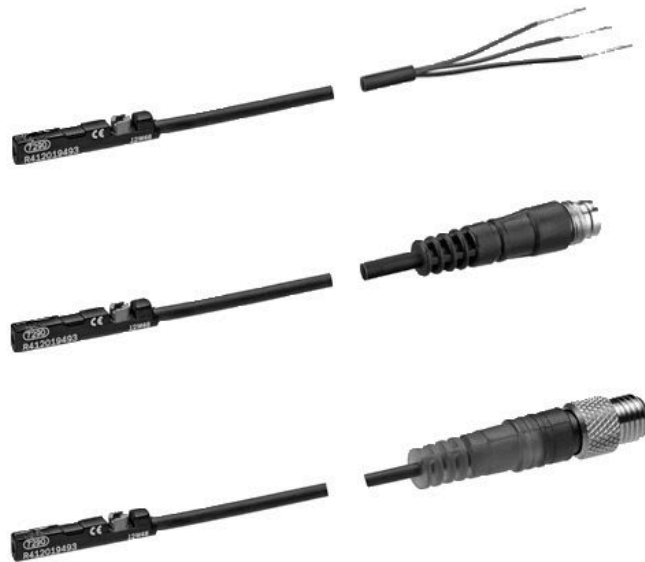


# ST4-2P



**AVENTICS™**

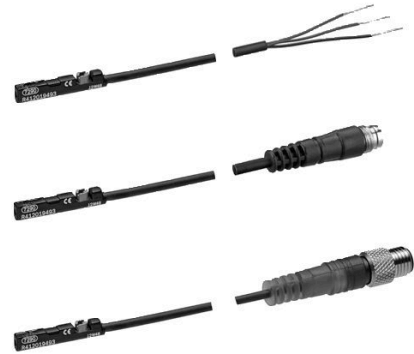
**AVENTICS Series ST4 Magnetic  
proximity sensors**



## Sensors, Series ST4-2P

The AVENTICS Series ST4-2P sensors make it possible to measure any two switching points in a 50 mm range using just one sensor in a 4 mm C-slot. As a result, there is no need to install a second sensor, making the process easier, faster and more precise. Assembly and cabling effort are also halved. A serial interface is provided for diagnosis and configuration.

- One sensor for two switching points
- Two switch outputs 2x PNP make contact
- Only one C-groove is assigned
- IO-Link
- Half the effort for assembly and wiring
- Intuitive, precise programming of switching points



## Product overview

### **Magnetic proximity sensors**

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### **Electrical accessories**

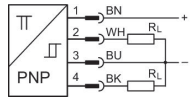
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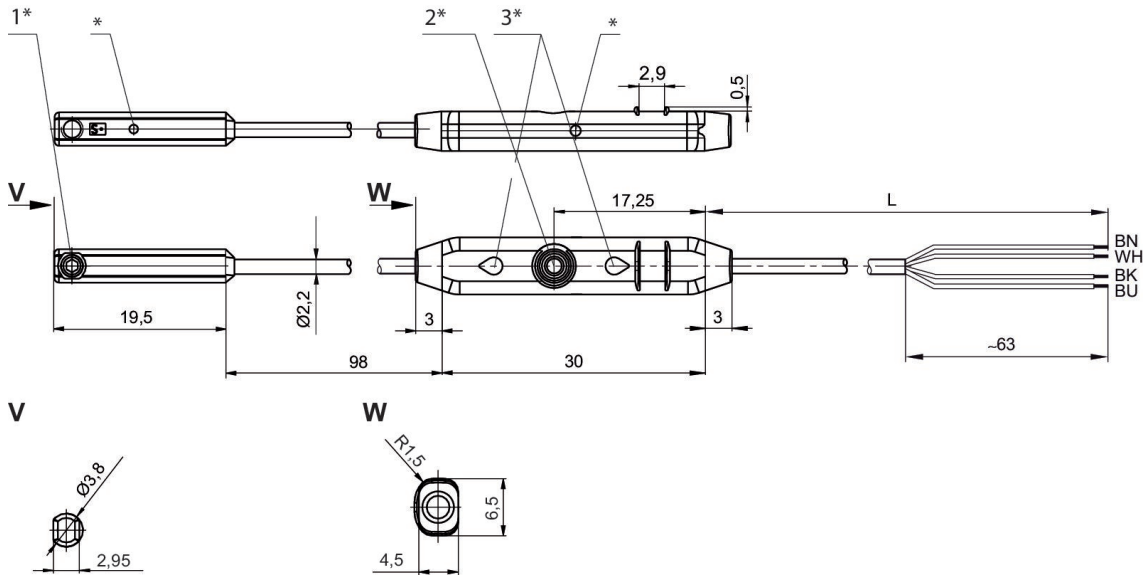
**Sensors, Series ST4-2P, with cable, without wire end ferrule, tin-plated**

For series: PRA SSI RTC GPC MSC MSN RCM CVI  
Electrical connection 2, type: without wire end ferrule, tin-plated  
Certificates: RoHS



Direct mounting for series	Indirect mounting for series	Slot width	Switch descr.	Electrical connection number of poles	Part No.
PRA, SSI, RTC, GPC, MSC, MSN, RCM, CVI	MNI, CSL-RD, ICM	4 mm C-slot	electronic PNP	4-pin	R412010139

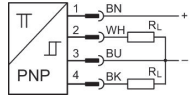
**Dimensions**



1\* = mounting screw 2\* = teach button 3\* = LED  
L = cable length  
(2) WH=white  
\* Switching point

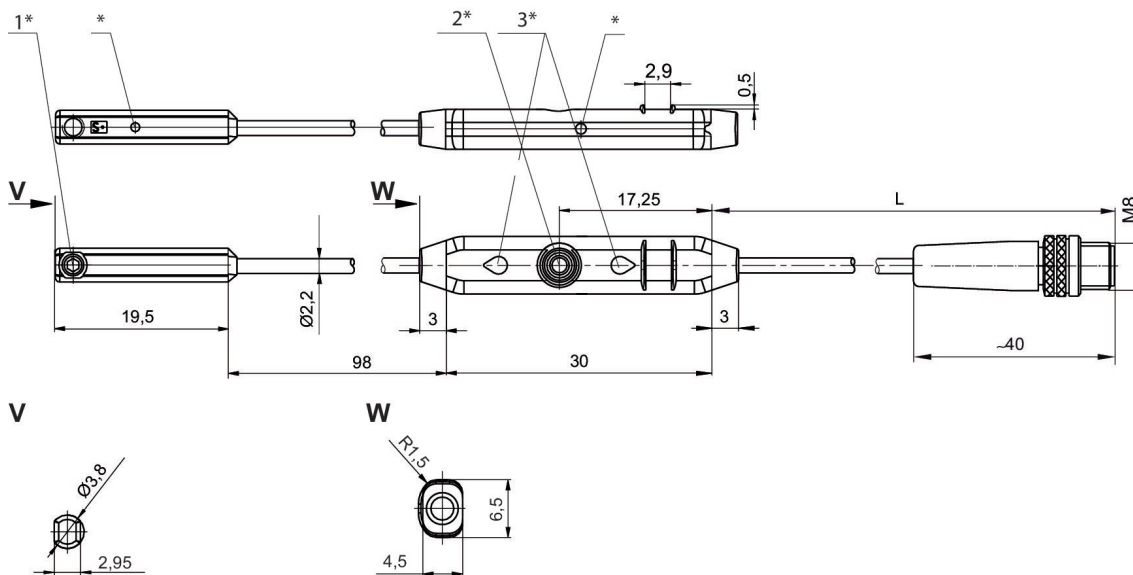
**Sensors, Series ST4-2P, with cable, plug M8x1**

For series: PRA SSI RTC GPC MSC MSN RCM CVI  
 Electrical connection 2, type: Plug  
 Electrical connection 2, thread size: M8x1  
 Certificates: RoHS  
 Electrical connection 2, number of poles: 4-pin



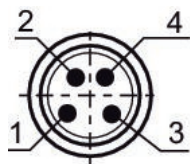
Direct mounting for series	Indirect mounting for series	Slot width	Switch descr.	Electrical connection size	Electrical connection number of poles	Part No.
PRA, SSI, RTC, GPC, MSC, MSN, RCM, CVI	MNI, CSL-RD, ICM	4 mm C-slot	electronic PNP	M8x1	4-pin	R412010140

**Dimensions**



1\* = mounting screw 2\* = teach button 3\* = LED  
 L = cable length  
 \* Switching point

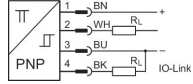
**R412010140**



Pin	Allocation
1	(+)
2	(OUT)
3	(-)
4	(OUT)

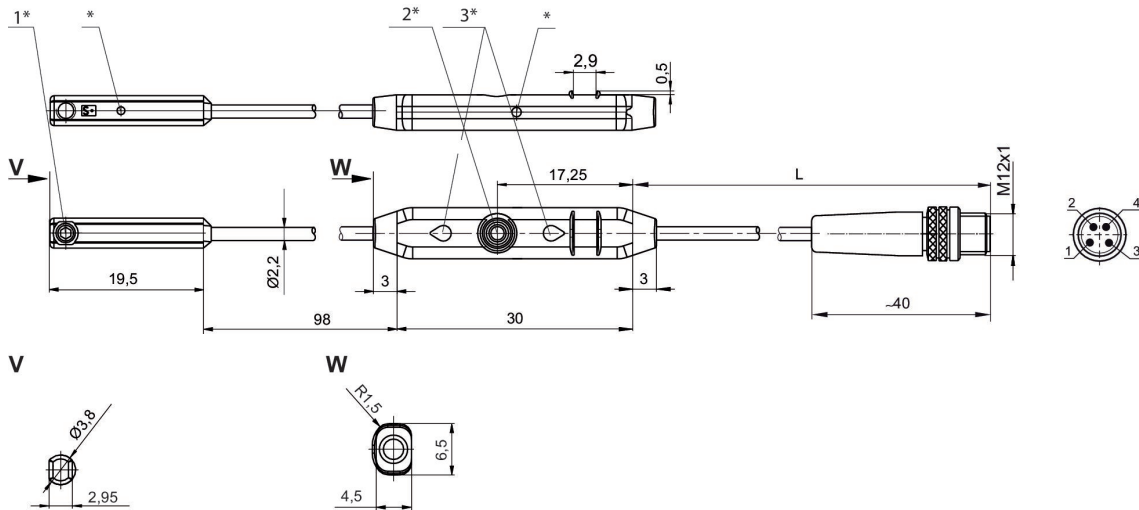
**Sensors, Series ST4-2P, with cable, plug M12x1, IO-Link**

For series: PRA SSI RTC GPC MSC MSN RCM CVI  
 Electrical connection 2, type: Plug  
 Electrical connection 2, thread size: M12x1  
 Certificates: RoHS  
 Electrical connection 2, number of poles: 4-pin



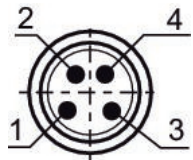
Direct mounting for series	Indirect mounting for series	Slot width	Switch descr.	Electrical connection size	Electrical connection number of poles	Part No.
PRA, SSI, RTC, GPC, MSC, MSN, RCM, CVI	MNI, CSL-RD, ICM	4 mm C-slot	electronic PNP	M12x1	4-pin	R412023459

**Dimensions**



1\* = mounting screw 2\* = teach button 3\* = LED  
 L = cable length  
 PIN assignment: 1 = (+), 2 = (OUT), 3 = (-), 4 = (OUT) IO-Link  
 \* Switching point

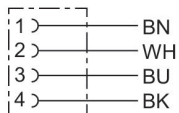
**R412023459**



Pin	Allocation
1	(+)
2	(OUT)
3	(-)
4	(OUT) IO-Link

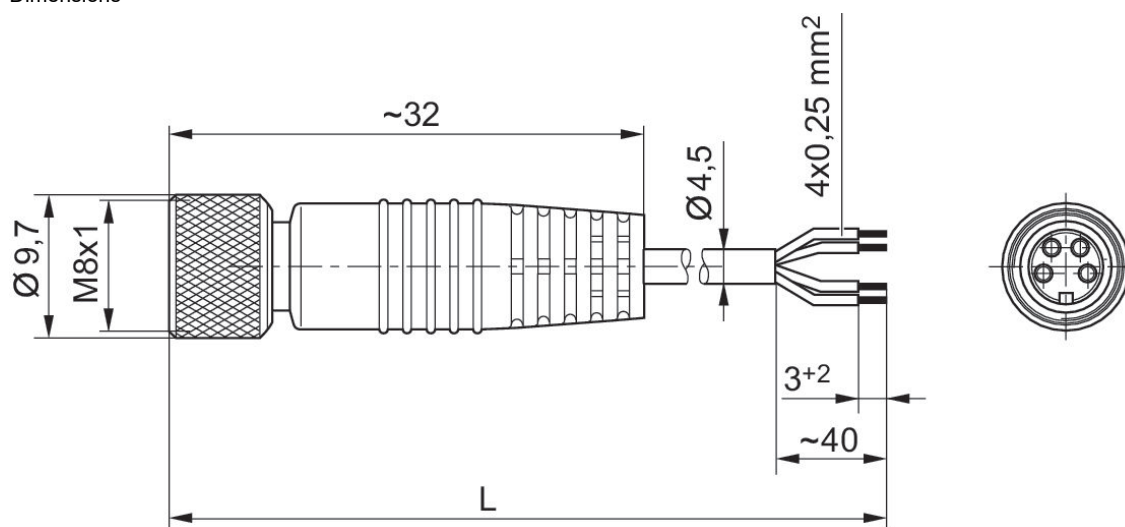
**Round plug connector, Series CON-RD, open cable ends, straight, 4-pin**

Electrical connection 1, type: Socket  
 Electrical connection 1, thread size: M8x1  
 Electrical connection 1, number of poles: 4-pin



Operational voltage	Current [A]	Shielding	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, coding	Electrical connection 2, type	Cable length [m]	Cable-Ø [mm]	Wire cross-section [mm²]	Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
48 V AC/DC	4	unshielded	Socket	M8x1	A-coded	open cable ends	3	4.5	0.25	-40	85	1834484144
48 V AC/DC	4	unshielded	Socket	M8x1	A-coded	open cable ends	5	4.5	0.25	-40	85	1834484146

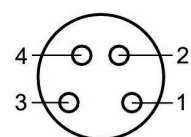
Dimensions



L = length

**1834484144, 1834484146**

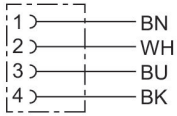
Pin assignment, socket



(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black

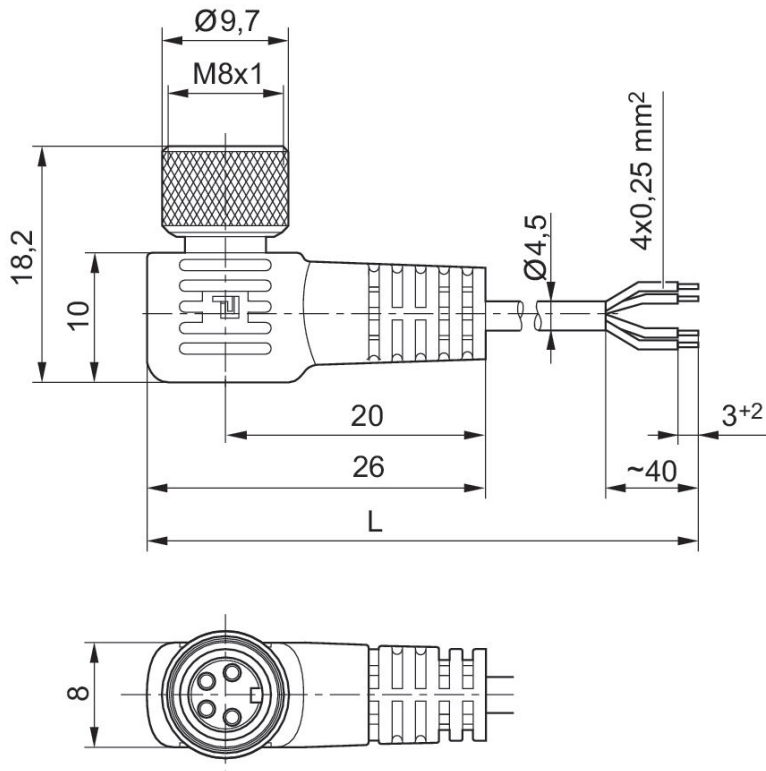
**Round plug connector, Series CON-RD, Plug M8x1, 4-pin**

Electrical connection 1, type: Socket  
 Electrical connection 1, thread size: M8x1  
 Electrical connection 1, number of poles: 4-pin



Operational voltage	Current [A]	Shielding	Electrical connection 1, type	Electrical connection 1, thread size	Electrical connection 1, coding	Electrical connection 2, type	Cable length [m]	Cable-Ø [mm]	Wire cross-section [mm²]	Min. ambient temperature [°C]	Max. ambient temperature [°C]	Part No.
48 V AC/DC	4	unshielded	Socket	M8x1	A-coded	open cable ends	3	4.5	0.25	-25	85	1834484145
48 V AC/DC	4	unshielded	Socket	M8x1	A-coded	open cable ends	5	4.5	0.25	-25	85	1834484147

Dimensions in mm

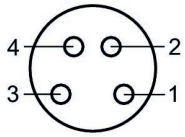


L = length



**1834484145, 1834484147**

Pin assignment, socket



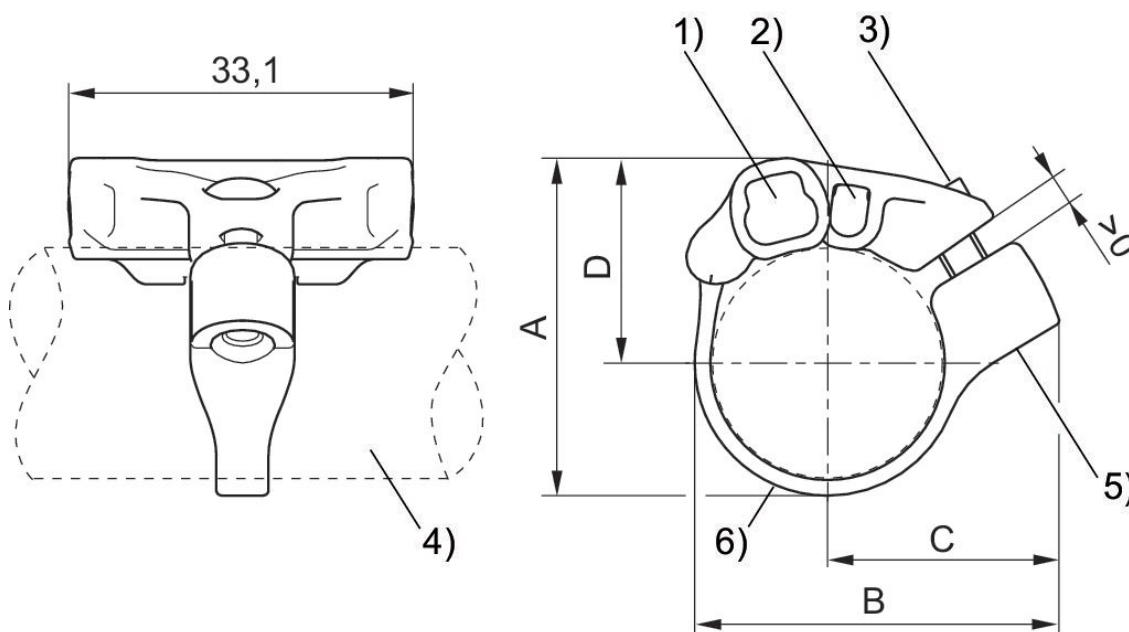
(1) BN=brown (2) WH=white (3) BU=blue (4) BK=black

**Sensor mounting, Series CB1**

For series: ST4 ST6



Min. cylinder Ø [mm]	Material	Part No.
16	Polyamide, Stainless Steel	R412021791
20	Polyamide, Stainless Steel	R412021792
25	Polyamide, Stainless Steel	R412021793



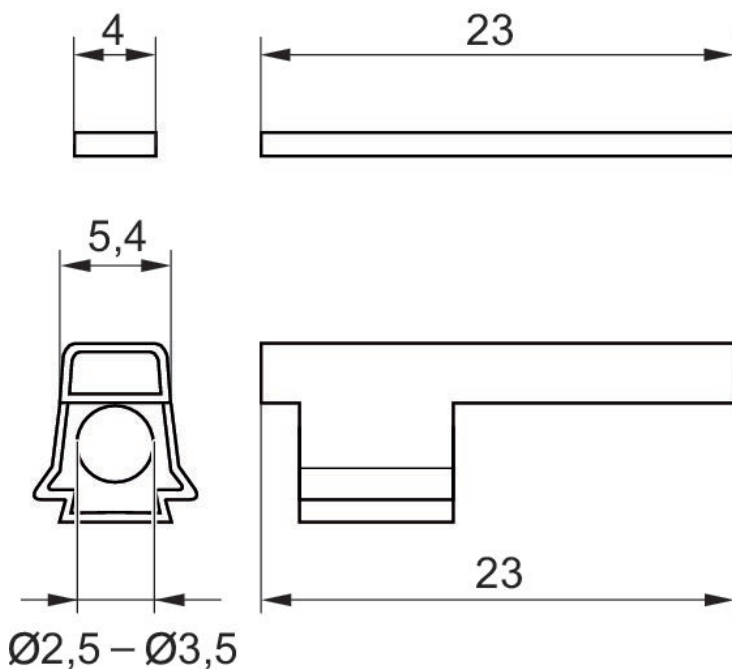
1) Sensor slot for ST6 2) Sensor slot for ST4 3) Mounting screw (made of stainless steel) 4) Cylinder profile 5) Thread insert (made of stainless steel) 6) Tightening strap

Part No.	A	B	C	D
R412021791	27.7	32.5	22.1	17.3
R412021792	32.4	35	22.4	19.7
R412021793	37.4	39.5	24.3	22.2

**Name plate**







Min. ambient temperature [°C]	Max. ambient temperature [°C]	Delivery unit [piece]	Housing material	Part No.
-40	100	10	Polycarbonate	R412026278



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control valves



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