

Badotherm pressure gauge model BDT21 is the solid front, safety pattern gauges according to the operational safety requirements of AMSE B40.100 and ANSI B 40.1.1. The BDT21 stainless steel safety gauge with phenolic casing has a solid front baffle wall and a full blow-out back. This pressure gauge is typically used for applications in the chemical, petro-chemical, and oil & gas industry or anywhere where safety comes first. These gauges are designed to withstand the severest of operating conditions created by the ambient environment and the process medium.


DESIGN INFORMATION

DESIGN NORM	SAFETY DESIGNATION	INGRESS PROTECTION
ASME B40.100	S3 as per EN837-2	IP67 per IEC 60529

STANDARD MODEL MATERIAL SPECIFICATIONS

PROCESS CONNECTION	TUBE	CASE	BEZEL
AISI 316(L)	AISI 316	black ASA+PC	black ASA+PC
MOVEMENT	WINDOW	POINTER	DIAL
stainless steel	laminated safety glass	aluminium, black	aluminium, white with black markings

TECHNICAL SPECIFICATIONS

	125 mm
Connection	1/2" BSP/NPT
Minimum range	-1 bar
Maximum range	1600 bar
Accuracy	0.5% FSV
Pointer	adjustable slotted
Mounting variations	A / C
Free zero	•
Internal limit stop	Min/Max
Connection construction	screwed
Solid front, full blow out	on the back
Compensation plug material	NBR
Window gasket	NBR
PED (CE marking >200 bar)	•

SPECIAL EXECUTIONS

BDT21-M	tube and socket Monel 400
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OPTIONS

WINDOW	polycarbonate
PROCESS CONNECTION	METRIC or BSPT in various sizes
RESTRICTOR SCREW	AISI 316(L)
POINTER	micro adjustable
CASE FILLING	BPF01 (glycerine), BPF02 (silicon)
FILLING KIT	compensation bellow, o-ring for front case seal, and mounting screws for rear cover
CLEANING	for oxygen service, or oil and grease free (in case of filling use BPF05)
CALIBRATION CERTIFICATES	5 points (rising and falling)
ATEX	EX II 2 GD c (ATEX 94/9/EC)
ACCESSORIES	please check for matching accessories such as siphons (BDT42), snubbers (BDT45), swivel gauges (BDT47), overpressure protectors (BDT49), diaphragm seals and instrument needle valves and manifolds

PRESSURE DETAILS

WORKING PRESSURE

	125 mm
steady	full scale value
fluctuating	0.9 x full scale value
short time	1.3 x full scale value

TEMPERATURE DETAILS

CASE FILLING FLUID				WINDOW		GASKETS	
		ambient	process	ambient		ambient	
-	without	-40°C to 60°C	200°C	safety glass	<200°C	window NBR	<100°C
BPF01	glycerine	1000 cSt	-20°C to 60°C	polycarbonate	<120°C	fill plug NBR	<100°C
BPF02	silicone	1000 cSt	-40°C to 60°C			fill plug HNBR	<150°C

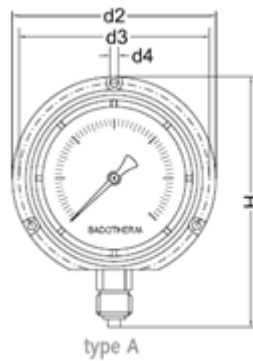
TEMPERATURE EFFECT

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

MOUNTING VARIATIONS

- type A bottom connection, direct mounting
- type C bottom connection, surface mounting (flange material in same material as casing and bezel)

DRAWINGS



DIMENSIONS

ns	d	d1	L	H	h	d2	d3	d4	weight
4½"	148	129	86	180	130	148	137	6	0.80 kg

All dimensions in mm



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