## **INSTALLATION / OPERATION / MAINTENANCE**



# Flow Clean Strainer

- 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.

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)



X46 Angle Type B (In Inches)									
B(NPT)	<b>C</b> (S)	AE) D	Е	Н	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				

X46B Angle

#### 

X46A Straight

#### When Ordering, Please Specify:

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

Male

Materials

A (NPT)	<b>B</b> (NPT)	D	Е	F	G	Ι			
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			
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X46A Straight Type A (In Inches)

#### 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).

