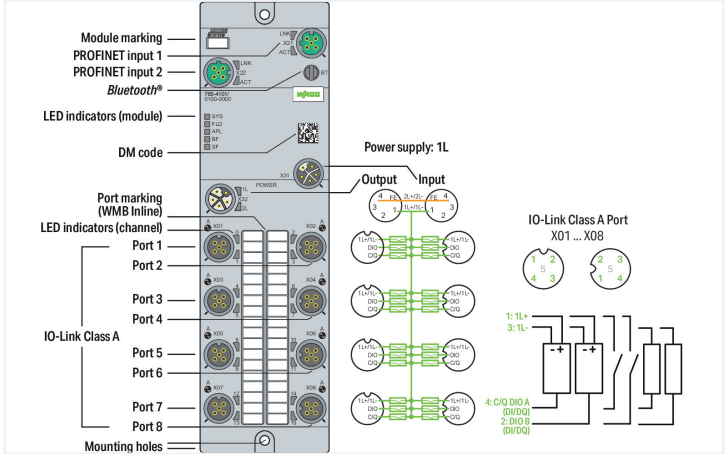




Application:
Decentralized processing of digital and IO-Link signals

This device records and controls IO-Link-capable digital field device signals (e.g., from sensors, actuators and hubs) that are received or controlled by a higher-level controller. The device is designed as a Class A master and offers eight IO-Link ports or 16 digital inputs/outputs.

IO-Link:
The device has several IO-Link communication interfaces for interoperation with IO-Link devices.
The IO-Link interface enables direct access to the process and diagnostic data and allows the parameters of the connected devices to be set during operation.
The IODD can also be <https://ioddfinder.io-link.com> downloaded via the IODDfinder.

Technical data			
Fieldbus		Device functions	
Communications	PROFINET PROFINET IO device; 2-port switch, LLDP, MRP, SNMP	Parameter	Input filter Output current Temperature
Connection technology: communication/ fieldbus	2 x D-coded M12; 4-pole	Diagnostics	Undervoltage; overcurrent; overload; overtemperature
Interface standard	10BASE-T/100BASE-TX; potential-free	Device functions	Bluetooth® OPC UA server
Autonegotiation; autocrossover	Yes	Visualization	Android/iOS app Web server
PROFINET IO features	PROFINET IO device; 2-port switch, LLDP, MRP, SNMP		



IO-Link master	
IO-Link master classification	Class A; V1.1 specification
Port-Modus	IO-Link: autoconfig, manual, tool-based DI DO
Cycle time	400 µs (min.)
Operating mode	IO-Link master, DI or DO (adjustable for pin 4 per port); DI or DO (adjustable for pin 2 per port)

IO-Link ports	
Number of digital inputs	16
Number of digital outputs	16
Connection technology: inputs/outputs	8 x A-coded M12; 5-pole
Signal type (voltage)	24 VDC
Input characteristic	high-side switching Type 3, per IEC 61131-2
Input filter	0.2 ... 20 ms
Output current (per channel)	2 A (typ.) for DO
Supply current per port	1L: 1 A for IO-Link; 4 A (max.) for DIO

Supply (module)	
Connection technology: supply	2 x L-coded M12; 5-pole
Supply voltage	24 VDC (18 ... 31.2 V); 1L
Current consumption (max.)	16000 mA
Current consumption (note)	per supply line; overload- and short-cir- cuit-protected
Reverse voltage protection	Yes

Physical data	
Width	60 mm / 2.362 inches
Height	30 mm / 1.181 inches
Depth	210 mm / 8.268 inches

Material data	
Fire load	0 MJ
Weight	610 g
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +80 °C
Protection type	IP67
Protection class	III per EN 61140, IEC 61140, VDE 0140-1
Pollution degree	3 (EN 60664-1)
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Relative humidity (without condensation)	95 %
Vibration resistance	5g per IEC 60068-2-6
Shock resistance	Short-term: 50g/11 ms/half-sine per IEC 60068-2-27; Long-term: 30g/6 ms/half-sine per IEC 60068-2-29
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-4



Commercial data		
PU (SPU)		1 pcs
Packaging type		Box
Country of origin		DE
GTIN		4055143949996
Customs tariff number		85371098990

Product classification		
UNSPSC		32151705
ETIM 9.0		EC001601
ETIM 8.0		EC001601
ECCN		NO US CLASSIFICATION

Environmental Product Compliance		
RoHS Compliance Status		Compliant,No Exemption
SCIP notification number (Austria)		3d1b5f75-0483-45fd-94ce-081697512ae4
SCIP notification number (Belgium)		2345134c-9018-4565-95d4-8989d408f3d5
SCIP notification number (Bulgaria)		3ebe2820-3366-4690-b9b3-41b90079f1b9
SCIP notification number (Czech Republic)		94b741cb-a59a-4c93-ab8e-fe235a561502
SCIP notification number (Denmark)		0adc9ac4-e60d-46c0-bfa9-6e30b0c06044
SCIP notification number (Finland)		d26c4196-9345-490c-bc64-07e80b4d51b5
SCIP notification number (France)		f1567d28-637b-4580-b962-7fc67b19afd7
SCIP notification number (Germany)		ec77edca-13ab-40d1-b1c0-987ff3355111
SCIP notification number (Hungary)		2869872b-f535-42f4-847c-eceb43f0a0c2
SCIP notification number (Italy)		f95be9a8-4689-407b-89d1-1a535a82b8bc
SCIP notification number (Netherlands)		46e786b0-3e2d-435a-b6e6-33f69ba20460
SCIP notification number (Poland)		2bd9299e-30d5-4051-bc95-7c46764e5617
SCIP notification number (Romania)		b8658276-5634-4d52-a5a9-4159c451ac9a
SCIP notification number (Sweden)		b3ad0cc5-fb1c-4cef-8923-368ed8406760

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KC National Radio Research Agency	Article 58-2, Clause 3	KC R-R-W43-FB765			
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	-	E175199			



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance

765-4101/100-000

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Documentation

Manual

Product Manual 8-Port IO-Link Master Class A; Profinet

1561688587 | 6 | en-US | 2024-11-12 18:30 16.01.2025

pdf

9956.84 KB

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System Description

WAGO I/O System Field; General Product Information

pdf

1009.23 KB

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Instruction Leaflet

I/O System Field package insert

V 1.3.0 01.04.2025

pdf

1083.98 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models 765-4101/100-000

↓

CAE data

EPLAN Data Portal 765-4101/100-000

↓

ZUKEN Portal 765-4101/100-000

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Libraries

Device Description File

750-916; GSD files of version 2.x for PROFINET/ series 750/753, 765, 767 and 852

3.0 15.01.2023

zip

2582.40 KB

↓

Gerätebeschreibungsdateien 765-41xx, 765-11xx, PROFINET

V1_1_0_22

zip

27.85 KB

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1 Compatible Products

1.1 Required Accessories

1.1.1 Cover

1.1.1.1 Cover



Item No.: 756-8103
M12 protective cap; for unused plugs



Item No.: 756-8102
M12 protective cap; for unused sockets



1.1.2 Marking

1.1.2.1 Marker



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.2.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.3 Tool

1.1.3.1 Assembly tool



Item No.: 206-701
Torque wrench M8 and M12; Assembly kit

1.2 Optional Accessories

1.2.1 Cables and connectors

1.2.1.1 Adapter



Item No.: 756-9503/040-000
Accessories; 4-pole



Item No.: 756-9504/040-000
Accessories; 4-pole

1.2.1.2 Configurable Connector



Item No.: 756-9205/040-000
Fitted pluggable connector; 4-pole; M12 plug, right angle; Spring



Item No.: 756-9202/040-000
Fitted pluggable connector; 4-pole; M12 plug, straight, A-coded; Spring



Item No.: 756-9701/050-000
Fitted pluggable connector; 5-pole, shielded; M12 plug, straight; IDC technology



Item No.: 756-9711/050-000
Fitted pluggable connector; 5-pole, shielded; M12 socket, straight; IDC technology

1.2.1.3 Configurable Shielded Connector



Item No.: 756-9501/040-000
Accessories; M12 plug, right angle; 4-pole



Item No.: 756-9501/060-000
Fitted pluggable connector; 4-pole, shielded; M12 plug, straight, D-coded; Spring



1.2.1.4 Distribution connector

 Item No.: 756-9301/040-000 Accessories; 4-pole	 Item No.: 756-9301/050-000 Accessories; 5-pole	 Item No.: 756-5517/040-010 Sensor/Actuator cable; 2xM12 socket; angled; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5517/040-020 Sensor/Actuator cable; 2xM12 socket; angled; M12A plug; straight; 4-pole; Length: 2 m
 Item No.: 756-5516/040-010 Sensor/Actuator cable; 2xM12 socket; straight; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5516/040-020 Sensor/Actuator cable; 2xM12 socket; straight; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5514/040-010 Sensor/Actuator cable; 2xM8 socket; angled; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5514/040-020 Sensor/Actuator cable; 2xM8 socket; angled; M12A plug; straight; 4-pole; Length: 2 m
 Item No.: 756-5513/040-010 Sensor/Actuator cable; 2xM8 socket; straight; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5513/040-020 Sensor/Actuator cable; 2xM8 socket; straight; M12A plug; straight; 4-pole; Length: 2 m		

1.2.1.5 ETHERNET/PROFINET cable

 Item No.: 756-1202/060-100 ETHERNET cable; M12D plug; angled; 4-pole; Length: 10 m	 Item No.: 756-1202/060-020 ETHERNET cable; M12D plug; angled; 4-pole; Length: 2 m	 Item No.: 756-1202/060-200 ETHERNET cable; M12D plug; angled; 4-pole; Length: 20 m	 Item No.: 756-1202/060-050 ETHERNET cable; M12D plug; angled; 4-pole; Length: 5 m
 Item No.: 756-1204/060-010 ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 1 m	 Item No.: 756-1204/060-100 ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 10 m	 Item No.: 756-1204/060-020 ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 2 m	 Item No.: 756-1204/060-200 ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 20 m
 Item No.: 756-1204/060-030 ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 3 m	 Item No.: 756-1204/060-050 ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 5 m	 Item No.: 756-1201/060-100 ETHERNET cable; M12D plug; straight; 4-pole; Length: 10 m	 Item No.: 756-1201/060-020 ETHERNET cable; M12D plug; straight; 4-pole; Length: 2 m
 Item No.: 756-1201/060-200 ETHERNET cable; M12D plug; straight; 4-pole; Length: 20 m	 Item No.: 756-1201/060-050 ETHERNET cable; M12D plug; straight; 4-pole; Length: 5 m	 Item No.: 756-1203/060-100 ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 10 m	 Item No.: 756-1203/060-020 ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 2 m
 Item No.: 756-1203/060-200 ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 20 m	 Item No.: 756-1203/060-050 ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 5 m		

1.2.1.6 Power cable

 Item No.: 756-3504/050-100 Power cable; M12L plug; angled; 5-pole; Length: 10 m	 Item No.: 756-3514/050-100 Power cable; M12L plug; angled; 5-pole; Length: 10 m	 Item No.: 756-3504/050-150 Power cable; M12L plug; angled; 5-pole; Length: 15 m	 Item No.: 756-3514/050-150 Power cable; M12L plug; angled; 5-pole; Length: 15 m
 Item No.: 756-3504/050-020 Power cable; M12L plug; angled; 5-pole; Length: 2 m	 Item No.: 756-3504/050-050 Power cable; M12L plug; angled; 5-pole; Length: 5 m	 Item No.: 756-3514/050-050 Power cable; M12L plug; angled; 5-pole; Length: 5 m	 Item No.: 756-3504/050-075 Power cable; M12L plug; angled; 5-pole; Length: 7.5 m
 Item No.: 756-3514/050-075 Power cable; M12L plug; angled; 5-pole; Length: 7.5 m	 Item No.: 756-3503/050-100 Power cable; M12L plug; straight; 5-pole; Length: 10 m	 Item No.: 756-3513/050-100 Power cable; M12L plug; straight; 5-pole; Length: 10 m	 Item No.: 756-3503/050-150 Power cable; M12L plug; straight; 5-pole; Length: 15 m



1.2.1.6 Power cable

 Item No.: 756-3513/050-150 Power cable; M12L plug; straight; 5-pole; Length: 15 m	 Item No.: 756-3503/050-020 Power cable; M12L plug; straight; 5-pole; Length: 2 m	 Item No.: 756-3513/050-020 Power cable; M12L plug; straight; 5-pole; Length: 2 m	 Item No.: 756-3503/050-050 Power cable; M12L plug; straight; 5-pole; Length: 5 m
 Item No.: 756-3513/050-050 Power cable; M12L plug; straight; 5-pole; Length: 5 m	 Item No.: 756-3503/050-075 Power cable; M12L plug; straight; 5-pole; Length: 7.5 m	 Item No.: 756-3513/050-075 Power cable; M12L plug; straight; 5-pole; Length: 7.5 m	 Item No.: 756-3502/050-100 Power cable; M12L socket; angled; 5-pole; Length: 10 m
 Item No.: 756-3512/050-100 Power cable; M12L socket; angled; 5-pole; Length: 10 m	 Item No.: 756-3502/050-150 Power cable; M12L socket; angled; 5-pole; Length: 15 m	 Item No.: 756-3512/050-150 Power cable; M12L socket; angled; 5-pole; Length: 15 m	 Item No.: 756-3502/050-020 Power cable; M12L socket; angled; 5-pole; Length: 2 m
 Item No.: 756-3512/050-020 Power cable; M12L socket; angled; 5-pole; Length: 2 m	 Item No.: 756-3502/050-050 Power cable; M12L socket; angled; 5-pole; Length: 5 m	 Item No.: 756-3512/050-050 Power cable; M12L socket; angled; 5-pole; Length: 5 m	 Item No.: 756-3502/050-075 Power cable; M12L socket; angled; 5-pole; Length: 7.5 m
 Item No.: 756-3512/050-075 Power cable; M12L socket; angled; 5-pole; Length: 7.5 m	 Item No.: 756-3506/050-003 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 0.3 m	 Item No.: 756-3506/050-005 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 0.5 m	 Item No.: 756-3516/050-005 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 0.5 m
 Item No.: 756-3506/050-010 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 1 m	 Item No.: 756-3516/050-010 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 1 m	 Item No.: 756-3506/050-100 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 10 m	 Item No.: 756-3516/050-100 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 10 m
 Item No.: 756-3506/050-150 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 15 m	 Item No.: 756-3506/050-020 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 2 m	 Item No.: 756-3516/050-020 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 2 m	 Item No.: 756-3516/050-200 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 20 m
 Item No.: 756-3516/050-400 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 40 m	 Item No.: 756-3506/050-050 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 5 m	 Item No.: 756-3516/050-050 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 5 m	 Item No.: 756-3506/050-075 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 7.5 m
 Item No.: 756-3516/050-075 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 7.5 m	 Item No.: 756-3501/050-100 Power cable; M12L socket; straight; 5-pole; Length: 10 m	 Item No.: 756-3511/050-100 Power cable; M12L socket; straight; 5-pole; Length: 10 m	 Item No.: 756-3501/050-150 Power cable; M12L socket; straight; 5-pole; Length: 15 m
 Item No.: 756-3511/050-150 Power cable; M12L socket; straight; 5-pole; Length: 15 m	 Item No.: 756-3501/050-020 Power cable; M12L socket; straight; 5-pole; Length: 2 m	 Item No.: 756-3511/050-020 Power cable; M12L socket; straight; 5-pole; Length: 2 m	 Item No.: 756-3501/050-050 Power cable; M12L socket; straight; 5-pole; Length: 5 m
 Item No.: 756-3511/050-050 Power cable; M12L socket; straight; 5-pole; Length: 5 m	 Item No.: 756-3501/050-075 Power cable; M12L socket; straight; 5-pole; Length: 7.5 m	 Item No.: 756-3511/050-075 Power cable; M12L socket; straight; 5-pole; Length: 7.5 m	 Item No.: 756-3505/050-003 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 0.3 m
 Item No.: 756-3505/050-005 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 0.5 m	 Item No.: 756-3515/050-005 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 0.5 m	 Item No.: 756-3505/050-010 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 1 m	 Item No.: 756-3515/050-010 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 1 m
 Item No.: 756-3505/050-100 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 10 m	 Item No.: 756-3515/050-100 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 10 m	 Item No.: 756-3505/050-150 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 15 m	 Item No.: 756-3505/050-020 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 2 m



1.2.1.6 Power cable

 Item No.: 756-3515/050-020 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 2 m	 Item No.: 756-3515/050-200 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 20 m	 Item No.: 756-3515/050-300 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 30 m	 Item No.: 756-3515/050-400 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 40 m
 Item No.: 756-3505/050-050 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 5 m	 Item No.: 756-3515/050-050 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 5 m	 Item No.: 756-3505/050-075 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 7.5 m	 Item No.: 756-3515/050-075 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 7.5 m

1.2.1.7 Sensor/actuator cable

 Item No.: 756-5312/040-015 Sensor/Actuator cable; M12A plug; angled; 4-pole; Length: 1.5 m	 Item No.: 756-5312/040-100 Sensor/Actuator cable; M12A plug; angled; 4-pole; Length: 10 m	 Item No.: 756-5312/040-050 Sensor/Actuator cable; M12A plug; angled; 4-pole; Length: 5 m	 Item No.: 756-5311/040-015 Sensor/Actuator cable; M12A plug; straight; 4-pole; Length: 1.5 m
 Item No.: 756-5311/040-100 Sensor/Actuator cable; M12A plug; straight; 4-pole; Length: 10 m	 Item No.: 756-5311/040-050 Sensor/Actuator cable; M12A plug; straight; 4-pole; Length: 5 m	 Item No.: 756-5404/040-010 Sensor/Actuator cable; M12A socket; angled; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5404/040-020 Sensor/Actuator cable; M12A socket; angled; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5403/040-010 Sensor/Actuator cable; M12A socket; angled; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5403/040-020 Sensor/Actuator cable; M12A socket; angled; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5402/040-010 Sensor/Actuator cable; M12A socket; straight; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5402/040-020 Sensor/Actuator cable; M12A socket; straight; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5401/040-010 Sensor/Actuator cable; M12A socket; straight; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5401/040-020 Sensor/Actuator cable; M12A socket; straight; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5510/040-010 Sensor/Actuator cable; M8 socket; angled; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5510/040-020 Sensor/Actuator cable; M8 socket; angled; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5509/040-010 Sensor/Actuator cable; M8 socket; angled; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5509/040-020 Sensor/Actuator cable; M8 socket; angled; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5508/040-010 Sensor/Actuator cable; M8 socket; straight; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5508/040-020 Sensor/Actuator cable; M8 socket; straight; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5507/040-010 Sensor/Actuator cable; M8 socket; straight; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5507/040-020 Sensor/Actuator cable; M8 socket; straight; M12A plug; straight; 4-pole; Length: 2 m		

1.2.2 Software

1.2.2.1 Programming and configuration software

 Item No.: 2759-106/1121-1000 IO-Link Configurator; Single License; Online activation
