

LGXL RESTRICTION ORIFICE PLATE

Summary

LGXL restriction orifice plate is suitable for occasions such as automatic control and piping in engineering design. The following are several commonly used occasions:

a. Where the fluid is required to pass continuously at a small flow rate, such as the analysis sampling pipeline, the flushing pipeline of the pump, the bypass pipeline of the hot standby pump, etc., LGXL restriction orifice plate can be installed to achieve.



b. Where fluid pressure reduction is required, such as: installing a restriction orifice behind the control valve to reduce the pressure drop on the valve, reduce valve noise, reduce the wear of the valve seat and valve core, and avoid liquid flash behind the valve evaporation and cavitation phenomena extend the service life of the control valve; when the fluid needs to be depressurized, and where the accuracy of the depressurization is not high, the LGXL restriction orifice plate can be used to depressurize.

c. Where fluid pressure reduction and flow restriction are required, such as: LGXL restriction orifice plate is installed on the bypass of the control valve to prevent the pressure relief from being too fast or the risk of liquid evacuation when the bypass is operated, and the piping is vented when the system produces a lot of noise due to large pressure drop, LGXL restriction orifice plate can be used to reduce the noise and improve the production environment.

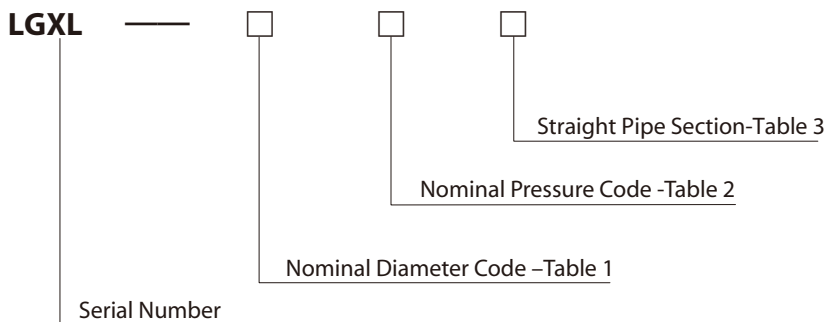


Table 1-Nominal Diameter Code and Meaning

Code		01	016	02	026	03	04	05	06	08	10
DN	mm	10	15	20	25	32	40	50	65	80	100
	in		1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4

Code		12	15	20	25	30	35	40	45	50	60
DN	mm	125	150	200	250	300	350	400	450	500	600
	in	5	6	8	10	12	14	16	18	20	24

Code		70	80	90	100	105	110	115	120	125	130
DN	mm	700	800	900	1000	1050	1100	1150	1200	1250	1300
	in	28	32	36	40	42	44	46	48	50	52

Table 2-Nominal Pressure Code and Meaning

Code		01	02	03	04	05	06	10	11	15	16
PN	MPa	1.6	2.0	2.5	4.0	5.0	6.3	10.0	11.0	15.0	16.0
	Class		150			300			600	900	

Code		25	26	42						
PN	MPa	25.0	26.0	42.0						
	Class		1500	2500						

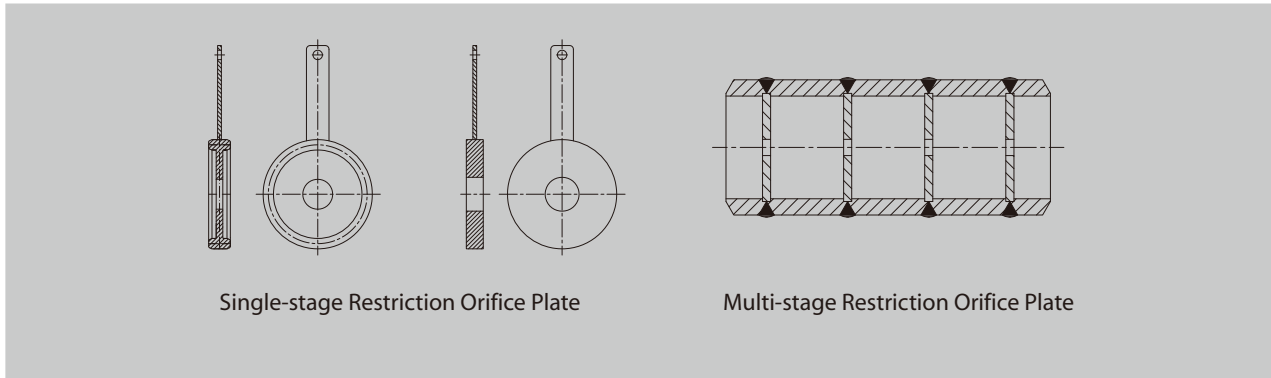
Table 3-Straight Pipe Section Code and Meaning

Code		A	B	C	D	E	F
Meaning	Flow Element	Flow Element, Mounting Flange	Flow Element, Mounting Flange, Upstream and downstream straight pipe section	Flow Element, Mounting Flange, Upstream and downstream straight pipe section, Upstream and downstream connection flange	Flow Element, Mounting Flange, Upstream and downstream straight pipe section, Upstream connection flange	Flow Element, Mounting Flange, Upstream and downstream straight pipe section, Downstream connection flange	Welding Structure

For example, DN50 CL300 restriction orifice plate with flange LGXL-0505A

Outline Drawing and Installation

1. Structure Type



Single-stage Restriction Orifice Plate

Multi-stage Restriction Orifice Plate

2. Installation Method

2.1 Flange Installation

- Install LGXL restriction orifice plate firmly between a pair of flanges, and require the restriction orifice plate to be concentric with the pipe and the LGXL restriction orifice plate is perpendicular to the center line of the pipe.

2.2 Embedded in the Pipeline for Welding Installation

- This installation method can be a single-plate LGXL restriction orifice plate, or a multi-plate LGXL restriction orifice plate, but a flange should be installed at an appropriate position in front of the LGXL restriction orifice plate to facilitate maintenance check.

2.3 Butt Welding Installation with Pipeline

- This installation method of LGXL restriction orifice plate directly butt welded with the pipeline is generally not suitable because it is not easy to check and replace.

2.4 When LGXL restriction orifice plate is installed in series with the control valve, attention must be paid to the reasonable pressure drop distribution between the control valve and the LGXL restriction orifice plate to ensure that the control valve operates well in the control system.

2.5 The installation position of LGXL restriction orifice plate is usually after control valve.

Order Requirements

Company Name						Tag No.			Qty	
Data Which User Should Provide						Factory Design Calculation Results				
Measured Fluid Name		Pipe Specification (Inner Diameter)				Working Condition Parameters	Fluid Density (kg/m ³)			
Working Pressure (MPa)		Pipe Material (New)					Fluid Viscosity (MPa.s)			
Working Temperature (°C)		Flow Element Material					Full Scale Flow (kg/h)			
Density (kg/m ³)		Local Atmospheric Pressure (Mpa)					Full Scale Pressure Drop (MPa)			
Flow Kg/h	Max	Physical Parameter Corresponding State (Working Condition)				Design Parameters	Common Flow (kg/h)			
	Normal						Common Pressure Drop (MPa)			
	Min						Pipe Diameter (mm)			
Gas	Component Name						Flange Standard and Specifications			
	Volume Ratio %					Flange Surface Type				
	Pure Component Molecular Weight					Full Scale Pressure Drop (MPa)				
	Pure Component Density					Orifice Plate Qty				
						Adiabatic Index		$\beta (d/D)$		
Relative Humidity		Straight Pipe Section Length				Single Plate Hole Number x Aperture				
Notes										