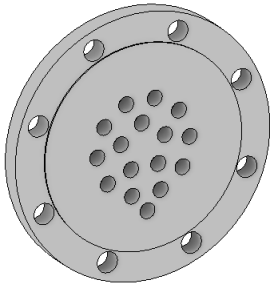


Noise Reduction

Noise Attenuation Equipment is used to reduce unwanted or excessive noise that commonly occurs in pressure reducing stations.

Noise Reduction Capability: 5-10+ dBA



**Series-OP
Orifice Plate**

Description

Selection: Series OP orifice plates are custom engineered to maximize noise attenuation and reduce dbA to the lowest achievable value. The number and diameter of holes will be determined based on application conditions, and the plate diameter will typically be equal to the recommended downstream pipe size. Therefore, the following information is required for selection:

- Inlet (Supply) Pressure to the HD/HSP Regulator*
- Outlet (Downstream) Pressure of the HD/HSP Regulator*
- Steam Flow Rate (lb/hr)

How it Works

The **Series-OP** Orifice Plate with its drilled orifice pattern is installed after the pressure regulating valve to smooth out turbulence caused by the pressure drop across the regulator. Noise reduction levels of **5-10+ dBA** can typically be achieved; higher possible.

Installation

The Series-OP Orifice Plate is installed between ANSI flanges immediately after the regulator.

Series-OP Typical Hook-up

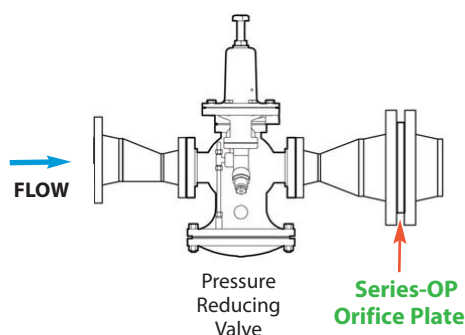


Plate Diameter	Connection	Full Model Code
1"	150# FLG	OPX-14-150-##-0.000
	300# FLG	OPX-14-300-##-0.000
1 1/2"	150# FLG	OPX-16-150-##-0.000
	300# FLG	OPX-16-300-##-0.000
2"	150# FLG	OPX-17-150-##-0.000
	300# FLG	OPX-17-300-##-0.000
2 1/2"	150# FLG	OPX-18-150-##-0.000
	300# FLG	OPX-18-300-##-0.000
3"	150# FLG	OPX-19-150-##-0.000
	300# FLG	OPX-19-300-##-0.000
4"	150# FLG	OPX-20-150-##-0.000
	300# FLG	OPX-20-300-##-0.000
5"	150# FLG	OPX-21-150-##-0.000
	150# FLG	OPX-21-300-##-0.000
6"	150# FLG	OPX-22-150-##-0.000
	300# FLG	OPX-22-300-##-0.000
8"	150# FLG	OPX-23-150-##-0.000
	300# FLG	OPX-23-300-##-0.000
10"	150# FLG	OPX-24-150-##-0.000
	300# FLG	OPX-24-300-##-0.000
12"	150# FLG	OPX-25-150-##-0.000
	300# FLG	OPX-25-300-##-0.000
14"	150# FLG	OPX-26-150-##-0.000
	300# FLG	OPX-26-300-##-0.000

X = Material
1 = A105 CS
2 = 304 SST
3 = 316 SST

**## = Number
of Holes**
 Factory Determined

**0.000 = Diameter
of Holes**
 Factory Determined

Notes: 1) Other sizes and flange connections available; Consult Factory.
 *2) Orifice Plates may be available for other valves; Consult Factory.

Series-OP OUTSIDE DIAMETER – inches		
Pipe Size	150# Flange	300# Flange
1"	4 1/4	4 7/8
1 1/2"	5	6 1/8
2"	6	6 1/2
2 1/2"	7	7 1/2
3"	7 1/2	8 1/4
4"	9	10
5"	10	11
6"	11	12 1/2
8"	13 1/2	15
10"	16	17 1/2
12"	19	20 1/2
14"	21	23

Notes: 1) All dimensions follow ASME/ANSI B16.5 flange standard, including thickness, bolt circle, bolt hole diameter, etc.

2) Unless otherwise specified, all OP Series Orifice Plates supplied as raised face.