

Pressure gauges with Bourdon tube without / with glycerine filling

Nominal size NG 63
Accuracy class 1,6

According to DIN EN 837-1



Features

High dynamic loads
Rugged construction

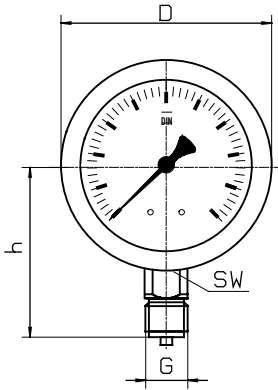
Applications

Food industrie,
Plant construction ,Chemical industry, Mining,
General Machine construction,
with glycerine filling : Compressors,
Pumps, Hydraulics

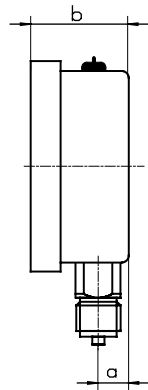
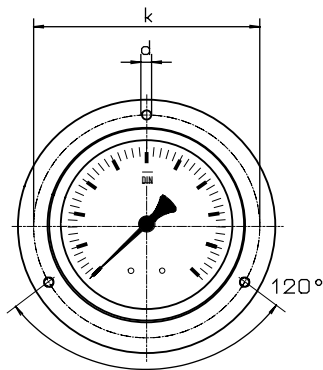
	with glycerine filling			
Model and ND	MR-20 63	MR-25 63	MR-20 63 F	MR-24 63 F
Connection	bottom	back,excentric	bottom	back,centric
Ranges in bar	0...1, 1,6, 2,5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1.000 -1 / 0, -1 / +0,6, -1 / +1,5, -1 / +3, -1 / +5, -1 / +9, -1 / +15			
Application	permanent loading : to 3/4 max.rating dynamic loading : to 2/3 max. rating Overload protection : max. rating			
Case	CrNi steel			
Bezel	CrNi steel		CrNi steel	
Window	plexiglass			
Dial	Aluminium white , scale and imprint black			
Pointer	Aluminium , black			
Movement	CUZn -alloy,			
Measuring element	Copper alloy, up to 40 bar bourdon tube, from 60 bar helical tube stainless steel > 400 bar helical tube			
Connection	G 1/4 B			
Protection	IP 65 nach EN 60529 / IEC 529			
Temperatures	Medium: -20°C bis 80°C, ambient : -25°C bis 60°C			
Weight	0,2 kg		0,25 kg	

Dimensions

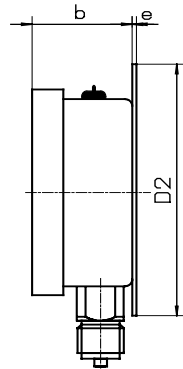
Connection bottom



Front flange

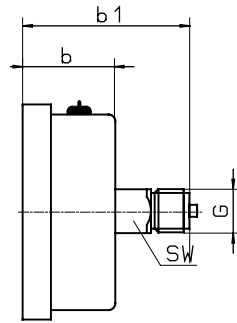


Rear flange

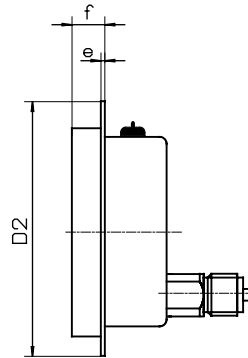


Connention back

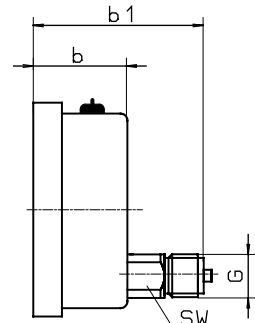
Centric



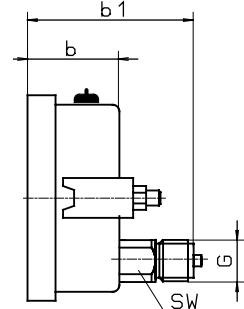
Front flange



excentric



with triangle bezel and U-clamp,



Dimensions in mm

Model	NG	D	a	b	b1	h		D2	e	f	k	d	sw	G
MR-20	63	68,5	9,5	31	-	53		85	3	16	75	3,7	14	G 1/4 B
MR-25	63	68,5	-	31	60	-		85	3	16	75	3,7	14	G 1/4 B
MR-20 F	63	68,5	9,5	31	-	53		85	3	16	75	3,7	14	G 1/4 B
MR-24 F	63	68,5	-	31	60	-		85	3	16	75	3,7	14	G 1/4 B

Modelspecification

Model	Connection	Filling	Nominal size	Range	Options
MR-3	0 or 5 (4)	F or -	63	f.e. 10 bar	

Bottom = 0
 Back centric = 4
 Back excentric = 5

with filling = F

after rangespecification
 for 10 bar = 010

for example : front mounting flange

Heavy Duty pressure gauges with Bourdon tube

Nominal size ND 100 ,ND 160
Accuracy class 1.0

according to DIN EN 837-1

Features

- Accuracy class 1.0
- High reliability on a longterm basis
- Stainless steel case
- Overload capacity 1.3 x
- Copper alloy measuring system



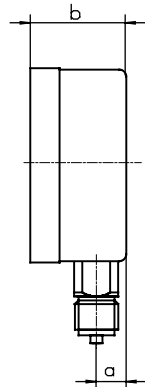
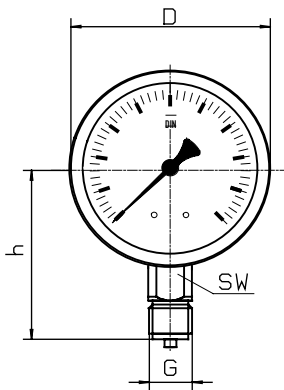
Applications

- Mechanical engineering and apparatus construction,
- power supply,
- laboratory and test engineering

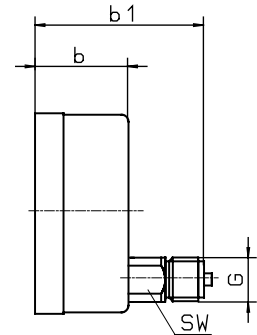
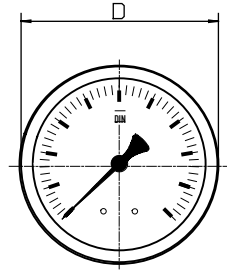
Models and ND	MR-20 100	MR-25 100	MR-20 160	MR-25 160
Connections	bottom	back,eccentric	bottom	back,eccentric
Ranges in bar	0...0,6, 1, 1,6, 2,5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1.000, 1.600 -0,6 / 0, -1 / 0, -1 / +0,6, -1 / +1,5, -1 / +3, -1 / +5, -1 / +9, -1 / +15, -1 / +24			
Application	Constant load : up to full scale value , >1000 bar 3/4 Alternating load : up to 0,9 x full scale value , > 1000 bar 2/3 Overrange protection 1,3 times max. , > 1000 bar full scale value			
Case	CrNi steel, pressure relief opening (closed with rubber disk)			
Bezel	CrNi steel bayonet			
Window	Lamineted safety glass			
Dial	Aluminium , white ,scale and imprint black			
Pointer	Aluminium, black			
Movement	CuZn-alloy			
Measuring element	CuZn-alloy up to 40 bar,above 40 bar helical spring stainless steel			
Connection	Copper Alloy up to 1000 bar, > 1000 bar CrNi steel			
Connectionthread	G 1/2 B			
Protection	IP 54 to EN 60529 / IEC 529			
Temperature drift	Medium: -20°C bis 80°C, Ambient : -25°C bis 60°C			
Weight	0,6 kg		1,0 kg	

Dimensions

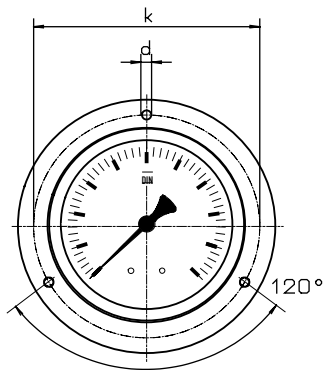
Connection bottom



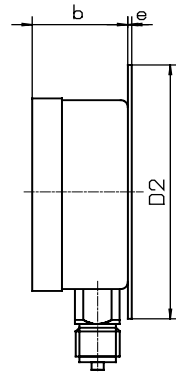
Connection back, eccentric



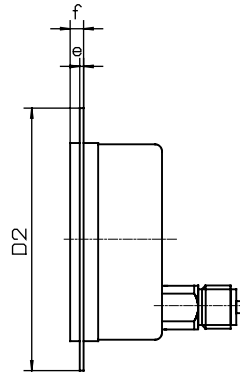
front flange



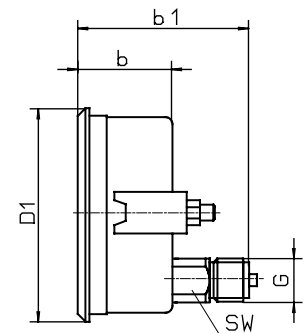
rear flange



front flange

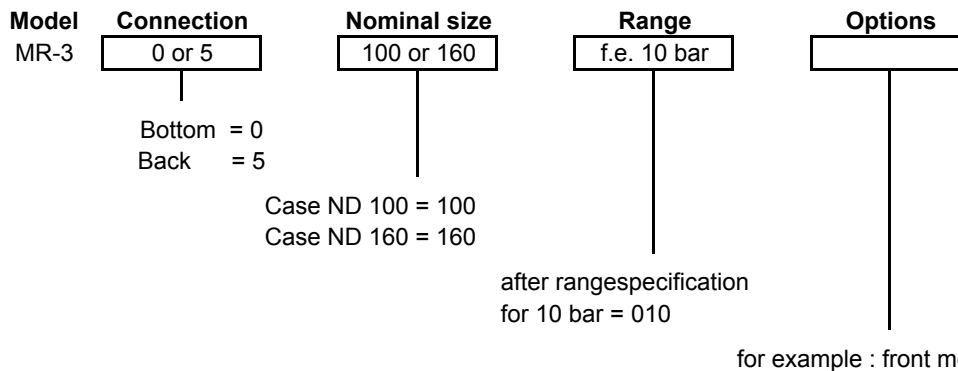


with triangle bezel a. U-clamp



Dimensions in mm														
Model	NG	D	a	b	b1	h	D1	D2	e	f	k	d	sw	G
MR-20	100	101	15	49	-	86	107	132	2	6	116	5	22	G 1/2 B
MR-25	100	101	-	49	85	-	107	132	2	6	116	5	22	G 1/2 B
MR-20	160	160	15	51	-	118	-	196	3	8	178	5,6	22	G 1/2 B
MR-25	160	160	-	51	86	-	166	196	3	8	178	5,6	22	G 1/2 B

Modelspecification



Heavy Duty pressure gauges with Bourdon tube and glycerine filling

Nominal size ND 100 ,ND 160
Accuracy class 1.0

according to DIN EN 837-1

Features

- Accuracy class 1.0
- High reliability on a longterm basis
- Stainless steel case
- Overload capacity 1.3 x
- Copper alloy measuring system
- Protection to IP 65



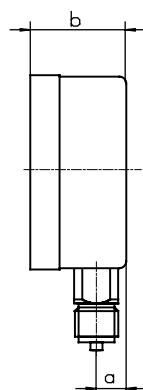
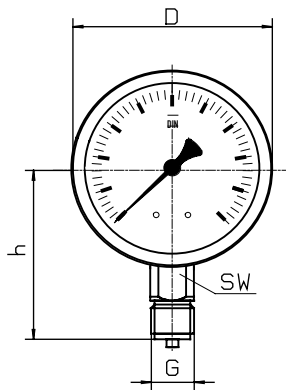
Applications

- Hydraulics , compressors,
- power stations,
- water treatment plants,pumps,

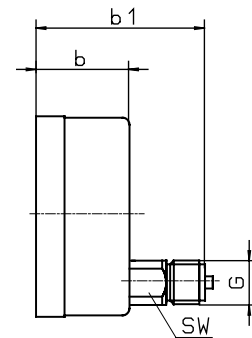
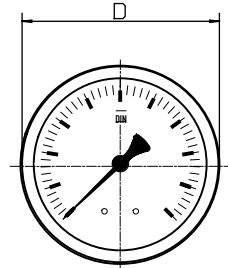
Models and ND	MR-20 F 100	MR-25 F 100	MR-20 F 160	MR-25 F 160
Connections	bottom	back,eccentric	bottom	back,eccentric
Ranges in bar	0...0,6, 1, 1,6, 2,5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400, 600, 1.000, 1.600 -0,6 / 0, -1 / 0, -1 / +0,6, -1 / +1,5, -1 / +3, -1 / +5, -1 / +9, -1 / +15, -1 / +24			
Application	Constant load : up to full scale value , >1000 bar 3/4 Alternating load : up to 0,9 x full scale value , > 1000 bar 2/3 Overange protection 1,3 times max. , > 1000 bar full scale value			
Case	CrNi steel			
Bezel	CrNi steel bayonet			
Window	Glass lens			
Dial	Aluminium , white ,scale and imprint black			
Pointer	Aluminium, black			
Movement	CuZn-alloy			
Measuring element	CuZn-alloy up to 40 bar,above 60 bar helical spring stainless steel			
Connection	Copper Alloy up to 1000 bar, > 1000 bar CrNi steel			
Connectionthread	G 1/2 B			
Liquid filling	Glycerine			
Protection	IP 54 to EN 60529 / IEC 529			
Temperature drift	Medium: -20°C bis 80°C, Ambient : -25°C bis 60°C			
Weight	0,6 kg		1,0 kg	

Dimensions

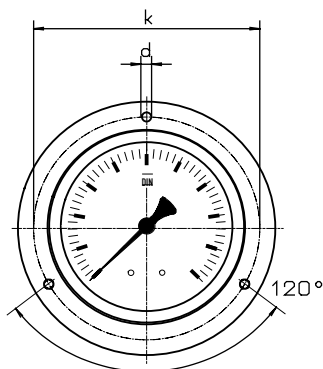
Connection bottom



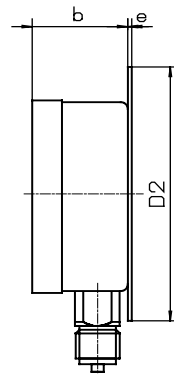
Connection back, eccentric



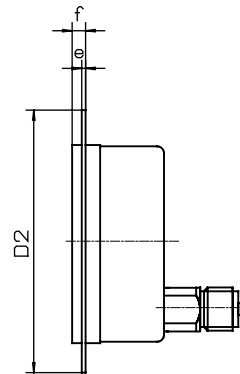
front flange



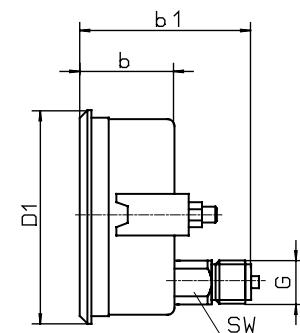
rear flange



front flange



with triangle
bezel a. mounting
bracket



Dimensions in mm														
Model	NG	D	a	b	b1	h	D1	D2	e	f	k	d	sw	G
MR-20 F	100	101	15	49	-	86	107	132	2	6	116	5	22	G 1/2 B
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MR-20 F	160	160	15	51	-	118	-	196	3	8	178	5,6	22	G 1/2 B
MR-25 F	160	160	-	51	86	-	166	196	3	8	178	5,6	22	G 1/2 B

Modelspecification

