

## — MODEL — **X43H**

# **H Style Strainer**



The Cla-Val Model X43H H-Style Strainer offers an effective means of removing unwanted solid particles in pipeline flow. These strainers are ideal for preventing fouling, and debris and particle buildup in Cla-Val Automatic Control Valves. The large flow area design, with a flat stainless steel strainer mesh perpendicular to flow, is ideal for low pressure drop applications.

#### Maintenance

The Cla-Val Model X43H is fast and easy to maintain with the compact H-pattern, requiring service without removal from line. Routine maintenance requires only removal of the top cover and removing unwanted solid particles and debris from valve and wire cloth mesh strainer. The strainer may be installed in any position, however, installation with cover up is recommended.

#### INTRODUCTION

When ordering wire cloth, mesh size and wire diameter are critical dimensions.

#### **MESH SIZE**

Mesh size can be indicated by three different terms: Distance Between Wires, Mesh per Inch, and Space Size.

#### THE DISTANCE BETWEEN WIRES

The Distance Between Wires dimension is the distance between adjacent wires, measuring from the center of both wires. The Mesh per Inch dimension is the number of openings within an inch of the wire cloth. This dimension is expressed as two numbers, such as  $3\times 3$ , which means there are three openings horizontally and three openings vertically in one inch.

#### THE SPACE SIZE DIMENSION

The Space Size dimension, also known as clear opening, is the actual open space between adjacent wires. This term is unique to space cloth.

#### **WIRE DIAMETER**

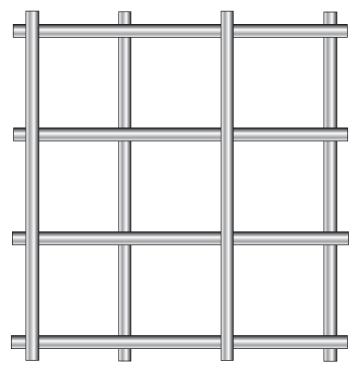
Wire diameter indicates the thickness of the wire. As the wire gets thinner, the opening width and open area dimensions get larger within wire cloth of the same mesh size. For example,  $2 \times 2$  mesh size with 0.120" wire diameter has 57.8% open area, compared to  $2 \times 2$  mesh with thinner 0.047" wire diameter, which has 82.1% open area. Also, as the wire diameter decreases, wire flexibility increases.

#### MESH

Mesh designates the number of openings and fractional parts of an opening, per lineal inch. Mesh is determined by counting the number of openings from the center of any wire to the center of a parallel wire, one inch in distance. When the point one inch distant from the center of a wire falls between wires within an opening, the mesh count is expressed as a fraction.

Note: When ordering parts always refer to the catalog number and stock number on the valve nameplate.

Wire cloth is offered in six different styles to meet the demands of your particular requirements. For more information about each style, please contact a Cla-Val Regional Sales Office.



Strainer Wire Cloth Mesh Information continued on back page

### **WIRE MESH CHART**

X43H Sizes		10 Mesh*			12 Mesh			14 Mesh					
		Screen Opening		Open Area		Screen Opening		Open Area		Screen Opening		Open Area	
Inch	mm	Inch	mm	%	Ratio	Inch	mm	%	Ratio	inch	mm	%	Ratio
1 ½"	40	0.078	2.000	55%	8.2	0.066	1.680	52%	8.0	0.056	1.410	50%	7.8
2"	50	0.078	2.000	55%	5.2	0.066	1.680	52%	5.0	0.056	1.410	50%	4.9
2 ½"	65	0.078	2.000	55%	3.1	0.066	1.680	52%	3.0	0.056	1.410	50%	2.9
3	80	0.078	2.000	55%	3.5	0.066	1.680	52%	3.3	0.056	1.410	50%	3.3
4	100	0.078	2.000	55%	2.2	0.066	1.680	52%	2.0	0.056	1.410	50%	2.0
6	150	0.078	2.000	55%	2.0	0.066	1.680	52%	1.9	0.056	1.410	50%	1.8
8	200	0.078	2.000	55%	1.7	0.066	1.680	52%	1.6	0.056	1.410	50%	1.5
10	250	0.078	2.000	55%	2.8	0.066	1.680	52%	2.7	0.056	1.410	50%	2.6
12"	300	0.078	2.000	55%	1.9	0.066	1.680	52%	1.8	0.056	1.410	50%	1.8
14"	350	0.078	2.000	55%	1.4	0.066	1.680	52%	1.3	0.056	1.410	50%	1.3
16"	400	0.078	2.000	55%	2.0	0.066	1.680	52%	1.9	0.056	1.410	50%	1.8
20"	500	0.078	2.000	55%	2.0	0.066	1.680	52%	1.9	0.056	1.410	50%	1.8
24"	600	0.078	2.000	55%	1.4	0.066	1.680	52%	1.3	0.056	1.410	50%	1.3

<sup>\*</sup>X43H Standard Mesh

### **WIRE MESH CHART**

Screen	Opening	Mesh	Wire D	iameter	Open Area	Product Group	
Inch	mm	IVIESTI	Inch	mm	Open Area	Froduct Group	
0.0132	0.355	58	0.0040	0.102	59.0%	Bolting	
0.0130	0.330	54	0.0055	0.140	49.4%	Bolting	
0.0127	0.330	60	0.0040	0.102	57.8%	Bolting	
0.0127	0.323	58	0.0045	0.114	54.6%	Bolting	
0.0125	0.318	50	0.0075	0.191	39.1%	Mill	
0.0122	0.310	60	0.0045	0.114	53.3%	Bolting	
0.0121	0.307	62	0.0040	0.102	56.5%	Bolting	
0.0113	0.287	70	0.0030	0.076	62.4%	Bolting	
0.0112	0.284	66	0.0040	0.102	54.2%	Bolting	
0.0112	0.284	55	0.0070	0.178	37.9%	Mill	

Screen	Opening	Mesh	Wire D	iameter	Open Area	Product Group	
Inch	mm	IVIESTI	Inch	Inch mm		Product Group	
0.0111	0.281	64	0.0045	0.114	50.7%	Bolting	
0.0110	0.279	50	0.0090	0.229	30.3%	Market	
0.0106	0.269	70	0.0037	0.094	54.9%	Bolting	
0.0106	0.269	66	0.0045	0.114	49.4%	Bolting	
0.0103	0.262	70	0.0040	0.102	51.8%	Bolting	
0.0102	0.259	72	0.0037	0.094	53.8%	Bolting	
0.0102	0.259	60	0.0065	0.165	37.5%	Mill	
0.0099	0.251	72	0.0040	0.102	50.7%	Bolting	
0.0098	0.249	74	0.0037	0.094	57.2%	Bolting	
0.0095	0.241	74	0.0040	0.102	49.6%	Bolting	

Screen	Opening	Maab	Wire D	iameter	On an Area	Product Group
Inch	mm	Mesh	Inch	mm	Open Area	
0.0095	0.241	76	0.0037	0.094	51.7%	Bolting
0.0094	0.239	84	0.0025	0.063	62.4%	
0.0092	0.234	76	0.0040	0.102	48.4%	Bolting
0.0092	0.234	60	0.0075	0.191	30.3%	Market
0.0091	0.231	78	0.0037	0.094	50.6%	Bolting
0.0088	0.224	80	0.0037	0.094	49.6%	Bolting
0.0088	0.224	78	0.0040	0.102	47.3%	Bolting
0.0087	0.220	60	0.0080	0.203	27.0%	Market
0.0085	0.216	80	0.0040	0.102	46.2%	Bolting
0.0084	0.213	84	0.0035	0.089	49.8%	Bolting

For a more detailed IOM Manual go to www.cla-val.com or contact a Cla-Val Regional Sales Office.