



TVS 6000UD Forged Steel Trap Valve Station

Compact double isolation and bleed concept (Up and Downstream) with 360° Connector

For pressures up to 650 psig (45 barg)...Capacities to 1300 lb/hr (590 kg/h)

Using 2000 Series IB Steam Traps

Steam Trapping and Steam Tracing Equipment

Integral double piston style inlet and outlet isolation valves

3-year warranty

**Patent Pending
US 62/945,958**

Connection flexibility
(SW, BW, BSPT, NPT Flanges
EN or ANSI)

Bleed outlet

Bleed inlet

Connector block adaptable to inverted bucket, disc, thermostatic wafer, bimetallic, float and thermostatic steam traps

Test valve used to test and evaluate trap operation

Strainer and blowdown valve



Description

This original concept has been developed to meet new demanding requirements regarding safety when operating steam equipments such as steam traps, in various industrial environments. TVS 6000UD is a compact double isolation and bleed concept (up and downstream) with a 360° connector.

TVS 6000UD provides double isolation inlet and outlet piston valves, bleed of inlet/outlet valves, a test valve, a strainer and a blowdown valve at trap inlet all merged together in a single compact 2-bolts universal connector. The TVS 6000UD's design ensures increased safety while saving space, time and cost.

This TVS 6000UD is covered by a three-year-warranty. The TVS 6000UD can be fitted with steam traps of different technologies (thermodynamic, thermostatic, float and thermostatic or freely floating. Please refer to specific steam trap capacity charts).

Connections

Screwed BSPT and NPT
Socketweld and Butt weld
Flanged EN1092-1 PN40 or ASME B16.5

Materials – TVS 6000UD Connector

Connector:	ASTM A350 LF2
Test valve:	ASTM A582 T303 – Nitronic 60
Blowdown valve:	ASTM A582 T303 – Nitronic 60
Depressurising valve:	ASTM A582 T303 – Nitronic 60
Flanges:	P250GJ (other material on request)

Isolation Valve Components

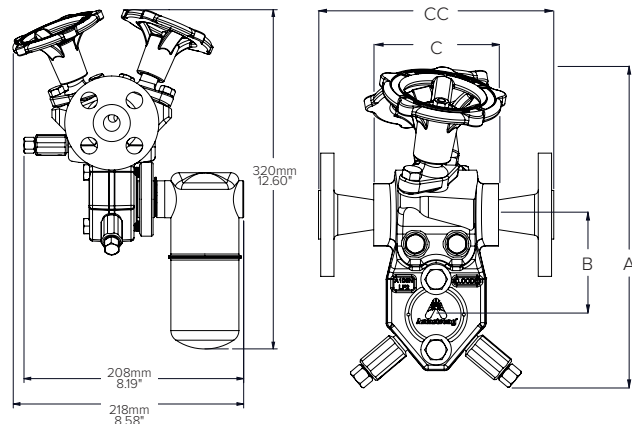
Valve Sealing Rings:	Graphite and Stainless Steel
Bonnet	ASTM A350 LF2
Bonnet Bolting	DIN933 8.8
Stem and washers	ASTM A564 17-4 H900
Lantern bushings :	ASTM A582 T304
Valve washer :	ASTM A582 T304
Disc springs :	AISI T301
Nut :	AISI T304
Handwheel :	Ductile Iron

Flow Direction

Left to Right (L/R)
Right to Left (R/L)

Table ST-2-1. TVS 6000UD Compact double isolation and bleed

	in	mm	in	mm	in	mm
Connection Size	1/2	15	3/4	20	1	25
"A" valve closed	9	230	9	230	9	230
"A" valve open	9 13/16	250	9 13/16	250	9 13/16	250
"B"	2 13/16	72	2 13/16	72	2 13/16	72
"C" Face-to-Face (screwed, SW & BW)	3 15/16	100	3 15/16	100	3 15/16	100
"CC" Face-to-Face (flanged EN1092-1 PN40)	5 7/8	150	5 7/8	150	6 1/4	160
"CC" Face-to-Face (flanged ASME B16.5 #150)	6 11/16	170	6 3/4	172	7	179
"CC" Face-to-Face (flanged ASME B16.5 #300)	7	179	7 1/8	182	7 1/2	192
Weight in lb (kg) (screwed, SW & BW)	11.4 (5.2)		11.4 (5.2)		11.4 (5.2)	
Weight in lb (kg) (flanged EN1092-1 PN40)	15.2 (6.9)		16.5 (7.5)		17.4 (7.9)	
Maximum Allowable Pressure ,	45 barg @ 315 °C		653 psig @ 599 °F			
Maximum Hydrotest Temperature	599 °F / 315 °C					
Maximum Hydrotest Pressure	986 psig / 68 barg					



, May be derated depending on flange rating and type.

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

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Steam Trapping and
Steam Tracing Equipment

Table ST-3-1. Model 2010 Capacity

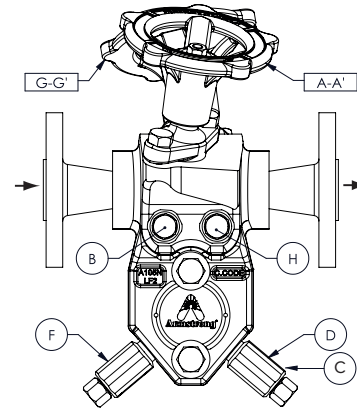
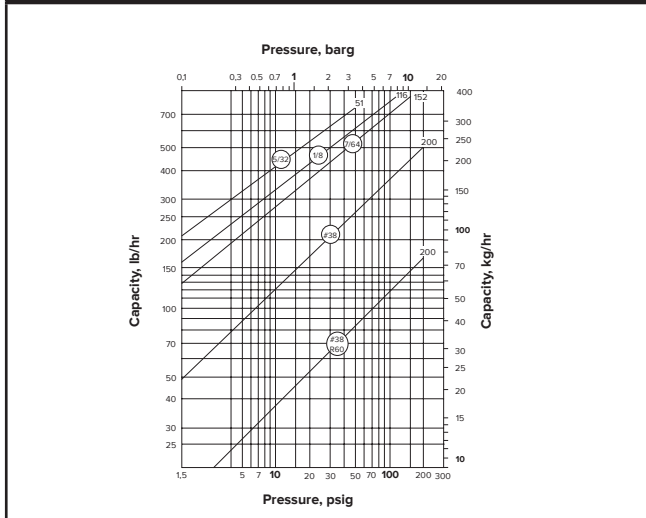
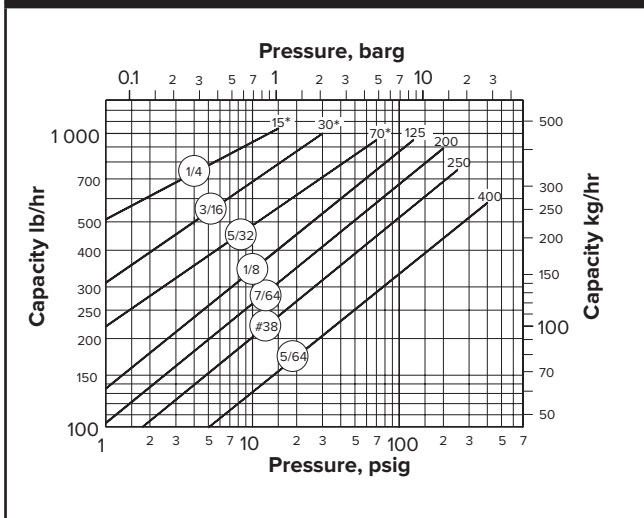
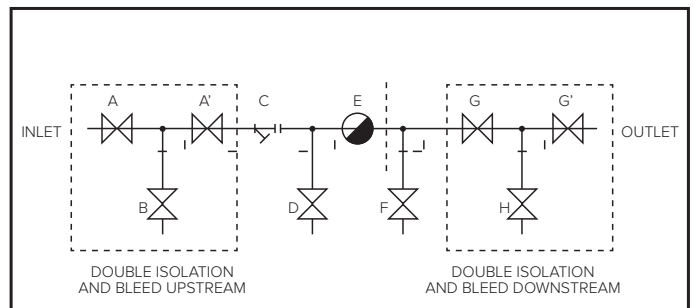


Table ST-3-2. Model 2011 Capacity



TVS 6000UD - L/R version



- UPSTREAM**
 A: INLET FIRST ISOLATION VALVE
 A': INLET SECOND ISOLATION VALVE
 B: BLEED INLET
 C: STRAINER
 D: DEPRESSURIZING VALVE
 E: STEAM TRAP CONNECTION
- DOWNSTREAM**
 F: TEST VALVE
 G: OUTLET FIRST ISOLATION VALVE
 G': OUTLET SECOND ISOLATION VALVE
 H: BLEED OUTLET

Table ST-3-3. Model 2022 Capacity

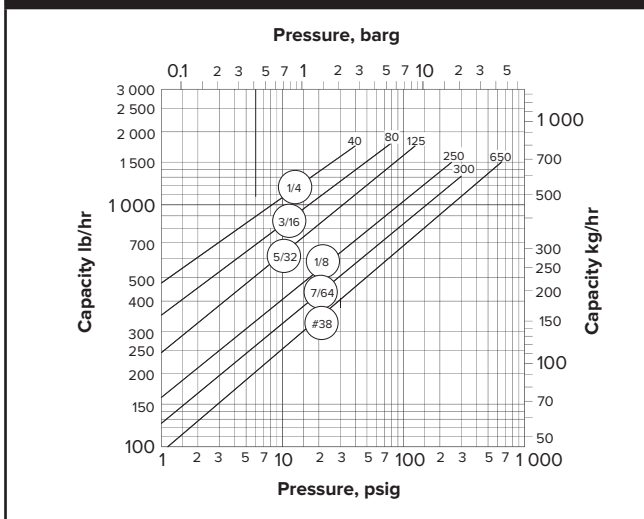


Table ST-3-4. How to Order

Model	Connection	Type of Connection	Flow Direction
TVS 6000UD	DN15 DN20 DN25	Flanges EN1092-1 & PN Class	L/R = Left to Right R/L = Right to Left
	1/2" 3/4" 1"	BSPT, NPT, SW, BW, Flanges ASME B16.5 & Class RF	

* Capacities to be reduced by 5% for pressure below 5 bar (tested with Armstrong steam traps).

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