

# Hard graphite seated floating ball design valve (Trim 3H)

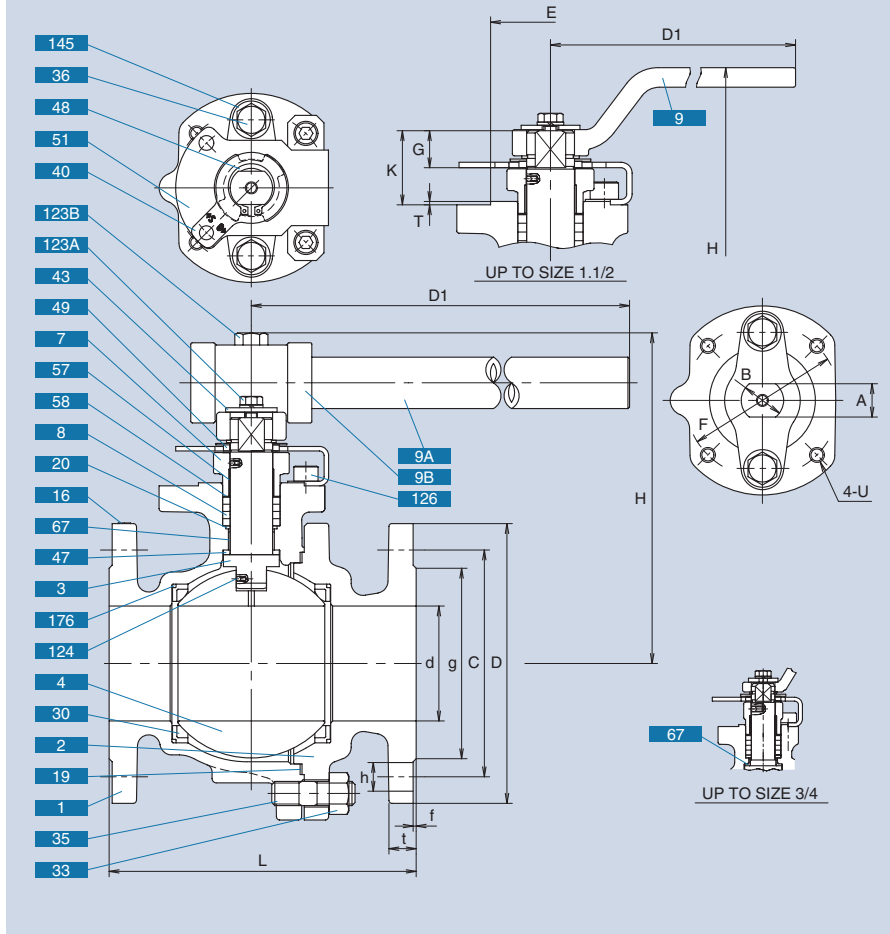
## 150UTDZ 3HM, 150SCTDZ 3HM

### Construction and Materials

No.	Parts	Stainless steel shell	Carbon steel shell
		150UTDZ 3HM	150SCTDZ 3HM
1	Body	A351 Gr.CF8M	A216 Gr.WCB
2	Body cap	A351 Gr.CF8M	A216 Gr.WCB
3	Stem	A276 Type 316	
4	Ball	A276 Type 316	
7	Gland	A351 Gr.CF8	
8	Gland packing	Flexible graphite	
9	Handle*1	Ductile iron	
9A	Handle bar*1	Carbon steel	
9B	Handle head*1	Ductile iron	
16	Name plate	A276 Type 304	
19	Gasket	Flexible graphite	
20	Packing washer	A276 Type 316L	
30	Ball seat	Carbon + JIS SUS329J1*2	
33	Cap nut	A194 Gr.8M	A194 Gr.2HM
35	Cap bolt	A193 Gr.B8M	A193 Gr.B7M
36	Gland bolt	Stainless steel	
40	Keylock plate	A276 Type 304	
43	Handle-lock plate	A276 Type 304	
47	Thrust washer	Carbon	
48	Snap ring	A276 Type 304	
49	Stopper	A276 Type 304	
51	Stopper plate	A276 Type 304	
57	Gland bush	Carbon	
58	Gland washer	A276 Type 304	
67	Stem bearing	Carbon	
123A	Handle-lock plate bolt	Stainless steel	
123B	Handle bolt	Stainless steel	
124	Spring & pin	A313 & A276 Type 316	
126	Stopper plate bolt	Stainless steel	
145	Coned disc springs	Inconel® 718 or Equivalent	
176	Seat packing	Flexible graphite	

\*1) Refer to the following table \*2) Equivalent to AISI Type 329

Operation (Standard)	Class 150
Lever type	Size 1/2 to 11/2
Bar type	Size 2 to 4
Gear	Size 5 to 8



### Dimensions:150UTDZ 3HM, 150SCTDZ 3HM

Unit: inch

Nominal size in.	d	H	D1	L	End flange					Mounting Dimension for Actuator											APPROX. MASS (lb)		
					D	Bolt hole		Bolt size	g	t	f	A	B	E	F	G	K	T	U	ISO5211 Flange Type			
						C	NO.	h															
1/2	0.55	4.25	5.12	4.25	3.50	2.38	4	0.62	1/2	1.38	0.44	0.06	0.36	0.47	0.99	1.42	0.35	0.87	0.04	M5	F03	5.73	
3/4	0.75	4.37	5.12	4.62	3.88	2.75	4	0.62	1/2	1.69	0.44	0.06	0.36	0.47	0.99	1.42	0.35	0.87	0.04	M5	F03	6.17	
1	0.95	4.88	6.30	5.00	4.25	3.12	4	0.62	1/2	2.00	0.44	0.06	0.55	0.71	1.38	1.97	0.55	1.18	0.06	M6	F05	9.92	
1.1/4*	1.26	5.04	6.30	5.50	4.61	3.50	4	0.63	1/2	2.52	0.50	0.06	0.55	0.71	1.38	1.97	0.55	1.18	0.06	M6	F05	11.02	
1.1/2	1.50	5.28	9.06	6.50	5.00	3.88	4	0.62	1/2	2.88	0.56	0.06	0.67	0.87	2.17	2.76	0.67	1.34	0.06	M8	F07	18.74	
2	1.97	5.83	11.81	7.00	6.00	4.75	4	0.75	5/8	3.62	0.62	0.06	0.67	0.87	2.17	2.76	0.67	1.34	0.06	M8	F07	25.13	
2.1/2	2.52	8.23	23.62	7.50	7.00	5.50	4	0.75	5/8	4.12	0.69	0.06	0.87	1.10	2.76	4.02	0.87	1.77	0.08	M10	F10	43.43	
3	3.00	8.62	23.62	8.00	7.50	6.00	4	0.75	5/8	5.00	0.75	0.06	0.87	1.10	2.76	4.02	1.06	1.77	0.08	M10	F10	55.12	
4	3.94	9.88	39.37	9.00	9.00	7.50	8	0.75	5/8	6.19	0.94	0.06	1.06	1.42	3.35	4.92	1.06	2.05	0.08	M12	F12	108.03	

\* 150UTDZ 3H only.

### Dimensions:150UTDZ 3HM, 150SCTDZ 3HM

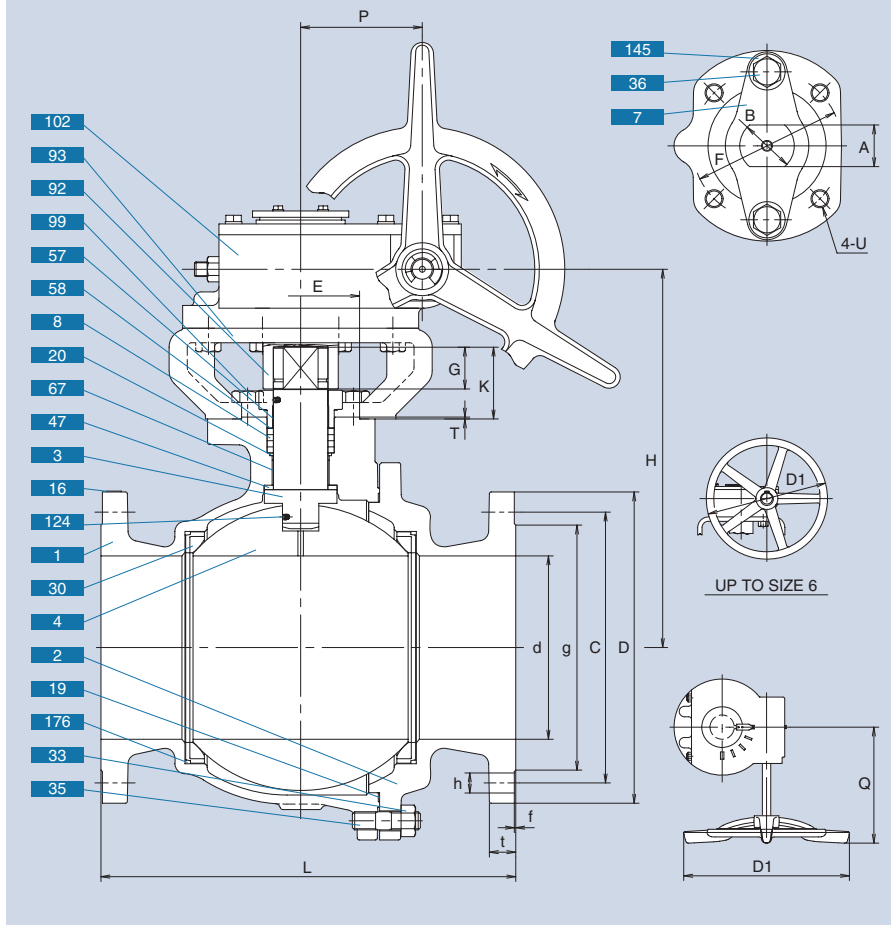
Unit: mm

Nominal size mm	d	H	D1	L	End flange					Mounting Dimension for Actuator											APPROX. MASS (kg)		
					D	Bolt hole		Bolt size	g	t	f	A	B	E	F	G	K	T	U	ISO5211 Flange Type			
						C	NO.	h															
15	14	108	130	108	89	60.5	4	16	1/2	35	11.2	1.6	9	12	25	36	9	22	1	M5	F03	2.6	
20	19	111	130	117	98	70.0	4	16	1/2	43	11.2	1.6	9	12	25	36	9	22	1	M5	F03	2.8	
25	24	124	160	127	108	79.5	4	16	1/2	51	11.2	1.6	14	18	35	50	14	30	1.5	M6	F05	4.5	
32	32	128	160	140	117	89.0	4	16	1/2	64	12.7	1.6	14	18	35	50	14	30	1.5	M6	F05	5.0	
40	38	134	230	165	127	98.5	4	16	1/2	73	14.3	1.6	17	22	55	70	17	34	1.5	M8	F07	8.5	
50	50	148	300	178	152	120.5	4	19	5/8	92	15.9	1.6	17	22	55	70	17	34	1.5	M8	F07	11.4	
65	64	209	600	190	178	139.5	4	19	5/8	105	17.5	1.6	22	28	70	102	22	45	2	M10	F10	19.7	
80	76	219	600	203	190	152.5	4	19	5/8	127	19.1	1.6	22	28	70	102	22	45	2	M10	F10	25.0	
100	100	251	1000	229	229	190.5	8	19	5/8	157	23.9	1.6	27	36	85	125	27	52	2	M12	F12	49.0	

\* 150UTDZ 3H only.

# Hard graphite seated floating ball design valve (Trim 3H)

## G-150UTDZ 3HM, G-150SCTDZ 3HM



### Construction and Materials

No.	Parts	Stainless steel shell	Carbon steel shell
		G-150UTDZ 3HM	G-150SCTDZ 3HM
1	Body	A351 Gr.CF8M	A216 Gr.WCB
2	Body cap	A351 Gr.CF8M	A216 Gr.WCB
3	Stem	A276 Type 316	
4	Ball	A276 Type 316	
7	Gland	A351 Gr.CF8	
8	Gland packing	Flexible graphite	
16	Name plate	A276 Type 304	
19	Gasket	Flexible graphite	
20	Packing washer	A276 Type 316L	
30	Ball seat	Carbon + JIS SUS329J1*1	
33	Cap nut	A194 Gr.8M	A194 Gr.2HM
35	Cap bolt	A193 Gr.B8M	A193 Gr.B7M
36	Gland bolt	Stainless steel	
47	Thrust washer	Carbon	
57	Gland bush	Carbon	
58	Gland washer	A276 Type 304	
67	Stem bearing	Carbon	
92	Connector	Carbon Steel	
93	Bracket	Ductile Iron	
99	Bolt	Stainless Steel	
102	Gear unit		
124	Spring & pin	A313 & A276 Type 316	
145	Coned disc springs	Inconel® 718 or Equivalent	
176	Seat packing	Flexible graphite	

\*1) Equivalent to AISI Type 329

### Dimensions: G-150UTDZ 3HM, G-150SCTDZ 3HM

Unit: inch

Nominal size in.	d	H	D1	L	End flange							P	Q	Mounting Dimension for Actuator										APPROX. MASS (lb)	
					D	Bolt hole			Bolt size	g	t			f	A	B	E	F	G	K	T	U	ISO5211 Flange Type		
						C	NO.	h																	
5	4.84	10.79	12.20	14.00	10.0	8.50	8	0.88	3/4	7.31	0.94	0.06	3.48	8.27	1.06	1.42	3.35	4.92	1.06	2.05	0.08	M12	F12	163.14	
6	5.95	13.19	14.17	15.50	11.0	9.50	8	0.88	3/4	8.50	1.00	0.06	3.48	8.27	1.42	1.89	3.94	5.51	1.42	2.48	0.08	M16	F14	264.56	
8	7.95	16.42	19.69	18.00	13.5	11.75	8	0.88	3/4	10.62	1.12	0.06	5.28	14.84	1.81	2.36	5.12	6.50	1.81	3.11	0.08	M20	F16	467.38	

### Dimensions: G-150UTDZ 3HM, G-150SCTDZ 3HM

Unit: mm

Nominal size mm	d	H	D1	L	End flange							P	Q	Mounting Dimension for Actuator										APPROX. MASS (kg)	
					D	Bolt hole			Bolt size	g	t			f	A	B	E	F	G	K	T	U	ISO5211 Flange Type		
						C	NO.	h																	
125	123	274	310	356	254	216.0	8	22	3/4	186	23.9	1.6	65.5	165	27	36	85	125	27	52	2	M12	F12	74	
150	151	335	360	394	279	241.5	8	22	3/4	216	25.4	1.6	88.5	210	36	48	100	140	36	63	2	M16	F14	120	
200	202	417	500	457	343	298.5	8	22	3/4	270	28.6	1.6	134.0	377	46	60	130	165	46	79	2	M20	F16	212	