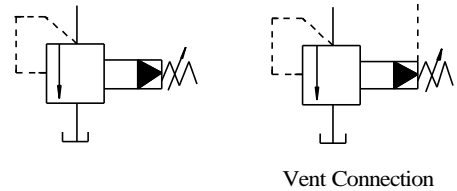


Graphic Symbols



Specifications

Model Numbers		Max. Operating Pressure MPa (PSI)	Pres. Adj. Range MPa (PSI)	Max. Flow L/min (U.S.GPM)	Approx. Mass kg (lbs.)	
Threaded Connection	Sub-plate Mounting				BT type	BG type
BT-03-* -32*	BG-03-* -32*	25 (3630)	Note) ★-25 (★-3630)	100 (26.4)	5.0 (11.0)	4.7 (10.4)
BT-06-* -32*	BG-06-* -32*			200 (52.8)	5.0 (11.0)	5.6 (12.3)
BT-10-* -32*	BG-10-* -32*			400 (106)	8.5 (18.7)	8.7 (19.2)

Note: Refer to the Minimum adjustment Pressure characteristics on page 14.

Yuken can offer flanged connection valves described below.
 For details, contact us.

Model Numbers	Max Operating Pres. MPa (PSI)	Max Flow L/min (U.S.GPM)
BF-10-* -32*	25 (3630)	400(106)
BF-16-* -32*		800(211)
BF-24-* -20*	21 (3050)	1200 (317)

Model Number Designation

F-	B	T	-03	-V	-32	*
Special Seals	Series Number	Type of Mounting	Valve Size	High Venting * Pres. Feature	Design Number	Design Standards
F: Special Seals for Phosphate Ester Type Fluids (Omit if not required)	B: Pilot Operated Relief Valves	T: Threaded Connection	03	V: For High Venting Pressure Feature (Omit if not required)	32	N Japanese Std. "JIS" 90: European Design Std. 90: N. American Design Std.
			06		32	
			10		32	
		G: Sub-plate Mounting	03		32	N Japanese Std. "JIS" and one: European Design Std. 90: N. American Design Std.
			06		32	
			10		32	

★ Use high venting pressure type to reduce the response time from unload to onload.



■ Attachment

● Mounting Bolts

Valve Model Numbers	Socket Head Cap Screw	
	Japanese Std. "JIS" and European Design Std.	N. American Design Std.
BG-03	M12 × 70 Lg. (2 pcs.), M12 × 95 Lg. (2 pcs.)	1/2-13UNC × 2-3/4 Lg. (2 pcs.), 1/2-13UNC × 3-3/4 Lg. (2 pcs.)
BG-06	M16 × 60 Lg. (2 pcs.), M16 × 80 Lg. (2 pcs.)	5/8-11UNC × 2-1/4 Lg. (2 pcs.), 5/8-11UNC × 3-1/4 Lg. (2 pcs.)
BG-10	M20 × 70 Lg. (2 pcs.), M20 × 90 Lg. (2 pcs.)	3/4-10UNC × 2-3/4 Lg. (2 pcs.), 3/4-10UNC × 3-1/2 Lg. (2 pcs.)

■ Sub-plate

Valve Model Numbers	Japanese Standard "JIS"		European Design Standard		N. American Design Standard		Approx. Mass kg (lbs.)
	Sub-plate Model Numbers	Thread Size	Sub-plate Model Numbers	Thread Size	Sub-plate Model Numbers	Thread Size	
BG-03	BGM-03-20	Rc 3/8	BGM-03-3080	3/8BSP.F	BGM-03-2090	3/8NPT	2.4(5.3)
	BGM-03X-20	Rc 1/2	BGM-03X-3080	1/2BSP.F	BGM-03X-2090	1/2NPT	3.1(6.8)
BG-06	BGM-06-20	Rc 3/4	BGM-06-3080	3/4BSP.F	BGM-06-2090	3/4NPT	4.7(10.4)
	BGM-06X-20	Rc 1	BGM-06X-3080	1BSP.F	BGM-06X-2090	1NPT	5.7(12.6)
BG-10	BGM-10-20	Rc 1-1/4	BGM-10-3080	1-1/4BSP.F	BGM-10-2090	1-1/4NPT	8.4(18.5)
	BGM-10X-20	Rc 1-1/2	BGM-10X-3080	1-1/2BSP.F	BGM-10X-2090	1-1/2NPT	10.3(22.7)

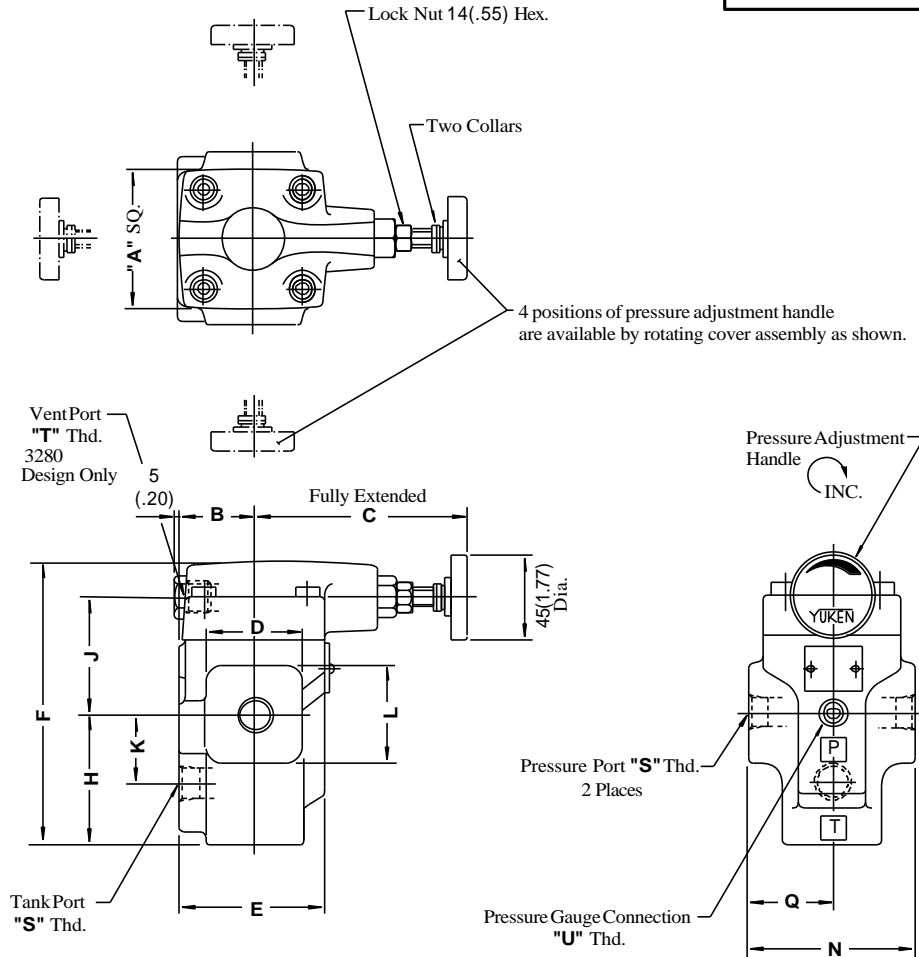
- Sub-plates are available. Specify the sub-plate model number from the table above. When sub-plates are not used, the mounting surface should have a good ma-chined finish.

■ Instructions

- If a remote control relief valve is used in the vent circuit, see page 3. In addition, if the internal volume of the vent line is too large, chattering is likely to occur. Thus, as far as possible reduce the inside Dia. and the length of the pipe.
- Pressure is limited by collars fitted. If a working pressure cannot be attained, remove some collars. One collar is equivalent to 10 MPa (1450 PSI).
- With a small flow, the setting pressure may be unstable. Use models numbered 03 and 06 with a flow rate above 8 L/min (2.1 U.S. GPM) and model 10 with 15 L/min (4.0 U.S. GPM).
- There are two threaded connection pressure ports. They can be connected each other in-line; one as inlet and the other as an outlet or the valve can be used by plugging one of the pressure ports.

BT-03-* -32/3280/3290
BT-06-* -32/3280/3290
BT-10-* -32/3280/3290

DIMENSIONS IN
MILLIMETRES (INCHES)

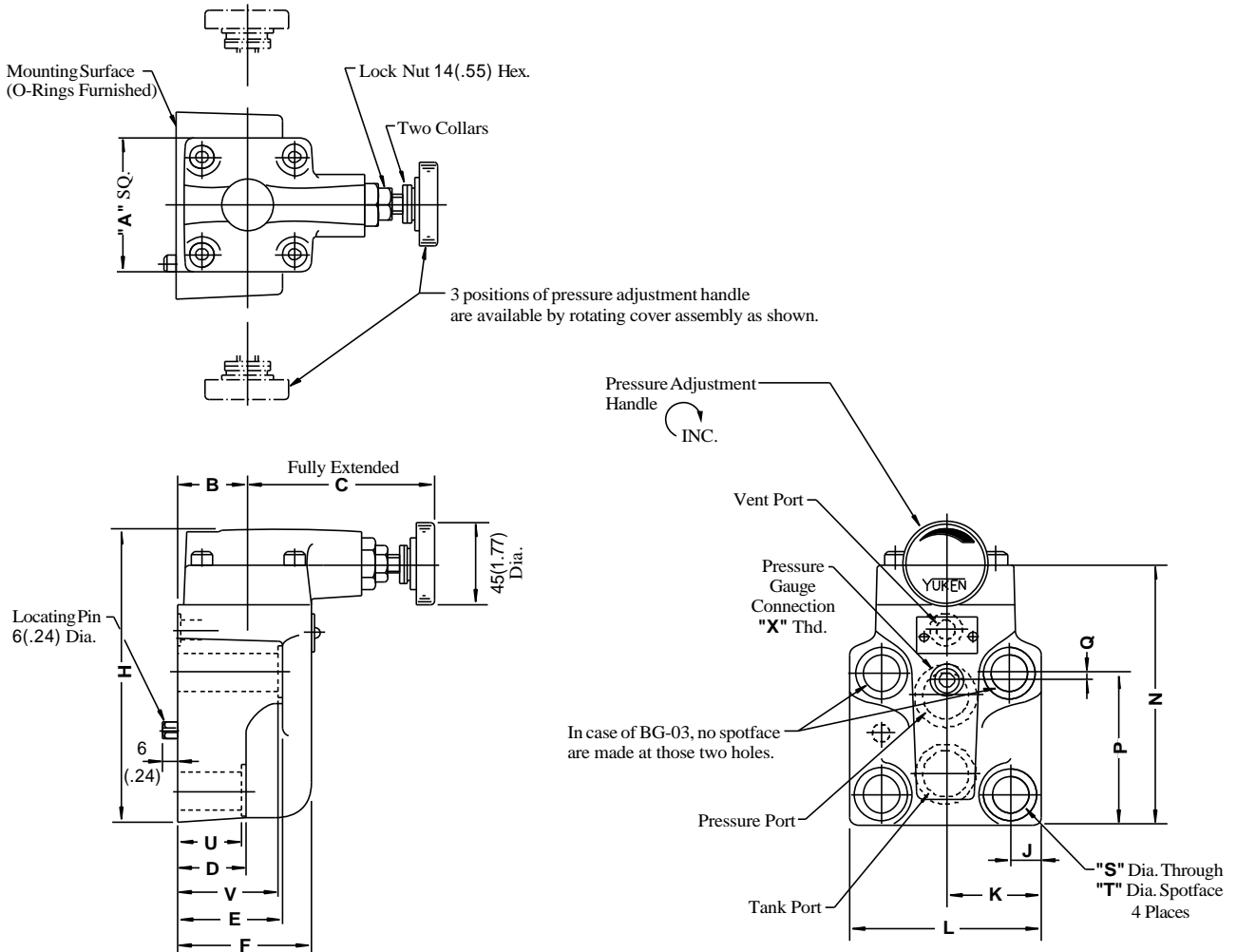


Model Numbers	Dimensions mm (Inches)											
	A	B	C	D	E	F	H	J	K	L	N	Q
BT-03-* -32/3280/ 3290	75 (2.95)	40 (1.57)	105 (4.13)	52 (2.05)	78 (3.07)	150.5 (5.93)	68.5 (2.70)	62 (2.44)	36 (1.42)	52 (2.05)	90 (3.54)	45 (1.77)
BT-06-* -32/3280/	85 (3.35)	50 (1.97)	101 (3.98)	80 (3.15)	96 (3.78)	183 (7.20)	89 (3.50)	74 (2.91)	49 (1.93)	80 (3.15)	120 (4.72)	60 (2.36)

Model Numbers	Thread Size		
	"S" Thd.	"T" Thd.	"U" Thd.
BT-03-* -32	Rc 3/8	Rc 3/8	Rc 1/4
BT-03-* - 3280	3/8BSP.F 3/8NPT	3/8BSP.F 3/8NPT	1/4BSP.Tr 1/4NPT
BT-03-* - 3290	Rc 3/4 3/4BSP.F	Rc 3/8 3/8BSP.F	Rc 1/4 1/4BSP.Tr
BT-06-* -32	3/4NPT	3/8NPT	1/4NPT
BT-06-* - 3280	Rc 1-1/4 1-1/4BSP.F	Rc 3/8 3/8BSP.F	Rc 1/4 1/4BSP.Tr
BT-06-* -	1-1/4 NPT	3/8 NPT	1/4 NPT

BG-03-* -32/3290
BG-06-* -32/3290
BG-10-* -32/3290

MENSIONS IN
MILLIMETRES (INCHES)

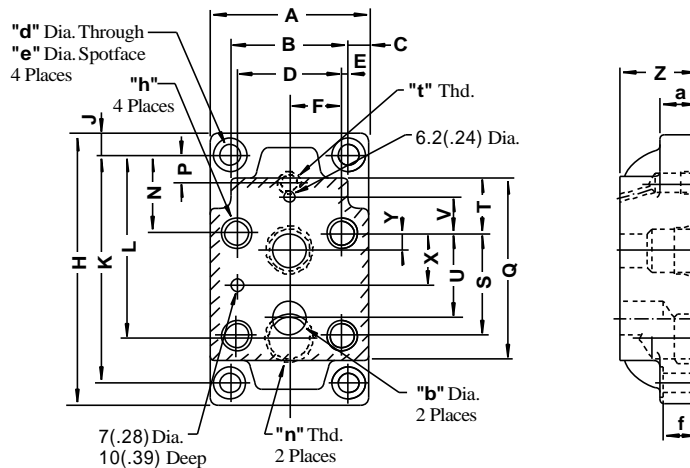


Model Numbers	Dimensions mm (Inches)																
	A	B	C	D	E	F	H	J	K	L	N	P	Q	S	T	U	V
BG-03-* -32/ 3290	75 (2.95)	40 (1.57)	105 (4.13)	57 (2.24)	78 (3.07)	78 (3.07)	137 (5.39)	14.1 (.56)	41 (1.61)	82 (3.23)	117 (4.61)	77 (3.03)	22 (.87)	13.5 (.53)	21 (.83)	55 (2.17)	—
BG-06-* -32/ 3290	85 (3.35)	45 (1.77)	101 (3.98)	47 (1.85)	67 (2.64)	84 (3.31)	195 (7.68)	20.7 (.81)	62 (2.44)	124 (4.88)	175 (6.89)	110 (4.33)	6 (.24)	21.5 (.85)	32 (1.26)	45 (1.77)	65 (2.56)

Model Numbers	Thread Size	Mounting Surface
	"X" Thd	
BG-03-* -32	Rc 1/4=1/4BSP.Tr	ISO 6264-AR-06-2-A
BG-03-* -	1/4NPT	
3290	Rc 1/4=1/4BSP.Tr	ISO 6264-AS-08-2-A
BG-06-* -32	1/4NPT	
BG-06-* -	Rc 1/4=1/4BSP.Tr	ISO 6264-AT-10-2-A
3290	1/4 NPT	

BGM-03,03X-20 / 3080 / 2090
 BGM-06,06X-20 / 3080 / 2090
 BGM-10,10X-20 / 3080 / 2090

DIMENSIONS IN MILLIMETRES (INCHES)



Model Numbers	Dimensions mm (Inches)													
	A	B	C	D	E	F	H	J	K	L	N	P	Q	S
BGM-03	86 (3.39)	60 (2.36)	13 (.51)	53.8 (2.12)	3.1 (.12)	26.9 (1.06)	149 (5.87)	13 (.51)	123 (4.84)	86 (3.39)	32 (1.26)	26 (1.02)	97 (3.82)	53.8 (2.12)
BGM-03X										95 (3.74)	21 (.83)			
BGM-06	108 (4.25)	78 (3.07)	15 (.59)	70 (2.76)	4 (.16)	35 (1.38)	180 (7.09)	15 (.59)	150 (5.91)	106.5 (4.19)	51 (2.01)	27.2 (1.07)	121 (4.76)	66.7 (2.63)
BGM-06X										119 (4.69)	18 (.71)			
BGM-10	126 (4.96)	94 (3.70)	16 (.63)	82.6 (3.25)	5.7 (.22)	41.3 (1.63)	227 (8.94)	16 (.63)	195 (7.68)	138.2 (5.44)	62 (2.44)	30.2 (1.19)	154 (6.06)	88.9 (3.50)
BGM-10X										158 (6.22)	17 (.67)			

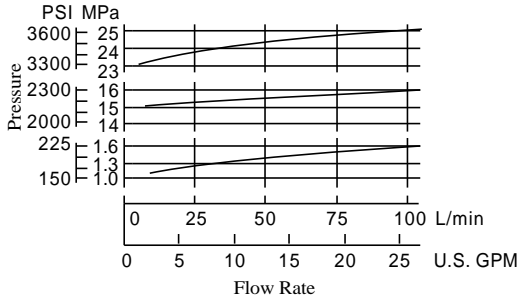
Model Numbers	Dimensions mm (Inches)										
	T	U	V	X	Y	Z	a	b	d	e	f
BGM-03	19 (.75)	47.4 (1.87)	0 (0)	22 (.87)	22 (.87)	32 (1.26)	20 (.79)	14.5 (.57)	11 (.43)	17.5 (.69)	19 (.75)
BGM-03X						40 (1.57)					
BGM-06	37 (1.46)	55.5 (2.19)	23.8 (.94)	33.4 (1.31)	11 (.43)	40 (1.57)	25 (.98)	23 (.91)	13.5 (.53)	21 (.83)	24 (.94)
BGM-06X						50 (1.97)					
BGM-10	42 (1.65)	76.2 (3.00)	31.8 (1.25)	44.5 (1.75)	12.7 (.50)	50 (1.97)	32 (1.26)	28 (1.10)	17.5 (.69)	26 (1.02)	31 (1.22)
BGM-10X						63 (2.48)					

Model Numbers	Japanese Standard "JIS" Design "20"			European Design Standard Design "3080"			N. American Design Standard Design "2090"			
	"h"	"n" Thd.	"t" Thd.	"h"	"n" Thd.	"t" Thd.	"h"	"n" Thd.	"t" Thd.	
BGM-03	M12Thd. 20(.79) Deep	Rc3/8	Rc 1/4	M12Thd. 20(.79) Deep	3/8BSP.F	1/4 BSP.F	1/2-13UNC Thd. 22(.87) Deep	3/8NPT	1/4 NPT	
BGM-03X		Rc1/2			1/2BSP.F			1/2NPT		
BGM-06	M16Thd. 25(.98) Deep	Rc3/4		M16Thd. 25(.98) Deep	3/4BSP.F			5/8-11UNC Thd. 27(1.06) Deep		3/4NPT
BGM-06X		Rc1			1BSP.F			1NPT		
BGM-10	M20Thd. 28(1.10) Deep	Rc1-1/4		M20Thd. 28(1.10) Deep	1-1/4BSP.F			3/4-10UNC Thd. 28(1.10) Deep		1-1/4NPT
BGM-10X		Rc 1-1/2			1-1/2 BSP.F			1-1/2NPT		

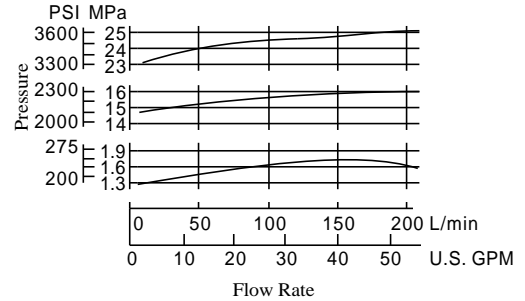
Nominal Override Characteristics

Hydraulic fluid: Viscosity : 35 mm²/s (164 SSU)
Specific Gravity : 0.850

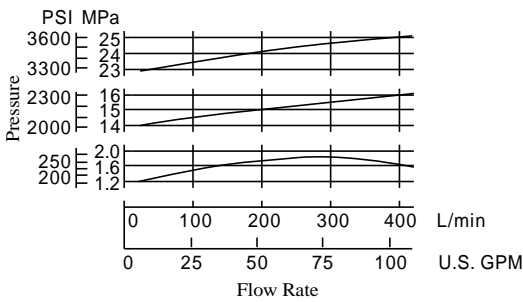
BT-03, BG-03



BT-06, BG-06



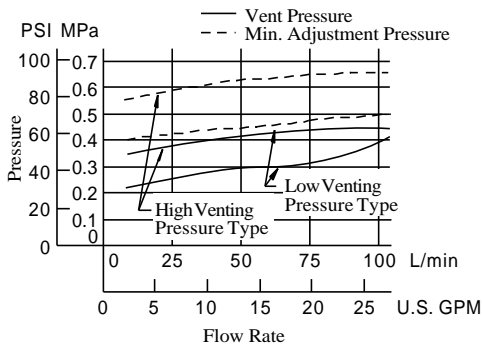
BT-10, BG-10



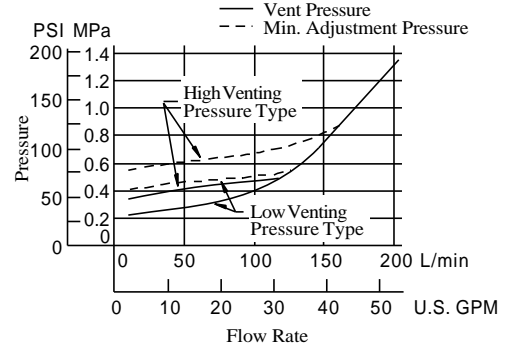
Min. Adj. Pressure & Vent Pressure vs. Flow

Hydraulic fluid: Viscosity : 35 mm²/s (164 SSU)
Specific Gravity : 0.850

BT-03, BG-03



BT-06, BG-06



BT-10, BG-10

