

Ductile Iron Y-Type Strainer

Weights: 9kg - 260kg
Sizes: DN 50 – 350
Class: 150
Pressure: PN16
Temperatures: -10°C to 400°C



Application

The VT372N Ductile Iron Y-Type Strainer is a robust and versatile filtration device used in industrial applications to remove debris and unwanted particles from pipeline systems. The perforated mesh screen traps solid particles as pipeline media continuously flows through the strainer, preventing contamination to the rest of the pipeline. It is an effective and economical solution for maintaining the integrity and efficiency of fluid systems.

The ductile iron body offers excellent fracture resistance, making the Y-Type Strainer highly reliable and long-lasting. Its ability to offer high flow rates and withstand significant pressure differentials make it ideal for demanding applications in industries such as oil and gas, water treatment, and power generation, and its corrosion resistance ensures long-term operation in the chemical processing industry.

Dimensions

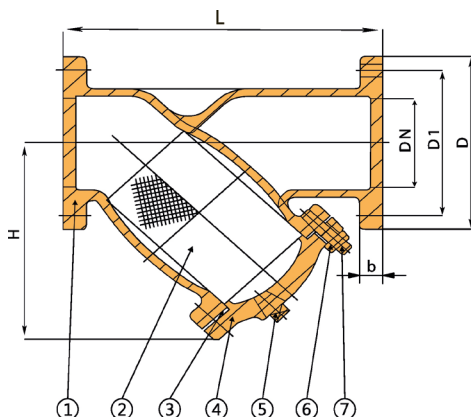
NPS	DN	L	H	D1	D	B	Kg
2"	50	225	135	120	152	15	9
2½"	65	273	155	139	178	17	12
3"	80	292	175	152	190	19	13
4"	100	352	209	190	229	23	19
5"	125	420	248	216	254	23	31
6"	150	470	287	241	279	25	35
8"	200	543	380	298	343	28	68
10"	250	660	425	362	406	30	99
12"	300	762	505	432	483	31	157
14"	350	946	630	476	433	35	260

P/T Ratings

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

Temperature ° Celsius	-10°C to +38°C	93°C	149°C	204°C	260°C	316°C	372°C	400°C
Pressure Bar	19.6	17.9	15.9	13.8	11.7	9.7	7.6	6.5

Diagram



#	Part	Material
1	Body	Ductile Iron A536
2	Screen	304 Stainless Steel
3	Gasket	Graphite + Steel
4	Cover	Ductile Iron A536
5	Plug	304 Stainless Steel
6	Nut	Carbon Steel
7	Stud	Carbon Steel

Specifications

Models

VT275N

Body Material

Ductile Iron

Iron Grade

ASTM A536 65-45-12

Drill Tables

Table 10, 16, D, ASA150

Standards

Design Standard MSS SP-70

Flanges conform to ANSI B16.5

Face to Face conform to ANSI B16.10

Services

Water, Oil, Gas, Steam

Industries

Chemicals, Food and Beverage, Pharmaceutical, Power Generation, Water Works, HVAC

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

DIVT275STN

DI Y-TYPE STRAINER 304SS CL150 FLANGED

Ductile Iron Y-Type Strainer 304 Stainless

Steel Screen Class 150 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



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

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

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