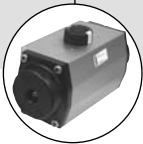




Metal Body Butterfly Valve Wafer Pattern, Manual operated

- 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

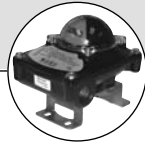
Type VV2670-MV can be combined with...



Type 2051QT
Pneumatic actuator



Type 3003
Electric actuator



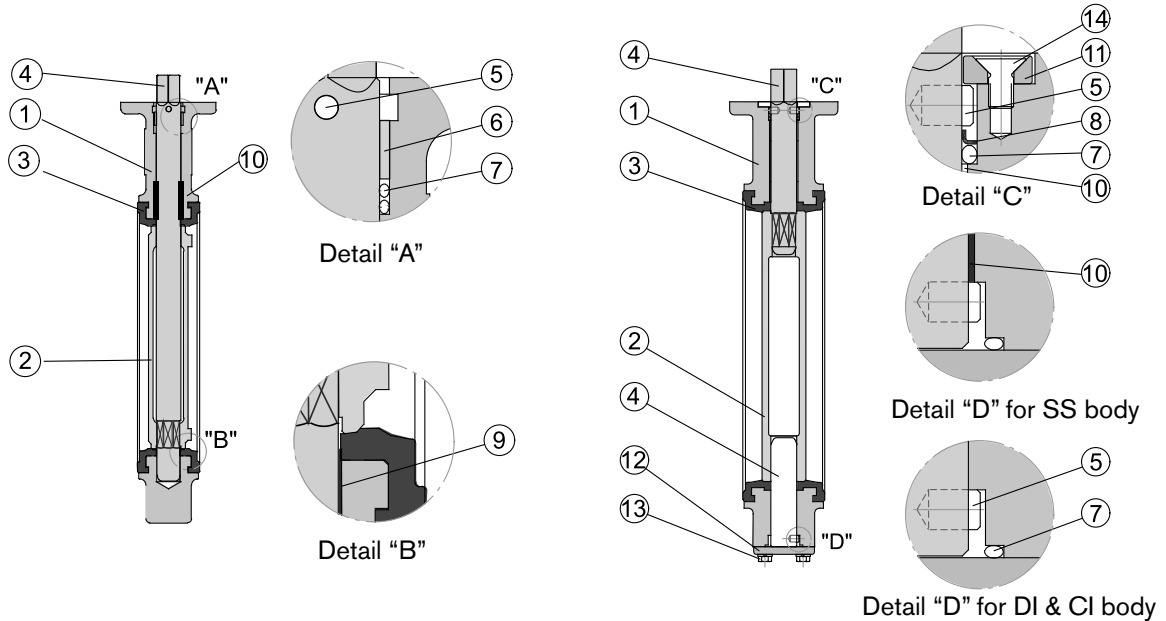
Type 1062QT
Position feedback

The VV2670-MV is a lever or gear operated quarter turn wafer pattern butterfly valve. The valve has face to face dimension in accordance to ISO5752 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 ISO5211.

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	DN40 to DN350 Suitable for mounting between ANSI 150#, PN10, PN16, JIS5K, JIS10K flanges DN400 to DN600 To specify mounting flange standard at time of ordering
Shell testing pressure	24 bar
Medium Pressure DN50 to DN300	Max. 16 bar
DN350 to DN600	Max. 10 bar (with SS410 stem) Max. 16 bar (with SS630 stem) (Subjected to pressure limitation in accordance to mounting flanges standard and temperature limitation in accordance to choice of seat material)
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

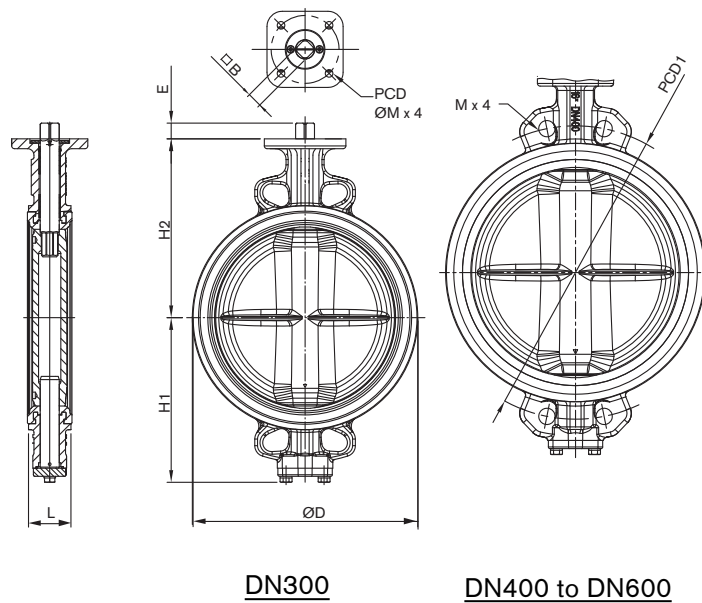
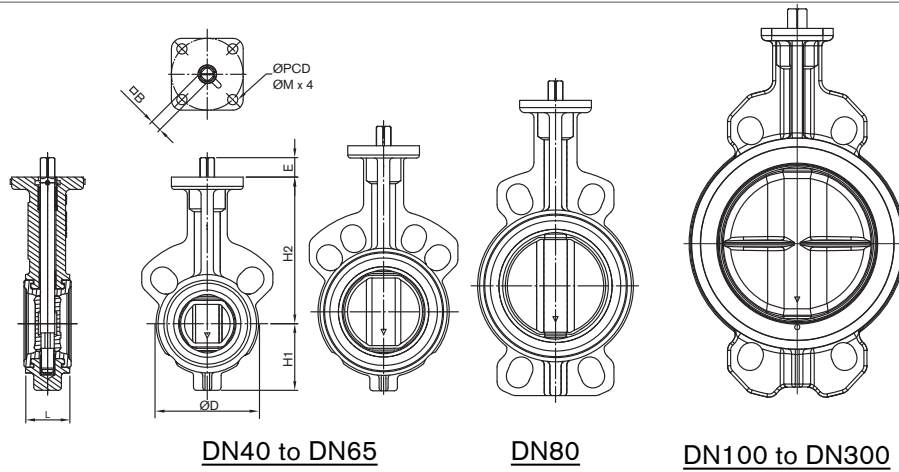
DN350- DN600

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	2.0	0.7	3.3
50	15	17	19	23	19	21	23	3.0	0.7	3.3
65	18	20	22	26	22	24	27	3.8	0.7	3.3
80	28	31	34	41	34	38	42	4.0	0.7	3.3
100	37	41	45	54	45	50	56	5.3	0.7	3.3
125	61	68	76	91	76	84	93	7.3	0.8	3.3
150	118	127	140	154	126	138	152	8.2	0.8	3.3
200	171	190	211	253	211	234	260	13.5	1.6	7.5
250	275	306	340	408	340	378	420	21.2	1.6	7.5
300	381	423	470	564	470	522	580	32.5	1.6	7.5
350	545	605	672	-	672	747	630	48.0	-	9
400	728	809	899	-	899	999	1110	60.0	-	9
450	912	1013	1126	-	1126	1251	1390	80.0	-	22
500	1135	1261	1401	-	1401	1557	1730	125.0	-	22
600	1325	1472	1636	-	1638	1818	2020	200.0	-	35

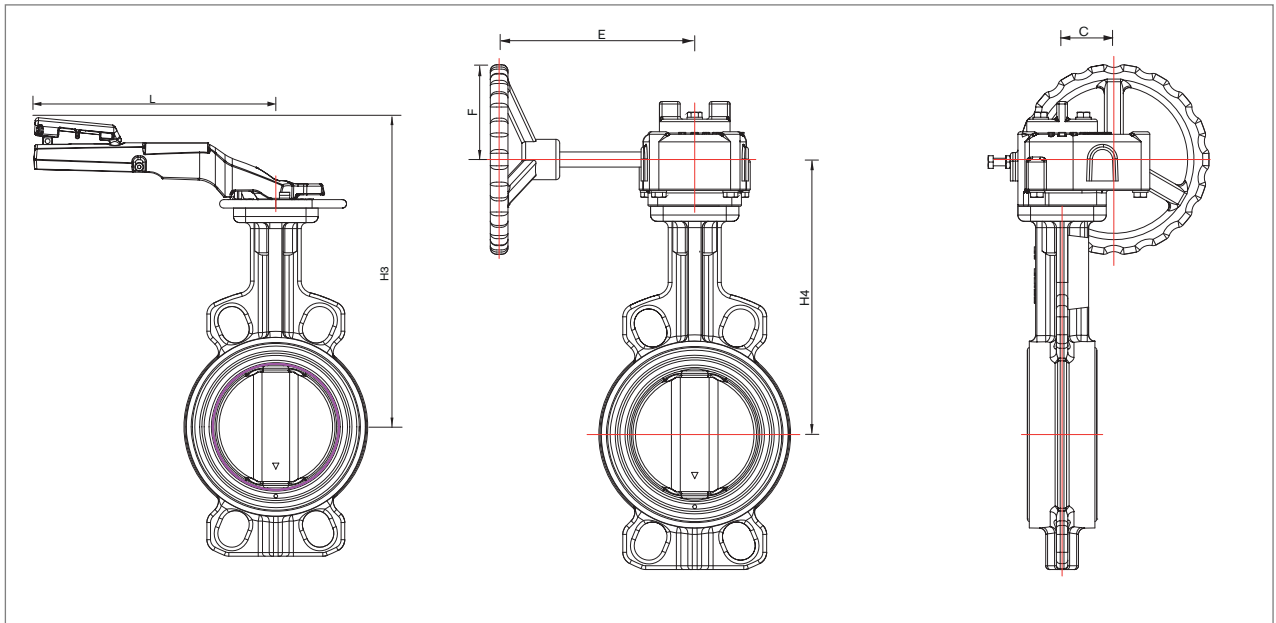
Note: All torque value provided above are inclusive 30% safety factor.

Dimensions - Bare Shaft



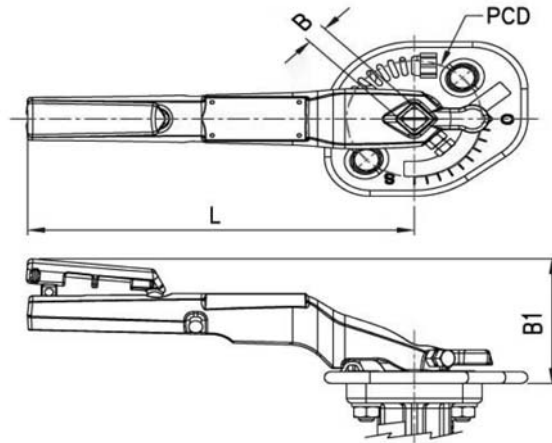
Size DN	Shaft		Top Flange			Out Line Dimension					
	B	E	PCD	ISO 5211	Ø M	L	H1	H2	Ø D	M	PCD1
[mm]	[mm]	[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
40	11	19	70	F07	9	33.0	80.0	120.0	81.0	37.0	7.0
50	11	19	70	F07	9	43.0	65.0	143.0	96.0	39.0	8.0
65	11	19	70	F07	9	46.0	71.0	155.0	110.0	55.0	13.0
80	11	19	70	F07	9	46.0	77.0	162.0	124.0	69.0	19.0
100	11	19	70	F07	9	52.0	107.0	181.0	148.0	91.0	27.0
125	14	19	70	F07	9	56.0	122.0	197.0	180.0	115.0	36.0
150	14	19	70	F07	9	56.0	150.0	210.0	206.0	140.0	47.0
200	17	24	102	F10	11	60.0	165.0	240.0	259.0	186.0	68.0
250	19	24	102	F10	11	66.0	201.0	286.0	320.0	239	90
300	22	24	102	F10	11	78.0	234.0	309.0	370.0	288.0	111.0
350	27	29	125	F12	14	78.0	301.0	329.0	412.0	325.0	128.0
400	27	29	125	F12	14	102.0	333.0	361.0	475.0	375.0	143.0
450	36	38	140	F14	18	114.0	358.0	393.0	530.0	423.0	162.0
500	36	38	140	F14	18	127.0	392.0	427.0	585.0	473.0	182.0
600	46	48	165	F16	22	154.0	454.0	492.0	687.0	560.0	214.0

Dimensions - with Lever / Gear Operator

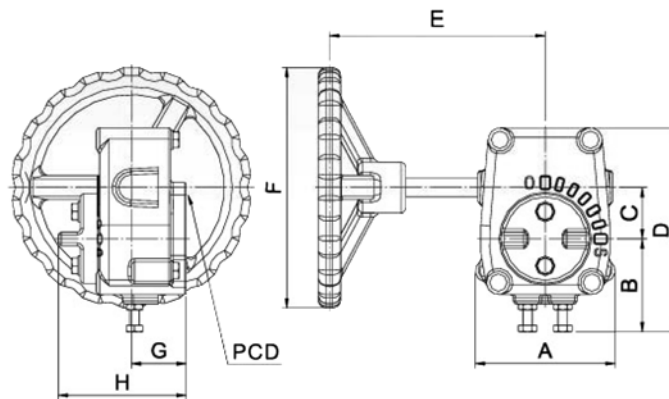


Size DN [mm]	Operator Type	Lever		Gear			Handwheel Turns N Fully Open/Closed	Mounting Flange ISO5211
		H3 [mm]	L [mm]	H4 [mm]	C [mm]	E [mm]		
40	Lever 1	195	200	-	-	-	-	F07
	Gear 1	-	-	157	41	155	150	
50	Lever 1	218	200	-	-	-	-	F07
	Gear 1	-	-	180	41	155	150	
65	Lever 1	230	200	-	-	-	-	F07
	Gear 1	-	-	192	41	155	150	
80	Lever 1	237	200	-	-	-	-	F07
	Gear 1	-	-	199	41	155	150	
100	Lever 1	258	200	-	-	-	-	F07
	Gear 1	-	-	218	41	155	150	
125	Lever 2	272	250	-	-	-	-	F07
	Gear 1	-	-	234	41	155	150	
150	Lever 2	285	250	-	-	-	-	F07
	Gear 2	-	-	247	41	155	150	
200	Lever 3	324	355	-	-	-	-	F10
	Gear 2	-	-	281	63	195	200	
250	Lever 2	370	355	-	-	-	-	F10
	Gear 2	-	-	327	63	195	200	
300	Lever 2	393	355	-	-	-	-	F10
	Gear 2	-	-	350	63	195	200	
350	Gear 3	-	-	370	61	255	310	F12
400	Gear 3	-	-	402	61	255	310	F12
450	Gear 4	-	-	445	81	340	400	F14
500	Gear 4	-	-	479	81	340	400	F14
600	Gear 5	-	-	548	123	307	400	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) (m ³ /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	SN42004	SN42013	
50			4	10	22	38	60	100	132	193	SN42005	SN42014	
65			8	18	35	61	95	187	240	315	SN42006	SN42015	
80			10	26	48	83	126	214	338	425	SN42002	SN42016	
100			15	39	72	119	221	361	606	723	SN42007	SN42017	
125			24	62	118	217	394	599	1038	1243	SN42008	SN42018	
150			10	41	95	326	542	873	1260	1859	SN42003	SN42019	
200			64	165	306	573	995	1567	2310	3124	SN42009	SN42020	
250			Gear	101	245	451	836	1462	2253	3256	4757	SN42010	SN42021
300				129	312	615	1137	2125	3248	4991	7058	SN42011	SN42022
350		0 - 10*		163	390	795	1498	2573	3980	5749	7319	SN42012	SN42023
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 type of flanges