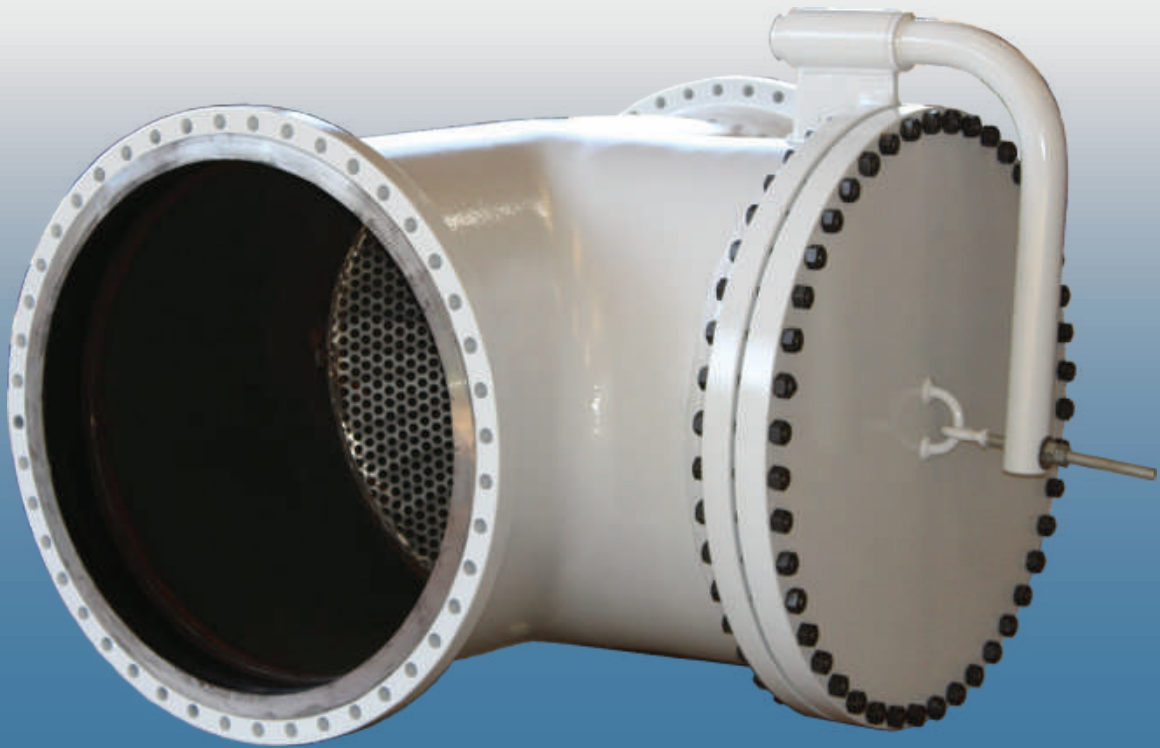




Fabricated TEE Strainers Types 59 & 60 Series

Remove solid particulates from
Liquids • Gas • Steam



*Refining • Petrochemical • Power
Oil & Gas*

Protect Pumps, Compressors, Turbines, Meters,
Mechanical Equipment

WINSTON / ROYAL GUARD CORPORATION



Fabricated TEE Strainers Types 59, 60, and GP59

Types 59, 60, and GP59 Tee, or “T” strainers protect compressors, pumps, valves, and other downstream equipment by removing sand, dirt, pipe scale, grit, welding beads and other solids from liquids and gases.



Tee strainer applications include liquid hydrocarbons and chemicals, gas, steam, air, water, and others in the pipeline, refining, chemical, petrochemical, power, pulp and paper, and related industries.

Offering a compact design for installation in tight spaces, the tee strainer is available in various flow configurations. The Type 59T has a straight through flow and other types are designed to replace a piping elbow for a right angle flow. Consideration must be given to orientation when specifying a quick-opening closure.

Standard material for the tee strainer body and flanges is carbon steel with 304 stainless steel basket (carbon steel, 316 stainless steel, and other alloys are optional). Available materials are 300 series stainless steels (all or wetted parts only), Monel®400, Nickel 200, Hastelloy®B and C276, Inconel®, Incoloy®, and chrome moly. Except for chrome moly, the basket can be manufactured in any of these materials.

Internal perforated baskets are manufactured from heavy gauge materials and seam welded for maximum protection.

A complete selection of perforated metal and wire cloth is available for various openings and retention requirements. Typical basket openings are 80 mesh (0.0070” opening) for gas service, 40 mesh (0.0150” opening) for steam, and perforated with 1/8” diameter holes on 3/16” centers for process liquids. Most wire mesh sizes will have perforated support.

The basket access cover is available as a bolted blind flange with lifting handle or davit, or a quick-opening closure for easier and faster access for basket cleaning.

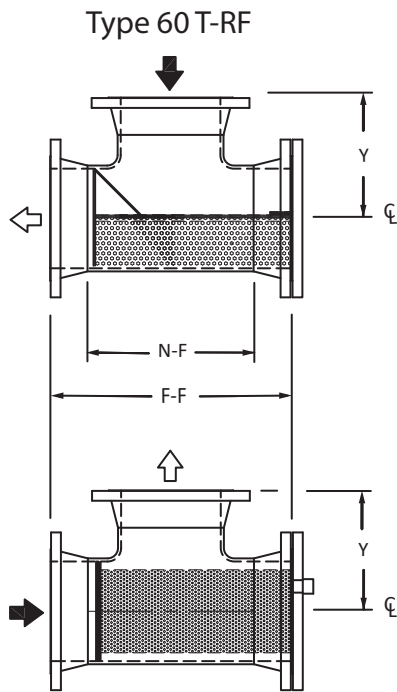
Options include ASME code stamp, flange lifting davit, quick-opening closure, lifting eye(s), vent, differential pressure connections, blowdown, painting per specification, and other customer requirements. Inlet/outlet styles include flanged or butt weld.

Manufacturing codes for tee strainers include ASME Section VIII, Division 1, ASME B31.3, B31.4, B31.8, B31.12, or in accordance with customer specifications.

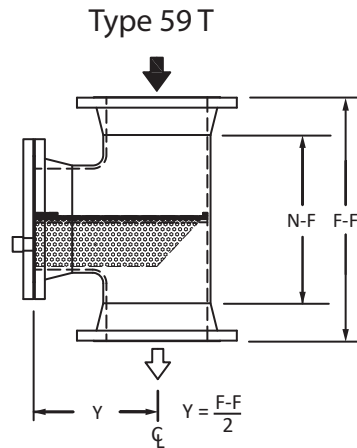
ASME Code Certified: Winston/Royal Guard is an ASME Section VIII, Division 1 Code certified manufacturing facility with National Board certification. Capabilities include all types of non-destructive testing with a rigidly controlled Quality Control system.



Fabricated TEE Strainers



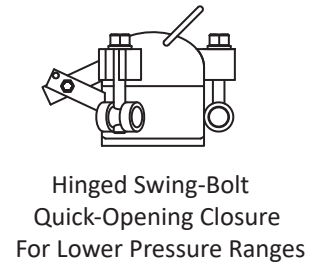
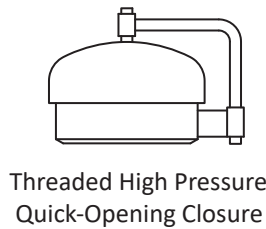
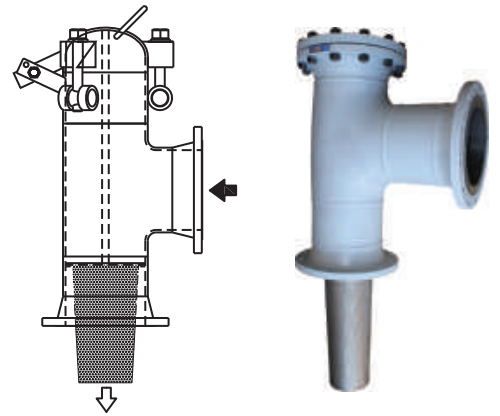
Type 60 T



59 T Strainer



Type GP59
Contact factory for dimensions



| SIZE | N-F | F-F | | | | | | |
|-------|--------|---------|---------|---------|---------|----------|----------|-----------|
| | | 150# RF | 300# RF | 600# RF | 900# RF | 600# RTJ | 900# RTJ | 1500# RTJ |
| 2 | 5 | 10-1/4 | 10-3/4 | 11-1/2 | 13-3/4 | 11-5/8 | 13-7/8 | 13-7/8 |
| 2-1/2 | 6 | 11-3/4 | 12-1/4 | 13 | 15 | 13-1/8 | 15-1/8 | 15-1/8 |
| 3 | 6-3/4 | 12-1/2 | 13-1/4 | 14 | 15-1/2 | 14-1/8 | 15-5/8 | 17 |
| 4 | 8-1/4 | 14-1/2 | 15-1/4 | 17 | 18 | 17-1/8 | 18-1/8 | 19-1/8 |
| 6 | 11-1/4 | 18-1/2 | 19-1/4 | 21-1/4 | 23 | 21-3/8 | 23-1/8 | 25-3/4 |
| 8 | 14 | 22-1/4 | 23 | 25-1/4 | 27-1/2 | 25-3/8 | 27-5/8 | 31-7/8 |
| 10 | 17 | 25-1/4 | 26-1/2 | 29-3/4 | 32-1/4 | 29-7/8 | 32-3/8 | 38-1/8 |
| 12 | 20 | 29-1/4 | 30-1/2 | 33 | 36-1/2 | 33-1/8 | 36-5/8 | 43-5/8 |
| 14 | 22 | 32-1/4 | 33-1/2 | 35-3/4 | 39-1/2 | 35-7/8 | 39-7/8 | 47 |
| 16 | 24 | 34-1/4 | 35-3/4 | 38-3/4 | 41-3/4 | 38-7/8 | 42-1/8 | 50-1/8 |
| 18 | 27 | 38-1/4 | 39-3/4 | 42-1/4 | 45-3/4 | 42-3/8 | 46-1/4 | 54-3/8 |
| 20 | 30 | 41-5/8 | 43 | 45-3/4 | 50-1/4 | 46 | 50-3/4 | 59-5/8 |
| 24 | 34 | 46-1/4 | 47-1/2 | 50-3/4 | 57-3/4 | 51-1/8 | 58-1/2 | 67-7/8 |
| 30 | 44 | 55 | 60-3/4 | | | | | |
| 36 | 53 | 65-5/8 | 72-1/4 | | | | | |

Dimensions are in inches. Tolerance is plus or minus 1/8". The standard strainer basket is perforated with 1/8" diameter holes on 3/16" centers.

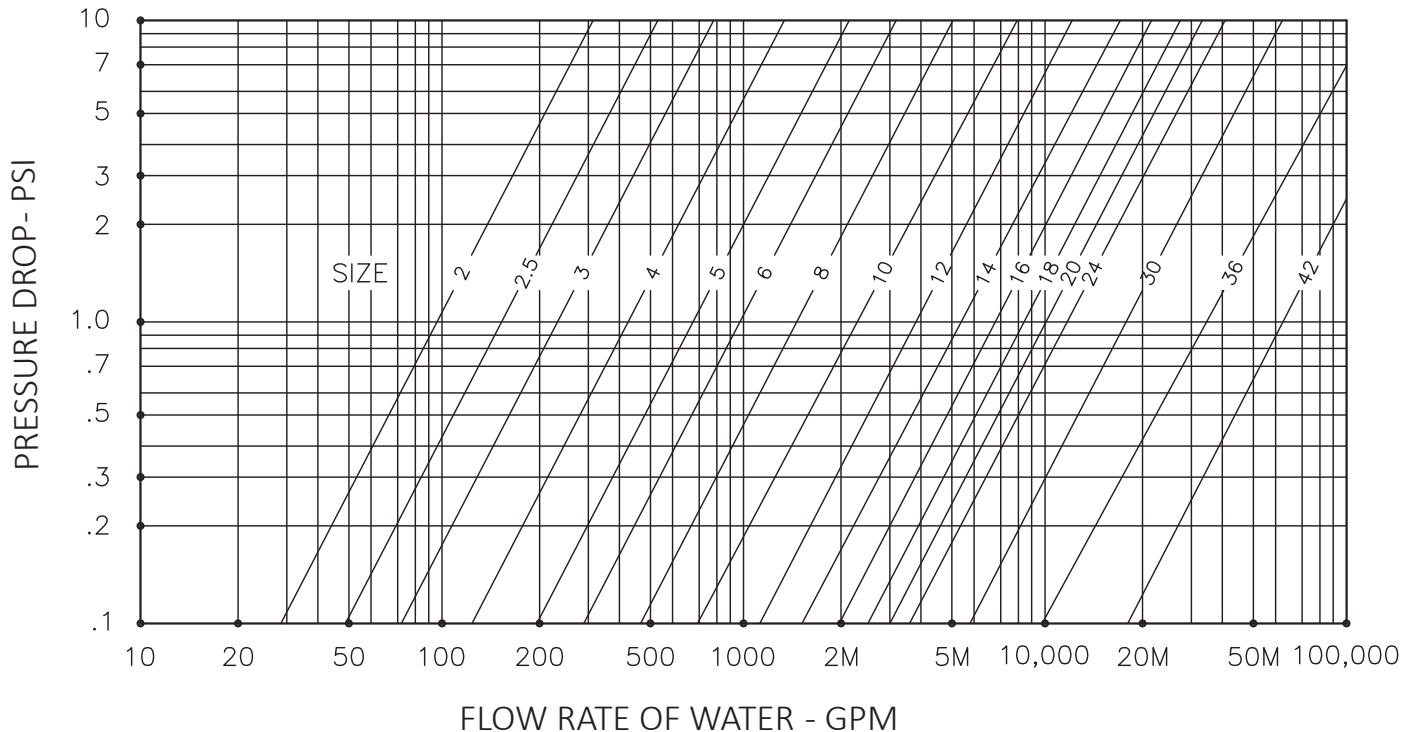
Larger sizes are available. Contact factory for dimensional details.



Fabricated TEE Strainers

PRESSURE DROP

CLEAN PERFORATED BASKET WITH 1/8" DIAMETER HOLES



CORRECTION FACTOR

FOR LIQUIDS MORE VISCOUS THAN WATER OR WHERE A WIRE LINER IS ADDED, MULTIPLY PRESSURE DROP IN CHARTS BY:

| VISCOSITY (SSU) | PERFORATED 1/8" DIA. HOLES | PERFORATED WITH WIRE CLOTH | | |
|-----------------|----------------------------|----------------------------|---------|---------|
| | | 40 MESH | 60 MESH | 80 MESH |
| 30 | 1.00 | 1.32 | 1.53 | 1.62 |
| 270 | 1.30 | 1.61 | 1.83 | 2.00 |
| 385 | 1.44 | 1.76 | 2.00 | 2.20 |
| 500 | 1.58 | 1.92 | 2.13 | 2.41 |
| 1000 | 1.66 | 2.22 | 2.41 | 2.63 |
| 2000 | 1.86 | 2.41 | 2.72 | 2.91 |

FOR WATER USE 30 SSU

Specifications are subject to change without notice. 7-29-2021 (supersedes 2-7-2019)

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