

Cast Iron Y-Type Strainer

Weights: 13kg - 421kg
Sizes: DN 50 – 350
Class: 125
Pressure: PN14
Temperatures: -10°C to 230°C



Application

The VT275 Cast Iron Y-Type Strainer is an essential component used in pipelines and systems to filter out impurities and debris from flowing fluids. The cast iron y-type strainer is constructed from high-quality cast iron material, known for its robust durability and resistance to corrosion. Its Y-shaped design allows for efficient filtration by trapping solid particles larger than the designated mesh size, preventing them from entering downstream equipment or causing potential damage.

The strainer’s bolted cover enables easy access for maintenance and cleaning, ensuring smooth and uninterrupted system operation. With its sturdy construction, the cast iron y-type strainer provides long-lasting performance and reliability. It plays a crucial role in protecting sensitive equipment, such as pumps, valves, and meters, from clogging and damage. By effectively removing contaminants from the fluid stream, this strainer contributes to improved system efficiency, reduced maintenance costs, and extended equipment lifespan.

Dimensions

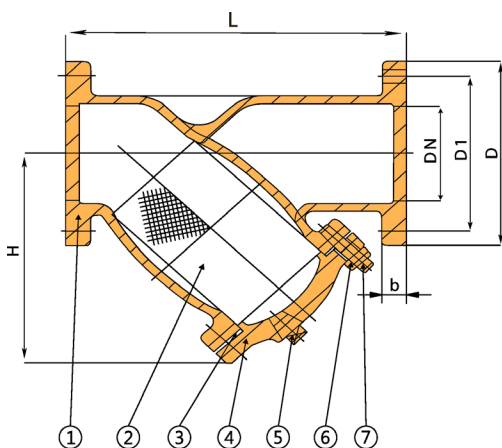
NPS	DN	L	H	D1	D2	B	Kg
2"	50	225	176	121	152	16	13
2½"	65	273	177	140	178	18	15
3"	80	292	195	152	190	19	20
4"	100	352	243	191	229	24	32
5"	125	391	294	216	254	24	47
6"	150	470	320	241	279	25	67
8"	200	543	397	299	343	29	109
10"	250	660	479	362	406	30	174
12"	300	762	558	432	483	32	243
14"	350	949	648	477	533	35	421

P/T Ratings

Valvetech’s Pressure/Temperature Ratings according to ANSI B16.10

Temperature ° Celsius	-10°C to +65°C	100°C	120°C	140°C	150°C	160°C	200°C	230°C
Pressure Bar	13.8	12.7	12.1	11.6	11.4	10.8	9.8	8.6

Diagram



#	Part	Material
1	Body	ASTM A126B
2	Screen	304 Stainless Steel
3	Gasket	Graphite + Steel
4	Cover	ASTM A126B
5	Plug	Malleable Cast Iron
6	Nut	ASTM A563
7	Stud	ASTM A307B

Specifications

Models

VT275

Body Material

Cast Iron

Iron Grade

ASTM A126 B

Screen

304 Stainless Steel

Drill Tables

Table 10, 16, D, ASA150

Standards

Design Standard MSS SP-70
 Flanges conform to ASME B16.1
 Face to Face conform to ASME B16.10

Services

Water, Oil, Gas, Steam

Industries

Chemical Processing, Food and Beverage, HVAC, Pharmaceutical and Biotechnology, Power Generation, Water Treatment

Priority Media

Asphalt Emulsion, Benzene, Cane Sugar, Carbonate, Castor Oil, Detergents, Diethylene Glycol, Ethane, Fish Oil, Glucose, Lacquers, Mineral Oils, Nitrogen, Olive Oil, Propane Gas, Resin, Xylene

Inventory Code and Description

CIVT275ST050
 CI Y-TYPE STRAINER FLANGED

Also Known As:

Angle Type Strainer, Y-Filter, Y-Pattern Valve Strainer, Y-Strainer

Strainers

Models:	VT275N ; VT275
Class:	150 ; 125
Sizes:	DN 50 - 300
Pressure:	PN16 ; PN14
Body Material:	Ductile Iron ; Cast Iron
Temperatures:	-10°C to 400°C
Weights:	9kg - 260kg



Specifications

Services

Water, Oil, Gas, Steam

Industries

Chemical Processing, Food and Beverage, HVAC, Pharmaceutical and Biotechnology, Power Generation, Pulp and Paper, Water Treatment

Priority Media

Asphalt Emulsion, Benzene, Cane Sugar, Carbonate, Castor Oil, Detergents, Diethylene Glycol, Ethane, Fish Oil, Glucose, Lacquers, Mineral Oils, Nitrogen, Olive Oil, Propane Gas, Resin, Xylene

Also Known As:

Angle Type Strainer
Y-Filter
Y-Pattern Valve Strainer
Y-Strainer

Strainer Details

Y-Type Strainers provide a simple and efficient way of filtering and removing solids and other contaminants from liquid, gas, or steam lines. This is done using a 304 Stainless Steel screen as a straining element to capture debris. Installed at the beginning of a pipeline, the Strainer facilitate a coarse filtration process which protects the pipes, as well as valves, gearboxes and disc's, from harsh impacts of solid objects. It also traps potential obstructions that could prevent valves from fully opening or closing.

Application

To clear the strainer, only the stainless-steel plug needs to be unscrewed, making maintenance easier and resulting in reduced downtime. The advantage of using the plug is that the system can remain partially operational during its maintenance. Should the screen become clogged, then the iron cover can be removed, and the mesh can be extracted, cleaned, and placed back in the strainer. If the mesh does need to be completely removed, then the pipeline will need to be shut down.

Versatility is the big appeal to the VT275N as it can be installed in vertical, horizontal, or angular pipelines due in part to the absence of moving parts. This flexibility enables engineers to adapt the strainer to the available space and flow conditions without compromising performance.

Typical applications of Y-Type Strainers include:

- **Liquid Filtration** to remove solid particles, debris, and contaminants
- **Gas Filtration** to capture solid particles, rust, scale, and other impurities in the gas flow
- **Plumbing Systems** to prevent clogs, blockages, and damage to fixtures and appliances
- **Industrial Processing Equipment** to protect from solid contaminants
- **Cooling Systems** to remove debris, sediment, and particulates from circulating water

Advantages:

- **Efficient particle removal** due to the Y-shaped configuration, which has excellent flushing capabilities due to the blow-down port
- **Low pressure drop** if the straining element is strategically positioned to allow for smooth fluid flow, while efficiently capturing debris
- **Easy maintenance and cleaning** because of the threaded or bolted cover, which allows for quick access to the straining element and reduces downtime
- **Versatile installation options** (vertical, horizontal, angular) enabling installations in various orientations and positions
- **Larger open ratios** than a T-Type Strainer and a broader range of pressure classes

Common Industry Uses:

- Power Generation, protecting turbines, boilers, and condensers from foreign objects present in the circulating water or fuel systems
- Water Treatment, removing suspended solids, sediment, algae, and other particulates from the water supply before it enters the treatment process or distribution system
- Food and Beverage, removing solid impurities, sediment, and particulates from various liquid ingredients, such as juices, syrups, oils, and sauces, to maintain product quality and safety
- Pulp and Paper, protecting pumps, valves, and other equipment from fibres, debris, and contaminants present in the process water and chemical solutions