2.4 Profibus DP cables

2.4.1 Order data

Length	Short description, model number					
	Profibus DP connection cable		Profibus DP attachment cable		Profibus DP open cable	
2.0 m	X67CA0B02.0020	X67CA0B12.0020				
5.0 m	X67CA0B02.0050	X67CA0B12.0050	X67CA0B22.0050	X67CA0B32.0050	X67CA0B42.0050	X67CA0B52.0050
10.0 m	X67CA0B02.0100	X67CA0B12.0100				
15.0 m	X67CA0B02.0150	X67CA0B12.0150	X67CA0B22.0150	X67CA0B32.0150	X67CA0B42.0150	X67CA0B52.0150
50.0 m			X67CA0B22.0500	X67CA0B32.0500	X67CA0B42.0500	X67CA0B52.0500
Page	669	670	671	672	673	674
						

Table 525: X67CA0Bxx Profibus DP cable - Order data

2.4.2 Technical data

Product ID	Profibus DP cables
General information	
Cable cross section mm² AWG	 2 x 0.34 mm² 2 x 22 AWG
Durability	Good chemical and oil resistance Flame resistant according to VDE 0482 part 265-2-1 / IEC 60332-1
Lines (wires)	
Lines	Fine-stranded wires 0.34 mm² (22 AWG) Class 6 (19 x 0.14 mm / 19 x 36 AWG)
Wire insulation	Cell polyethylene
Characteristics	Free of CDC and cadmium
Wire colors	red / green
Cable structure	
Lines Stranding Shield	 2-wire twisted pair Aluminum foil and meshed wire shield made of tinned Cu wires
Outer sheathing Material Characteristics Color Labeling	 PUR YI2 Free of CDC, cadmium and halogen Purple B&R X67CA0Bxx.xxxx
Electrical characteristics	
Conductor resistance (loop)	≤145 Ω/km at 20°C
Shield resistance	≤15 Ω/km at 20°C
Insulation resistance	≥5 GΩ x km at 20°C
Degree of insulation	Category III according to IEC 60664-1
Installed voltage	Max. 125 V AC/DC
Rated current	Max. 4 A / contact
Mechanical characteristics	
Protection type - plug/coupling	IP67, only when screwed in
Temperature range With fixed installation With flexible installation	 -25 to +70°C -25 to +70°C
Outer diameter	7.8 mm ± 0.2 mm
Flex radius	≥65 mm when flexed
Drag chain data Speed Acceleration Bending cycles	Tested at +10 to +22°C Max. 4.0 m/s at 5.5 m horiz. traverse path distance Max. 8 m/s² >5 million

Table 526: X67CA0Bxx Profibus DP cable - Technical data

2.4.3 X67CA0B02.xxxx

Dimensions

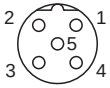
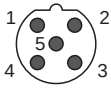

Pin assignments				
Plugs	**Pin**	**Name**	**Wire colors**	**Socket**
 B-coded	1	NC		 B-coded
	2	V+	Green	
	3	NC		
	4	CAN_H	Red	
	5	SHLD	Shield	
	M12 [1]	SHLD	Shield	

Table 527: X67CA0B02 Profibus DP connection cable - Measurements and pin assignments

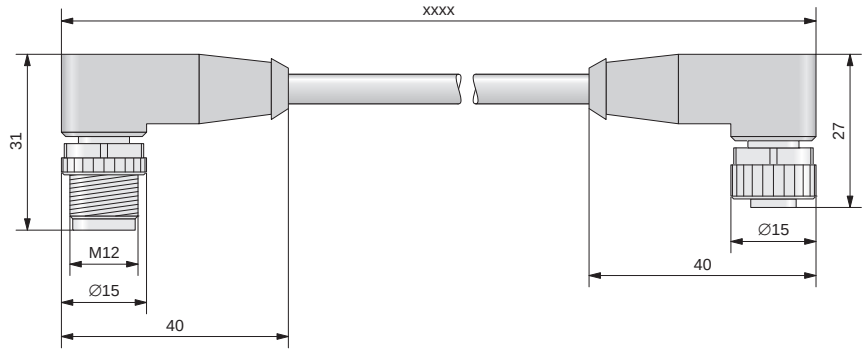
1) Shielding 360° around M12 knurled screw and additionally pin5

Cable lengths			
Model number	**Standard length [dm]**	**Actual length [cm]**	**Tolerance [cm]**
X67CA0B02.0020	20	200	+5
X67CA0B02.0050	50	500	+10
X67CA0B02.0100	100	1000	+10
X67CA0B02.0150	150	1500	+10

Table 528: X67CA0B02 Profibus DP connection cable - Cable lengths

2.4.4 X67CA0B12.xxxx

Dimensions



Pin assignments

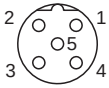
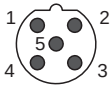
Plugs	Pin	Name	Wire colors	Socket
 B-coded	1	NC		 B-coded
	2	V+	Green	
	3	NC		
	4	CAN_H	Red	
	5	SHLD	Shield	
	M12 [1]	SHLD	Shield	

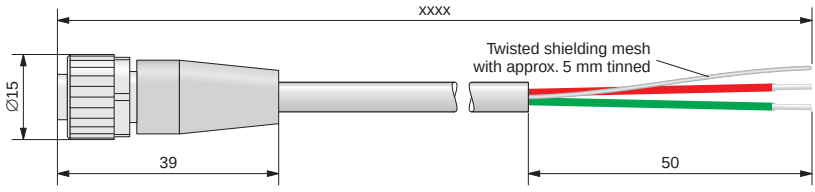
Table 529: X67CA0B12 Profibus DP connection cable - Measurements and pin assignments

1) Shielding 360° around M12 knurled screw and additionally pin5

Cable lengths			
Model number	**Standard length [dm]**	**Actual length [cm]**	**Tolerance [cm]**
X67CA0B12.0020	20	200	+5
X67CA0B12.0050	50	500	+10
X67CA0B12.0100	100	1000	+10
X67CA0B12.0150	150	1500	+10

Table 530: X67CA0B12 Profibus DP connection cable - Cable lengths

2.4.5 X67CA0B22.xxxx

Dimensions


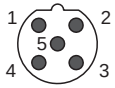
Pin assignments				
Socket	**Pin**	**Name**	**Wire colors**	**Open**
 B-coded	1	NC		For custom wiring
	2	V+	Green	
	3	NC		
	4	CAN_H	Red	
	5	SHLD	Shield	
	M12 [1]	SHLD	Shield	

Table 531: X67CA0B22 Profibus DP attachment cable - Measurements and pin assignments

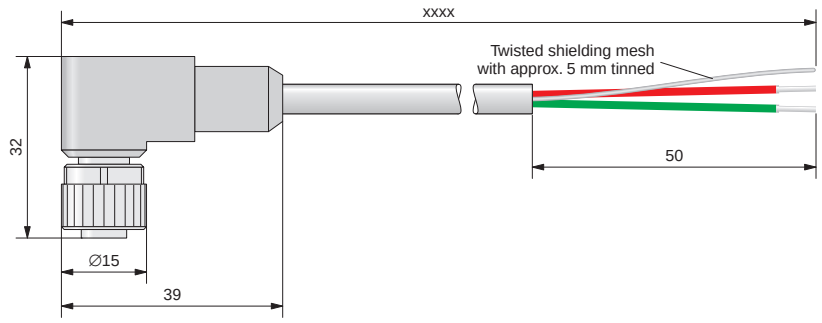
1) Shielding 360° around M12 knurled screw and additionally pin5

Cable lengths			
Model number	**Standard length [dm]**	**Actual length [cm]**	**Tolerance [cm]**
X67CA0B22.0050	50	500	+10
X67CA0B22.0150	150	1500	+10
X67CA0B22.0500	500	5000	+10

Table 532: X67CA0B22 Profibus DP attachment cable - Cable lengths

2.4.6 X67CA0B32.xxxx

Dimensions



Pin assignments

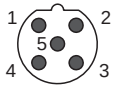
Socket	Pin	Name	Wire colors	Open
 B-coded	1	NC		For custom wiring
	2	V+	Green	
	3	NC		
	4	CAN_H	Red	
	5	SHLD	Shield	
	M12 [1]	SHLD	Shield	

Table 533: X67CA0B32 Profibus DP attachment cable - Measurements and pin assignments

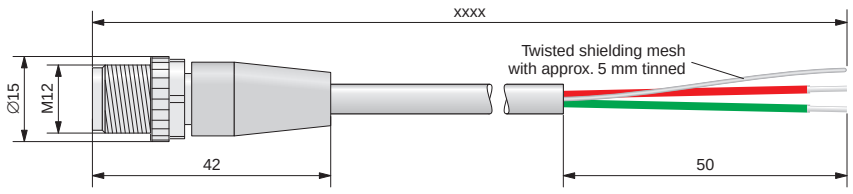
1) Shielding 360° around M12 knurled screw and additionally pin5

Cable lengths			
Model number	**Standard length [dm]**	**Actual length [cm]**	**Tolerance [cm]**
X67CA0B32.0050	50	500	+10
X67CA0B32.0150	150	1500	+10
X67CA0B32.0500	500	5000	+10

Table 534: X67CA0B32 Profibus DP attachment cable - Cable lengths

2.4.7 X67CA0B42.xxxx

Dimensions



Pin assignments

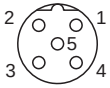
Plugs	Pin	Name	Wire colors	Open
 B-coded	1	NC		For custom wiring
	2	V+	Green	
	3	NC		
	4	CAN_H	Red	
	5	SHLD	Shield	
	M12 [1]	SHLD	Shield	

Table 535: X67CA0B42 Profibus DP open cable - Measurements and pin assignments

1) Shielding 360° around M12 knurled screw and additionally pin5

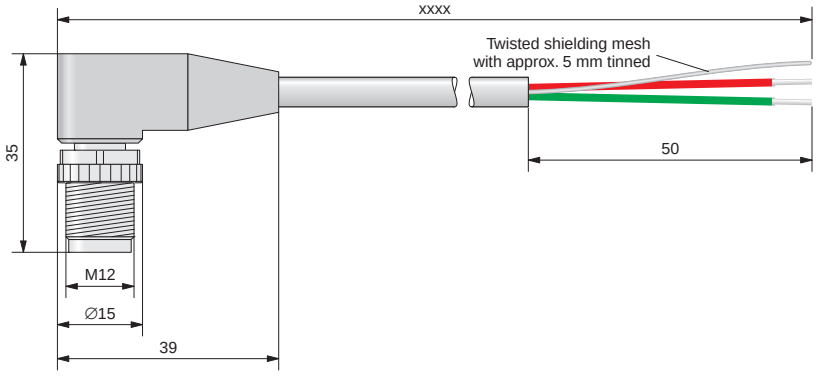
Cable lengths

Model number	Standard length [dm]	Actual length [cm]	Tolerance [cm]
X67CA0B42.0050	50	500	+10
X67CA0B42.0150	150	1500	+10
X67CA0B42.0500	500	5000	+10

Table 536: X67CA0B42 Profibus DP open cable - Cable lengths

2.4.8 X67CA0B52.xxxx

Dimensions



Pin assignments

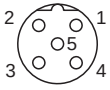
Plugs	Pin	Name	Wire colors	Open
 B-coded	1	NC		For custom wiring
	2	V+	Green	
	3	NC		
	4	CAN_H	Red	
	5	SHLD	Shield	
	M12 [1]	SHLD	Shield	

Table 537: X67CA0B52 Profibus DP open cable - Measurements and pin assignments

1) Shielding 360° around M12 knurled screw and additionally pin5

Cable lengths			
Model number	Standard length [dm]	Actual length [cm]	Tolerance [cm]
X67CA0B52.0050	50	500	+10
X67CA0B52.0150	150	1500	+10
X67CA0B52.0500	500	5000	+10

Table 538: X67CA0B52 Profibus DP open cable - Cable lengths