



# Model IFOA

- 1/2, 1 and 1-1/2" NPT sizes
- ±0.5% accuracy
- Flanged construction



# Integral Orifice Flow Element 1/2, 1 ,1-1/2" Pipe sizes

The integral orifice is a flow element capable of being close coupled with differential pressure transmitters to make a complete flow meter. It provides easy-to-install, low-cost measurement of the small flows found frequently in plant metering operations and research projects. It can be ordered with internal NPT threads or flanged pipe runs, welded both upstream and downstream of the flow restriction. The orifice assembly may be directly mounted to the transmitter or remote using optional adapter kit 155S711.

#### PERFORMANCE SPECIFICATIONS

#### Accuracy

#### Calibrated

±0.5% of actual flow when operated within the calibrated rangeusing the average value of K

# Uncalibrated Orifice Bores

0.020-0.065 ±5% of rate 0.113-0.500 ±2% of rate 0.612-1.127 ±1.5% of rate

## Pressure Rating

#### Threaded

1/2 in. and 1 in. NPT: 3000 psig (21 000 kPa) at 300°F (150°C) 1-1/2 NPT: 1500 psig (10 500 kPa) at 300°F (150°C)

#### Flanged

Class 150 ANSI: 275 psig (1900 kPa) MWP at 100°F (38°C) Class 300 ANSI: 720 psig (5000 kPa) MWP at 100°F (38°C)

#### PHYSICAL SPECIFICATIONS

#### Materials of Construction

Threaded type body 316 SST,

Orifice plate 316 SST, Hastelloy-C1 Flanged type element All 316 SST only

Sealing gasket Silicate ceramic filled TFE

#### Pipe Size

1/2, 1 and 1-1/2 in.

# Pipe Schedule

Schedule 40, 80<sup>(2)</sup>

#### Connection to Transmitter

Flat gasketed surfaces bolted to transmitter or 3-valve manifold.

#### Face to Face Dimensions

Threaded type 1/2 and 1 in.: 3-11/16 in.

(93.7 mm)

1-1/2 in.: 4-1/16 in. (103.2 mm)

Flanged type 1/2 & 1 in.: 24 in. (609.6 mm) length

1-1/2 in.: 38 in. (965.2 mm) length

#### NACE Standard

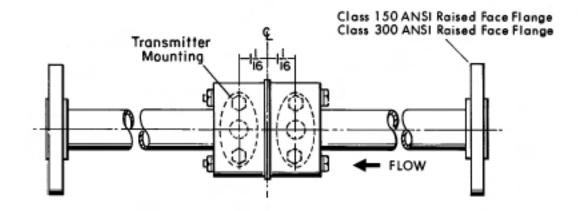
Construction materials 316 SST with 316 SST orifice plate and 316 SST and Hastelloy C orifice plate conform to NACE Standard MR-0175-88. Conformance is on process wetted materials only and does not include bolting.

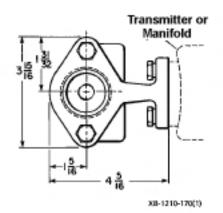
#### Temperature Rating

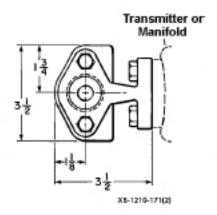
300°F (148.9°C) max.

# Weights

Class 150 ANSI Flange	
(1/2 in. and 1 in.)	11.6 lb (5.3 kg)
Class 300 ANSI Flange	
(1/2 in. and 1 in.)	17.6 lb (8 kg)
Class 150 ANSI Flange	
(1-1/2 in.)	18.8 lb (8.5 kg)
Class 300 ANSI Flange	
(1-1/2 in.)	24.8 lb (11 kg)







# **Model Number Designation**

## **Optional Extras:**

Orifice bore Calculation (Applies to Special Bore Only)

Replacement Orifice Plate Kits

Consist of standard bore orifice plate and two silicone-ceramic filled TFE gaskets.

Refer to Parts & Supplies Price Book.

Adapter Kit 155S711 for remote mounting of transmitter. Refer to Parts & Supplies Price Book.

Oxygen Service Cleaning - per CGA-G4.