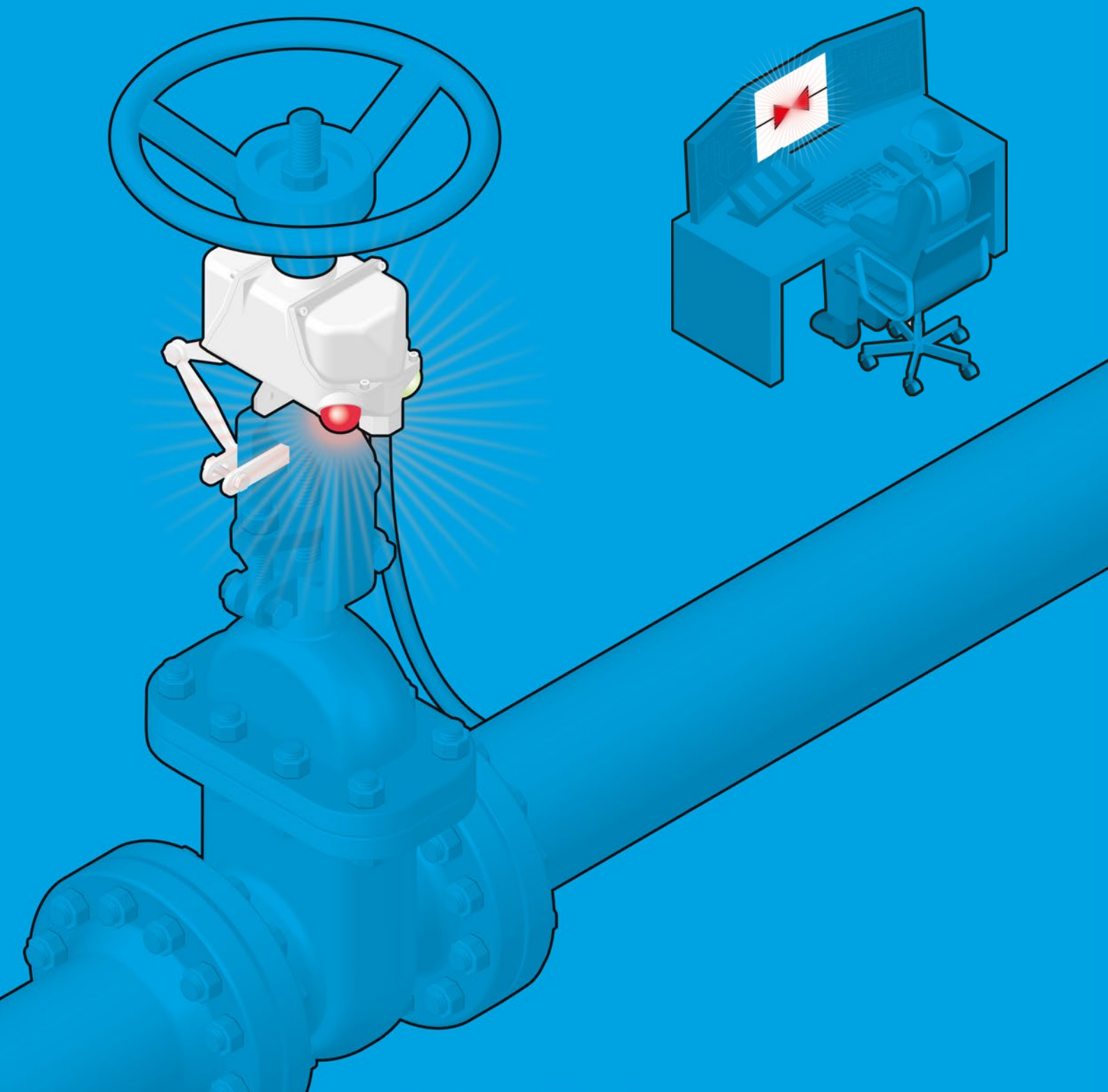
sofis

valve operation

VPI position indicator



Real-time position feedback of your manual valves

Real-time information about your assets is key to great plant performance. The VPI position indicator sends real-time valve position information to your DCS to help you optimize your process flow.

VPI is a high-performance switch box for manual multi-turn valves. It detects when valves have reached their open or closed position and sends a signal to your DCS. This valuable information about manual assets enriches your control system's capabilities. It helps to further optimize your process performance, and prevents safety issues or product contamination caused by incorrect valve line-ups.

In-field notification

Reliable signal to your control room

With position indicators you obtain vital process information

Accurate position information of your manual valves helps you to further optimize your processes. With position indicators on your manual valves you:

- have up-to-date valve status information in your control room
- improve your process performance
- ensure that many procedures go first-time-right

Improve your process performance with real-time valve status information

VPI is the most reliable, universal indicator for multi-turn valves

To obtain position indication from multi-turn valves like gates or globes, operations often relies on self made solutions. These solutions take a lot of time and effort to make and often perform poorly. Their designs may limit free operation of the host valve and their fragility often causes false signals. The VPI position indicator is a reliable, universally-applicable alternative, offering many benefits.

VPI protects sensors against interference and impact

The VPI determines the valve end-stops using a unique counter. This patented Geneva gear mechanism combines a large range of rotations with very high switching accuracy. All electronic components and the counting mechanism are enclosed in a robust body. They are protected against outside interference and impact and are not affected by vibration.

VPI can be used in any type of environment

The VPI is available in coated aluminium and in high performance AISI 316, making it suitable for use in harsh, offshore and other corrosive environments.
The VPI can be installed in highly explosive atmospheres and is certified for use in zone 1 classified areas.

VPI is easily mounted on existing valves in process

The VPI is mounted with a universal bracket that requires no welding or modifications to your valve. The standard models can be used for any type of multi-turn valve.

VPI is easily reset when valve settings change

Once set, the open and closed positions need no periodic adjustments. In case the valve end-stops change, VPI is easily reset within minutes.

Models

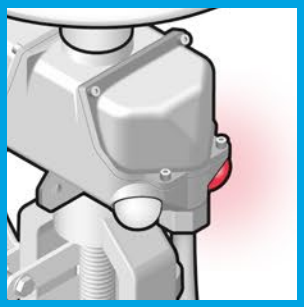
The Sofis VPI position indicator is the most reliable position indicator for any type of multi-turn or gearbox-operated valve. We have two basic models to choose from. Both models are universally applicable and extremely durable.

A-series (onshore)

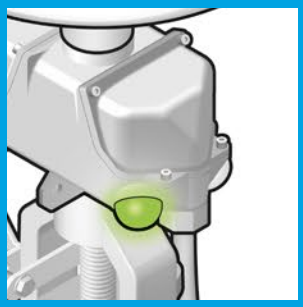
The high standard for onshore environments.
The VPI A-series is made of high-quality, powder-coated aluminium. The A-series is suitable for operation in any type of onshore environment, from arctic to desert weather conditions.

S-series (offshore)

Extremely durable for offshore and other corrosive environments.
The VPI S-series is made of the highest quality AISI 316 stainless steel. With its extreme durability, the S-series can resist the roughest offshore conditions, withstanding continuous exposure to salt or high concentrations of corrosive gases or liquids.



Closed LED



Open LED

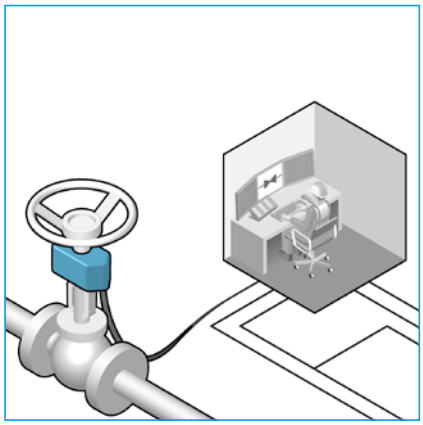
Visual position indication

The VPI is optionally available with LED indicators for in-field position signals. Check your valve position while standing next to your valve with the LED indicators. The LEDs clearly indicate which position the VPI is signalling to the control room. And you can spot manual valve status in the field from a distance.

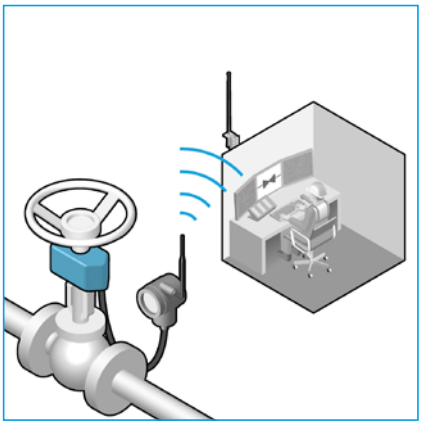
Configurations

VPI can be configured according to your plant specifications. Various sensors, protection modes and communication protocols are available.

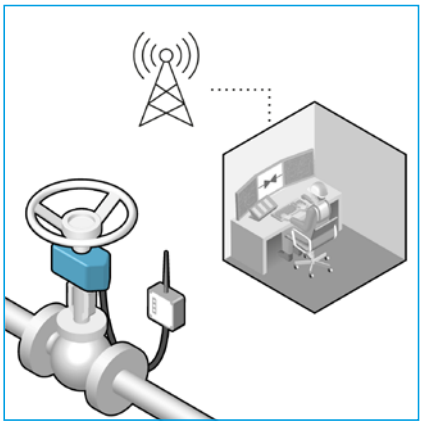
The VPI can be applied in any plant. You can connect the VPI to your control system in a number of ways, depending on your communication infrastructure.



Wired
Use your existing cable infrastructure.



Industrial wireless
Connect the VPI to a wireless transmitter, irrespective of which protocol you use.



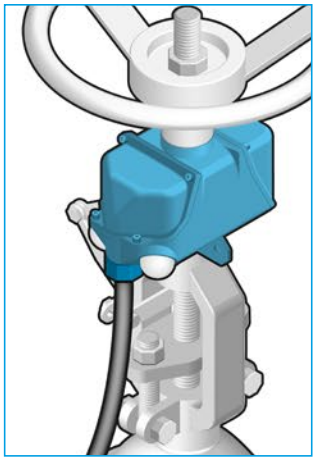
Mobile internet
In remote locations, the VPI can communicate online via a GPRS transmitter.

Intrinsically safe

VPI A/S-series are Atex and IECEx certified as intrinsically safe (Ex i).
VPI is available with a wide range of sensors:

Type	Brand	Remarks
NAMUR sensor	Pepperl+Fuchs	General purpose NAMUR
Dry contact switch	Omron	General purpose dry contact switch
Safety NAMUR sensor	Pepperl+Fuchs	Safety function, usable up to SIL 3
Leverless limit switch	GO switch	High reliability and durability limit switch.

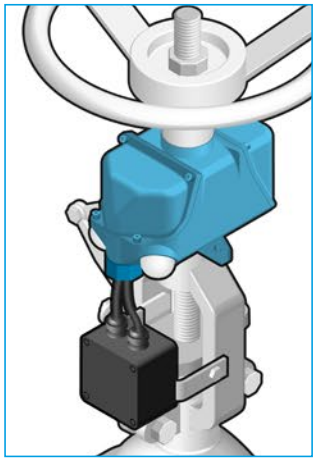
* Download the product sheet for a full list of sensor options and specifications



Flame proof

VPI is also available in flame proof version. This version is equipped with an external, Ex d junction box. The Ex d version can be equiped with a range of sensors and switches.

Type	Brand	Remarks
Dry contact switch	Bartec	Ex d, SPDT, 3 meter cable
Leverless limit switch	GO switch	Ex d, SPDT, 3.6 meter cable
Leverless limit switch	Euroswitch	Ex d, SPDT, 2 meter cable

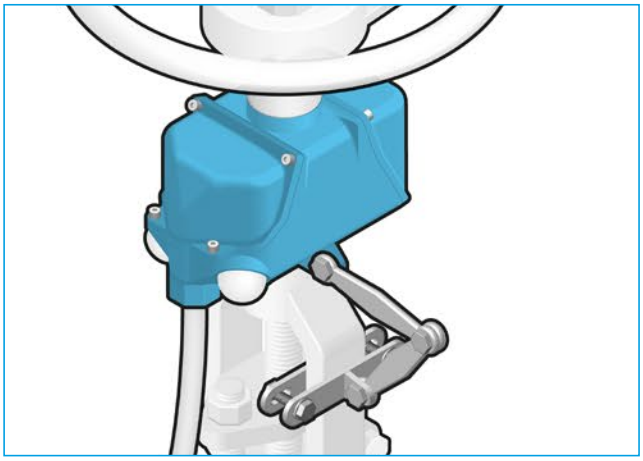


Mounting

VPI position indicator is specifically designed to fit any type of gate, globe or rising stem valve. It is equipped with a universal mounting bracket, integrated terminal blocks and easily-accessible setting inlets.

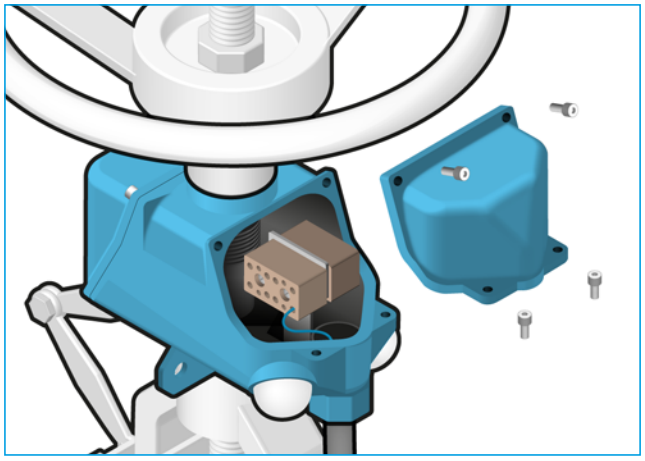
Universal mounting

- replaces original handwheel
- fitted with customized adaptor
- equipped with universal bracket



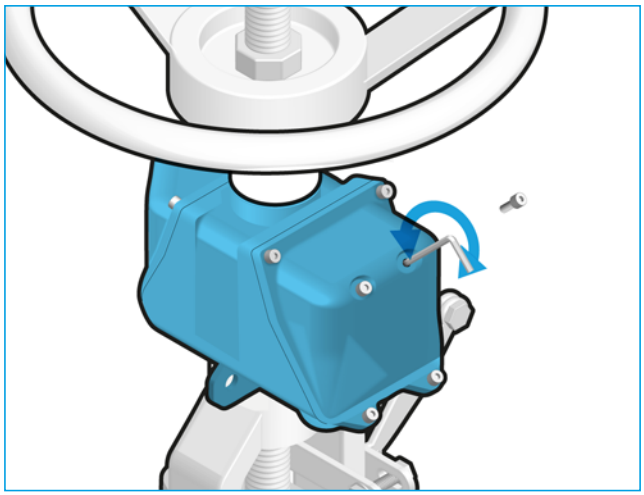
Quick connecting

- wiring connected to terminal blocks
- easy to reach by removing cover



Easy setting

- setting through setting inlets
- inlets covered by tamper-proof screws



Experience

The VPI position indicator design is based on extensive experience. Using proven technology, thousands are already successfully deployed, by renowned end-users in the Oil & Gas and tank storage industry.

Smith Flow Control and Netherlocks Safety Systems have merged. We are Sofis, the leading valve operation specialists. With our combined expertise we offer smart integrated solutions to optimize valve operation. Our products help create a safer and more efficient working environment and are often regarded as the industry standard. We work closely with our customers and provide simple and reliable solutions.

We are smarter together.

Contact
For support:
support@sofisglobal.com
For enquiries:
www.sofisglobal.com/contact

Online
www.sofisglobal.com
YouTube: Sofis valve operation
Facebook: @Sofisglobal
Twitter: @Sofisglobal

Locations
Alphen aan den Rijn, Netherlands
+31 172 471339
Beijing, China
+86 10 5879 7989
Dubai, UAE
+971 4359 1988
Erlanger, USA
+1 859 578 2395
Houston, USA
+1 281 547 7422
Singapore
+65 6395 8555
Stockstadt, Germany
+49 6027 4051221
Vadodara, India
+91 265 234 1134
Victoria, Australia
+61 3 9771 5370
Witham, UK
+44 1376 517901

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