

# PRODUCT DATA SHEET

## Ramén KS Ball Sector Valve



**RaménValves**

We know the flow

DN25 up to DN300 | Wafer/flanged | PN 16/25/40 | Soft/metal seat



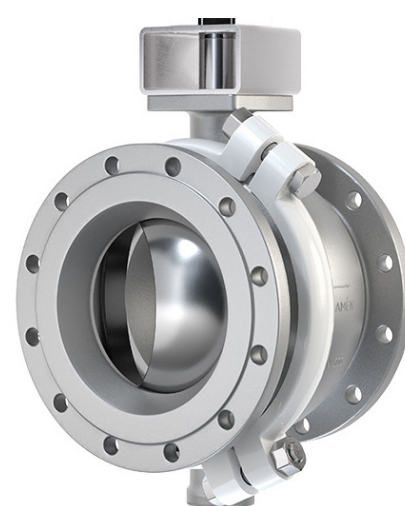
KS DN25



KS DN40/50



KS DN80-250



KS DN300

The Ramén KS Ball Sector Valve is a stainless steel, soft or metal seated, valve used for both control and isolating of liquids and gases.

The Ramén KS Ball Sector Valve is available in seven different types: **KS-1**, **KS-1A**, **KS-1B**, **KS-1C**, **KS-1E**, **KS-1S** and **KS-1F** in three different alloys: Stainless steel (EN 1.4409 / 316L), 254SMO (EN 1.4547) and titanium grade 2.

- Excellent throttling characteristic of liquids and gases
- Good resistance to abrasive flow
- Easy maintenance with quick exchange of seat ring
- Compact and easy installation
- Easy automation with ISO 5211 top flange and 100% backlash free coupling
- Self-draining

**Table 1. The different Ramén KS Ball Sector Valve models**

Type	Areas of use	Typical applications
KS-1	Soft seated, used in industrial applications for clean and non-abrasive liquid or gas at moderate pressure, pressure drop and temperature.	Clean and non-abrasive liquids Clean water, oil and non-abrasive suspensions Gases and vapors Nitrogen (N <sub>2</sub> ), oxygen (O <sub>2</sub> ), natural gas, air etc.
KS-1A	Soft seated, recommended when media is slightly contaminated liquids, slurries or dry powder and where shut off tightness is required.	Fibre suspensions Condensate Waste water Chemicals Bio gas Tank bottom valve
KS-1B	Metal seated, used when handling abrasive media at moderate pressure and temperature. This configuration is also used for elevated velocity caused by high pressure drop.	Slurries Liquor (Green, white & black) Low pressure steam Chemicals Water & waste water Process water
KS-1C	Metal seated, same as model KS-1B but for applications with risk of incipient cavitation and/or for abrasive slurries.	
KS-1E	Metal seated, same as model KS-1B but for applications with risk of full cavitation and/or for abrasive slurries.	
KS-1S	Metal seated with FKM V76F orings suitable for low pressure steam.	Low pressure steam
KS-1F	Soft seated, used in auxiliary systems in the food industry.	Clean liquids

Table 2. Technical information	KS-1	KS-1A	KS-1B	KS-1C	KS-1E	KS-1S	KS-1F
Design	Flangeless, wafertype (size DN300 flanged)						
Nominal sizes	DN25 - DN300 (1"-12")						
Body material	DN25 / 1" : 1.4432 (AISI 316L) - DN40 / 1.5" to DN300 / 12": 1.4409 (AISI 316L)						
Shaft material	DN25 / 1" : 1.4435 (AISI 329) - DN40 / 1.5" to DN300 / 12": 1.4460 (AISI 329)						
Ball Sector material	DN25 / 1" : 1.4435 (AISI 329) DN40 / 1.5" to DN300 / 12": 1.4409 (AISI 316L)	DN 25 / 1" : 1.4435 (AISI 329) + Exp <sup>(1)</sup> DN40 / 1.5" to DN300 / 12": 1.4409 (AISI 316L) + Exp <sup>(1)</sup>				DN25 / 1" : 1.4435 (AISI 329) DN40 / 1.5" to DN300 / 12": 1.4409 (AISI 316L)	
Seat material	PTFE (Carbon/graphite reinforced)		Stellite		Deep Stellite	Stellite	Virgin PTFE
Seat holding ring	DN 25 / 1" : 1.4432 (AISI 316L) DN40 / 1.5" to DN300 / 12": 1.4409 (AISI 316L)			DN25/1" : 1.4432 (AISI 316L) + Exp <sup>(1)</sup> DN40/1.5" to DN300/12": 1.4409 (AISI 316L) + Exp <sup>(1)</sup>		DN 25 / 1" : 1.4432 (AISI 316L) DN40 / 1.5" to DN300 / 12": 1.4409 (AISI 316L)	
O-rings material	FKM					FKM V76F	FKM
Bearing material	PTFE						
Nominal pressure DN 40 - DN 50 DN 80 - DN 100 DN 150 - DN 250 DN 300	PN 40 (for flange PN 10/40 and ANSI 150/300) PN 25 (for flange PN 10/25 and ANSI 150/300) PN 16 (for flange PN 10/16 and ANSI 150) PN 16 (Flanged PN 16 or ANSI 150)						
Vacuum	Suitable for full vacuum						
Operating temperature	-30°C to 200° -22°F to 392°F (broader temperature range depending on seat and sealing material, see below)					-15to 250 degC -5 to 482 degF	-30°C to 200° -22°F to 392°F
Seat leakage class according to (EN60534-4)	VI		IV			VI	
Shell test according to (EN12266-1)	No leakage detectable						
Characteristic	Equal percentage						
Rangeability	Up to 300:1						
Certificates and approvals	CE-marked acc. to PED 2014/68/EU, Category II, Module D1 ATEX according to directive 2014/34/EU. Fugitive emission standards acc. to ISO 15848-1 and VDI 2440 (TA-luft). Fullfills FDA regulation and EC declaration 2023/2006 and 1935/2004 for articles intended to come in contact with food.						
O-rings options	EPDM70, FKM V76F, FFKM, Vitoflon						
Alloy steels options	254SMO (1.4547), Titanium Gr.2						
Seat options	White PTFE, PEEK						

<sup>(1)</sup> SuperExpanite®

Table 3. Seat- and o-ring temperatures							
Material	FKM (Standard)	EPDM70	FKM V76F	FFKM	Vitoflon	PTFE	Stellite
Min tempera-	-25°C (-13°F)	-40°C (-40°F)	-15°C (-5°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
Max tempera-	200°C (392°F)	150°C (302°F)	250°C (482°F)	250°C (482°F)	205°C (401°F)	200°C (392°F)	250°C (482°F)
Typical application	Water, hot water, oil, air	Low temperature applications	Steam	Corrosive chemicals	Corrosive chemicals	Non abrasive applications	Abrasive applications

<b>Table 4. Pressure and temperature limits</b>								
Temperature related max working pressure in bar for material stainless steel EN 1.4409 and 254SMO EN 1.4547								
	-40°C [bar]	+20°C [bar]	+50°C [bar]	+75°C [bar]	+100°C [bar]	+150°C [bar]	+200°C [bar]	+250°C [bar]
EN 1.4409								
PN10	10	10	9	8,5	8	7,5	7	7
PN16	16	16	14,5	13,5	13	12	11,5	11
PN25	25	25	23	21,5	20,5	19	18	17,5
PN40	40	40	37	35	33	31	29	28
EN 1.4547								
PN10	10	10	10	10	10	9,2	8,3	7,8
PN16	16	16	16	16	16	14,8	13,3	12,5
PN25	25	25	25	25	25	23,1	20,7	19,5
PN40	40	40	40	40	40	36,9	33,2	31,3

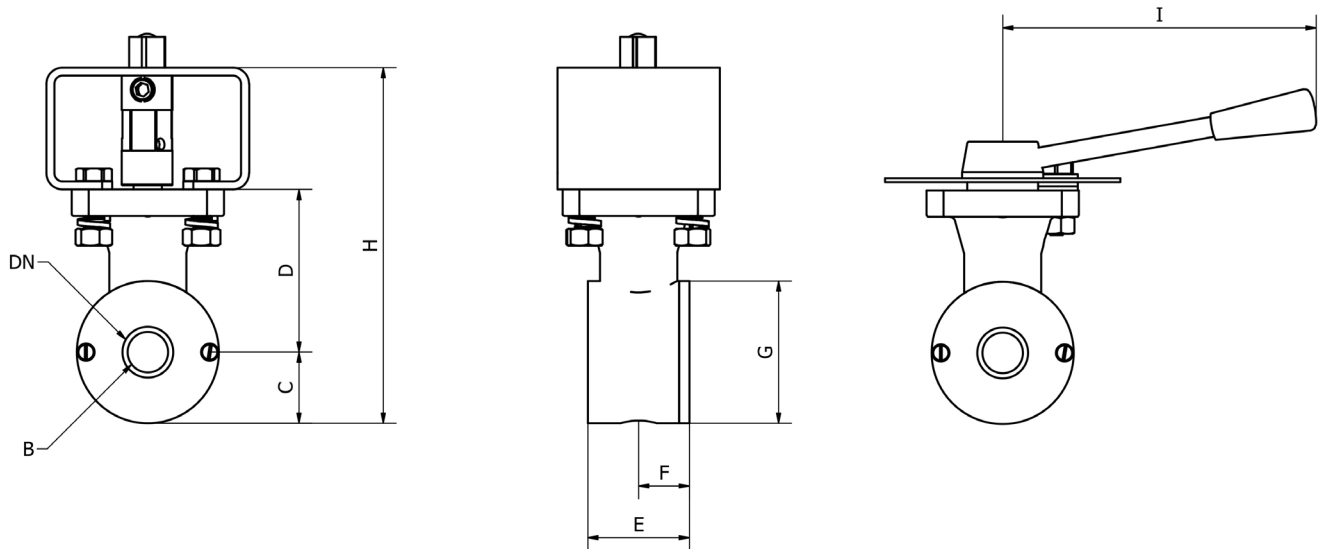
<b>Table 5. Max differential pressure vs temperature</b>					
Valve size	Max recommended differential pressure				
	Seat of PTFE			Seat of Stellite	
DN	0-80°C [bar]	120°C [bar]	150°C [bar]	0-80°C [bar]	200°C [bar]
25-50	25	6	1	25	25
80-100	16	6	1	16	16
150-250	16	6	1	16	12
300	10	6	1	10	8

Above values are guidelines only for normal throttling control and shut off with clean media. For applications involving rapidly cycling pressure and temperature conditions there is sometimes necessary to apply an extra safety factor.

<b>Table 6. Pressure recovery factor FL<sup>(1)</sup></b>							
Factor FL	Opening in percent						
	5%	10%	20%	40%	60%	80%	100%
	0,9	0,88	0,85	0,77	0,67	0,62	0,60

<sup>(1)</sup> Liquid pressure recovery factor

## KS DN25



**Table 7A. Dimensions KS DN25**

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

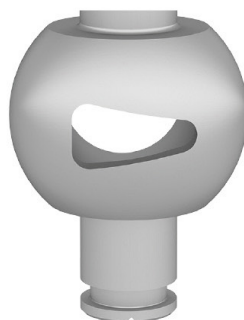
**Table 7B. Valve data KS DN25**

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 <sup>3</sup> /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
Closed	0-18°	0-18°	0-18°	0-18°	0-18°	0-30°	0°	0-25°	0°
Flow control	18-90°	18-90°	18-90°	18-90°	18-90°	30-90°	0-90°	25-90°	0-90°
Bore [mm]	Triangle shaped groove					Triangle shaped bore		15	19
Characteristic	Percentage characteristic					Modified equal percentage		Equal percentage	
Actuator torque [Nm] Recommended <sup>(1)</sup> Max.						20-50		100	

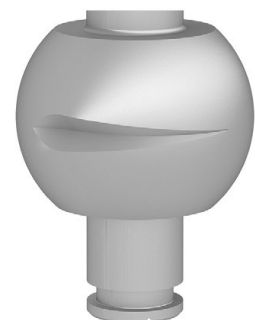
<sup>(1)</sup> The lower value of the torque range can be used for on-off applications for clean media at normal temperatures. The higher value of the torque range shall be used for pneumatic actuators with positioner when high control accuracy is needed or for dirty/sticky media. Indicated torques values include safety factor, on valve's break away torque, which is at least x2.



KS25/20  
Circular opening

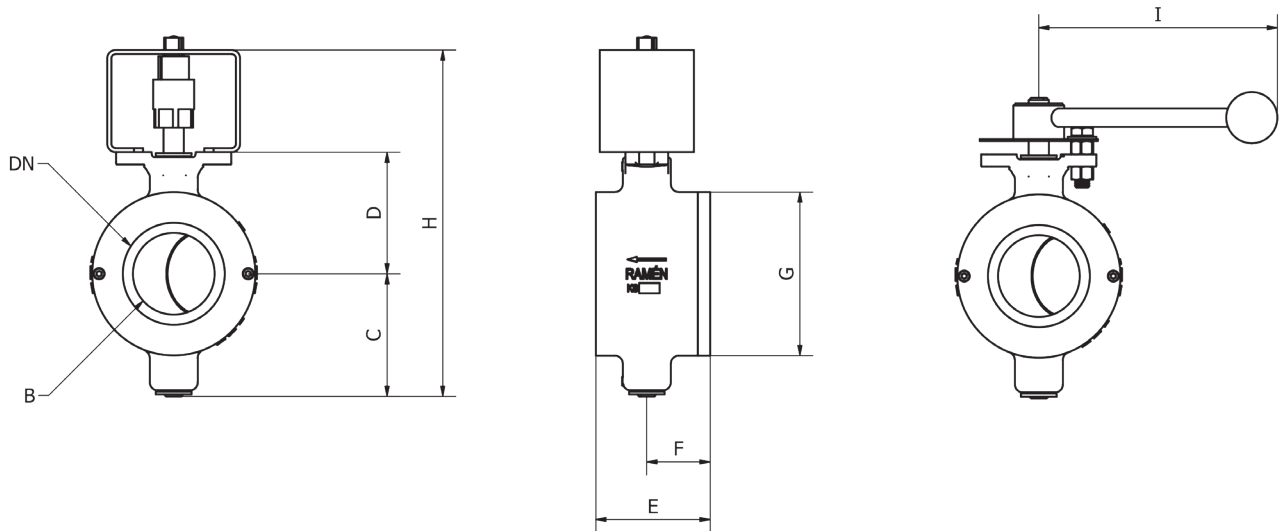


KS25/5  
Triangle shaped bore



KS25/0,3  
Triangle shaped groove

## KS DN40 to DN300



**Table 8A. Dimensions KS DN40 to DN300**

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	107	118	167	188	233	310
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. <sup>(1)</sup>	N.A. <sup>(1)</sup>
Weight [kg]	4	4	8	12	25	38	67	170
Top mounting flange acc. to (EN-ISO 5211) <sup>(2)</sup>	D14 or <sup>(3)</sup> D17 F05 & 07	D14 or <sup>(3)</sup> D17 F05 & 07	D17 or <sup>(3)</sup> D22 F07 & F10	D17 or <sup>(3)</sup> D22 F07 & F10	D22 or <sup>(3)</sup> D27 F10 & F12	D22 or <sup>(3)</sup> D27 F10 & F12	D27 F10 & F12	D36 F14

<sup>(1)</sup> Gear boxes available on request

<sup>(2)</sup> D refers to diagonal square size & F refers to hole pattern.

<sup>(3)</sup> Optional

**Table 8B. Technical specifications KS DN40 to DN300**

DN	40	50	80	100	150	200	250	300
Kvs [m <sup>3</sup> /h]	34 64	94	255	390	810	1365	2220	3840
Cv [gpm]	40 75	110	300	460	950	1600	2600	4500
Actuator torque [Nm] Recommended <sup>(1)</sup>	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°

<sup>(1)</sup> 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.

**Table 9. Technical specifications Ball Sector Valve (For all KSC configurations)**

<b>Design</b>	Flangeless, wafertype (DN 300 flanged)	
<b>Nominal sizes</b>	DN 25 - DN 300, 1"-12"	
<b>Material</b>	<b>Soft seat</b> EN 1.4409, AISI 316L EN 1.4460, AISI 329 EN 1.4409, AISI 316L PTFE (Carbon/graphite reinforced) EN 1.4409, AISI 316L FKM Rulon®	<b>Metal seat</b> EN 1.4409, AISI 316L EN 1.4460, AISI 329 EN 1.4409, AISI 316L+Expanite Stellite EN 1.4409, AISI 316L FKM Rulon®
<b>Nominal pressure</b>	<b>DN 25 - DN 50</b> <b>DN 80 - DN 100</b> <b>DN 150 - DN 250</b> <b>DN 300</b>	PN 40 (for flange PN 10/40 and ANSI 150/300/600) PN 25 (for flange PN 10/25 and ANSI 150/300) PN 16 (for flange PN 10/16 and ANSI 150) PN 16 (Flanged PN 16 or ANSI 150)
<b>Operating temperature</b>	-40°C - 200°C. (-40°F - 392°F)	
<b>Seat leakage class according to EN60534-4</b>	IV (Metal seat) VI (Soft seat)	
<b>Shell test according to EN12266-1</b>	No leakage detectable	
<b>Characteristic</b>	Equal percentage	
<b>Rangeability</b>	Up to 300:1	
<b>Options</b>	Other materials and higher operating temperature on request.	

**Table 10. Technical specifications Pneumatic modulating KSC**

<b>Pneumatic actuator</b>	
<b>Type for modulating KSC</b>	Double acting or spring return
<b>Rotation angle</b>	0° to 90°
<b>Operating pressure</b>	2 - 10 bar
<b>Housing</b>	Anodized aluminum
<b>Operating temperature</b>	-30°C to +80°C
<b>Drive medium</b>	Air (Dry or lubricated), or inert gases (Non-dangerous fluids)
<b>Protection class</b>	IP67
<b>Intelligent positioner</b>	
<b>Input signal</b>	4-20 mA, two wires system
<b>Output signal</b>	4-20mA feedback (as option)
<b>Supply air pressure</b>	1.4 - 6 bar
<b>Communication protocol</b>	HART 7
<b>Housing</b>	Aluminum coated
<b>Protection class</b>	IP66 and NEMA 4X
<b>Operating temperature</b>	-40°C to +85°C
<b>1/4 NPT</b>	1/4 NPT
<b>Electrical connection</b>	M20x1.5
<b>Filter regulator with pressure gauge</b>	
<b>Material</b>	Aluminum
<b>Set pressure</b>	0.5 to 7 bar
<b>Max. supply pressure</b>	10 bar
<b>Operating temperature</b>	-5°C to +60°C
<b>Filter element</b>	5 µm
<b>Pneumatic connection</b>	1/4 NPT

**Table 11. Technical specifications Electric modulating KSC**

Electrical actuator	
Rotation angle	0° to 90°
Standard voltage	1-phase AC current 100 - 240 V / 50 - 60 Hz
Positioner	4-20 mA input/output or 0-10V
Operating temperature	-30°C to +70°C
ON/OFF duty	Classes A and B according to EN 15714-2, short-time duty S2 - 15 min.
Local controls	With push buttons (Under cover)
Protection class	IP68
Insulation class	F tropicalized
Bluetooth	Integrated Bluetooth interface for configuring the actuator
Operating time	From 4 to 320s. Continuous
Handwheel	Yes
Electrical actuator DN 300	
Rotation angle	0° to 90°
Standard voltage	3-phase AC current 220-500V / 50- 60 Hz
Positioner for modulating KSC	4-20 mA input/output or 24VDC OPEN-STOP-CLOSE
Operating temperature	-30°C to +70°C
Modulating duty	Class C according to EN 15714-2, intermittent duty S4 - 25%
Local controls	With push buttons (Under cover)
Protection class	IP68
Insulation class	F tropicalized
Bluetooth	Integrated Bluetooth interface for configuring the actuator
Operating time	From 12 to 125s. Continuous
Handwheel	Yes

**Table 12. Technical specifications Pneumatic ON/OFF KSC**

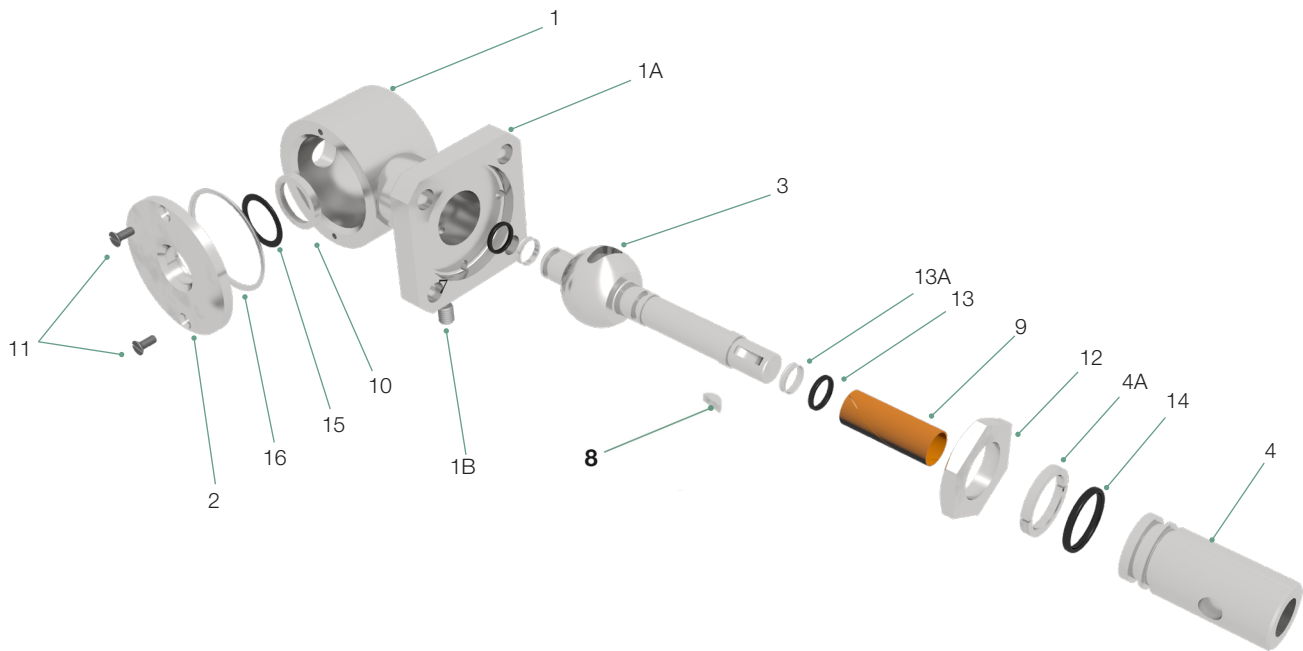
Pneumatic actuator	
Type for modulating KSC	Spring return
Rotation angle	0° to 90°
Operating pressure	2 - 10 bar
Housing	Anodized aluminum
Operating temperature	-30°C to +80°C
Drive medium	Air (Dry or lubricated), or inert gases (Non-dangerous fluids)
Protection class	IP67
Operating time	From 4 to 320s. Continuous
Handwheel	Yes

Solenoid	
Material	Anodized aluminum
Mounting	NAMUR
Min/Max. supply pressure	1.5 / 8 bar
Operating temperature	-10°C to +50°C
Protection class	IP65
Insulation class	F
Voltage	230 VAC, 24 VAC, 24 VDC, 12 VDC
Connection	1/4"
Limit switch	
Type	Mechanical
Enclosure	IP67
Material	Aluminum, Polyester coated
Ambient temperature	-20°C to +80°C

**Table 13. Technical specifications electric ON/OFF KSC**

Electrical actuator	
Rotation angle	0° to 90°
Standard voltage	1-phase AC current 100 - 240 V / 50 - 60 Hz
Operating temperature	-30°C to +70°C
ON/OFF duty	Classes A and B according to EN 15714-2, short-time duty S2 - 15 min.
Local controls	With push buttons (Under cover)
Protection class	IP68
Insulation class	F tropicalized
Bluetooth	Integrated Bluetooth interface for configuring the actuator
Operating time	From 4 to 320s. Continuous
Handwheel	Yes
Electrical actuator DN 300	
Rotation angle	0° to 90°
Standard voltage	3-phase AC current 220-500V / 50- 60 Hz
Operating temperature	-30°C to +70°C
Modulating duty	Class C according to EN 15714-2, intermittent duty S4 - 25%
Local controls	With push buttons (Under cover)
Protection class	IP68
Insulation class	F tropicalized
Bluetooth	Integrated Bluetooth interface for configuring the actuator
Operating time	From 12 to 125s. Continuous
Handwheel	Yes

## Exploded view DN 25



**Table 14A. Parts list DN 25**

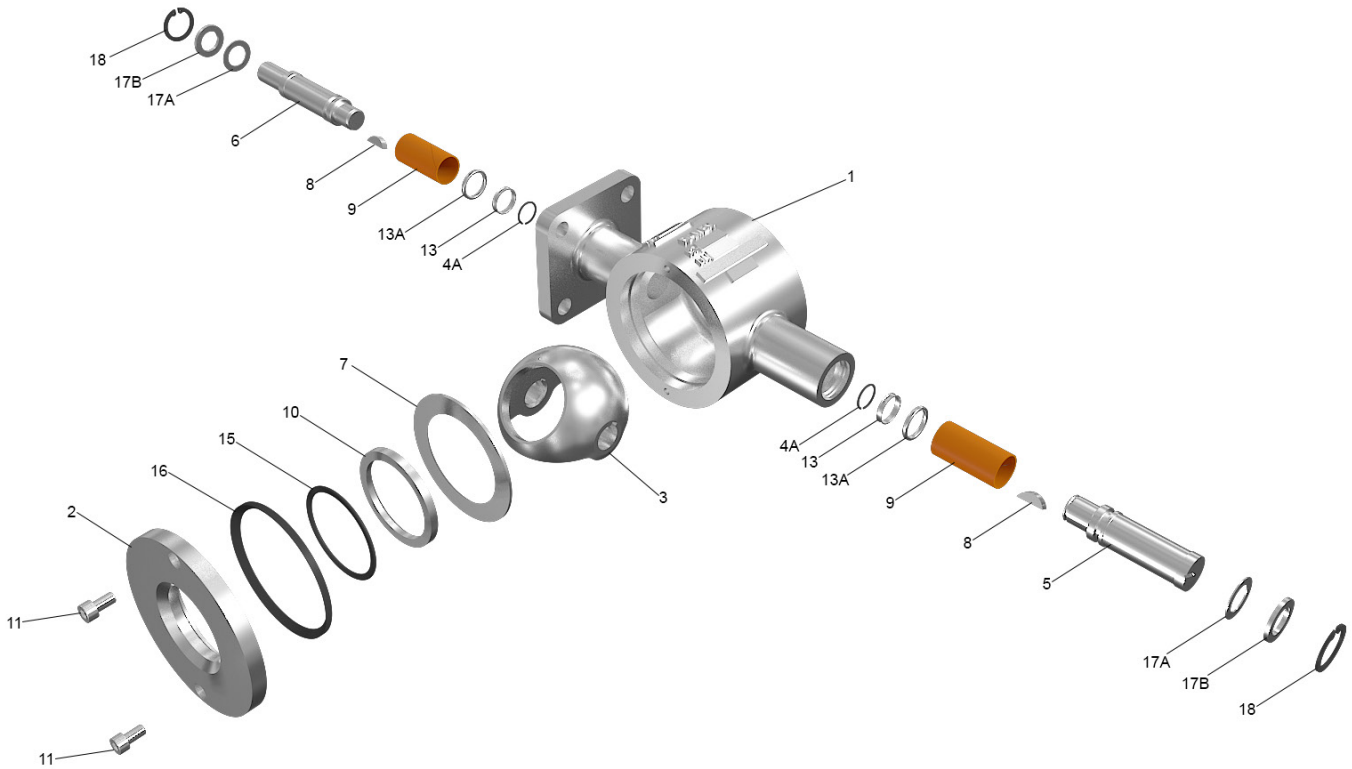
Part	QTY	Name	Material
1	1	Body	EN 1.4432 (AISI 316L)
1A	1	Flange	EN 1.4432 (AISI 316L)
1B	1	Grub screw	EN 1.4409 (AISI 316L)
2	1	Seat holding ring	EN 1.4432 (AISI 316L) SuperExpanite® (model 1C, 1E)
3	1	Ball sector & shaft	EN 1.4435 (AISI 316L) SuperExpanite® (model 1A, 1B, 1C, 1E)
4	1	Bearing sleeve	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	PTFE
10	1	Seat ring	Carbon reinforced PTFE (model 1, 1A) Stellite (model 1B, 1C) Deep Stellite (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

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

**Table 14B.  
Standard spare part kit**

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

## Exploded view DN 40/50



**Table 15A. Parts list DN 40/50**

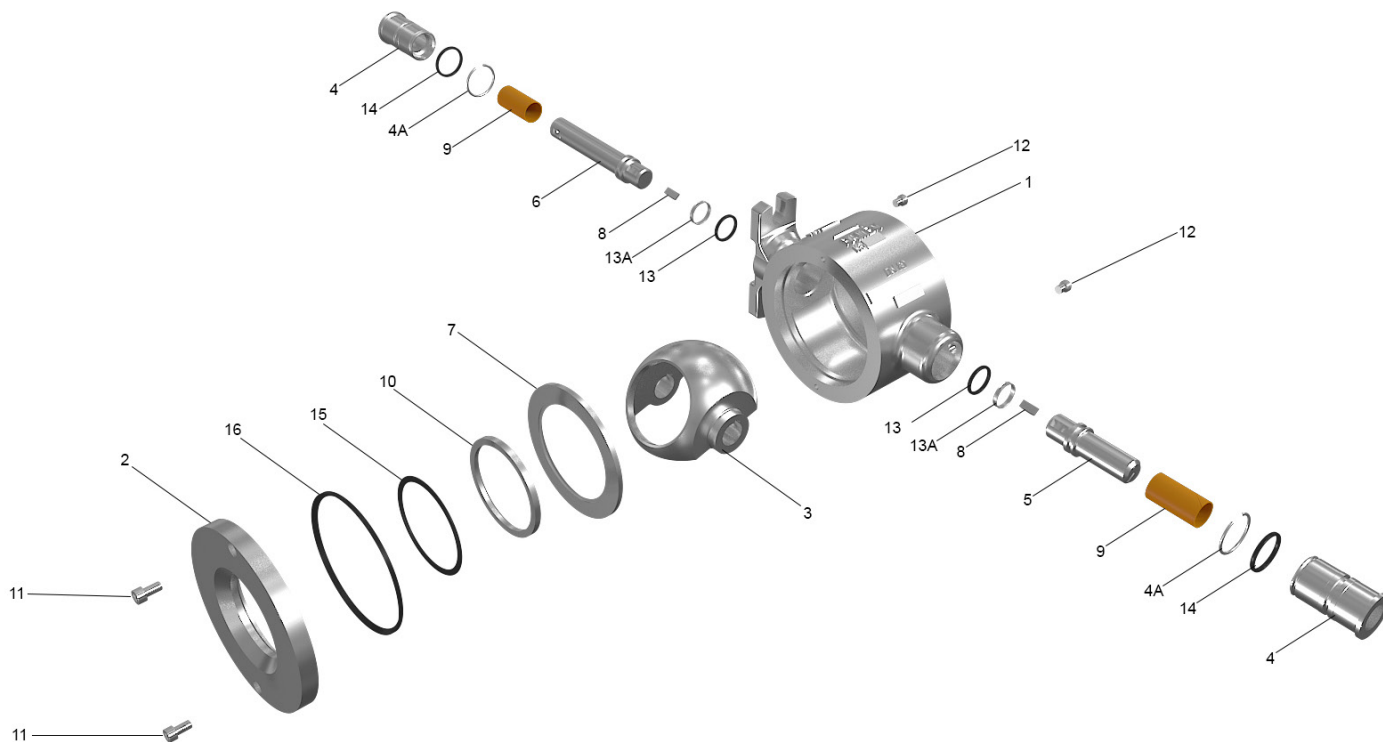
Part	QTY	Name	Material
1	1	Body	EN 1.4409 (AISI 316L)
2	1	Seat holding ring	EN 1.4409 (AISI 316L) SuperExpanite® (model 1C, 1E)
3	1	Ball sector	EN 1.4409 (AISI 316L) SuperExpanite® (model 1A, 1B, 1C, 1E)
4	2	Bearing sleeve	EN 1.4460 (AISI 329)
4A	2	Safety ring	EN 1.4409 (AISI 316L)
5	1	Shaft	EN 1.4460 (AISI 329)
6	1	Shaft	EN 1.4460 (AISI 329)
7	1	Seat support ring	EN 1.4409 (AISI 316L)
8	2	Key	EN 1.4460 (AISI 329)
9	2	Bearing	PTFE
10	1	Seat ring	Carbon reinforced PTFE (model 1, 1A) Stellite (model 1B, 1C) Deep Stellite (model 1E)
12	2	Grub screw	EN 1.4409 (AISI 316L)
13	2	O-ring	FKM
13A	2	Sliding ring	PTFE
14	2	O-ring	FKM
15	1	O-ring	FKM
16	1	O-ring	FKM
17A			
17B			
18			

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

**Table 15B. Standard spare part kit**

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

**Exploded view DN 80-250**



**Table 16A. Parts list DN 80-250**

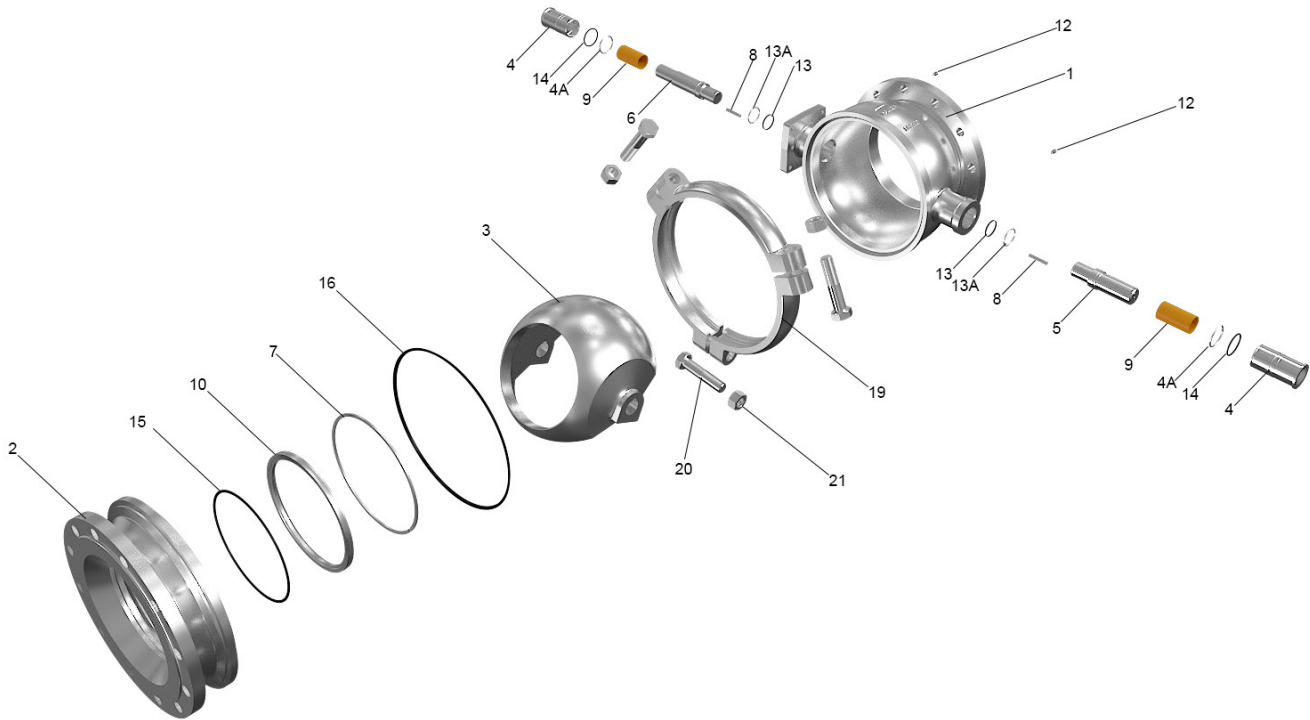
Part	QTY	Name	Material
1	1	Body	EN 1.4409 (AISI 316L)
2	1	Seat holding ring	EN 1.4409 (AISI 316L) SuperExpanite® (model 1C, 1E)
3	1	Ball sector	EN 1.4409 (AISI 316L) SuperExpanite® (model 1A, 1B, 1C, 1E)
4	2	Bearing sleeve	EN 1.4460 (AISI 329)
4A	2	Safety ring	EN 1.4409 (AISI 316L)
5	1	Shaft	EN 1.4460 (AISI 329)
6	1	Shaft	EN 1.4460 (AISI 329)
7	1	Seat support ring	EN 1.4409 (AISI 316L)
8	2	Key	EN 1.4460 (AISI 329)
9	2	Bearing	PTFE
10	1	Seat ring	Carbon reinforced PTFE (model 1, 1A) Stellite (Model 1B, 1C) Deep Stellite (Model 1E)
12	2	Grub screw	EN 1.4409 (AISI 316L)
13	2	O-ring	FKM
13A	2	Sliding ring	PTFE
14	2	O-ring	FKM
15	1	O-ring	FKM
16	1	O-ring	FKM

**Table 16B. 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.

## Exploded view DN 300



**Table 17A. Parts list DN 300**

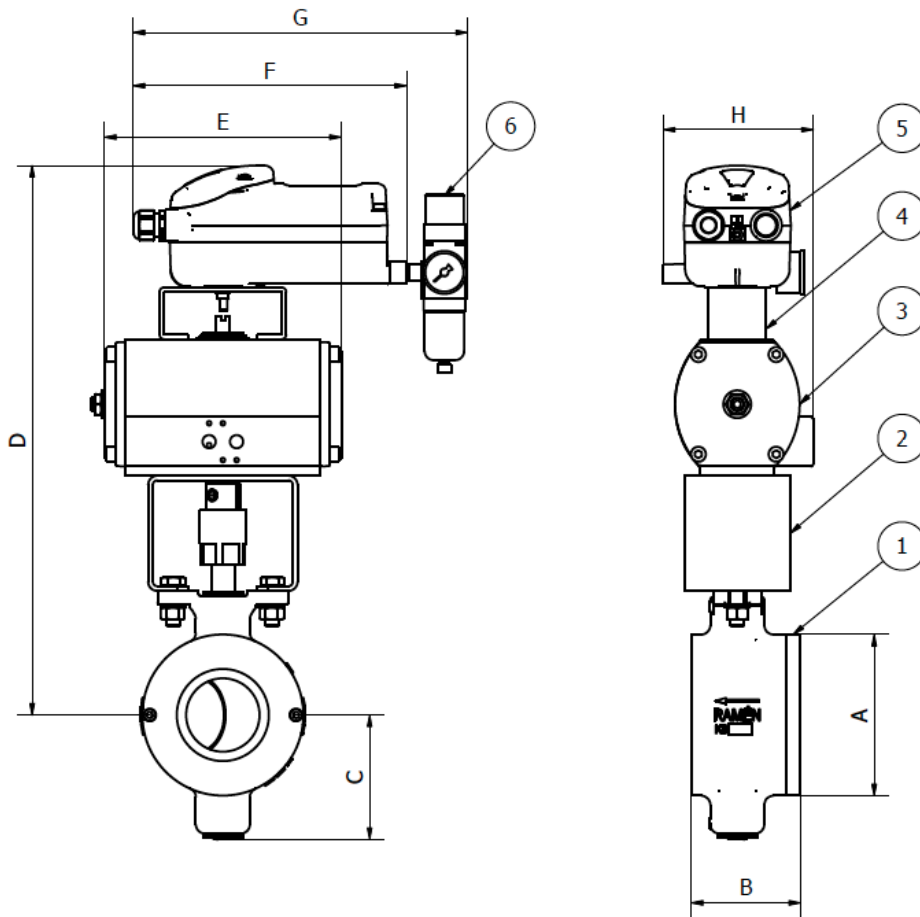
Part	QTY	Name	Material
1	1	Body	EN 1.4409 (AISI 316L)
2	1	Seat holding ring	EN 1.4409 (AISI 316L) SuperExpanite® (model 1C)
3	1	Ball sector	EN 1.4409 (AISI 316L) SuperExpanite® (model 1A, 1B, 1C)
4	2	Bearing sleeve	EN 1.4460 (AISI 329)
4A	2	Safety ring	EN 1.4409 (AISI 316L)
5	1	Shaft	EN 1.4460 (AISI 329)
6	1	Shaft	EN 1.4460 (AISI 329)
7	1	Seat support ring	EN 1.4409 (AISI 316L)
8	2	Key	EN 1.4460 (AISI 329)
9	2	Bearing	PTFE
10	1	Seat ring	Carbon reinforced PTFE (model 1, 1A) Stellite (Model 1B, 1C)
12	2	Grub screw	EN 1.4409 (AISI 316L)
13	2	O-ring	FKM
13A	2	Sliding ring	PTFE
14	2	O-ring	FKM
15	1	O-ring	FKM
16	1	O-ring	FKM
19	1	Clamp ring	EN-GJS-400
20	3	Screw	C.St. Zn.Pl.
21	3	Nut	Stainless steel

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

**Table 17B  
Standard spare part kit**

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

## Dimensions KSC pneumatic control double acting actuator



**Table 18. Dimensions**

DN	25	40	50	80	100	150	200	250	300
A [mm]	70	94	94	140	160	220	274	330	460
B [mm]	50	71	71	95	112	170	210	269	368
C [mm]	35	95	95	108	120	168	196	234	307
D [mm]	400	415	415	478	489	579	607	766	864
E [mm]	175	175	175	206	206	224	224	358	366
F [mm]	238	238	238	238	238	238	238	238	238
G [mm]	310	310	310	310	310	310	310	310	310
H [mm]	105	105	105	120	120	137	137	197	228
WM DA size	8	8	8	12	12	20	20	70	100
Weight [kg]	11	14	14	23	25	39	52	97	204

**Table 19. Part list**

Part no.	Item
1	Ball Sector valve
2	Actuator mounting kit
3	Pneumatic actuator
4	Positioner bracket
5	Positioner
6	Filter regulator

## Dimensions KSC pneumatic control single acting actuator

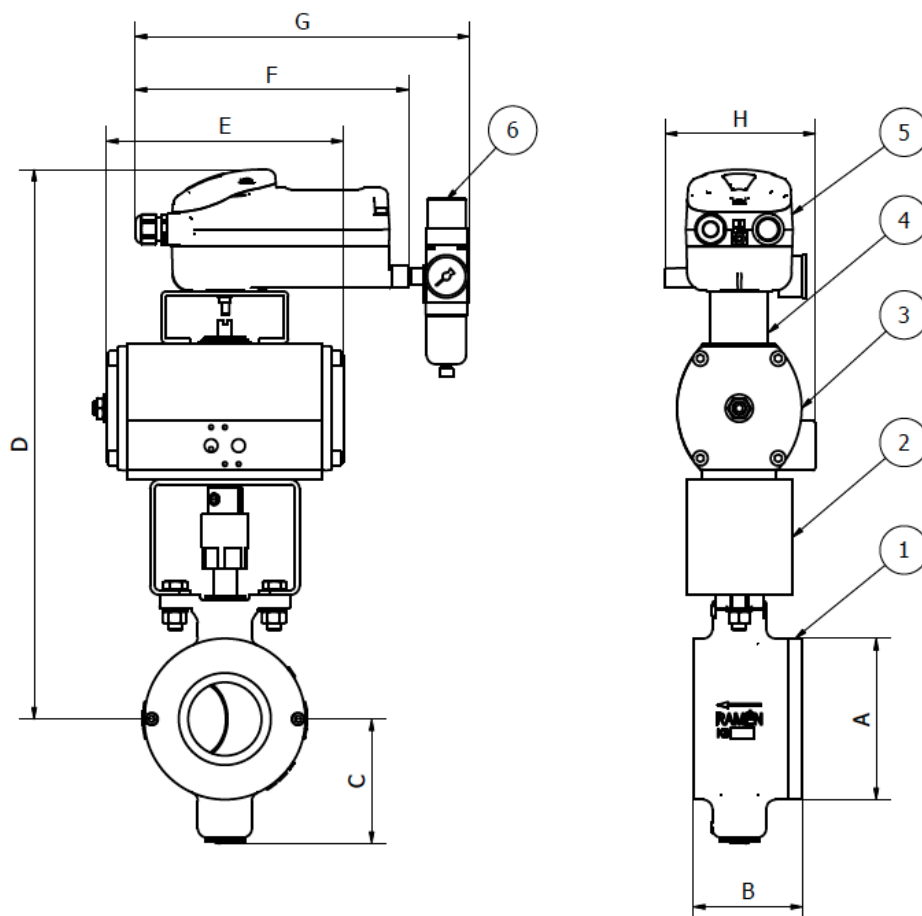
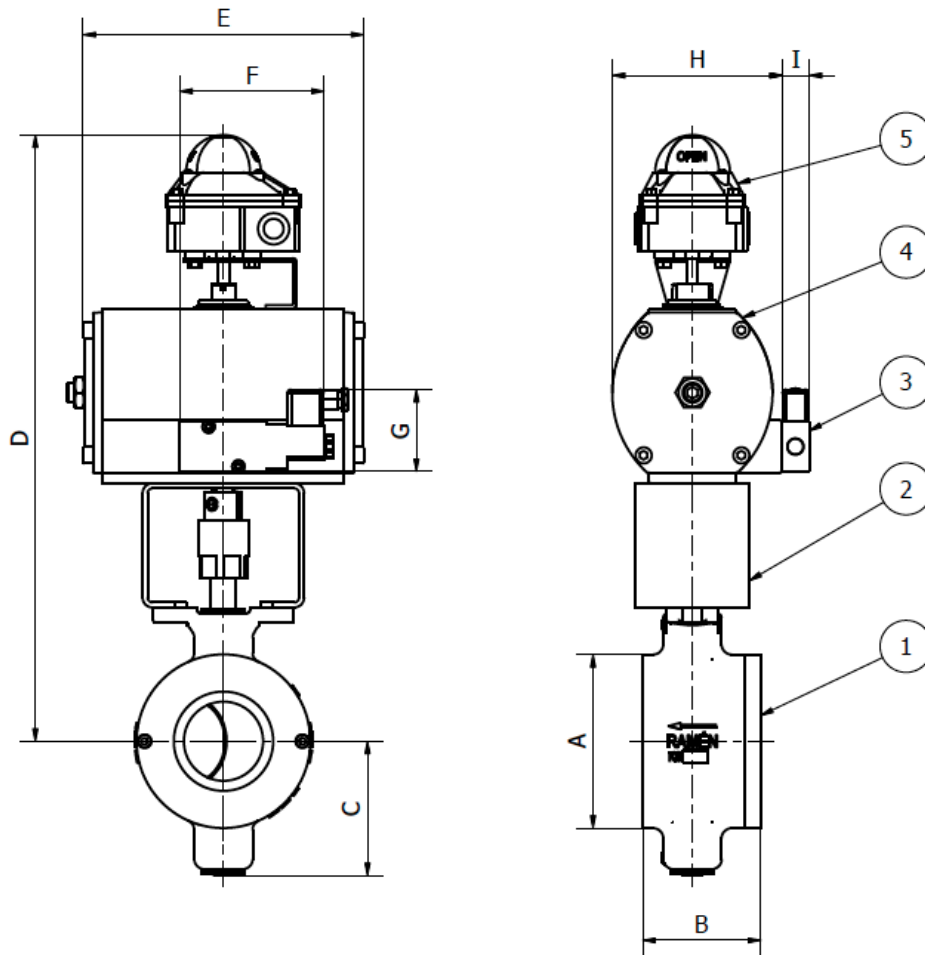


Table 20. Dimensions									
DN	25	40	50	80	100	150	200	250	300
A [mm]	70	94	94	140	160	220	274	330	460
B [mm]	50	71	71	95	112	170	210	269	368
C [mm]	35	95	95	108	120	168	196	234	307
D [mm]	400	425	425	500	511	635	663	766	912
E [mm]	175	206	206	224	224	270	270	358	394
F [mm]	238	238	238	238	238	238	238	238	238
G [mm]	310	310	310	310	310	310	310	310	310
H [mm]	105	120	120	137	137	156	156	197	280
WM SR size	8	12	12	20	20	35	35	70	150
Weight [kg]	11	14	14	23	25	45	58	97	210

Table 21. Part list	
Part no.	Item
1	Ball Sector valve
2	Actuator mounting kit
3	Pneumatic actuator
4	Positioner bracket
5	Positioner
6	Filter regulator

## Dimensions KSC pneumatic ON/OFF



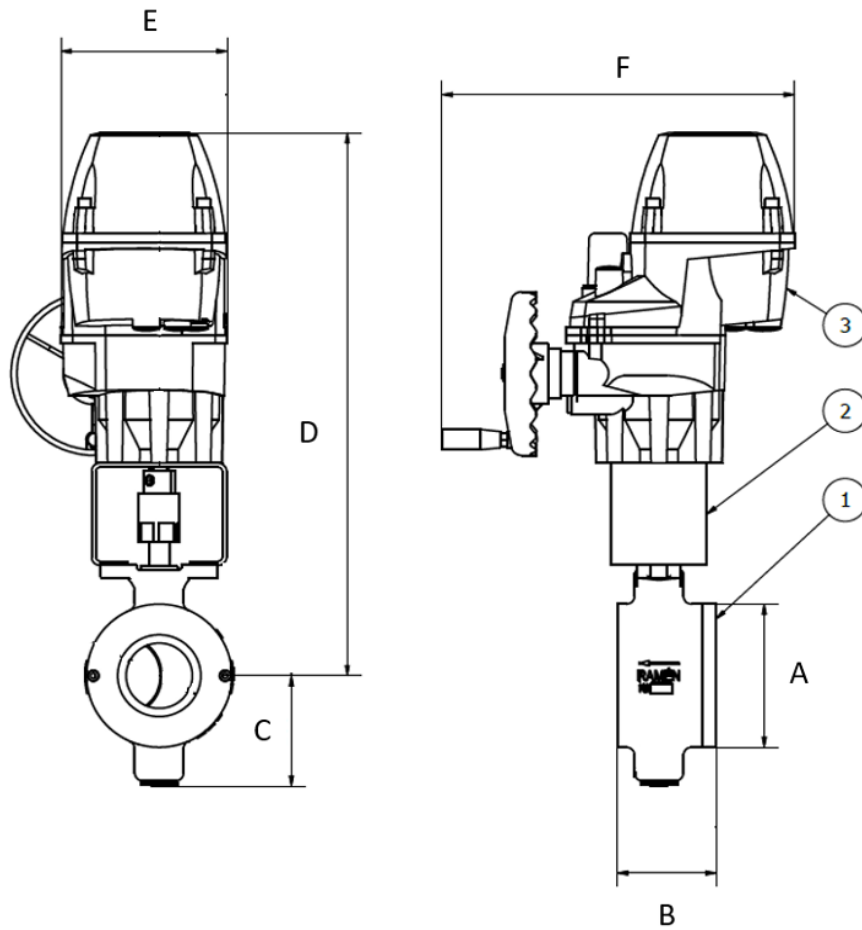
**Table 22. Dimensions**

DN	25	40	50	80	100	150	200	250	300
A [mm]	70	94	94	140	160	220	274	330	460
B [mm]	50	71	71	95	112	170	210	269	368
C [mm]	35	95	95	108	120	168	196	236	307
D [mm]	249	274	274	349	360	792	848	991	1108
E [mm]	177	206	206	226	226	270	270	358	394
F [mm]	105	120	120	137	137	116	116	116	116
G [mm]	66	66	66	66	66	66	66	66	66
H [mm]	105	121	121	137	137	156	156	197	280
I [mm]	22	22	22	22	22	22	22	22	22
WM SR size	8	12	12	20	20	35	35	70	150
Weight [kg]	7	9	9	16	20	43	64	98	226

**Table 23. Part list**

Part no.	Item
1	Ball Sector valve
2	Actuator mounting kit
3	Solenoid
4	Pneumatic actuator
5	Limit switch

## Dimensions KSC electrical control or ON/OFF



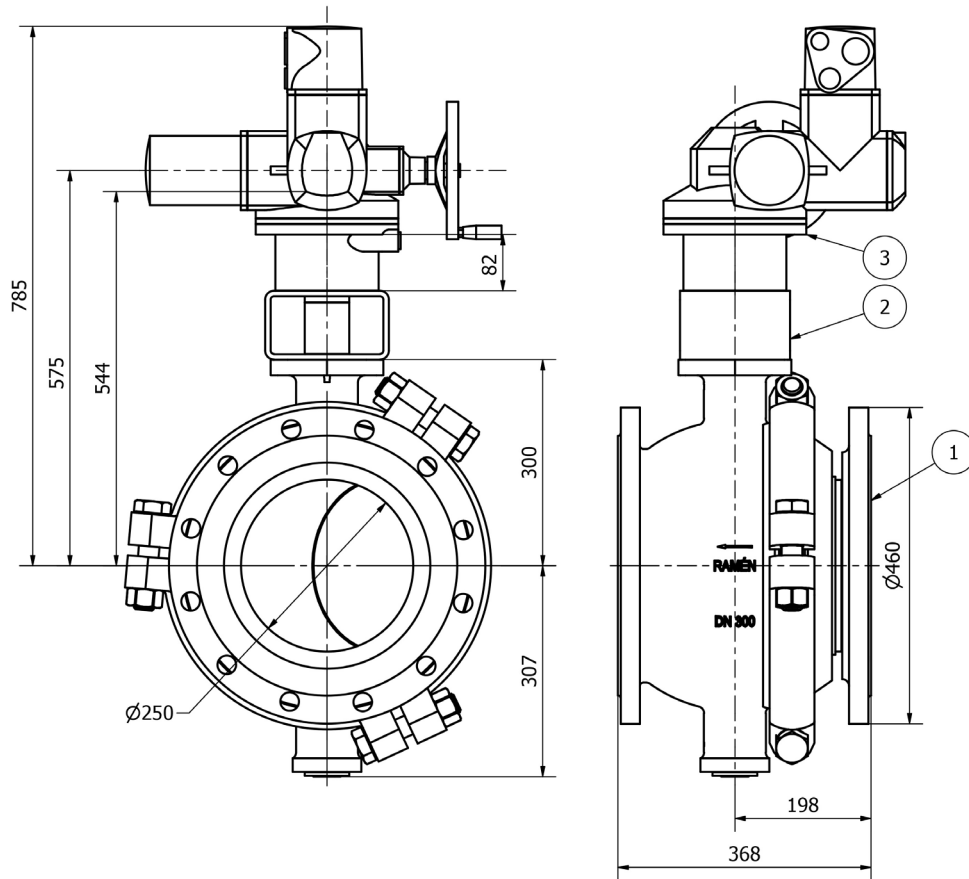
**Table 24. Dimensions**

DN	25	40	50	80	100	150	200	250
A [mm]	70	94	94	140	160	220	274	330
B [mm]	50	71	71	95	112	170	210	269
C [mm]	35	95	95	108	120	168	196	236
D [mm]	427	442	442	531	542	610	638	681
E [mm]	160	160	160	160	160	160	160	160
F [mm]	315	315	315	339	339	339	339	339
PROFOX size	Q80	Q150	Q150	Q300	Q300	Q600	Q600	Q600
Weight [kg]	11	12	12	19	23	36	49	78

**Table 25  
Part list**

Part no.	Item
1	Ball Sector valve
2	Actuator mounting kit
3	Electrical actuator

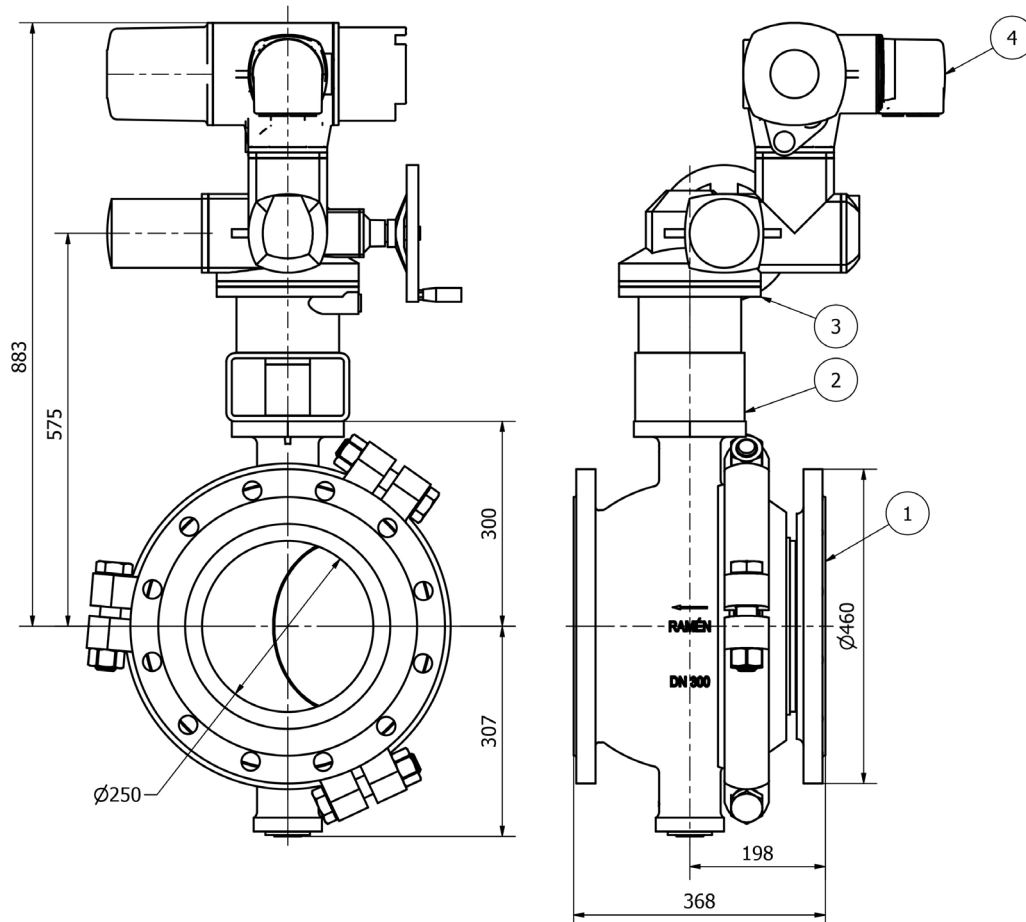
## Parts list KSC electrical ON/OFF DN300



Weight: 213 kg

Table 26 Part list	
Part no.	Item
1	Ball Sector valve
2	Actuator mounting kit
3	Electrical actuator

## Parts list KSC electric modulating DN300



Weight: 220 kg

**Table 27. Part list**

Part no.	Item
1	Ball Sector valve
2	Actuator mounting kit
3	Electrical actuator
4	Controller

**Table 28. Ordering code**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
KS	50	1	A	xK	K	T								

I	Model code
KS	Ball Sector valve/soft or metal seat with shaft/seat O-rings, wafered type (size DN300 in flanged)

II	Nominal Size/ trim size
i.e. DN25/03	25/0,03
	...
DN100	100
	...
DN300	DN300

III	Body and ball sector material
1	AISI316L (EN 1.4409)
5	Titanium grade 5
11	254SMO (EN1.4547)
4G	Body in ductile iron lined with Polyurethane (PUR) and natural rubber (NR) lined ball sector (EN GJS-400-15)

IV	Seat/ wetted part- material combination
-	Seat ring: PTFE, Ball Sector: EN 1.4409
A	Seat ring: PTFE, Ball Sector: AISI 316L+Exp
B	Seat ring: stellite, Ball Sector: AISI 316L+Exp
C	Seat ring: stellite, Ball Sector: AISI 316L+Exp, Seat holding ring: Exp
E	Seat ring: Deep stellite, Ball Sector: AISI 316L+Exp, Seat holding ring: Exp
F	Seat ring: Peek, Ball Sector: EN 1.4409+Exp

V	Shaft sealing O-ring (item 13/14)*	ref. to table α
VI	Seat back-up O-ring (item 15)*	ref. to table α
VII	Sealing between inlet cover ring and body (item 16)*	ref. to table α

Position III and IV are combined, e.g., 1A.

\*If same material for all, please use one code for V,VI,VII ( e.g. EPDM 70 peroxide for all V, VI,VII, coding will be xP)

Table α							
Sealing material	FKM	EPDM 70	EPDM 90	FFKM	Vitoflon	FFKM Perlast	FKM V76F
Code	-	P	F	K	T	R	V

VIII	Pressure class
PN40	DN25-50
PN25	DN80-100
PN16	DN150-300



**Address:** Fredsforstigen 22A, SE-168 67 Bromma, Sweden

**Office:** +46 8 598 931 00 | www.ramenvalves.com