

DIAPHRAGM VALVE

WEIR / STRAIGHT THROUGH TYPE

CAST IRON / CARBON STEEL / STAINLESS STEEL



Tel: 03-5569 2933 (6 Lines) Fax: 03-5569 2588, 5569 2788
Email: mercroid@mercroid.com.my, valmicro@valmicro.com.my
http://www.mercroid.com.my



S2K Type
(Type A)

G2K Type
(Type KB)

APPLICATION

Suitable for water, steam, oil, gases, abrasive and non-abrasive media
(Refer to corrosion resistance table for valve materials selection).

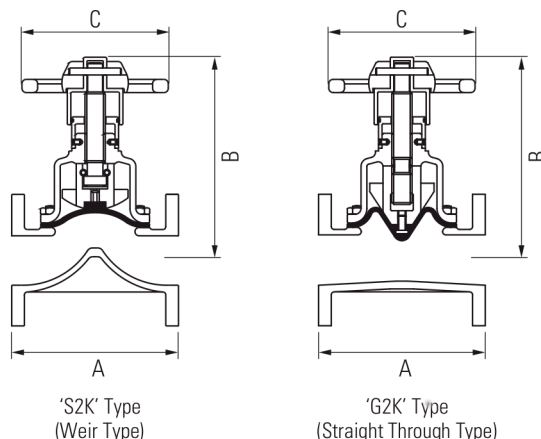
SPECIFICATION

Face to Face Dimension
End Connection

Pressure Rating
Perforated Screen Diameter

Mesh Size

Series 1 according to EN 558-1
Flange end to ANSI 150, ANSI 300,
DIN PN16, PN40, JIS 10K, JIS 20K
DIN PN16, DIN PN40, Class 150 and 300
1mm for DN15 to DN350
1.25mm for DN100 to DN300
1.6mm for DN100 to DN300
20 / 40 / 60 / 80 / 100

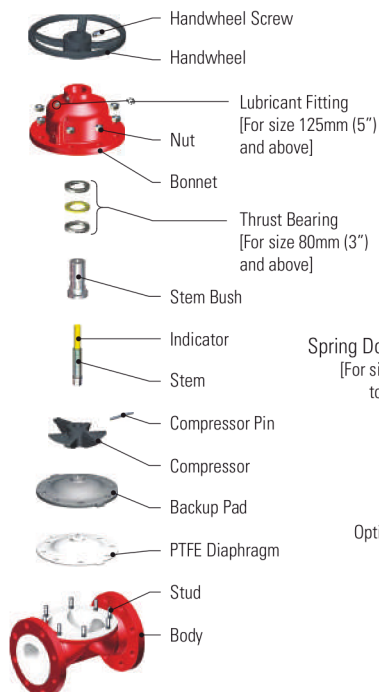


'S2K' Type
(Weir Type)

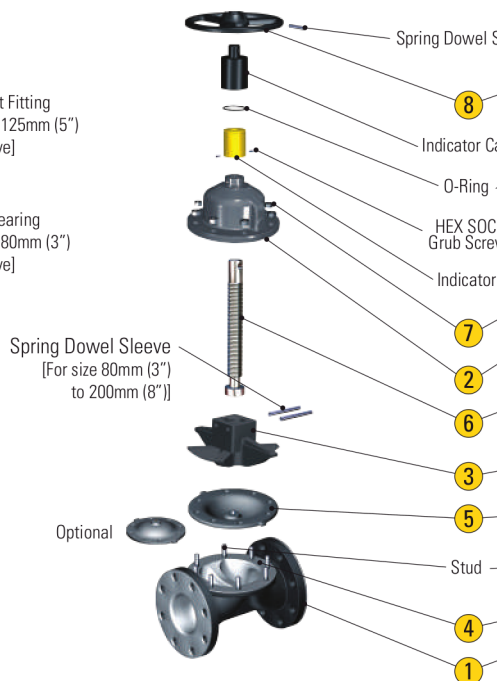
'G2K' Type
(Straight Through Type)

VALVE PARTS - Rising Handwheel

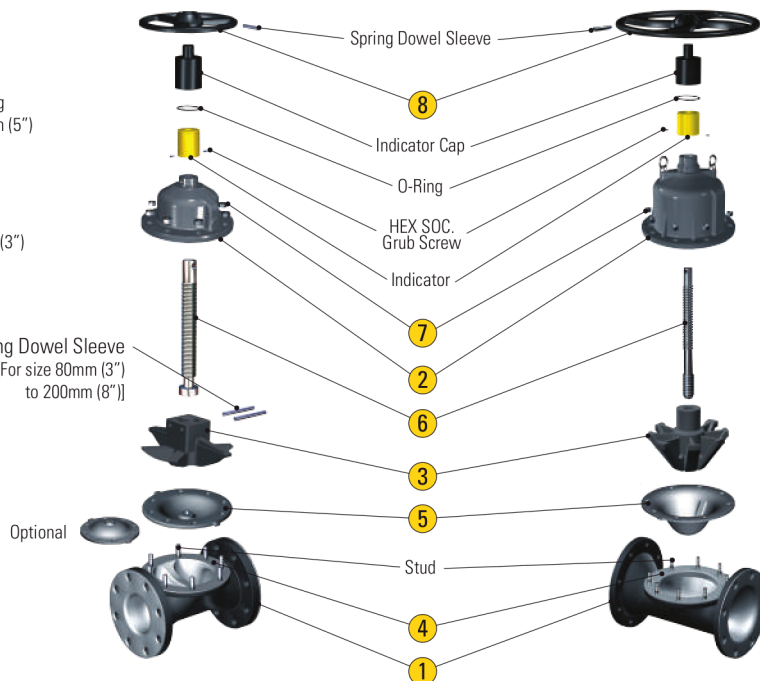
Series 'S2K' (PFA Lined)



Series 'S2K'



Series 'G2K'



Diaphragms - Series 'S2K' & 'G2K'



Series 'S2K' Close Type

Series 'S2K' Open Type

Series 'S2K' PTFE with Elastomer Pad

Series 'G2K' Close Type

MATERIAL

Parts	Material
1 Body	Cast Iron ASTM A216 Class B / EN-1561 No.EN-JL 1040 / S G Iron EN-1563 No.EN-JS 1024 / ASTM A395 Gr. 60-40-18 / 30% Cr. Cast Steel ASTM A743 Gr. CC50 / ASTM A216 Gr. WCB / Stainless Steel ASTM A351 Gr. CF8 / CF8M
2 Bonnet	
3 Compressor	
4 Body Lining	Ebonite / Natural / Butyl / Neoprene / EPDM / Nitrile, other Elastomer & even PFA, PTFE, PP etc.
5 Diaphragm	Natural / Butyl / Neoprene / EPDM / Nitrile / Hypalon / Viton / Silicon / PTFE ect.
6 Stem	Steel ASTM A276 Type 410
7 Connecting Studs / Nuts	Steel Gr. 4.6 / 4
8 Handwheel	Cast Iron ASTM A126 Class B / EN-1561 No.EN-JL 1040
Surface Protection for Cast Iron and Cast Carbon Steel Valves	Prime Coat : Chlorine free with modified alkyd resin unobjectionable in physiological and toxicological respects. Additional external coating : Black stoving enamel

DIMENSIONS

Unit : mm (inch)

Size	A					Series 'S2K' Weir Type					Series 'G2K' Straight Through Type			
	BS			DIN Unlined & Lined	MSS* SP-88 PFA Lined	B	C	Approx.Wt, Kg (LB)			B	C	Approx.Wt, Kg (LB)	
	Unlined	Rubber Lined	PFA* Lined					BS	DIN	MSS			BS	DIN
15 (1/2)	108 (4.3)	114 (4.5)	114 (4.5)	130 (5.1)	108 (5.1)	105 (4.1)	80 (3.1)	2.5 (5.5)	2.8 (6.2)	2.5 (5.5)	105 (4.1)	80 (3.1)	2.4 (3.1)	2.6 (5.7)
20 (3/4)	117 (4.6)	123 (4.8)	123 (4.8)	150 (5.9)	149 (5.9)	115 (4.5)	80 (3.1)	2.6 (5.7)	3.2 (7.0)	3.0 (6.6)	115 (4.5)	80 (3.1)	2.8 (6.2)	3.0 (6.6)
25 (1)	127 (5.0)	133 (5.2)	133 (5.2)	160 (6.3)	149 (5.9)	132 (5.2)	120 (4.7)	3.5 (7.7)	4.2 (9.3)	4.0 (8.8)	135 (5.3)	120 (4.7)	4.2 (9.3)	4.6 (10.1)
32 (1-1/4)	146 (5.7)	152 (6.0)	152 (6.0)	180 (7.1)	152 (6.0)	140 (5.5)	120 (4.7)	4.5 (9.9)	5.5 (12.1)	5.0 (11.0)	135 (5.3)	120 (4.7)	4.5 (9.9)	5.5 (12.1)
40 (1-1/2)	159 (6.3)	165 (6.5)	165 (6.5)	200 (7.9)	176 (6.9)	180 (7.1)	150 (5.9)	7.0 (15.4)	8.0 (17.6)	7.5 (16.5)	135 (5.3)	150 (5.9)	5.5 (12.1)	6.0 (13.2)
50 (2)	190 (7.5)	196 (7.7)	196 (7.7)	230 (9.1)	202 (7.9)	210 (8.3)	150 (5.9)	10 (22)	15 (33)	11 (24)	175 (6.9)	150 (5.9)	10 (22)	11 (24)
65 (2-1/2)	216 (8.5)	222 (8.7)	222 (8.7)	290 (11.4)	222 (8.7)	235 (9.3)	180 (7.1)	15 (33)	19 (42)	16 (35)	200 (7.9)	180 (7.1)	16 (35)	18 (39)
80 (3)	254 (10.0)	260 (10.2)	260 (10.2)	310 (12.2)	264 (10.4)	305 (12.0)	250 (9.8)	22 (49)	26 (57)	23 (51)	260 (10.2)	250 (9.8)	25 (55)	28 (62)
100 (4)	305 (12.0)	313 (12.3)	311 (12.2)	350 (13.8)	329 (12.9)	340 (13.4)	250 (9.8)	38 (84)	43 (95)	38 (84)	275 (10.8)	250 (9.8)	33 (73)	37 (82)
125 (5)	356 (14.0)	364 (14.3)	362 (14.2)	400 (15.7)	416 (16.4)	420 (16.5)	315 (12.4)	63 (139)	69 (152)	71 (156)	340 (13.4)	315 (12.4)	57 (126)	64 (141)
150 (6)	406 (15.9)	414 (16.3)	412 (16.2)	480 (18.9)	416 (16.4)	490 (19.3)	360 (14.2)	92 (203)	107 (236)	94 (207)	440 (17.3)	360 (14.2)	67 (148)	82 (181)
200 (8)	521 (20.5)	529 (20.8)	527 (20.8)	600 (23.6)	530 (20.9)	645 (25.4)	470 (18.5)	164 (361)	186 (410)	167 (368)	495 (19.5)	470 (18.5)	116 (256)	136 (300)

* Series 'S2K' only

DIAPHRAGMS - TYPICAL SELECTION AND APPLICATION

Grade	Material	Application	Temperature Range °C (°F)	Hardness In Shore - A	UTS Kg/cm² (PSI)	Colour Code
A	Natural Rubber	Mildy Acid Resistant	-30 to 80 (-22 to 176)	65 - 75	170 (2418)	White
AA	Natural Rubber	Abrasion Resistant	-30 to 80 (-22 to 176)	60 - 70	150 (2134)	White
AS	Natural Rubber	Highly Abrasion Resistant	-30 to 80 (-22 to 176)	45 - 55	150 (2134)	White
WA	White Natural Rubber	Food & Pharmaceuticals	-10 to 80 (14 to 176)	55 - 65	100 (1422)	White
N	Neoprene Rubber	Diluted Acid Resistant	-25 to 95 (-13 to 203)	60 - 70	120 (1707)	Red
NWT	Neoprene Rubber	Water Treatment	-25 to 95 (-13 to 203)	60 - 70	120 (1707)	Red
NCMS	Neoprene Rubber	Caustic Soda	-25 to 95 (-13 to 203)	60 - 70	120 (1707)	Red
B	Butyl Rubber	Steam Sterilisation	-25 to 120 (-13 to 248)	60 - 70	100 (1422)	Blue
WB	White Butyl Rubber	Food & Pharmaceuticals	-25 to 105 (-13 to 221)	55 - 65	80 (1138)	Blue
R	Nitrile Rubber	Oil & Fats	-10 to 90 (14 to 194)	65 - 75	120 (1707)	Yellow
H	Hypalon Rubber	Acid Resistant	-15 to 100 (5 to 212)	60 - 70	80 (1138)	Green
EP	Ethylene Propylene	Radio Active Materials	-30 to 150 (-22 to 302)	65 - 75	80 (1138)	Orange
V	Viton Rubber	Aromatics Chlorine	-5 to 150 (23 to 302)	70 - 80	70 (996)	Pink
S	Silicon Rubber	High Temperatures	-100 to 250 (-148 to 482)	55 - 65	70 (996)	Black
T	PTFE	All Chemicals And Food	-30 to 175 (-22 to 347)	-	-	-

TECHNICAL DATA FOR FLUOROPOLYMER RESIN

Resin	Technical Name	Trade Name	Temperature Range °C (°F)	Melting PT, °C (°F)
PTFE	Poly Tetra Fluoro Ethylene	Teflon	-50 to 260 (-58 to 500)	327 (621)
PFA	Per Fluoro Alkoxy	Teflon	-50 to 260 (-58 to 500)	310 (590)
ETFE	Ethylene Tetra Fluoro Ethylene	Tefzel	-50 to 180 (-58 to 356)	240 (464)
FEP	Fluorinated Ethylene Propylene	Teflon	-50 to 200 (-58 to 392)	265 (509)
ECTFE	Ethylene Chloro Trifluoro Ethylene	Halar	-50 to 170 (-58 to 338)	240 (464)
PVDF	Poly Vinylidene Fluoride	Kynar	-50 to 140 (-58 to 284)	160 (320)
PP	Poly Propylene	-	-50 to 120 (-58 to 248)	150 (302)

*Specification given are subject to changed without further notice.