

Basic features

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

Display/Operation

Actuator supply UA, indicator	yes
IO-Link communication indicator	yes
Module supply indicator	yes
Sensor supply US indicator	yes
Switching function display	yes

Electrical connection

Connection (COM 1)	M12x1-Male, 4-pin, A-coded
Connection slots	8x M12x1-Female, 5-pin, A-coded
Contact, surface protection	NiAu

Electrical data

Configurable inputs/outputs	yes
Current consumption without load, max.	60 mA
Current sum UA, actuator	4 A
Current sum US, sensor	4 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	8x 500 mA

Environmental conditions

Ambient temperature	-25...70 °C
IP rating	IP68, IP69K, when threaded in
Storage temperature	-25...70 °C
Temperature coefficient typ.	±0.01 %/K

Smart Automation and Monitoring System

I/O modules

BNI IOL-727-S51-P012

Order Code: BNI00F9

BALLUFF

Functional safety

MTTF (40 °C) 57.1 a

IO-Link

IO-Link Profil IDs 0x4000 Identification and Diagnosis

Interface

Additional function Vibration
Internal temperature
Device discovery

Analog inputs 4x Analog, voltage/analog, current (0...10 V/-10...10 V/0...5 V/-5...5 V/5...10 V/4...20 mA/0...20 mA)

Cycle time min. 3 ms

Digital inputs 8x PNP, Type 1, Type 3

Digital outputs 8x PNP

IO-Link version 1.1

Interface IO-Link 1.1

Process data IN 16 bytes

Process data OUT 1 byte

Process data cycle min. 3 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 36.8 x 183.5 mm

Mounting ground strap M4 internal thread

Mounting part 2-hole screw mount

Range/Distance

Resolution ≤ 16 Bit Adjustable

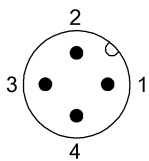
Remarks

See short guide and/or Manual

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

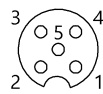
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



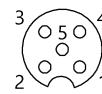
IO-Link

PIN 1: +24V
PIN 2: +24V
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



Analog input port

PIN 1: +24V, 200mA
PIN 2: Input 2
PIN 3: GND
PIN 4:
Input 1
PIN 5: Function ground