



# WINDPOWER

## Transducers IK1-D

### MAGNETOSTRICTIVE DISPLACEMENT TRANSDUCERS

- Earth moving
- Nautical sector
- Level checks

#### Magnetostrictive technology

The new generation of potentiometric transducer is the magnetostrictive displacement transmitter, in which there is no contact between the transducer and the mobile cursor.

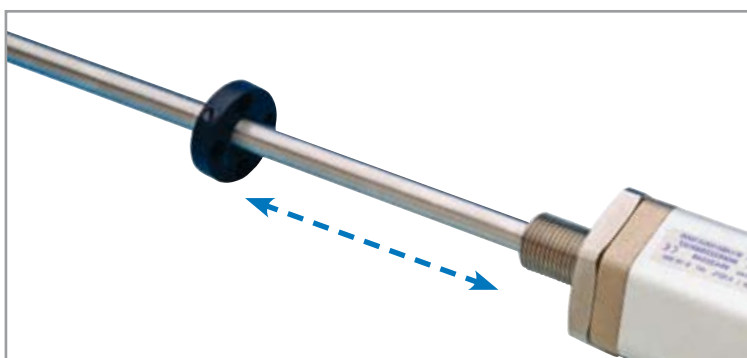
The measurement element, a copper wire passing through a special alloy tube, measures the interaction between mechanical waves and electromagnetic fields.

A current pulse is transmitted along the tube from the sensor head. Interaction between the current pulse and the magnetic field generated by the displacement magnet creates torsion that is transmitted along the wave/guide rod in the form of a mechanical wave. By measuring the time between transmission of the first signal and detection of torsion on the rod, you can calculate the exact position of the magnet.

*There is no direct contact between moving parts, so the transducer is not subject to wear. This also guarantees greater precision and repeatability.*



Model	IK1-D
Useful electrical stroke range	50..4000 mm
Independent linearity	±0.02%
Resolution	Max. 10µm
Work temperature range	-30..+70°C
Maximum displacement speed	10 m/sec
Interface	Digital
Available	1 cursor (PWM) 1 cursor (start/stop)
Protection level	IP67
Installation	Flange



Specifically designed for insertion in hydraulic and pneumatic cylinders thanks to small size of rod and magnet.

Analog or digital interface for direct link to PLC or other standard electronics. Standard flange for quick and simple installation.

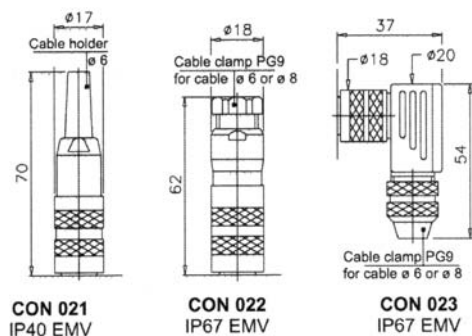


# Transducers IK1-D

## Accessories

### CONNECTORS

For versions IK1 B only 6-pin DIN 45322 output  
Non-isolated



**CON 021**  
IP40 EMV

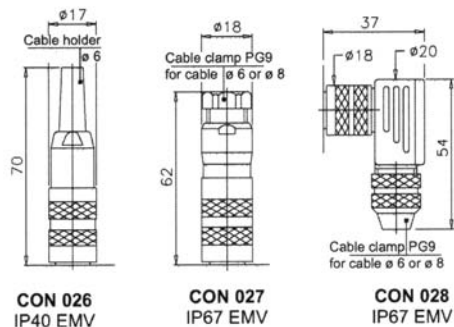
**CON 022**  
IP67 EMV

**CON 023**  
IP67 EMV

Connector extraction length 10 mm

### CONNECTORS

For versions IK1 C only 8-pin DIN 45326 output  
isolated



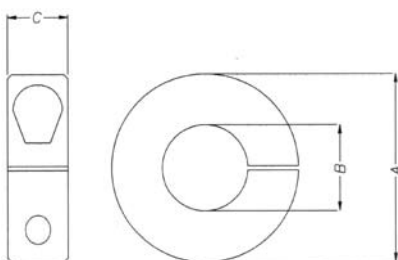
**CON 026**  
IP40 EMV

**CON 027**  
IP67 EMV

**CON 028**  
IP67 EMV

Connector extraction length 10 mm

### FLOAT STOP PKIT036



#### DIMENSIONS

Diameter A = 22 mm  
Diameter B = 10.5 mm  
Diameter C = 7.2 mm  
Thickness = 7.9 mm

#### MATERIAL

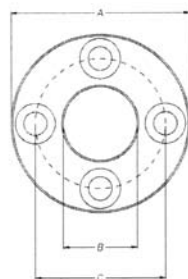
AISI 316 steel

#### ENCLOSURES

N°1 Washer AISI 316 D3  
N°1 Screw AISI 316 M3x8

code: **MIM518**  
code: **MIM849**

### FLOATING CURSORS



#### PCUR022

##### DIMENSIONS

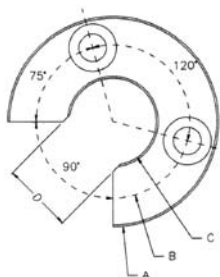
Diameter A = 32.8 mm  
Diameter B = 13.5 mm  
Diameter C = 23.9 mm  
Thickness = 7.9 mm

##### MATERIAL

Aluminium

##### ENCLOSURES

N°8 Brass nuts M4  
N°8 Brass washers D4  
N°8 Brass screws M4x25



#### PCUR023

##### DIMENSIONS

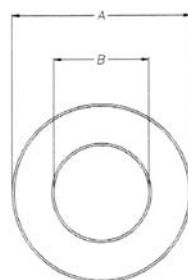
Diameter A = 32.8 mm  
Diameter B = 13.5 mm  
Diameter C = 23.9 mm  
Thickness = 7.9 mm

##### MATERIAL

Aluminium

##### ENCLOSURES

N°4 Brass nuts M4  
N°4 Brass washers D4  
N°2 Brass screws M4x25



#### PCUR024

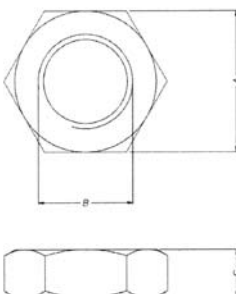
##### DIMENSIONS

Diameter A = 25.4 mm  
Diameter B = 13.5 mm  
Thickness = 7.9 mm

##### MATERIAL

Aluminium

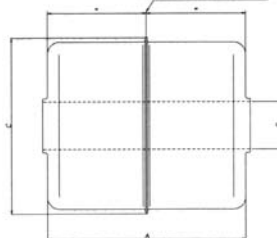
### HEXAGON LOCK NUT



MODEL	FLA002	FLA003
Hight A	CH 27	
Thread B	M 18 x 1.5	3/4" - 16 UNF
Hight C mm	9	
Material	AISI 316 steel	

### FLOATING CURSORS FOR LIQUIDS

#### HEIGHT DETECTION POSITION



MODEL	PCUR026	PCUR027
Length A mm	52.4	
Diam. B (Hole) mm	12	15
Diam. C mm	42	
Material	AISI 316 steel	

**Note:** The supply for cursors PCUR026 and PCUR027 includes float stop kit PKIT036.

