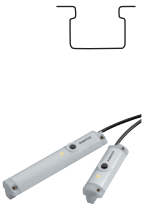
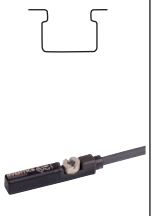
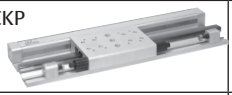
Nut geometries

Overview of the basic compatibility between the sensor series and cylinder series

Recommended sensors for on-cylinder mounting:

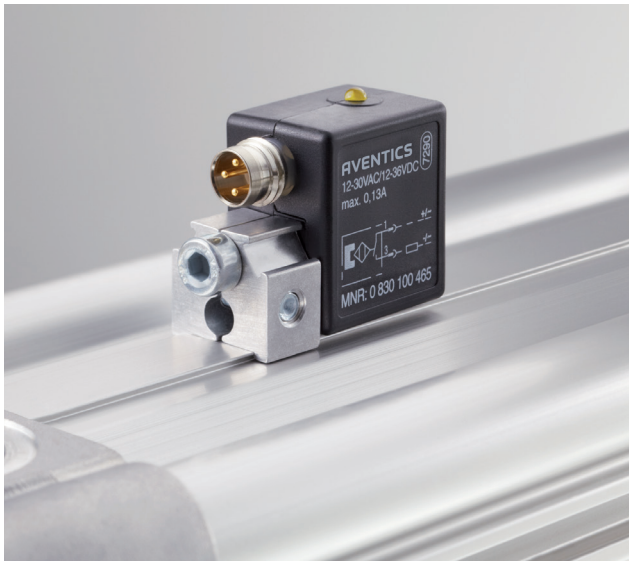
- via the nut: ●
- via sensor mounting: ○

	 SM6 series	 SM6-AL series	 ST4 series	 ST4-2P series	 ST6 series	 ST9 series	 SN2 series
	Page 10	Page 11	Page 12	Page 13	Page 14	Page 15	Page 16
MNI ISO / ICM ISO 	○		○	○	○		○
CSL 			○	○	○		
RPC 					○		
CCI/KPZ ISO 	●				●		
SSI 	●		●	●	●		
KHZ 					○	●	
PRA/CVI ISO 	●	○	●	●	●		○
TRB/CVI ISO 	○				○		○
ITS ISO 	○	○			○		○
ICL ISO 					○		
RTC 		○	●	●	○		
GSU/CKP 			●	●			
GPC 	●		●	●	●		
MSC 			●	●			
MSN 			●	●			
RCM 			●	●			

SN2 sensor series – universal sensor, highly compatible with different cylinders

Wide variety of functions, compact design
With their universal functionality and form, the sensors in the SN2 series are at home in nearly every industry and application. They are designed as an especially robust reed sensor for a wide voltage range of up to 240 V AC. With their wide range of mounting options, they can be assembled on almost all cylinder series. Matching sensor mountings are available for all cylinder forms and profiles to guarantee secure mounting.

- Cubic sensor solution for universal applications
- A wide variety of sensor mountings for use with many different cylinders
- With 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
- Additional variant with pulse stretching



Series	SN2
Type of contact	Reed, electronic PNP
Dimensions in mm (LxHxW)	Approx. 22 x 26 x 16
Supply voltage	10-30 V (PNP), up to 240 V AC (Reed)
Continuous current	130 mA
Switching point precision	± 0.1 mT
Ambient temperature	-20 to +80 °C, also up to +120 °C
Connection variants	Free wire ends, M8

SN2 sensor series

Connection variants:

Selection criteria

Finding the optimum sensors for your application

Not better, not worse, just different. All AVENTICS sensors work reliably and precisely. Which specific sensor is right for your application depends solely on the cylinders used, the machine design, the specific measurement tasks and the desired operating ease of use.

Cylinder and mounting
When selecting the right sensor, the initial criteria are the cylinder and mounting options. For pneumatic drives equipped with sensor nuts, sensors specifically designed for this configuration should always be the first choice. This enables simple, secure and rapid assembly at any time, without additional sensor mountings.

Measurement task, accuracy level and ease of adjustment
A variety of specially designed sensor mountings enables variable use of the sensor series with many different cylinders and profiles from the AVENTICS product range. You are free to choose the sensor you wish, whether you need a special sensor type or highly specific functions. In addition, the differences between electric and electronic sensors, described below, should be taken into account.

Electric sensors (Reed)	Electronic sensors (PNP, NPN)
Not protected against short circuits	Short circuit protected
For AC/DC voltage	For DC voltage only
Wide voltage range (0-240 V AC/DC)	Voltage range generally limited (typically 0-36 V)
Residual ripple not critical	Permissible residual ripple of supply voltage limited
No current consumption in non-switched state	Low current consumption, even in non-switched state
Affected by wear (especially with inductive and capacitive loads)	Wear-free
At high acceleration, false switching possible due to vibration or shocks	Switching function not affected by vibration or shocks
Bounce possible (in µs range)	Bounce free
Potential-free	Not potential-free
Long service life, average of 10 million switching cycles	“Unlimited” service life