

Pressure Gauge with Sanitary Diaphragm series MSA

Food & Beverage industry
Pharmaceutical & Bio-technology
Glycerine / Silicon free liquid filled
St. steel case & diaphragm seals

General features

- Clamp on type chemical seal pressure gauge
- German movement and sensing element
- Pressure ranges from 0...2.5 bar to 0...40 bar
- Accuracy class 1.0 for 100mm and 1.6 for 63mm & 80mm
- Degree of Protection IP65
- Hygienic design with advanced surface quality

Application area

- series MSA is designed to meet the requirements of the food, beverage, pharmaceutical and biotechnology industries.

General specification

Size

63mm, 80mm, 100mm in all stainless steel pressure gauge

Pressure range

0...2.5 to 0...40 bar

Accuracy class

Class 1.6 for 63mm and 80mm

Class 1.0 for 100mm

Temperature

operating / ambient temperature ranges

-20...+60 °C

storage temperature

-20...+60 °C

Type of mounting

Bottom connection

Case and bezel ring

Material: Stainless steel

Bayonet ring

with blow-out disc at the top of the case

Bourdon tube

st. steel

Movement

st. steel

Dial

Aluminum

Pointer

aluminum, black

Window

Instrument glass



Sanitary diaphragm seal pressure gauge, series MSA

Sanitary diaphragm

ASME BPE and ISO 1127

Tri-clamp for tube according to BS 4825

Material body: stainless steel 1.4435 / 316L

Material diaphragm: stainless steel 1.4435 / 316L

Nominal pressure PN 16 / 40

Sensing media: Glycerine

Diaphragm Housing

Stainless steel 316L flush welded with chemical seal

Helium leak detection up to 10^{-9} mbar l/s.

The reference temperature is +20 °C.

Please specify if an operating temperature (tA) deviating from +20 °C is required or the cleaning temperature (tR) is higher than +150 °C

Surface Roughness of the Wetted Parts

Ra < 0.8 µm

Process Connection - Stainless steel 1.4435 /316L

Clamp connection - 1" / DN 25, PN 16/40

Clamp connection - 1.5" / DN 38, PN 16/40

Clamp connection - 2" / DN 51, PN 16/40

Others on request

Degree of protection / IP 65

Option

Liquid filling in pressure gauge

- Glycerin
- Silicone oil

System filling after suction for calibration

- Glycerin
- Silicone oil
- Vegetable oil
- High temperature oil

Ordering information

Model code

MSA

Process connection

S10 : sanitary clamp 1S
S15 : sanitary clamp 1.5S
S20 : sanitary clamp 2S
XX : others on request

System filling

Gly : Glycerin
Sil. : Silicon oil
Veg : Vegetable oil
HT : High temperature oil

Dial size

MAXK.31x [63mm]
MAXK.41x [80 mm]
MAXK.51x [100 mm]

Liquid filling

0 : Dry
1 : Glycerin
2 : Silicon

Option

Refer to option table

Pressure range code, unit "bar"

Code	Range
R28	0...2.5 bar
R30	0...4 bar
R32	0...6 bar
R33	0...10 bar
R35	0...16 bar
R37	0...25 bar
R39	0...40 bar
YY	Others

Unit of measurement

B : bar
M : MPa
P : psi
D : dual scale
X : others

Option code

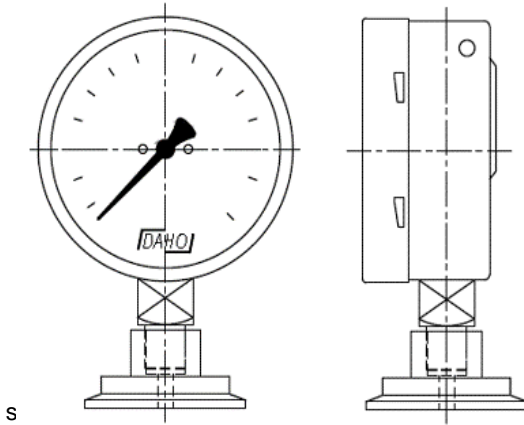
Code	Description	Code	Description
ND	New dial design	TP	St. stell tag plate, 60 x 20 x 0.5t
NF	New dial face printing cost per pcs	MC	Manufacture calibration certificate
GM	Green marking per pcs	KC	KOLAS Ilac-MRA calibration certificate
CD	New dial face design with company logo	R	Reed switch
RS	Restrictor screw in socket hole for high pulsation	SN	Snubber
UC	U-calmp for back connection, steel	AD	Adaptor
NO	"USE No OIL" per pcs, at least ≥ 10 pcs	CC	Certificate of conformance / orign
OF	Oval 3-hole front flange	PM	2" Pipe mounting bracket
MP	Maximum pointer	NC	Ni-Cr Plate
BB	Bayonet bezel ring for MBX5	AL	Aluminium pointer for MBX3

How to Order

MSA.S15.HT. MAXK.511.BR39.GM

MSA.Sanitary clamp 1.5S, High Temperature oil, MAXK.511, 100mm, Glycerin, 0...40 bar, Green marking 20-25 bar

Outline drawing

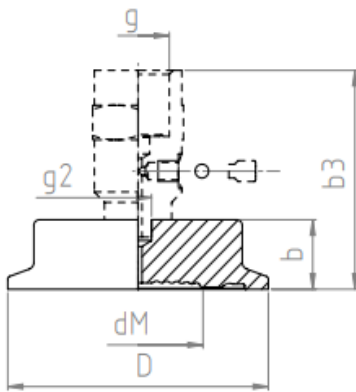


(Unit : mm)

Clamp O.D	1"	1.5"	2"
MSA	50.5	50.5	64

Sanitary diaphragm

Sanitary diaphragm seal pressure gauge, series MSA



NPS	PN	for outer tube Ø x wall thickness	inner tube Ø	b	b3	D	dM	d ¹⁾	g	g2	m	minimum span	t _k -value	approx. weight	
														vd8	vG½
1 ^{"2)}	40	25.4 x 1.65	22.1	20	63	63	19	21	G½	Ø 8	21	0 - 2.5 ⁵⁾	6.50	0.33	0.46
1½ ^{"2)}		38.1 x 1.65	34.8			78	32	34				0 - 1 ⁴⁾	1.40	0.55	0.68
2 ^{"2)}		50.8 x 1.65	47.5			92	38	40				0 - 1 ⁴⁾	0.80	0.91	1.04

DAHO

Daho Tronic Ltd.
 STX W-Tower 209
 Gyeongin-ro 53Gil 90 Guro-gu
 Seoul 08215 Korea
 Tel: +82 2 865-7001 Fax: +82 2 865-7109
 info@daho.co.kr
 www.daho.co.kr