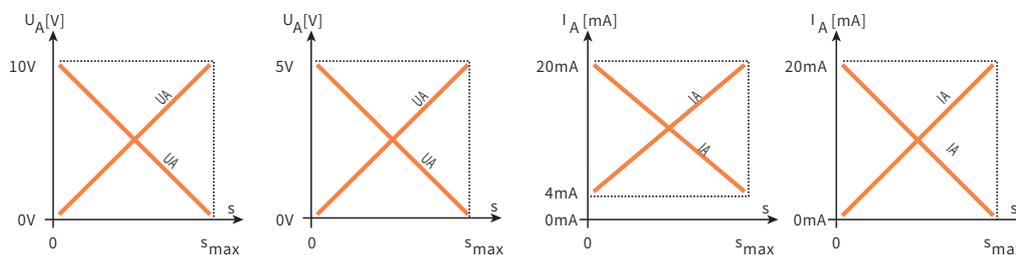




EE-Analog

EE pressure resistant outer tube

Redundant design, two independent 4-20mA outputs, highest reliability (customized)



- + Strong resistance to vibration and impact
- + Compact structure: suitable for occasions with strict requirements for the installation space of electronics housing, widely used in construction machinery
- + Durable and sturdy: fully enclosed design, with a maximum protection level of IP68
- + Linear measurement: absolute value output, no need to reset to zero
- + Easy to use: standard signal output, maintenance free
- + Maximum durability: continuous non-contact measurement
- + Full range adjustable: 100% adjustable zero and full range



TECHNICAL PARAMETER

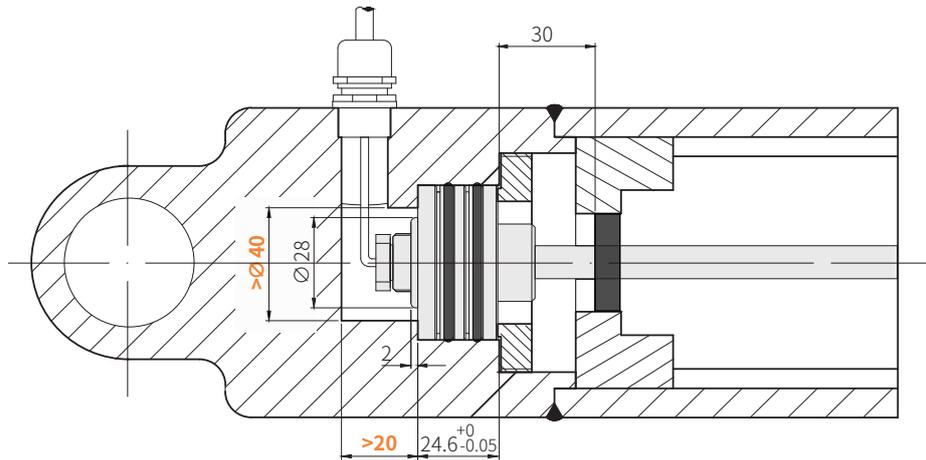
Input									
Measured data	Position								
Measurement range	50mm...4500mm								
Output									
Voltage	0...10VDC, 10...0VDC, 0...5VDC, 5...0VDC (Controller min. load impedance >5K Ω)								
Current	4...20mA, 20...4mA, 0...20mA, 20...0mA, two independent paths 4~20mA (min./max. load 0/750 Ω), redundant design								
Resolution									
Resolution	16 bit D/A								
None-Linearity	< $\pm 0.02\%$ F.S.(min. $\pm 50\mu\text{m}$)								
Repeatability	< $\pm 0.002\%$ F.S.(min. $\pm 20\mu\text{m}$)								
Update time	<table border="1"> <thead> <tr> <th>Stroke length</th> <th>$\leq 1200\text{mm}$</th> <th>$\leq 2400\text{mm}$</th> <th>$\leq 4500\text{mm}$</th> </tr> </thead> <tbody> <tr> <td>Update time</td> <td>0.5ms</td> <td>1ms</td> <td>2ms</td> </tr> </tbody> </table>	Stroke length	$\leq 1200\text{mm}$	$\leq 2400\text{mm}$	$\leq 4500\text{mm}$	Update time	0.5ms	1ms	2ms
Stroke length	$\leq 1200\text{mm}$	$\leq 2400\text{mm}$	$\leq 4500\text{mm}$						
Update time	0.5ms	1ms	2ms						
Temperature coefficient	< 30ppm/ $^{\circ}\text{C}$								
Mounting									
Mounting position	Any								
Mounting form	Extrusion mounting								
Design/Material									
Electronics housing	Stainless steel 304								
Measuring rod	Stainless steel 304/316L								
Magnet	Standard magnet								
External pipe pressure	$\Phi 10$ measuring rods: 35MPa (continuous), 70MPa (peak) $\Phi 7$ measuring rods: 30MPa (continuous), 45MPa (peak)								
Electrical connection									
Wiring connection	Straight out cable								
Operating voltage	+24VDC(-15/+20%)								
Polarity protection	Up to -36VDC								
Overvoltage protection	Up to +36VDC								
Power consumption	<50mA (varies with range size)								
Dielectric strength	500 VDC (DC ground to machine ground)								
Operating conditions									
Loop velocity	Any								
Operating temperature	-40...85 $^{\circ}\text{C}$								
Humidity	90 % relative humidity, no condensation								
Ingress protection	IP68								
Shock	100 g/11 ms, IEC standard 60068-2-27								
Vibration	15 g/10...2000 Hz, IEC standard 60068-2-6 (resonant frequencies exclusive)								
EMC	Electromagnetic emission according to EN 61000-6-3 Electromagnetic immunity according to EN 61000-6-2								

Installation and Fixation

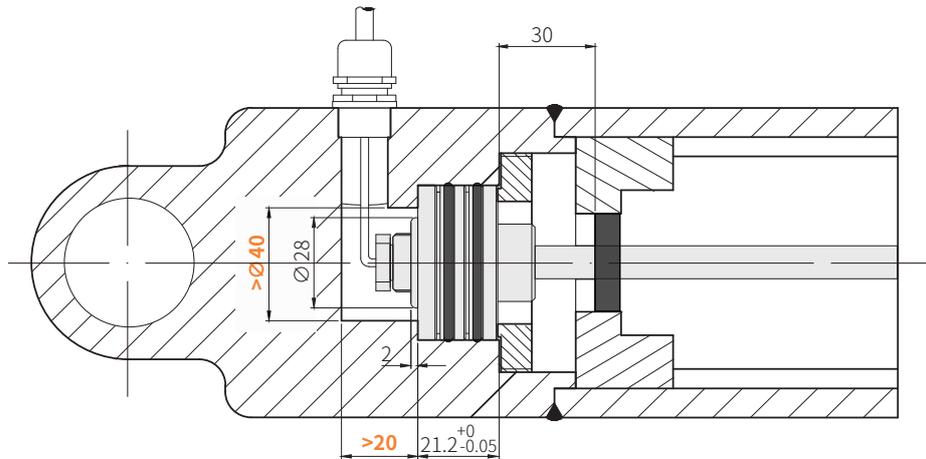
Installation instructions

- + Secure the magnet with non-permeable gasket.
- + The size of hole in the piston rod depends on factors such as hydraulic pressure and piston speed. The minimum hole size is $\Phi 10$ ($\Phi 7$ measuring rods) or $\Phi 13.5$ ($\Phi 10$ measuring rods).
- + The top mounting hole of the cylinder is greater than 40 mm in diameter and 20 mm in depth.

Basic installation diagram



Customized installation diagram



Wiring

5-core straight out wire	Color	Function
	Brown	+24VDC(-15/+20%)
	White	0 VDC(GND)
	Yellow	Signal Ground (Shared ground with power supply ground)
	Green	Signal output

***Redundant output, please customize**

ORDER CODE

EE - - - M- - - - -

Product form

- B Basic straight-out cable
- R Customized straight-out cable

Stroke length

0050~4500mm
(5mm increments)

Output

(Output Code)

Rod

- C Rod -Φ10mm
- D Rod -Φ7mm
- R Rod -Φ10mm With terminal connector and M4x6 threaded hole at the tail end

Connection type

RP/T__ Straight out__m high performance / temperature cable
(If the cable length is less than two digits, add zeros in front.)

Analog Output Code [1][2][3]

[1] [2] Output	[3] Magnet
A0 4~20mA (forward)	V0 0~10V (forward)
A1 20~4mA (reverse)	V1 10~0V (reverse)
A2 0~20mA (forward)	V2 0~5V (forward)
A3 20~0mA (reverse)	V3 5~0V (reverse)
A4 4~20mA (dual output forward) (Customizable)	1 one magnet

K=Anti-vibration program (If there are special needs, please fill in the end of the model number.)

Note: forward, data grows larger when the magnet is distant from the electronics housing;
reverse, data grows larger when the magnet approaches the electronics housing.

Model selection

Model: EEB-D-0100M-RP10-A01

Explanation: EE series straight out cable basic displacement sensor, measuring rod diameter 7mm, range 100mm, straight out 10 m high performance cable, 4...20mA (forward), single magnetic ring.



ACCESSORIES

Analog

EE

Name	Ring magnet	Ring magnet	Ring magnet	Ring magnet	
Operating temperature	-40~125°C				
Order code	12-1020	12-1032	12-1019	12-1024	12-1001
Name	Non-permeable gasket				
Operating temperature	-40~125°C				
Order code	12-1037	12-1037	12-1021	12-1025	12-1008

Integral cables



Connector	5 pin M12 female connector	5 pin M12 female connector (90 degree angle)
Name	Integral cable	Integral cable
Cable	5 wire 0.25mm ² shielded cable	5 wire 0.25mm ² shielded cable
Color/Diameter	Orange/ Ø 6	Orange/ Ø 6
Plug surface	<ul style="list-style-type: none"> 1-Brown 2-Green 3-White 4-Gray 5-Yellow 	<ul style="list-style-type: none"> 1-Brown 2-Green 3-White 4-Gray 5-Yellow
Length	5...30M	5/10/15/20/30M
Order code	16-1035	16-1040

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■ For more customizable products, please contact us.

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