



Pilot System Strainers & Restriction Assemblies



X46A Straight



X46B Angle

- X46A/X46B Flow Clean Strainer
- Self Scrubbing Cleaning Action
- Straight Type or Angle Type
- Many Sizes Available

The Cla-Val Model X46 Flow Clean Strainer is composed of a heavy mesh monel inner screen covered with a fine mesh monel outer screen. These two elements are securely soldered to a sturdy brass bar stock housing. The outer screen is a 40 x 40 mesh screen with .008" wire. This strainer is designed to prevent passage of foreign particles larger than .015". It is especially effective against such contaminants as algae, mud, scale, wood pulp, moss, and root fibers. Available in several different sizes as shown. There is a model for every Cla-Val Valve.

The Flow Clean strainer operates on a velocity principle utilizing the circular "air foil" section to make it self cleaning. Impingement of particles is on the "leading edge" only. The low pressure area on the downstream side of the screen prevents foreign particles from clogging the screen. There is also a scouring action, due to eddy currents, which keeps most of the screen area clean.

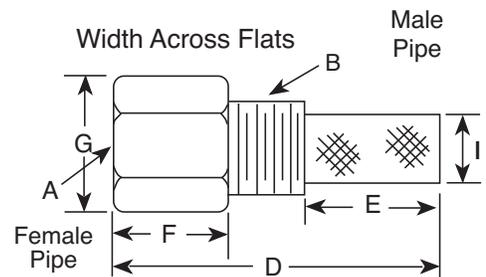
The strainer can be installed in any piping system where there is a moving stream to keep it clean. On Cla-Val Valves the installation is made in the body tapping so the screen is projecting into the flow stream.

Dimensions (In Inches)

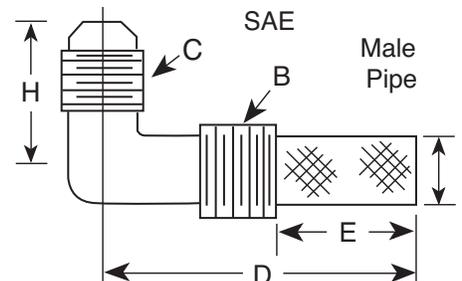
Straight Type A (In Inches)								
A	B	C	D	E	F	G	H	I
1/8	1/8	-	1 1/4	3/4	1/2	1/2	-	1/4
1/4	1/4	-	2 1/4	1	3/4	3/4	-	3/8
3/8	3/8	-	2 1/2	1	7/8	7/8	-	1/2
1/2	1/2	-	2 1/2	1 1/4	1/2	7/8	-	3/4
3/4	3/4	-	3	1 1/4	1	1 1/8	-	3/4
1	1	-	3 3/8	2	1 1/2	1	-	7/8
1 1/4	1 1/4	-	4	2	1	1 1/2	-	7/8
1 1/2	1 1/2	-	4 1/4	2 1/4	1 1/2	1 1/4	-	7/8
1 3/4	1 3/4	-	4 1/2	2 1/2	1 1/4	1 3/4	-	7/8
2	2	-	4 3/4	2 3/4	1 1/2	1 3/4	-	7/8
Angle Type B (In Inches)								
-	1/8	1/4	1 3/8	5/8	-	-	7/8	1/4
-	1/4	1/4	1 1/4	3/4	-	-	1	3/8
-	3/8	1/4	2	7/8	-	-	1	1/2
-	1/2	3/8	1 1/8	7/8	-	-	1	1/2
-	3/4	3/8	2 1/8	1	-	-	1 1/4	5/8

Specifications

Body — Brass (also available in stainless steel on special order)
 Strainer Screen — fabricated from Monel wire.



Straight Type A



Angle Type B

When Ordering, Please Specify:

- Catalog No. X46
- Straight Type or Angle Type



X42N-2

Strainer and Needle Valve Assembly



Size	Body Material.	Screen Material.
3/8"	Standard: Bronze	Monel
3/8"	Option: Bronze	Stainless Steel
3/8"	Option: Stainless Steel	Stainless Steel

X42N-3

Strainer and Needle Valve Assembly



Size	Body Material.	Screen Material.
3/8"	Standard: Bronze	Monel
3/8"	Option: Bronze	Stainless Steel
3/8"	Option: Stainless Steel	Stainless Steel

X43

"Y" Pattern Strainer



Size	Body Material	Screen Material
3/8"	Standard: Bronze	Stainless Steel

X44A

Strainer and Orifice Assembly



Size	Body Material	Screen Material
3/8"	Standard: Bronze	Monel
3/8"	Option: Bronze	Stainless Steel
3/8"	Option: Stainless Steel	Stainless Steel

X58B

Restriction Assembly



Size	Body Material	Restriction Fitting Material
1/4 - 3/8"	Standard: Bronze	Delrin
	Option: Bronze	Delrin
	Option: Stainless Steel	Stainless Steel

X58C

Restriction Assembly



Size	Body Material	Restriction Fitting Material
1/4 - 3/8"	Standard: Bronze	Bronze
	Option: Bronze	Delrin
	Option: Stainless Steel	Stainless Steel



CLA-VAL

PO Box 1325 Newport Beach CA 92659-0325
Phone: 949-722-4800 • Fax: 949-548-5441

CLA-VAL CANADA

4687 Christie Drive
Beamsville, Ontario
Canada L0R 1B4
Phone: 905-563-4963
Fax: 905-563-4040

CLA-VAL EUROPE

Chemin des Mesanges 1
CH-1032 Romanel/
Lausanne, Switzerland
Phone: 41-21-643-15-55
Fax: 41-21-643-15-50

Represented By:

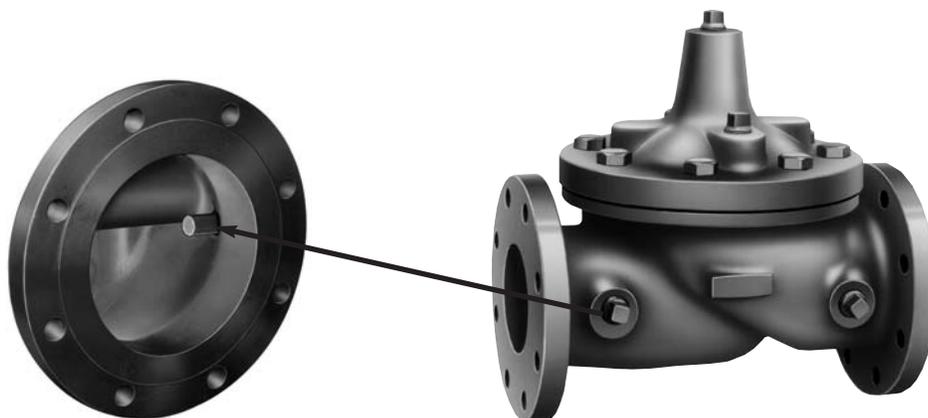


X46A

Flow Clean Strainer

The Strainer With The Self-Scrubbing Cleaning Action

The Cla-Val Model X46A Flow Clean Strainer is composed of heavy mesh monel inner screen covered with a fine mesh monel outer screen. These two elements are securely soldered to sturdy brass bar stock housing. The outer screen is a 40 x 40 mesh screen with .008" wire. This strainer is designed to prevent passage of foreign particles larger than .015". It is especially effective against such contaminants as algae, mud scale, wood pulp, moss and root fibers.



Note: No replacement parts available - to be sold as complete assembly only.

When ordering please specify: Valve Nameplate Data



— MODEL — **X46**

Flow Clean Strainer

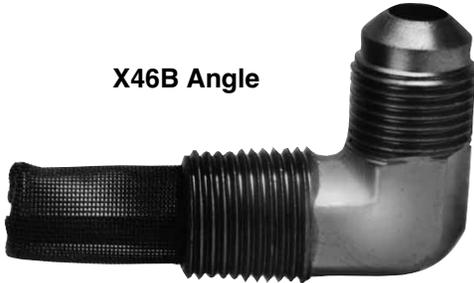


X46A Straight

- Self Scrubbing Cleaning Action
- Straight Type or Angle Type

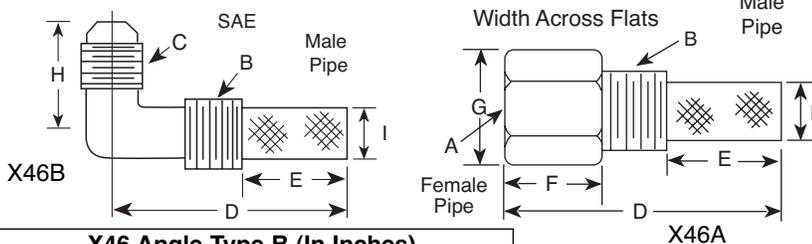
The Cla-Val Model X46 Strainer is designed to prevent passage of foreign particles larger than .015". It is especially effective against such contaminant as algae, mud, scale, wood pulp, moss, and root fibers. There is a model for every Cla-Val. valve.

X46B Angle



The X46 Flow Clean strainer operates on a velocity principle utilizing the circular "air foil" section to make it self cleaning. Impingement of particles is on the "leading edge" only. The low pressure area on the downstream side of the screen prevents foreign particles from clogging the screen. There is also a scouring action, due to eddy currents, which keeps most of the screen area clean.

Dimensions (In Inches)



B(NPT)	C(SAE)	D	E	H	I
1/8	1/4	1-3/8	5/8	7/8	1/4
1/4	1/4	1-3/4	3/4	1	3/8
3/8	1/4	2	7/8	1	1/2
3/8	3/8	1-7/8	7/8	1	1/2
1/2	3/8	2-3/8	1	1-1/4	5/8

A (NPT)	B (NPT)	D	E	F	G	I
1/8	1/8	1-3/4	3/4	1/2	1/2	1/4
1/4	1/4	2-1/4	1	3/4	3/4	3/8
3/8	3/8	2-1/2	1	7/8	7/8	1/2
3/8	1/2	2-1/2	1-1/4	1/2	7/8	3/4
1/2	1/2	3	1-1/4	1	1-1/8	3/4
3/8	3/4	3-3/8	2	1/2	1	7/8
3/4	3/4	4	2	1	1-1/2	7/8
3/8	1	4-1/4	2-3/4	1/2	1-3/8	7/8
1	1	4-1/2	2-3/4	1-1/4	1-3/4	7/8
1/2	1	4-1/4	2-3/4	1/2	1-3/8	7/8

When Ordering, Please Specify:

- Catalog Number X46
- Straight Type or Angle Type
- Size Inserted Into and Size Connection
- Materials

INSTALLATION

The strainer is designed for use in conjunction with a Cla-Val Main Valve, but can be installed in any piping system where there is a moving fluid stream to keep it clean. When it is used with the Cla-Val Valve, it is threaded into the upstream body port provided for it on the side of the valve. It projects through the side of the Main Valve into the flow stream. All liquid shunted to the pilot control system and to the cover chamber of the Main Valve passes through the X46 Flow Clean Strainer.

INSPECTION

Inspect internal and external threads for damage or evidence of cross-threading. Check inner and outer screens for clogging, embedded foreign particles, breaks, cracks, corrosion, fatigue, and other signs of damage.

DISASSEMBLY

Do not attempt to remove the screens from the strainer housing.

CLEANING

After inspection, cleaning of the X46 can begin. Water service usually will produce mineral or lime deposits on metal parts in contact with water. These deposits can be cleaned by dipping X46 in a 5-percent muriatic acid solution just long enough for deposit to dissolve. This will remove most of the common types of deposits.

Caution: use extreme care when handling acid. If the deposit is not removed by acid, then a fine grit (400) wet or dry sandpaper can be used with water.

Rinse parts in water before handling. An appropriate solvent can clean parts used in fueling service. Dry with compressed air or a clean, lint-free cloth.

Protect from damage and dust until reassembled.

REPLACEMENT

If there is any sign of damage, or if there is the slightest doubt that the Model X46 Flow Clean Strainer may not afford completely satisfactory operation, replace it. Use Inspection steps as a guide. Neither inner screen, outer screen, nor housing is furnished as a replacement part. Replace Model X46 Flow Clean Strainer as a complete unit.

When ordering replacement Flow-Clean Strainers, it is important to determine pipe size of the tapped hole into which the strainer will be inserted (refer to column A or F), and the size of the external connection (refer to column B or G).