

# Cooling Element

KEIRv

## Accessories for diaphragm seals and in-line seals

### Standard Versions

Information on applications, features, metrological influences such as temperature and floating time of our cooling elements can be found in model overview 7000.

#### Application

Cooling elements for decoupling pressure measuring instruments from the measuring point are recommended for applications where medium temperatures at the measuring point are higher than +100 °C (+212 °F) however below +300 °C (+572 °F).

The cooling element meets the current requirements of the international standards concerning hygienic applications.

It stands out due to exceptionally easy cleanability and a better cooling efficiency. For pressure gauge / chemical seal combinations with cooling element, which are mounted and filled at our factory, we supply the welded cooling element version KEIRv as standard.

#### Construction

Models **KEIRv** and **KEIRvG** have an orifice d8 as instrument connection for welding to a pressure gauge, e.g. RCh 100 – 3vDW or capillary line.

Leakage cannot occur at the welded connection of pressure gauge / cooling element / chemical seal and the filling port that is not accessible externally. The parts can be easily cleaned externally.

Models **KEIRvGi** and **KEIRvGixG** have a measuring instrument adapter with female thread for direct mounting to measuring instruments with male thread.

The screwed connections pressure gauge / adapter and the filling port must not be loosened or opened, as otherwise filling fluid leaks and the measuring unit loses its functional capability.



#### Material

316L

#### Instrument Connection

Orifice d8 for welding to the measuring instrument

#### Process Connection

Model KEIRv with 8 mm (0.31") welding connection, other connections see page 2

#### Temperature

Class 300 (up to +300 °C)

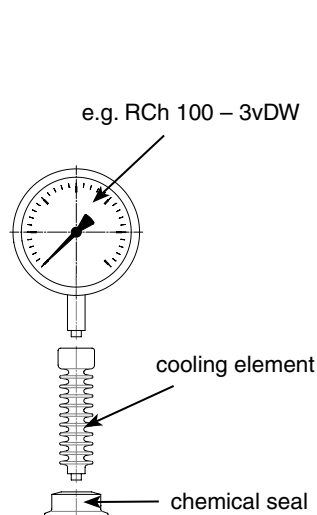
#### Nominal Pressure

PN 600 bar

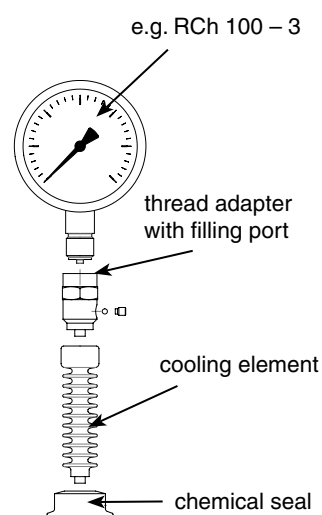
#### Dimensional Drawings

see page 2

#### KEIRv



#### KEIRvGi



### Mounting/Filling

Information on mounting and filling are available upon request.

### Ordering Information

- **KEIRv**  
welded with chemical seal and measuring instrument
- **KEIRvG**  
screwed with chemical seal and welded with measuring instrument
- **KEIRvGi**  
welded with chemical seal and screwed with measuring instrument
- **KEIRvGixG**  
screwed with chemical seal and measuring instrument



Sales and Export South, West, North

**ARMATURENBau GmbH**

Manometerstraße 5 • D-46487 Wesel - Ginderich  
Tel.: +49 2803 9130 – 0 • Fax: +49 2803 1035  
www.armaturenba.com • mail@armaturenba.com

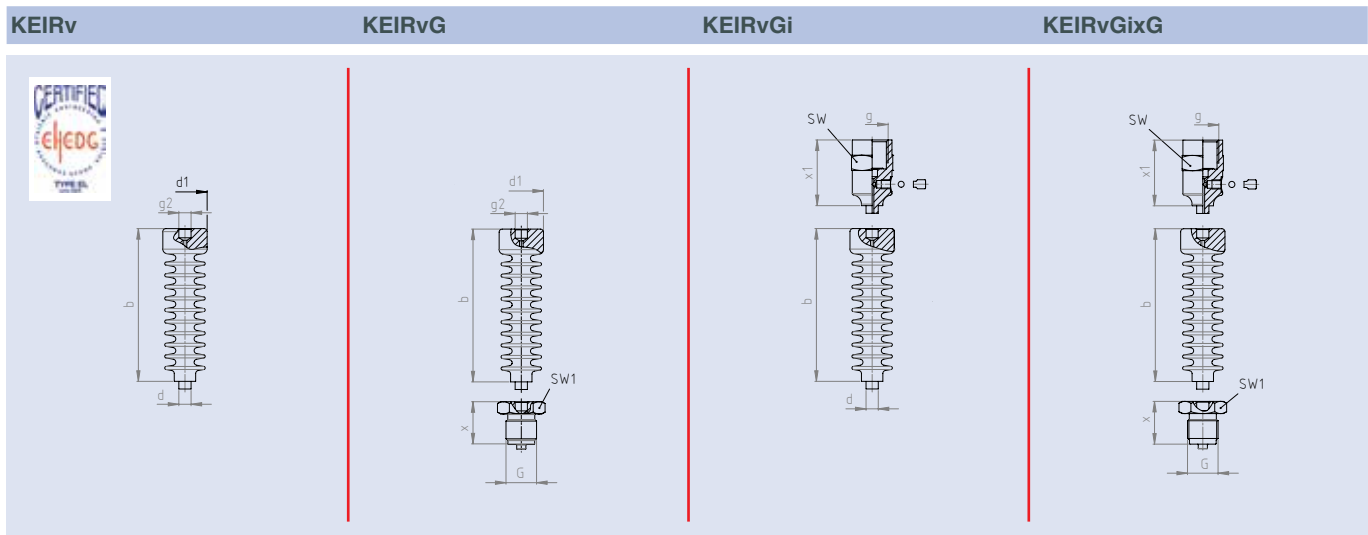
Subsidiary Company, Sales and Export East

**MANOTHERM Beierfeld GmbH 7.7002**

Am Gewerbepark 9 • D-08344 Grünhain-Beierfeld  
Tel.: +49 3774 58 – 0 • Fax: +49 3774 58 – 545  
www.manotherm.com • mail@manotherm.com

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# Dimensional Drawing, Dimensional Data (mm/inch), Weight (kg/lb), Temperature Graph (°C)



## Dimensional Data (mm/inch) and Weight (kg/lb)

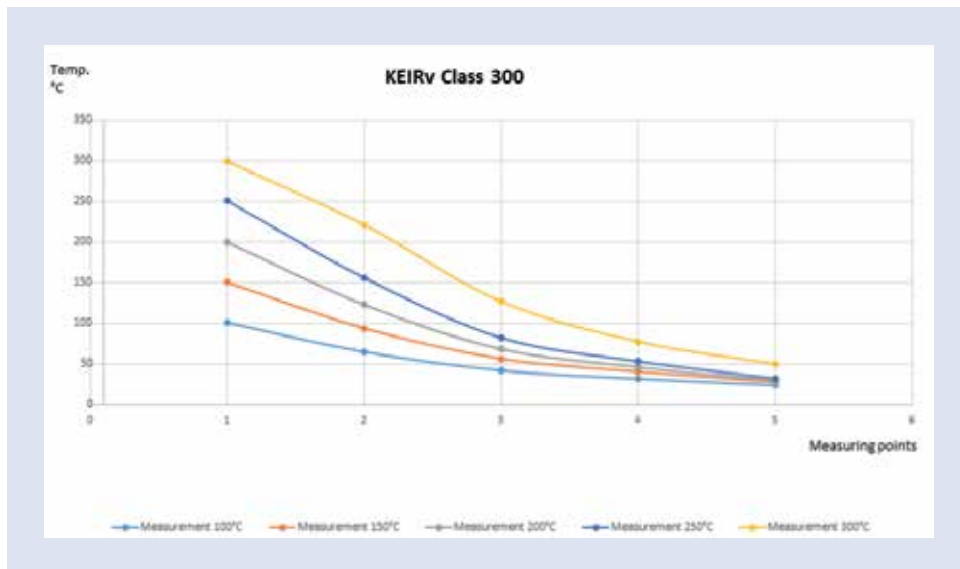
Cooling element					
Model	b	d	d1	g2	Weight
KEIRv	100 3.94	ø8x5	29 1.14	ø8	0.25
KEIRvG		—			0.33
KEIRvGi		ø8x5		0.32	
KEIRvGixG		—		—	0.33
					0.73

## Dimensional Data (mm/inch)

Instrument connection		
g	x1	SW
G ½i	43 1.69	27 1.06
M 20x1,5i		
½NPTi		
G ¼i	37 1.46	
M 12x1,5i		
¼NPTi		

## Dimensional Data (mm/inch)

Process connection		
G	x	SW1
G ½B	28	27 1.06
M 20x1,5	1.10	
½NPT	1.06	
G ¼B	23 0.91	22 0.87
M 12x1,5		
¼NPT		



- Measuring point 1 = medium temperature
- Measuring point 2 = cooling element bottom
- Measuring point 3 = cooling element centre
- Measuring point 4 = cooling element top
- Measuring point 5 = pressure gauge body

The constant medium temperatures were measured at different measuring points. In the diagram, the corresponding values for intermediate temperatures can be determined approximately.

