

spirax/sarco®

K Series

6" and 8" Ductile Iron Control Valves

Description

Two port cast steel single seat globe valves conforming to ANSI/ASTM standards in sizes 6" and 8" (DN150 and DN 200) available with flanged connections. When used in conjunction with a pneumatic or electric linear actuator they provide characterized modulating or on/off flow control. For close control with pneumatic actuators, a valve positioner should be used.

Compatible actuators and positioners

Electric	EL5650 series
Pneumatic	PN5700, 6700, 1000 series
	PP5 (pneumatic)
Positioners	EP5 and ISP5 (electropneumatic)
	SP2 (smart electropneumatic)

Refer to the relevant Technical Information Sheet for further details.

Sizes and pipe connections

K_A73 6" and 8" (DN150 and 200) flanged ANSI 125 and ANSI 250.

Options

Trim	Equal %, linear, reduced Cv, fast opening (on/off) soft seal, hard faced, low noise and anti-cavitation.
Stem seal	PTFE chevrons and graphite packing.

Refer to TI-P305-04 for further details.

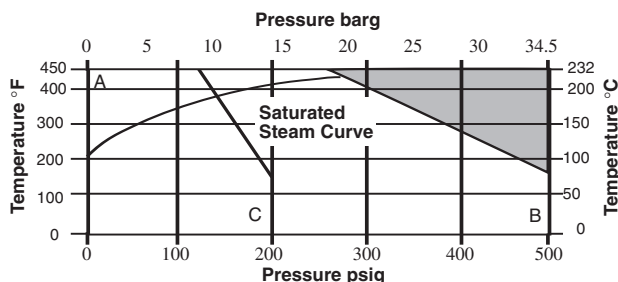
Technical data

Plug design	6" and 8" (DN150 and DN200)	Vee port
Leakage	Metal-to-metal seat	ANSI/FCI 70/2 Class IV
	PTFE soft seal	ANSI/FCI 70/2 Class VI
	KEA valves	Equal percentage (modulating)
Flow characteristic	KLA valves	Linear (modulating)
	KFA valves	Fast opening (on/off)
Rangeability		50 to 1
Travel	6" and 8" (DN150 and DN200)	2" (50 mm)

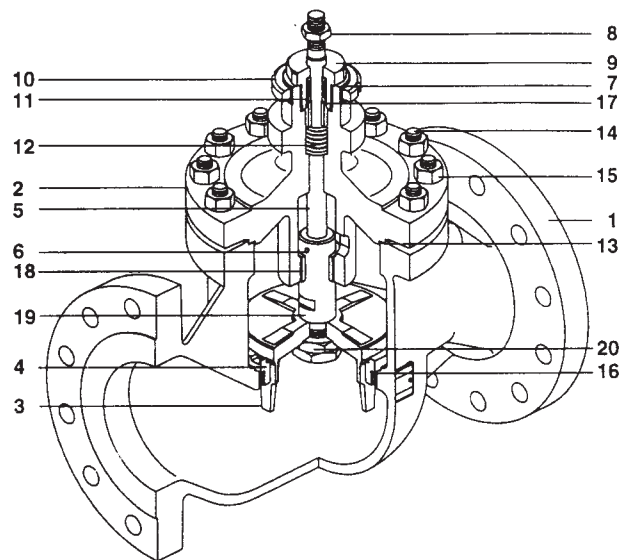
Limiting conditions

Body design conditions	ANSI 125 and ANSI 250	
Maximum design temperature	PTFE chevron seals	450°F (232°C)
	Graphite packed seals	450°F (232°C)
Minimum design temperature		14°F (-10°C)
Design for a maximum cold hydraulic test pressure of:	ANSI 125 300 psig (20.7 barg)	
	ANSI 250 750 psig (51.7 barg)	
Maximum differential pressures	see actuator TI	

Operating range



The product must not be used in this region
 A - B Flanged ANSI 300 A - C Flanged ANSI 150



Materials

No	Part	Material	
1	Body	Ductile iron	ASTM A395
2	Bonnet	Ductile iron	ASTM A395
3	Valve plug	Stainless steel	ASTM A276 Gr. 431
4	Valve seat	Stainless steel	ASTM A276 Gr. 431
5	Valve stem	Stainless steel	ASTM A276 Gr. 431
6	Pin	Stainless steel	AISI 302
7	Gland nut gasket	Semi-rigid graphite laminated	
8	Lock-nut	Stainless steel	
9	Gland nut	Stainless steel	ASTM A276 Gr. 431
10	Mounting nut	Mild steel zinc plated	
11	Gland seals	PTFE chevrons	
12	Gland spring	Stainless steel	
13	Bonnet gasket	Semi-rigid graphite laminated	
14	Bonnet studs	Steel	ASTM A193 B7
15	Bonnet nuts	Steel	ASTM A194 2H
		5" (DN150)	5/8" UNC
		3" (DN200)	3/4" UNC
16	Seat gasket	Semi-rigid graphite laminated	
17	Guide bush	Glass reinforced PTFE	
18	Bonnet guide	Stainless Steel	AISI 440B Hardened
19	Valve post	Stainless steel	ASTM A276 Gr. 431
20	Plug lock-nut	Stainless steel	

Local regulations may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only.
 In the interests of development and improvement of the product, we reserve the right to change the specification. TI-P305-09-US 07.05

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Cv values

Size	6" (DN150)	8" (DN200)
Equal % and linear trim	351	550
On/Off trim	383	630

Three reductions in Cv are available for equal percentage and linear trims, for details see TI-P305-04-US K Series Valve options.

For conversion $Cv \text{ (UK)} = Cv \text{ (US)} \times 0.833$ $Kvs = Cv \text{ (US)} \times 0.855$

Dimensions/weights (approximate) in inches (mm) and lbs (kg)

Valve size	A	B	B	Weight
		(ANSI 125)	(ANSI 250)	
6" (DN150)	11.6 (283)	17.8 (451)	18.6 (473)	162 (74)
8" (DN200)	13.0 (330)	21.4 (543)	22.4 (568)	244 (111)

Installation

The valve should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body.

If necessary the actuator should be commissioned in accordance with the Installation and Maintenance Instructions supplied with the valve.

How to order

Example: 1 off 6" KEA73 Cv 351 control valve flanged ANSI 250

Spare parts

See TI-P305-05.

