

## Diaphragm seal for high temperature applications flange-type with diaphragm extension, Type series DB90..



### Features

- Recessed diaphragm of stainless steel, laser welded
- Extension length: 91 mm
- Measuring device connection:
  - screwed with temperature decoupler
  - welded with temperature decoupler

### Application

Suitable for mounting to bourdon tube pressure gauges and pressure transmitters. The diaphragm seal in flange-type design with diaphragm extension is suited for the special applications in plastics processing.

### Application area

- Plastics processing

## Technical data

### Constructional design / case

Design:	Flange-type design, extension length: 91 mm, Special lengths upon request, connection flange Ø 90 mm, with 4 bore holes d= 13 mm and 2 disassembly threads M12
Material basic body:	stainless steel mat.-no. 1.4404 (316L)
Material clamping flange:	stainless steel mat.-no. 1.4404 (316L)
Material dia- phragm:	stainless steel mat.-no. 1.4435 (316L)

### Measuring device connection

Design:	<ul style="list-style-type: none"> <li>■ With temperature decoupler screwed</li> <li>■ With temperature decoupler welded</li> </ul>
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### System filling

See order details; further fillings upon request.  
Further details about pressure transmission fluids see general technical information TA\_038.

### Temperature ranges

Medium:	Up to 320 °C (short-term 350 °C), see order details system filling.
Storage:	-20...80 °C (for system filling FV3H) 0...70 °C (for system filling FMH1)

### Temperature error

In order to optimise the system we provide a detailed error calculation upon request .

### Installation position

Mounting position vertical

### Weight

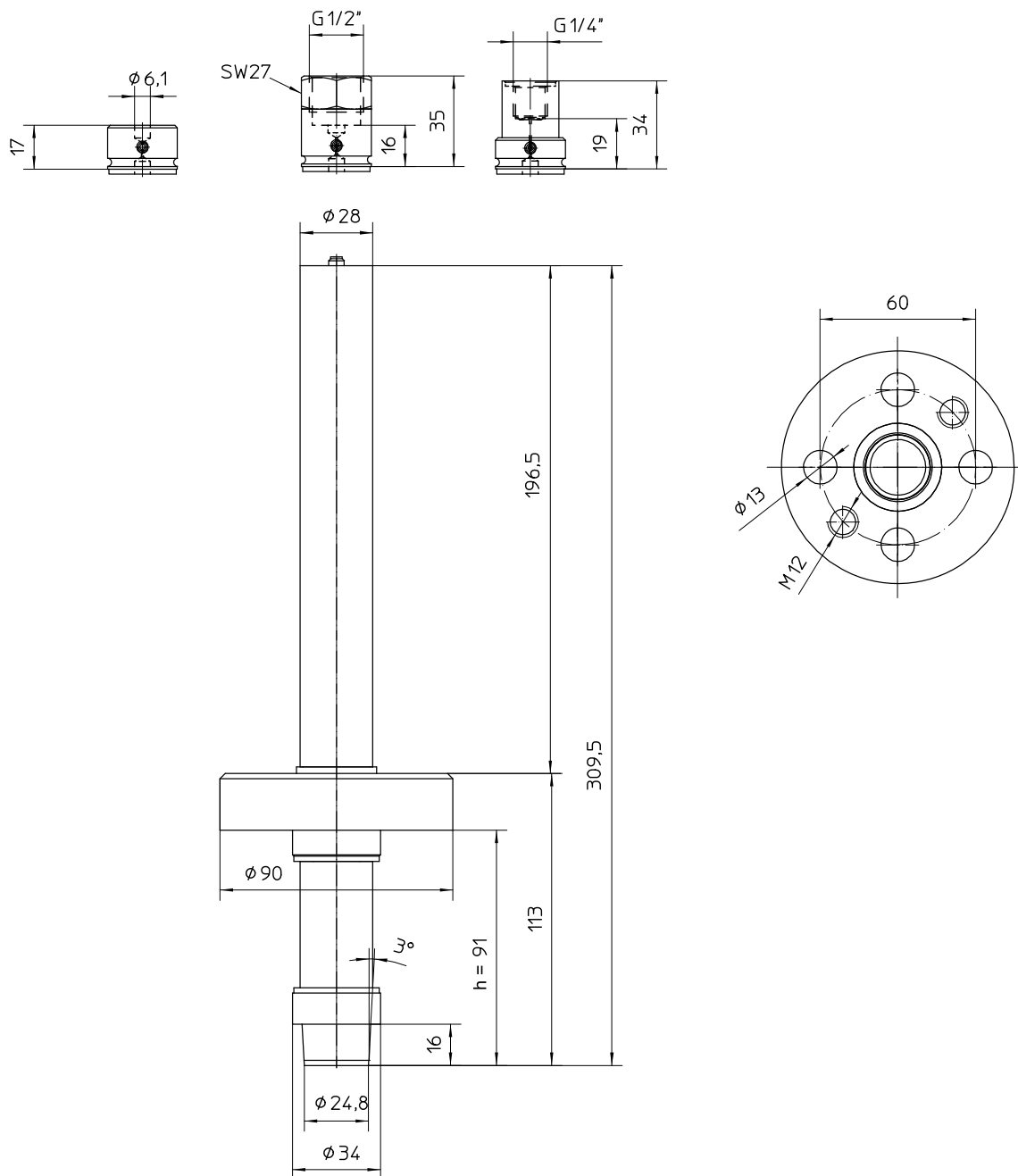
Weight: With measuring device connection G1/2: approx. 1.8 kg, further weights upon request.

### Accessories

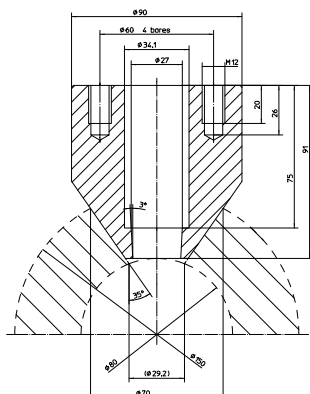
- 2 socket head screws M12 x 55 DIN 912, quality A 2-70 (for disassembly)
- 2 gaskets DIN 7603 A 27 x 32 Al
- 4 socket head screws M12 x 35 DIN 912, quality A2-70 (for mounting)

**Further information about diaphragm seals see general technical information TA\_031.**

## Dimensions



## Weld-in adapter



All dimensions are in millimeter

## Order details

### Diaphragm seal for high temperature applications, Type series DB90..

Order details DB 90..			
DB9001	design	diaphragm seal with connection flange Ø 90 mm, with 4 bore holes d= 13 mm and 2 disassembly threads M12	
G7	material diaphragm	stainless steel mat.-no. 1.4435 (316L)	
K1	material sealing surface/extension	stainless steel mat.-no. 1.4404 (316L)	
F1	extension length	h = 91 mm	
A150	measuring device connection	with temperature decoupler (for temperatures up to 350 °C)	screwed G1/4" , model E
A151			screwed G1/2" per EN 837-1
A450			welded
	system filling	<u>pressure transmission fluid</u>	<u>temperature range</u>
L25		liquid metal FMH1	10...320 °C (short-term up to 350 °C)
L31		high-temperature oil FV3H	-10...320 °C (short-term up to 350 °C)

Accessories	
MX1005-A1-B1	2 gaskets DIN 7603 A 27 x 32 Al 2 socket head screws M12 x 55 DIN 912, quality A 2-70 (for disassembly)
MZ8100-A21	4 socket head screws M12 x 35 DIN 912, quality A2-70 (for mounting)

Order code (example): DB9001 – G7 - K1 - F1 - A150 - ....