

Badotherm model BDT18 series gauges are available as 50/63/80/100/160 mm dia. These gauges are designed to withstand the severest of operating conditions created by the ambient environment and the process medium. The BDT18 has many optional features. The welded connection on 100 and 160 mm dia guarantees that when the case is filled no leakage will occur. All Badotherm stainless steel tubes are made from seamless drawn tube.

## stainless steel process pressure gauge

### mounting variations

- type A bottom connection, direct mounting
- type B panel mounting, clamp fixing, back connection
- type C surface mounting, bottom connection
- type D back connection, direct mounting
- type E panel mounting, back connection
- type F panel mounting, bottom connection

### technical specification model BDT18

<b>diameter</b>	<b>connection</b>	<b>window</b>	<b>ranges</b>
50 to 160 mm	1/2" BSP/NPT	glass	from -1/1600 bar
<b>casing</b>	<b>tube</b>	<b>movement</b>	<b>dial</b>
AISI304 bayonet	AISI316	stainless steel	aluminium
<b>bezel</b>	<b>socket</b>	<b>pointer</b>	<b>accuracy</b>
AISI304 bayonet	AISI316	fixed	1.0% FSD

Note: 50/63/80 mm standard connection is 1/4" BSP/NPT  
 50/63/80 mm accuracy 1.6% FSD (50 mm max. 70 bar)  
 50 mm not available type B  
 63/80 mm up to 1000 bar

### options and special executions at extra cost

casing	AISI316
bezel	AISI316
window	safety glass; plastic
dials	customized – i.e., non standard ranges or logos
certificates	calibration -; conformity -; material
manuals	installation and maintenance
pointer	adjustable slotted 63/80/100/160 mm only
connection	METRIC; BSPT; acc JIS in various sizes
restrictor	AISI316
connection position	top or side
receiver gauge	3-15 psi; 0.2-1 bar; 0-100% lin; 0-10 sq.rt.
drag-pointer system	for dia 63/100/160 mm
red pointer	on dial
special version	with MONEL internals type BDT18-M
special version	with BRASS internals type BDT10
filling	glycerine; silicone; fluorolube
with contact device	BDT30 & BDT31 & BDT36-18



**BDT18**

## BDT18 - technical data sheet

### pressure details

#### working pressure

Steady	full scale value
Fluctuating	0,9 x full scale value
Short time	see over-pressure table

#### pressure element

	<100 bar	≥ 100 bar
BDT18	AISI316	AISI316

#### over-pressure

max. scale in bar	over-pressure at 20 °C
-1 to 100	1,25 x full scale value
101 to 600	1,15 x full scale value
601 to 1600	1,10 x full scale value

Note : only withstand for a short period of time

### temperature details

#### temperature limitations

	ambient	process
without filling	-40 °C to 60 °C	200 °C
glycerine filling	-25 °C to 60 °C	60 °C
silicone filling	-40 °C to 60 °C	90 °C

The variation of indication caused by the effects of temperature shall not exceed :

$\pm 0,04 \times (\text{ambient temperature} - \text{reference temperature})\%$   
of the span

### design information

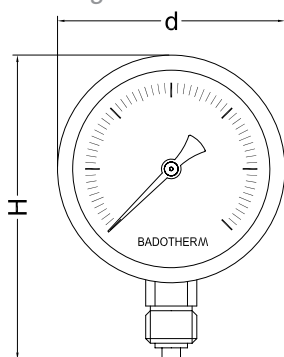
#### ingress protection

IP 65 per EN 60 529 / IEC 529

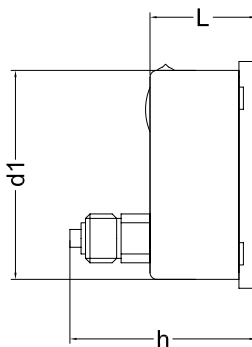
#### design

EN 837-1

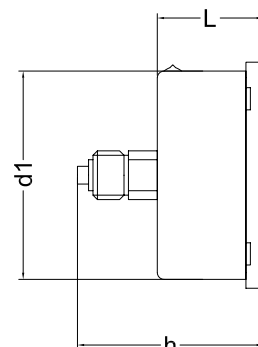
#### drawings



type A



type D (Ø 63 mm, without blow-out back)



type D Ø 50 mm

#### dimensions

ns	d	d1	L	H	h	weight
50	56	51	30	75	52	0,10 kg
63	68	63	30	88	58	0,14 kg
80	89	80	32	112	58	0,30 kg
100	110	100	49	142	83	0,53 kg
160	160	149	50	200	84	1,02 kg

Note : dimensions are in mm