

# rotork®

## Gears



### SPI - Smart Position Indicator

Limit switches enclosed in a IECEx/ATEX certified protective enclosure providing an accurate and reliable Open/Close signal to the control room for multi-turn manual valves. Using 30+ years of proven technology, the new Smart Position Indicator mechanically displays the position of the valve for in-field notification and digitally signals its open/closed position.

With certification for use in gas and dust explosion hazardous environments, the Smart Position Indicator helps to create a safer working environment. The compact Smart Position Indicator offers Ex e or Ex i certified limit switches complete with internal terminations, removing the requirement for an external junction box.

#### Application

The Smart Position Indicator is designed for use in chemical, petro-chemical, oil and gas industries, power plants and water supply.

#### Features

- Multi-turn manual duty
- ISO5210 F10 output
- Anodised aluminium housing
- Stainless Steel fasteners
- Protected shafts
- Adjustable open/shut plates & contacts
- Maintenance free
- Switches and terminals housed inside a protective enclosure
- Switches used:
  - Bartec 07-1501-6520-63
  - Pepperl+Fuchs NCB2-V3-N0
  - Crouzet 831391 CBB.5.A
  - Omron D3V-161-1A5 (or equivalent)
- Mount to existing F10 input flange (stem acceptance Ø20 x 60 mm)
- Direct mount to rising stem valve (max stem acceptance Ø20 x 100 mm stroke including thrust taking)

## SPI Smart Position Indicator

#### Options

- Pin / key handwheel

#### Environmental Specification

- IP67 minimum sealed unit

#### Certification

- **Hazardous Area:**

On versions fitted with flameproof micro-switches:

Ex II 2GD

Ex e d IIC T4 Gb / Ex h IIC T4 Gb / Ex tb IIIC T135°C Db IP67  
T ambient = -25 to +65 °C  
(1.5 A version) or -25 to +40 °C (5 A version)

On versions fitted with intrinsically safe proximity sensors:

Ex II 2G

Ex ib IIC T4 Gb / Ex h IIC T4 Gb  
T ambient = -25 to +100 °C

- **Non Hazardous Area:**

Watertight & Dust-tight, BS EN 60529 IP67  
T ambient = -25 to +100 °C

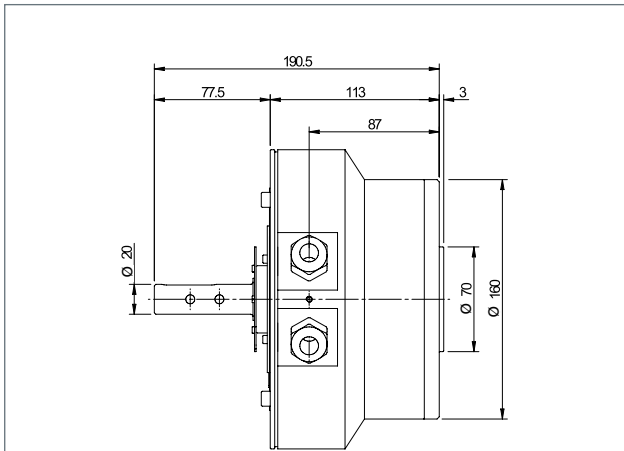
Keeping the World Flowing

## Technical Specification

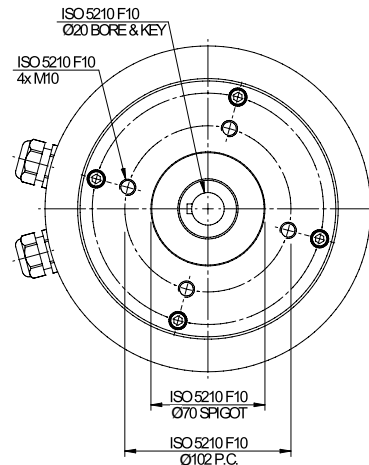
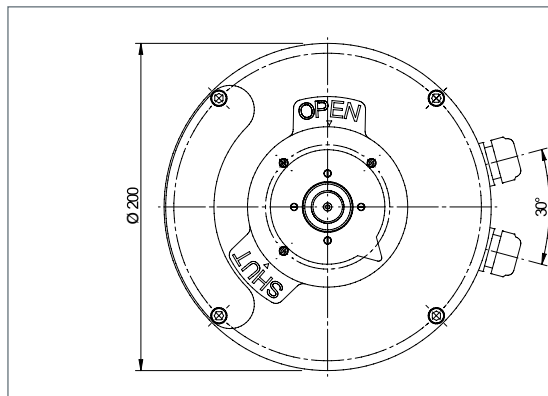
Size	Ratio : 1	Gearbox Number of Turns		Weight (kg)
		Min	Max	
SPI 1	34.8	4	26	6.4
SPI 2	113.3	13	87	6.4
SPI 3	368	42	284	6.6
SPI 4	1196	137	923	6.7

## Material Specification

Description	Material
Fasteners	Stainless Steel A4
Position Indicator	Stainless Steel 303
Sealing	NBR
Housing	Aluminium
Gearing	Carbon Steel C45
End Plates	Aluminium



Note: Cable glands are shown for pictorial purposes only.  
Cable gland holes are 1/2" - 14 NPT.



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