



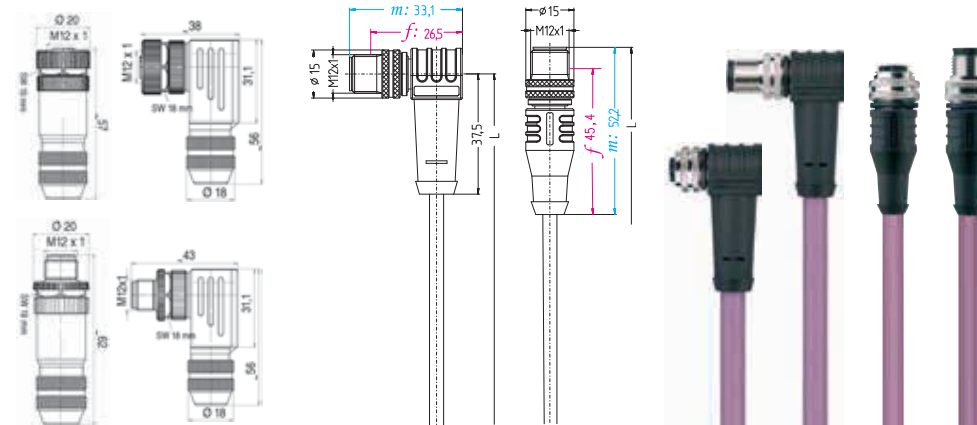
Product line	Version	Cable quality
PB_M12x1	f   ↑	PUR   S1800 <sup>®</sup>
	f   ↗	PUR   S1800 <sup>®</sup>
	m   ↑	PUR   S1800 <sup>®</sup>
	m   ↗	PUR   S1800 <sup>®</sup>
	f   ↑	
	m   ↑	
	f   ↗	
	m   ↗	
100m bus cable		PUR   S1800 <sup>®</sup>

Other versions, cable-lengths or cable terminals converted with wire-end sleeves are available upon request

**Cable quality PUR | S1800<sup>®</sup>**

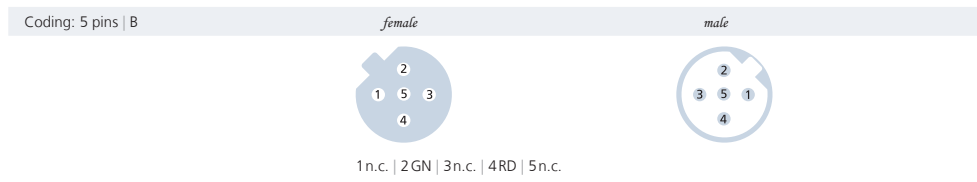
UL- and CSA-listed shielded PUR-cable for automation technology (control of sensors and actuators). Suited for PROFIBUS DP. Setup and materials used allow for applications under harsh environment conditions (abrasion, bending, vibrations etc.). Drag-chain application is possible and trouble-free (>1 million bending cycles).

ESCHA Nomenclatur	S1800 <sup>®</sup>	
Cable quality	PUR	
Transmission value	RSA485 (cable type A)	
Nominal diameter	Ø 7.6mm	
Wire-structure data	19xØ0.15mm	
Wire colours	GN   RD	
Bending radius	single	5xd
	repeated	10xd
	drag-chain	≥10xd (v <sub>max</sub> = 200m/min   a <sub>max</sub> = 5m/s <sup>2</sup> )
Temperature range	operating	-25°C...+80°C
	fixed installation	-50°C...+80°C
	drag-chain	-25°C...+60°C



**PROFIBUS \_ M12x1**

Technical data	Round connector	Field-wireable
Rated voltage [U <sub>max</sub> ]	60V	125V
Current load [I <sub>max</sub> ]	4A	4A
Insulation resistance	≥ 10 <sup>8</sup> Ω	≥ 10 <sup>8</sup> Ω
Standards	IEC 61076-2-101	IEC 61076-2-101
Material	Grip: TPU, BK Contact carrier: TPU, BK Contacts: CuZn, gold-plated Locking mechanism: CuZn, nickel-plated Sealing: FPL /FKM	Zinc diecasting nickel-plated PA, BK CuZn, gold-plated CuZn FPL /FKM
Ambient temperature	-30°C...+90°C	-40°C...+85°C
Degree of pollution	3	3
Protection class (installed)	IP67, IP69K	IP67
Mechanical life cycle	>100 Mating cycles	>100 Mating cycles
Core cross-section/Clamping ability		0.75mm <sup>2</sup>   AWG18
External diameter of the cable		Ø 6..8mm
Connection		Screw-terminal, shieldable



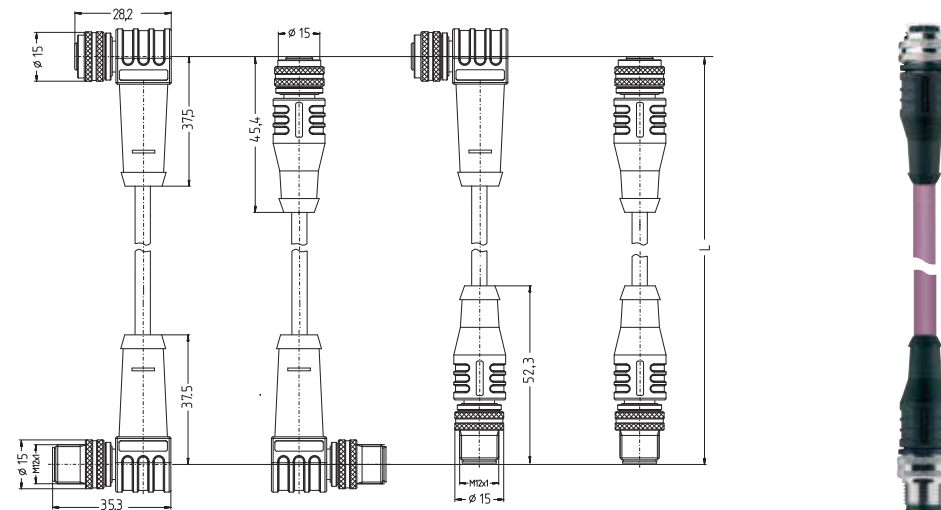


Product line	Version	Cable quality
PB_M12x1 O	f   ↑_m   ↑	PUR   S2800 ®
	f   ↗_m   ↑	PUR   S1800 ®
	f   ↑_m   ↗	PUR   S1800 ®
	f   ↗_m   ↗	PUR   S1800 ®

**Cable quality PUR | S1800 ®**

UL- and CSA-listed shielded PUR-cable for automation technology (control of sensors and actuators). Suited for PROFIBUS DP. Setup and materials used allow for applications under harsh environment conditions (abrasion, bending, vibrations etc.). Drag-chain application is possible and trouble-free (>1 million bending cycles).

ESCHA Nomenclatur	S1800®	
Cable quality	PUR	
Transmission value	RSA485 (cable type A)	
Nominal diameter	Ø 7.6mm	
Wire-structure data	19xØ0.15mm	
Wire colours	GN   RD	
Bending radius	single	5xd
	repeated	10xd
	drag-chain	≥10xd (v <sub>max</sub> = 200m/min   a <sub>max</sub> = 5m/s <sup>2</sup> )
Temperature range	operating	-25°C...+80°C
	fixed installation	-50°C...+80°C
	drag-chain	-25°C...+60°C



**PROFIBUS \_ M12x1 cord sets double ended**

Technical data	Value
Rated voltage [U <sub>max</sub> ]	60V
Current load [I <sub>max</sub> ]	4A
Insulation resistance	≥10 <sup>8</sup> Ω
Standards	IEC 61076-2-101
Material	Grip: TPU, BK
	Contact carrier: TPU, BK
	Contacts: CuZn, gold-plated
	Locking mechanism: CuZn, nickel-plated
	Sealing: FPL /FKM
Ambient temperature	-30°C...+90°C
Degree of pollution	3
Protection class (installed)	IP67, IP69K
Mechanical life cycle	>100 Mating cycles

Coding: 5 pins | B



1n.c. | 2GN | 3n.c. | 4RD | 5n.c.

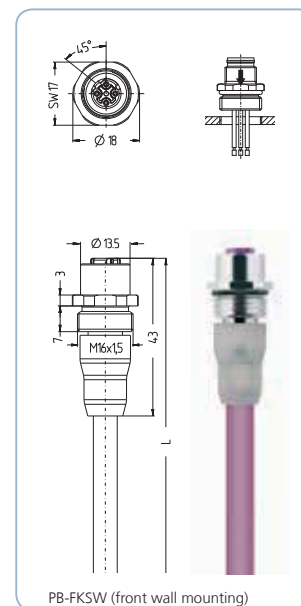


M12x1-Flanges	Pins	Version	Cable-quality
Front-wall	5   B	f   ↑   ○	PUR   S1800®
Back-wall	5   B	f   ↑   ○	PUR   S1800®
		f   ↗   ○	PUR   S1800®

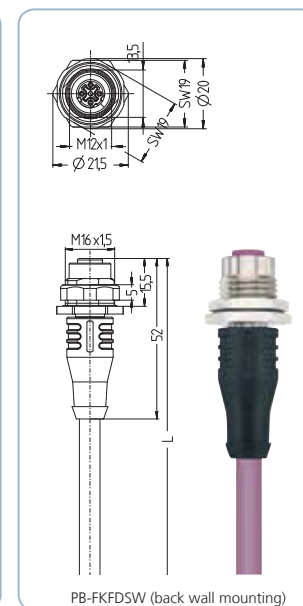
**Cable quality PUR | S1800®**

UL- and CSA-listed shielded PUR-cable for automation technology (control of sensors and actuators). Suited for PROFIBUS DP. Setup and materials used allow for applications under harsh environment conditions (abrasion, bending, vibrations etc.). Drag-chain application is possible and trouble-free (>1 million bending cycles).

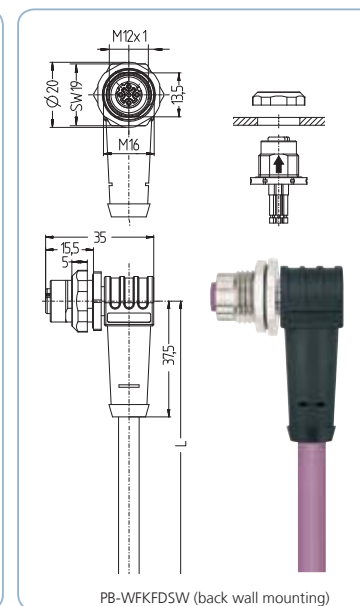
ESCHA Nomenclatur	S1800®	
Cable quality	PUR	
Date transmission	RS 485 (cable type A)	
Nominal diameter	Ø 7.6mm	
Wire-structure data	19 x Ø0.15mm	
Wire colours	GN   RD	
Bending radius	single	5xd
	repeated	10xd
	drag-chain	≥10xd (v <sub>max</sub> = 200m/min   a <sub>max</sub> = 5m/s <sup>2</sup> )
Temperature range	operating	-25°C...+80°C
	fixed installation	-50°C...+80°C
	drag-chain	-25°C...+60°C



PB-FKSW (front wall mounting)



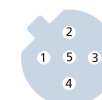
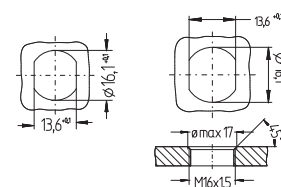
PB-FKFDSW (back wall mounting)



PB-WFKFDSW (back wall mounting)

**PROFIBUS\_Connectors for device installation (flanges)**

Technical data	Value
Rated voltage [U <sub>max</sub> ]	60V
Current load [I <sub>max</sub> ]	4A
Insulation resistance	≥10 <sup>8</sup> Ω
Standards	IEC 61076-2-101
Materials Flange housing	CuZn, nickel-plated
Grip	TPU, BK (back wall mounting) Hotmelt, transparent (front wall mounting)
Contact carrier	TPU, VT
Contacts	CuZn, gold-plated
Sealing	FPL /FKM
Sealing (screw in thread)	NBR
Ambient temperature	-30°C...+90°C
Degree of pollution	3
Protection class (installed)	IP67
Mechanical life cycle	>100 Mating cycles
Panel cut-out (cutting for anti-twist safeguard)	Coding
Back wall mounting Front wall mounting	5   B   female

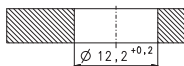


1n.c. | 2GN | 3n.c. | 4RD | 5n.c.



PROFIBUS M12x1-Flanges	Connection	Version	
Back-wall mounting	Print-contact	$m \mid \rightarrow \mid \bigcirc$	Fig. 1
		$f \mid \rightarrow \mid \bigcirc \mid \Delta h < 2.5\text{mm}$	Fig. 2
		$f \mid \rightarrow \mid \bigcirc \mid \Delta h < 4.0\text{mm}$	Fig. 2
		$f \mid \rightarrow \mid \bigcirc \mid \Delta h < 5.0\text{mm}$	Fig. 2

Panel cut-out



Footprint

PB-WKFSW5-P/12/...

PB-WFSFSW5-P/12/...

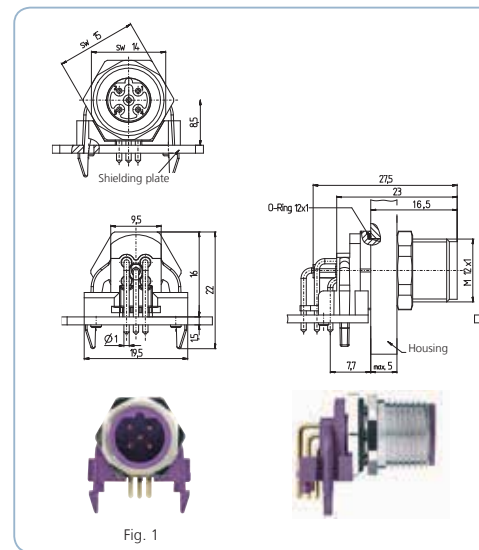
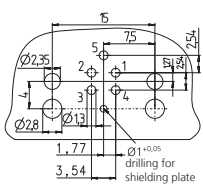
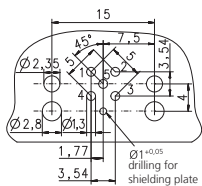


Fig. 1

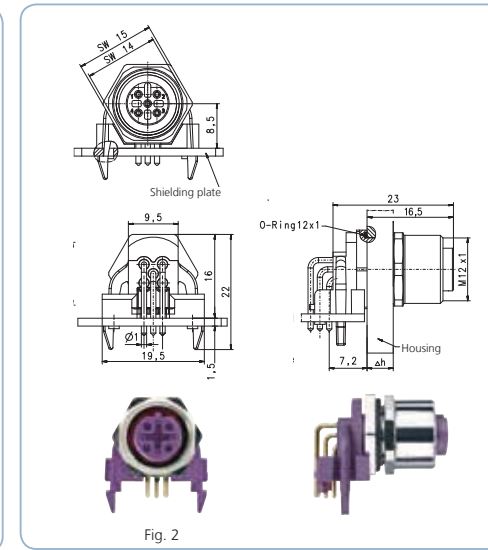


Fig. 2

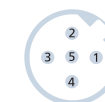
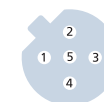
PROFIBUS\_Connectors for device installation (flanges)

Technical data	
Rated voltage [Umax]	60V
Current load [Imax]	4A
Insulation resistance	≥ 10 <sup>8</sup> Ω
Standards	IEC 61076-2-101
Materials	Flange housing: CuZn, nickel-plated Contact carrier: TPU, VT Contacts: CuZn, gold-plated Sealing: FPL /FKM Sealing (screw in thread): NBR
Ambient temperature	-30°C...+90°C
Degree of pollution	3
Protection class (installed)	IP67
Mechanical life cycle	>100 Mating cycles

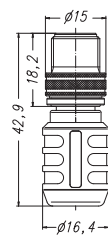
Coding: 5 pins | B

female

male



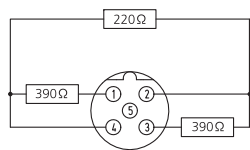
1n.c. | 2GN | 3n.c. | 4RD | 5n.c.



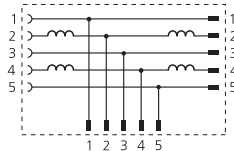
Type	Output 1	Output 2	Output 3
T-splitter ○	M12x1 <i>f</i>   5	M12x1 <i>f</i>   5	M12x1 <i>m</i>   5
Y-splitter ○	<i>m</i>   5	<i>m</i>   5	<i>f</i>   5
Termination plug	<i>m</i>   1		

Wiring

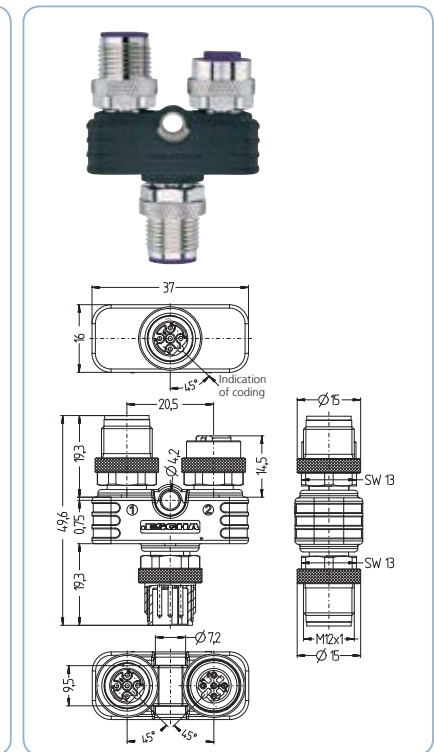
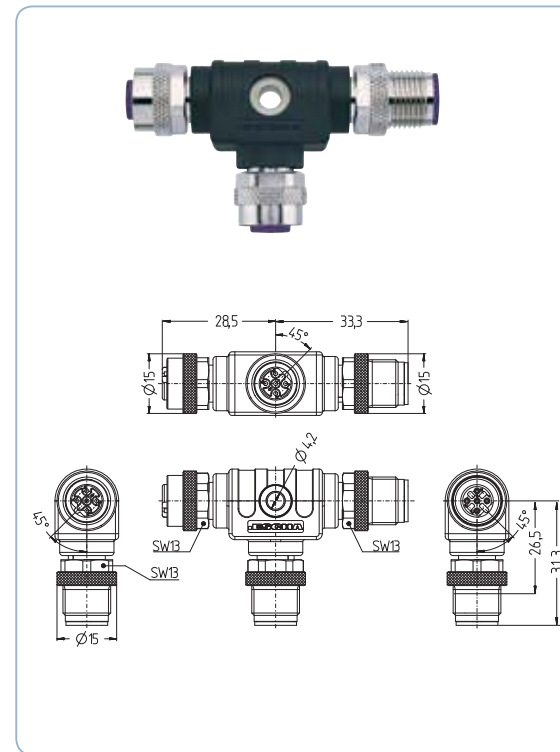
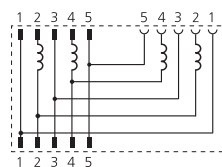
Termination plug



T-splitter ○



Y-splitter ○

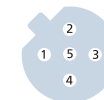


PROFIBUS \_ M12x1 termination plug | T/Y-splitter

Technical data	Value
Rated voltage [U <sub>max</sub> ]	60V
Current load [I <sub>max</sub> ]	4A
Insulation resistance	≥ 10 <sup>8</sup> Ω
Standards	IEC 61076-2-101
Material	Grip: TPU, BK Contact carrier: TPU, BK Contacts: CuZn, gold-plated Locking mechanism: CuZn, nickel-plated Sealing: FPL /FKM
Ambient temperature	-30°C...+90°C
Degree of pollution	3
Protection class (installed)	IP67, IP69K
Mechanical life cycle	>100 Mating cycles

Coding: 5 pins | B

*female*



*male*

