

**Basic features**

<b>Approval/Conformity</b>	CE WEEE cULus UKCA Ecolab
<b>Scope of delivery</b>	Grounding strap M4x6 screw Short guide
<b>Secondary features for condition monitoring</b>	Vibration monitoring Internal temperature monitoring
<b>Style</b>	Two-row

**Display/Operation**

<b>IO-Link communication indicator</b>	yes
<b>Module supply indicator</b>	yes
<b>Sensor supply US indicator</b>	yes
<b>Switching function display</b>	yes

**Electrical connection**

<b>Connection (COM 1)</b>	M12x1-Male, 4-pin, A-coded
<b>Connection (supply voltage IN)</b>	M12x1-Male, 5-pin, L-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>	yes
<b>Current consumption without load, max.</b>	50 mA
<b>Current sum UA, actuator</b>	16 A
<b>Current sum US, sensor</b>	2 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
<b>Switching current</b>	12x 2 A 4x 4 A

# Smart Automation and Monitoring System

I/O modules

## BNI IOL-314-S52-P071

### Order Code: BNI00F7

# BALLUFF

#### Environmental conditions

Ambient temperature	-25...70 °C
Ambient temperature UL max.	50 °C
EN 60068-2-6, Vibration	5...61 Hz, constant amplitude 1 mm 61...500 Hz, constant acceleration 15 g
IP rating	IP68, IP69K, when threaded in
Storage temperature	-25...85 °C

#### Functional safety

MTTF (40 °C)	23.5 a
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#### IO-Link

IO-Link Profil IDs	0x4000 Identification and Diagnosis
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#### Interface

Additional function	Vibration Internal temperature Device discovery
Cycle time min.	2 ms
Digital inputs	16x PNP/NPN, Type 1, Type 3
Digital outputs	16x PNP
Extension port	yes
Frame type	2.V
IO-Link version	1.1
Interface	IO-Link 1.1
Process data IN	12 bytes
Process data OUT	2 bytes
Process data cycle min.	2 ms
Single-channel monitoring	yes
Transfer rate	COM3 (230.4 kBaud)

#### Material

Gasket, material	FKM NBR
Housing material	PPS
Housing shield	no

#### Mechanical data

Dimension	68 x 31.8 x 183.5 mm
Mounting ground strap	M4 internal thread
Mounting part	2-hole screw mount
Weight	424 g

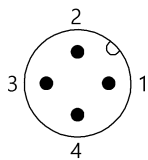
#### Remarks

See short guide and/or Manual

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



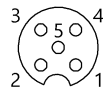
IO-Link

PIN 1: +24V

PIN 2: n.c.

PIN 3: GND

PIN 4: C/Q, IO-Link DC-Channel



I/O ports

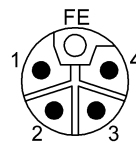
PIN 1: +24V, 200mA

PIN 2: Input/Output 2

PIN 3: GND

PIN 4: Input/Output 1

PIN 5: Function ground



PIN 1: US

PIN 2: GND UA

PIN 3: GND US

PIN 4: UA

PIN 5: FE