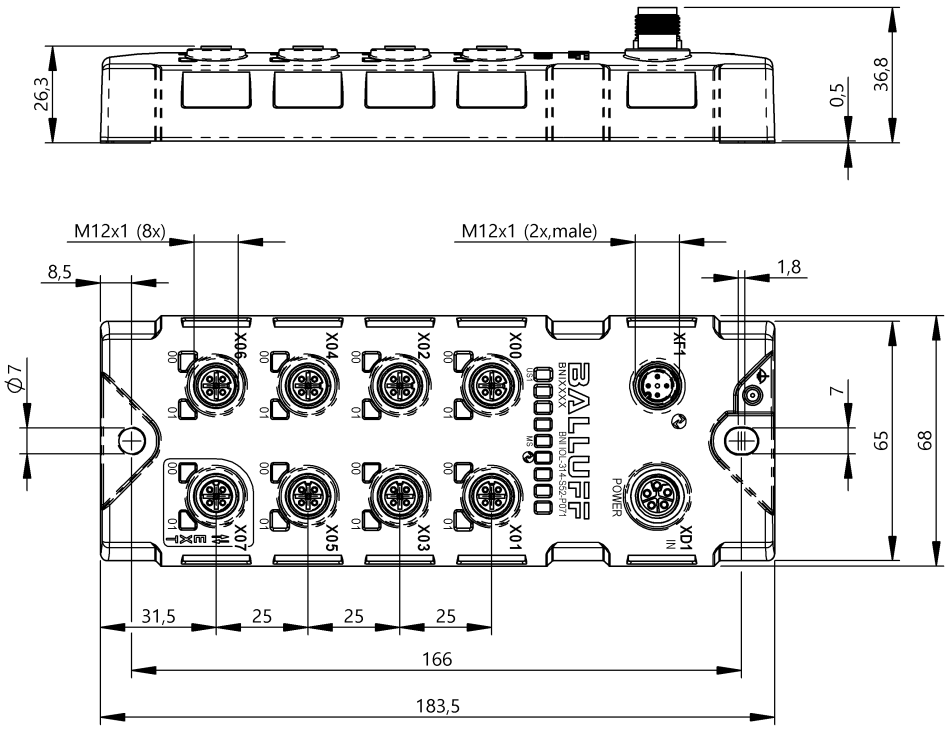
I/O modules

BNI IOL-314-S52-P071
Order Code: BNI00F7



Basic features

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

Display/Operation

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 (supply voltage IN)	M12x1-Male, 5-pin, L-coded
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	yes
Current consumption without load, max.	50 mA
Current sum UA, actuator	16 A
Current sum US, sensor	2 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	12x 2 A 4x 4 A

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

IO-Link

IO-Link Profil IDs	0x4000 Identification and Diagnosis

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	PBT, GF30 1.4404 stainless steel, Inserts
Housing shield	no

Mechanical data

Dimension	68 x 38.3 x 183.5 mm
Mounting ground strap	M4 internal thread
Mounting part	2-hole screw mount
Weight	424 g

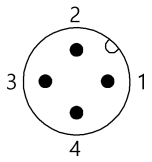
Remarks

See short guide and/or Manual

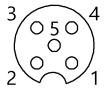
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

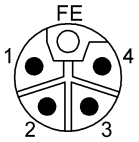
Connector Drawings



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