



VALVE POSITION INDICATOR

Product sheet





Netherlocks' Valve Position Indicator (VPI) seamlessly provides an overview of positions of the manual valves within your plant network that saves costs, time and avoids safety issues due to misalignment of manually operated valves.

VPI can be configured according to application (onshore or offshore), spindle size, sensor requirements, detection mode (open, closed or dual) and local indication. A configurator at the end of this document serves to configure VPI, following your own specifications and requirements.

VPI model series

The **VPI A-series** are made of high quality, powder coated aluminium. The A-series are fit for operation in any type of onshore environment, from arctic to desert weather conditions.

The **VPI S-series** are made of the best quality AISI 316 stainless steel. With its extreme durability, the S-series resist even the roughest offshore conditions and all weather types.

Size range

VPI fits any type of manual multi-turn valve or gearbox and can be configured from 5 up to 210 rotations.

- > Small body, for spindle diameter up to 27 mm
- > Large body, for spindle diameter up to 70 mm

Detection mode

VPI can detect both open and closed positions or only the open or closed position of your valves.

Local indication

Check your valve position while standing next to your valve with optional LED indicators. The LEDs clearly indicate which position the VPI signals to the control room.

Classifications

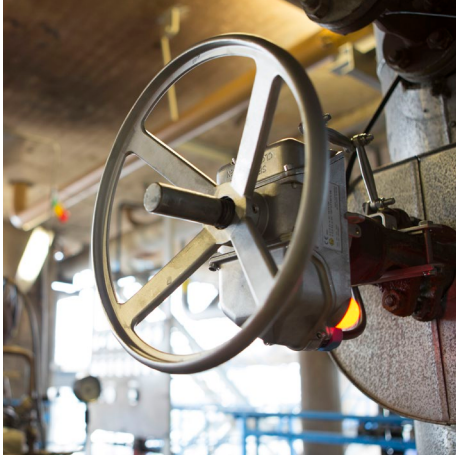
VPI is an ATEX and IECEx certified product, approved for use in zone 1 classified areas.

- > Product IP Rating: IP66
- > ATEX: KIWA 15ATEX0032X
- > IECEx: IECEx KIWA 15.0013X



II 2 G Ex ia IIC T6/T4 Gb
II 2 D Ex ia IIIC T80°C/T130°C Db



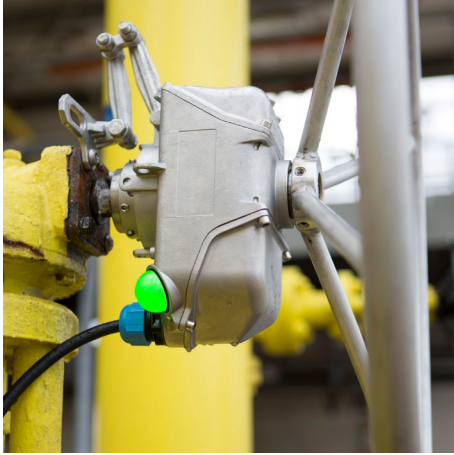


SIZES AND MATERIALS

	VPI A-series Small	VPI A-series Large	VPI S-series Small	VPI S-series Large
Body material	Aluminium A360	Aluminium A360	AISI 316	AISI 316
Body coating	Interpon 610 powder coating	Interpon 610 powder coating	N/A	N/A
Hand wheel material	Carbon steel coated	Carbon steel coated	AISI 316	AISI 316
Bracket material	AISI 316	AISI 316	AISI 316	AISI 316
Adaptor material	AISI 316	AISI 316	AISI 316	AISI 316
Total weight (kg)	1.8	3.8	3.3	6.4
Dimensions (mm) L X W X H	191x120x142	220x177x178	191x120x142	220x177x178
Spindle diameter (mm)	5-27	20-70	5-27	20-70
Drive bush thread range (mm)	5-36	30-80	5-36	30-80

Note: Weights exhibited above are excluding the weight of the adaptor and the hand wheel of the VPI





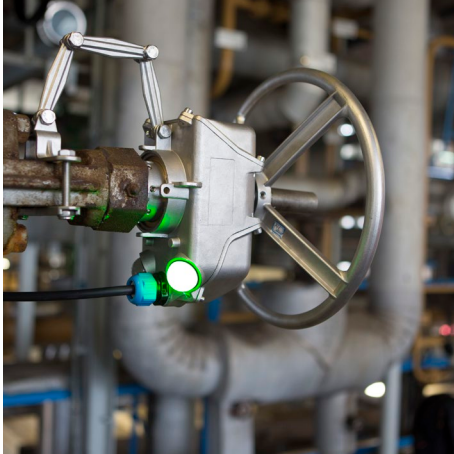
SENSOR OPTIONS (NO SURCHARGE AND AVAILABLE FROM STOCK)

No.	Type	Brand	Model	Remarks
1	NAMUR sensor	Pepperl+Fuchs	SC3.5-G-NO	General purpose NAMUR
3	Dry contact switch	Omron	D2VW-01L2A-1M	General purpose dry contact switch

ADVANCED SENSOR OPTIONS (SURCHARGE AND LEADTIME +4 WEEKS)

No.	Type	Brand	Model	Remarks
2	Safety NAMUR sensor	Pepperl+Fuchs	NJ3-18GK-S1N	Safety function, usable up to SIL 3
4	Leverless limit switch	Topworx GO switch	74-1352H-S2	High reliability and durability limit switch, VPI Large model only





ALTERNATIVE SENSOR OPTIONS (SURCHARGE AND LEAD TIME ON REQUEST)

No.	Type	Brand	Model	Remarks
5	Leverless limit switch	Longvale Euroswitch	FS-A222	Alternative leverless limit switch, VPI Large model only
6	NAMUR sensor	Pepperl+Fuchs	NJ5-18GK-N-150	Extended temperature range: $-40^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$
7	Safety NAMUR sensor	Pepperl+Fuchs	NJ4-12GK-SN	Extended temperature range: $-50^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$
8	NAMUR sensor	Pepperl+Fuchs	NJ2-11-N-G	Alternative NAMUR sensor
9	NAMUR sensor	Pepperl+Fuchs	SJ3,5-N	Alternative NAMUR sensor
10	NAMUR sensor	Pepperl+Fuchs	NJ2-V3-N	Alternative NAMUR sensor
11	NAMUR sensor	Pepperl+Fuchs	NJ4-12GK-N	Alternative NAMUR sensor
12	NAMUR sensor	Pepperl+Fuchs	NCB2-V3-N0	Alternative NAMUR sensor
13	Safety NAMUR sensor	Pepperl+Fuchs	SJ3,5-SN	Alternative safety NAMUR sensor: $-50^{\circ}\text{C} \leq T_a \leq +100^{\circ}\text{C}$





RATING & OPERATING CONDITIONS

No.	Sensor option	Models without LEDs	Models with LEDs
1	NAMUR sensor Pepperl + Fuchs SC3,5-G-NO	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
2	Safety NAMUR sensor Pepperl + Fuchs NJ3-18GK-S1N	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
3	Dry contact switch Omron D2VW-01L2A-1M	II 2G Ex ia IIC T6 Gb II 2D Ex ia IIIC T85°C Db -40°C ≤ Ta ≤ +80°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -40°C ≤ Ta ≤ +50°C
4	Leverless limit switch Topworx GO switch 74-1352H-S2	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T85°C/T130°C Db -40°C ≤ Ta ≤ +50°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -40°C ≤ Ta ≤ +50°C
5	Leverless limit switch Longvale Euroswitch FS-A222	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T85°C/T130°C Db -60°C ≤ Ta ≤ +80°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -40°C ≤ Ta ≤ +50°C
6	NAMUR sensor Pepperl + Fuchs NJ5-18GK-N-150	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -40°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -40°C ≤ Ta ≤ +50°C
7	Safety NAMUR sensor Pepperl + Fuchs NJ4-12GK-SN	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -50°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -40°C ≤ Ta ≤ +50°C
8	NAMUR sensor Pepperl + Fuchs NJ2-11-N-G	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
9	NAMUR sensor Pepperl + Fuchs SJ3,5-N	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
10	NAMUR sensor Pepperl + Fuchs NJ2-V3-N	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
11	NAMUR sensor Pepperl + Fuchs NJ4-12GK-N	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
12	NAMUR sensor Pepperl + Fuchs NCB2-V3-N0	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -25°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -25°C ≤ Ta ≤ +50°C
13	Safety NAMUR sensor Pepperl + Fuchs SJ3,5-SN	II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db -50°C ≤ Ta ≤ +70°C/+100°C	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130°C Db -40°C ≤ Ta ≤ +50°C





MODEL CONFIGURATION

Material	Size	Sensor type	Detection mode	Local indication
A A-series	S Small	1: NAMUR sensor	O Open	N Without lights
S S-series	L Large	2: Safety NAMUR sensor	C Closed	L With LED lights
		3: Dry contact switch	D Dual (Open & Closed)	
		4: Leverless limit switch		
		5: ...		

CONFIGURATION EXAMPLE

Requirement	Model code
Valve position indicator for multi-turn valves	VPI
For onshore application (Aluminium housing)	A
Small size body	S
Safety NAMUR sensor	2
Open and closed detection	D
Without LED lights	N
Required VPI model	VPI-A-S2DN

