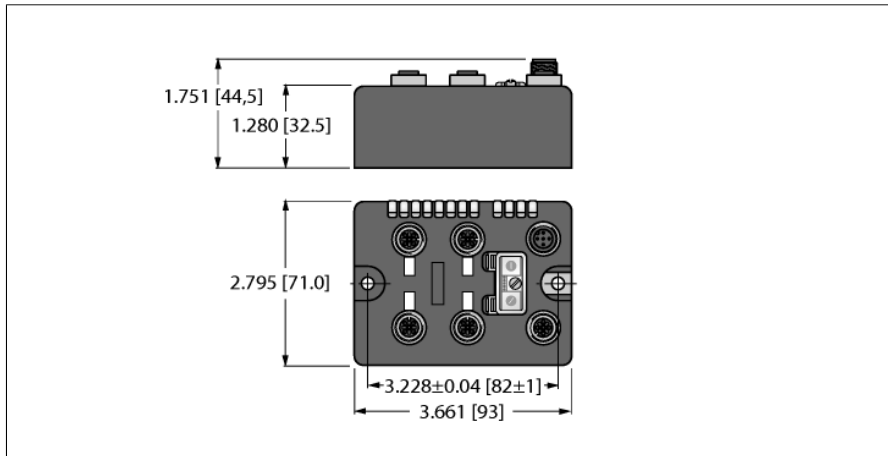


**BL compact™ fieldbus station for CANopen**  
**8 Configurable Digital PNP Channels**  
**BLCCO-4M12S-8XSG-P**



- On-machine Compact fieldbus I/O block
- CANopen slave
- 10, 20, 50, 125, 250, 500, 800, or 1000 kbps
- Two 5-pole M12 connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- M12 I/O connectors
- 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
- Selection of filtering times (Input delay)
- Invertible inputs

<b>Type designation</b>	BLCCO-4M12S-8XSG-P
Ident-No.	6811302
<b>Electrical isolation</b>	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 (VI / VO / V+) present on this device must be concurrently connected to suitable power supplies.
<b>Fieldbus transmission rate</b>	10 kbps ... 1 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus connection technology	2 × M12, 5-pole
Fieldbus address range	1...99
Fieldbus addressing	2 decimally coded rotary switches
Service interface	RS232 interface
<b>Digital inputs</b>	from 8XSG
Input type	PNP
Type of input diagnostics	Group 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
<b>Digital outputs</b>	from 8XSG
Output type	PNP
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
<b>Vibration test</b>	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

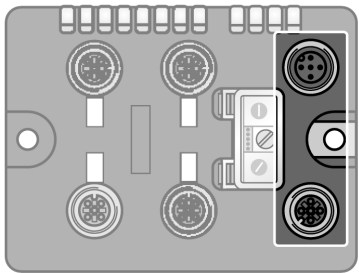
**BL compact™ fieldbus station for CANopen**  
**8 Configurable Digital PNP Channels**  
**BLCCO-4M12S-8XSG-P**

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<b>Dimensions (W x L x H)</b>	71 x 93 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, nickel plated brass connectors
Housing color	Black
Window material	Lexan
Material screw	Nickel-plated brass
Material label	Polyester with polycarbonate overlay
Ground label material	Nickel plated brass
Weight	320 ± 20 g
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque

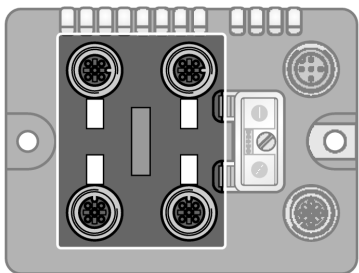
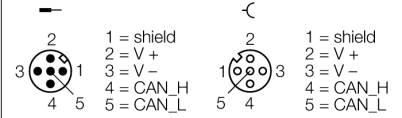
**BL compact™ fieldbus station for CANopen**  
**8 Configurable Digital PNP Channels**  
**BLCCO-4M12S-8XSG-P**

**Pinning and wiring diagram**



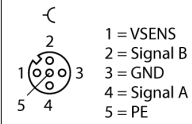
**CANopen**  
Fieldbus cable (example): RSC RKC 572-2M ident-no. U0323 or RSC-RKC572-2M ident-no. 6603629

**Pin Assignment**



**Digital Inputs and Outputs**  
Extension cable (example): PKGS 3M-2-PSGS 3M ident-no. U-43299 or PKG3M-2-PSG3M/TEL ident-no. 6625303

**Pin Assignment**



**BL compact™ fieldbus station for CANopen**  
**8 Configurable Digital PNP Channels**  
**BLCCO-4M12S-8XSG-P****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
ERR	-	OFF	No communication error
	RED	ON	CAN bus communication error
BUS	GREEN	ON	NMT-slave state is „Operational“
	ORANGE	ON	NMT-slave state is „Pre-Operational“
	RED	ON	NMT-slave state is „Stopped“
ERR & BUS	RED (ERR) & GREEN (BUS)	FLASHING (4 Hz)	Searching for the baud rate

**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

\* D LED also indicates gateway diagnostics

**BL compact™ fieldbus station for CANopen**  
**8 Configurable Digital PNP Channels**  
**BLCCO-4M12S-8XSG-P****I/O Data Map**

<b>INPUT</b>	<b>BYTE</b>	<b>Bit 7</b>	<b>Bit 6</b>	<b>Bit 5</b>	<b>Bit 4</b>	<b>Bit 3</b>	<b>Bit 2</b>	<b>Bit 1</b>	<b>Bit 0</b>
	0	DI 1 <sub>7</sub>	DI 1 <sub>6</sub>	DI 1 <sub>5</sub>	DI 1 <sub>4</sub>	DI 1 <sub>3</sub>	DI 1 <sub>2</sub>	DI 1 <sub>1</sub>	DI 1 <sub>0</sub>
	1	-	-	-	-	-	-	-	-
<b>OUTPUT</b>	<b>BYTE</b>	<b>Bit 7</b>	<b>Bit 6</b>	<b>Bit 5</b>	<b>Bit 4</b>	<b>Bit 3</b>	<b>Bit 2</b>	<b>Bit 1</b>	<b>Bit 0</b>
	0	DO 1 <sub>7</sub>	DO 1 <sub>6</sub>	DO 1 <sub>5</sub>	DO 1 <sub>4</sub>	DO 1 <sub>3</sub>	DO 1 <sub>2</sub>	DO 1 <sub>1</sub>	DO 1 <sub>0</sub>
	1	-	-	-	-	-	-	-	-