

# FLOW CONTROLS

## RESTRICTORS



### FEATURES

- The TV adjustable valve functions as a needle valve flow restrictor. The TCV adjustable valve functions as a flow control valve, with a needle valve flow restrictor in one direction and free flow in the opposite direction.

### Symbol



TV



TCV

### Model Code

**TV - T 03 - \*\* - N**

1    2    3    4    5

**1 Series**

**TV:** Needle Valve

**TCV:** Flow Control Valve with Reverse Free Flow Check

**2 Mounting Style**

**T:** Threaded Body

**G:** Subplate Mounted

**3 Valve Size**

**03:** 8 GPM

**06:** 20 GPM

**10:** 50 GPM

**4 Design Number**

**5 Ports**

**No Code:** For "G" Subplate Style

**N:** NPT Ports for "T" Threaded

Body Style

03: 3/8" NPT

06: 3/4" NPT

10: 1-1/4" NPT

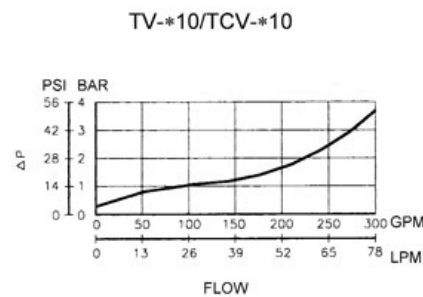
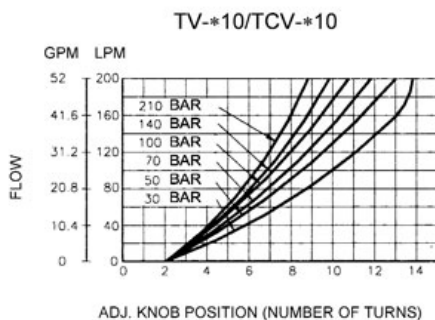
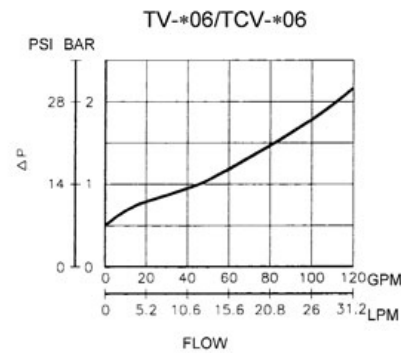
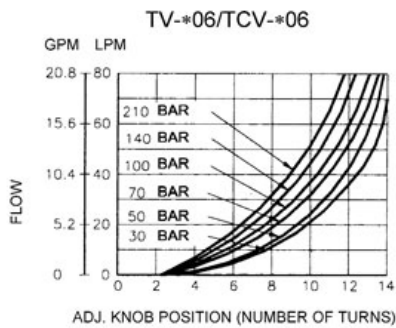
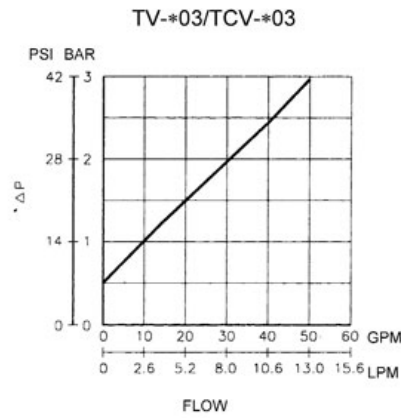
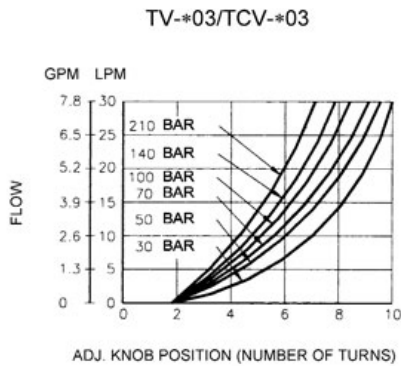
# FLOW CONTROLS RESTRICTORS

## SPECIFICATIONS

MODEL NUMBERS		MAX. OPERATED PRESSURE BAR (PSI)	RATED FLOW LPM (GPM)	WEIGHT KGS (LBS)	
THREAD TYPE	SUBPLATE TYPE				
TV-T03	TV-G03	207 (3000)	30 (8)	1.4(3.1)	1.5(3.1)
TCV-T03	TCV-G03			1.5(3.1)	2.1(4.6)
TV-T06	TV-G06		80 (20)	2.6(5.7)	2.7(6.0)
TCV-T06	TCV-G06			3.5(7.7)	4.0(8.8)
TV-T10	TV-G10		200 (50)	5.2(11.5)	6.1(13.5)
TCV-T10	TCV-G10			7.4(16.3)	8.1(17.8)

## PERFORMANCE CURVES

### PRESSURE DROP FOR REVERSED FREE FLOW

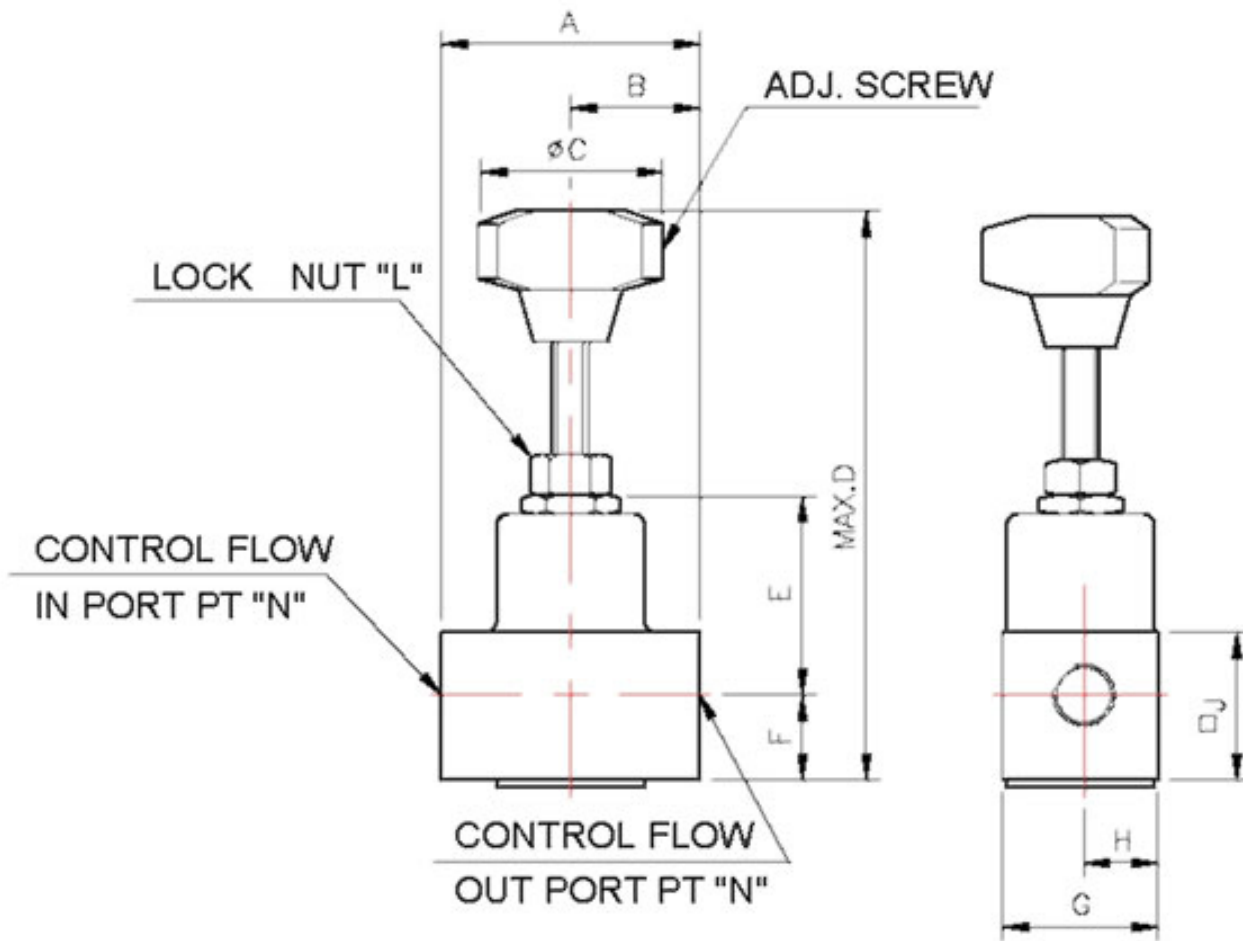


# FLOW CONTROLS RESTRICTORS

## DIMENSIONS

TV-T03/06/10-\*\*

UNIT :	mm(inch)
WEIGHT :	kgs(lbs)
T03	1.40(3.08)
T06	2.60(5.72)
T10	5.20(11.44)



MODEL	A	B	C	D	E	F	G	H	J	L	N
TV-T03	70 (2.76)	35 (1.38)	40 (1.57)	143 (5.63)	54 (2.13)	23 (0.91)	42 (1.65)	20 (0.79)	40 (1.57)	19 (0.75)	M10 (3/8")
TV-T06	100 (3.94)	50 (1.97)	40 (1.57)	136.5 (5.37)	62 (2.44)	30 (1.18)	62 (2.44)	30 (1.18)	60 (2.36)	19 (0.75)	M19 (3/4")
TV-T10	130 (5.12)	65 (2.56)	56 (2.20)	173 (6.81)	73 (2.87)	40 (1.57)	82 (3.23)	40 (1.57)	80 (3.15)	22 (0.87)	M32 (1-1/4")

# FLOW CONTROLS RESTRICTORS

## DIMENSIONS

TV-G03/06/10-\*\*

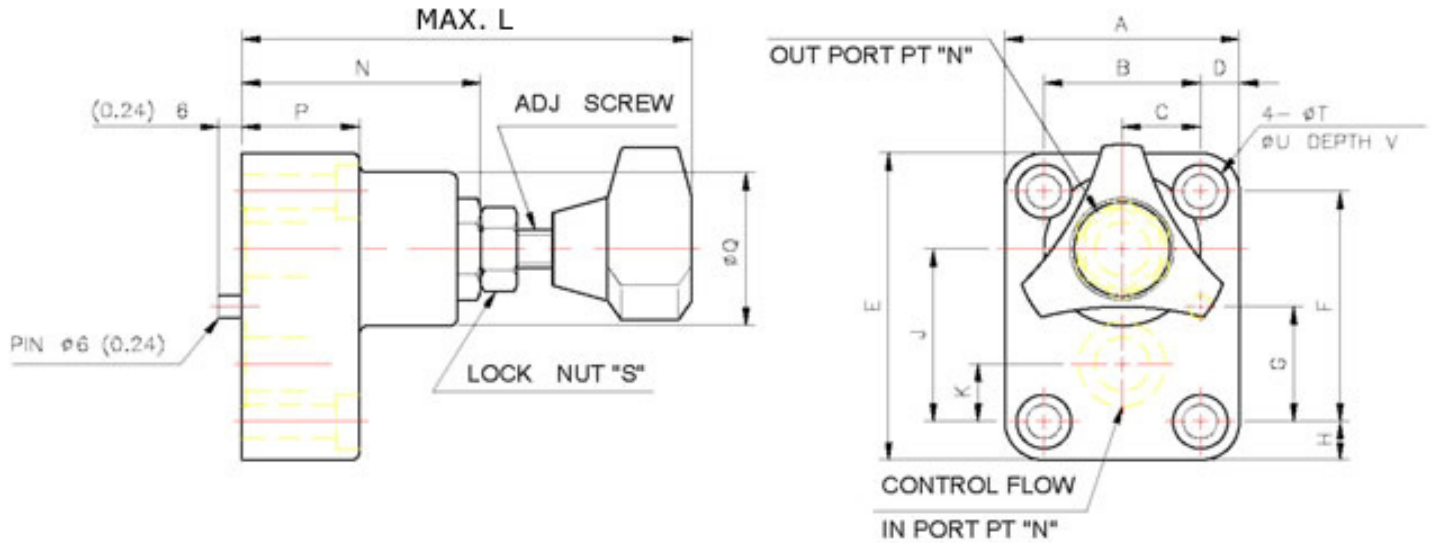
UNIT : mm(inch)

WEIGHT : kgs(lbs)

G03 1.50(3.30)

G06 2.70(5.94)

G10 6.10(13.42)



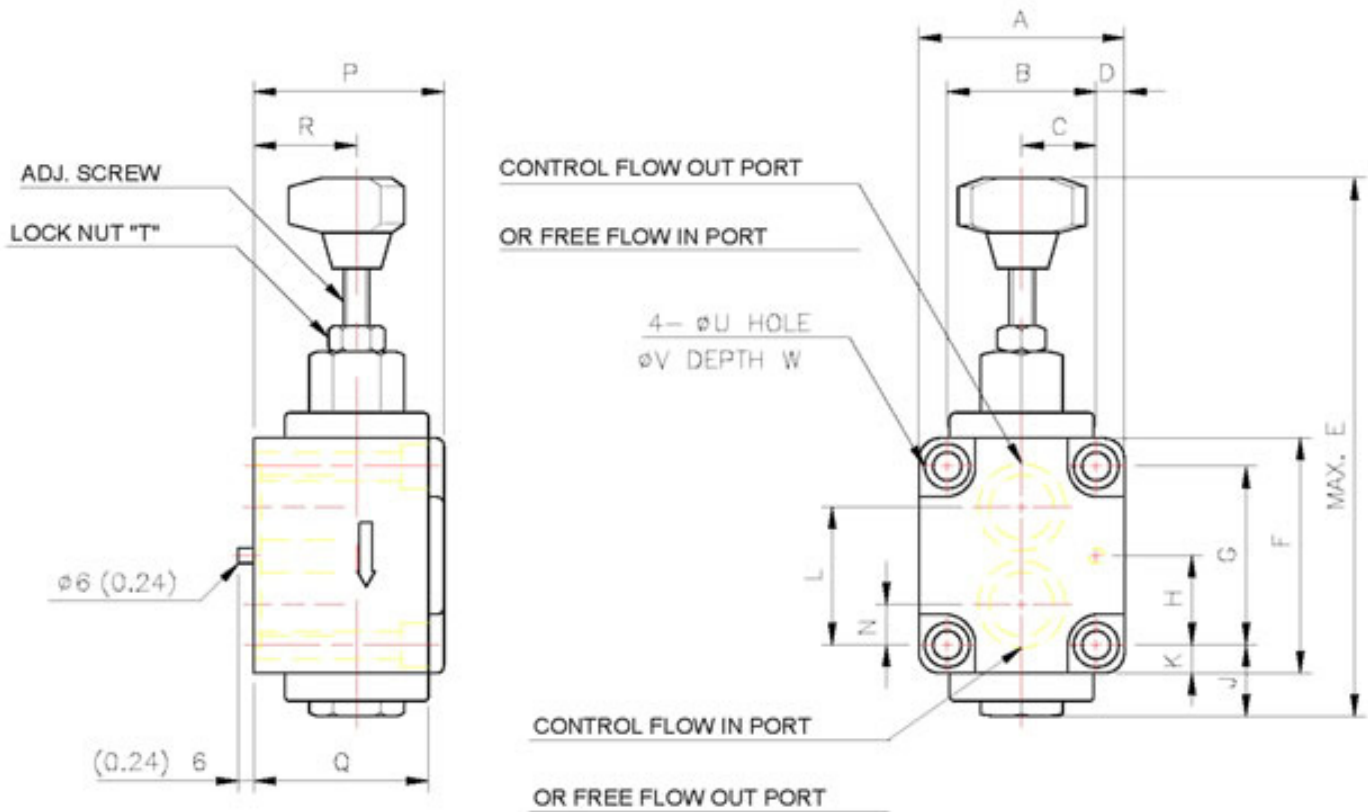
MODEL	A	B	C	D	E	F	G	H	J
TV-G03	60 (2.36)	40 (1.57)	20 (0.79)	10 (0.39)	80 (3.14)	60 (2.36)	30 (1.18)	10 (0.39)	45 (1.77)
TV-G06	80 (3.15)	58 (2.28)	29 (1.14)	11 (0.43)	92 (3.62)	70 (2.76)	35 (1.38)	11 (0.43)	54 (2.13)
TV-G10	100 (3.94)	72 (2.83)	36 (1.42)	14 (0.55)	120 (4.72)	92 (3.62)	46 (1.81)	14 (0.55)	71 (2.80)

MODEL	K	L	N	P	Q	S	T	U	V
TV-G03	15 (0.59)	100 (3.94)	65 (2.56)	30 (1.18)	44 (1.73)	19 (0.75)	9 (0.35)	14 (0.55)	8.6 (0.34)
TV-G06	16 (0.63)	117.5 (4.63)	73 (2.87)	42 (1.65)	41.5 (1.63)	23 (0.90)	11 (0.43)	17.5 (0.69)	10.8 (0.43)
TV-G10	21 (0.83)	145 (5.71)	100 (3.94)	55 (2.17)	56 (2.20)	23 (0.90)	13.5 (0.53)	21 (0.83)	1.0 (0.04)

# FLOW CONTROLS RESTRICTORS

## DIMENSIONS

TCV-G03/06/10-\*\*



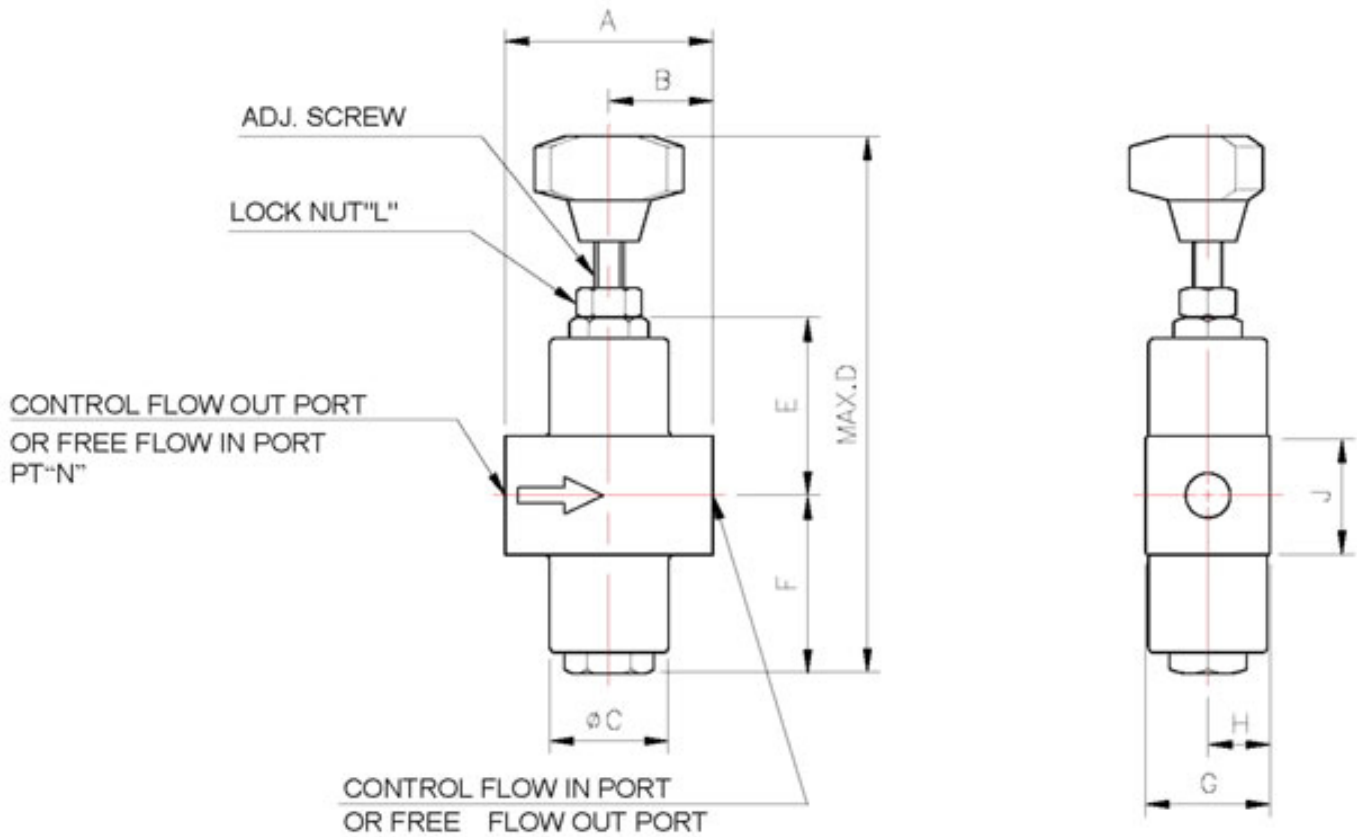
MODEL	A	B	C	D	E	F	G	H	J
TCV-G03	60 (2.36)	40 (1.57)	20 (0.79)	10 (0.39)	179 (7.05)	80 (3.14)	60 (2.36)	30 (1.18)	28 (1.10)
TCV-G06	80 (3.15)	58 (2.28)	29 (1.14)	11 (0.43)	213 (8.39)	95 (3.74)	70 (2.76)	35 (1.38)	30 (1.18)
TCV-G10	100 (3.94)	72 (2.83)	36 (1.42)	14 (0.55)	228 (8.98)	120 (4.72)	92 (3.62)	46 (1.81)	31 (1.22)

MODEL	K	L	N	P	Q	R	T	U	V	W
TCV-G03	10 (0.39)	45 (1.77)	15 (0.59)	62 (2.44)	55 (2.17)	35 (1.38)	19 (0.75)	8.8 (0.35)	14 (0.55)	8.6 (0.34)
TCV-G06	11 (0.43)	54 (2.13)	16 (0.63)	74 (2.91)	68 (2.68)	40 (1.57)	19 (0.75)	11 (0.43)	17.5 (0.69)	10.8 (0.43)
TCV-G10	14 (0.55)	71 (2.80)	21 (0.83)	97 (3.82)	82 (3.23)	50 (1.97)	22 (0.87)	13.5 (0.53)	21 (0.83)	1 (0.04)

# FLOW CONTROLS RESTRICTORS

## DIMENSIONS

TCV-T03/06/10-\*\*



MODEL	A	B	C	D	E	F	G	H	J	L	N
TCV-T03	70 (2.76)	35 (1.38)	40 (1.57)	180 (7.08)	62.5 (2.46)	58 (2.28)	42 (1.65)	21 (0.82)	40 (1.57)	19 (0.75)	M10 (3/8")
TCV-T06	100 (3.94)	50 (1.97)	60 (2.36)	215 (8.46)	83 (3.27)	65 (2.56)	62 (2.44)	31 (1.22)	60 (2.36)	19 (0.75)	M19 (3/4")
TCV-T10	130 (5.12)	65 (2.56)	80 (3.15)	228 (8.98)	106 (4.17)	77 (3.03)	82 (3.23)	41 (1.61)	80 (3.15)	22 (0.87)	M32 (1-1/4")

# FLOW CONTROLS RESTRICTORS

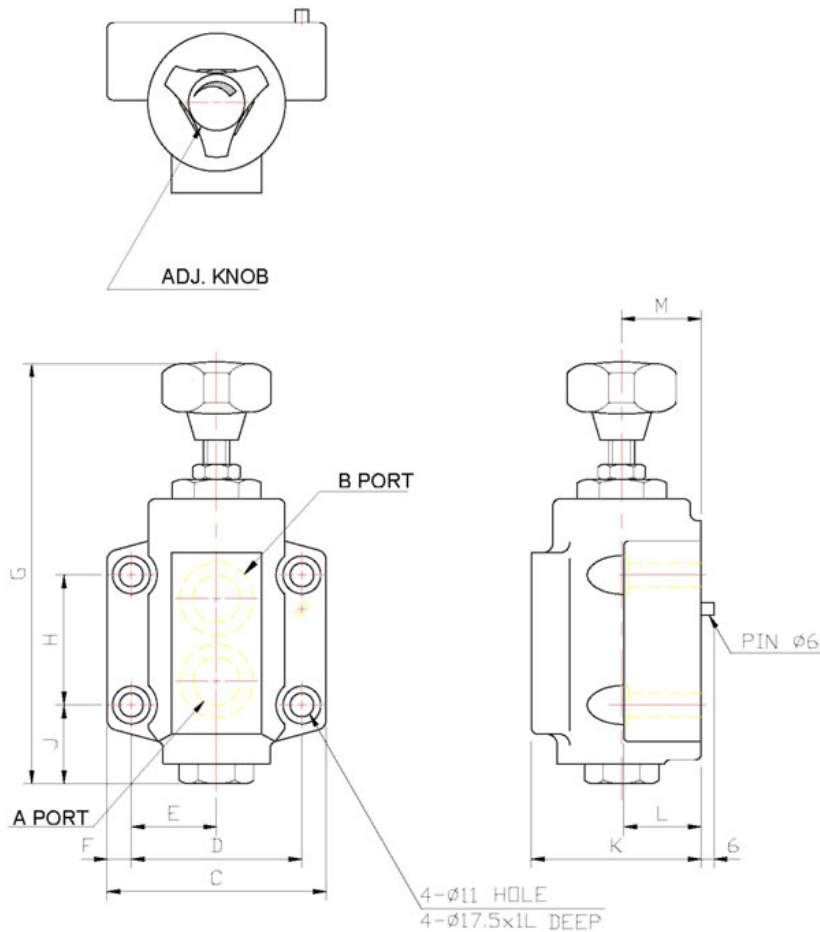
## DIMENSIONS

TV/TCV-G03/06

TV/TCV-G03: ISO 5781-AG-06-2-A

TV/TCV-G06: ISO 5781-AH-08-2-A

MODEL		A PORT	B PORT
TV	-3	CONTROL FLOW IN PORT	CONTROL FLOW OUT PORT
	-6		
TCV	-3	CONTROL FLOW IN PORT OR FREE FLOW OUT PORT	CONTROL FLOW OUT PORT OR FREE FLOW IN PORT
	-6		



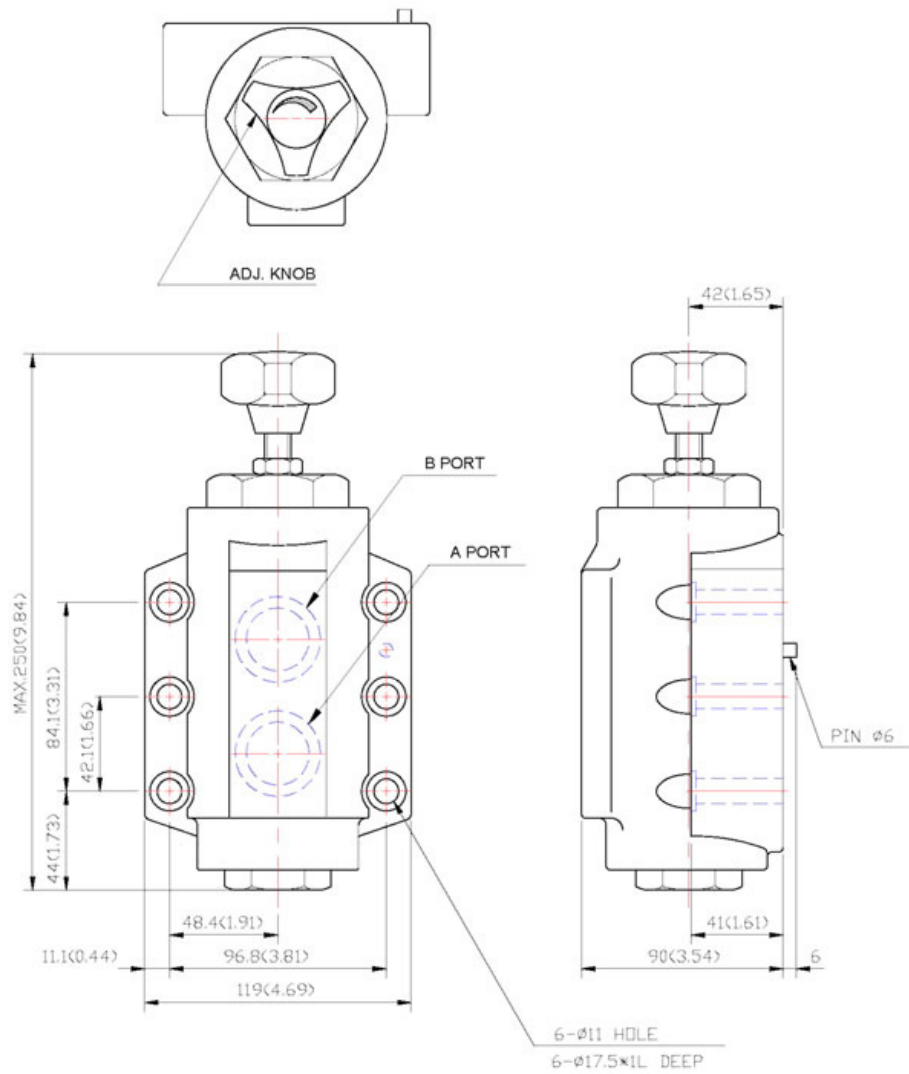
MODEL	C	D	E	F	G	H	J	K
TV/TCV-G03	90 (3.54)	66.7(2.63)	33.3(1.31)	11.7(0.46)	173(6.81)	42.9(1.69)	32(1.26)	64(2.52)
TV/TCV-G06	102(4.02)	79.4(3.13)	39.7(1.56)	11.3(0.44)	203(7.99)	60.3(2.37)	36.5(1.44)	79(3.11)

MODEL	L	M
TV/TCV-G03	31(1.22)	31(1.22)
TV/TCV-G06	36(1.42)	37(1.46)

# FLOW CONTROLS RESTRICTORS

## DIMENSIONS

TV/TCV-G10



MODEL		A PORT	B PORT
TV-G10	-3	CONTROL FLOW IN PORT	CONTROL FLOW OUT PORT
	-6		
TCV-G10	-3	CONTROL FLOW IN PORT OR FREE FLOW OUT PORT	CONTROL FLOW OUT PORT OR FREE FLOW IN PORT
	-6		