

Sensors, Series SM6-AL



AVENTICS™

AVENTICS Series SM6-AL
Distance measuring sensors


EMERSON™

Sensors, Series SM6-AL

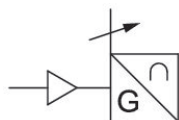
The AVENTICS Series SM6-AL are analog distance measuring sensors, which ensure a continuous detection of the piston movements in measuring ranges from 107 mm up to 1007 mm. A control element on the sensor allows for setting of the zero point and variable selection of the distance measurement range.

- Robust aluminium housing
- Zero point and measurement range settings via tech-in button possible
- Provides high accuracy and linearity
- Excellent repeatability and reliability through proven hall sensors
- Choice of any mounting position and cable exit
- Include IO-link



Sensors, Series SM6-AL

Plug
M8x1
cULus

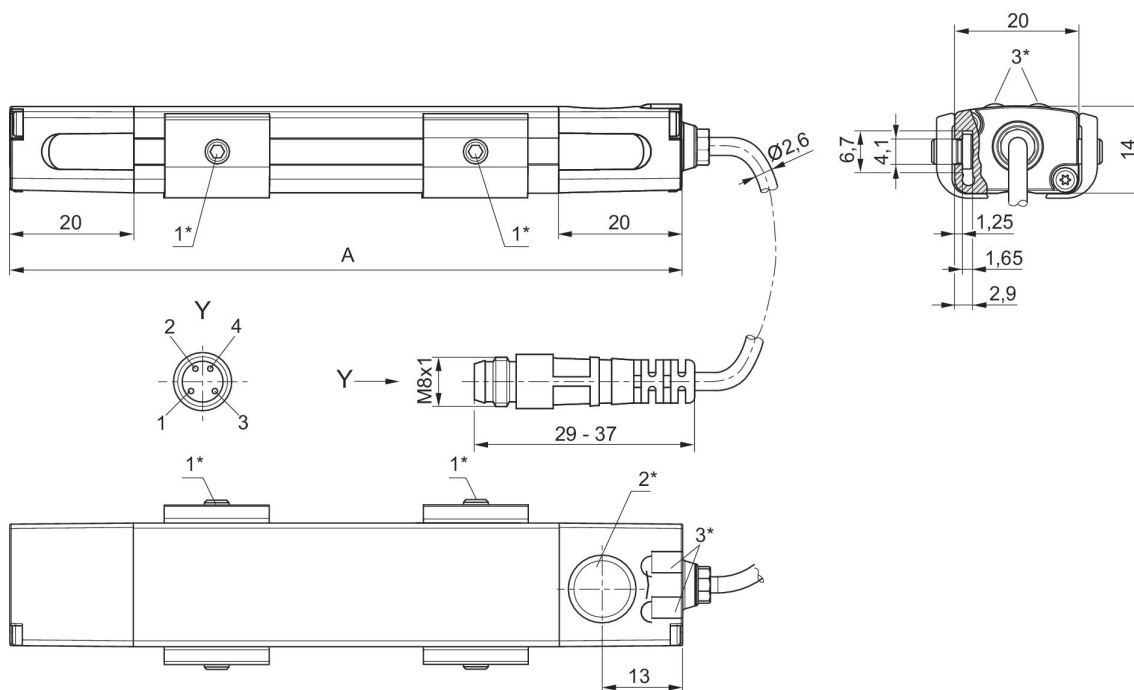


Type of contact	Cable length L [m]	max. measuring range [mm]	Overall length Sensor [mm]	Incl. number of sensor clamp pairs [piece]	Version	Part No.
Analog	0.3	107	109	2	short circuit resistant, Protected against polarity reversal, Overload protection	R412010880
Analog	0.3	143	145	2	short circuit resistant, Protected against polarity reversal, Overload protection	R412010881
Analog	0.3	179	181	2	short circuit resistant, Protected against polarity reversal, Overload protection	R412010882
Analog	0.3	215	217	2	short circuit resistant, Protected against polarity reversal, Overload protection	R412010883
Analog	0.3	251	253	2	short circuit resistant, Protected against polarity reversal, Overload protection	R412010884
Analog	0.3	287	289	3	short circuit resistant, Protected against polarity reversal, Overload protection	R412010885
Analog	0.3	323	325	3	short circuit resistant, Protected against polarity reversal, Overload protection	R412010886
Analog	0.3	359	361	3	short circuit resistant, Protected against polarity reversal, Overload protection	R412010887
Analog	0.3	395	397	3	short circuit resistant, Protected against polarity re-	R412010888

Type of contact	Cable length L [m]	max. measuring range [mm]	Overall length Sensor [mm]	Incl. number of sensor clamp pairs [piece]	Version	Part No.
					versal, Overload protection	
Analog	0.3	431	433	3	short circuit resistant, Protected against polarity reversal, Overload protection	R412010889
Analog	0.3	467	469	4	short circuit resistant, Protected against polarity reversal, Overload protection	R412010890
Analog	0.3	503	505	4	short circuit resistant, Protected against polarity reversal, Overload protection	R412010891
Analog	0.3	539	541	4	short circuit resistant, Protected against polarity reversal, Overload protection	R412010892
Analog	0.3	575	577	4	short circuit resistant, Protected against polarity reversal, Overload protection	R412010893
Analog	0.3	611	613	4	short circuit resistant, Protected against polarity reversal, Overload protection	R412010894
Analog	0.3	647	649	4	short circuit resistant, Protected against polarity reversal, Overload protection	R412010895
Analog	0.3	683	685	5	short circuit resistant, Protected against polarity reversal, Overload protection	R412010896
Analog	0.3	719	721	5	short circuit resistant, Protected against polarity reversal, Overload protection	R412010897
Analog	0.3	755	757	5	short circuit resistant, Protected against polarity reversal, Overload protection	R412010898
Analog	0.3	791	793	5	short circuit resistant, Protected against polarity reversal, Overload protection	R412010899
Analog	0.3	827	829	6	short circuit resistant, Protected	R412010900

Type of contact	Cable length L [m]	max. measuring range [mm]	Overall length Sensor [mm]	Incl. number of sensor clamp pairs [piece]	Version	Part No.
					against polarity reversal, Overload protection	
Analog	0.3	863	865	6	short circuit resistant, Protected against polarity reversal, Overload protection	R412010901
Analog	0.3	899	901	6	short circuit resistant, Protected against polarity reversal, Overload protection	R412010902
Analog	0.3	935	937	6	short circuit resistant, Protected against polarity reversal, Overload protection	R412010903
Analog	0.3	971	973	6	short circuit resistant, Protected against polarity reversal, Overload protection	R412010904
Analog	0.3	1007	1009	6	short circuit resistant, Protected against polarity reversal, Overload protection	R412010905

Dimensions



1* = threaded pin M3x11 2* = teach area 3* = LED

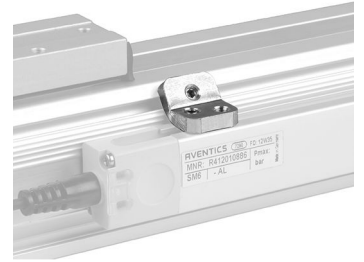
A = sensor length

Pin assignment: 1 = (+), 2 = (OUT 1) 3 = (GND), 4 = (OUT 2/IO-Link), EN 60947-5-7

LED 1: yellow = measuring operation, red = error

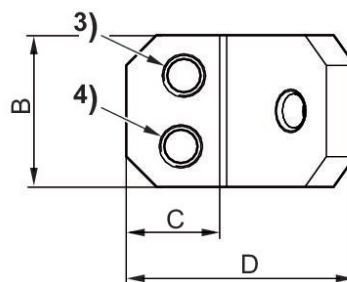
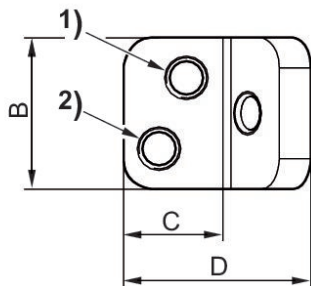
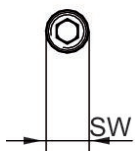
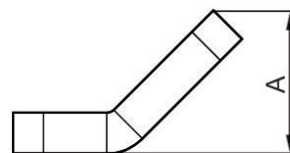
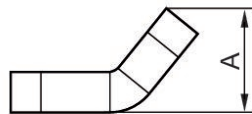
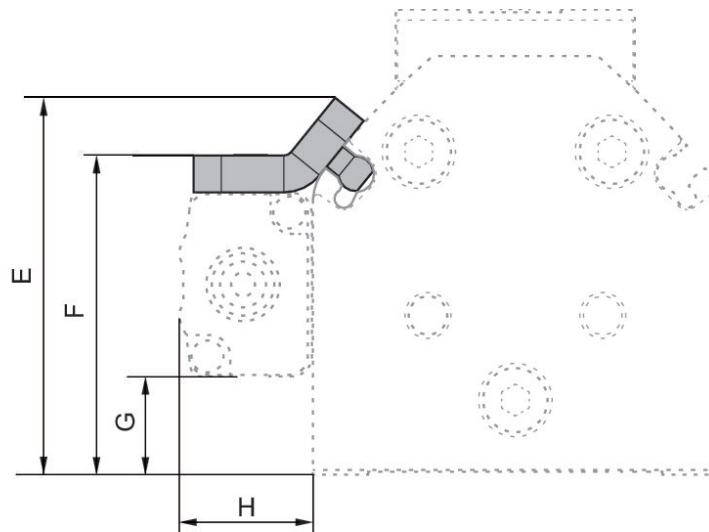
LED 2: green = voltage signal, blue = current signal

Sensor mounting, Series CB1



Material	Part No.
Aluminum	R412022298

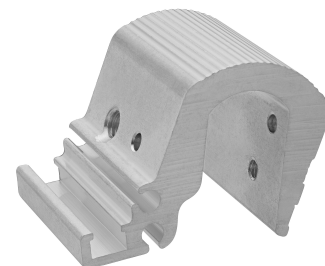
Dimensions



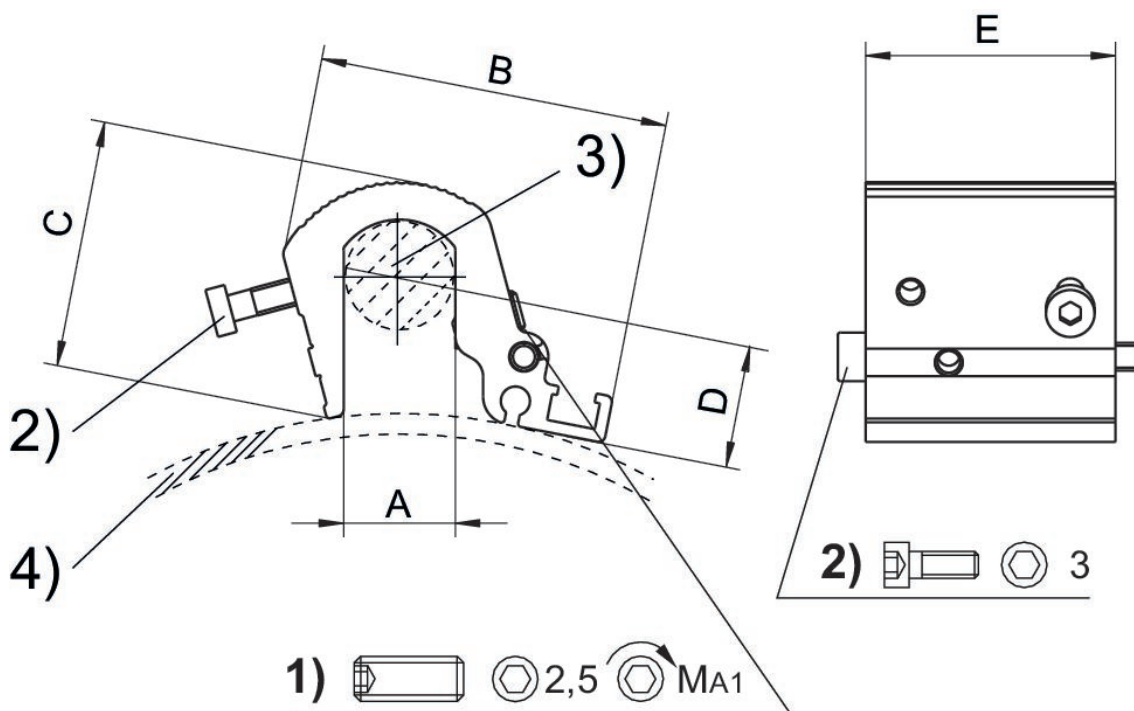
* Threaded pin (brass)
2 clamp mounting sets for SM6-AL 109 - 469 mm 3 clamp mounting sets for SM6-AL 505 - 793 mm 4 clamp mounting sets for SM6-AL 829 - 1009 mm

Piston Ø	Note	A	B	C	D	E	F	G	H	SW
25	1)	10.3	15	9.8	18.5	41	34.7	10.7	14.4	2
32	2)	10.3	15	9.8	18.5	46.7	40.4	16.4	14.4	2
40	3)	14.2	15	9.2	22.6	55	45.2	21.1	14.4	2
50	4)	14.2	15	9.2	22.6	60.6	50.5	26.5	14.4	2

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

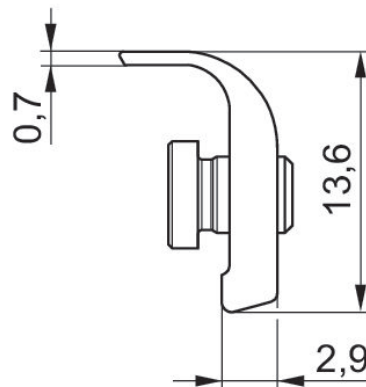
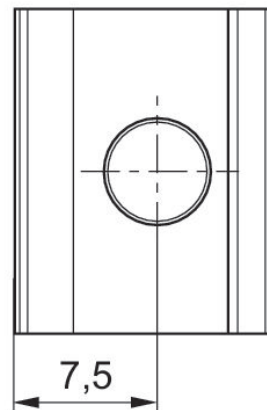
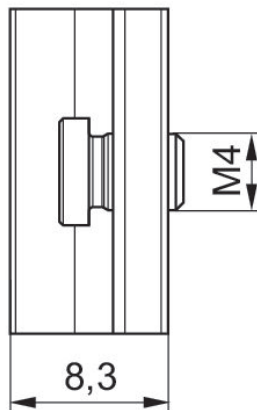
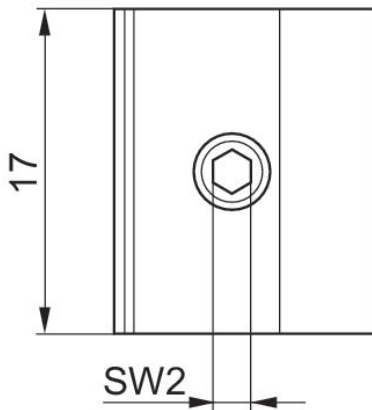
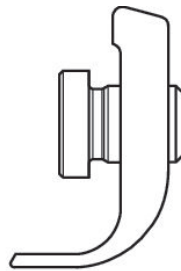
Cylinders Ø	Part No.	A	B	C	D	E	MA1 [Nm]
160 - 200 mm	R412017979	16	51	36	6.8	36	2
250 - 320 mm	R412017980	24	56	44.5	6.8	36	2

Scope of delivery: Incl. mounting screws

Sensor mounting



Material	Part No.
Aluminum	R412010906



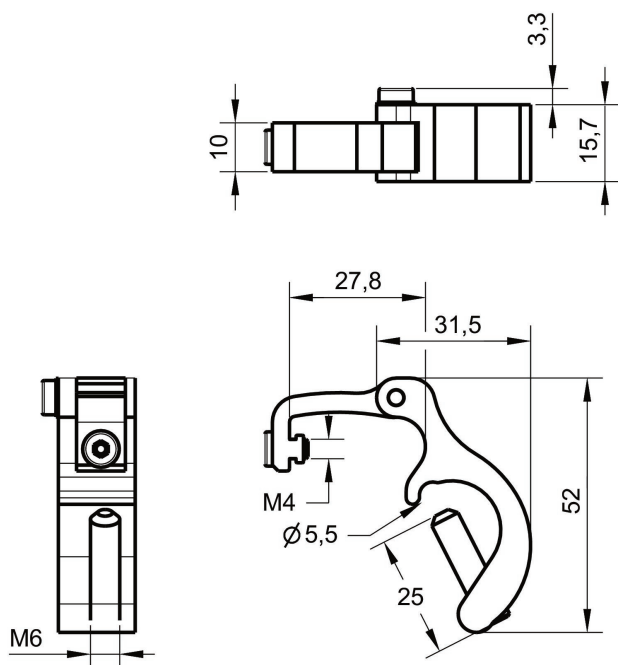
Sensor mounting SM6-AL

TaskMaster®



for sensor	Material	Part No.
SM6-AL	Aluminum	R432038613

Dimensions in mm



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



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