

AUTOMATIC SELF-CLEANING STRAINERS



Model 2596 2", 3", and 4" Sizes

Eaton's Model 2596 Automatic Self-Cleaning Pipeline Strainers with Cenpeller™ Technology are now available in 2", 3", 4", 4"L, 6", and 8" pipeline sizes. A new size unit, the "4L", will cover applications where the combination of flow rate and open area requirements may make a standard 4" too small. These smaller size strainers incorporate all the improved design features currently available on the 10" through 48" size Model 2596 Strainers, and have a higher cleaning efficiency than the Model 596 strainers that they replace.

The Model 2596 is a motorized strainer designed for continuous, efficient removal of entrained solids from liquids in pipeline systems. Removing these solids from the system protects expensive system components from damage.

An automated control system monitors the strainer's operation. Cleaning is accomplished by an integral backwash system. A small portion of the screen element is isolated and cleaned by reverse flow while the remaining



screen area continues to strain without interrupting system flow. This efficient design uses only a small amount of the liquid being strained to carry debris away from the strainer element.

Eaton Automatic Self-Cleaning Strainers are used to strain fresh, brackish or salt intake water for plant services such as cooling, process, and fire protection. Process industries rely on them to protect heat exchangers, pumps, valves, and water spray nozzles. Power industry applications include straining pump seal water and traveling screen wash water. Sewage and water treatment plants use them to strain secondary effluent prior to discharge, and to provide clean plant service water. Steel mills use them for spray nozzle protection in rolling mills and other cooling water applications. Eaton Automatic Strainers can also be used on other liquid applications where the viscosity is "water-like", such as machine tool coolant. These are just some of the applications where an Eaton Strainer solves the need for more reliable process systems.

Exclusive idL™ Seal for No Leak Service

Available only on Eaton Strainers, this unique shaft seal replaces older style packing and prevents troublesome leakage. This idL Seal has a special quad design that keeps the exterior of the strainer dry and clean in service-no process liquid can run down the sides of the strainer.

Cenpeller Technology for **Efficient Operation**

A common problem in many automatic self-cleaning strainers is inefficient backwashing due to debris lodged in the strainer element. The Model 2596 Strainer features Eaton's Cenpeller Technology which solves this problem. A unique vane plate is positioned at the inlet of the strainer element where it contacts the process media before it enters the element. The vane causes the incoming liquid to move in a circular motion, forcing the debris to lay up against the surface of the strainer element rather than impinging on the element and lodging in the element's openings. Lodged debris in the strainer element can negatively impact the differential pressure across the strainer, resulting in a shut down of the strainer while the element is manually cleaned. Cenpeller Technology in the Model 2596 Strainer helps prevent this problem while making backwashing much easier and more efficient.



Inlet of strainer element

TECHNICAL INFORMATION

Easier Maintenance

To simplify maintenance Eaton's Model 2596 Strainers feature a unitized modular assembly. This means that the motor, gear reducer, and the internal operating mechanism are all housed within the strainer cover and lift off as a unit. This makes all components easily accessible, simplifies maintenance, and reduces associated maintenance costs.

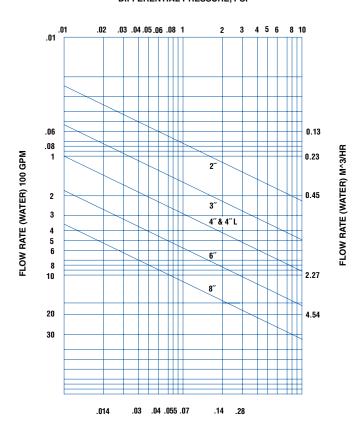
Application Limits

Cast Iron Class 125 Flange (-20° to 150°F) 200 psi (2″-8″) Cast Stainless Steel Class 150 Flange (-20° to 100°F) 275 psi (2″-4″)

Options

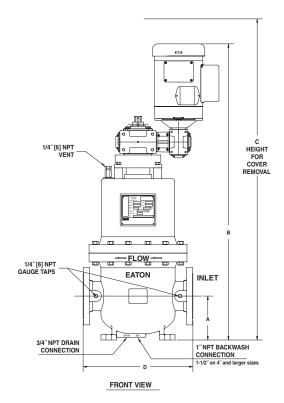
Stainless steel, copper nickel, monel, aluminum bronze, and other materials of construction. ASME code stamp.

DIFFERENTIAL PRESSURE, PSI



DIFFERENTIAL PRESSURE, BARS

Pressure drop data indicates results to be expected with clean water, under normal flows, with standard straining media and in clean strainer.



APPROXIMATE DIMENSIONS (IN)				APPROXIMATE WEIGHT (LB)			
Size	Α	В	С	D	Dry	Wet	Cover
2"	6	401/2	42 ¹ /2	15	328	382	164
3″	6	401/2	42 ¹ /2	15	344	399	164
4"	7	42	44	15	353	413	164
4" L	8	52	55	23 ¹ /2	805	998	438
6"	8	55	58	231/2	836	1081	438
8″	8	55	58	23 ¹ /2	901	1129	438

Dimensions are for reference only. For installation purposes, request certified drawings.

DuraWedge® Element

DuraWedge is a nonclogging, rugged stainless steel element for the most demanding applications. It is constructed from v shaped profile wire. A wide range of opening sizes is available. Consult Eaton for the proper choice.



Convoluted Element

A sturdy, economical stainless steel element for general service use. Available perf openings of 1/8," 1/16," and 1/32." Available mesh sizes of 40, 60, 80, 100, and 150 mesh. Consult Eaton for the proper choice.



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