Emco Controls

CONSTRUCTION AND DESIGN OF INSTRUMENTS FOR FLOW, LEVEL AND TEMPERATURE

EMCO Meter Run with Carrier Rings and Corner Pressure Tappings Series MSRF

Principle

EMCO Meter Run with an orifice plate is used as primary element in flow measurement of liquid, gas and steam according to the differential pressure principle.

Construction

Design and calcu-

lation standards : ISO 5167, ISO/TR 15377, BS 1042, ASME Fluid Meters,

DIN 19205Shell Flow Meter Engineering Handbook,

Sizes : DN 10 – DN 50, 3/8" - 2".

Pressure rating : PN 10 - 400, 150 - 2500 lbs

Plate thickness : 3 mm.

Vent or drain hole : On request.

Plate material : AISI 316, other on request.

Carrier ring and

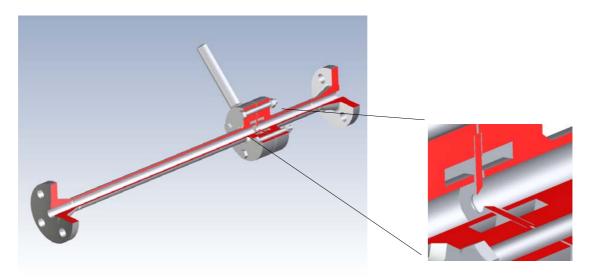
pipe material : Carbon steel, AISI 316, other materials on request.

Pipe run : Can be honed for increased accuracy.

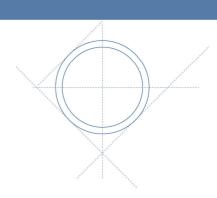
Flange standards : DIN, AISI B 16.5.

Connection : Flanges with flat or raised face or groove according

to DIN 2526, 2513 or 2512, or RF and RTJ according to ANSI B 16.5

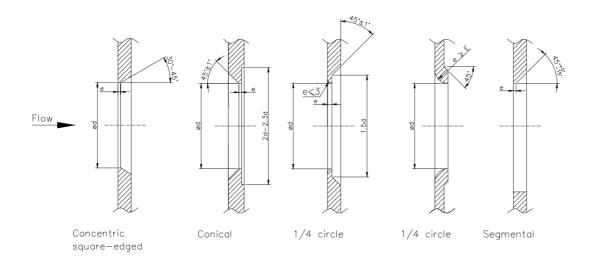


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Orifice plate shape : Square edge concentric, other shapes on request.

Orifice plates are bevelled on the downstream side.



Pressure : 3/8", 1/2" BSP, Ø 12 mm, 1/2" NPT.int.

Male tappings : on request.

Tap location : Normally same side of carrier rings, otherwise to be stated with order.

Marking : The carrier rings are marked with "+" and "-" and flow direction.

Technical Data

Accuracy : +/- 0,8 - 1 %

Pressure loss : Depending on β , for β equal to 0,6 : ca. 60 %

of the differential pressure measured

Limits for Reynolds No.: Re > 1260 x β^2 D according to ISO 5167

 $2000 < Re < 10^8$ according to ASME MFC-3M

Sizes : DN Inch Total length

אט	inch	Total length
10	3/8"	400
15	1/2"	550
20	3/4"	700
25	1"	900
32	1 1/4"	1100
40	1 ½"	1300
50	2"	1500
All dimensions in mm.		

