

# Metal Diaphragms

## PRODUCT DESCRIPTION

The metal diaphragm is a circular, thin-film elastic element that deforms elastically when subjected to axial load or pressure. The metal diaphragm is usually made of high-quality metal materials such as stainless steel, Inconel, titanium, and tantalum. These materials have excellent mechanical properties, corrosion resistance, and durability and are particularly suitable for use in harsh environments.



Metal diaphragms come in three main shapes: corrugated, dome, and flat. The corrugated diaphragm is the most widely used because it has a large deformation capacity and a linear characteristic curve. **We mainly produce and sell corrugated metal diaphragms, which can be provided in a variety of sizes and materials.**

## KEY FEATURES

- Isolate and seal
- Pressure transfer and measurement
- Resistant to extreme conditions
- Machinery protection

## MATERIALS

- ✓ Stainless steel 316L
- ✓ Hastelloy C276
- ✓ Inconel 625
- ✓ Monel 400
- ✓ Titanium
- ✓ Tantalum
- ✓ Nickel

## APPLICATIONS

- Semiconductors
- Medical equipment
- Industrial machinery
- Consumer electronics
- Food processing & pharmaceuticals

## Diaphragms for Sensors



### APPLICATIONS

- Pressure sensor (flat diaphragm pressure sensor, diffused silicon pressure sensor)
- Pressure transmitter (small pressure transmitter)

OD (φ)	Thickness (mm)
10	0.02 / 0.03 / 0.05
12	0.02 / 0.025 / 0.03 / 0.05
12.2	0.02 / 0.025 / 0.03 / 0.05
12.4	0.02 / 0.025 / 0.03 / 0.05
13.8	0.02 / 0.03 / 0.05
14.5	0.02 / 0.025 / 0.03 / 0.05
15	0.02 / 0.025 / 0.03 / 0.05
18	0.02 / 0.025 / 0.03 / 0.05
18.4	0.02 / 0.025 / 0.03 / 0.05
18.5	0.02 / 0.025 / 0.03 / 0.05
18.8	0.02 / 0.025 / 0.03 / 0.05
20	0.025 / 0.03

Other diameters and thicknesses on request.

## Diaphragms for Pressure Gauges

### APPLICATION:

Metal diaphragms are used in various diaphragm pressure gauges, pressure switches, pressure sensors, and transmitters.

### SPECIFICATIONS:



D	d	Thickness (mm)
24	18 / 20	0.05 / 0.08
26	22	0.05 / 0.08
30	24 / 26	0.03 / 0.05 / 0.08
32	25	0.05 / 0.08
35	29	0.05 / 0.08
36	30	0.02 / 0.03 / 0.05
38	30 / 32	0.03 / 0.05 / 0.08
40	30 / 32	0.05 / 0.08 / 0.1
42	35	0.05 / 0.08
45	35	0.05 / 0.08 / 0.1
50	30 / 35 / 38 / 40 / 45	0.05 / 0.08 / 0.1
55	45	0.05 / 0.08
60	45 / 50	0.05 / 0.08 / 0.1
65	38 / 40 / 45 / 50	0.05 / 0.08 / 0.1
69	59	0.08 / 0.1
75	40 / 50 / 55 / 60 / 65	0.08 / 0.1
82	72	0.08 / 0.1
84	50 / 60	0.08 / 0.1
89	50 / 79	0.08 / 0.1
92	50	0.08 / 0.1
95	50	0.08 / 0.1
98	50 / 88	0.08 / 0.1
100	60 / 90	0.08 / 0.1
Other diameters and thicknesses on request.		