

Sensors, Series SN2



AVENTICS™

**AVENTICS Series SN2 Magnetic
proximity sensors**


EMERSON™

Series SN2

The AVENTICS Series SN2 sensors are compatible with a range of cylinders. With their universal functionality and shape, the sensors of the Series SN2 are found in a variety of industries and applications. With a robust reed sensor they are designed for a wide voltage range of up to 240 VAC.

- Cubic sensor solution for universal applications
- A wide variety of sensor mountings for application needs
- With a M8-plug (2-, 3-, and 4-pin) directly on the sensor housing or free wire ends
- Service-friendly, since the line can be mounted directly on the housing
- Reed and electronic PNP sensor versions available
- Variant: pulse stretching



Sensor, Series SN2

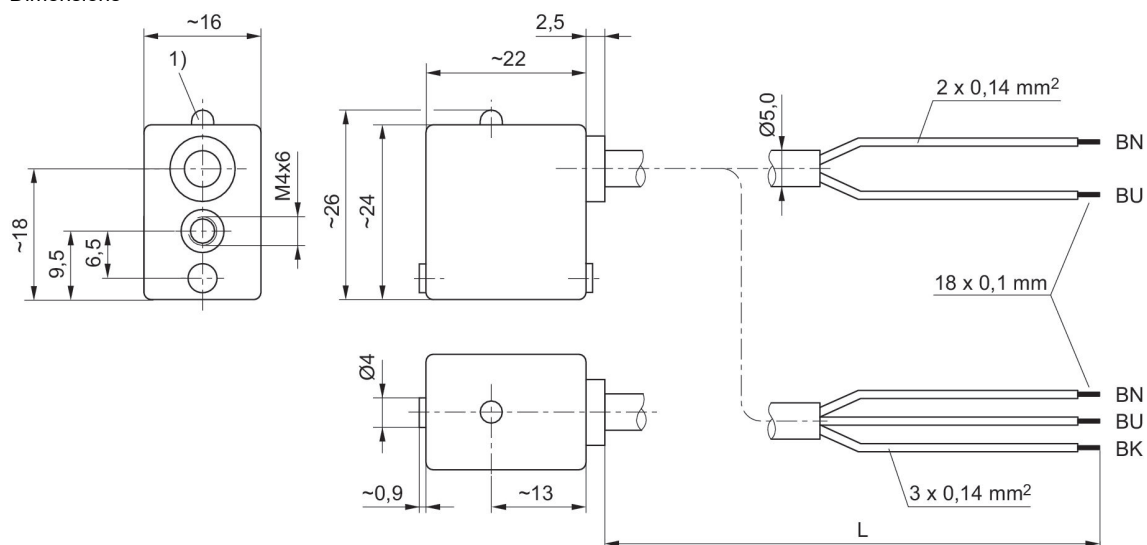
without wire end ferrule, tin-plated



Type of contact	Cable sheath	Electrical connection number of poles	Cable length L [m]	Operating voltage DC, min. [V DC]	Operating voltage DC, max. [V DC]	Operating voltage AC, min. [V AC]	Operational voltage AC, max. [V AC]	Version	Part No.
Reed	Polyvinyl chloride	2-pin	3	0	60	0	240	Protected against polarity reversal	0830100315
Reed	Polyvinyl chloride	2-pin	3	12	60	12	240	Protected against polarity reversal	0830100365
Reed	Polyvinyl chloride	2-pin	3	12	60	12	240	Protected against polarity reversal	0830100368
Reed	Polyurethane	2-pin	3	12	60	12	240	Protected against polarity reversal	0830100370
Reed		2-pin	3	0	60	0	240	Protected against polarity reversal	0830100316
Reed		2-pin	3	0	60	0	240	Protected against polarity reversal	0830100373
Reed	Polyurethane	2-pin	3	12	60	12	240	Protected against polarity reversal	0830100367
Reed	Thermoplastic elastomer	2-pin	3	12	60	12	240	Protected against polarity reversal	0830100317
Reed	Polyvinyl chloride	2-pin	5	12	60	12	240	Protected against polarity reversal	0830100366
Reed	Polyvinyl chloride	2-pin	5	12	60	12	240	Protected against polarity reversal	0830100369
Reed	Polyvinyl chloride	2-pin	7	12	60	12	240	Protected against polarity reversal	0830100327
Reed	Polyvinyl chloride	2-pin	10	12	60	12	240	Protected against polarity reversal	0830100325

Type of contact	Cable sheath	Electrical connection number of poles	Cable length L [m]	Operating voltage DC, min. [V DC]	Operating voltage DC, max. [V DC]	Operating voltage AC, min. [V AC]	Operational voltage AC, max. [V AC]	Version	Part No.
Reed	Thermoplastic elastomer	2-pin	11	12	60	12	240	Protected against polarity reversal	0830100326
Reed	Polyvinyl chloride	2-pin	20	12	60	12	240	Protected against polarity reversal	R412004848
Reed	Polyvinyl chloride	2-pin	3	12	42	12	42	Protected against polarity reversal	0830100371
Reed	Polyvinyl chloride	2-pin	5	12	42	12	42	Protected against polarity reversal	0830100372
electronic PNP	Polyvinyl chloride	3-pin	3	10	30	10	30	short circuit resistant, Protected against polarity reversal	0830100375
electronic PNP	Thermoplastic elastomer	3-pin	3	10	30			Protected against polarity reversal	0830100378
electronic PNP	Polyurethane	3-pin	3	10	30	10	30	short circuit resistant, Protected against polarity reversal	0830100377
electronic PNP	Polyvinyl chloride	3-pin	5	10	30	10	30	short circuit resistant, Protected against polarity reversal	0830100376

Dimensions



1) LED
L = cable length BN = brown, BK = black, BU = blue

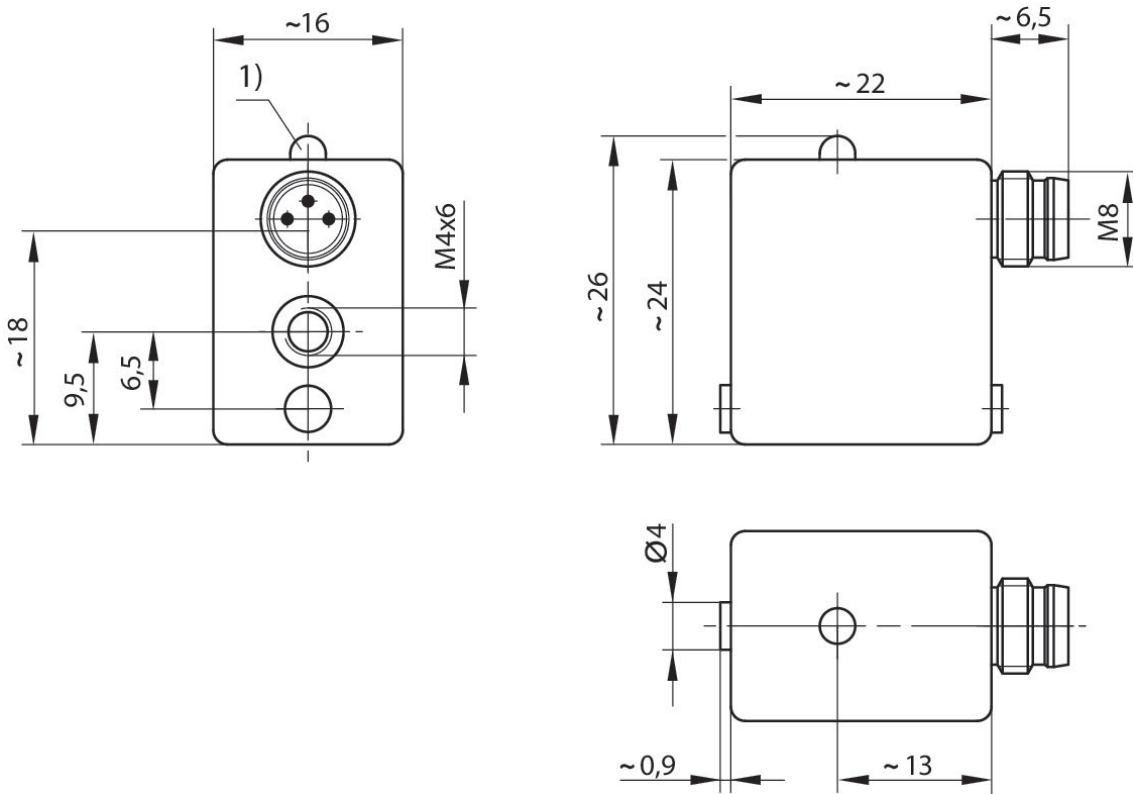
Sensor, Series SN2

Plug
M8



Type of contact	Electrical connection number of poles	Operating voltage DC, min. [V DC]	Operating voltage DC, max. [V DC]	Operating voltage AC, min. [V AC]	Operational voltage AC, max. [V AC]	Version	Part No.
Reed	2-pin	12	36	12	30	Protected against polarity reversal	0830100465
Reed	2-pin	12	36	12	30	Protected against polarity reversal	0830100468
Reed	3-pin	12	36	12	30	Protected against polarity reversal	R412004299
Reed	2-pin	12	36	12	30	Protected against polarity reversal	0830100466
Reed	3-pin	12	36	12	30	Protected against polarity reversal	0830100469
Reed	3-pin	12	36	12	30	Protected against polarity reversal	R412004820
Reed	3-pin	12	36	12	30	Protected against polarity reversal	0830100472
electronic PNP	3-pin	10	30	12	30	short circuit resistant, Protected against polarity reversal	0830100480
electronic PNP	3-pin	10	30			short circuit resistant, Protected against polarity reversal	R412004800

Dimensions



1) LED
M8: combination plug can be combined with valve plug connectors $\varnothing 6.5$ mm and M8.

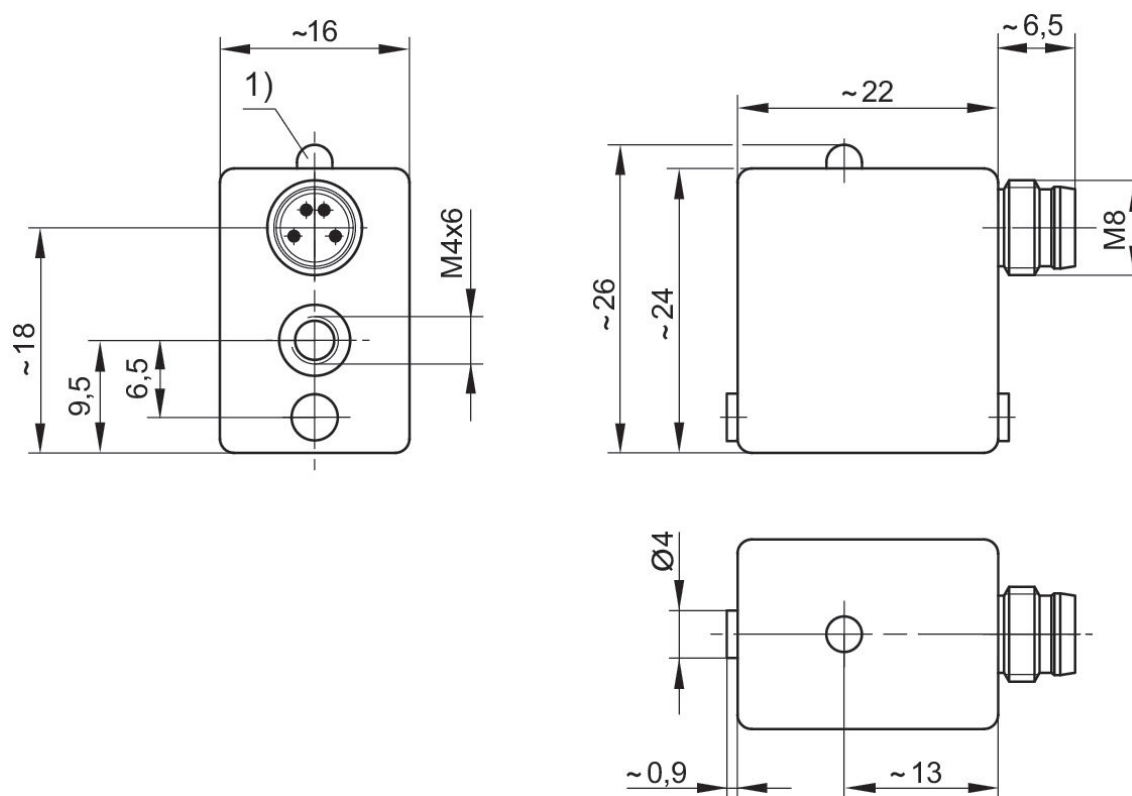
Sensor, Series SN2

Plug
M8



Type of contact	Electrical connection number of poles	Operating voltage DC, min. [V DC]	Operating voltage DC, max. [V DC]	Operating voltage AC, min. [V AC]	Operational voltage AC, max. [V AC]	Version	Part No.
Reed	4-pin	12	36	12	30	Protected against polarity reversal	0830100467

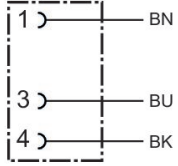
Dimensions



1) LED
M8: combination plug can be combined with valve plug connectors Ø6.5 mm and M8.

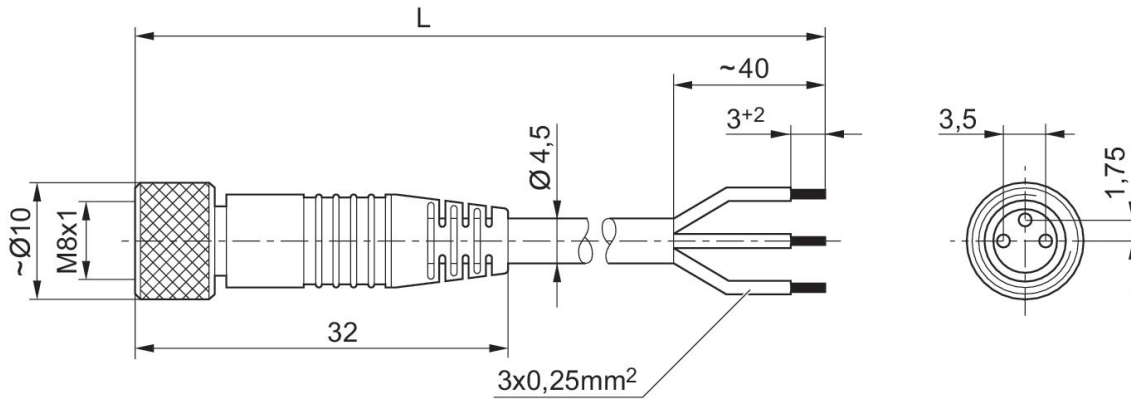
Round plug connector, Series CON-RD

Socket
M8x1
3-pin



Part No.
1834484166
1834484168
1834484247

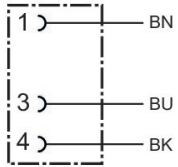
Dimensions



L = length

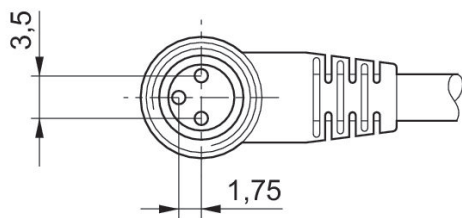
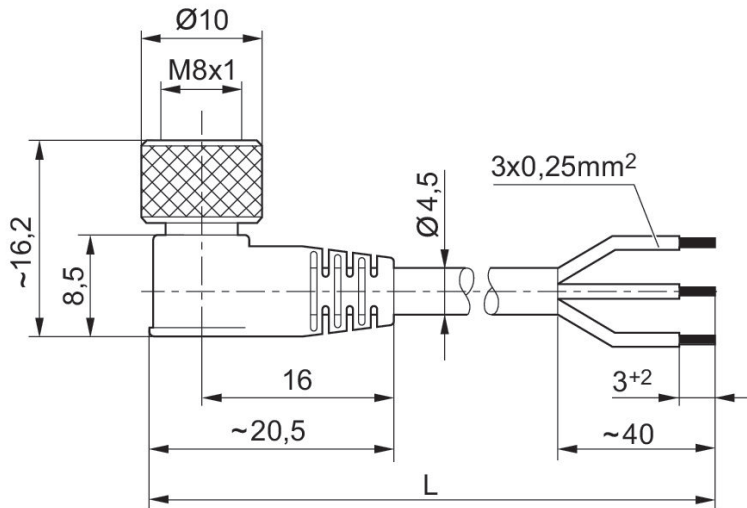
Round plug connector, Series CON-RD

Socket
M8x1
3-pin



Part No.
1834484167
1834484169
1834484248

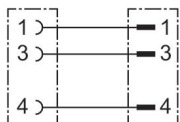
Dimensions



L = length

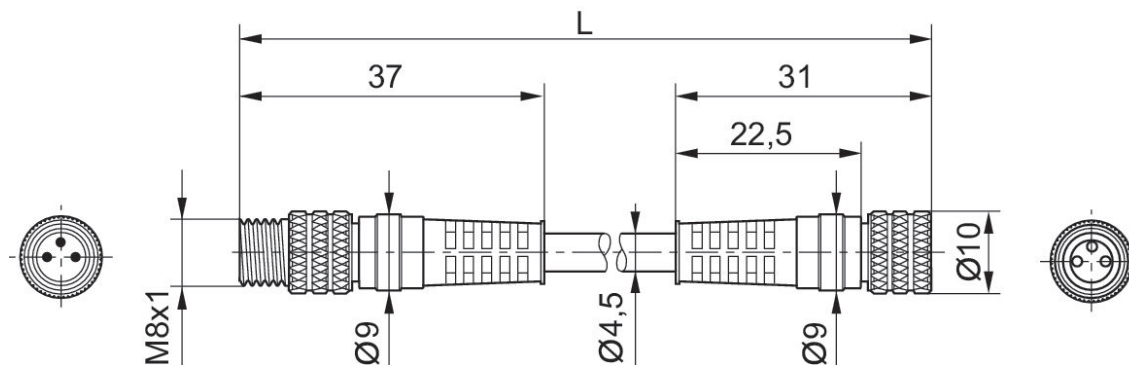
Round plug connector, Series CON-RD

Plug
M8x1
3-pin



Part No.
8946203702
8946203712
8946203722

Dimensions



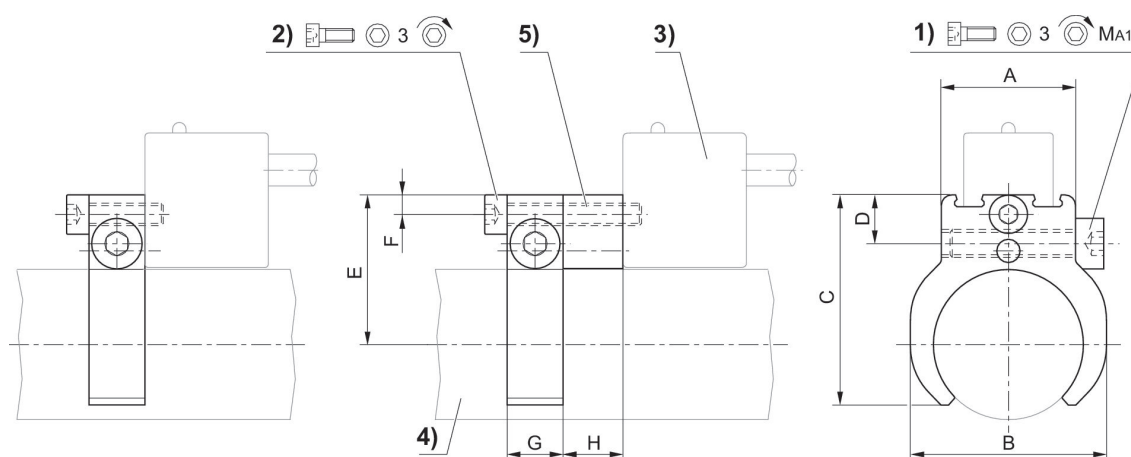
L = length

Sensor mounting, Series CB1

SN1
SN2



Cylinders Ø min. [mm]	Cylinders Ø max. [mm]	Material	Part No.
10	10	Aluminum	1827020065
12	12	Aluminum	1827020066
16	16	Aluminum	1827020067
20	20	Aluminum	1827020068
25	25	Aluminum	1827020069



1) Clamping screw 2) Mounting screw for sensor 3) Sensor 4) Cylinder profile 5) Insert (on request)

Cylinders Ø mm	Part No.	A	B	C	D	E	F	G	H	1)
10	1827020065	16	16	23.5	8.2	18.7	3.5	10	10.7	M4x14
12	1827020066	16	20	25.5	8.2	19.9	3.5	10	10.7	M4x14
16	1827020067	20	24	29.7	8.7	21.9	3.5	10	10.7	M4x25
20	1827020068	20	28	33	8.7	24.1	3.5	10	10.7	M4x25
25	1827020069	24	35	37.5	8.7	26.6	3.5	10	10.7	M4x25

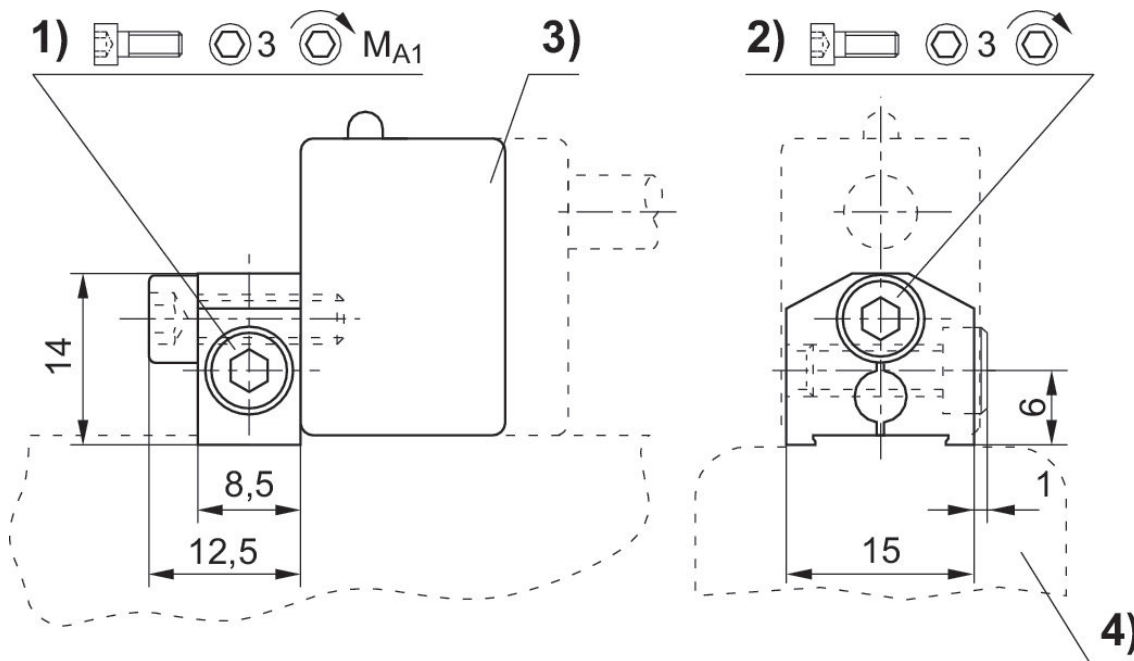
Cylinders Ø mm	MA1 [Nm]
10	1 +0,3
12	1 +0,3
16	1 +0,3
20	1 +0,3
25	1 +0,3

Sensor mounting, Series CB1

SN1
SN2



Material	Part No.
Aluminum	1827020084



1) Clamping screw 2) Mounting screw for sensor 3) Sensor 4) Cylinder profile

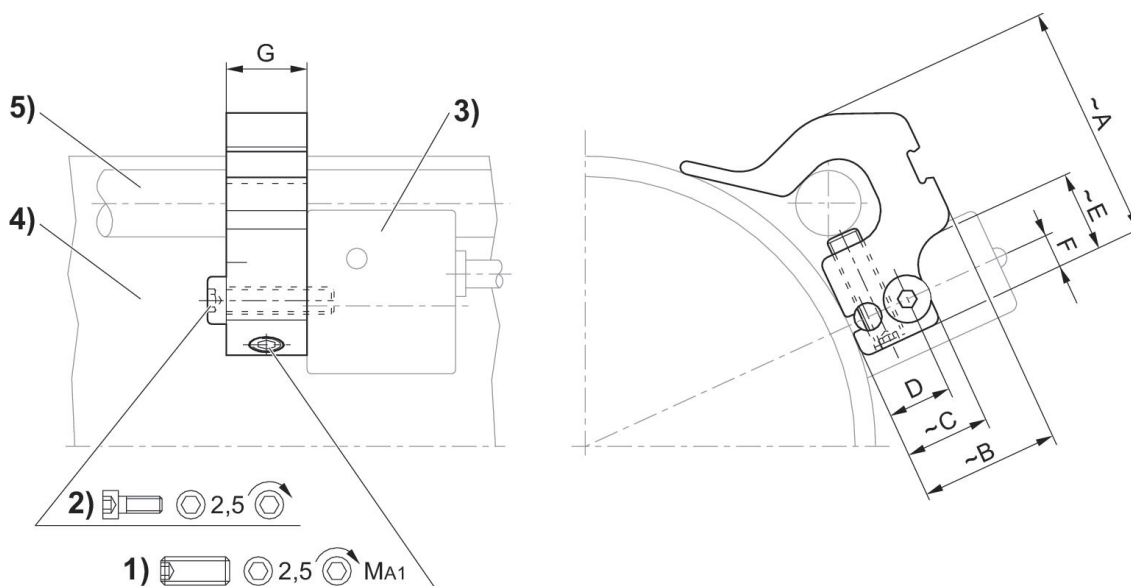
Part No.	Clamp- ing screw	MA1 [Nm]
1827020084	M4x12	2

Sensor mounting, Series CB1

SN1
SN2



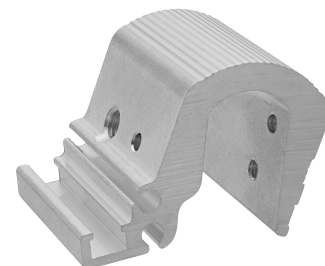
Cylinders Ø min. [mm]	Cylinders Ø max. [mm]	Material	Part No.
32	40	Aluminum	1827020081
50	63	Aluminum	1827020082
80	100	Aluminum	1827020083



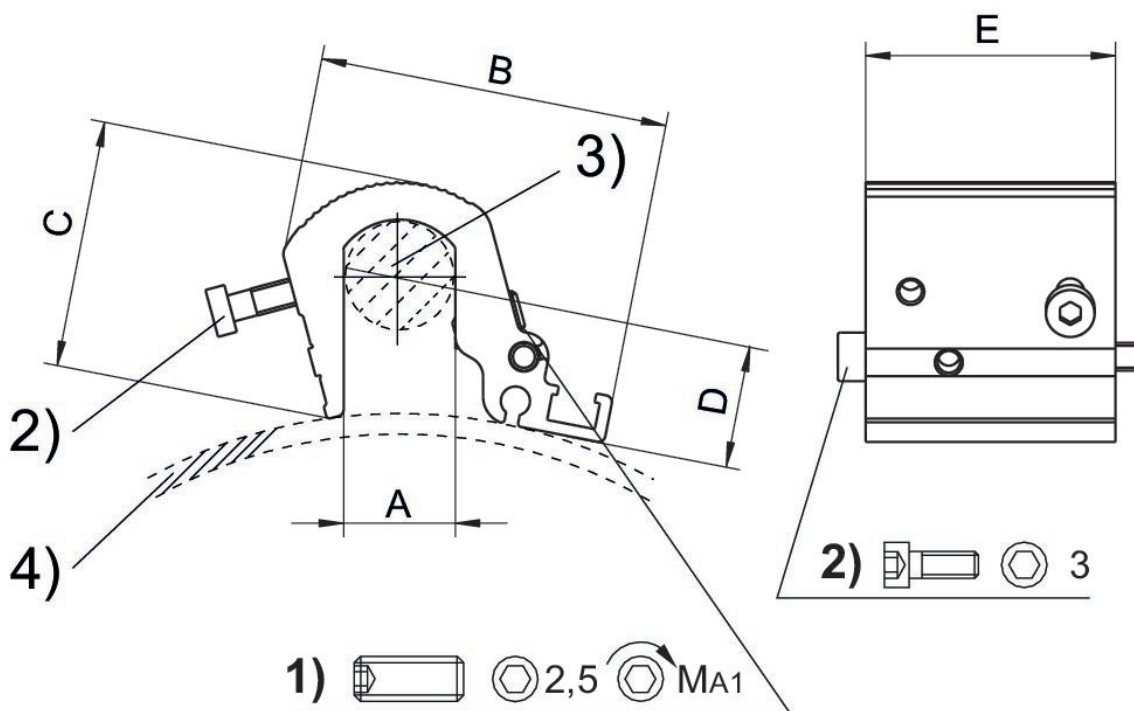
1) Clamping threaded pin 2) Mounting screw for sensor 3) Sensor 4) Cylinder profile 5) Tie rod

Part No.	Cylinders Ø mm	A	B	C	D	E	F	G	Clamping threaded pin	MA1 [Nm]
1827020081	32 - 40 mm	25.3	12.5	12.5	9.5	–	5	16	M5x16	1 +0,3
1827020082	50 - 63 mm	28.7	15.6	12.5	9.5	12	5	12	M5x16	1 +0,3
1827020083	80 - 100 mm	33.8	23	12.5	9.5	12	5	12	M5x16	1 +0,3

Sensor mounting, Series CB1



Cylinders Ø min. [mm]	Cylinders Ø max. [mm]	for sensor	Material	Part No.
160	200	ST6, SN2, SN6, SN1, SM6	Aluminum	R412017979
250	320	ST6, SN2, SN6, SN1, SM6	Aluminum	R412017980



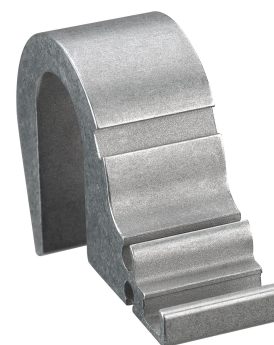
1) Clamping threaded pin 2) Mounting screws for sensor 3) Tie rod 4) Cylinder profile

Cylinders Ø	Part No.	A	B	C	D	E	MA1 [Nm]
160 - 200 mm	R412017979	16	51	36	6.8	36	2
250 - 320 mm	R412017980	24	56	44.5	6.8	36	2

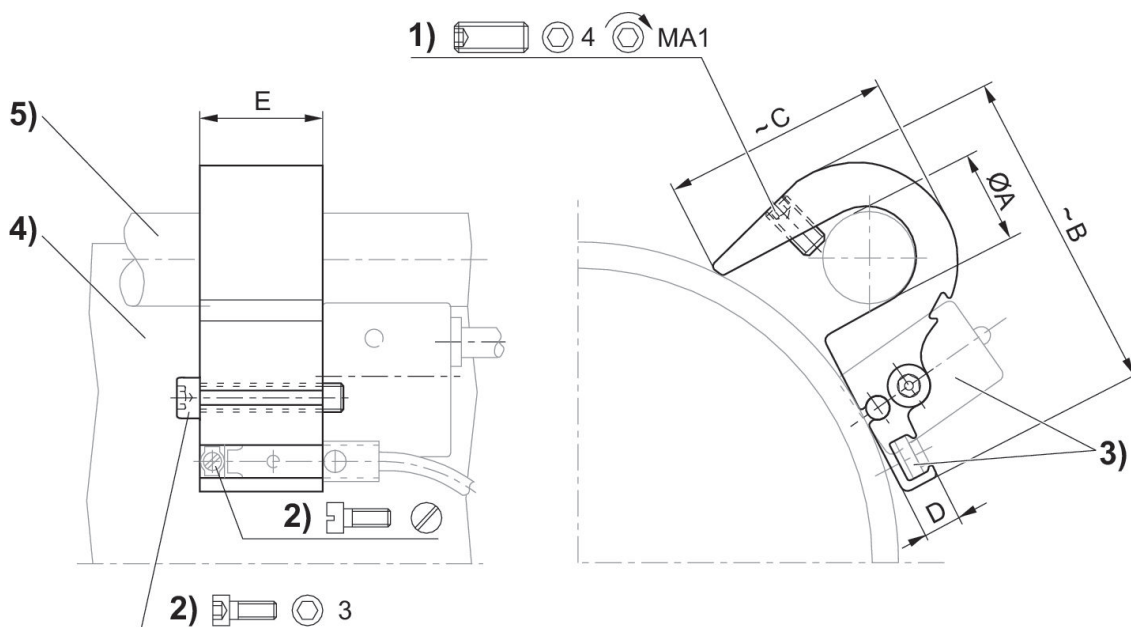
Scope of delivery: Incl. mounting screws

Sensor mounting, Series CB1

ST6
SM6
SN1
SN2



Cylinders Ø min. [mm]	Cylinders Ø max. [mm]	Material	Part No.
125	125	Aluminum	1827020292



1) Clamping threaded pin 2) Mounting screw for sensor 3) Sensor 4) Cylinder profile 5) Tie rod

Part No.	Cylinders Ø	Ø A	B	C	D	E	Clamping threaded pin	MA1 [Nm]
1827020292	125 mm	12	45	29	6.5	21	M5x10	2

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: [Emerson.com/Aventics](https://www.emerson.com/aventics)

Your local contact: [Emerson.com/contactus](https://www.emerson.com/contactus)



[Emerson.com](https://www.emerson.com)



[Facebook.com/EmersonAutomationSolutions](https://www.facebook.com/EmersonAutomationSolutions)



[LinkedIn.com/company/Emerson-Automation-Solutions](https://www.linkedin.com/company/Emerson-Automation-Solutions)



[Twitter.com/EMR_Automation](https://twitter.com/EMR_Automation)

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that the products are subject to a natural process of wear and aging.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners. © 2019 Emerson Electric Co. All rights reserved.



CONSIDER IT SOLVED™