

Needle Valves

Used as stop valves for pressure gauge lines and small-capacity line. Also can be used as restrictors for regulating flow rates in pilot lines.

Specifications

Model Numbers		Max. Flow L/min (U.S.GPM)	Max. Operating Pressure MPa (PSI)	Approx. Mass kg (lbs.)
In-Line Type	Angle Type			
GCT-02-32*	GCTR-02-32*	★	35 (5080)	0.34 (.75)

★ Depends on allowable pressure drops. See Flow vs. Adjustment Revolutions characteristics and Pressure Drop at Full Open characteristics.



Model Number Designation

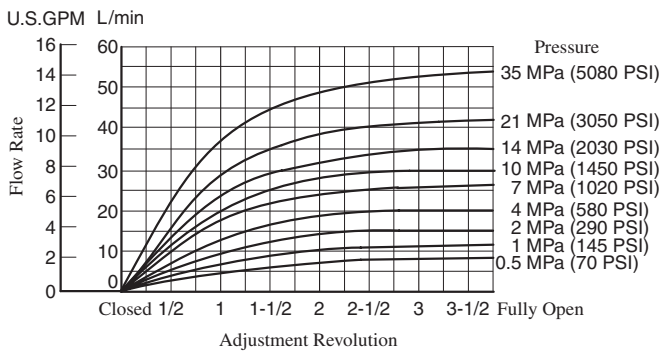
F-	GCT	-02	-32	*
Special Seals	Series Number	Valve Size	Design Number	Design Standards
F: Special Seals for Phosphate Ester Type Fluids (Omit if not required)	GCT : In-line Type Needle Valve, Threaded Connection GCTR : Angle Type Needle Valve, Threaded Connection	02	32	Refer to ★

Graphic Symbol

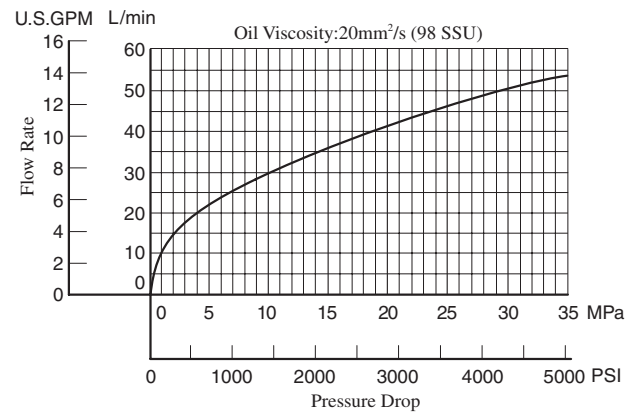


★ Design Standards: None.....Japanese Standard "JIS"
80.....European Design Standard
90.....N. American Design Standard

Flow vs. Adjustment Revolutions



Pressure Drop at Full Open

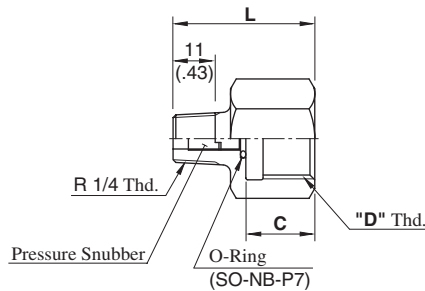


Adaptor

Used where pressure gauges are attached directly to needle valves. Equipped with pressure snubber for reducing harmful surges to protect pressure gauges.

Adaptors are not accessories to needle valves. Order them referring to the table below. For the models shown here, only Japanese standard specifications are available.

AG-02S
AG-03S
AG-04S



DIMENSIONS IN MILLIMETRES (INCHES)

Adaptor Type	Thread Size "D" Thd.	Dimensions mm (Inches)			Approx. Mass kg (lbs.)
		B	C	L	
AG-02S	G 1/4	24 (.94)	14 (.55)	32 (1.26)	0.075 (.165)
AG-03S	G 3/8	24 (.94)	16 (.63)	35 (1.38)	0.075 (.165)
AG-04S	G 1/2	27 (1.06)	18 (.71)	37 (1.46)	0.08 (.176)

GCT-02-32/3280/3290

M20 Thd.
Lock Nut 24(.94) Hex.
Fully Extended 82.5 (3.25)
16 (.63)
Outlet Port (Adaptor Mounting Side) "A" Thd.
Inlet Port "A" Thd.
50 (1.97)
24 (.94)
21 (.83) Dia.
Max. 10 (.39)
Panel mounting dimensions

Model Numbers	"A" Thd.	mm (Inches)	
		B	C
GCT-02-32	Rc 1/4	50 (1.97)	25 (.98)
GCT-02-3280	1/4 BSP.F	48 (1.89)	24 (.94)
GCT-02-3290	1/4 NPT	50 (1.97)	25 (.98)

DIMENSIONS IN MILLIMETRES (INCHES)

GCTR-02-32/3280/3290

M20 Thd.
Lock Nut 24(.94) Hex.
Fully Extended 82.5 (3.25)
16 (.63)
Outlet Port (Adaptor Mounting Side) "A" Thd.
Inlet Port "A" Thd.
50 (1.97)
24 (.94)
21 (.83) Dia.
Max. 10 (.39)
Panel mounting dimensions

Model Numbers	"A" Thd.	mm (Inches)
		B
GCTR-02-32	Rc 1/4	25 (.98)
GCTR-02-3280	1/4 BSP.F	24 (.94)
GCTR-02-3290	1/4 NPT	25 (.98)

List of Seals

GCT-02-32/3280/3290
GCTR-02-32/3280/3290

List of Seals

Item	Name of Parts	Part Numbers	Qty.
5	O-Ring	SO-NA-P5	1
6	Back Up Ring	SO-BB-P5	1

Note : When ordering the seals, please specify the seal kit number from the table below.

List of Seal Kits

Valve Model Numbers	Seal Kit Numbers
GCT-02	KS-GCT-02-32
GCTR-02	

Installation

Refer to the following procedures to fit the valve with a panel. Figure in a circle below is shown on the above drawing.

1. Remove the nut ⑨ then take off the handle ⑧.
2. Take off the nut ③.
3. Insert the needle valve to a panel hole.
4. Screw the nut ③ onto the valve and fix the valve with the panel.
5. Fit the handle ⑧ and fix it with the nut ⑨.