

PROFIBUS-DP IP 20 T-distributor

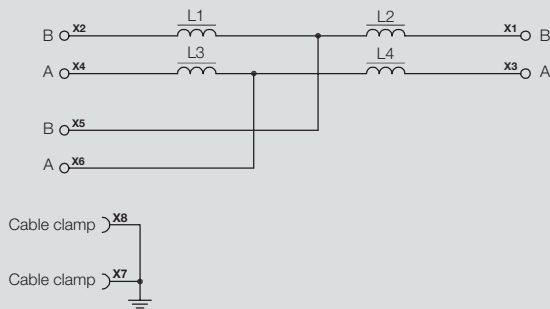


The distributor for PROFIBUS-DP enables the user to connect it conveniently in the electrical cabinet.

They can be mounted on TS32/35 rails and used to connect standardised PROFIBUS-DP lines. Spur cables can also be connected. Please note that spur cables should be kept short as possible. Part No. 8788580000 has a 9-pin sub-D socket for connecting analysis/programming devices.

- T-piece functions
- Good shield contact
- Ample space for connecting the bus cable
- TS 32/35 terminal rail mounting
- Standardised Sub-D connection for PROFIBUS-DP

RS PB-DP T



Technical data

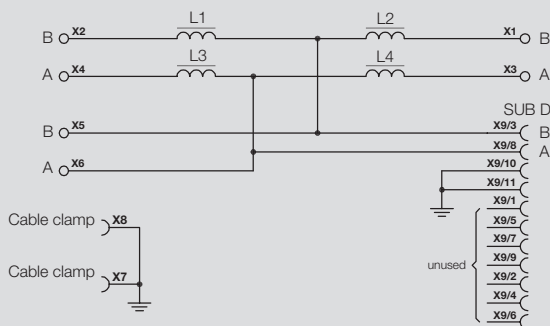
Data transmission rate		max. 1.5 Mbps (with max. 6.6 m spur line) max. 12 Mbps (no spur lines)
Operating temperature	°C	0 ... 55
Storage temperature	°C	-25 ... +70
Ingress protection class		IP 20
Dimensions (LxWxH)	mm	70 x 45 x 42
Plug-in connector		sub-D 9-pin
Cable diameter	mm	4.5 ... 8
Single conductor cross-section	mm ²	0.5 ... 2.5
Type of connection		screw

Information

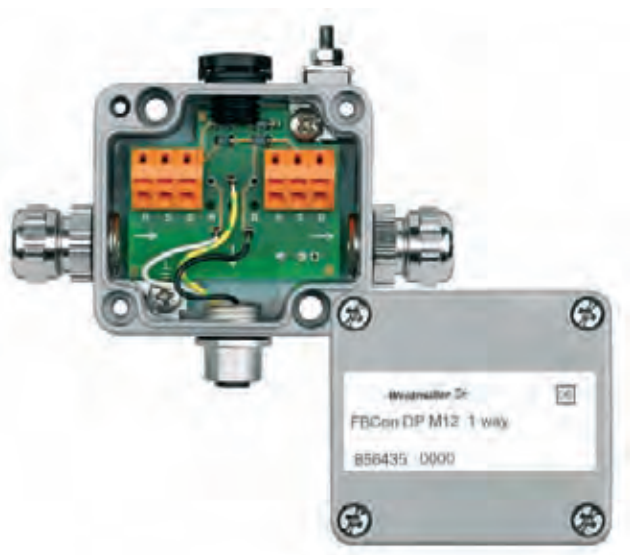
Ordering data

Type	Qty.	Order No.
RS PB-DP T	1	8800040000
RS PB-DP T SUB-D	1	8788580000

RS PB-DP T SUB-D



PROFIBUS-DP distributors



PROFIBUS-DP distributor

The PROFIBUS-DP topology is a line structure. The spur (T-distributor) connect the individual field devices or remote I/Os to the bus cable. The length of the spur cable depends on the transmission rate and should be as short as possible. The total of all spur lengths for transmission rates up to 1.5 MBaud may not exceed max. 6.6 m. The trunk cable passes through an EMC cable gland into an aluminium enclosure where it is connected to a tension clamp terminal. The spur line to the device is connected using a B-coded M12 socket or an EMC cable gland. Terminating resistors must be wired onto the start and end of the PROFIBUS-DP network. The Terminator modules can take care of this task. The electrically isolated 24-VDC power supply for the bus terminator is routed into the cable gland on the right side. The housing features a pressure-compensation mechanism that counters the effects of climatic fluctuations. The guidelines issued by the PROFIBUS user organisation must be observed.

PROFIBUS-DP

Technical data

Operating temperature	-25 °C to 55 °C
Ingress protection class	IP 66
Enclosure material	High grade aluminium alloy (AL - SI 12)
Finish	Painted RAL 7001
PROFIBUS-DP connection	Tension clamp terminals 0.5 - 1.5 mm ²
Cable entry	Cable gland M16
Cable gland clamping range	5.5 - 9.5 mm
Contact surface	M12 plug/socket CuZnAu
Transmission rate	Max. 1.5 MBaud
Power supply bus connection	Bus terminator 24 VDC +/-10 %
Trunk cable via cable gland	

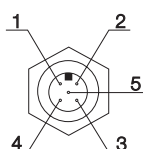
Installation advice

Torques	
M16 cable gland at enclosure	6.0 Nm
Union nut, M16 cable gland	4.0 Nm
Enclosure cover	1.8 - 2.0 N
External earthing cable	1.8 - 2.0 Nm
Adaptor/stud cable	0.5 Nm

Pin assignment

Pin no.	Connection	Wire colour
Pin 1	unassigned	
Pin 2	RxDx/TxD-N / A-wire	green
Pin 3	unassigned	
Pin 4	RxDx/TxD-N / B-wire	red
Pin 5	shield	
Cable gland	shield	

Socket B-coded



PROFIBUS-DP

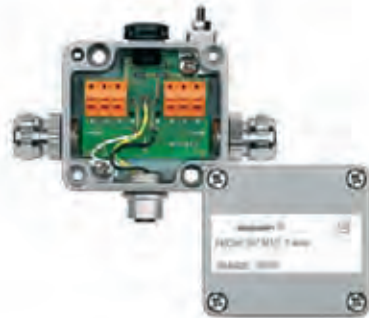
1-channel distributor

Cable gland



1-channel distributor

M12 connection



Ordering data

Type	Type of connection	Qty.	Order No.
Aluminium housing			
FBCon DP CG 1way	branch line CG	1	8564340000
Stainless steel enclosure			
FBCon SS DP PCG 1way	all connections PCG	1	8714260000

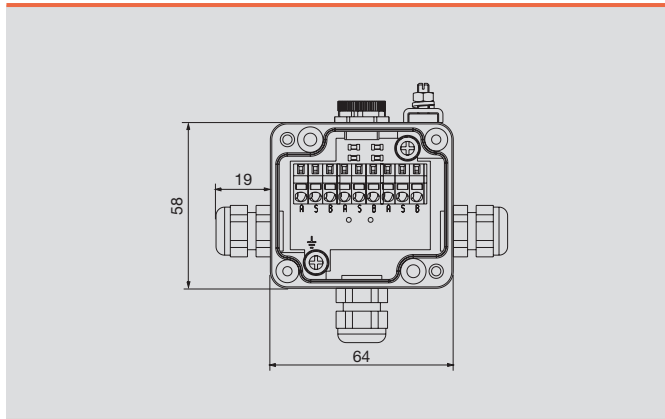
Ordering data

Type	Type of connection	Qty.	Order No.
Aluminium housing			
FBCon DP M12 1way	branch line M12	1	8564350000
Stainless steel enclosure			
FBCon SS DP M12 1way	branch line M12	1	8714270000

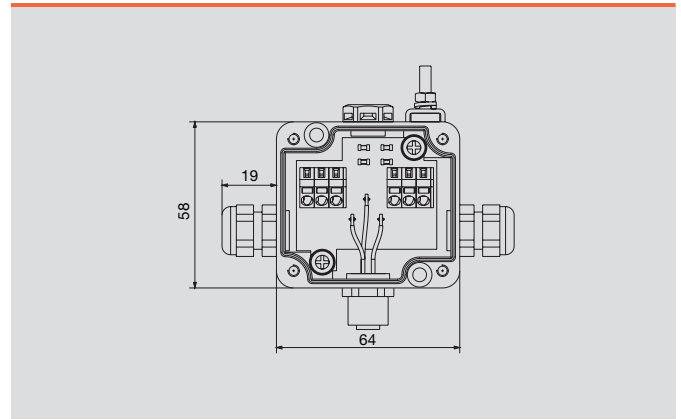
CG = brass cable gland
PCG = plastic cable gland

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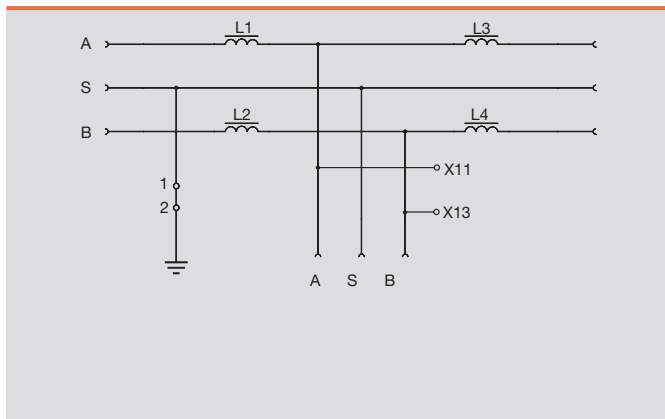
Dimensioned drawing



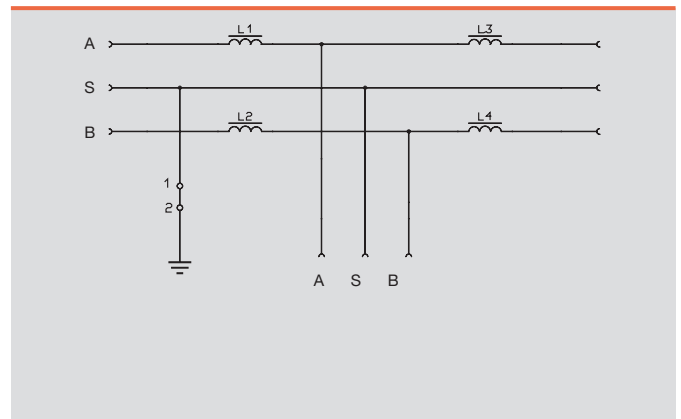
Dimensioned drawing



Wiring diagram

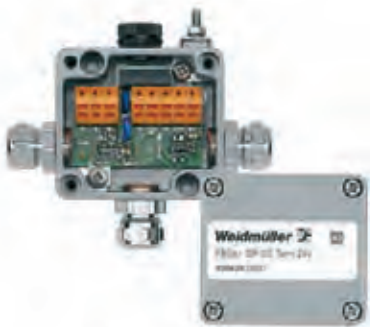


Wiring diagram



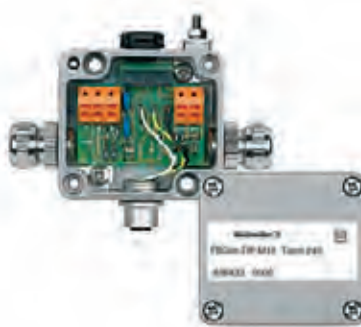
Terminator

Cable gland



Terminator

M12 connection



Ordering data

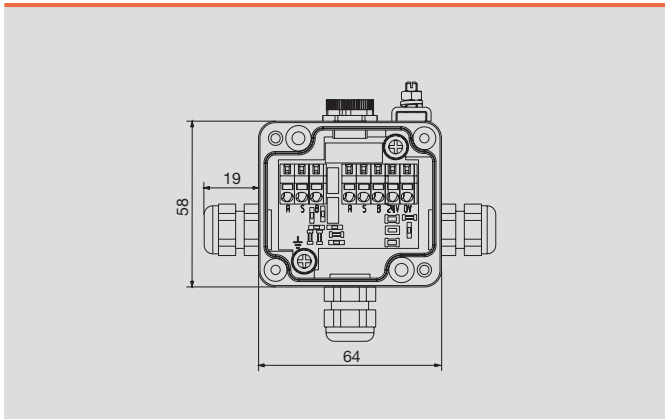
Type	Type of connection	Qty.	Order No.
Aluminium housing			
FBCon DP CG Term 24V	branch line CG	1	8564290000
Stainless steel enclosure			
FBCon SS DP PCG Term 24V	all connections PCG	1	8714240000

Ordering data

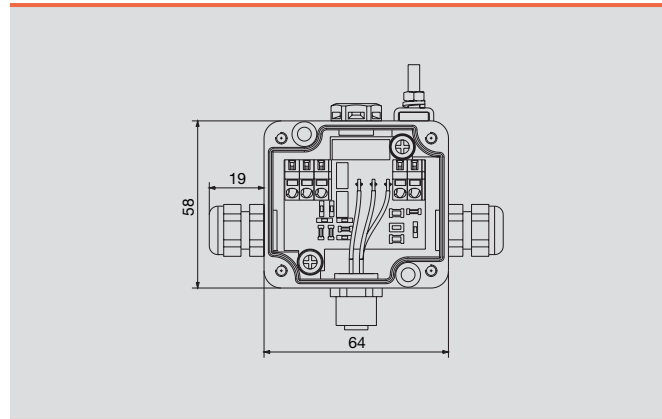
Type	Type of connection	Qty.	Order No.
Aluminium housing			
FBCon DP M12 Term 24V	branch line M12	1	8564330000
FBCon DP M12 Term 5V	branch line M12	1	8564320000
Stainless steel enclosure			
FBCon SS DP M12 Term 24V	branch line M12	1	8714250000

CG = brass cable gland
PCG = plastic cable gland

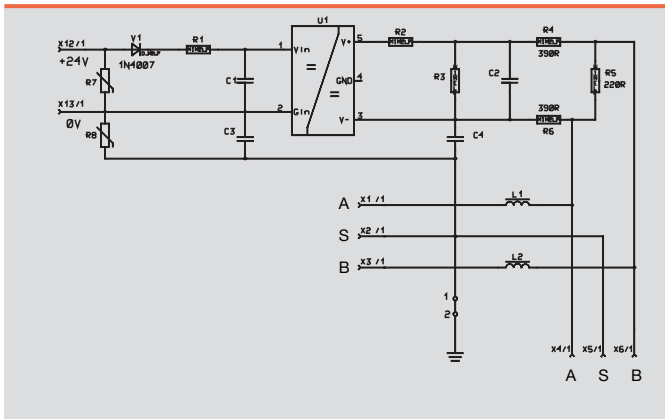
Dimensioned drawing



Dimensioned drawing



Wiring diagram



Wiring diagram

