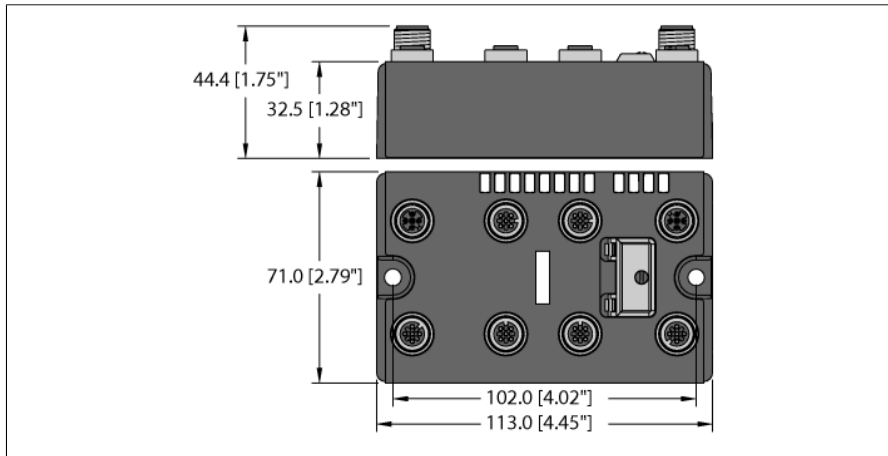


BL compact™ fieldbus station for PROFIBUS-DP
8 Configurable Digital PNP Channels
BLCDP-4M12VMT-8XSG-PD



- On-machine Compact fieldbus I/O block
- PROFIBUS-DP slave
- 9.6 kbps ... 12 Mbps
- Two 5-pole M12, reverse-keyed, connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- All exposed metal is stainless steel
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 8 Configurable digital PNP channels, 24 VDC
- Max. 0.5A per channel
- Channel diagnostics
- Selection of filtering times (Input delay)
- Invertible inputs

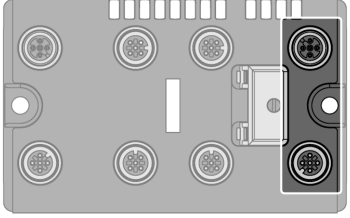

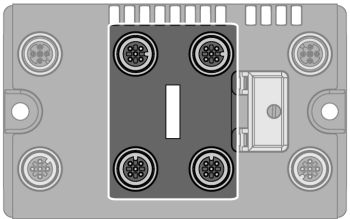
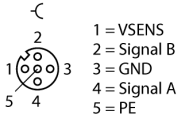
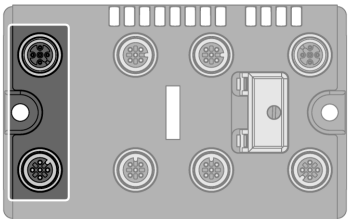
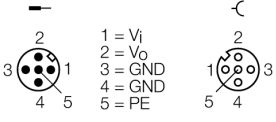
Type designation	BLCDP-4M12VMT-8XSG-PD
Ident-No.	6811189
Electrical isolation	The inputs and outputs of the 8XSG I/O cards are supplied via a common ground. Therefore, it is recommend not to use this module for safety or emergency stop applications.
Fieldbus transmission rate	9.6 kbps ... 12 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus connection technology	2 × M12, 5-pole, reverse keyed
Fieldbus address range	0...99
Fieldbus addressing	2 decimally coded rotary switches
Service interface	RS232 interface
Digital inputs	from 8XSG
Input type	PNP
Type of input diagnostics	Channel diagnostics
Low level signal voltage	< 4.5 VDC
High level signal voltage	7 ... 30 VDC
Low level signal current	< 1.5 mA
High level signal current	2.1 ... 3.7 mA
Input delay	(configurable) 0.25 or 2.5 ms
Digital outputs	from 8XSG
Output type	PNP
Type of output diagnostics	Channel diagnostics
Output voltage	24 VDC
Output current per channel	0.5 A
Output delay	3 ms
Load type	resistive, inductive, lamp load
Load resistance, resistive	> 48 Ω
Load resistance, inductive	< 1.2 H
Lamp load	< 3 W
Switching frequency, resistive	< 200 Hz
Switching frequency, inductive	< 2 Hz
Switching frequency, lamp load	< 20 Hz
Short-circuit protection	yes
Vibration test	according to IEC 61131-2
Extended vibration resistance	
- up to 20 g (at 10 up to 150 Hz)	For mounting on base plate or machinery
Shock test	according to IEC 61131-2
Electromagnetic compatibility	according to IEC 61131-2
Approvals and certificates	CE, cULus

BL compact™ fieldbus station for PROFIBUS-DP
8 Configurable Digital PNP Channels
BLCDP-4M12VMT-8XSG-PD

Dimensions (W x L x H)	71 x 113 x 32.5mm
Operating temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	15 to 95% (non-condensing)
Protection class	IP67
	IP69K
Housing material	Glass-filled nylon, 316L stainless steel connectors
Housing color	Black
Window material	Lexan
Material screw	303 stainless steel
Material label	Polyester with polycarbonate overlay
Ground label material	304 Stainless Steel
Weight	390 ± 20 g
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque

BL compact™ fieldbus station for PROFIBUS-DP
8 Configurable Digital PNP Channels
BLCDP-4M12VMT-8XSG-PD

Pinning and wiring diagram

	<p>PROFIBUS-DP Fieldbus cable (example): RSSW RKSW 455-2M ident-no. U0350 or RSSW-RKSW455-2M ident-no. 6602222</p>	<p>Pin Assignment (M12, B-Code)</p>  <p>1 = 5 V 2 = BUS-A 3 = GND 4 = BUS-B 5 = n.c. flange = shield</p>
	<p>Digital Inputs and Outputs Extension cable (example): RK 4.4T-2-RS 4.4T ident-no. U2445 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208</p>	<p>Pin Assignment</p>  <p>1 = VSNS 2 = Signal B 3 = GND 4 = Signal A 5 = PE</p>
	<p>Auxiliary Power Extension cable (example): RKC 4.4T-2-RSC 4.4T ident-no. U5264 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208</p>	<p>Pin Assignment</p>  <p>1 = Vi 2 = Vo 3 = GND 4 = GND 5 = PE</p>

BL compact™ fieldbus station for PROFIBUS-DP
8 Configurable Digital PNP Channels
BLCDP-4M12VMT-8XSG-PD**Station LED status**

LED	Color	Status	Description
IOs		OFF	No power
	RED	ON	Low power or station error
	RED	FLASHING (1 Hz)	I/O module configuration error
	RED	FLASHING (4 Hz)	No I/O module bus communication
	GREEN	ON	Station ok
	GREEN	FLASHING	Force mode active
BUS		OFF	No field bus communication
	GREEN	ON	Field bus communication active
	GREEN	FLASHING (1 Hz)	No field bus communication active, device status OK
	RED	ON	Bus error at the gateway; no data exchange
	RED	FLASHING	Faulty PROFIBUS-DP address
BUS		OFF	No field bus communication
	GREEN	ON	Field bus communication active
	GREEN	FLASHING (1 Hz)	No field bus communication active, device status OK
	RED	ON	Bus error at the gateway; no data exchange
	RED	FLASHING	Faulty PROFIBUS-DP address

I/O LED status

LED	Color	Status	Description
D *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Diagnostics active
XSG channels 0...7		OFF	Channel status x = "0" (OFF), no diagnostics active
	GREEN	ON	Channel status x = "1" (ON)
	RED	ON	Short-circuit at output
	RED	FLASHING (2 Hz)	Short-circuit sensor supply

* D LED also indicates gateway diagnostics

BL compact™ fieldbus station for PROFIBUS-DP
8 Configurable Digital PNP Channels
BLCDP-4M12VMT-8XSG-PD**I/O Data Map**

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DI 7 C3P2	DI 6 C2P2	DI 5 C1P2	DI 4 C0P2	DI 3 C3P4	DI 2 C2P4	DI 1 C1P4	DI 0 C0P4
	1	-	-	-	-	-	-	-	-
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DO 7 C3P2	DO 6 C2P2	DO 5 C1P2	DO 4 C0P2	DO 3 C3P4	DO 2 C2P4	DO 1 C1P4	DO 0 C0P4
	1	-	-	-	-	-	-	-	-