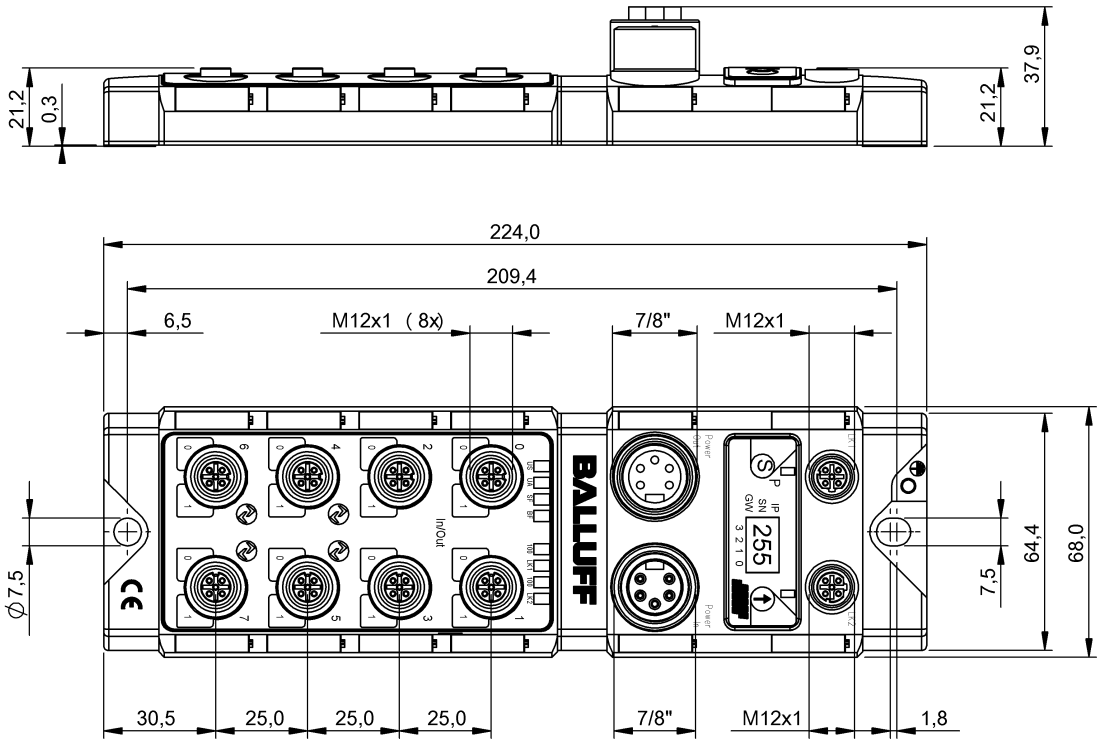
Network Blocks

BNI PNT-502-105-Z015
Order Code: BNI004U



Basic features

Approval/Conformity	CE UKCA IO-Link WEEE cULus
Safety Hub Support	yes
Scope of delivery	Part label (20x) Port cover M12 (4x) Grounding strap Lock washer Short guide M4x6 screw
Style	Two-row
Supported web browsers	Google Chrome Mozilla Firefox

Display/Operation

Actuator supply UA, indicator	LED green
IO-Link communication indicator	LED green
Sensor supply US indicator	LED green
Switching function display	LED yellow

Electrical connection

Connection (COM 1)	M12x1-Female, 4-pin, D-coded
Connection (COM 2)	M12x1-Female, 4-pin, D-coded
Connection (supply voltage IN)	7/8"-Male, 5-pin
Connection (supply voltage OUT)	7/8"-Female, 5-pin
Connection slots	8x M12x1-Female, 5-pin, A-coded
Contact, surface protection	NiAu

Electrical data

Address range	IPV4
Configurable inputs/outputs	yes
Current sum UA, actuator	9.0 A
Current sum US, sensor	9.0 A
IO-Link function	Master
Input current max. at 24 V	130 mA
Operating voltage Ub	18...30.2 VDC
Output current max.	2 A
Rated operating voltage Ue DC	24 V
Transfer rate	10/100 Mbit/s

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)	49 a

Interface

Auxiliary interfaces	4x IO-Link
Conformity class	B
Digital inputs	16x PNP, Type 3
Digital outputs	16x PNP
Fast Start-Up (FSU)	yes
IO-Link version	1.1
Interface 01	Profinet
Interface 01, protocol version	I/O
Netload class	III
Port-class	Type A

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 37.9 x 224 mm
Mounting ground strap	M4
Mounting part	2-hole screw mount
Weight	788 g

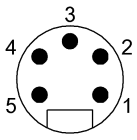
Remarks

See short guide

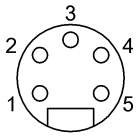
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

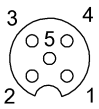
Connector Drawings



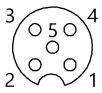
Power IN
PIN 1: 0V
PIN 2: 0V
PIN 3: Function ground
PIN 4: Sensor and bus supply.
PIN 5: Actuator supply



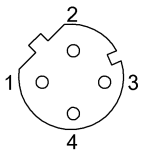
Power OUT
PIN 1: 0V
PIN 2: 0V
PIN 3: Function ground
PIN 4: Sensor and bus supply.
PIN 5: Actuator supply



I/O ports
PIN 1: +24V, 0.2A
PIN 2: In-/output/Diagnostics
PIN 3: 0V
PIN 4: In-/Output
PIN 5: Function ground



IO-Link
PIN 1: +24V
PIN 2: In-/output/Diagnostics
PIN 3: 0V
PIN 4: IO-Link/In-/Output
PIN 5: n.c.



Profinet Port
PIN 1: TD+
PIN 2: RD+
PIN 3: TD-
PIN 4: RD-