

# Stainless steel liquid filled gauges

## Model GFS

Nominal size: 63 mm (2.5"), 100 mm (4")

ASME B40.100 / EN 837-1 / IS-3624

Accuracy: Class 1.6 (1.6%) for 63 mm, Class 1 (1%) for 100 mm

### Features

- Rugged stainless steel construction
- Socket and case welded
- Protection IP65
- Usable to full scale
- Overload protection 130 %
- Dry or liquid filled
- Measuring system stainless steel

### Ranges

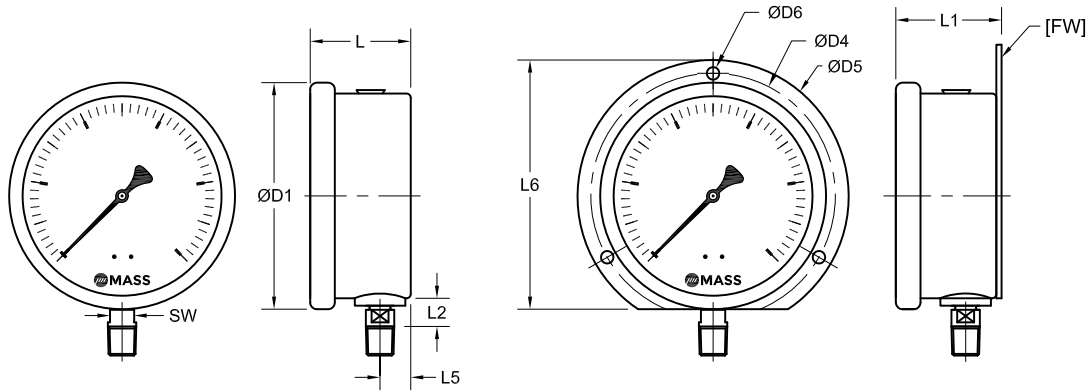
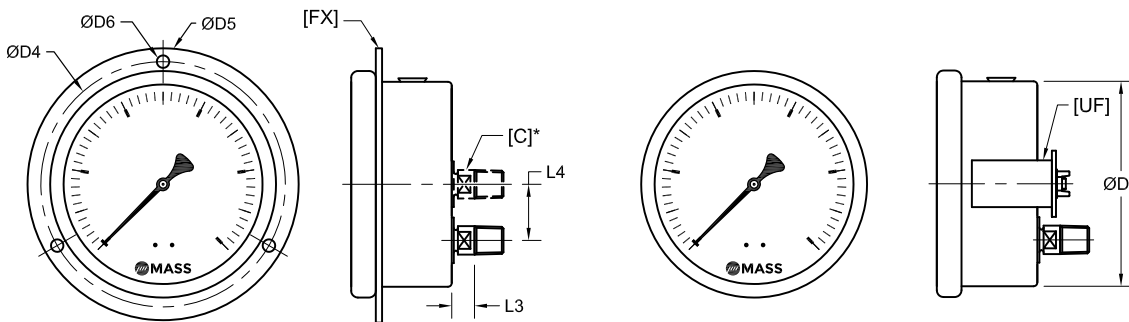
-30 in. Hg ... 0 psi up to 0 ... 23,000 psi  
 -1 ... 0 bar up to 0 ... 1600 bar & kg/cm<sup>2</sup>  
 -100 ... 0 kPa up to 0 ... 160,000 kPa



### Applications

Power packs  
 Hydraulic machinery  
 Pumps  
 Power plants  
 Pipelines  
 Transmission stations

Technical specification	GFS	
Dial size in mm	63	100
Construction	Open front cylindrical case with crimp type bezel ring	
Measuring principle	Bourdon tube	
Range in kg/cm <sup>2</sup> (or bar)	1 1.6 2.5 4 6 10 16 25 40 60 100 160 250 400 600 1000 1600 -1/0 -1/0.6 -1/1.5 -1/3 -1/5 -1/9 -1/15 -1/24	
Overpressure limit	130 % F.S., short time.	
Pressure type	Gauge, vacuum and compound	
Process connection	1/8" 1/4" BSP / NPT (M)	1/4" 3/8" 1/2" BSP / NPT (M), M20x1.5(M)
Connection location	Lower, back	
Material	Pressure connection: Stainless steel 304, 316, 316L Tube: Stainless steel 316, optional 316L Case/bayonet ring: Stainless steel 304, optional 316L Window: Acrylic glass, optional laminated safety glass Dial: Aluminum, black markings on white background Pointer: Plastic, Black   Aluminum, black Movement: Stainless steel 304	
Accuracy	Class 1.6 (1.6% F.S)	Class 1 (1% F.S.)
Permissible	Ambient temperature: -40 ... 60 °C (-40 ... 140 °F) Medium temperature: Max. 200 °C (392 °F) (dry), max. 100 °C (212 °F) (for liquid filled) Storage temperature: -40 ... 65 °C (-40 ... 150 °F) Effect: Max. 0,3 % / 10 K	
Protection according	IP65	
Conformity according to RL 94/9/EC appendix X for mechanical equipment in potential hazardous areas (for 63mm only)	Optional, Marking CE EX II 2 GD c File no. XXXXXXXX at notified body 0044, TUV NORD CERT (only with safety glass)	
Filling liquids	Glycerin, silicone, halocarbon, others on request	
Mounting	Standard stem, optional panel, bracket, surface or others on request	
Weight with liquid filling in kg	0.21	0.75
Accessories, options	Diaphragm seals, valves, dampener, gauge saver, etc	

**General dimensions in mm**

**Lower Connection Direct Mounting**
**Lower Connection Surface Mounting**

**Back Connection Front Panel Mounting**
**Back Connection U-Clamp Mounting**

DIAL SIZE	63	100
ØD1	67.7	108
ØD2	61.5	98.5
ØD4	75	118
ØD5	85	132
ØD6	3.6	6
L	32.5	47.5
L1	37	51
L2	13	16
L3	13	18
L4	-	27
L5	10.8	14.8
L6	78	122
SW	11	17

[C]\* for 63mm only

**Order information**

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering units	Filling/case material	Options
(63) 63 mm	GFS	(S) Socket 316, Tube 316	(L) IP 65	(04) 1/2" NPT (M) <sup>1)</sup>	(L) Lower	-1/ 0	kg/cm <sup>2</sup> (bar)	(=) No filling	(NH) Tagging wired
				(03) 3/8" NPT (M) <sup>1)</sup>	(B) Back	-1/ 0.6		(GV) Silicone	(DA) Dial Marking
(100) 100 mm	GFS	(L) Socket and Tube 316L	(L) IP 65	(02) 1/4" NPT (M)	(C) Center back <sup>2)</sup>	-1/ 1.5	Equivalent ranges in kPa, MPa, psi, bar and others units available	(GR) Glycerin	(CS) Dual Scale
				(01) 1/8" NPT (M) <sup>2)</sup>		-1/ 3		(GX) Halocarbon	(OF) Oil free
				(15) 1/2" BSP(M) <sup>1)</sup>		-1/ 5		(YW) Case material 316L (1.4404)	(SG) Safety glass <sup>2)</sup>
				(14) 3/8" BSP(M) <sup>1)</sup>		-1/ 9			(FX) Front panel
				(13) 1/4" BSP(M)		-1/ 15			(FW) Surface plate
				(12) 1/8" BSP(M) <sup>2)</sup>		-1/ 24			(UF) U-clamp
				(16) M20x1.5(M) <sup>1)</sup>		0/ 1			(ATX) ATEX listed <sup>3)</sup>
						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/ 400							
		0/ 600							
		0/ 1000							
		0/ 1600 <sup>1)</sup>							

1) Not for 63mm 2) For 63 mm only 3) Safety glass(SG) mandatory for Ex-proof and for 63mm only

**How to order**

Size	Type	System material	Execution	Process connection	Connection orientation	Range	Engineering unit	Filling/case material	Option
63	GFS	S	L	02	L	0/16	KG/CM2	=	NH