Bourdon Tube Test Pressure Gauges

Type 01.15: ±0.6% FS

Type 01.16: ±0.6% FS Solid Front

Type 01.17: ±0.25% FS Solid Front

01.15, 01.16, 01.17

EN 837-1

These instruments have been designed for laboratories, instrument testing or recalibration facilities and in other applications where accuracy and repeatability are of primary importance. Whenever is requested the conformity to safety normatives EN 837-1 and ANSI B40.1 is possible to use the models 01.16 and 01.17: these intruments have a solid separating wall in stainless steel, placed between the dial and the elastic element and an integral blow out back that is released from the case whenever a pressure is created inside the case, due to leaks or accidental ruptures of the elastic element. Thay can be used with fluids or gasses that do not have high viscosity and do not cristallize. The wetted parts in beryllium copper of model 01.17 permits higher accuracy, while the ones in AISI 316L of models 01.15 and 01.16 permits to use them in worse working conditions determined by aggressive ambients or process fluids. Each instrument is supplied with a calibration certificate that guarantee the traceability to the National and International master primary instruments. Upon request we can supply the calibration certificate issued by an Internationally recognized laboratory of PTB (DKD Calibration Service).

Functional and constructive characteristics.

01.15.1 all stainless steel

Accuracy class: 0,6 as per EN 837-1.
Ambient temperature: -25...+65 °C.
Process fluid temperature: -40...+150 °C.
Calibration temperature: +20 °C.
Working pressure: max 75% of the full scale value.
Overpressure: 30% of the full scale value.
Protection: IP 55 as per IEC 529.
Socket material: AISI 316L st.st.
Elastic element: AISI 316L st.st. seamless tube.
Welding: AISI 316L TIG.
Case: AISI 304 st.st.
Ring: AISI 304 st.st., bayonet lock.
Window: glass, 4 mm thick.
Movement: stainless steel with internal limit stops for minimum and maximum pressure.
Dial: aluminium, white with black markings and anti-parallax mirror band.
Pointer: balanced, anti-parallax knife-edge micrometer adjustable.
Gaskets: EPDM.

01.16.1 all stainless steel, solid front

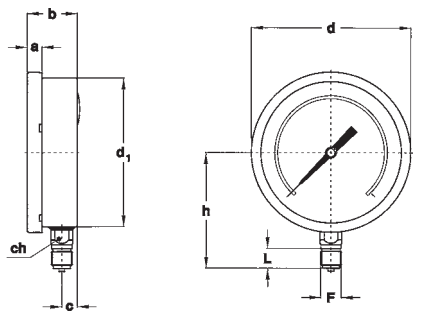
Blow out disk: AISI 304 st.st.
Window: laminated safety glass.
Other features: as type 01.15.1.

01.17.1 high precision, solid-front

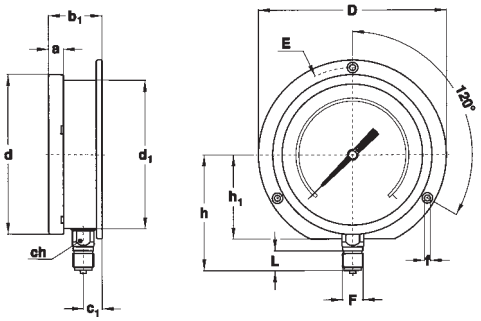
Accuracy class: 0,25 as per EN 837-1.
Ambient temperature: +15...+65 °C.
Process fluid temperature: max +65 °C.
Calibration temperature: +20 °C.
Working pressure: max 75% of the full scale value.
Overpressure (referred to the full scale value)**:** 25% for pressure ranges - 60 bar; 15% for pressure ranges ³ 100 bar.
Protection: IP 55 as per IEC 529.
Socket material: AISI 316L st.st.
Elastic element: beryllium copper.
Welding: silver alloy.
Case: AISI 304 st.st.
Ring: AISI 304 st.st., bayonet lock.
Blow out disk: AISI 304 st.st.
Window: laminated safety glass.
Movement: high precision type.
Dial: aluminium light green with, black markings and anti-parallax mirror band.
Pointer: balanced, anti-parallax knife-edge micrometer adjustable.
Gaskets: EPDM.

All instruments are supplied with calibration certificate referred to master primary instrument.

01.15: TYPE , DIMENSIONS AND WEIGHTS



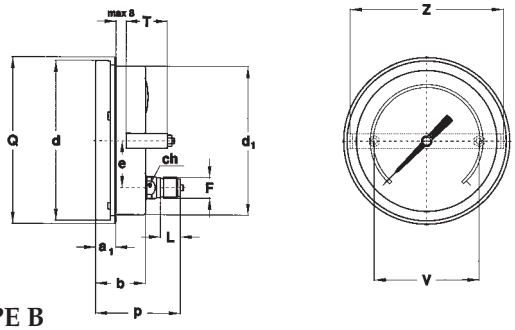
TYPE A
stem mounting;
lower connection.



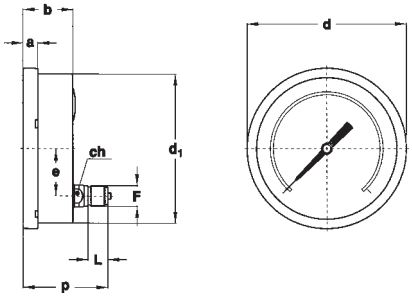
TYPE C
surface mounting, back flange;
lower connection.

Type	F	a	b	b_1	c	c_1	d	d_1	f	h	h_1	D	E	ch	L	Weight
A	1/2" BSP or NPT	15	50,5	-	15,5	-	161	149,6	-	117	-	-	-	22	20	0,94 Kg.
C	1/2" BSP or NPT	15	-	54	-	19	161	149,6	6	117	85	190	175	22	20	1,07 Kg.

(dimensions : mm.)



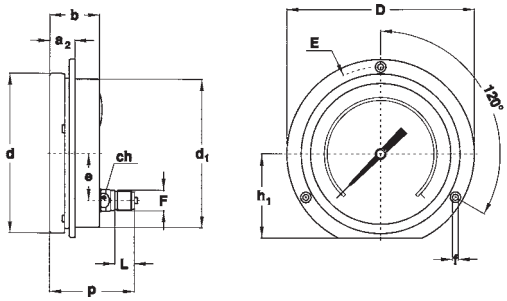
TYPE B
flush mounting, "U"-Clamp;
back connection.



TYPE D
stem mounting;
back connection.

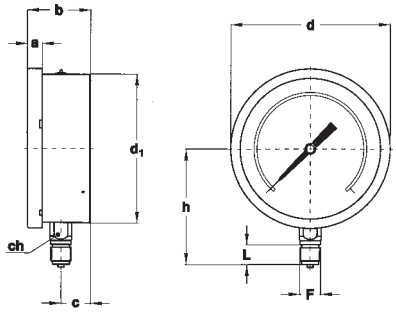
Type	F	a	a_1	a_2	b	d	d_1	e	f	h_1	p	D	E	Q	T	V	Z	ch	L	Weight
B	1/2" BSP or NPT	-	20,5	-	50,5	161	149,6	47,8	-	-	85,5	-	-	164	41,5	106	155	22	20	1,07 Kg.
D	1/2" BSP or NPT	15	-	-	50,5	161	149,6	47,8	-	-	85,5	-	-	-	-	-	-	22	20	0,94 Kg.
E	1/2" BSP or NPT	-	-	25,5	50,5	161	149,6	47,8	6	85	85,5	190	175	-	-	-	-	22	20	1,06 Kg.

(dimensions : mm.)

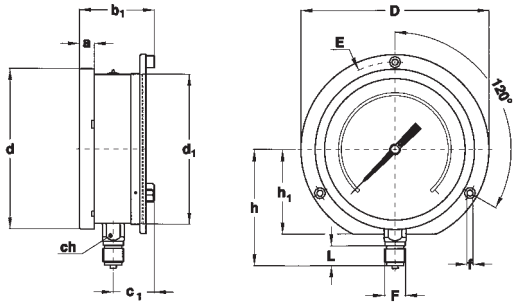


TYPE E
flush mounting, front flange;
back connection.

01.16, 01.17: TYPE, DIMENSIONS AND WEIGHTS



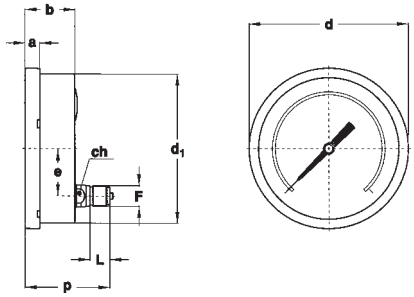
TYPE A
stem mounting,
lower connection.



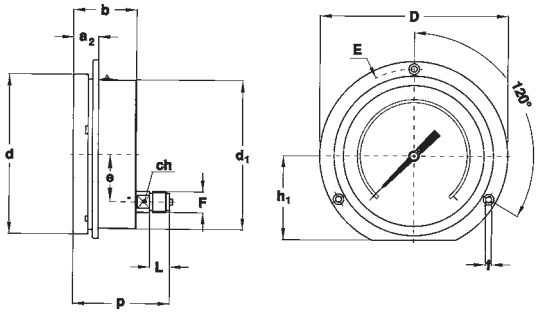
TYPE C - (only for model **01.16**)
surface mounting, back flange;
lower connection.

Model	Type	F	a	b	b_1	c	c_1	d	d_1	f	h	h_1	D	E	L	ch	Weight
01.16	A	1/2" BSP or NPT	15	64	-	30	-	161	150,5	-	117	-	-	-	20	22	1,13 Kg.
01.16	C	1/2" BSP or NPT	15	-	75,5	-	40,5	161	150,5	6	117	85	190	175	20	22	1,26 Kg.
01.17	A	1/2" BSP or NPT	15	64	-	29	-	161	150,5	-	117	-	-	-	20	24	1,19 Kg.
01.17	C	1/2" BSP or NPT	15	-	75,5	-	40,5	161	150,5	6	117	85	190	175	20	24	1,323 Kg.

(dimensions : mm.)



TYPE D
stem mounting;
back connection.



TYPE E
flush mounting, front flange;
back connection.

Model	Type	F	a	a_2	b	d	d_1	e	f	h_1	p	D	E	L	c	Weight
01.16	D	1/2" BSP or NPT	15	-	64	161	150,5	47,8	-	-	96	-	-	20	17	1,03 Kg.
01.16	E	1/2" BSP or NPT	-	25,5	64	161	150,5	47,8	6	85	96	190	175	20	17	1,13 Kg.
01.17	D	1/2" BSP or NPT	15	-	64	161	150,5	47,8	-	-	97,5	-	-	20	17	1,10 Kg.
01.17	E	1/2" BSP or NPT	-	25,5	64	161	150,5	47,8	6	85	97,5	190	175	20	17	1,22 Kg.

(dimensions : mm.)

Bourdon Tube Test Pressure Gauges
Types 01.15, 01.16 and 01.17 - DN 150

01.15, 01.16, 01.17

REV. 02 E 03/00

HOW TO ORDER

	CODES & DESCRIPTIONS
01	01- bourdon tube pressure gauges
17	15 - all stainless steel MN15 16 - all stainless steel, solid-front MN16 17 - high precision, solid-front MN17
1	
D	A - lower connection - stem mounting B - lower connection - flush mounting, "U" -Clamp C - lower connection - surface mounting, back flange D - back connection - stem mounting E - back connection - flush mounting, front flange
G	G - DS150
2	1 - up to 2,5 bar 2 - from 4 to 40 bar 3 - over 40 bar
0/10 bar	see ranges table
41M	21M - 1/4" BSP M 23M - 1/4" NPT M 41M - 1/2" BSP M 43M - 1/2" NPT M
A40	see options table

ACCESSORIES

AISI 316 ANCC valve for pressure up to 100 bar, with process connection flanged ø 40 mm and pressure gauge connection 1/4" BSP F . Employed for point to point pressure measurement.

RANGES

RANGE	Minor graduations	Figure intervals	bar	kPa	MPa	psi
-1...0	0,005	0,1	✦			
0...0,6	0,002	0,05	✦		✦	
0...1	0,005	0,1	✦		✦	
0...1,6	0,005	0,1	✦		✦	
0...2,5	0,01	0,2	✦		✦	
0...4	0,02	0,2	✦		✦	
0...6	0,02	0,5	✦		✦	
0...10	0,05	1	✦		✦	✦
0...16	0,05	1	✦		✦	✦
0...25	0,1	2	✦		✦	
0...30	0,1	2	✦		✦	✦
0...40	0,2	2	✦		✦	
0...60	0,2	5	✦	✦	✦	✦
0...100	0,5	10	✦	✦		✦
0...160	0,5	10	✦	✦		✦
0...250	1	20	✦	✦		
0...300	1	30	✦	✦		✦
0...400	2	20	✦	✦		✦
0...600	2	50	✦	✦		✦
0...1000	5	100	✦**(1)**			✦
0...2000	10	100				✦
0...3000	10	200				✦
0...4000	20	200				✦
0...6000	20	500				✦
0...10000	50	1000				✦
0...15000	50	1000				✦**(1)**

(1) Available only for mod. 01.17.

OPTIONS

DESCRIPTION	CODE
Carrying case (3)	**A40**
Nace version for pressure ranges - 40 bar (1)	**E30**
S.I.T. Certificate for pressure ranges	**CE1**
S.I.T. Certificate for vacuum ranges	**CE3**
Oxygen service (2)	**P02**
AISI 316 ANCC valve	**V16**

(1) option not available for 01.17;
(2) available only for 01.16 - 01.17;
(3) available only for lower connection, stem mounting

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