

Ramén Ball Sector Valve - Type KS-1

DN 40-300 | Wafer | PN 40 | Stainless steel | PTFE Seat | Viton®



Ramén Ball Sector Valve material execution 1 with carbon/graphite reinforced PTFE seat ring.

The Ramén Ball Sector Control Valve in material execution 1 is a stainless steel AISI 316 soft seated control valve with a carbon/graphite reinforced PTFE seat with Viton® O-ring seals and a media protected shaft bearing of modified PTFE.

KS-1 is the natural choice for clean and non-abrasive liquid or gas at moderate pressure, pressure drop and temperature. KS-1 is excellent for industrial gases like N₂, O₂, air, natural gas and clean liquids such as oil, water and non-abrasive fibre suspensions in industrial applications.

Example of applications	Automation options
<ul style="list-style-type: none"> ▪ Clean and non-abrasive liquids ▪ Clean water, oil and non-abrasive suspensions ▪ Gases and vapors ▪ Nitrogen (N₂), oxygen (O₂), natural gas, air etc. 	<ul style="list-style-type: none"> ▪ Pneumatic actuator SR (Spring Return) or DA (Double Acting) ▪ Digital/Electro pneumatic/Pneumatic positioner ▪ Electrical actuator ▪ Hydraulic actuator

Technical specifications

Design	Flangeless, wafertype (size DN 300 flanged)	
Nominal sizes	DN 40 - DN 300	1½"-12"
Material	Body	EN 1.4408, SS 2343
	Shafts	EN 1.4460, SS 2324
	Ball Sector	EN 1.4408, SS 2343
	O-rings	Viton®
	Bearing	Rulon®
Nominal pressure	DN 40 - DN 50	PN 40 (for flange PN 10/40 and ANSI 150/300/600)
	DN 80 - DN 100	PN 25 (for flange PN 10/25 and ANSI 150/300)
	DN 150 - DN 250	PN 16 (for flange PN 10/16 and ANSI 150)
	DN 300	PN 16 (Flanged PN 16 or ANSI 150)
Operating temperature	-40° C - 170° C	-40° F - 340° F
Characteristic	Equal percentage	
Rangeability	300:1	
Seat	PTFE (Carbon/graphite reinforced)	
Options	O-rings	EPDM, Nitril, Kalrez®, Viton GLT, EPDM 90
	Alloy steels	304, 316L, 254 SMO, Hastelloy, Duplex, Super Duplex
	Seat	White PTFE, PEEK, FDA Approved

Version 1.4 161128 | Subject to changes

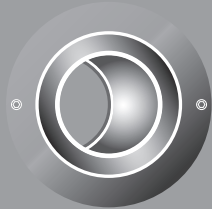


Industrial Control Valves and Regulators

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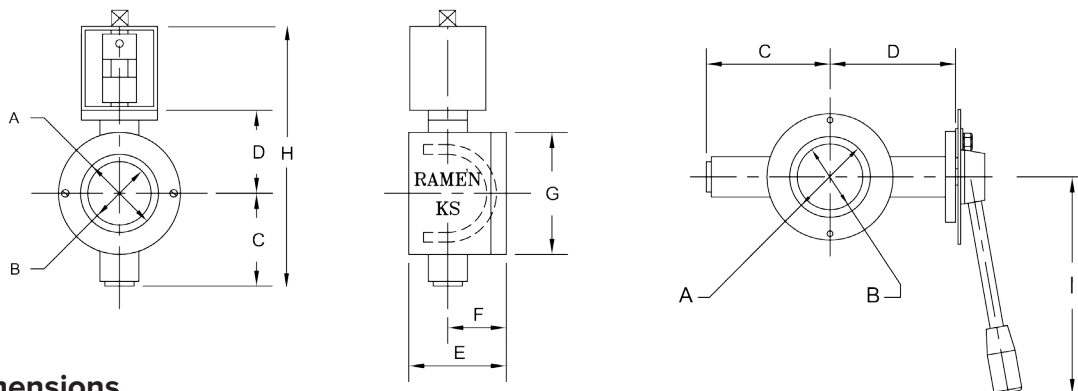
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Dimensions

DN	40	50	80	100	150	200	250	300
B Bore [mm]	25 32	40	64	80	120	150	195	250
C [mm]	95	95	107	118	167	188	233	310
D [mm]	95	95	108	119	162	190	228	300
E [mm]	71	71	95	112	170	210	270	368
F [mm]	38	38	55	62	95	120	150	198
G [mm]	94	94	140	160	220	274	330	460
H [mm]	250	250	315	337	454	503	561	710
I [mm]	160	160	290	290	370	370	N.A.*	N.A.*
Weight [kg]	4	4	8	12	25	38	67	170
Top mounting flange** EN-ISO 5211**	D14/17 F05/F07	D14/17 F05/F07	D17/22 F07/F10	D17/22 F07/F10	D22/27 F10/F12	D22/27 F10/F12	D27 F10/F12	D36 F14

*Gear boxes available on request

**D refers to diagonal square size & F refers to hole pattern.

Valve data

DN	40	50	80	100	150	200	250	300	
K_{vs} [m³/h]	34 64	94	255	390	810	1365	2220	3840	
C_v [gpm]	40 75	110	300	460	950	1600	2600	4500	
Actuator torque [Nm]	Recommended*	30-90	30-90	80-200	80-200	160-400	160-400	250-600	700-1200
	Max.	100	100	200	200	400	400	700	2000
Rotation angle	30°-90° 20°-90°	0°-90°	0°-90°	0°-90°	0°-90°	0°-90°	0°-90°	0°-90°	

*The lower value of the torque range can be used for ON-OFF applications for clean media at normal temperatures. The higher value of the torque range shall be used for pneumatic actuators with positioner when high control accuracy is needed or for dirty/sticky media.

About Ramén Valves

Ramén manufactures the Ramén Ball Sector Valve in Sweden for throttling of liquids, gases, steam and slurries. The Ramén Ball Sector Valve has been installed in thousands of applications worldwide since 1968. The industrial design and the high performance throttling characteristics have been used within the pulp and paper, chemical and mining industry among others. The construction details and manufacturing techniques of Ramén are based on extensive and varied usage, often in harsh applications and environments.



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