



The right connection
The right environment

Throttle / Check Valves, Sub-plate mounting TCMS

Ref. No. H06105
Release: Aug 2020

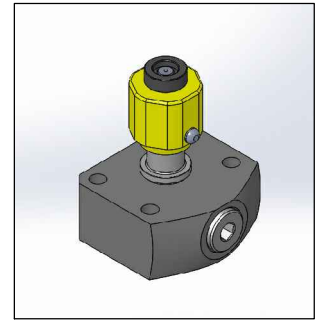
ENGINEERING - 1 of 4

Description

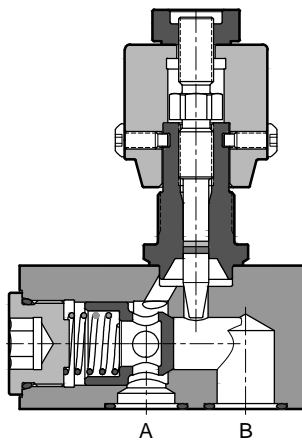
The Valve allows accurate adjustment of flow by throttling action. The throttling can be varied by rotation of the Hand knob.

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

The mounting Interface conforms to ISO 5781

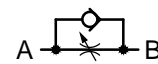


Section



Model : TCMS

Hydraulic Symbol



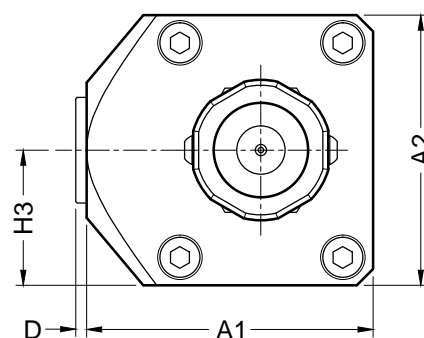
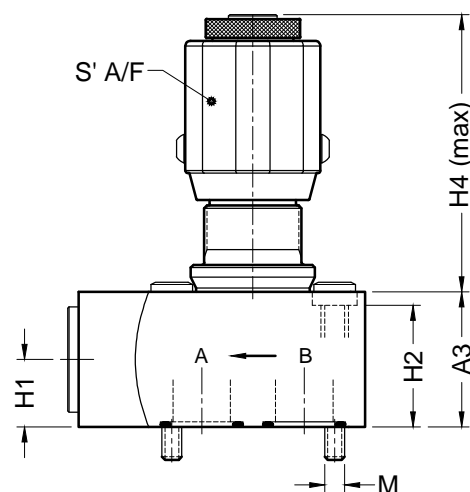
Unit Dimensions

Sub-plate mounting

Dimensions in mm.



Part code	A1	A2	A3	H1	H2	H3	H4 (max)	D	S
TCMS06-2.0	60	44	25	12.5	22.5	22.0	64.0	3	30
TCMS10-3.0	81	88	40	22.5	40.0	44.0	81.5	3	41
TCMS20-2.0	106	100	50	25.0	45.0	50.0	120.0	4	50
TCMS30-2.0	135	117	70	35.0	65.0	58.5	120.0	4	50



Part code	Valve fixing screws, 10.9 grade	Torque
TCMS06-2.0	M5 x 0.8 x 30 Long, 4 Nos	5 Nm
TCMS10-3.0	M10 x 1.5 x 55 Long, 4 Nos	40 Nm
TCMS20-2.0	M10 x 1.5 x 60 Long, 4 Nos	52 Nm
TCMS30-2.0	M10 x 1.5 x 80 Long, 6 Nos	55 Nm



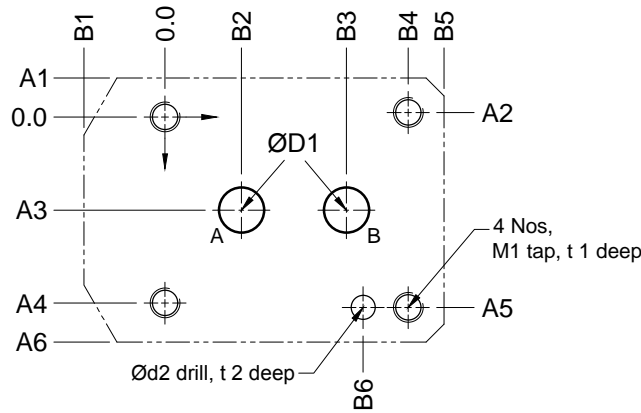
The right connection
The right environment

Throttle / Check Valves, Sub-plate mounting TCMS

Ref. No. H06105
Release: Aug 2020

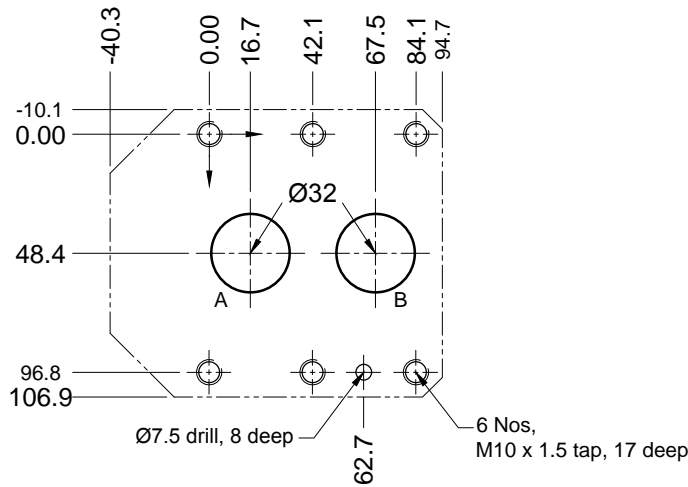
ENGINEERING - 2 of 4

Interface details for NG-06, NG-10 and NG-20 as per ISO 5871

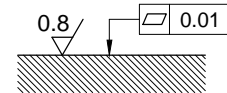


Part code	ØD1	A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	B5	B6	M1	t 1	Ød2	t 2
TCMS06-2.0	7.5	-6.50	-0.75	15.5	31.0	31.75	37.5	-13.5	12.7	30.2	40.5	46.5	33.0	M5 x 0.8	9	4.0	5
TCMS10-2.0	14.0	-10.65	0.00	33.3	66.7	66.7	77.35	-27.5	7.1	35.7	42.9	53.5	31.8	M10 x1.5	17	7.5	8
TCMS20-2.0	22.0	-10.30	0.00	39.7	79.4	79.4	89.7	-34.5	11.1	49.2	60.3	71.5	44.5	M10 x 1.5	17	7.5	8

Interface details for **TCMS30-2.0**



Required surface finish
on Interface area



Technical Specifications

- Construction ----- Conical throttling spool with rotation of hand knob for flow adjustment.
Poppet valve for free reverse flow.
- Mounting style ----- Sub-plate mounting.
- Mounting Interface ----- As per ISO 5781
- Mounting position ----- Optional
- Flow direction ----- Adjustable throttled flow from A to B, free flow from B to A.
- 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 4406 20/18/15
- Nom. flow handling capacity ----- Refer graphs



The right connection
The right environment

Throttle / Check Valves, Sub-plate mounting TCMS

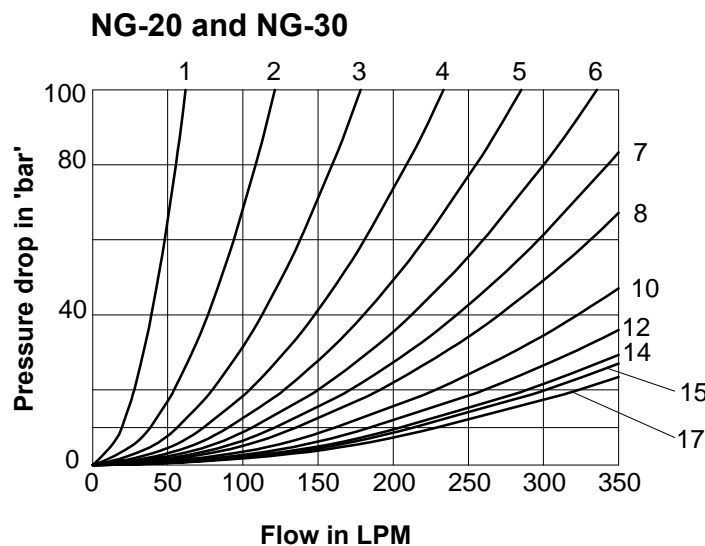
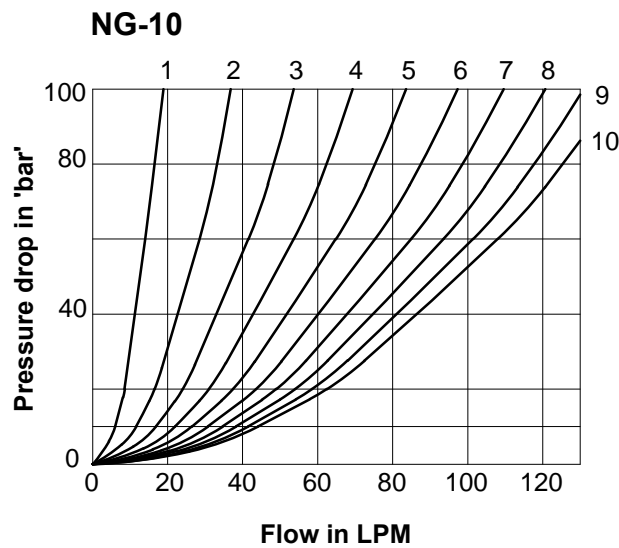
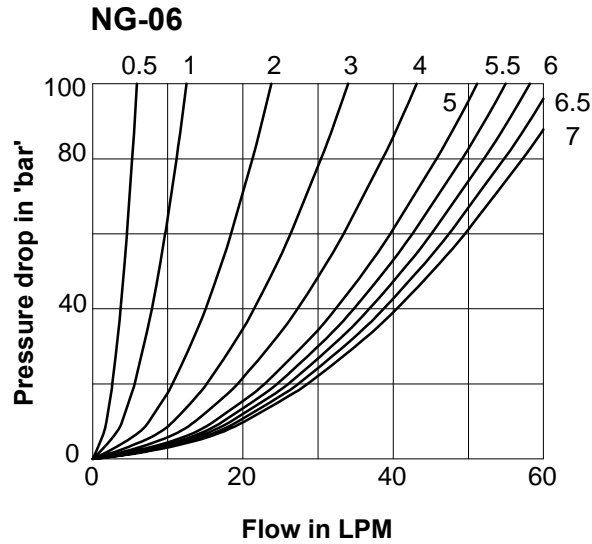
Ref. No. H06105
Release: Aug 2020

ENGINEERING - 3 of 4

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





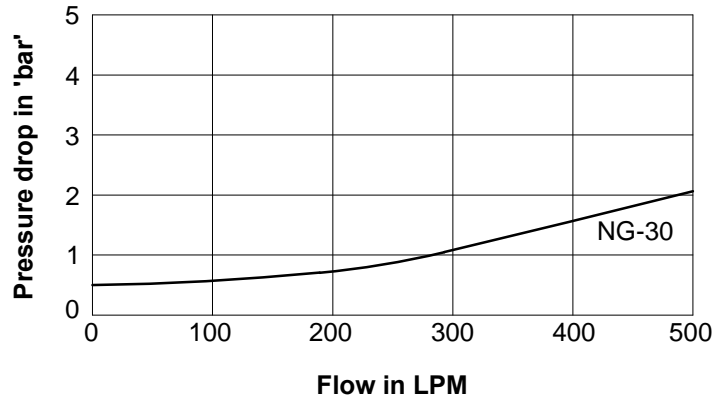
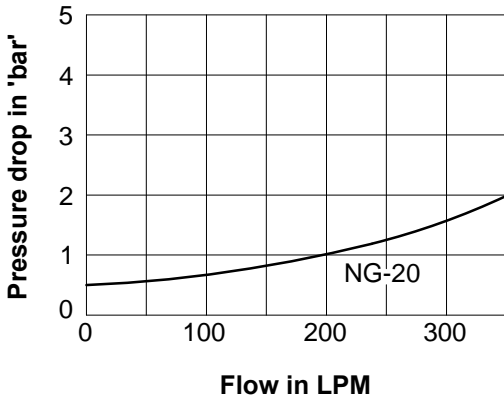
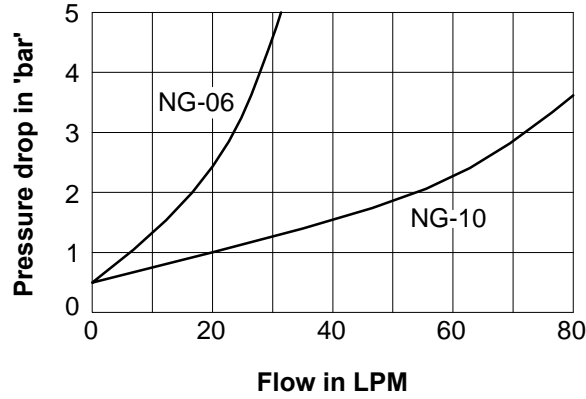
The right connection
The right environment

Throttle / Check Valves, Sub-plate mounting TCMS

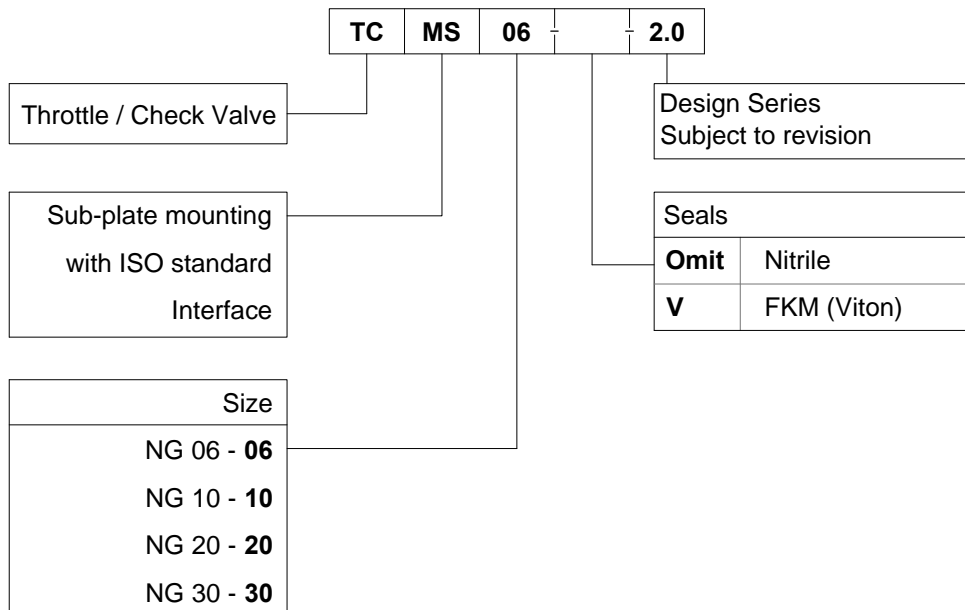
Ref. No. H6105
Release: Aug 2020

ENGINEERING - 4 of 4

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



Ordering Code



All rights reserved.
Subject to change without notice.
Due to continuous improvement in the design of the product, the actual product supplied may look different than shown above.