

Badotherm pressure gauge model BDT12 is a diaphragm type pressure gauge and suitable for all gaseous and liquid media, as well as for viscous media and suspended solids. This pressure gauge is typically used for applications in the chemical, petro-chemical, oil & gas, power and utilities, machine building and general process industries. These gauges can be made with flanged connections according ANSI, DIN, and JIS standards.



DESIGN INFORMATION

DESIGN NORM	INGRESS PROTECTION
EN 837-3	IP65 per IEC 60529

STANDARD MODEL MATERIAL SPECIFICATIONS

PROCESS CONNECTION	DIAPHRAGM	CASE	BEZEL
AISI 316(L)	AISI 316(L) / Duratherm	AISI 304, bayonet	AISI 304, bayonet
MOVEMENT	WINDOW	POINTER	DIAL
stainless steel	glass	aluminium, black	aluminium, white with black markings

TECHNICAL SPECIFICATIONS

	BDT12	BDT12-01
	100 / 160 mm	100 / 160 mm
Connection	1/2" BSP/NPT	1/2" BSP/NPT
Minimum range	600 mbar	16 mbar
Maximum range	25 bar	400 mbar
Accuracy	1.6% FSD	1.6% FSD
Pointer	adjustable slotted	adjustable slotted
Mounting variations	A	A
Diaphragm ¹	AISI 316 / Duratherm	AISI 316
Free zero	•	•
Internal limit stop	•	•
Connection construction	welded	welded
Blow out	on the back	on the back
Compensation plug, material ²	NBR	NBR
Window gasket	NBR	NBR
Flange gasket	FKM	FKM

¹ Duratherm ≥ 4 bar

² HNBR for filled executions

SPECIAL EXECUTIONS

BDT12-S	with AISI 316(L) case and bezel
BDT12-09	with sanitary connection

OPTIONS

WINDOW	laminated safety glass or plastic
PROCESS CONNECTION	other
POINTER	micro adjustable pointer, red pointer on dial, drag pointer
WETTED PARTS	PTFE lining (not with tapered thread)
PROTECTION SHEET	PTFE foil, Monel 400, Hastelloy C-276, or Tantalum (vacuum up to -50 mbar)
CASE FILLING	BPF01 (glycerine), BPF02 (silicon), BPF03 (for contacts), BPF04 (foaming service), BPF05 (ECTFE Inert for oxygen service)
CLEANING	oxygen service (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

steady	full scale value
fluctuating	0.9 x full scale value
over-pressure	optional; see over-pressure table

OVER-PRESSURE

type	range	over-pressure
BDT12-01	0-400 mbar	10 x full scale value
BDT12	0.6-25 bar	10 x full scale value (max.10 bar)

TEMPERATURE DETAILS

CASE FILLING FLUID

		ambient	process
-	without	-40°C to 60°C	200°C
BPF01	glycerine 1000 cSt	-20°C to 60°C	90°C
BPF02	silicone 1000 cSt	-40°C to 60°C	90°C
BPF03	for contacts 80 cSt	-40°C to 60°C	90°C
BPF04	foaming service 50 cSt	-40°C to 60°C	90°C
BPF05	oxygen service 30 cSt	-40°C to 60°C	90°C

WINDOW

	ambient
glass	<400°C
safety glass	<200°C
polycarbonate	<120°C

GASKETS

	ambient
window NBR	<100°C
fill plug NBR	<100°C
fill plug HNBR	<150°C
flange FKM	<200°C

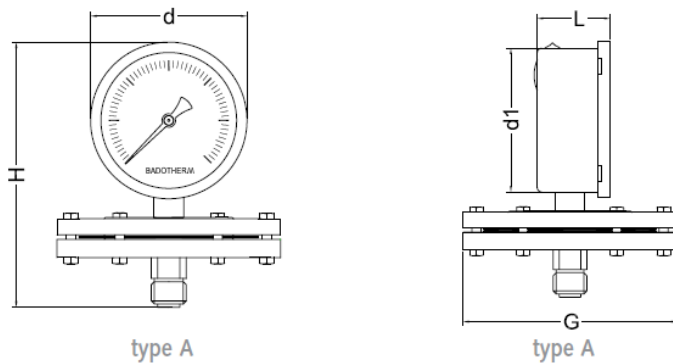
TEMPERATURE EFFECT

The variation of indication caused by the effect of temperature shall not exceed:
 $\pm 0.08 \times (\text{ambient temperature} - \text{reference temperature})\% \text{ of the span}$

MOUNTING VARIATIONS

- type A bottom connection, direct mounting

DRAWINGS



DIMENSIONS

type	ns	d	d1	L	H	G	weight	filled
BDT12	100	110	100	50	200	108	1.58 kg	2.14 kg
BDT12	160	160	150	52	250	108	1.91 kg	4.17 kg
BDT12-01	100	110	100	50	200	160	1.76 kg	2.32 kg
BDT12-01	160	160	150	52	250	160	2.09 kg	3.36 kg

All dimensions in mm



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

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