



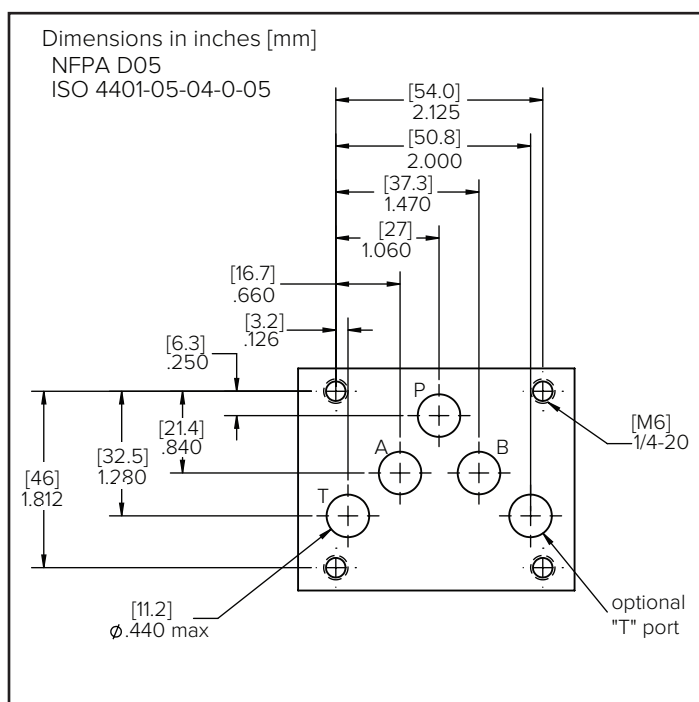
# C05MSV-D

## DIRECT OPERATED CHECK VALVE

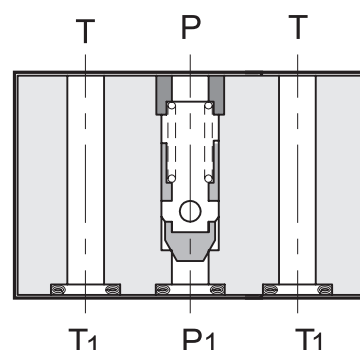
**MODULAR VERSION**  
**NFPA D05 ISO 4401-05**

**P** max **5000 PSI 350 bar**  
**Q** max SEE PERFORMANCE TABLE

## MOUNTING INTERFACE



## OPERATING PRINCIPLE



- The C05MSV-D valve is a direct check valve made as a modular version with mounting surface according to NFPA D05/ISO 4401-05 standards.
- It is used to avoid oil backflows and self-emptying of lines, or to generate back-pressures.
- It can be assembled quickly under a NFPA D05/ISO 4401-05 directional solenoid valve without the use of pipes, using suitable tie-rods or bolts.
- It is available in versions with the check valve on the pressure port or tank port.

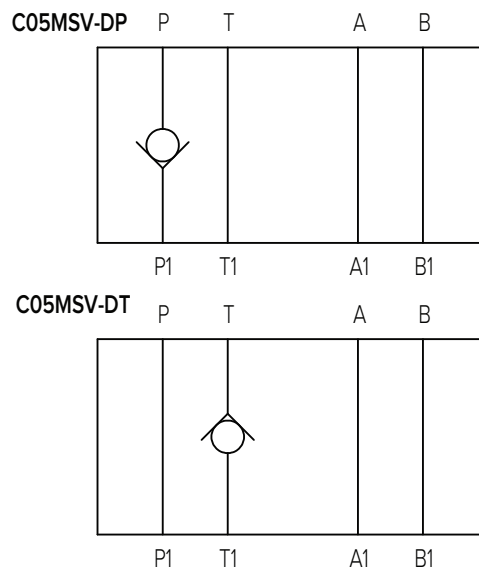
## CONFIGURATIONS (see hydraulic symbols table)

- C05MSV-DP: Check valve on line P
- C05MSV-DT: Check valve on line T

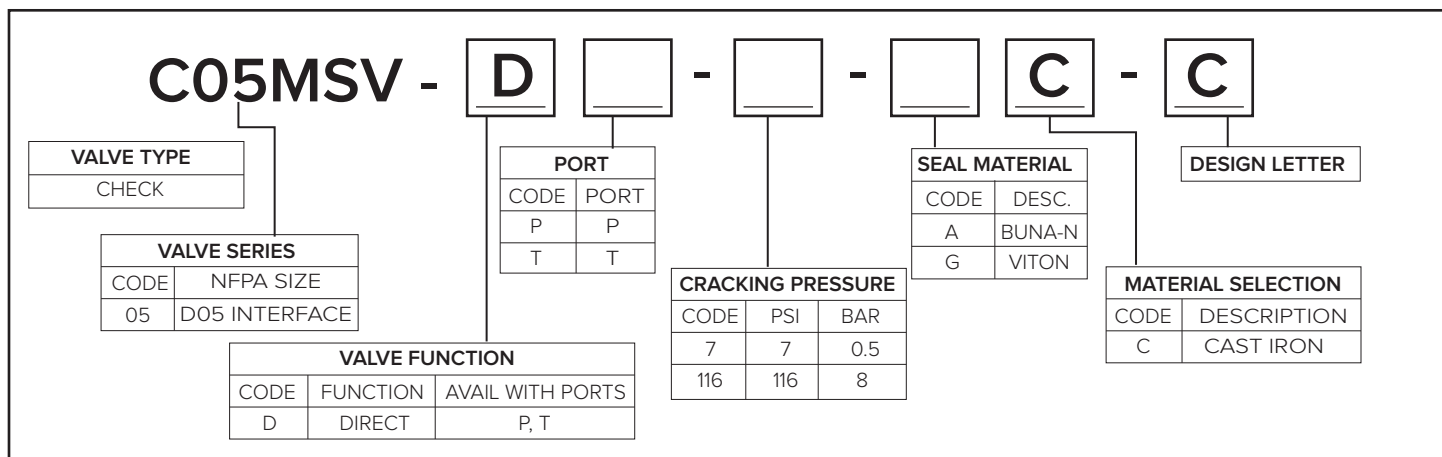
## PERFORMANCES (measured with mineral oil of viscosity 36cSt at 120°F [50°C])

Maximum operating pressure	PSI [bar]	5000 [350]
Check valve cracking pressure		7, 116 [ 0.5, 8]
Maximum flow rate in controlled lines and the free lines	GPM [l/min]	26 [100]
Ambient temperature range	°F [°C]	-4 to 140 [-20 to +60]
Fluid temperature range	°F [°C]	-4 to 176 [-20 to +80]
Fluid viscosity range	cSt	10 - 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass:	lbs [kg]	5.1 [2.3]

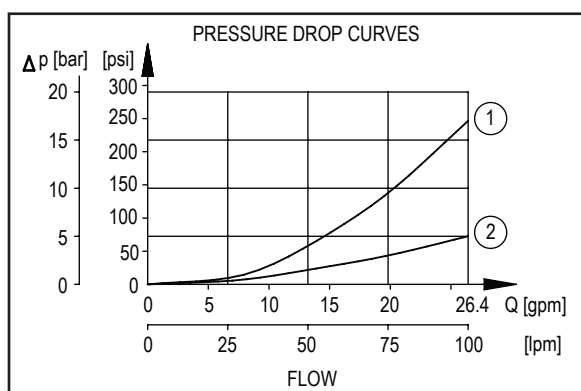
## HYDRAULIC SYMBOLS



## 1 • IDENTIFICATION CODE



## 2 • CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 120°F [50°C])



- 1) pressure drops on controlled lines (P1→P and T→T1)
- 2) pressure drops on free lines

**NOTE:** check valve cracking pressure must be added to the values indicated in the curve 1 in the diagram

## 3 • HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code A). For fluids HFDR type (phosphate esters) use FPM seals (code G). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 176°F [80°C] causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

## 4 • OVERALL AND MOUNTING DIMENSIONS

