

SystemStak™ Relief Valves

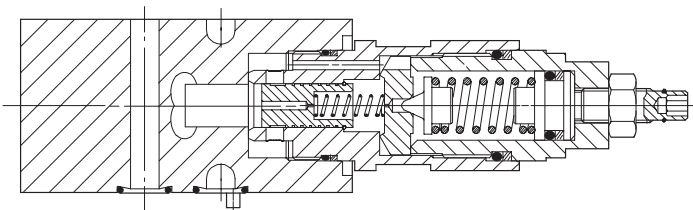
DGMC-3-41
DGMC2-3-41

General Description

These two-stage adjustable pressure relief valves limit the maximum pressure in the line(s) controlled by the integral relief valve elements.

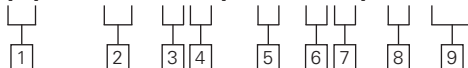
Pressure adjustment options of control knob (with or without keylock) or screw/locknut design are available. The two-stage operation is basically identical to long-established balanced piston valves, described in detail in Eaton Industrial hydraulics manual.

Typical Section



Model Codes

DGMC(2) -3- ** - ** (-B* - **)- * - 41



1 Type

2 – Dual relief function
Omit for single relief function

2

First function

Single relief, or first line of dual models

Code	Pressure limited in	Discharge into	Usage
PT	P	T	Single only
AB	A	B	Single, or dual with BA
BA	B	A	Single only
AT	A	T	Single, or dual with BT
BT	B	T	Single only

3 Pressure adjustment range, first function

A – 3-50 bar (45-725 psi)
B – 3-100 bar (45-1450 psi)
C – 10-200 bar (145-2900 psi)
G – 50-315 bar (725-4500 psi)

4 Pressure adjustment/locking method, first function

H – Handknob
K – Micrometer with keylock
W – Screw and locknut

5 Second function

Second line of dual models

Code	Pressure limited in	Discharge into	Usage
BA	B	A	Dual with AB
BT	B	T	Dual with AT

Omit for single line models

6 Pressure adjustment range, second function

Options as in 3

7 Pressure adjustment/locking method, second function

Options as in 4

8 Gauge port: option on AT and PT single models only

B – G1/4" 1/4 BSPF
S – SAE 4 (7/16"-20 UNF-2B)
Blank – No gauge

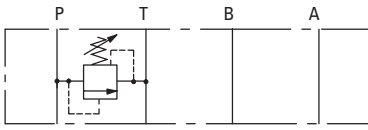
9 Design number, 41 series

Subject to change.
Installation dimensions unchanged for design numbers 40 to 49 inclusive.

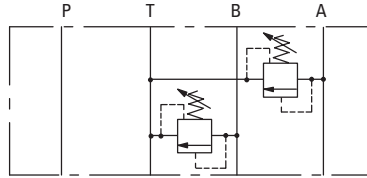
Functional Symbols

For simplicity these two-stage valves are represented as single-stage models

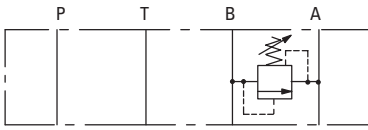
DGMC-3-PT-41



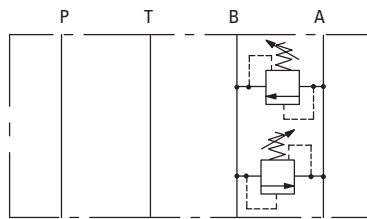
DGMC2-3-AT-**-BT-41



DGMC-3-BA-41



DGMC2-3-AB-**-BA-41

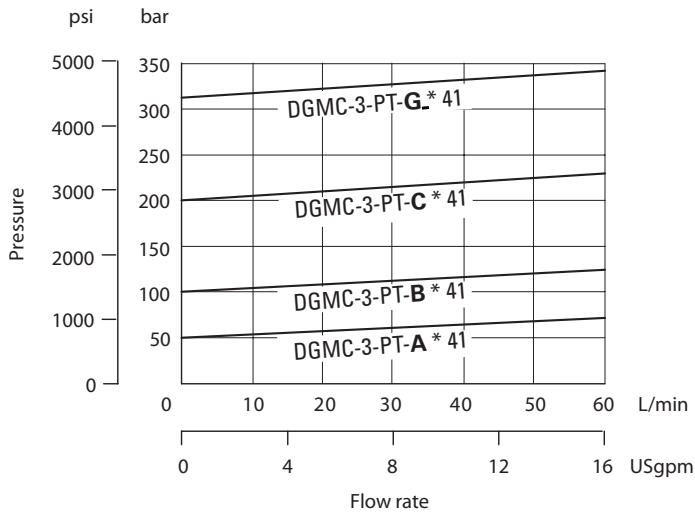


Operating Data

Maximum flow rate	60 L/min (16 USgpm)
Maximum operating pressure	315 bar (4500 psi)
Pressure drops	See graphs
Mounting position	Optional
Mass Approx.	DGMC- 1.3kg (2.9lb) DGMC2- 2.5kg (5.5lb)

Performance Data

Pressure override Typical performance for PT models at max. pressure settings with mineral oil at 21 cSt (102 SUS) and at 50°C (122°F).



Installation Dimensions

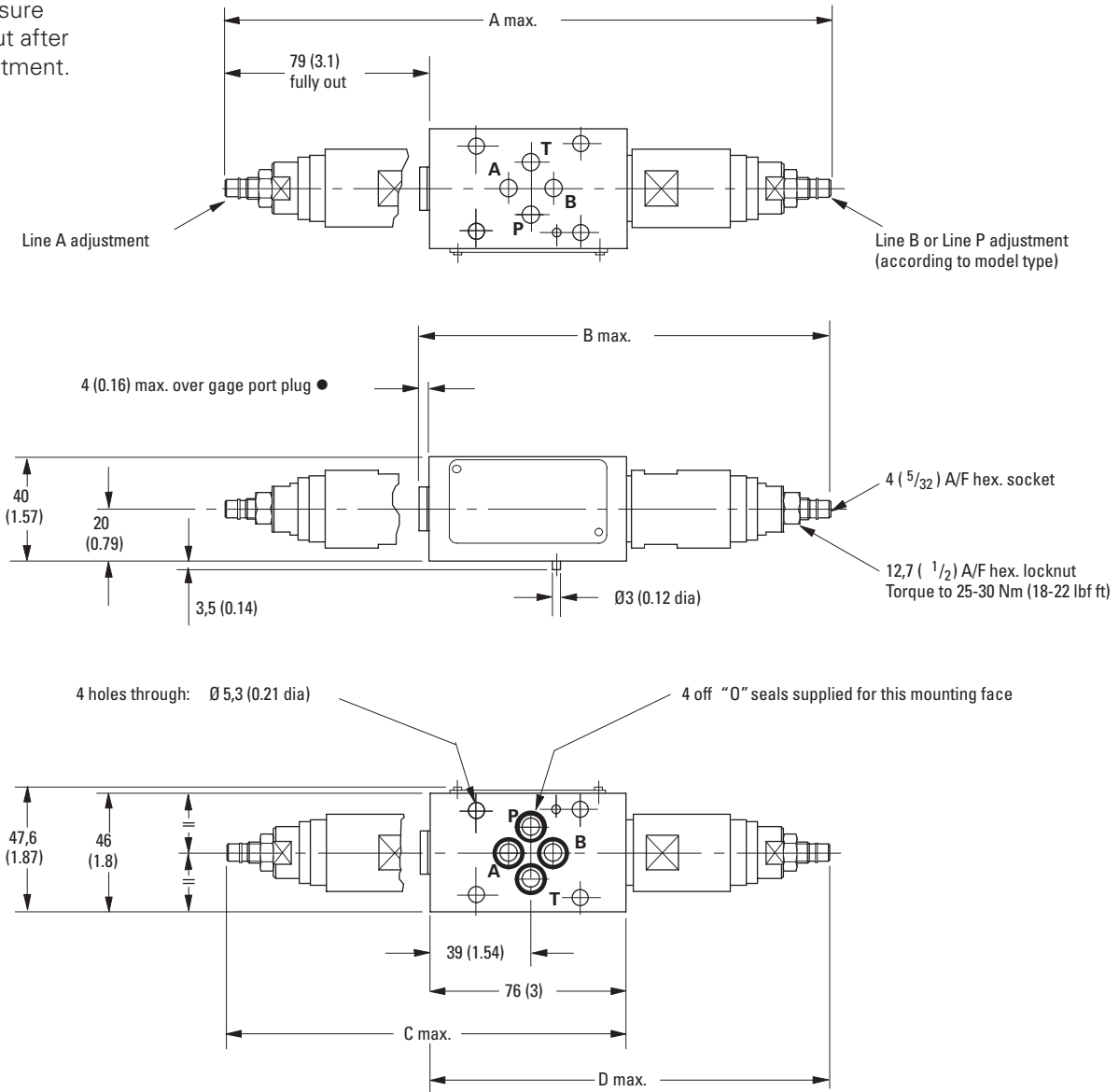
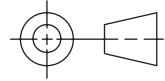
in mm (inches)

DGMC(2)-3**-*(-B**)-41

Models with type W adjuster

To adjust valve setting
slacken off locknut and turn
adjuster screw. ■

■ Turn clockwise to increase
pressure; counter-clockwise
to decrease pressure
Re-tighten locknut after
completing adjustment.



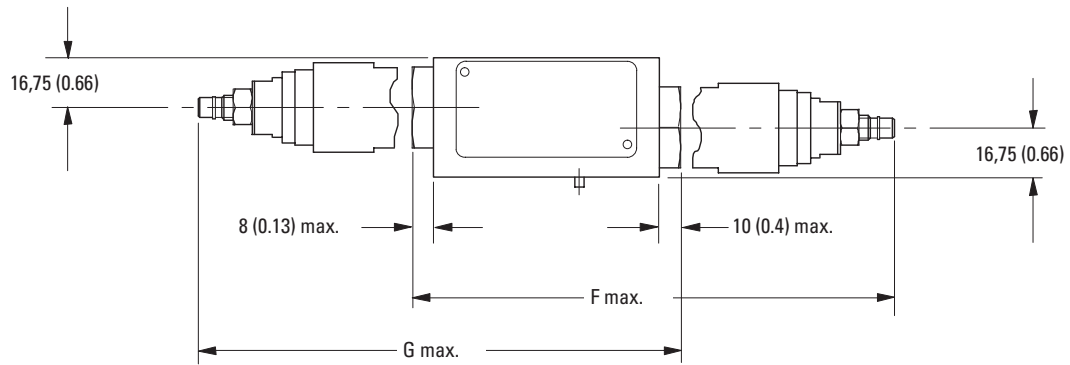
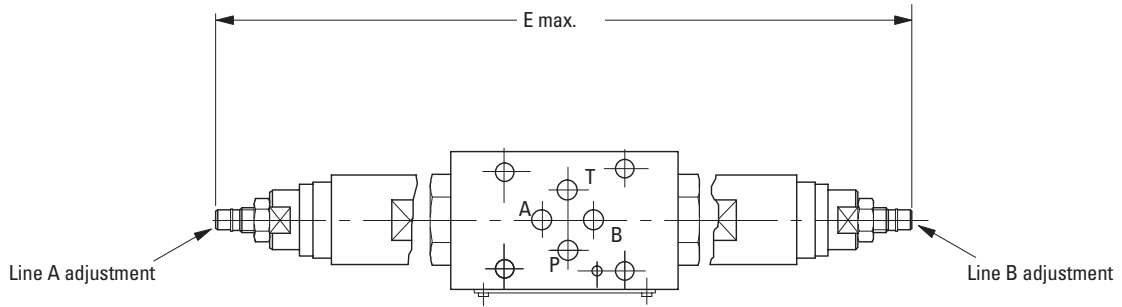
Model	A	B	C	D
DGMC-3-AT-*W-41	-	-	154 (6.1)	-
DGMC-3-BT-*W-41	-	-	-	156 (6.2)
DGMC-3-AT-*W*-41	-	160 (6.3)	-	-
DGMC-3-PT-*W-41	-	-	-	156 (6.2)
DGMC-3-PT-*W*-41	-	160 (6.3)	-	-
DGMC2-3-AT-*W-BT-*W-41	234 (9.2)	-	-	-

● For gage port thread options see model code 8

M

Installation Dimensions

in mm (inches)



Model	E	F	G
DGMC-3-AB-*W-41	-	-	164 (6.5)
DGMC-3-BA-*W-*-41	-	164 (6.5)	-
DGMC2-3-AB-*W-BA-*W-41	234 (9.2)	-	-