Easy programming Robust. Flexible.

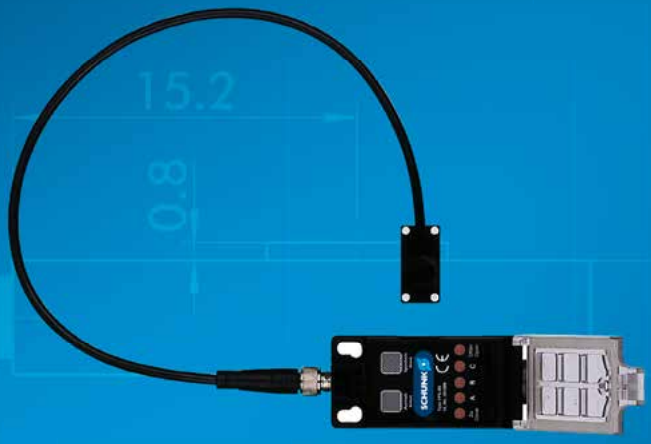
FPS Flexible Position Sensor

The FPS sensor system determines the position of the base jaws. Then it digitally shows, in which of the five freely teachable ranges the jaw is currently positioned. Moreover, the jaw position can be evaluated from the software "FPS controller"

Field of Application

Position determinationof the gripper jaws up to a stroke of appr. 30 mm in clean or dirty environment free from swarfs.

Advantages – Your benefit



Easy operation with only two push buttons or via machine control unit with free control cables

Simple start-up since all positions can be adjusted by the customer himself using the teach-in procedure

Five digital outputs for greater efficiency towards single sensors

Close spacing between two switching points is adjustable

Insensitive to contaminations by not ferromagnetic materials

Function and switching condition display via LEDs at the evaluation electronics

CE compliant for safety and longevity in continuous

Digital technology for insensitivity to interference

Many more additional features measurement functionality, communication and remote maintenance via RS232 protocol, position programming and read out of switching points, monitoring of temperature and power supply, visualization via PC, data logging, calibration of the system to gripper stroke, intelligent access controll, adaptation to new product in the process

Options and special Information

Sources of interference: Sensors can be influenced by other magnetic fields in the immediate vicinity. Disturbing magnetic fields can be generated by motors, electric welders, permanent magnets or magnetized material (so-called soft magnets) such as Allen keys, metal chips, etc.

Application example

① **FPS-F5 / -F5 T Electronic Processor**

② **PGN-plus 2-Finger Parallel Gripper**

③ **Software "FPS Controller"**

SCHUNK offers more ...

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

MPG-plus Pneumatic Small Parts Gripper

PGN-plus 2-Finger Parallel Gripper

KA Connection Cable

ⓘ Further information regarding the products can be found on the following product pages or at 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**

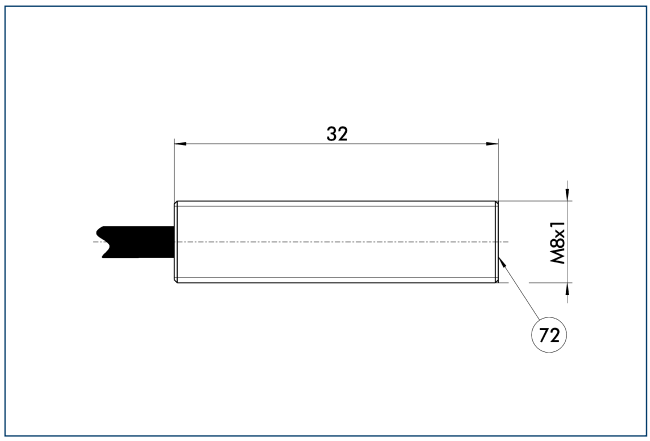
FPS FPS-S

Accessories | Sensor Systems | Flexible Position Sensor

Technical data

Description		FPS-S M8	FPS-S 13
ID		0301704	0301705
Cable diameter	[mm]	3.5	3.5
Cable length	[cm]	30	30
Connection of FPS on processor side		M8	M8
Weight	[kg]	0.02	0.01
min. / max. ambient temperature	[°C]	-25/70	-25/70
IP class (sensor)		65	65
IP class (sensor connected)		65	65
min. bending radius (dynamically)	[mm]	17.5	17.5
min. bending radius (statically)	[mm]	35	35

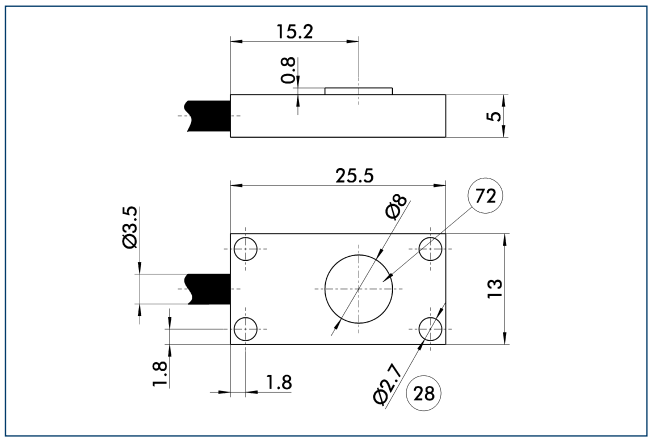
S-M8 sensor



72 Active sensor surface

The drawing shows the basic version of the sensor without the corresponding evaluation electronics.

S13 sensor



28 Through-bore

72 Fit for centering sleeves

The drawing shows the basic version of the sensor without the corresponding evaluation electronics.

FPS FPS-F5

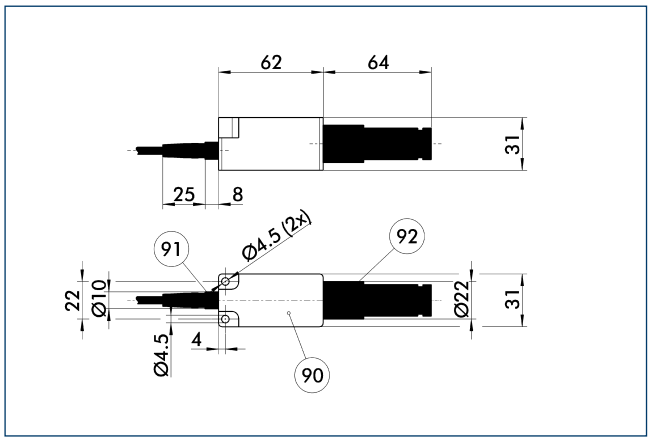
Accessories | Sensor Systems | Flexible Position Sensor

Technical data

Description		FPS-F5	FPS-F5 T
ID		0301805	0301807
Nominal voltage	[V]	24	24
min. voltage (DC)	[V]	10	10
max. voltage DC	[V]	30	30
Nominal current (DC)	[A]	0.01	0.01
Weight	[kg]	0.06	0.06
min. / max. ambient temperature	[°C]	-25/70	-25/70
IP class		65	65

ⓘ The units are suitable for monitoring up to 5 positions. By indicating the tolerance values, the FPS-F5 T flexible position sensor can be also used for workpiece control.

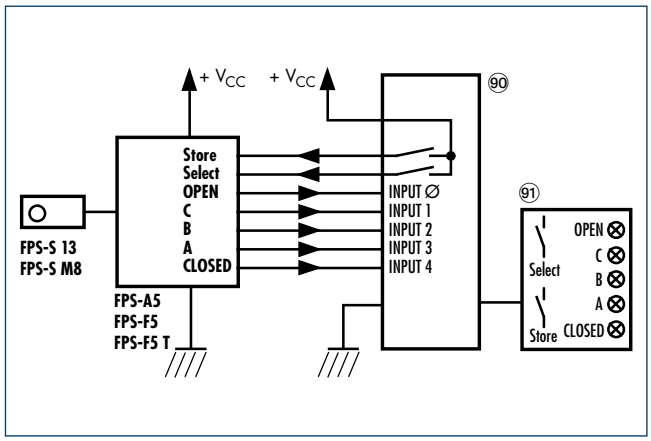
Electronic processor



(90) Transparent plastic cover, below operating and display panel
(91) Plug sensor side
(92) Plug cabinet side

The drawing shows the evaluation of the FPS sensors.

Connection diagram



(90) SPS / PCL
(91) Machine tableau (provided by the customer)