

Throttle / Check Valves, Model : TG / TCG



the right connection
the right environment

Ref. No : H04737 Release March 2018 (Dimensions in mm)

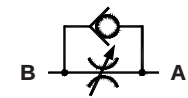
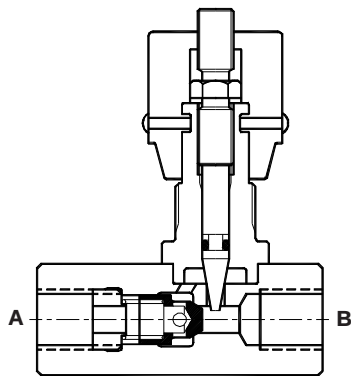
Description

The Valve allows accurate adjustment of flow by throttling action. The throttling can be varied by rotation of the Hand knob.

The valve is also equipped with a built - in check valve for free reverse flow.



Section



Hydraulic Symbol

Unit Dimensions

In-line port (G) mounting

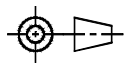
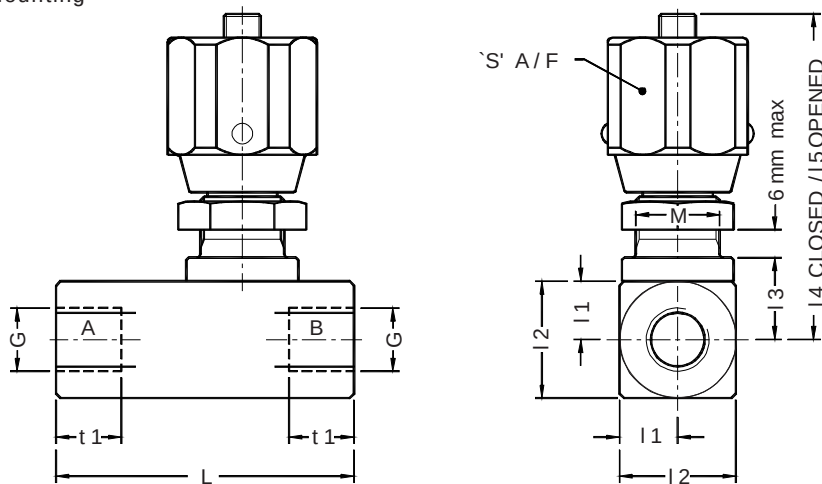


Table 1

Ordering Code	Size	G	I1	I2	I3	I4	I5	M	t1	S	L
TCG02-2.0	NG-06	G 1/4	12.5	25	17.5	69.5	76.5	M18x1.5	12	30	64
TCG03-2.0	NG-08	G 3/8	15.0	30	20.0	72.0	79.0	M18x1.5	13	30	70
TCG04-2.0	NG-10	G 1/2	17.5	35	23.5	89.0	99.0	M22x1.5	14	41	80
TCG06-2.0	NG-15	G 3/4	22.5	45	28.5	94.0	104.0	M22x1.5	17	41	95
TCG08-2.0	NG-20	G1	25.0	50	35.0	128.0	145.0	M36x2.0	18	50	125
TCG10-2.0	NG-25	G1.1/4	30.0	60	40.0	133.0	150.0	M36x2.0	21	50	142
TCG12-2.0	NG-30	G1.1/2	35.0	70	45.0	138.0	155.0	M36x2.0	22	50	150

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In-line Tube

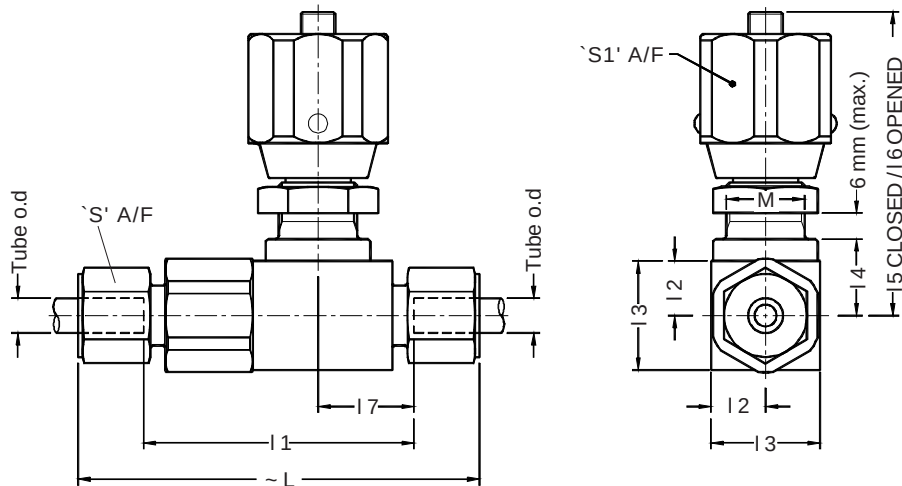


Table 2

Ordering Code	Tube OD	Size	I1	I2	I3	I4	I5	I6	I7	M	S	S1	L
TC06PL-2.0	6-L	NG-06	57.0	12.5	25.0	17.5	69.5	76.5	20.0	M18x1.5	14	30	87.0
TC08PL-2.0	8-L		57.0						20.0		17		87.0
TC06PS-2.0	6-S		61.0						22.0		17		91.0
TC08PS-2.0	8-S		61.0						22.0		19		91.0
TC10PL-2.0	10-L	NG-08	63.0	15.0	30.0	20.0	72.0	79.0	21.0	M18x1.5	19	30	93.0
TC10PS-2.0	10-S		64.0						21.5		22		97.0
TC12PS-2.0	12-S		64.0						21.5		24		97.0
TC12PL-2.0	12-L	NG-10	70.0	17.5	35.0	23.5	89.0	99.0	22.0	M22x1.5	22	41	100.0
TC15PL-2.0	15-L		72.0						23.0		27		102.0
TC14PS-2.0	14-S		74.0						24.0		27		110.0
TC16PS-2.0	16-S		73.0						23.5		30		110.0
TC18PL-2.0	18-L	NG-15	80.5	22.5	45.0	28.5	94.0	104.0	24.5	M22x1.5	32	41	113.5
TC20PS-2.0	20-S		82.5						25.5		36		125.5
TC22PL-2.0	22-L	NG-20	109.0	25.0	50.0	35.0	128.0	145.0	36.5	M36x2.0	36	50	142.0
TC25PS-2.0	25-S		108.0						36.0		46		156.0
TC28PL-2.0	28-L	NG-25	120.0	30.0	60.0	40.0	133.0	150.0	39.5	M36x2.0	41	50	153.0
TC30PS-2.0	30-S		120.0						39.5		50		173.0
TC35PL-2.0	35-L	NG-30	130.0	35.0	70.0	45.0	138.0	155.0	40.5	M36x2.0	50	50	173.0
TC42PL-2.0	42-L		129.0						40.0		60		175.0
TC38PS-2.0	38-S		131.0						41.0		60		193.0

Ordering Code

Construction Conical throttling spool with rotation of hand knob
for flow adjustment. Poppet valve for free reverse flow.

Mounting style In-line port or tube mounting.

Mounting position Optional

Flow direction Adjustable throttled flow from A to B, free flow from B to A
as indicated on valve body.

Operating pressure 315 bar

Hydraulic medium Mineral Oil.

Viscosity range 10 cSt to 380 cSt.

Fluid temperature range -20 °C to +80 °C

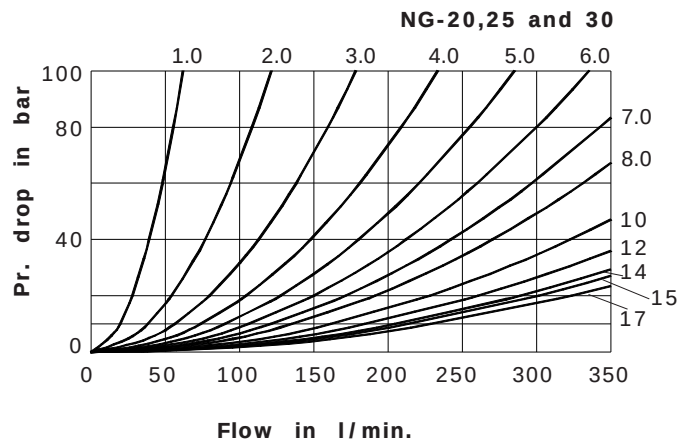
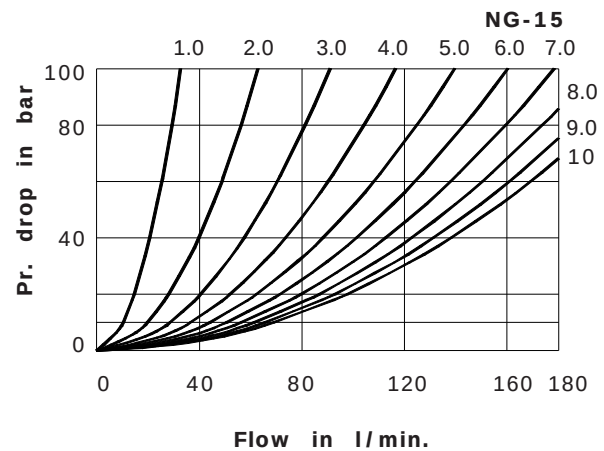
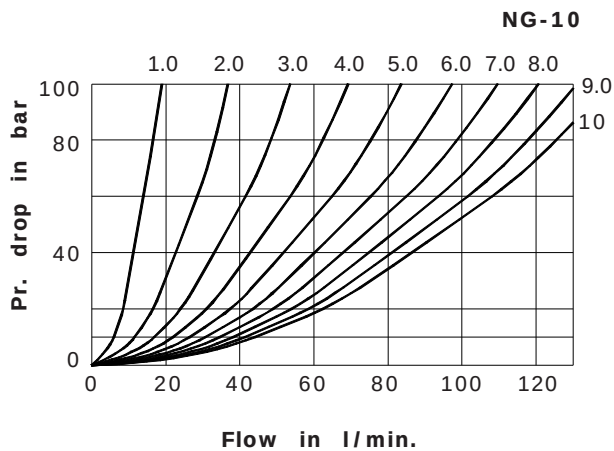
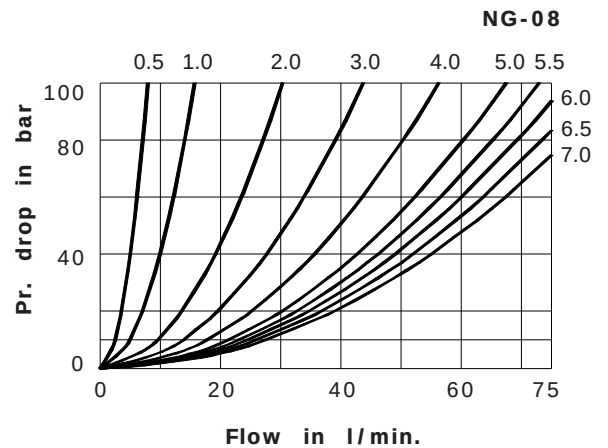
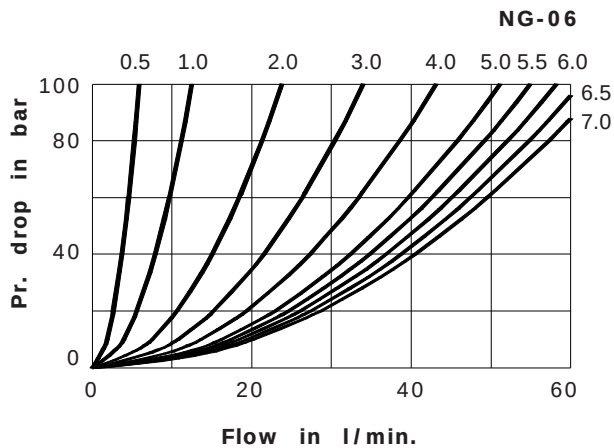
Fluid Cleanliness requirement As per ISO 19/16 or better.

Nom. flow handling capacity Refer graphs

Expected performance Curves

Oil used : ISO VG 68,
Viscosity : 68 cSt @ 40 °C
Direction of flow : A to B

Graphs below shows
Throttle position (No.of turns) from closed position



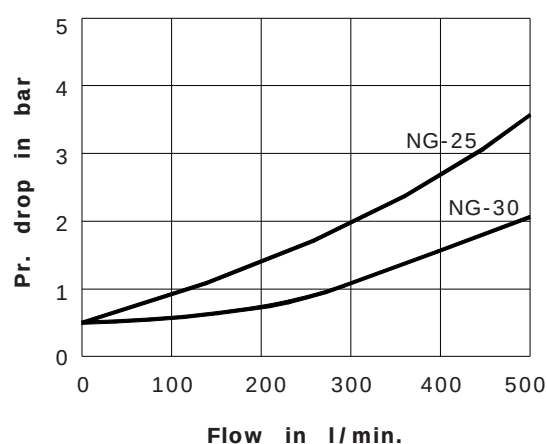
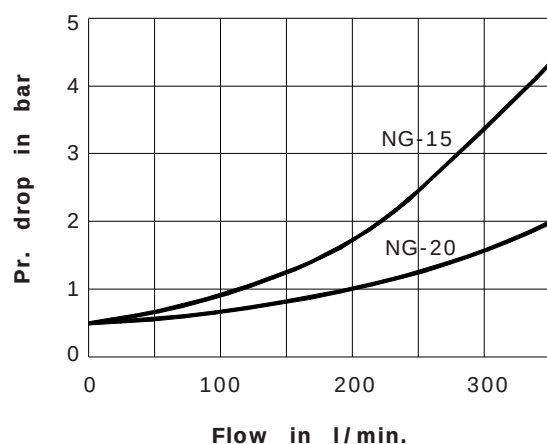
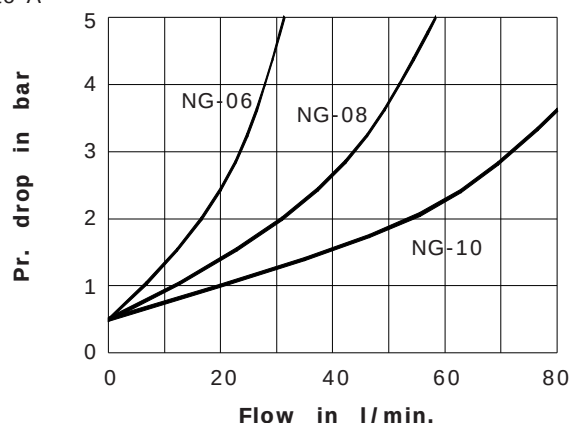
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Direction of free flow from B' to A'



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Throttle/Check Valve		TC	G02				2.0
For Valves with BSP ports	G 1/4	G02					
	G 3/8	G03					
	G 1/2	G04					
	G 3/4	G06					
	G1	G08					
	G1.1/4	G10					
	G1.1/2	G12					
For Valves with Tube ends	For Tube Size Refer Table 2						
End connection type (for valves with Tube end only)							
With Ferrule - P							
			Design Series Subject to revision				
			Seal Material				
			Omit Nitrile 90°				
			V Viton 90°				
			X Without seal				
			Pressure Series (for valves with Tube end only)				
			L - Low Pressure				
			S - High Pressure				