

# APS-M1

Accessories | Sensor Systems | Analog Position Sensor

## Precise. Flexible. Reliable.

### APS-M1 Analog Position Sensor

The mechanical analog sensor ensures accurate recording of the gripper jaws position

#### Field of Application

For the precise measurement of the gripper jaw position in clean environments

#### Advantages – Your benefit

**Analog multi position monitoring for any desired positions** for flexibility in all automation solutions

**Precise measuring system** also for long strokes

**Compact design** for space-saving installation in any control cabinet

**CE compliant** for long life during permanent operation



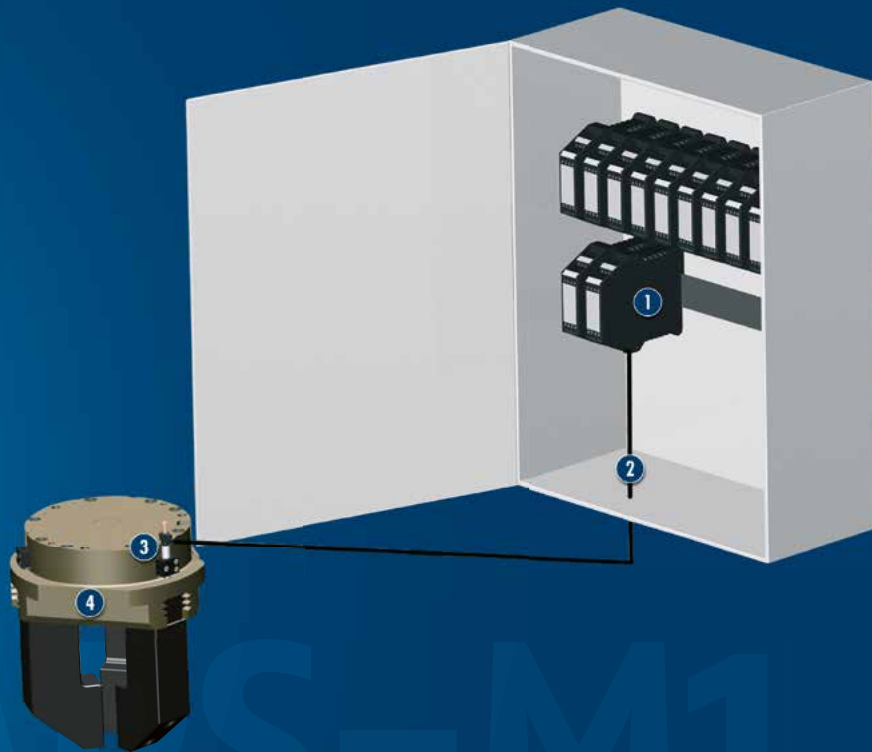
#### Options and special Information

**Warranty:** 24 months (details, general terms and conditions and operating manuals can be downloaded at [www.schunk.com](http://www.schunk.com))

**Attachment sets:** For the APS system one attachment set is required per gripper. The matching attachment set is indicated for every gripper size.

**Order:** Sensor and evaluation electronics must be ordered separately.

## Application example



① APS-M1E Processor

③ APS-M1S Sensor

② APS-K7 Extension Cable

④ PZN-plus 100 3-Finger Centric Gripper

## SCHUNK offers more ...

The following components make the product APS-M1 even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



PGN-plus 2-Finger  
Parallel Gripper



PZN-plus 3-Finger  
Centric Gripper



KST Cable Connector



KA Connection Cable

① Further information regarding the products can be found on the following product pages or at [www.schunk.com](http://www.schunk.com). Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696

CAD data, operating manuals and other current product documents are available at [www.schunk.com](http://www.schunk.com)

# APS-M1 M1

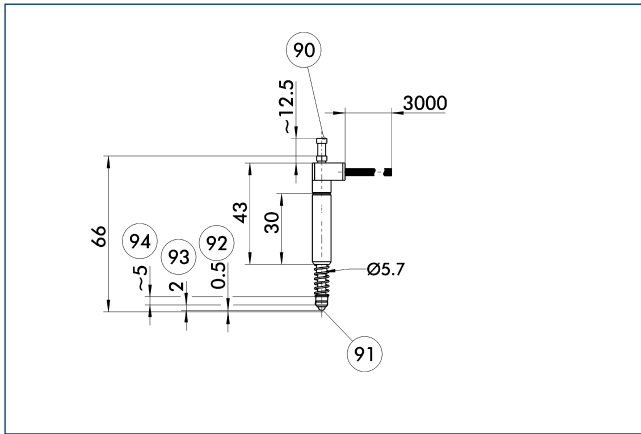
Accessories | Sensor Systems | Analog Position Sensor



## Technical data

Description		APS-M1S
ID		0302062
Measuring stroke	[mm]	2
Measuring accuracy	[mm]	0.004
Nominal current	[A]	0.023
IP class		67
Temperature drift zero signal	[%/10K]	0.1
Thermal drift of amplification factor	[%/10K]	0.2
min. / max. ambient temperature	[°C]	10/60
Weight	[kg]	0.16
Technical data		
Description		APS-M1E
ID		0302064
Supply voltage		DC
Nominal voltage	[V]	24
min. voltage	[V]	22
max. voltage	[V]	26
Nominal current	[A]	0.1
IP class		20
min. / max. ambient temperature	[°C]	0/60
Repeat accuracy (sensor and processor)	[%]	0.3
Weight	[kg]	0.16
Housing material		PA
Output signal		0..10 V DC / 4..20 mA
Mounting		Top-hat rail

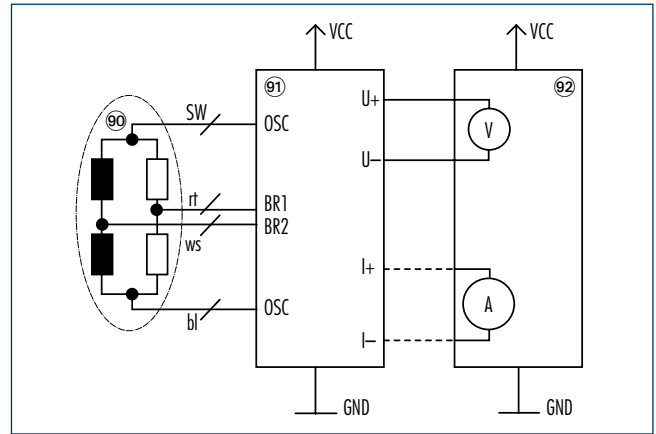
APS sensor



- ⑨0 Position with retracted feeler rod
- ⑨1 Carbide ball 1/8"
- ⑨2 Initial stroke
- ⑨3 Range of measurement
- ⑨4 Free stroke

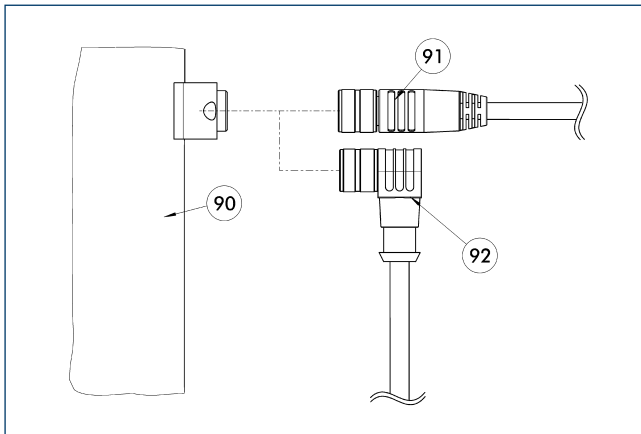
The drawing shows the basic version of the sensor.

Connection diagram



- ⑨0 APS-M1S sensor
- ⑨1 APS-M1E electronic processor
- ⑨2 Automation device, e.g. S7-300

Cable connector / cable extension



- ⑨0 Connecting point for component
- ⑨1 Cable with straight connection
- ⑨2 Cable with angular connection

Description	ID	Length [m]
Connection cables		
APS-K0200	0302066	2
APS-K0700	0302068	7

① BG stands for a connection cable with a straight female connector and BW for an angled female connector.