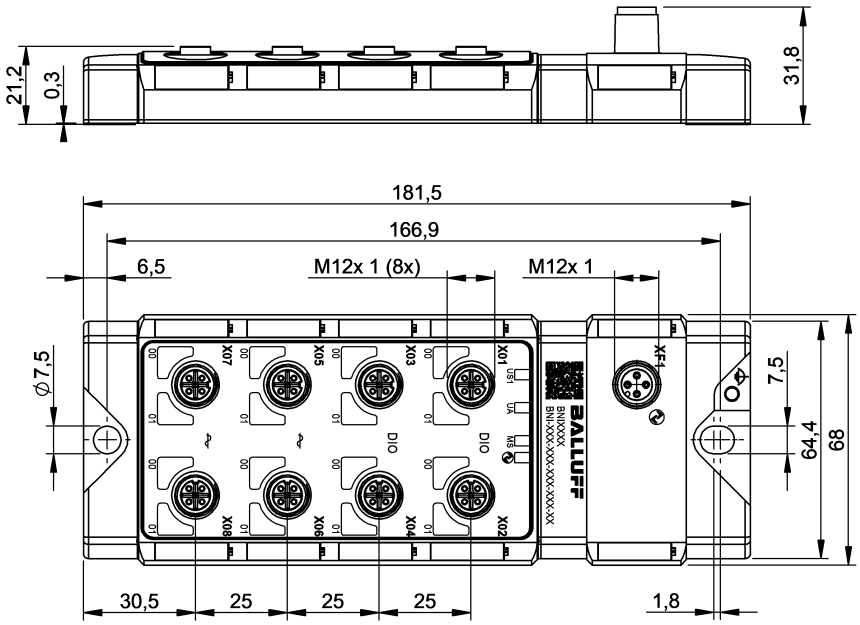
I/O modules

BNI LH5-727-S51-Z012
Order Code: BNI00KN



Basic features

Approval/Conformity	CE UKCA WEEE cULus
Scope of delivery	Grounding strap Lock washer Short guide M4x6 screw
Secondary features for condition monitoring	Vibration monitoring Internal temperature monitoring Inclination monitoring and installation aid
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	Imoloy plated 2-4 µm / Gold plated 0.4 µm

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	4x 500 mA

I/O modules

BNI LH5-727-S51-Z012
Order Code: BNI00KN

Environmental conditions

Ambient temperature	-25...60 °C
Ambient temperature UL max.	50 °C
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	IP67, when threaded in
Storage temperature	-25...70 °C

Functional safety

MTTF (40 °C)	57.1 a

IO-Link

IO-Link Profil IDs	0x4000 Identification and Diagnosis 0x0031 BLOB FW-Update

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	4x PNP, Type 1, Type 3
Digital outputs	8x PNP
Frame type	2.V
IO-Link version	1.1
Interface	IO-Link 1.1.4
Process data IN	17 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	Die-cast zinc, nickel-plated
Housing shield	yes
Surface protection	Cu 15 µm Ni 15 µm

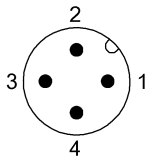
Mechanical data

Dimension	68 x 31.8 x 181.5 mm
Mounting ground strap	M4 internal thread
Mounting part	2-hole screw mount
Weight	608 g

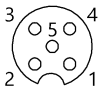
Range/Distance

Resolution	≤ 16 Bit Adjustable

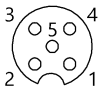
Connector Drawings



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