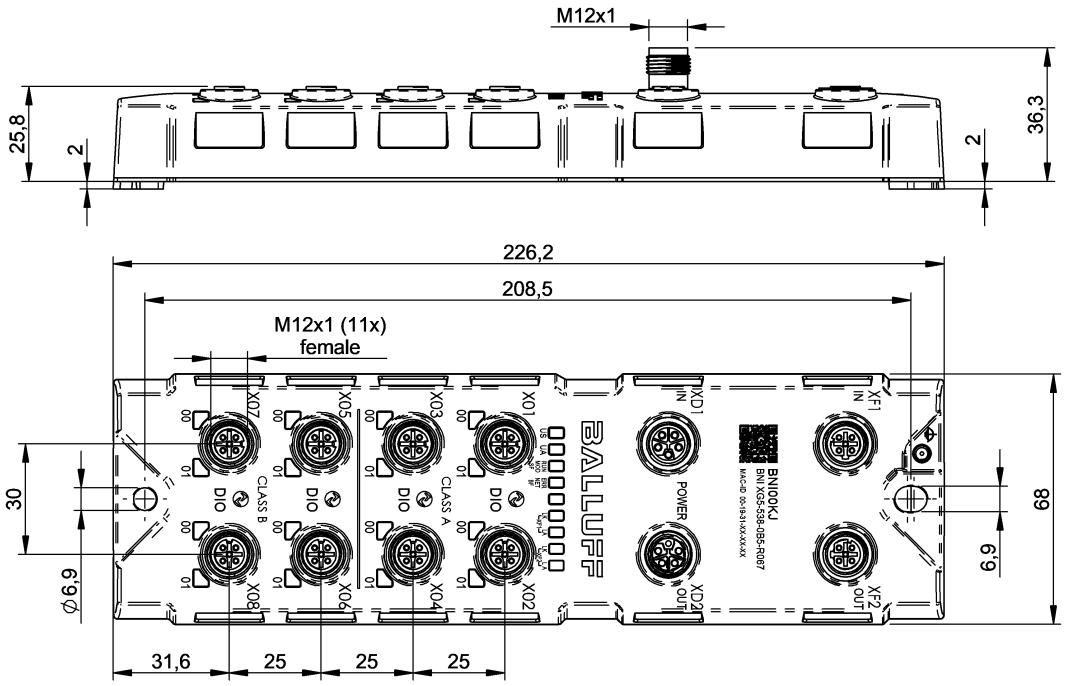
Network Blocks

BNI XG5-538-0B5-R067
Order Code: BNI00KJ



Basic features

Approval/Conformity	CE WEEE UKCA cULus KC
Display	no
Not incl. in scope of delivery	Label plates Port cover
Safety Hub Support	yes
Scope of delivery	Grounding strap M4x6 screw
Style	Two-row
Supported web browsers	Google Chrome Mozilla Firefox Microsoft Edge

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)	M12x1-Male, 5-pin, L-coded
Connection (supply voltage OUT)	M12x1-Female, 5-pin, L-coded
Connection slots	8x M12x1-Female, 5-pin, A-coded
Contact, surface protection	NiAu

Electrical data

Configurable inputs/outputs	yes
Current max. Pin 1/L+	2 A
Current sum UA, actuator	16 A
Current sum US, sensor	16 A
IO-Link function	Master
Operating voltage Ub	18...30 VDC
Output current max.	4 A short-circuit proof and overload-proof
Output current max. Pin 2	4 A
Output current max. Pin 4	2 A
Output current max. per port (Class A)	4 A
Output current max. per port (Class B)	6 A
Rated operating voltage Ue DC	24 V
Transfer rate	10/100 Mbit/s

Environmental conditions

Ambient temperature	-40...70 °C
Ambient temperature UL max.	50 °C
EN 60068-2-27, Continuous shock	100 g, 2 ms
EN 60068-2-27, Shock	100 g, 6 ms
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	-40...70 °C
Weld-splatter-resistant	1

Functional safety

MTTF (40 °C)	60 a

Interface

Auxiliary interfaces	8x IO-Link
Conformity class	B
Digital inputs	12x PNP, Type 3
Digital outputs	12x PNP
IO-Link version	1.1.4
Interface 01	Profinet / EtherNet/IP / EtherCAT / Modbus TCP
Interface 01, protocol version	Profinet: I/O EtherCAT: CoE, EoE, AoE, FoE
Interface IIoT	REST API, MQTT parsed OPC UA
Netload class	III
Port-class	Type A (4x) + Type B (4x)

Material

Gasket, material	FKM NBR
Housing material	Plastic Stainless steel, Inserts
Housing shield	no

Mechanical data

Dimension	68 x 38.3 x 226.2 mm
Mounting ground strap	M4
Mounting part	2-hole screw mount
Weight	570 g

Remarks

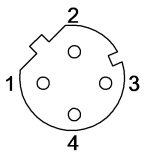
Digital inputs:
+4×PNP Type 3 inputs available on pin 2 of the Class B ports, provided that pins 3 and 5 are internally bridged (e.g., when using cable type BCC0FJZ).
Digital outputs:
+4×PNP outputs available on pin 2 of the Class B ports, provided that pins 3 and 5 are internally bridged (e.g., when using cable type BCC0FJZ).

See short guide

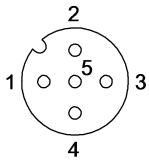
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

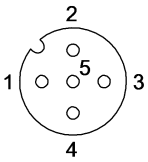
Connector Drawings



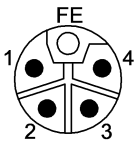
Ethernet
PIN 1: TD+
PIN 2: RD+
PIN 3: TD-
PIN 4: RD-



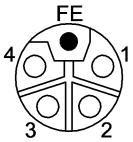
IO -Link Class A
PIN 1: L+ (US+)
PIN 2: I/Q (DI/DO)
PIN 3: L- (US-)
PIN 4: C/Q (SIO/IO-Link)
PIN 5: n.c.



IO -Link Class B
PIN 1: L+ (US+)
PIN 2: 2L+ (UA+) Switch option
PIN 3: L- (US-)
PIN 4: C/Q (SIO/IO-Link)
PIN 5: 2L- (UA-)



Power IN
PIN 1: L+ (US+)
PIN 2: 2L- (UA-)
PIN 3: L- (US-)
PIN 4: 2L+ (UA+)
PIN 5: FE



Power OUT
PIN 1: L+ (US+)
PIN 2: 2L- (UA-)
PIN 3: L- (US-)
PIN 4: 2L+ (UA+)
PIN 5: FE