Integral Flow Orifice Assembly is used when differential pressure transmitter has to be directly mounted on the orifice assembly. This eliminates cost of installation of differential pressure transmitter with impulse piping up to the orifice assembly. The assembly consists of an orifice plate between two integral blocks having corner taps. Generally, meter run pipe is recommended with upstream length of 750mm and downstream length of 250mm. The pipes are welded to the blocks with end flanges.

Advantages
- Improves accuracy and repeatability in 1/2", 1" and 1 1/2" line sizes
- Improves reliability and maintenance costs
- Multivariable measurement for gas and steam

Standard features

Measuring fluid
Liquid, Gas, Steam

Material
Orifice plate - 316L, Hastelloy C 276, Monel 400
Body - A351 CF8M, A494 CW12MW
Pipe - A312 316/316L, Hastelloy C 276
Flange - A182 F316/316L, Hastelloy C 276

Line sizes
- 1/2" (15 mm)
- 1" (25 mm)
- 1+1/2" (40 mm)

Process connection
- Flanged
- NPT

Process temperature limits
-40° to 230°C
for direct/remote mount
**Ordering information**

**F510: Integral orifice assembly**

**Body material**
- S : 316(A351 CF8M)
- T : 304(A351 CF8)
- H : Hastelloy C 276(A494 CW12MW)
- O : Others

**Line size**
1 : 1/2"(15mm)
2 : 1"(25mm)
3 : 1 1/2"(40mm)

**Pipe ends**
- 1 : JIS 10K SORF
- 2 : JIS 20K SORF
- 3 : JIS 30K SORF
- 4 : JIS 10K WNRF
- 5 : JIS 20K WNRF
- 6 : JIS 30K WNRF
- 7 : JIS 10K RTJ
- 8 : JIS 20K RTJ
- 9 : JIS 30K RTJ
- 10 : ANSI 150# SORF
- 11 : ANSI 300# SORF
- 12 : ANSI 600# SORF
- 13 : ANSI 150# WNRF
- 14 : ANSI 300# WNRF
- 15 : ANSI 600# WNRF
- 16 : ANSI 150# RTJ
- 17 : ANSI 300# RTJ
- 18 : ANSI 600# RTJ
- 20 : NPT Threaded
- 21 : Beveled
- 22 : Others

**Orifice plate material**
- S : 316L
- H : Hastelloy C 276
- M : Monel

**Mounting**
- D : Direct
- R : Remote

**Option**
- D : DP Transmitter
- F : Flow Calibration
- M : 3 or 5 way Manifold Valve
- N : None

Sample model number:

F510  S  3  10  S  D  N