DelVal Series 75/76 One-Piece Ball Valve

The DelVal Series 75/76 is a one-piece flanged floating ball valve with raised face ends, made in 1" to 4" (DN 25 to 100); Series 75 is Class 150 and Series 76 is Class 300.



Key data	
Size range	1" to 4" (DN 25 to 100)
Pressure rating	Series 75 – Class 150; Series 76 – Class 300
Body type	Flanged RF
Design standard	API 608, ASME B16.34

Pressure and temperature ratings

Temperature limits by material

Material / Group	Material	Lower limit / °F	Lower limit / °C	Upper limit / °F	Upper limit / °C
Body	WCB	-20	-29	797	425
Body	LCB	-50	-46	653	345
Body	CF8	-320	-196	1000	538
Body	CF8M	-320	-196	1000	538
Seat	PTFE	-40	-40	392	200
Seat	RPTFE	-58	-50	428	220
Seat	PEEK	-58	-50	500	260
Seat	ULTRA	-58	-50	500	260

Note: These ratings are a guide for general service.
Please consult UEC for specific recommendations.

Standards and specifications

* Pressure-temperature rating shall be the lesser of the shell rating or the seat rating.

Standards and specifications

Item	Detail
Design	API 608, ASME B16.34
Face to Face	ASME B16.10
Testing	API 598
Flange Standard	ASME B16.5
Pressure Temperature*	ASME B16.34
Fire Safe Certified	API 607
Body Style	One-Piece
Rating	ASME Class 150, 300
Temp Range	-46°C to 200°C; -50°F to 390°F

Dimensions and weights

Key to dimension letters

Item	Detail
B	Face-to-face length
H	End face to stem centreline
D	Pipe centreline to top of lever
J	Pipe centreline to top flange face
E	Lever length from stem centreline
ØA	Bore diameter at valve end
ØO	Bore diameter at ball (reduced port)
ØR	Raised face diameter
ØC	Flange outside diameter
ØG	Stem diameter
F	Stem width across flats

Operating torque

Maximum torque (BTO), Class 150 and 300 (Nm and lbf-in)

Size	Maximum torque (BTO) / Class 150 / Nm	Maximum torque (BTO) / Class 150 / Lbf-In	Maximum torque (BTO) / Class 300 / Nm	Maximum torque (BTO) / Class 300 / Lbf-In
1”	6	53	8	71
2”	20	177	32	283
3”	40	354	60	531
4”	65	575	100	885

*Torques are based on clean, wet service. If other conditions exist, a service factor should be applied. Consult UEC for specific service factor.

Flow coefficient (Cv)

Cv (USGPM), Class 150 and 300

Size	Class 150	Class 300
1"	36	35
2"	157	155
3"	432	430
4"	on request	675

Materials of construction

Parts and materials

Item	Description	Standard Material*
1	BODY	A216 WCB, WCC/A352 LCB, LCC/A351 CF8M
2	INSERT	A216 WCB, WCC/A352 LCB, LCC/A351 CF8M
3	BALL	A182 F316
4	STEM	A479 SS316
5	SEAT	PTFE/RPTFE/ULTRA/PEEK
6	BODY GASKET	GRAPHITE
7	THRUST BEARING	ULTRA
8	GLAND PACKING	GRAPHITE
9	PROTECTOR	PEEK
10	GLAND	A479 SS316
11	BELLEVILLE WASHER	17-7 PH SS
12	STOP PLATE	CARBON STEEL
13	LOCKING CLIP	STAINLESS STEEL

Item	Description	Standard Material*
14	HEX LOCK NUT	A194 8M
15	STOPPER PIN	STAINLESS STEEL
16	LEVER	DUCTILE IRON
17	HEX HEAD BOLT	A193 B8M

*Other materials may be available upon request.

Dimensions and weights

Class 150 and 300 (mm) (columns 1 of 2)

Sizes	Class	B	ØA x ØO*	H	J	Top Flange Details / BC	Top Flange Details / Hole dia	Top Flange Details / Nos	ØG	F	L	K
DN25	150	127	25 x 20	57	40	42	M5	4	14	10	22.5	12.2
DN50	150	178	51 x 38	72	65	50	M6	4	18	13	31	16.7
DN80	150	203	76 x 62	95	95	70	M8	4	22	16	43	25.4
DN100	150	229	100 x 76	110	112	102	M10	4	30	22	57.5	34.2
DN25	300	165	25 x 20	57	40	42	M5	4	14	10	22.5	12.2
DN50	300	216	51 x 38	72	65	50	M6	4	18	13	31	16.7
DN80	300	282	76 x 62	95	95	70	M8	4	22	16	43	25.4
DN100	300	305	100 x 76	110	112	102	M10	4	30	22	57.5	34.2

Class 150 and 300 (mm) (columns 2 of 2)

Sizes	Key Size	ØR	ØC	Flange drilling / ØP	Flange drilling / Hole dia	Flange drilling / Nos	D	E	Weight (kg)
DN25	–	51	110	79.4	16	4	105	225	3
DN50	–	92.1	150	120.7	19	4	134	225	7.5
DN80	–	127	190	152.4	19	4	173	360	16.5
DN100	–	157.2	230	190.5	19	8	196	400	29.5
DN25	–	51	125	88.9	19	4	105	225	5
DN50	–	92.1	165	127	19	8	134	225	10.5
DN80	–	127	210	168.3	22.2	8	173	360	23
DN100	–	157.2	255	200	22.2	8	196	400	39

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-75-76-one-piece-ball-valve. Data as published by DelVal Flow Controls; DelVal and DelTorq are trademarks of DelVal Flow Controls.