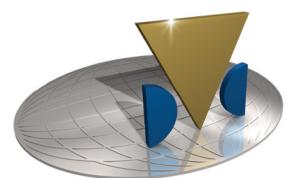




Valves with a difference

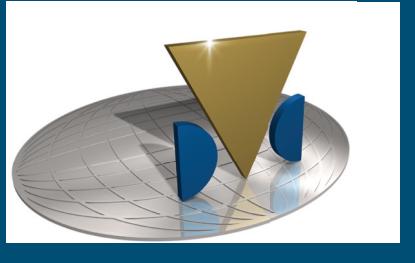
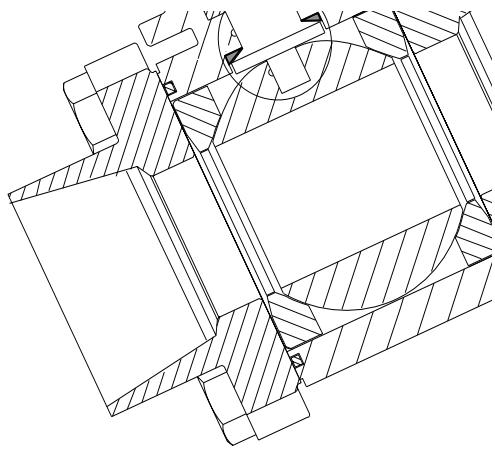
Ball Valves



DVC INTERNATIONAL

With DVC as your business partner, you are always guaranteed a wide and well sorted product range and a unique technical know-how

Product development is a key factor for DVC, ensuring you the best products at any time



Long Service
Stainless Steel
Value for Money
Blow-out Proof Stem
Minimum Drop of Pressure

What is important to you, when you buy Ball Valves? What about: Long service? Easy to clean? Stainless steel? Value for money? Blow-out proof stem? Minimum drop of pressure?

DVC Stainless Steel Ball Valves are characterized by their blow out proof stem and minimum drop of pressure. The Ball Valves are available in a wide range of dimensions.

All these benefits you will get with DVC Ball Valves. It is your assurance for a prosperous business.

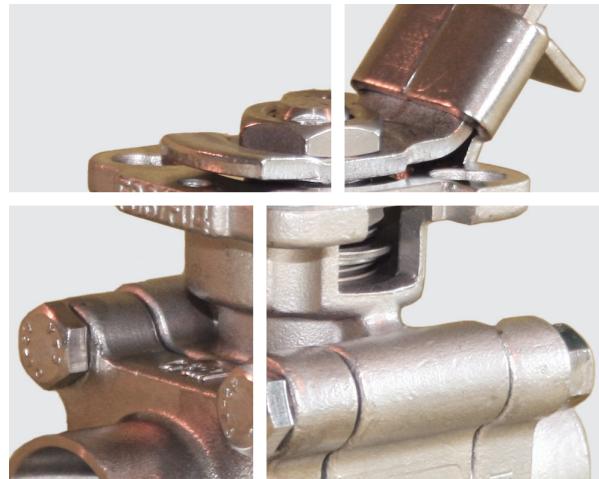
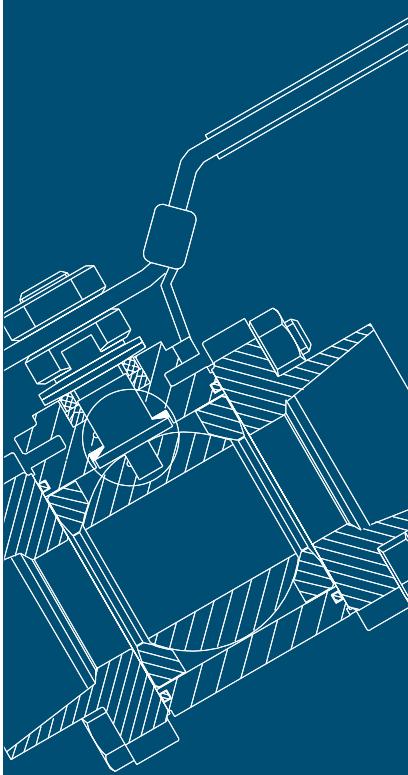


Table of contents



Index.....	3
3-Piece Ball Valve Product Range	4
Flanged Ball Valve Product Range	6
Unique SealMax triple-sealing stem packing system	7
Structure and Material Type 1210 and 1310	8
Structure and Material Type 1211 and 1311	9
Structure and Material Type 1212	10
Structure and Material Type 1213 and 1313	11
Structure and Material Type 1440 and 1441	12
Structure and Material Type 1500 and 1501	13
Dimensions Type 1210 and 1310	14
Dimensions Type 1211 and 1311	15
Dimensions Type 1212	16
Dimensions Type 1213 and 1313	17
Dimensions Type 1440 and 1441	18
Dimensions Type 1500 and 1501	19
Approvals	20
"V" Series Ball Control Port Ball Valves	21
Accesories - Actuators.....	25
Actuator Principle	25
Accessories - Brackets.....	26
Accessories - Limit Switches and Solenoid Valve	27

3-piece ball valve product range

- Solid ball valve for high performance tasks. All ball valves are CE/Atex approved and pressure tested. Can on demand be delivered with certificate EN 10204 - 3.1.
- Bolt circle diameter and face to face dimensions of the body is equal to Worcester, Valtac and Mecafrance from DN15 to DN50. This means that our type 1210/1310 can be mounted between existing end caps.
- Antistatic stem with pyramid segment. Stem with 45 ° face of contact. This means larger contact area together with reinforced stem seat and a surface quality on Ra >/=0,8 µ. These advantages will provide the possibility of a very long lifetime.
- PTFE with 25% carbon fill are used for seats and pyramid segment. This material is very suitable for high pressure and temperature and it offers more resistance to wear than traditional PTFE.
- ISO 5211 flange with recess centers bracket and actuator in order to avoid any dynamic load on the stem and stuffing box.
- Maintenance free stuffing box with belleville washers.
- Reinforced V-rings and FPM O-ring will provide optimum sealing and longer lifetime - also at various temperatures.
- Stainless steel butt weld end caps according to ISO 1127 is standard. From stock we can also deliver butt weld caps according to SMS 3008.

3-piece Ball Valve

Type 1210/1310
Female / female

Dimension
1/4" to 2 1/2"



3-piece ball valve product range

GENERAL

Size/pressure	:	1/4" to 1 1/4" RB = 125 bar 1 1/2" to 2 1/2" RB = 100 bar (Pressure rating depends on packing material and temperature)
Material	:	Steel and stainless steel.
Threaded ends	:	BSPP - DIN 259.2999
Butt weld ends	:	Type 1210 - B 16.25 Type 1310 - DIN 2463/ISO 1127 line 1
ISO top flange	:	ISO 5211

OPTIONS

Approval	:	Fire safe API 607 and BS 6755
Connection	:	Various. BSPT - BS 21, NPT - ANSI B 2.1, JISPT, Socket weld - ANSI B 16.11
Seat/packing	:	Various materials.

3-piece Ball Valve

Type 1211/1311
Female / female

Dimension
1/4" to 4"



GENERAL

Size/pressure	:	1/4" to 1 1/4" RB = 125 bar 1 1/2" to 2 1/2" RB = 100 bar 2 1/2" to 4" RB = 69 bar (Pressure depends of packing material and temperature)
Material	:	Steel and stainless steel
Threaded ends	:	BSPP - DIN 259.2999
Butt welded ends	:	Type 1211 - BS 5351 Type 1311 - DIN 2463/ISO 1127 line 1
ISO top flange	:	ISO 5211

OPTIONS

Materials	:	Other alloys - Titanium
Approvals	:	Fire safe API 607 and BS 6755
Connection	:	Various. BSPT - BS 21, NPT - ANSI B 2.1, JISPT, Socket weld - ANSI B 16.11
Seat/packing	:	Various materials

3-piece ball valve product range

3-piece Ball Valve

Type 1212

Dimension
3/8" to 4"



GENERAL

Size/pressure : 3/8" to 2" = 64 bar
2 1/2" to 4" = 50 bar
(Pressure depends of packing material and temperature)

Material : Steel
Butt weld ends : BS 5351
ISO top flange : ISO 5211

OPTIONS

Material : Other alloys
Connection : Socket weld - ANSI B 16.11
Seat/packing : Various materials

3-piece Ball Valve

Type 1213/1313

Dimension
1/4" to 4"



GENERAL

Size/pressure : 1/4" to 2" FB = 69 bar
2 1/2" to 4" FB = 55 bar
(Pressure depends of packing material and temperature)

Material : Steel and stainless steel
Thread : BSPP - DIN259.2999
Butt weld ends : Type 1213 - BS 5351
ISO top flange : Type 1313 - DIN2463 / ISO 1127 line 1
ISO 5211

OPTIONS

Connection : BSPT - BS 21, NPT - ANSI B 2.1, JISPT,
Seat/packing : Various materials
Socket weld - ANSI B 16.11

Flanged ball valve product range

Flanged Ball Valve

Type 1440/1441

Dimension
DN 15 - DN 100



GENERAL

Dimensions	:	DN 15 - DN 100
Pressure	:	DN 15 - DN 50, PN 40 DN 65 - DN 100 PN 16
Flanges	:	DIN 2635 - PN 40 DIN 2633 - PN 16
Face-to-face	:	EN 558, series 14 for DN15 - DN100 EN 558, series 15 for DN125 - DN150
Mounting Flanges	:	ISO 5211

OPTIONS

Approvals	:	Firesafe API 607 (4 th edition) and BS 6755
Seat/packing	:	Various materials
Face-to-face	:	EN 558, series 15 for all sizes

Flanged Ball Valve

Type 1500/1501

Dimension
DN 15 - DN 100



GENERAL

Size	:	DN 15 to DN 100 (Pressure depends of packing material and temperature)
Material	:	Steel and stainless steel
Face-to-face	:	"Non standard", but near EN 558
Mounting flanges	:	ISO 5211

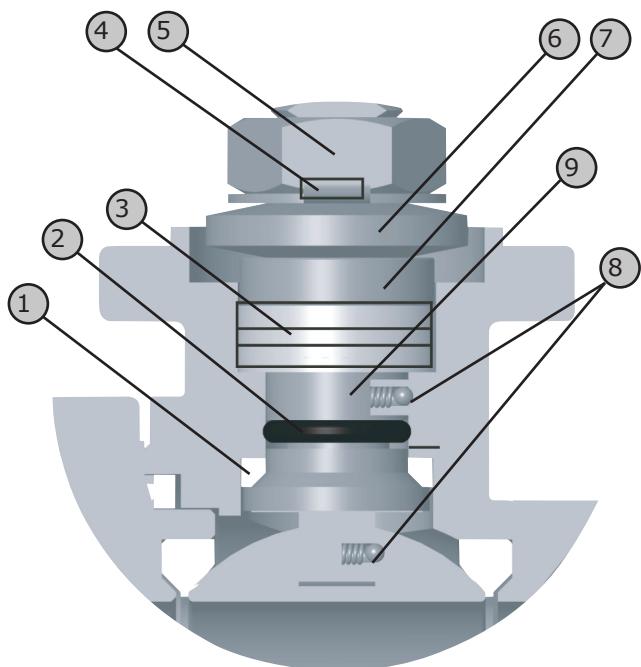
OPTIONS

Approvals	:	Firesafe API 607 (4 th edition) and BS 6755
Material	:	Other alloys
Seat/packing	:	Various materials

Unique SealMax® triple-sealing stem packing system.

- MAINTENANCE FREE - LIVE LOADED
- EXTRA LONG SERVICE INTERVALS
- TA - LUFT APPROVED.
- FIRE-SAFE APPROVED API 607 4TH. EDITION

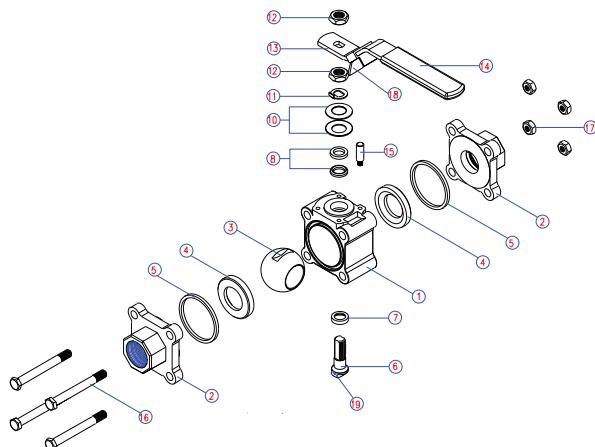
- (1) Antistatic stem with pyramid segment as 1.st stage sealing 45 degrees slope.
- (2) O-ring as 2. stage sealing element.
- (3) V-ring in multiple layers expanding sideways and offering the 3rd sealing element.
- (4) Lock saddle stabilizing the stem nut avoiding loosening during operation.
- (5) Stem nut compresses the entire stem system to make the sealing optimal.
- (6) Belleville washers keeps the sealing system optimal during changing pressures and temperatures.
- (7) Gland of stainless steel equalizes the compressive forces on the sealing system.
- (8) * Anti static devices stem-to-ball and stem-to-body as standard.
- (9) Smooth stem finish reduces seal friction and operating torque prolonging service intervals.



* Only fire-safe approved model

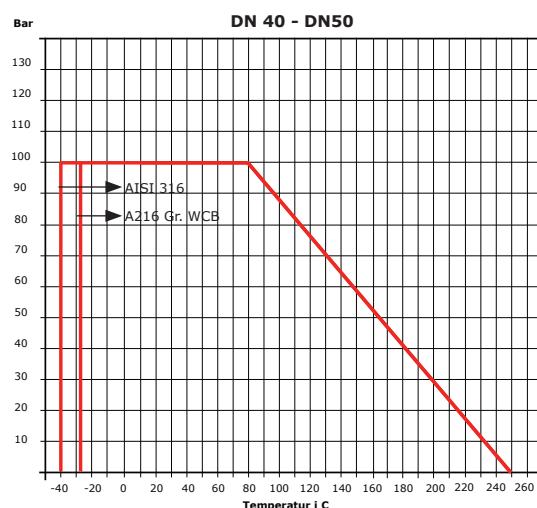
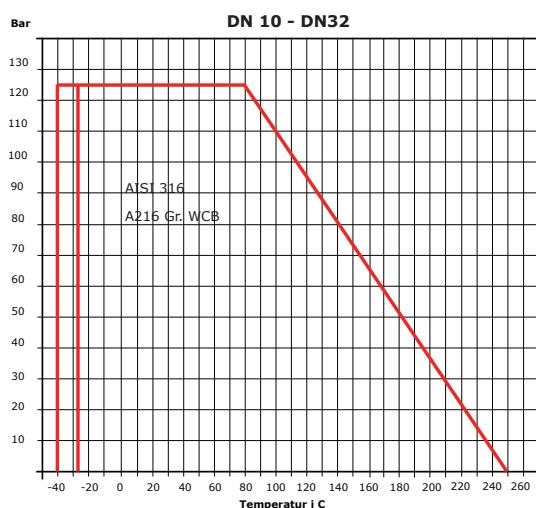
Structure and material type 1210 steel and 1310 stainless steel

Structure and material



No.	Description	Material
1	Body	Stainless steel - AISI 316
2	End Cap	Stainless steel - AISI 316
3	Ball	Stainless steel - AISI 316
4	Seat	PTFE with 25% carbon composit
5	Joint Gasket	PTFE
6	Stem	Stainless steel - AISI 316
7	Stem Seal	PTFE with 25% carbon composit
8	Stem Seal	75% PTFE, 20% glas fiber, 5% graphite
10	Belleville Washer	50CrV4
11	Lock Saddle	Stainless Steel - AISI 304
12	Stem Nut	Stainless Steel - AISI 304
13	Handle	Stainless Steel - AISI 304
14	Handle Sleeve	Vinyl
15	Stop	Stainless Steel - AISI 304
16	Bolt	Stainless Steel - AISI 304
17	Nut	Stainless Steel - AISI 304
18	Locking Device	Stainless Steel - AISI 304
19	Anti-Static Device	Stainless Steel - AISI 304

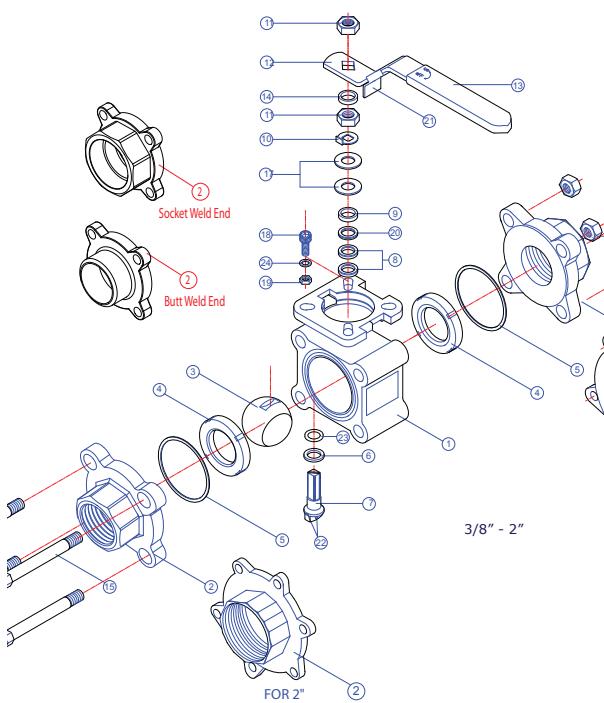
Pressure/temperature for valves with standard seats PTFE with 25% carbon.



Structure and material type 1211 steel and 1311 stainless steel

Structure and material

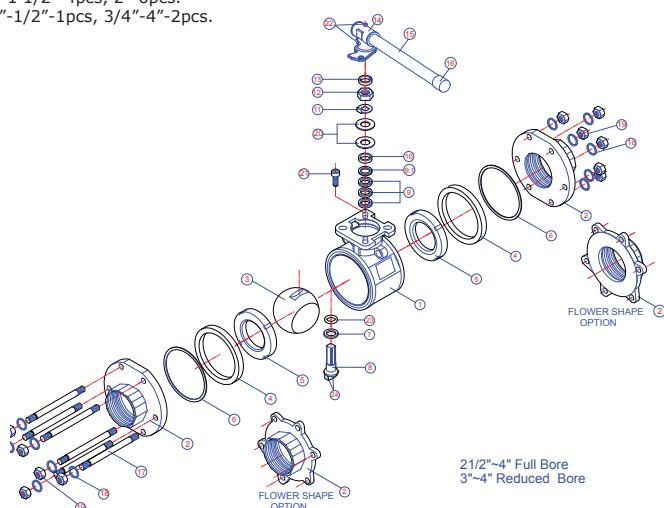
No.	Description	Qty	Material
1	Body	1	CF8M
2	End cap	2	CF8M#
3	Ball	1	SS316
4	Seat	2	RPTFE
5	Joint gasket	2	PTFE
6	Stem seal	1	PTFE
7	Stem	1	SS316
8	Gland packing	2	PTFE
9	Gland bush	1	SS304
10	Lock saddle	1	SS304
11	Stem nut	2	SS304
12	Handle	1	SS304
13	Handle sleeve	1	VINYL
14	Stem washer	1	SS304
15	Bolt	*	SS304
16	Bolt nut	*	SS304
17	Belleville washer	2	SS301
18	Stop pin	1	SS304
19	Pin nut	1	SS304
20	Gland packing	1	25% Glass Fiber Filled + PTFE
21	Locking device	1	SS304
22	Anti-static device	@	SS316
23	O-ring	1	VITON
24	Washer	1	SS304



#socket weld and butt weld uses CF3M material.

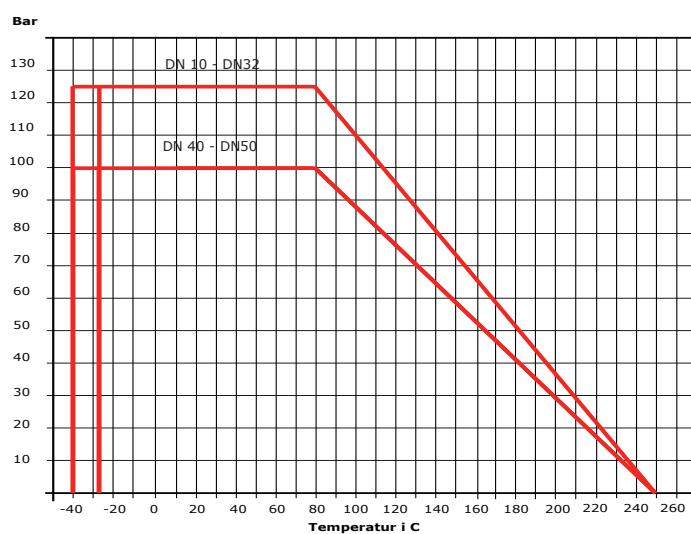
*1/4"-1 1/2"-4pcs, 2"-6pcs.

@1/4"-1/2"-1pcs, 3/4"-4"-2pcs.



No.	Description	Qty	Material
1	Body	1	CF8M
2	End cap	2	CF8M*
3	Ball	1	SS316
4	Seat ring	2	CF8M
5	Seat	2	RTFE
6	Joint gasket	2	PTFE
7	Stem seal	1	RTFE
8	Stem	1	SS316
9	Gland packing	3	PTFE
9.1	Gland packing	1	25% Glass Fiber Filled + PTFE
10	Gland bush	1	SS304
11	Stem washer	1	SS304
12	Stem nut	1	SS304
13	Stem washer	1	SS304
14	Handle-A	1	SS304
15	Handle-B	1	SS304
16	Handle sleeve	1	VINYL
17	Bolt	6	SS304
18	Bolt washer	12	SS304
19	Bolt nut	12	SS304
20	Belleville washer	2	SS301
21	Stop pin	1	SS304
22	Handle screw	2	SS304
23	O-ring	1	VITON
24	Anti-static device	2	ss316

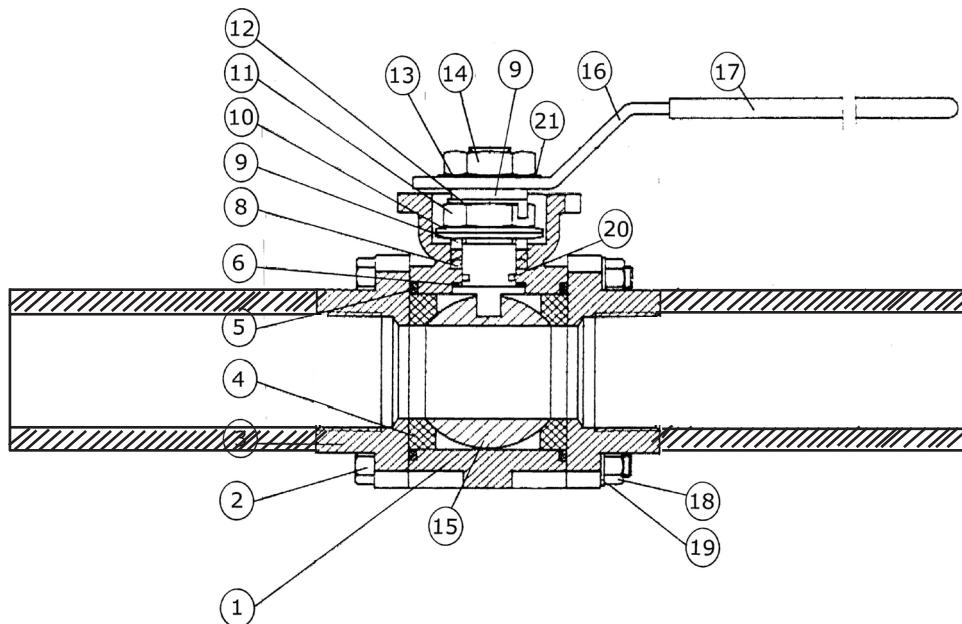
*socket weld and butt weld uses CF3M material.



Pressure/temperature for valves with standard seats PTFE with 25% carbon.

Structure and material type 1212 steel

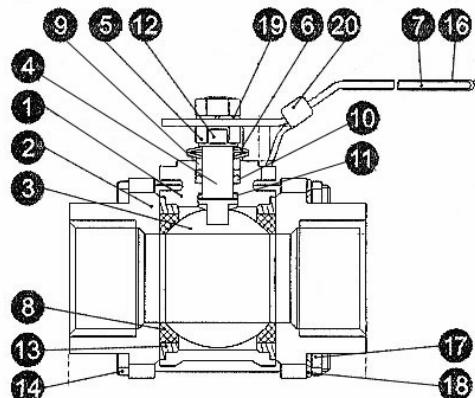
Structure and material



No.	Description	Steel
1	Body	A 216 Gr. WCB
2	Bolt	Steel
3	Connection	A 216 Gr. WCB
4	Seat	PTFE with 25% carbon
5	Joint gasket	PTFE
6	Thrust washer	PTFE with 25% carbon
7	Stop	Stainless steel AISI 304
8	Stem seal	PTFE
9	Bushing	Stainless steel AISI 304
10	Belleville washer	Stainless steel AISI 301
11	Nut	Stainless steel AISI 304
12	Lock saddle	Stainless steel AISI 304
13	Nut	Steel
14	Stem	Stainless steel AISI 304
15	Ball	Stainless steel AISI 304
16	Handle	Steel
17	Sleeve	Vinyl
18	Nut	Steel
19	Washer	Steel
20	O-ring	Viton
21	Washer	Steel

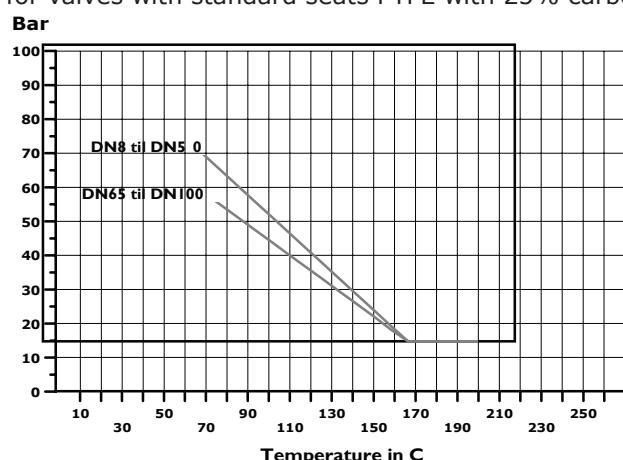
Structure and material type 1213 steel and 1313 stainless steel

Structure and material



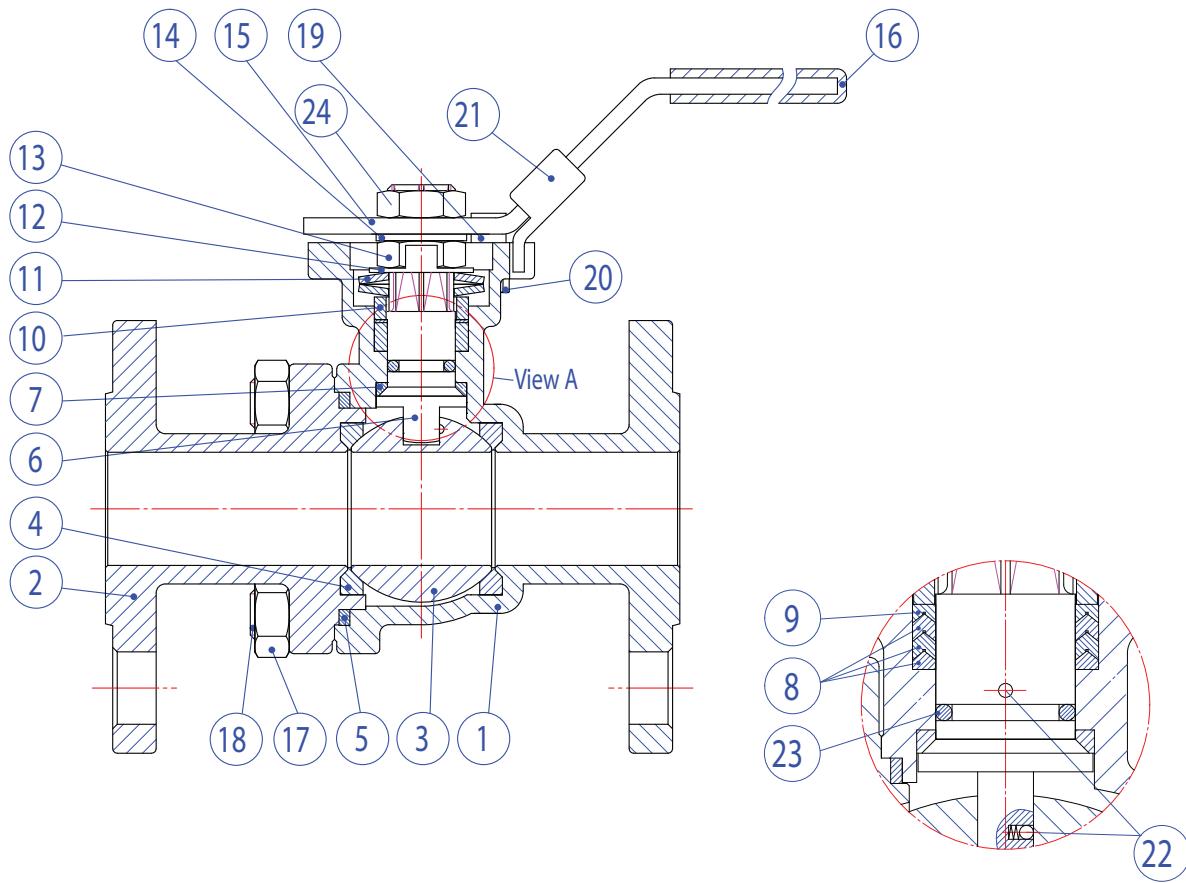
No.	Description	Steel	Stainless steel
1	Body	A216 Gr. WCB	Stainless steel AISI 316
2	Connection	A216 Gr. WCB	Stainless steel AISI 316
3	Ball	Stainless steel AISI 316	Stainless steel AISI 316
4	Stem	Stainless steel AISI 316	Stainless steel AISI 316
5	Stem nut	Stainless steel AISI 304	Stainless steel AISI 304
6	Belleville washer	Stainless steel AISI 301	Stainless steel AISI 301
7	Handle	Stainless steel AISI 304	Stainless steel AISI 304
8	Seat	25% carbon filled PTFE	25% carbon filled PTFE
9	Gland	Stainless steel AISI 304	Stainless steel AISI 304
10	Stem seal	PTFE	PTFE
11	Thrust washer	25% carbon filled PTFE	25% carbon filled PTFE
12	Lock saddle	Stainless steel AISI 304	Stainless steel AISI 304
13	Joint gasket	25% carbon filled PTFE	25% carbon filled PTFE
14	Bolt	Stainless steel AISI 304	Stainless steel AISI 304
15	Sleeve	Vinyl	Vinyl
16	Nut	Stainless steel AISI 304	Stainless steel AISI 304
17	Washer	Stainless steel AISI 304	Stainless steel AISI 304
18	Washer	Stainless steel AISI 304	Stainless steel AISI 304
19	Stop nut	Stainless steel AISI 304	Stainless steel AISI 304

Pressure/temperature for valves with standard seats PTFE with 25% carbon.



Structure and material type 1440 stainless steel and 1441 steel

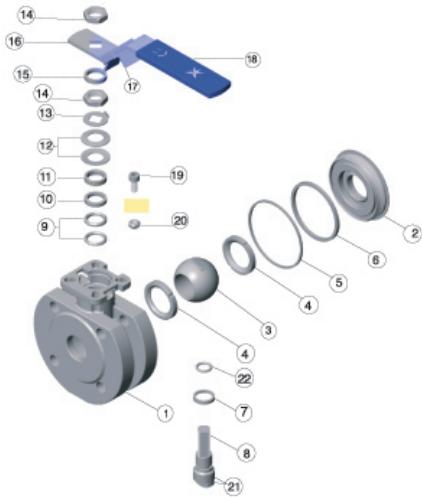
Structure and material



No.	Description	Materials
1	Body	Stainless Steel AISI 316
2	Connection	Stainless Steel AISI 316
3	Ball	Stainless Steel AISI 316
4	Seat	PTFE
5	Packing	PTFE
6	Stem	Stainless Steel AISI 316
7	Pyramid Segment	PTFE
8	V-ring	PTFE
9	Stem Packing	PTFE with 25% glass fibre
10	Bushing	Stainless Steel AISI 304
11	Belleville Washer	Stainless Steel AISI 301
12	Lock Saddle	Stainless Steel AISI 304
13	Stem Nut	Stainless Steel AISI 304
14	Washer	Stainless Steel AISI 304
15	Handle	Stainless Steel AISI 304
16	Handle Sleeve	Vinyl
17	Nut	Stainless Steel AISI 304
18	bolt	Stainless Steel AISI 304
19	Stop	Stainless Steel AISI 304
20	Nut	Stainless Steel AISI 304
21	Locking Device	Stainless Steel AISI 304
22	Anti-static Device	Stainless Steel AISI 304
23	O-ring	Viton
24	Nut	Stainless Steel AISI 304

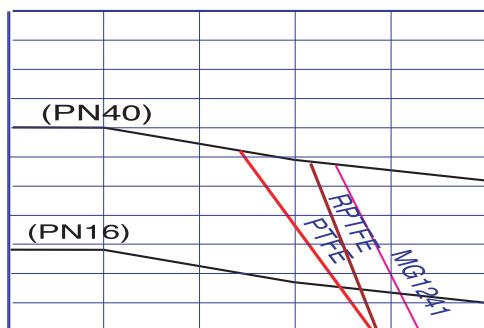
Structure and material type 1500 stainless steel and 1501 steel

Structure and material

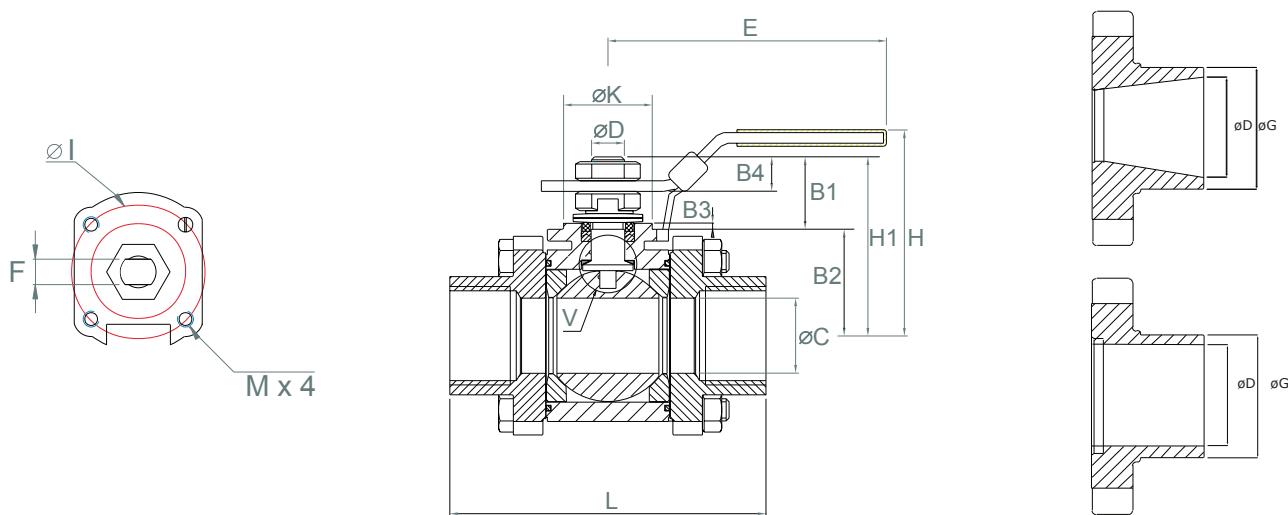


No.	Description	Material
1	Body	GS-C25
2	End cap	GS-C25
3	Ball	Stainless steel AISI 316
4	Seat	PTFE/RPTFE
5	Joint gasket	PTFE
6	Joint gasket	PTFE
7	Stem seal	RPTFE
8	Stem	Stainless steel AISI 316
9	Gland packing	PTFE
10	Gland packing	25% Glass fiber filled + PTFE
11	Gland bush	Stainless steel AISI 304
12	Belleville washer	Stainless steel AISI 301
13	Stop washer	Stainless steel AISI 304
14	Stem nut	Stainless steel AISI 304
15	Stem washer	Stainless steel AISI 304
16	Handle	Stainless steel AISI 304
17	Locking device	Stainless steel AISI 304
18	Handle sleeve	Vinyl
19	Stop pin	Stainless steel AISI 304
20	Pin nut	Stainless steel AISI 304
21	Antistatic - device	Stainless steel AISI 304
22	O-ring	Viton

Pressure/temperature for valves with standard seats PTFE + 25% carbon.



Dimensions type 1210 steel and 1310 stainless steel



Dim.		Valve with handle										Top flange				Stem				
RB		FB		L [mm]	L [mm]	L [mm]	B2	ØC	E	H	H1	ISO 5211	G	K	Mx4	B3	ØD	F	B1	B4
				Thread	Welding	SMS	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
DN15	1/2"	DN10	3/8"	64.8	64.8	64.8	29.8	10	134	64.3	37.2	F03	36	25	M5	0.5	9.5	6.5	7.4	6.1
DN20	3/4"	DN15	1/2"	72.5	75.0	75.0	29.0	15	134	71.5	45.1	F03	36	25	M5	2.0	9.5	6.5	16.1	7.3
DN25	1"	DN20	3/4"	85.4	89.8	89.8	33.0	20	134	76.0	51.1	F03	36	25	M5	2.0	9.5	6.5	18.1	8.8
DN32	1 1/4"	DN25	1"	105.3	109.4	109.4	36.0	25	170	82.3	60.6	F04	42	30	M5	2.0	11.1	8.0	24.6	11.0
DN40	1 1/2"	DN32	1 1/4"	111.0	114.4	114.4	40.0	32	170	87.3	64.3	F04	42	30	M5	2.0	11.1	8.0	24.3	9.7
DN50	2"	DN40	1 1/2"	127.3	130.0	130.0	47.3	38	207	103.6	77.5	F05	50	35	M6	2.0	14.3	9.7	30.2	12.2
DN65	2 1/2"	DN50	2"	145.0	145.0	145.0	69.5	50	207	121.6	95.0	F05	50	35	M6	2.0	14.3	9.7	30.2	12.2

Dim.		*) Torque		Weight [kg]		Kv-values		Butt welding ends				
RB		FB		[Nm]		[kg]		m³/t		Type 1210 ØG / ØD	Type 1310 ØG / ØD	SMS 3008 ØG / ØD
DN15	1/2"	DN10	3/8"	9.6		0.68		6.9		17.5 / 12.5	17.2 / 14.0	12.0 / 10.0
DN20	3/4"	DN15	1/2"	10.8		0.83		6.9		21.7 / 15.8	21.3 / 18.1	18.0 / 16.0
DN25	1"	DN20	3/4"	14.4		1.37		12.7		27.2 / 21.0	26.9 / 23.7	25.0 / 22.6
DN32	1 1/4"	DN25	1"	19.2		2.05		29.2		34.0 / 26.6	33.7 / 29.7	32.0 / 29.6
DN40	1 1/2"	DN32	1 1/4"	31.2		2.74		48.2		42.7 / 35.1	42.4 / 38.4	33.7 / 31.3
DN50	2"	DN40	1 1/2"	40.8		3.99		73.1		48.6 / 40.9	48.3 / 44.2	38.0 / 35.6
DN65	2 1/2"	DN50	2"	57.6		5.83		107.5		60.5 / 52.5	60.3 / 56.3	51.0 / 48.6

1) Torque figure included 30% safety factor.

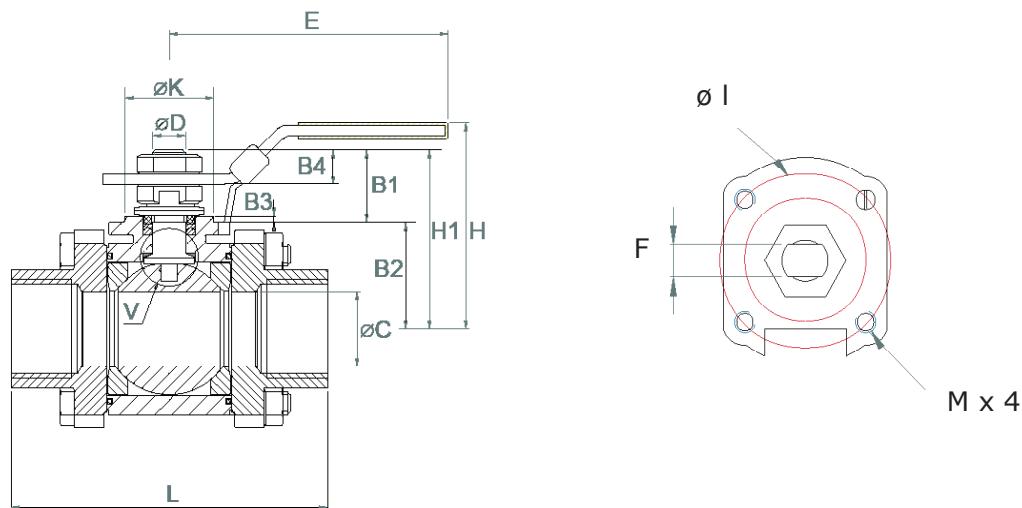
When dimensioning the actuator following must be added:

+15% if dry air and demineralized water.

+30% if sludge and abrasive medias.

- 15% if lubricating medias.

Dimensions type 1211 steel and 1311 stainless steel

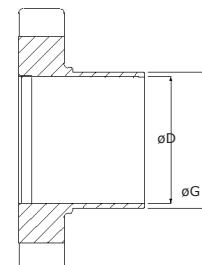


Dim.		Valve with handle							Top flange					Stem				
[DN]	[tomme]	L [mm]	L [mm]	L [mm]	B2	ØC	E	H	H1	ISO 5211	G	K	Mx4	B3	ØD	F	B1	B4
DN10	3/8"	64.8	64.8	64.8	29.8	10	134	64.3	37.2	F03	36	25	M5	0.5	9.5	6.5	7.4	6.1
DN15	1/2"	72.5	75.0	75.0	29.0	15	134	71.5	45.1	F03	36	25	M5	2.0	9.5	6.5	16.1	7.3
DN20	3/4"	85.4	89.8	89.8	33.0	20	134	76.0	51.1	F03	36	25	M5	2.0	9.5	6.5	18.1	8.8
DN25	1"	105.3	109.4	109.4	36.0	25	170	82.3	60.6	F04	42	30	M5	2.0	11.1	8.0	24.6	11.0
DN32	1 1/4"	111.0	114.4	114.4	40.0	32	170	87.3	64.3	F04	42	30	M5	2.0	11.1	8.0	24.3	9.7
DN40	1 1/2"	127.3	130.0	130.0	47.3	38	207	103.6	77.5	F05	50	35	M6	2.0	14.3	9.7	30.2	12.2
DN50	2"	145.0	145.0	145.0	69.5	50	207	121.6	95.0	F05	50	35	M6	2.0	14.3	9.7	30.2	12.2

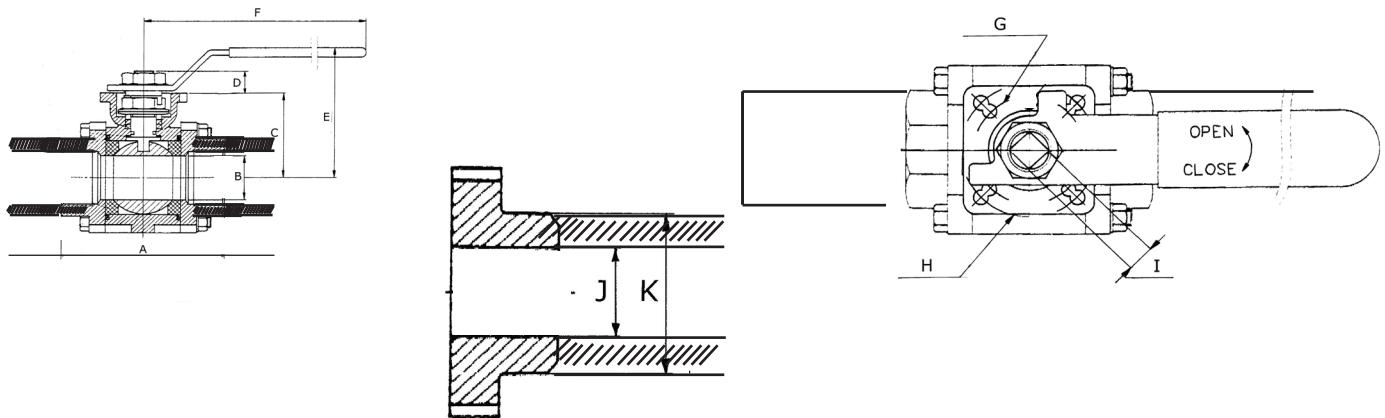
Dim.		*) Torque		Weight [kg]		Kv-values		Butt weld ends					
[DN]	[inch]	[Nm]		[kg]		m³/t		Type 1210	Type 1310	SMS3008			
DN10	3/8"	9.6		0.68		6.9		17.5 / 14.0	17.2 / 14.0	12.0 x 1.0			
DN15	1/2"	10.8		0.83		6.9		21.3 / 17.3	21.3 / 18.1	18.0 x 1.0			
DN20	3/4"	14.4		1.37		12.7		26.9 / 22.3	26.9 / 23.7	25.0 x 1.2			
DN25	1"	19.2		2.05		29.2		33.7 / 28.5	33.7 / 29.7	32.0 x 1.2			
DN32	1 1/4"	31.2		2.74		48.2		42.4 / 37.2	42.4 / 38.4	33.7 x 1.2			
DN40	1 1/2"	40.8		3.99		73.1		48.3 / 43.1	48.3 / 44.2	38.0 x 1.2			
DN50	2"	57.6		5.83		107.5		60.3 / 54.5	60.3 / 56.3	51.0 x 1.2			

1) Torque figure included 30% safety factor.
When dimensioning the actuator following must be added:

+15% if dry air and demineralized water.
+30% if sludge and abrasive medias.
- 15% if lubricating medias.



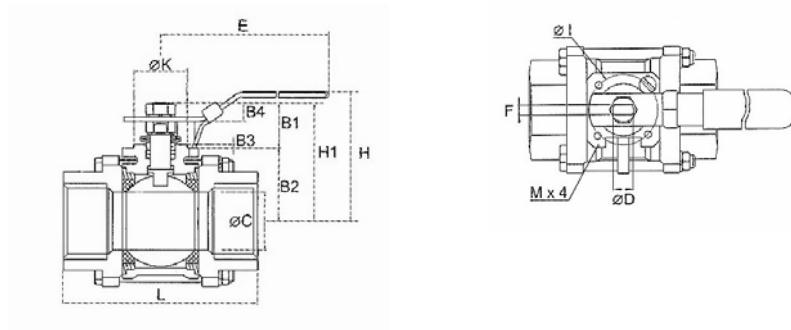
Dimensions type 1212 steel



Dim.	Valve with handle					Weld ends									
	DN	A weld	B	C	E	F	J	K	ISO 5211	G	øGx4	ISO 5211	H	øHx4	I
10	225	11.6	35.1	72.0	114	10	18	F03	36	5.5	-	-	-	9	6.7
15	225	12.7	35.1	72.0	114	15	21.8	F03	36	5.5	-	-	-	9	6.7
20	225	15.0	40.5	77.0	114	20	28	F03	36	5.5	F04	42	5.5	9	8.0
25	245	20.0	50.5	87.0	114	25	34	F03	36	5.5	F04	42	5.5	9	9.6
32	255	25.4	50.5	91.0	133	32	43	F04	42	5.5	F05	50	6.5	11	12.5
40	260	31.8	60.0	99.0	187	40	49	F04	42	5.5	F05	50	6.5	11	12.6
50	275	38.1	77.0	116.0	187	50	61	F05	50	6.5	F07	70	8.5	14	16.1
65 F	334	65.0	93.0	147.0	315	70	8.5	F07	70	8.5	-	-	-	17	28.5
80	354	76.0	113.0	167.0	315	82	88.9	F07	70	8.5	-	-	-	17	30.0
100	365	100.0	137.0	187.0	315	105	114.3	F07	70	8.5	F10	102	10.5	19	31.5

F - Full bore

Dimensions type 1213 steel and 1313 stainless steel



Dim.		Valve with handle						ISO top flange						Stem				K _v -value
(mm)	(inch)	L	B2	ØC	E	H	H1	ISO 5211	ØI	ØK	Mx4	B3	ØD	F	B1	B4	Full Open	
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		(mm)	(m ³ /h)								
10	3/8"	63.5	29.5	13	130	65.0	50.5	F03	36	25	M5	2	9.5	6.5	19.5	8.3	6.9	
15	1/2"	65.5	29.5	15	130	65.0	50.5	F03	36	25	M5	2	9.5	6.5	19.5	8.3	10.3	
20	3/4"	76.2	33.0	20	130	68.0	53.7	F03	36	25	M5	2	9.5	6.5	19.5	8.6	27.5	
25	1"	86.0	40.0	25	165	71.0	66.3	F04	42	30	M5	2	11.0	8.0	20.9	13.7	48.2	
32	1 1/4"	102.8	41.0	32	165	78.0	65.9	F04	42	30	M5	2	11.0	8.0	25.3	13.8	70.5	
40	1 1/2"	119.0	47.5	38	190	86.0	80.7	F05	50	35	M6	2	14.0	9.7	31.5	14.6	103.2	
50	2"	131.4	55.0	50	190	95.0	88.0	F05	50	35	M6	2	14.0	9.7	31.5	14.6	207.0	
65	2 1/2"	164.0	75.0	65	250	130.0	119.3	F07	70	55	M8	2	19.0	12.0	41.2	26.7	275.0	
80	3"	182.5	85.0	80	250	148.0	125.8	F10	102	70	M10	2	19.0	12.0	41.4	21.9	499.0	
100	4"	235.6	108.0	100	280	185.0	161.8	F10	102	70	M10	2	24.0	15.0	51.0	33.0	877.0	

Dim.		1) Torque (Nm)	Weight (kg)	Butt weld ends	
(mm)	(inch)			Type 1213	Type 1313
10	3/8"	9.6	0.40	17.2/12.7	17.2/14.0
15	1/2"	9.6	0.60	21.3/15.0	21.3/18.1
20	3/4"	10.8	0.80	26.9/20.5	26.9/23.7
25	1"	20.4	1.10	33.7/25.7	33.7/29.7
32	1 1/4"	21.6	1.70	42.4/34.4	42.4/38.4
40	1 1/2"	36.0	2.60	48.3/40.3	48.3/44.3
50	2"	46.8	3.20	60.3/51.3	60.3/55.1
65	2 1/2"	73.2	7.40	76.1/67.1	76.1/70.9
80	3"	102.0	11.20	88.9/80.0	88.9/83.7
100	4"	156.0	20.30	114.3/103.1	114.3/109.1

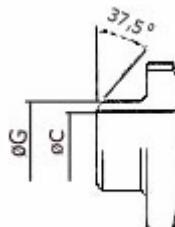
1) Torque figure included 30% safety factor.

When dimensioning the actuator following must be added:

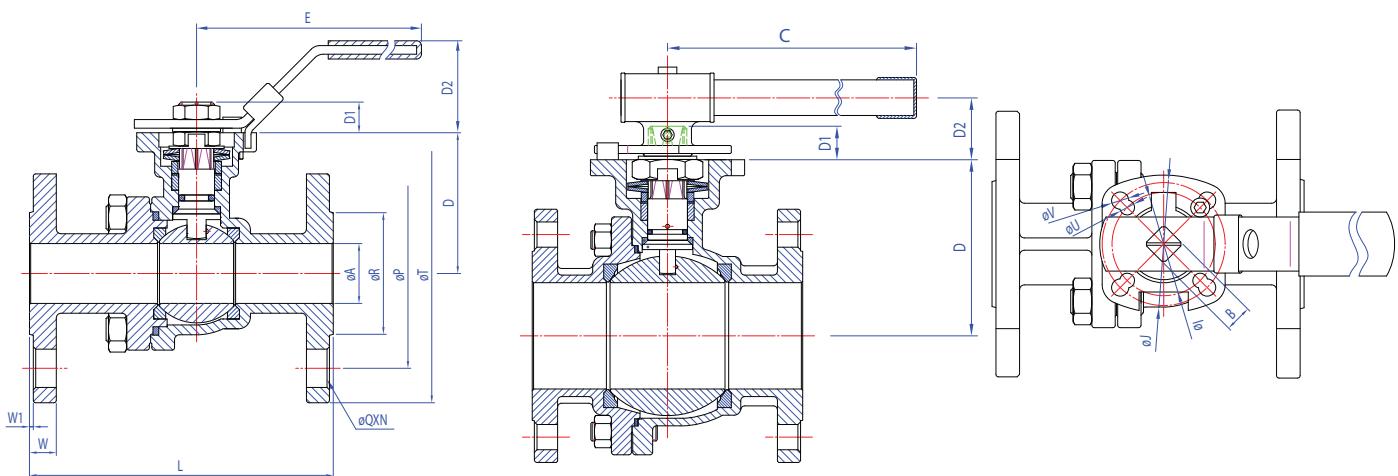
+15% if dry air and demineralized water.

+30% if sludge and abrasive medias.

- 15% if lubricating medias.



Dimensions type 1440 stainless steel and 1441 steel



Dim.	Valve with handle										ISO top flange						Stem		
	[mm]	øA	C	D	D2	L	øQxN	øP	øR	øT	W	W1	ISO 5211	øI	øUx4	ISO 5211	øJ	øVx4	B
15	15	165	49	36	115	14 x 4	65	45	95	16	2	F04	42	6.0	F05	50	7.0	11	10
20	20	165	54	36	120	14 x 4	75	58	105	18	2	F04	42	6.0	F05	50	7.0	11	10
25	25	165	59	38	125	14 x 4	85	68	115	18	2	F04	42	6.0	F05	50	7.0	11	11
32	32	215	73	49	130	18 x 4	100	78	140	18	2	F05	50	7.5	F07	70	9.0	14	13
40	40	262	89	58	140	18 x 4	110	88	150	18	3	F07	70	10.0	F10	102	12.0	17	19
50	50	262	97	58	150	18 x 4	125	102	165	20	3	F07	70	10.0	F10	102	12.0	17	19
65	65	262	116	58	170	18 x 4	145	122	185	20	3	F07	70	10.0	F10	102	12.0	17	19
80	80	365	133	46	180	18 x 8	160	138	200	20	3	F10	102	12.0	F12	125	14.0	22	23
100	100	365	157	46	190	18 x 8	180	158	220	20	3	F10	102	12.0	F12	125	14.0	22	23

Valve data

Dim.	* Torque [Nm]			Kv-value [m³/h at 1 bar]			Weight	
	[MM]	Break away torque	At 0 bar	90° fully open	[kg]			
15		13.2	10.8	10	2.10			
20		16.8	13.2	27	3.00			
25		20.4	16.8	48	3.70			
32		28.8	22.8	70	5.50			
40		49.2	39.6	102	8.20			
50		54.0	43.2	204	9.40			
65		70.8	56.4	272	14.70			
80		116.4	93.6	493	19.60			
100		176.4	140.4	867	27.25			

* Torque figure included 30% safety factor.

When dimensioning the actuator please add the following:

+ 15% if dry air or demineralized water.

+ 30% if sludge or abrasive medias.

- 15% if lubricating medias.

Dimensions type 1500 stainless steel and 1501 steel

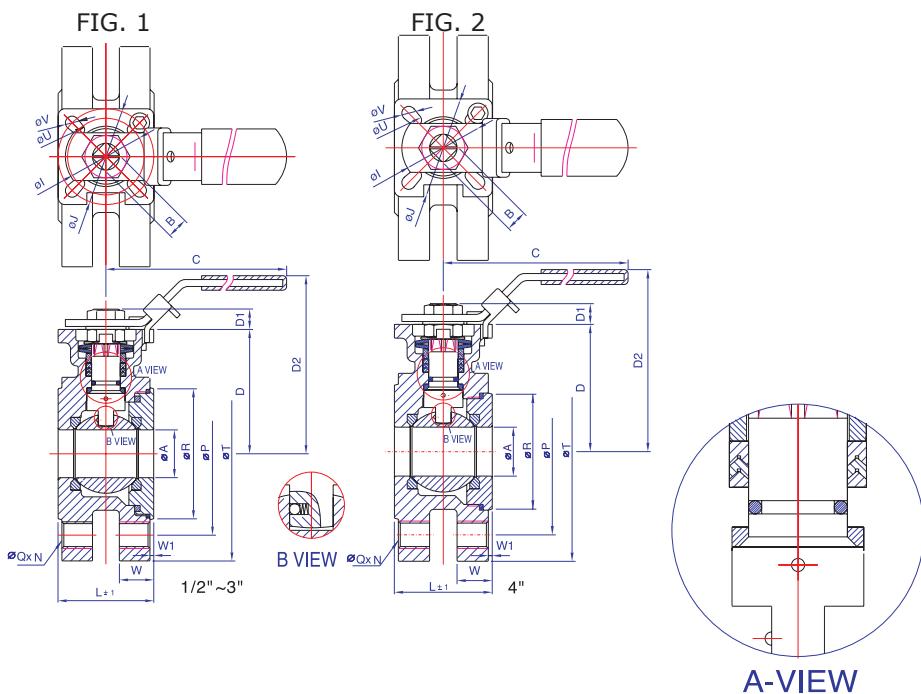


FIG. 1 PN 10/16 & FIG. 2 PN 25/40

SIZE	ØA	B	C	D	D1	D2	Ø I	Ø J	L	N	*N	Ø P	Q	Ø R	Ø T	W	W1	Ø U	Ø V	Wt(kg)	ISO 5211
DN15	15	9	139	48.7	7	85	36	42	40.8	4	4	65	M12	45	82	16	2	6	6	1.3	F03/F04
DN20	20	9	139	5.7	8	90	36	42	44	4	4	75	M12	58	98.6	18	2	6	6	1.96	F037F04
DN25	25	11	165	65	12	104	40	50	50	4	4	85	M12	68	115	18	2	6	7	2.8	F04/F05
DN32	32	11	165	77	11.3	116	40	50	60	4	4	100	M16	78	140	18	2	6	7	4.15	F04/F05
DN40	38	14	215	85.5	15.5	135	50	70	65	4	4	110	M16	88	150	18	3	7.5	9	5.25	F05/F07
DN50	50	14	215	93	16	142	50	70	80	4	4	125	M16	102	165	18	3	7.5	9	6.66	F05/F07
DN65	65	17	263	109.7	15.8	168	70	102	110	4	8	145	M16	122	185	22	3	10	12	11.88	F07/F10
DN80	80	17	313	119.5	16	178	70	102	120	8	8	160	M16	138	200	24	3	10	12	14.9	F07/F10

FIG. 1 PN 10/16 & FIG. 2 PN 25/40

SIZE	ØA	B	C	D	*D	D1	D2	*D2	Ø I	Ø J	L	N	Ø P
DN100	100	17	344	131.7	132.7	17.8	190	191	70	102	150	8	180
*Ø P	Ø Q	*Ø Q	Ø R	*Ø R	Ø T	*Ø T	W	*W	W1	Ø U	Ø V	Wt(kg)	ISO5211
190	M16	M20	158	162	220	235	20	24	3	10	12	20.38	F07/F10

Approvals



- CE - according to PED 97/23/EC
- EN10204 3.1(please always inform if necessary).
- ATEX - according to directive 94/9/FG
- TA LUFT 2002, SEC 5.2.01

Installation guide

■ Installation

- 1.1 The valve is capable of tight shutoff with flow in either direction or dead-end, regardless of the position of the valve in the line.
- 1.2 To prevent damage to the seat and ball surface, the pipeline must be flushed free of dirt, burrs and welding residues, before installing the valve.
- 1.3 Maintain the valve or drive it in rotation only on the screwed side: by the 6-sides end with a plane wrench or an adjustable wrench

■ Use

- 2.1 Lifespan of the valve can be maximized, if the valve is used within the rated range, in accordance with pressure, temperature and corrosion data.

■ Operation

- 3.1 To open the valve, turn the handle 1/4 turn (90 degrees)

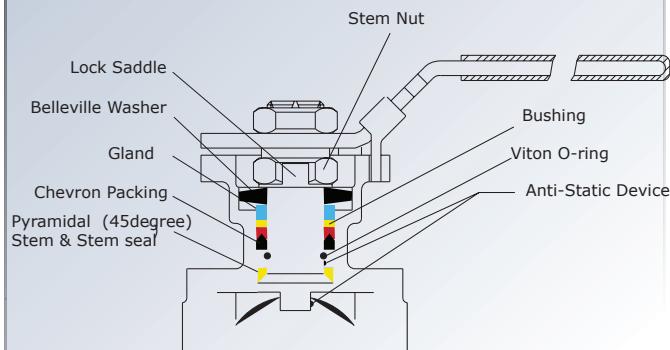
- A. Valve in open position - the handle is parallel (in-line) with the valve or pipeline.
- B. Valve in closed position - the handle is perpendicular (crossed) with the valve or pipeline.

"V" Series ball control port ball valves

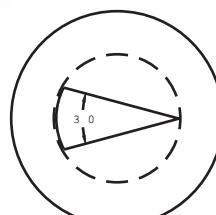


"V" Series Ball Valves are ideal for achieving more precise control with the simplicity and sealing features of the ball valve.

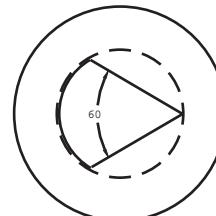
We offer them 1/2" - 4" in a 3-piece design and 1/2" - 6" flanged. The standard "V" notch options are 30, 60 and 90. While they are available as manual valves, we specialize in automating them to suit your particular control requirements.



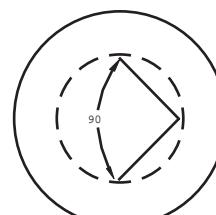
"V" port control valves are available with 30V, 60V and 90V notch. V port valves offer better and more consistent control than traditional round ported ball valves. We offer this valve with the control port cast and machined into the ball, not in the seat. This allows for much better flow characteristics and eliminates the need to replace seats. The 30 option allows for finer tapered control throughout the valve rotation and the 60 and 90 offers a larger Kv in addition to controlled flow.



30V - Port



60V - Port



90V - Port



PTFE with 25% carbon fill

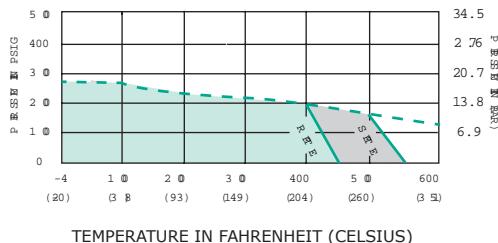
"V" Series ball control port ball valves

"V" Series Flow Coefficients- Kv Chart

Valve Size	Ball Angle	0%	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	30	0	0.1	0.1	0.2	0.4	0.6	0.9	1.3	1.9	2.6	3
	60	0	0.1	0.1	0.4	0.6	1.1	1.6	2.4	3.9	5.1	7
	90	0	0.1	0.2	0.5	0.7	1.1	1.8	2.6	4.4	6.3	8.1
3/4"	30	0	0.1	0.2	0.6	0.8	1.3	2.1	2.8	3.9	5.3	6.3
	60	0	0.1	0.2	0.7	1.2	2	3.3	4.7	7.6	10.5	14
	90	0	0.2	0.5	0.9	1.4	2.4	3.6	5.4	9.3	13.2	16.3
1"	30	0	0.1	0.4	0.9	1.5	2.7	4.1	6	11.4	9.9	11.7
	60	0	0.2	0.5	1.3	2.1	2	6.2	9.2	12.3	17.9	24.5
	90	0	0.2	0.7	2.1	4	6	9.5	13.3	18.7	24.5	33.8
1 1/4"	30	0	0.2	0.5	1.3	2.4	4.3	6.4	9.3	11.7	15.2	23.3
	60	0	0.2	0.7	2.1	3.5	6.4	11.1	14.9	22.2	30.3	60.7
	90	0	0.4	0.9	2.4	5.8	9.3	16.3	22.2	32.7	45.5	91
1 1/2"	30	0	0.4	0.7	1.9	3.5	5.8	8.8	12.8	16.3	19.8	23.3
	60	0	0.5	0.9	2.9	4.7	9.3	15.2	22.2	31.5	46.7	60.7
	90	0	0.5	1.1	4.1	8.2	15.2	23.3	36.2	49	73.5	91
2"	30	0	0.5	1.4	4.4	7	11.8	17.5	26.8	36.2	50.2	70
	60	0	0.5	1.8	5.4	10.5	19.3	31.5	45.5	64.2	96.7	128
	90	0	0.6	2.3	7	14	25.7	40.8	52.5	81.7	123	158
2 1/2"	30	0	0.5	1.2	4.7	9.4	14	21	32.6	43.2	72.4	87.5
	60	0	0.5	1.8	5.8	11.7	24.5	39.7	61.9	87.5	120	175
	90	0	0.6	2	8.2	16.3	32.7	56	81.7	124	187	254
3"	30	0	0.6	1.4	4.4	9.3	16.3	26.8	38.5	53.7	75.9	95.7
	60	0	0.6	2.9	7	16.3	29.2	46.7	75.9	106	149	193
	90	0	0.8	4.1	9.3	21	40.8	70	105	158	239	362
4"	30	0	0.7	2.4	7	17.5	33.8	56	82.9	117	152	186
	60	0	0.8	3.5	12.8	29	46.7	68.9	105	165	247	415
	90	0	1.2	4.1	18.7	46.7	87.5	146	222	344	516	782
6"	30	0	1.1	3.7	16.3	38.5	70	120	181	257	327	408
	60	0	2.3	5.8	25.7	70	128	222	333	486	684	934
	90	0	3.5	9.3	40.8	105	187	327	496	759	1132	1727

Pressure vs. Temperature Charts 1"-6"

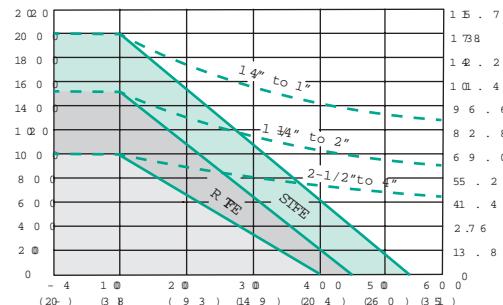
PN16 Flanged Design



NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be consulted when determining the limitation of the valve for specific application.

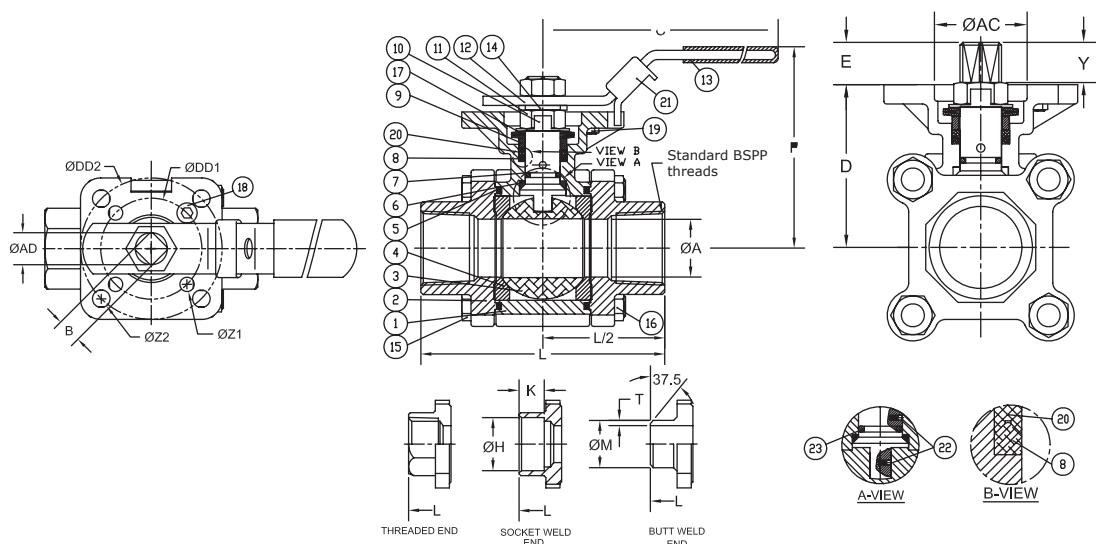
Consult DVC for other seat material.

3-piece Design



"V" Series ball control port ball valves

Type 1211/1311 V-Port Control Valve

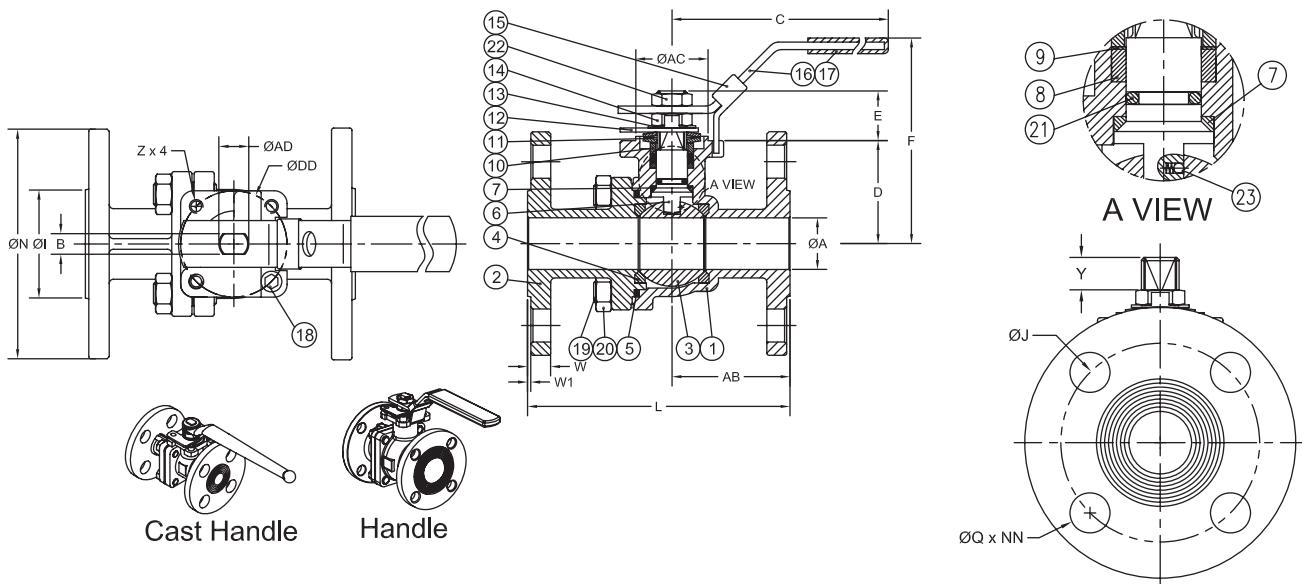


DIMENSIONS (mm)

SIZE	ØA	B	C	D	E	F	H	K	L	M	T	Y	AC	AD	DD1	DD2	ØZ2	ØZ1	(kg)	ISO 5211
	15	9	139	42	6.4	76	22	10	72	22	1.5	6.4	27	11	42	50	7	7	0.91	F047F05
3/4"	20	9	139	46	8.3	81	27	13	85	27	1.5	8.3	27	11	50	70	8.6	7	1.36	F05/F07
	25	11	165	59	10	98	34	13	105	34	2.0	10	34	14	50	70	8.6	7	2.04	F05/F07
1 1/4"	32	11	165	62	10	102	43	13	111	43	2.0	10	34	14	50	70	8.6	7	2.72	F05/F07
	40	14	215	79	13	128	49	13	127	49	2.0	13	39	19	50	70	8.6	7	4.54	F05/F07
2"	50	14	215	87	13	136	61	16	143	60	2.0	13	39	19	50	70	9	7.6	6.9	F05/F07
	65	19	262	109	17	168	73	16	185	76	2.6	17	53	24	70	102	12	10	11.8	F07/F10
3"	80	19	262	118	18	177	90	16	205	90	2.6	18	53	24	70	102	12	10	15.4	F07/F10
	100	19	312	134	17	193	115	20	240	116	2.6	17	53	24	70	102	12	10	23.6	F07/F10

"V" Series ball control port ball valves

Type 1440/1441 V-Port Control Valve Flanged



DIMENSION (mm)
INVESTMENT CAST BODY

SIZE	A	B	C	D	E	F	I	J	L	N	Q	W	W1	Y	Z	AB	AC	AD	D	NN	(kg)	ISO 5211
1/2"	15	8	170	34	23	80	37	60	108	89	16	11	1.5	9	M5	46	30	11	42	102	1.68	F04
3/4"	20	8	170	42	24	87	46	70	117	99	16	11	1.5	10	M5	55	30	11	42	102	2.09	F04
1"	25	10	204	50	24	98	53	80	127	108	16	11	1.5	8	M6	56	35	14	50	102	1.41	F05
1 1/2"	40	12	261	78	35	153	73	99	165	127	16	14	1.5	15	M8	71	55	19	70	102	6.17	F07
2"	50	12	261	86	35	162	92	121	178	152	19	16	1.5	15	M8	86	55	19	70	102	8.71	F07
2 1/2"	65	12	261	86	35	173	105	140	190	178	19	18	1.5	15	M8	77	55	19	70	102	13.6	F07
3"	80	15	354	107	46	177	127	152	203	191	19	19	1.5	24	M10	102	70	24	102	102	18.6	F10
4"	100	15	354	122	45	191	157	191	230	229	19	24	1.5	24	M10	103	70	24	102	203	29.5	F10

Accessories - Actuators

Actuators

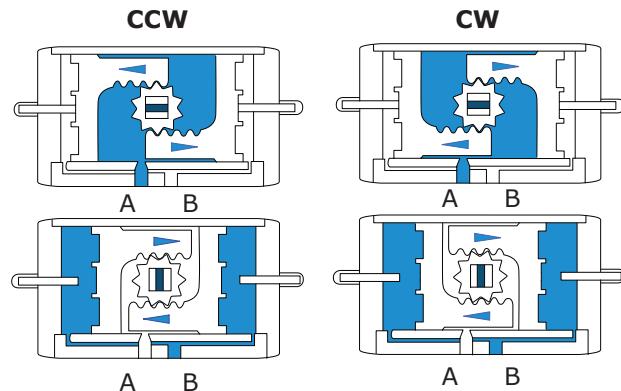
Spring Return Double Acting



- Body is hard anodized (40μ) as standard but can be supplied PTFE coated or all stainless.
- Twin rack pistons made from die-cast aluminium - hard anodized or from galvanized cast steel.
- End caps are made from die-cast aluminium powder polyester painted, PTFE or nickel plated.
- The pinion is high-precision and integrative, made from nickel-alloy steel.
- Pre-loaded, coated high performance springs are made from corrosion resistance material (only type 5051 - Spring Return Actuators).
- Two independent external travel stop adjustment bolts can easily and precisely be adjusted +/- 5% at both open and close directions.
- Bearings and guides made from low friction, long life compound material to avoid direct contact between metals.
- NBR O-rings provide trouble-free operation at standard temperature ranges. For low and high temperatures FPM and Silicone are used.

Actuator Principle

Double Acting Actuator



CCW: Air to Port A forces the pistons outwards, causing the pinion to turn counter clockwise while the air is being exhausted from Port B.

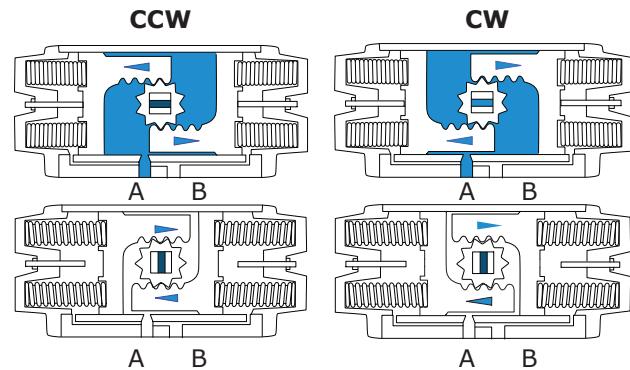
Air to Port B forces the pistons inwards, causing the pinion to turn clockwise while the air is being exhausted from Port A.

CCW is standard at DVC International

CW: Air to Port A forces the pistons outwards, causing the pinion to turn clockwise while the air is being exhausted from Port B.

Air to Port B forces the pistons inwards causing the pinion to turn counter clockwise while the air is being exhausted from Port A.

Spring Return Actuator



CCW: Air to Port A forces the pistons outwards, causing the springs to compress. The pinion turns counter clockwise while the air is being exhausted from Port B.

Loss of air pressure on Port A, the stored energy in the springs forces the pistons inwards. The pinion turns clockwise while air is being exhausted from Port A.

CCW is standard at DVC International

CW: Air to Port A forces the pistons outwards, causing the springs to compress. The pinion turns clockwise while the air is being exhausted from Port B.

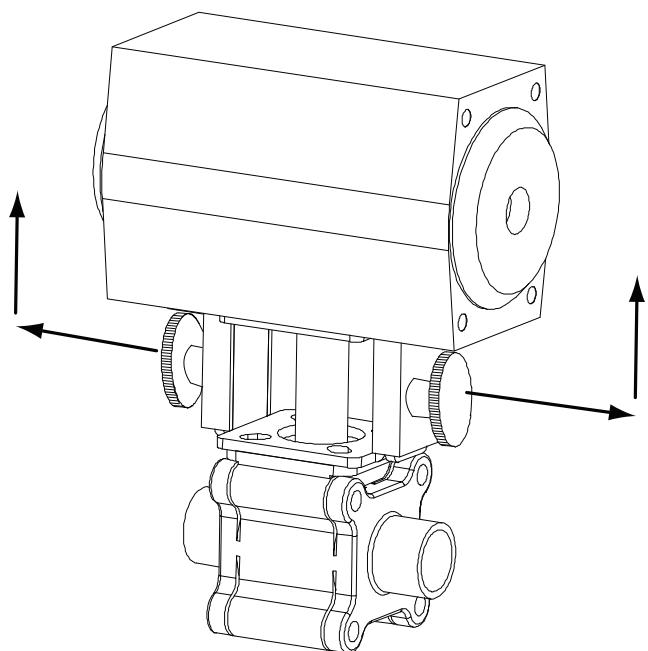
Loss of air pressure on Port A, the stored energy in the springs forces the pistons inwards. The pinion turns counter clockwise while air is being exhausted from Port A.

Accessories - Brackets

Quick Bracket

Adjustable

Type 5740 can easily be adjusted to various dimensions of valves ranging from 42 mm - 97 mm in height. F03 - F10 (ISO 5211 top / bottom flange).



Easy mounting

Type 5740 has an uncomplicated construction and is therefore very easy to mount even with pneumatic tools, just separate the top part from the bottom part (see illustration).

Easy maintenance

Type 5740 requires no tools for maintenance.

Safety

During maintenance it is easy to click off the actuator making sure that the valve can not be activated unintentionally - simply pull the two handles outwards and lift the actuator incl. the attached top part of the bracket (see illustration).

Bracket

Easy mounting

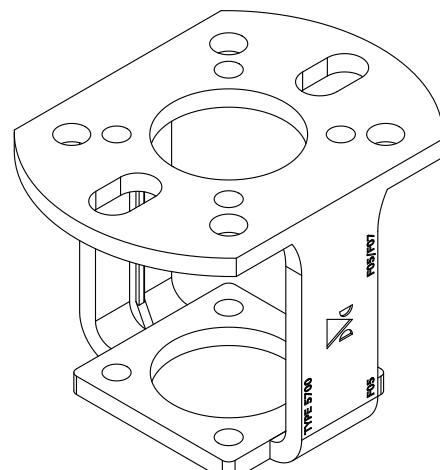
Type 5700 has an uncomplicated construction and is therefore very easy to mount even without pneumatic tools.

No maintenance

Type 5700 requires no maintenance.

Heavy-duty

Type 5700 has a robust design and is made of AISI 304.



Accessories - Limit Switches and Solenoid Valve

Limit Switch - Mechanical



For 2- and 3 piece fixtures.

Body in corrosion resistant and impact resistant aluminium.
Powder coated.

Supplied with standard mounting bracket and cable connection.

Tightness Class IP 67 as standard and IP 68 as option.

Excellent visual indication of open or closed valve. Can be changed to suite rotation direction.

Approvals according to UL, CSA, SEMKO, SEV EN 61058-1 and CE standards.

Supplied with mechanical switch set as standard. Can be supplied with inductive sensors PNP/NPN with various voltage.

Limit Switch - Inductive Double Sensor



Short circuit protection.

Can be supplied with ATEX.

Complies with EN 60947-5-2, connection equipment for low voltage.

Excellent visual indication of open and closed valve.

Made of corrosion resistant material (glass fibre reinforced plastic).

Easy mounting.

Solenoid Valve NAMUR



Low power consumption and long service life.

Surface is hard anodised - 20µ.

Locking device.

NAMUR standard for direct mounting on actuators.

CE approved.

Each solenoid valve is function tested and pressure tested.

Valves with a difference

DVC INTERNATIONAL

Product Range

- Ball Valves
- Butterfly Valves Soft Seated
- Butterfly Valves Metal Seated
- Y-angle Globe Control Valves
- Thin Wafer Check Valves
- Pneumatic Actuators
- Electrical Actuators
- Brackets for Actuators
- Limit Switches
- Level Gauges - Reflex & Transparent

Try us

- together we can make a difference

DVC is a company with a difference - our goal is not to be just another player - we want to be a leading company in the valve business.

Our distributors needs drive our business. It is our goal to build long-term partnerships with everyone of our distributors, contributing to their success.

Accuracy, excellent service, flexibility, timely delivery and cost effectiveness all ensure that we meet and even exceed the expectations of our distributors.

Visit us at **www.dvc.nu** and learn more about DVC and our products.

