



I/O hub

ICA-16DIO-G11-IO

- IO-Link interface for service and process data
- 16 digital inputs/outputs can be configured
- Logic level can be configured per port
- Filter time can be configured per port
- Pulse extension can be configured per port

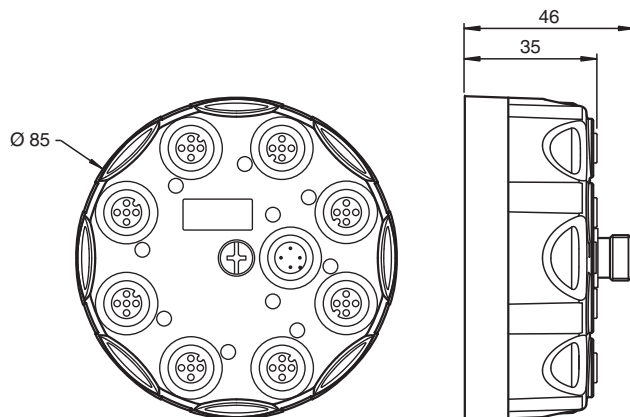
I/O hub with IO-Link interface for 16 freely configurable digital inputs/outputs



Function

The ICA-16DIO-G11-IO is an IO-Link field module with 16 freely configurable digital inputs/outputs. The module and the inputs and outputs are supplied with power via IO-Link. The inputs and outputs are connected via 4-pin M12 sockets. IO-Link is connected via a 4-pin M12 connector. The current switching state or an overload of the inputs or outputs is indicated via LEDs.

Dimensions



Technical Data

General specifications

MTBF	144 a
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Indicators/operating means

LED PWR	LED green: flashing with short break (1 Hz) - IO-Link mode
LED P	Switch state (IO); multicolor LED yellow: only IO pin 4 is active blue: only IO pin 2 is active green: both IO pin 4 and pin 2 are active red: overload at sensor supply or output

Electrical specifications

Operating voltage	U_B	18 ... 30 V DC, PELV
No-load supply current	I_0	≤ 30 mA
Operating current	I_B	Total current of all inputs/outputs max. 3A (limited by fuse)

Interface

Interface type	IO-Link
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

IO-Link revision	1.1
Device profile	Identification and Diagnosis - I&D Firmware update
Process data	Inputs 3 Byte - Input signals 16 Bit - diagnosis signals 5 Bit Outputs 2 Byte - Output signals 16 Bit
Vendor ID	1 (0x0001)
Device ID	985602 (0x0F0A02)
Data transfer rate	COM3 (230.4 kbits/s)
Min. cycle time	1 ms
SIO mode support	no
Compatible master port type	Class A
Input	
Number/Type	16 Inputs for 3-wire sensors (PNP), DC (P1 ... P8)
Supply	from IO-Link
Current loading capacity	180 mA , overload and short-circuit protected
Input current	≤ 5 mA (limited internally)
Switching point	Type 3 according to IEC 61131-2
Output	
Number/Type	16 electronic outputs, PNP (P1 ... P86), overload-proof and short-circuit-proof
Supply	from IO-Link
Voltage	≥ (U _B - 1.5 V)
Current	180 mA per output
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 EN 55011:2016
Standard conformity	
Degree of protection	EN 60529:2000
Input	EN 61131-2:2007
Communication interface	IEC 61131-9 / IO-Link V1.1.4
Emitted interference	EN 61000-6-4:2007
Noise immunity	EN 61000-6-2:2005, EN 61326-1:2006
Approvals and certificates	
UL approval	E223772 Power limitation by fuse in accordance with UL248-1, UL248-14, rated current 3 A. Protection of the personnel and the plant is not ensured if the product is not being used according to its intended use. Load specification DC General Use / DC Pilot Duty Degree of protection not tested by UL; tested by Pepperl+Fuchs SE Units shall be connected using CYJV or PVVA cord having suitable ratings min.50 V, min 4 A, min. 100 °C. The product must be installed in accordance with local laws.
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)
Relative humidity	85 % non-condensing
Climatic conditions	For indoor use only
Altitude	≤ 5000 m above MSL
Shock and impact resistance	30 g, 11 ms in 6 spatial directions, 3 shocks 10 g, 16 ms in 6 spatial directions, 1000 shocks
Vibration resistance	0.35 mm / 5 g 5 ... 500 Hz
Pollution degree	3
Mechanical specifications	
Degree of protection	IP68 / IP69K

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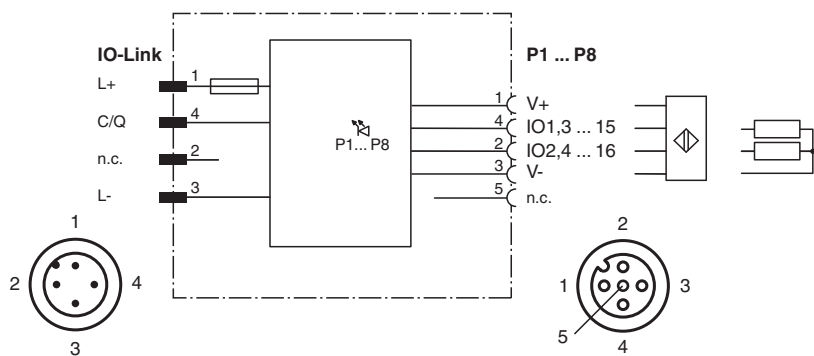
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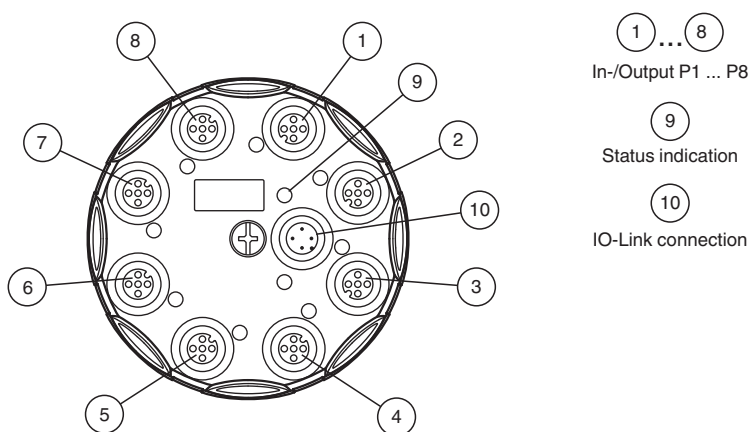
Technical Data

Connection	IO-Link: M12 round plug connector in accordance with EN 61076-2-101, LM type (4-pin, connector contacts, screw-locking, A-coded) Female connector: LF type or similar P: M12 round plug connector in accordance with EN 61076-2-101, LF type (4-pin, socket contacts, screw-locking, A-coded) Mating connector: LM type or similar	
Material		
Housing		PBT PC
Mounting screw		Stainless steel 1.4305 / AISI 303
Mass		200 g
Tightening torque, housing screws		1.8 Nm
Tightening torque, cable gland		0.4 Nm
Dimensions		
Height		46 mm
Diameter		85 mm
Connection		height 11 mm
Construction type		Field housing
Mounting		Mounting plate

Wiring Diagram



Assembly



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