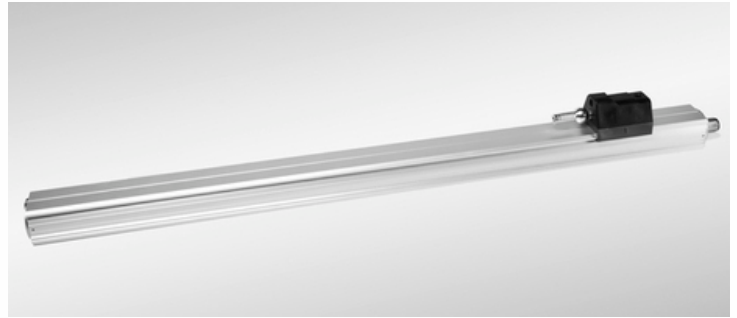


Magnetostrictive Linear Transducer Series PMS

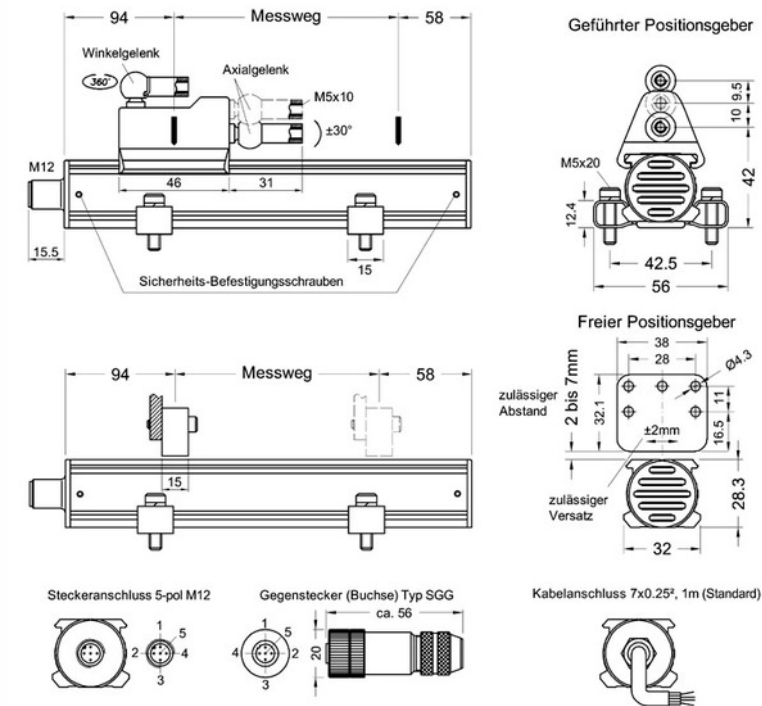
- Contactless measurement principle
→ Infinite lifetime
→ Robust against shock- and vibration influences
- Solid konstruktion, protection class IP67
- Accurate measurement because of low linearity tolerance of $\pm 0,02\%$
- Output signal is absolute
- 2 positions ascertainable
- Measurement length between 50 mm and 4000 mm in 42 versions



Robust in desin and an accurate measuring are the features of the PMS. Further advantages are its infinite life time and ruggedness against shock- and vibration influences.

The solid construction and a protection of IP67 allows applications in rough environs.

Drawing



Magnetostrictive Linear Transducer Series PMS

Electrical Data

Electrical Travel in mm	50, 100, 130, 150, 175, 200, 225, 250, 300, 350, 360, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1100, 1200, 1250, 1300, 1400, 1500, 1750, 2000, 2250, 2500, 2750, 3000, 3250, 3500, 3750, 4000
Linearity Tolerance, typical	< ±0,04% F.S. at 50-175 mm < ±0,02% F.S from 200 mm on
Supply Voltage	24V DC ± 20%
Power Consumption, typical	70 mA (0 - 10V) 90 mA (0 / 4 - 20mA)
Insulation	500
Output Signal	0 - 10 V / 4 - 20 mA / 0 - 20 mA
Maximum Value	10,6 V resp. 25 mA
Resolution	infinite (limited by output ripple)
Load Resistance	2kOhm (0 - 10 V) 500 Ohm (0 / 4 - 20 mA)
Hysteresis	< 0,01 mm
Temperature Coefficient	50 ppm/K
Polarity and surge protection	yes
Sampling Rate, typical	0,5 ms 1 ms at 300-1100 mm 1,5 ms at 1100-2000 mm 2 ms > 2000 mm

Mechanical Data

Maximum Displacement Speed	≤10 m/s
Maximum Acceleration	≤100 m/s ²

Ambient Conditions

Operating Temperature	-30 ... + 75° C
Storage Temperature	-40 ... + 100° C
Protection Class	IP67
Shock	100g / 11ms (IEC68T2-27)
Vibration	12g / 10 ... 2000Hz (IEC68T2-6)

Magnetostrictive Linear Transducer Series PMS

Wiring Cable / Connector			Electronic Versions		
Colour	PIN	Function	Type	Supply	Signal
grey	1	AP1 (0 ... 10V / 0/4 ... 20mA)	2410	24V	0 ... 10V
pink	2	GND, AP1	2420	24V	0 ... 20mA
yellow	3	AP2, INV-AP1 (=Standard) (10 ... 0V / 20 ... 4/0mA)	2442	24V	4 ... 20 mA
pink	2	GND, AP1, AP2			
brown	5	Supply voltage +			
white	4	GND Supply			
AP1 = Output position magnet 1 AP2 = Output position magnet 2 INV-AP1 = Inverse output positions magnet 1					

Accessories

- Controlled Position Encoder:**
 Not included in delivery. Please order separately.
 - with axial joint - Art. 122 134
 - with angle joint - Art. 122 528
- Free Position Encoder:**
 Not included in delivery. Please order separately. Art. 120 639
- Mounting Clamp:**
 1 Set included in delivery.
 (1 Set = 2 clamps with 4 screws and 4 lock washers - Art. 122 527)
- Plug:**
 Not included in delivery. Please order separately.
 - 5-pol. M12 IP67 straight - Type SGG - Art. 125 482
 - 5-pol. M12 IP67 angled - Type SGW - Art. 125 483

Order Code

Series	Numer of Encoders	Analog Output	Elec. Travel	Elec. Connection	Signal
PMS	1 2	A	50 ... 100 ... 4000	K K2 (2m cable) S (5 pole M12) S6 (6 pole M16)	2410 (24 V / 0-10V) 2420 (24 V / 0-20 mA) 2442 (24 V / 4-20mA)

Example: PMS 2 A 700 K 2410

Series PMS, 2 position encoders, analog output, electrical travel 700mm, cable (length = 1m; other length on request), supply 24V, signal 0 ... 10V

The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.

Aug. 13. 2014

All specifications are subject to change without notice.