

# C03MSV-D

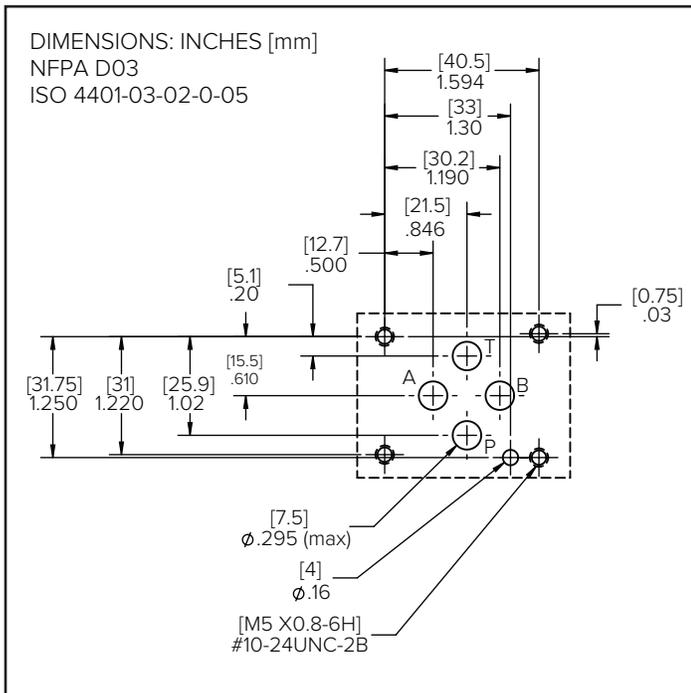
## DIRECT OPERATED CHECK VALVE



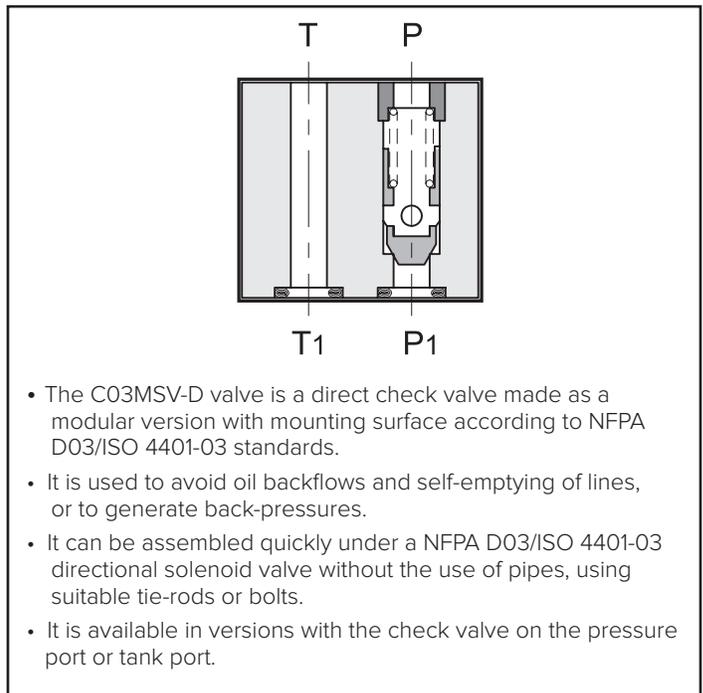
**MODULAR VERSION**  
**NFPA D03 ISO 4401-03**

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

### MOUNTING INTERFACE



### OPERATING PRINCIPLE



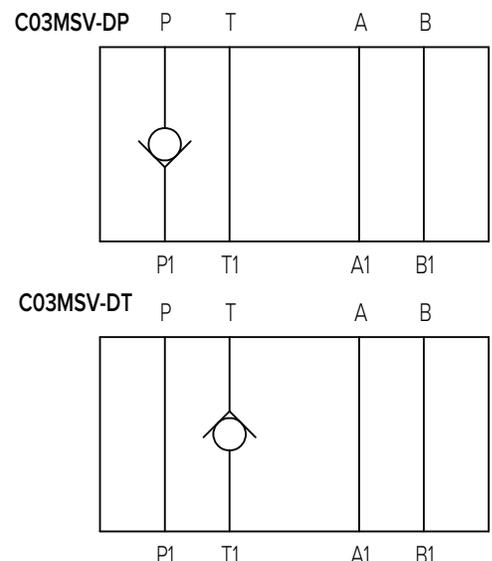
### CONFIGURATIONS (see hydraulic symbols table)

- C03MSV-DP: Check valve on line P
- C03MSV-DT: Check valve on line T

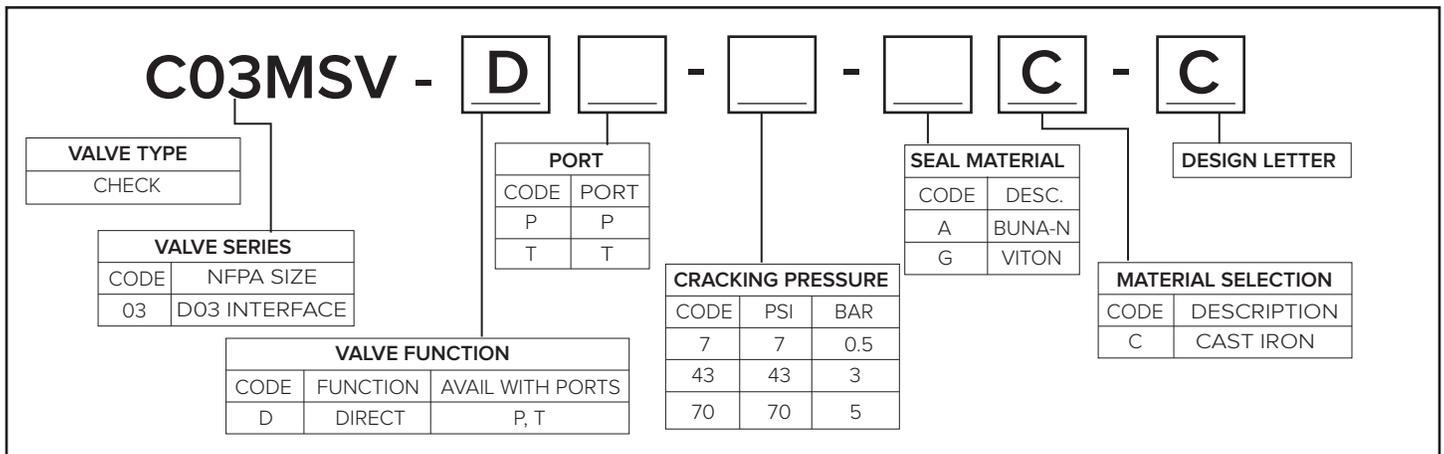
### PERFORMANCES (measured with mineral oil of viscosity 36cSt at 120°F [50°C])

Maximum operating pressure	PSI [bar]	5000 [350]
Check valve cracking pressure		43, 7, 70 [ 3, 0.5, 5]
Maximum flow rate in controlled lines	GPM [l/min]	13.2 [50]
Maximum flow rate in the free lines		20 [75]
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]	2.2 [1]

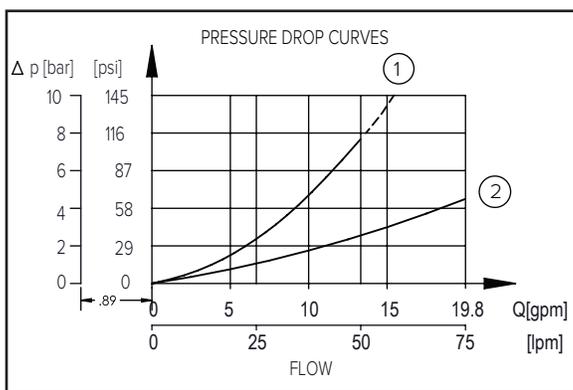
### HYDRAULIC SYMBOLS



# 1 • IDENTIFICATION CODE



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



- 1) pressure drops on controlled lines
- 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

