

Flow Control Valves Flow Control & Check Valves

Max. Pressure 21 MPa

C



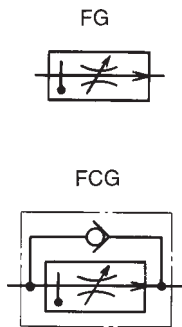
- These valves are pressure and temperature compensating type valves and maintain a constant flow rate independent of change in system pressure (load) and temperature (viscosity of the fluid). The valves have a digital flow adjusting dial to set the flow rate easily.
- The valves with an integral check valve allow free oil flow from the outlet port to the inlet port.

Specifications

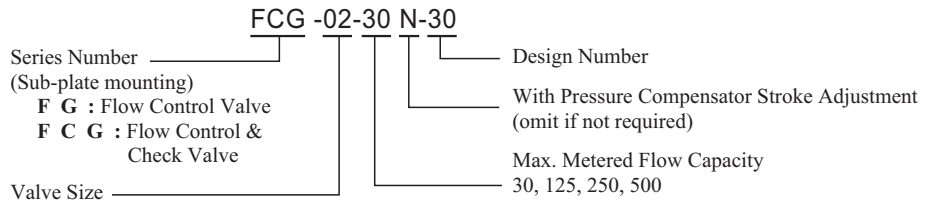
Valve Size	Model No.	Max. Metered Flow Capacity L/min	Min. Metered Flow Capacity L/min	Max. Pressure MPa (kgf/cm ²)	Mass kg
1/4	FG-02-30-※-30 FCG-02-30-※-30	30	0.05	21 (214)	3.8
3/8	FG-03-125-※-30 FCG-03-125-※-30	125	0.2		7.9
* 3/4	FG-06-250-※-30 FCG-06-250-※-30	250	2		23.0
* 1 1/4	FG-10-500-※-30 FCG-10-500-※-30	500	4		52.0

* Products are made by Yuken Kogyo. If you have any inquiry, please contact our sales engineers.

Graphic Symbol



Model Number Designation



Mounting Bolt (Attachment)

Model NO.	Socket Head Cap Screw	Q'ty	Tightening Torque N•m (kgf•m)
F※G-02	M8 x 50 Lg.	4	31~38 (3.2~3.9)
F※G-03	M10 x 75 Lg.	4	60~74 (6.1~7.5)
F※G-06	M16 x 130 Lg.	4	253~310 (25.8~31.6)
F※G-10	M20 x 160 Lg.	4	493~603 (50.3~61.5)

Sub-plate

Valve Model No.	Sub-plate Model No.	Piping Size Rc	Mass kg
FG -02 FCG	FGM-02-20	1/4	2.3
	FGM-02X-20	3/8	
	FGM-02Y-20	1/2	
FG -03 FCG	FGM-03X-20	1/2	3.9
	FGM-03Y-20	3/4	
	FGM-03Z-20	1	
FG -06 FCG	FGM-06X-20	1	12.5
	FGM-06Y-20	1-1/4	
	FGM-06Z-20	1-1/2	
FG -10 FCG	FGM-10Y-20	1-1/2 or 2 Flange Mounting *	37

* Sub-plates are available. When ordering, please specify sub-plate model no. from the table above. Please refer to page 72 for dimensions.

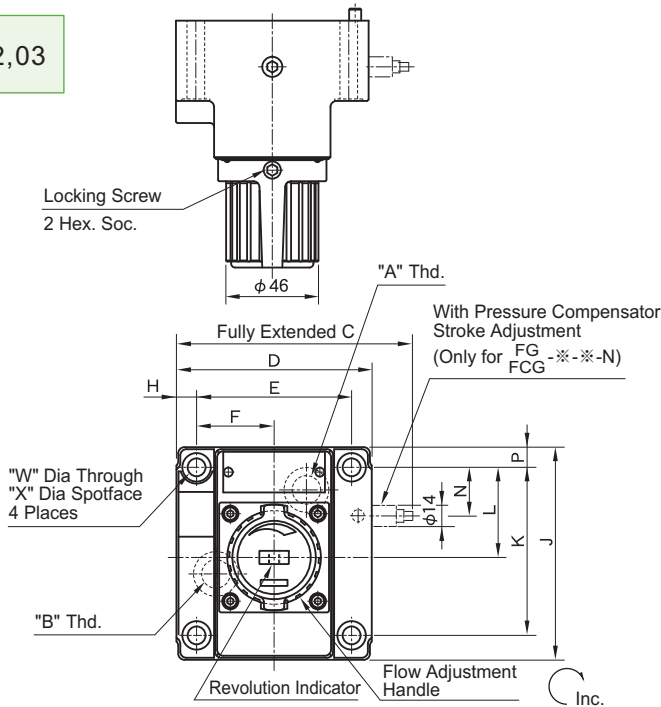
* When ordering FGM-10Y, please see type F3 series pipe flanges.

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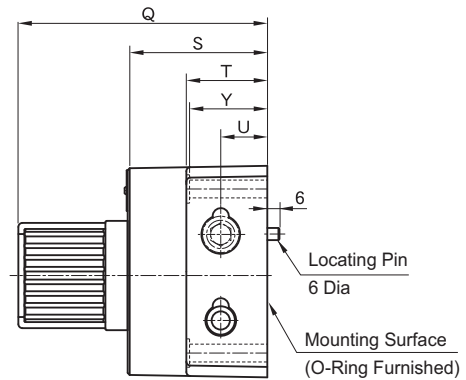
FG
FCG -02,03



Mounting Surface:
F※G-02:ISO 6263-06-05-0-97
F※G-03:ISO 6263-07-09-0-97

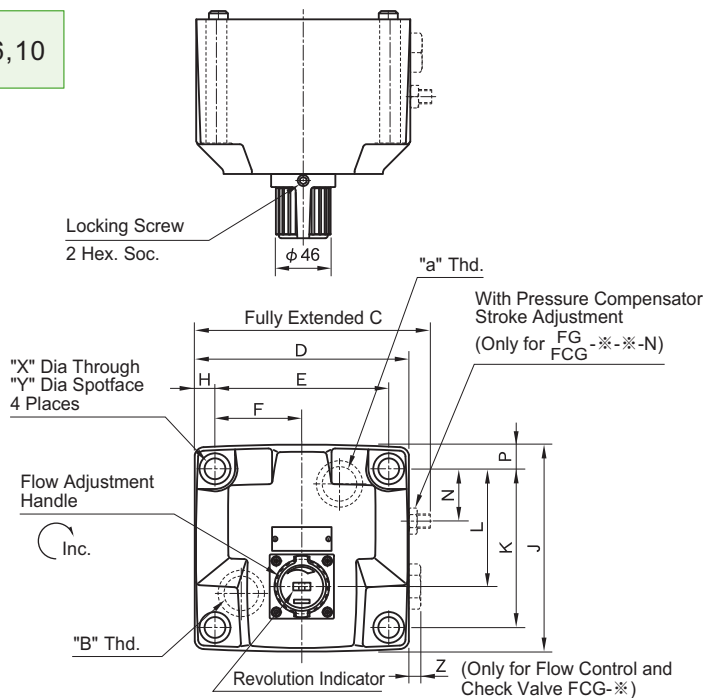
Note: For dimensions of mounting surface, please refer to FGM-02 & 03 type sub-plate on next page (page 72)

Model No.	"A" Thd.	"B" Thd.
FG-02,03	Controlled Flow Inlet	Controlled Flow Outlet
FCG-02,03	Controlled Flow Inlet or Reversed Free Flow Outlet Port	Controlled Flow Outlet or Reversed Free Flow Inlet Port



Model No.	C	D	E	F	H	J	K	L	N	P	Q	S	T	U	V	W	X	Y
FG FCG -02	116	96	76.2	38.1	9.9	104.5	82.6	44.3	24	9.9	123	69	40	23	1	8.8	14	39
FG FCG -03	145	125	101.6	50.8	11.7	125	101.6	61.8	29.8	11.7	152	98	64	41	2	11	17.5	63

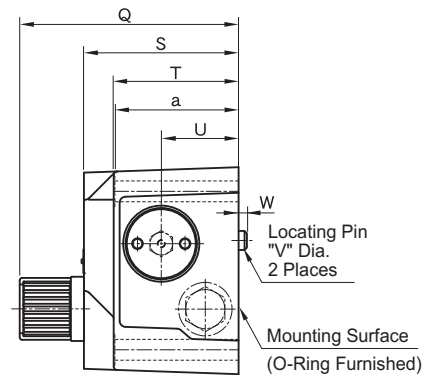
FG
FCG -06,10



Mounting Surface:
F※G-06:ISO 6263-08-13-0-97

Note: For dimensions of mounting surface, please refer to FGM-06 & 10 type sub-plate on next page (page 72)

Model No.	"A" Thd.	"B" Thd.
FG-06,10	Controlled Flow Inlet	Controlled Flow Outlet
FCG-06,10	Controlled Flow Inlet or Reversed Free Flow Outlet Port	Controlled Flow Outlet or Reversed Free Flow Inlet Port



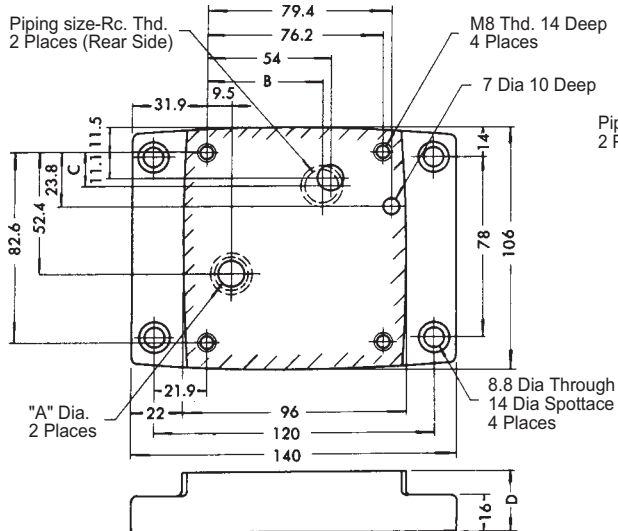
Model No.	C	D	E	F	H	J	K	L	N	P	Q	S	T	U	V	W	X	Y	Z	a
FG FCG -06	198	180	146.1	73	17	174	133.4	99	44	20.3	184	130	105	65	16	7	17.5	26	9	103
FG FCG -10	267	244	196.9	98.5	23.5	228	177.8	144.5	61	25	214	160	137	85	18	10	21.5	32	7.5	133

Flow Control Valves Flow Control & Check Valves

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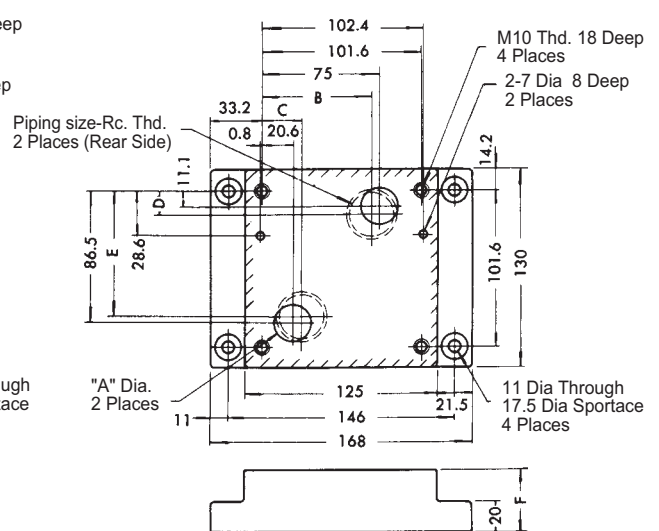
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Sub-plate
FGM-02, 02X, 02Y-20



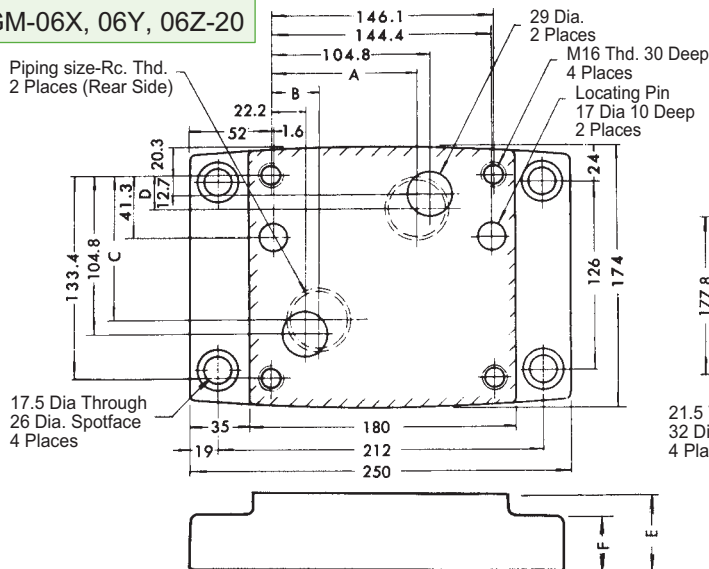
Model No.	Piping Size Rc	A	B	C	D
FGM-02-20	1/4	11	54	11.1	25
FGM-02X-20	3/8	14	54	11.1	25
FGM-02Y-20	1/2	14	51	14	35

FGM-03X, 03Y, 03Z-20



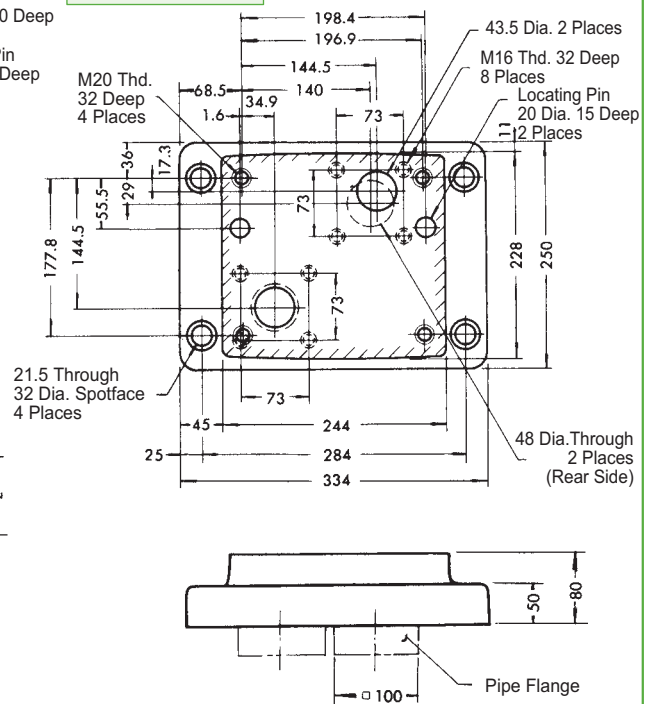
Model No.	Piping Size Rc	A	B	C	D	E	F
FGM-03X-20	1/2	17.5	75	20.6	11.1	86.5	25
FGM-03Y-20	3/4	23	70	25.6	16.1	81.5	40
FGM-03Z-20	1	23	70	25.6	16.1	81.5	40

FGM-06X, 06Y, 06Z-20



Model No.	Piping Size Rc	A	B	C	D	E	F
FGM-06X-20	1	104.8	22.2	104.8	18	45	35
FGM-06Y-20	1-1/4	99	34	99	23	60	40
FGM-06Z-20	1-1/2	99	34	99	23	60	40

FGM-10Y-20



Restrictors One Way Restrictors

Max. Pressure 21 MPa



SRG Type

Graphic Symbol



SRG



SRCG Type

Graphic Symbol



SRCG

- These valves are used to regulate an actuator speed in a circuit where line pressure is almost steady and small fluctuation of oil flow due to pressure change is permitted.
- The valves with an integral check valve allow free oil flow from the outlet to the inlet port.

Specifications

Valve Size	Model No.	Rated Flow L/min	Mass kg
3/8	SRG-03-※-41	30	1.2
	SRCT-03-※-41		1.2
	SRCG-03-※-41		2.1
3/4	SRG-06-※-41	80	2.4
	SRCT-06-※-41		3.2
	SRCG-06-※-41		4.0
1 1/4	SRCT-10-※-41	200	7.1
	SRCG-10-※-41		8.1

※ SRT-03/06/10, SRG-10 stop production.

Model Number Designation

SR G-03-※-41

Series Number ————

SR : Restrictor

SRC : One Way Restrictor

Type of Connection ————

T : Threaded Connection
(Only for SRCT)

G : Sub-plate Mounting

Valve Size ————

03, 06, 10

Pressure Range Mpa (kgf/cm²) ————

H : Pressure Range 5~21 (51~214)

L : Pressure Range 0.5~5 (5.1~51)

Design Number ————

Sub-plate

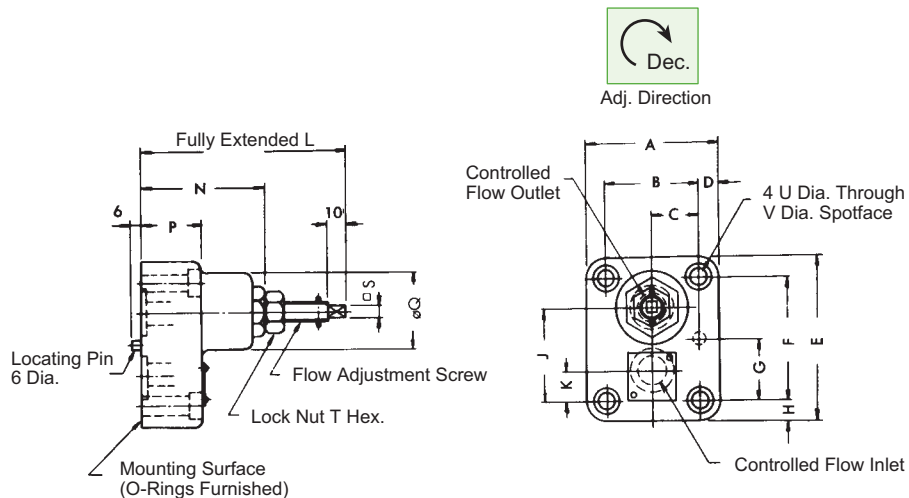
Valve Model No.	Sub-plate Model No.	Piping Size Rc	Mass kg
SRG-03 SRCG-03	SRGM-03-40	3/8	1.2
SRG-06 SRCG-06	SRGM-06-40	3/4	2.5
SRCG-10	SRGM-10-40	1 1/4	4.2

Sub-plates are available. When ordering, please specify sub-plate model no. from the table above.

Mounting Bolts (Attachment)

Model No.	Socket Head Cap Screw	Q'ty	Tightening Torque N·m (kgf·m)
SRG-03	M8 x 35 Lg.	4	31~38 (3.2~3.9)
SRCG-03	M8 x 60 Lg.	4	60~74 (6.1~7.5)
SRG-06	M10 x 45 Lg.	4	104~127 (10.6~13.0)
SRCG-06	M10 x 70 Lg.	4	
SRCG-10	M12 x 100 Lg.	4	

SRG-03, 06



Model No.	A	B	C	D	E	F	G	H	J	K	L	N	P	Q	S	T	U	V	X
SRG-03	60	40	20	10	80	60	30	10	45	15	100	61	30	40	8	19	8.8	14	8.6
SRG-06	80	58	29	11	92	70	35	11	54	16	117.5	73	42	40	8	19	11	17.5	10.8

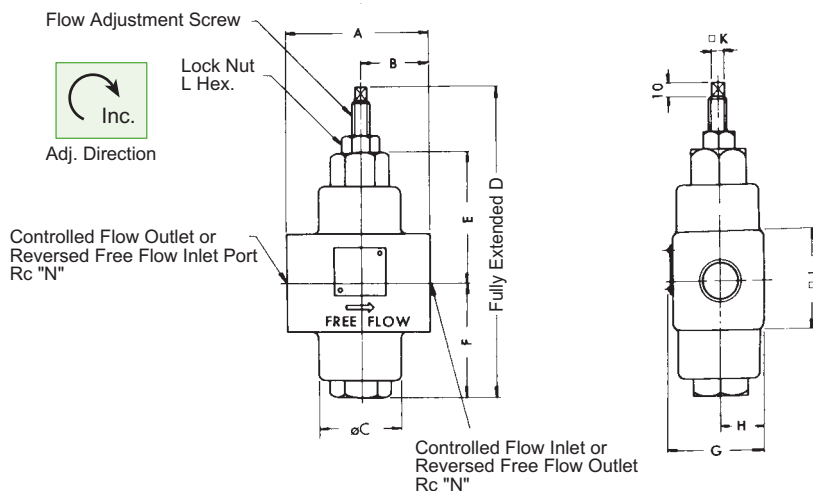
Note: For dimensions of mounting surface, please refer to SRGM type sub-plate (page 75).

Restrictors One Way Restrictors

Max. Pressure 21 MPa

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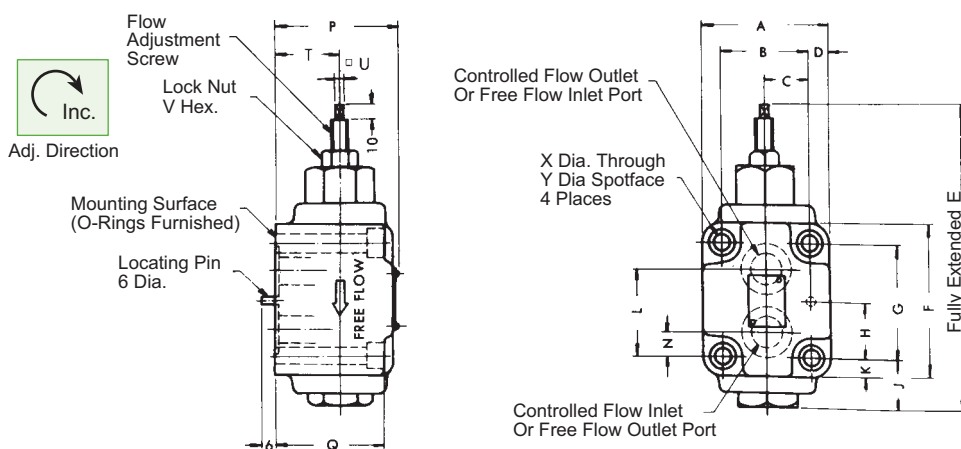
SRCT-03, 06, 10



Model No.	A	B	C	D	E	F	G	H	J	K	L	N
SRCT-03	70	35	40	151	60	58	42	20	40	8	19	3/8
SRCT-06	100	50	56	186	83	65	62	30	60	8	19	3/4
SRCT-10	130	65	70	228	106	77	82	40	80	10	24	1 1/4

Note: For dimensions of mounting surface, please refer to SRGM type sub-plate (page 75).

SRCG-03, 06, 10



Model No.	A	B	C	D	E	F	G	H	J	K	L	N	P	Q	T	U	V	X	Y	Z
SRCG-03	60	40	20	10	151	80	60	30	28	10	45	15	62	55	35	8	19	8.8	14	8.6
SRCG-06	80	58	29	11	186	92	70	35	30	11	54	16	74	68	40	8	19	11	17.5	10.8
SRCG-10	100	72	36	14	228	120	92	46	31	14	71	21	97	82	50	10	24	13.5	21	1

Note: For dimensions of mounting surface, please refer to SRGM type sub-plate (page 75).

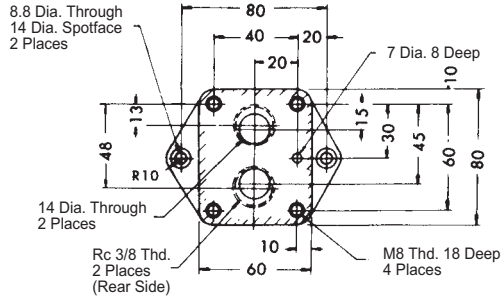
Restrictors One Way Restrictors

Max. Pressure 21 MPa

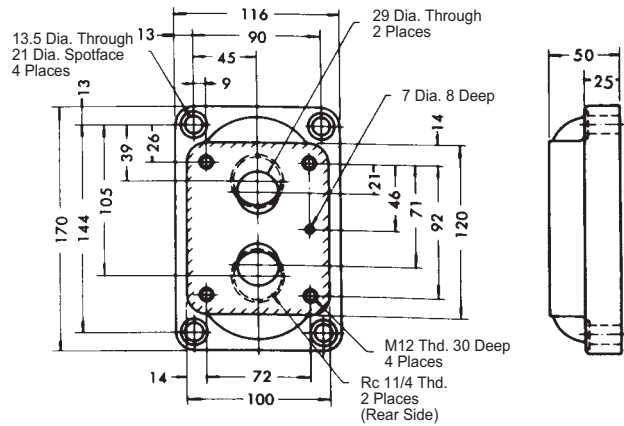
SUB-PLATE

C

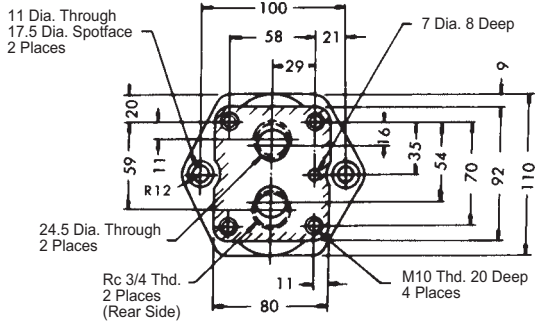
SRGM-03-40



SRGM-10-40



SRGM-06-40



Throttle Modules Throttle & Check Modules

Max. Pressure 25 MPa



TC1G-03



TC2G-03

These valves, when used in combination with a solenoid controlled pilot operated directional valve, regulate the speed of an actuator or control the change-over speed of the main spool by throttling the pressure port or the cylinder port.

Specifications

Valve Size	Model No.	Rated Flow L/min	Mass kg
1/8	TC1G-01-40	30	0.6
	TC2G-01-40		0.65

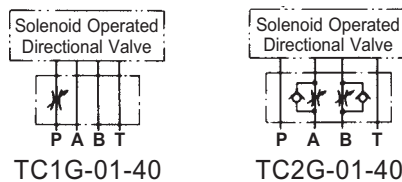
※ To count extra 25mm of screw length when mounting Solenoid Operated Directional Valves.

Model Number Designation

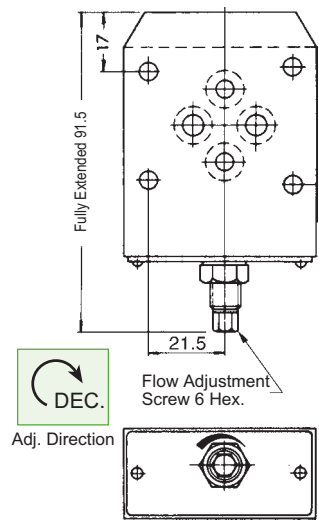
TC1G-01-40

Series Number (Sub-plate mounting) _____ Design Number
 TC1G: P Port Meter-in (C1) _____ Valve Size
 TC2G: AB Port Meter-out (C2) _____

Graphic Symbol

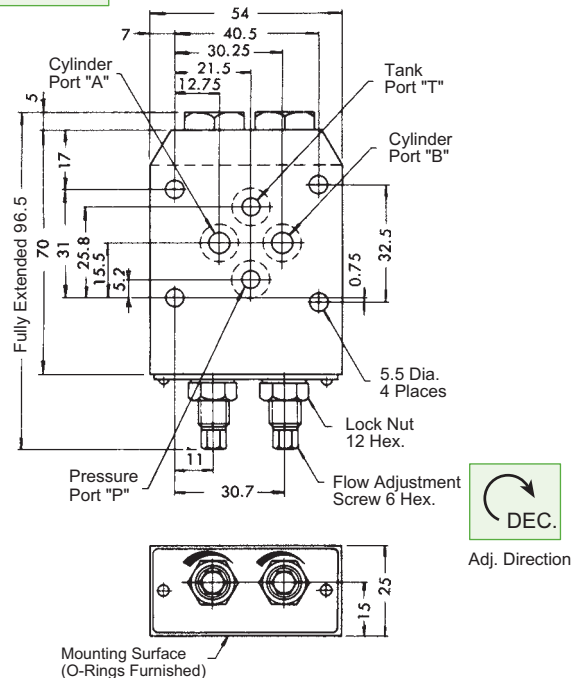


TC1G-01-40



For other dimensions, please refer to TC2G-01 type

TC2G-01-40



Needle Valves

Max. Pressure 35 MPa

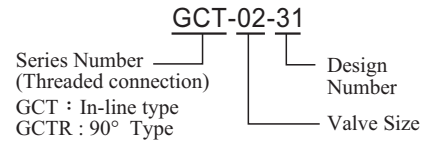


These valves can be used as a stop valve or a throttle valve to control the flow in small capacity pipelines, or can be used as a shut-off valve in pressure gauge lines.

Specifications

Valve Size	Model No.	Max. Flow L/min	Mass kg
1/4	GCT-02-31 GCTR-02-31	5	0.34

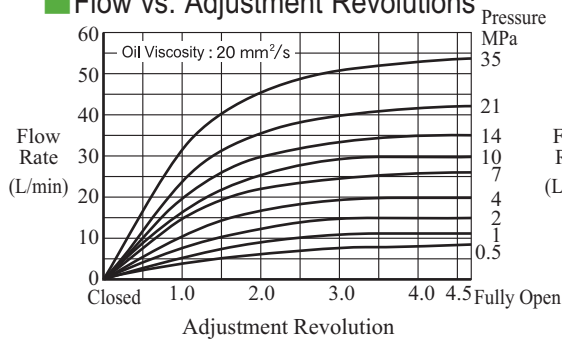
Model Number Designation



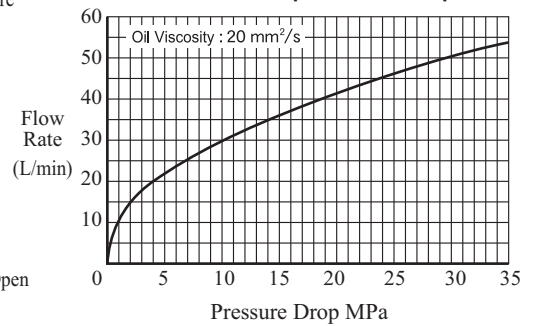
Graphic Symbol



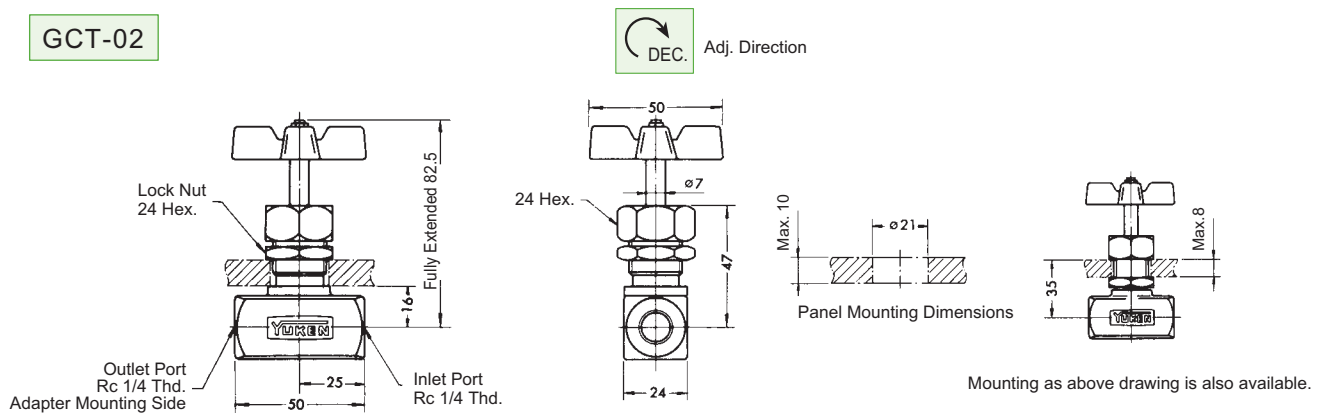
Flow vs. Adjustment Revolutions



Pressure Drop at Full Open



GCT-02



GCTR-02

