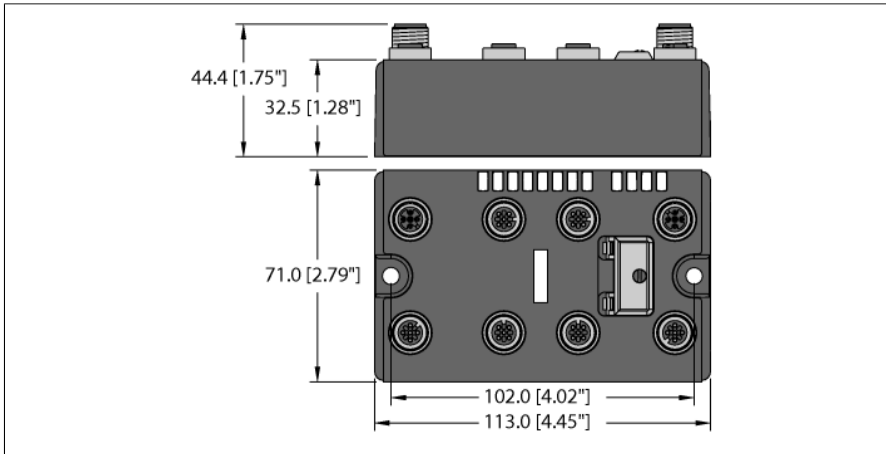


# BL compact™ fieldbus station for PROFIBUS-DP

## 4 Digital PNP Outputs

### BLCDP-4M12MT-4DO-2A-P

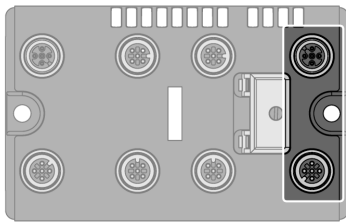


Type	BLCDP-4M12MT-4DO-2A-P
ID	6811191
Nominal system voltage	24 VDC
System power supply	Via auxiliary power
Voltage supply connection	2 x M12, 5-pin
Admissible range $V_i$	18...30 VDC
Nominal current $I_i$	100 mA
Max. current $I_i$	1 A
Admissible range $V_o$	18...30 VDC
Nominal current $I_o$	100 mA
Max. current $I_o$	4 A
Fieldbus transmission rate	9.6 kbps ... 12 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	0...99
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 x M12
	5-pole, reverse keyed
Fieldbus termination	external
Service interface	RS232 interface
<b>Digital outputs</b>	
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply ( $V_{sens}$ )	24 VDC
Output current per channel	2 A
Output voltage	24 VDC from supply voltage
Output delay	3 ms
Load type	resistive, inductive, lamp load
Load resistance, resistive	> 12 $\Omega$
Load resistance, inductive	< 1.2 H
Lamp load	< 10 W
Switching frequency, resistive	< 200 Hz
Switching frequency, inductive	< 2 Hz
Switching frequency, lamp load	< 20 Hz
Short-circuit protection	yes

- 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
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 4 digital PNP outputs, 24 VDC
- Max. 2A per output (4A total)

Dimensions	113 x 71 x 32.5 mm
Mounting	2 × 5.4 mm diameter holes, 1.7 Nm torque
Weight	390 ± 20 g
Housing material	Glass-filled nylon, nickel plated brass connectors
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 to 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	according to IEC 61131-2
Electromagnetic compatibility	Acc. to IEC 61131-2
Approvals and certificates	CE, cULus

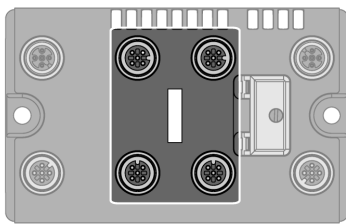
## Pinning and wiring diagram



### PROFIBUS-DP

Fieldbus cable (example): RSSW RKSW 455-2M ident-no. U0350  
or RSSW-RKSW455-2M ident-no. 6602222

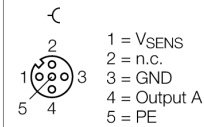
### Pin Assignment (M12, B-Code)



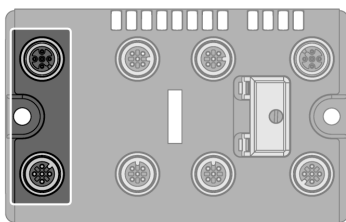
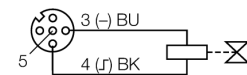
### Digital Outputs

Extension cable (example): RK 4T-2-RS 4T ident-no. U2151-3 or  
RKC4T-2-RSC4T/TEL ident-no. 6625204

### Pin Assignment



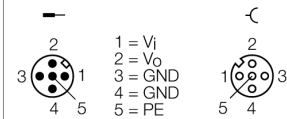
### Wiring Diagram



### 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

### Pin Assignment



**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 Data Map**

<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>3</sub>	DO 1 <sub>2</sub>	DO 1 <sub>1</sub>	DO 1 <sub>0</sub>
	1	-	-	-	-	-	-	-	-