



Inductive proximity sensors

Rectangle: JPA17 series, JPA25 series, JPA30 series, JPA40 series

Cylindrical: JSM8 series, JM12 series, Series JM18, JM30 series

JPA Series



JSM Series



JM Series



Order code selection:

TYPE

J: inductive

DESIGN

Blank: standard design

MATERIAL

P: Plastics
S: Stainless Steel
Blank: nickel-copper

SHAPE

Axx: Rectangle
Mxx: Cylindrical

DIMENSION S

Blank: standard design

SENSING DISTANCE

XX: mm
U: Non-embedded
E: Embedded

<u>JPA17</u>	<u>JPA25</u>	<u>JPA30</u>
08U	10U	15U
05E	08E	10E

<u>JPA40</u>	<u>JSM8</u>	<u>JM30</u>
20U	02U	15U
15E	04U	22U
	1E5	40U

<u>JM12</u>	02E	10E
04U		15E
08U		22E
10U		
02E		
04E		
06E		
05E		
08E		
12E		

OUTPUT

D1: DC3, NPN NO
D2: DC3, PNP NO
D3: DC3, NPN NC
D4: DC3, PNP NC

TERMINATION

C2: 2m cable
C3: 3m cable
C4: 4m cable
C5: 5m cable
X: M8 connector
Y: M12 connector

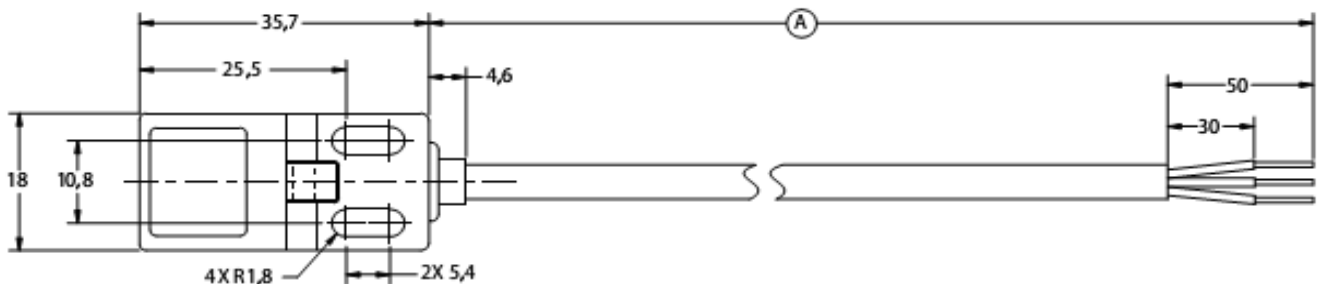
Rectangular Series Specifications

JPA17, JPA25, JPA30, JPA40 series

	JPA17	JPA25	JPA30	JPA40
Supply voltage	12 Vdc - 24 Vdc			
Operating voltage	10 Vdc - 30 Vdc			
Load current	Max. 100mA		Max. 200mA	
Circuit Protection	Reverse polarity protection, short circuit protection			
Dielectric strength	≥ 1000 Vac, 1 min			
Insulation resistance	≥ 500 M Ω (500 Vdc)			
Operating temperature range	-25 °C - 70 °C			
Operating humidity range	35% RH - 95% RH			
IP protection	IP67			
Housing material	30 % ABS 70 % PBT			
Plug	Black PVC			
Installation: Screw Size	M3	M4	M4	M5
Moment	0,7 N m	1.5 N m	1.5 N m	2 N m
Termination	cable	cable	cable	cable
Indicator	Single red LED lights			

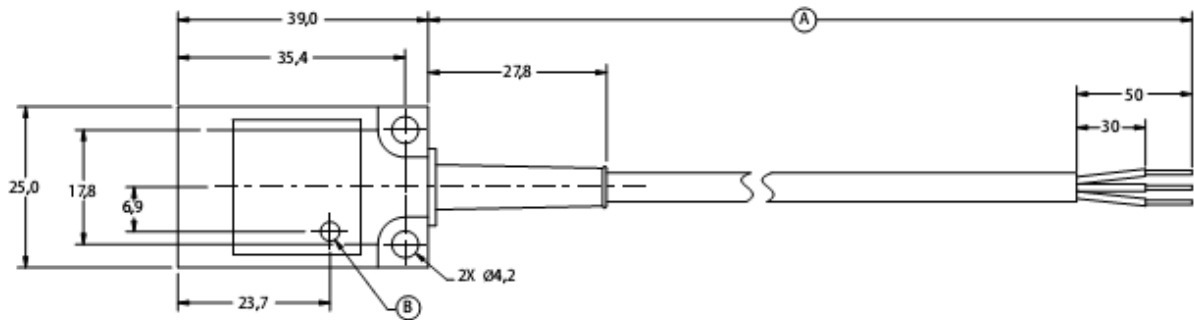
JPA17

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)
Non-embedded	8mm	NPN NO	500Hz	≤ 10 mA	≤ 2 V (100 mA load)	3% - 10% Sn1	< 3% Sn1	JPA1708UD1C2
		PNP NO						JPA1708UD2C2
		NPN NC						JPA1708UD3C2
		PNP NC						JPA1708UD4C2
Embedded	5mm	NPN NO	600Hz					JPA1705ED1C2
		PNP NO						JPA1705ED2C2
		NPN NC						JPA1705ED3C2
		PNP NC						JPA1705ED4C2



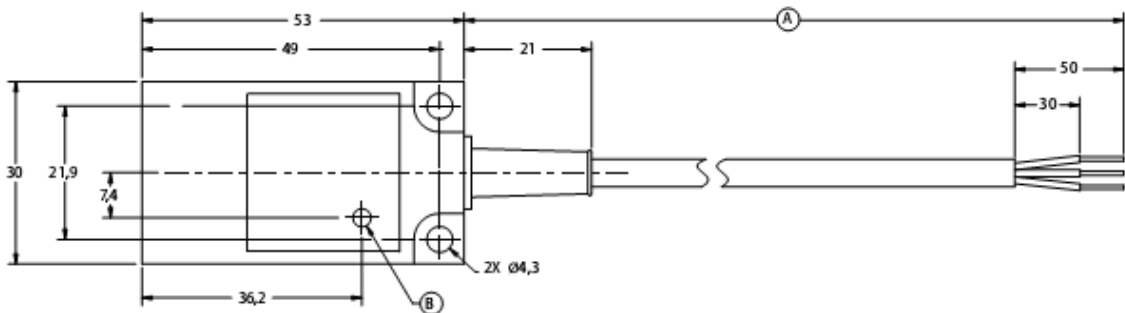
JPA25

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)
Non-embedded	10 mm	NPN NO	500Hz	≤ 10 mA	≤ 2 V (100 mA load)	3% - 10% Sn1	< 3% Sn1	JPA2510UD1C2
		PNP NO						JPA2510UD2C2
		NPN NC						JPA2510UD3C2
		PNP NC						JPA2510UD4C2
Embedded	8 mm	NPN NO	600Hz					JPA2508ED1C2
		PNP NO						JPA2508ED2C2
		NPN NC						JPA2508ED3C2
		PNP NC						JPA2508ED4C2



JPA30

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)
Non-embedded	15 mm	NPN NO	500Hz	≤ 10 mA	≤ 2 V (100 mA load)	3% - 10% Sn1	< 3% Sn1	JPA3015UD1C2
		PNP NO						JPA3015UD2C2
		NPN NC						JPA3015UD3C2
		PNP NC						JPA3015UD4C2
Embedded	10 mm	NPN NO	600Hz					JPA3010ED1C2
		PNP NO						JPA3010ED2C2
		NPN NC						JPA3010ED3C2
		PNP NC						JPA3010ED4C2

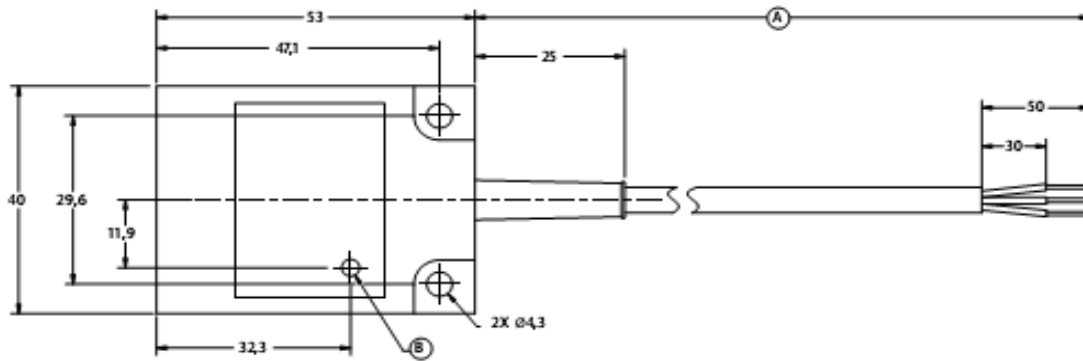


JPA40

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)
Non-embedded	20 mm	NPN NO	500Hz	≤ 10 mA	≤ 2 V (100 mA load)	3% - 10% Sn1	< 3% Sn1	JPA4020UD1C2
		PNP NO						JPA4020UD2C2
		NPN NC						JPA4020UD3C2
		PNP NC						JPA4020UD4C2
Embedded	15 mm	NPN NO	600Hz					JPA4015ED1C2
		PNP NO						JPA4015ED2C2
		NPN NC						JPA4015ED3C2
		PNP NC						JPA4015ED4C2

(1) with 2 m cable

(2) For other cable lengths see Order code selection



(A) Cable length

(B) Sensing Center

(C) Housing: ABS (30%) PBT (70%)

(D) Red LED

(E) Plug: PVC rubber

(F) **JPA17**: Cable: 4.0 mm diameter, 3 X 0.2mm², CCC, SGS certification

JPA25, JPA30, JPA40: Cable: 4.0 mm diameter, 3 X 0.2mm², CCC, SGS certification

Cylindrical Series Specifications

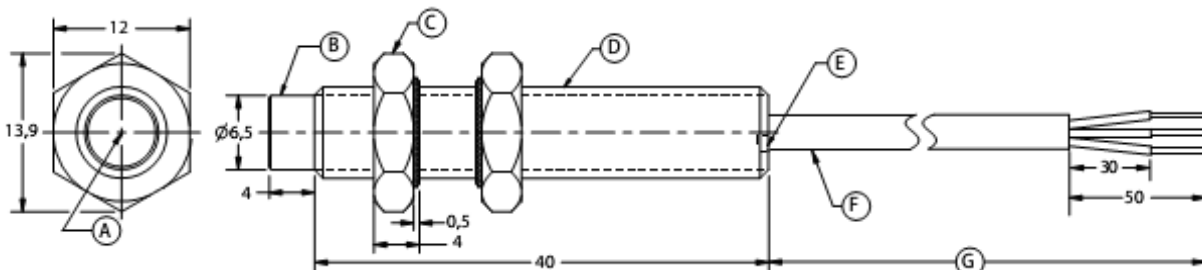
JSM8, JM12, JM18, JM30 series

	JSM8	JM12	JM18	JM30
Supply voltage	12 Vdc - 24 Vdc			
Operating voltage	10 Vdc - 30 Vdc			
Load current	Max. 100mA	Max. 200mA		
Voltage drop	2V			
Leakage Current	Maximum 0.1 uA			
Circuit Protection	Reverse polarity protection, short circuit protection			
Dielectric strength	≥ 1000 Vac, 1 min			
Insulation resistance	≥ 500 M Ω (500 Vdc)			
Operating temperature range	-25 °C - 70 °C			
Operating humidity range	35% RH - 95% RH			
IP protection	IP67			
Housing material	Stainless steel	Nickel-plated brass		
Termination	Pre-wired cable, 4-pin M8 connector 4-pin M12 connector	Pre-wired cable, 4-pin M12 connector		
Installation torque	4.5 Nm	18 Nm	28 Nm	82 Nm
Indicator	360 ° red LED lights 1 or 4 LED lights (depending on the model)			

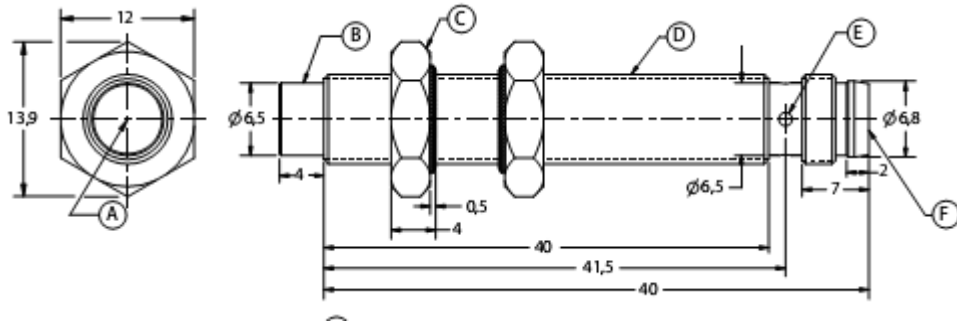
JSM8

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)
Non-embedded	4 mm	NPN NO	300Hz	≤ 10 mA	≤ 2 V (100 mA load)	3% - 10% Sn1	$< 3\%$ Sn1	JSM804UD1C2
		PNP NO						JSM804UD2C2
		NPN NC						JSM804UD3C2
		PNP NC						JSM804UD4C2
	2 mm	NPN NO						JSM802UD1C2
		PNP NO						JSM802UD2C2
		NPN NC						JSM802UD3C2
		PNP NC						JSM802UD4C2
Embedded	1.5 mm	NPN NO	300Hz	≤ 10 mA	≤ 2 V (100 mA load)	3% - 15% Sn1	$< 3\%$ Sn1	JSM81E5D1C2
		PNP NO						JSM81E5D2C2
		NPN NC						JSM81E5D3C2
		PNP NC						JSM81E5D4C2
	2 mm	NPN NO						JSM802ED1C2
		PNP NO						JSM802ED2C2
		NPN NC						JSM802ED3C2
		PNP NC						JSM802ED4C2

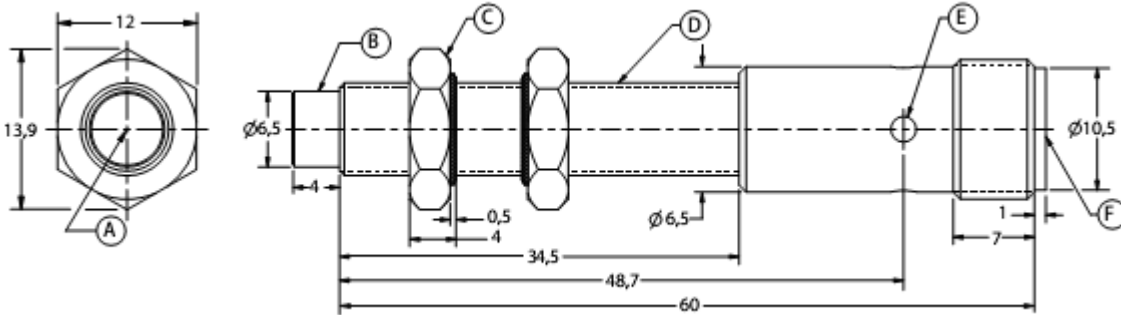
Pre-wired cable



M8 connector



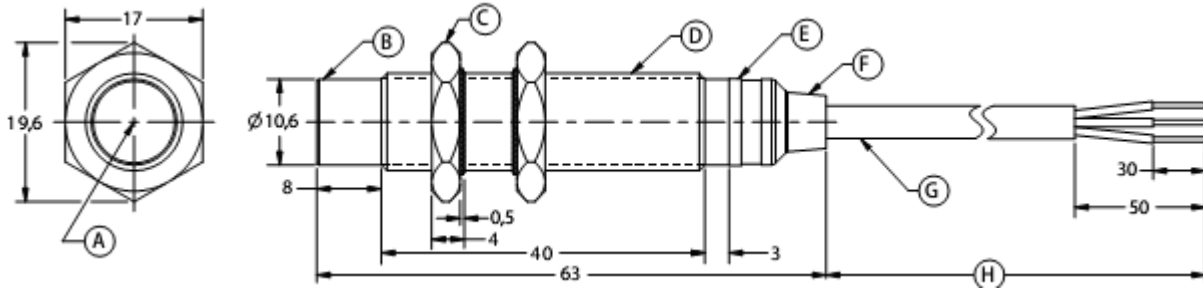
M12 connector



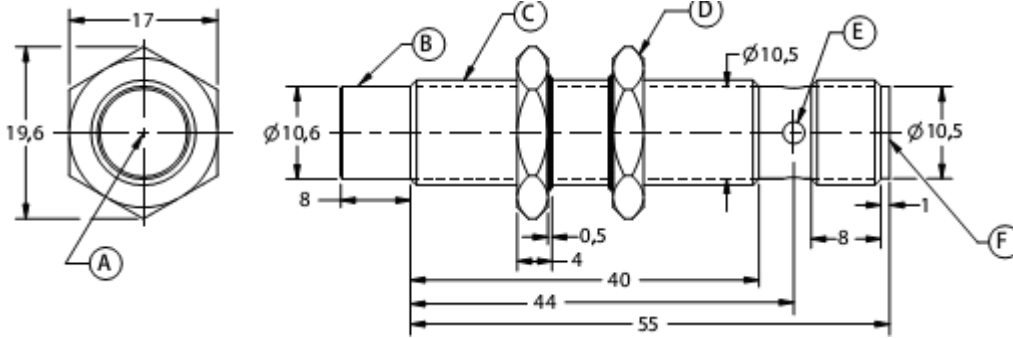
JM12

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)								
Non-embedded	8 mm	NPN NO	500 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM1208UD1C2								
		PNP NO						JM1208UD2C2								
		NPN NC						JM1208UD3C2								
		PNP NC						JM1208UD4C2								
	10 mm	NPN NO	300 Hz					JM1210UD1C2								
		PNP NO						JM1210UD2C2								
		NPN NC						JM1210UD3C2								
		PNP NC						JM1210UD4C2								
	4 mm	NPN NO	1000 Hz					≤ 10 mA	≤ 2 V (200 mA load)	3% - 10% Sn1	< 3% Sn1	JM1204UD1C2				
		PNP NO										JM1204UD2C2				
		NPN NC										JM1204UD3C2				
		PNP NC										JM1204UD4C2				
Embedded	2 mm	NPN NO	1500 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1					JM1202ED1C2				
		PNP NO										JM1202ED2C2				
		NPN NC										JM1202ED3C2				
		PNP NC										JM1202ED4C2				
	4 mm	NPN NO	800 Hz									≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM1204ED1C2
		PNP NO														JM1204ED2C2
		NPN NC														JM1204ED3C2
		PNP NC														JM1204ED4C2
	6 mm	NPN NO	500 Hz					≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1					JM1206ED1C2
		PNP NO														JM1206ED2C2
		NPN NC														JM1206ED3C2
		PNP NC														JM1206ED4C2

Pre-wired cable



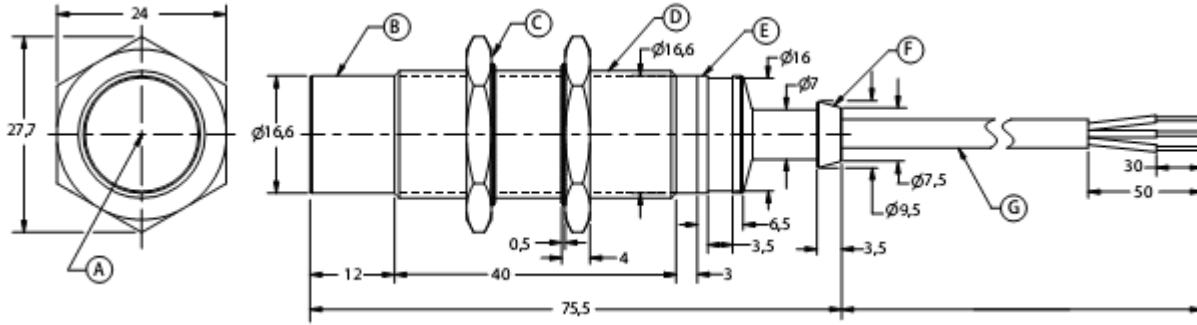
M12 connector



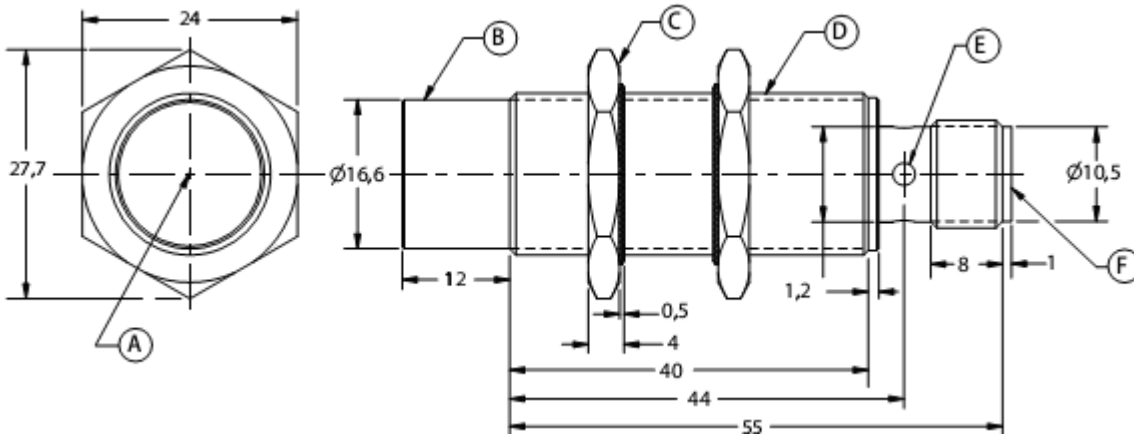
JM18

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)	
Non-embedded	12 mm	NPN NO	150 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM1812UD1C2	
		PNP NO						JM1812UD2C2	
		NPN NC						JM1812UD3C2	
		PNP NC						JM1812UD4C2	
	20 mm	NPN NO	800 Hz	≤ 10 mA	≤ 2 V (200 mA load)	3% - 10% Sn1	< 3% Sn1	JM1820UD1C2	
		PNP NO						JM1820UD2C2	
		NPN NC						JM1820UD3C2	
		PNP NC						JM1820UD4C2	
	Embedded	5 mm	NPN NO	1000 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM1805ED1C2
			PNP NO						JM1805ED2C2
			NPN NC						JM1805ED3C2
			PNP NC						JM1805ED4C2
8 mm		NPN NO	300 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM1808ED1C2	
		PNP NO						JM1808ED2C2	
		NPN NC						JM1808ED3C2	
		PNP NC						JM1808ED4C2	
12 mm	NPN NO	300 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM1812ED1C2		
	PNP NO						JM1812ED2C2		
	NPN NC						JM1812ED3C2		
	PNP NC						JM1812ED4C2		

Pre-wired cable



M12 connector



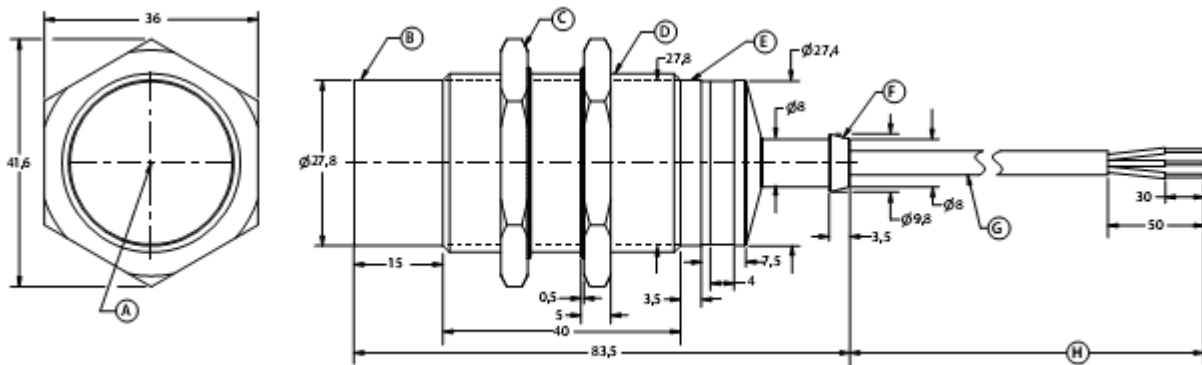
JM30

Non-embedded Embedded	Sensing distance	Sensor output (Sn1)	Frequency response	Current consumption	Voltage drop (1)	Hysteresis	Repeatability	Oder (2)								
Non-embedded	22 mm	NPN NO	100 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM3022UD1C2								
		PNP NO						JM3022UD2C2								
		NPN NC						JM3022UD3C2								
		PNP NC						JM3022UD4C2								
	40 mm	NPN NO	50 Hz					JM3040UD1C2								
		PNP NO						JM3040UD2C2								
		NPN NC						JM3040UD3C2								
		PNP NC						JM3040UD4C2								
	15 mm	NPN NO	300 Hz					≤ 10 mA	≤ 2 V (200 mA load)	3% - 10% Sn1	< 3% Sn1	JM3015UD1C2				
		PNP NO										JM3015UD2C2				
		NPN NC										JM3015UD3C2				
		PNP NC										JM3015UD4C2				
Embedded	10 mm	NPN NO	500 Hz	≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1					JM3010ED1C2				
		PNP NO										JM3010ED2C2				
		NPN NC										JM3010ED3C2				
		PNP NC										JM3010ED4C2				
	15 mm	NPN NO	100 Hz									≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1	JM3015ED1C2
		PNP NO														JM3015ED2C2
		NPN NC														JM3015ED3C2
		PNP NC														JM3015ED4C2
	22 mm	NPN NO	100 Hz					≤ 15 mA	≤ 2.5 V (200 mA load)	3% - 15% Sn1	< 5% Sn1					JM3022ED1C2
		PNP NO														JM3022ED2C2
		NPN NC														JM3022ED3C2
		PNP NC														JM3022ED4C2

(1) with 2 m cable

(2) For other cable lengths see Order code selection

Pre-wired cable



M12 connector

