

Badotherm pressure gauge model BDT20-HP for high pressure solid front, safety pattern gauge according the highest class of the EN 837-1 / 9.7.2 and ANSI B 40.1. The BDT20-HP stainless steel safety gauge has a solid front baffle wall and a full blow-out back. The gauge is executed with high pressure connections. The BDT20-HP has a solid front baffle wall and a full blow-out back. 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 |
|-------------|--------------------|--------------------|
| EN 837-1 | S3 as per EN837-2 | IP67 per IEC 60529 |

STANDARD MODEL MATERIAL SPECIFICATIONS

| PROCESS CONNECTION | TUBE | CASE | BEZEL |
|--------------------|------------------------|------------------|--------------------------------------|
| AISI316(L) | Ni-Span-C | AISI304, bayonet | AISI304, bayonet |
| MOVEMENT | WINDOW | POINTER | DIAL |
| stainless steel | laminated safety glass | aluminium, black | aluminium, white with black markings |

TECHNICAL SPECIFICATIONS

| | 100 mm | 160 mm |
|-------------------------------------|---------------|---------------|
| Connection | 9/16 - 18 UNF | 9/16 - 18 UNF |
| Minimum range | 2500 bar | 2500 bar |
| Maximum range | 4000 bar | 4000 bar |
| Accuracy | 1.0% FSV | 1.0% FSV |
| Pointer | fixed | fixed |
| Mounting variations | A / C | A / C |
| Free zero | • | • |
| Internal limit stop | Min/Max | Min/Max |
| Connection construction | welded | welded |
| Solid front, full blow out | on the back | on the back |
| Compensation plug material* | NBR | NBR |
| Window gasket | NBR | NBR |
| PED (CE marking >200 bar) | • | • |

* HNBR for filled executions

SPECIAL EXECUTIONS

| | |
|-------------------|-----------------------------|
| BDT20-S HP | casing and bezel AISI316(L) |
|-------------------|-----------------------------|

OPTIONS

| | |
|---------------------------------|---|
| PROCESS CONNECTION | M16x1.5 or 5/8-18 UNF |
| POINTER | micro adjustable, adjustable slotted |
| FILLING | BPF01 (glycerine), BPF02 (silicon), BPF04 (foaming service) |
| 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 |

DATA SHEET

BDT20 HP– HIGH PRESSURE SOLID FRONT PRESSURE GAUGE

PRESSURE DETAILS

WORKING PRESSURE

| | 100 mm | 160 mm |
|--------------------|------------------------|------------------------|
| steady | full scale value | full scale value |
| fluctuating | 0.9 x full scale value | 0.9 x full scale value |
| short time | 1.1 x full scale value | 1.1 x full scale value |

TEMPERATURE DETAILS

| FILLING FLUID | | | WINDOW | | GASKETS | |
|---------------|-----------------|----------|---------------|---------|-----------------------|--------|
| | | | ambient | ambient | ambient | |
| - | without | | -40°C to 90°C | 200°C | window NBR | <100°C |
| BPF01 | glycerine | 1000 Cst | -20°C to 65°C | 90°C | fill plug NBR | <100°C |
| BPF02 | silicone | 1000 Cst | -40°C to 65°C | 90°C | fill plug HNBR | <150°C |
| BPF43 | foaming service | 50 Cst | -40°C to 60°C | 90°C | | |

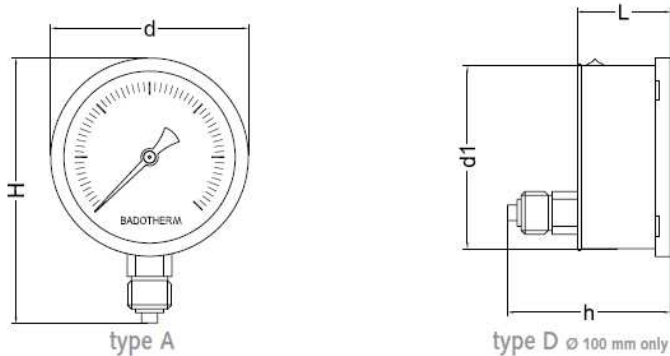
TEMPERATURE EFFECT

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

DRAWINGS

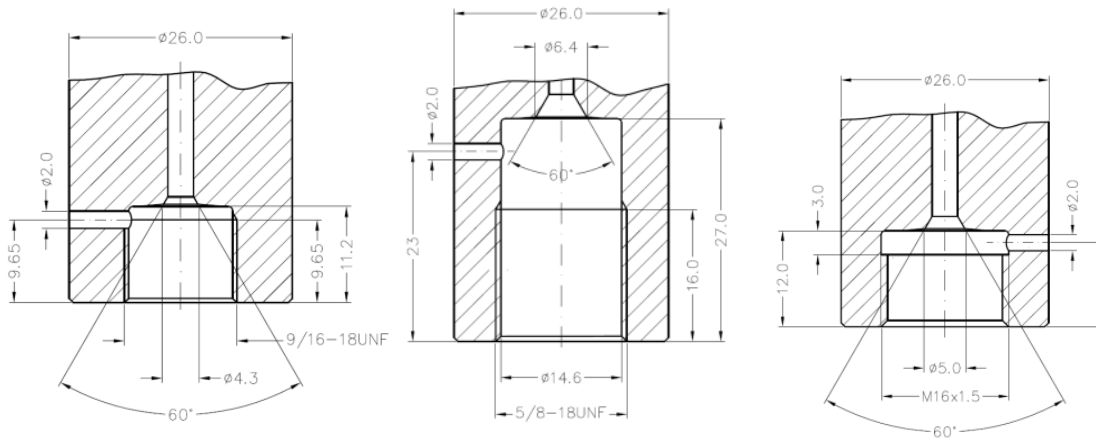


DIMENSIONS

| ns | d | d1 | L | H | h | weight | filled |
|------------|-----|-----|----|-----|-----|---------|---------|
| 100 | 110 | 100 | 63 | 142 | 100 | 0.65 kg | 1.12 kg |
| 160 | 160 | 149 | 64 | 200 | - | 1.20 kg | 2.30 kg |

All dimensions in mm

DRAWING CONNECTIONS



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

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