

# DIAPHRAGM SEALS

BULLETIN 99-EW KEY #U999017

# M&G Type EW Compact Diaphragm Seal

## **FFATURES**

- All welded construction, no bolt, gasketless design meets EPA 1990 Clean Air Act standards
- All 316 Stainless Steel construction standard
- Excellent low pressure response with 0.002 thick diaphragm. Ideal for vacuum and other selected low pressure applications
- Standard seal rated to 2500 psig at 100° F (38° C) and optional 5000 psig at 100° F (38° C)
- Compact size allows installation in tight areas
- Can be used with most 4-1/2 inch and smaller process gauges
- Minimum volumetric displacement for applications where process temperatures exceed 250° F (121° C)



## EW SERIES MINIATURE DIAPHRAGM SEAL

## DESCRIPTION

AMETEK Mansfield & Green has developed the miniature EW series all-welded diaphragm seal to be an economical alternative to custom and specialty seals. EW seals were designed for new construction and MRO applications in the Process Industries.

Applications for the EW seals include spray paint equipment, agricultural application equipment, water and wastewater and chlorine treatment equipment, and any other application where process media and pressure pulsation may adversely affect the life of gauge components. The unique design features a body that is free of bolts or gaskets to protect against leakage and fugitive emissions as defined by the EPA Clean Air Act of 1990. The compact sizing of the seal allows installation in areas of limited spacing, and it will operate with most

4-1/2 inch and smaller pressure gauges. The EW Series seals are available in several different configurations.

All EW Series seals are of stainless steel construction with the diaphragm welded directly to the housing. The seals are available with 1/4 inch and 1/2 inch NPT pipe thread connections on the instrument and process sides. Wrench flats are provided for easy installation.

EFFECTIVE: 12/99 SUPERSEDES: 7/98

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## **SPECIFICATIONS**

### FUNCTIONAL

PRESSURE RANGE

**Standard**: 0 to 2500 psig at 100° F **Optional**: 0 to 5000 psig at 100° F

#### **VACUUM RANGE**

0 to 20 inches Hg for vacuum indication only

#### **DISPLACEMENT CAPACITY**

0.011 cubic inches stainless steel and Tantalum

#### PHYSICAL

#### MATERIALS OF CONSTRUCTION

**Diaphragm and Housings:** Standard 316L stainless steel

Options:

Bottom Housing: <u>Hastelloy</u> C-276

Diaphragm: Tantalum

#### **INSTRUMENT CONNECTION**

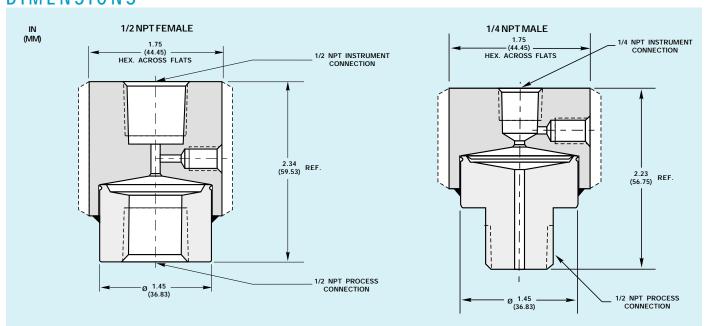
0.25 inch NPT (6.35 mm) male and female 0.50 inch NPT (12.70 mm) male and female

#### PROCESS CONNECTION

0.25 inch NPT (6.35 mm) male and female 0.50 inch NPT (12.70 mm) male and female

## SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

## DIMENSIONS



MODEL #	DESCRIPTION	DIMENSIONS
EWX44N6LN	EW 1/4 NPTF X 1/4 NPTF (6.35 X 6.35 mm)	1-19/32 H X 1-3/4 HEX
EWX42N6LN	EW 1/4 NPTF X 1/2 NPTF (6.35 X 12.70 mm)	1-27/32 H X 1-3/4 HEX
EWX24N6LN	EW 1/2 NPTF X 1/4 NPTF (12.70 X 6.35 mm)	2-1/32 H X 1-3/4 HEX
EWX22N6LN	EW 1/2 NPTF X 1/2 NPTF (12.70 X 12.70 mm)	2-11/32 H X 1-3/4 HEX
EWX4476LN	EW 1/4 NPTF X 1/4 NPTM (6.35 X 6.35 mm)	2-1/32 H X 1-3/4 HEX
EWX4276LN	EW 1/4 NPTF X 1/2 NPTM (6.35 X 12.70 mm)	2-15/64 H X 1-3/4 HEX
EWX2476LN	EW 1/2 NPTF X 1/4 NPTM (12.70 X 6.35 mm)	2-17/32 H X 1-3/4 HEX
EWX2276LN	EW 1/2 NPTF X 1/2 NPTM (12.70 X 12.70 mm)	2-23/32 H X 1-3/4 HEX

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TEST AND CALIBRATION INSTRUMENTS

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