

*Germanjet 1700 Series  
Non-contact Absolute Position Transducer*



Absopos Technology



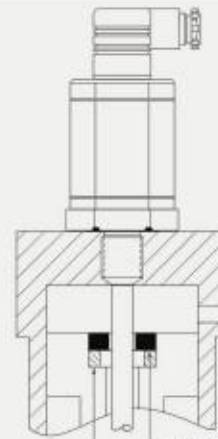
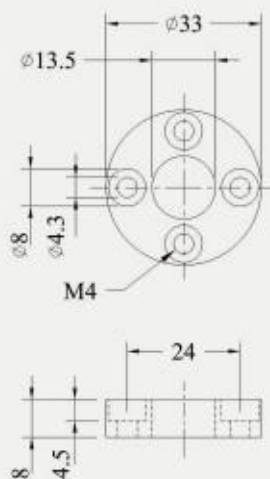
# Non-contact Absolute Position Transducer

## Germanjet 1700 Series

The 1700 series non-contact absolute position transducer is specially designed for hydraulic cylinder to provide precise, direct and absolute position feedback. The absence of electrical contact eliminates all wear and guarantees almost unlimited mechanical life expectancy. Flange is made of stainless steel; it can be inserted directly into hydraulic cylinder. The sensor cartridge can be removed from the flange while still installed in the cylinder. This allows quick sensor cartridge replacement without the loss of hydraulic pressure.

The transducer is rated for IP65 which offers full protection against outside agents for use in harsh environments. The connector (DIN 43650) is common use in hydraulic device and easy for field connection. This transducer is also suitable for machine installation.

## Magnet Installation



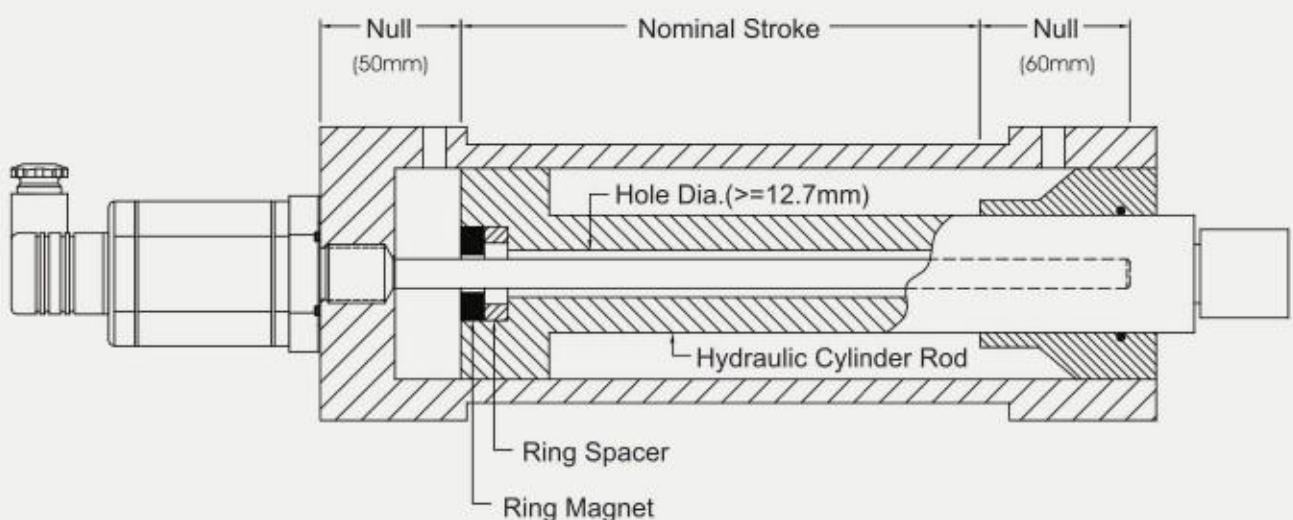
Remark:

Mounting screw must be made of non-magnetizable materials.

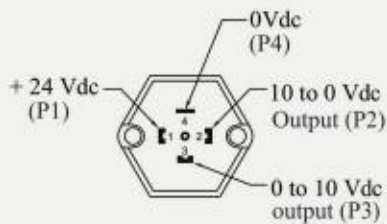
If cylinder is made of magnetizable materials, ring spacer must be installed.

Ring Magnet (Order No: 1700900001)  
Ring Spacer (Order No: 1700900002)

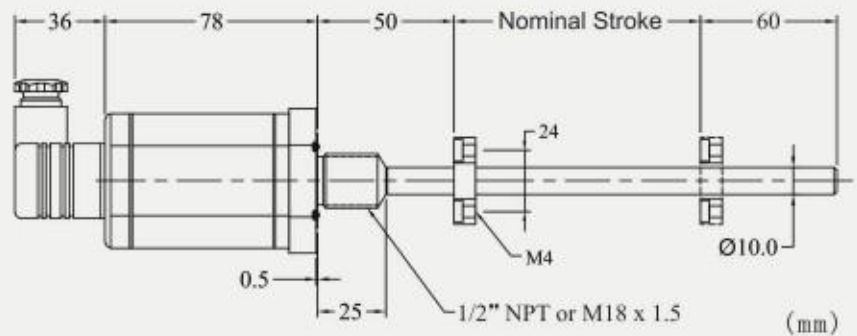
## Installation / Mounting



## Dimension



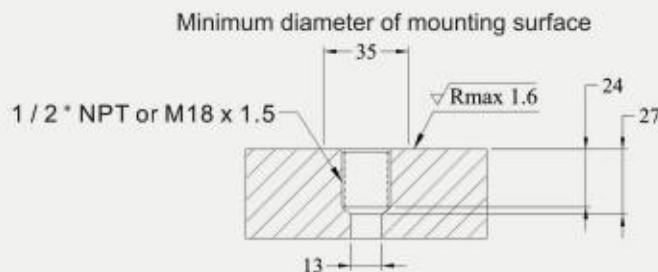
(View toward sensor pins)



## General Specifications

Measurement Type	Linear displacement
Input Voltage	+24Vdc nominal (20.4 - 28.8Vdc)
Input Protection	Polarity protection up to -30Vdc, Overvoltage protection up to 36Vdc
Current Consumption	50 - 140mA (stroke range dependent)
Dielectric Strength	500Vdc (DC ground to machine ground)
Output	0-10Vdc, 10-0Vdc double output, minimum load 5K $\Omega$
Resolution	Infinite, restricted by output ripple
Repeatability	< $\pm 0.005\%$ of full scale
Non-Linearity	< $\pm 0.01\%$ of full scale (minimum $\pm 90 \mu m$ )
Update Time	0.5ms up to 1200mm / 1.0ms up to 2400mm 2.0ms up to 4800mm / 5.0ms up to 7600mm stroke length
Operation Temperature	-40 to 85°C
Sealing	IP 65
Vibration Rating	5g/10-2000 Hz per IEC standard 68-2-6
Shock Rating	100g single hit per IEC standard 68-2-27
Pressure Rating	350 bar / 600 bar peak
Mounting	1 / 2 " NPT or M18 x 1.5
Housing Material	Anodized aluminum sensor cartridge / 316 stainless steel tube and flange

## Mounting Surface Requirement



Installation hole must be perpendicular with mounting surface and center with sensor rod

## Ordering Code

1700 X 1 X X X X

### Stroke Length

0075 = 75 mm	0325 = 325 mm	0600 = 600 mm
0100 = 100 mm	0350 = 350 mm	0650 = 650 mm
0125 = 125 mm	0375 = 375 mm	0700 = 700 mm
0150 = 150 mm	0400 = 400 mm	0750 = 750 mm
0175 = 175 mm	0425 = 425 mm	0800 = 800 mm
0200 = 200 mm	0450 = 450 mm	0850 = 850 mm
0225 = 225 mm	0475 = 475 mm	0900 = 900 mm
0250 = 250 mm	0500 = 500 mm	0950 = 950 mm
0275 = 275 mm	0525 = 525 mm	1000 = 1000mm
0300 = 300 mm	0550 = 550 mm	*other length upon request

### Mounting thread

1 = 1 / 2" NPT  
2 = M18 x 1.5

## Sensor Cartridge Replacement



The sensor cartridge can be removed from the flange while still installed in the cylinder. This allows quick sensor cartridge replacement without the loss of hydraulic pressure.