


E..-S




Engineering
GREAT Solutions

Spraywater Control Valve

E..-S - Spraywater Control Valve

Designed as a Z-body type valve, the E..-S's anti-cavitation trim design forces the flow of spraywater through a three (optional four) stage cascade and an additional outlet cage. The multistage seat is a capsuled design, keeping the flow of spraywater away from the valve body. This successfully eliminates damage to the valve body caused by erosion and ensures a faultless operation over many years of operation.

Key features

- > Compact, robust design
- > Clamped trim for easy maintenance
- > Multi-step anti-cavitation trim
- > Bottom access body design
- > High rangeability
- > Designed for conditions up to 320 bar at 340°C
- > Tight shut-off (EN12266-1 Class B, MSS-SP61 or ANSI/FCI 70.2 Cl. V)
- > Wide installed base

Benefits

- > Top and bottom-guided valve stem design
 - Ensures excellent control of the medium throughout the range
 - Prevents the valve and piping from damage caused by stem vibrations
- > Bottom access valve body
 - Reduces maintenance costs to a minimum
 - All internal parts accessible without removing actuator
- > Multistage seat
 - Capsuled design to keep medium flow away from body
 - Eliminates damage caused by erosion

Typical materials

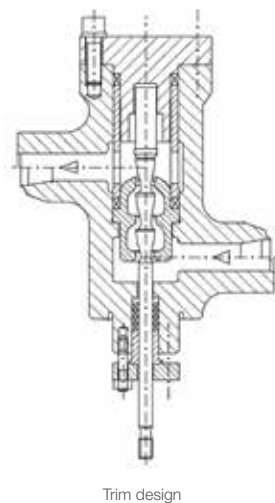
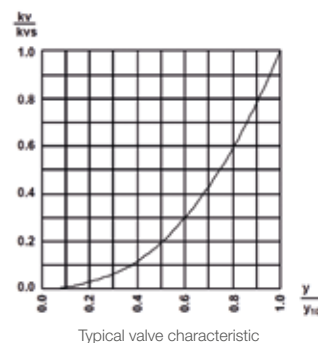
	Standard	Alternative
Body	G20Mo5	A105, 16Mo3, 13CrMo4-4
Bonnet	G20Mo5	A105, 16Mo3, 13CrMo4-4
Outlet cage	X20CrMoV11-1	
Stem/plug	X19CrMoNbVN11-1	
Seat	X17CrNi16-2	

Note: Other materials upon request

Applications

Normally used in spraywater applications where the pressure drop across the valve is rated as continuously high, such as:

- > High pressure bypass systems
- > Superheater spraywater injection systems
- > Reheater spraywater injection systems



- > Other spraywater systems requiring control valves for accurate spraywater control under rugged operation

Product specification

Body style

Z-body, bottom access type
Flanged bonnet

Pipe connection

Butt-welding according to customer's requirement

Body material

Cast- G20Mo5 (Others available on request)

Design code

EN12516-2

Water data

Temperature range: Up to 340°C
Inlet pressure: Up to 320 bar

Trim

Flow to open
Multistep cascade (3 stages, optional 4th)
Downstream cage
Unbalanced

Characteristic

Equal percentage

Seat/stem tightness

EN12266-1 Class B, MSS-SP61
or ANSI/FCI 70.2 Cl. V

Actuation

Double acting hydraulic actuator ASM-E
Electric actuator upon request

Serviceability

Replaceable stem/plug
Replaceable trim and outlet cage
Bolted bonnet
Trim access opposite actuator

Options

Transition pieces for large pipe diameters and material compatibility

Orientation

No restrictions as for the valve operating system

General information

Flow capacity

Type	No. of stages	KVs max.	CVs max.	KVs min.	CVs min.	Seat (mm)	Stroke (mm)
E22-3S	3	1.95	2.28	0.031	0.036	20	25
		3.06	3.57				
		4.70	5.48				
E32.3S	3	4.70	5.48	0.047	0.055	30	40
		7.52	8.77				
		11.80	13.77				
E45-3S	3	9.40	10.97	0.078	0.091	42	45
		14.80	17.27				
		23.50	27.42				
E56.3S	3	23.50	27.42	0.115	0.134	52	60
		29.40	34.30				
		37.60	43.86				

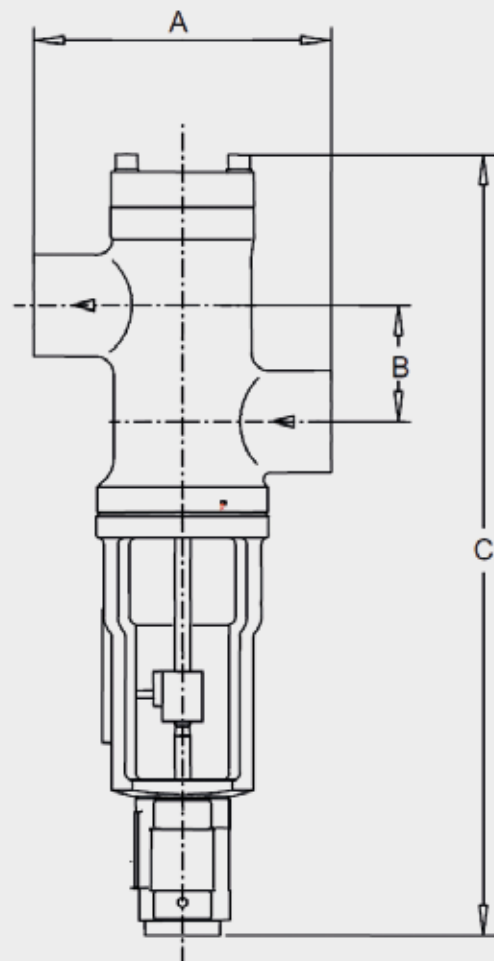
Inlet/outlet pipe dimensions

Type	Inlet/outlet	
E22-3S	DN40-DN65	1.5" - 2.5"
E32.3S	DN80-DN125	3.0" - 5.0"
E45-3S	DN80-DN125	3.0" - 5.0"
E56.3S	DN100-DN150	4.0" - 6.0"

Note: For other dimensions please contact IMI CCI

Outline dimensions

Type	A (mm)	B (mm)	C (mm)	Weight (kg)
E22-3S	320	97	870	90
E32.3S	400	160	1055	170
E45-3S	400	160	1220	210
E56.3S	460	200	1490	305



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