

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



### **Application area**

Plastics processing

#### **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.

#### **Technical data**

#### Constructional design

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

stainless steel mat.-no. 1.4404 (316L)

body:

Material stainless steel mat.-no. 1.4404 (316L)

clamping flange:

stainless steel mat.-no. 1.4435 (316L)

Material diaphragm:

#### Measuring device connection

Design: With temperature decoupler screwed

With temperature decoupler welded

#### System filling

See order details; further 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)

 $0...70~^{\circ}\text{C}$  (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

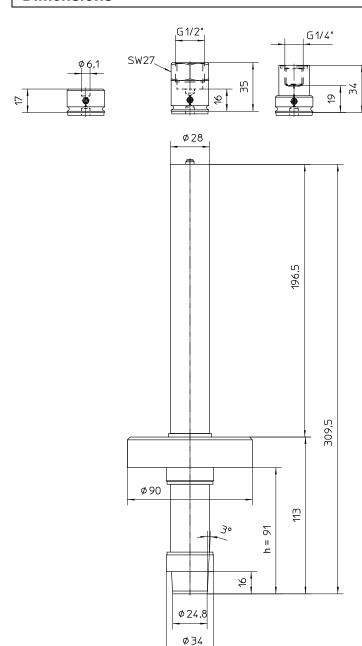
Weight: With measuring device connection G1/2: approx. 1.8 kg, further weights upon request.

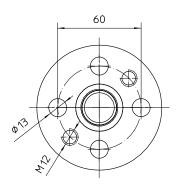
#### **Accessories**

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

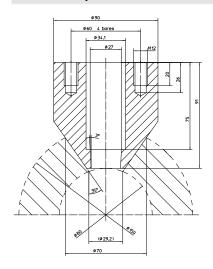
Further information about diaphragm seals see general technical information TA\_031.

# **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 matno. 1.4435 (316L)	
K1	material sealing surface/extension	stainless steel matno. 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	pressure transmission fluid	temperature range
L25		liquid metal FMH1	10320 C (short-term up to 350 °C)
L31		high-temperature oil FV3H	-10320 C (short-term up to 350 °C)

Accessories		
MX1005-A1-B1	5-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 - ....