

Description

Centric butterfly valve with elastomer liner for liquids and gases in the industrial range, general services, water treatment, ...

Product features

- Body construction D1 Wafer DN 25-900
D3 Lug DN 25-400
D4 U-section DN 150-1600
- Face to face dimension according to ISO 5752/20, EN 558-1/20
- Top flange according to EN ISO 5211
- Max. working pressure 16 bar
- Rating PN6, PN10, PN16, ANSI cl. 150
- Temperature range $-20^{\circ}\text{C} \div 140^{\circ}\text{C}$ according to material
- Tightness test according to EN 12266-1/P12
leakage rate A, test fluid water



The butterfly valves DESPONIA meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.



**D1
Wafer**



**D3
Lug**

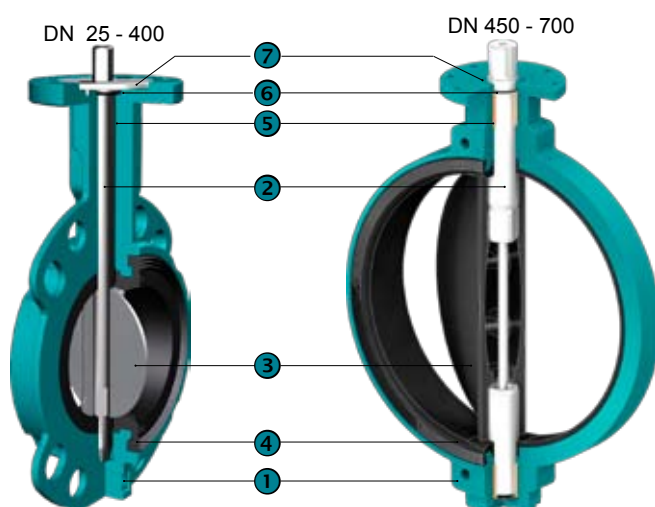


**D4
U-section**

Fluids under control.

Construction

1	Body (extended valve neck allowing insulation)
2	Blow out proof shaft with position indication
3	Disc
4	Exchangeable liner with sealing grooves on the tightening face
5	Shaft bearing (DN25-400 Resicoat®, DN450-1600 Bronze)
6	External shaft sealing
7	Retaining washer (blow out protection)



DN 750 - 1600



Cv values m³/h

opening angle of the valve

Sizes	20°	30°	40°	50°	60°	70°	80°	90°
32		1,5	5	10	15	26	34	40
40		2,7	8,5	16	25	37	46	50
50	2	7	15	28	45	68	88	100
65	3	11	24	48	85	138	180	210
80	8	22	50	83	134	230	312	360
100	15	35	70	130	225	410	585	650
125	28	70	135	230	360	600	920	1050
150	33	95	205	320	580	980	1410	1620
200	60	175	355	580	910	1600	2450	2800
250	132	340	590	940	1480	2550	3950	4480
300	200	505	890	1450	2100	3800	5960	6800
350	280	680	1200	2050	3150	5050	8100	9200
400	365	860	1500	2490	3980	6600	10200	11700
450	465	1080	1900	3150	5050	8700	13300	15200
500	580	1200	2300	3740	6150	11000	16800	18900
600	820	1600	2780	5200	8940	14500	23500	26800
700	890	2050	3450	6050	11050	18800	31500	37100
800	1300	2550	4950	8750	14200	23500	39500	48500
900	1650	3300	6400	11800	19400	31500	52500	61300
1000	2150	4250	8200	15100	23500	39400	65500	80500
1200	4000	7500	12500	19800	34000	55400	98300	119200
1400	5200	10120	18200	32500	51500	89500	142000	162000
1600	7100	14210	26050	45000	71200	118500	196200	228500

Type code

D1	0100	3	3	2AR	4A	2AR	E	
①	②	③	④	⑤	⑥	⑦	⑧	
①	Type	D1	Wafer					DN25-900
		D3	Lug body					DN25-400
		D4	U-section body					DN150-1600
②	Nominal diameter	0025-1600	mm					
③	Working pressure	0	2,5 bar					
		1	6 bar					
		*	10/16bar, see table below					
④	Rating	**	PN6/10/16 see table below. Other ratings on request					
⑤	Body	1AE	Cast iron EN-GJL-250, Polyurethan coated 70µ				< 140°C	DN450-1600
		2AR	Ductile iron EN-GJS-400-15, Epoxy (Resicoat®) coated 200µ				< 110°C	DN25-400
		2AE	Ductile iron EN-GJS-400-15, Polyurethan coated 70µ				< 140°C	DN450-1600
		2AN	Ductile iron EN-GJS-400-15, Polyurethan coated 250µ				< 110°C	
⑥	Shaft	4A	Stainless steel 1.4028, AISI420					
		4L	Stainless steel 1.4542 / 17-4PH					
⑦	Disc	2AR	Ductile iron EN-GJS-400-15, Rilsan coated 250µ				< 90°C	DN25-700
		2AE	Ductile iron EN-GJS-400-15, Polyurethan coated 70µ				< 120°C	DN800-1600
		2AC	Ductile iron EN-GJS-400-15, Chrome coated					DN25-600
		2AH	Ductile iron EN-GJS-400-15, Halar coated min.600µ				< 70°C	
		4C0	Stainless steel 1.4408, AISI316					
		4CP	Stainless steel 1.4408, AISI316, polished					DN25-600
		4I0	Super Duplex steel 1.4573					
		4S0	Super austenitic steel 1.4588					
		5C0	Alubronze ASTM B148 C95800 / G-Cu Al 10 Ni					
7H0	Hastelloy ASTM A494 CW-12MW							
⑧	Liner	E	EPDM		< 95°C	pmax DN25-1200 = 16 bar, DN1400-1600 = 10 bar		
		EE	EPDM DVGW, ACS, WRAS, EN681-1		< 80°C	pmax DN25-1200 = 16 bar, DN1400-1600 = 10 bar		
		EC	EPDM HT		< 130°C	pmax DN25-1200 = 16 bar, DN1400-1600 = 10 bar		
		N	Nitril (NBR)		< 100°C	pmax DN25-300 = 16 bar, DN350-1600 = 10 bar		
		H	CSM (Hypalon)		< 125°C	pmax DN25-300 = 16 bar, DN350-1600 = 10 bar		
		V	FPM (Viton)		< 200°C	pmax DN25-300 = 16 bar, DN350-1600 = 10 bar		
			Other materials and white liners on request					

Other executions on request !

* Working pressure (Code)

Body material	DN→	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
EN-GJL-250 (1A)	6 bar																								1
	10 bar																								
EN-GJS-400-15 (2A)	10 bar																								
	16 bar																								

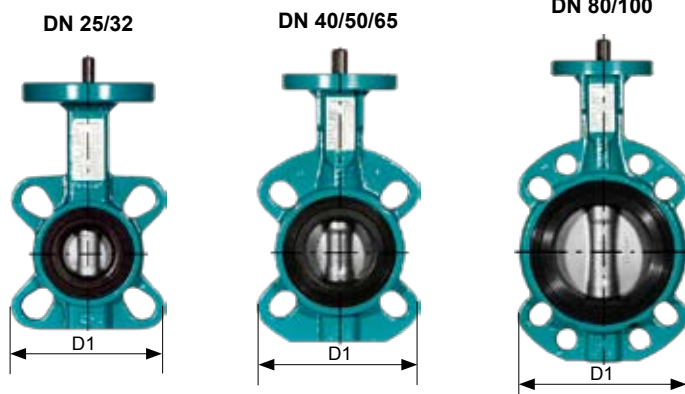
**Rating (Code)

DESPONIA	DN→	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
 D1	PN6																								
	PN10																								
	PN16																								
 D3	PN10																								
	PN16																								
 D4	PN10																								
	PN16																								

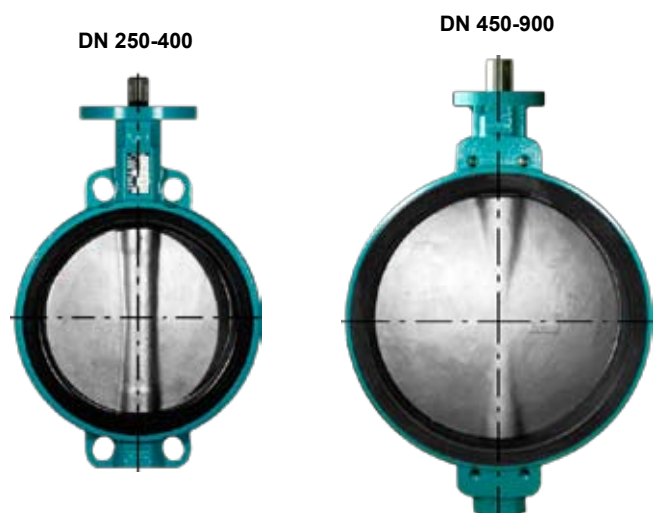
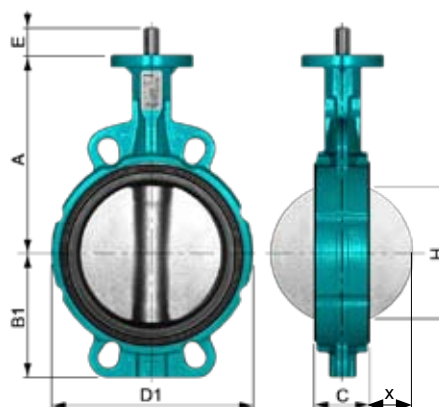
Max. pressure and temperature limits of application are dependent of the working conditions.

Dimensions

D1 Wafer, DN25-800



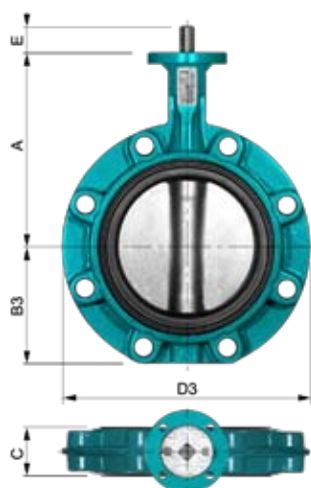
DN 125/150/200



DN	A	B1	C	D1	E	H*	x*	[kg]
(25)32	110	51	30	101	19	19	3	1,4
40	130	54	33	108	19	28	6	2
50	135	72	43	120	19	32	6	3
65	150	82	46	138	19	50	11	3,6
80	160	92	46	142	19	69	19	4
100	180	102	52	162	19	88	26	5,5
125	195	120	56	189	19	115	36	7,5
150	210	133	56	214	19	141	48	8,6
200	240	163	60	270	25	194	72	12,7
250	279	196	68	324	32	240	91	22,2
300	315	232	78	378	32	290	112	30,8
350	330	257	80	425	40	330	130	41,5
400	365	292	102	475	40	377	145	57,2
450	397	355	113	538	65	425	164	95
500	437	393	126	595	65	474	182	125
600	522	464	153	695	80	569	218	180
700	565	503	168	800	80	660	257	280
800	627	577	190	908	80	774	304	387
900	696	643	204	1015	80	855	337	502

* When using plastic stubs please check dimension H/x to avoid damaging of disc

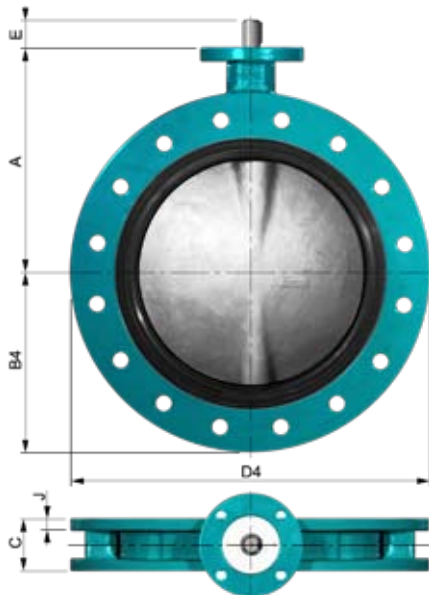
D3 Lug body, DN 25-400



DN	A	B3	C	D3	E	H*	x*	[kg]
25	110	51	30	101	19	19	3	1,4
32	110	51	30	101	19	19	3	1,4
40	130	54	33	108	19	28	6	2
50	135	72	43	116	19	32	6	3,2
65	150	82	46	131	19	50	11	4
80	160	92	46	188	19	69	19	6,1
100	180	102	52	219	19	88	26	8,5
125	195	120	56	248	19	115	36	10
150	210	133	56	274	19	141	48	11
200	240	163	60	332	25	194	72	19,6
250	279	196	68	402	32	240	91	28,7
300	315	232	78	472	32	290	112	41,2
350	330	257	80	520	40	330	130	55
400	365	292	102	584	40	377	145	75

Dimensions

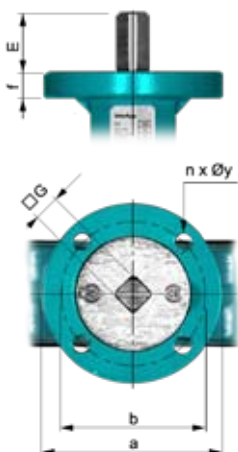
D4 U-section body, DN 150-1600



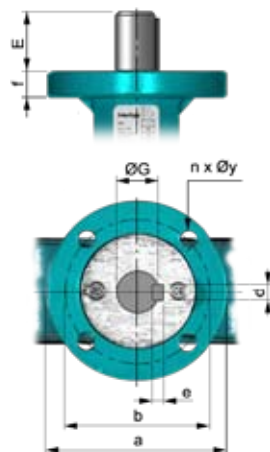
DN	A	B4	C	D4	H*	x*	J	E	[kg]
150	210	133	56	285	141	48	10	19	15
200	240	163	60	340	194	72	12,5	25	19,5
250	279	196	68	406	240	91	15	32	30,5
300	315	232	78	482	290	112	15	32	44
350	330	257	78	533	330	130	18	40	59
400	365	292	102	597	377	145	20	40	82
450	397	355	114	640	425	164	24	65	118
500	437	393	127	715	474	182	26	65	175
600	522	464	154	840	569	218	28,5	80	260
700	565	503	165	927	660	257	31,5	80	345
750	590	541	170	985			34	80	435
800	627	577	190	1060	774	304	36,5	80	510
900	696	643	204	1170	855	337	38	100	660
1000	745	693	216	1255	960	383	44	100	790
1100	820	738	218	1395	1054	429	44	100	850
1200	881	806	254	1485	1149	462	47	120	1180
1400	990	908	280	1746	1336	543	40	120	1700
1600	1117	1048	318	1924	1553	634	50	155	2600

Top flange according to ISO 5211

DN 25-400



DN 450-1600



DN	E	G	d	e	f	ISO	a	b	n x Øy
25-40	19	□ 8	-	-	12	F07	90	70	4 x 9
50-100	19	□ 11	-	-	12	F07	90	70	4 x 9
125-150	19	□ 14	-	-	12	F07	90	70	4 x 9
200	25	□ 17	-	-	12	F07	90	70	4 x 9
250-300	32	□ 22	-	-	18	F10/F12	155	102/125	4 x 10 / 4 x 13
350	40	□ 22	-	-	18	F12	155	125	4 x 13
400	40	□ 27	-	-	18	F12	155	125	4 x 13
450-500	65	Ø 45	14	9	25	F14	175	140	4 x 18
600	80	Ø 70	20	12	25	F16	220	165	4 x 22
700	80	Ø 70	20	12	25	F25	300	254	8 x 18
(750)	80	Ø 70	20	12	30	F25	300	254	8 x 18
800	80	Ø 70	20	12	30	F25	300	254	8 x 18
900	100	Ø 80	22	14	30	F30	350	298	8 x 22
1000	100	Ø 80	22	14	30	F30	350	298	8 x 22
(1100)	100	Ø 80	22	14	30	F30	350	298	8 x 22
1200	120	Ø 100	28	16	30	F30	350	298	8 x 22
1400	120	Ø 120	32	18	35	F30	350	298	8 x 22
1600	155	Ø 130	32	18	40	F35	418	356	8 x 33,5

When mounting the valve at the end of a line please note:

- Body type	D3 possible without counter flange
- Body material	D4 only with counter flange
- Medium	2A (EN-GJS-400-15)
- Max. working pressure (with 16 bar disc)	only for liquids, 10÷30°C
	DN25-200 10 bar
	DN250-600 6 bar
	DN700-1400 2,5 bar

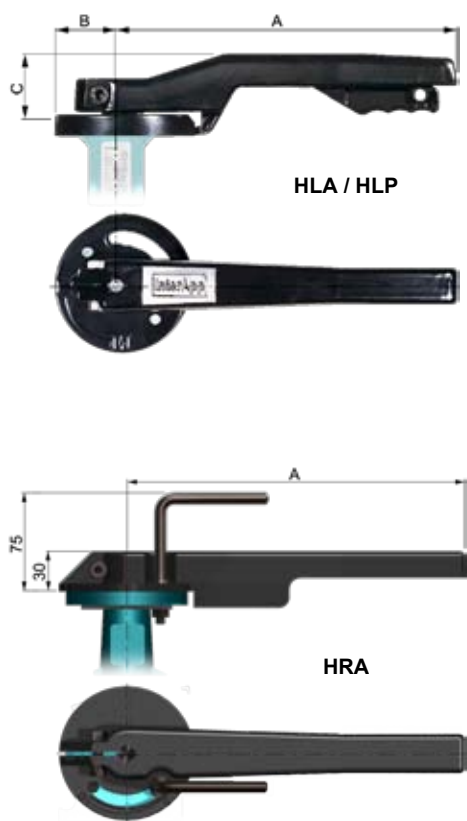
- no water hammer !!!

please consult our document "Flanges"



Dimensions

Handlever (DN25-300)



Aluminium, Epoxy coated

DN		A	B	C	[kg]
25-40	HLA.F0708.180	180	45,5	41	0,4
50-65	HLA.F0711.180	180	45,5	41	0,4
80-100	HLA.F0711.240	243	45,5	43	0,5
125-150	HLA.F0714.340	340	45,5	51	0,6
200	HLA.F0717.340	340	45,5	51	0,6
250-300	HLA.F1222.500	500	77,5	40	2,2

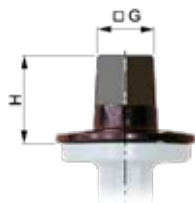
Polyamide PA 6, 30% glass fibers reinforced

DN		A	B	C	[kg]
25-40	HLP.F0708.240	243	45,5	41	0,3
50-65	HLP.F0711.240	243	45,5	41	0,3
80-100	HLP.F0711.240	243	45,5	43	0,3
125-150	HLP.F0714.340	340	45,5	51	0,5
200	HLP.F0717.340	340	45,5	51	0,5

Aluminium, Epoxy coated

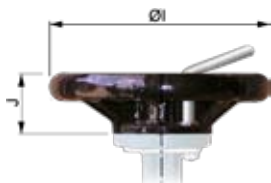
DN		A	[kg]
25-40	HRA.F0708.180	180	0,4
50-65	HRA.F0711.180	180	0,4
80-100	HRA.F0711.250	250	0,5
125-150	HRA.F0714.340	340	0,6
200	HRA.F0717.340	340	0,6

Plumber square (DN25-200)



DN		G	H
25-40	PO.F0708.30	30	65
50-100	PO.F0711.30	30	65
125-150	PO.F0714.30	30	65
200	PO.F0717.30	30	65

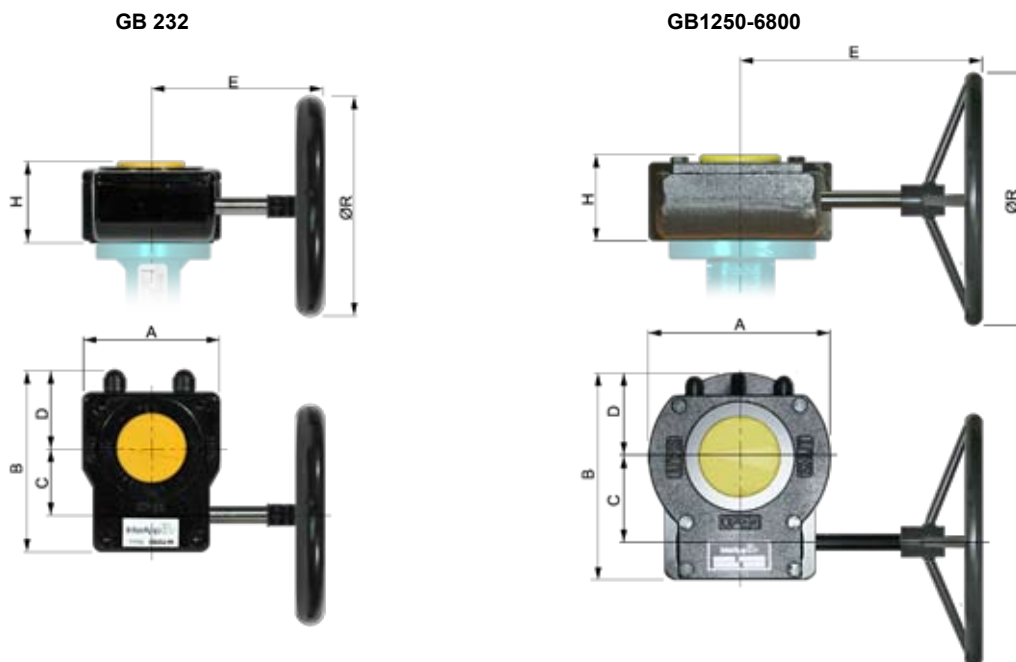
Handwheel (DN25-150)



DN		I	J
25-40	HW.F0708.200	200	52
50-100	HW.F0711.200	200	52
125-150	HW.F0714.250	250	52

Dimensions

Gearbox



For liquids 20°C - 80°C , p_{max} DN25-300 ...16 bar, DN350-1600 ... 10 bar

DN		A	B	C	D	E	H	ØR	n*	[kg]
25-40	GB232-05.F05-F0711.100(R08)	80	114	42,5	48	121	53	100	10	0,8
50-100	GB232-05.F05-F0711.100	80	114	42,5	48	121	53	100	10	0,8
125-150	GB232-05.F05-F0714.100	80	114	42,5	48	121	53	100	10	0,8
200	GB232-06.F05-F0717.160	80	114	42,5	48	180	59	160	10	0,9
250-300	GB232-08.F07-F1022.250	100	131	50	56	216	67	250	9,25	1,55
350	GB232-13.F10-F1222.300	175	209	80	83	361	84	300	10	5,4
400	GB232-13.F10-F1227.500	175	209	80	83	396	84	500	10	5,4
450	GB232-14.F1445.600	175	209	80	83	396	84	600	10	5,4
500	GB1250N.F1445.500	220	258	105	110	347	100	500	13,75	22
600	GB1250N.F1665.700-SH100	220	258	105	110	447	100	700	13,75	22
700	GB1950N/HR.F2570.600	285	402,5	211	142,5	387	155	600	21	32
750	GB1950N/HR.F2570.700-SH100	285	402,5	211	142,5	487	155	600	21	32
800	GB1950N/HR.F2570.700-SH100	285	402,5	211	142,5	487	155	700	21	32
900	GB6800N/SP4.F3080.500	370	482	263	170	500	160	500	79,25	70
1000	GB6800N/SP4.F3080.500	370	482	263	170	500	160	500	79,25	70
1100	GB6800N/SP4.F3080.500	370	482	263	170	500	160	500	79,25	70
1200	GB6800N/SP4.F30100.500	370	482	263	170	500	160	500	79,25	70
1400	GBA250G/SP9.F30120.800	510	725	431	235	629	169	800	176	225
1600	GBA250G/SP9.F35130.800	510	725	431	235	629	169	800	176	225

* n = Handwheel turns ON/OFF

Material:

GB232 : Aluminium, Polyurethan coated
GB880-GB6800 : Cast iron, Polyurethan coated

Wir erklären, dass die nachfolgend aufgeführten Armaturen die Sicherheitsanforderungen der Druckgeräterichtlinie 97/23/EG erfüllen.

Beschreibung der Armaturen

Description: Butterfly Valve

- Desponia DN 32 – 1400

- Desponia *plus* DN 32 – 600

Einstufung der Armatur

Classification of the valves

Absperrklappen / *Butterfly valves* Desponia DN 32- DN 1400

Absperrklappen / *Butte valves* Desponia plus DN 32-600

Fluide Gruppe 1 / *Fluids group 1*

Gase / *Gases*

DN25/32-150 PN 2.5-20

DN200 PN2.5-16

DN250-350 PN2.5-10

Flüssigkeiten / *Liquids*

DN300 PN20

DN350-500 PN16-20

DN600-800 PN10-20

DN900-1200 PN 6-20

DN 1400 PN 2.5-20

Fluide Gruppe 2 / *Fluids group 2*

Gase / *Gases*

DN200 PN20

DN250 PN16-20

DN300 PN16

DN400-500 PN2.5-10

DN600-800 PN2.5-6

DN900-1400 PN2.5

Konformitätsbewertungsverfahren

Conformity Assessment Procedure

Module A1

Benannte Stelle für die Kontrolle

Notified Body for the inspection

TUV International Group TÜV Rheinland, S.L. - N° 1027

Adresse

Address

Avenida de Burgos, 114 3ª Planta 28050-Madrid

Zertifikatsnummer

Certificate number

DEP.A1.000336

Angewendete Normen

Technical Standards used

EN 593; EN 1561; EN 1563; etc

Armaturen ≤ DN 25 fallen unter der DGR 97/23/EG Art. 3.3 und dürfen nicht mit dem CE-Kennzeichen markiert sein. *Valves ≤ DN 25 comply with the PED 97/23/CE Art. 3.3 and are therefore not allowed to be CE-labelled.*

Eine auftragsbezogene Konformitätserklärung wird auf Wunsch ausgestellt.

An order related conformity declaration will be issued on request.