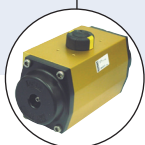




Type VV2670-MV-LUG can be combined with...



Type 2051QT

Pneumatic actuator



Type 3003

Electric actuator



Type 1062QT

Position feedback

Metal Body Butterfly Valve Lug Pattern, Manual operated

- Shut off pressure up to 16 bar
- Unique stem retaining mechanism for easy maintenance
- Low pressure drop, minimum turbulence
- Abrasion and corrosion resistant
- Lever or Gear Operated

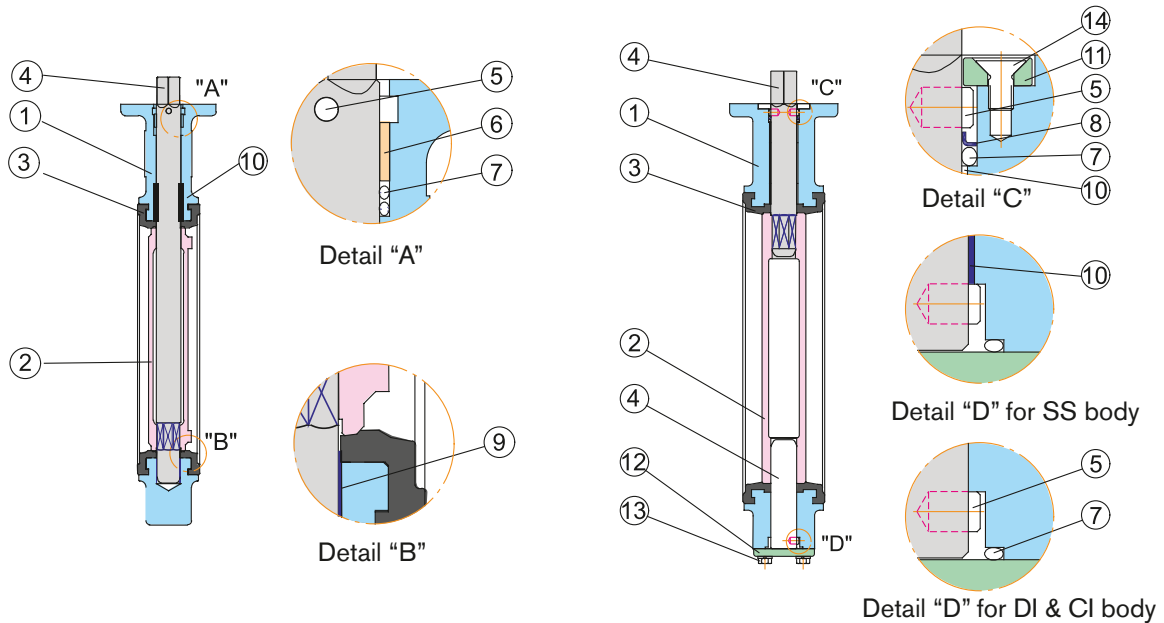
The VV2670-MV-Lug is a lever or gear operated quarter turn lug pattern butterfly valve suitable for dead end service. The valve has face to face dimension in accordance to ISO 5752 table 5 short. With its resilient seat design, the valve is design to provide perfect shut off pressure of up to 16 bar. The stem is retained in the body by means of unique stem retaining mechanism, hence the stem can be removed from the body and disc without any special tools. Spherically machined and hand polished, the disc has a self centering feature that ensures geometrical and dimensional stability for bubble tight shut off, low rotating torque and long life cycle. The valve can be easily installed between flanges with no gasket required. The valve can be manually operated or retrofitted to many type of pneumatic or electric actuator with its top flange dimension in accordance to ISO 5211.

Technical Data

Size	DN40 - DN600
Body material	Ductile iron A536-65-42-15, epoxy painted On request - Cast iron or Stainless steel
Disc material	CF8M Other materials on request
Stem material	SS410 (F6A) On request: SS316, SS630
Seat material	EPDM On request - FKM, EPT
Installation	Lug drilled to ANSI 150#, PN10, PN16, JIS5K, JIS10K standard. To specify at time of ordering
Shell testing pressure	24 bar
Medium Pressure	Max. 16 bar
Medium Temperature EPDM FKM	-20°C to + 110°C -10°C to + 160°C
Operator material Lever Gear	Ductile iron with Steel notch plate Cast iron

Section view

No	Name	Materials	No	Name	Materials	No	Name	Materials
1	Body	Ductile iron / Cast iron/ CF8M	6	Bush	Delrin	11	Upper cover	Cast iron, SS for SS body
2	Disc	CF8M	7	O-ring	NBR	12	Bottom Cover	Cast iron, SS for SS body
3	Seat	EPDM / FKM	8	Thrust ring	SS304	13	Bolt	Steel
4	Stem	SS410 / SS630 / SS316	9	Bush	Bronze	14	Bolt	Steel
5	Pin	SS304	10	Bush	RPTFE + SS			



DN 40 to DN 300

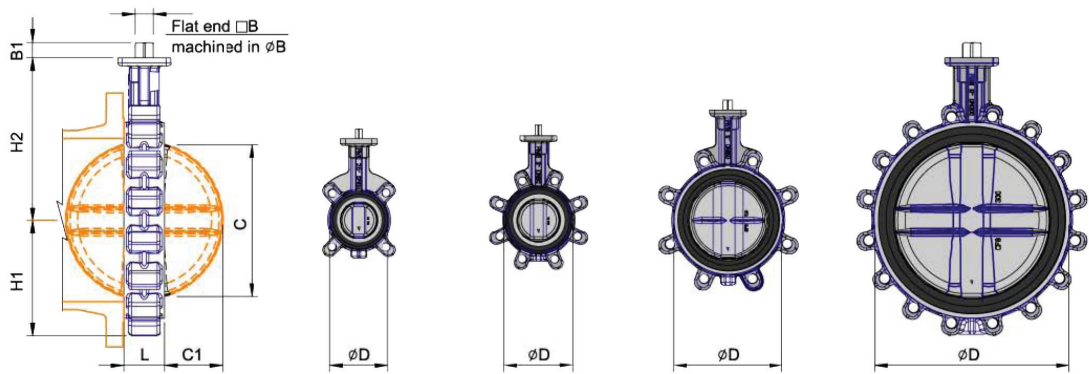
DN350- DN600

Torque & Weight

Size (mm)	Media (Liquid) Pressure Break Torque (Nm)				Media (Gas) Pressure Break Torque (Nm)			Weight (kg)		
	3 bar	6 bar	10 bar	16 bar	3 bar	6 bar	10 bar	Valve bare shaft	Lever Operator	Gear Operator
40	15	17	19	23	19	21	23	2.2	0.7	3.3
50	15	17	19	23	19	21	23	3.4	0.7	3.3
65	18	20	22	26	22	24	27	4.0	0.7	3.3
80	28	31	34	41	34	38	42	4.5	0.7	3.3
100	37	41	45	54	45	50	56	7.6	0.7	3.3
125	61	68	76	91	76	84	93	9.5	0.8	3.3
150	118	127	140	154	126	138	152	10.4	0.8	3.3
200	171	190	211	253	211	234	260	17.5	1.6	7.5
250	275	306	340	408	340	378	420	26.5	1.6	7.5
300	381	423	470	564	470	522	580	43.5	1.6	7.5
350	545	605	672	-	672	747	630	58.0	-	9
400	728	809	899	-	899	999	1110	81.0	-	9
450	912	1013	1126	-	1126	1251	1390	110.0	-	22
500	1135	1261	1401	-	1401	1557	1730	155.0	-	22
600	1325	1472	1636	-	1638	1818	2020	318.0	-	35

Note: All torque value provided above are inclusive 30% safety factor.

Dimensions - Bare Shaft

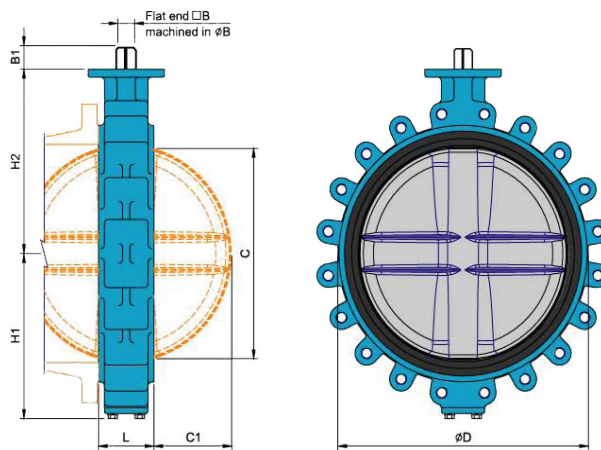


DN40 to DN65

DN80

DN100 to DN150

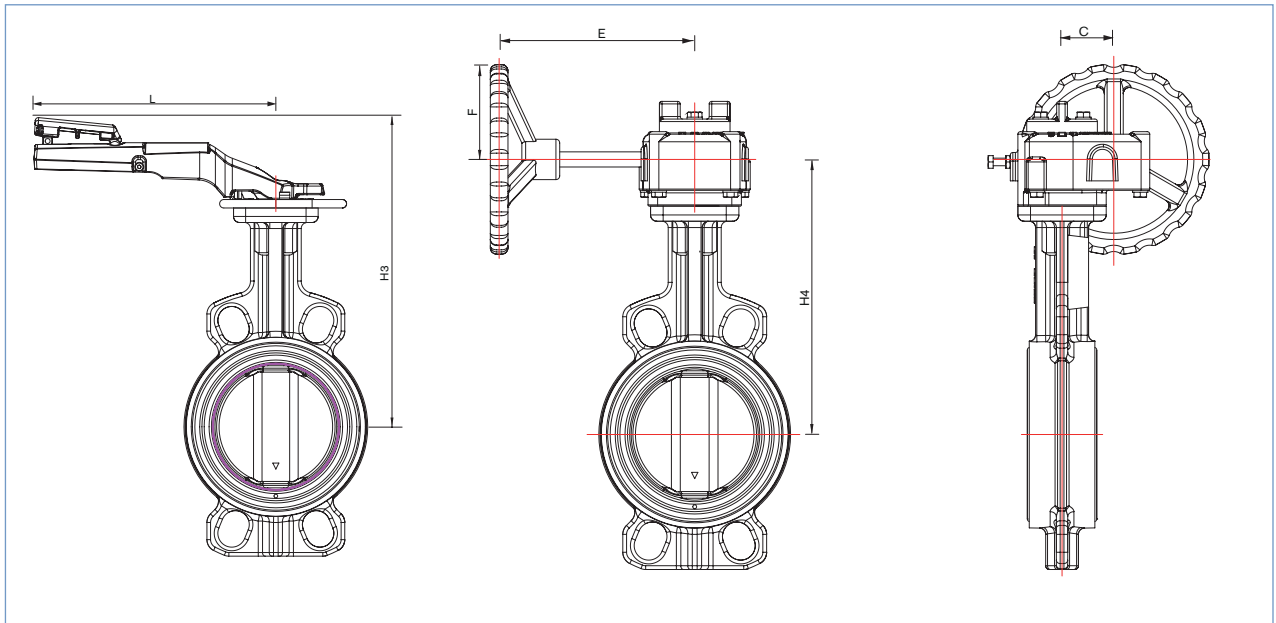
DN200 to DN300



DN350 to DN600

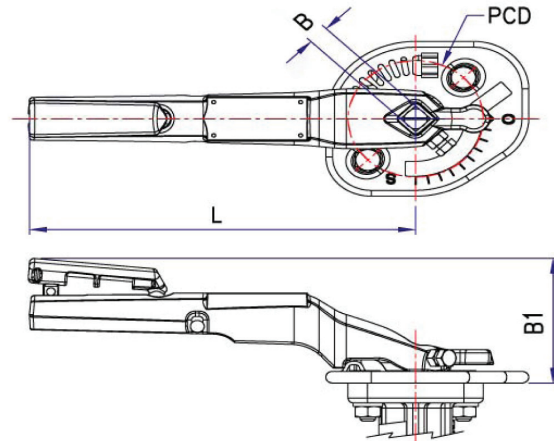
Size	Shaft			Top Flange		Out Line Dimension				Disc clearance	
DN	Ø B	□ B	B1	PCD	ISO 5211	L	H1	H2	Ø D	C	C1
[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
40	14	11	19	70	F07	33.0	60.0	120.0	81.0	340	7.0
50	14	11	19	70	F07	43.0	65.0	143.0	96.0	39.0	8.0
65	14	11	19	70	F07	46.0	71.0	155.0	110.0	55.0	13.0
80	14	11	19	70	F07	46.0	77.0	162.0	124.0	69.0	19.0
100	14	11	19	70	F07	52.0	89.0	181.0	148.0	91.0	27.0
125	18	14	19	70	F07	56.0	112.0	197.0	180.0	115.0	36.0
150	18	14	19	70	F07	56.0	123.0	210.0	206.0	140.0	47.0
200	22	17	24	102	F10	60.0	150.0	240.0	259.0	186.0	68.0
250	25	19	24	102	F10	68.0	179.0	286.0	320.0	239.0	90.0
300	28	22	24	102	F10	78.0	216.0	309.0	370.0	288.0	111.0
350	35	27	29	125	F12	78.0	301.0	329.0	412.0	325.0	128.0
400	35	27	29	125	F12	102.0	333.0	361.0	475.0	375.0	143.0
450	48	36	38	140	F14	114.0	358.0	393.0	530.0	423.0	162.0
500	48	36	38	140	F14	127.0	392.0	427.0	585.0	473.0	182.0
600	60	46	48	165	F16	154.0	454.0	492.0	687.0	560.0	214.0

Dimensions - with Lever / Gear Operator

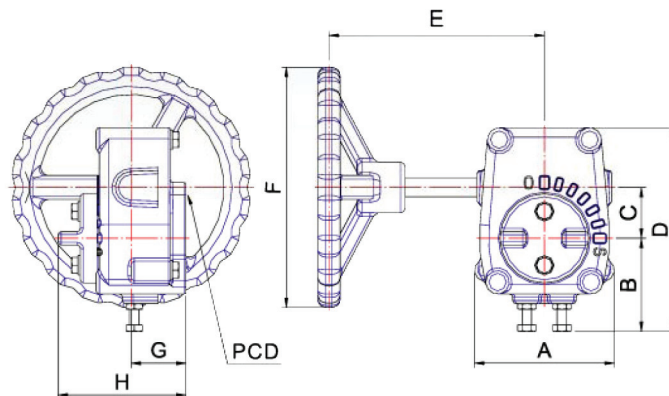


Size	Operator Type	Lever		Gear				Handwheel Turns N Fully Open/Closed	Mounting Flange ISO5211
DN [mm]		H3 [mm]	L [mm]	H4 [mm]	C [mm]	E [mm]	F [mm]		
40	Lever 1	195	200	-	-	-	-	-	F07
	Gear 1	-	-	157	41	155	150	10	
50	Lever 1	218	200	-	-	-	-	-	F07
	Gear 1	-	-	180	41	155	150	10	
65	Lever 1	230	200	-	-	-	-	-	F07
	Gear 1	-	-	192	41	155	150	10	
80	Lever 1	237	200	-	-	-	-	-	F07
	Gear 1	-	-	199	41	155	150	10	
100	Lever 1	258	200	-	-	-	-	-	F07
	Gear 1	-	-	218	41	155	150	10	
125	Lever 2	272	250	-	-	-	-	-	F07
	Gear 1	-	-	234	41	155	150	10	
150	Lever 2	285	250	-	-	-	-	-	F07
	Gear 2	-	-	247	41	155	150	10	
200	Lever 3	324	355	-	-	-	-	-	F10
	Gear 2	-	-	281	63	195	200	9	
250	Lever 2	370	355	-	-	-	-	-	F10
	Gear 2	-	-	327	63	195	200	9	
300	Lever 2	393	355	-	-	-	-	-	F10
	Gear 2	-	-	350	63	195	200	9	
350	Gear 3	-	-	370	61	255	310	9	F12
400	Gear 3	-	-	402	61	255	310	9	F12
450	Gear 4	-	-	445	81	340	400	13	F14
500	Gear 4	-	-	479	81	340	400	13	F14
600	Gear 5	-	-	548	123	307	400	17.5	F16

Dimensions



Type	Dimensions			Mounting Flange		Weight [Kg]
	L [mm]	B1 [mm]	□ B [mm]	PCD [mm]	ISO 5211	
Lever 1	200	75	11	70	F07	0.7
Lever 2	250	75	14	70	F07	0.8
Lever 3	355	84	17/19/22	102	F10	1.6



Type	Dimensions								Mounting Flange		Gear ratio	Weight [Kg]
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	PCD [mm]	ISO 5211		
Gear 1	87	49	41	130	155	150	37	81	70	F07	1:40	3.3
Gear 2	117	81	63	176	195	200	42	91	102	F10	1:36	7.5
Gear 3	153	97	61	186	255	310	41	88	125	F12	1:36	9
Gear 4	181	102	81	223	340	400	52	117	140	F14	1:52	22
Gear 5	251	113	123	293	307	400	56	127	165	F18	1:70	35

Kv value and ordering chart

With Ductile Iron Body, SS316 Disc, SS410 Stem and EPDM Seat

Valve Size (mm)	Pressure range (bar)	Operator	Angle of Opening Kv value (Water) (m³/h)								Item No. (Complete with Lever or Gear operator)	Item No. (Bare Shaft)
			20°	30°	40°	50°	60°	70°	80°	90°		
40	0 -16	Lever	2	7	14	22	38	59	81	113	TBA**	TBA**
50			4	10	22	38	60	100	132	193	TBA**	TBA**
65			8	18	35	61	95	187	240	315	TBA**	TBA**
80			10	26	48	83	126	214	338	425	TBA**	TBA**
100			15	39	72	119	221	361	606	723	TBA**	TBA**
125			24	62	118	217	394	599	1038	1243	TBA**	TBA**
150			10	41	95	326	542	873	1260	1859	TBA**	TBA**
200			64	165	306	573	995	1567	2310	3124	TBA**	TBA**
250	0 -10*	Gear	101	245	451	836	1462	2253	3256	4757	TBA**	TBA**
300			129	312	615	1137	2125	3248	4991	7058	TBA**	TBA**
350			163	390	795	1498	2573	3980	5749	7319	TBA**	TBA**
400			231	508	1077	1973	3381	5385	8099	11458	TBA**	TBA**
450			256	621	1208	2315	3925	6331	9474	13612	TBA**	TBA**
500			346	859	1692	3086	5348	8513	13109	18748	TBA**	TBA**
600			494	1153	2389	4466	7561	11945	18088	25217	TBA**	TBA**

* For Pressure Range 0 - 16 bar, request for SS630 stem

** ID depends on the drilled type of flanges