

Direct mount pressure gauge DN 100, Type A1203

Section: 1

Sheet No.: 32GB

Date: December 1997

Standard stainless pressure gauge

- The TEMPRESS A1203 pressure gauge has been designed and constructed using AISI 316 stainless and acid-proof steel
- Available in both liquid-filled and dry version
- Bottom or rear mount
- Twelve different thread connections, e.g. G $\frac{1}{2}$ B
- Scale in accordance with international standard



Modular design

The modular design of the TEMPRESS direct mount pressure gauge means it can be adapted to suit every application where the instrument can be fitted directly via the thread connection.

The wide range of connectors has made it possible to supply the necessary thread types.

Temperature compensation

The unique temperature compensation system ensures an accurate display. Under conditions where the ambient temperature may vary, automatic compensation is made for temperature changes of up to 60°C.

Safety pressure gauge

The temperature compensation system also functions as a blow-out mechanism. Should the measuring system burst due to excess pressure, the temperature compensation system is pushed out the back of the instrument.

The TEMPRESS direct mount pressure gauge is DNV (Det Norske Veritas) approved.

Specifications

Type A1203	Pressure gauge, direct mount
Case size Case material Display face Bezel	DN 100 AISI 316, natural Acrylic or toughened glass AISI 316
Connection	AISI 316 for thread type, see ordering key
Measuring system	AISI 316
Liquid filling	Span \leq 2 bar Silicone Span $>$ 2 bar Glycerine Option Silicone Dry gauge
Measuring range	From -1 bar to +1000 bar see ordering key
Minimum span	1 bar
Accuracy	Cl. 1,0 (\pm 1 % FS)

TEMPRESS reserves the right to change without notice

Agent:



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Media and ambient temperatures

	Glass type	Media temperature				Ambient temperature			
		min.	max.	min.	max.	min.	max.	min.	max.
Dry gauge	Acrylic	-20°C	130°C	-4°F	265°F	-10°C	70°C	14°F	160°F
	Toughened	-20°C	200°C	-4°F	390°F	-10°C	120°C	14°F	250°F
Liquid filled gauge		Filling liquid							
Standard gauge	Glycerine	0°C	100°C*)	32°F	210°F*)	0°C	60°C*)	32°F	140°F*)
	Silicone	-40°C	70°C*)	-40°F	160°F*)	-40°C	50°C*)	-40°F	120°F*)

*) The average value of the maximum ambient temperature and the media temperature must not exceed the maximum ambient temperature.

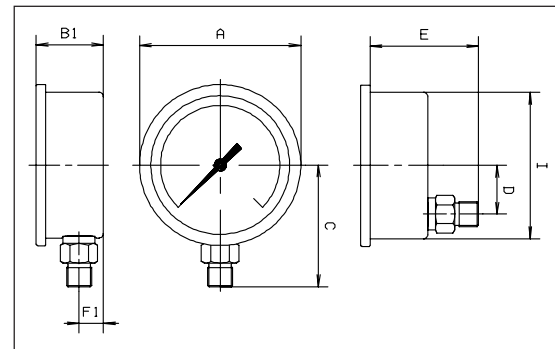
Example: at a media temperature of 100°C the ambient temperature must not exceed 20°C, when glycerine filled.

$$\frac{\text{Media temperature} + \text{Ambient temperature}}{2} = \leq \text{maximum ambient temperature} \left(\frac{100^\circ\text{C} + 20^\circ\text{C}}{2} = 60^\circ\text{C} \right)$$

Compensated temperature range

Span	Liquid filled	Glycerine	Silicone
		°C	NA
≤ 2 bar	°C	NA	0-40
≤ 29 psi	°F	NA	32-105
> 2 bar - < 4 bar	°C	0 - 50	0 - 40
> 29 psi - < 59 psi	°F	32 - 120	32 - 105
≥ 4 bar	°C	0 - 60	0 - 50
≥ 59 psi	°F	32 - 140	32 - 120

Dimensions	
A	∅108 (1.25")
B1	45 (1.77")
C	83 (3.27")
D	33 (1.30")
E	72 (2.83")
F1	16 (0.63")
I	∅ 99 (3.90")



Ordering key for A1203

When ordering, pls. state:	Example	See table
Type number	A120301	Type number
Measuring range	0-10 bar	Range
Connector	G½B	Connector
Design marked by " * " are TEMPRESS standard, which will be delivered if nothing else is stated in the order.		
Design:	filled / dry scale marking movement glass damping pointer 0-adjust. certificates logo markings	Liquid filled * Single scale * Brass * Acrylic * No damping <60 bar * Incl. damping ≥60 bar * Standard pointer * No 0-adjustment * No * TEMPRESS DENMARK * No *
		See options - - - - - - - - - - -

Type Number

Type number	Type No.
Connection Bottom (6 o'clock)	A120301
- Top (12 -)	A120311
- Right (3 -)	A120312
- Left (9 -)	A120313
Connection Rear (6 o'clock)	A120302
- (12 -)	A120321

Measuring range

bar, kp/cm², kg/cm²	kPa	MPa	psi	lb/in²
-1 - 0	-100 - 0	-0,1 - 0 - 0,3	-30"Hg - 0	-30"Hg - 0
-1 - 0 - 0,6	-100 - 0 - 60	0 - 0,4	-30"Hg - 0 - 15	-30"Hg - 0 - 15
-1 - 0 - 1	-100 - 0 - 150	0 - 0,6	-30"Hg - 0 - 30	-30"Hg - 0 - 30
-1 - 0 - 1,5	-100 - 0 - 300	0 - 1	-30"Hg - 0 - 60	-30"Hg - 0 - 60
-1 - 0 - 3	-100 - 0 - 500	0 - 1,6	-30"Hg - 0 - 100	-30"Hg - 0 - 100
-1 - 0 - 5	-100 - 0 - 900	0 - 2,5	-30"Hg - 0 - 150	-30"Hg - 0 - 160
-1 - 0 - 9	-100 - 0 - 1500	0 - 4	0 - 15	0 - 15
-1 - 0 - 10	0 - 100	0 - 6	0 - 30	0 - 30
-1 - 0 - 12	0 - 160	0 - 10	0 - 60	0 - 60
-1 - 0 - 15	0 - 250	0 - 16	0 - 100	0 - 100
-1 - 0 - 25	0 - 400	0 - 25	0 - 150	0 - 150
0 - 1	0 - 600	0 - 40	0 - 160	0 - 160
0 - 1,6	0 - 800	0 - 60	0 - 200	0 - 200
0 - 2,5	0 - 1000	0 - 100	0 - 250	0 - 250
0 - 4	0 - 1600		0 - 300	0 - 300
0 - 6	0 - 2000		0 - 400	0 - 400
0 - 7	0 - 2500		0 - 600	0 - 600
0 - 10	0 - 4000		0 - 1000	0 - 1000
0 - 14	0 - 6000		0 - 1500	0 - 1600
0 - 16	0 - 10000		0 - 2000	0 - 2000
0 - 20	0 - 16000		0 - 3000	0 - 3000
0 - 25	0 - 25000		0 - 4000	0 - 4000
0 - 40	0 - 40000		0 - 6000	0 - 6000
0 - 60	0 - 60000		0 - 10000	0 - 10000
0 - 100	0 - 100000		0 - 15000	0 - 16000
0 - 160				
0 - 250				
0 - 400				
0 - 600				
0 - 1000				

The table cannot be used as a conversion table

Connector

Connector
G½B
¼ NPT
¼ flare
G¾B
¾ NPT
G½B
½ NPT
G½B DIN
G¾B
M12 / ∅ 6
M14 / ∅ 8
M16 / ∅ 10

Options

Filled / dry	Liquid filled * Liquid filled - Silicone >2 bar Dry gauge	Scale marking	Single scale* Dual scale
Movement	Brass * AlSi 316	Glass	Acrylic * Toughened glass
Damping	No damping * Damping screw, AlSi 316	Pointer	Standard Pointer * Memory pointer Maximum pointer
0-adjustment	No 0-adjustment * 0-adjustment	Certifikates	No * Calibration certificate Mat. cert. EN 10204-2.2
Logo	TEMPRESS DENMARK * Customer logo No logo	Markings	No * 1 colour (excl. black) 2 colours (-) SS sign with TAG No.
* = Standard design			