

Cooling Elements

Cooling elements are applied to decouple the pressure measuring instrument from the measuring point. This is strongly recommended for medium temperatures of +100 °C (+212 °F) and up. Versions for temperatures up to +250 °C (+482 °F) are available.

Pressure gauge/chemical seal combinations, if mounted and filled at our factory, are in standard version delivered with model KEIv, which is welded to the chemical seal.

Standard Configurations

Material

Model KEI: 316 L (1.4435) outside / 316 Ti (1.4571) inside
 Model KEIv: 316 L (1.4435) outside / 316 Ti (1.4571) inside
 Model KEIvR: 316 L (1.4435)

Instrument Connection

G ½ (½" BSP) female

Chemical seal connection

Model KEI: G ½ B (½" BSP) male
 Models KEIv, KEIvR: 8 mm (.31") weld connection

Length

Model KEI: 100 mm (3.94")
 Model KEIv: 110 mm (4.33")
 Model KEIvR: 78 mm (3.07")
 (compare overleaf) for medium temperatures up to +150 °C (+302 °F)

Pressure Limit

PN 400 bar (5800 psi)

Special Options e.g.

- Models KEI, KEIv: length 200 mm (7.87") for medium temperatures up to +250 °C (+482 °F), other dimensions upon request
- Other chemical seal connections, e.g. ½" NPT
- Other instrument connections upon request

We recommend the usage of a capillary line for temperatures >+250 °C (+482 °F) resp. length >200 mm (7.87"), see right column.

How to Order:

Please pay attention to the required information about the process conditions as explained in our model overview 7000 and in our check lists for instruments with chemical seals! Please add to the ordering code for measuring instrument and chemical seal as follows:

Model: **KEI** (standard, G ½ B x G ½ female)
KEIv (welded to the chemical seal)
KEIvR (with cooling fins, welded)

Special options: see above,
 e.g. for KEI or KEIv length 200 mm (7.87"), or other connection for instrument or chemical seal

Capillary Line

Capillary lines with chemical seal are likewise applied for separating a pressure measuring instrument from the measuring point if the medium temperatures are too high, or if the mounting conditions at the measuring point are unfavourable.

The standard capillary line is welded to pressure gauges of nom. case size ≥100 (4") with wetted parts -3 (stainless steel), and screwed to all other pressure measuring instrument versions.

A mounting device is required for systems with capillary line, e.g. gauge holder bracket (MgH), rear mounting flange or front mounting flange for pressure gauges.

Standard Configurations

Material Capillary Line Stainless steel 316 Ti (1.4571)

Diameter x Wall Size Capillary 4 x 1 mm (.16" x .04")

Bending Radius 150 mm (5.91") minimum

Flexible Armor (Protection Tubing) Stainl. steel, outside Ø7 mm (.28")

Chemical Seal Connection Welded

Length

1 m (3.28 feet) to 10 m (32.8 feet) in full meter steps ¹⁾

Instrument Connection

FLv: 8 mm (.31") weld connection, adapter ring for gauge holder bracket ²⁾
 FL: G ½ (½" BSP) female, adapter for gauge holder bracket ²⁾

Pressure Limitation PN 400 bar (5800 psi),
 at 20 °C (68 °F) up to 600 bar (8700 psi)

Special Options e.g.

- Other instrument connections
- Screw connection to the chemical seal
- Flexible armor (protection tubing) with PE coating
- Other length of capillary line upon request
- Capillary line with diameter 3 mm (.12"), ordering code: **FL3** (screwed to the gauge), **FLv3** (welded to the gauge)

How to Order:

Please pay attention to the required information about the process conditions as explained in our model overview 7000 and in our check lists for instruments with chemical seals!

Please add to the ordering code for measuring instrument and chemical seal the specification for the capillary line as follows:

- Model (if a certain version is required): FLv, FL3, FLv3
- Length
- Special options (see above)

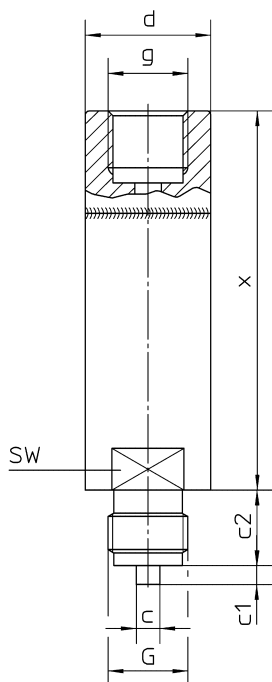
¹⁾ > 10 m upon request; max. length depending on pressure range, model et. al., details upon request

²⁾ without if mounted to pressure gauges of case configurations Rh, Fr, rFr

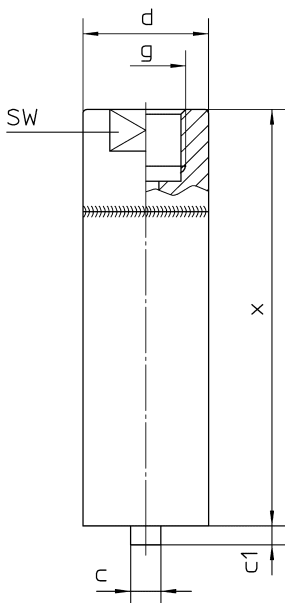


Dimensional Drawings, Dimensions and Weight

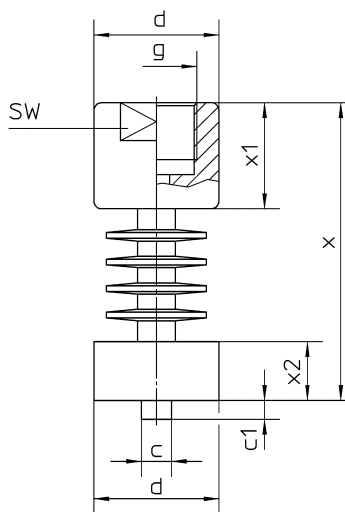
Model KEI



Model KEIv



Model KEIvR



Dimensional Data (mm / inches) and Weight (kg / lb)

Model	c	c1	c2	d	g	G	x	x1	x2	SW	Weight (approx.)		
KEI	6 .24	3 .12	20 .79	33 1.30	G ½ ½" BSP-f	G ½ B	100 ¹⁾	—	—	27 1.06	0.40		
							½" BSP-m	3.94					.88
KEIv	8 .31	5 .2	—					—	110 ¹⁾		—	—	
							4.33				.99		
KEIvR	8 .31	5 .2	—			—	78	36	10		0.35		
							3.07	1.41	.39		.77		

¹⁾ optionally 200 mm (7.87") for temperatures > +150 °C (up to +250 °C max.) resp. > +302 °F (up to +482 °F max.)