

H-STYLE STRAINERS – MODEL X43H

INTRODUCTION

This specification covers the design, manufacture, and testing of H-style strainers, Model X43H, in sizes ranging from 1-1/2 in. (40 mm) through 48 in. (1200 mm).

PART 1 - GENERAL

1. Standard products – use the same manufacturer for multiple units of the same type.
2. “Tying” of equipment into packages for the purpose of thwarting competition shall be considered to be in non-compliance with these specifications.
3. Manufacturers shall price items under different subsections or sections separately.

PART 2 - PRODUCTS

2.01 H-STYLE STRAINERS

A. FUNCTION

The H-style strainer shall be designed to remove solid particles from the pipeline to prevent fouling, debris accumulation, and particle buildup in automatic control valves. The strainer shall provide a low pressure drop and allow service and maintenance without removal from the pipeline.

B. MATERIALS

1. Material Specification for the H-Style Strainers:

Component	Material Description
Body & Cover	Ductile Iron per ANSI B16.42, NSF/ANSI 61 Fusion Bonded Epoxy Coating. No fabricated carbon steel allowed.
Strainer Mesh	316 Stainless Steel
Cover Seal	Buna-N® Synthetic Rubber
Drain/Blow-Off Plug	Stainless Steel, threaded for ball valve connection. Grooved drain connections not permitted.
Fasteners	Stainless Steel
Strainer Frame (if used)	Epoxy Coated Ductile Iron
Optional Accessories	Differential Pressure Gauge, Differential Pressure Switch

C. MANUFACTURE

1. Strainer Design:

- a. Strainer shall be a compact H-pattern body with a flat stainless steel mesh screen perpendicular to the flow path for low pressure drop.
- b. Maintenance shall be performed by removing the top cover only.
- c. The strainer shall be installable in any position, though vertical with the cover up is recommended.

2. Strainer Sizes & Ratings:

- a. Sizes: 1-1/2" through 48" (40 mm through 1200 mm)
- b. Pressure Rating:
 - - ANSI Class 150: 250 psi Max.
 - - ANSI Class 300: 400 psi Max.

- c. Temperature Rating: Up to 175°F (80°C)

3. Strainer Openings (Mesh Sizes):

- a. Standard Mesh: 10 mesh (2000 micron / 0.078 inch openings)
- b. Optional Mesh: 0.059 inch and 0.039 inch openings must be available

4. Cv Performance:

- a. Flow capacities (Cv) must be published and verifiable.
- b. Example: 4" strainer shall have a minimum Cv of 654 (gpm @ 1 psi drop).

5. End Connections:

- a. Flanged per ANSI Class 150 or 300
- b. 300# flanges shall have raised faces

D. PRODUCT DATA

1. The following shall be provided:

- a. Manufacturer's technical product data
- b. Installation, Operation, and Maintenance Manual (IOM)
- c. Pressure drop vs. flow performance chart
- d. Weight and dimensional data for all sizes
- e. Material certification sheets as required

PART 3 - EXECUTION

A. DELIVERY, STORAGE AND HANDLING

1. Delivery:

- a. Manufacturer shall deliver the strainers to:
Address, City, State, Zip
Attention: _____
Phone Number: _____
Call 48 hours prior to delivery.

2. Packing and Shipping:

- a. Strainers shall be factory assembled.
- b. Unassembled accessories shall be labeled and packaged for field assembly.
- c. Strainers shall be protected from damage during transport.
- d. Strainers must remain covered and stored until installation.

PART 4 – LINK2VALVES™ STRAINER SERVICE ASSET MANAGEMENT

A. GENERAL FUNCTION

When strainers are supplied as part of a control valve package, they shall be compatible with the Link2Valves™ service management system to enable maintenance scheduling, service record tracking, and mobile access via supported devices.

WARRANTY

The manufacturer shall warrant the H-Style Strainer to be free from defects in materials and workmanship for a period of three (3) years from the date of shipment, provided it is installed and maintained per manufacturer's guidelines.

APPROVED MANUFACTURER AND MODEL

The strainer shall be CLA-VAL Company Model X43H as manufactured by Cla-Val Co., Costa Mesa, CA 92627-4416.