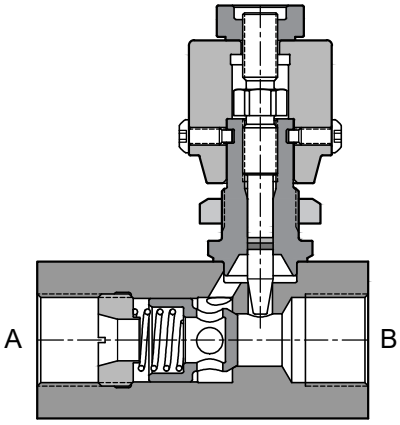
Description

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.

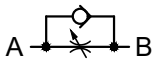
The valve is not viscosity or pressure compensated.

Section



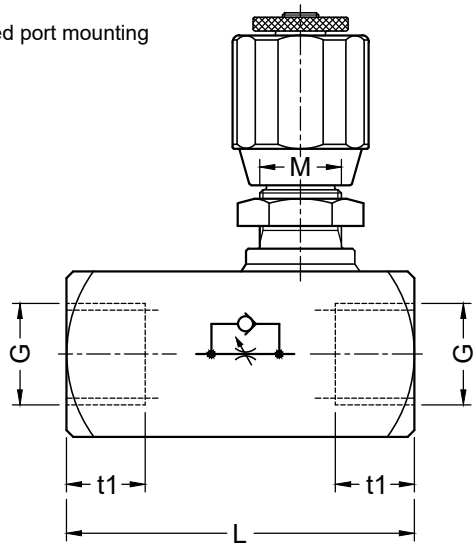
Model : TCG

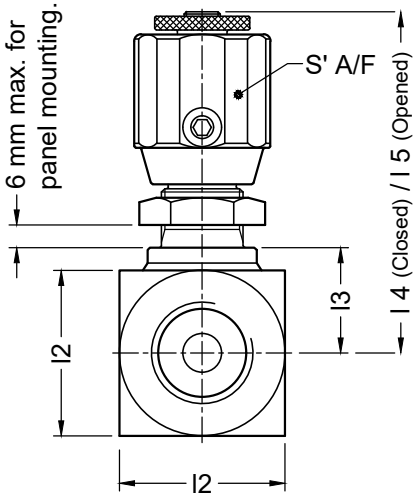
Hydraulic Symbol



Unit Dimensions

In-line threaded port mounting





Dimensions in mm.

Table-1

Part code	Size	G	l 2	l 3	l 4	l 5	M	t 1	S	L	Pr. bar	Mass (Kg)
TCG02-2.0	NG-06	G 1/4	25	17.5	69.5	76.5	M18x1.5	12	30	64	315	0.45
TCG03-3.0	NG-08	G 3/8	30	20.0	72.0	79.0	M18x1.5	13	30	70	315	0.59
TCG04-2.0	NG-10	G 1/2	35	23.5	89.0	99.0	M22x1.5	14	41	80	315	0.96
TCG06-2.0	NG-15	G 3/4	45	28.5	94.0	104.0	M22x1.5	17	41	95	315	1.42
TCG08-2.0	NG-20	G 1	50	35.0	128.0	145.0	M36x2.0	18	50	125	315	2.80
TCG10-2.0	NG-25	G 1.1/4	60	40.0	133.0	150.0	M36x2.0	21	50	142	315	3.90
TCG12-2.0	NG-30	G 1.1/2	70	45.0	138.0	155.0	M36x2.0	22	50	150	315	5.30

In-line Tube mounting

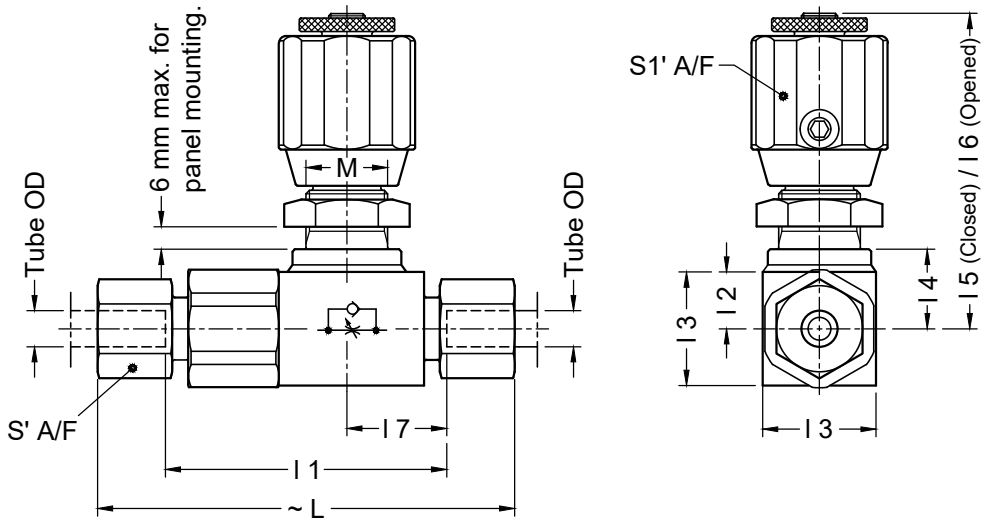


Table-2

Part code	Tube OD	Pressure Series	Pressure (bar)	Size	l 1	l 3	l 4	l 5	l 6	l 7	M	S	S1	L
TC06PL-2.0	06	L	250	NG-06	57.0	25.0	17.5	69.5	76.5	20.0	M18x1.5	14	30	87.0
TC08PL-2.0	08	L	250		57.0					20.0		17		87.0
TC06PS-2.0	06	S	315		61.0					22.0		17		91.0
TC08PS-2.0	08	S	315		61.0					22.0		19		91.0
TC10PL-2.0	10	L	250	NG-08	63.0	30.0	20.0	72.0	79.0	21.0	M18x1.5	19	30	93.0
TC10PS-2.0	10	S	315		64.0					21.5		22		97.0
TC12PS-2.0	12	S	315		64.0					21.5		24		97.0
TC12PL-2.0	12	L	250	NG-10	70.0	35.0	23.5	89.0	99.0	22.0	M22x1.5	22	41	100.0
TC15PL-2.0	15	L	250		72.0					23.0		27		102.0
TC16PS-2.0	16	S	315		74.0					23.5		30		110.0
TC18PL-2.0	18	L	160	NG-15	80.5	45.0	28.5	94.0	104.0	24.5	M22x1.5	32	41	113.5
TC20PS-2.0	20	S	315		82.5					25.5		36		125.5
TC22PL-2.0	22	L	160	NG-20	109.0	50.0	35.0	128.0	145.0	36.5	M36x2.0	36	50	142.0
TC25PS-2.0	25	S	315		108.0					36.0		46		156.0
TC28PL-2.0	28	L	100	NG-25	120.0	60.0	40.0	133.0	150.0	39.5	M36x2.0	41	50	153.0
TC30PS-2.0	30	S	250		120.0					39.5		50		173.0
TC35PL-2.0	35	L	100	NG-30	130.0	70.0	45.0	138.0	155.0	40.5	M36x2.0	50	50	173.0
TC42PL-2.0	42	L	100		129.0					40.0		60		175.0
TC38PS-2.0	38	S	250		131.0					41.0		60		193.0

Technical Specifications

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

Mounting style ---------- Inline port or tube mounting.

Mounting position ---------- Optional

Flow direction ---------- Adjustable throttled flow from A to B, free flow from B to A.

Operating pressure ---------- Refer Table -1 and Table-2.

Hydraulic medium ---------- Mineral oil.

Viscosity range ---------- 10 cSt to 380 cSt.

Fluid temperature range ---------- -20 ºC to +80 ºC

Fluid cleanliness requirement ---------- As per ISO 4406 20/18/15

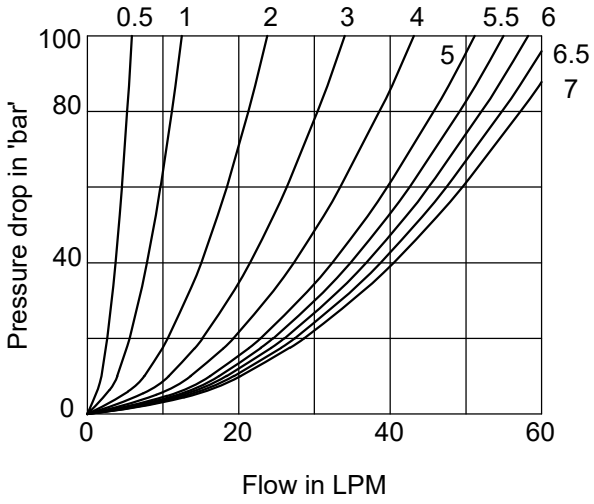
Nom. flow handling capacity ---------- Refer graphs

Expected performance curves

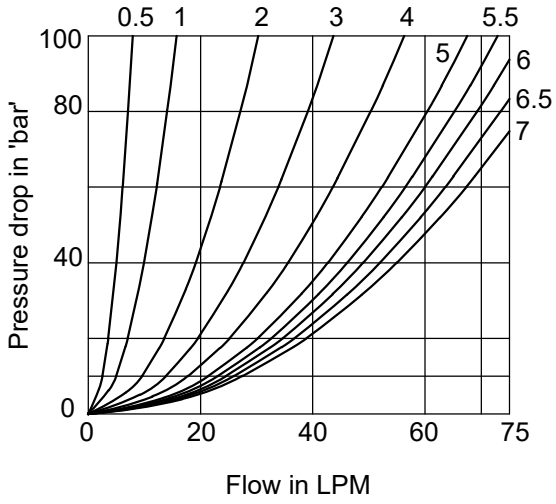
Oil used : ISO VG 68
Viscosity : 68 cSt @ 40 °C
Direction of flow : A to B

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

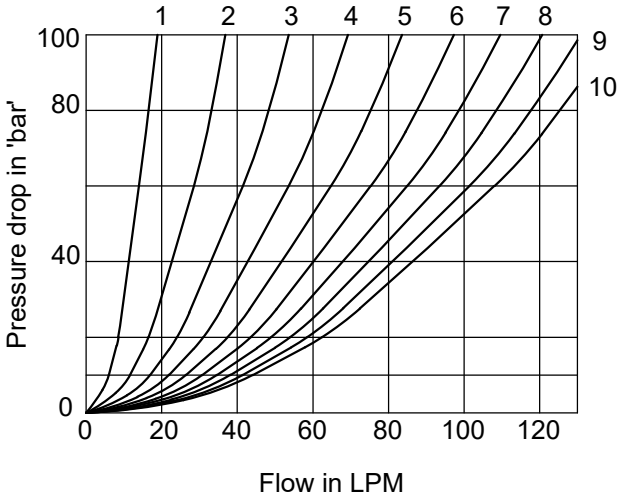
NG-06



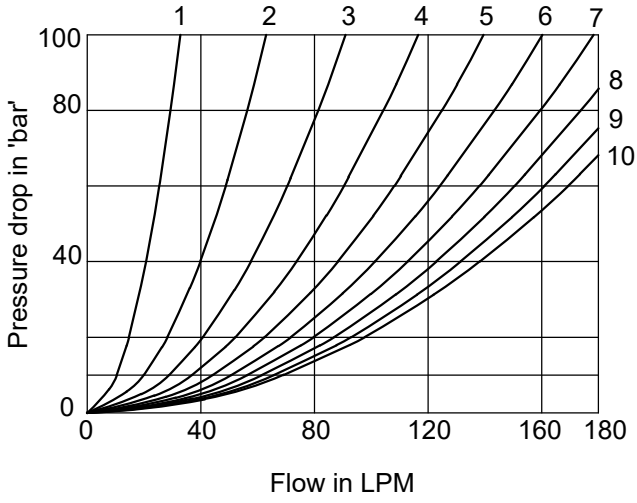
NG-08



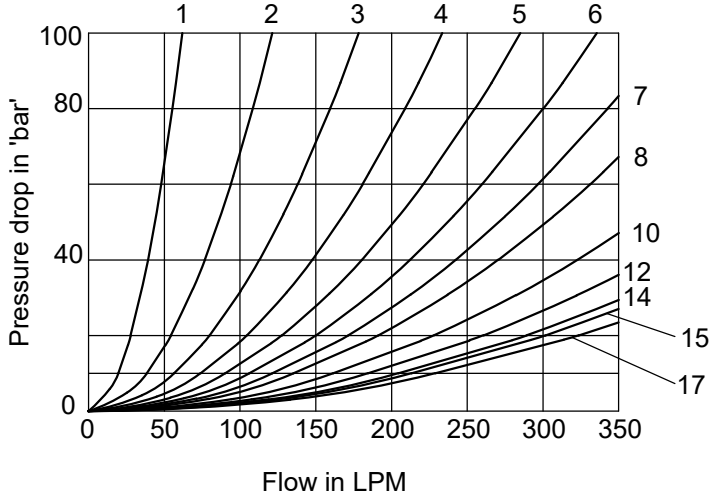
NG-10



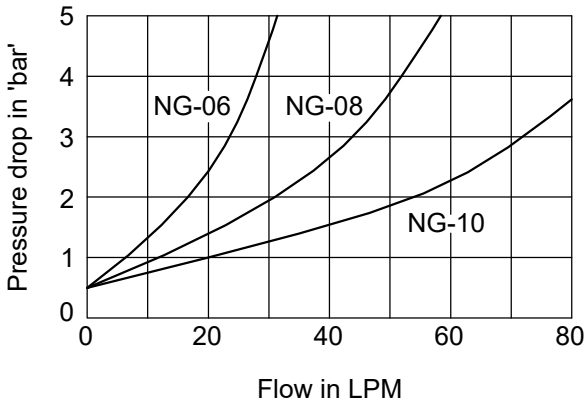
NG-15

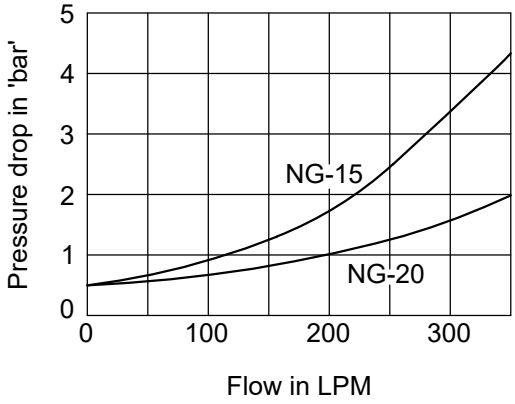


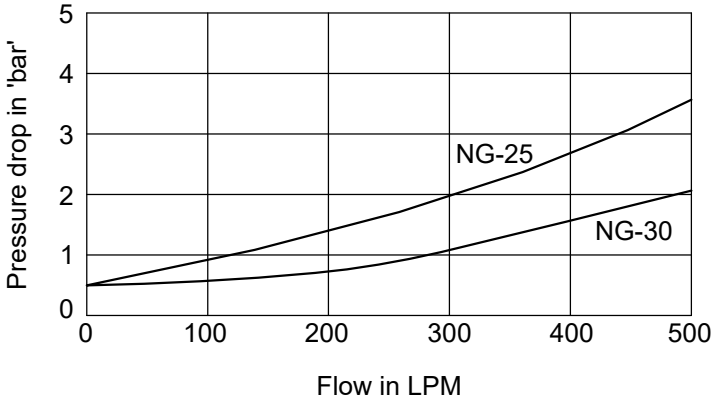
NG-20, NG-25 and NG-30



Direction of free flow from 'B' to 'A'







Ordering Code

TC	G02		-		-	2.0

Throttle / Check Valve

For Valves with G Ports	G 1/4	**G02**
	G3/8	**G03**
	G 1/2	**G04**
	G3/4	**G06**
	G 1	**G08**
	G1.1/4	**G10**
	G1.1/2	**G12**
For Valves with Tube ends (Will have Double bite ferrule)	Tube sizes	6 8 10 12 15 16 18 20 22 25 28 30 35 38 42

Design Series
Subject to revision

Seals	
Omit	Nitrile
V	FKM (Viton)

Pressure Series (For valves with tube ends only)	
Omit	For valves with G threads
L	Low Pressure
S	High Pressure