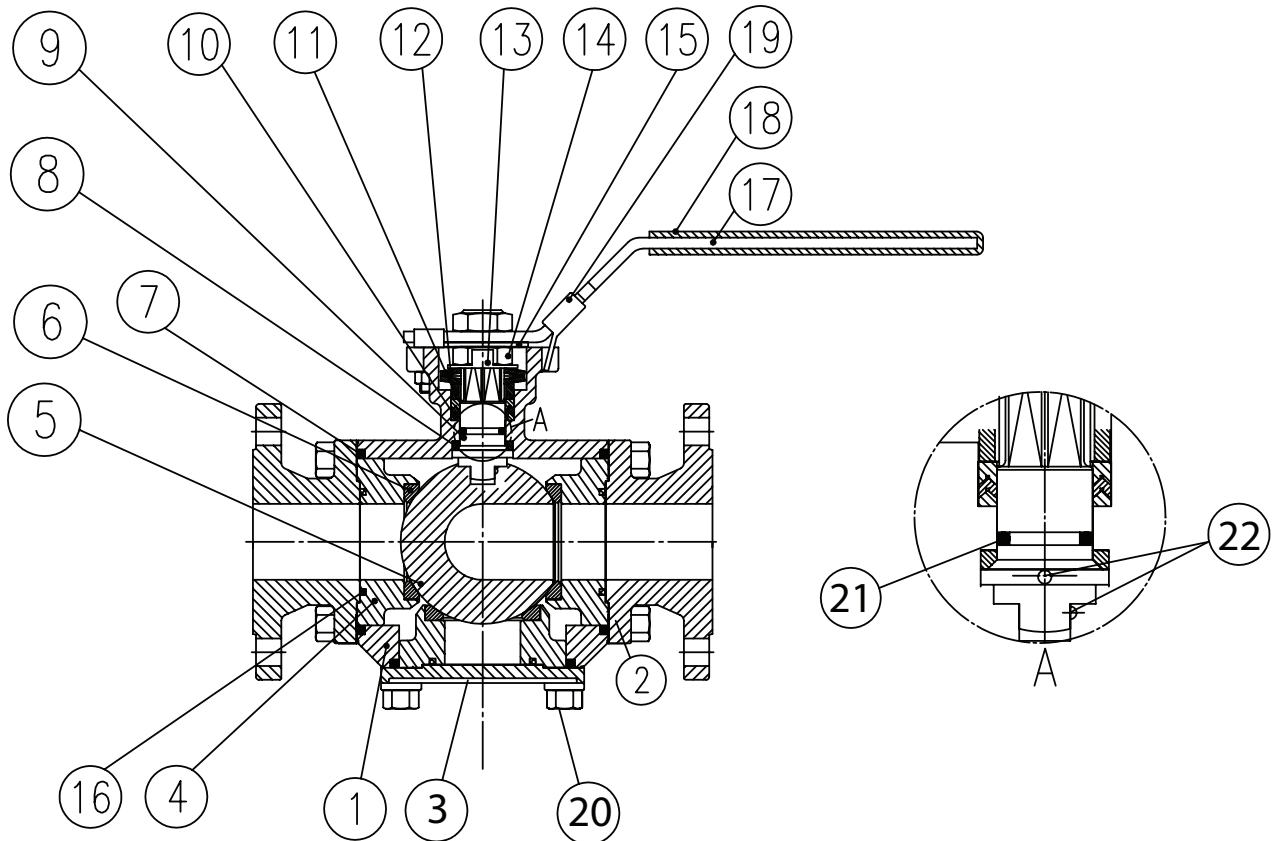


**GENERAL FEATURES:**

- Full bore
- 90° turnable handle
- Mounting flange according to ISO 5211
- Anti-blow out stem
- Self-adjusting stem packing
- Seats in RPTFE
- Connections: BSP threaded, NPT threaded, butt weld BW, socket weld SW, flanges

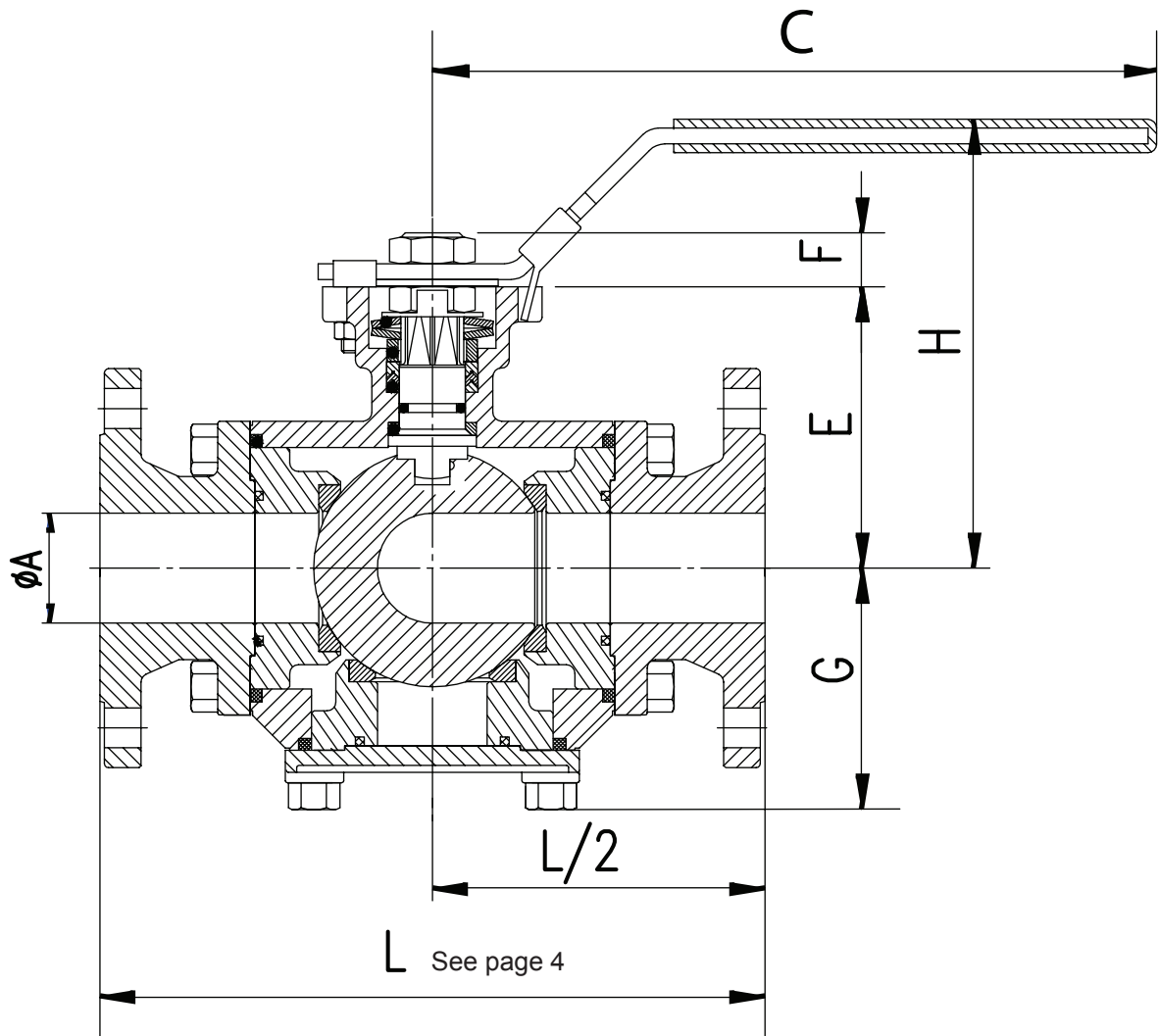


DESIGN STANDARDS	
Standards	ISO 5752
Compliance	ANSI B16.34, ANSI B16.25, ANSI B1.20, API 6D
Actuator mounting flange	ISO 5211
Marking	ISO 5209, EN 19
TESTS AND CERTIFICATES	
Quality Assurance	ISO 9001
Material certificate	EN 10204-3.1
Pressure test	API 598, BS 6755 part1



Item	Description	Materials
1	Body	ASTM A351 Gr CF8M
2	End cap A	ASTM A351 Gr CF8M
3	End cap B	ASTM A351 Gr CF8M
4	Seat retainer	ASTM A351 Gr CF8M
5	Ball	Stainless steel 316
6	Seat	RPTFE (PTFE+15% glassfiber)
7	Joint gasket	PTFE
8	Stem seal	RPTFE
9	Stem	Stainless steel 304
10	Gland packing	25% glass fibre filled PTFE
11	Gland bush	Stainless steel 304
12	Belleville washer	Stainless steel 301
13	Stop washer	Stainless steel 304
14	Stem nut	Stainless steel 304
15	Stem washer	Stainless steel 304
16	Retainer seal	PTFE
17	Handle	Stainless steel 304
18	Handle sleeve	Vinyl
19	Locking device	Stainless steel 304
20	Bolt nut	Stainless steel 304
21	O-ring	Viton
22	Anti-static device	Stainless steel 304

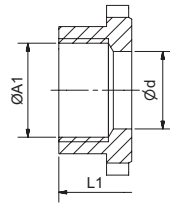
Subject to changes


**DIMENSIONS:** (mm)

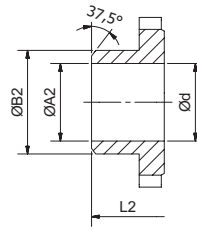
Ø	ØA	C	E	F	G	H	Kg *
1/2"	15	150	43,9	9	35,1	85	1,3
3/4"	20	165	54,2	10,5	45,3	93	2,81
1"	25	180	64,1	10,5	56,8	108	4,76
1 1/4"	32	215	78,5	13	59,8	127	5,75
1 1/2"	38	263	94,9	18	72,3	152	10,56
2"	50	313	101,6	18	80,5	159	13,42
2 1/2"	65	344	120	18	96,8	177	21,31
3"	76	370	132,9	23	105	195	28,85
4"	100	510	164	23	131,5	226	57,51

\* not for flanged ball valves

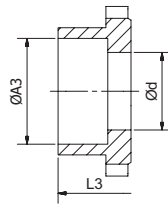
**BSP/NPT**



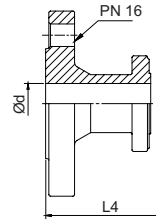
**BUTWELD**



**SOCKET WELD**



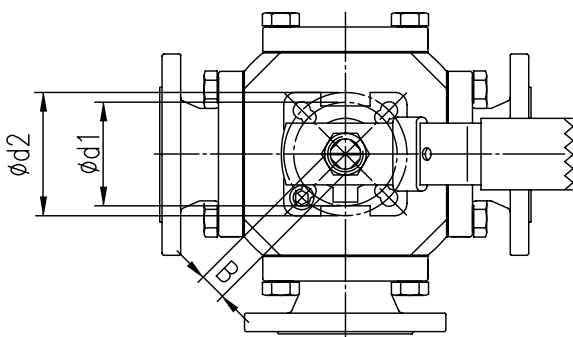
**FLANGED**



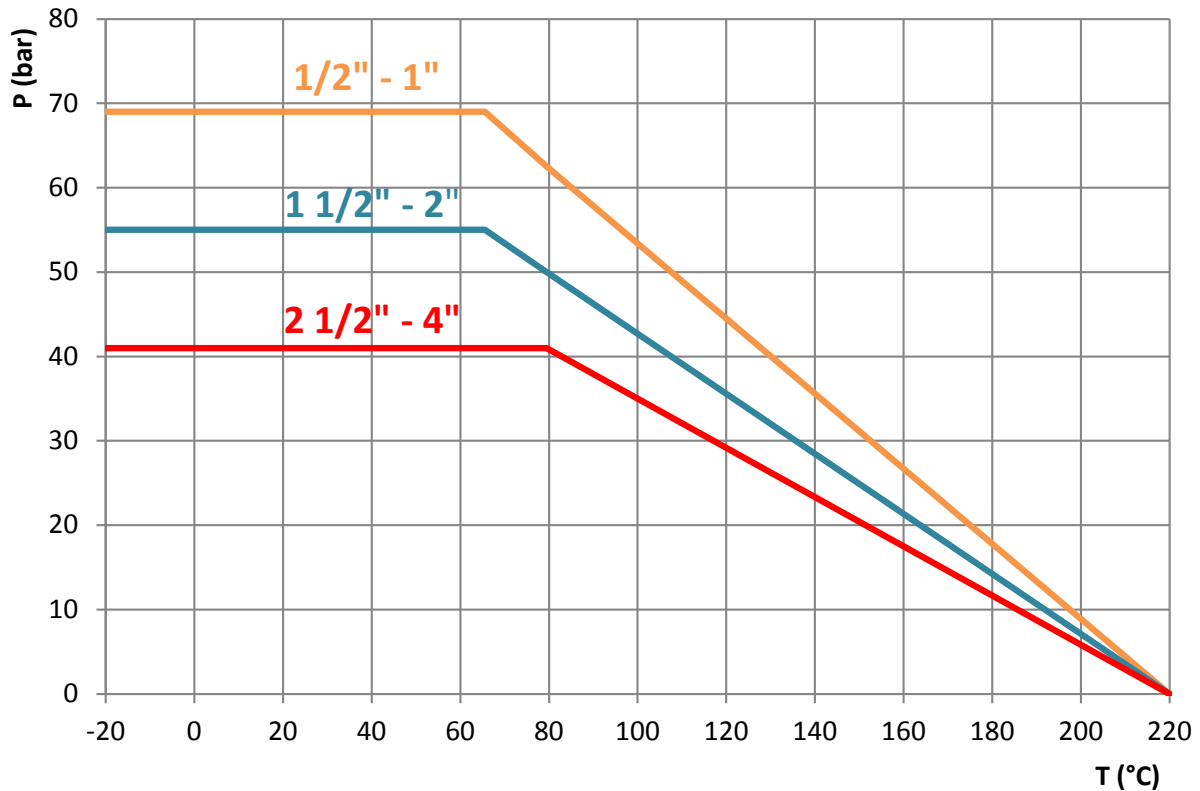
**DIMENSIONS:** (mm)

Ø A1	Ød	L1	ØA2	ØB2	L2	ØA3	L3	L4
1/2"	15	92	15	22,7	92	21,9	92	165
3/4"	20	110	20	27,5	110	27,3	110	190
1"	25	144	25	34	144	33,9	144	220
1 1/4"	32	146	32	42,7	146	42,8	146	235
1 1/2"	38	164	38	48,6	164	48,9	164	270
2"	50	184	50	60,5	184	61,3	184	290
2 1/2"	65	236	65	76,3	236	76,9	236	330
3"	76	265	76	90	265	90	265	340
4"	100	317	100	116	317	115,5	317	403

**DIMENSIONS:** (mm)



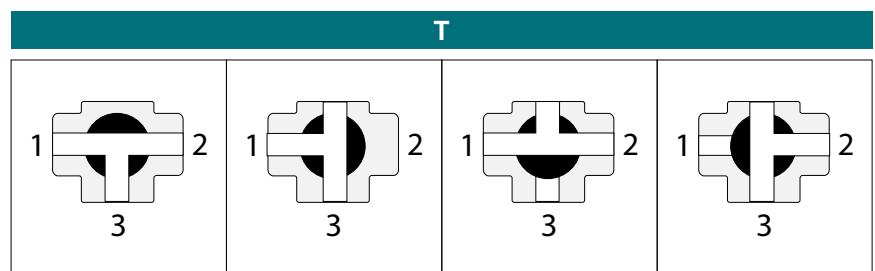
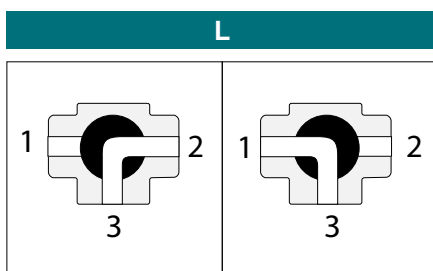
Ø	Ød	B	Ød1	Ød2	ISO 5211
1/2"	15	9	36	42	F03/F04/F05
3/4"	20	11	42	50	F04/F05
1"	25	11	42	50	F04/F05/F07
1 1/4"	32	14	50	70	F05/F07
1 1/2"	40	17	70	102	F07/F10
2"	50	17	70	102	F07/F10
2 1/2"	65	17	70	102	F07/F10
3"	80	22	102	125	F10/F12
4"	100	22	102	125	F10/F12

**PRESSURE-TEMPERATURE CHART:**

**TORQUES:** (in Nm, 30% safety)

Ø	T (Nm)
1/2"	8
3/4"	17
1"	29
1 1/4"	35
1 1/2"	59
2"	72
2 1/2"	92
3"	198
4"	250

**Kv VALUES:**

Ø	L-port	T-port (through)	T-port (branch)
1/2"	5,1	8,5	4,3
3/4"	13,6	17,9	11,1
1"	26,4	30,6	18,7
1 1/4"	27,2	49,3	21,3
1 1/2"	63,8	76,5	46,8
2"	119	148,8	85
2 1/2"	178,5	199,8	126,7
3"	318,8	382,5	229,5
4"	569,5	680	403,8

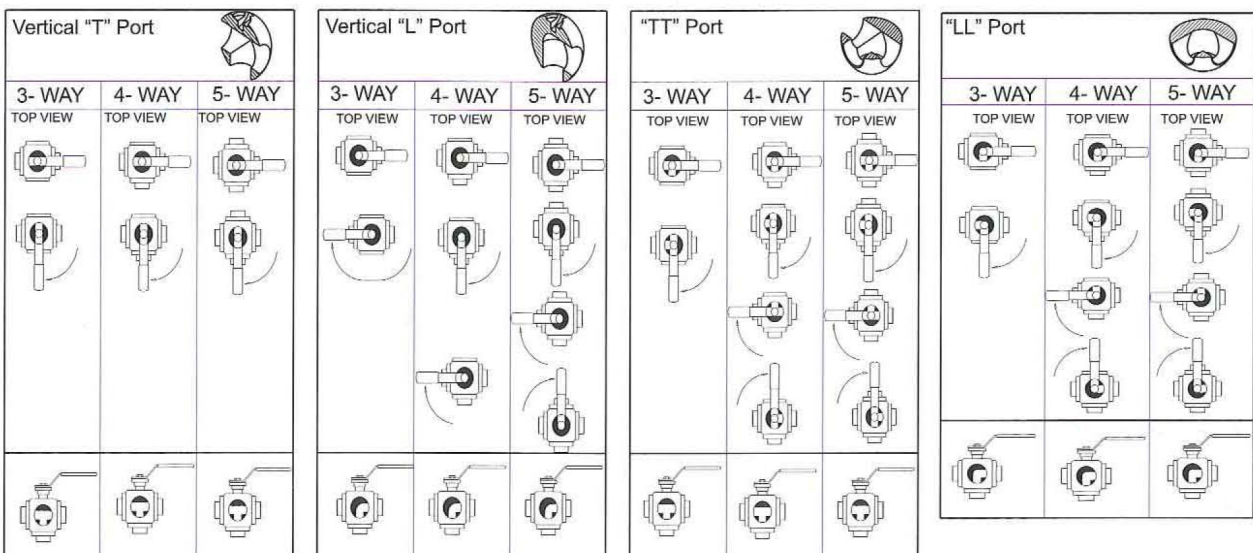
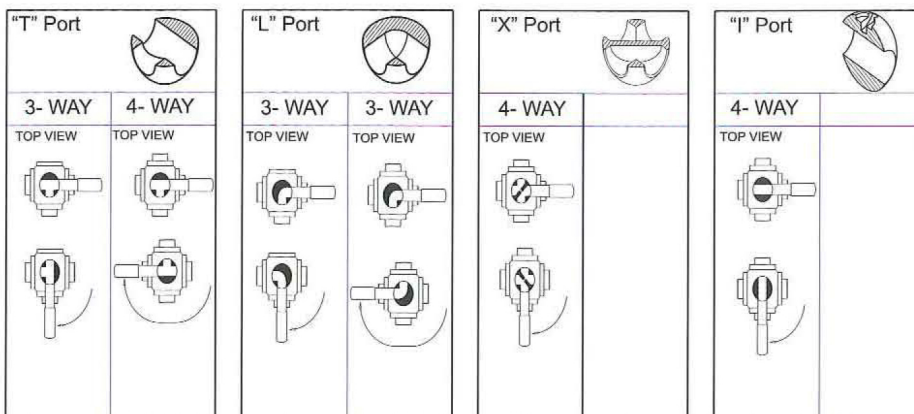
**CONFIGURATIONS:**


Subject to changes

V33H		1		IIR		L											
Type		Connection		Materiaal		Poort											
V33H	3-way horizontal	1	BSP threaded	Body	A	Steel	<table border="1"> <thead> <tr> <th colspan="2">Horizontal</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L-port</td> </tr> <tr> <td>T</td> <td>T-port</td> </tr> <tr> <td>X</td> <td>X-port</td> </tr> </tbody> </table>	Horizontal		L	L-port	T	T-port	X	X-port		
Horizontal																	
L	L-port																
T	T-port																
X	X-port																
V34H	4-way horizontal	2	BW ends	I	Stainless steel												
V33V	3-way vertical	3	SW ends	T	Titanium												
V34V	4-way vertical	4	NPT threaded	D	Duplex												
V35V	5-way vertical	5	Extended BW	A	Alloy 20												
		6	Flanged DIN PN 16	Ball	I	Stainless steel	<table border="1"> <thead> <tr> <th colspan="2">Vertical</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L-port</td> </tr> <tr> <td>T</td> <td>T-port</td> </tr> <tr> <td>LL</td> <td>Double L-port</td> </tr> <tr> <td>TT</td> <td>Double T-port</td> </tr> </tbody> </table>	Vertical		L	L-port	T	T-port	LL	Double L-port	TT	Double T-port
Vertical																	
L	L-port																
T	T-port																
LL	Double L-port																
TT	Double T-port																
		7	Flanged DIN PN 40	T	PTFE												
		8	Flanged ANSI 150 Lbs	S	Stansit												
		9	Flanged ANSI 300 Lbs	R	RPTFE												
		A	Flanged DIN PN 10	U	UHMWP												
				Seat	M	Metal	TT	Double T-port									

**EXAMPLE:**

V33H	1	IIR	L
3 way horizontal ball valve	BSP threaded	Body and ball in stainless steel Seat in RPTFE	L-port



Subject to changes