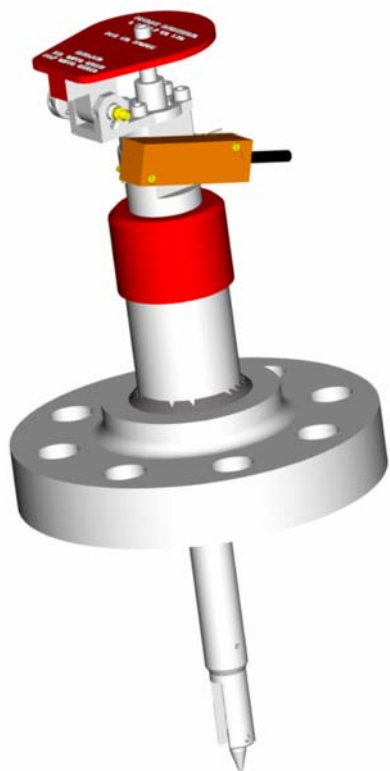




UNISIG – Flange Mounted

Product: Pig Signaller
Grouping: Pressure vessel
Version: 1.0



In addition to being designed for manufacture, to keep costs to a minimum, the PE UNISIG is also designed for ease of operation, therefore is simple to use and maintenance can be carried out in a fraction of the time of older designs.

With this in mind PE has designed the standard Flange mounted unit to be removed under pressure, without the need for an isolation valve, when used with PE Removal Tool.

Many leading operators have chosen the PE UNISIG to standardise on due to its simple design and inter-changeability of parts due to the modular configuration.

General function and application:
Pig signallers are fitted to launcher and receiver stations to confirm the launch / arrival of a pig. They can also be at any location along a pipeline length to give indication of a pig at a specific location, e.g. road and rail crossings. Also, other pipeline features such as valve stations, bends and tees. They can be used to detect the passage of all types of pigs from foams, spheres, and metal-bodied pigs to intelligent inspection tools.

Offers a cost effective, reliable signalling system. Incorporating a simple magnetic / mechanical design, which reduces the number of moving parts. This reduces initial capital costs, running and maintenance costs and in-turn; down time of your pipeline.

The design incorporates a unique magnetic system, which allows for the use of static seals. This means reduced risk of product leakage.

Main features:

- To suit pipe sizes from 2" upwards
- 2" Flanges RF & RTJ available
- Designed up to and including CL2500*
- No dynamic seals
- Can be removed under full line pressure
- Bi-directional trigger
- Can not be operated by line pressure

Options:

- Electrical auto reset switch, with junction boxes
- Adjustable trigger
- Mechanical, or electrical Counter
- Contract specific materials
- Contract specific paint finish

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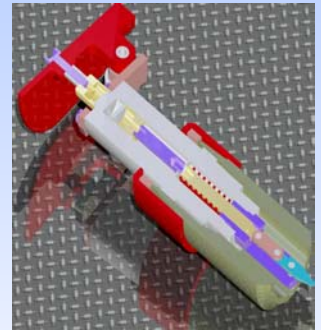
Installation & removal sequence



The design uses an internally mounted magnet, which means that a static seal seals all internal moving parts in the body of the signaller. Therefore reducing the risk of product leakage. A corresponding magnetic unit attached to the standard flag accessories, or an electrical switch (optional), registers the movement of the internal magnets. Giving a visual, or electrical signal of the passage of a pig.

In addition, where electrical switches are fitted they work independently from the mechanical flag, giving 100% built-in redundancy therefore greater reliability.

When fitted with an electrical switch both the switch and the internal system offer automatic reset. The internals are returned to the set position by a spring. This allows for use on multiple pigging operations such as batching of product and remote indication when connected to a control panel / room. UNISIG has been tested to prove a reset time of 0.6 seconds.



The trigger itself is also a simple conical shape, connected by a positive linkage to the internal magnet. This again gives increased service life and reliability, as it is less prone to damage by the passage of a pig, or debris, only protruding 17mm into the line. The trigger is designed to allow for bi-directional travel. The signaller is designed to register the passage of all types of pigs from foams to intelligent inspection tools.

Internals can be cleaned, serviced and then replaced in the reverse operational sequence, using the Removal Tool. This ingenious design incorporates the isolation valve into a universal removal tool, rather than individual signallers, therefore reducing the cost.

To support our range of signallers can offer our qualified personnel to carry out on-site maintenance and / or training.

MATERIALS

Component	Standard	Specials available upon request
Socket Welded Flange	ASTM A105	✓
Cap	316 St.St.	✓
Internals	316 St.St.	✓
Seals	Viton	✓

All wetted parts to NACE MR-01-75

DESIGN FEATURES*

Pressure rating	ANSI CL150 to CL1500		✓
Temperature rating	-29 to +125°C		✓
Design code	ASME VIII Div. 1		✓
2" Flange face	RF	RTJ	✓ ✓

*Specific alternatives, including ANSI CL2500 available on request