

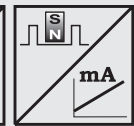
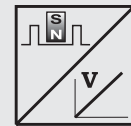
PCST21EX POSICHRON[®] Position Sensor

Stick Design, Ex protection, with Analog Output



POSICHRON[®] position sensor in stick design for hostile environments

- Protection class IP67
- Measurement range 0 ... 100 up to 0 ... 5750 mm
- Absolute position measurement
- For applications in hydraulic cylinders
- Wear- and maintenance-free
- 0 ... 10 V output
- 4 ... 20 mA output
- (being prepared)



Specifications	Outputs	Voltage: 0 ... 10 V, 3 wire Current: 4 ... 20 mA, 3 wire
	Resolution	Essentially infinite
	Sampling rate	0.5 ... 2 kHz depending on measurement range
	Linearity	±0.1 mm for ranges ≤500 mm ±0.02 % f.s. for ranges >500 mm
	Housing material	Stainless steel 1.4401
	Connection	Cable 3 m (standard)
	Mounting	Thread M18 x 1,5
	Operating pressure	400 bar, other values on request
	Protection class	IP67
	Operating temperature	-40 ... +85 °C
	Conformity of standards	
	Ex protection	EN 50014:2000; EN 50018:2000; EN 50281-1-1
	EMC, immunity to interference	EN 50081-1, 03.93; EN 50083-2, 11.94
	Protection class housing	EN 60529, IP67
Shock	EN60068-2-27, 50 g (10 ms)	
Vibration	EN60068-2-6, 20 g (20 Hz ... 2 kHz)	

Order Code PCST21EX

Model Name

PCST21EX - [] - [] - []

Measurement Range (in mm)

100 / 500 / 1000 / 1500 / 2000 / 2500 / 3000 / 4000 / 5000 / 5750
Other ranges on request

Outputs

10V = with 0 ... 10 V signal conditioner (3 wire)
420T = with 4 ... 20 mA signal conditioner (3 wire)

Connection

KAB3M = Cable output, standard length 3 m

Order Code Position Magnet (see accessories page 59)

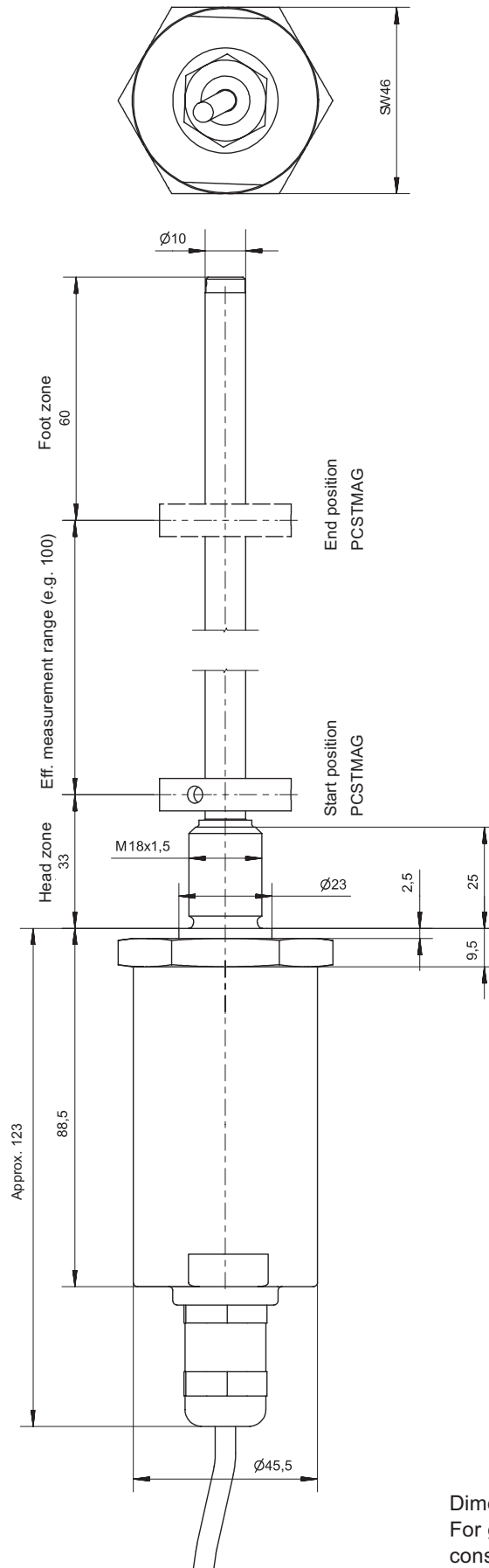
PCSTMAG...

Order Example: PCST21EX - 1000 - 10V - KAB3M

PCST21EX POSICHRON[®] Position Sensor Stick Design, Ex protection



Outline drawing

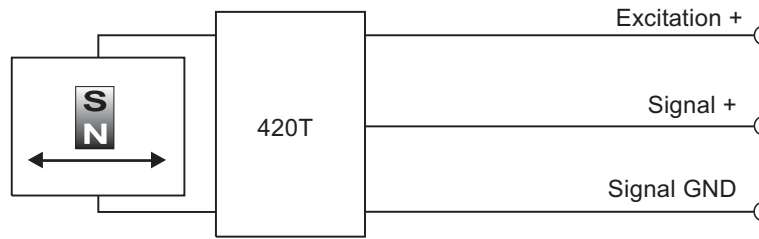


Dimensions informative only
For guaranteed dimensions
consult factory!

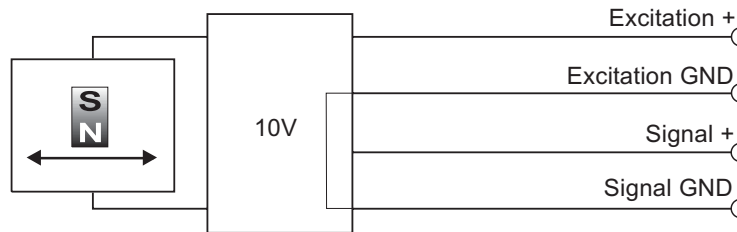
POSICHRON® Output Specification 420T and 10V



Signal Conditioner 420T Current output (3 wire)	Excitation voltage	+18...+27 V DC, residual ripple 10 mV _{SS}
	Excitation current	80 mA max.
	Load resistor	350 Ω max.
	Output current	4 ... 20 mA equivalent to 0 ... 100% range
	Stability (temperature)	±50 x 10 ⁻⁶ / °C full scale
	Protection	Reverse polarity, permanent short circuit
	Output noise	0.5 mV _{RMS}
	Operating temperature	-40 ... +85 °C
	Immunity to interference (EMC)	According to EN 61326: 1998



Signal conditioner 10V Voltage output (3 wire)	Excitation voltage	+18 ... +27 V DC, residual ripple 10 mV _{SS}
	Excitation current	80 mA max.
	Output voltage	0 ... +10 V DC equivalent to 0 ... 100% range
	Output current	2 mA max.
	Output load	> 5 kΩ
	Stability (temperature)	±50 x 10 ⁻⁶ / °C full scale
	Protection	Reverse polarity, permanent short circuit
	Output noise	0,5 mV _{RMS}
	Operating temperature	-40 ... +85 °C
Immunity to interference (EMC)	According to EN 61326: 1998	



Signal Wiring	Output signals	Connector	Cable colour	
	420T	10V		pin no.
	Excitation +	Excitation +	1	white
	Excitation GND	Excitation GND	2	brown
	Signal +	Signal +	3	green
		Signal GND	4	yellow

Connection
Mating Connector

View to sensor
connector