

## Basic features

<b>Approval/Conformity</b>	CE UKCA cULus WEEE
<b>Scope of delivery</b>	Part label (10x) Port cover M12 (4x) Grounding strap Lock washer Short guide M4x6 screw
<b>Style</b>	Two-row

## Display/Operation

<b>Actuator supply UA, indicator</b>	Green LED
<b>IO-Link communication indicator</b>	Green LED
<b>Module supply indicator</b>	Green LED
<b>Sensor supply US indicator</b>	Green LED
<b>Switching function display</b>	LED yellow

## Electrical connection

<b>Connection (COM 1)</b>	M12x1-Male, 4-pin, A-coded
<b>Connection slots</b>	8x M12x1-Female, 5-pin, A-coded
<b>Contact, surface protection</b>	nickel plated 2 µm/gold plated 0.4 µm

## Electrical data

<b>Configurable inputs/outputs</b>	no
<b>Current consumption without load, max.</b>	40 mA
<b>Current sum US, sensor</b>	3.5 A
<b>IO-Link function</b>	Device
<b>IO-Link ports, number</b>	1
<b>Operating voltage Ub</b>	18...30.2 VDC
<b>Rated operating voltage Ue DC</b>	24 V

## I/O modules

# BNI IOL-104-S02-R012

Order Code: BNI0090

# BALLUFF

### Environmental conditions

Ambient temperature	-5...70 °C
Ambient temperature UL max.	50 °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)	75 a
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### IO-Link

IO-Link Profil IDs	N/A
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### Interface

Cycle time min.	4.5 ms
Digital inputs	16x PNP, Type 3
Extension port	yes
IO-Link version	1.1
Interface	IO-Link 1.1
Process data IN	4 bytes
Process data cycle min.	4.5 ms
Single-channel monitoring	yes
Transfer rate	COM2 (38.4 kBaud)

### Material

Gasket, material	FKM 75
Housing material	PPS
Housing shield	no

### Mechanical data

Dimension	68 x 36.8 x 183.5 mm
Mounting ground strap	M4 internal thread
Mounting part	2-hole screw mount

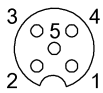
### Remarks

See short guide

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

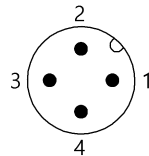
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

### Connector Drawings



#### I/O ports

PIN 1: +24V  
PIN 2: Input/Output 2  
PIN 3: GND  
PIN 4: Input/Output 1  
PIN 5: Function ground



#### IO-Link

PIN 1: +24V  
PIN 2: n.c.  
PIN 3: GND  
PIN 4: C/Q, IO-Link DC-Channel