DelVal Series 40/41 Split Body Lined Butterfly Valve

Series 40 (wafer) and Series 41 (lug) are DelVal's split body butterfly valves with a PTFE lined EPDM seat, made for 2" to 24" (DN 50 to 600) lines rated 150 PSIG (PN 10).



Key data	
Size range	2" to 24" (DN 50 to 600)
Pressure rating	150 PSIG (PN 10)
Seat	PTFE lined EPDM
Body style	Series 40 – Wafer; Series 41 – Lug

Pressure and temperature ratings

Seat temperature limits

Seat type	Lower limit*	Upper limit*
PTFE - Lined EPDM	-20°F (-29°C)	266°F (130°C)

*Temperature range shall be the lesser of the seat temperature or disc coating temperature.

Pressure rating

Size (inch)	DN	psig	barg
2” to 24”	50 to 600	150	10

End-of-line service (lug body)

Item	Detail
End-of-Line Service	Lug body valves may be used in end-of-line service with downstream piping removed.
2” to 24” (DN 50 to DN 600)	2” to 24” (DN 50 to DN 600) lug type butterfly valves are suitable for operation without a downstream flange installed, the dead-end pressure ratings is 75 psi.

Standards and specifications

Design, testing and flange standards

Item	Detail
Design	Full compliance to BS EN 593, general compliance to API 609, MSS SP 67
Face to Face	BS EN 558 Series 20, API 609 Category-A, ISO 5752 Series 20, MSS SP 67
Testing	BS EN 12266-1, API 598, MSS SP 67
Flange Standard	ASME B16.5 Class 150, Other International Standards
Body Style	Split Body
***Temp Range**	-29°C to 130°C -20°F to 266°F
Size Range	2" to 24"
Applications	Mild Chemical, Food and Pharmaceutical Industry

Dimensions and weights

Key to dimension letters

Item	Detail
ØA	Body outside diameter
B	Face-to-face length
E	Valve centreline to top of top flange
Sq. F	Top flange square size
ØG	Stem diameter
H	Stem width across flats
J	Stem projection above top flange

Operating torque

Note: Above torques are for clean media and do not contain any safety factors for actuator sizing. If other conditions exist, a service factor should be applied. Please consult UEC for specific service factor.

Torque by valve size (Nm)

Item	Value
Valve size	Pressure ΔP, Bar
	10
2"	16
2.5"	26
3"	40
4"	52
5"	70
6"	98
8"	170
10"	260
12"	420
14"	635
16"	873
18"	1230
20"	1535
24"	2446

Materials of construction

Parts and materials

Item	Description	Standard material* (CI/DI)	Standard material* (CS/SS)
1	Body	ASTM A126 Class B ASTM A395 60-40-18	ASTM A216 WCB ASTM A351 CF8M/CF8
****2**	Seat	PTFE Lined EPDM	PTFE Lined EPDM
3	Disc + Stem	ASTM A351 CF8M/CF8 (One piece investment cast disc-stem 2” to 12”) ASTM A995 Gr. 4A/5A/6A (One piece investment cast disc-stem 2” to 12”) ASTM A351 CF8M/CF8+ASTM A479 SS410/SS316 SH (One piece disc-Stem 14” to 24”) ASTM A995 Gr. 4A/5A/6A + A479 SS316 SH/S31803 (One piece disc-Stem 14” to 24”)	ASTM A351 CF8M/CF8 (One piece investment cast disc-stem 2” to 12”) ASTM A995 Gr. 4A/5A/6A (One piece investment cast disc-stem 2” to 12”) ASTM A351 CF8M/CF8+ASTM A479 SS410/SS316 SH (One piece disc-Stem 14” to 24”) ASTM A995 Gr. 4A/5A/6A + A479 SS316 SH/S31803 (One piece disc-Stem 14” to 24”)
****4**	Sleeve Bearing	–	Bear-G
****5**	Bearing Spacer	–	Polyacetal
****6**	U-Cup Seal	NBR (BUNA-N)	NBR (BUNA-N)
****7**	Stem Bushing	Polyacetal	Polyacetal

Item	Description	Standard material* (CI/DI)	Standard material* (CS/SS)
8	Socket Head Cap Screw	ISO 3506 A2-70	ISO 3506 A2-70
9	Dowel Pin	BS970 EN8	BS970 EN8
****10**	'O' Ring	NBR (BUNA-N) (24")	NBR (BUNA-N)
11	Thrust Bearing (24")	Phosphor Bronze BS1400 PB4	–
12	Bottom Cover	Carbon Steel IS 2062 Gr.B (24") ASTM A240 SS304/SS316 (24")	ASTM A479 Type SS410 Steel/ASTM A240 SS304/SS316 Carbon Steel IS 2062 Gr.B
13	Hex Head Bolt	ISO 3506 A2-70 (24")	ISO 3506 A2-70
14	Key (14" to 24")	BS970 EN8	BS970 EN8

**Recommended spares.
*Other materials may be available on request.
CI = Cast Iron, DI = Ductile Iron, CS = Carbon Steel, SS = Stainless Steel

Dimensions and weights

Wafer and lug, Series 40/41 (mm) (columns 1 of 2)

Valve size (inch)	DN	ØA	B*	E	Sq. F	Top flange PCD	Top flange no. of holes	Top flange hole dia.	ØG	H	J	Key size
2	50	91	43	140	80	70	4	10	14.0	10.0	32	–
2½	65	106	46	152	80	70	4	10	14.0	10.0	32	–
3	80	122	46	160	80	70	4	10	14.0	10.0	32	–
4	100	152	52	180	80	70	4	10	19.0	13.0	32	–
5	125	176	56	192	100	70 / 102	4	10 / 12	22.0	16.0	32	–
6	150	205	56	205	100	70 / 102	4	10 / 12	22.0	16.0	32	–
8	200	264	60	241	120	102 / 125	4	12 / 14	24.0	19.0	32	–
10	250	315	68	273	120	102 / 125	4	12 / 14	30.0	22.0	51	–
12	300	370	78	311	120	125	4	14	35.0	24.0	51	–
14	350	415	78	346	120	125	4	14	35.0	–	51	10.00 x 10.00
16	400	472	102	375	120	125	4	14	35.0	–	51	10.00 x 10.00
18	450	525	114	406	170	165	4	21	50.0	–	64	10.00 x 12.00
20	500	580	127	438	170	165	4	21	50.0	–	64	10.00 x 12.00
24	600	692	154	495	ϕ210	165	4	21	63.5	–	102	15.88 x 15.88

*Metric value face to face dimension ‘B’ conforms to API 609 category A / BS EN 558-1 Series 20 / ISO 5752 Series 20 / MSS SP 67 / ASME B16.10.

Wafer and lug, Series 40/41 (mm) (columns 2 of 2)

Valve size (inch)	DN	K	Lug bolting PCD	Lug bolting no. of holes	Lug bolting thread (UNC-2B)	Approx. weight, wafer Series 40 (kg)	Approx. weight, lug Series 41 (kg)
2	50	36.1	120.7	4	⅝ - 11	3.5	4.1
2½	65	54.0	139.7	4	⅝ - 11	3.5	4.7
3	80	70.5	152.4	4	⅝ - 11	4.0	4.8
4	100	92.2	190.5	8	⅝ - 11	5.6	8.8
5	125	118.9	215.9	8	¾ - 10	8.2	13.0
6	150	141.1	241.3	8	¾ - 10	9.6	15.2
8	200	187.4	298.5	8	¾ - 10	16.1	29.8
10	250	237.7	362.0	12	⅞ - 9	24.8	37.4
12	300	283.0	431.8	12	⅞ - 9	35.6	54.6
14	350	328.3	476.2	12	1 - 8	49.0	55.7
16	400	375.8	539.7	16	1 - 8	59.2	83.6

Valve size (inch)	DN	K	Lug bolting PCD	Lug bolting no. of holes	Lug bolting thread (UNC-2B)	Approx. weight, wafer Series 40 (kg)	Approx. weight, lug Series 41 (kg)
18	450	421.4	577.8	16	1⅛ - 7	88.2	108.6
20	500	472.6	635.0	20	1⅛ - 7	107.4	139.2
24	600	572.7	749.3	20	1¼ - 7	175.0	216.4

*Metric value face to face dimension ‘B’ conforms to API 609 category A / BS EN 558-1 Series 20 / ISO 5752 Series 20 / MSS SP 67 / ASME B16.10.

For a quotation, send the size, pressure rating, materials, operator and quantity to UEC by phone, WhatsApp or email. Inch and pound tables are on the product page at www.unitedengg.co.in/valves/delval/series-40-41-split-body-lined-butterfly-valve. Data as published by DelVal Flow Controls; DelVal and DelTorq are trademarks of DelVal Flow Controls.