

Badotherm pressure gauge model BDT18-HP for high pressures above 1600 bar. Badotherm pressure gauge model BDT18-HP is manufactured taking into account the guidelines of the DIN16001 and is available in full stainless steel and suitable bourdon tube materials. This pressure gauge is typically used for applications in the hydraulic, water jetting and high pressure environments and machine building and general process industries. Safety comes first, with a blow-out feature, pressure elements made of seamless drawn tubes and welded type connection construction. These gauges are designed to withstand the severest of operating conditions of the ambient environment and the process medium.


**DESIGN INFORMATION**

<b>DESIGN NORM</b> DIN16001	<b>SAFETY DESIGNATION</b> -	<b>INGRESS PROTECTION</b> IP 65 per IEC 60529
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**STANDARD MODEL MATERIAL SPECIFICATIONS**

<b>PROCESS CONNECTION</b> AISI 316(L)	<b>TUBE</b> Pressure Material Table	<b>CASE</b> AISI 304, bayonet	<b>BEZEL</b> AISI 304, bayonet
<b>MOVEMENT</b> stainless steel	<b>WINDOW</b> laminated safety glass	<b>POINTER</b> aluminium, black	<b>DIAL</b> aluminium, white with black markings

**TECHNICAL SPECIFICATIONS**

	100 mm	160 mm
<b>Connection</b>	9/16 - 18 UNF	9/16 - 18 UNF
<b>Minimum range</b>	>1600 bar / 25.000 psi	>1600 bar / 25.000 psi
<b>Maximum range</b>	7000 bar / 100.000 psi	7000 bar / 100.000 psi
<b>Accuracy</b>	1.0% FSV	1.0% FSV
<b>Pointer</b>	fixed	fixed
<b>Mounting variations</b>	A / C / D	A / C / D
<b>Free zero</b>	•	•
<b>Internal limit stop</b>	Min/Max	Min/Max
<b>Connection construction</b>	welded	welded
<b>Blow out</b>	on the back	on the back
<b>Compensation plug material*</b>	NBR	NBR
<b>Window gasket</b>	NBR	NBR
<b>PED (CE marking)</b>	•	•

\* HNBR for filled executions

**SPECIAL EXECUTIONS**

<b>BDT18-S HP</b>	casing and bezel AISI 316(L)
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**OPTIONS**

<b>PROCESS CONNECTION</b>	M16x1.5 or 5/8-18 UNF, 1/2" BSP (not recommended > 1600 bar)
<b>POINTER</b>	micro adjustable, adjustable slotted
<b>CASE FILLING</b>	BPF01 (glycerine), BPF02 (silicon), BPF04 (foaming service)
<b>CALIBRATION CERTIFICATES</b>	5 points (rising and falling),
<b>ATEX</b>	EX II 2 GD c (ATEX 94/9/EC)
<b>RESTRICTOR SCREW</b>	AISI 316(L)

PRESSURE DETAILS

WORKING PRESSURE

	100 mm	160 mm
<b>steady</b>	0.75x full scale value	0.75x full scale value
<b>fluctuating</b>	0.9 x full scale value	0.9 x full scale value
<b>short time</b>	1 x full scale value	1 x full scale value

PRESSURE MATERIAL TABLE

pressure	material
<b>1600...2500 bar</b>	AISI 316L
<b>3000...7000 bar</b>	Ni-Span-C 902
<b>3000 bar</b>	25CrMo4*

\* Not suitable for water

TEMPERATURE DETAILS

CASE FILLING FLUID

			ambient	process
-	without		-40°C to 60°C	200°C
<b>BPF01</b>	glycerine	1000 cSt	-20°C to 60°C	90°C
<b>BPF02</b>	silicone	1000 cSt	-40°C to 60°C	90°C
<b>BPF43</b>	foaming service	50 cSt	-40°C to 60°C	90°C

WINDOW

	ambient
<b>safety glass</b>	<200°C

GASKETS

	ambient
<b>window NBR</b>	<100°C
<b>fill plug NBR</b>	<100°C
<b>fill plug HNBR</b>	<150°C

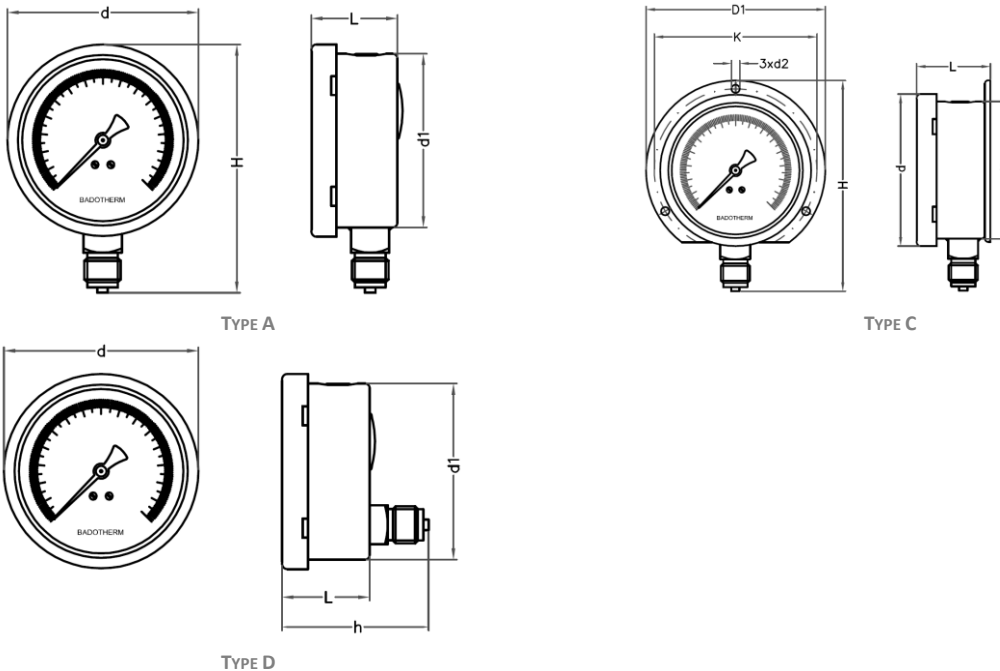
TEMPERATURE EFFECT

The variation of indication caused by the effect of temperature shall not exceed:  
 $\pm 0.04 \times (\text{ambient temperature} - \text{reference temperature})\% \text{ of the span}$

MOUNTING VARIATIONS

- type A bottom connection, direct mounting
- type C bottom connection, surface mounting
- type D back connection, direct mounting

DRAWINGS

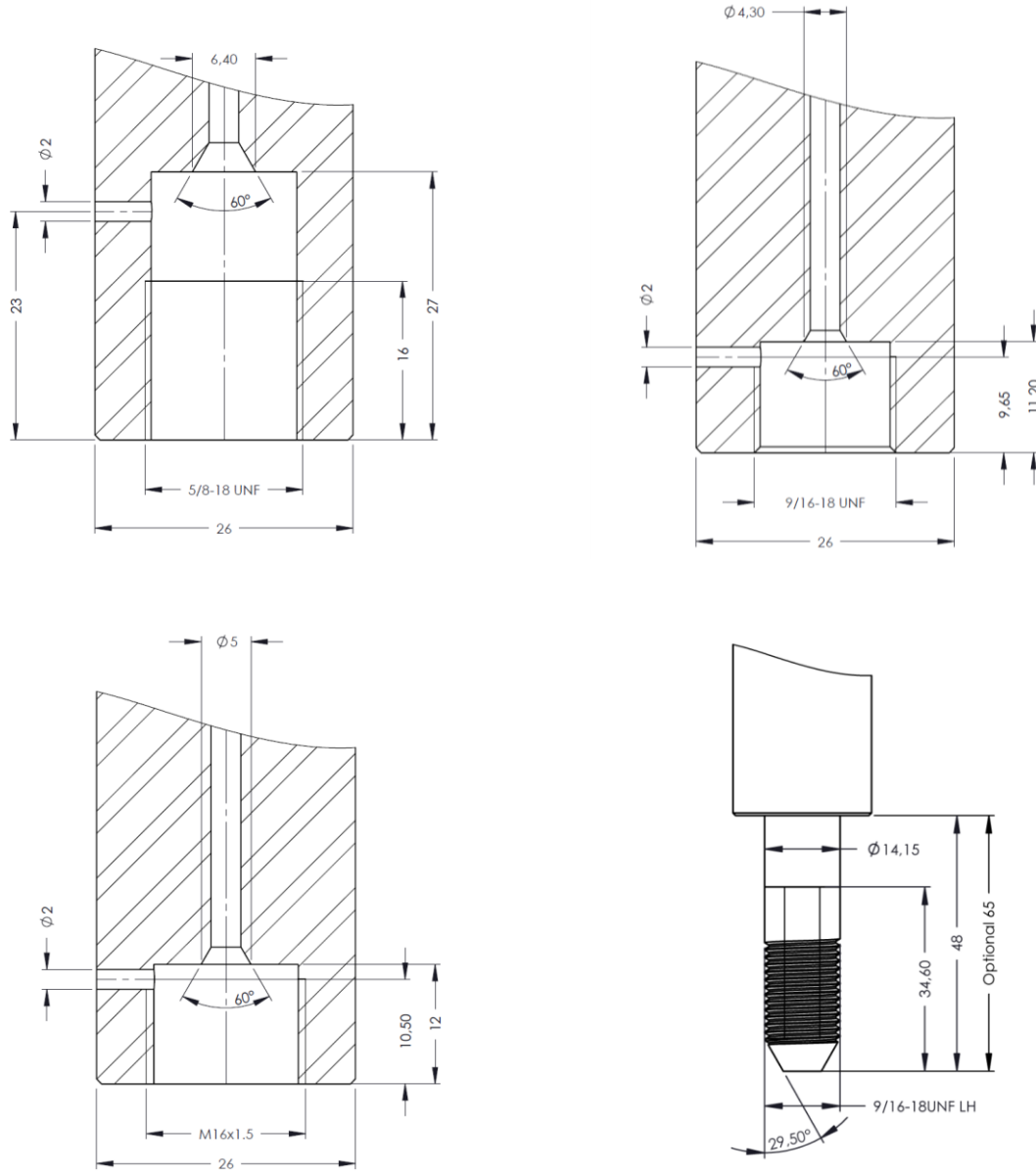


DIMENSIONS

ns	d	d1	D1	K	L	H	h	weight	filled
back flange									
<b>100</b>	110	100	130	118	49	142	83	0.65 kg	1.12 kg
<b>160</b>	160	149	196	178	50	200	84	1.20 kg	2.30 kg

All dimensions in mm

DRAWING CONNECTIONS



Holland – United Kingdom – Romania – India – Thailand – Dubai – USA

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