

LGXL RESTRICTION ORIFICE PLATE

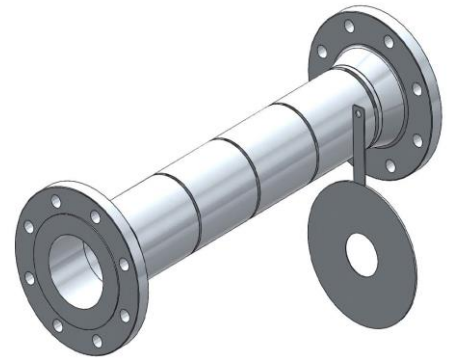
Summary

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.



Model Selection Table

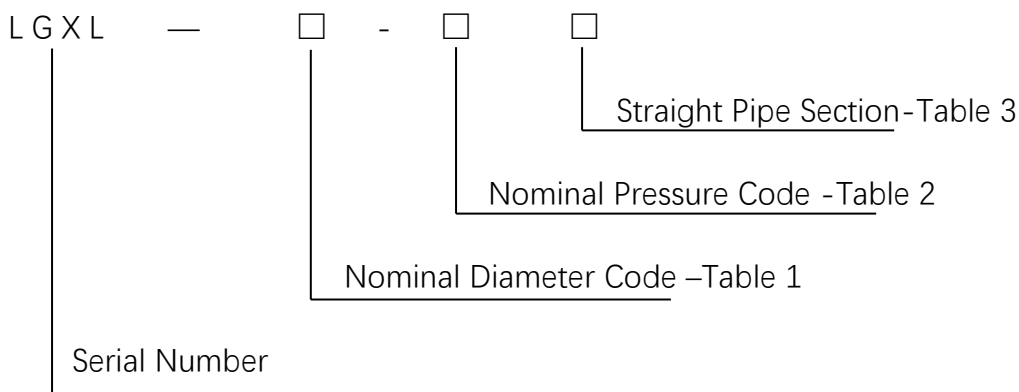


Table 1-Nominal Diameter Code and Meaning

Code		1	2/11	3/12	4/13	5/14	6/15	7/16	8/17	9/18	10/19
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		20/51	21/52	22/53	23/54	24/55	25/56	26/57	27/58	28/59	30/61
DN	mm	125	150	200	250	300	350	400	450	500	600
	in	5	6	8	10	12	14	16	18	20	24
Code		32/63	34/65	36/67	38/69	40/71	42/73				
DN	mm	700	800	900	1000	1100	1200				
	in	28	32	36	40	44	48				

Table 2-Nominal Pressure Code and Meaning

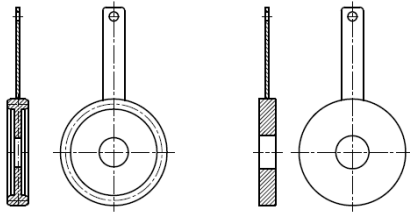
Code		3	4	5	6	7	8	9	10	11	12
PN	MPa	1.6	2.0	2.5	4.0	5.0	6.3	10.0	11.0	15.0	16.0
	Class		150			300			600	900	
Code		13	14	15/16							
PN	MPa	25.0	26.0	42.0							
	Class		1500	2500							

Table 3-Straight Pipe Section Code and Meaning

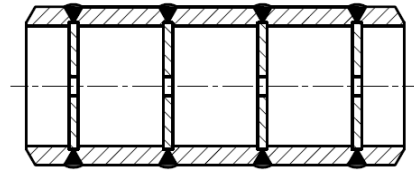
Code		A	B	C	D	E	F
Meaning	Flow Element	Flow Element, Mounting Flange	Flow Element, Mounting Flange, Upstream and downstream straight pipe section	Flow Element, Mounting Flange, Upstream and downstream straight pipe section, Upstream and downstream connection flange	Flow Element, Mounting Flange, Upstream 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-7-7A
 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)		Common Flow (kg/h)
	Normal		Common Pressure Drop (MPa)	
	Min		Pipe Diameter (mm)	

Gas	Component Name				Design Parameters	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		β d / D)	
Relative Humidity		Straight Pipe Section Length			Single Plate Hole Number×Aperture			
Notes								