SIEMENS

Motor Starters

SIMATIC ET 200pro MS
SIRIUS M200D

Frequency Converters

SIMATIC ET 200pro FC
SINAMICS G110D
SINAMICS G110M
SINAMICS G115D
SINAMICS G120D

Supplementary Products



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In addition to the Siemens products listed in this supplementary products overview, further supplementary products from our Product Partners are also available.

Further information can be found in **Chapter 12** of this document

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Note

In the individual Chapters, the supplementary products listed in this overview are assigned to the corresponding products using a selection matrix. The corresponding interface of the motor starter/inverter is also listed and additional information is provided.

Example:

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module PROFINET without Push Pull	M200D PROFINET	G110D	G110M PROFINET	G115D	G120D PROFINET without Push Pull
Yes [1] (X02)	Yes [1] (X31 / X32)		Yes (X03 / X04)	Yes (X150 P1/P2)	Yes [1] (X03)

Explanation of the example:

- With the exception of the G110D, the supplementary product can be used for all devices
- This supplementary product is ideally suited for the G110M and G115D (Yes, with green marking)
- It can be used for the other devices; however, more suitable supplementary products exist (Yes, with light green marking). Some explanations are still given
- If no data is specified, then this supplementary product is not suitable/not required for this device (no data with dark gray marking)
- The X designations in brackets specify the designation of the connector

Product Partner products

The products listed in this overview are a summary of the various Siemens Catalogs and catalogs of Solution Partners Harting and Knorrtec. This overview does not claim to be complete.

Products from Solution Partners with manufacturer code for the order number (HTG: and ZKT:) can be directly sourced through Siemens.

Technical data of the Product Partner products can be found on the websites of the respective Product Partner (see chapter 12).

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1 400V power supply

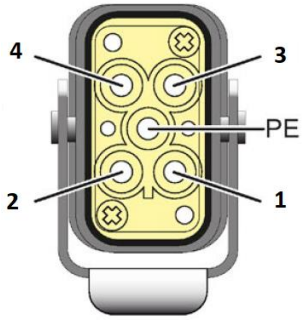
Q4/2 Connector



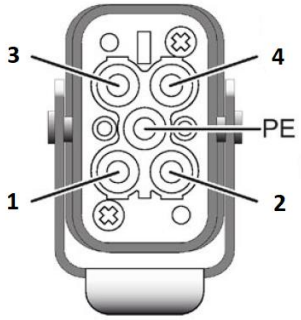
IN

Pin	Motor Starter
1	Phase L1
2	Phase L2
3	Phase L3
4	Neutral conductor [1]
11	Connector control [2]
12	Connector control [2]
PE	Protective earth

[1] Only with 230V brake
[2] Only SIRIUS M200D motor starter



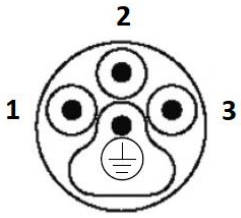
IN



OUT

Pin	Frequency converter
1	Phase L1
2	Phase L2
3	Phase L3
4	---
11	---
12	---
PE	Protective earth

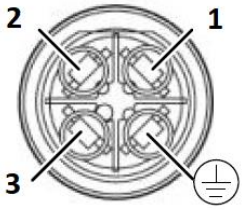
MQ15 Connector



IN

Pin	Frequency converter
1	Phase L1
2	Phase L2
3	Phase L3
PE	Protective earth

QUICKON Connector



Pin	Frequency converter
1	Phase L1
2	Phase L2
3	Phase L3
PE	Protective earth

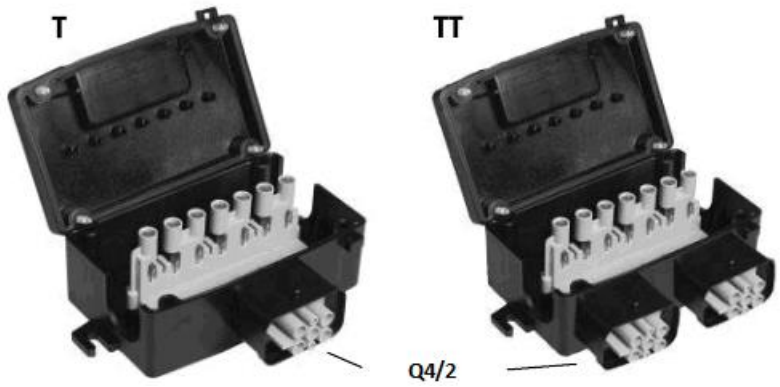
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1.1 Power distribution

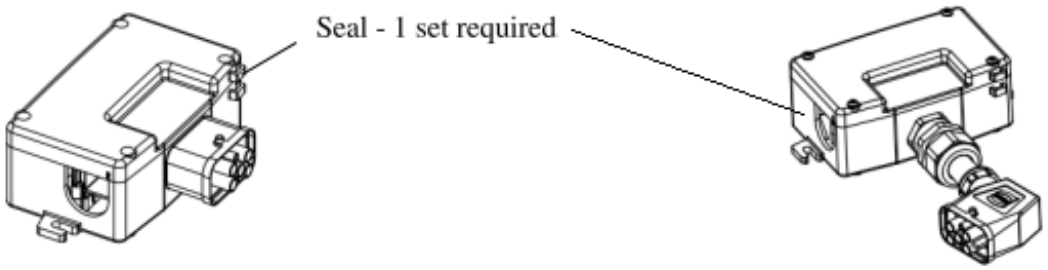
1.1.1 Power Terminal connector

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)

Power T-Terminal connector

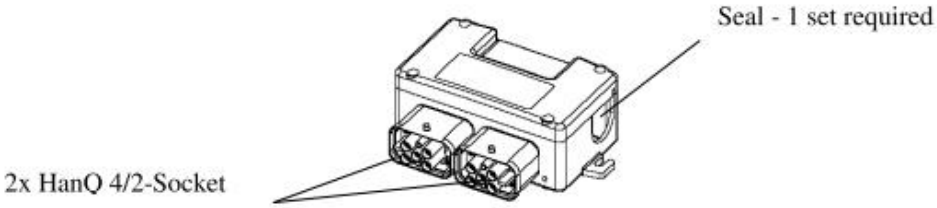


Order no.	Description	UL
3RK1911-2BF01	Power T–distributor (1 feeder), for power cable with diameter **up to 4 mm²**	Yes
3RK1911-2BF02	**up to 6mm²**	
3RK1911-2BG02	Power TT–distributor (2 feeders), for power cable with diameter **up to 6 mm²**	Yes
3RK1911-5BA00	Sealing set for power T-distributor for power line with diameter **10 ... 13 mm**	Yes
3RK1911-5BA10	**13 ... 16 mm**	
3RK1911-5BA20	**16 ... 19 mm**	
3RK1911-5BA30	**19 ... 22 mm**	
3RK1911-5BA50	Blanking plug	



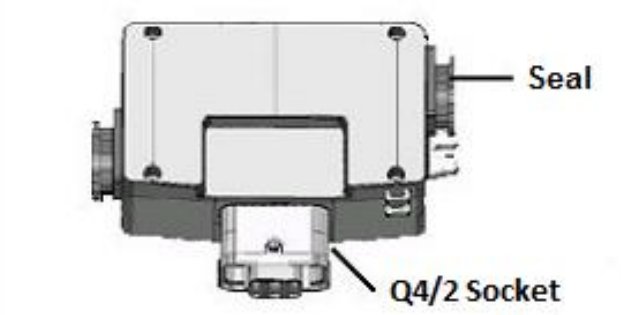
(Picture source Harting)

Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882010500	Power T-Terminal connector for power bus cable, for **2.5mm² - 4mm²** with built-in 7-pole connector, female insert, Hood	On Request at Harting
HTG:61882010501	**4mm² - 6mm²**	
HTG:61882010502	Power T-Terminal connector Length 2.5m and 7-pole connector, female insert, hood, for power bus cable for **2.5mm² - 4mm²** **with connected cable 5x2.5mm²**	On Request at Harting
HTG:61882010503	for power bus cable for **4mm² - 6mm²** **with connected cable 5 x 4mm²**	
HTG:61882010504	for power bus cable for **4mm² - 6mm²** **with connected cable 5 x 6mm²**	
HTG:61834010200	Sealing for cable **10 - 13mm** (1 Set = 2 pieces)	On Request at Harting
HTG:61834010201	Sealing for cable **13 – 16mm** (1 Set = 2 pieces)	
HTG:61834010202	Sealing for cable **16 – 19mm** (1 Set = 2 pieces)	
HTG:61834010203	Sealing for cable **19 – 22mm** (1 Set = 2 pieces)	
HTG:61834010204	Sealing **blind grommet** (1 piece)	



(Picture source Harting)

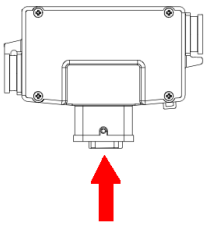
Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882020770	Energy double T-Connector for bus cable, from **4mm² up to 6mm²** with two built-in 7-pole connector, female insert, hood, CSA	On Request at Harting
HTG:61834010200	Sealing for cable **10 - 13mm** (1 Set = 2 pieces)	On Request at Harting
HTG:61834010201	Sealing for cable **13 – 16mm** (1 Set = 2 pieces)	
HTG:61834010202	Sealing for cable **16 – 19mm** (1 Set = 2 pieces)	
HTG:61834010203	Sealing for cable **19 – 22mm** (1 Set = 2 pieces)	
HTG:61834010204	Sealing **blind grommet** (1 piece)	



(Picture source Knorrtec)

Product Partner Knorrtec		
Order no.	**Description**	**UL**
ZKT:10018700	Power T-Terminal connector for power bus cables from **2.5 mm² to 6 mm²** With mounted plug connector Q4/2 socket insert and grommet housing contour	On Request at Knorrtec
ZKT:10021000	Seal for **10 – 13 mm** cable (1 set = 2 seals)	auf On Request at Knorrtec
ZKT:10021100	Seal for **13 – 16 mm** cable (1 set = 2 seals)	
ZKT:10021200	Seal for **16 – 19 mm** cable (1 set = 2 seals)	
ZKT:10021300	Seal for **19 – 22 mm** cable (1 set = 2 seals)	
ZKT:10021400	**Blind stopper** seal (1 seal)	

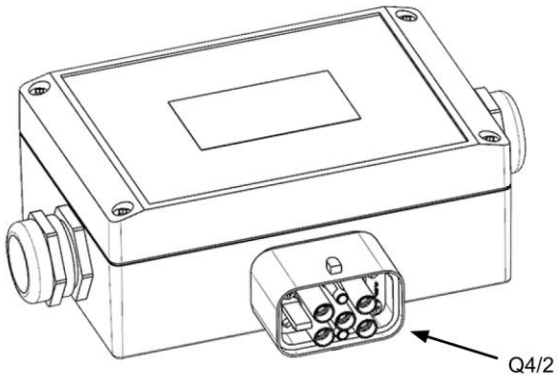
Plug set for connection to T-distributor (Q 4/2 connector, straight feeder)



Order no.	**Description**	**UL**
3RK1911-2BS60	Q 4/2 Straight plug set with axial feeder **2.5 mm²**	Yes
3RK1911-2BS20	**4 mm²**	
3RK1911-2BS40	**6 mm²**	

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Energy T-Connector for power bus (max. 25mm²)



(Picture source Harting)

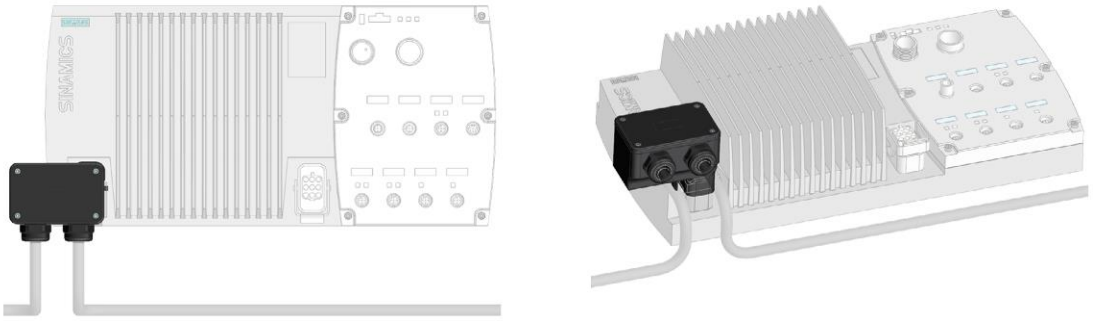
Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882010181	Energy T-Terminal connector for power bus cable up to 25mm² for power bus cross sectional change or power bus extension glands M25 for cable cross section from 13 up to 18mm with built-in 7-pole connector, female insert, hood	On Request at Harting

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Daisy Chain Power Junction-Box for direct mounting on MS and FU

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D without 230V AC Brake	G110D	G110M	G115D	G120D
		Yes (X1)	Yes (X1)			Yes (X1)

Junction -Box (3 Phases + PE) for direct mounting on X1 plug of motor starter (without 230V brake) and frequency converter. Cross section 1.5 – 4mm²



(Picture source Harting)

Product Partner Harting		
Order no.	Description	UL
HTG:61882010509	Power-Junction Box for connecting to MS (w/o 230V brake) / G110D / G120D Hood 2x angled outlet female insert for Q 4/2 cross-section 1.5 - 4mm², cable gland 11.5-15.5mm	On Request at Harting
HTG:61834010220	Blind grommet for the Last Power-Junction Box (1 piece)	On Request at Harting
HTG:61834010221	Sealing insert KB 9-13mm (10 pieces)	
HTG:61834010222	Sealing insert KB 7-10.5mm (10 pieces)	

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Power-Box

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)



(Bildquelle Knorrtec)

Product Partner Knorrtec					
Description					
Power box Contact unit for uncut power cables, housing IP65, complete with seals					
Order no.	**Power bus**	**Round cable**	**Branch**	**Round cable**	**UL**
ZKT:10035300	5 x 4 mm² 4 x 6 mm² 5 x 6 mm²	D = 15 - 17 mm	5 x 4 mm² 4 x 6 mm² 5 x 6 mm²	D = 15 - 17 mm	On Request at Knorrtec
ZKT:10035310	5 x 4 mm² 4 x 4 mm²	D = 13 - 15 mm	5 x 4 mm² 4 x 4 mm²	D = 13 - 15 mm	
ZKT:10035320	5 x 4 mm²	D = 15 - 17 mm	5 x 2.5 mm² 4 x 2.5 mm²	D = 11 - 13 mm	
ZKT:10035330	5 x 4 mm² 4 x 6 mm² 5 x 6 mm²	D = 15 - 17 mm	4 x 4 mm²	D = 13 - 15 mm	
ZKT:10035340	5 x 4 mm² 4 x 4 mm²	D = 13 - 15 mm	5 x 2.5 mm² 4 x 2.5 mm²	D = 11 - 13 mm	
ZKT:10035350	5 x 2.5 mm² 4 x 2.5 mm²	D = 11 - 13 mm	5 x 2.5 mm² 4 x 2.5 mm²	D = 11 - 13 mm	
Order no.	**Power bus**	**Ribbon cable**	**Branch**	**Ribbon cable**	**UL**
ZKT:10035360	5 x 6 mm²	7,5 x 26,5 mm	5 x 4 mm² 4 x 6 mm² 5 x 6 mm²	D = 15 - 17 mm	On Request at Knorrtec
ZKT:10035370	5 x 6 mm²	7,5 x 26,5 mm	5 x 4 mm² 4 x 4 mm²	D = 13 - 15 mm	

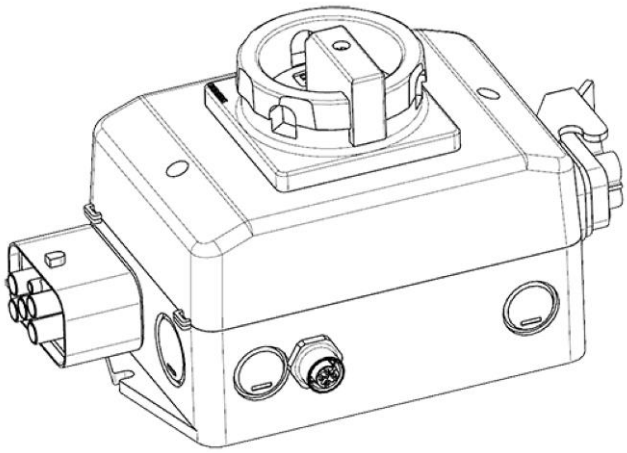
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1.1.1 Repair switch

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D [1]	G110M [1]	G115D [2]	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)

[1] These devices can optionally be supplied with an integrated maintenance switch
[2] The wall mounted SINAMICS G115D is optionally available with integrated maintenance switch

Repair switch Q4/2



(Picture source Harting)

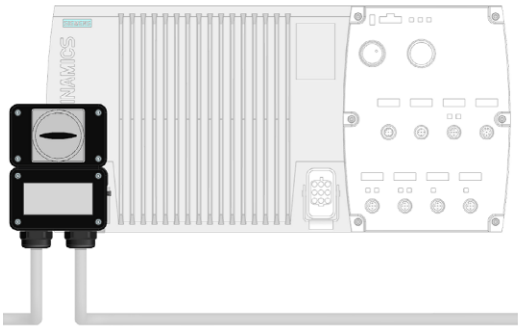
Product Partner Harting		
Order no.	Description	UL
HTG:61882010330	Selectively block Han Q 4/2 Designed as isolator and maintenance switch with M12 socket for NC/NO message	On Request at Harting

SIEMENS

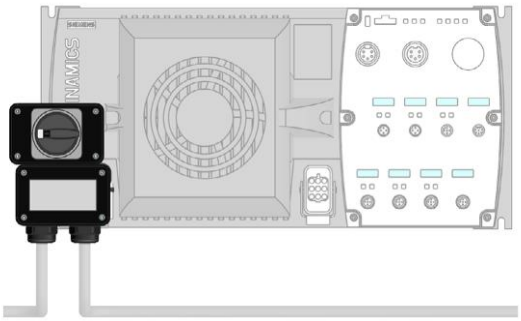
Daisy Chain Power Junction-Box with repair switch for direct mounting on SINAMICS G120D

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
						Yes (X1)

Junction -Box (3 Phases + PE) with maintenance switch for direct mounting on X1 plug of SINAMICS G120D. Cross section 1.5 – 4mm²



0,75 till 3kW



4 till 7,5kW

(Picture source Harting)

Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882010609	Power-Junction Box for SINAMICS G120D with switchable port **0.75 till 3kW** Hood 2x angled outlet female insert for Q 4/2 cross-section 1.5 - 4mm², cable gland 11.5-15.5mm	On Request at Harting
HTG:61882010608	Power-Junction Box for SINAMICS G120D with switchable port **0.75 till 3kW and switch-status message via M12 connection cable** Hood 2x angled outlet female insert for Q 4/2 cross-section 1.5 - 4mm², cable gland 11.5-15.5mm	
HTG:61882010709	Power-Junction Box for SINAMICS G120D with switchable port **4 till 7.5kW** Hood 2x angled outlet female insert for Q 4/2 cross-section 1.5 - 4mm², cable gland 11.5-15.5mm	
HTG:61882010708	Power-Junction Box for SINAMICS G120D with switchable port **4 till 7.5kW and switch-status message via M12 connection cable** Hood 2x angled outlet female insert for Q 4/2 cross-section 1.5 - 4mm², cable gland 11.5-15.5mm	
HTG:61834010220	Blind grommet for the Last Power-Junction Box (1 piece)	On Request at Harting
HTG:61834010221	Sealing insert KB 9-13mm (10 pieces)	
HTG:61834010222	Sealing insert KB 7-10.5mm (10 pieces)	

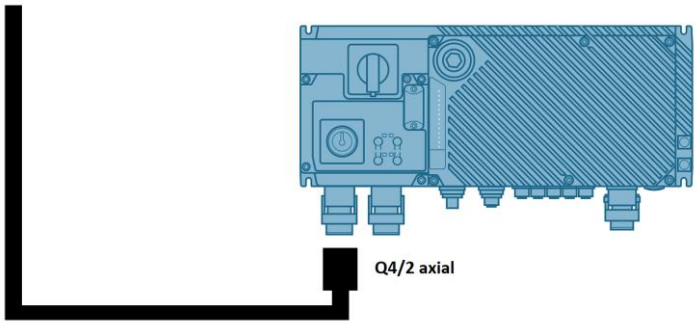
SIEMENS

1.2 Power feed cables single-sided pre-assembled

1.2.1 Q4/2; open end to axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D [1] with Q4/2	G120D
					Yes (X1)	

[1] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q4/2 connectors can be used if the installation situation allows a cable outlet to the rear.
For the motor mounted G115D, cables with angled connectors should be used to avoid interference contours.



(Exemplary representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2.5mm²			
HTG:61882013000	ZKT:70056500000150	Power feed cable 4x2,5mm², open cable end ➔ Q4/2 socket axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013001	ZKT:70056500000300	**Length 3m**	
HTG:61882013002	ZKT:70056500000500	**Length 5m**	
HTG:61882013003	ZKT:70056500001000	**Length 10m**	
HTG:61882013004	ZKT:70056500001500	**Length 15m**	
Cross section 4mm²			
HTG:61882013005	ZKT:70056600000150	Power feed cable 4x4mm², open cable end ➔ Q4/2 socket axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013006	ZKT:70056600000300	**Length 3m**	
HTG:61882013007	ZKT:70056600000500	**Length 5m**	
HTG:61882013008	ZKT:70056600001000	**Length 10m**	
HTG:61882013009	ZKT:70056600001500	**Length 15m**	
Cross section 6mm²			
HTG:61882013010	ZKT:70056700000150	Power feed cable 4x6mm², open cable end ➔ Q4/2 socket axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013011	ZKT:70056700000300	**Length 3m**	
HTG:61882013012	ZKT:70056700000500	**Length 5m**	
HTG:61882013013	ZKT:70056700001000	**Length 10m**	
HTG:61882013014	ZKT:70056700001500	**Length 15m**	

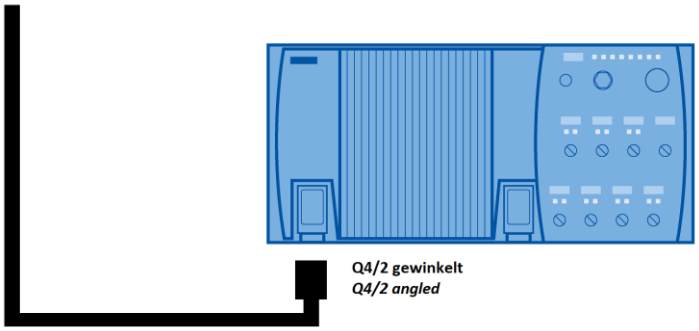
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

1.2.2 Q4/2; open end to angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D without 230V AC Brake	G110D	G110M with Q4/2	G115D [1] with Q4/2	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)

[1] This cable is the preferred cable for the motor mounted SINAMICS G115D. It is suitable for the wall mounted G115D if the installation situation allows a cable outlet to the rear.



(Example representation with SINAMICS G120D)

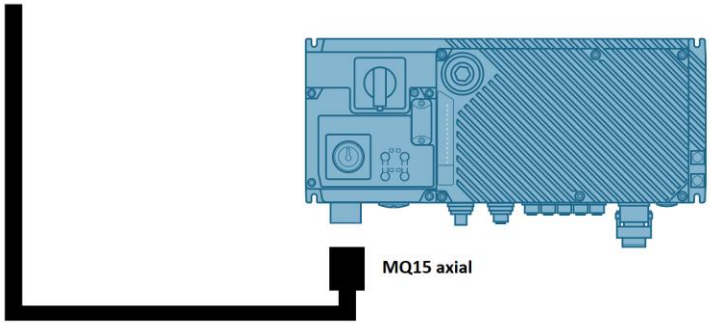
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2.5mm²			
HTG:61882010192	ZKT:70013700000150	Power feed cable 4x2,5mm², open cable end ➔ Q4/2 socket angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010193	ZKT:70013700000300	**Length 3m**	
HTG:61882010194	ZKT:70013700000500	**Length 5m**	
HTG:61882010195	ZKT:70013700001000	**Length 10m**	
HTG:61882010432	ZKT:70013700001500	**Length 15m**	
Cross section 4mm²			
HTG:61882010196	ZKT:70013800000150	Power feed cable 4x4mm², open cable end ➔ Q4/2 socket angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010197	ZKT:70013800000300	**Length 3m**	
HTG:61882010198	ZKT:70013800000500	**Length 5m**	
HTG:61882010199	ZKT:70013800001000	**Length 10m**	
HTG:61882010434	ZKT:70013800001500	**Length 15m**	
Cross section 6mm²			
HTG:61882010200	ZKT:70013200000150	Power feed cable 4x6mm², open cable end ➔ Q4/2 socket angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010201	ZKT:70013200000300	**Length 3m**	
HTG:61882010202	ZKT:70013200000500	**Length 5m**	
HTG:61882010203	ZKT:70013200001000	**Length 10m**	
HTG:61882010436	ZKT:70013200001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

SIEMENS

1.2.3 MQ15; open end to angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D with MQ15	G120D
					Yes (X1)	



(Example representation with wand mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2.5mm²			
HTG:61882013015	ZKT:70057100000150	Power feed cable 4x2,5mm², open cable end ➔ MQ15 socket angled connector **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013016	ZKT:70057100000300	**Length 3m**	
HTG:61882013017	ZKT:70057100000500	**Length 5m**	
HTG:61882013018	ZKT:70057100001000	**Length 10m**	
HTG:61882013019	ZKT:70057100001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

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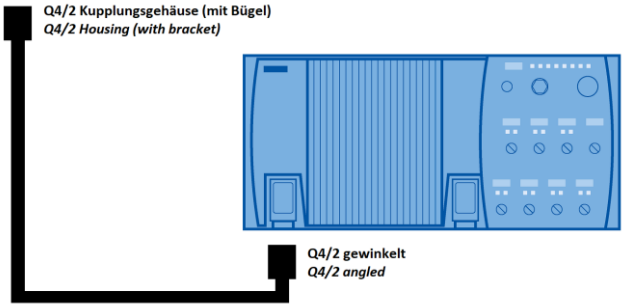
1.3 Power feed cables both side pre-assembled

1.3.1 Q4/2; axial to angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D without 230V AC Brake	G110D	G110M with Q4/2	G115D with Q4/2 [1)]	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)

[1)] This cable is the preferred cable for the motor mounted SINAMICS G115D. It is suitable for the wall mounted G115D if the installation situation allows a cable outlet to the rear.

This power cable is intended for connecting the MS / FI to a T-distributor



(Example representation with SINAMICS G120D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2,5mm²			
HTG:61882020400	ZKT:70008800000150	Power feed cable 4x2,5mm², Q4/2 coupling with plug axial cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020401	ZKT:70008800000300	**Length 3m**	
HTG:61882020402	ZKT:70008800000500	**Length 5m**	
HTG:61882020403	ZKT:70008800001000	**Length 10m**	
HTG:61882020543	ZKT:70008800001500	**Length 15m**	
Cross section 4mm²			
HTG:61882020404	ZKT:70008900000150	Power feed cable 4x4mm², Q4/2 coupling with plug axial cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020405	ZKT:70008900000300	**Length 3m**	
HTG:61882020406	ZKT:70008900000500	**Length 5m**	
HTG:61882020407	ZKT:70008900001000	**Length 10m**	
HTG:61882020506	ZKT:70008900001500	**Length 15m**	
Cross section 6mm²			
HTG:61882020408	ZKT:70013600000150	Power feed cable 4x4mm², Q4/2 coupling with plug axial cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020409	ZKT:70013600000300	**Length 3m**	
HTG:61882020410	ZKT:70013600000500	**Length 5m**	
HTG:61882020411	ZKT:70013600001000	**Length 10m**	
HTG:61882020743	ZKT:70013600001500	**Length 15m**	

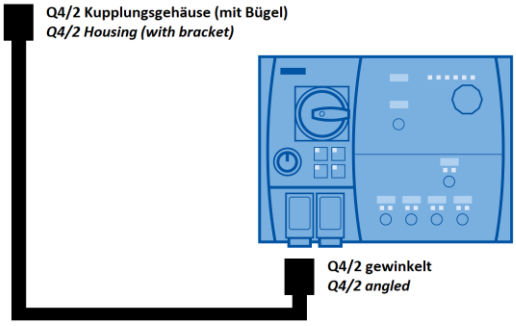
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

1.3.2 Q4/2; axial to angled cable outlet (with neutral conductor)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D with 230V AC Brake	G110D	G110M	G115D	G120D
		Yes (X1)				

This power feed cable can be used to connect the MS to a T-distributor if the neutral conductor is required



Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2,5mm²			
HTG:61882020693	ZKT:70025200000150	Power feed cable for M200D 5x2,5mm² Q4/2 coupling with plug axial cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020694	ZKT:70025200000300	**Length 3m**	
HTG:61882020695	ZKT:70025200000500	**Length 5m**	
HTG:61882020696	ZKT:70025200001000	**Length 10m**	

Special length and other variants available from Harting / Knorrtec on request

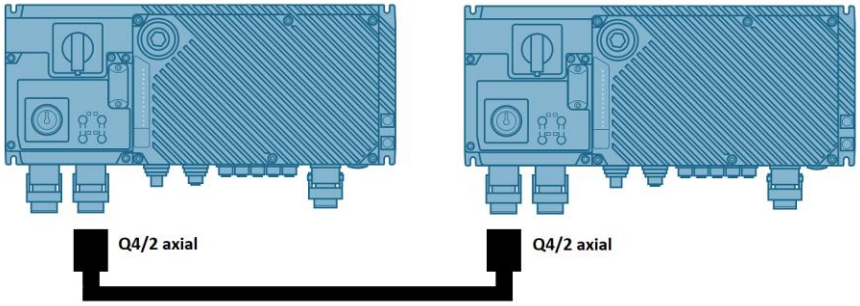
SIEMENS

1.4 Energy transfer both side pre-assembled

1.4.1 Q4/2; both sides axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D with Q4/2 [1]	G120D
					Yes (X1)	

[1] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q4/2 connectors can be used if the installation situation allows a cable outlet to the rear.
For the motor mounted G115D, cables with angled connectors should be used to avoid interference contours.



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2.5mm²			
HTG:61882023000	ZKT:70056800000150	Power feed cable 4x2,5mm², Q4/2 plug with axial cable outlet ➔ Q4/2 socket with axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023001	ZKT:70056800000300	**Length 3m**	
HTG:61882023002	ZKT:70056800000500	**Length 5m**	
HTG:61882023003	ZKT:70056800001000	**Length 10m**	
HTG:61882023004	ZKT:70056800001500	**Length 15m**	
Cross section 4mm²			
HTG:61882023005	ZKT:70056900000150	Power feed cable 4x4mm², Q4/2 plug with axial cable outlet ➔ Q4/2 socket with axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023006	ZKT:70056900000300	**Length 3m**	
HTG:61882023007	ZKT:70056900000500	**Length 5m**	
HTG:61882023008	ZKT:70056900001000	**Length 10m**	
HTG:61882023009	ZKT:70056900001500	**Length 15m**	
Cross section 6mm²			
HTG:61882023010	ZKT:70057000000150	Power feed cable 4x6mm², Q4/2 plug with axial cable outlet ➔ Q4/2 socket with axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023011	ZKT:70057000000300	**Length 3m**	
HTG:61882023012	ZKT:70057000000500	**Length 5m**	
HTG:61882023013	ZKT:70057000001000	**Length 10m**	
HTG:61882023014	ZKT:70057000001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

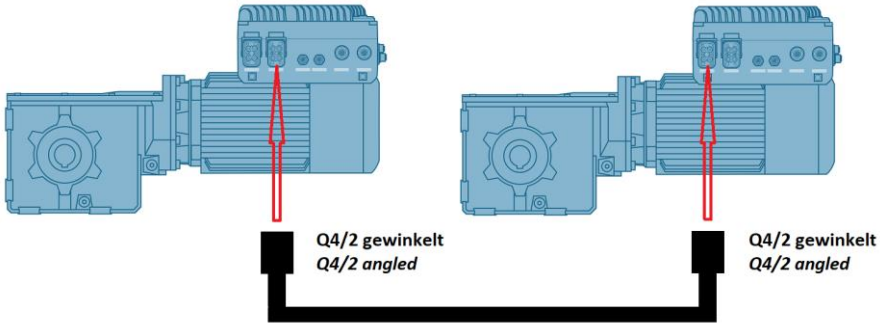
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1.4.2 Q4/2; both sides angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D [1]	G110D [1]	G110M with Q4/2	G115D with Q4/2 [2]	G120D [1]
Yes (X1 / X3)	Yes (X1 / X3)	Yes (X1)	Yes (X1)	Yes (X1 / X3)	Yes (X1 / X3)	Yes (X1)

[1] Feed only, no forwarding
[2] This cable is the preferred cable for the motor mounted SINAMICS G115D. It is suitable for the wall mounted G115D if the installation situation allows a cable outlet to the rear

This power cable can be used to transfer the 400V supply voltage to additional 400V loads (e.g. ET 200pro station, SINAMICS G110M, SINAMICS G115D …).



(Example representation with motor mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2,5mm²			
HTG:61882020340	ZKT:70015100000150	Power feed cable 4x2,5mm², Q4/2 plug with angled cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020341	ZKT:70015100000300	**Length 3m**	
HTG:61882020342	ZKT:70015100000500	**Length 5m**	
HTG:61882020343	ZKT:70015100001000	**Length 10m**	
Cross section 4mm²			
HTG:61882023005	ZKT:70015200000150	Power feed cable 4x4mm², Q4/2 plug with angled cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023006	ZKT:70015200000300	**Length 3m**	
HTG:61882023007	ZKT:70015200000300	**Length 5m**	
HTG:61882023008	ZKZ:70015200001000	**Length 10m**	
Cross section 6mm²			
HTG:61882023010	ZKT:70013100000150	Power feed cable 4x6mm², Q4/2 plug with angled cable outlet ➔ Q4/2 socket with angled cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023011	ZKT:70013100000300	**Length 3m**	
HTG:61882023012	ZKT:70013100000500	**Length 5m**	
HTG:61882023013	ZKT:70013100001000	**Length 10m**	

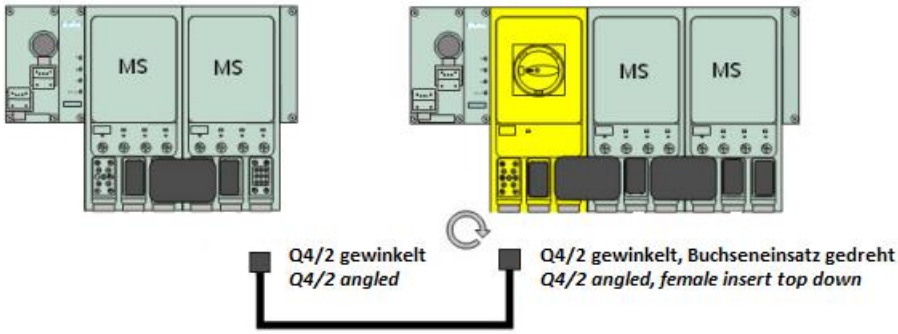
Special length and other variants available from Harting / Knorrtec on request

1.4.3 Q4/2; both sides angled cable outlet (Outlet side turned socket insert for ET 200pro RSM)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q4/2 [1]	G115D with Q4/2 [1] [2]	G120D
Yes (X1 / X3)	Yes (X1 / X3)			Yes (X3)	Yes (X3)	

[1] Feed only, no forwarding
[2] This cable is the preferred cable for the motor mounted SINAMICS G115D. It is suitable for the wall mounted G115D if the installation situation allows a cable outlet to the rear

This power cable can be used to transfer the 400V supply voltage from a station (ET 200pro, G110M, G115D …) to an ET 200pro station with RSM.



(Example representation with SIMATIC ET200pro) (Picture source Harting)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 6mm²			
HTG:61882020360	ZKT:70013000000150	Power feed cable 4x6mm² to ET 200pro RSM, Q4/2 plug with angled cable outlet ➔ Q4/2 socket with angled cable outlet, turned socket insert for ET 200pro RSM **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020361	ZKT:70013000000300	**Length 3m**	
HTG:61882020362	ZKT:70013000000500	**Length 5m**	
HTG:61882020363	ZKT:70013000001000	**Length 10m**	

Special length and other variants available from Harting / Knorrtec on request

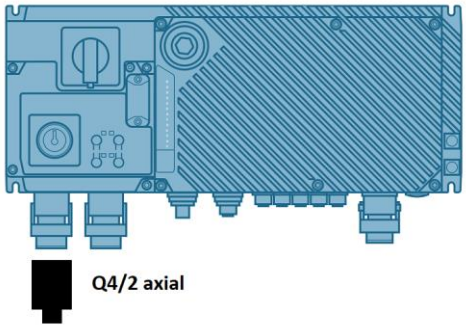
SIEMENS

1.5 Plug set for power infeed

1.5.1 Q4/2; socket set with axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D with Q4/2 [1]	G120D
					Yes (X1)	

[1] This connector set is the preferred connector for the wall mounted SINAMICS G115D. Alternatively, angled Q4/2 connectors can be used if the installation situation allows a cable outlet to the rear.
For the motor mounted G115D, angled connectors should be used to avoid interference contours.



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61834010317	ZKT:10066800	Power Infeed connector set Q4/2 socket **2,5mm²**, Grommet housing with axial cable outlet incl. cable gland	On Request at Harting / Knorrtec
HTG:61834010318	ZKT:10066810	**4 mm²**	
HTG:61834010319	ZKT:10066820	**6 mm²**	

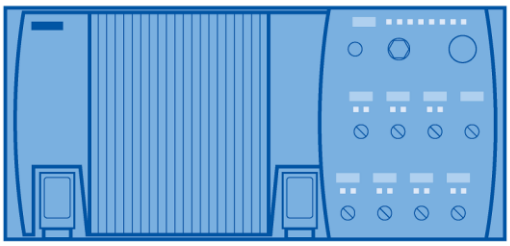
Refer to the Product Partners for additional versions, crimping and disassembly tools

SIEMENS

1.5.2 Q4/2; socket set with angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q4/2	G115D with Q4/2 [1)]	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)

[1)] This connector set is the preferred connector for the motor mounted SINAMICS G115D. It is suitable for the wall mounted G115D if the installation situation allows a cable outlet to the rear.





Q4/2 gewinkelt
Q4/2 angled

(Example representation with SINAMICS G120D)

Order no.	Description	UL
3RK1911-2BE50	Power Infeed connector set Q4/2 socket **2,5mm²**, Grommet housing with angled cable outlet incl. cable gland	Yes
3RK1911-2BE10	**4 mm²**	Yes
3RK1911-2BE30	**6 mm²**	Yes

Refer to the Product Partners for additional versions, crimping and disassembly tools

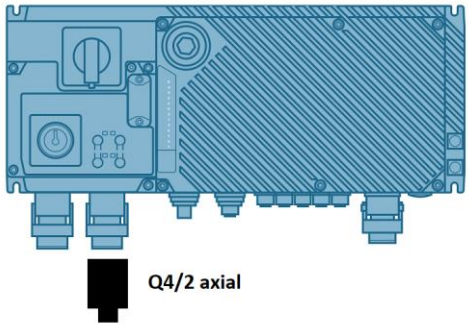
SIEMENS

1.6 Plug set for power forwarding

1.6.1 Q4/2; plug set with axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D with Q4/2 [1]	G120D
					Yes (X1)	

[1] This connector set is the preferred connector for the wall mounted SINAMICS G115D. Alternatively, angled Q4/2 connectors can be used if the installation situation allows a cable outlet to the rear.
For the motor mounted G115D, angled connectors should be used to avoid interference contours.



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61834010314	ZKT:10066700	Energy transfer connector set Q4/2 plug **2,5mm²**, Grommet housing with axial cable outlet incl. cable gland	On Request at Harting / Knorrtec
HTG:61834010315	ZKT:10066710	**4 mm²**	
HTG:61834010316	ZKT:10066720	**6 mm²**	

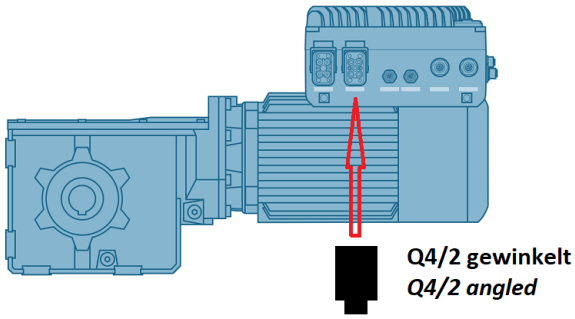
Refer to the Product Partners for additional versions, crimping and disassembly tools

SIEMENS

1.6.2 Q4/2; plug set with angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q4/2	G115D with Q4/2 [1)]	G120D
Yes (X3)	Yes (X3)			Yes (X3)	Yes (X3)	

[1)] This connector set is the preferred connector for the motor mounted SINAMICS G115D. It is suitable for the wall mounted G115D if the installation situation allows a cable outlet to the rear.



(Example representation with motor mounted SINAMICS G115D)

Order no.	Description	UL
3RK1911-2BF50	Energy transfer connector set Q4/2 plug **2,5mm²**, Grommet housing with angled cable outlet incl. cable gland	Yes
3RK1911-2BF10	**4 mm²**	

Refer to the Product Partners for additional versions, crimping and disassembly tools

SIEMENS

1.7 Sealing cap for energy forwarding socket

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q4/2	G115D with Q4/2	G120D
Yes (X3)	Yes (X3)			Yes (X3)	Yes (X3)	



Order no.	Description	UL
3RK1902-0CJ00	**Sealing cap for power socket**	No

1.8 Power supply cable (cut-to-length)

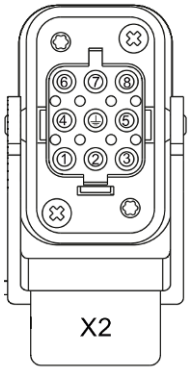
SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X1/ X3)	Yes (X1/ X3)	Yes (X3)	Yes (X3)	Yes (X1/ X3)	Yes (X1/ X3)	Yes (X3)



Order no.	Description	UL
3RK1911-0AG60	Power bus cable **5 x 4mm²** **20m**	Yes
3RK1911-0AG70	**50m**	
3RK1911-0AG80	**100m**	
3RK1911-0AH60	Power bus cable **5 x 6mm²** **20m**	Yes
3RK1911-0AH70	**50m**	
3RK1911-0AH80	**100m**	

SIEMENS

2 Motor connection (motor starter)



Pin	w/o Brake	With 400 V / 230 V brake	With 180 V brake
1	L1 Out		
2	-	N (with AC 230V brake)	-
3	L3 Out		
4	-	Brake L1 (switched)	Brake (-)
5	Temperature sensor		
6	-	Brake L3 (direct, for AC 400V Brake)	Brake (+)
7	L2 Out		
8	Temperature sensor		
PE	Protective earth		

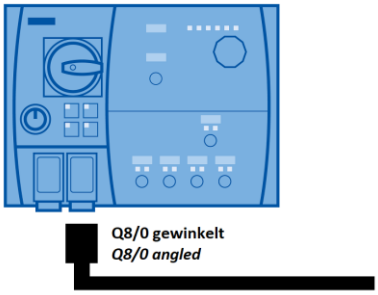
It is not necessary to use shielded motor cables and motor connection plugs for motor starters.

SIEMENS

2.1 Motor cable (unshielded), preassembled motor-starter side

2.1.1 Q8/0; angled cable outlet, without brake, without temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



(Example representation with SIRIUS M200D)

Order no.	Description	UL
	Cross section 1,5mm²	
3RK1911-0EB31	Motor cable 4x1,5 mm² without brake, without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 5m**	Yes

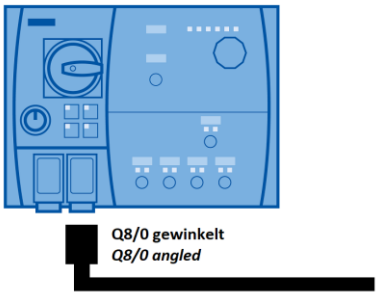
Order no. Harting	Order no. Knorrtec	Description	UL
		Cross section 1,5mm²	
HTG:61882010211	ZKT:70014800000150	Motor cable 4x1,5mm² without brake, without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010212	ZKT:70014800000300	**Length 3m**	
HTG:61882010213	ZKT:70014800000500	**Length 5m**	
		Cross section 2,5mm²	
HTG:61882010214	ZKT:70014900000150	Motor cable 4x2,5mm² without brake, without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010215	ZKT:70014900000300	**Length 3m**	
HTG:61882010216	ZKT:70014900000500	**Length 5m**	
---	ZKT:70014900001000	**Length 10m**	

Special length and other variants available from Harting / Knorrtec on request

SIEMENS

2.1.2 Q8/0; angled cable outlet, without brake, with temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				

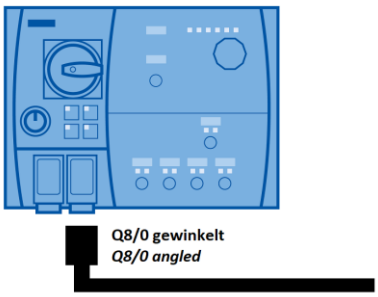


(Example representation with SIRIUS M200D)

Order no.	Description	UL
	Cross section 1,5mm²	
3RK1911-0EF31	Motor cable 6x1,5 mm² without brake, with temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 5m**	No

2.1.3 Q8/0; angled cable outlet, with brake (400V AC or 180V DC (only M200D)), without temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



(Example representation with SIRIUS M200D)

Order no.	Description	UL
Cross section 1,5mm²		
3RK1911-0ED31	Motor cable 6x1,5 mm² with brake, without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 5m**	Yes

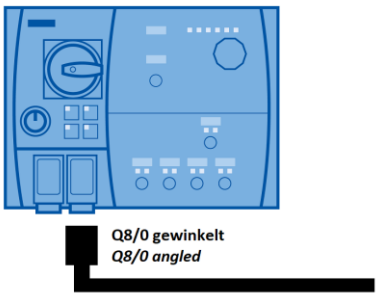
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882010218	ZKT:70009500000150	Motor cable 6x1,5mm² with brake, without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010219	ZKT:70009500000300	**Length 3m**	
HTG:61882010220	ZKT:70009500000500	**Length 5m**	
Cross section 2,5mm²			
HTG:61882010221	ZKT:70015400000150	Motor cable 6x2,5mm² with brake, without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010222	ZKT:70015400000300	**Length 3m**	
HTG:61882010223	ZKT:70015400000500	**Length 5m**	

Special length and other variants available from Harting / Knorrtec on request

SIEMENS

2.1.4 Q8/0; angled cable outlet, with brake (230V AC), without temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



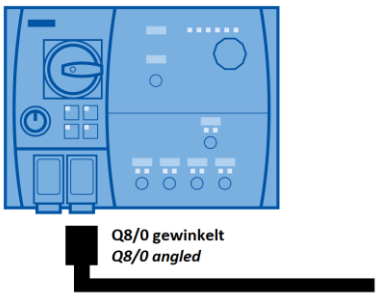
(Example representation with SIRIUS M200D)

Order no.	Description	UL
Cross section 1,5mm²		
3RK1911-0EH31	Motor cable 6x1,5 mm² with brake (230V AC on Pin 2 and 4), without temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 5m**	No

SIEMENS

2.1.5 Q8/0; angled cable outlet, with brake (400V AC or 180V DC (only M200D)) and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



(Example representation with SIRIUS M200D)

Order no.	Description	UL
Cross section 1,5mm²		
3RK1911-0EG31	Motor cable 8x1,5 mm² with brake and temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 5m**	No

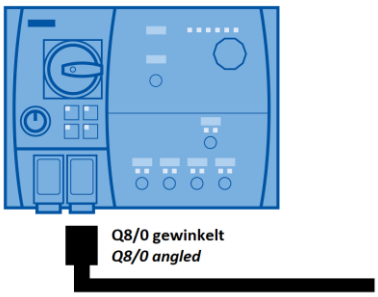
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882010452	ZKT:70011300000150	Motor cable 8x1,5mm² with brake and temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010453	ZKT:70011300000300	**Length 3m**	
HTG:61882010454	ZKT:70011300000500	**Length 5m**	
Cross section 2,5mm²			
HTG:61882010455	ZKT:70040600000150	Motor cable 8x2,5mm² with brake and temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010456	ZKT:70040600000300	**Length 3m**	

Special length and other variants available from Harting / Knorrtec on request

SIEMENS

2.1.6 Q8/0; angled cable outlet, with brake (230V AC) and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



(Example representation with SIRIUS M200D)

Order no.	Description	UL
Cross section 1,5mm²		
3RK1911-0EE31	Motor cable 8x1,5 mm² with brake (230V AC on Pin 2 and 4) and temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 5m**	No

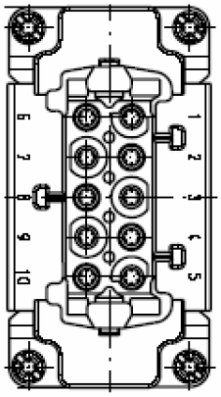
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882010476	ZKT:70062000000150	Motor cable 8x1,5mm² with brake (230V AC on Pin 2 and 4) and temperature sensor, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882010477	ZKT:70062000000300	**Length 3m**	
HTG:61882010478	ZKT:70062000000500	**Length 5m**	

Special length and other variants available from Harting / Knorrtec on request

SIEMENS

2.2 Motor cable (unshielded), preassembled on both sides (Q 8/0 and 10 E (1-bracket))

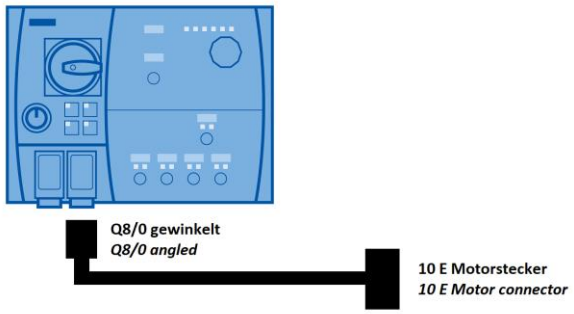
10 E Connector at the motor



Pin	Function
1	U1
2	V1
3	W1
4	Brake
5	Brake
6	W2
7	U2
8	V2
9	Temperature sensor
10	Temperature sensor
PE	Protective earth

2.2.1 Q8/0; angled cable outlet to 10E with star connection, without brake, without temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



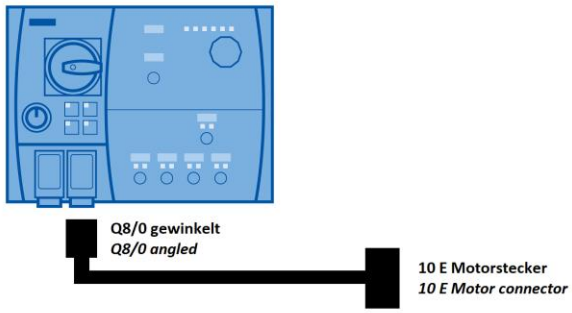
(Example representation with SIRIUS M200D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882020424	ZKT:70014600000150	Motor cable 4x1,5mm² without brake, without temperature sensor, Q8/0 angled cable outlet ➔ 10E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020425	ZKT:70014600000300	**Length 3m**	
HTG:61882020426	ZKT:70014600000500	**Length 5m**	
Cross section 2,5mm²			
HTG:61882020427	ZKT:70014700000150	Motor cable 4x2,5mm² without brake, without temperature sensor, Q8/0 angled cable outlet ➔ 10E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020428	ZKT:70014700000300	**Length 3m**	
HTG:61882020429	ZKT:70014700000500	**Length 5m**	

Special length and other variants available from Harting / Knorrtec on request

2.2.2 Q8/0; angled cable outlet to 10E with star connection, with brake (400V AC or 180V DC (only M200D)), with temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				



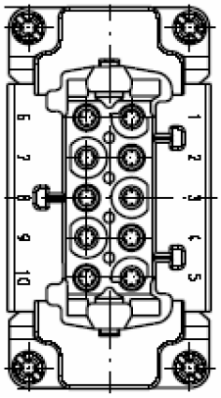
(Example representation with SIRIUS M200D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882020682	ZKT:70026200000150	Motor cable 8x1,5mm² with brake and temperature sensor, Q8/0 angled cable outlet ➔ 10 E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020683	ZKT:70026200000300	**Length 3m**	
HTG:61882020684	ZKT:70026200000500	**Length 5m**	
Cross section 2,5mm²			
HTG:61882020685	ZKT:70026300000150	Motor cable 8x2,5mm² with brake and temperature sensor, Q8/0 angled cable outlet ➔ 10 E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882020686	ZKT:70026300000300	**Length 3m**	
HTG:61882020687	ZKT:70026300000500	**Length 5m**	

Special length and other variants available from Harting / Knorrtec on request

2.3 Motor cable (unshielded), preassembled on both sides (Q 8/0 and 10 E (2-bracket)

10 E Connector at the motor

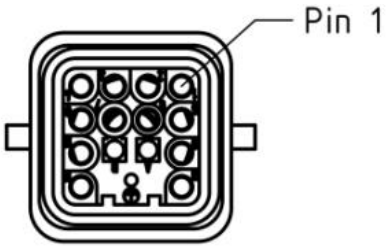


Pin	Function
1	U1
2	V1
3	W1
4	Brake
5	Brake
6	W2
7	U2
8	V2
9	Temperature sensor
10	Temperature sensor
PE	Protective earth

reassembled motor cables with 10 E connector on motor side with 2-bracket are on request also available from Harting and Knorrtec

2.4 Motor cable (unshielded), preassembled on both side (Q 8/0 and Q 12/0)

Q 12/0 Connector at the motor



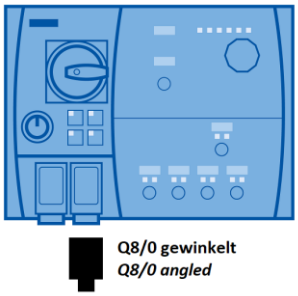
Pin	Function
1	U1
2	V1
3	W1
4	-
5	W2
6	U2
7	V2
8	-
9	Brake
10	Temperature sensor
11	Brake
12	Temperature sensor
PE	Protective earth

Preassembled motor cables with CQ 12/0 connectors on motor side are on request also available from Harting and Knorrtec

SIEMENS

2.5 Q8/0; Motor connection plug, motor-starter side (unshielded)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (X2)		Yes (X2)				

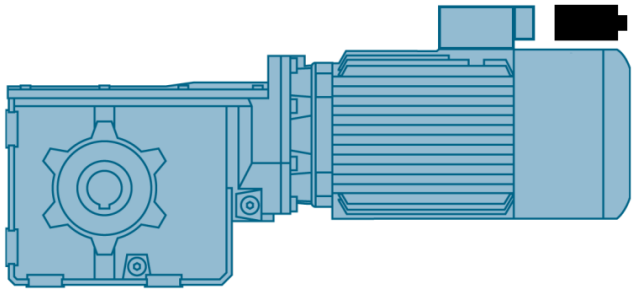


(Example representation with SIRIUS M200D)

Order no.	Description	UL
3RK1902-0CE00	Plug set for connection to the motor starter, motor connection **8x1.5 mm²**, 9-pin, complete with PG16 cable gland	Yes
3RK1902-0CC00	**6x2,5mm²**	

Refer to the Product Partners Harting and Knorrtec for crimping and disassembly tools

2.6 10 E; Motor connection plug, motor side (unshielded)



Order no.	Description	UL
3RK1911-2BM21	Plug set for motor cable for connection to the motor, grommet housing straight feeder contact insert 10 E star jumper incl. gland and seven contact receptacles **1.5 mm²**	Yes
3RK1911-2BM22	**2.5mm²**	
3RK1911-2BL21	Connector set EMC for motor cable for connection to motor Sleeve housing straight, outgoing feeder, Socket insert Han 10E **with EMC protection circuit**, Star jumper included, Screw connection included **4 x 1.5 mm² / 3 x 2.5 mm²**	No
3RK1911-2BL22	**4 x 2.5mm² / 3 x 3mm²**	

Refer to the Product Partners Harting and Knorrtec for crimping and disassembly tools as well as additional versions

SIEMENS

2.7 Motor interference suppression module

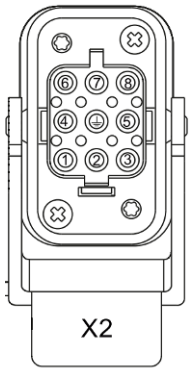
Order no.	Description	UL
3RK1911-6EA00	RC element motor interference suppression module for installation in motor terminal box, **Design square** 3x 400...575V AC/4 kW	No
3RK1911-6EB00	RC element motor interference suppression module for installation at motor terminal box, **Design round** 3x 400...575 V AC/4 kW	No

2.8 Motor cable, cut-to-length (unshielded)

Refer to Product Partner Program

SIEMENS

3 Motor connection (frequency converter)



Pin	Function
1	U
2	-
3	W
4	Brake (-)
5	Temperature sensor (+)
6	Brake (+)
7	V
8	Temperature sensor (-)
PE	Protective earth

It is possible to use non-shielded motor cables when using inverters. However, in order to comply with EMC Class C2, shielded cables are required with the appropriate EMC-compliant installation.

It is not necessary to use shielded motor cables and motor connection plugs for motor starters.

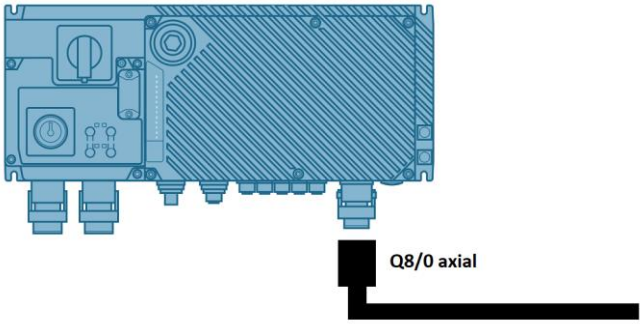
SIEMENS

3.1 Motor cable (shielded), preassembled converter side

3.1.1 Q8/0; axial cable outlet, without brake, without temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

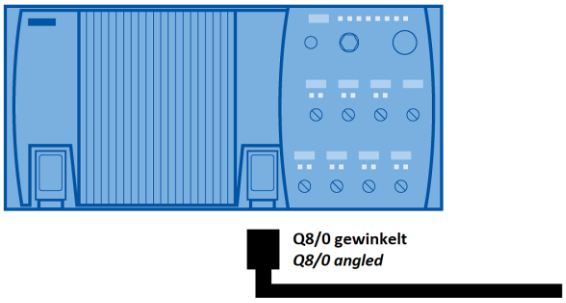
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882013025	ZKT:70057920000150	Motor cable for converter, 4x1,5mm², shielded, Q8/0 axial cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013026	ZKT:70057920000300	**Length 3m**	
HTG:61882013027	ZKT:70057920000500	**Length 5m**	
HTG:61882013028	ZKT:70057920001000	**Length 10m**	
HTG:61882013029	ZKT:70057920001500	**Length 15m**	
Cross section 2,5mm²			
HTG:61882013030	ZKT:70058020000150	Motor cable for converter, 4x2,5mm², shielded, Q8/0 axial cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013031	ZKT:70058020000300	**Length 3m**	
HTG:61882013032	ZKT:70058020000500	**Length 5m**	
HTG:61882013033	ZKT:70058020001000	**Length 10m**	
HTG:61882013034	ZKT:70058020001500	**Length 15m**	
Cross section 4mm²			
HTG:61882013035	ZKT:70058120000150	Motor cable for converter, 4x4mm², shielded, Q8/0 axial cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013036	ZKT:70058120000300	**Length 3m**	
HTG:61882013037	ZKT:70058120000500	**Length 5m**	
HTG:61882013038	ZKT:70058120001000	**Length 10m**	
HTG:61882013039	ZKT:70058120001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

3.1.2 Q8/0; angled cable outlet, without brake, without temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable can be used for the wall mounted G115D if the installation situation allows a cable outlet to the rear. Alternatively, motor cables with axial outlet are also available.



(Example representation with SINAMICS G120D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882010350	ZKT:70049101000150	Motor cable for converter, 4x1,5mm², shielded, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	Yes
HTG:61882010351	ZKT:70049101000300	**Length 3m**	
HTG:61882010352	ZKT:70049101000500	**Length 5m**	
HTG:61882010437	ZKT:70049101000750	**Length 7,5m**	
HTG:61882010353	ZKT:70049101001000	**Length 10m**	
HTG:61882010354	ZKT:70049101001500	**Length 15m**	
Cross section 2,5mm²			
HTG:61882010355	ZKT:70061601000150	Motor cable for converter, 4x2,5mm², shielded, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	Yes
HTG:61882010356	ZKT:70061601000300	**Length 3m**	
HTG:61882010357	ZKT:70061601000500	**Length 5m**	
HTG:61882010438	ZKT:70061601000750	**Length 7,5m**	
HTG:61882010358	ZKT:70061601001000	**Length 10m**	
HTG:61882010359	ZKT:70061601001500	**Length 15m**	
Cross section 4mm²			
HTG:61882010360	ZKT:70061701000150	Motor cable for converter, 4x4mm², shielded, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	Yes
HTG:61882010361	ZKT:70061701000300	**Length 3m**	
HTG:61882010362	ZKT:70061701000500	**Length 5m**	
HTG:61882010439	ZKT:70061701000750	**Length 7,5m**	
HTG:61882010363	ZKT:70061701001000	**Length 10m**	
HTG:61882010364	ZKT:70061701001500	**Length 15m**	

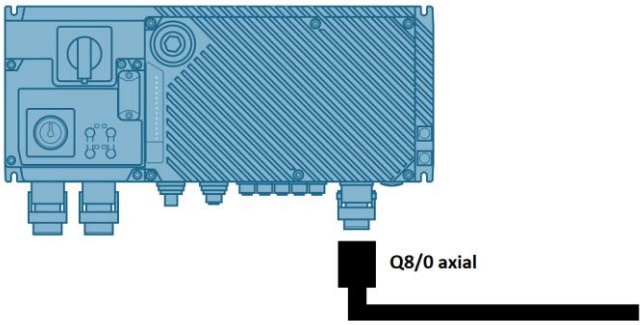
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

3.1.3 Q8/0; axial cable outlet, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882013040	ZKT:70058220000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q8/0 axial cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013041	ZKT:70058220000300	**Length 3m**	
HTG:61882013042	ZKT:70058220000500	**Length 5m**	
HTG:61882013043	ZKT:70058220001000	**Length 10m**	
HTG:61882013044	ZKT:70058220001500	**Length 15m**	
Cross section 2,5mm²			
HTG:61882013045	ZKT:70058320000150	Motor cable for converter, 4x2,5mm² + 2x(2x0,75mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q8/0 axial cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013046	ZKT:70058320000300	**Length 3m**	
HTG:61882013047	ZKT:70058320000500	**Length 5m**	
HTG:61882013048	ZKT:70058320001000	**Length 10m**	
HTG:61882013049	ZKT:70058320001500	**Length 15m**	
Cross section 4mm²			
HTG:61882013050	ZKT:70058420000150	Motor cable for converter, 4x4mm² + 2x(2x1,0mm²), shielded, Q8/0 axial cable outlet ➔ open cable end **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882013051	ZKT:70058420000300	**Length 3m**	
HTG:61882013052	ZKT:70058420000500	**Length 5m**	
HTG:61882013053	ZKT:70058420001000	**Length 10m**	
HTG:61882013054	ZKT:70058420001500	**Length 15m**	

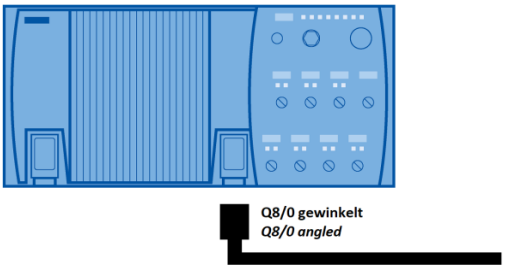
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

3.1.4 Q8/0; angled cable outlet, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable can be used for the wall mounted G115D if the installation situation allows a cable outlet to the rear. Alternatively, motor cables with axial outlet are also available.



(Example representation with SINAMICS G120D)

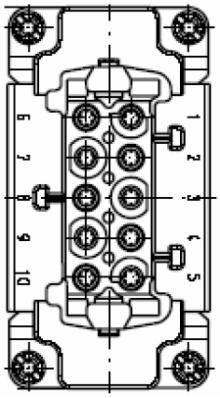
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882010288	ZKT:70020501000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	Harting: Yes Knorrtec: on request
HTG:61882010289	ZKT:70020501000300	**Length 3m**	
HTG:61882010290	ZKT:70020501000500	**Length 5m**	
HTG:61882010412	ZKT:70020501000750	**Length 7,5m**	
HTG:61882010299	ZKT:70020501001000	**Length 10m**	
HTG:61882010300	ZKT:70020501001500	**Length 15m**	
Cross section 2,5mm²			
HTG:61882010291	ZKT:70041801000150	Motor cable for converter, 4x2,5mm² + 2x(2x0,75mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	Harting: Yes Knorrtec: on request
HTG:61882010292	ZKT:70041801000300	**Length 3m**	
HTG:61882010293	ZKT:70041801000500	**Length 5m**	
HTG:61882010440	ZKT:70041801000750	**Length 7,5m**	
HTG:61882010301	ZKT:70041801001000	**Length 10m**	
HTG:61882010302	ZKT:70041801001500	**Length 15m**	
Cross section 4mm²			
HTG:61882010303	ZKT:70017001000150	Motor cable for converter, 4x4mm² + (2x1,0mm² + 2x1,5mm²)) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q8/0 angled cable outlet ➔ open cable end **Length 1,5m**	Harting: Yes Knorrtec: on request
HTG:61882010304	ZKT:70017001000300	**Length 3m**	
HTG:61882010305	ZKT:70017001000500	**Length 5m**	
HTG:61882010441	ZKT:70017001000750	**Length 7,5m**	
HTG:61882010306	ZKT:70017001001000	**Length 10m**	
HTG:61882010307	ZKT:70017001001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

SIEMENS

3.2 Motor cable (shielded), preassembled on both sides (Q 8/0 and 10 E (1-bracket)

10 E Connector at the motor

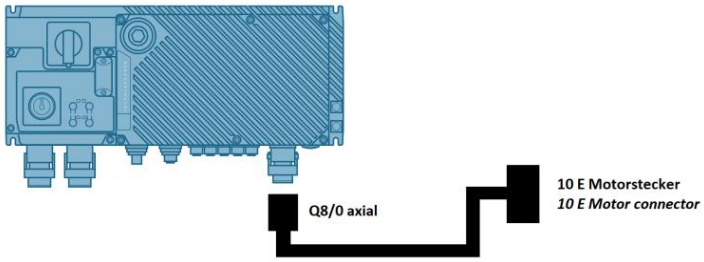


Pin	Function
1	U1
2	V1
3	W1
4	Brake (-)
5	Brake (+)
6	W2
7	U2
8	V2
9	Temperature sensor (+)
10	Temperature sensor (-)
PE	Protective earth

3.2.1 Q8/0; axial cable outlet to 10 E with star connection, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

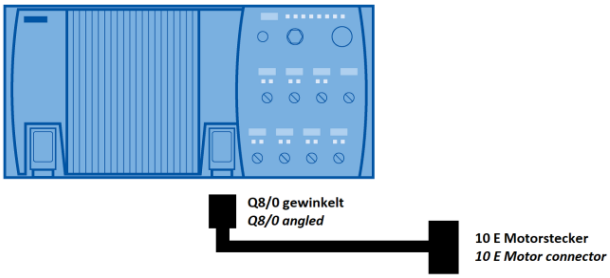
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882023015	ZKT:70058520000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q 8/0 axial cable outlet ➔ 10 E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023016	ZKT:70058520000300	**Length 3m**	
HTG:61882023017	ZKT:70058520000500	**Length 5m**	
HTG:61882023018	ZKT:70058520000750	**Length 7,5m**	
HTG:61882023019	ZKT:70058520001000	**Length 10m**	
HTG:61882023020	ZKT:70058520001500	**Length 15m**	
Cross section 2,5mm²			
HTG:61882023021	ZKT:70058620000150	Motor cable for converter, 4x2,5mm² + 2x(2x0,75mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 axial cable outlet ➔ 10 E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023022	ZKT:70058620000300	**Length 3m**	
HTG:61882023023	ZKT:70058620000500	**Length 5m**	
HTG:61882023024	ZKT:70058620000750	**Length 7,5m**	
HTG:61882023025	ZKT:70058620001000	**Length 10m**	
HTG:61882023026	ZKT:70058620001500	**Length 15m**	
Cross section 4mm²			
HTG:61882023027	ZKT:70058720000150	Motor cable for converter, 4x4mm² + (2x 1,0mm² + 2x1,5mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 axial cable outlet ➔ 10 E with star connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023028	ZKT:70058720000300	**Length 3m**	
HTG:61882023029	ZKT:70058720000500	**Length 5m**	
HTG:61882023030	ZKT:70058720000750	**Length 7,5m**	
HTG:61882023031	ZKT:70058720001000	**Length 10m**	
HTG:61882023032	ZKT:70058720001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

3.2.2 Q8/0; angled cable outlet to 10 E with star connection, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1)]	G115D with Q8/0 [2)]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1)] Only in combination with the G110M WMK (Wall Mounting Kit)
[2)] This cable can be used for the wall mounted G115D if the installation situation allows a cable outlet to the rear. Alternatively, motor cables with axial outlet are also available.



(Example representation with SINAMICS G120D)

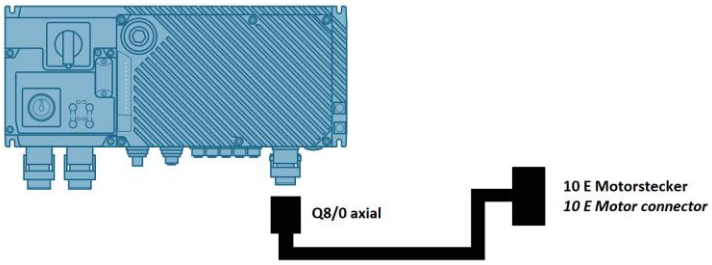
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882020499	ZKT:70018201000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q 8/0 angled cable outlet ➔ 10 E with star connection **Length 1,5m**	Harting: Yes Knorrtec: on Request
HTG:61882020514	ZKT:70018201000300	**Length 3m**	
HTG:61882020515	ZKT:70018201000500	**Length 5m**	
HTG:61882020573	ZKT:70018201000750	**Length 7,5m**	
HTG:61882020574	ZKT:70018201001000	**Length 10m**	
HTG:61882020575	ZKT:70018201001500	**Length 15m**	
Cross section 2.5mm²			
HTG:61882020500	ZKT:70045401000150	Motor cable for converter, 4x2,5mm² + 2x(2x0,75mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 angled cable outlet ➔ 10 E with star connection **Length 1,5m**	Harting: Yes Knorrtec: on Request
HTG:61882020520	ZKT:70045401000300	**Length 3m**	
HTG:61882020521	ZKT:70045401000500	**Length 5m**	
HTG:61882020576	ZKT:70045401000750	**Length 7,5m**	
HTG:61882020577	ZKT:70045401001000	**Length 10m**	
HTG:61882020578	ZKT:70045401001500	**Length 15m**	
Cross section 4mm²			
HTG:61882020522	ZKT:70016801000150	Motor cable for converter, 4x4mm² + (2x 1,0mm² + 2x1,5mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 angled cable outlet ➔ 10 E with star connection **Length 1,5m**	Harting: Yes Knorrtec: on Request
HTG:61882020523	ZKT:70016801000300	**Length 3m**	
HTG:61882020524	ZKT:70016801000500	**Length 5m**	
HTG:61882020579	ZKT:70016801000750	**Length 7,5m**	
HTG:61882020580	ZKT:70016801001000	**Length 10m**	
HTG:61882020581	ZKT:70016801001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

3.2.3 Q8/0; axial cable outlet to 10 E with delta connection, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882023033	ZKT:70058820000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q 8/0 axial cable outlet ➔ 10 E with delta connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023034	ZKT:70058820000300	**Length 3m**	
HTG:61882023035	ZKT:70058820000500	**Length 5m**	
HTG:61882023036	ZKT:70058820000750	**Length 7,5m**	
HTG:61882023037	ZKT:70058820001000	**Length 10m**	
HTG:61882023038	ZKT:70058820001500	**Length 15m**	
Cross section 2,5mm²			
HTG:61882023039	ZKT:70058920000150	Motor cable for converter, 4x2,5mm² + 2x(2x0,75mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 axial cable outlet ➔ 10 E with delta connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023040	ZKT:70058920000300	**Length 3m**	
HTG:61882023041	ZKT:70058920000500	**Length 5m**	
HTG:61882023042	ZKT:70058920000750	**Length 7,5m**	
HTG:61882023043	ZKT:70058920001000	**Length 10m**	
HTG:61882023044	ZKT:70058920001500	**Length 15m**	
Cross section 4mm²			
HTG:61882023045	ZKT:70059020000150	Motor cable for converter, 4x4mm² + (2x 1,0mm² + 2x1,5mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 axial cable outlet ➔ 10 E with delta connection **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023046	ZKT:70059020000300	**Length 3m**	
HTG:61882023047	ZKT:70059020000500	**Length 5m**	
HTG:61882023048	ZKT:70059020000750	**Length 7,5m**	
HTG:61882023049	ZKT:70059020001000	**Length 10m**	
HTG:61882023050	ZKT:70059020001500	**Length 15m**	

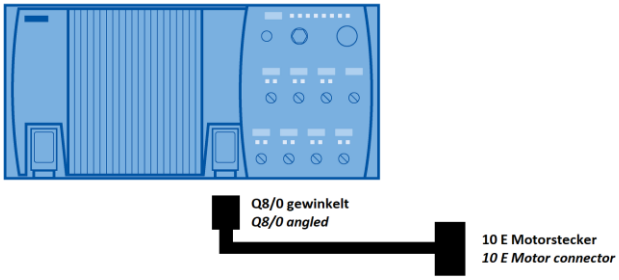
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

3.2.4 Q8/0; angled cable outlet to auf 10 E with delta connection, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable can be used for the wall mounted G115D if the installation situation allows a cable outlet to the rear. Alternatively, motor cables with axial outlet are also available.



(Example representation with SINAMICS G120D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882020525	ZKT:70020401000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q 8/0 angled cable outlet ➔ 10 E with delta connection **Length 1,5m**	Harting: Yes Knorrtec: on Request
HTG:61882020526	ZKT:70020401000300	**Length 3m**	
HTG:61882020527	ZKT:70020401000500	**Length 5m**	
HTG:61882020582	ZKT:70020401000750	**Length 7,5m**	
HTG:61882020583	ZKT:70020401001000	**Length 10m**	
HTG:61882020584	ZKT:70020401001500	**Length 15m**	
Cross section 2.5mm²			
HTG:61882020528	ZKT:70046001000150	Motor cable for converter, 4x2,5mm² + 2x(2x0,75mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 angled cable outlet ➔ 10 E with delta connection **Length 1,5m**	Harting: Yes Knorrtec: on Request
HTG:61882020529	ZKT:70046001000300	**Length 3m**	
HTG:61882020530	ZKT:70046001000500	**Length 5m**	
HTG:61882020585	ZKT:70046001000750	**Length 7,5m**	
HTG:61882020586	ZKT:70046001001000	**Length 10m**	
HTG:61882020587	ZKT:70046001001500	**Length 15m**	
Cross section 4mm²			
HTG:61882020531	ZKT:70016901000150	Motor cable for converter, 4x4mm² + (2x1,0mm² + 2x1,5mm²) (Harting) or 2x(2x1mm²) (Knorrtec), shielded, Q 8/0 angled cable outlet ➔ 10 E with delta connection **Length 1,5m**	Harting: Yes Knorrtec: on Request
HTG:61882020532	ZKT:70016901000300	**Length 3m**	
HTG:61882020533	ZKT:70016901000500	**Length 5m**	
HTG:61882020588	ZKT:70016901000750	**Length 7,5m**	
HTG:61882020589	ZKT:70016901001000	**Length 10m**	
HTG:61882020592	ZKT:70016901001500	**Length 15m**	

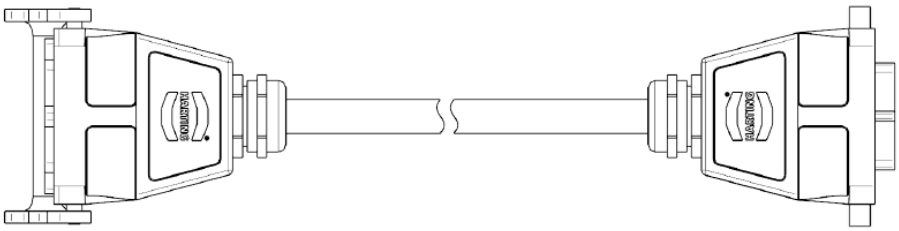
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

3.2.5 Rotary field adapter to invert the motor rotational direction

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M [1]	G115D [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] Only in combination with the wall mounted G115D



(Picture source Harting)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 2,5mm²			
HTG:61882021094	ZKT:70050300000050	Rotary field adapter-cable, **star connection,** 2x 10E 4G2,5+2x(2x0,75) mm² (Harting) or 4G2,5+2x(2x1) mm² (Knorrtec) rotating field left -> right rotating field right -> left **Length 0,5m**	On Request at Harting / Knorrtec
HTG:61882020539	ZKT:70061200000050	Rotary field adapter-cable, **delta connection,** 2x 10E 4G2,5+2x(2x0,75) mm² (Harting) or 4G2,5+2x(2x1) mm² (Knorrtec) rotating field left -> right rotating field right -> left **Length 0,5m**	
Cross section 4mm²			
HTG:61882021095	ZKT:70061300000050	Rotary field adapter-cable, **star connection,** 2x 10E 4G4+2x1,0+2x1,5mm² (Harting) or 4G4+2x(2x1) mm² (Knorrtec) rotating field left -> right rotating field right -> left **Length 0,5m**	On Request at Harting / Knorrtec
HTG:61882020540	ZKT:70061400000050	Rotary field adapter-cable, **delta connection,** 2x 10E 4G4+2x1,0+2x1,5mm² (Harting) or 4G4+2x(2x1) mm² (Knorrtec) rotating field left -> right rotating field right -> left **Length 0,5m**	

Special length and other variants available from Harting / Knorrtec on request

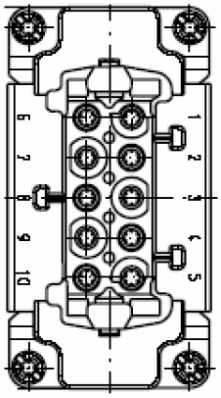
SIEMENS

3.3 Motor cable (shielded), preassembled on both sides (Q 8/0 and 10 E (2-bracket)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] Only in combination with the wall mounted G115D

10 E Connector at the motor



Pin	Function
1	U1
2	V1
3	W1
4	Brake (-)
5	Brake (+)
6	W2
7	U2
8	V2
9	Temperature sensor (+)
10	Temperature sensor (-)
PE	Protective earth

Preassembled motor cables with 10 E connector on motor side with 2-bracket are on request also available from Harting and Knorrtec

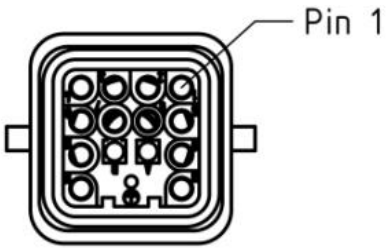
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3.4 Motor cable (shielded), preassembled on both sides (Q 8/0 and Q 12/0)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] Only in combination with the wall mounted G115D

Q 12/0 Connector at the motor

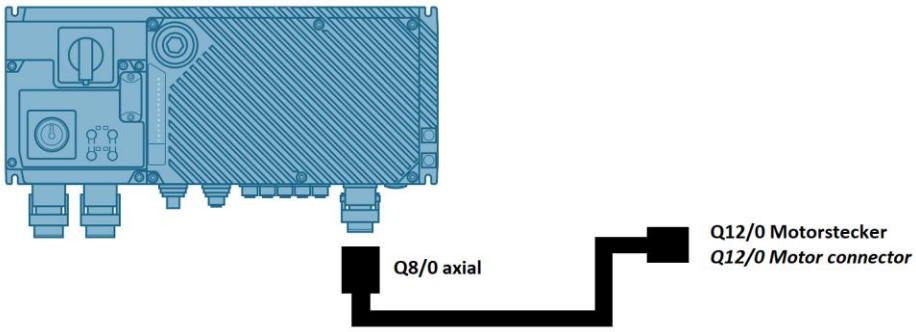


Pin	Function
1	U1
2	V1
3	W1
4	-
5	W2
6	U2
7	V2
8	-
9	Brake
10	Temperature sensor
11	Brake
12	Temperature sensor
PE	Protective earth

3.4.1 Q8/0; axial cable outlet to Q12/0 with star connection, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

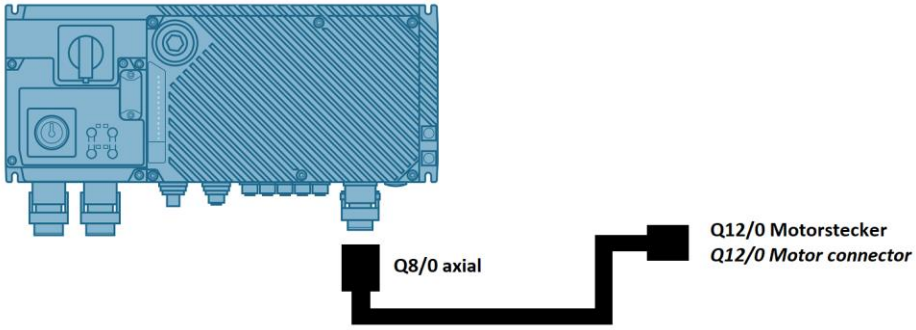
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61882023051	ZKT:70059120000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q 8/0 axial cable outlet ➔ Q12/0 with star connection, axial cable outlet **Length 1,5m**	On Request at Harting / Knorrtec
HTG:61882023052	ZKT:70059120000300	**Length 3m**	
HTG:61882023053	ZKT:70059120000500	**Length 5m**	
HTG:61882023054	ZKT:70059120000750	**Length 7,5m**	
HTG:61882023055	ZKT:70059120001000	**Length 10m**	
HTG:61882023056	ZKT:70059120001500	**Length 15m**	
Cross section 2,5mm²			
---	ZKT:70059420000150	Motor cable for converter, 4x2,5mm² + 2x(2x1mm²), shielded, Q 8/0 axial cable outlet ➔ Q12/0 with star connection, axial cable outlet **Length 1,5m**	On Request at Knorrtec
---	ZKT:70059420000300	**Length 3m**	
---	ZKT:70059420000500	**Length 5m**	
---	ZKT:70059420000750	**Length 7,5m**	
---	ZKT:70059420001000	**Length 10m**	
---	ZKT:70059420001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

3.4.2 Q8/0; axial cable outlet to Q12/0 with delta connection, with brake and temperature sensor

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable is the preferred cable for the wall mounted SINAMICS G115D. Alternatively, cables with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
---	ZKT:70059320000150	Motor cable for converter, 4x1,5mm² + 2x(2x0,75mm²), shielded, Q 8/0 axial cable outlet ➔ Q12/0 with delta connection, axial cable outlet **Length 1,5m**	On Request at Knorrtec
---	ZKT:70059320000300	**Length 3m**	
---	ZKT:70059320000500	**Length 5m**	
---	ZKT:70059320000750	**Length 7,5m**	
---	ZKT:70059320001000	**Length 10m**	
---	ZKT:70059320001500	**Length 15m**	
Cross section 2,5mm²			
---	ZKT:70059520000150	Motor cable for converter, 4x2,5mm² + 2x(2x1mm²), shielded, Q 8/0 axial cable outlet ➔ Q12/0 with delta connection, axial cable outlet **Length 1,5m**	On Request at Knorrtec
---	ZKT:70059520000300	**Length 3m**	
---	ZKT:70059520000500	**Length 5m**	
---	ZKT:70059520000750	**Length 7,5m**	
---	ZKT:70059520001000	**Length 10m**	
---	ZKT:70059520001500	**Length 15m**	

Special length and other variants available from Harting / Knorrtec on request

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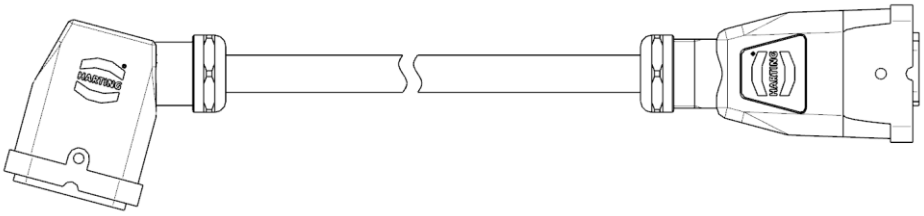
3.5 Motor duplex junction to drive two motors

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] Only in combination with the wall mounted G115D



Motor Duplex Box



Duplex Box adapter cable

(Picture source Harting)

NOTE: It is recommended to use two equal motor cable. Please take care about the maximum cable length of the inverter

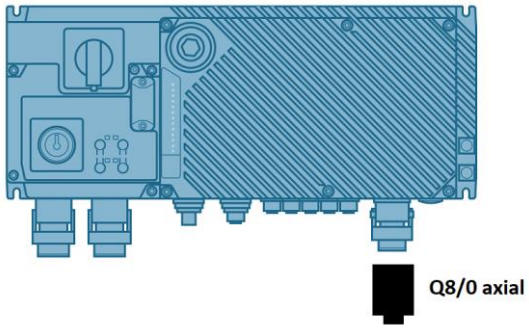
Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882030022	**Motor duplex box EMV Han** Q8/0 + 2x Q8/0 EMC output (Fits to standard motor cable)	On Request at Harting
HTG:61882020541	**Duplex box adapter cable** FC – Box, Han Q8/0 angled -> axial **4G2,5+2x(2x0,75)mm²** Length 1,5m	
HTG:61882020593	**Duplex box adapter cable** FC – Box, Han Q8/0 angled -> axial **4G4+2x1+2x1,5 mm²** Length 1,5m	

3.6 Motor connection plug, converter side (shielded)

3.6.1 Q8/0; axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
				Yes (X2)	Yes (X2)	

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This plug is the preferred plug for the wall mounted SINAMICS G115D. Alternatively, plugs with angled Q8/0 connectors can be used if the installation situation allows a cable outlet to the rear.



(Example representation with wall mounted SINAMICS G115D)

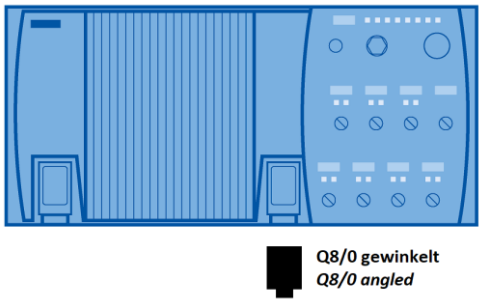
Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61834010320	ZKT:10067200	Q8/0 connector set (shielded) for motor connection to converter, sleeve housing with axial cable outlet, male insert, 8 pins (4x1,5mm² + 4x0,75 mm²)	On Request at Harting / Knorrtec
		Harting: Gland for 10 - 13mm cable diameter	
		Knorrtec: Gland for 7 - 13mm cable diameter	
Cross section 2.5mm²			
HTG:61834010321	ZKT:10067210	Q8/0 connector set (shielded) for motor connection to converter, sleeve housing with axial cable outlet, male insert	On Request at Harting / Knorrtec
		Harting: 8 pins (4x2,5mm² + 4x0,75mm²), Gland for 11 - 14mm cable diameter	
		Knorrtec: 8 pins (4x2,5mm² + 4x1mm²), Gland for 7 - 13mm cable diameter	
Cross section 4mm²			
HTG:61834010322	ZKT:10067220	Q8/0 connector set (shielded) for motor connection to converter, sleeve housing with axial cable outlet, male insert, 8 pins (4x4mm² + 4x1,0 mm²)	On Request at Harting / Knorrtec
		Harting: Gland for 13 - 18mm cable diameter	
		Knorrtec: Gland for 10,5 - 15mm cable diameter	

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3.6.2 Q8/0; angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M with Q8/0 [1]	G115D with Q8/0 [2]	G120D
	Yes (X2)		Yes (X2)	Yes (X2)	Yes (X2)	Yes (X2)

[1] Only in combination with the G110M WMK (Wall Mounting Kit)
[2] This cable can be used for the wall mounted G115D if the installation situation allows a cable outlet to the rear. Alternatively, motor cables with axial outlet are also available.

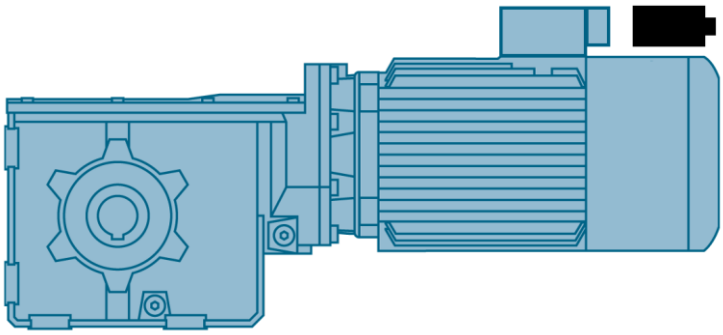


(Example representation with SINAMICS G120D)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61834010131	ZKT:10032001	Q8/0 connector set (shielded) for motor connection to converter, sleeve housing with angled cable outlet, male insert, 8 pins (4x1,5mm² + 4x0,75 mm²)	
		Harting: Gland for 10 - 13mm cable diameter	Yes
		Knorrtec: Gland for 7 - 13mm cable diameter	On Request
Cross section 2.5mm²			
HTG:61834010132	ZKT:10032011	Q8/0 connector set (shielded) for motor connection to converter, sleeve housing with angled cable outlet, male insert	
		Harting: 8 pins (4x2,5mm² + 4x0,75mm²), Gland for 11 - 14mm cable diameter	Yes
		Knorrtec: 8 pins (4x2,5mm² + 4x1mm²), Gland for 7 - 13mm cable diameter	On Request
HTG:61834010253	---	Q8/0 Field mountable connector set (shielded) for motor connection to converter, sleeve housing with angled cable outlet, Quick Lock male insert, terminal cross section 0,5 till 2,5mm², gland for 9 - 13mm cable diameter	On Request
Cross section 4mm²			
HTG:61834010133	ZKT:10032021	Q8/0 connector set (shielded) for motor connection to converter, sleeve housing with angled cable outlet, male insert, 8 pins (4x4mm² + 4x1,0 mm²)	
		Harting: Gland for 13 - 18mm cable diameter	Yes
		Knorrtec: Gland for 10,5 - 15mm cable diameter	On Request

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3.7 Motor connection plug, motor side (shielded)



3.7.1 10 E with star jumper (1-bracket)

Order no. Harting	Order no. Knorrtec	Description	UL
Cross section 1,5mm²			
HTG:61834010120	ZKT:10019710	10 E connector set (shielded) for motor connection, star jumper, sleeve housing with axial cable outlet, female connector, 7 pins (3x1,5mm² + 4x0,75mm²)	
		Harting: Gland for 10 - 14mm cable diameter	Yes
		Knorrtec: Gland for 11 - 20mm cable diameter	On Request
Cross section 2.5mm²			
HTG:61834010121	ZKT:10019720	10 E connector set (shielded) for motor connection, star jumper, sleeve housing with axial cable outlet, female connector, 7 pins (3x2,5mm² + 4x0,75mm²)	
		Harting: Gland for 10 - 14mm cable diameter	Yes
		Knorrtec: Gland for 11 - 20mm cable diameter	On Request
Cross section 4mm²			
HTG:61834010122	ZKT:10019730	10 E connector set (shielded) for motor connection, star jumper, sleeve housing with axial cable outlet, female connector, 7 pins (3x4mm² + 4x1mm²)	
		Harting: Gland for 12 - 18mm cable diameter	Yes
		Knorrtec: Gland for 11 - 20mm cable diameter	On Request

3.7.2 10 E with delta jumper (1-bracket)

Product Partner Harting		
Order no.	**Description**	**UL**
Cross section 1,5mm²		
HTG:61834010123	10 E connector set (shielded) for motor connection, delta jumper, sleeve housing with axial cable outlet, female connector, Gland for 10 - 14mm cable diameter, 10 pins (3x1,5mm²+3x3mm²+4x0,75mm²)	Yes
Cross section 2,5mm²		
HTG:61834010124	10 E connector set (shielded) for motor connection, delta jumper, sleeve housing with axial cable outlet, female connector, Gland for 10 - 14mm cable diameter, 10 pins (3x2,5mm²+3x4mm²+4x0,75mm²)	Yes
Cross section 4mm²		
HTG:61834010125	10 E connector set (shielded) for motor connection, delta jumper, sleeve housing with axial cable outlet, female connector, Gland for 12 - 18mm cable diameter, 10 pins (3x 4mm²x3x2,5mm²+4x1,0mm²)	Yes

Product Partner Knorrtec		
Order no.	**Description**	**UL**
Cross section 1 till 2,5mm²		
ZKT:10031900	10 E connector set (shielded) for motor connection, delta jumper, sleeve housing with axial cable outlet, female connector, EMC Gland for 11– 20 mm cable diameter, 3x insulation-piercing connectors 1 to 2.5mm² + 4 contact sockets 0.75 mm²	On Request
Cross section 4 till 6mm²		
ZKT:10031910	10 E connector set (shielded) for motor connection, delta jumper, sleeve housing with axial cable outlet, female connector, EMC Gland for 11– 20 mm cable diameter, 3x insulation-piercing connectors 4 to 6mm² + 4 contact sockets 1mm²	On Request

3.7.3 Q 8/0

Q 8/0 connector set is also available from Harting

3.7.4 Q 12/0 with star jumper

Q 12/0 connector set is also available from Harting

3.7.5 Q 12/0 with star- or delta jumper

Q 12/0 connector set is also available from Knorrtec

3.7.6 K 4/4 (1 lever locking system)

Connector set for self-assembly, 1 lever locking system / 1 bracket (SIMOGEAR option N09)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61834010302	ZKT:10067100	K4/4 connector set (shielded) for motor connection, sleeve housing, **female** connector 6-16mm², M32 gland	On Request at Harting / Knorrtec
HTG:61834010304	ZKT:10066800	K4/4 connector set (shielded) for motor connection, coupling housing, **male** connector 6-16mm², M32 gland	

Ready-made cables are available on request from Harting / Knorrtec

3.7.7 K 4/4 (2 levers locking system)

Connector set for self-assembly, 2 lever locking system / 2 diagonal brackets (SIMOGEAR option N11)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61834010307	ZKT:10067110	K4/4 connector set (shielded) for motor connection, sleeve housing, female connector 6-16mm², M32 gland	On Request at Harting / Knorrtec
HTG:61834010308	ZKT:10067120	K4/4 connector set (shielded) for motor connection, sleeve housing, female connector >16mm² (Knorrtec 10 till 22 mm²), M32 gland	

Ready-made cables are available on request from Harting / Knorrtec

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3.8 Motor cable, cut-to-length (shielded)

MOTION-CONNECT cables are available in the following variants:

- MOTION-CONNECT 500
  - Cost-effective solution for mainly fixed installation
  - Use for low mechanical loads
  - Tested for traverse paths up to 5 m
- MOTION-CONNECT 800PLUS
  - Fulfills the requirements for use in cable carriers
  - Use for high mechanical loads
  - Oil resistant
  - Tested for traverse paths up to 50 m

Refer to the Product Partner Program for additional versions

MOTION-CONNECT 500 (1,5mm²)

Order no.	Description	UL
6FX5008-1BB11-1FA0	Motor cable 4 x 1,5mm² (without brake / without temperature sensor) **50m**	Yes
6FX5008-1BB11-2AA0	**100m**	
6FX5008-1BB11-3AA0	**200m**	
6FX5008-1BB11-6AA0	**500m**	
6FX5008-1BA11-1FA0	Motor cable 4 x 1,5mm² + 2 x 1,5mm² (with brake or temperature sensor) **50m**	Yes
6FX5008-1BA11-2AA0	**100m**	
6FX5008-1BA11-3AA0	**200m**	
6FX5008-1BA11-6AA0	**500m**	

Motor cables 4 x 1,5mm² + 2 x 1,5mm² + **2 x 1mm²** (with brake and temperature sensor) see Product Partner Program

MOTION-CONNECT 800PLUS (1,5mm²)

Order no.	Description	UL
6FX8008-1BB11-1FA0	Motor cable 4 x 1,5mm² (without brake / without temperature sensor) **50m**	Yes
6FX8008-1BB11-2AA0	**100m**	
6FX8008-1BB11-3AA0	**200m**	
6FX8008-1BB11-6AA0	**500m**	
6FX8008-1BA11-1FA0	Motor cable 4 x 1,5mm² + 2 x 1,5mm² (with brake or temperature sensor) **50m**	Yes
6FX8008-1BA11-2AA0	**100m**	
6FX8008-1BA11-3AA0	**200m**	
6FX8008-1BA11-6AA0	**500m**	

Motor cables 4 x 1,5mm² + 2 x 1,5mm² + **2 x 1mm²** (with brake and temperature sensor) see Product Partner Program

SIEMENS

MOTION-CONNECT 500 (2,5mm²)

Order no.	Description	UL
6FX5008-1BB21-1FA0	Motor cable 4 x 2,5mm² (without brake / without temperature sensor) **50m**	Yes
6FX5008-1BB21-2AA0	**100m**	
6FX5008-1BB21-3AA0	**200m**	
6FX5008-1BB21-6AA0	**500m**	
6FX5008-1BA21-1FA0	Motor cable 4 x 2,5mm² + 2 x 1,5mm² (with brake or temperature sensor) **50m**	Yes
6FX5008-1BA21-2AA0	**100m**	
6FX5008-1BA21-3AA0	**200m**	
6FX5008-1BA21-6AA0	**500m**	

Motor cable 4 x 2,5mm² + 2 x 1,5mm² + **2 x 1mm²** (with brake and temperature sensor) see Product Partner Program

MOTION-CONNECT 800PLUS (2,5mm²)

Order no.	Description	UL
6FX8008-1BB21-1FA0	Motor cable 4 x 2,5mm² (without brake / without temperature sensor) **50m**	Yes
6FX8008-1BB21-2AA0	**100m**	
6FX8008-1BB21-3AA0	**200m**	
6FX8008-1BB21-6AA0	**500m**	
6FX8008-1BA21-1FA0	Motor cable 4 x 2,5mm² + 2 x 1,5mm² (with brake or temperature sensor) **50m**	Yes
6FX8008-1BA21-2AA0	**100m**	
6FX8008-1BA21-3AA0	**200m**	
6FX8008-1BA21-6AA0	**500m**	

Motor cable 4 x 2,5mm² + 2 x 1,5mm² + **2 x 1mm²** (with brake and temperature sensor) see Product Partner Program

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MOTION-CONNECT 500 (4mm²)

Order no.	Description	UL
6FX5008-1BB31-….	Motor cable 4 x 4mm² (without brake / without temperature sensor) **Delivery from up to 99m**	Yes
6FX5008-1BB31-2AA0	**100m**	
6FX5008-1BB31-3AA0	**200m**	
6FX5008-1BB31-6AA0	**500m**	
6FX5008-1BA31-….	Motor cable 4 x 4mm² + 2 x 1,5mm² (with brake or temperature sensor) **Delivery from up to 99m**	Yes
6FX5008-1BA31-2AA0	**100m**	
6FX5008-1BA31-3AA0	**200m**	
6FX5008-1BA31-6AA0	**500m**	

Motor cable 4 x 4mm² + 2 x 1,5mm² **+ 2 x 1mm²** (with brake and temperature sensor) see Product Partner Program

MOTION-CONNECT 800PLUS (4mm²)

Order no.	Description	UL
6FX8008-1BB31-….	Motor cable 4 x 4mm² (without brake / without temperature sensor) **Delivery from up to 99m**	Yes
6FX8008-1BB31-2AA0	**100m**	
6FX8008-1BB31-3AA0	**200m**	
6FX8008-1BB31-6AA0	**500m**	
6FX8008-1BA31-….	Motor cable 4 x 4mm² + 2 x 1,5mm² (with brake or temperature sensor) **Delivery from up to 99m**	Yes
6FX8008-1BA31-2AA0	**100m**	
6FX8008-1BA31-3AA0	**200m**	
6FX8008-1BA31-6AA0	**500m**	

Motor cable 4 x 4mm² + 2 x 1,5mm² **+ 2 x 1mm²** (with brake and temperature sensor) see Product Partner Program

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4 Braking resistor

4.1 SINAMICS G110D

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
			Yes			



Order no.	Description	UL
6SL3501-0BE08-6AA0	External braking resistor for SINAMICS G110D with **0.75 kW and 1.5 kW,** 400 Ohm, IP65	Yes
6SL3501-0BE12-1AA0	**3 kW and 4 kW,** 160 Ohm, IP65	
6SL3501-0BE14-1AA0	**5.5 kW and 7.5 kW,** 80 Ohm, IP65	

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4.2 SINAMICS G110M

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
				Yes		

4.2.1 Internal braking resistors



Order no.	Description	UL
6SL3501-0BE18-8AA0	Internal brake resistor for SINAMICS G110M with **0.37 kW, 0.75 kW, 1.1 kW and 1.5 kW,** 350 Ohm, IP20	Yes
6SL3501-0BE22-0AA0	**2,2 kW, 3 kW and 4 kW,** 175 Ohm, IP20	

4.2.2 External braking resistors

External brake resistors can be ordered from the Product Partner Koch

SIEMENS

5 24 V power supply

7/8“ connector



IN

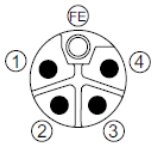


OUT

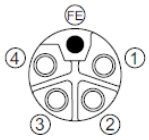
Pin	Signal	Description
1	2M	Switched 0 V
2	1M	Unswitched 0 V
3	FE	Functional earth
4	1L+	Unswitched +24 V
5	2L+	Switched +24 V

The 24 V power supply via 7/8” connector is designed for a **group fusing that does not exceed 8 A**.

M12 Power L-coded connector



IN

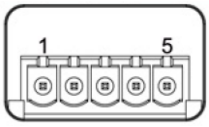


OUT

Pin	Signal	Description
1	1L+	Unswitched 24V
2	2M	Switched 0V
3	1M	Unswitched 0V
4	2L+	Switched 24V
FE	FE	Functional earth

The 24 V power supply via M12 Power connector is designed for a **group fusing that does not exceed 16 A**.

Push Pull connector



IN / OUT

Pin	Signal	Description
1	1L+	Unswitched +24 V
2	1M	Unswitched 0 V
3	2L+	Switched +24 V
4	2M	Switched 0 V
5	FE	Functional earth

The 24 V power supply via Push Pull connector is designed for a **group fusing that does not exceed 8 A**.

The power consumption of the individual products depends on the connected sensors, etc. Details can be found in the associated device documentation of the individual products (SINAMICS G120D, see also http://support.automation.siemens.com/WW/view/en/26986267)

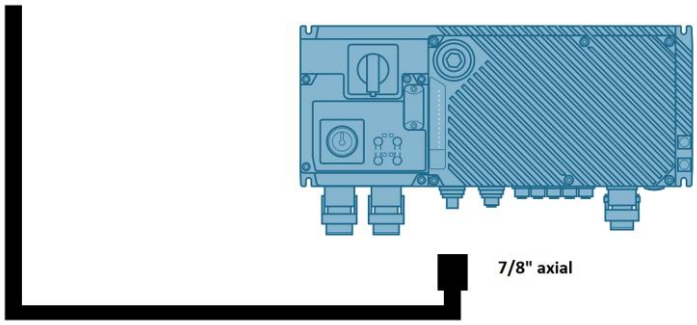
SIEMENS

5.1 7/8“ Plug-in cable

5.1.1 24V feed-in, axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET with 7/8“ connector	G115D PROFINET and IO-Control with 7/8“ connector	G120D with 7/8“ connector
Yes (X01) [1]	Yes (X03) [1]	Yes (X33) [1]		Yes (X01) [1]	Yes (X01)	Yes (X01) [1]

[1] Siemens recommends, to avoid interfering contours, the use of plug connections with angled cable outlet.



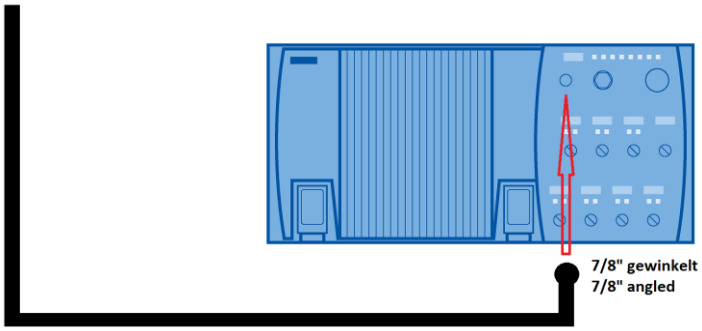
(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:K200001002	ZKT:70057300000150	7/8“ power cable for switched and unswitched 24V, **5x2,5mm²,** 7/8“ socked, axial cable outlet ➔ open cable end **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:K200002002	ZKT:70057300000300	**Length 3 m**	
HTG:K200003002	ZKT:70057300000500	**Length 5 m**	
HTG:K200004002	ZKT:70057300001000	**Length 10 m**	
HTG:K200005002	ZKT:70057300001500	**Length 15 m**	

Special length and other variants available from Harting / Knorrtec on request

5.1.2 24V feed-in, angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET with 7/8“ connector	G115D	G120D with 7/8“ connector
Yes (X01)	Yes (X03)	Yes (X33)		Yes (X01)		Yes (X01)



(Example representation with SINAMICS G120D)

Order no.	Description	UL
3RK1902-3GB30	7/8“ power cable for switched and unswitched 24V, **5x1,5mm²,** 7/8“ socket, angled cable outlet ➔ open cable end **Length 3 m**	No
3RK1902-3GB50	**Length 5 m**	
3RK1902-3GC10	**Length 10 m**	

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882010626	ZKT:70061500000150	7/8“ power cable for switched and unswitched 24V, **5x2,5mm²,** 7/8“ socked, angled cable outlet ➔ open cable end **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882010628	ZKT:70061500000300	**Length 3 m**	
HTG:61882010629	ZKT:70061500000500	**Length 5 m**	

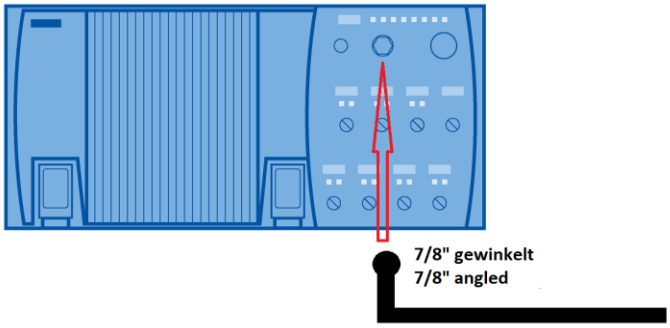
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

5.1.3 24V feed-out, angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET with 7/8“ connector	G115D	G120D with 7/8“ connector
Yes (X02)	Yes (X04)	Yes (X34)		Yes (X02)		Yes (X02)

24V DC forwarding for connection of devices without plug connection



(Example representation with SINAMICS G120D)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882010620	ZKT:70061800000150	7/8“ power cable for switched and unswitched 24V, **5x2,5mm²,** 7/8“ plug, angled cable outlet ➔ open cable end **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882010622	ZKT:70061800000300	**Length 3 m**	
HTG:61882010623	ZKT:70061800000500	**Length 5 m**	

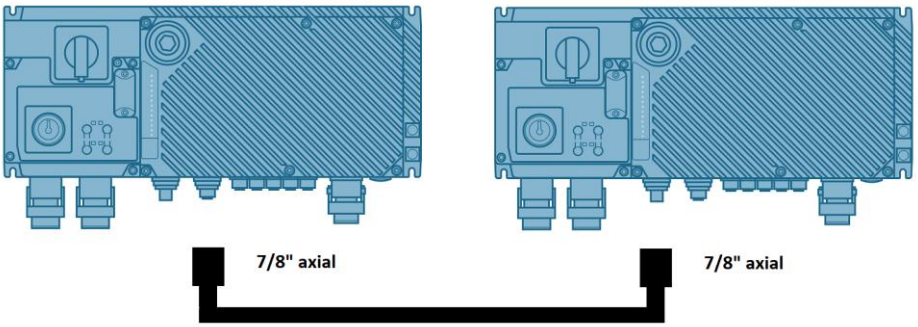
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

5.1.4 24V routing, axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET with 7/8“ connector	G115D PROFINET and IO-Control with 7/8“ connector	G120D with 7/8“ connector
Yes [1] (X01 / X02)	**Yes [1] (X03 / X04)**	**Yes [1] (X33 / X34)**		**Yes [1] (X01 / X02)**	**Yes (X01 / X02)**	**Yes [1] (X01 / X02)**

[1] Siemens recommends, to avoid interfering contours, the use of plug connections with angled cable outlet.



(Example representation with wall mounted SINAMICS G115D)

Order no.	Description	UL
6XV1822-5BE30	7/8“ power cable for switched and unswitched 24V, **5x1,5mm²,** 7/8“ plug, axial cable outlet ➔ 7/8“ socked, axial cable outlet **Length 0,3 m**	No
6XV1822-5BE50	**Length 0,5 m**	
6XV1822-5BH10	**Length 1,0 m**	
6XV1822-5BH15	**Length 1,5 m**	
6XV1822-5BH20	**Length 2,0 m**	
6XV1822-5BH30	**Length 3,0 m**	
6XV1822-5BH50	**Length 5,0 m**	
6XV1822-5BN10	**Length 10 m**	
6XV1822-5BN15	**Length 15 m**	

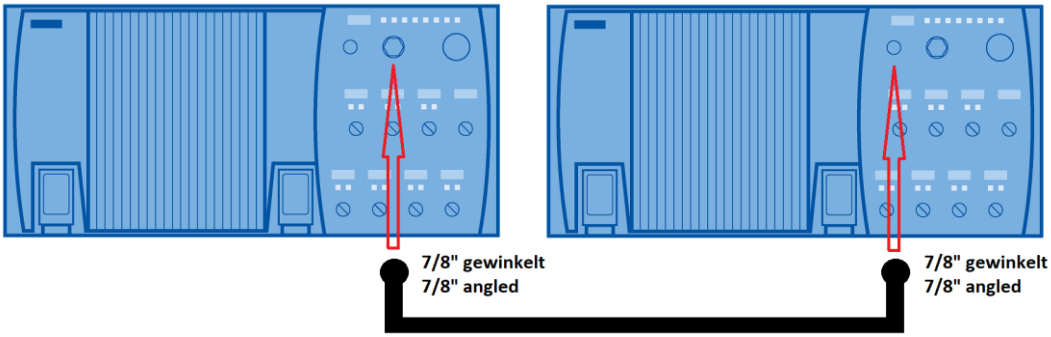
Order no. Harting	Order no. Knorrtec	Description	UL
HTG:K3K2001002	ZKT:70057400000150	7/8“ power cable for switched and unswitched 24V, **5x2,5mm²,** 7/8“ plug, axial cable outlet ➔ 7/8“ socked, axial cable outlet **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:K3K2002002	ZKT:70057400000300	**Length 3 m**	
HTG:K3K2003002	ZKT:70057400000500	**Length 5 m**	
HTG:K3K2004002	ZKT:70057400001000	**Length 10 m**	
HTG:K3K2005002	ZKT:70057400001500	**Length 15 m**	

Special length and other variants available from Harting / Knorrtec on request

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5.1.5 24V routing, angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS und PROFINET with 7/8“ connector	G115D	G120D with 7/8“ connector
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)		Yes (X01 / X02)



(Example representation with SINAMICS G120D)

Order no.	Description	UL
3RK1902-3NB30	7/8“ power cable for switched and unswitched 24V, **5x1,5mm²,** 7/8“ plug, angled cable outlet ➔ 7/8“ socked, angled cable outlet **Length 3 m**	No
3RK1902-3NB50	**Length 5 m**	
3RK1902-3NC10	**Length 10 m**	

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882020620	ZKT:70061900000150	7/8“ power cable for switched and unswitched 24V, **5x2,5mm²,** 7/8“ plug, angled cable outlet ➔ 7/8“ socked, angled cable outlet **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882020622	ZKT:70061900000300	**Length 3 m**	
HTG:61882020623	ZKT:70061900000500	**Length 5 m**	

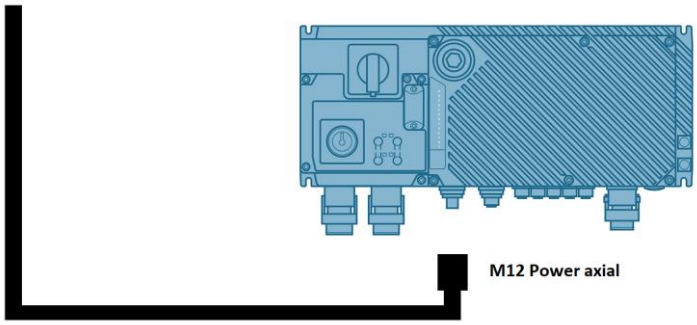
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

5.2 M12 Power Plug-in cable

5.2.1 24V feed-in, axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module	M200D	G110D	G110M	G115D PROFINET and IO-Control with M12 Power connector	G120D
					Yes (X01)	



(Example representation with wall mounted SINAMICS G115D)

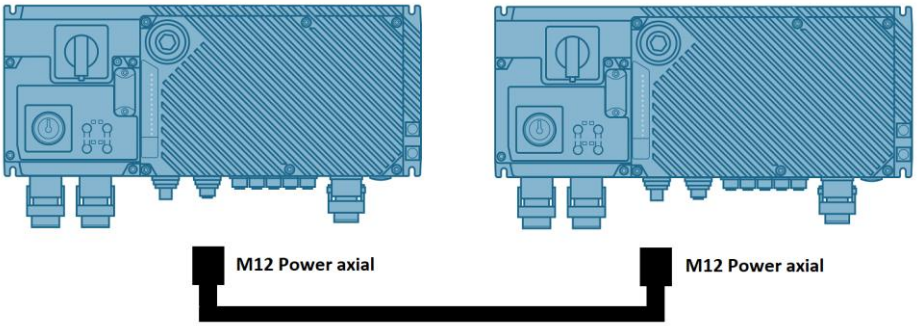
Order no. Harting	Order no. Knorrtec	Description	UL
HTG:K400001002	ZKT:70057500000150	M12 Power power cable for switched and unswitched 24V, **5x2,5mm²,** M12 l-coded socked, axial cable outlet ➔ open cable end **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:K400002002	ZKT:70057500000300	**Length 3 m**	
HTG:K400003002	ZKT:70057500000500	**Length 5 m**	
HTG:K400004002	ZKT:70057500001000	**Length 10 m**	
HTG:K400005002	ZKT:70057500001500	**Length 15 m**	

Special length and other variants available from Harting / Knorrtec on request

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5.2.2 24V routing, axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module	M200D	G110D	G110M	G115D PROFINET and IO-Control with M12 Power connector	G120D
					Yes (X01 / X02)	



(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:K5K4001002	ZKT:70057600000150	M12 Power power cable for switched and unswitched 24V, **5x2,5mm²,** M12 l-coded plug, axial cable outlet ➔ M12 l-coded socked, axial cable outlet **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:K5K4002002	ZKT:70057600000300	**Length 3 m**	
HTG:K5K4003002	ZKT:70057600000500	**Length 5 m**	
HTG:K5K4004002	ZKT:70057600001000	**Length 10 m**	
HTG:K5K4005002	ZKT:70057600001500	**Length 15 m**	

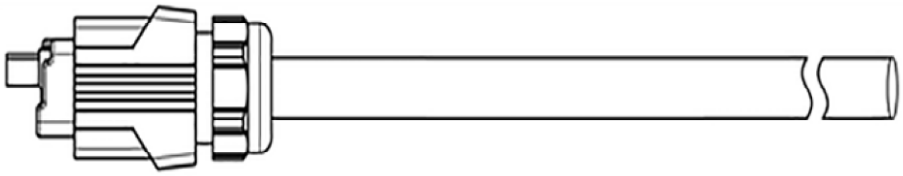
Special length and other variants available from Harting / Knorrtec on request

SIEMENS

5.3 Push Pull plug-in cable (AIDA-Standard)

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFINET Push Pull Interface module	M200D	G110D	G110M	G115D	G120D PROFINET Push Pull
Yes (X03 / X04)					Yes (X01 / X02)

5.3.1 One side pre-assembled

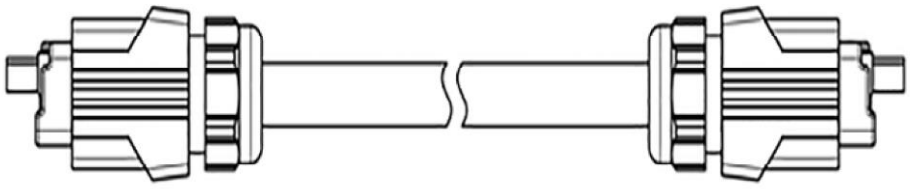


(Picture source Harting)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882010540	ZKT:70062300000150	PushPull Power L power cable for switched and unswitched 24V, **5x2,5mm²,** Push Pull Power L socked, axial cable outlet ➔ open cable end **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882010541	ZKT:70062300000300	**Length 3 m**	
HTG:61882010542	ZKT:70062300000500	**Length 5 m**	

Special length and other variants available from Harting / Knorrtec on request

5.3.2 Both sides pre-assembled



(Picture source Harting)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882020835	ZKT:70062400000150	PushPull Power L power cable for switched and unswitched 24V, **5x2,5mm²,** Push Pull Power L socked, axial cable outlet ➔ Push Pull Power L socked, axial cable outlet **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882020836	ZKT:70062400000300	**Length 3 m**	
HTG:61882020837	ZKT:70062400000500	**Length 5 m**	

Special length and other variants available from Harting / Knorrtec on request

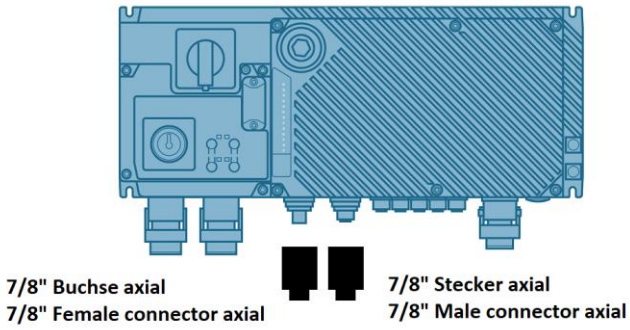
SIEMENS

5.4 Connectors

5.4.1 7/8“; axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET with 7/8“ connector	G115D PROFINET and IO-Control with 7/8“ connector	G120D PROFIBUS and PROFINET with 7/8“ connector
Yes [1] (X01 / X02)	**Yes [1] (X03 / X04)**	**Yes [1] (X33 / X34)**		**Yes [1] (X01 / X02)**	**Yes (X01 / X02)**	**Yes [1] (X01 / X02)**

[1] Siemens recommends, to avoid interfering contours, the use of plug connections with angled cable outlet.



(Example representation with wall mounted SINAMICS G115D)

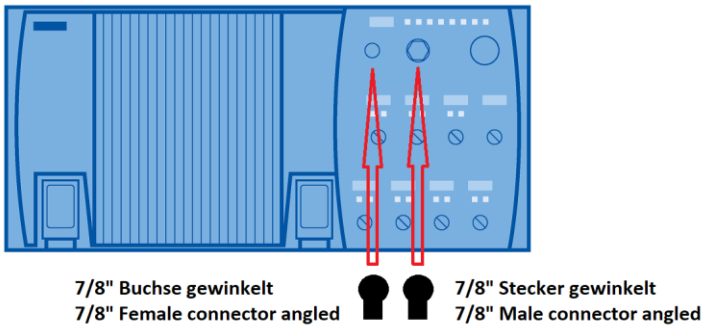
Order no.	Description	UL
6GK1905-0FB00	7/8’’- Connector**,** 5-pole, axial cable outlet, screw connection, wire size **1,5mm²** **Female connector** (1 pack = 5 units)	No
6GK1905-0FA00	**Male connector** (1 pack = 5 units)	

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61834010168	ZKT:30023602	7/8“ - Connector, 5-pole, axial cable outlet, screw connection, wire size **2,5 mm²**, cable diameter 10 – 12 mm **Female connector**	Harting: On Request Knorrtec: Yes
HTG:61834010167	ZKT:30023502	**Male connector**	

SIEMENS

5.4.2 7/8“; angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module with 7/8“ connector	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET with 7/8“ connector	G115D	G120D PROFIBUS und PROFINET with 7/8“ connector
Yes (X01 / X02)	**Yes (X03 / X04)**	**Yes (X33 / X34)**		**Yes (X01 / X02)**		**Yes (X01 / X02)**



(Example representation with SINAMICS G120D)

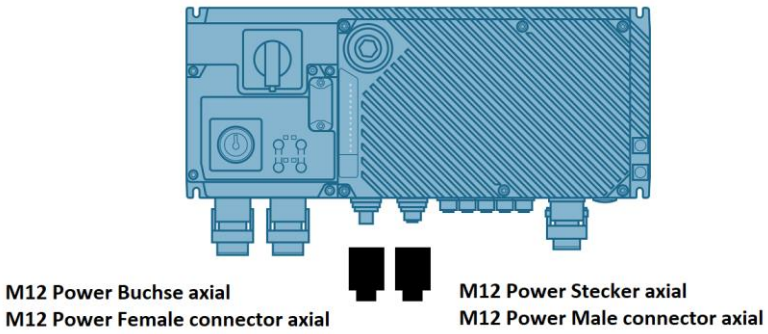
Order no.	Description	UL
3RK1902-3DA00	7/8”- connector, 5-pole, angled cable outlet, screw connection, wire size **1,5 mm²** **Female connector**	No
3RK1902-3BA00	**Male connector**	

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61834010158	ZKT:30023612	7/8“ – connector, 5 pole, angled cable outlet, screw connection, wire size **2,5 mm²,** cable diameter 10 – 12 mm **Female connector**	Harting: On Request Knorrtec: Yes
HTG:61834010157	ZKT:30023512	**Male connector**	

SIEMENS

5.4.3 M12 Power L-coded; axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Interface-module	M200D	G110D	G110M	G115D PROFINET and IO-Control with M12 Power	G120D
					Yes (X01 / X02)	



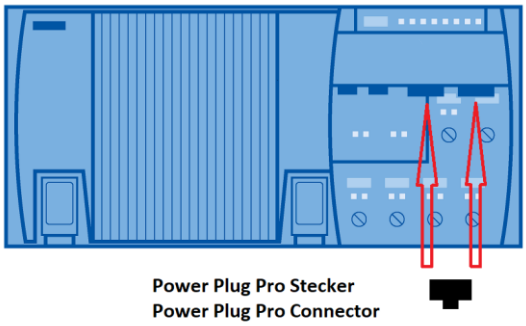
(Example representation with wall mounted SINAMICS G115D)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:6183401032400	ZKT:10067000	M12 Power connector, L-coded, axial cable outlet, wire size 2,5mm² **Female connector**	On Request at Harting / Knorrtec
HTG:6183401032300	ZKT:10066900	**Male connector**	

SIEMENS

5.4.4 POWER PLUG PRO-connector (AIDA – Standard)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface-module	ET 200pro PROFINET Push Pull Interface module	M200D	G110D	G110M	G115D	G120D PROFINET Push Pull
	Yes (X03 / X04)					**Yes (X01 / X02)**



(Example representation with SINAMICS G120D)

Order no.	Description	UL
6GK1907-0AB11-6AA0	**Power Plug PRO** 5-pole, connector with metal housing	Yes

SIEMENS

5.5 24 V power cable 5 x 1.5 mm²

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET	G115D IO-Control and PROFINET	G120D
Yes	Yes	Yes		Yes	Yes	Yes



Order no.	Description	UL
6XV1830-8AH10	**SIMATIC NET ENERGY CABLE** 5-core power cable, stranded, 5 x 1.5 mm², trailing-type, max. delivery length 1000 m (3281 ft); minimum order 20 m (65.62 ft), cut-to-length	No

SIEMENS

5.6 24 V power supply fuse protection (group fusing)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module	M200D PROFIBUS and PROFINET	G110D	G110M PROFIBUS and PROFINET	G115D IO-Control and PROFINET	G120D
Yes (X01)	Yes (X03)	Yes (X33)	Yes (X03)	Yes (X01)	Yes (X01)	Yes (X01)

Standard fuses can be used – or for switched-mode power supplies, the SITOP PSE200U selectivity module should be preferably used with single channel signal.



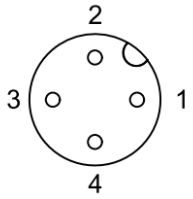
The new versions of the selectivity modules permit a safe shutdown of faulty consumer branches and evaluate them for specific channels (irrespective of the cable length and cross-section). The channel-specific status display of the four output channels is made at the status output of the device. The supplied pulse/pause signal can be evaluated at a single standard digital input of the SIMATIC S7 and an appropriate SIMATIC S7 function block.

For detailed information, see http://support.automation.siemens.com/WW/view/en/61866040

Order no.	Description	UL
6EP1961-2BA41	**SITOP PSE200U selectivity module** 4-channel, 3-10 A, with single channel signaling	Yes

SIEMENS

6 AS-Interface connection



Pin	Function
1	U_{AS-i+}
2	PWR-AUX-
3	U_{AS-i-}
4	PWR-AUX+

6.1 AS-Interface branch

6.1.1 Without cable, with M12 socket

SIMATIC		SIRIUS	SINAMICS			
ET 200pro		M200D AS-Interface	G110D	G110M AS-Interface	G115D AS-Interface	G120D
		Yes (X31) [1)]	**Yes (X03) [1)]**	**Yes (X03) [1)]**	**Yes (X03)**	

[1)] Siemens recommends, to avoid interfering contours, the use of plug connections with angled cable outlet.



Order no.	Description	UL
3RK1901-2NR20	**AS-Interface M12 branch** U_ASI and PWR-AUX, **with M12 socket** IP67/68/69K, max. 4 A	Yes

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:K6C1001002	ZKT:70057820000100	M12 connecting cable between AS-Interface M12 branch and G115D, M12 plug A-coded, axial cable outlet ➔ M12 socket A-coded, axial cable outlet, 4x0,34mm² **Length 1m**	On Request at Harting / Knorrtec
		Harting: 4x0,34mm²	
		Knorrtec: 5x0,75mm²	
HTG:K6C2002002	ZKT:70057820000200	**Length 2m**	

6.1.2 With cable

SIMATIC		SIRIUS	SINAMICS			
ET 200pro		M200D AS-Interface	G110D	G110M AS-Interface	G115D AS-Interface	G120D
		Yes (X31)	Yes (X03)	Yes (X03)		



Order no.	Cescription	UL
3RK1901-1NR21	**AS-interface M12 branch** AS-I and U-AUX, **1 m cable with M12 angled plug** IP 67/68/69K, max. 4 A	Yes
3RK1901-1NR22	**AS-interface M12 branch** AS-I and U-AUX, **2m cable with M12 angled plug** IP 67/68/69K, max. 4 A	

6.2 AS-interface M12 receptacle (angled cable outlet)

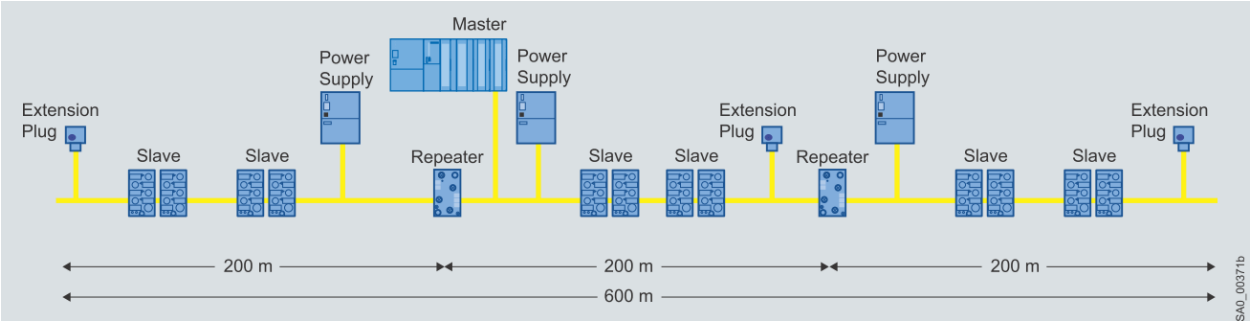
SIMATIC		SIRIUS	SINAMICS			
ET 200pro		M200D AS-Interface	G110D	G110M AS-Interface	G115D AS-Interface	G120D
		Yes (X31)	Yes (X03)	Yes (X03)		



Order no.	Description	UL
3RK1902-4CA00-4AA0	**M12 receptacle, angled, 4-pin** Screwed connection, max. 0.75 mm², A-coded, max. 4 A	No

SIEMENS

6.3 AS-Interface Extension Plug



The cable to an AS-Interface network can be up to 100 meters long. Using an AS-i Extension Plug, the cable length can be doubled up to 200 m at a favorable price.



(AS-Interface Extension Plug Compact)

Order no.	Description	UL
3RK1901-1MX02	**AS-Interface Extension Plug Compact** Doubling the cable length to 200m per AS-Interface segment, protection IP67, direct connection to AS-Interface profile cable	No

SIEMENS

6.4 AS-interface cable end cover

This is used for sealing open cable ends (AS-interface shaped cable) with IP67



Order no.	Description	UL
3RK1901-1MN00	**Cable end cover**	No

6.5 AS-interface cable (yellow)



Order no.	Description	UL
3RX9010-0AA00	**AS-interface cable,** profiled yellow, **rubber**, 2 x 1.5 mm² **100 m**	No
3RX9012-0AA00	**1000 m**	
3RX9013-0AA00	**AS-interface cable,** profiled yellow, **TPE, oil resistant,** 2 x 1.5 mm² **100 m**	Yes
3RX9014-0AA00	**1000 m**	
3RX9015-0AA00	**AS-interface cable,** profiled yellow, **PUR, oil resistant, approved for marine use,** 2 x 1.5 mm² **100 m**	No
3RX9016-0AA00	**1000 m**	
3RX9017-0AA00	**AS-interface cable,** profiled **yellow** **TPE, oil resistant,** 2 x 1.5 mm², **special variant in accordance with UL CLASS 2** **100 m**	Yes

6.6 AS-interface cable (black)



Order no.	Description	UL
3RX9020-0AA00	**AS-interface cable,** profiled for 24 V external auxiliary voltage black**, rubber,** 2 x 1.5 mm², **100 m**	No
3RX9022-0AA00	**1000m**	
3RX9023-0AA00	**AS-interface cable,** profiled for 24 V external auxiliary voltage black**, TPE, oil resistant,** 2 x 1.5 mm² **100 m**	Yes
3RX9024-0AA00	**1000m**	
3RX9025-0AA00	**AS-interface cable,** profiled for 24 V external auxiliary voltage **black**, **PUR, oil resistant,** 2 x 1.5 mm², **approved for marine use** **100 m**	No
3RX9026-0AA00	**1000m**	
3RX9027-0AA00	**AS-interface cable,** profiled for 24 V external auxiliary voltage **black**, **TPE, oil resistant,** 2 x 1.5 mm², **special variant in accordance with UL CLASS 2** **100 m**	Yes

6.7 AS-i Addressing unit



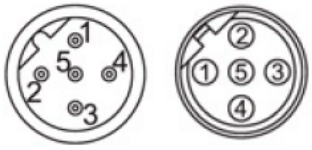


Order no.	Description
3RK1904-2AB02	**AS-interface addressing unit V3.0** for setting the addresses of AS-i slave modules, input/output test and other functions. AS-i specification V3.0, M12 connection receptacle, with addressing cable 1.5 m (M12 plug / hollow plug). With batteries (4 x 1.5 V LR6). Addressing user modules using accessories 3RK1901-1MA00
3RK1902-4PB15-3AA0	**Addressing cable M12 to M12** Control cable, preassembled, M12 straight cable plug, M12 straight plug, 1.5 m cable 3 x 0.34 mm², A-coded, max. 4A; PUR sheath; black

Other AS-Interface components see catalog IK PI

SIEMENS

7 PROFIBUS / USS connection



IN OUT

Pin	Function
1	-
2	Data A (N)
3	-
4	Data B (P)
5	Functional earth

To avoid disturbing contours, Siemens recommends the use of plug connectors with angled cable outlet.

For SINAMICS G110M, please use connectors with straight/axial cable outlet.

7.1 PROFIBUS M12 plug-in cable

7.1.1 Preassembled on one side, angled cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M	G115D	G120D PROFIBUS
Yes (X03)	Yes (X31)				Yes (X03)



Order no.	Description	UL
3RK1902-1GB30	**PROFIBUS bus cable** Preassembled on one side M12 angled, 3-core pin, shielded **Length 3 m**	No
3RK1902-1GB50	**Length 5 m**	
3RK1902-1GC10	**Length 10 m**	

7.1.2 Preassembled on both sides, angled cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M	G115D	G120D PROFIBUS
Yes (X03 / X04	Yes (X31 / X32)				Yes (X03 / X04)



Order no.	Description	UL
3RK1902-1NB30	**PROFIBUS bus cable** Preassembled on both sides M12 angled, 3-core pin, shielded **Length 3 m**	No
3RK1902-1NB50	**Length 5 m**	
3RK1902-1NC10	**Length 10 m**	

7.1.3 Preassembled on both side, axial cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M PROFIBUS / USS	G115D	G120D PROFIBUS
Yes (X03 / X04) [1]	Yes (X31 / X32) [1]		Yes (X03 / X04)		Yes (X03 / X04) [1]

[1] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



Order no.	Description	UL
6XV1830-3DE30	**PROFIBUS M12 plug-in cable** Preassembled FC trailing cable with two 5-pin M12 pin/receptacle plugs, UL **Length 0.3 m**	Yes
6XV1830-3DE50	**Length 0.5 m**	
6XV1830-3DH10	**Length 1 m**	
6XV1830-3DH15	**Length 1.5 m**	
6XV1830-3DH20	**Length 2 m**	
6XV1830-3DH30	**Length 3 m**	
6XV1830-3DH50	**Length 5 m**	
6XV1830-3DN10	**Length 10 m**	
6XV1830-3DN15	**Length 15 m**	

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7.2 PROFIBUS M12 connection plug

7.2.1 Angled cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M	G115D	G120D PROFIBUS
Yes (X03 / X04)	Yes (X31 / X32)				Yes (X03 / X04)



Order no.	Description	UL
3RK1902-1BA00	**PROFIBUS M12 angled plug** Screw fastening, 5-pin screw connection, max. 0.75 mm², B-coded, no terminating resistor **Pin insert**	No
3RK1902-1DA00	**Contact insert**	

7.2.2 Axial cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M PROFIBUS / USS	G115D	G120D PROFIBUS
Yes (X03 / X04) [1]	Yes (X31 / X32) [1]		Yes (X03 / X04)		Yes (X03 / X04) [1]

[1] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



Order no.	Description	UL
6GK1905-0EA00	**PROFIBUS M12 connection plug** 5-pin, B-coded, metal enclosure, with axial cable outlet for on-site assembly **Pin insert (1 pack = 5 units)**	No
6GK1905-0EB00	**Receptacle insert (1 pack = 5 units)**	

SIEMENS

7.2.3 Profibus terminal plug

Can be used instead of the in ET 200 interface modules / motor starter / frequency inverter integrated terminal resistors

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M PROFIBUS / USS	G115D	G120D PROFIBUS
Yes (X04)	Yes (X32)		Yes (X04)		Yes (X04)



(Image similar)

Order no.	Description	UL
6GK1905-0EC00	**M12 Terminal plug** with integrated terminal resistor combination **Pin insert (1 pack = 5 units)**	Yes

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7.3 PROFIBUS bus connection plug RS485

RS485 connection plugs are required for connecting to switchgear components, such as S7 controller.



Order no.	Description	UL
6ES7972-0BA52-0XA0	**SIMATIC DP, connection plug for PROFIBUS up to 12 Mbit/s** 90-degree cable outlet, FastConnect insulation-piercing technology, **without PG receptacle** **(1 pack = 1 unit)**	Yes
6ES7972-0BA52-0XB0	**(1 pack = 100 units)**	
6ES7972-0BB52-0XA0	**With PG receptacle** **(1 pack = 1 unit)**	Yes
6ES7972-0BB52-0XB0	**(1 pack = 100 units)**	



Order no.	Description	UL
6ES7972-0BA60-0XA0	**SIMATIC DP, connection plug for PROFIBUS up to 12 Mbit/s** 35-degree cable outlet, FastConnect insulation-piercing technology, **without PG receptacle**	Yes
6ES7972-0BB60-0XA0	**With PG receptacle**	



Order no.	Description	UL
6GK1500-0FC10	**SIMATIC DP, connection plug for PROFIBUS up to 12 Mbit/s** 180-degree cable outlet, FastConnect insulation-piercing technology, **without PG receptacle**	Yes

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7.4 PROFIBUS cables



Order no.	Description	UL
6XV1830-0EH10	**PROFIBUS FC Standard Cable GP** Standard type with special construction for fast assembly, 2-core, shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1831-2A	**PROFIBUS FC Standard Cable IS GP** Standard type with special construction for fast assembly, 2-core, shielded for intrinsically safe distributed peripheral systems, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1830-0JH10	**PROFIBUS FC Robust Cable** With PUR outer sheath for deployment in environments subject to chemical and mechanical burdens, 2-core, shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1830-0GH10	**PROFIBUS FC Food Cable** With PE outer sheath for use in the food and beverage industry, 2-core, shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	No
6XV1830-3FH10	**PROFIBUS FC Underground Cable** Underground cable, 2-core shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1831-2K	**PROFIBUS FC Flexible Cable** Flexible (braided conductors), halogen-free bus cable with PUR sheath for occasional movement, 2-core, shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1831-2L	**PROFIBUS FC Trailing Cable** PROFIBUS trailing cable, max. acceleration 4 m/s², at least 3 million bending cycles, minimum bending radius 120 mm, 2-core shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1830-3GH10	**PROFIBUS Festoon Cable GP** For festooned laying, 2-core shielded, max. acceleration 4 m/s², at least 5 million bending cycles, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1830-0LH10	**PROFIBUS FC FRNC Cable GP** Flame-retardant and halogen-free bus cable with copolymer sheath, FRNC, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1830-0PH10	**PROFIBUS Torsion Cable** Bus cable for highly-flexible use: Special cable (braided conductors) for deployment on moving machine parts (5 million torsion movements over 1 m cable, ± 180º); 2-core shielded; cut-to-length; delivery unit max. 1000 m, minimum order 20 m	
6XV1830-0MH10	**SIENOPYR PROFIBUS Shipboard Cable** Halogen-free, step-resistant, flame-retardant ship-construction approved cable for permanent laying on ships and offshore units in rooms and on free decks. Sold by the meter; max. delivery length 1000 m (3281 ft), minimum order 20 m	No
6XV1830-3EH10	**PROFIBUS FC Trailing Cable** Trailing cable, max. acceleration 4 m/s², at least 3 million bending cycles, minimum bending radius 120 mm, 2-core shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes

7.5 Tools



Order no.	Description
6GK1905-6AA00	**PROFIBUS FastConnect Stripping Tool** Pre-adjusted stripping tool for fast stripping of PROFIBUS FastConnect bus cables
6GK1905-6AB00	**PROFIBUS FastConnect Blade Cassettes** Replacement blade cassettes for the PROFIBUS FastConnect Stripping Tool, 5 units

Other PROFIBUS components see catalog IK PI

SIEMENS

8 PROFINET connection

M12-Connector



IN / OUT

Pin	Function
1	Transmission data + (TD+)
2	Receive data + (RD+)
3	Transmission data – (TD-)
4	Receive data – (RD-)

Push Pull Connector (AIDA-Standard)



IN / OUT

Pin	Function
1	Transmission data + (TD+) (Yellow)
2	Transmission data – (TD-) (Orange)
3	Receive data + (RD+) (White)
4	-
5	-
6	Receive data – (RD-) (Blue)
7	-
8	-

To avoid disturbing contours, Siemens recommends the use of plug connectors with angled cable outlet.

For SINAMICS G110M, please use connectors with straight/axial cable outlet.

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8.1 PROFINET M12 plug-in cables

8.1.1 Preassembled on one side, angled cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module with M12	M200D PROFINET	G110D	G110M	G115D	G120D PROFINET with M12
Yes (X02 P1/P2)	Yes (X31 / X32)				Yes (X03 P1/P2)



Order no.	Description	UL
3RK1902-2HB30	**PROFINET M12 plug-in cable** Preassembled on one side, angled, 4-pin, D-coded **Length 3 m**	No
3RK1902-2HB50	**Length 5 m**	
3RK1902-2HC10	**Length 10 m**	

8.1.2 Preassembled on both sides, angled cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module with M12	M200D PROFINET	G110D	G110M	G115D	G120D PROFINET with M12
Yes (X02 P1/P2)	Yes (X31 / X32)				Yes (X03 P1/P2)



Order no.	Description	UL
6XV1870-8GE30	**PROFINET M12 plug-in cable** Flexible plug-in cable, preassembled with two 4-pole M12 connectors (D-coded, 90° cable outlet direction), **Length 0.3 m**	Yes
6XV1870-8GE50	**Length 0.5 m**	
6XV1870-8GH10	**Length 1 m**	
6XV1870-8GH15	**Length 1.5 m**	
6XV1870-8GH20	**Length 2 m**	
6XV1870-8GH30	**Length 3 m**	
6XV1870-8GH50	**Length 5 m**	
6XV1870-8GN10	**Length 10 m**	
6XV1870-8GN15	**Length 15 m**	

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8.1.3 Preassembled on both sides, axial cable outlet (M12 – M12)

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module PROFINET with M12	M200D PROFINET	G110D	G110M PROFINET	G115D PROFINET	G120D PROFINET with M12
Yes (X02 P1/P2) [1)]	**Yes (X31 / X32) [1)]**		**Yes (X03 / X04)**	**Yes (X150 P1/P2)**	**Yes (X03 P1/P2) [1)]**

[1)] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



Order no.	Description	UL
6XV1870-8AE30	**IE Connecting Cable M12-180/M12-180** Pre-assembled IE FC TP Trailing Cable GP 2 x 2 PROFINET Type C) with two 4-pin M12 plugs (4-pin, D-coded), IP65/IP67, UL **Length 0.3 m**	Yes
6XV1870-8AE50	**Length 0,5m**	
6XV1870-8AH10	**Length 1m**	
6XV1870-8AH15	**Length 1,5m**	
6XV1870-8AH20	**Length 2m**	
6XV1870-8AH30	**Length 3m**	
6XV1870-8AH50	**Length 5m**	
6XV1870-8AN10	**Length 10m**	
6XV1870-8AN15	**Length 15m**	

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8.1.4 Preassembled on both sides, axial cable outlet (RJ45 – M12)

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module PROFINET with M12	M200D PROFINET	G110D	G110M PROFINET	G115D PROFINET	G120D PROFINET with M12
Yes (X02 P1/P2) [1)]	**Yes (X31 / X32) [1)]**		**Yes (X03 / X04)**	**Yes (X150 P1/P2)**	**Yes (X03 P1/P2) [1)]**

[1)] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



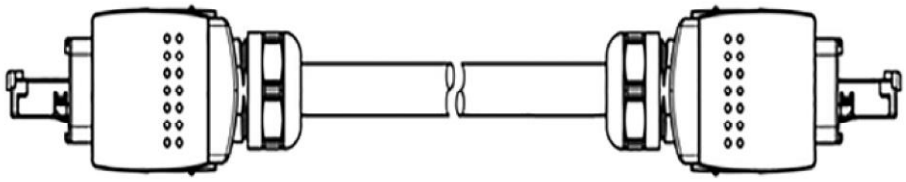
Order no.	Description	UL
6XV1871-5TH20	**IE Connecting Cable** **M12-180/IE FC RJ45 plug 145** Pre-assembled IE FC TP Trailing Cable GP 2 x 2 (PROFINET Type C) with M12 plugs (D-coded) and IE FC RJ45 plug, IP65/IP67 degree of protection **Length 2 m**	Yes
6XV1871-5TH30	**Length 3m**	
6XV1871-5TH50	**Length 5m**	
6XV1871-5TN10	**Length 10m**	
6XV1871-5TN15	**Length 15m**	

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8.2 PROFINET Push Pull cable (AIDA-Standard)

SIMATIC	SIRIUS	SINAMICS			
ET 200pro PROFINET Push Pull Interface module	M200D	G110D	G110M	G115D	G120D PROFINET Push Pull
Yes (X02 P1/P2)					Yes (X03 P1/P2)

8.2.1 Preassembled on both sides, RJ45

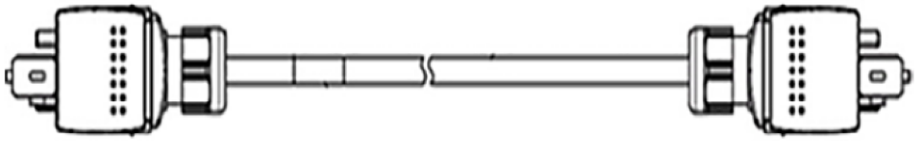


(Picture source Harting)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882020870	ZKT:70062100000150	PROFINET PushPull RJ45 metal **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882020871	ZKT:70062100000300	**Length 3 m**	
HTG:61882020872	ZKT:70062100000500	**Length 5 m**	

Special length available from Harting / Knorrtec on request

8.2.2 Preassembled on both sides, SCRJ



(Picture source Harting)

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882020875	ZKT:70062200000150	PROFINET PushPull SCRJ metal **Length 1,5 m**	Auf On Request at Harting / Knorrtec
HTG:61882020876	ZKT:70062200000300	**Length 3 m**	
HTG:61882020877	ZKT:70062200000500	**Length 5 m**	

Special length available from Harting / Knorrtec on request

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8.3 PROFINET M12 and Push Pull connector plug

8.3.1 M12 angled cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module with M12	M200D PROFINET	G110D	G110M	G115D	G120D PROFINET with M12
Yes (X02 P1/P2)	Yes (X31 / X32)				Yes (X03 P1/P2)



Order no.	Description	UL
3RK1902-2DA00	**IE M12 Plug PRO** For assembly in the field, M12 plug connector (D-coded), angled cable outlet, metal enclosure, UL, fast connection method **1 unit**	Yes

8.3.2 M12 axial cable outlet

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Interface module with M12	M200D PROFINET	G110D	G110M PROFINET	G115D	G120D PROFINET with M12
Yes (X02 P1/P2) [1)]	Yes (X31 / X32) [1)]		Yes (X03 / X04)	Yes (X150 P1/P2)	Yes (X03 P1/P2) [1)]

[1)] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



Order no.	Description	UL
6GK1901-0DB20-6AA0	**IE M12 Plug PRO** For assembly in the field, M12 plug connector (D-coded), axial cable outlet, metal enclosure, UL, fast connection method **1 unit**	Yes
6GK1901-0DB20-6AA8	**8 units**	

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8.3.3 RJ45 PLUG PRO-plug (AIDA – Standard)

SIMATIC	SIRIUS	SINAMICS			
ET 200pro Push Pull Interface module	M200D	G110D	G110M	G115D	G120D PROFINET with Push Pull
Yes (X02 P1/P2)					**Yes (X03 P1/P2)**



Order no.	Description	UL
6GK1901-1BB10-6AA0	**RJ45 PLUG PRO connector** For on-site assembly of the CU2x0D-2 PN-F PP Control Unit, UL **1 unit**	Yes

Version with metallized housing is also available from the Harting company

8.3.4 Fiber Optic PLUG PRO-plug (AIDA – Standard)

SIMATIC	SIRIUS	SINAMICS			
ET 200pro POF Push Pull Interface module	M200D	G110D	G110M	G115D	G120D PROFINET with POF Push Pull
Yes (X02 P1/P2)					**Yes (X03 P1/P2)**



Order no.	Description	UL
6GK1900-0MB00-6AA0	**IE SC RJ POF PLUG PRO** FO plug for on-site mounting to POF FO cables (packaging unit 1 duplex-connector)	No
6GK1900-0NB00-6AA0	**IE SC RJ POF PLUG PRO** FO plug for on-site mounting to PCF FO cables (packaging unit 1 duplex-connector)	

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8.4 PROFINET RJ45 Connection plug

RJ45 connection plugs are required for connecting to switchgear components, such as S7 controller and switch.

8.4.1 180°-degree cable outlet



Order no.	Description	UL
6GK1901-1BB10-2AA0	**IE FC RJ45 Plug 180 2x2** RJ45 plug connectors (10/100 Mbit/s) with robust metal housing and Fast Connect connection method, for IE FC cable 2 x 2, 180-degree cable outlet **1 pack = 1 unit**	Yes
6GK1901-1BB10-2AB0	**1 pack = 10 units**	
6GK1901-1BB10-2AE0	**1 pack = 50 units**	

8.4.2 90°-degree cable outlet



Order no.	Description	UL
6GK1901-1BB20-2AA0	**IE FC RJ45 Plug 90 2x2** RJ45 plug connectors (10/100 Mbit/s) with robust metal housing and Fast Connect connection method, for IE FC cable 2 x 2, 90-degree cable outlet **1 pack = 1 unit**	Yes
6GK1901-1BB20-2AB0	**1 pack = 10 units**	
6GK1901-1BB20-2AE0	**1 pack = 50 units**	

8.4.3 145°-degree cable outlet



Order no.	Description	UL
6GK1901-1BB30-0AA0	**IE FC RJ45 Plug 145 2x2** RJ45 plug connectors (10/100 Mbit/s) with robust metal housing and Fast Connect connection method, for IE FC cable 2 x 2, 145-degree cable outlet **1 pack = 1 unit**	Yes
6GK1901-1BB30-0AB0	**1 pack = 10 units**	
6GK1901-1BB30-0AE0	**1 pack = 50 units**	

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8.5 PROFINET cables



Order no.	Description	UL
6XV1840-2AH10	**IE FC TP Standard Cable GP 2 x 2 (Type A)** SIMATIC NET, IE FC TP Standard cable, GP 2x2 (PROFINET Type A), TP installation cable for connection to FC outlet RJ45, for universal application, 4-wire, shielded, CAT. 5E, **sold by the meter**, max. consignment: 2000 m, minimal order quantity: 20 m	Yes
6XV1840-2AN50	**50 m**	
6XV1840-2AT10	**100 m**	
6XV1840-2AT20	**200 m**	
6XV1840-2AT50	**500 m**	
6XV1840-2AU10	**1000 m**	
6XV1870-2B	**IE FC TP Flexible Cable GP 2 x 2 (Type B)** TP installation cable with flexible cores, PROFINET type B, 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1870-2D	**IE FC TP Trailing Cable GP 2 x 2 (Type C)** TP installation cable for trailing-cable deployment (1 million bending cycles), 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1840-3AH10	**IE FC TP Trailing Cable 2 x 2 (Type C)** TP installation cable for connection to FC OUTLET RJ45 for trailing-cable use (4 million bending cycles), 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 2000 m, minimum order 20 m	
6XV1870-2F	**IE TP Torsion Cable 2 x 2 (Type C)** TP installation cable, 4-core, for use in highly flexible applications (torsion), cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1840-4AH10	**IE FC TP Marine Cable 2 x 2 (Type B)** TP installation cable for connection to FC OUTLET RJ45, for marine use, 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	
6XV1871-2L	**IE FC TP Food Cable GP 2 x 2 (Type C)** TP installation cable for use in the food and beverage industry, 4-core, CAT 5E, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	No
6XV1871-2S	**IE FC TP Festoon Cable GP 2 x 2 (Type B)** TP installation cable for festooned laying, at least 5 million bending cycles, 4-core, CAT 5E, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1871-2F	**IE FC TP FRNC Cable GP 2 x 2 (Type B)** Halogen-free TP installation cable for connection to FC OUTLET RJ45, for occasional movement, 4-core, shielded, CAT 5, cut-to-length, max. delivery length 1000 m (3281 ft); minimum order 20 m (65.62 ft), cut-to-length	

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8.6 Tools



Order no.	Description
6GK1901-1GA00	**IE FC Stripping Tool** Pre-adjusted stripping tool for fast stripping of Industrial Ethernet FC cables
6GK1901-1GB01	**IE FC Blade Cassettes** Replacement blade cassette for the Industrial Ethernet Stripping Tool; deployment for IE FC RJ45 Plugs and IE FC RJ45 Modular Outlet, 5 units

8.7 PROFINET POF / PCF cables





Order no.	Description	UL
6XV1874-2A	**SIMATIC NET, POF STANDARD CABLE GP 980/1000** PROFINET, standard cable, sold by the meter min. order length: 20m, max. length: 500m	Yes
6XV1874-2B	**SIMATIC NET, POF TRAILING CABLE 980/1000** PROFINET, trailing cable, sold by the meter min. order length: 20m, max. length: 500m	
6XV1861-2A	**SIMATIC NET PCF STANDARD CABLE (200/230)** Standard cable, splittable, UL approved, w/o connectors, sold by the meter, min. order length: 20m, max. length: 2000m	
6XV1861-2C	**SIMATIC NET PCF TRAILING CABLE (200/230)** Trailing cable, splittable, w/o connector, sold by the Meter min. order length: 20 m, max. length: 2000 m	No

8.8 Tool for POF / PCF cables



Order no.	Description
6GK1900-1GL00-0AA0	**FC FO TERMINATION KIT** FC SC- U FC BFOC PLUG kit for on-site preassembling off FC FO plugs to FC FO cables

Other PROFINET components see catalog IK PI

SIEMENS

9 Digital inputs and outputs

Motor starter SIMATIC ET 200pro MS / SIRIUS M200D



Pin	Inputs	Outputs
1	+ 24 V (unswitched)	-
2	-	-
3	0 V (unswitched)	0 V (switched)
4	DI x	DO x
5	Functional earth	Functional earth

Frequency converter SINAMICS G110M / G110D / G115D / G120D



Pin	Inputs	Outputs
1	+ 24 V (unswitched)	-
2	DI y (DI1, DI3, DI5)	DO 1
3	0 V (unswitched)	0 V (switched)
4	DI x (DI0, DI2, DI4)	DO 0
5	Functional earth	Functional earth

To avoid disturbing contours, Siemens recommends the use of plug connectors with angled cable outlet.

For SINAMICS G110M and G115D, please use connectors with straight/axial cable outlet.

SIEMENS

9.1 M12 – Plug-in cables

9.1.1 Preassembled on one side

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (IN1 … IN4)		**Yes (IN1 … IN4 OUT1 … OUT2)**	**Yes (X07 and X08)**			**Yes (X05, X06, X08 and X09)**



Order no.	Description	UL
3RK1902-4HB15-5AA0	**Control cable, preassembled on one side** M12 angled plug, screw mounting, 5-pin, 5 x 0.34 mm², A-coded, black PUR sheath, max. 4 A **Cable length 1.5 m**	Yes
3RK1902-4HB50-5AA0	**Cable length 5 m**	
3RK1902-4HC01-5AA0	**Cable length 10 m**	

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9.2 M12 – Plug

9.2.1 Angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes (IN1 … IN4)		**Yes (IN1 … IN4 OUT1 and OUT2)**	**Yes (X07 and X08)**			**Yes (X05, X06, X08 and X09)**



Order no.	Description	UL
3RK1902-4DA00-5AA0	**M12 angled plug** Screw mounting, 5-pin screw-type connection, max. 0.75 mm², A-coded, max. 4 A	No

9.2.2 Axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
Yes [1] (IN1 … IN4)		**Yes [1] (IN1 … IN4 OUT1 and OUT2)**	**Yes [1] (X07 and X08)**	**Yes (X05, X07 and X08)**	**Yes (X05, X07 and X08)**	**Yes [1] (X05, X06, X08 and X09)**

[1] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



Order no.	Description	UL
3RK1902-4BA00-5AA0	**M12 axial plug** Screw mounting, 5-pin screw-type connection, max. 0.75 mm², A-coded, max. 4 A	No

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9.3 M12 – Y-Connector

9.3.1 Direct mounting

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
			Yes (X07 and X08)			**Yes (X05, X06, X08 and X09)**



6ES7194-1KA00-0XA0		
Receptacle A	Receptacle B	Plug
1 Buchse	2 Buchse	Stecker
1	1	1
No Connection	4	2
3	3	3
4	No Connection	4
5	5	5

Order no.	Description	UL
6ES7194-1KA01-0XA0	**Y-connector** for the double connection of I/O using single cables 5-pin M12	No

9.3.2 With cable

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
			Yes (X07 and X08)	**Yes (X05, X07 and X08)**	**Yes (X05, X07 and X08)**	**Yes (X05, X06, X08 and X09)**



Order no.	Description	UL
6ES7194-6KA00-0XA0	**Y cable for distributed I/O** For the double wiring of I/O with one cable **5-pin M12, 200mm**	No

SIEMENS

10 Analog Inputs

SINAMICS G110D (1 AI (0-10 V) / alternative as 1 DI (10 V or 24 V usable)



Pin	Function
1	10 V / 24 V
2	AIN +
3	0 V
4	AIN -
5	Functional earth

SINAMICS G110M (2 AI (0 - 10 V, 0 – 20mA) / alternative as 2 DI (10 V) usable)



Pin	Function
1	-
2	+ 10 V
3	AI 0 +
4	AI 1 +
5	AI 0 -
6	AI 1 -
7	0 V
8	-

SINAMICS G120D (2 AI (0-10 V) / alternative as 2 DI (10 V) usable)



Pin	Function
1	-
2	+ 10 V
3	AI 0 +
4	AI 1 +
5	-
6	-
7	0 V
8	-

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10.1 M12 (5 poles) – shielded connector, angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
			Yes (X15)			

[Corresponding shielded connection plugs are available from Knorrtec, among others]

10.2 M12 (8 poles) – Y-Connector with cable (8 poles to 2 x 5 poles)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
				Yes (X10)		Yes (X10)

Using this connecting element, two unipolar analog or digital input signals can be fed through two separate cables to connection X10 of the CU240D-2 of the SINAMICS G110M and G120D.



(Picture source Knorrtec)

Signal	M12 8pol plug	M12 4pol socket 1	M12 4pol socket 2
+ 10V	2	1	1
AI0+	3	2	-
AI1+	4	-	2
0V	7	3	3

Product Partner Knorrtec		
Order no.	Description	UL
ZKT:10050500	**Y-cable 2x Analog** For the connection of two analog inputs M12 plug 8 poles to 2x M12 socket 4 poles	On Request at Knorrtec

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10.3 M12 (8 poles) – shielded connector

10.3.1 Angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
				Yes (X10)		**Yes (X10)**



(Picture source Knorrtec)

Product Partner Knorrtec		
Order no.	**Description**	**UL**
ZKT:30037200	**M12 8 pole connector** Screw connection, angled cable outlet, shielded	On Request at Knorrtec

10.3.2 Axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
				Yes (X10) [1)]		**Yes (X10) [1)]**

[1] Siemens recommends the use of plug connections with angled cable outlet to avoid interference contours.



(Picture source Knorrtec)

Product Partner Knorrtec		
Order no.	**Description**	**UL**
ZKT:30027600	**M12 8 pole connector** Screw connection, axial cable outlet, shielded	On Request at Knorrtec

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11 Encoder connection (HTL - / SSI - Encoder)

SINAMICS G115D X07 HTL-Encoder



Pin	Function
1	+24 V
2	Channel B
3	0 V
4	Channel A
5	Functional earth

The encoder signals A and B can be read in via interface X07

SINAMICS G120D X06 HTL-Encoder (CU240D-2 and CU250D-2)



Pin	Function
1	+24 V
2	Channel A
3	Channel A‘
4	Channel B
5	Channel B‘
6	Channel Z
7	Channel Z‘
8	0 V

SINAMICS G120D X10 SSI-Geber (only CU250D-2)



Pin	Function
1	-
2	+24 V
3	Data +
4	Data -
5	CLK +
6	CLK -
7	0 V
8	-

The CU240D-2 of the SINAMICS G120D provides an HTL-encoder interface.

The CU250D-2 of the SINAMICS G120D provides an HTL- and an SSI-encoder interface that can be used independently or together.

To prevent disturbing contours, Siemens recommends the use of angled plug connectors.

At the Push-Pull variant of the SINAMICS G120D (CU2x0D-2 PP) only angled plug connectors can be used.

SIEMENS

11.1 Cables for HTL– Encoder (preassembled on both sides)

11.1.1 M12 (5poles) to HTL-Encoder M23 (12poles)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D
					Yes (X07)	

Usable for the following encoder / motor- and geared motor options:

- 6FX2001-4
- 1XP8012-1
- 1XP8032-1
- SIMOTICS option G01
- SIMOGEAR options Q47…49 and Q53…55



Frequency converter:
M12 plug, 5poles

Encoder:
M23 socket, 12 poles 0° coded

(Picture source Harting)

Frequency converter M12 Pin	Encoder M23 Pin	Function
1	2 and 12	+24 V
2	8	Channel A
3	10 and 11	0 V
4	5	Channel B
5	---	---

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882023057	ZKT:70059270000100	**HTL encoder cable** M12 A-coded axial 5 poles M23 axial 12 poles **Length 1 m**	On Request at Harting / Knorrtec
HTG:61882023058	ZKT:70059220000150	**Length 1,5 m**	
HTG:61882023059	ZKT:70059220000300	**Length 3 m**	
HTG:61882023060	ZKT:70059220000500	**Length 5 m**	
HTG:61882023061	ZKT:70059220000750	**Length 7,5 m**	
HTG:61882023062	ZKT:70059220001000	**Length 10 m**	
HTG:61882023063	ZKT:70059220001500	**Length 15 m**	

Special length from Harting / Knorrtec on request

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11.1.2 M12 (8poles) to HTL-Encoder M23 (12poles)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2
						Yes (X06 HTL-Encoder)

Usable for the following encoder / motor- and geared motor options:

- 6FX2001-4
- 1XP8012-1
- 1XP8032-1
- SIMOTICS option G01
- SIMOGEAR options Q47…49 and Q53…55



Frequency converter:
M12 plug, 8poles

Encoder:
M23 socket, 12 poles 0° coded

(Picture source Harting)

Frequency converter M12 Pin	Encoder M23 Pin	Function
1	12	+24 V
2	5	Channel A
3	6	Channel A‘
4	8	Channel B
5	1	Channel B‘
6	3	Channel Z
7	4	Channel Z‘
8	10	0 V

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882020936	ZKT:70023800000150	**HTL encoder cable** M12 A-coded 90° angled 8 poles M23 axial 12 poles **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882020938	ZKT:70023800000300	**Length 3 m**	
HTG:61882020939	ZKT:70023800000500	**Length 5 m**	
---	ZKT:70023800000750	**Length 7,5 m**	
HTG:61882020940	ZKT:70023800001000	**Length 10 m**	
HTG:61882020941	ZKT:70023800001500	**Length 15 m**	
---	ZKT:70023800002000	**Length 20 m**	
---	ZKT:70023800003000	**Length 30 m**	

Special length from Harting / Knorrtec on request

SIEMENS

11.1.3 M12 (8poles) to HTL-Encoder M23 (12poles) with inverted signals

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2
						Yes (X06 HTL-Encoder)

Usable for the following encoder / motor- and geared motor options:

- 6FX2001-4
- 1XP8012-1
- 1XP8032-1
- SIMOTICS option G01
- SIMOGEAR options Q47…49 and Q53…55



Frequency converter: M12 plug, 8poles

Encoder: M23 socket, 12 poles 0° coded

(Picture source Harting)

Frequency converter M12 Pin	Encoder M23 Pin	Function
1	12	+24 V
2	**8**	Channel B
3	**1**	Channel B‘
4	**5**	Channel A
5	**6**	Channel A‘
6	3	Channel Z
7	4	Channel Z‘
8	10	0 V

Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882020974	**HTL encoder cable with inverted signals** M12 A-coded 90° angled 8 poles M23 axial 12 poles **Length 1,5 m**	On Request at Fa. Harting
HTG:61882021024	**Length 3 m**	
HTG:61882021025	**Length 5 m**	
HTG:61882021026	**Length 10 m**	
HTG:61882021027	**Length 15 m**	

Special length from Harting on request

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11.1.4 Adapter to reverse direction of rotation for HTL-Encoder M23 to M23

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2
						Yes (X06 HTL-Encoder)



(Picture source Harting)

Product Partner Harting		
Order no.	**Description**	**UL**
HTG:61882021092	Adapter to reverse direction of rotation HTL M23/M23 (mirrored spare motor) **Length 0,5 m**	On Request at Harting

Special length from Harting on request

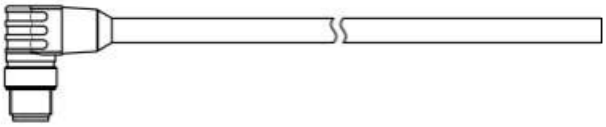
SIEMENS

11.1.5 M12 (8poles) to HTL-Encoder with terminal box

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2
						Yes (X06 HTL-Encoder

Usable for the following encoder / motor- and geared motor options:

- 1XP8022-1
- SIMOGEAR options Q56…61



Frequency converter:
M12 plug, 8poles

(Picture source Harting)

Frequency converter M12 Pin	Wire color	Function
1	White	+24 V
2	Brown	Channel A
3	Green	Channel A‘
4	Yellow	Channel B
5	Gray	Channel B‘
6	Pink	Channel Z
7	Blue	Channel Z‘
8	Red	0 V

Order no. Harting	Order no. Knorrtec	Description	UL
---	ZKT:70040200000150	**HTL encoder cable** M12 A-coded 90° angled 8 poles Encoder side open cable end **Length 1,5 m**	On Request at Harting / Knorrtec
---	ZKT:70040200000300	**Length 3 m**	
HTG:2134D200838050	ZKT:70040200000500	**Length 5 m**	
---	ZKT:70040200000750	**Length 7,5 m**	
HTG:2134D200838100	ZKT:70040200001000	**Length 10 m**	
HTG:2134D200838150	ZKT:70040200001500	**Length 15 m**	
---	ZKT:70040200002000	**Length 20 m**	
---	ZKT:70040200003000	**Length 30 m**	

Special length from Harting / Knorrtec on request

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11.2 Cables for SSI– Encoder (preassembled on both sides)

11.2.1 M12 (8poles) to SSI-Geber M23 (17poles)

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU250D-2
						Yes (X10 SSI-Encoder)

Usable for the following encoder / motor- and geared motor options:

- 1XP8014-20
- 1XP8024-20
- 1XP8024-21
- SIMOGEAR options Q79, 80 and 81



Frequency converter:
M12 plug, 8poles

Encoder:
M23 socket, 17 poles
0° coded

(Picture source Harting)

Frequency converter M12 Pin	Encoder M23 Pin	Function
2	7	+24 V
3	14	DATA +
4	17	DATA -
5	8	CLK +
6	9	CLK -
7	10	0 V

Order no. Harting	Order no. Knorrtec	Description	UL
HTG:61882020978	ZKT:70032300000150	**SSI encoder cable** M12 A-coded 90° angled 8 poles M23 axial 17 poles **Length 1,5 m**	On Request at Harting / Knorrtec
HTG:61882021031	ZKT:70032300000300	**Length 3 m**	
HTG:61882021032	ZKT:70032300000500	**Length 5 m**	
---	ZKT:70032300000750	**Length 7,5 m**	
HTG:61882021033	ZKT:70032300001000	**Length 10 m**	
HTG:61882021034	ZKT:70032300001500	**Length 15 m**	
---	ZKT:70032300002000	**Length 20 m**	
---	ZKT:70032300003000	**Length 30 m**	

Special length from Harting / Knorrtec on request

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11.3 Cable for SSI / HTL-Combination encoder

As ordering option (order code Q79), an SSI / HTL combination encoder is available for SIMOGEAR geared motors. This can also be ordered as individual device (FDU:55190000051005). The encoder has a 1 m cable with 17-pin M23 coupling socket.

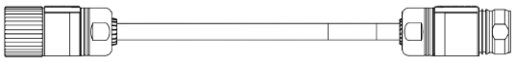
SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU250D-2
						Yes (X06 HTL-Encoder and X10 SSI-Encoder)

To connect the SSI / HTL combination encoder to the SINAMICS G120D, a Y adapter is available from the Knorrtec Company. This splits up the SSI and HTL signals to the two M12 connections of the SINAMICS G120D.

An extension cable may be required depending on the required cable length between SINAMICS G120D and SSI / HTL encoder.



SSI / HTL-Encoder with 1m cable



Extension cable



Adapter to CU250D-2

(Picture source Knorrtec)

Order no.	Description	UL
6FX5002-2AD04-… [1)] or 6FX8002-2AD04-… [1)]	Extension cable, both-sided with 17pol. M23 male- / female connector	Yes
plus		
Product Partner Knorrtec		
Order no.	**Description**	**UL**
ZKT:10051900	**Adapter for combination encoder (Y-Adapter)** Side 1: 2x M12 8 pin male Pin assignment SSI on G120D Pin assignment HTL on G120D Side 2: M23 17pin (P) female Pin assignment for absolute encoder with SSI and HTL-signals Length 0.5 m	On Request at Knorrtec

[1)] (… = Length codes see Chapter 13.1)

SIEMENS

11.4 M12 – shielded connector for HTL / SSI – Geber

11.4.1 5 poles axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2
					Yes (X07 HTL-Encoder)	



Order no. Harting	Order no. Knorrtec	Description	UL
HTG:21033221400	ZKT:30027630	**M12 connector 4poles A-coded** Screw connection, axial cable outlet, shielded	On Request at Harting / Knorrtec

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11.4.2 8 poles angled cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2
						Yes (X06 HTL-Encoder and X10 SSI-Encoder)



(Picture source Knorrtec)

Product Partner Knorrtec		
Order no.	**Description**	**UL**
ZKT:30037200	**M12 connector 8poles** Screw connection, angled cable outlet, shielded	On Request at Knorrtec

11.4.3 8 poles axial cable outlet

SIMATIC		SIRIUS	SINAMICS			
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G115D	G120D CU2x0D-2 without Push-Pull variants
						Yes (X06 HTL-Encoder and X10 SSI-Encoder)



(Picture source Knorrtec)

Product Partner Knorrtec		
Order no.	**Description**	**UL**
ZKT:30027600	**M12 connector 8poles** Screw connection, axial cable outlet, shielded	On Request at Knorrtec

SIEMENS

11.5 Incremental HTL rotary position encoder

Incremental rotary position encoders can be ordered either separately or as mounting option for motors and geared motors.

For further information concerning the order options, see Catalog D81.1 for motors or Catalog MD50.1 (SIMOGEAR) for geared motors



Order no.	Description	UL
6FX2001-4DA10	**100 I/U mounted encoder** optical incremental with HTL level, operational voltage 10-30 V, **synchronous flange**, **1 m universal cable feeder (axial/radial) with plug**	Yes
6FX2001-4DA50	**500 I/U mounted encoder**	
6FX2001-4DB00	**1000 I/U mounted encoder**	
6FX2001-4DC50	**2500 I/U mounted encoder**	
6FX2001-4FA10	**100 I/U mounted encoder** optical incremental with HTL level, operational voltage 10-30 V, **synchronous flange**, **radial flange receptacle**	
6FX2001-4FA50	**500 I/U mounted encoder**	
6FX2001-4FB00	**1000 I/U mounted encoder**	
6FX2001-4FC50	**2500 I/U mounted encoder**	
6FX2001-4HA10	**100 I/U mounted encoder** optical incremental with HTL level, operational voltage 10-30 V, **synchronous flange**, **axial flange receptacle**	
6FX2001-4HA50	**500 I/U mounted encoder**	
6FX2001-4HB00	**1000 I/U mounted encoder**	
6FX2001-4HC50	**2500 I/U mounted encoder**	
6FX2001-4NA10	**100 I/U mounted encoder** optical incremental with HTL level, operational voltage 10-30 V, **clamping flange**, **1 m universal cable feeder (axial/radial) with plug**	
6FX2001-4NA50	**500 I/U mounted encoder**	
6FX2001-4NB00	**1000 I/U mounted encoder**	
6FX2001-4NC50	**2500 I/U mounted encoder**	
6FX2001-4QA10	**100 I/U mounted encoder** optical incremental with HTL level, operational voltage 10-30 V, **clamping flange**, **radial flange receptacle**	
6FX2001-4QA50	**500 I/U mounted encoder**	
6FX2001-4QB00	**1000 I/U mounted encoder**	
6FX2001-4QC50	**2500 I/U mounted encoder**	
6FX2001-4SA10	**100 I/U mounted encoder** optical incremental with HTL level, operational voltage 10-30 V, **clamping flange**, **axial flange receptacle**	
6FX2001-4SA50	**500 I/U mounted encoder**	
6FX2001-4SB00	**1000 I/U mounted encoder**	
6FX2001-4SC50	**2500 I/U mounted encoder**	
6FX2003-0SU12	**Signal plug with union nut** mating connector for HTL encoder 12-pin	Yes

SIEMENS

11.6 Absolute SSI rotary position encoder

Absolute rotary position encoders can be ordered either separately or as mounting option for motors and geared motors.

For further information concerning the order options, see Catalog D81.1 for motors or Catalog MD50.1 (SIMOGEAR) for geared motors



Order no.	Description	UL
6FX2001-5FS12	**Singleturn SSI absolute encoder** 8192 steps/rotation (13-bit), operational voltage 10-30 V, **synchronous flange, radial flange receptacle**	Yes
6FX2001-5HS12	**Singleturn SSI absolute encoder** 8192 steps/rotation (13-bit), operational voltage 10-30 V, **synchronous flange, axial flange receptacle**	
6FX2001-5QS12	**Singleturn SSI absolute encoder** 8192 steps/rotation (13-bit), operational voltage 10-30 V, **clamping flange, radial flange receptacle**	
6FX2001-5SS12	**Singleturn SSI absolute encoder** 8192 steps/rotation (13-bit), operational voltage 10-30 V, **clamping flange, axial flange receptacle**	
6FX2001-5FS24	**Multiturn SSI absolute encoder** 8192 steps/rotation, 4096 rotations (25-bit), operational voltage 10-30 V, **synchronous flange, radial flange receptacle**	
6FX2001-5HS24	**Multiturn SSI absolute encoder** 8192 steps/rotation, 4096 rotations (25-bit), operational voltage 10-30 V, **synchronous flange, axial flange receptacle**	
6FX2001-5QS24	**Multiturn SSI absolute encoder** 8192 steps/rotation, 4096 rotations (25-bit), operational voltage 10-30 V, **clamping flange, radial flange receptacle**	
6FX2001-5SS24	**Multiturn SSI absolute encoder** 8192 steps/rotation, 4096 rotations (25-bit), operational voltage 10-30 V, **clamping flange, axial flange receptacle**	
6FX2003-0SU12	**Signal plug with union nut** mating connector for SSI encoder 12-pin	Yes

11.7 Combination encoder (SSI- and HTL-Encoder)

The SSI / HTL combination encoder is a combination of SSI and HTL encoder in one housing. It is suitable for applications where absolute value positioning and closed-loop motor control without encoder is required (e.g. hoisting gear, scissor-type lifting table …).

The SSI / HTL combination encoder can be sourced as ordering option of the SIMOGEAR geared motor (order code Q79) or as individual device (FDU:55190000051005). The encoder has a 1 m cable with coupling socket

11.8 Other encoders

A list of the tested third-party encoders is contained in the SINAMICS G120D CU250D-2 manual http://support.automation.siemens.com/WW/view/de/60443897 as "Encoder examples" in the Appendix

SIEMENS

12 Product Partner Program

HARTING

Direct link to the Harting Corp. supplementary products catalog:
http://www.harting.com/en/product-center/siemens-solution-partner/

KNORRTEC

Direct link to the Knorrtec Corp. supplementary products catalog:
https://www.knorrtec.de/eshop.php?action=home&s_group_id=*&shopfilter_category=&s_language=english

KOCH

Direct link to the Koch Corp. (Brake resistors) supplementary products catalog:
http://www.bremsenergie.de/en/products/customized-solutions/siemens-product-partner

SIEMENS

13 Attachment

13.1 Length code for Siemens cables

Description	Order No. supplement				
Length code for pre-assembled cables	**6FX.0.2-.....-**	■	■	■	■
0 m		**1**			
100 m (328 ft)		**2**			
200 m (656 ft)		**3**			
0 m			**A**		
10 m (32.8 ft)			**B**		
20 m (65.6 ft)			**C**		
30 m (98.4 ft)			**D**		
40 m (131 ft)			**E**		
50 m (164 ft)			**F**		
60 m (197 ft)			**G**		
70 m (230 ft)			**H**		
80 m (262 ft)			**J**		
90 m (295 ft)			**K**		
0 m				**A**	
1 m (3.28 ft)				**B**	
2 m (6.56 ft)				**C**	
3 m (9.84 ft)				**D**	
4 m (13.1 ft)				**E**	
5 m (16.4 ft)				**F**	
6 m (19.7 ft)				**G**	
7 m (22.9 ft)				**H**	
8 m (26.3 ft)				**J**	
9 m (29.5 ft)				**K**	
0 m					**0**
0.1 m (3.94 in)					**1**
0.2 m (7.87 in)					**2**
0.3 m (11.81 in)					**3**
0.4 m (15.75 in)					**4**
0.5 m (19.96 in)					**5**
0.6 m (23.62 in)					**6**
0.7 m (27.56 in)					**7**
0.8 m (31.5 in)					**8**
Examples:	1.0 m (3.28 ft):	1	A	B	0
	2.2 m (7.22 ft):	1	A	C	2
	8.0 m (26.3 ft):	1	A	J	0
	299.0 m (981 ft):	3	K	K	0

Description	Order No. supplement				
Length code for power and signal cables, sold by the meter[1)]	**6FX.008-.....-**	■	■	**A**	**0**
50 m (164 ft)		**1**	**F**		
100 m (328 ft)		**2**	**A**		
200 m (656 ft)		**3**	**A**		
500 m (1640 ft)		**6**	**A**		

Definition of lengths for pre-assembled cables



Cable with exposed core ends and pre-assembled connector



Cable with pre-assembled connectors at both ends

Tolerances:

- Cable lengths up to 10 m (32.8 ft): ± 2 %
- Cable lengths of 10 m (32.8 ft) and longer: ± 1 %