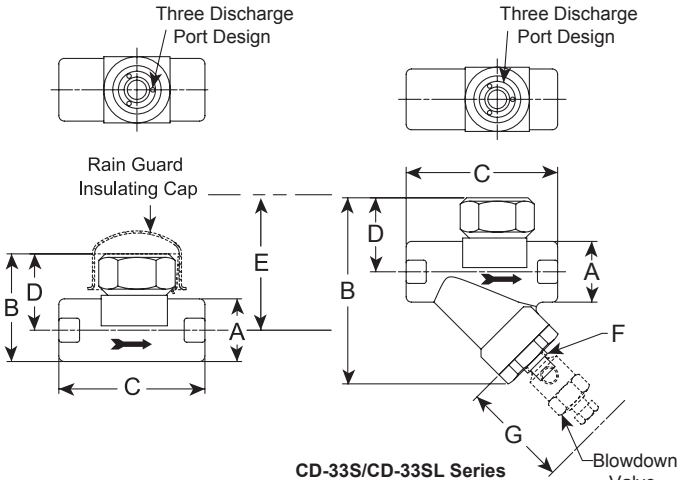
CD-33 Series Disc Trap

For Steam Service up to 600 psig (42 bar)...Capacities to 2,500 lb/hr (1,134 kg/hr)



CD-33/CD-33L Series

CD-33S/CD-33SL Series With Integral Strainer

The Armstrong CD-33 is a disc style trap designed to control the trap's cycle rate. By reducing the cycle rate, the Armstrong CD-33 will have a longer service life than typical disc traps. This enhanced performance will ensure that maintenance time is minimized and steam costs are greatly reduced.
The CD-33 is designed with three discharge ports, which offer stable disc operation to extend trap operating life. The capacities of the Armstrong CD-33 have been engineered specifically for the following applications: large steam main drips, process equipment, and HVAC heating equipment on constant pressure. The CD-33L (low capacity 1/2" and 3/4" only) trap is designed for the low capacity applications of steam main drips and steam tracing lines. By ensuring that the capacities are designed to suit the application, and are not oversized, the CD-33 Series will last longer than other disc traps with excessive capacity ratings.

Specification

Steam trap shall be stainless steel thermodynamic type, integral seat design with hardened disc and seating surfaces, and electroless nickel plated finish. When required, trap shall be supplied with an integral Y strainer, integral blowdown valve or rain guard insulating cap. Maximum allowable pressure (vessel design) shall be 915 psig @ 752°F (63 bar @ 400°C). Maximum operating pressure shall be 600 psig @ 752°F (41 bar @ 400°C).

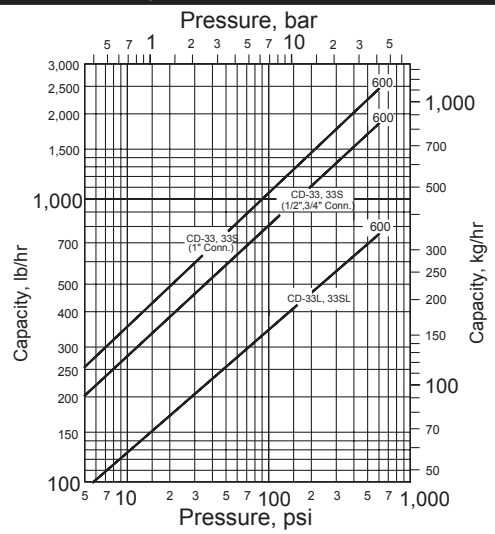
List of Materials

Name of Part	Material
Body	ASTM A743 Gr. CA40
Cap	ASTM A743 Gr. CA40
Disc	ASTM A276 Gr. 420
Strainer Screen	30 x 30 Mesh T-304 Stainless Steel
Screen Retainer	ASTM A743 Gr. CA40
Blowdown Plug (CD-33S only)	Carbon Steel

Options

BlowdownValve	Stainless Steel
Rain Guard Insulating Cap (1/2", 3/4" Sizes Only)	Stainless Steel

Model CD-33 Capacity



For a fully detailed certified drawing, refer to:
CD-33/33L CD #1116
CD-33S/33SL CD #1250

Advantages

- Three discharge port design
- Minimum wear with controlled cycling
- Freeze-resistant
- Hardened seat and disc

CD-33 Series Disc Trap

Model No.	CD-33				CD-33S (w/strainer)				CD-33L (low capacity)		CD-33SL (w/strainer) (low capacity)	
Pipe Connection Size	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
	1/2, 3/4	15, 20	1	25	1/2, 3/4	15, 20	1	25	3/8, 1/2, 3/4	10, 15, 20	1/2, 3/4	15, 20
"A"	1-7/16	37	1-3/4	44	1-7/16	37	1-3/4	44	1-7/16	36	1-7/16	36
"B" Height	2-1/2	63	3-1/8	79	4-1/4	108	4-3/4	121	2-1/2	63	4-1/4	108
"C" Length	3-5/16	84	3-15/16	100	3-1/2	89	4-1/8	105	3-5/16	84	3-1/2	89
"D" ℄ to Top of Cap	1-3/4	44	2-1/4	57	1-3/4	44	2-1/4	57	1-3/4	44	1-3/4	44
"E" Withdrawal Distance Rain Guard Insulating Cap	–	–	–	–	3	76	3	76	–	–	3	76
"F" Blowdown Connection Size	–	–	–	–	1/4 NPT	6	1/4 NPT	6	–	–	1/4 NPT	6
"G" Withdrawal Distance BlowdownValve	–	–	–	–	3-1/2	89	3-1/2	89	–	–	3-1/2	89
Weight, lb (kg)	1.4 (0.64)		2.5 (1.1)		2.2 (1.0)		3.25 (1.5)		1.41 (0.64)		2.2 (1.0)	
Maximum Allowable Pressure(Vessel Design)	915 psig @ 752°F (63 bar @ 400°C)											
Minimum Operating Pressure, psi (bar)	3.5 psig (0.24 bar)											
Maximum Operating Pressure, psi (bar)	600 psig @ 486°F (41 bar @ 252°C)											

Maximum Back Pressure as Percent of Inlet Pressure, 80%