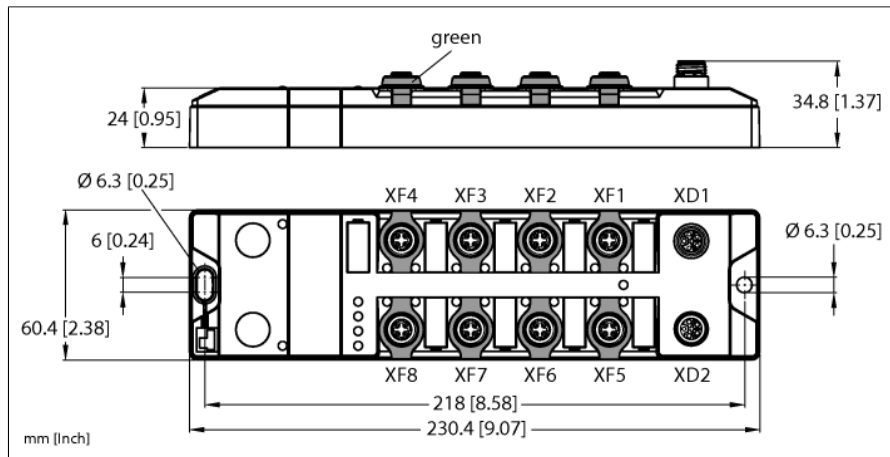


Unmanaged Ethernet Switch

8 × 100-Mbit Ports

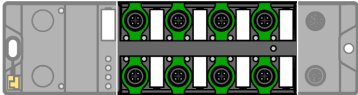
TBEN-LL-SE-U1



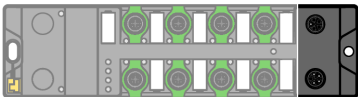
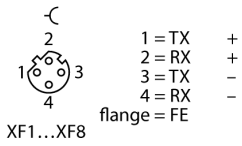
Type	TBEN-LL-SE-U1
ID	100028461
Supply	
Supply voltage	24 VDC
Admissible range	8...30 VDC Load dump protection at 12 V XD1-XD2 forward current max. 16 A per voltage group
Voltage supply connection	M12, L-coded
Electrical isolation	galvanic isolation of the voltage groups V1 and V2, voltages up to 500 VAC
Power dissipation, typical	≤ 2.9 W
System data	
Transmission rate Ethernet	10/100 Mbps
Connection technology Ethernet	8 × M12, 4-pin, D-coded
Web server	Default: 192.168.1.254
Frame forwarding	store and forward
Switch interface	
10/100-Mbit ports	8
802.3ab compliance	No
802.3q compliance	Yes
802.3u compliance	Yes
802.3x compliance	Yes
Auto-crossing (802.3)	Yes
Auto-negotiation (802.3)	Yes
Auto-polarity (802.3)	Yes
Cable test	No
Flow control (802.3X)	Yes
Jumbo frames	Yes, up to 10,240 bytes
Multicasts	Yes
Multiple queues per port	Yes, max. 8
QoS port prioritization (802.1D/p)	No

- 8 × M12, 4-pin, D-coded, 100 Mbps
- Glass fiber reinforced housing
- Shock and vibration tested
- Fully potted module electronics
- Protection classes IP65, IP67, IP69K
- M12, L-coded male connector for power supply
- Galvanically isolated voltage groups
- ATEX zone 2/22
- CCC-Ex

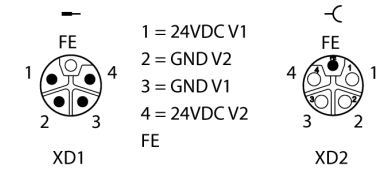
Standard/Directive conformity	
Vibration test	Acc. to EN 60068-2-6 Acceleration up to 20 g
Shock test	acc. to EN 60068-2-27
Drop and topple	acc. to EN 60068-2-31/IEC 60068-2-32
Electromagnetic compatibility	Acc. to EN 61131-2
Approvals and certificates	CE UKCA ATEX zone 2/22 CCC-Ex UV resistant acc. to DIN EN ISO 4892-2A (2013)
UL Certificate	cULus LISTED 21 W2, Encl.type 1 IND.CONT.EQ.
Note on ATEX/IECEx	The Quick Start Guide with information on use in Ex areas must be observed.
General Information	
Dimensions (W x L x H)	60.4 x 230.4 x 34.8 mm
Ambient temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Altitude	Max. 5000 m
Protection class	IP65 IP67 IP69K
MTTF	284 years acc. to SN 29500 (Ed. 99) 20 °C
Housing material	PA6-GF30
Housing color	Black
Connector material	Nickel-plated brass
Window material	Lexan
Material screw	303 stainless steel
Material label	Polycarbonate
Halogen-free	yes
Mounting	2 mounting holes □ 6.3 mm



Ethernet M12 × 1



M12 power supply, L-coded



Accessories

Type code	Ident no.		Dimension drawing
TB-SG-L	100014865	Protective housing for TBEN-L and TBIL-M block I/O modules for use in ATEX Zone 2/22	