

Bourdon tube pressure gauges // industrial version

Types MRE and MRE-g



Type MRE



Type MRE-g



Highlights

- Suitable for outdoor use - Closed system
- Case complete stainless steel
- Without electrical auxiliary power

Technical data

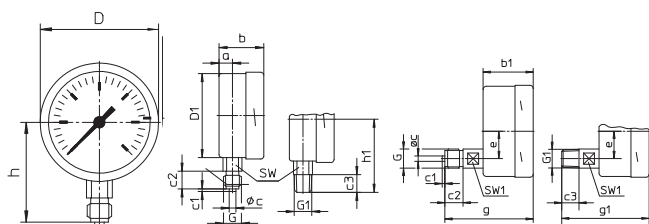
Type	MRE / MRE-g
Version	Bayonet ring case or crimped-on ring case
Nominal size	100 mm, 160 mm, 250 mm
Accuracy	EN 837-1, class 1.0
Medium / Application	Liquid and gaseous media
Process connection	Thread see table , brass, optional stainless steel
Measurement system	Bourdon spring bronze, optional stainless steel
Degree of protection according to EN 60529	IP54 (nominal sizes 100 and 160 mm also IP65 with filled case with closed pressure compensation insert)
Ambient temperature	-40 to 60 °C (-20 to 60 °C with case filling)
Storage temperature	-40 to 70 °C (-20 to 70 °C with case filling)
Medium temperature	Devices with brass connection max. 60 °C Devices with stainless steel connection max. 200 °C (max. 100 °C with case filling)
Nominal use temperature	20 °C*
Pressure load capacity	Of full-scale value
→ Resting load	100 %
→ Dynamic load	90 %
→ Overload	Max. 130 %
Approvals (for nominal size 100 mm)	

* The pressure gauges are calibrated at a reference temperature of 20 °C. At other operating temperatures the maximum indication error is ±0.4 % of full scale value per 10 °C difference in accordance with EN 837-1.

Types and dimensions // bayonet ring case

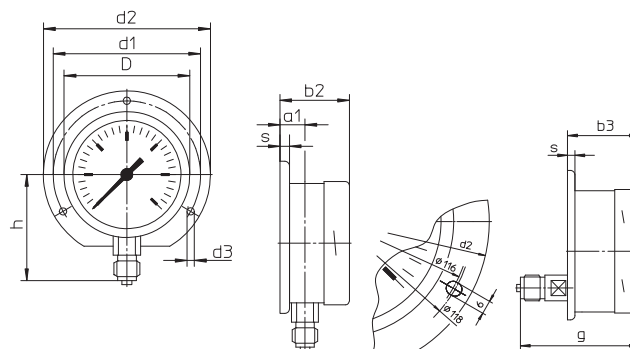
Without mounting flange

Bottom connection or lower back connection



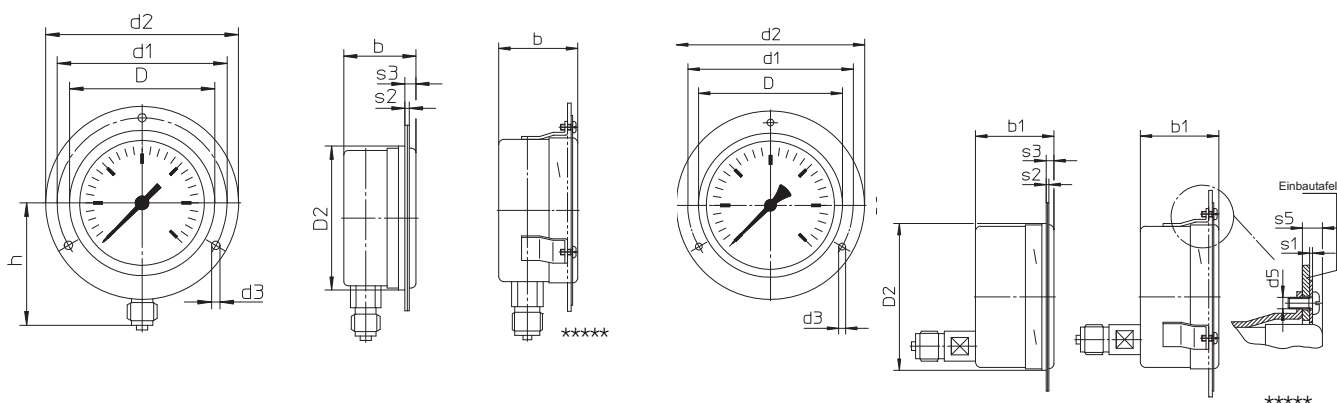
With rear flange***

Bottom connection** or lower back connection*



With front flange

Bottom connection* or lower back connection****



* Version available on request, but not recommended by EN 837-1.

** Nominal size 100 rear flange optionally available with oval holes compliant with EN 837-1.

*** With three lugs for nominal size 250.

**** Recommended panel cut out $\varnothing 104 \pm 0.5$ mm for NS 100; $\varnothing 164 \pm 0.5$ mm for NS 160; $\varnothing 254 \pm 0.5$ mm for NS 250.

***** Welded lugs and separate fixing flange at front.

Dimensions [mm]

NS	D	D1	D2	a	a1	b	b1	b2	b3	c	c1	c2	c3	d1	d2
100	101	99	103	20	23.5	55	55	58.5	58.5	6	3	20	19	116	132
160	161	159	163	15	18	50	55	53	58	6	3	20	19	178	196
250	251	249		15.5	17.5	58	58	60	60	6	3	20	19	270	285

Dimensions [mm]

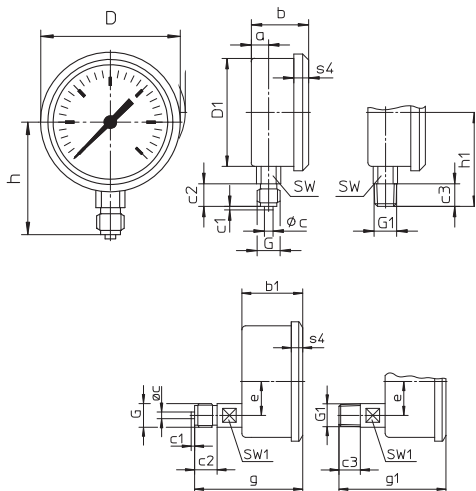
NS	d3	d5	G	G1	e	g	g1	h [†]	h1 [†]	s	s1	s2	s3	s5	SW	SW1	Weight [kg] (approx.)*	
																	unfilled	filled
100	4.8	M4	G½ B M20 x 1.5	½ NPT	30	97	96	87	84	6	1	2	5.5	7	22	17	0.60	0.95
160	5.8	M5	G½ B M20 x 1.5	½ NPT	30	92.5	91.5	115	114	6	1.5	2.5	6	8	22	17	1.10	1.95
250	5.8		G½ B M20 x 1.5	½ NPT	52	97	96	165	164	6	-	2	8.5	-	22	17	2.10	

* Data applies to versions without mounting flange

Types and dimensions // crimped-on ring case

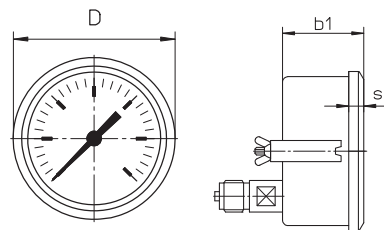
Without mounting flange

Bottom connection or lower back connection



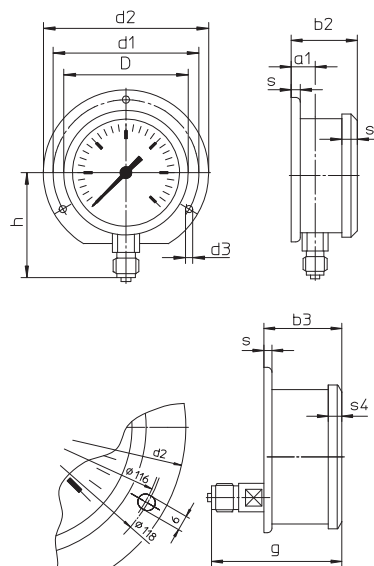
With u-clamp fixing****

Lower back connection*



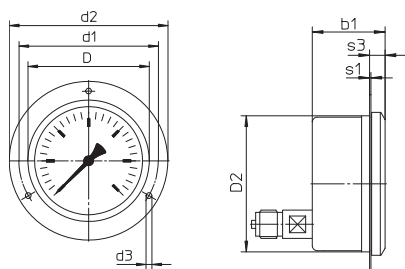
With rear flange

Bottom connection** or lower back connection*



With front flange

Lower back connection***



- * Version available on request, but not recommended by EN 837-1.
- ** NS 100 rear flange optionally available with oval holes compliant with EN 837-1.
- *** Recommended panel cut out $\varnothing 102 \pm 0.5$ mm for NS 100; NS 160 on request.
- **** Recommended panel cut out $\varnothing 102 \pm 0.5$ mm for NS 100; $\varnothing 162 \pm 0.5$ mm for NS 160.

Dimensions [mm]																
NS	D	D1	D2	a	a1	b	b1	b2	b3	c	c1	c2	c3	d1	d2	
100	106	99	101	20	23.5	54	54	57.5	57.5	6	3	20	19	116	132	
160	167	159	161	15	18	50	55	53	58	6	3	20	19	178	196	


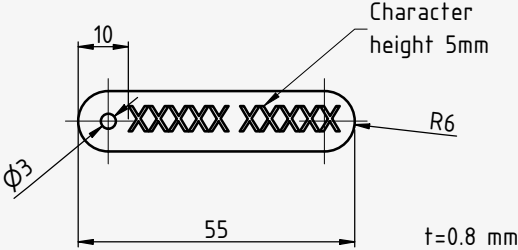
Dimensions [mm]															Weight [kg] (approx.)*	
NS	d3	G	G1	e	g	g1	h ^{±1}	h1 ^{±1}	s	s1	s3	s4	SW	SW1	unfilled	filled
100	4.8	G½ B M20 x 1.5	½ NPT	30	96	95	87	84	6	1	11.5	10	22	17	0.60	0.90
160	5.8	G½ B M20 x 1.5	½ NPT	30	97	96	115	114	6			11	22	17	1.10	1.70

* Angaben für Ausführungen ohne Befestigungsvorrichtung

Article numbers

Order code							
Bourdon tube pressure gauges, industrial version							
Bayonet ring case	MRE						
Crimped-on ring case	MREG						
Nominal size							
100 mm		3					
160 mm		4					
250 mm	available only as type MRE with bayonet ring case	5					
Connection thread							
G½ B bottom			1				
G½ B lower back connection			2				
M20 x 1.5 bottom			3				
M20 x 1.5 lower back connection			4				
½ NPT bottom			B				
½ NPT lower back connection			C				
Connection material							
Brass				1			
Stainless steel				3			
Display ranges							
-1...0 bar					315		
-1...0.6 bar					505		
-1...1.5 bar					515		
-1...3 bar					525		
-1...5 bar					535		
-1...9 bar					545		
-1...15 bar					555		
0...0.6 bar					015		
0...1 bar					025		
0...1,6 bar					035		
0...2.5 bar					045		
0...4 bar					055		
0...6 bar					065		
0...10 bar					075		
0...16 bar					085		
0...25 bar					095		
0...40 bar					105		
0...60 bar					115		
0...100 bar					125		
0...160 bar					135		
0...250 bar					145		
0...400 bar					155		
0...600 bar					165		
0...1000 bar					175		
0...1600 bar	only with stainless steel connection available				185		
Mounting flange							
None						0	
Rear flange						1	
Front flange						2	
U-clamp	only with crimped-on ring case (nominal size 100 or 160 mm)					3	
Options							
None							0
Filled case							
Unfilled case							0
Filled case (glycerine)	only with nominal size 100 or 160 mm						G
Example order number		MRE	3	1	1	315	0 0 0

Accessories

Accessories	Article number
<p>Measuring point designation Laser-inscribed stainless steel plate with fixing wire for easy attachment to measuring points</p> <ul style="list-style-type: none">→ Scope of delivery: Designation plate inscribed according to specification and enclosed fixing wire (sealing wire)→ Fastening: Wire (included in delivery), alternatively sealing, cable ties or similar (not included in delivery)→ Materials: Plate stainless steel 1.4571, wire stainless steel→ Dimensions: Plate 55 x 10 x 0.8 mm, wire length 180 mm→ Inscription: one-sided, single-line, max. 11 characters, character height 5 mm, designation width max. 40 mm, letters, numbers, symbols, barcodes, QR codes→ Transmission of designations: digital list, file formats Excel, Word or CSV  	<p>ONSITETAG</p>