

PRODUCT DATA SHEET

Ramén Ball Sector Valve type KS-25



Ramén Valves

We know the flow

DN 25 | Wafer | PN 40 | Stainless steel | Metal/Soft seat



The Ramén Ball Sector Control Valve is a stainless steel, soft or metal seated control valve with a hard chrome coated ball sector.

Type 1A with a soft seat is recommended when media is slightly contaminated liquids, slurries or dry powder and where shut off tightness is required.

Type 1B have a Stellite metal seat. This configuration is used when handling abrasive media at moderate pressure and temperature. It is also used for elevated velocity or pressure drop.

Type 1C have a Stellite metal seat and hard chrome coated seat holding ring used for abrasive media. It is also well suited for applications with elevated velocity or pressure drop and with incipient cavitation.

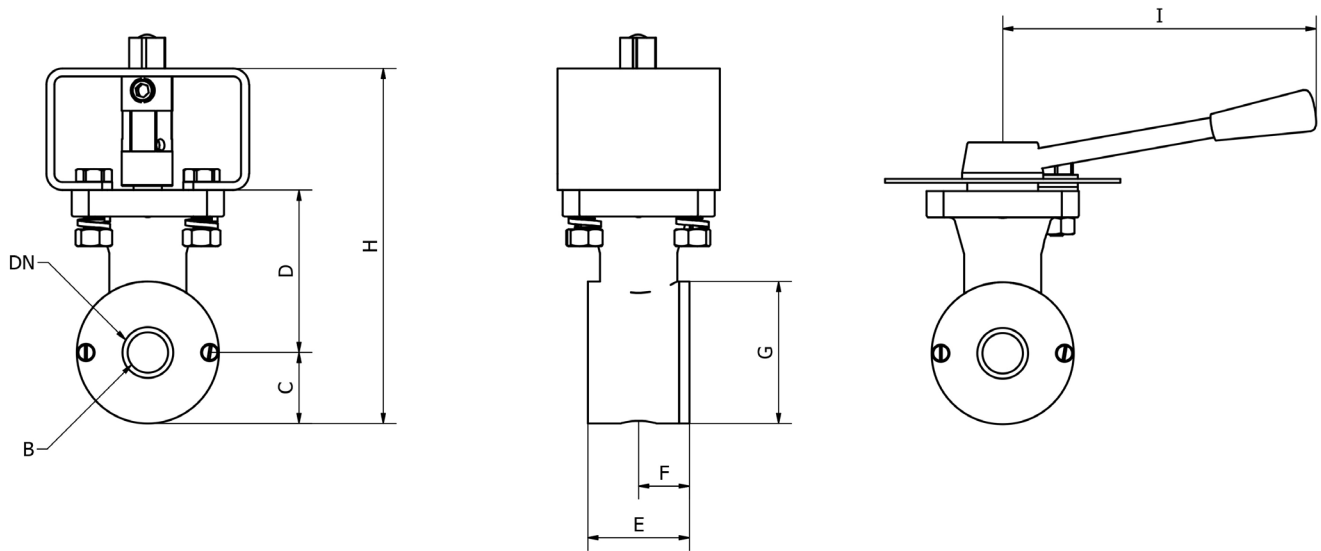
Type 1E is a stainless steel control valve with a deep Stellite metal seat used for abrasive media. This configuration is also used for elevated velocity, temperature and pressure drop which gives a risk for cavitation to occur.

KS-25 offers 9 different trims for versatile solutions, controlling very low flowrates within various applications fields. To enable high accuracy and rangeability with minimal hysteresis the KS-25 trims are engineered with individual geometries enabling an outstanding performance in low flow control of liquids and gases.

Technical information			
Design		Flangeless, wafer type	
Nominal sizes		DN 25	1"
Material	Body	EN 1.4432, AISI 316L	
	Shaft	EN 1.4435, AISI 329	
	Ball Sector	EN 1.4435 +Cr, AISI 316L+Cr	
	Seat	1A: Carbon reinforced PTFE 1B,1C,1E: Stellite	
	O-rings Bearing	FKM Rulon®	
Nominal pressure	DN 25	PN 40 (for flange PN 10/40 and ANSI 150/300)	
Operating temperature*		-40°C - 270°C (250°C optional) ⁽¹⁾	40°F - 340°F (480°C optional) ⁽¹⁾
Seat leakage class according to EN60534-4		Soft seat: VI Metal seat: IV	
Shell test according to EN12266-1		No leakage detectable	
Actuator torque [Nm] Recommended ⁽²⁾ Max.		20-50 100	
Rangeability		Up to 300:1	
Options	O-rings	EPDM, Nitril, Kalrez®, Viton GLT, EPDM 90, FDA approval, Perlast®	
	Alloy steels	304, 316L, SMO, Hastelloy, Duplex, Super Duplex, Titanium White	
	Seat	PTFE, PEEK, FDA approval	
Certificates and approvals		ATEX according to directive 2014/34/EU Fugitive emission standards acc. to ISO 15848-1 and VDI 2440 (TA-luft) Fullfills EC declaration 2023/2006 and 1935/2004 for articles intended to come in contact with food.	

⁽¹⁾ Depending on sealing material

⁽²⁾ 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. Indicated torques values include safety factor, on valve's break away torque, which is at least x2.



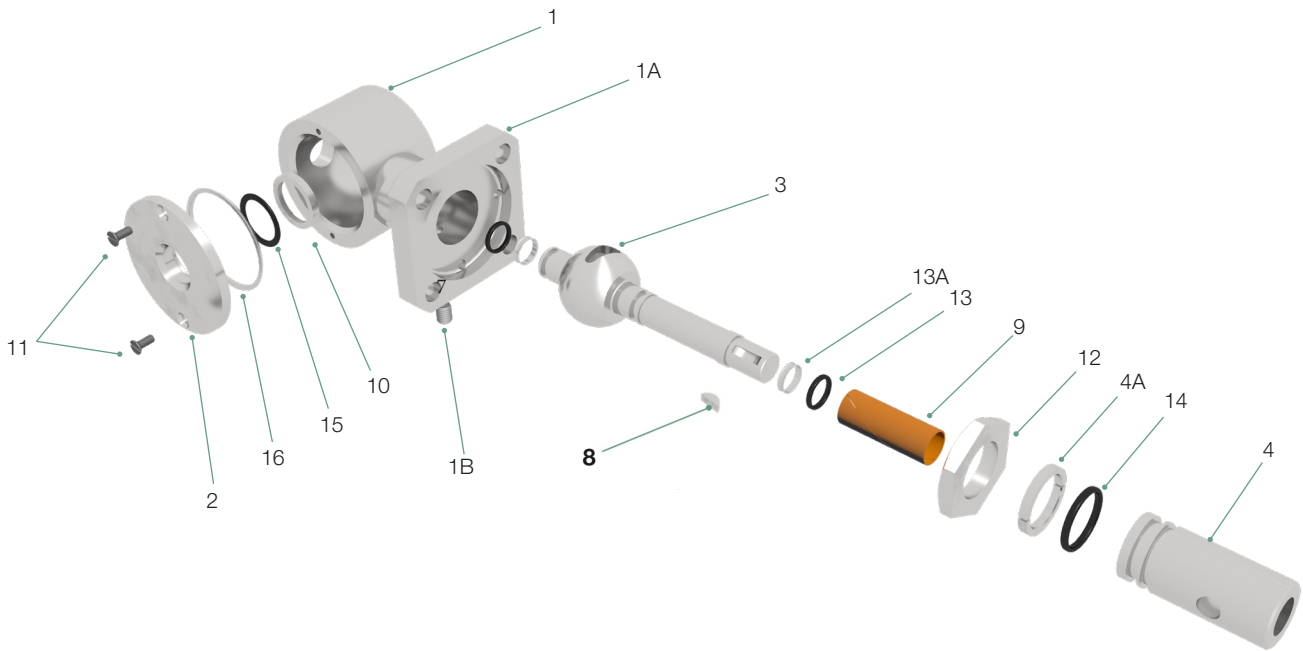
Dimensions										
DN	B Bore [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	Weight [kg]	Top mounting flange* EN-ISO 5211
25	See table "Valve data"	35	80	50	25	70	175	160	3,2	F05/F07, D14*

* D17 available on request

Valve data										
Size	25/0,03	25/0,3	25/0,7	25/1,3	25/2,5	25/5	25/10	25/15	25/20	
K_{vs} [m ³ /h]	0,025	0,25	0,6	1,1	2,1	5	7,5	12,5	21	
C_v [gpm]	0,03	0,3	0,7	1,3	2,5	5,8	9	15	25	
Rotation angle	0-18°	0-18°	0-18°	0-18°	0-18°	0-30°	0°	0-25°	0°	
Bore [mm]	Triangle shaped groove					Triangle shaped bore		15	19	
Characteristic	Percentage characteristic					Modified equal percentage		Equal percentage		

For bigger valve sizes refer to "Data Sheet Ramén Ball Sector Valve KS-1" (A-B-C-E)

Exploded view DN 25



Parts list DN 25

Part	QTY	Name	Material
1	1	Body	EN 1.4432 (AISI 316L)
1A	1	Flange	EN 1.4432 (AISI 316L)
1B	1	Grub screw	EN 1.4409 (AISI 316L)
2	1	Seat holding ring	EN 1.4432 (AISI 316L) Hard chromed (model 1C, 1E)
3	1	Ball sector & shaft	EN 1.4435 (AISI 316L) Hard chromed (model 1C, 1E)
4	1	Bearing sleeve	EN 1.4460 (AISI 329)
4A	1	Split ring	EN 1.4460 (AISI 329)
8	1	Woodruff key	EN 1.4460 (AISI 329)
9	1	Bearing	Rulon®
10	1	Seat ring	Carbon reinforced PTFE (Model 1A) Stellite (Model 1B, 1C, 1E)
11	2	Screw	EN 1.4409 (AISI 316L)
12	1	Grub screw	EN 1.4409 (AISI 316L)
13	2	O-ring	FKM
13A	2	Sliding ring	PTFE
14	1	O-ring	FKM
15	1	O-ring	FKM
16	1	O-ring	FKM

Standard spare part kit

Part	Name
9	Shaft bearing
10	Seat ring
13A	Sliding ring
13, 14, 15, 16	O-rings

All materials acc. to standard configuration. Please contact Ramén Valves for order specific materials.