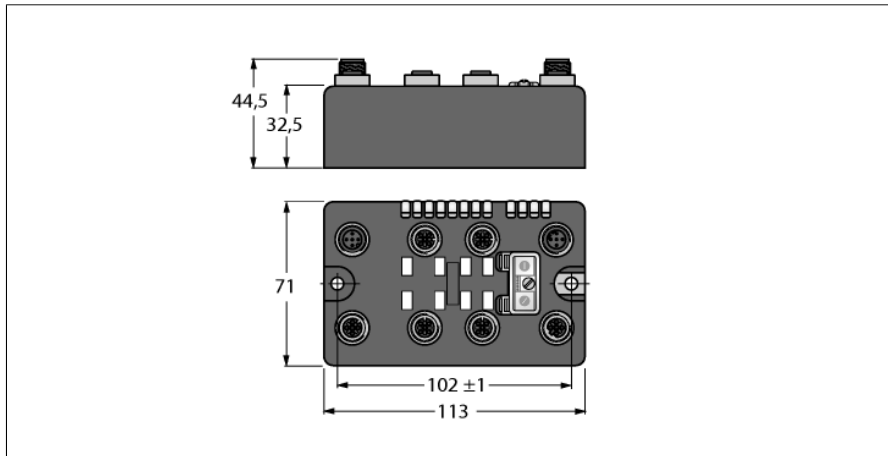


BL compact Fieldbus Station for PROFIBUS-DP
8 Configurable Digital Channels
BLCDP-4M12MT-8XSG-PD



- On-Machine™ compact fieldbus I/O blocks
- PROFIBUS-DP slave
- 9.6 kbps ... 12 Mbps
- Two 5-pin, reverse-keyed M12 male receptacles for fieldbus connection
- 2 rotary coding switches for node-address
- IP 69K
- M12 I/O ports
- LEDs indicating status and diagnostics
- Electronics galvanically isolated from the field level via optocouplers
- 8 digital PNP channels, 24 VDC
- Max. 0.5 A per channel
- Channel diagnostics
- Adjustable filter times (input delay)
- Input inverting possible

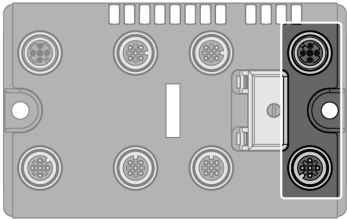
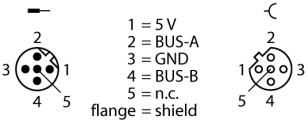
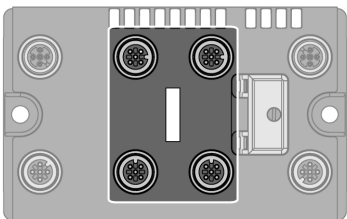
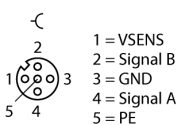
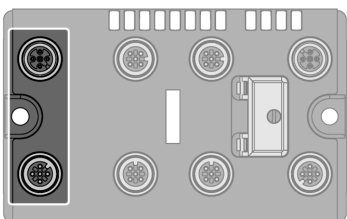
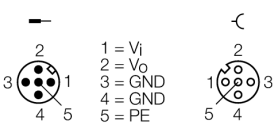
Type designation	BLCDP-4M12MT-8XSG-PD
Ident no.	6811168
Nominal system voltage	24 VDC
System power supply	Via auxiliary power
Voltage supply connection	2 x M12, 5-pin
Admissible range V_i	18...30 VDC
Nominal current V_i	200 mA
Max. current V_i	1 A
Admissible range V_o	18...30 VDC
Nominal current V_o	100 mA
Max. current V_o	4 A
Electrical isolation	The 8XSG I/O cards have a common reference potential for operating and load voltage due to their freely selectable digital channels. Subsequently, all voltage sources (V_i , V_o , V_+) present on this device must be concurrently connected to suitable power supplies.
Fieldbus transmission rate	9.6 kbps ... 12 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	0...99
Fieldbus addressing	2 dec. Rotary coding switches
Fieldbus connection technology	2 x M12 5-pin, reverse-keyed
Fieldbus termination	External
Service interface	RS232 interface
Digital inputs	from 8XSG
Input type	PNP
Type of input diagnostics	Channel diagnostics
Sensor supply (V_{sens})	24 VDC, 100 mA short-circuit limiting
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	0.25 or 2.5 (configurable) ms

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Digital outputs	from 8XSG
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply (V_{Sens})	24 VDC from supply voltage
Output current per channel	0.5 A
Output voltage	24 VDC from supply voltage
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

Dimensions	113 x 71 x 32.5 mm
Mounting	2 x 5.4 mm diameter holes, 1.7 Nm torque
Weight	390 \pm 20 g
Housing material	Glass fiber reinforced nylon, nickel-plated connector
Housing color	Black
Material screw	Nickel-plated brass
Material label	Polyester with polycarbonate overlay
Ground label material	Nickel-plated brass
Protection class	IP67 IP69K
Ambient temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	15...95 %, non-condensing
Vibration test	Acc. to IEC 61131-2
- up to 20 g (at 10 up to 150 Hz)	For mounting on base plate or machinery
Shock test	acc. to IEC 61131-2
Electromagnetic compatibility	Acc. to IEC 61131-2
Approvals and certificates	CE, cULus

BL compact Fieldbus Station for PROFIBUS-DP
8 Configurable Digital Channels
BLCDP-4M12MT-8XSG-PD

	<p>PROFIBUS-DP Fieldbus cable (example): RSSW RKSU 455-2M ident-no. U0350 or RSSW-RKSU455-2M ident-no. 6602222</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 = VSENS 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 Channels
BLCDP-4M12MT-8XSG-PD**Status: Station LED**

LED	Color	Status	Description
IOs		OFF	Power off
	RED	ON	Insufficient power supply
	RED	FLASHING (1Hz)	Deviating station configuration
	RED	FLASHING (4 Hz)	No module bus communication
	GREEN	ON	Station OK
	GREEN	FLASHING	Force mode active
BUS		OFF	Keine Feldbus Kommunikation
	GREEN	ON	Feldbus Kommunikation aktiv
	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	Keine Feldbus Kommunikation
	GREEN	ON	Feldbus Kommunikation aktiv
	GREEN	FLASHING (1 Hz)	Keine Feldbuskommunikation aktiv, Gerätestatus OK
	RED	ON	Busfehler am Gateway; kein Datenaustausch
	RED	FLASHING	Fehlerhafte PROFIBUS-DP Adresse

Status: I/O LED

LED	Color	Status	Description
D *		OFF	Diagnostic disabled
	RED	ON	Station / module bus communication failure
	RED	FLASHING (0.5Hz)	Summarized diagnostic
XSG channels 0...7		OFF	Status channel x = 0 (OFF), diagnostic disabled
	GREEN	ON	Status channel = 1 (ON)
	RED	ON	Short-circuit at output
	RED	FLASHING (2 Hz)	Short-circuit sensor supply

* D LED also indicates gateway diagnostic

BL compact Fieldbus Station for PROFIBUS-DP
8 Configurable Digital Channels
BLCDP-4M12MT-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 1 ₇	DI 1 ₆	DI 1 ₅	DI 1 ₄	DI 1 ₃	DI 1 ₂	DI 1 ₁	DI 1 ₀
	1	-	-	-	-	-	-	-	-
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
	0	DO 1 ₇	DO 1 ₆	DO 1 ₅	DO 1 ₄	DO 1 ₃	DO 1 ₂	DO 1 ₁	DO 1 ₀
	1	-	-	-	-	-	-	-	-