

More Precision.

induSENSOR // Linear inductive displacement sensors



induSENSOR EDS



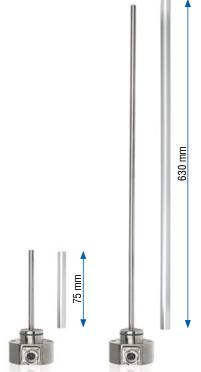
induSENSOR EDS long-stroke sensors are designed for industrial use in hydraulic and pneumatic cylinders for displacement and position measurements of pistons or valves, e.g., to measure

- displacement, position, gap
- deflection
- movement, stroke
- filling level, immersion depth and spring travel

The sensor elements of the EDS series are protected by a pressure resistant stainless steel housing. The sensor controller and signal processing are completely integrated in a sensor flange.

An aluminum tube is used as target, which is guided over the sensor rod in a non-contact and wear-free manner.

Due to their robust, constructional design, the EDS long-stroke sensors have proven invaluable for integration into hydraulic and pneumatic cylinders and for position monitoring in harsh industrial environments. Due to the eddy current principle applied, no permanent magnets need to be mounted inside the cylinder.

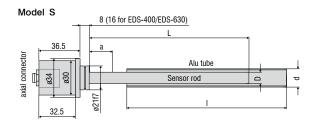


induSENSOR EDS sensors impress with an optimal ratio of compact design and large measuring range. Due to their small offset, the measuring range starts very close to the flance

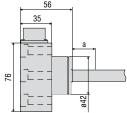


Model		EDS-75	EDS-100	EDS-160	EDS-200	EDS-250	EDS-300	EDS-400	EDS-500	EDS-630	
Series		S	S, F	S, F	S	S, F	S, F	S, F	S	S, F	
Measuring range		75 mm	100 mm	160 mm	200 mm	250 mm	300 mm	400 mm	500 mm	630 mm	
Resolution		0.038 mm	0.05 mm	0.08 mm	0.1 mm	0.125 mm	0.15 mm	0.2 mm	0.25 mm	0.315 mm	
Frequency response (-3dB)		150 Hz									
Measuring rate		600 Sa/s 500 Sa/s									
Linearity :	≤ ±0.3 % FSO	≤ ±0.23 mm	$\leq \pm 0.3 \text{mm}$	≤ ±0.48 mm	$\leq \pm 0.6 \text{mm}$	$\leq \pm 0.75$ mm	$\leq \pm 0.9 \text{ mm}$	$\leq \pm 1.2 \text{ mm}$	$\leq \pm 1.5 \text{mm}$	≤ ±1.89 mm	
Temperature stability		≤ 200 ppm FSO/K									
Supply voltage		18 30 VDC									
Max. current consumption		40 mA									
Analog output 1)		4 20 mA (load 500 Ohm)									
Connection	S Series	- 7-pin M9 screw/plug connection (Binder); axial, radial on request (see accessories for connection cable)									
	F series	Bayonet 5-pin screw/plug connection; radial output (see accessories for connection cable)									
Tomporatura rango	Storage	-40 +100 °C									
Temperature range	Operation	-40 +85 ℃									
Pressure resistance		450 bar (front)									
Shock (DIN EN 60068-2-27)		40 g / 6 ms in 3 axes, 1000 shocks each 100 g / 6 ms radial, 3 shocks each 300 g / 6 ms axial, 3 shocks each									
Vibration (DIN EN 60068-2-6)		± 2.5 mm / 5 44 Hz, 10 cycles each ± 23 g / 44 500 Hz, 10 cycles each									
Protection class (DIN EN 60529) 2)		IP65 (F series) / IP67 (S series)									
Material		Stainless steel (housing); aluminum (measuring tube)									

FSO = Full Scale Output



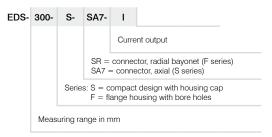






6 mounting holes ø9 mm on pitch circle ø63 mm

Article designation



Measuring	Sense	or rod		Offset			
ranges	L	D		l	d		а
75	110	10	11	10	1	15	
100	140	10	14	40	1	20	
160	200	10	20	00	16		20
200	240	10	24	40	1	20	
250	290	10	290		16		20
300	340	10	340		16		20
400	450	12	450 (S)	460 (F)	18 (S)	26 (F)	25
500	550	12	550		18		25
630	680	12	680 (S)	690 (F)	18 (S)	26 (F)	25

¹⁾ Optional voltage output (1 ... 5 V) with output cable C703-5/U for EDS, S series ²⁾ Models with plug connection only with suitable and connected mating plug

Accessories for S series

Connection cables

C703-5 EDS connection cable for S series, 7-pin, length 5 m

C703-5/U EDS connection cable for S series, 7-pin, length 5 m, for voltage output 1 - 5 V C703/90-5 EDS connection cable for S series, 7-pin, length 5 m with 90° angled cable connector

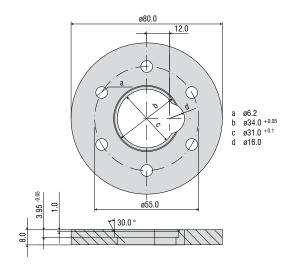
Mating plug, S series

Spare tubes

Measuring tube for EDS-75-S Spare tube Measuring tube for EDS-100-S Spare tube Measuring tube for EDS-160-S Spare tube Measuring tube for EDS-200-S Spare tube Measuring tube for EDS-250-S Spare tube Measuring tube for EDS-300-S Spare tube Measuring tube for EDS-400-F Spare tube Measuring tube for EDS-630-F Spare tube

Installation ring

0483326 EDS mounting ring



Accessories for the F series

Connection cables

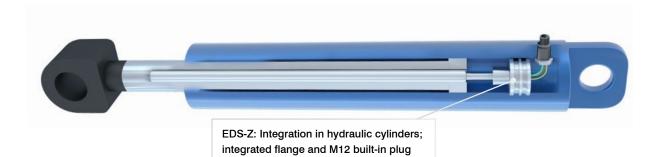
C705-5 EDS connection cable for F series, 5-pin, length 5 m
C705-15 EDS connection cable for F series, 5-pin, length 15 m

EDS connector kit, F series

Spare tubes

Measuring tube for EDS-100-F Spare tube Measuring tube for EDS-160-F Spare tube Measuring tube for EDS-200-F Spare tube Measuring tube for EDS-250-F Spare tube Measuring tube for EDS-300-F Spare tube Measuring tube for EDS-400-F Spare tube Measuring tube for EDS-630-F Spare tube





Sensors and Systems from Micro-Epsilon



Sensors and systems for displacement, distance and position



Sensors and measurement devices for non-contact temperature measurement



Measuring and inspection systems for metal strips, plastics and rubber



Optical micrometers and fiber optics, measuring and test amplifiers



Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection