

MODEL 53BTX SJ

STEAM JACKET DUPLEX BASKET STRAINER

Sizes 2" and 3", Carbon Steel or Stainless Steel, Flanged Connections



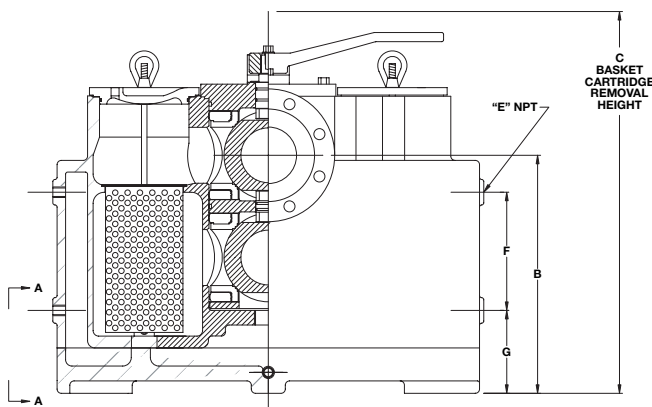
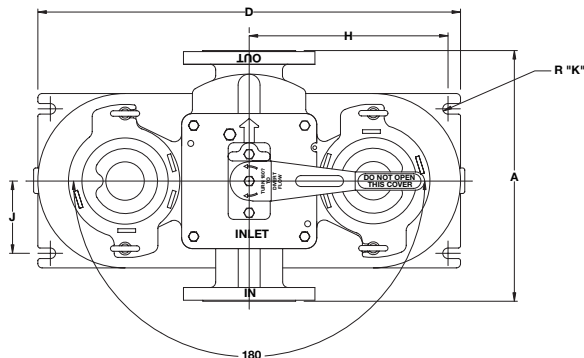
Model 53BTX-SJ

Patented diverter cartridge assures leak tight isolating of basket chamber during cleaning

Steam jacketed strainers are used for applications where materials must be kept hot in order to remain fluid. Applications examples are chocolate, asphalt, resins, and polymers. The strainer body temperature is maintained by circulating steam or a heat transfer fluid through the strainer jacket.

FEATURES

- Dynamic ball sealing system for long life, patent pending
- Easy access for diverter cartridge removal
- Strainer rated to 200 psi at 150°F
- Steam jacket rated to 150 psi at 250°F
- Easy to operate lever handle, no expensive gearbox required
- Reinforced polymer seats for longer service life
- Mounting pad for rock solid installation
- Double stem o-rings for positive sealing
- Piston seal strainer basket covers
- Top mounted easy access vent valve



Selection Chart

Size	Body & Cartridge Material	Connection	Seat/ Seal	Diverter Balls	Strainer Rating Metric	Steam Jacket Rating Metric
2" & 3"	Carbon or Stainless Steel	Flanged	TFE/Viton®	Stainless Steel	125# ANSI 200 PSIG@ 150°F (PN16 13.8 Bar@66°C)	150 PSIG@ 250°F (10.3 Bar @121°C)



Should the diverter valve require service, it slides right out the top of the strainer body. A minimum of parts, easily replaced, makes service a snap. Exploded view shows simplicity of design.

Dimensions (in/mm)

Size	A	B	C	D	E	F	G	H	J	K	Weight (lb/kg)
2"	13.00/330	10.38/264	23.75/603	21.00/533	0.50/13	4.00/102	4.00/102	9.88/251	3.75/95	.031/8	330/150
3"	15.00/394	11.13/283	26.75/730	26.13/664	0.50/13	4.25/108	4.88/124	12.50/318	4.50/114	0.31/8	580/263

No-Hassle Strainer Basket Servicing

Eaton's Model 53BTX SJ Steam Jacket Duplex Basket Strainers are used in applications where the process media must be kept hot in order to remain fluid and flow easily through the piping system. They remove dirt and debris from the system and protect sensitive system components. The duplex design allows cleaning or replacing of a strainer basket without having to shut down the system flow, perfect for continuous or batch process applications.

The strainer features a design that makes strainer basket servicing a no hassle operation. No more "race against the clock" during basket servicing to get the job done before the basket chamber overflows with fluid. The Model 53BTX SJ keeps the chamber dry during service. This gives the operator time to clean or replace the strainer basket without ever having to worry about leakage. And without overflow, there's no need to clean up after servicing the strainer basket. The Model 53BTX SJ is simply a better way to work.

Superior by Design

A unique flow diverter valve cartridge in the Model 53BTX SJ isolates the two strainer basket chambers and prevents fluid bypass. An easy-to-turn handle operates the cartridge and diverts the system flow from one chamber to the other. The flow in the pipeline is never shut down.

When a strainer basket needs to be cleaned, the lever handle is turned to take it out of service and to divert the flow through the other chamber. The position of the handle clearly indicates at all times which chamber is in service.

No special tools are needed to access the strainer basket for cleaning. The chamber is first drained and then the cover is lifted and swung clear of the chamber opening. The dynamic diverter cartridge seals prevent fluid bypass into the out-of-service chamber making for easy, hassle-free strainer basket servicing.

Eaton's Better Flow Diverter Cartridge

The heart of the Model 53BTX SJ is the unique flow diverter cartridge that features a patent pending, highly dynamic sealing system on the diverter balls that ensures exceptionally long seat life and positive sealing. The Eaton design works so well that there is no need for manual internal or external ball support adjustments. With very low operating torque the strainer can be operated with an easy turn lever handle. An expensive gearbox is not needed.

The double sealing system, on both the upper and lower stems, guards against any possible leakage. Special reinforced polymer seats are used for extended service life.

Should cartridge service become necessary, it's easy to accomplish. Just remove four bolts and the cartridge comes right out through the top of the strainer. There's no need to take the strainer completely apart or remove it from the line.

Application Versatility

The compact, low profile Model 53BTX SJ fits into spaces ordinary steam jacket strainers might not, yet it still uses full size strainer baskets with low pressure drop performance, so important in applications with high viscosity process media.

Eaton has a strainer basket for every application. Baskets with openings from 3/4" down to 45 microns are available for the Model 53BTX SJ. Choose the best size for your application with no compromises. The standard baskets are made of Type 316 stainless steel; however, if the application requires, baskets of Monel®, brass or Hastelloy® C are available. For easy basket servicing there are two drain plugs on each strainer basket chamber. Additionally, there is an easy-to-access vent valve on top of the strainer body.

Available options for the Model 53BTX SJ include differential pressure gauges, with or without switches, and magnetic separators installed in the strainer basket for removing fine ferrous particulate matter from the process media.

