

## Motor Starters

SIMATIC ET 200pro MS  
SIRIUS M200D

## Frequency Converters

SIMATIC ET 200pro FC  
SINAMICS G110D / M  
SINAMICS G120D

## Supplementary Products



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



Further information can be found in [Chapter 12](#) of this document

## 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 PROFIBUS Interface module	M200D PROFIBUS	G110D	G110M PROFIBUS / USS	G120D PROFIBUS
Yes (X03 / X04)	Yes (X31 / X32)		Yes (X03 / X04)	Yes (X03 / X04)

### 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 (Yes, with green marking)
- It can be used for the other devices; however, more suitable supplementary products exist (Yes, with light green marking)
- 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

## Solution Partner products

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

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

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## 1 400 V power supply



Pin	Motor starter	Frequency Converter
1	Phase L1	
2	Phase L2	
3	Phase L3	
4	Neutral conductor	-
11	Connector control*	-
12	Connector control*	-
PE	Protective earth	

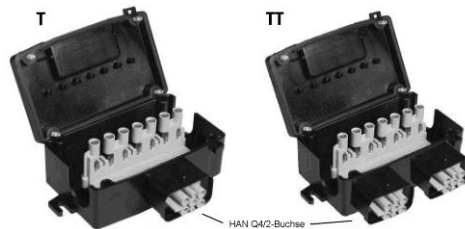
\* Only SIRIUS M200D motor starter

### 1.1 Power distribution

#### 1.1.1 Power T-Terminal connector

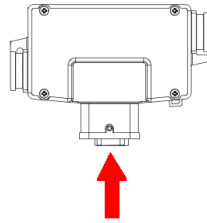
SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)	Yes (X1)

#### Power T-Terminal connector



Order no.	Description	UL
3RK1 911-2BF01	<b>Power T-distributor (1 feeder)</b> , for power cable with diameter <b>up to 4 mm<sup>2</sup></b>	Yes
3RK1 911-2BF02	<b>up to 6mm<sup>2</sup></b>	Yes
3RK1 911-2BG02	<b>Power TT-distributor (2 feeders)</b> , for power cable with diameter <b>up to 6 mm<sup>2</sup></b>	Yes
3RK1911-5BA00	<b>Sealing set for power T-distributor</b> for power line with <b>diameter 10 ... 13 mm</b>	Yes
3RK1911-5BA10	<b>13 ... 16 mm</b>	Yes
3RK1911-5BA20	<b>16 ... 19 mm</b>	Yes
3RK1911-5BA30	<b>19 ... 22 mm</b>	Yes
3RK1911-5BA50	<b>Blanking plug</b>	Yes

## Plug set for connection to T-distributor (HAN Q4/2 connector, straight feeder)

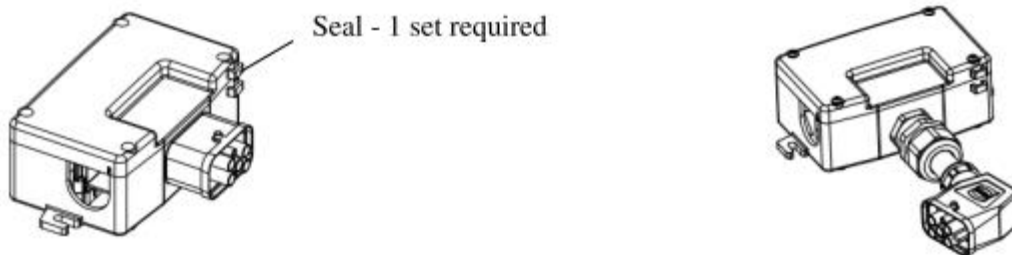


Order no.	Description	UL
3RK1911-2BS60	<b>HAN Q4/2</b> Straight plug set with axial feeder <b>2.5 mm<sup>2</sup></b>	Yes
3RK1911-2BS20	<b>4 mm<sup>2</sup></b>	Yes
3RK1911-2BS40	<b>6 mm<sup>2</sup></b>	Yes

### 1.1.2 Power T-Terminal connector (Harting)

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

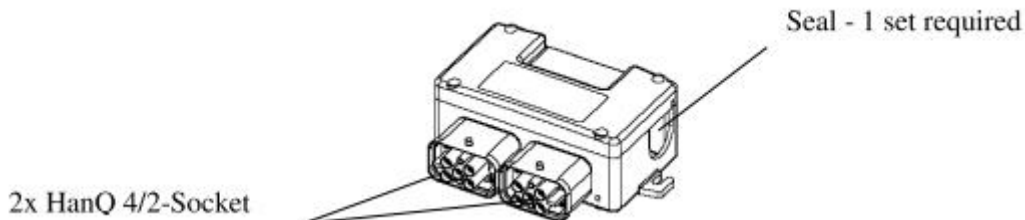
### Power T-Terminal connector



Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 201 0500	<b>Power T-Terminal connector</b> for power bus cable, for <b>2,5mm<sup>2</sup> - 4mm<sup>2</sup></b> with built-in 7-pole connector, female insert, Hood	On Request at Harting
HTG:61 88 201 0501	<b>4mm<sup>2</sup> - 6mm<sup>2</sup></b>	
HTG:61 88 201 0502	Power T-Terminal connector Length 2,5m and 7-pole connector, female insert, hood, for power bus cable for <b>2,5mm<sup>2</sup> - 4mm<sup>2</sup></b> <b>with connected cable 5x2,5mm<sup>2</sup></b>	On Request at Harting
HTG:61 88 201 0503	for power bus cable for <b>4mm<sup>2</sup> - 6mm<sup>2</sup></b> <b>with connected cable 5 x 4mm<sup>2</sup></b>	
HTG:61 88 201 0504	for power bus cable for <b>4mm<sup>2</sup> - 6mm<sup>2</sup></b> <b>with connected cable 5 x 6mm<sup>2</sup></b>	
HTG:61 83 401 0200	Sealing for cable <b>10 - 13mm</b> (1 Set = 2 pieces)	On Request at Harting
HTG:61 83 401 0201	Sealing for cable <b>13 - 16mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0202	Sealing for cable <b>16 - 19mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0203	Sealing for cable <b>19 - 22mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0204	Sealing blind grommet (1 piece)	

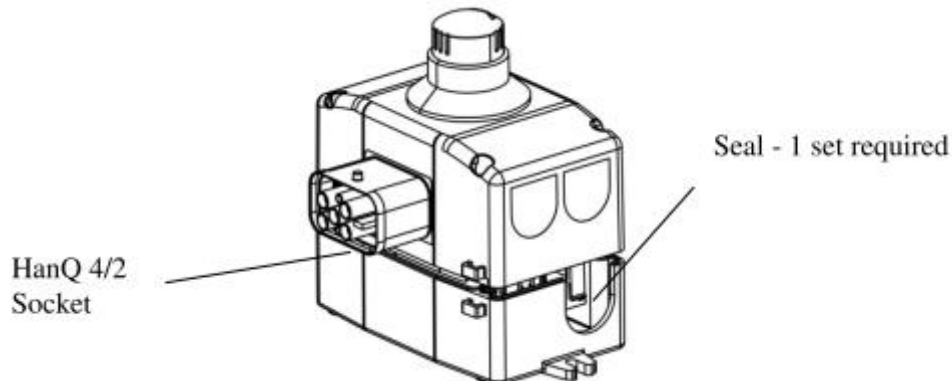


## Energy double T-Connector



Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 202 0770	<b>Energy double T-Connector</b> for bus cable, from 4mm <sup>2</sup> up to 6mm <sup>2</sup> with two built-in 7-pole connector, female insert, hood, CSA	On Request at Harting
HTG:61 83 401 0200	Sealing for cable <b>10 - 13mm</b> (1 Set = 2 pieces)	On Request at Harting
HTG:61 83 401 0201	Sealing for cable <b>13 - 16mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0202	Sealing for cable <b>16 - 19mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0203	Sealing for cable <b>19 - 22mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0204	Sealing blind grommet (1 piece)	

## Energy T-Connector with maintenance switch



Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 201 0505	<b>Power T-Terminal connector</b> for power bus cable, for 4mm <sup>2</sup> - 6mm <sup>2</sup> with built-in 7-pole connector, female insert, Hood, <b>with lockable main Switch</b>	On Request at Harting
HTG:61 83 401 0200	Sealing for cable <b>10 - 13mm</b> (1 Set = 2 pieces)	On Request at Harting
HTG:61 83 401 0201	Sealing for cable <b>13 - 16mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0202	Sealing for cable <b>16 - 19mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0203	Sealing for cable <b>19 - 22mm</b> (1 Set = 2 pieces)	
HTG:61 83 401 0204	Sealing blind grommet (1 piece)	

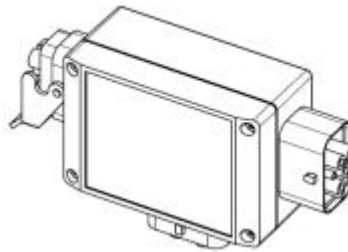
## Energy T-Connector for power bus (max. 25mm<sup>2</sup>)



Han Q4/2

Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 201 0181	<b>Energy T-Terminal connector for power bus cable up to 25mm<sup>2</sup></b> 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

## Han Q4/2 Power T



Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 203 0017	<b>Han Q4/2 Power T</b> 3x pluggable, Supply via Han Q4/2 connector, leaving 2x Han Q4/2 socket with high hood	On Request at Harting

## Maintenance Switch Han Q4/2

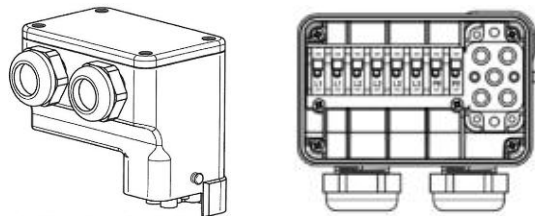


Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 201 0330	<b>Selectively block Han Q4/2</b> Designed as isolator and maintenance switch with M12 socket for NC/NO message	On Request at Harting

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

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
		Yes (X1) Without neutral conductor	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 – 4mm<sup>2</sup>

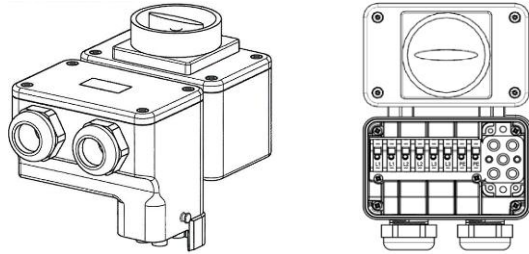


Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 201 0509	<b>Power-Junction Box</b> for connecting to MS (w/o 230V brake) / G110D / G120D Hood 2x angled outlet female insert for Han Q 4/2 cross-section 1,5 - 4mm <sup>2</sup> , cable gland 11,5-15,5mm	On Request at Harting
HTG:61 83 401 0220	Blind grommet for the Last Power-Junction Box (1 piece)	On Request at Harting
HTG:61 83 401 0221	Sealing insert KB 9-13mm (10 pieces)	
HTG:61 83 401 0222	Sealing insert KB 7-10,5mm (10 pieces)	
HTG:61 83 401 0156	Operating tool	

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

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

Junction -Box (3 Phases + PE) with maintenance switch for direct mounting on X1 plug of SINAMICS G120D. Cross section 1,5 – 4mm<sup>2</sup>

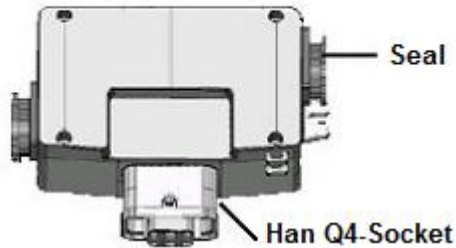


Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 201 0609	<b>Power-Junction Box with switchable port and monitoring contact</b> for connecting G120D Hood 2x angled outlet female insert for Han Q 4/2 cross-section 1,5 - 4mm <sup>2</sup> , cable gland 11,5-15,5mm	On Request at Harting
HTG:61 83 401 0220	Blind grommet for the Last Power-Junction Box (1 piece)	On Request at Harting
HTG:61 83 401 0221	Sealing insert KB 9-13mm (10 pieces)	
HTG:61 83 401 0222	Sealing insert KB 7-10,5mm (10 pieces)	
HTG:61 83 401 0156	Operating tool	

## 1.1.3 Power T-Terminal connector (Knorrtec)

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

### Power T-Terminal connector



Solution Partner Knorrtec		
Order no.	Description	UL
ZKT:10018700	<b>Power T-Terminal connector</b> for power bus cables from 2.5 mm <sup>2</sup> to 6 mm <sup>2</sup> With mounted plug connector 4/2 socket insert and grommet housing contour	On Request at Knorrtec
ZKT:10021000	Seal for <b>10 – 13 mm</b> cable (1 set = 2 seals)	On Request at Knorrtec
ZKT:10021100	Seal for <b>13 – 16 mm</b> cable (1 set = 2 seals)	
ZKT:10021200	Seal for <b>16 – 19 mm</b> cable (1 set = 2 seals)	
ZKT:10021300	Seal for <b>19 – 22 mm</b> cable (1 set = 2 seals)	
ZKT:10021400	Blind stopper seal (1 seal)	

## Power-Box



Solution Partner Knorrtec					
Description					
<b>Powerbox</b>					
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 mm <sup>2</sup> 4 x 6 mm <sup>2</sup> 5 x 6 mm <sup>2</sup>	D = 15 - 17 mm	5 x 4 mm <sup>2</sup> 4 x 6 mm <sup>2</sup> 5 x 6 mm <sup>2</sup>	D = 15 - 17 mm	On Request at Knorrtec
ZKT:10035310	5 x 4 mm <sup>2</sup> 4 x 4 mm <sup>2</sup>	D = 13 - 15 mm	5 x 4 mm <sup>2</sup> 4 x 4 mm <sup>2</sup>	D = 13 - 15 mm	
ZKT:10035320	5 x 4 mm <sup>2</sup>	D = 15 - 17 mm	5 x 2,5 mm <sup>2</sup> 4 x 2,5 mm <sup>2</sup>	D = 11 - 13 mm	
ZKT:10035330	5 x 4 mm <sup>2</sup> 4 x 6 mm <sup>2</sup> 5 x 6 mm <sup>2</sup>	D = 15 - 17 mm	4 x 4 mm <sup>2</sup>	D = 13 - 15 mm	
ZKT:10035340	5 x 4 mm <sup>2</sup> 4 x 4 mm <sup>2</sup>	D = 13 - 15 mm	5 x 2,5 mm <sup>2</sup> 4 x 2,5 mm <sup>2</sup>	D = 11 - 13 mm	
ZKT:10035350	5 x 2,5 mm <sup>2</sup> 4 x 2,5 mm <sup>2</sup>	D = 11 - 13 mm	5 x 2,5 mm <sup>2</sup> 4 x 2,5 mm <sup>2</sup>	D = 11 - 13 mm	
Order no.	Power bus	Ribbon cable	Branch	Ribbon cable	UL
ZKT:10035360	5 x 6 mm <sup>2</sup>	7,5 x 26,5 mm	5 x 4 mm <sup>2</sup> 4 x 6 mm <sup>2</sup> 5 x 6 mm <sup>2</sup>	D = 15 - 17 mm	On Request at Knorrtec
ZKT:10035370	5 x 6 mm <sup>2</sup>	7,5 x 26,5 mm	5 x 4 mm <sup>2</sup> 4 x 4 mm <sup>2</sup>	D = 13 - 15 mm	

## 1.1.4 Power T-Terminal connector (Weidmüller)

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

### Distributor box AC (3~, N, PE)



Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 1957580000	<b>FieldPower® T- distributor box AC</b> IP65, IDC connection power cable, Uncut power cable 2,5 – 6 mm² , Push-In connection: 1.5 – 6 mm², Plug-in connection (optional), UL- approval <b>FP Box</b>	Yes
WDM: 4329610000	<b>FieldPower® Round cable seal, slotted. For FP Box...</b> <b>IP65</b> <b>Cable diameter 7,5 - 9mm</b>	Yes
WDM: 4323210000	<b>9 - 11mm</b>	
WDM: 4323230000	<b>11 - 13mm</b>	
WDM: 4323220000	<b>13 - 15mm</b>	
WDM: 4324010000	<b>15 - 17mm</b>	
WDM: 4323240000	<b>Blanking seal (terminating plug)</b>	

For preassembled power cables for the FieldPower® system see capture 1.2.9.

## Distributor box AC (3~, N, PE) with fuse plug-in connector



With LED outage display



With LED outage display and outage signal via M12

Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 1961780000	<p><b>FieldPower®</b>  <b>T-distributor box with fuse plug-in connector and red LED outage display visible from outside</b></p> <p>For 3 fuses 6,3 x 32 mm (¼ x 1 ¼")                      Max. power loss fuse at 23°C                      - overload protection: 1,6 W (at 1,5 x I N )                      - short-circuit protection: 4 W (at 1,5 x I N )                      IP65, IDC connection power cable  <b>FP Box Fuse</b></p>	On Request at Weidmüller
WDM: 1025060000	<p><b>FieldPower®</b>  <b>T-distributor box with fuse plug-in connector and red LED outage display visible from outside and outage signal via M12</b></p> <p>For 3 fuses 6,3 x 32 mm (¼ x 1 ¼")                      Max. power loss fuse at 23°C                      - overload protection: 1,6 W (at 1,5 x I N )                      - short-circuit protection: 4 W (at 1,5 x I N )                      IP65, IDC connection power cable  <b>FP Box Fuse R</b></p>	
WDM: 4329610000	<p><b>FieldPower® Round cable seal, slotted. For FP Box...</b>  <b>IP65</b>  <b>Cable diameter 7,5 - 9mm</b></p>	On Request at Weidmüller
WDM: 4323210000	<b>9 - 11mm</b>	
WDM: 4323230000	<b>11 - 13mm</b>	
WDM: 4323220000	<b>13 - 15mm</b>	
WDM: 4324010000	<b>15 - 17mm</b>	
WDM: 4323240000	<b>Blanking seal (terminating plug)</b>	

For preassembled power cables for the FieldPower® system see capture 1.2.9.



## Distributor box AC (3~, N, PE) with maintenance switch



Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 1003260000	<b>FieldPower®</b> <b>T-distributor box with decentralized maintenance switch</b> Red/Black handle with ON/OFF positions Switching capacity 16 A Can be secured with 3 locks No-voltage signal contact (NO) fed out via M12 socket IDC connection power cable, Connection from maintenance switch to contact unit, pre-assembled: 4 mm <sup>2</sup> , IP65 <b>FP Box On/Off</b>	Yes
WDM: 4329610000	<b>FieldPower® Round cable seal, slotted. For FP Box...</b> <b>IP65</b> <b>Cable diameter 7,5 - 9mm</b>	Yes
WDM: 4323210000	<b>9 - 11mm</b>	
WDM: 4323230000	<b>11 - 13mm</b>	
WDM: 4323220000	<b>13 - 15mm</b>	
WDM: 4324010000	<b>15 - 17mm</b>	
WDM: 4323240000	<b>Blanking seal (terminating plug)</b>	

For preassembled power cables for the FieldPower® system see capture 1.2.9.

## Plug-in connector AC (3~, N, PE) for distribution box AC



single



double

Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 1952120000	<b>FieldPower® PTS 4</b> plug-in connector <b>1 connection per pole</b> , 5-pole, Push-In connection Connection: 0,5 – 4mm <sup>2</sup>	Yes
WDM: 1952130000	<b>FieldPower® PTDS 4</b> plug-in connector, <b>2 connections per pole</b> , 5-pole, Push-In connection Connection: 0,5 – 4mm <sup>2</sup>	Yes

For preassembled power cables for the FieldPower® system see capture 1.2.9.

## Sheath stripping tool for round cables



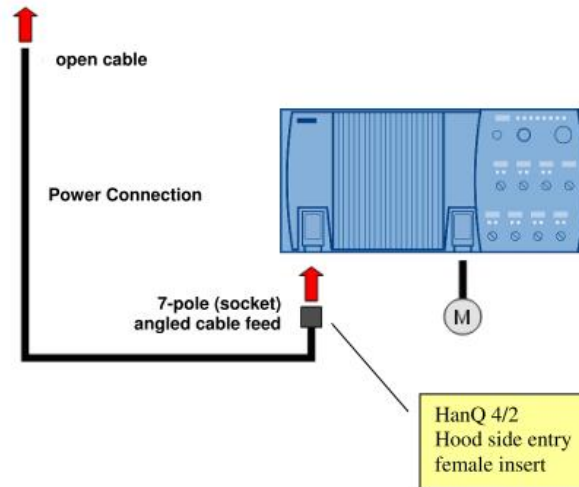
Solution Partner Weidmüller	
Order no.	Description
WDM: 9204190000	<b>FieldPower® AM 16</b> Sheath stripping tool for round cables, Adjustable cutting depth, Longitudinal and circular cuts
WDM: 9204260000	<b>FieldPower® replacement blade AM16</b> Replacement blade for stripping tool

## 1.2 Power cables

### 1.2.1 Preassembled on one side (angled)

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
Yes (X1)	Yes (X1)	Yes (X1) with 180V DC and 400V AC brake	Yes (X1)	Yes (X1) With HanQ	Yes (X1)

The power cable is preassembled on the motor starter or frequency converter



(Example representation with SINAMICS G120D)

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2.5mm<sup>2</sup></b>		
HTG:61 88 201 0192	<b>Power cable open</b> HanQ 4/2 side entry 4x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0193	<b>Length 3m</b>	
HTG:61 88 201 0194	<b>Length 5m</b>	
HTG:61 88 201 0195	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 201 0196	<b>Power cable open</b> HanQ 4/2 side entry 4x4mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0197	<b>Length 3m</b>	
HTG:61 88 201 0198	<b>Length 5m</b>	
HTG:61 88 201 0199	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 201 0200	<b>Power cable open</b> HanQ 4/2 side entry 4x6mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0201	<b>Length 3m</b>	
HTG:61 88 201 0202	<b>Length 5m</b>	
HTG:61 88 201 0203	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

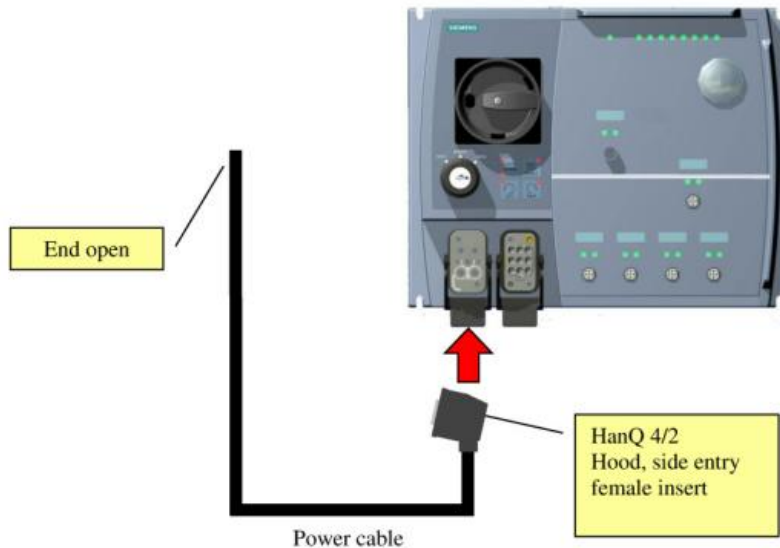
Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2.5mm<sup>2</sup></b>		
ZKT:70013700000150	<b>Power supply cable open</b> E bus plug ISO23570-3 socket angled <b>4x2.5 mm<sup>2</sup></b> <b>Length 1.5 m</b>	On Request at Knorrtec
ZKT:70013700000300	<b>Length 3m</b>	
ZKT:70013700000500	<b>Length 5m</b>	
ZKT:70013700001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70013800000150	<b>Power supply cable open</b> E bus plug ISO23570-3 socket angled <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013800000300	<b>Length 3m</b>	
ZKT:70013800000500	<b>Length 5m</b>	
ZKT:70013800001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70013200000150	<b>Power supply cable open</b> E bus plug ISO23570-3 socket angled <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013200000300	<b>Length 3m</b>	
ZKT:70013200000500	<b>Length 5m</b>	
ZKT:70013200001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	

Solution Partner Weidmüller		
Order no.	Description	UL
<b>Cross section 2.5mm<sup>2</sup></b>		
WDM: 8000003548	<b>Power line open</b> With HQ4 2 socket for L1, L2, L3, PE, plastic-housing angled HQ4 2 <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Weidmüller
<b>Cross section 4mm<sup>2</sup></b>		
WDM: 1069990000	<b>Power line open</b> With HQ4 2 socket for L1, L2, L3, PE, plastic-housing angled HQ4 2 <b>4x4mm<sup>2</sup></b> <b>Length 3m</b>	On Request at Weidmüller

## 1.2.2 Preassembled on one side (angled with neutral conductor)

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

Preassembled power cable with neutral conductor for motor starters with 230V brake.

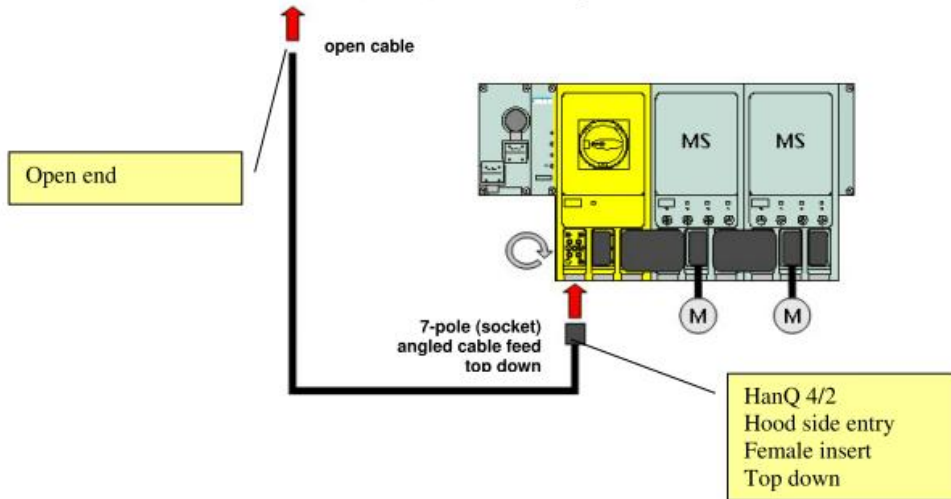


Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0458	<b>Power cable (N) for M200D open</b> HAN Q4/2 side entry <b>5x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0459	<b>Length 3m</b>	
HTG:61 88 201 0460	<b>Length 5m</b>	
HTG:61 88 201 0461	<b>Length 10m</b>	
	<b>Special length on request at Harting</b>	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 201 0462	<b>Power cable (N) for M200D open</b> HAN Q4/2 side entry <b>5x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0463	<b>Length 3m</b>	
HTG:61 88 201 0464	<b>Length 5m</b>	
HTG:61 88 201 0465	<b>Length 10m</b>	
	<b>Special length on request at Harting</b>	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 201 0466	<b>Power cable (N) for M200D open</b> HAN Q4/2 side entry <b>5x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0467	<b>Length 3m</b>	
HTG:61 88 201 0468	<b>Length 5m</b>	
HTG:61 88 201 0469	<b>Length 10m</b>	
	<b>Special length on request at Harting</b>	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70025500000150	<b>Power cable (N) for M200D open</b> E bus plug ISO23570-3 socket angled <b>5x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025500000300	<b>Length 3m</b>	
ZKT:70025500000500	<b>Length 5m</b>	
ZKT:70025500001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70025600000150	<b>Power cable (N) for M200D open</b> E bus plug ISO23570-3 socket angled <b>5x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025600000300	<b>Length 3m</b>	
ZKT:70025600000500	<b>Length 5m</b>	
ZKT:70025600001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70025700000150	<b>Power cable (N) for M200D open</b> E bus plug ISO23570-3 socket angled <b>5x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025700000300	<b>Length 3m</b>	
ZKT:70025700000500	<b>Length 5m</b>	
ZKT:70025700001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	

## 1.2.3 Preassembled on one side (for ET 200pro Repair switch module RSM)

SIMATIC	SIRIUS	SINAMICS		
ET 200pro RSM	M200D	G110D	G110M	G120D
Yes (X1)				



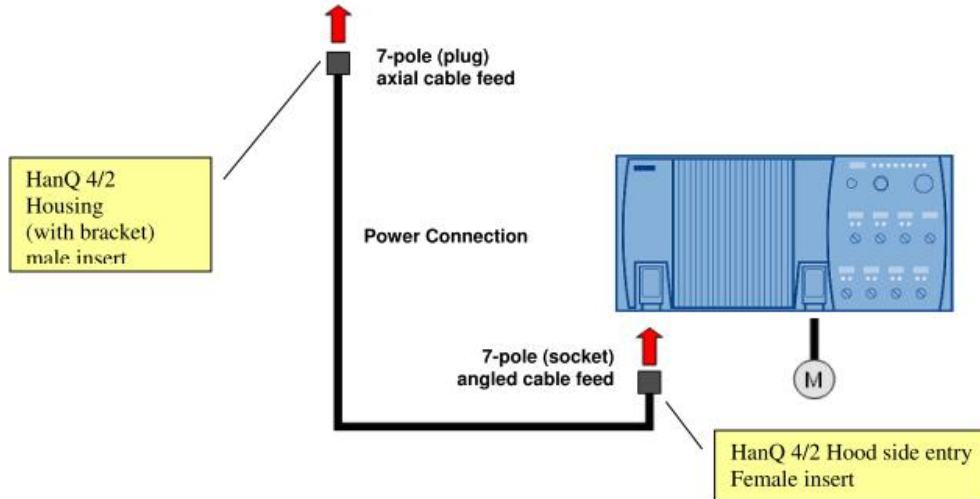
Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0310	<b>Power cable RSM for ET 200pro open</b> HAN Q4/2 side entry Insert RSM-side top down <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0311	<b>Length 3m</b>	
HTG:61 88 201 0312	<b>Length 5m</b>	
HTG:61 88 201 0313	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 201 0184	<b>Power cable RSM for ET 200pro open</b> HAN Q4/2 side entry Insert RSM-side top down <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0185	<b>Length 3m</b>	
HTG:61 88 201 0186	<b>Length 5m</b>	
HTG:61 88 201 0187	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 201 0188	<b>Power cable RSM for ET 200pro open</b> HAN Q4/2 side entry Insert RSM-side top down <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0189	<b>Length 3m</b>	
HTG:61 88 201 0190	<b>Length 5m</b>	
HTG:61 88 201 0191	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70014100000150	<b>Power supply cables RSM for ET 200pro open</b> E bus plug ISO23570-3 angled RSM side insert, turned <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014100000300	<b>Length 3m</b>	
ZKT:70014100000500	<b>Length 5m</b>	
ZKT:70014100001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70014200000150	<b>Power supply cables RSM for ET 200pro open</b> E bus plug ISO23570-3 angled RSM side insert, turned <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014200000300	<b>Length 3m</b>	
ZKT:70014200000500	<b>Length 5m</b>	
ZKT:70014200001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70012900000150	<b>Power supply cables RSM for ET 200pro open</b> E bus plug ISO23570-3 angled RSM side insert, turned <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70012900000300	<b>Length 3m</b>	
ZKT:70012900000500	<b>Length 5m</b>	
ZKT:70012900001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	



## 1.2.4 Preassembled on both sides (axial / angled)

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
Yes (X1)	Yes (X1)	Yes (X1) with 180V DC and 400V AC brake	Yes (X1)	Yes (X1) With HanQ	Yes (X1)



(Example representation with SINAMICS G120D)

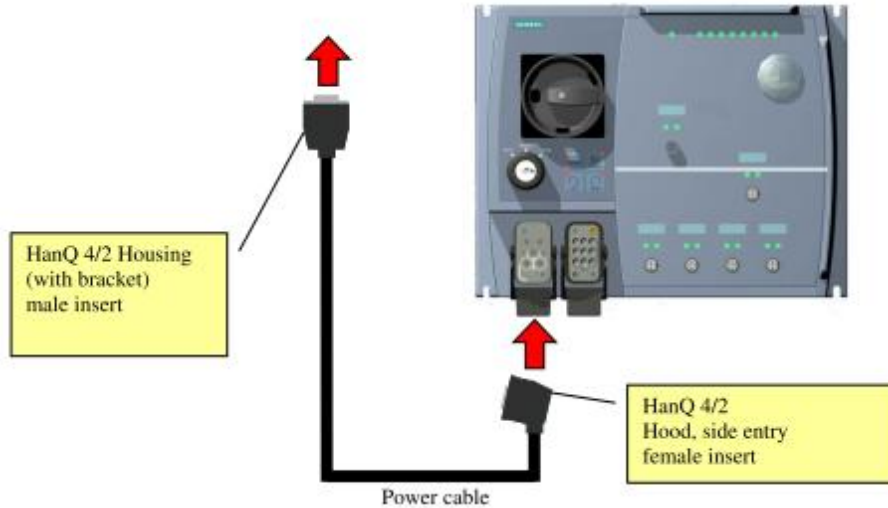
Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0400	<b>Power cable</b> HanQ 4/2 top entry - HanQ 4/2 side entry <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0401	<b>Length 3m</b>	
HTG:61 88 202 0402	<b>Length 5m</b>	
HTG:61 88 202 0403	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0404	<b>Power cable</b> HanQ 4/2 top entry - HanQ 4/2 side entry <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0405	<b>Length 3m</b>	
HTG:61 88 202 0406	<b>Length 5m</b>	
HTG:61 88 202 0407	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 202 0408	<b>Power cable</b> HanQ 4/2 top entry - HanQ 4/2 side entry <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0409	<b>Length 3m</b>	
HTG:61 88 202 0410	<b>Length 5m</b>	
HTG:61 88 202 0411	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70008800000150	<b>Power supply cable</b> HanQ 4/2 top entry - HanQ 4/2 side entry <b>4x2.5 mm</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70008800000300	<b>Length 3m</b>	
ZKT:70008800000500	<b>Length 5m</b>	
ZKT:70008800001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70008900000150	<b>Power supply cable</b> HanQ 4/2 top entry - HanQ 4/2 side entry <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70008900000300	<b>Length 3m</b>	
ZKT:70008900000500	<b>Length 5m</b>	
ZKT:70008900001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70013600000150	<b>Power supply cable</b> HanQ 4/2 top entry - HanQ 4/2 side entry <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013600000300	<b>Length 3m</b>	
ZKT:70013600000500	<b>Length 5m</b>	
ZKT:70013600001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	

## 1.2.5 Preassembled on both sides (axial / angled, with neutral conductor)

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

Preassembled power cable with neutral conductor for motor starters with 230V brake.

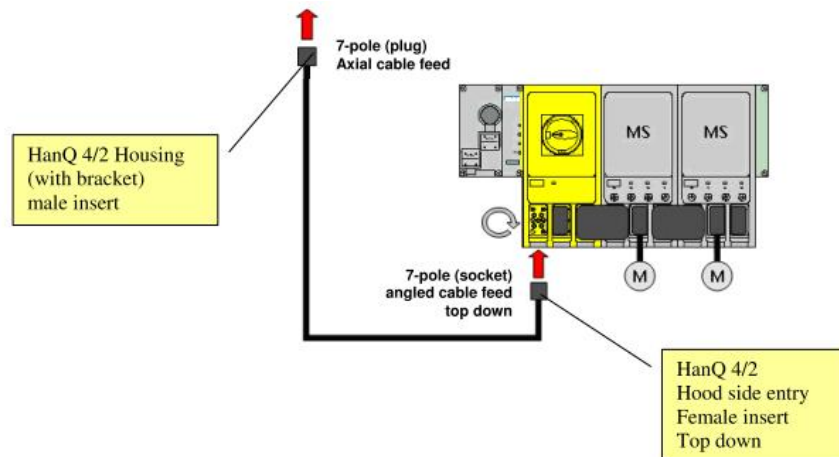


Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0693	<b>Power cable (N) for M200D</b> HAN Q4/2 top entry - HAN Q4/2 side entry <b>5x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0694	<b>Length 3m</b>	
HTG:61 88 202 0695	<b>Length 5m</b>	
HTG:61 88 202 0696	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0697	<b>Power cable (N) for M200D</b> HAN Q4/2 top entry - HAN Q4/2 side entry <b>5x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0698	<b>Length 3m</b>	
HTG:61 88 202 0699	<b>Length 5m</b>	
HTG:61 88 202 0700	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 202 0701	<b>Power cable (N) for M200D</b> HAN Q4/2 top entry - HAN Q4/2 side entry <b>5x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0702	<b>Length 3m</b>	
HTG:61 88 202 0703	<b>Length 5m</b>	
HTG:61 88 202 0704	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70025200000150	<b>Power supply cable (N)</b> HAN Q4/2 top entry - HAN Q4/2 side entry <b>5x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025200000300	<b>Length 3m</b>	
ZKT:70025200000500	<b>Length 5m</b>	
ZKT:70025200001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70025300000150	<b>Power supply cable (N)</b> HAN Q4/2 top entry - HAN Q4/2 side entry <b>5x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025300000300	<b>Length 3m</b>	
ZKT:70025300000500	<b>Length 5m</b>	
ZKT:70025300001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70025400000150	<b>Power supply cable (N)</b> HAN Q4/2 top entry - HAN Q4/2 side entry <b>5x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025400000300	<b>Length 3m</b>	
ZKT:70025400000500	<b>Length 5m</b>	
ZKT:70025400001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	

## 1.2.6 Preassembled on both sides (for ET 200pro Repair switch module RSM)

SIMATIC	SIRIUS	SINAMICS		
ET 200pro RSM	M200D	G110D	G110M	G120D
Yes (X1)				



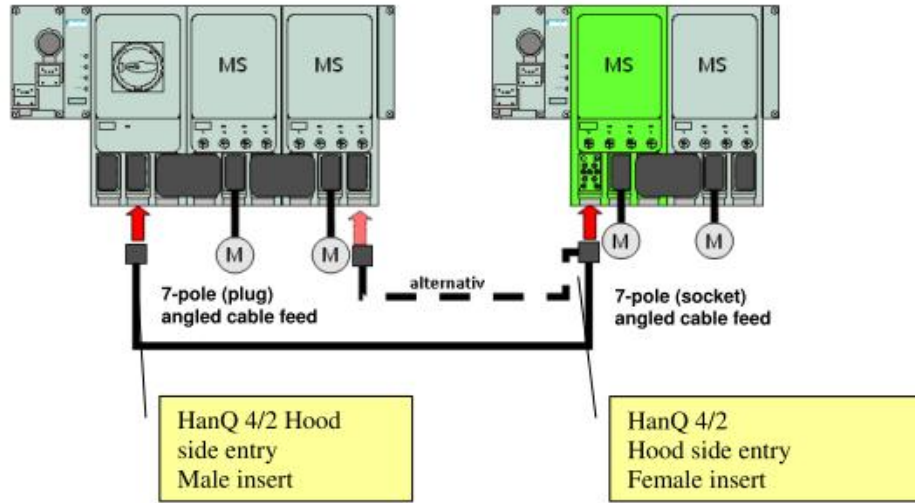
Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0412	<b>Power cable RSM for ET 200pro</b> HAN Q4/2 top entry - HAN Q4/2 side entry Insert RSM-side top down <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0413	<b>Length 3m</b>	
HTG:61 88 202 0414	<b>Length 5m</b>	
HTG:61 88 202 0415	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0416	<b>Power cable RSM for ET 200pro</b> HAN Q4/2 top entry - HAN Q4/2 side entry Insert RSM-side top down <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0417	<b>Length 3m</b>	
HTG:61 88 202 0418	<b>Length 5m</b>	
HTG:61 88 202 0419	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 202 0420	<b>Power cable RSM for ET 200pro</b> HAN Q4/2 top entry - HAN Q4/2 side entry Insert RSM-side top down <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0421	<b>Length 3m</b>	
HTG:61 88 202 0422	<b>Length 5m</b>	
HTG:61 88 202 0423	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70013900000150	<b>Power supply cables RSM for ET 200pro</b> E-BUS-plug ISO23570-3 straight – E-BUS-plug ISO23570-3 angled RSM side insert, turned <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013900000300	<b>Length 3m</b>	
ZKT:70013900000500	<b>Length 5m</b>	
ZKT:70013900001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70014000000150	<b>Power supply cables RSM for ET 200pro</b> E-BUS-plug ISO23570-3 straight – E-BUS-plug ISO23570-3 angled RSM side insert, turned <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014000000300	<b>Length 3m</b>	
ZKT:70014000000500	<b>Length 5m</b>	
ZKT:70014000001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70014500000150	<b>Power supply cables RSM for ET 200pro</b> E-BUS-plug ISO23570-3 straight – E-BUS-plug ISO23570-3 angled RSM side insert, turned <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014500000300	<b>Length 3m</b>	
ZKT:70014500000500	<b>Length 5m</b>	
ZKT:70014500001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	

## 1.2.7 Preassembled on both sides (Energy transfer angled / angled)

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
Yes (X1 / X3)	Yes (X1 / X3)	Yes (X1 line entry)	(X1 line entry)	Yes (X1 / X3) With HanQ	(X1 line entry)

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



(Example representation with SIMATIC ET 200pro)

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0340	<b>Power transfer RSM/MS - MS for ET 200pro and G110M</b> HAN Q4/2 side entry - HAN Q4/2 side entry <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0341	<b>Length 3m</b>	
HTG:61 88 202 0342	<b>Length 5m</b>	
HTG:61 88 202 0343	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0344	<b>Power transfer RSM/MS - MS for ET 200pro and G110M</b> HAN Q4/2 side entry - HAN Q4/2 side entry <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0345	<b>Length 3m</b>	
HTG:61 88 202 0346	<b>Length 5m</b>	
HTG:61 88 202 0347	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 202 0348	<b>Power transfer RSM/MS - MS for ET 200pro and G110M</b> HAN Q4/2 side entry - HAN Q4/2 side entry <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0349	<b>Length 3m</b>	
HTG:61 88 202 0350	<b>Length 5m</b>	
HTG:61 88 202 0351	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

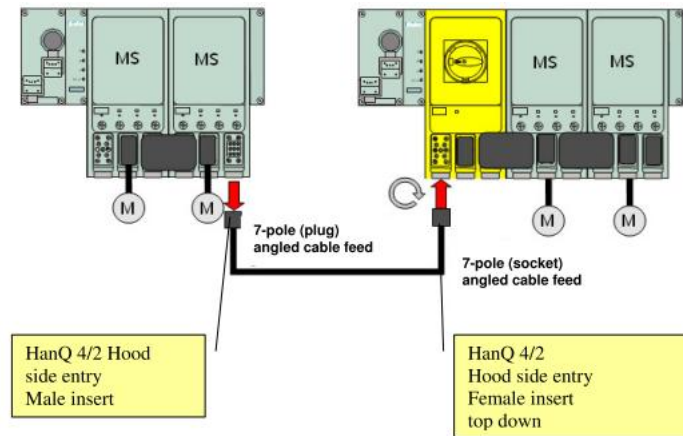
Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70015100000150	<b>Power transmission RSM/MS - MS for ET 200pro and G110M</b> E bus plug ISO23570-3 angled E bus plug ISO23570-3 angled <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70015100000300	<b>Length 3m</b>	
ZKT:70015100000500	<b>Length 5m</b>	
ZKT:70015100001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70015200000150	<b>Power transmission RSM/MS - MS for ET 200pro and G110M</b> E bus plug ISO23570-3 angled E bus plug ISO23570-3 angled <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70015200000300	<b>Length 3m</b>	
ZKT:70015200000500	<b>Length 5m</b>	
ZKT:70015200001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70013100000150	<b>Power transmission RSM/MS - MS for ET 200pro and G110M</b> E bus plug ISO23570-3 angled E bus plug ISO23570-3 angled <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013100000300	<b>Length 3m</b>	
ZKT:70013100000500	<b>Length 5m</b>	
ZKT:70013100001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	



## 1.2.8 Preassembled on both sides (Energy transfer angled / angled to ET 200pro RSM)

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

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



(Example representation with SIMATIC ET 200pro)

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0352	<b>Power transfer MS or G110M - RSM for ET 200pro</b> HAN Q4/2 side entry - HAN Q4/2 side entry, Insert RSM-side top down <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0353	<b>Length 3m</b>	
HTG:61 88 202 0354	<b>Length 5m</b>	
HTG:61 88 202 0355	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0356	<b>Power transfer MS or G110M - RSM for ET 200pro</b> HAN Q4/2 side entry - HAN Q4/2 side entry, Insert RSM-side top down <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0357	<b>Length 3m</b>	
HTG:61 88 202 0358	<b>Length 5m</b>	
HTG:61 88 202 0359	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 6mm<sup>2</sup></b>		
HTG:61 88 202 0360	<b>Power transfer MS or G110M - RSM for ET 200pro</b> HAN Q4/2 side entry - HAN Q4/2 side entry, Insert RSM-side top down <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0361	<b>Length 3m</b>	
HTG:61 88 202 0362	<b>Length 5m</b>	
HTG:61 88 202 0363	<b>Length 10m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70014300000150	<b>Power transmission MS - RSM for ET 200pro</b> E bus plug ISO23570-3 angled E bus plug ISO23570-3 angled RSM side insert, turned RSM-Side <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014300000300	<b>Length 3m</b>	
ZKT:70014300000500	<b>Length 5m</b>	
ZKT:70014300001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70014400000150	<b>Power transmission MS - RSM for ET 200pro</b> E bus plug ISO23570-3 angled E bus plug ISO23570-3 angled RSM side insert, turned RSM-Side <b>4x4mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014400000300	<b>Length 3m</b>	
ZKT:70014400000500	<b>Length 5m</b>	
ZKT:70014400001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 6mm<sup>2</sup></b>		
ZKT:70013000000150	<b>Power transmission MS - RSM for ET 200pro</b> E bus plug ISO23570-3 angled E bus plug ISO23570-3 angled RSM side insert, turned RSM-Side <b>4x6mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013000000300	<b>Length 3m</b>	
ZKT:70013000000500	<b>Length 5m</b>	
ZKT:70013000001000	<b>Length 10m</b>	
	<b>Special length</b> on request at Knorrtec	

## 1.2.9 Preassembled on both sides for Weidmüller Field Power connection box

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
Yes (X1)	Yes (X1)	Yes (X1) with 180V DC and 400V AC brake	Yes (X1)	Yes (X1) with HanQ	Yes (X1)



Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 8000005228	<b>Power line PVC, With FieldPower® plug-in connector and HQ4 2 socket for L1, L2, L3, PE</b> Plastic-housing angled 1 x HQ4 2 <b>Length 2m</b>	On Request at Weidmüller
WDM: 8000005229	<b>Length 5m</b>	



Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 8000005264	<b>Power line PVC, With FieldPower® plug-in connector and HQ4 2 socket for L1, L2, L3, PE</b> Plastic-housing angled 2 x HQ4 2 <b>Length 2 x 2m</b>	On Request at Weidmüller
WDM: 8000005230	<b>Length 2 x 5m</b>	

## 1.3 Plug set for power infeed

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



Order no.	Description	UL
3RK1911-2BE50	<b>Power supply plug set</b> HAN Q4/2 5 contact insert, 2.5 mm <sup>2</sup> contact insert, two auxiliary contacts 0.5 mm <sup>2</sup> pin 11+12 (for connection to MS, RSM of the ET 200PRO, M200D) <b>2.5 mm<sup>2</sup> (HAN Q4/2)</b> Grommet housing, angled feeder incl. cable gland	Yes
3RK1911-2BE10	<b>4 mm<sup>2</sup> (HAN Q4/2)</b>	Yes
3RK1911-2BE30	<b>6 mm<sup>2</sup> (HAN Q4/2)</b>	Yes

[A connector set that can be assembled in the field for the power infeed, with a connection cross-section up to 10mm<sup>2</sup>, is also available from the Harting company](#)

## 1.4 Plug set for power to forward energy

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
Yes (X3)	Yes (X3)			Yes (X3) With HanQ	



Order no.	Description	UL
3RK1911-2BF50	<b>Connector set sleeve housing angled HanQ4/2</b> for power transmission, including cable glands <b>2.5mm<sup>2</sup></b>	Yes
3RK1911-2BF10	<b>4 mm<sup>2</sup></b>	Yes

[A connector set that can be assembled in the field for power transfer, with a connection cross-section up to 10mm<sup>2</sup>, is also available from the Harting company](#)

[Refer to the Solution Partners for additional versions, crimping and disassembly tools](#)

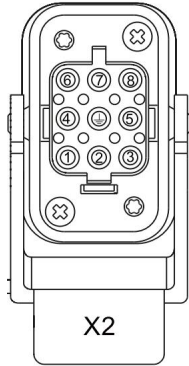
## 1.5 Power supply cable (cut-to-length)

Order no.	Description	UL
3RK1911-0AG60	Power bus cable <b>5 x 4mm<sup>2</sup></b> <b>20m</b>	Yes
3RK1911-0AG70	<b>50m</b>	
3RK1911-0AG80	<b>100m</b>	
3RK1911-0AH60	Power bus cable <b>5 x 6mm<sup>2</sup></b> <b>20m</b>	Yes
3RK1911-0AH70	<b>50m</b>	
3RK1911-0AH80	<b>100m</b>	

Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 600 0115	Power cable <b>4x2,5mm<sup>2</sup></b> <b>Length 50m</b>	On Request at Harting
HTG:61 88 600 0116	<b>Length 100m</b>	
	<b>Length &gt;100m</b> on request at Harting	
HTG:61 88 600 0117	Power cable <b>4x4mm<sup>2</sup></b> <b>Length 50m</b>	On Request at Harting
HTG:61 88 600 0118	<b>Length 100m</b>	
	<b>Length &gt;100m</b> on request at Harting	
HTG:61 88 600 0119	Power cable <b>4x6mm<sup>2</sup></b> <b>Length 50m</b>	On Request at Harting
HTG:61 88 600 0120	<b>Length 100m</b>	
	<b>Length &gt;100m</b> on request at Harting	
HTG:61 88 600 0101	Power bus cable, UL/CSA <b>5x2,5mm<sup>2</sup></b> <b>Length 50m</b>	Yes
HTG:61 88 600 0102	<b>Length 100m</b>	
	<b>Length &gt;100m</b> on request at Harting	
HTG:61 88 600 0107	Power bus cable, UL/CSA <b>5x4mm<sup>2</sup></b> <b>Length 50m</b>	Yes
HTG:61 88 600 0108	<b>Length 100m</b>	
	<b>Length &gt;100m</b> on request at Harting	
HTG:61 88 600 0113	Power bus cable, UL/CSA <b>5x6mm<sup>2</sup></b> <b>Length 50m</b>	Yes
HTG:61 88 600 0114	<b>Length 100m</b>	
	<b>Length &gt;100m</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
ZKT:10029420	Power supply cable <b>4x2.5 mm<sup>2</sup></b> Sheath diameter 11.1 mm <b>Length 50m</b>	On Request at Knorrtec
ZKT:10029430	<b>Length 100m</b>	
ZKT:10029400	<b>Length &gt;100m</b>	
ZKT:10029520	Power supply cable <b>4x4 mm<sup>2</sup></b> Sheath diameter 13.8 mm <b>Length 50m</b>	On Request at Knorrtec
ZKT:10029530	<b>Length 100m</b>	
ZKT:10029500	<b>Length &gt;100m</b> on request at Harting	
ZKT:10029620	Power supply cable <b>4x6 mm<sup>2</sup></b> Sheath diameter 15.6 mm <b>Length 50m</b>	On Request at Knorrtec
ZKT:10029630	<b>Length 100m</b>	
ZKT:10029600	<b>Length &gt;100m</b> on request at Harting	
ZKT:10029120	<b>Power bus cable 5x2.5 mm<sup>2</sup></b> Sheath diameter 12.4 mm <b>Length 50 m</b>	On Request at Knorrtec
ZKT:10029130	<b>Length 100m</b>	
ZKT:10029100	<b>Length &gt;100m</b>	
ZKT:10029220	Power bus cable <b>5x4 mm<sup>2</sup></b> Sheath diameter 15.3 mm <b>Length 50m</b>	On Request at Knorrtec
ZKT:10029230	<b>Length 100m</b>	
ZKT:10029200	<b>Length &gt;100m</b>	
ZKT:10029320	Power bus cable <b>5x6 mm<sup>2</sup></b> Sheath diameter 17.3 mm <b>Length 50m</b>	On Request at Knorrtec
ZKT:10029330	<b>Length 100m</b>	
ZKT:10029300	<b>Length &gt;100m</b>	

## 2 Motor connection (motor starter)

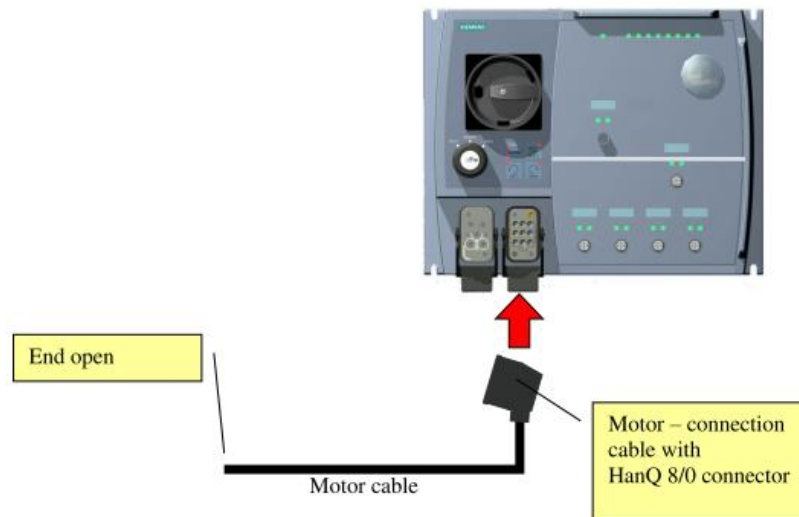


Pin	w/o Brake	With 400 V / 230 V brake	With 180 V brake
1	L1 Out		
2	-	N (with AC 230V brake)	-
3	L3 Out		
4	-	Brake L1 (switched)	Brake (-)
5	Temperature sensor		
6	-	Brake L3 (direct, for AC 400V Brake)	Brake (+)
7	L2 Out		
8	Temperature sensor		
PE	Protective earth		

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

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

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



### 2.1.1 Without brake, without temperature sensor

Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
3RK1 911-0EB31	<b>Motor cable for M200D and ET 200pro MS for Motor w/o Brake, w/o temperature sensor</b> HAN Q8/0 side entry - open 4 x 1,5 mm <sup>2</sup> <b>Length 5 m</b>	Yes

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 201 0211	<b>Motor cable for M200D and ET 200pro MS for Motor w/o Brake, w/o Temperature transmitter</b> HAN Q8/0 side entry - open 4x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0212	<b>Length 3m</b>	
HTG:61 88 201 0213	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0214	<b>Motor cable for M200D and ET 200pro MS for Motor w/o Brake, w/o Temperature transmitter</b> HAN Q8/0 side entry - open 4x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0215	<b>Length 3m</b>	
HTG:61 88 201 0216	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	



Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70014800000150	<b>Motor cable for MS ET 200pro, ET 200X, AS-i Compact, M200D for motors with star bridge, without a brake without a temperature sensor</b> E bus plug ISO23570-2 angled - open <b>4x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014800000300	<b>Length 3m</b>	
ZKT:70014800000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70014900000150	<b>Motor cable for MS ET 200pro, ET 200X, AS-i Compact, M200D for motors with star bridge, without a brake without a temperature sensor</b> E bus plug ISO23570-2 angled - open <b>4x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014900000300	<b>Length 3m</b>	
ZKT:70014900000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

Solution Partner Weidmüller		
Order no.	Description	UL
<b>Cross section 2,5mm<sup>2</sup></b>		
WDM: 8000003131	<b>Motor line PVC for motor starter</b> with HQ8 plug-in connector for U, V, W, PE, plastic-housing angled HQ8 <b>Length 10m</b>	On Request at Weidmüller
WDM: 8000003132	<b>Length 15m</b>	

## 2.1.2 Without brake, with temperature sensor

Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
3RK1 911-0EF31	<b>Motor cable for M200D and ET 200pro MS for Motor w/o Brake, with temperature sensor</b> HAN Q8/0 side entry – open <b>6 x 1,5 mm<sup>2</sup></b> <b>Length 5 m</b>	No

## 2.1.3 With brake (400V AC or 180V DC (only M200D)), without temperature sensor

Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
3RK1 911-0ED31	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake (400V AC or 180V DC), w/o temperature sensor</b> HAN Q8/0 side entry – open <b>6 x 1,5 mm<sup>2</sup></b> <b>Length 5 m</b>	Yes

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 201 0218	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake, w/o Temperature transmitter</b> HAN Q8/0 side entry - open <b>6x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0219	<b>Length 3m</b>	
HTG:61 88 201 0220	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0221	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake, w/o Temperature transmitter</b> HAN Q8/0 side entry - open <b>6x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0222	<b>Length 3m</b>	
HTG:61 88 201 0223	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70009500000150	<b>Motor cable for MS ET 200pro, ET 200X, AS-i Compact, M200D for motors with star bridge, with a brake 400V AC or 180V DC</b> E bus plug ISO23570-2 angled - open <b>6x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70009500000300	<b>Length 3m</b>	
ZKT:70009500000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70015400000150	<b>Motor cable for MS ET 200pro, ET 200X, AS-i Compact, M200D for motors with star bridge, with a brake 400V AC or 180V DC</b> E bus plug ISO23570-2 angled - open <b>6x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70015400000300	<b>Length 3m</b>	
ZKT:70015400000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

## 2.1.4 With brake (230V AC), without temperature sensor

Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
3RK1 911-0EH31	<b>Motor cable for Motor with Brake (230V on pin 2 and 4), w/o temperature sensor</b> HAN Q8/0 side entry – open <b>6 x 1,5 mm<sup>2</sup></b> <b>Length 5 m</b>	No

<b>Solution Partner Harting</b>		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 201 0470	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake 230V, w/o Temperature transmitter</b> HAN Q8/0 side entry - open <b>6x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0471	<b>Length 3m</b>	
HTG:61 88 201 0472	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0473	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake 230V, w/o Temperature transmitter</b> HAN Q8/0 side entry - open <b>6x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0474	<b>Length 3m</b>	
HTG:61 88 201 0475	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

<b>Solution Partner Knorrtec</b>		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70025800000150	<b>Motor cable for M200D for motors with star bridge, with a brake 230V AC</b> E bus plug ISO23570-2 angled – open <b>6x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025800000300	<b>Length 3m</b>	
ZKT:70025800000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70025900000150	<b>Motor cable for M200D for motors with star bridge, with a brake 230V AC</b> E bus plug ISO23570-2 angled – open <b>6x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70025900000300	<b>Length 3m</b>	
ZKT:70025900000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

## 2.1.5 With brake (400V AC or 180V DC (only M200D)), with temperature sensor

Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
3RK1 911-0EG31	<b>Motor cable for Motor with brake, with temperature sensor</b> HAN Q8/0 side entry – open 8 x 1,5 mm <sup>2</sup> <b>Length 5 m</b>	No

<b>Solution Partner Harting</b>		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 201 0452	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake, with Temperature transmitter</b> HAN Q8/0 side entry - open 8x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0453	<b>Length 3m</b>	
HTG:61 88 201 0454	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0455	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake, with Temperature transmitter</b> HAN Q8/0 side entry - open 8x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0456	<b>Length 3m</b>	
HTG:61 88 201 0457	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

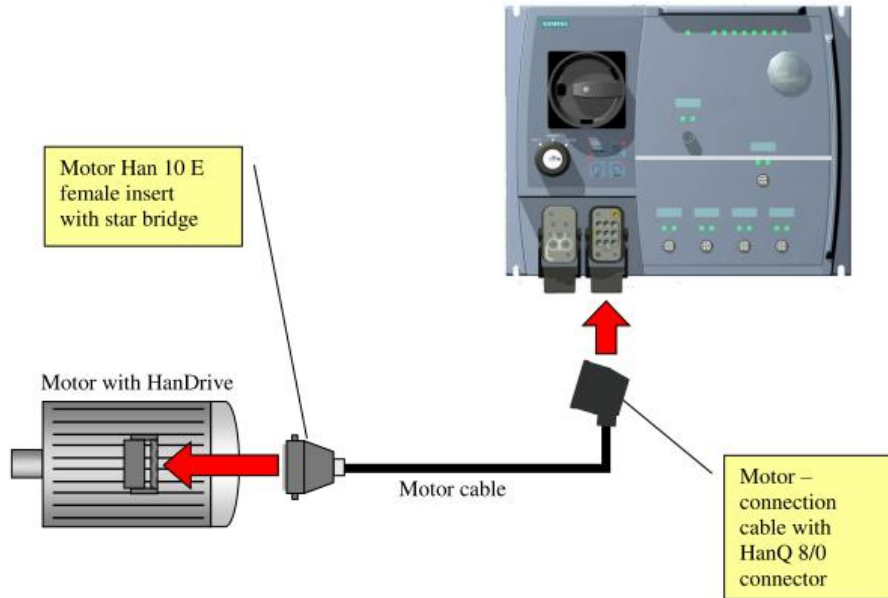
<b>Solution Partner Weidmüller</b>		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
WDM: 8000005235	<b>Motor line PVC for motor starter with HQ8 plug-in connector for U, V, W, PE, with thermistor, with brake</b> Plastic-housing angled HQ8 <b>Length 2m</b>	On Request at Weidmüller
WDM: 8000005237	<b>Length 5m</b>	

## 2.1.6 With brake (230V AC), with temperature sensor

Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
3RK1 911-0EE31	<b>Motor cable for Motor with brake (230V AC on pin 2 and 4), with temperature sensor</b> HAN Q8/0 side entry – open <b>8 x 1,5 mm<sup>2</sup></b> <b>Length 5 m</b>	No

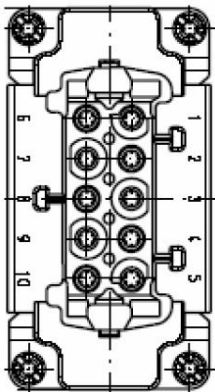
<b>Solution Partner Harting</b>		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 201 0476	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake 230V, with Temperature transmitter</b> HAN Q8/0 side entry - open <b>8x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0477	<b>Length 3m</b>	
HTG:61 88 201 0478	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0479	<b>Motor cable for M200D and ET 200pro MS for Motor with Brake 230V, with Temperature transmitter</b> HAN Q8/0 side entry - open <b>8x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 201 0480	<b>Length 3m</b>	
HTG:61 88 201 0481	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

## 2.2 Motor cable (unshielded), preassembled on both sides (HAN Q8 and HAN 10E (1-bracket))



(Example representation with SIRIUS M200D)

### HAN 10E 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 Star connection, without brake, without temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 202 0424	<b>Motor cable for M200D and ET 200pro MS w/o Brake, w/o Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 4x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0425	<b>Length 3m</b>	
HTG:61 88 202 0426	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0427	<b>Motor cable for M200D and ET 200pro MS w/o Brake, w/o Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 4x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0428	<b>Length 3m</b>	
HTG:61 88 202 0429	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70014600000150	<b>Motor cable for MS ET 200pro, ET 200X, AS-i Compact, M200D with star bridge for motors without a brake</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 4x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014600000300	<b>Length 3m</b>	
ZKT:70014600000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70014700000150	<b>Motor cable for MS ET 200pro, ET 200X, AS-i Compact, M200D with star bridge for motors without a brake</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 4x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70014700000300	<b>Length 3m</b>	
ZKT:70014700000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

## 2.2.2 Star connection, without brake, with temperature sensor

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70026600000150	<b>Motor cable for MS M200D and ET 200pro MS, with star bridge for motors with temperature sensor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 <b>6x1,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026600000300	<b>Length 3m</b>	
ZKT:70026600000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70026700000150	<b>Motor cable for MS M200D and ET 200pro MS, with star bridge for motors with temperature sensor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 <b>6x2,5mm<sup>2</sup></b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026700000300	<b>Length 3m</b>	
ZKT:70026700000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	



## 2.2.3 Star connection, with brake (400V AC or 180V DC (only M200D)), without temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 202 0607	<b>Motor cable for M200D and ET 200pro MS with Brake, w/o Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 6x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0608	<b>Length 3m</b>	
HTG:61 88 202 0609	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0610	<b>Motor cable for M200D and ET 200pro MS with Brake, w/o Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 6x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0611	<b>Length 3m</b>	
HTG:61 88 202 0612	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70013300000150	<b>Motor cable for MS ET 200pro, ET 200X, M200D, with star bridge for motor with a brake without suppressor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 6x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70013300000300	<b>Length 3m</b>	
ZKT:70013300000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70015300000150	<b>Motor cable for MS ET 200pro, ET 200X, M200D, with star bridge for motor with a brake without suppressor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 6x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70015300000300	<b>Length 3m</b>	
ZKT:70015300000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

## 2.2.4 Star connection, with brake (230V AC), without temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 202 0705	<b>Motor cable for M200D and ET 200pro MS with Brake 230V, w/o Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 6x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0706	<b>Length 3m</b>	
HTG:61 88 202 0707	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0708	<b>Motor cable for M200D and ET 200pro MS with Brake 230V, w/o Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 6x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0709	<b>Length 3m</b>	
HTG:61 88 202 0710	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70026000000150	<b>Motor cable for M200D with star bridge for motor with a brake 230V AC without suppressor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 6x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026000000300	<b>Length 3m</b>	
ZKT:70026000000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70026100000150	<b>Motor cable for M200D with star bridge for motor with a brake 230V AC without suppressor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 6x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026100000300	<b>Length 3m</b>	
ZKT:70026100000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

## 2.2.5 Star connection, with brake (400V AC or 180V DC (only M200D)), with temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 202 0682	<b>Motor cable for M200D and ET 200pro MS with Brake, with Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 8x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0683	<b>Length 3m</b>	
HTG:61 88 202 0684	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0685	<b>Motor cable for M200D and ET 200pro MS with Brake, with Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 8x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0686	<b>Length 3m</b>	
HTG:61 88 202 0687	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70026200000150	<b>Motor cable for M200D and ET 200pro MS with star bridge for motor with a brake 400V AC / 180V DC and temperature sensor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 8x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026200000300	<b>Length 3m</b>	
ZKT:70026200000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70026300000150	<b>Motor cable for M200D and ET 200pro MS with star bridge for motor with a brake 400V AC / 180V DC and temperature sensor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 8x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026300000300	<b>Length 3m</b>	
ZKT:70026300000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

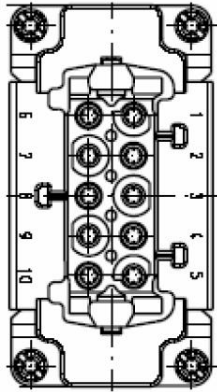
## 2.2.6 Star connection, with brake (230V AC), with temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 202 0711	<b>Motor cable for M200D and ET 200pro MS with Brake 230V, with Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 8x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0712	<b>Length 3m</b>	
HTG:61 88 202 0713	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 202 0714	<b>Motor cable for M200D and ET 200pro MS with Brake 230V, with Temperature transmitter, with star bridge</b> HAN Q8/0 side entry - HAN 10E 8x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Harting
HTG:61 88 202 0715	<b>Length 3m</b>	
HTG:61 88 202 0716	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
ZKT:70026400000150	<b>Motor cable for M200D with star bridge for motor with a brake 230V AC and temperature sensor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 8x1,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026400000300	<b>Length 3m</b>	
ZKT:70026400000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2,5mm<sup>2</sup></b>		
ZKT:70026500000150	<b>Motor cable for M200D with star bridge for motor with a brake 230V AC and temperature sensor</b> E bus plug ISO23570-2 angled E bus plug ISO23570-1 8x2,5mm <sup>2</sup> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70026500000300	<b>Length 3m</b>	
ZKT:70026500000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

## 2.3 Motor cable (unshielded), preassembled on both sides (HAN Q8 and HAN 10E (2-bracket))

HAN 10E Connector at the motor

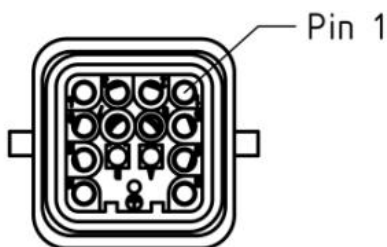


Pin	Function
1	U1
2	V1
3	W1
4	Brake
5	Brake
6	W2
7	U2
8	V2
9	Temperature sensor
10	Temperature sensor
PE	Protective earth

[Preassembled motor cables with HAN 10E connector on motor side with 2-bracket are on request also available from the Harting and Knorrtec companies](#)

## 2.4 Motor cable (unshielded), preassembled on both side (HAN Q8 and HAN Q12/0)

HAN Q12/0 Connector at the motor



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

[Preassembled motor cables with HAN Q12/0 connectors on motor side are on request also available from the Harting and Knorrtec companies](#)

## 2.5 Motor connection plug, motor-starter side (unshielded)



Order no.	Description	UL
3RK1 902-0CE00	<b>Plug set for connection to the motor starter, motor connection</b> 8 x 1.5 mm <sup>2</sup> , 9-pin, complete with PG16 cable gland	Yes
3RK1 902-0CC00	<b>6 x 2,5mm<sup>2</sup></b>	Yes

[Refer to the Solution Partners for crimping and disassembly tools](#)

## 2.6 Motor connection plug, motor side (unshielded)

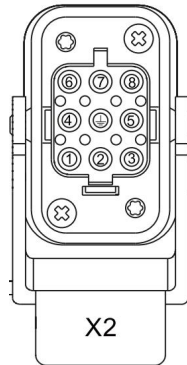
Order no.	Description	UL
3RK1 911-2BM21	<b>Plug set for motor cable for connection to the motor</b> , grommet housing straight feeder contact insert HAN 10E star jumper incl. gland and seven contact receptacles 1.5 mm <sup>2</sup>	Yes
3RK1 911-2BM22	<b>2,5mm<sup>2</sup></b>	Yes

[Refer to the Solution Partners for crimping and disassembly tools as well as additional versions](#)

## 2.7 Motor cable, cut-to-length (unshielded)

[Refer to the Solution Partner Program](#)

## 3 Motor connection (frequency converter)



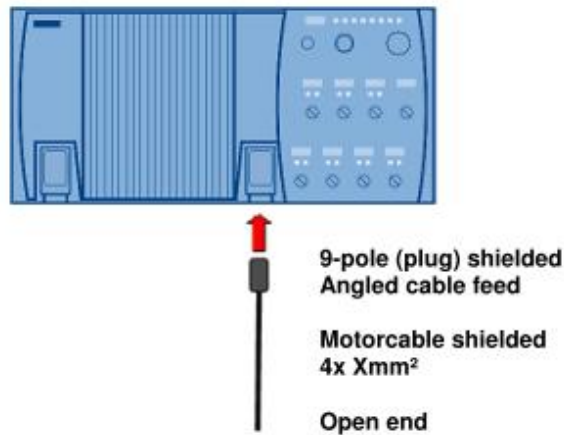
Pin	Function
1	U
2	-
3	W
4	Brake (-)
5	Temperature sensor (+)
6	Brake (+)
7	V
8	Temperature sensor (-)
PE	Protective earth

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.

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

## 3.1 Motor cable (shielded), preassembled converter side



(Example representation with SINAMICS G120D)

### 3.1.1 Without brake, without temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
HTG:61 88 201 0350	<b>Motor cable for FC, shielded</b> HanQ 8 – open 4x1,5mm <sup>2</sup> <b>Length 1,5m</b>	Yes
HTG:61 88 201 0351	<b>Length 3m</b>	
HTG:61 88 201 0352	<b>Length 5m</b>	
HTG:61 88 201 0353	<b>Length 10m</b>	
HTG:61 88 201 0354	<b>Length 15m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0355	<b>Motor cable for FC, shielded</b> HanQ 8 – open 4x2,5mm <sup>2</sup> <b>Length 1,5m</b>	Yes
HTG:61 88 201 0356	<b>Length 3m</b>	
HTG:61 88 201 0357	<b>Length 5m</b>	
HTG:61 88 201 0358	<b>Length 10m</b>	
HTG:61 88 201 0359	<b>Length 15m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 201 0360	<b>Motor cable for FC, shielded</b> HanQ 8 – open 4x4mm <sup>2</sup> <b>Length 1,5m</b>	Yes
HTG:61 88 201 0361	<b>Length 3m</b>	
HTG:61 88 201 0362	<b>Length 5m</b>	
HTG:61 88 201 0363	<b>Length 10m</b>	
HTG:61 88 201 0364	<b>Length 15m</b>	
	<b>Special length</b> on request at Harting	



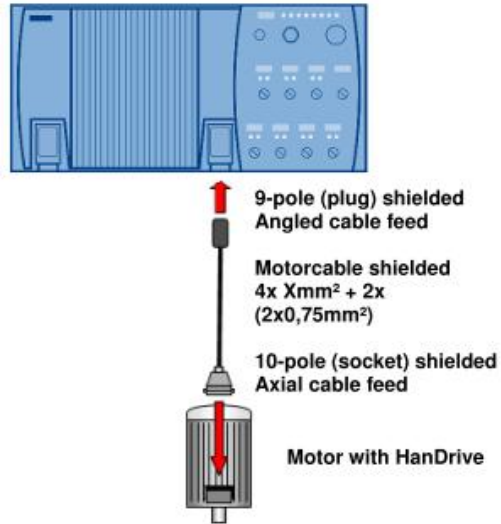
## 3.1.2 With brake (400V AC or 180V DC), with temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1,5mm<sup>2</sup></b>		
HTG:61 88 201 0288	<b>Motor cable for FC, shielded</b> HanQ 8 - open <b>4x1,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 201 0289	<b>Length 3m</b>	
HTG:61 88 201 0290	<b>Length 5m</b>	
HTG:61 88 201 0299	<b>Length 10m</b>	
HTG:61 88 201 0300	<b>Length 15m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2,5mm<sup>2</sup></b>		
HTG:61 88 201 0291	<b>Motor cable for FC, shielded</b> HanQ 8 - open <b>4x2,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 201 0292	<b>Length 3m</b>	
HTG:61 88 201 0293	<b>Length 5m</b>	
HTG:61 88 201 0301	<b>Length 10m</b>	
HTG:61 88 201 0302	<b>Length 15m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 201 0303	<b>Motor cable for FC, shielded</b> HanQ 8 - open <b>4x4mm<sup>2</sup> + (2x1,0mm<sup>2</sup> + 2x1,5mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 201 0304	<b>Length 3m</b>	
HTG:61 88 201 0305	<b>Length 5m</b>	
HTG:61 88 201 0306	<b>Length 10m</b>	
HTG:61 88 201 0307	<b>Length 15m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
ZKT:70020501000150	<b>Motor cable for frequency converter, shielded</b> Motor plug ISO23570-3 type 2 pin open <b>4x1.5 mm<sup>2</sup> + 2x(2x0.75 mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70020501000300	<b>Length 3m</b>	
ZKT:70020501000500	<b>Length 5m</b>	
ZKT:70020501001000	<b>Length 10m</b>	
ZKT:70020501001500	<b>Length 15m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2.5mm<sup>2</sup></b>		
ZKT:70009601000150	<b>Motor cable for frequency converter, shielded</b> Motor plug ISO23570-3 type 2 pin open <b>4x2,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70009601000300	<b>Length 3m</b>	
ZKT:70009601000500	<b>Length 5m</b>	
ZKT:70009601001000	<b>Length 10m</b>	
ZKT:70009601001500	<b>Length 15m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70017001000150	<b>Motor cable for frequency converter, shielded</b> Motor plug ISO23570-3 type 2 pin open <b>4x4mm<sup>2</sup> + 2x(2x1mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70017001000300	<b>Length 3m</b>	
ZKT:70017001000500	<b>Length 5m</b>	
ZKT:70017001001000	<b>Length 10m</b>	
ZKT:70017001001500	<b>Length 15m</b>	
	<b>Special length</b> on request at Knorrtec	

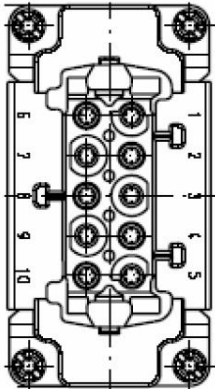
Solution Partner Weidmüller		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
WDM: 8000005240	<b>Motor line PVC shielded for frequency converters HQ8 plug-in connector for U, V, W, PE, with thermistor, with brake</b> EMC metal housing angled HQ8 <b>Length 2m</b>	On Request at Weidmüller
WDM: 8000005241	<b>Length 5m</b>	

## 3.2 Motor cable (shielded), preassembled on both sides (HAN Q8 and HAN 10E (1-bracket))



(Example representation with SINAMICS G120D)

### HAN 10E 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 Star connection, with brake (400V AC or 180V DC), with temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
HTG:61 88 202 0499	<b>Motor cable for FC, shielded star jumper</b> HanQ 8 - Han 10E <b>4x1,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 202 0514	<b>Length 3m</b>	
HTG:61 88 202 0515	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2.5mm<sup>2</sup></b>		
HTG:61 88 202 0500	<b>Motor cable for FC, shielded star jumper</b> HanQ 8 - Han 10E <b>4x2,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 202 0520	<b>Length 3m</b>	
HTG:61 88 202 0521	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0522	<b>Motor cable for FC, shielded star jumper</b> HanQ 8 - Han 10E <b>4x4mm<sup>2</sup> + (2x 1,0mm<sup>2</sup> + 2x1,5mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 202 0523	<b>Length 3m</b>	
HTG:61 88 202 0524	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
ZKT:70018201000150	<b>Motor cable for frequency converter, shielded Star bridge</b> Motor plug I SO23570-3 type 2 pin Motor plug ISO23570-3 type 1 socket <b>4x1.5 mm<sup>2</sup> + 2x(2x0.75 mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70018201000300	<b>Length 3m</b>	
ZKT:70018201000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2.5mm<sup>2</sup></b>		
ZKT: 70012301000150	<b>Motor cable for frequency converter, shielded Star bridge</b> Motor plug I SO23570-3 type 2 pin Motor plug ISO23570-3 type 1 socket <b>4x2,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT: 70012301000300	<b>Length 3m</b>	
ZKT: 70012301000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT: 70016801000150	<b>Motor cable for frequency converter, shielded Star bridge</b> Motor plug I SO23570-3 type 2 pin Motor plug ISO23570-3 type 1 socket <b>4x4mm<sup>2</sup> + 2x(2x1mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT: 70016801000300	<b>Length 3m</b>	
ZKT: 70016801000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

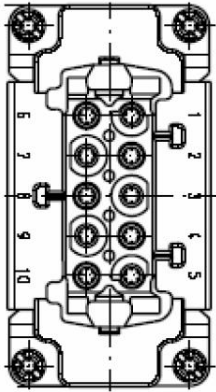
## 3.2.2 Delta connection, with brake (400V AC or 180V DC), with temperature sensor

Solution Partner Harting		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
HTG:61 88 202 0525	<b>Motor cable for FC, shielded triangular jumper</b> HanQ 8 - Han 10E <b>4x1,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 202 0526	<b>Length 3m</b>	
HTG:61 88 202 0527	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 2.5mm<sup>2</sup></b>		
HTG:61 88 202 0528	<b>Motor cable for FC, shielded triangular jumper</b> HanQ 8 - Han 10E <b>4x2,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 202 0529	<b>Length 3m</b>	
HTG:61 88 202 0530	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	
<b>Cross section 4mm<sup>2</sup></b>		
HTG:61 88 202 0531	<b>Motor cable for FC, shielded triangular jumper</b> HanQ 8 - Han 10E <b>4x4mm<sup>2</sup> + (2x1,0mm<sup>2</sup> + 2x1,5mm<sup>2</sup>)</b> <b>Length 1,5m</b>	Yes
HTG:61 88 202 0532	<b>Length 3m</b>	
HTG:61 88 202 0533	<b>Length 5m</b>	
	<b>Special length</b> on request at Harting	

Solution Partner Knorrtec		
Order no.	Description	UL
<b>Cross section 1.5mm<sup>2</sup></b>		
ZKT:70020401000150	<b>Motor cable for frequency converter, shielded Delta bridge</b> Motor plug ISO23570-3 type 2 pin Motor plug ISO23570-3 type 1 socket <b>4x1,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70020401000300	<b>Length 3m</b>	
ZKT:70020401000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 2.5mm<sup>2</sup></b>		
ZKT:70015901000150	<b>Motor cable for frequency converter, shielded Delta bridge</b> Motor plug ISO23570-3 type 2 pin Motor plug ISO23570-3 type 1 socket <b>4x2,5mm<sup>2</sup> + 2x(2x0,75mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70015901000300	<b>Length 3m</b>	
ZKT:70015901000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	
<b>Cross section 4mm<sup>2</sup></b>		
ZKT:70016901000150	<b>Motor cable for frequency converter, shielded Delta bridge</b> Motor plug ISO23570-3 type 2 pin Motor plug ISO23570-3 type 1 socket <b>4x4mm<sup>2</sup> + 2x(2x1 mm<sup>2</sup>)</b> <b>Length 1,5m</b>	On Request at Knorrtec
ZKT:70016901000300	<b>Length 3m</b>	
ZKT:70016901000500	<b>Length 5m</b>	
	<b>Special length</b> on request at Knorrtec	

### 3.3 Motor cable (shielded), preassembled on both sides (HAN Q8 and HAN 10E (2-bracket))

HAN 10E Connector at the motor

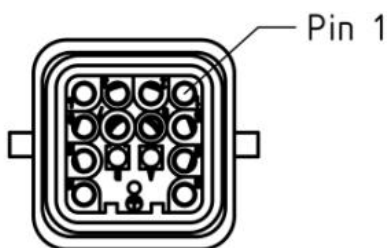


Pin	Function
1	U1
2	V1
3	W1
4	Brake
5	Brake
6	W2
7	U2
8	V2
9	Temperature sensor
10	Temperature sensor
PE	Protective earth

[Preassembled motor cables with HAN 10E connector on motor side with 2-bracket are on request also available from the Harting and Knorrtec companies](#)

### 3.4 Motor cable (shielded), preassembled on both sides (HAN Q8 and HAN Q12/0)

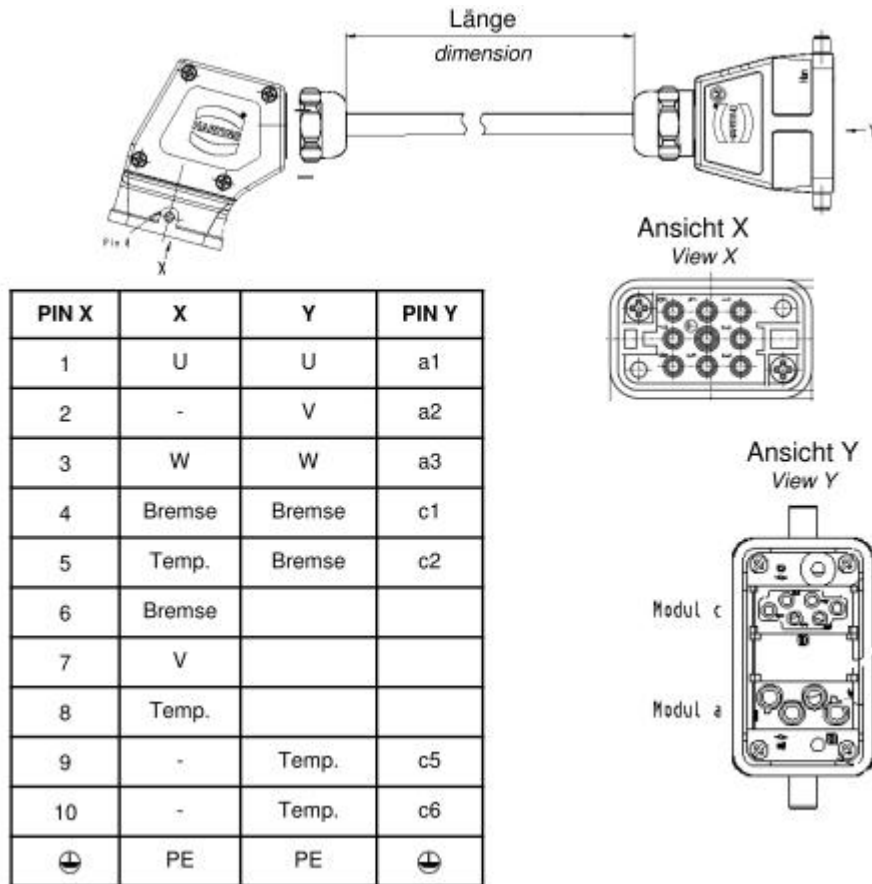
HAN Q12/0 Connector at the motor



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

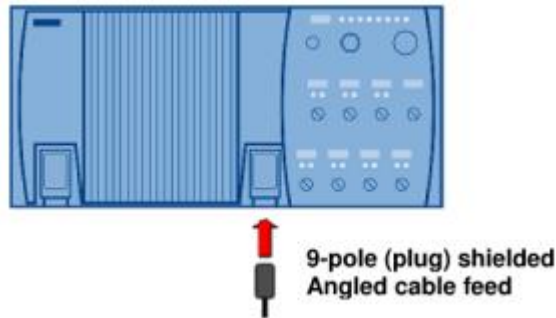
[Preassembled motor cables with HAN Q12/0 connectors on motor side are on request also available from the Harting and Knorrtec companies](#)

## 3.5 Adapter cable - 4mm<sup>2</sup> connection on 6mm<sup>2</sup> for UL-Norm



Solution Partner Harting		
Order no.	Description	UL
HTG:61 88 202 0497	<b>Motor cable for FC, shielded</b> HanQ 8 - Han 10, modular 4x4mm <sup>2</sup> + (2x1,0mm <sup>2</sup> + 2x1,5mm <sup>2</sup> ) <b>Length 0,3m</b> Special length on request at Harting	Yes
HTG:61 83 401 0130	<b>Set of connectors for adapter cable</b> <b>Cross section 4x6 + (2x1,0mm<sup>2</sup> + 2x1,5mm<sup>2</sup>)</b> Han 10 modular 4x Contacts 6mm <sup>2</sup> + 2x Contacts 1,0mm <sup>2</sup> + 2x Contacts 1,5mm <sup>2</sup> Housing + Module male insert 4 pole + Module male insert 6 pole	

## 3.6 Motor connection plug, converter side (shielded)



(Example representation with SINAMICS G120D)

Solution Partner Harting		
Order no.	Description	UL
HTG:61 83 401 0131	<b>Set of connectors (shielded) for motor cable for connection to FC</b> Hood with side-entry male insert for Han Q8/0 <b>Gland for cable cross section 10-13 mm</b> <b>8 male contacts (4x1,5mm<sup>2</sup>+4x0,75 mm<sup>2</sup>)</b>	Yes
HTG:61 83 401 0132	<b>Set of connectors (shielded) for motor cable for connection to FC</b> Hood with side-entry male insert for Han Q8/0 <b>Gland for cable cross section 11-14 mm</b> <b>8 male contacts (4x2,5mm<sup>2</sup>+4x0,75mm<sup>2</sup>)</b>	
HTG:61 83 401 0133	<b>Set of connectors (shielded) for motor cable for connection to FC</b> Hood with side-entry male insert for Han Q8/0 <b>Gland for cable cross section 13-18 mm</b> <b>8 male contacts (4x4mm<sup>2</sup>+4x1,0 mm<sup>2</sup>)</b>	
HTG:61 83 401 0253	<b>Field mountable Set of connectors (shielded) for motor cable for connection to FC</b> with male insert HanQ 8/0 quick lock, Terminal cross section <b>0,5 – 2,5mm<sup>2</sup></b> , two-parts hood with side-entry, cable gland for cross section <b>11 – 14mm</b>	On Request at Harting

Solution Partner Knorrtec		
Order no.	Description	UL
ZKT:10032001	<b>Plug set (shielded) for motor cable for connection to frequency converter</b> Metal EMC, EMC cable screw connector, grommet housing straight outgoing feeder, Motor plug ISO23570-3 type 2 pin <b>Screw connector for cable diameters 7 – 13mm</b> <b>4 contact pins (4x1,5mm<sup>2</sup> + 4x0,75mm<sup>2</sup>)</b>	On Request at Knorrtec
ZKT:10032011	<b>Plug set (shielded) for motor cable for connection to frequency converter</b> Metal EMC, EMC cable screw connector, grommet housing straight outgoing feeder, Motor plug ISO23570-3 type 2 pin <b>Screw connector for cable diameters 7 – 13mm</b> <b>4 contact pins (4x2,5mm<sup>2</sup> + 4x0,75mm<sup>2</sup>)</b>	
ZKT:10032021	<b>Plug set (shielded) for motor cable for connection to frequency converter</b> Metal EMC, EMC cable screw connector, grommet housing straight outgoing feeder, Motor plug ISO23570-3 type 2 pin <b>Screw connector for cable diameters 10,5 – 15 mm</b> <b>4 contact pins (4x4mm<sup>2</sup> + 4x1mm<sup>2</sup>)</b>	



## 3.7 Motor connection plug, motor side (shielded)



Motor with HanDrive

### 3.7.1 With star connection

Solution Partner Harting		
Order no.	Description	UL
HTG:61 83 401 0120	<b>Set of connectors (shielded) for motor cable for connection at motor, Star jumper</b> Hood Female insert for Han 10E <b>Gland for cable cross section 10 - 14mm</b> <b>7 female contacts (3x1,5mm<sup>2</sup> + 4x0,75mm<sup>2</sup>)</b>	Yes
HTG:61 83 401 0121	<b>Set of connectors (shielded) for motor cable for connection at motor, Star jumper</b> Hood Female insert for Han 10E <b>Gland for cable cross section 10 - 14mm</b> <b>7 female contacts (3x 2,5mm<sup>2</sup>+4x0,75 mm<sup>2</sup>)</b>	
HTG:61 83 401 0122	<b>Set of connectors (shielded) for motor cable for connection at motor, Star jumper</b> Hood Female insert for Han 10E <b>Gland for cable cross section 12-18 mm</b> <b>7 female contacts (3x4mm<sup>2</sup>+4x1,0mm<sup>2</sup>)</b>	

Solution Partner Knorrtec		
Order no.	Description	UL
ZKT:10019710	<b>Plug set (shielded) for motor cable for connection to the motor Star bridge</b> Grommet housing straight outgoing feeder Motor plug ISO23570-3 type 1 socket <b>EMC screw connector for cable diameters 11 – 20 mm</b> <b>3 contact sockets 1.5 mm<sup>2</sup> + 4x0.75 mm<sup>2</sup></b>	On Request at Knorrtec
ZKT:10019720	<b>Plug set (shielded) for motor cable for connection to the motor Star bridge</b> Grommet housing straight outgoing feeder Motor plug ISO23570-3 type 1 socket <b>EMC screw connector for cable diameters 11 – 20 mm</b> <b>3 contact sockets 2,5mm<sup>2</sup> + 4x0,75mm<sup>2</sup></b>	
ZKT:10019730	<b>Plug set (shielded) for motor cable for connection to the motor Star bridge</b> Grommet housing straight outgoing feeder Motor plug ISO23570-3 type 1 socket <b>EMC screw connector for cable diameters 11 – 20 mm</b> <b>3 contact sockets 4mm<sup>2</sup> + 4x1mm<sup>2</sup></b>	

## 3.7.2 With delta connection

Solution Partner Harting		
Order no.	Description	UL
HTG:61 83 401 0123	<b>Set of connectors (shielded) for motor cable for connection to motor, Triangular jumper,</b> Hood, Female insert for Han 10E <b>Gland for cable cross section 10 - 14mm</b> <b>10 female contacts (3x1,5mm<sup>2</sup> + 3x3mm<sup>2</sup> + 4x0,75mm<sup>2</sup>)</b>	Yes
HTG:61 83 401 0124	<b>Set of connectors (shielded) for motor cable for connection to motor, Triangular jumper,</b> Hood, Female insert for Han 10E <b>Gland for cable cross section 10 - 14mm</b> <b>10 female contacts (3x2,5mm<sup>2</sup>+3x4mm<sup>2</sup>+4x0,75mm<sup>2</sup>)</b>	
HTG:61 83 401 0125	<b>Set of connectors (shielded) for motor cable for connection to motor, Triangular jumper,</b> Hood, Female insert for Han 10E <b>Gland for cable cross section 12-18 mm</b> <b>10 female contacts (3x 4mm<sup>2</sup>x3x2,5mm<sup>2</sup>+4x1,0mm<sup>2</sup> )</b>	

Solution Partner Knorrtec		
Order no.	Description	UL
ZKT:10031900	<b>Plug set (shielded) for motor cable for connection to the motor Delta bridge</b> Grommet housing straight outgoing feeder Motor plug ISO23570-3 type 1 socket <b>EMC screw connector for cable diameters 11 – 20 mm</b> <b>3x insulation-piercing connectors 1 to 2.5mm<sup>2</sup> + 4 contact sockets 0.75 mm<sup>2</sup></b>	On Request at Knorrtec
ZKT:10031910	<b>Plug set (shielded) for motor cable for connection to the motor Delta bridge</b> Grommet housing straight outgoing feeder Motor plug ISO23570-3 type 1 socket <b>EMC screw connector for cable diameters 11 – 20 mm</b> <b>3x insulation-piercing connectors 4 to 6mm<sup>2</sup> + 4 contact sockets 1mm<sup>2</sup></b>	

## 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 Solution Partners for additional versions](#)

### MOTION-CONNECT 500 (1,5mm<sup>2</sup>)

Order no.	Description	UL
6FX 5008-1BB11-1FA0	<b>Motor cable 4 x 1.5 mm<sup>2</sup></b> (without brake / without temperature sensor) <b>50 m</b>	Yes
6FX5008-1BB11-2AA0	<b>100m</b>	
6FX5008-1BB11-3AA0	<b>200m</b>	
6FX5008-1BB11-6AA0	<b>500m</b>	
6FX5008-1BA11-1FA0	<b>Motor cable 4 x 1.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup></b> (with brake or temperature sensor) <b>50 m</b>	Yes
6FX5008-1BA11-2AA0	<b>100m</b>	
6FX5008-1BA11-3AA0	<b>200m</b>	
6FX5008-1BA11-6AA0	<b>500m</b>	

[Motor cables 4 x 1.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup> + 2 x 1 mm<sup>2</sup> \(with brake and temperature sensor\), see Solution Partner Program](#)

### MOTION-CONNECT 800PLUS (1,5mm<sup>2</sup>)

Order no.	Description	UL
6FX8008-1BB11-1FA0	<b>Motor cable 4 x 1.5 mm<sup>2</sup></b> (without brake / without temperature sensor) <b>50 m</b>	Yes
6FX8008-1BB11-2AA0	<b>100m</b>	
6FX8008-1BB11-3AA0	<b>200m</b>	
6FX8008-1BB11-6AA0	<b>500m</b>	
6FX8008-1BA11-1FA0	<b>Motor cable 4 x 1.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup></b> (with brake or temperature sensor) <b>50 m</b>	Yes
6FX8008-1BA11-2AA0	<b>100m</b>	
6FX8008-1BA11-3AA0	<b>200m</b>	
6FX8008-1BA11-6AA0	<b>500m</b>	

[Motor cables 4 x 1.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup> + 2 x 1 mm<sup>2</sup> \(with brake and temperature sensor\), see Solution Partner Program](#)

## MOTION-CONNECT 500 (2,5mm<sup>2</sup>)

Order no.	Description	UL
6FX5008-1BB21-1FA0	<b>Motor cable 4 x 2.5 mm<sup>2</sup></b> (without brake / without temperature sensor) <b>50 m</b>	Yes
6FX5008-1BB21-2AA0	<b>100m</b>	
6FX5008-1BB21-3AA0	<b>200m</b>	
6FX5008-1BB21-6AA0	<b>500m</b>	
6FX5008-1BA21-1FA0	<b>Motor cable 4 x 2.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup></b> (with brake or temperature sensor) <b>50 m</b>	Yes
6FX5008-1BA21-2AA0	<b>100m</b>	
6FX5008-1BA21-3AA0	<b>200m</b>	
6FX5008-1BA21-6AA0	<b>500m</b>	

[Motor cables 4 x 2.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup> + 2 x 1 mm<sup>2</sup> \(with brake and temperature sensor\), see Solution Partner Program](#)

## MOTION-CONNECT 800PLUS (2,5mm<sup>2</sup>)

Order no.	Description	UL
6FX8008-1BB21-1FA0	<b>Motor cable 4 x 2.5 mm<sup>2</sup></b> (without brake / without temperature sensor) <b>50 m</b>	Yes
6FX8008-1BB21-2AA0	<b>100m</b>	
6FX8008-1BB21-3AA0	<b>200m</b>	
6FX8008-1BB21-6AA0	<b>500m</b>	
6FX8008-1BA21-1FA0	<b>Motor cable 4 x 2.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup></b> (with brake or temperature sensor) <b>50 m</b>	Yes
6FX8008-1BA21-2AA0	<b>100m</b>	
6FX8008-1BA21-3AA0	<b>200m</b>	
6FX8008-1BA21-6AA0	<b>500m</b>	

[Motor cables 4 x 2.5 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup> + 2 x 1 mm<sup>2</sup> \(with brake and temperature sensor\), see Solution Partner Program](#)

## MOTION-CONNECT 500 (4mm<sup>2</sup>)

Order no.	Description	UL
6FX5008-1BB31-....	<b>Motor cable 4 x 4 mm<sup>2</sup></b> (without brake / without temperature sensor) <b>Delivery form up to 99 m</b>	Yes
6FX5008-1BB31-2AA0	<b>100m</b>	
6FX5008-1BB31-3AA0	<b>200m</b>	
6FX5008-1BB31-6AA0	<b>500m</b>	
6FX5008-1BA31-....	<b>Motor cable 4 x 4 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup></b> (with brake or temperature sensor) <b>Delivery form up to 99 m</b>	Yes
6FX5008-1BA31-2AA0	<b>100m</b>	
6FX5008-1BA31-3AA0	<b>200m</b>	
6FX5008-1BA31-6AA0	<b>500m</b>	

[Motor cables 4 x 4 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup> + 2 x 1 mm<sup>2</sup> \(with brake and temperature sensor\), see Solution Partner Program](#)

## MOTION-CONNECT 800PLUS (4mm<sup>2</sup>)

Order no.	Description	UL
6FX8008-1BB31-....	<b>Motor cable 4 x 4 mm<sup>2</sup></b> (without brake / without temperature sensor) <b>Delivery form up to 99 m</b>	Yes
6FX8008-1BB31-2AA0	<b>100m</b>	
6FX8008-1BB31-3AA0	<b>200m</b>	
6FX8008-1BB31-6AA0	<b>500m</b>	
6FX8008-1BA31-....	<b>Motor cable 4 x 4 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup></b> (with brake or temperature sensor) <b>Delivery form up to 99 m</b>	Yes
6FX8008-1BA31-2AA0	<b>100m</b>	
6FX8008-1BA31-3AA0	<b>200m</b>	
6FX8008-1BA31-6AA0	<b>500m</b>	

[Motor cables 4 x 4 mm<sup>2</sup> + 2 x 1.5 mm<sup>2</sup> + 2 x 1 mm<sup>2</sup> \(with brake and temperature sensor\), see Solution Partner Program](#)

## 4 Braking resistor

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	G120D
			Yes (X4)		

### 4.1 Braking resistor

The braking resistors are supplied with a 500 mm preassembled cable and connection plug for the SINAMICS G110D.

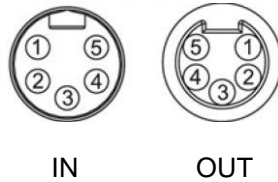
Rated power of the converter	Order no.	Description	UL
0,75	6SL3501-0BE08-6AA0	Braking resistor for SINAMICS G110D <b>(0.75 kW / 1.5 kW)</b> , 400 ohm, IP65	No
1,5			
3	6SL3501-0BE12-1AA0	Braking resistor for SINAMICS G110D <b>(3 kW / 4 kW)</b> , 160 ohm, IP65	No
4			
5,5	6SL3501-0BE14-1AA0	Braking resistor for SINAMICS G110D <b>(5.5 kW / 7.5 kW)</b> , 80 ohm, IP65	No
7,5			

### 4.2 Connection plug for braking resistor

Order no.	Description	UL
6SL3563-4RA00-0GA0	<b>Connector kit</b> for braking resistor	No

## 5 24 V power supply

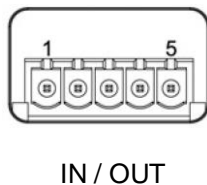
### 7/8" plug connector



Pin	Function
1	switched 0 V
2	unswitched 0 V
3	functional earth
4	unswitched +24 V
5	switched +24 V

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

### Push Pull connector



Pin	Function
1	unswitched +24 V
2	unswitched 0 V
3	switched +24 V
4	switched 0 V
5	functional earth

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

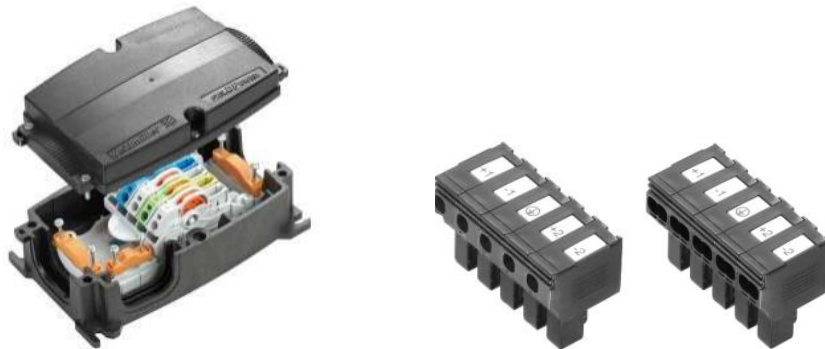
The power consumption of the individual products depends on the connected sensors, etc. Details can be found in the associated device documentation of the individual products (SINAMICS G120D, see also <http://support.automation.siemens.com/WW/view/en/26986267>)

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

## 5.1 Power distribution 24V DC

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module	M200D  PROFIBUS and PROFINET	G110D	G110M  USS, PROFIBUS and PROFINET	G120D  PROFIBUS and PROFINET
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)

### 5.1.1 FieldPower Distributor box DC (Weidmüller)



Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 1440920000	<b>FieldPower®</b> <b>T-distributor box DC, IP65, FieldPower® Box</b> +1, -1, FE, +2, -2 IDC connection power cable, Uncut power cable 2,5 – 6 mm <sup>2</sup> , Push-In connection: 1.5 – 6 mm <sup>2</sup> , Plug-in connection (optional) <b>FP Box DC</b>	On Request at Weidmüller
WDM: 1131370000	<b>FieldPower® PTS 4 DC</b> Plug-in connector <b>1 connection per pole</b> , 5-pole +1, -1, FE, +2, -2, Push-In connection, Connection: 0,5 – 4mm <sup>2</sup>	On Request at Weidmüller
WDM: 1009990000	<b>FieldPower® PTDS 4 DC</b> Plug-in connector <b>2 connections per pole</b> , 5-pole +1, -1, FE, +2, -2, Push-In connection, Connection: 0,5 – 4mm <sup>2</sup>	
WDM: 4329610000	<b>FieldPower® Round cable seal, slotted. For FP Box...</b> <b>IP65</b> <b>Cable diameter 7,5 - 9mm</b>	Yes
WDM: 4323210000	<b>9 - 11mm</b>	
WDM: 4323230000	<b>11 - 13mm</b>	
WDM: 4323220000	<b>13 - 15mm</b>	
WDM: 4324010000	<b>15 - 17mm</b>	
WDM: 4323240000	<b>Blanking seal (terminating plug)</b>	



## 5.1.2 FieldPower Distributor box DC (+1,-1, FE, -2, +2) with fuse plug-in connector (Weidmüller)



Solution Partner Weidmüller		
Order no.	Description	UL
WDM: 8000007924	<b>FieldPower®</b> <b>T-distributor box with fuse plug-in connector and red LED outage display visible from outside</b> For 2 fuses 6,3 x 32 mm (¼ x 1 ¼") Max. power loss fuse at 23°C - overload protection: 1,6 W (at 1,5 x I N ) - short-circuit protection: 4 W (at 1,5 x I N ) IP65, IDC connection power cable <b>FP Box Fuse DC</b>	On Request at Weidmüller
WDM: 4329610000	<b>FieldPower® Round cable seal, slotted. For FP Box...</b> <b>IP65</b> <b>Cable diameter 7,5 - 9mm</b>	Yes
WDM: 4323210000	<b>9 - 11mm</b>	
WDM: 4323230000	<b>11 - 13mm</b>	
WDM: 4323220000	<b>13 - 15mm</b>	
WDM: 4324010000	<b>15 - 17mm</b>	
WDM: 4323240000	<b>Blanking seal (terminating plug)</b>	

## 5.2 7/8" Plug-in cable

### 5.2.1 Preassembled on one side, angled cable feeder

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module w/o Push Pull connector	M200D  PROFIBUS and PROFINET	G110D	G110M  USS, PROFIBUS and PROFINET with 7/8" connector	G120D  PROFIBUS and PROFINET w/o Push Pull connector
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)



Order no.	Description	UL
3RK1 902-3GB30	<b>Power cable 7/8"</b> for 24 V switched and unswitched, preassembled with 1 x 7/8" on one side (angled), <b>5 x 1.5 mm<sup>2</sup></b> , receptacle, 5-pin <b>Length 3 m</b>	No
3RK1 902-3GB50	<b>Length 5 m</b>	No
3RK1 902-3GC10	<b>Length 10 m</b>	No

[Version with 2.5mm<sup>2</sup> cross-section is also available from the Harting company](#)

## 5.2.2 Preassembled on both sides, angled cable feeder

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module w/o Push Pull connector	M200D  PROFIBUS and PROFINET	G110D	G110M  USS, PROFIBUS and PROFINET with 7/8" connector	G120D  PROFIBUS and PROFINET w/o Push Pull connector
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)



Order no.	Description	UL
3RK1 902-3NB30	<b>Power cable 7/8"</b> for 24 V switched and unswitched, preassembled with 2 x 7/8" on both sides (angled), <b>5 x 1.5 mm<sup>2</sup></b> , pin - receptacle, 5-pin <b>Length 3 m</b>	No
3RK1 902-3NB50	<b>Length 5 m</b>	No
3RK1 902-3NC10	<b>Length 10 m</b>	No

[Version with 2.5mm<sup>2</sup> cross-section is also available from the Harting company](#)

## 5.2.3 Preassembled on both sides, axial cable feeder

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

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module w/o Push Pull connector	M200D  PROFIBUS and PROFINET	G110D	G110M  USS, PROFIBUS and PROFINET with 7/8" connector	G120D  PROFIBUS and PROFINET w/o Push Pull connector
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)



Order no.	Description	UL
6XV1822-5BE30	<b>7/8" power plug-in cable</b> for 24 V switched and unswitched, preassembled with 2 x 7/8" on both sides (axial), 5 x 1.5 mm <sup>2</sup> , pin - receptacle, 5-pin <b>Length 0.3 m</b>	No
6XV1822-5BE50	<b>Length 0.5 m</b>	No
6XV1822-5BH10	<b>Length 1.0 m</b>	No
6XV1822-5BH15	<b>Length 1.5 m</b>	No
6XV1822-5BH20	<b>Length 2.0 m</b>	No
6XV1822-5BH30	<b>Length 3.0 m</b>	No
6XV1822-5BH50	<b>Length 5.0 m</b>	No
6XV1822-5BN10	<b>Length 10 m</b>	No
6XV1822-5BN15	<b>Length 15 m</b>	No

[Version with 2.5mm<sup>2</sup> cross-section is also available from the Harting company](#)

## 5.3 7/8" and Push Pull – connector

### 5.3.1 7/8" plug connector (angled cable feeder)

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module w/o Push Pull	M200D PROFIBUS and PROFINET	G110D	G110M USS, PROFIBUS and PROFINET w/o 7/8" connector	G120D PROFIBUS and PROFINET w/o Push Pull connector
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)



Order no.	Description	UL
3RK1 902-3BA00	<b>7/8" plug connector</b> 5-pin, B-coded, plastic enclosure, screwed fastening, angled, 1.5 mm <sup>2</sup> screw connection, 1 unit <b>Pin insert</b>	No
3RK1 902-3DA00	<b>Contact insert</b>	No

[Version with 2.5mm<sup>2</sup> cross-section is also available from the Harting company](#)

## 5.3.2 7/8" plug connector (axial cable feeder)

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

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module w/o Push Pull connector	M200D  PROFIBUS and PROFINET	G110D	G110M  USS, PROFIBUS and PROFINET with 7/8" connector	G120D  PROFIBUS and PROFINET w/o Push Pull connector
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)



Order no.	Description	UL
6GK1905-0FA00	<b>7/8" plug connector</b> 5-pin, B-coded, plastic enclosure, axial cable feeder, <b>pin insert</b> (1 pack = 5 units)	No
6GK1905-0FB00	<b>Receptacle insert</b> (1 pack = 5 units)	No

## 5.3.3 POWER PLUG PRO plug connector (AIDA – standard)

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



Order no.	Description	UL
6GK1907-0AB10-6AA0	<b>POWER PLUG PRO plug connector</b> For the CU2x0D-2 PN-F PP, 5-pin push-pull power plug for on-site assembly (1 pack = 1 unit)	Yes

## 5.4 24 V power cable 5 x 1.5 mm<sup>2</sup>

SIMATIC		SIRIUS	SINAMICS		
ET 200pro PROFIBUS Interface module	ET 200pro PROFINET Interface module	M200D	G110D	G110M	G120D
Yes (X01 / X02)	Yes (X03 / X04)	Yes (X33 / X34)		Yes (X01 / X02)	Yes (X01 / X02)



Order no.	Description	UL
6XV1830-8AH10	<b>SIMATIC NET ENERGY CABLE,</b> 5-core power cable, stranded, 5 x 1.5 mm <sup>2</sup> , trailing-type, max. delivery length 1000 m (3281 ft); minimum order 20 m (65.62 ft), cut-to-length	No

## 5.5 24 V power supply fuse protection (group fusing)

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

Standard fuses can be used (7A) – or for switched-mode power supplies, the SITOP PSE200U selectivity module should be preferably used with single channel signal.

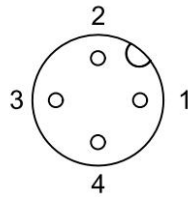


The new versions of the selectivity modules permit a safe shutdown of faulty consumer branches and evaluate them for specific channels (irrespective of the cable length and cross-section). The channel-specific status display of the four output channels is made at the status output of the device. The 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	<b>SITOP PSE200U selectivity module,</b> 4-channel, 3-10 A, with single channel signaling	Yes

## 6 AS-Interface Anbindung



Pin	Function
1	U <sub>AS-i</sub> +
2	PWR-AUX-
3	U <sub>AS-i</sub> -
4	PWR-AUX+

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

### 6.1 AS-interface M12 branch



Order no.	Description	UL
3RK1 901-1NR20	<b>AS-interface M12 branch AS-I and U-AUX, with M12 receptacle IP 67/68/69K, max. 4 A</b>	Yes
3RK1 901-1NR21	<b>AS-interface M12 branch AS-I and U-AUX, 1 m cable with M12 angle plug IP 67/68/69K, max. 4 A</b>	Yes
3RK1 901-1NR22	<b>AS-interface M12 branch AS-I and U-AUX, 2m cable with M12 angle plug IP 67/68/69K, max. 4 A</b>	Yes

### 6.2 AS-interface control cable (preassembled on one side, angled cable feeder)



Order no.	Description	UL
3RK1 902-4GB50-4AA0	<b>Control cable, with angled M12 receptacle at one end; 4-pin 5 m cable 4 x 0.34 mm<sup>2</sup> A-coded, max. 4 A; PUR sheath; black</b>	Yes

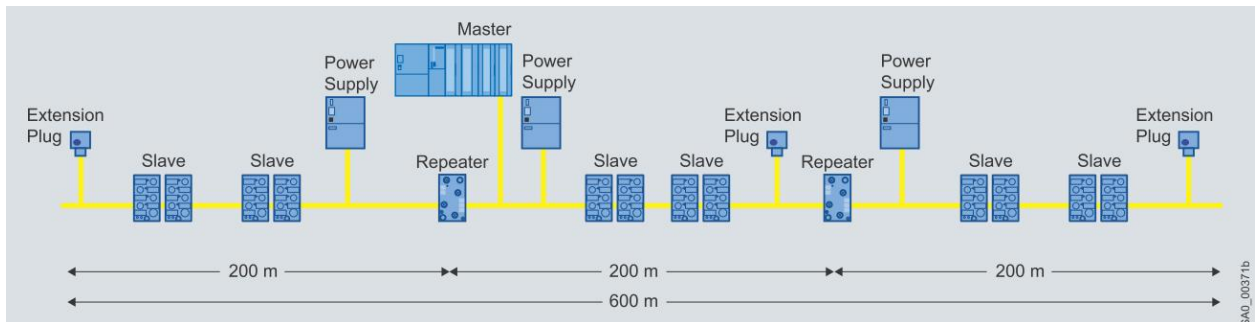


## 6.3 AS-interface M12 receptacle (angled cable feeder)



Order no.	Description	UL
3RK1 902-4CA00-4AA0	<b>M12 receptacle, angled, 4-pin</b> Screwed connection, max. 0.75 mm <sup>2</sup> , A-coded, max. 4 A	No

## 6.4 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)



(AS-Interface Extension Plug Plus)

Order no.	Description	UL
3RK1901-1MX02	<b>AS-Interface Extension Plug Compact</b> Doubling the cable length to 200m per AS-Interface segment, protection IP67, direct connection to AS-Interface profile cable	No
3RK1901-1MX01	<b>AS-Interface Extension Plug Plus</b> Doubling the cable length to 200m per AS-Interface segment, with integrated slave for diagnose, protection IP67, connection via AS-Interface M12 branch 3RX9801-0AA00 (must be ordered separately)	No

## 6.5 AS-interface cable end cover

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



Order no.	Description	UL
3RK1 901-1MN00	Cable end cover	No

## 6.6 AS-interface cable (yellow)



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

## 6.7 AS-interface cable (black)



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

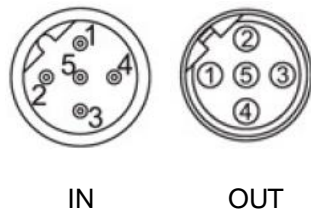
## 6.8 AS-i Addressing unit



Order no.	Description
3RK1904-2AB02	<b>AS-interface addressing unit V3.0</b> 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	<b>Addressing cable M12 to M12</b> Control cable, preassembled, M12 straight cable plug, M12 straight plug, 1.5 m cable 3 x 0.34 mm <sup>2</sup> , A-coded, max. 4A; PUR sheath; black

Other AS-Interface components see [catalog IK PI](#)

## 7 PROFIBUS / USS Interface



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 feeder

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



Order no.	Description	UL
3RK1 902-1GB30	<b>PROFIBUS bus cable</b> Preassembled on one side M12 angled, 3-core pin, shielded <b>Length 3 m</b>	No
3RK1 902-1GB50	<b>Length 5 m</b>	No
3RK1 902-1GC10	<b>Length 10 m</b>	No

## 7.1.2 Preassembled on both sides, angled cable feeder

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



Order no.	Description	UL
3RK1 902-1NB30	<b>PROFIBUS bus cable</b> Preassembled on both sides M12 angled, 3-core pin, shielded <b>Length 3 m</b>	No
3RK1 902-1NB50	<b>Length 5 m</b>	No
3RK1 902-1NC10	<b>Length 10 m</b>	No

## 7.1.3 Preassembled on both side, axial cable feeder

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



Order no.	Description	UL
6XV1830-3DE30	<b>PROFIBUS M12 plug-in cable</b> Preassembled FC trailing cable with two 5-pin M12 pin/receptacle plugs, UL <b>Length 0.3 m</b>	Yes
6XV1830-3DE50	<b>Length 0,5 m</b>	Yes
6XV1830-3DH10	<b>Length 1,0 m</b>	Yes
6XV1830-3DH15	<b>Length 1,5 m</b>	Yes
6XV1830-3DH20	<b>Length 2,0 m</b>	Yes
6XV1830-3DH30	<b>Length 3,0 m</b>	Yes
6XV1830-3DH50	<b>Length 5,0 m</b>	Yes
6XV1830-3DN10	<b>Length 10 m</b>	Yes
6XV1830-3DN15	<b>Length 15 m</b>	Yes

## 7.2 PROFIBUS M12 connection plug

### 7.2.1 Angled cable feeder

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



Order no.	Description	UL
3RK1 902-1BA00	<b>PROFIBUS M12 angled plug</b> Screw fastening, 5-pin screw connection, max. 0.75 mm <sup>2</sup> , B-coded, no terminating resistor <b>Pin insert</b>	No
3RK1 902-1DA00	<b>Contact insert</b>	No

### 7.2.2 Axial cable feeder

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



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

## 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	<b>SIMATIC DP, connection plug for PROFIBUS up to 12 Mbit/s</b> 90 degree cable feeder, FastConnect insulation-piercing technology, <b>without PG receptacle</b> (1 pack = 1 unit)	Yes
6ES7972-0BA52-0XB0	(1 pack = 100 units)	Yes
6ES7972-0BB52-0XA0	<b>With PG receptacle</b> (1 pack = 1 unit)	Yes
6ES7972-0BB52-0XB0	(1 pack = 100 units)	Yes



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



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

## 7.4 PROFIBUS cables



Order no.	Description	UL
6XV1 830-0EH10	<b>PROFIBUS FC Standard Cable GP</b> Standard type with special construction for fast assembly, 2-core, shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1 831-2A	<b>PROFIBUS FC Standard Cable IS GP</b> 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	Yes
6XV1 830-0JH10	<b>PROFIBUS FC Robust Cable</b> 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	Yes
6XV1 830-0GH10	<b>PROFIBUS FC Food Cable</b> 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
6XV1 830-3FH10	<b>PROFIBUS FC Underground Cable</b> Underground cable, 2-core shielded, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	No
6XV1 831-2K	<b>PROFIBUS FC Flexible Cable</b> 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
6XV1 831-2L	<b>PROFIBUS FC Trailing Cable</b> PROFIBUS trailing cable, max. acceleration 4 m/s <sup>2</sup> , 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
6XV1 830-3GH10	<b>PROFIBUS Festoon Cable GP</b> For festooned laying, 2-core shielded, max. acceleration 4 m/s <sup>2</sup> , at least 5 million bending cycles, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1 830-0LH10	<b>PROFIBUS FC FRNC Cable GP</b> Flame-retardant and halogen-free bus cable with copolymer sheath, FRNC, cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1 830-0PH10	<b>PROFIBUS Torsion Cable</b> Bus cable for highly-flexible use: Special cable (braided conductors) for deployment on moving machine parts (5 million torsion movements over 1 m cable, ± 180°); 2-core shielded; cut-to-length; delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1 830-0MH10	<b>SIENOPYR PROFIBUS Shipboard Cable</b> 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	<b>PROFIBUS FC Trailing Cable</b> Trailing cable, max. acceleration 4 m/s <sup>2</sup> , 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
6GK1 905-6AA00	<b>PROFIBUS FastConnect Stripping Tool</b> Pre-adjusted stripping tool for fast stripping of PROFIBUS FastConnect bus cables
6GK1 905-6AB00	<b>PROFIBUS FastConnect Blade Cassettes</b> Replacement blade cassettes for the PROFIBUS FastConnect Stripping Tool, 5 units

Other PROFIBUS components see [catalog IK PI](#)

## 8 PROFINET Connection

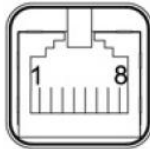
### M12-Connector



IN / OUT

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

### Push Pull Connector



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.

## 8.1 PROFINET M12 plug-in cables

### 8.1.1 Preassembled on one side, angled cable feeder

SIMATIC	SIRIUS	SINAMICS		
ET 200pro Interface module w/o Push Pull	M200D PROFINET	G110D	G110M PROFINET	G120D PROFINET w/o Push Pull
Yes (X02)	Yes (X31 / X32)			Yes (X03)



Order no.	Description	UL
3RK1 902-2HB30	<b>PROFINET M12 plug-in cable</b> Preassembled on one side, angled, 4-pin, D-coded <b>Length 3 m</b>	No
3RK1 902-2HB50	<b>Length 5 m</b>	No
3RK1 902-2HC10	<b>Length 10 m</b>	No

### 8.1.2 Preassembled on both sides, angled cable feeder

SIMATIC	SIRIUS	SINAMICS		
ET 200pro Interface module w/o Push Pull	M200D PROFINET	G110D	G110M PROFINET	G120D PROFINET w/o Push Pull
Yes (X02)	Yes (X31 / X32)			Yes (X03)



Order no.	Description	UL
3RK1 902-2NB30	<b>PROFINET M12 plug-in cable</b> Preassembled on both sides, angled, 4-pin, D-coded <b>Length 3 m</b>	No
3RK1 902-2NB50	<b>Length 5 m</b>	No
3RK1 902-2NC10	<b>Length 10 m</b>	No

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

SIMATIC	SIRIUS	SINAMICS		
ET 200pro Interface module w/o Push Pull	M200D PROFINET	G110D	G110M PROFINET	G120D PROFINET w/o Push Pull
Yes (X02)	Yes (X31 / X32)		Yes (X03 / X04)	Yes (X03)



Order no.	Description	UL
6XV1870-8AE30	<b>IE Connecting Cable M12-180/M12-180</b> 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 <b>Length 0.3 m</b>	Yes
6XV1870-8AE50	<b>Length 0,5m</b>	Yes
6XV1870-8AH10	<b>Length 1m</b>	Yes
6XV1870-8AH15	<b>Length 1,5m</b>	Yes
6XV1870-8AH20	<b>Length 2m</b>	Yes
6XV1870-8AH30	<b>Length 3m</b>	Yes
6XV1870-8AH50	<b>Length 5m</b>	Yes
6XV1870-8AN10	<b>Length 10m</b>	Yes
6XV1870-8AN15	<b>Length 15m</b>	Yes

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

SIMATIC	SIRIUS	SINAMICS		
ET 200pro Interface module w/o Push Pull	M200D PROFINET	G110D	G110M PROFINET	G120D PROFINET w/o Push Pull
Yes (X02)	Yes (X31 / X32)		Yes (X03 / X04)	Yes (X03)



Order no.	Description	UL
6XV1 871-5TH20	<b>IE Connecting Cable M12-180/IE FC RJ45 plug 145</b> 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 <b>Length 2 m</b>	Yes
6XV1 871-5TH30	<b>Length 3m</b>	Yes
6XV1 871-5TH50	<b>Length 5m</b>	Yes
6XV1 871-5TN10	<b>Length 10m</b>	Yes
6XV1 871-5TN15	<b>Length 15m</b>	Yes

## 8.2 PROFINET M12 and Push Pull connector plug

### 8.2.1 M12 angled cable feeder

SIMATIC	SIRIUS	SINAMICS		
ET 200pro Interface module w/o Push Pull	M200D PROFINET	G110D	G110M PROFINET	G120D PROFINET w/o Push Pull
Yes (X02)	Yes (X31 / X32)			Yes (X03)



Order no.	Description	UL
3RK1902-2DA00	<b>IE M12 Plug PRO</b> For assembly in the field, M12 plug connector (D-coded), angled cable feeder, metal enclosure, UL, fast connection method <b>1 unit</b>	No

### 8.2.2 M12 axial cable feeder

SIMATIC	SIRIUS	SINAMICS		
ET 200pro Interface module w/o Push Pull	M200D PROFINET	G110D	G110M PROFINET	G120D PROFINET w/o Push Pull
Yes (X02)	Yes (X31 / X32)		Yes (X03)	Yes (X03)



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

## 8.2.3 RJ45 PLUG PRO-plug (AIDA – standard)

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



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

[Version with metallized housing is also available from the Harting company](#)

## 8.2.4 Fiber Optik PLUG PRO-plug (AIDA – standard)

SIMATIC	SIRIUS	SINAMICS		
ET 200pro FO Interface module	M200D	G110D	G110M	G120D PROFINET FO
Yes (X02)				Yes (X03)



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

## 8.3 PROFINET RJ45 Connection plug

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

### 8.3.1 180° degree cable feeder



Order no.	Description	UL
6GK1901-1BB10-2AA0	<b>IE FC RJ45 Plug 180 2x2</b> 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 feeder <b>1 pack = 1 unit</b>	Yes
6GK1901-1BB10-2AB0	<b>1 pack = 10 units</b>	Yes
6GK1901-1BB10-2AE0	<b>1 pack = 50 units</b>	Yes

### 8.3.2 90° degree cable feeder



Order no.	Description	UL
6GK1901-1BB20-2AA0	<b>IE FC RJ45 Plug 90 2x2</b> 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 feeder <b>1 pack = 1 unit</b>	Yes
6GK1901-1BB20-2AB0	<b>1 pack = 10 units</b>	Yes
6GK1901-1BB20-2AE0	<b>1 pack = 50 units</b>	Yes

### 8.3.3 145° degree cable feeder



Order no.	Description	UL
6GK1901-1BB30-0AA0	<b>IE FC RJ45 Plug 145 2x2</b> 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 feeder <b>1 pack = 1 unit</b>	Yes
6GK1901-1BB30-0AB0	<b>1 pack = 10 units</b>	Yes
6GK1901-1BB30-0AE0	<b>1 pack = 50 units</b>	Yes

## 8.4 PROFINET cables



Order no.	Description	UL
6XV1 840-2AH10	<b>IE FC TP Standard Cable GP 2 x 2 (Type A)</b> TP installation cable for connection to FC OUTLET RJ45, for universal use, 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 2000 m, minimum order 20 m	Yes
6XV1 870-2B	<b>IE FC TP Flexible Cable GP 2 x 2 (Type B)</b> TP installation cable with flexible cores, PROFINET type B, 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 1000m, minimum order 20 m	Yes
6XV1 870-2D	<b>IE FC TP Trailing Cable GP 2 x 2 (Type C)</b> TP installation cable for trailing-cable deployment (1 million bending cycles), 4-core, shielded, CAT 5, cut-to-length, delivery unit max. 1000m, minimum order 20 m	Yes
6XV1 840-3AH10	<b>IE FC TP Trailing Cable 2 x 2 (Type C)</b> 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	Yes
6XV1 870-2F	<b>IE TP Torsion Cable 2 x 2 (Type C)</b> TP installation cable, 4-core, for use in highly-flexible applications (torsion), cut-to-length, delivery unit max. 1000 m, minimum order 20 m	Yes
6XV1 840-4AH10	<b>IE FC TP Marine Cable 2 x 2 (Type B)</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	Yes
6XV1 871-2L	<b>IE FC TP Food Cable GP 2 x 2 (Type C)</b> 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 20m	No
6XV1 871-2S	<b>IE FC TP Festoon Cable GP 2 x 2 (Type B)</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
6XV1 871-2F	<b>IE FC TP FRNC Cable GP 2 x 2 (Type B)</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	Yes



## 8.5 Tools



Order no.	Description
6GK1 901-1GA00	<b>IE FC Stripping Tool</b> Pre-adjusted stripping tool for fast stripping of Industrial Ethernet FC cables
6GK1 901-1GB01	<b>IE FC Blade Cassettes</b> Replacement blade cassette for the Industrial Ethernet Stripping Tool; deployment for IE FC RJ45 Plugs and IE FC RJ45 Modular Outlet, 5 units

## 8.6 PROFINET POF / PCF cables



Order no.	Description	UL
6XV1874-2A	<b>SIMATIC NET, POF STANDARD CABLE GP 980/1000</b> PROFINET, standard cable, sold by the meter min. order length: 20m, max. length: 500m	Yes
6XV1874-2B	<b>SIMATIC NET, POF TRAILING CABLE 980/1000</b> PROFINET, trailing cable, sold by the meter min. order length: 20m, max. length: 500m	Yes
6XV1 861-2A	<b>SIMATIC NET PCF STANDARD CABLE (200/230)</b> Standard cable, splittable, UL approved, w/o connectors, sold by the meter, min. order length: 20m, max. length: 2000m	Yes
6XV1 861-2C	<b>SIMATIC NET PCF TRAILING CABLE (200/230)</b> Trailing cable, splittable, w/o connector, sold by the Meter min. order length: 20 m, max. length: 2000 m	No

## 8.7 Tool for POF / PCF cables



Order no.	Description
6GK1900-1GL00-0AA0	<b>FC FO TERMINATION KIT</b> 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](#)

## 9 Digital inputs and outputs

Motor starter SIMATIC ET 200pro MS / SIRIUS M200D



Pin	Input	Output
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 / G120D



Pin	Input	Output
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, please use connectors with straight/axial cable outlet.

### 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	G120D
Yes (IN1 ... IN4)		Yes (IN1 ... IN4 OUT1 ... OUT2)	Yes (X07 and X08)		Yes (X05, X06, X08 and X09)



Order no.	Description	UL
3RK1 902-4HB15-5AA0	<b>Control cable, preassembled on one side</b> M12 angled plug, screw mounting, 5-pin, 5 x 0.34 mm <sup>2</sup> , A-coded, black PUR sheath, max. 4 A <b>Cable length 1.5 m</b>	Yes
3RK1 902-4HB50-5AA0	<b>Cable length 5 m</b>	Yes
3RK1 902-4HC01-5AA0	<b>Cable length 10 m</b>	Yes

## 9.1.2 Preassembled on both sides

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



Order no.	Description	UL
3RK1 902-4PB15-3AA0	<b>Control cable, preassembled on both sides</b> M12 straight plug, M12 straight receptacle, screw mounting, 3-pin, <b>3 x 0.34 mm<sup>2</sup></b> , A-coded, black PUR sheath, max. 4 A <b>Cable length 1.5 m</b>	No

## 9.2 M12 – Plug

### 9.2.1 Angled cable feeder

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



Order no.	Description	UL
3RK1 902-4DA00-5AA0	<b>M12 angled plug</b> Screw mounting, 5-pin screw-type connection, max. 0.75 mm <sup>2</sup> , A-coded, max. 4 A	No

### 9.2.2 Axial cable feeder

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



Order no.	Description	UL
3RK1 902-4BA00-5AA0	<b>M12 straight plug</b> Screw mounting, 5-pin screw-type connection, max. 0.75 mm <sup>2</sup> , A-coded, max. 4 A	No

## 9.3 M12 – Y-Connector

### 9.3.1 Direct mounting

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	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	<b>Y-connector</b> 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	G120D
			Yes (X07 and X08)	Yes (X05, X07 and X08)	Yes (X05, X06, X08 and X09)



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

## 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	-

## 10.1 M12 (5 pin)

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

### 10.1.1 Shielded connector, angled cable feeder

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



[Matching connectors are also available from the Knorrtec company](#)

### 10.1.2 Shielded connector, axial cable feeder

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



[Matching connectors are also available from the Knorrtec company](#)

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

SIMATIC		SIRIUS	SINAMICS		
ET 200pro MS	ET 200pro FU	M200D	G110D	G110M	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.



Signal	M12 8 pin male	M12 4 pin female 1	M12 4 pin femail 2
+ 10V	2	1	1
AI0+	3	2	-
AI1+	4	-	2
0V	7	3	3

[Matching adapter cables are also available from the Knorrtec company](#)

## 10.3 M12 (8 pin)

### 10.3.1 Shielded connector, angled cable feeder

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



[Matching connectors are also available from the Knorrtec company](#)



## 10.3.2 Shielded connector, axial cable feeder

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

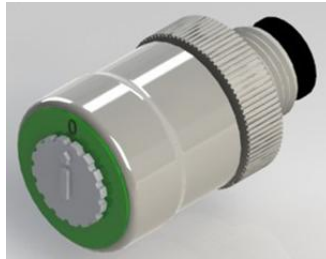


[Matching connectors are also available from the Knorrtec company](#)

## 10.4 M12 (8 pin) – Potentiometer for analog input

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

To enter a setpoint (e.g. a second speed setpoint for SINAMICS G110M) via AI0 of the converter.



[Potentiometer is also available from the Knorrtec company](#)

## 11 Encoder connection (HTL - / SSI - encoder)

### SINAMICS G120D X06 HTL-encoder



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 X08 SSI-encoder (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.

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

## 11.1 Cable for HTL and SSI – Encoder (FC side, assembled)

### 11.1.1 Axial cable feeder



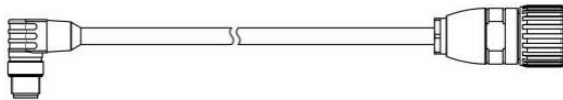
[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

## 11.2 Cable for HTL– Encoder (FC and Encoder side assembled)

### 11.2.1 HTL-Encoder with M23 (12pol.) connection plug, FC angled

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

- 6FX2001-4
- 1XP8012-1
- 1XP8032-1
- Motor option G01
- SIMOGEAR option Q47...49 and Q53...55



Frequency Converter:  
M12 male, 8pin

Encoder:  
M23 female, 12 pin, 0° coded

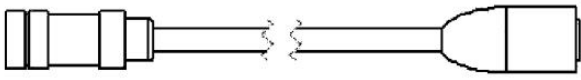
Frequency Converter M12 Pin	Encoder M23 Pin	Function
1	12	+24 V
2	5	Channel A
3	6	Channel A'
4	8	Channel B
5	1	Channel B'
6	3	Channel Z
7	4	Channel Z'
8	10	0 V

[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

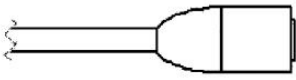
## 11.2.2 HTL-Encoder with M23 (12pol.) connection plug, FC axial

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

- 6FX2001-4
- 1XP8012-1
- 1XP8032-1
- Motor option G01
- SIMOGEAR option Q47...49 and Q53...55



Frequency Converter:  
M12 male, 8pin



Encoder:  
M23 female, 12 pin, 0° coded


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

[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

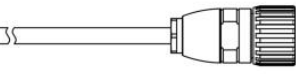
## 11.2.3 HTL-Encoder with M23 (12pol.) connection plug, FC axial (HTL inverted)

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

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



Frequency Converter:  
M12 male, 8pin



Encoder:  
M23 female, 12 pin, A-coded

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

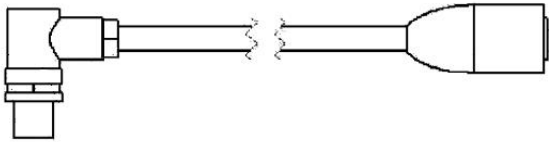
[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

## 11.3 Cable for SSI- Encoder (FC and Encoder side assembled)

### 11.3.1 SSI-Encoder with M23 (17pol.) connection plug, FC angled

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

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



Frequency Converter:  
M12 male, 8pin

Encoder:  
M23 female, 17 pin, 0° coded

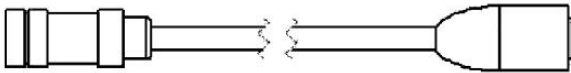
Frequency Converter M12 Pin	Encoder M23 Pin	Function
2	7	+24 V
3	14	DATA +
4	17	DATA -
5	8	CLK +
6	9	CLK -
7	10	0 V

[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

## 11.3.2 SSI-Encoder with M23 (17pol.) connection plug, FC axial

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

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



Frequency Converter:  
M12 male, 8pin

Encoder:  
M23 female, 17 pin, 0° coded

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

[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

## 11.3.3 SSI-Encoder with M16 (8pol.) connection plug, FC axial

Usable for SICK encoders



Frequency Converter:  
M12 male, 8pin

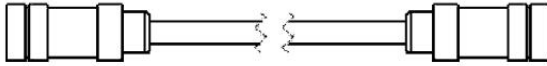
Encoder:  
M16 female, 8 pin

Frequency Converter M12 Pin	Encoder M16 Pin	Function
2	3	+24 V
3	1	DATA +
4	4	DATA -
5	6	CLK +
6	8	CLK -
7	7	0 V

[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

## 11.3.4 SSI-Encoder with M12 (8pol.) connection plug, FC axial

Usable for Pepperl und Fuchs WCS3B-LS310 encoder



Frequency Converter:  
M12 male, 8pin

Encoder:  
M12 female, 8 pin

Frequency Converter M12 Pin	Encoder M12 Pin	Function
2	1	+24 V
3	5	DATA +
4	6	DATA -
5	3	CLK +
6	4	CLK -
7	2	0 V

[Prefabricated connecting cables are also available from the Harting and Knorrtec companies](#)

## 11.4 Cable for SSI / HTL-Combination encoder

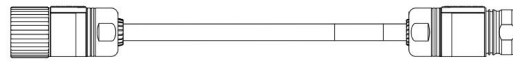
As ordering option (order code Q79), an SSI / HTL combination encoder is available for SIMOGEAR geared motors. This can also be ordered as individual device (FDU:55190000051005). The encoder has a 1 m cable with 17-pin M23 coupling socket.

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

Order no.	Description	UL
6FX5002-2AD04-... bzw. 6FX8002-2AD04-...	Extension cable, both-sided with 17pol. M23 male- / female connector	Yes
<b>plus</b>		
<b>Solution Partner Knorrtec</b>		
Order no.	Description	UL
ZKT: 10051900	<b>Adapter for combination encoder (Y-Adapter)</b>  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

(... = Length code see [Chapter 13.1](#))



## 11.5 M12 – Plug for HTL / SSI – Encoder

### 11.5.1 Angled cable feeder



[Matching connectors are also available from the Knorrtec company](#)

### 11.5.2 Axial cable feeder



[Matching connectors are also available from the Knorrtec company](#)

## 11.6 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 D87.1 (MOTOX) and MD50.1 (SIMOGEAR) for geared-motors



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

## 11.7 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 D87.1 (MOTOX) and MD50.1 (SIMOGEAR) for geared-motors



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

## 11.8 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:5519000051005). The encoder has a 1 m cable with coupling socket.

## 11.9 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.

## 12 Solution Partner Program



Link to the Solution Partner Program:

<https://www.automation.siemens.com/solutionpartner/partnerfinder/Partner-Finder.aspx?lang=en>

and select at Technology: **Distributed Field Installation System.**

Direct link to the Harting Corp. supplementary products catalog:

<http://www.harting.com/en/product-center/siemens-solution-partner/>

Harting USA: <http://www.harting-usa.com/industrial-connectors/siemens-solution-partner/>

Direct link to the Knorrtec Corp. supplementary products catalog:

<http://www.knorrtec.de/en/company-profile/siemens-solution-partner>

Direct link to the Weidmüller Corp. supplementary products catalog:

[www.weidmueller.com/siemens](http://www.weidmueller.com/siemens)

## 13 Attachment

### 13.1 Length code for Siemens cables

Description	Order No.	supplement
<b>Length code for pre-assembled cables</b>		
	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 (19.68 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
	6.0 m (26.3 ft):	1 A J 0
	299.0 m (981 ft):	3 K K 0

Description	Order No.	supplement
<b>Length code for power and signal cables, sold by the meter<sup>1)</sup></b>		
	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):  $\pm 2\%$
- Cable lengths of 10 m (32.8 ft) and longer:  $\pm 1\%$