

## FRS02 Filter regulator (Aluminium casing)

## FRS03 Filter regulator (Stainless Steel casing)



Control of instrument supply air pressure, and removal by filtration of dust particles and water content. FRS02 and FRS03 are dedicated for direct mounting to valve positioners SRI990, SRD991, and SRD960.

### FEATURES

- Minimal effect of upstream pressure fluctuation
- Low inherent air consumption
- Gauges 3 scales (bar / psi / kPa)
- Bowl with manual drain
- 1/4 NPT connection for in and output air
- Aluminium housing for FRS02
- Stainless Steel housing (316) for FRS03
- Air flow at max deviation 18 Nm<sup>3</sup>/h
- Range of setting 0 to 8 bar
- Max inlet pressure 10 bar / 150 psi
- Temperature Range -30°C to 70°C
- Filter: Sintered bronze (FRS02), Stainless Steel (FRS03), Filter grade 30 μm
- Explosion protection II 2 GD c IIC T6  
ATEX - constructive design  
CU TR Explosion protection

**TECHNICAL DATA**

Inlet pressure . . . . . max.10 bar / 150 psi  
 Control range . . . . . 0 - 8 bar / 0 - 116 psi  
 Indicating range . . . . . 0 - 10 bar / 0 - 145 psi  
 Error limit . . . . . Class 2.5  
 Air throughput Qn. . . . . max. 18 Nm<sup>3</sup>/h \*  
 Upstream press. dependency < 1 mbar / 0.1 bar  
 Max.inherent air consumption < 0.001 m<sup>3</sup>/h \*  
 Location class . . . . . IP 54 acc. to IEC 529  
 Area classification . . . . . D2 acc. to IEC 654/1

Ambient temperature range . -30 to 70°C/ -22 to 158°F \*\*  
 Mounting . . . . . Wall mounting/Pipe mounting  
 Nominal position . . . . . NL 90  
 Pneum. connections. . . . . internal thread 1/4 - 18 NPT

**Materials**

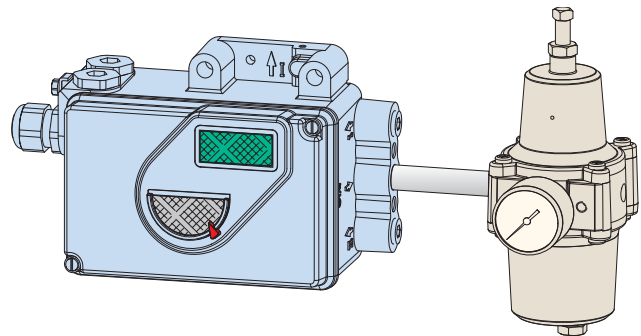
- Housing: Diecast Aluminium (FRS02), SS 316 (FRS03)
- Filter: Sintered bronze (FRS02), SS (FRS03),  
 filter grade 30 µm
- Gauge: housing: SS; measuring system: brass

Weight . . . . . FRS02: 0.70 kg (1.54 lb)  
 FRS03: 1.62 kg (3.57 lb)

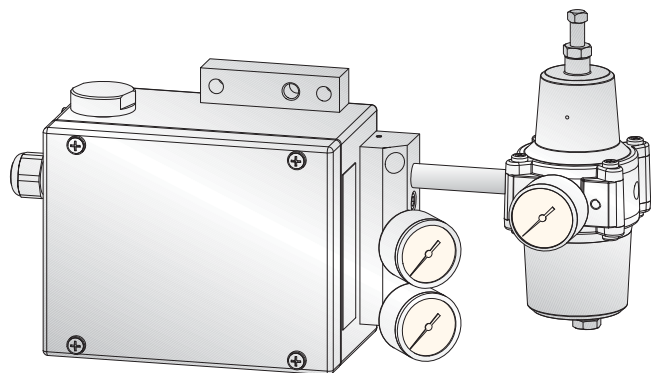
\* Measured at 7 bar upstream pressure and 1.4 bar output pressure, based on standard reference conditions.  
 \*\* The supply air must be dry for operation at temperatures below 0 °C (observe dew point)

**APPLICATION**

Specially dedicated for direct mounting to valve positioners SRI990, SRD991, and SRD960.

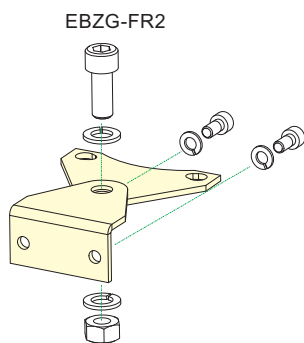
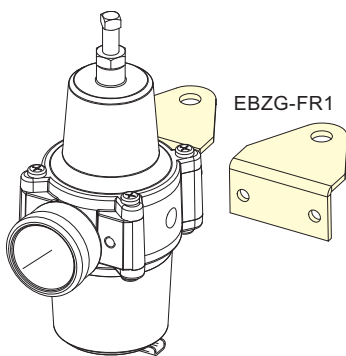


FRS02 direct mounted to SRD991 or SRI990, via Tube connector VG-91

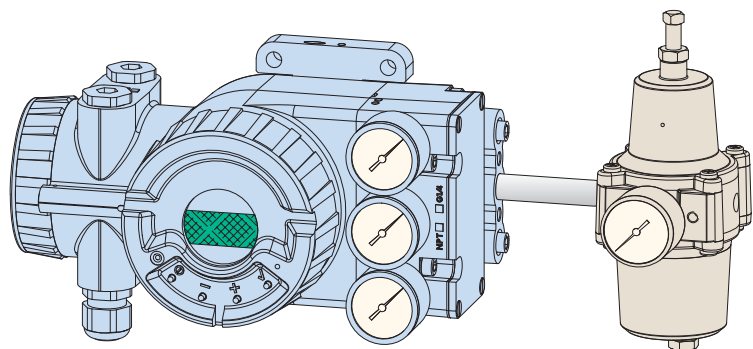


FRS03 (SS) direct mounted to SRD991 or SRI990 (in SS housing)

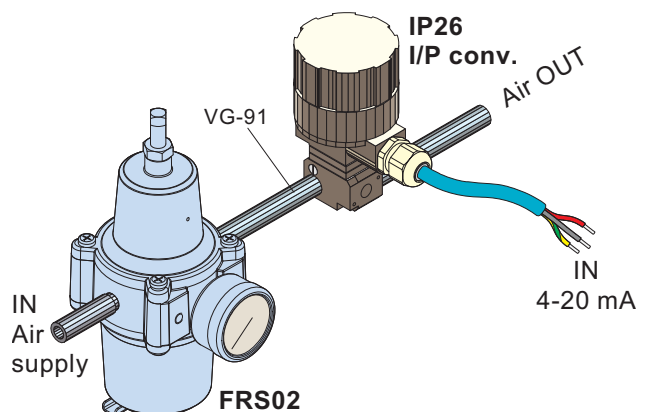
**Accessory: Mounting bracket**



Mounting via Mounting Bracket

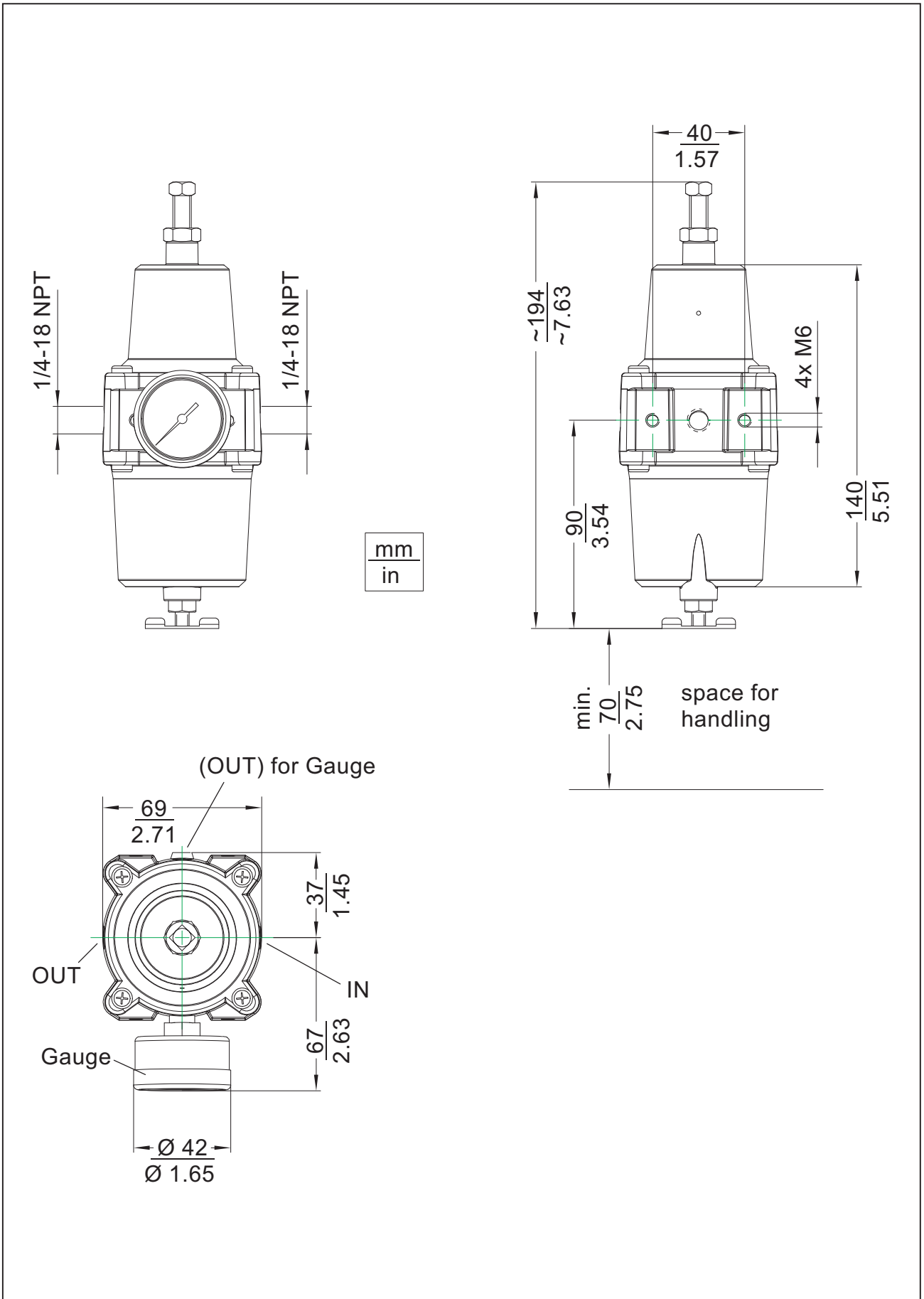


FRS02 direct mounted to SRD960



FRS02 direct mounted to IP26

**DIMENSIONS FRS02, FRS03**



**MODEL CODES**

<b>Filter Regulator (Aluminium casing)</b> . . . . .	<b>FRS02</b>
<b>Filter Regulator (Stainless Steel casing)</b> . . . . .	<b>FRS03</b>
Tube, 1/4 NPT both sides, material 1.4404, for direct mounting to filter Regulator. . . . .	VG-91
Tube, 1/4 NPT both sides, material 1.4571, for direct mounting to filter Regulator, prepared for gauge 1/8 NPT. . . . .	VG-92
<b>Mounting Brackets</b>	
Mounting Bracket for FRS02 or FRS03 . . . . .	EBZG-FR1
Orientable Mounting Bracket for FRS02 or FRS03. . . . .	EBZG-FR2

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