	E 6	B-6	Siemens V52
330232	8 x 16 x 32	D	E 6	A-6	Baumüller
330236	8 x 16 x 32	E	E 6	A-6	Siemens G8
330240	8 x 19 x 25	E	E 6	A-4	El. Faurndau
330244	8 x 20 x 25	C	E 6	B-6	Siemens V8.20
330248	8 x 23 x 26	B	E 3	B-6	Indar
330252	10 x 10 x 20	B	E 6	B-5	Smit
330256	10 x 12,5 x 32	C	E 6	A-6	Siemens KG10
330260	10 x 16 x 25	B	E 6	A-6	Hansa
330264	10 x 20 x 25	B	E 6	B-6	Thrige
330268	10 x 20 x 32	B	E 6	A-6	Siemens V63
330272	10 x 20 x 32	C	E 6	B-6	AEG/Lloyd
330276	10 x 20 x 32	I	E 6	B-6	Shaft earthing
330280	10 x 25 x 32	C	E 6	B-6	Siemens V10.25
330284	12 x 30 x 35	B	E 3	B-6	Indar

CARBON BRUSHES

Continuation: Carbon Brushes

Cat. no.	Dimensions mm	Graphite	Model	Term.	Remarks
330290	12,5 x 16 x 32	B	E 6	B-6	Siemens KG16
330296	12,5 x 16 x 32	C	E 6	B-6	Siemens KG16
330302	12,5 x 20 x 32	B	E 6	B-6	Thrige/Hansa
330308	12,5 x 20 x 32	C	E 6	A-6	Siemens KG20
330314	12,5 x 25 x 32	B	E 6	A-6	Siemens V74
330320	12,5 x 25 x 32	C	E 6	A-6	Siemens V101
330326	12,5 x 25 x 32	G	E 6	B-6	Lloyd/AEG
330332	12,5 x 25 x 35	I	E 6	B-6	Shaft earthing
330338	12,5 x 25 x 40	B	E 6	B-6	Smit
330344	12,5 x 25 x 40	C	E 6	B-6	Smit
330350	12,5 x 25 x 40	D	E 6	B-6	Smit
330356	12,5 x 32 x 32	C	E 5	B-6	Siemens V12.32
330362	12,5 x 32 x 32	C	E 33		Siemens W12
330368	12,5 x 32 x 40	B	E 4	G-6	AEG
330374	16 x 20 x 32	B	E 6	B-4	Thrige
330380	15 x 30 x 30	C	E 24	A-6	BBC
330386	16 x 25 x 40	C	E 10/E 28	G-6	Siemens G57
330392	16 x 25 x 40	C	E 6	B-6	Smit
330398	16 x 25 x 40	C	E 5	A-6	Siemens G25
330404	16 x 32 x 32	B	E 5	A-6	Siemens V16.32
330410	16 x 32 x 32	C	E 5	A-6	Siemens V16.32
330416	16 x 32 x 40	B	E 5	B-6	Siemens V85
330422	16 x 32 x 40	B	E 4	G-6	AEG/BBC
330428	16 x 32 x 40	C	E 4	G-6	AEG/BBC
330434	16 x 32 x 40	D	E 4	G-6	AEG/BBC
330440	16 x 32 x 50	B	E 27	B-6	Smit/ASEA
330446	16 x 32 x 50	C	E 27	B-6	Smit/ASEA
330452	16 x 32 x 50	D	E 27	B-6	Smit/ASEA
330458	16 x 40 x 40	C	E 33		Siemens W16
330464	16 x 40 x 40	G	E 33		Siemens W16
330470	20 x 32 x 32	B	E 24	A-6	BBC
330476	20 x 32 x 40	C	E 5	F-6	Siemens
330482	20 x 40 x 40	G	E 33		Siemens W20
330488	20 x 40 x 50	B	E 5	G-8	Siemens V96
330494	25 x 32 x 40	G	E 10/E 28	G-6	Morgan
330500	30 x 30 x 40	B	E 24	A-6	BBC
330506	30 x 30 x 50	B	E 24	A-6	BBC

COMMUTATOR STONES



Fig. 1



Fig. 2



Fig. 3

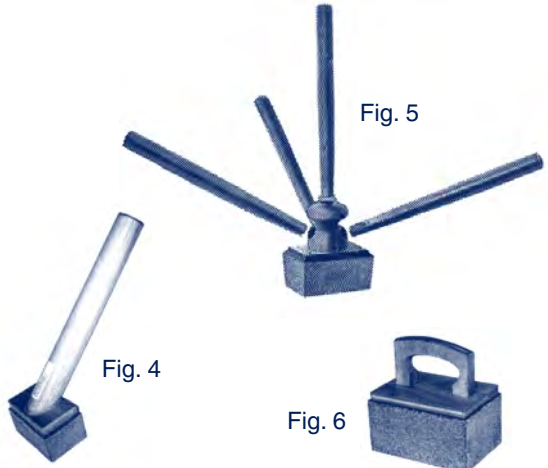


Fig. 4

Fig. 5

Fig. 6

Commutator stones

Purpose: Grinding of commutator of electrical motors and generators.

Stones can be used while the machine is running.

Cat. no.	Dimensions	Model	Grades	Fig.
335112	3/8" x 5/8" x 6"	Pencil type	medium	1
335118	3/8" x 5/8" x 6"	Pencil type	fine	1
335124	1 1/8" x 1/2" x 5/16"	Style s type	medium/fine	2
335130	1" x 1" x 6.5"	Plain lathe type	medium	3
335136	1" x 1" x 6.5"	Plain lathe type	fine	3
335142	1" x 1.5" x 6.5"	Plain lathe type	medium	3
335148	1" x 1.5" x 6.5"	Plain lathe type	fine	3
335154	1.5" x 1.5" x 1.5"	Tramway handle type	medium	4
335160	1.5" x 1.5" x 1.5"	Tramway handle type	fine	4
335166	2" x 2" x 2"	Tramway handle type	medium	4
335172	2" x 2" x 2"	Tramway handle type	fine	4
335178	3" x 2" x 1.5"	Comb. handle type	coarse	5
335184	3" x 2" x 1.5"	Comb. handle type	medium	5
335190	3" x 2" x 1.5"	Comb. handle type	fine	5
335196	4" x 3" x 2"	Saw handle type	coarse	6
335202	4" x 3" x 2"	Saw handle type	medium	6
335208	4" x 3" x 2"	Saw handle type	fine	6

COMMUTATOR ASSESSORIES

Brush seaters

Purpose: To seat quickly commutator and slip-ring brushes of any material.



Cat. no.	Dimensions	
335312	4 3/4" x 5/8" x 1/2"	Box of 2
335318	4 3/4" x 5/8" x 1 1/8"	Box of 1

Fibre glass cleaning brushes

Purpose: Polishes, lubricates and cleans all types of commutators and slip rings while machine is running.



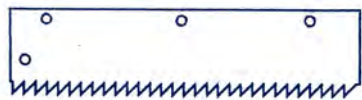
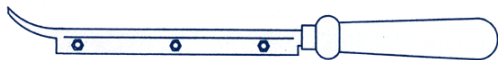
Cat. no.	Dimensions
335372	6" x 3/4"
335378	6" x 1"
335384	6" x 2"

Commutator cloth and polishing paper



Cat. no.	Description	grit
335512	Roll commutator cloth, fine	220
335518	Roll commutator cloth, medium	150
335524	Roll commutator cloth, coarse	80
335530	Sheet commutator cloth, fine	220
335536	Sheet commutator cloth, coarse	80
335542	Sheet commutator polishing paper, fine	220
335548	Sheet commutator polishing paper, medium	150

COMMUTATOR ACCESSOIRES



Commutator saws (mica undercutter tools)	
Cat. no.	Description
335572	Commutator saw frame without blades
335584	Saw blade 0,40 mm for frame
335588	Saw blade 0,50 mm for frame
335592	Saw blade 0,60 mm for frame
335596	Saw blade 0,70 mm for frame
335600	Saw blade 0,80 mm for frame
335604	Saw blade 1,00 mm for frame



Fig. 1



Fig. 3



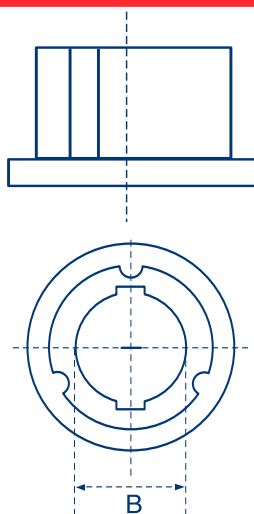
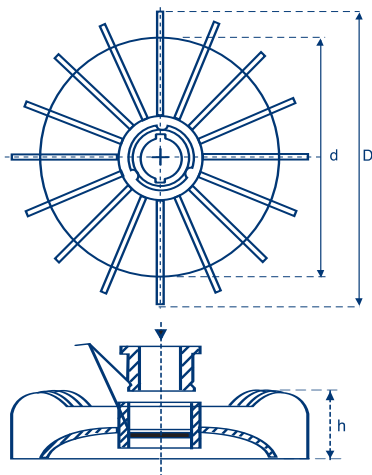
Fig. 4



Fig. 2

Commutator tools		
Cat. no.	Description	Fig.
335712	Commutator slotting file with handle	1
335718	Commutator slotting file without handle	2
335760	Commutator cement in jar	3
335772	Brush pressure meter, scale 0-2000 gr	4

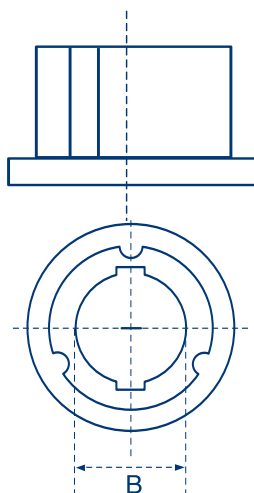
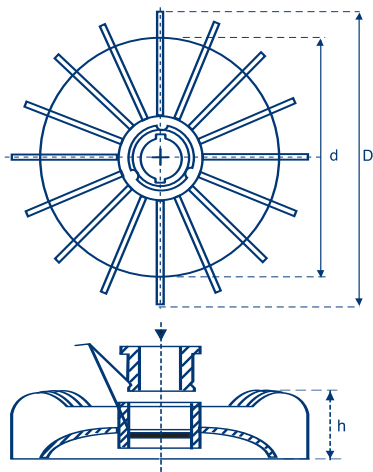
FAN BLADES



Cat. no.	Description	Overall dia (D) mm	Blind dia (d) mm	Height (H) mm	Shaft (B) mm
340112	Fan blade	123	101	27	--
340124	Fan blade	131	116	27	--
340160	Shaft bushes		for above Fan blade		self-tap
340166	Shaft bushes		for above Fan blade		14
340172	Shaft bushes		for above Fan blade		16
340178	Shaft bushes		for above Fan blade		19
340184	Shaft bushes		for above Fan blade		20

Cat. no.	Description	Overall dia (D) mm	Blind dia (d) mm	Height (H) mm	Shaft (B) mm
340212	Fan blade	165	135	33	--
340224	Fan blade	172	147	38	--
340260	Shaft bushes		for above Fan blade		self-tap
340266	Shaft bushes		for above Fan blade		24
340272	Shaft bushes		for above Fan blade		25
340278	Shaft bushes		for above Fan blade		30

FAN BLADES



Cat. no.	Description	Overall dia (D) mm	Blind dia (d) mm	Height (H) mm	Shaft (B) mm
340312	Fan blade	214	175	47	--
340324	Fan blade	247	203	55	--
340360	Shaft bushes		for above Fan blade		self-tap
340366	Shaft bushes		for above Fan blade		28
340372	Shaft bushes		for above Fan blade		30
340378	Shaft bushes		for above Fan blade		32
340384	Shaft bushes		for above Fan blade		40
340390	Shaft bushes		for above Fan blade		45

Cat. no.	Description	Overall dia (D) mm	Blind dia (d) mm	Height (H) mm	Shaft (B) mm
340412	Fan blade	295	242	55	--
340424	Fan blade	335	280	55	--
340460	Shaft bushes		for above Fan blade		self-tap
340466	Shaft bushes		for above Fan blade		42
340472	Shaft bushes		for above Fan blade		45
340478	Shaft bushes		for above Fan blade		50

ENAMELLED COPPER WIRE



Enamelled copper wire for rewinding electric motors and coils etc.

Cat. no.	dia mm
342112	0,05
342116	0,063
342120	0,071
342124	0,08
342128	0,09
342132	0,10
342136	0,112
342140	0,125
342144	0,132
342148	0,14
342152	0,15
342156	0,16
342160	0,17
342164	0,18
342168	0,19
342172	0,20
342176	0,224
342180	0,25
342184	0,28
342188	0,30
342192	0,315
342196	0,355
342100	0,40

Cat. no.	dia mm
342204	0,45
342208	0,50
342212	0,56
342216	0,60
342220	0,63
342224	0,71
342228	0,75
342232	0,80
342236	0,85
342240	0,90
342244	0,95
342248	1,00
342252	1,06
342256	1,12
342260	1,18
342264	1,25
342268	1,32
342272	1,40
342276	1,50
342280	1,60
342284	1,70
342288	1,80
342292	2,00

CAPACITORS



Motor-run capacitor with 250mm twin-cable and M-8 bottom screw

Cat. no.	Voltage	μF	Size dia x L mm.
345112	400-450	1	30 x 64
345118	400-450	2	30 x 64
345124	400-450	3	30 x 64
345130	400-450	4	30 x 64
345136	400-450	5	30 x 64
345142	400-450	6	30 x 64
345148	400-450	7	30 x 64
345154	400-450	8	30 x 64
345160	400-450	10	30 x 78
345166	400-450	12	30 x 78
345172	400-450	16	30 x 96
345178	400-450	20	30 x 96
345184	400-450	25	30 x 96
345190	400-450	30	40 x 102
345196	400-450	35	40 x 102
345202	400-450	40	50 x 96
345208	400-450	45	50 x 96
345214	400-450	50	50 x 96
345220	400-450	60	50 x 127
345226	400-450	80	50 x 127
345232	400-450	100	50 x 127

TERMINAL BOARDS



Terminal boards for electric motors, 3-pole, 6 connections

Cat. no.	Dimensions mm			Center to center holes	diam hole mm	Bolt
	Length	Width	Height			
347112	40	25	10	15 mm	4,5	M4
347118	44	28	9	15 mm	4,5	M4
347124	50	32	10	18 mm	4,5	M4
347130	54	34	10	20 mm	5,8	M4
347136	56	36	11	20 mm	5,5	M5
347142	64	40	12	23 mm	6,2	M5
347148	64	40	12	23 mm	7,0	M5
347154	70	45	13	25 mm	6,5	M6
347160	78	48	14	28 mm	6,0	M6
347166	78	48	14	28 mm	7,0	M6
347172	82	52	15	30 mm	7,0	M6
347178	95	60	16	35 mm	7,0	M8
347184	96	60	16	35 mm	9,5	M8
347190	114	70	18	44 mm	7,0	M8
347196	120	75	20	45 mm	11,5	M10

ELECTRIC FANS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Oscillating fans

Cat. no.	Description	Voltage	Dia fan blade	Fig.
348212	Desk fan	130V 50/60Hz	300 mm	2
348412	Desk fan	230V 50/60Hz	150 mm	1
348424	Desk fan	230V 50/60Hz	225 mm	1
348436	Desk fan	230V 50/60Hz	300 mm	2
348448	Wall fan	230V 50/60Hz	300 mm	3
348460	Desk fan	230V 50/60Hz	400 mm	2
348472	Fan on stand	230V 50/60Hz	400 mm	4

Mini cooling fans

	Cat. no.	Voltage	Sizes
	348712	24V DC	120 x 120 x 38 mm
	348724	115V 50/60Hz	120 x 120 x 38 mm
	348736	220-240V 50/60Hz	120 x 120 x 38 mm
	348772	Finger guard for above	

ELECTRIC BLOWERS



Fig. 1



Fig. 2



Fig. 3

Blower/heaters for cleaning and drying electrical equipment

Cat. no.	Description	Voltage	Wattage	Setting°C	
349212	Blower/Heater	110V	1650	100 till 600°C	1
349224	Blower/Heater	230V	2000	100/600°C	2
349236	Blower/Heater	230-240V	2000	100 till 600°C	3



Fig. 1

Blower-suck machine

Cat. no.	Description	Voltage
349512	Blower-suck machine	110V
349524	Blower-suck machine	230V

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2

Coffee maker

Cat. no.	Description	Voltage	Capacity	Fig.
350212	Coffee maker	110V AC	10 cups	1
350260	Coffee maker	220V AC	10 cups	1
350308	Coffee percolator	220V AC	2 ltr	2

Coffee mills

	Cat. no.	Description	Voltage
	350360	Coffee mill	110V AC
	350372	Coffee mill	220V AC

Water boiler

	Cat. no.	Description	Voltage	Cap.
	350512	Water boiler	110V AC	1,7 ltr
	350536	Water boiler	220V AC	1,7 ltr

Hand mixers

	Cat. no.	Description	Voltage
	350712	Hand mixer	110V AC
	350724	Hand mixer	220V AC

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2

Toasters, automatic

Cat. no.	Description	Voltage	Capacity	Fig.
350812	Toaster, automatic	110V AC	2 slices	1
350824	Toaster, automatic	110V AC	4 slices	2
350836	Toaster, automatic	220V AC	2 slices	1
350848	Toaster, automatic	220V AC	4 slices	2

Electric steam iron

	Cat. no.	Description	Voltage
	350912	Electric steam iron	110V AC
	350924	Electric steam iron	220V AC

Blenders

	Cat. no.	Description	Voltage	Cap.
	351012	Blender	110V AC	1,5 ltr
	351024	Blender	220V AC	1,5 ltr

Rice cookers

	Cat. no.	Description	Voltage	Cap.
	351212	Rice cooker	110	2,0 ltr
	351224	Rice cooker	110	3,6 ltr
	351248	Rice cooker	220	2,0 ltr
	351260	Rice cooker	220	3,6 ltr
	351284	Rice cooker	220	10,0 ltr

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2



Fig. 3

Hot plates

Cat. no.	Voltage	Wattage	Plate diameter	Fig.
351440	220V AC	600W	ø 145 mm	1
351424	120V AC	600W	ø 145 mm	1
351448	220V AC	1000W	ø 187 mm with switch	2
351460	220V AC	750/1500W	ø 152/187 mm with switch	3



Fig. 1



Fig. 2

Hot plates with switch and roll-framework

Cat. no.	Voltage	Wattage	Plate diameter	Fig.
351612	110V AC	1500W	ø 187 mm	1
351624	110V AC	1000/1500W	ø 152/187 mm	2
351648	220V AC	1500W	ø 187 mm	1
351660	220V AC	1000/1500W	ø 152/187 mm	2

Microwave Oven



Cat. no.	Description	Voltage
351812	Microwave Oven	110V 60Hz
351824	Microwave Oven	220V 60Hz

DOMESTIC EQUIPMENT

Wall clock

	Cat. no.	Description
	351912	Wall clock, battery operated

Insect killer lamp

	Cat. no.	Description
	352112	Insect killer lamp 220V
	352118	Spare lamp 220V E27 for above

Drinking water coolers

	Cat. no.	Description	Voltage
	352312	Drinking water cooler	110V 50/60Hz
	352324	Drinking water cooler	220V 50/60Hz



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Refrigerators, compressor system

Cat. no.	Voltage	Content Cool/Freeze	Dimensions (HxWxD)	Fig.
352518	110V 50/60Hz	90/0 ltr	55 x 55 x 60 cm, single door	1
352530	110V 50/60Hz	130/10 ltr	85 x 45 x 60 cm, single door	2
352542	110V 50/60Hz	216/24 ltr	121 x 55 x 60 cm, single door	3
352558	110V 50/60Hz	236/64 ltr	154 x 54 x 58 cm, double door	4
352564	110V 50/60Hz	285/95 ltr	167 x 60 x 60 cm, double door	4
353112	220V 50/60Hz	45/0 ltr	50 x 44 x 45 cm, single door	1
353118	220V 50/60Hz	90/0 ltr	55 x 55 x 60 cm, single door	1
353130	220V 50/60Hz	130/10 ltr	85 x 45 x 60 cm, single door	2
353136	220V 50/60Hz	216/24 ltr	121 x 55 x 60 cm, single door	3
353148	220V 50/60Hz	320/0 ltr	155 x 60 x 60 cm, single door	3
353152	220V 50/60Hz	198/52 ltr	141 x 54 x 58 cm, double door	4
353158	220V 50/60Hz	236/64 ltr	154 x 54 x 58 cm, double door	4
353164	220V 50/60Hz	285/95 ltr	167 x 60 x 60 cm, double door	4

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Freezer

Cat. no.	Voltage	Content	Dimensions (HxWxD)	Fig.
353760	110V 50/60Hz	390 ltr	88 x 112 x 66 cm, chest-type	1
353836	220V 50/60Hz	330 ltr	160 x 60 x 60 cm, cabinet-type	2
353872	220V 50/60Hz	480 ltr	88 x 135 x 66 cm, chest-type	1

Ice cube maker

Cat. no.	Voltage	Capacity	Stock	Dimensions (HxWxD)	Fig.
354036	220V 50/60Hz	24 kg/24 h	10 kg	59 x 56 x 54 cm	3

Dish washer

Cat. no.	Voltage	Capacity sets	Dimensions (HxWxD)	Fig.
354536	220V 60Hz	12 couverts	85 x 60 x 60 cm	4

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2



Fig. 3

Washing machines, fully automatic 16 programs, top loading

Cat. no.	Voltage	Capacity	Dimensions (HxWxD)	Fig.
355072	220V 60Hz	5 kg	85 x 40 x 60 cm	1

Washing machines, fully automatic 18 programs, front loading

Cat. no.	Voltage	Capacity	Dimensions (HxWxD)	Fig.
355136	110V 60Hz	5 kg	85 x 60 x 53 cm	2
355236	220V 60Hz	5 kg	85 x 60 x 53 cm	2

Dryer, fully automatic, front loading

Cat. no.	Voltage	Capacity	Dimensions (HxWxD)	Fig.
355536	110V 60Hz	4,5 kg	85 x 60 x 58 cm	3
355636	220V 60Hz	4,5 kg	85 x 60 x 58 cm	3
355712	Connecting-unit, to put Dryer on top of Washing machine			

DOMESTIC EQUIPMENT



Fig. 1

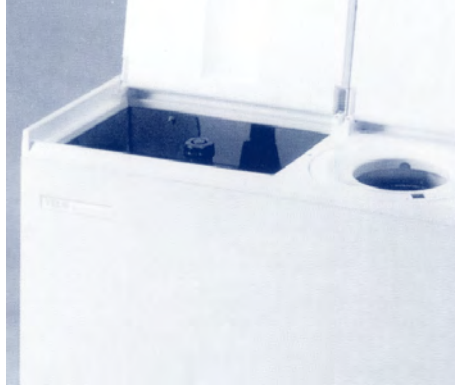


Fig. 2



Fig. 3

Washing machines, agitating type with heater

Cat. no.	Voltage	Capacity	Dimensions (HxWxD)	Fig.
356124	110V 60Hz	5.5 kg	80 x 53 x 48 cm	1
356224	220V 50Hz	5.5 kg	80 x 53 x 48 cm	1
356324	220V 60Hz	5.5 kg	80 x 53 x 48 cm	1

Washing machines, agitating type with heater and spin dryer

Cat. no.	Voltage	Capacity	Dimensions (HxWxD)	Fig.
356524	110V 60Hz	5 kg	84 x 89 x 48 cm	2
356624	220V 50Hz	5 kg	84 x 89 x 48 cm	2
356724	220V 60Hz	5 kg	84 x 89 x 48 cm	2

Spin dryer

Cat. no.	Voltage	Capacity	Dimensions (HxWxD)	Fig.
356912	110V 60Hz	4 kg	62 x ø 37 cm	3
356924	220V 50Hz	4 kg	62 x ø 37 cm	3
356936	220V 60Hz	4 kg	62 x ø 37 cm	3

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2



Fig. 3

Fig. 4



Vacuum cleaners

Cat. no.	Voltage	Description	Fig.
357124	110V AC/DC	Vacuum cleaner, sledge model	2
357136	110V AC/DC	Vacuum cleaner, kettle model, Nilfisk	3
357212	220V AC/DC	Vacuum cleaner, compact model	1
357224	220V AC/DC	Vacuum cleaner, sledge model	2
357236	220V AC/DC	Vacuum cleaner, kettle model, Nilfisk	3
357248	220V AC/DC	Vacuum cleaner, wet and dry, kettle model	4

Paper dust bags for vacuum cleaners



Cat. no.	Description
357512	Spare dust bags for Cat. no. 357124
357524	Spare dust bags for Nilfisk
357536	Spare dust bags for Cat. no. 357224
357548	Spare dust bags for Cat. no. 357248

DOMESTIC EQUIPMENT



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Electric water heaters

Cat. no.	Voltage	Wattage	ltrs	Dimensions (dia x H mm)	Fig.
358112	110V 50/60Hz	1200	30	ø 365 x 540 mm	1
358124	110V 50/60Hz	1200	80	ø 450 x 660 mm	1
358212	220V 50/60Hz	1200	30	ø 365 x 540 mm	1
358224	220V 50/60Hz	1200	80	ø 450 x 660 mm	1

Ribbed tube heaters, watertight

Cat. no.	Voltage	Wattage	Dimensions (L x H x dia mm)	Fig.
358424	110V AC/DC	1000W	105,5 x 15,5 x rib ø 8,7 cm	2
358436	110V AC/DC	1500W	155,5 x 15,5 x rib ø 8,7 cm	2
358512	220V AC/DC	500W	55,5 x 15,5 x rib ø 8,7 cm	2
358524	220V AC/DC	1000W	105,5 x 15,5 x rib ø 8,7 cm	2
358536	220V AC/DC	1500W	155,5 x 15,5 x rib ø 8,7 cm	2
358572	Thermostate with switch for above, non watertight IP30			3
358584	Thermostate for above, watertight IP65			4

Fan heater with thermostate, desk and wall mounting

	Cat. no.	Voltage	Wattage
	358624	110V 50/60Hz	800/1200
	358648	220V 50/60Hz	1000/2000

HEATING EQUIPMENT

Immersion heaters, complete with cord			
	Cat. no.	Voltage	Wattage
	358712	220V AC/DC	2000

Spiralized elements			
	Cat. no.	Voltage	Wattage
	358760	110V AC/DC	700
	358772	220V AC/DC	700



Fig. 1



Fig. 2

Cat. no.	Voltage	Wattage/meter	Description	Fig.
359112	110	51W	ordering by meter	1
359224	220	11W	ordering by meter	1
359236	220	30W	ordering by meter	1
359312	--	--	Connection set for above	
359318	--	--	Join connection set for above	
359512	220	21W	complete set for 2 mtr	2
359518	220	21W	complete set for 4 mtr	2
359524	220	21W	complete set for 8 mtr	2
359530	220	21W	complete set for 12 mtr	2
359536	220	21W	complete set for 14 mtr	2
359542	220	21W	complete set for 18 mtr	2
359548	220	21W	complete set for 24 mtr	2
359554	220	21W	complete set for 36 mtr	2
359560	220	21W	complete set for 48 mtr	2

THERMOSTATS

Danfoss thermostats type RT

- High repeatability
- Interchangeable contact system
- Two cable entries
- IP54
- DEMKO approved
- Ship approved



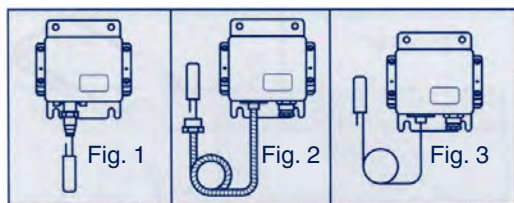
Technical data

Contact system:	SPDT, interchangeable to other types		
Contact load:	AC-1 Ohmic:	10A, 440V	
	AC-3 (motor):	4A, 400V	
	AC-11/15 (coil/transf.):	3A, 400V	
	DC-13/14:	12W, 230V	

Cat. no.	Adj. diff. range (°C)			sensor temp. (°C)	Maximum Cap. Tube lenght (m)	Type
	Setting range (°C)	At lowest range sett.	At highest range sett.			
365212	-5 to 30	1.5 to 7	1.2 to 4	75	Room sensor	RT 4
365218	10 to 45	1.3 to 7	1 to 5	100	Room sensor	RT 103
365224	-5 to 30	2 to 8	2 to 10	150	2	RT 14
365230	-5 to 30	2 to 8	2 to 10	150	5	RT 14
365236	-5 to 30	2 to 8	2 to 10	150	8	RT 14
365242	25 to 90	2.4 to 10	3.5 to 20	300	2	RT 101
365248	26 to 90	2.4 to 11	3.5 to 21	300	5	RT 101
365254	70 to 150	6 to 25	1.8 to 8	215	2	RT 107
365260	70 to 150	6 to 25	1.8 to 8	215	5	RT 107
365266	120 to 215	7 to 30	1.8 to 9	260	2	RT 120
365272	150 to 250	6.5 to 30	1.8 to 9	300	2	RT 123
365278	150 to 250	6.5 to 30	1.8 to 9	300	5	RT 123
365284	200 to 300	5 to 25	2.5 to 10	350	2	RT 124
365290	200 to 300	5 to 25	2.5 to 10	350	5	RT 124

For sensor pockets see page 523

THERMOSTATS



Danfoss thermostats type KPS

- For harsh environments
- Very robust construction
- Resistant to shock and vibration
- IP67
- Covers most outdoor and indoor application
- Suitable for alarm and regulation

Technical data

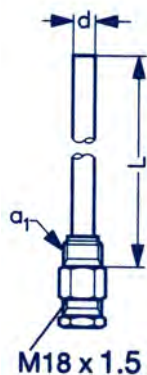
Contact load:	AC-1 Ohmic:	10A, 440V
	AC-3 (motor):	6A, 440V

Cat. no.	Setting range (°C)	Mech. diff. (°C)	Maximum sensor temp. (°C)	Cap. Tube lenght (m)	Figure	Type
365412	20 to 60	3 to 14	130	--	1	KPS77
365418	20 to 60	3 to 14	130	2	2	KPS77
365424	20 to 60	3 to 14	130	2	3	KPS77
365430	50 to 100	4 to 16	200	--	1	KPS79
365436	50 to 100	4 to 16	200	2	2	KPS79
365442	50 to 100	4 to 16	200	2	3	KPS79
365448	70 to 120	4.5 to 18	220	--	1	KPS80
365454	70 to 120	4.5 to 18	220	2	2	KPS80
365460	70 to 120	4.5 to 18	220	2	3	KPS80

For sensor pockets see page 513

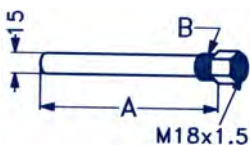
THERMOSTATS

Danfoss thermostats pockets



Sensor pockets for RT thermostats only

Cat. no.	Thread (a)	Dia (d) mm	Sensor lenght (L) mm	Material
365612	G 1/2"	11 mm	112 mm	Brass
365624	G 1/2"	11 mm	112 mm	Stainless St. 18/8



Sensor pockets for KPS thermostats only

Cat. no.	Thread (B)	Dia (d) mm	Sensor lenght (A) mm	Material
365660	G 1/2"	15 mm	110 mm	Brass
365672	G 1/2"	15 mm	110 mm	Stainless St. 18/8

PRESSURE SWITCHES

Danfoss pressure switches type RT

- High repeatability
- Interchangeable contact system
- Two cable entries
- IP54
- Manual or automatic reset
- DEMKO approved
- Ship approved



Technical data

Media:	Air, Gas, Liquid	
Contact system:	SPDT, interchangeable to other types	
Contact load:	AC-1 Ohmic:	10A, 440V
	AC-3 (motor):	4A, 400V
	AC-11/15 (coil/transf.):	3A, 400V
	DC-13/14:	12W, 230V

Cat. no.	Setting range (bar)	Adjustable/Fixed Differential (bar)	Maximum operating press. (bar)	pressure connection	Type
366212	-1 to 0	0,09 to 0,4	7	G3/8"	RT121
366218	0 to 0.3	0,01 to 0,05	0,4	G3/8"	RT113
366224	0.1 to 1.1	0,07 to 0,16	7	G3/8"	RT112
366230	0.2 to 3	0,08 to 0,25	7	G3/8"	RT110
366236	0.2 to 6	0,25 to 1,2	22	G3/8"	RT200
366242	1 to 10	0,3 to 1,3	22	G3/8"	RT116
366248	4 to 17	1,2 to 4	22	G3/8"	RT5
366254	10 to 30	1 to 4	42	G3/8"	RT117

PRESSURE SWITCHES

Danfoss pressure switches type KPS

- For harsh environments
- Very robust construction
- Resistant to shock and vibration
- IP67
- Covers most outdoor and indoor application
- Suitable for alarm and regulation
- Marine approved



Technical data

Media: Air, Gas, Liquid

Contact system: SPDT, gold plated

Contact load: AC-1 Ohmic: 10A, 440V

AC-3 (motor): 4A, 400V

AC-11/15 (coil/transf.): 3A, 400V

DC-13/14: 12W, 230V

Cat. no.	Setting range (bar)	Adjustable/fixed Differential (bar)	Maximum operating press. (bar)	pressure connection	Type
366412	0 to 2.5	0.1	6	G3/8"	KPS31
366418	0 to 3.5	0.2	10	G3/8"	KPS33
366424	0 to 8	0.4 to 1.5	12	G3/8"	KPS35
366430	6 to 18	0.85 to 2.5	22	G3/8"	KPS37
366436	10 to 35	2.0 to 6	45	G3/8"	KPS39

SOLENOID VALVES

Danfoss 2/2 Way direct operated valve

- Robust construction
- For neutral liquids and gases such as water, oil and compressed air
- Coil Enclosure up to IP67
- WRc approved versions
- Thread connections G1/8" to G1"
- Ambient temperature up to 80°C
- Flow range for water up to 2.1m³/h



Technical data

Pressure range: 0 to 30 bar

Media: Oil, air or water

Valve body: brass

				Differential pressure (bar)		
				based on coil type BA		
Cat. no.	End connection	Kv Valve m³/h	Orifice mm	Max: 9W ac	15W dc	Min.
367212	G 1/8"	0.05	1.5	30	20	0
367218	G 1/4"	0.05	1.5	30	20	0
367224	G 3/8"	0.30	3.0	30	4	0
				based on coil type BG		
				12W ac	20W dc	Min
367236	G 3/8"	0.70	6.0	1.5	1.2	0
367242	G 1/2"	2.85	15.0	0.2	0.09	0
367248	G 3/4"	4.50	20.0	0.15	0.055	0
367254	G 1"	8.00	25.0	0.07	0.035	0

Coils type BA/BG see next page.

SOLENOID VALVES

Danfoss type BA/BG coils for direct operated valve



Technical data	Coil type BA - IP00 9W ac/15W dc	Coil type BG - IP67 12W ac/20W dc
Power consumption:		
Cut in:	AC: 39VA	AG: 55VA
Holding:	AC: 19VA(9W), DC: 15W	AC: 26VA(12W), DC: 20W
Connection:	spade terminals	terminal box Pg 13.5
Enclosure:	IP00	IP67
With cable plug:	IP65	N/A

Cat. no.	Supply voltage	Type BA (IP00)
367402	12V DC	BA012D
367406	24V DC	BA024D
367412	24V 50Hz	BA024A
367424	24V 60Hz	BA024B
367436	115V 60Hz	BA115B
367448	230V 50Hz	BA230A
367460	220V 60Hz	BA220B
367472	380V 50Hz/440V 60Hz	BA380A
367512	Cable plug to IP65 enclosure	

Cat. no.	Supply voltage	Type BG (IP67)
367602	12V DC	BG012D
367606	24V DC	BG024D
367612	24V 50Hz	BG024A
367624	24V 60Hz	BG024B
367636	110V 60Hz	BG110B
367648	230V 50Hz	BG230A
367660	220V 60Hz	BG220B
367672	380V 50Hz/440V 60Hz	BG380A

PANEL METERS



Ammeters with 90° scale, for panel mounting 72 x 72 mm

Cat. no.	Scale	Overload scaling	For use
370112	10A	20A	AC - Direct
370124	15A	30A	AC - Direct
370136	25A	50A	AC - Direct
370148	60A	120A	AC - Direct
370212	25A	50A	AC-Current transformer 5 A
370224	60A	120A	AC-Current transformer 5 A
370236	100A	200A	AC-Current transformer 5 A
370248	200A	400A	AC-Current transformer 5 A
370260	400A	800A	AC-Current transformer 5 A
370312	25A	---	DC - Shunt 60mV
370324	60A	---	DC - Shunt 60mV
370336	100A	---	DC - Shunt 60mV
370348	150A	---	DC - Shunt 60mV
370360	250A	---	DC - Shunt 60mV

Voltmeters with 90° scale, for panel mounting 72 x 72 mm

Cat. no.	Scale	AC or DC
370512	0 - 40 V	AC
370524	0 - 250 V	AC
370536	0 - 400 V	AC
370548	0 - 500 V	AC
370612	0 - 40 V	DC
370624	0 - 60 V	DC
370636	0 - 150 V	DC
370648	0 - 250 V	DC

PANEL METERS



Frequency meters with 90° scale, for panel mounting 72 x 72 mm

Cat. no.		Scale Hz	Voltage
370812		55-65 Hz	110 V
370824		45-55 Hz	230 V
370836		55-65 Hz	220 V
370848		45-55 Hz	400 V
370860		55-65 Hz	440 V



Fig. 1



Fig. 2

AC Current Transformers for Ammeters

Cat. no.		C.T. ratio	Power	Fig.
370912		25:5 A	0.5 VA	1
370924		60:5 A	2.0 VA	1
370936		100:5 A	2.0 VA	1
370948		200:5 A	4.0 VA	1
370960		400:5 A	5.0 VA	1

DC Shunts for Ammeter

Cat. no.		Description		Fig.
371112		Shunt 25A/60m V		2
371124		Shunt 60A/60m V		2
371136		Shunt 100A/60m V		2
371148		Shunt 150A/60m V		2
371160		Shunt 250A/60m V		2



Hour meter, for panel mounting 48 x 48 mm

Cat. no.	Description
371212	Hour meter 12-36V DC
371218	Hour meter 24V 50Hz
371224	Hour meter 24V 60Hz
371230	Hour meter 110V 60Hz
371236	Hour meter 220V 50Hz
371242	Hour meter 220V 60Hz
371248	Hour meter 380V 50Hz
371254	Hour meter 440V 60Hz
371266	Adaptor for surface and DIN mounting
371278	Adaptor 72 x 72 mm for Hour meter 48 x 48 mm



Victron Phoenix inverter with a output of 230V 50Hz*

Cat no.	Type	Input voltage (DC)	Continuous power (W)	30-minute power (W)	Start up power (W)
375124	12/600	12	500	525	900
375148	12/1600	12	1300	1600	2300
375224	24/900	24	900	1100	2500
375248	24/3000	24	2500	3000	6000

* 120V 60Hz and 220V 60 Hz on request



Victron Phoenix/Skylia battery charger with a input of 185-264V 45-65Hz*

Cat no.	Type	Output voltage	Accessory battery charging current Adc	Start-up battery charging current Adc
375524	12/30*	12	30	4
375572	24/50	24	50	4
375596	24/100	24	100	4

* Input 90-265V 45-65Hz

Other Victron Energy types on request



Victron Phoenix Combi Multi inverter/charger
Inverter part with a output of 230V 50Hz*

Cat no.	Type	Input voltage (DC)	Continuous power (W)	30-minute power (W)	Start up power (W)
375724	12/1600/70	12	1300	1600	2300
375772	24/3000/70	24	2500	3000	6000

Battery charger part with a input of 185-265V 45-65Hz*

Cat no.	Type	Output voltage	Accessory battery charging current Adc	Start-up battery charging current Adc
	12/1600/70	12	70	4
	24/3000/70	24	70	4

* Can be adjusted to 60Hz; 120V 60Hz on request

Other Victron Energy types on request

IGNITION MATERIAL



Fig. 1



Fig. 2



Fig. 3



Fig. 4

High voltage cable, test voltage 6000V

Cat. no.	Number of conductors x mm ²	Outside dia mm	Fig.
150212	1 x 1,5 mm ²	7	1

Spark-plug

Cat. no.	Description	Fig.
377212	Protection cap, angle 90° isolated	2
377218	Connection plug, straight non-isolated	3

Ignition electrode for boilers, porcelain insulated

Cat. no.	Lenght porcelain mm	Diameter porcelain mm	Fig.
377272	68	14	4
377284	127	11	4
377296	127	14	4

CHRISTMAS LIGHTINGS



Christmas lightings

Cat. no.	Description	Voltage	Lamps
378112	X-mas Light set candle type lamps, clear	110	16
378172	X-mas Light set mini type lamps, clear	110	35
378524	X-mas Light set candle type lamps, clear	220	16
378530	X-mas Light set candle type lamps, coloured	220	16
378636	X-mas Light set mini type lamps, clear	220	35
378640	X-mas Light set mini type lamps, coloured	220	35
378652	X-mas Light set mini type lamps, clear	220	50
378656	X-mas Light set mini type lamps, coloured	220	50

Spare lamps for Christmas Lightning sets

Cat no.	Type of Lamp	Voltage	Colour	For lamp set	Set of
378908	Candle type	7	Clear	110V 16-lamps	3 pcs
378924	Candle type	14	Clear	220V 16-lamps	3 pcs
378866	Mini type	2,5	Clear	110V 35-lamps	5 pcs
378870	Mini type	2,5	Coloured	110V 35-lamps	5 pcs
378852	Mini type	5	Clear	220V 50-lamps	5 pcs
378856	Mini type	5	Coloured	220V 50-lamps	5 pcs
378836	Mini type	7	Clear	220V 35-lamps	5 pcs
378840	Mini type	7	Coloured	220V 35-lamps	5 pcs

TELEPHONES AND ACCESSORIES



Fig. 1



Fig. 2

Telephones		
Cat. no.	Description	Fig.
393112	Telephone Wall type, with tone/pulse switch	1
393124	Telephone Desk/wall type, with tone/pulse switch	2



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Telephones accessories		
Cat. no.	Description	Fig.
393572	Telephone Receptacle 4-pole, flush mounting	1
393596	Telephone Receptacle 4-pole, surface mounting	2
393636	Telephone Plug 4-pole	3
393712	Telephone Cable drum with 7 mtr and plug 4-pole	4
393718	Telephone Cable drum with 15 mtr and plug 4-pole	4

LEAD ACID BATTERIES LAYOUTS/TERMINALS

6 V



0



1



2



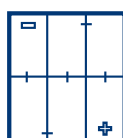
3



0



1



2



3

12 V



4



5



6



7



8



1



2



3



4



20



GENERAL TECHNICAL INFORMATION

Explanation of IP level of protection					
1st characteristic figure: protection against entry of solid bodies.			2nd characteristic figure: protection against penetration of water.		
0	None		0	None	
1	Solid bodies with size minimum over 50mm		1	Condensation (falling drops vertical)	
2	Solid bodies with size minimum over 12.5mm		2	Condensation (falling drops with angle up to 15°)	
3	Threadlike bodies with diameter over 2.5 mm		3	Sprinkling with angle up to 60° from the vertical	
4	Threadlike bodies with diameter over 1 mm		4	Splashing from all the directions	
5	Dust (partial protection)		5	Jets from all the directions	
6	Dust (total protection)		6	Water protection sea-storms	
			7	Immersion temporary	
			8	Immersion permanent	

Fluorescent Colour Conversion tables					
Colour Temp. °K	Philips	Osram	GE	Sylvania	Colour
4100	25	25	25	UW 125	Universal White
2950	29	30	29	WW 129	Warm White
4200	33	20	33	CW 133	Cool White
3400	35	23	35	W 135	White
3700	36	76	—	N 136	Natural
6200	54	10	54	D 154	Daylight
2700	827	41	827	HLX 182	Homelight de Luxe
3000	830	31	830	WWX 183	Warm White de Luxe
4000	840	21	840	CWX 184	Cool White de Luxe
6000	865	11	860	DX 186	Daylight de Luxe
2700	927	42	—	—	Homelight de Luxe
3000	930	32	930	WWX 193	Warm White de Luxe
3800	940	22	940	CWX 194	Cool White de Luxe
5000	950	12	—	—	Natural de Luxe
6500	960	72	—	—	Natural de Luxe

LAMP CHARACTERISTICS TABLE

Mercury Vapours							
ILCOS	ZVEI code	Philips	Osram	GE	Sylvania	Japanese	Base
QU	HME	HPL-N	HQL	H	HSL-BW	HF	E27/E40
---	HMR	HPL-RN	HQL-R	H....R	HSR-BW	HFR	E27/E40

Metal Halide							
ILCOS	ZVEI code	Philips	Osram	GE	Sylvania	Japanese	Base
ME	HIE	HPI	HQI-E	---	HSI-SX	---	E40
MT	HIT	HPI-T	HQI-T	SPL	HSI-T	---	E40
MT	---	CDM-T	HQI-T	CMH....T	HSI-T	---	G12
MD	HIT-DE	MHN(W)-TD	HQI-TS	ARC....TD	HSI-TD	---	RX7s

Sodium High Pressure							
ILCOS	ZVEI code	Philips	Osram	GE	Sylvania	Japanese	Base
SE	HSE	SON	NAV-E	LU....D	SHP	NHF	E27/E40
ST	HST	SON-T	NAV-T	LU....T	SHP-T	NHT	E27/E40
SD	HST-DE	---	NAV-TS	LU....TD	SHP-TD	---	RX7s

Sodium Low Pressure							
ILCOS	ZVEI code	Philips	Osram	GE	Sylvania	Japanese	Base
---	LST	SOX	NA	SOX	SLP	---	BY22

Blended Light Mercury Vapours (self-ballasted)							
ILCOS	ZVEI code	Philips	Osram	GE	Sylvania	Japanese	Base
---	---	ML	HWL	ML	HSB-BW	BHF	E27/E40
---	---	ML-R	HWLR	ML-R	HSB-R	BHRF	E27/E40

Compact Fluorescent							
ILCOS	ZVEI code	Philips	Osram	GE	Sylvania	Japanese	Base
FSD	TC	PL-S 2pin	DULUX S	BIAX S	LYNX S	---	G23
FSD	---	PL-S 4pin	DULUX S/E	BIAX S/E	LYNX SE	---	2G7
FSQ	TC-D	PL-C 2pin	DULUX D	BIAX D 2pin	LYNX D	---	G24d-1/3
FSQ	TC-T/E	PL-C 4pin	DULUX D/E	BIAX D 4pin	LYNX DE	---	G24q-1/3
FSD	TC-L	PL-L	DULUX L	BIAX L	LYNX L	---	2G11
FSS	---	---	DULUX F	---	LYNX F	---	2G10
FBT	DS-E	PL-E	DULUX EL	FLE .. DBX	MINI-LYNX	---	E14/E27

CONVERSION TABLES

Conversion Table of AWG

Preferred sizes of conductors					
AWG	mm ²	circ.mills	AWG	mm ²	circ. mills
4/0	107.2	211.600	10	5.27	10.380
	95.0	187.000		4.0	7.890
3/0	85.0	167.800	12	3.31	6.530
	70.0	138.000		2.5	4.930
2/0	67.5	133.100	14	2.08	4.110
1/0	53.4	105.600		1.5	2.960
	50.0	98.700	16	1.31	2.580
1	42.4	83.690		1.0	1.970
	35.0	69.100		0.90	1.773
2	33.6	66.360	18	0.82	1.620
3	26.7	52.620		0.80	1.578
	25.0	49.300		0.75	1.480
4	21.2	41.740		0.60	1.182
	16.0	31.600	20	0.51	1.020
6	13.3	26.240		0.50	987
	10.0	19.700	22	0.32	640
8	8.4	16.510	24	0.20	404
	6.0	11.800	26	0.13	253

Conversion Table of Pressure

bar	kg/cm ³	lb/in ²	S.B.P.	Mercurial m	Column in	Water Column	
						m	ft
1	1.01970	14.5	0.98690	0.75010	29.53	10.197	33.48
0,98070	1	14,22	0,96780	0,73560	28,96	10,000	32,81
0,06895	0,07031	1	0,06805	0,05171	2,03600	0,70310	2,30700
1,01330	1,03320	14,7	1	0,76000	29,92	10,33	33,90
1,33320	1,35950	19,34	1,31580	1	39,37	10,60	44,60
0,03386	0,03453	0,49120	0,03342	0,02540	1	0,34540	1,13300
0,09806	0,10000	1,42200	0,09678	0,07355	2,89600	1	3,28100
0,02989	0,03048	0,433550	0,02950	0,02242	0,88270	0,30480	1

S.B.P. = Standard Barometric Pressure

Conversion Table of Speed

m/s	km/h	kn	ft/s	mile/h
1	3,6000	1,9440	3,2810	2,2370
0,2778	1	0,5400	0,9113	0,6214
0,5144	1,8520	1	1,6880	1,1510
0,3048	1,0970	0,5925	1	0,6818
0,4470	1,6090	0,8690	1,4670	1

CONVERSION TABLES

Conversion Table of Length

cm	meter	inch	foot	yard	mile	km	knot
1	0,01000	0,39371	0,03281	0,01094	1	1,60931	0,86842
100	1	39,371	3,28081	1,09363	0,62138	1	0,53962
2,53995	0,02540	1	0,8333	0,02778	1,15151	1,85315	1
30,4794	0,30479	12	1	0,33333	---	---	---
91,4383	0,91438	36	3	1	---	---	---

LENGTH

Symbol	When you Know	Multiply By	To Find	Symbol
in	inches	2,54	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0,9	meters	m
mi	miles	0,04	kilometers	km
mm	millimeters	0,04	inches	in
cm	centimeters	0,4	inches	in
m	meters	3,3	feet	ft
m	meters	1,1	yards	yd
km	kilometers	0,6	miles	mi

LENGTH

Nautical Miles	Kilometers	Kilometers	Nautical Miles
1	1,8532	1	0,5396
2	3,7064	2	1,0792
3	5,5596	3	1,6188
4	7,4128	4	2,1584
5	9,2660	5	2,6980
6	11,1190	6	3,2375
7	12,9720	7	3,7771
8	14,8250	8	4,3167
9	16,7880	9	4,8563
10	18,5320	10	5,3959
20	37,064	20	10,792
30	55,596	30	16,188
40	74,128	40	21,584
50	92,660	50	26,980
60	111,190	60	32,375
70	129,720	70	37,771
80	148,250	80	43,167
90	167,880	90	48,563

CONVERSION TABLES

AREA				
Symbol	When you Know	Multiply By	To Find	Symbol
in ²	square inches	6,5	sq. centimeters	cm ²
ft ²	square feet	0,09	square meters	m ²
yd ²	square yards	0,8	square meters	m ²
mi ²	square miles	2,6	sq. kilometers	km ²
	acre	0,4	hectares (10.000m ²)	ha
cm ²	sq. centimeters	0,16	square inches	in ²
m ²	square meters	1,2	square yards	yd ²
km ²	sq. kilometers	0,4	square miles	mi ²
ha	hectares (10.000m ²)	2,5	acre	

Conversion Table of Square Measure							
m ²	in ²	ft ²	yd ²	acre	mile ²	hectare	km ²
1	1550.05	10,7637	1,19603	1	0,00156	0,40467	0,00405
0,0 ³ 645	1	0,00694	0,0 ³ 772	640	1	258,989	2,58989
0,09290	144	1	0,11111	2,47114	0,00386	1	0,01000
0,83609	1296	9	1	247,114	0,38612	100,000	1

*0,0³645 means 0,000645

MASS (WEIGHT)				
Symbol	When you Know	Multiply By	To Find	Symbol
oz	ounces	28	grams	g
lb	pounds	0,45	kilograms	kg
	short tons	0,9	tonnes	t
	(2000 lbs.)			
	long tons	1,01	tonnes	t
	(2240 lbs.)			
g	grams	0,035	ounce	oz.
kg	kilograms	2,2	pounds	lb
t	tonnes	1,1	short tons	
	(1000 kg)			
t	tonnes	0,98	long tons	
	(1000 kg)			

*0,0⁵787 means 0,0005787

CONVERSION TABLES

Cubic Measure				Liquid			
m ²	in ²	ft ²	yd ³	English gallon	American gallon	in ³	liter
1	61023,4	35,3137	1,30801	1	1,20100	277,393	4,54596
0,0 ⁴ 164	1	0,0 ³ 579	0,0 ² 14	0,8327	1	231	3,78543
0,02831	1728	1	0,03704	0,00361	0,00433	1	0,01639
0,76450	46656	27	1	0,22022	0,26419	61,0128	1

*0,0⁴164 means 0,0000164

VOLUME				
Symbol	When you Know	Multiply By	To Find	Symbol
tsp.	teaspoons	5	milliliters	ml
tbsp.	tablespoons	15	milliliters	ml
fl oz.	fluid ounces	30	milliliters	ml
c	cups	0,24	liters	l
pt.	pints	0,47	liters	l
qt	quarts	0,95	liters	l
gal.	gallons (U.S.)	3,8	liters	l
gal.	gallons (Imp)	4,5	liters	l
ft ³	cubic feet	0,028	cubic meters	m ³
yd ³	cubic yards	0,76	cubic meters	m ³
ml	milliliters	0,03	fluid ounces	fl. oz.
l	liters	2,1	pints	pt.
l	liters	1,06	quarts	qt
l	liters	0,26	gallons (U.S.)	gal.
l	liters	0,22	gallons (Imp)	gal.
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1,3	cubic yards	yd ³

Conversion Table of Density					
g/cm ³	lb/in ³	lb/ft ³	English t/yd ³	English lb/gall	American lb/gall
1	0,03613	62,43	0,7525	10,02	8,345
27,68	1	1728	20,83	277,4	231
0,01602	0,0 ³ 5787	1	0,01205	0,1605	0,1337
1,329	0,04801	82,96	1	13,32	11,09
0,0998	0,003605	6,229	0,7508	1	1,201
0,1198	0,004329	7,481	0,09017	0,8327	1

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100636	169	101484	173	102136	177	102796	180	105030	183
		101512	173	102142	177	102804	180	105512	183
100810	169	101524	173	102148	177	102812	180	105518	183
100814	169	101536	173	102154	177	102820	180	105524	183
100816	169	101542	173	102160	177	102828	180	105530	183
100824	169	101560	173	102166	177	102836	180	105612	183
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				102230	177	102860	180	105630	183
101010	171	101636	174	102254	177	102868	180		
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101022	171	101666	174	102312	178	102884	180	107018	185
101028	171	101672	174	102318	178	102892	180	107024	185
101042	171	101678	174	102324	178	102900	180	107030	185
101048	171	101684	174	102330	178	102908	180	107030	185
101054	171	101690	174	102336	178	102916	180	107118	185
101060	171	101696	174	102342	178	102924	180	107124	185
101066	171	101712	174	102348	178	102932	180	107130	185
101072	171	101718	174	102354	178	102940	180	107206	185
101078	171	101760	174	102366	178	102948	180	107212	185
101084	171	101766	174	102412	178			107218	185
101142	171	101772	174	102418	178	103006	181	107224	185
101148	171			102424	178	103012	181	107230	185
101154	171	101812	175	102430	178	103018	181	107312	185
101160	171	101818	175	102436	178	104012	181	107318	185
101166	171	101824	175	102442	178			107324	185
101172	171	101830	175	102448	178	104024	181	107330	185
101178	171	101836	175	102454	178	104030	181	107412	185
101184	171	101842	175	102460	178	104036	181	107418	185
		101872	175	102466	178	104060	181	107424	185
101206	172	101878	175			104066	181	107430	185
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