



Tube-spring manometers

TYPE:

11MT 63 11MT 160
11MT 100 11MT 250

Mounting

Radial (R)

Usage

For measuring of pressure and vacuum of low – viscosity and non-crystallizing gasses and liquids, not aggressive to copper and copper alloys.

Nominal dimensions (ND)

63, 100, 160, 250 mm

Class of precision

ND63 - 2,5 (1,6)
ND100 - 1,6 (1)
ND160 - 1,6 (1)
ND250 - 1,6 (1)

Measurement ranges

kPa	MPa	bar
0 ... 100		0 ... 1
0 ... 160		0 ... 1,6
0 ... 250		0 ... 2,5
0 ... 400		0 ... 4
0 ... 600		0 ... 6
	0 ... 1	0 ... 10
	0 ... 1,6	0 ... 16
	0 ... 2,5	0 ... 25
	0 ... 4	0 ... 40
	0 ... 6	0 ... 60
	0 ... 10	0 ... 100
	0 ... 16	0 ... 160
	0 ... 25	0 ... 250
	0 ... 40	0 ... 400
	0 ... 60	0 ... 600
-100 ... 0		-1 ... 0
-100 ... 60		-1 ... 0,6
-100 ... 150		-1 ... 1,5
-100 ... 300		-1 ... 3
-100 ... 500		-1 ... 5
	-0,1 ... 0,9	-1 ... 9
	-0,1 ... 1,5	-1 ... 15
	-0,1 ... 2,4	-1 ... 24
	-0,1 ... 4	-1 ... 40

Recommended measuring values

At static loads - 3/4 from the scale range
At pulsing loads - 2/3 from the scale range
At a brief measuring - the scale range

Permitted temperatures

Ambient $T_{min} - 20^{\circ}C$ $T_{max} + 60^{\circ}C$
Of the measured fluid $T_{max} + 60^{\circ}C$ / with soft solder /
 $T_{max} + 100^{\circ}C$ /with hard solder /

Stub types

Brass, radial (bottom connection), with mounting thread and wrench number :

ND63 - M12x1,5 (G 1/4") SW 14
ND100 - M20x1,5 (G 1/2") SW 22
ND160 - M20x1,5 (G 1/2") SW 22
ND250 - M20x1,5 (G 1/2") SW 22

Measuring element

≤ 10 MPa –alloyed copper, round

> 10 MPa –alloyed copper, multiple tube-spring



Dial

aluminium, white
graduation - black

Arrow

aluminium, black

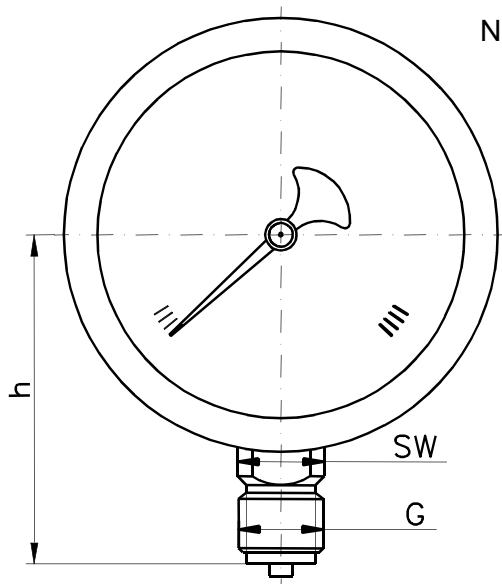
Box

ND63 - steel with polyester coating
ND100 - steel with polyester coating
ND160 - steel with polyester coating
ND250 - aluminium casting

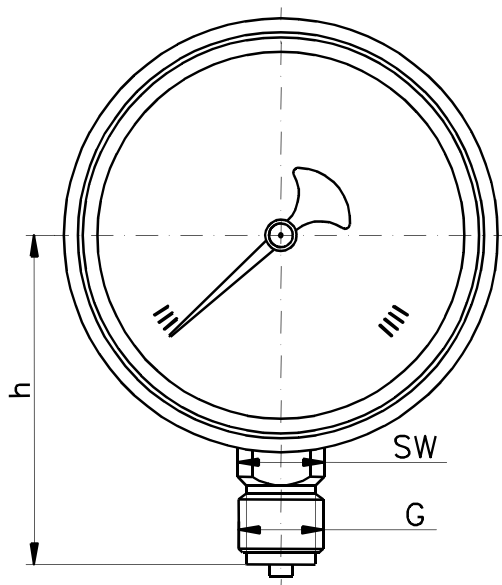
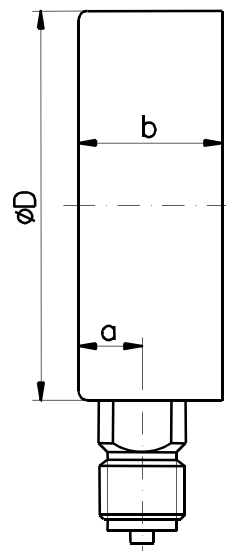
Options

BH -stainless steel box
R... - temperature scale in °C for freons
FA -front mounting flange
FB - rear mounting flange
ST - mounting clamp (to a panel)
DI - pin throttle
O₂ - for oxygen
C₂H₂ - for acetylene

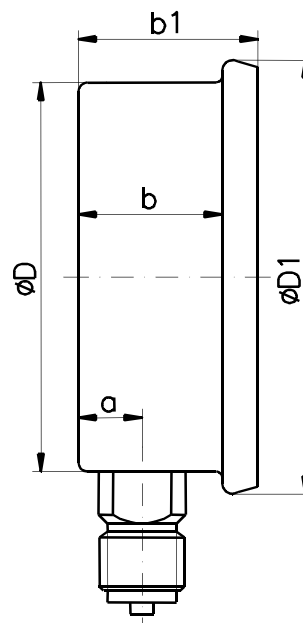
Other mounting threads
Other measuring units



ND 63, ND 160, ND 250



ND 100



ND	Dimensions [mm]									Weight [kg]
	a	b	b1	D	D1	h	G			
63	9	32	-	63	-	55	M12x1,5	G1/4"	14	0,150
100	13	36	46	100	110	80	M20x1,5	G1/2"	22	0,440
160	13	47	-	160	-	110	M20x1,5	G1/2"	22	0,880
250	16	56	-	250	-	155	M20x1,5	G1/2"	22	2,000



Tube-spring manometers Манометри с тръбна пружина

Type:
11MT 63 AE 11MT 63 AC
11MT 100 AE
11MT 160 AE
11MT 250 AE

Mounting

Central axial stub (AC)
Displaced axial stub (AE)

Usage

For measuring of pressure and vacuum of low-viscosity and non-crystallizing gasses and liquids, not aggressive to copper and copper alloys.

Nominal dimensions (ND)

63, 100, 160, 250 mm

Class of precision

ND63 - 2,5 (1,6)
ND100 - 1,6 (1)
ND160 - 1,6 (1)
ND250 - 1,6 (1)

Measurement ranges

kPa	MPa	bar
0 ... 100		0 ... 1
0 ... 160		0 ... 1,6
0 ... 250		0 ... 2,5
0 ... 400		0 ... 4
0 ... 600		0 ... 6
	0 ... 1	0 ... 10
	0 ... 1,6	0 ... 16
	0 ... 2,5	0 ... 25
	0 ... 4	0 ... 40
	0 ... 6	0 ... 60
	0 ... 10	0 ... 100
	0 ... 16	0 ... 160
	0 ... 25	0 ... 250
	0 ... 40	0 ... 400
	0 ... 60	0 ... 600
-100 ... 0		-1 ... 0
-100 ... 60		-1 ... 0,6
-100 ... 150		-1 ... 1,5
-100 ... 300		-1 ... 3
-100 ... 500		-1 ... 5
	-0,1 ... 0,9	-1 ... 9
	-0,1 ... 1,5	-1 ... 15
	-0,1 ... 2,4	-1 ... 24
	-0,1 ... 4	-1 ... 40

Recommended measuring values

At static loads - 3/4 from the scale range
At pulsing loads - 2/3 from the scale range
At a brief measuring - the scale range

Permitted temperatures

Ambient $T_{min} - 20^{\circ}C$ $T_{max} + 60^{\circ}C$
Of the measured fluid $T_{max} + 60^{\circ}C$ /with soft solder /
 $T_{max} + 100^{\circ}C$ / with hard solder /

Stub types

Brass, central axial or displaced axial(rear connection), with mounting thread and wrench number :

ND63 - M12x1,5 (G 1/4") SW 14
ND100 - M20x1,5 (G 1/2") SW 17
ND160 - M20x1,5 (G 1/2") SW 17
ND250 - M20x1,5 (G 1/2") SW 17

Measuring element

≤ 10 MPa – alloyed copper, round

> 10 MPa – alloyed copper, multiple tube-spring



Dial

aluminium , white
graduation, black

Arrow

aluminium, black

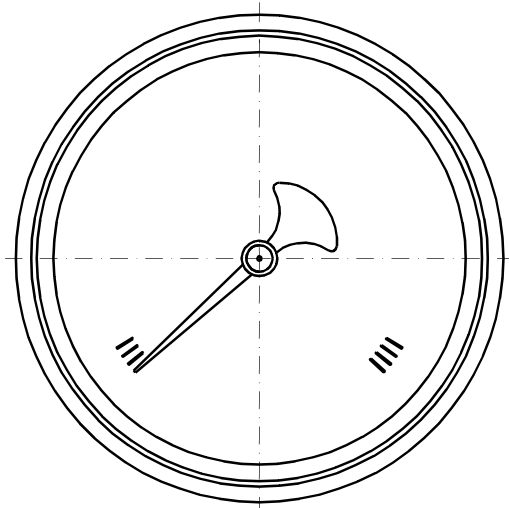
Box

ND63 - steel with polyester coating
ND100 - steel with polyester coating
ND160 - steel with polyester coating
ND250 - aluminium casting

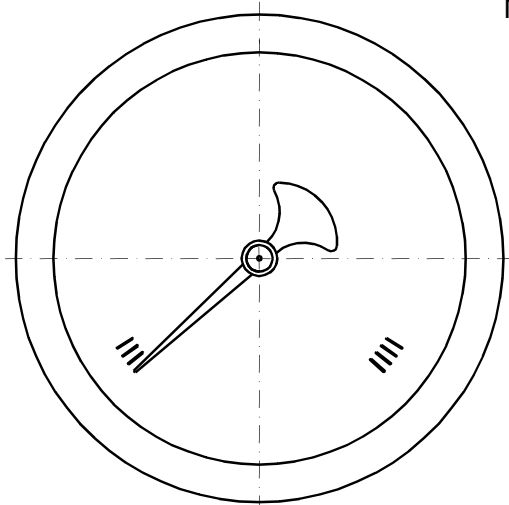
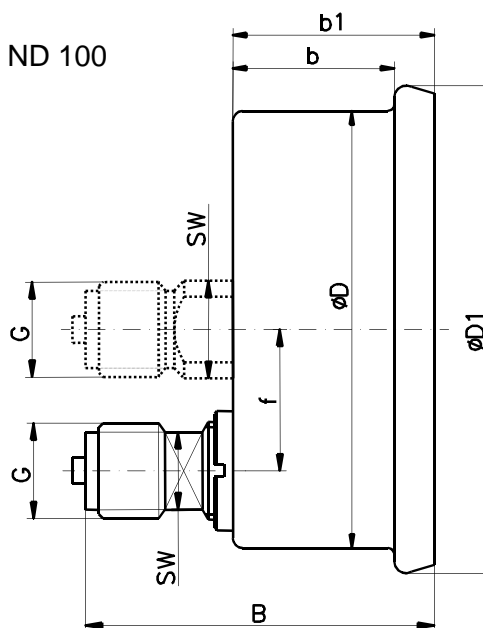
Options

BH - stainless steel box
R... - temperature graduation in °C for freons
FA - front mounting flange
FB - rear mounting flange
ST - mounting clamp (to a panel)
DI - pin throttle
O₂ - for oxygen
C₂H₂ - for acetylene

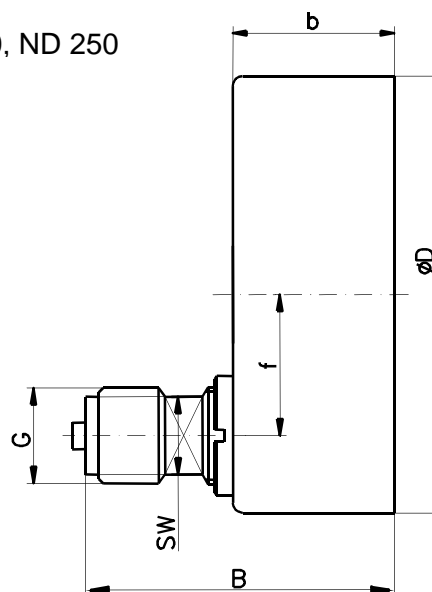
Other mounting threads
Other measuring units



ND 63, ND 100



ND 160, ND 250



ND	Dimensions [mm]									Weight [kg]
	f	b	b1	D	D1	B	G		SW	
63	19	24	33	63	70	57	M12x1,5	G1/4"	14	0,150
100	34	36	46	100	110	72	M20x1,5	G1/2"	17	0,450
160	52	47	-	160	-	84	M20x1,5	G1/2"	17	0,880
250	52	56	-	250	-	92	M20x1,5	G1/2"	17	2,000

AUSTA Ltd. reserves the right to change the design and dimensions of the devices without changing the type and way of measurement