

Mark 58G Series

In-Line Back Pressure Regulators

The Mark 58G is available in sizes up to 2" (DN50) in carbon steel or stainless steel. Diaphragms can be either Jorlon, Stainless Steel or Elastomer. Low flow versions with Cv values as low as 0.26 are available in certain sizes.

FEATURES

- Easy to maintain and service – top entry access to plug and diaphragm
- Large effective diaphragm area – reduces droop for increased accuracy and sensitivity
- Large orifices and body passages – provides high flow capacities
- "Tight Shutoff" – choice of ANSI CL VI bubble tight soft seat or ANSI CL IV hard seat
- Versatile application – use on steam, air, gas liquids or chemicals



MK58G

SPECIFICATIONS

Sizes: 1/4"* through 2" (DN8 through DN50)

End Connections

- Threaded — FNPT, BSPT, BSPP
- ANSI Flanges — 150#, 300# (1/2" – 2")
- DIN Flanges — PN10/16, PN25/40 (1/2" – 2")

Body Materials

- Carbon Steel
- Stainless Steel

Flow Capacity Cv (Kv)

- Cv 0.26 (0,22); 0.52 (0,45); 1.1 (0,95); 2.0 (1,7); 3.0 (2,6); 3.4 (2,9); 3.8 (3,3); 4.5 (3,9); 5.5 (4,8); 6.5 (5,6); 10.5 (9,1); 14 (12,1); 20 (17,3)

Hard Seat Plug

- 17-4PH plug with EPDM (Option 'H') -20°F to 500°F (-29°C to 260°C)
- 17-4PH plug with Viton (Option 'F') -20°F to 400°F (-29°C to 204°C)

Soft Seat Plug

- Buna-N / 316 (Option 'B') -20°F to 200°F (-29°C to 93°C)
- Viton / 316 (Option 'V') -20°F to 350°F (-29°C to 177°C)
- EPDM / 316 (Option 'J') -20°F to 350°F (-29°C to 177°C)

Maximum Inlet Pressure: 300 psi (20,7 bar)

Stem: 17-4PH Stainless Steel

Seat: Stainless Steel

Spring Housing: Cast Iron

Diaphragm

- Buna-N: -20°F to 200°F (-29°C to 93°C)
- EPDM: -20°F to 350°F (-29°C to 177°C); (290°F / 143°C for continuous steam)
- Jorlon: 20°F to 450°F (-29°C to 232°C)
- 316/316L SST: -20°F to 500°F (-29°C to 260°C)
- Viton/Nomex: -20°F to 450°F (-29°C to 232°C)

Shutoff

- Class IV - Hard Seat
- Class VI - Soft Seat

F_L Value

- 1/4" - 1" is 0.80
- 1 1/2" - 2" is 0.85

Spring Ranges PSI (BAR)

Size (DN)	PSI	BAR
1/4" to 1/2" (DN8 to DN15)	1-10; 5-25; 20-50; 40-200; 175-275	0,1-0,7; 0,3-1,7; 1,4- 3,5; 2,8-13,8; 12,1- 19,0
3/4" & 1" (DN20 & DN25)	1-7; 5-22; 15-105; 95-145; 135-215	0,1-0,5; 0,3-1,5; 1,0- 7,2; 6,6-10,0; 9,3-14,8
1-1/2" to 2" (DN40 to DN50)	1-20; 15-70; 60- 105; 95-150	0,1-1,4; 1,0-4,8; 4,1- 7,2; 6,6-10,3

SPECIFICATIONS, CONTINUED

Cv (Kv) Values

Trim 1/2"	
Cv (Kv)	
0.26 (0,22)	
0.52 (0,45)	
1.1 (0,95)	
2.0 (1,7)	
3.4 (2,9)	
Trim 3/4" & 1"	
Cv (Kv)	
2.0 (1,7)	
3.0 (2,6)	
3.8 (3,3) / 4.5 (3,9)*	
5.5 (4,8) / 6.5 (5,6)*	
Trim 1-1/2" & 2"	
Cv (Kv)	
10.5 (9,1)	
14 (12,1)	
20 (17,3)	

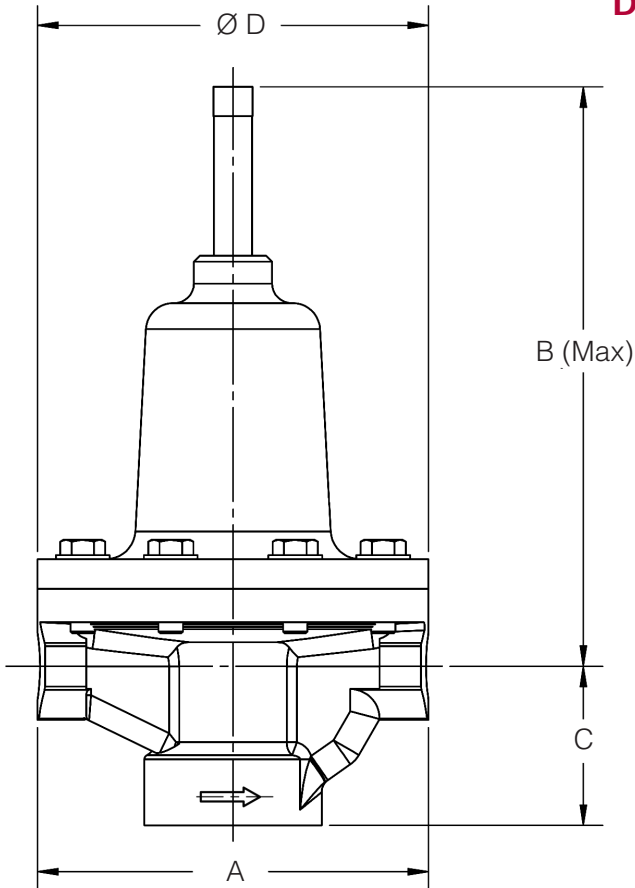
* Cv for Metal / Elastomer Diaphragm

DIMENSIONS

- Threaded Ends – inches (metric)

Size (DN)	Dimensions — Inches (mm)				Weight lbs (Kgs)
	A	B	C	D	
1/2" (15)	5.0 (127)	5.3 (134)	2.04 (51)	5.0 (127)	11 (5)
3/4" (20)	5.0 (127)	8.79 (223)	2.12 (53)	6.81 (172)	20 (9)
1" (25)	5.0 (127)	8.79 (223)	2.12 (53)	6.81 (172)	20 (9)
1-1/2" (40)	7.50 (191)	16.82 (427)	2.12 (53)	9.38 (238)	68 (31)
2" (50)	7.50 (191)	16.82 (427)	2.12 (53)	9.38 (238)	68 (31)

For 1/4" NPT, use 1/2" NPT with reducer bushings.



ORDERING SCHEMATIC

Model No	Size	Body Mat'l

1	2	3	4	5	6

7	8	9	10

Model	
58G	Standard

Size	
025	1/4" (DN8)*
050	1/2" (DN15)
075	3/4" (DN20)
100	1" (DN25)
150	1-1/2" (DN40)
200	2" (DN50)

* 1/2" NPT with 1/4" NPT reducer bushings.

Body Material	
CS	Carbon Steel (WCB)
S6	Stainless Steel (CF8M)

End Connections	
PT	NPT
BT	BSPT
BP	BSPP
F5	150# FE
F3	300# FE

Material & Trim 1/2"			
3 - Material		4 - Cv	
B	Buna-N	1	0.26
V	Viton	2	0.52
J	EPDM	3	1.1
M	Hard	4	2.0
		6	3.4

Material & Trim 3/4" & 1"			
3 - Material		4 - Cv	
B	Buna-N	4	2.0
V	Viton	5	3.0
J	EPDM	7	3.8 / 4.5*
M	Hard	8	5.5 / 6.5*

Material & Trim 1-1/2" & 2"			
3 - Material		4 - Cv	
B	Buna-N	9	10.5
V	Viton	A	14
J	EPDM	B	20
M	Hard		

* Cv for Metal / Elastomer Diaphragm

Range	
1/2" (DN15)	
C2	1 - 10 (0,07 - 0,7)
C8	5 - 25 (0,3 - 1,7)
54	20 - 50 (1,4 - 3,5)
CJ	40 - 200 (2,8 - 13,8)
CW	175 - 275 (12,1 - 19,0)
ZZ	Non-Standard
3/4", 1" (DN20, DN25)	
C1	1 - 7 (0,07 - 0,5)
C7	5 - 22 (0,3 - 1,5)
CD	15 - 105 (1,0 - 7,2)
CR	95 - 145 (6,6 - 10,0)
CU	135 - 215 (9,3 - 14,8)
ZZ	Non-Standard
1-1/2", 2" (DN40, DN50)	
C3	1 - 20 (0,07 - 1,4)
CC	15 - 70 (1,0 - 4,8)
CN	60 - 105 (4,1 - 7,2)
CS	95 - 150 (6,6 - 10,3)
ZZ	Non-Standard

Diaphragm	
BN	Buna-N
EP	EPDM
JL	Jorlon
S6	316SST
VI	Viton
ZZ	Non-Standard

Actuator	
1/2" (DN15)	
M1	S6 Diaph/Ranges 20-50 & below
E1	VI & BN Diaph/Ranges 20-50 & below
M2	S6 Diaph/Ranges 40-200 & above
E2	VI & BN Diaph/Ranges 40-200 & above
ZZ	Non-Standard
3/4", 1" (DN20, DN25)	
MD	For Metal Diaph (S6) All Ranges
E1	VI & BN Diaph/Ranges 5-22 & below
E2	VI & BN Diaph/Ranges 15-105 & above
ZZ	Non-Standard
1-1/2", 2" (DN40, DN50)	
MD	For Metal Diaph (S6) / All Ranges
ED	For Elastomer Diaph. (VI, BN) / All Ranges
ZZ	Non-Standard

