





ISOBEEPER

END-OF-STROKE SENSOR FOR WELDED OR CUSHIONED HYDRAULIC CYLINDERS ACCORDING TO ISO STANDARDS







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ISOBEEPER: WHAT IS IT? HOW DOES IT WORK?

IsoBeeper is an oil adduction fitting to be screwed into the threaded connections of the hydraulic cylinder, and at the same time it electrically detects the end-of-stroke position of the piston or its braking bushing.

The **IsoBeeper** product range is characterized by the insertion of a monostable magnetic attraction and transduction me-



chanism inside the fitting, with the magnets wrapped and pressurized by the mineral fluid; concentrically to the magnetic mechanism, the fitting has several radial holes for the transit of the fluid in the two flow directions.

The presence of the piston or of the ferrous braking bushing attracts this magnetic mechanism without contact between the parts, electrically transducing the end-of-stroke position; vice-versa, their absence determines the return to the resting phase and the sensor de-excitation.

The electronic magnetic sensor is inserted into an adapter that wraps around the hexagonal fitting, allowing the cable outlet to be angularly oriented by 60° to 60°.

IsoBeeper is applicable:

- on welded cylinders, by making simple mechanical predispositions;

- on new or existing cushioned cylinders according to ISO standards, without making any

changes (except in special cases). <u>Particularly in the latter, the great advantage is to avoid the</u> additional mechanical processing necessary to insert the inductive sensors in the cylinder heads; <u>moreover, the use of stainless steel liners, magnetic pistons and external sensors is excluded</u> (in cases where only the extreme positions of the piston must be detected).

The magnetic transduction mechanisms of **IsoBeeper** can be customized to read the braking bushings of the ISO hydraulic cylinder in the various diameters.





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PRODUCT VERSIONS

1) Male-Male Nipple

Cylinder side thread: GAS BSP (3/8"-1"), metric, SAE-UNF. **Valve side thread:** GAS BSP (3/8"-1") or metric 60°; metric 24° (DIN 2353); SAE-UNF.







2) Male-Female Adapter

Cylinder/valve side thread: GAS BSP (3/8"-1") - Other combinations on request and minimum batches.



These product versions, interchangeable with commercial fittings, offer the option of mounting both on welded cylinders and on cushioned cylinders according to ISO 6020/1, 6020/2, 6020/3, 6022 standards, providing where required the adjustment of the intervention point for reading the various diameters of the braking bushings; the **ISOBEEPER SAE** version is also available, and consists of a modular insert placed between the SAE flange and the connection of the hydraulic cylinder, suitably prepared for this purpose.

| HALL MAGNETIC SENSOR FEATURES | |
|--|---|
| Sensor body in PA6 30% glass fiber V0 blue | Impact resistance: 30g/11ms |
| Supply voltage: 5/30VDC | Vibrations resistance: 0,35mm/10-55Hz |
| Output current: 200mA | Degree of protection: IP67 |
| Dissipated power: 900mW | Operating temperature: -25C° +85C° |
| Maximum absorption without load: 30mA | Bipolar led (NO): • powered • activated |
| Repeatability precision: 0,1mm | Bipolar led (NC): powered activated |
| Delayed excitation and de-excitation: 30ms | Wiring: tripolar cable, L=2mt PVC* |

*Alternatively, we also provide the wiring with cable and flying M12 connector. The sensor is in PNP or NPN version, and depending on the adjustment of its position along the hexagonal body of the fitting it can provide NO or NC output signals.



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