

Basic features

Approval/Conformity	CE UKCA cULus WEEE
Scope of delivery	Part label (20x) Port cover M12 (4x) Grounding strap Lock washer Short guide M4x6 screw
Style	Two-row

Display/Operation

Actuator supply UA, indicator	Green LED
IO-Link communication indicator	Green LED
Module supply indicator	Green LED
Switching function display	LED yellow

Electrical connection

Connection (COM 1)	M12x1-Male, 4-pin, A-coded
Connection (supply voltage IN)	7/8"-Male, 5-pin
Connection slots	8x M12x1-Female, 5-pin, A-coded
Contact, surface protection	nickel plated 2 µm/gold plated 0.4 µm

Electrical data

Configurable inputs/outputs	no
Current consumption without load, max.	90 mA
Current sum UA, actuator	9.0 A
Current sum US, sensor	4.0 A
IO-Link function	Device
IO-Link ports, number	1
Operating voltage Ub	18...30.2 VDC
Rated operating voltage Ue DC	24 V
Switching current	16x 2 A

I/O modules

BNI IOL-256-S01-Z013

Order Code: BNI003Y

BALLUFF

Environmental conditions

Ambient temperature	-5...70 °C
Ambient temperature UL max.	45 °C
EN 60068-2-6, Vibration	61...500 Hz, constant acceleration 15 g 5...61 Hz, constant amplitude 1 mm
IP rating	IP67, when threaded in
Storage temperature	-25...70 °C

Functional safety

MTTF (40 °C)	67 a
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IO-Link

IO-Link Profil IDs	N/A
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Interface

Cycle time min.	3 ms
Digital outputs	16x PNP
IO-Link version	1
Interface	IO-Link 1.0
Process data IN	7 bytes
Process data OUT	2 bytes
Process data cycle min.	24 ms
Single-channel monitoring	yes
Transfer rate	COM2 (38.4 kBaud)

Material

Gasket, material	FKM 75
Housing material	Zinc, Die casting
Housing shield	yes
Surface protection	Cu 15 µm Ni 15 µm

Mechanical data

Dimension	68 x 32.4 x 181.5 mm
Mounting ground strap	M4 internal thread
Mounting part	2-hole screw mount

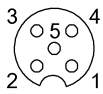
Remarks

See short guide

For more information about MTTF and B10d see MTTF / B10d Certificate

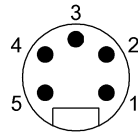
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



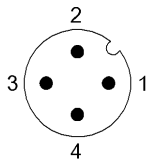
Output Ports

- PIN 1: not used
- PIN 2: Output 2
- PIN 3: GND
- PIN 4: Output 1
- PIN 5: Function ground



Power IN

- PIN 1: GND,reference pot. Segment1
- PIN 2: GND, reference potential, Segment2
- PIN 3: Function ground
- PIN 4: +24V, UA Segment2
- PIN 5: +24V, UA Segment1



IO-Link

- PIN 1: +24V
- PIN 2: not used
- PIN 3: GND
- PIN 4: C/Q, IO-Link DC-Channel