

GSD Measuring Diaphragm for Pressure Gauge

Feature

- ✓ Bidirectional precision control
- ✓ Excellent elastic consistency
- ✓ Excellent bidirectional linearity
- ✓ High repeatability and stability
- ✓ Stress-controlled heat treatment
- ✓ Standard diameters: 68mm, 75 mm and 130 mm
- ✓ Pressure ranges from 10 mbar to 16 bar

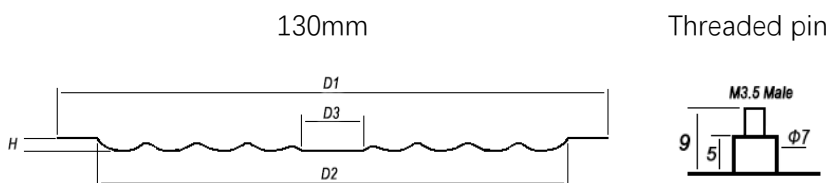


Introduction

The GSD measuring diaphragm is a precision elastic component designed as the core measuring element of mechanical diaphragm pressure gauges. It converts applied pressure into controlled elastic deformation, directly determining the accuracy, linearity, and long-term stability of the instrument.

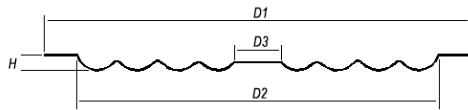
Manufactured with years of expertise in heat treatment and forming processes, the GSD diaphragm exhibits excellent elasticity combined with stable bidirectional linearity and repeatability. Careful control of internal stress and surface flatness ensures consistent performance across the full pressure range.

Dimension (mm)

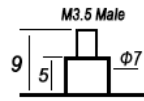


130mm	D1	D2	D3	H	Ripples
10mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	12
16mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	9
25mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	9
40mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	9
60mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	9
100mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	7
160mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	7
250mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	7
400mbar	130-0.3	121+0.8	12.5±0.3	2+0.5	7
*Displacement: 1.35±0.15mm					

75mm

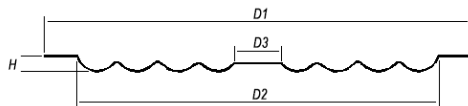


Threaded

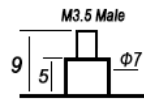


75mm	D1	D2	D3	H	Ripples
100mbar	75-0.3	63-0.5	15±0.3	2+0.5	5
160mbar	75-0.3	63-0.5	15±0.3	2+0.5	5
250mbar	75-0.3	63-0.5	15±0.3	2+0.5	5
400mbar	75-0.3	63-0.5	15±0.3	2+0.5	5
600mbar	75-0.3	63-0.5	15±0.3	2+0.5	4
1bar	75-0.3	63-0.5	15±0.3	2+0.5	4
1.6bar	75-0.3	63-0.5	15±0.3	2+0.5	4
2.5bar	75-0.3	63-0.5	15±0.3	2+0.5	4
4bar	75-0.3	63-0.5	16±0.3	2.5+0.5	3
6bar	75-0.3	63-0.5	16±0.3	2.5+0.5	3
10bar	75-0.3	63-0.5	16±0.3	2.5+0.5	3
16bar	75-0.3	63-0.5	16±0.3	2.5+0.5	3
* Displacement: 1.4±0.2mm					

68mm



Threaded



68mm	D1	D2	D3	H	Ripples
100mbar	68-0.3	63-0.5	15±0.3	2+0.5	5
160mbar	68-0.3	63-0.5	15±0.3	2+0.5	5
250mbar	68-0.3	63-0.5	15±0.3	2+0.5	5
400mbar	68-0.3	63-0.5	15±0.3	2+0.5	5
600mbar	68-0.3	63-0.5	15±0.3	2+0.5	4
1bar	68-0.3	63-0.5	15±0.3	2+0.5	4
1.6bar	68-0.3	63-0.5	15±0.3	2+0.5	4
2.5bar	68-0.3	63-0.5	15±0.3	2+0.5	4
4bar	68-0.3	63-0.5	16±0.3	2.5+0.5	3
6bar	68-0.3	63-0.5	16±0.3	2.5+0.5	3
10bar	68-0.3	63-0.5	16±0.3	2.5+0.5	3
16bar	68-0.3	63-0.5	16±0.3	2.5+0.5	3
* Displacement: 1.4±0.2mm					

Order Guide

GSD	Spring Diaphragm for Pressure Gauge				
	Code1	Diameter			
	068	68mm			
	075	75mm			
	130	130mm			
		Code2	Pressure range		
		010	10 mbar	130mm, 316L	
		016	16 mbar	130mm, 316L	
		025	25 mbar	130mm, 316L	
		040	40 mbar	130mm, 316L	
		060	60 mbar	130mm, 316L	
		100	100 mbar	130mm, 316L	68mm, 75mm, 316Ti
		160	160 mbar	130mm, 316L	68mm, 75mm, 316Ti
		250	250 mbar	130mm, 316L	68mm, 75mm, 316Ti
		400	400 mbar	130mm, 316L	68mm, 75mm, 316Ti
		600	600 mbar		68mm, 75mm, 316Ti
		1.0K	1 bar		68mm, 75mm, 316Ti
		1.6K	1.6 bar		68mm, 75mm, 316Ti
		2.5K	2.5 bar		68mm, 75mm, 316Ti
		4.0K	4 bar		68mm, 75mm, Inconel 718
		6.0K	6 bar		68mm, 75mm, Inconel 718
		10K	10 bar		68mm, 75mm, Inconel 718
		16K	16 bar		68mm, 75mm, Inconel 718
			Code3	Material	Valid Diameter
			Sl	316L	130mm
			Ti	316Ti	68mm, 75mm (≤ 2.5 bar)
			In	Inconel 718	68mm, 75mm (4 bar, 6 bar)
			MnPT	65Mn+PTFE	75mm
				Code4	Central Shape
				F	Flat without threaded pin
				P	Threaded pin
GSD	130	100	Ti	F	

Complete Sample: *GSD-130-100-Ti-F*