

Dome Valve® II | Inflatek Valve® II

(Registered Product name Americas and Asia)

(Registered Product name Europe and Africa)

Inflatable Seat Bubble Tight Valves for Bulk Materials,
Slurries and Dirty Gases

Technical Information

Generic Specification, Planning Dimensions and Options

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Mactenn

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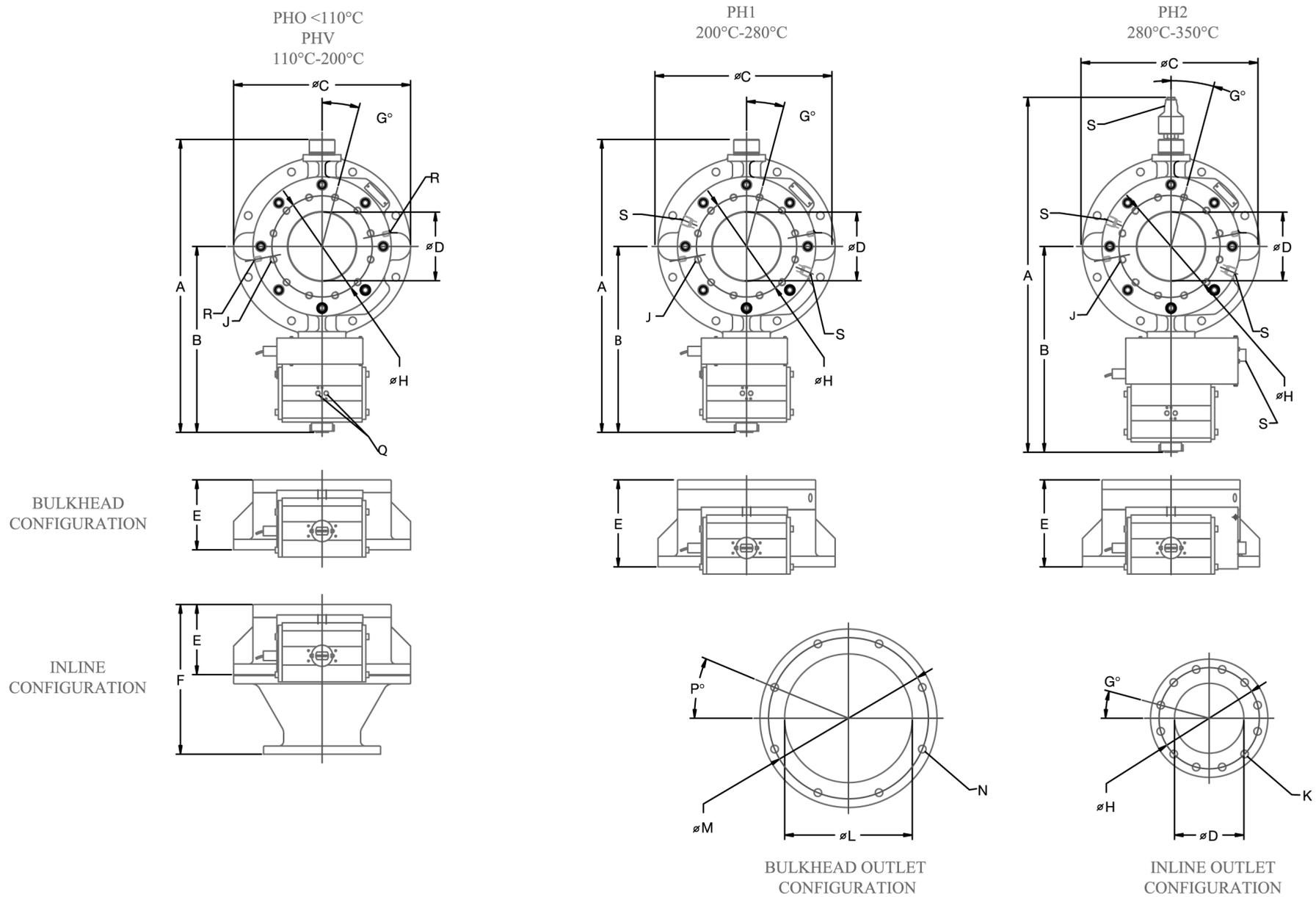
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Your local Distributor:

Dome Valve®/Inflatek Valve® Customer Connection Details PN16 Flange Patterns



Dome Valve®/Inflatek Valve® Customer Connection Details PN16 Flange Patterns

VALVE SIZE	PHO (<110°C / 230°F) & PHV (110°C -200°C / 230°F-392°F)																	WEIGHT KG/LB			
	A	B	C	D	E	F	G	H	J	No of HOLES	∅K	L	M	∅N	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	125 4.92	M16	4	18 0.71	140 5.51	190.5 7.5	16 0.63	6	30°	1/4" BSP	1/8" NPT	-	22 49	30 66
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	180 7.09	M16	8	18 0.71	240 9.45	300.0 11.81	18 0.71	6	30°	1/4" BSP	1/4" NPT	-	45 99	63 139
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	240 9.45	M20	8	22 0.87	313 12.32	390.7 15.38	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	-	76 168	110 243
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	15°	295 11.61	M20	12	22 0.87	387 15.24	470.0 18.50	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	-	118 260	164 362
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	355 13.98	M24	12	26 1.02	479 18.86	560.0 22.05	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	-	195 430	268 591
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	410 16.14	M24	12	26 1.02	548 21.57	630.0 24.80	27 1.06	12	15°	1/4" BSP	1/4" NPT	-	280 617	370 816
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	525 20.67	M27	16	30 1.18	700 27.56	840.0 33.07	36 1.42	20	9°	1/4" BSP	1/4" NPT	-	740 1631	925 2039
DN500 / 20"	1823 71.76	912 35.91	883 34.76	489 19.25	490 19.29	1044 41.10	9°	650 25.59	M30	20	33 1.30	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	-	750 1653	968 2133
DN600 / 24"	1971 77.60	985 38.78	1219 48.00	591 23.25	512 20.17	970 38.20	9°	770 30.32	M33	20	36 1.42	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	-	852 1878	1040 2292
DN800 / 30"	2339 92.09	1170 46.04	1340 52.77	737 29.00	749 29.5	1181 46.50	7.5°	950 37.40	M36	24	39 1.54	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	-	982 2164	1108 2442

VALVE SIZE	PH1 (200°C-280°C / 392°F-536°F)																	WEIGHT KG/LB			
	A	B	C	D	E	F	G	H	J	No of HOLES	∅K	L	M	∅N	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	125 4.92	M16	4	18 0.71	140 5.51	190.5 7.5	16 0.63	6	30°	1/4" BSP	1/8" NPT	3/8" BSP	22 49	30 66
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	180 7.09	M16	8	18 0.71	240 9.45	300.0 11.81	18 0.71	6	30°	1/4" BSP	1/4" NPT	1/2" BSP	45 99	63 139
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	240 9.45	M20	8	22 0.87	313 12.32	390.7 15.38	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	1/2" BSP	76 168	110 243
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	15°	295 11.61	M20	12	22 0.87	387 15.24	470.0 18.50	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	118 260	164 362
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	355 13.98	M24	12	26 1.02	479 18.86	560.0 22.05	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	195 430	268 591
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	410 16.14	M24	12	26 1.02	548 21.57	630.0 24.80	27 1.06	12	15°	1/4" BSP	1/4" NPT	1" BSP	280 617	370 816
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	525 20.67	M27	16	30 1.18	700 27.56	840.0 33.07	36 1.42	20	9°	1/4" BSP	1/4" NPT	1" BSP	740 1631	925 2039
DN500 / 20"	1823 71.76	912 35.91	883 34.76	489 19.25	490 19.29	1044 41.10	9°	650 25.59	M30	20	33 1.30	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	1" BSP	830 1829	1048 2310
DN600 / 24"	1971 77.60	985 38.78	1219 48.00	591 23.25	512 20.17	970 38.20	9°	770 30.32	M33	20	36 1.42	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	1" BSP	942 2076	1130 2491
DN800 / 30"	2339 92.09	1170 46.04	1340 52.77	737 29.00	749 29.5	1181 46.50	7.5°	950 37.40	M36	24	39 1.54	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	1" BSP	1082 2385	1208 2662

VALVE SIZE	PH2 (280°C-350°C / 536°F-662°F)																	WEIGHT KG/LB			
	A	B	C	D	E	F	G	H	J	No of HOLES	∅K	L	M	∅N	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	125 4.92	M16	4	18 0.71	140 5.51	190.5 7.5	16 0.63	6	30°	1/4" BSP	1/8" NPT	3/8" BSP	22 49	30 66
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	180 7.09	M16	8	18 0.71	240 9.45	300.0 11.81	18 0.71	6	30°	1/4" BSP	1/4" NPT	1/2" BSP	45 99	63 139
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	240 9.45	M20	8	22 0.87	313 12.32	390.7 15.38	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	1/2" BSP	76 168	110 243
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	15°	295 11.61	M20	12	22 0.87	387 15.24	470.0 18.50	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	118 260	164 362
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	355 13.98	M24	12	26 1.02	479 18.86	560.0 22.05	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	195 430	268 591
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	410 16.14	M24	12	26 1.02	548 21.57	630.0 24.80	27 1.06	12	15°	1/4" BSP	1/4" NPT	1" BSP	280 617	370 816
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	525 20.67	M27	16	30 1.18	700 27.56	840.0 33.07	36 1.42	20	9°	1/4" BSP	1/4" NPT	1" BSP	740 1631	925 2039
DN500 / 20"	1923 75.71	962 37.87	883 34.76	489 19.25	490 19.29	1044 41.10	9°	650 25.59	M30	20	33 1.30	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	1" BSP	850 1873	1068 2354
DN600 / 24"	2071 81.54	1035 40.75	1219 48.00	591 23.25	512 20.17	970 38.20	9°	770 30.32	M33	20	36 1.42	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	1" BSP	962 2120	1150 2535
DN800 / 30"	2439 96.02	1220 48.03	1340 52.77	737 29.00	749 29.5	1181 46.50	7.5°	950 37.40	M36	24	39 1.54	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	1" BSP	1102 2429	1228 2707

DIMENSIONS ARE NOT CERTIFIED FOR CONSTRUCTION AND MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

Dome Valve®/Inflatek Valve® Customer Connection Details PN10 Flange Patterns

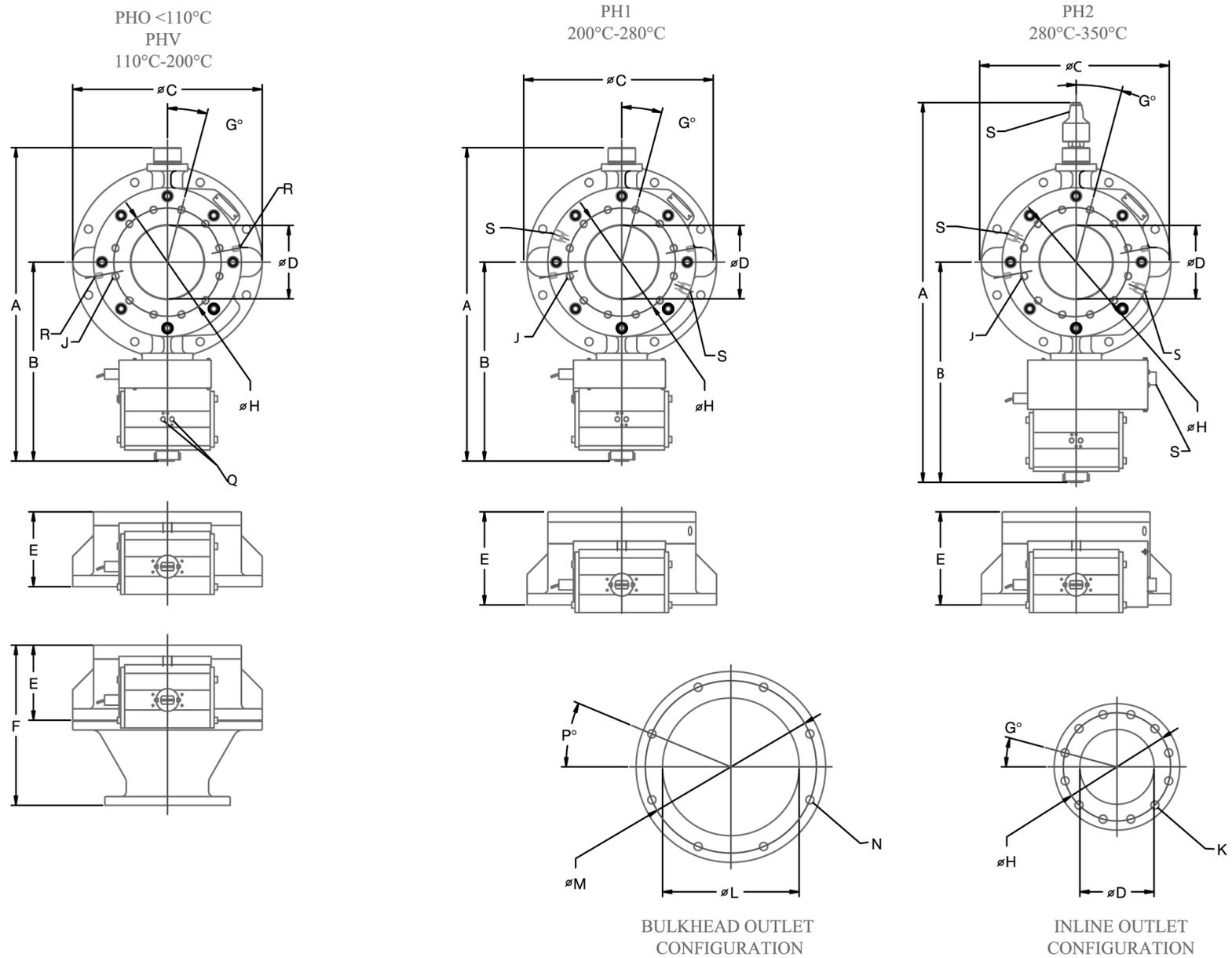
PHO (<110°C / 230°F) & PHV (110°C -200°C / 230°F-392°F)																			DIMENSIONS IN MILLIMETRES/INCHES				WEIGHT KG/LB	
VALVE SIZE	A	B	C	D	E	F	G	H	J	No of HOLES	ØK	L	M	ØN	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE			
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	125 4.92	M16	4	18 0.71	140 5.51	190.5 7.5	16 0.63	6	30°	1/4" BSP	1/8" NPT	-	22 49	30 66			
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	180 7.09	M16	8	18 0.71	240 9.45	300.0 11.81	18 0.71	6	30°	1/4" BSP	1/4" NPT	-	45 99	63 139			
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	240 9.45	M20	8	22 0.87	313 12.32	390.7 15.38	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	-	76 168	110 243			
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	22.5°	295 11.61	M20	8	22 0.87	387 15.24	470.0 18.50	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	-	118 260	164 362			
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	350 13.78	M20	12	22 0.87	479 18.86	560.0 22.05	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	-	195 430	268 591			
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	400 15.75	M20	12	22 0.87	548 21.57	630.0 24.80	27 1.06	12	15°	1/4" BSP	1/4" NPT	-	280 617	370 816			
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	515 20.28	M24	16	26 1.02	700 27.56	840.0 33.07	36 1.42	20	9°	1/4" BSP	1/4" NPT	-	740 1631	925 2039			
DN500 / 20"	1823 71.76	912 35.91	883 34.76	489 19.25	490 19.29	1044 41.10	9°	620 24.41	M24	20	26 1.02	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	-	750 1653	968 2133			
DN600 / 24"	1971 77.60	985 38.78	1219 48.00	591 23.25	512 20.17	970 38.20	9°	725 28.54	M27	20	30 1.18	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	-	852 1878	1040 2292			
DN800 / 30"	2339 92.09	1170 46.04	1340 52.77	737 29.00	749 29.5	1181 46.50	7.5°	950 37.40	M30	24	33 1.30	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	-	982 2164	1108 2442			

PHI (200°C-280°C / 392°F-536°F)																			WEIGHT KG/LB		
VALVE SIZE	A	B	C	D	E	F	G	H	J	No of HOLES	ØK	L	M	ØN	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	125 4.92	M16	4	18 0.71	140 5.51	190.5 7.5	16 0.63	6	30°	1/4" BSP	1/8" NPT	3/8" BSP	22 49	30 66
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	180 7.09	M16	8	18 0.71	240 9.45	300.0 11.81	18 0.71	6	30°	1/4" BSP	1/4" NPT	1/2" BSP	45 99	63 139
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	240 9.45	M20	8	22 0.87	313 12.32	390.7 15.38	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	1/2" BSP	76 168	110 243
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	22.5°	295 11.61	M20	8	22 0.87	387 15.24	470.0 18.50	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	118 260	164 362
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	350 13.78	M20	12	22 0.87	479 18.86	560.0 22.05	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	195 430	268 591
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	400 15.75	M20	12	22 0.87	548 21.57	630.0 24.80	27 1.06	12	15°	1/4" BSP	1/4" NPT	1" BSP	280 617	370 816
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	515 20.28	M24	16	26 1.02	700 27.56	840.0 33.07	36 1.42	20	9°	1/4" BSP	1/4" NPT	1" BSP	740 1631	925 2039
DN500 / 20"	1823 71.76	912 35.91	883 34.76	489 19.25	570 22.44	1124 44.25	9°	620 24.41	M24	20	26 1.02	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	1" BSP	830 1829	1048 2310
DN600 / 24"	1971 77.60	985 38.78	1219 48.00	591 23.25	602 23.70	1060 41.73	9°	725 28.54	M27	20	30 1.18	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	1" BSP	942 2076	1130 2491
DN800 / 30"	2339 92.09	1170 46.04	1340 52.77	737 29.00	849 33.43	1281 50.43	7.5°	950 37.40	M30	24	33 1.30	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	1" BSP	1082 2385	1208 2662

PH2 (280°C-350°C / 536°F-662°F)																			WEIGHT KG/LB		
VALVE SIZE	A	B	C	D	E	F	G	H	J	No of HOLES	ØK	L	M	ØN	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	125 4.92	M16	4	18 0.71	140 5.51	190.5 7.5	16 0.63	6	30°	1/4" BSP	1/8" NPT	3/8" BSP	22 49	30 66
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	180 7.09	M16	8	18 0.71	240 9.45	300.0 11.81	18 0.71	6	30°	1/4" BSP	1/4" NPT	1/2" BSP	45 99	63 139
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	240 9.45	M20	8	22 0.87	313 12.32	390.7 15.38	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	1/2" BSP	76 168	110 243
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	22.5°	295 11.61	M20	8	22 0.87	387 15.24	470.0 18.50	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	118 260	164 362
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	350 13.78	M20	12	22 0.87	479 18.86	560.0 22.05	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	195 430	268 591
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	400 15.75	M20	12	22 0.87	548 21.57	630.0 24.80	27 1.06	12	15°	1/4" BSP	1/4" NPT	1" BSP	280 617	370 816
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	515 20.28	M24	16	26 1.02	700 27.56	840.0 33.07	36 1.42	20	9°	1/4" BSP	1/4" NPT	1" BSP	740 1631	925 2039
DN500 / 20"	1923 75.71	962 37.87	883 34.76	489 19.25	570 22.44	1124 44.25	9°	620 24.41	M24	20	26 1.02	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	1" BSP	850 1873	1068 2354
DN600 / 24"	2071 81.54	1035 40.75	1219 48.00	591 23.25	602 23.70	1060 41.73	9°	725 28.54	M27	20	30 1.18	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	1" BSP	962 2120	1150 2535
DN800 / 30"	2439 96.02	1220 48.03	1340 52.77	737 29.00	849 33.43	1281 50.43	7.5°	950 37.40	M30	24	33 1.30	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	1" BSP	1102 2429	1228 2707

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Dome Valve®/Inflatek Valve® Customer Connection Details ANSI 150lb Flange Patterns



Dome Valve®/Inflatek Valve® Customer Connection Details ANSI 150lb Flange Patterns

PHO (<110°C / 230°F) & PHV (110°C -200°C / 230°F-392°F)																	DIMENSIONS IN MILLIMETRES/INCHES				WEIGHT KG/LB	
VALVE SIZE	A	B	C	D	E	F	G	H	J	No of HOLES	ØK	L	M	ØN	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE	
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	153 6.02	286 11.26	45°	120.6 4.75	5/8" UNC	4	19 0.75	140 66	190.5 49	16 0.63	6	30°	1/4" BSP	1/8" NPT	-	22 49	30 66	
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	137 5.39	303 11.93	22.5°	190.5 7.50	5/8" UNC	8	19 0.75	240 139	300.0 99	18 0.71	6	30°	1/4" BSP	1/4" NPT	-	45 99	63 139	
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	171 6.73	385 15.16	22.5°	241.3 9.50	3/4" UNC	8	22 0.87	313 243	390.7 168	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	-	76 168	110 243	
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	205 8.07	437 17.20	22.5°	298.4 11.75	3/4" UNC	8	22 0.87	387 362	470.0 260	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	-	118 260	164 362	
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	243 9.57	526 20.71	15°	361.9 14.25	7/8" UNC	12	25.4 1.00	479 591	560.0 430	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	-	195 430	268 591	
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	282 11.10	578 22.76	15°	431.8 17.00	7/8" UNC	12	25.4 1.00	548 816	630.0 617	27 1.06	12	15°	1/4" BSP	1/4" NPT	-	280 617	370 816	
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	429 16.89	791 31.14	11.25°	539.7 21.25	1" UNC	16	28.5 1.12	700 1896	840.0 1631	35 1.38	20	0°	1/4" BSP	1/4" NPT	-	740 1631	860 1896	
DN500 / 20"	1823 71.76	912 35.91	883 34.76	489 19.25	490 19.29	1044 41.10	9°	635 25.00	1 1/8" UNC	20	32 1.25	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	-	750 1653	968 2133	
DN600 / 24"	1971 77.60	985 38.78	1219 48.00	591 23.25	512 20.17	970 38.20	9°	749 29.50	1 1/4" UNC	20	35 1.38	1010 39.75	1117.7 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	-	852 1878	1040 2292	
DN800 / 30"	2339 92.09	1170 46.04	1340 52.77	737 29.00	749 29.5	1181 46.50	6.42°	914 36.00	1 1/4" UNC	28	35 1.38	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	-	982 2164	1108 2442	

PH1 (200°C-280°C / 392°F-536°F)																	WEIGHT KG/LB				
VALVE SIZE	A	B	C	D	E	F	G	H	J	No of HOLES	ØK	L	M	ØN	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	426 16.77	267 10.51	229 9.02	51 2.00	183 7.20	316 12.44	45°	120.6 4.75	5/8" UNC	4	19 0.75	140 66	190.5 49	16 0.63	6	30°	1/4" BSP	1/8" NPT	3/8" BSP	24 53	32 71
DN100 / 4"	598 23.54	392 15.43	340 13.39	100 3.94	184 7.24	351 13.82	22.5°	190.5 7.50	5/8" UNC	8	19 0.75	240 139	300.0 99	18 0.71	6	30°	1/4" BSP	1/4" NPT	1/2" BSP	48 106	66 146
DN150 / 6"	746 29.37	484 19.06	440 17.32	152 5.98	220 8.66	434 17.09	22.5°	241.3 9.50	3/4" UNC	8	22 0.87	313 243	390.7 168	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	1/2" BSP	80 176	114 251
DN200 / 8"	854 33.62	543 21.38	521 20.51	201 7.91	254 10.00	486 19.13	22.5°	298.4 11.75	3/4" UNC	8	22 0.87	387 362	470.0 260	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	126 278	172 379
DN250 / 10"	1007 39.65	630 24.80	620 24.41	252 9.92	298 11.73	581 22.87	15°	361.9 14.25	7/8" UNC	12	25.4 1.00	479 591	560.0 430	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	206 454	279 615
DN300 / 12"	1116 43.94	701 27.60	690 27.17	300 11.81	337 13.27	633 24.92	15°	431.8 17.00	7/8" UNC	12	25.4 1.00	548 816	630.0 617	27 1.06	12	15°	1/4" BSP	1/4" NPT	1" BSP	298 657	388 855
DN400 / 16"	1426 56.14	876 34.49	910 35.83	406 15.98	494 19.45	856 33.70	11.25°	539.7 21.25	1" UNC	16	28.5 1.12	700 1896	840.0 1631	35 1.38	20	0°	1/4" BSP	1/4" NPT	1" BSP	770 1698	890 1962
DN500 / 20"	1823 71.76	912 35.91	883 34.76	489 19.25	570 22.44	1124 44.25	9°	635 25.00	1 1/8" UNC	20	32 1.25	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	1" BSP	830 1829	1048 2310
DN600 / 24"	1971 77.60	985 38.78	1219 48.00	591 23.25	602 23.70	1060 41.73	9°	749 29.50	1 1/4" UNC	20	35 1.38	1010 39.75	1117.6 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	1" BSP	942 2076	1130 2491
DN800 / 30"	2339 92.09	1170 46.04	1340 52.77	737 29.00	849 33.43	1281 50.43	6.42°	914 36.00	1 1/4" UNC	28	35 1.38	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	1" BSP	1082 2385	1208 2662

PH2 (280°C-350°C / 536°F-662°F)																	WEIGHT KG/LB				
VALVE SIZE	A	B	C	D	E	F	G	H	J	No of HOLES	ØK	L	M	ØN	No of HOLES	P	Q	R	S	BULK HEAD	IN-LINE
DN50 / 2"	586 23.07	344 13.54	229 9.02	51 2.00	183 7.20	316 12.44	45°	120.6 4.75	5/8" UNC	4	19 0.75	140 66	190.5 49	16 0.63	6	30°	1/4" BSP	1/8" NPT	3/8" BSP	30 66	38 66
DN100 / 4"	748 29.45	440 17.32	340 13.39	100 3.94	184 7.24	351 13.82	22.5°	190.5 7.50	5/8" UNC	8	19 0.75	240 139	300.0 99	18 0.71	6	30°	1/4" BSP	1/4" NPT	1/2" BSP	56 123	74 139
DN150 / 6"	896 35.28	532 20.94	440 17.32	152 5.98	220 8.66	434 17.09	22.5°	241.3 9.50	3/4" UNC	8	22 0.87	313 243	390.7 168	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	1/2" BSP	88 194	122 243
DN200 / 8"	1036 40.79	601 23.66	521 20.51	201 7.91	254 10.00	486 19.13	22.5°	298.4 11.75	3/4" UNC	8	22 0.87	387 362	470.0 260	22 0.87	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	136 300	182 362
DN250 / 10"	1189 46.81	688 27.09	620 24.41	252 9.92	298 11.73	581 22.87	15°	361.9 14.25	7/8" UNC	12	25.4 1.00	479 591	560.0 430	27 1.06	8	22.5°	1/4" BSP	1/4" NPT	3/4" BSP	220 485	293 591
DN300 / 12"	1350 53.15	773 30.43	690 27.17	300 11.81	337 13.27	633 24.92	15°	431.8 17.00	7/8" UNC	12	25.4 1.00	548 816	630.0 617	27 1.06	12	15°	1/4" BSP	1/4" NPT	1" BSP	314 692	404 816
DN400 / 16"	1660 65.35	948 37.32	910 35.83	406 15.98	494 19.45	856 33.70	11.25°	539.7 21.25	1" UNC	16	28.5 1.12	700 1896	840.0 1631	35 1.38	20	0°	1/4" BSP	1/4" NPT	1" BSP	790 1741	910 1896
DN500 / 20"	1923 75.71	962 37.87	883 34.76	489 19.25	570 22.44	1124 44.25	9°	635 25.00	1 1/8" UNC	20	32 1.25	883 34.76	990.6 39.00	36 1.42	24	7.5°	1/4" BSP	1/4" NPT	1" BSP	850 1873	1068 2354
DN600 / 24"	2071 81.54	1035 40.75	1219 48.00	591 23.25	602 23.70	1060 41.73	9°	749 29.50	1 1/4" UNC	20	35 1.38	1010 39.75	1117.7 44.00	36 1.42	30	6°	1/4" BSP	1/4" NPT	1" BSP	962 2120	1150 2535
DN800 / 30"	2439 96.02	1220 48.03	1340 52.77	737 29.00	849 33.43	1281 50.43	6.42°	914 36.00	1 1/4" UNC	28	35 1.38	1140 44.88	1257.3 49.50	42 1.68	36	5°	1/4" BSP	1/4" NPT	1" BSP	1102 2429	1228 2707

DIMENSIONS ARE NOT CERTIFIED FOR CONSTRUCTION AND MAY BE SUBJECT TO CHANGE WITHOUT NOTICE

Features

The **Dome® (Inflatek®) Valve** is a pressure-tight, power-operated sealing valve for handling dust laden gases, abrasive materials and slurry mixtures. It is designed to provide an automatically applied bubble tight pressure seal when closed **through** a stationary or moving column of material. Ruggedly constructed from hardwearing materials the valve is rated for 1 million cycles between inspections.

Advanced features of the Dome (Inflatek) Valve II are:

- Proprietary double acting pneumatic actuator drive provides higher torque than pneumatic cylinder actuators
- Lubricated-for-life shaft bearings require no maintenance attention
- Patented shaft/dome connection feature eliminates c-pin connections simplifying valve assembly and maintenance (Patent No. 5,642,751)
- Mandatory three part pressure test to ISO 9001 to verify pressure rating and inflatable seal performance
- Mandatory certified functional test to every valve
- Non-contact proximity switch interlock for inflatable seal operation
- One million cycles between inspections
- Auto wear compensation of inflatable seal

Generic Specification

Configuration: Inline/Bulkhead

Design Pressure: 7 bar and 700 mbar vacuum

Design Temperature: 110°C/200°C/280°C/350°C constant temperature

Construction: Body: Cast Iron Gr. A278 C40/stainless steel 304/316
Spherical component: Cast iron Gr. A278 C40/stainless steel 304/316
Top Plate Assembly: Cast Iron Gr. A278 C40/stainless steel 304/316
Drive & Idle Shaft: Stainless Steel Gr. 304
Inflatable Seal Elastomer: See Options
Double Fluorocarbon/molythane shaft seals
Filament wound composite lubrication free shaft bearings

Finish: See Options

Drive: Double acting pneumatic actuator with visual valve position indication

Passive Controls: Zero contact Proximity Switch for seal actuation signal for 24-volt dc service

Operating Controls: See Options

Flange Connection: See Options

Design and Test: 97/23/EC (PED) Cat.I code and CE Stamped (Europe)
ISO 9001 QMP 10-2-4WI (USA)

Process Gas and Material: Non Lethal

Atex: Cat 2 and 3 **Zones:** Gas 1 and 2. Dust 21 and 22 available

Dimensions and Data: 1-39 Issue II Feb-05

Model Number (typical): IVII/DVII. DN --- IL/BH.PV7.PHO 50.60.70.80.90.CON 0

Options

Design Temperature Options:

110°C (230°F)	:PHO
200°C (392°F)	:PHV
280°C (536°F)	:PH1
350°C (660°F)	:PH2

Finish Options:

Standard Paint:<200C: Degreased plus 2 x synth. semi-gloss	:50
Mill Finish for stainless (Ra<125 micron)	:51
Electro Polish for stainless (Ra<32 micron)	:52
Super Finish for stainless (Ra<8 micron)	:53
High Temp<350C: Degreased plus 2 x Al heat resist. paint	:54
Other. (Specify)	:5X

Materials of Construction Options:

Cast Iron A278 Class 40.	<350°C (<650°F)	:60
Stainless steel Gr. 304.	<204°C (<400°F)	:61
Stainless steel Gr. 316	<204°C (<400°F)	:62
Internal Teflon coating*	<204°C (<400°F)	:63
Other.(Specify)		:6X
(*coating to cast iron/carbon steel valve)		

Inflatable Seal Elastomer Options:

Neoprene:	<230°F (110°C)	:70
Silicone:	<630°F (350°C)	:71
Viton:	<400°F (204°C)	:72
EPDM:	<300°F (149°C)	:73
FDA Rubber:	<230°F (110°C)	:74

Seal Protection and Spherical Component Cleaning Ring Options.

(Removes deposits of material adhering to spherical component surface)

Not Fitted	:80
Carbon steel	:81
Stainless steel 304	:82
Stainless steel 316	:83

Drive Options:

Double Acting Actuator	:90
Bare Shaft	:91
Other (Specify)	:9X

Control Options (available for ATEX Cat 2 or Cat 3)

Operating Controls: Not Supplied or Fitted	CON 0
Operating pneumatic only controls	CON 1
Operating pneumatic only controls for fail-safe close	CON 2
Open/Close position confirmation	CON 3
Inflatable seal actuation confirmation pressure switch	CON 4
PLC pre-wired and programmed	CON 5
Operating pneumatic only controls for fail-safe last position	CON 6

Ref. 1-39 Issue II Feb-05

Mactenn

Macawber