

# Restriction Orifice Multi Plate Spools



Precisionflow

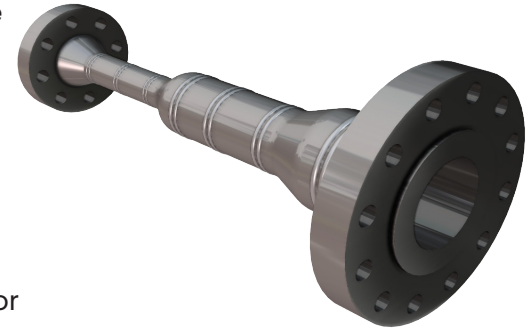
## Description

Restriction Orifice Multi Plate Spools are used as a means of controlling line pressure in systems using pressure critical componentry when a single Restriction plate is not adequate. The design is based on a series of Restriction Orifice Plates welded into a custom made pipe spool which creates an overall pressure drop and in turn provides the required downstream pressure.

Each restriction orifice is calculated and designed taking into account the medium characteristics, the pressure loss and the process data.

The use of multi-holed plates is often used if the noise at each plate is above the industry accepted 85 dB.

For liquid restriction applications the spool is normally the same line size. For gas restriction applications the multi plate spool is sometimes required to expand across pressure drop stages due to the expansion of the gas under the reduced pressures.



## Features

1. SPOOL FACING: Raised Face 'RF', Ring Type Joint 'RTJ' or BX ring (API 6A) – serrated machined face to ASME B16.5
2. SPOOL CONNECTIONS: Raised Face 'RF', Ring Type Joint 'RTJ', BX ring (API 6A) or Hubs – (RF flanges serrated machined face to ASME B16.5)
3. A data plate is affixed to the spool containing TAG, ANSI Class, Size (in DN), Material and Part Number
4. Plate bores are advised during the engineering phase
5. MATERIALS: Carbon Steel, Stainless Steel 304 & 316, Duplex, Super Duplex, Monel, Inconel
6. SIZES: 0.5" to 24" (15DN to 600DN) – other sizes available upon request
7. ANSI CLASS: 150-2500 ANSI & 4,000 to 10,000 PSI

## Ordering Information

Part number format for ordering is as follows; FACING-INLET-OULET-ANSI-SPOOL  
MTL-PLATE NO.-PLATE MTL

Inlet Size	0.5" - 24" (other sizes available upon request)		
Outlet	0.5" - 24" (other sizes available upon request)		
ANSI	150, 300, 600, 900, 1500, 2500, 10000 PSI		
Spool MTL	CS = Carbon Steel D = Duplex	304 = 304 St. Steel SD = Super Duplex	316 = 316 St. Steel M = Monel I = Inconel
Plate NO.	Number of plates in spool		
Plate MTL	304 = 304 St. Steel SD = Super Duplex	316 = 316 St. Steel M = Monel	D = Duplex I = Inconel

## Worked Examples

PFFROMPS-4-4-900-5-316

RF Restriction Orifice Multi Plate spool 4" inlet x 4" outlet  
900# with Carbon Steel spool and 5 x 316 SS plates

PFRTJROMPS-4-10-1500-5-CS-316

ORTJ Restriction Orifice Multi Plate Spool 4" inlet x 10" outlet  
1500# with Carbon Steel spool and 5 x 316 SS plates