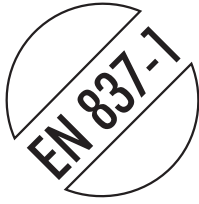


Safety Pressure Gauge

All Stainless Steel, "Solid-Front"

Type 01.20 - DS 63



These Solid-Front instruments are built in accordance with safety specifications of EN 837-1 "S3" and ANSI B40.1. The safety construction consists of a solid separating wall in stainless steel, placed between the scale and the elastic element and a blow out back which is released from the case whenever an internal pressure, due to leaks, is created or the elastic element is broken. A leak tight fit is ensured if the instrument is filled with a dampening fluid to prevent damage due to vibration. These instruments are designed for use in food, beverage, pharmaceutical, cryogenic, chemical and petrochemical processing industries, and in conventional and nuclear power plants. They are built to resist the most severe operating conditions created by the ambient environment and the process medium.

Functional and constructive characteristics.

01.20.1 Standard

Safety pattern code: S3 as per EN 837-1.
Accuracy class: 1,6 as per EN 837-1.
Ambient temperature: -25...+65 °C.
Process fluid temperature: max +100 °C .
Working pressure: max 75% of the full scale value .
Over pressure limit: (referred to the full scale value):
 25% for pressure range - 100 bar;
 15% for pressure range > 100 bar.
Protection: IP 55 as per IEC 529.
Socket material: AISI 316 st.st.
Elastic element: AISI 316L st. st. seamless tube.
Welding: AISI 316 TIG.
Case: AISI 304 st.st.
Ring: AISI 304 st.st., bayonet lock.
Blow out disk: ABS (AISI 304 st.st on request for radial connection type).
Window: safety glass.
Movement: stainless steel.
Dial: ABS, white with black markings.
Special dials: ranges different from standard, or custom artwork, available on request.
Pointer: aluminium, micrometric adjustable.
Gasket: silicon rubber.

01.20.2 Fillable

Protection: IP 67 as per IEC 529.
Pointer: aluminium, black.
Note: suitable for glycerine filling; other filling fluids available on request (see OPTIONS table).
Other features: as type 01.20.1 (as type 01.20.3, when filled).

01.20.3 Liquid filled

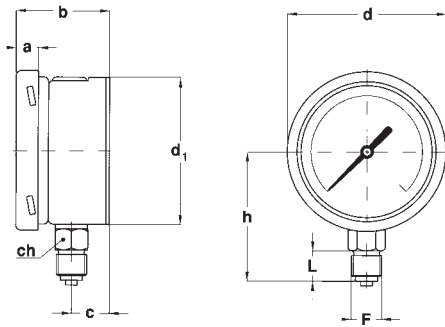
Ambient temperature: max +65 °C, (see DAMPING LIQUIDS table for further information).
Process temperature: max +65 °C.
Protection: IP 67 as per IEC 529.
Pointer: aluminium, black.
Damping liquids: glycerine 98% (optional silicon oil, Fluorolube).
Other features: as type 01.20.1 Standard.

safety pressure gauge

all stainless steel, "solid-front" Type 01.20 - DS 63

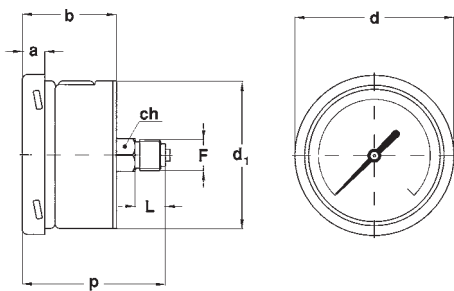
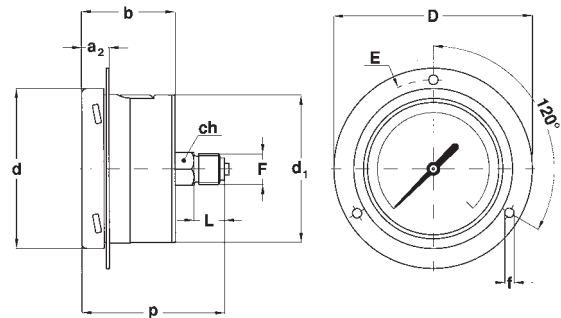
01.20

TYPES, DIMENSIONS AND WEIGHTS

**TYPE A**stem mounting;
lower connection.

Type	a	b	c	d	d ₁	Weight (Kg.)
A	10	40	16,7	68	62,6	0,2

(dimensions in mm.)

**TYPE D**stem mounting;
back connection.**TYPE E**flush mounting, front flange;
back connection.

Type	a	a ₂	b	d	d ₁	f	D	E	Weight (Kg.)
D-E	10	11,5	40	68	62,6	3,6	85	75	0,23

(dimensions in mm.)

PROCESS CONNECTION

F	Code	L	ch	h	p
1/8" BSP	11M	10	14 x 10	63	63
1/8" NPT	13M	10	14 x 10	63	63
1/4" BSP	21M	13	14 x 9	63	63
1/4" NPT	23M	13	14 x 8	63	63
1/4" BSP tapered	22M	13	14 x 8	63	63

(dimensions in mm.)

safety pressure gauge

all stainless steel, "solid-front" Type 01.20 - DS 63

DAMPING LIQUIDS

Damping liquids	Limit ambient temperature
Glycerine 98%	+15...+65 °C (+60...+150 °F)
Silicon oil	-45...+65 °C (-50...+150 °F)
"Fluorolube"	-60...+65 °C (-76...+150 °F)

Glycerine or silicone should not be used with highly oxidizing agents such as oxygen, chlorine, nitric acid or hydrogen peroxide, because of danger of spontaneous chemical reaction, inflammability or explosion. The use of fluorinated fluid is recommended in these cases.

RANGES

PRESSURE

TAB. 1

RANGE	bar	kPa	MPa	bar ext. psi int.	bar ext. kPa int.	bar ext. MPa int.
0...1	◆		◆	◆	◆	
0...1,6	◆		◆	◆	◆	
0...2,5	◆		◆	◆	◆	
0...4	◆		◆	◆	◆	
0...6	◆		◆	◆	◆	
0...10	◆		◆	◆		◆
0...16	◆		◆	◆		◆
0...25	◆		◆	◆		◆
0...40	◆		◆	◆		◆
0...60	◆		◆	◆		◆
0...100	◆	◆	◆	◆		◆
0...160	◆	◆		◆		◆
0...250	◆	◆		◆		◆
0...300	◆			◆		
0...400	◆	◆		◆		◆
0...600	◆	◆		◆		◆
0...1000	◆	◆		◆		◆
0...1600		◆				
0...2500		◆				

TAB. 2

RANGE	psi	psi int. kPa ext.	psi ext. bar int.	psi ext. Kg/cm ² int.
0...15	◆	◆	◆	◆
0...30	◆	◆	◆	◆
0...60	◆	◆	◆	◆
0...100	◆	◆	◆	◆
0...160	◆	◆	◆	◆
0...200	◆	◆	◆	◆
0...300	◆	◆	◆	◆
0...400	◆	◆	◆	◆
0...600	◆	◆	◆	◆
0...1000	◆	◆	◆	◆
0...1500	◆	◆	◆	◆
0...2000	◆	◆	◆	◆
0...3000	◆	◆	◆	◆
0...4000	◆	◆	◆	◆
0...5000	◆	◆	◆	◆
0...6000	◆	◆	◆	◆
0...10000	◆	◆	◆	◆
0...15000	◆	◆	◆	◆

VACUUM & COMPOUND

TAB. 3

RANGE	bar	kPa	bar ext. psi int.*	bar ext. kPa int.
-1...0	◆		◆	◆
-1...0,6	◆		◆	◆
-1...1,5	◆		◆	◆
-1...3	◆		◆	◆
-1...5	◆		◆	◆
-1...9	◆		◆	◆
-1...15	◆		◆	◆
-1...24	◆		◆	◆
-100...0		◆		
-100...150		◆		
-100...300		◆		
-100...500		◆		
-100...900		◆		
-100...1500		◆		

* vacuum unit of measurement: "inHg"

TAB. 4

RANGE	psi*	psi int.* kPa ext.	psi ext.* bar int.	psi ext.* Kg/cm ² int.
-30...0	◆	◆	◆	◆
-30...15	◆	◆	◆	◆
-30...30	◆	◆	◆	◆
-30...150	◆		◆	

* vacuum unit of measurement: "inHg"

safety pressure gauge

all stainless steel, "solid-front" Type 01.20 - DS 63

01.20

REV. 03 E 10/00

OPTIONS

Description	Code	01.20.1	01.020.2	01.20.3
"Fluorolube" filling (4)	F30			◆
ABS blow out disk for radial connection type	FIX	◆	◆	◆
DIN pointer (not adjustable)	L05	◆	◆	◆
Suitable for filling with silicone and "Fluorolube" (4)	P01		◆	
Oxygen service M049	P02	◆	◆ (2)	◆ (1)
Aluminium dial (3)	Q03	◆	◆	◆
Black dial (3)	Q04	◆	◆	◆
AISI304 st.st. restrictor ø 0,7 mm.	S02	◆	◆	◆
Silicone filling (4)	S10			◆

(1) to be ordered with "Fluorolube" filling only (option F30).

(2) to be ordered with option "P01".

(3) minimum quantity N. 100.

(4) window gasket and blow out vent VITON.

HOW TO ORDER

CODES & DESCRIPTION

01 01 - bourdon tube pressure gauges

20 20 - safety pressure gauges, "solid-front" MGS20

2
1 - dry version
2 - fillable version
3 - filled version

A
A - lower connection - stem mounting
D - back connection - stem mounting
E - back connection - flush mounting, front flange

C C - DS63

2
1 - up to 2,5 bar
2 - from 4 to 40 bar
3 - over 40 bar

0/10 bar see ranges table

21M
11M - 1/8" BSP
13M - 1/8" NPT
21M - 1/4" BSP
23M - 1/4" NPT
22M - 1/4" BSP tapered

P02 see options table

ACCESSORIES

Diaphragm seals: a complete range of diaphragm seals are available with a choice of materials of construction. Specifically for corrosive and difficult process fluids plus hygienic applications. For further details refer to our catalogue sheet.

Adjustable over-load protector: this is useful for installations which may generate high overpressures; the pressure gauges is automatically excluded at the pre-set pressure and cut in again automatically when the operating pressure returns to normal. For further details refer to our catalogue 05.48A-49A.

Valves: for construction details and for use limits refer to our catalogue 05.

Pigtail and siphons: recommended with temperatures of 65° C (150° F) or over. For further details refer to our catalogue 05.5xx.

Pressure snubbers: for further details refer to our catalogue 05.450-470.



DRUCK & TEMPERATUR Leitenberger GmbH
Postfach 64 • D-72136 Kirchentellinsfurt • Germany
Tel.: 0 71 21 - 9 09 20 - 0 • Fax: 0 71 21 - 9 09 20 - 99
E-Mail: dt-info@leitenberger.de
INTERNET-Site: http://www.leitenberger.de