

# TPED-compliant Cylinder Valves



**FITOK**

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## TPED-compliant Cylinder Valves

FITOK cylinder valves have been designed, manufactured, documented and tested in accordance with the requirements of the Transportable Pressure Equipment Directive 2010/35/EU. This directive sets out detailed rules concerning transportable pressure equipment to enhance safety and ensure free movement of such equipment within the European Union. FITOK cylinder valves comply with the Transportable Pressure Equipment Directive 2010/35/EU (TPED), and have been approved by a notified body, and acquired EC Type Approval Certificate.

## Application

FITOK TPED-compliant cylinder valves apply to compressed, liquefied or dissolved gases except acetylene, oxygen or oxidizing gas. In addition, they are not suitable for cryogenic equipment, portable fire extinguishers, liquefied and petroleum gas (LPG), and cannot be used as quick-release valves (e.g. for fire-extinguishing, explosion protection and rescue application).

## Test

Every FITOK TPED-compliant cylinder valve has been subjected to both internal leak tightness and external leak tightness test with nitrogen or compressed air at 1.2 times of rated working pressure prior to dispatch. The TPED-compliant cylinder valves have a maximum allowable internal and external leakage rate of 6 std cm<sup>3</sup>/h.

## Pi (Π) Making

Every FITOK TPED-compliant cylinder valve has been Pi-marked and the identification number of the notified body involved in the initial inspections and tests.

## ND Series Cylinder Valves



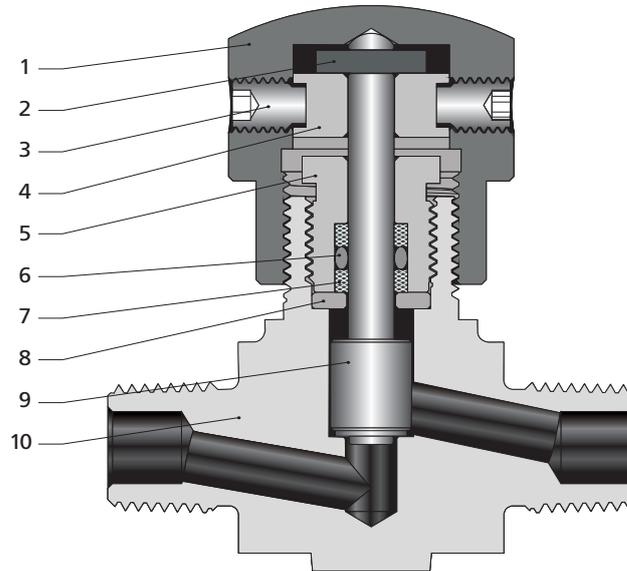
## Features

- ⦿ One-piece forged body
- ⦿ Compact design
- ⦿ Non-rotating stem
- ⦿ Soft tip design to seal easily
- ⦿ Special designed handle to stop contamination from entering into the valve

## Technical Data

Rated working temperature	Rated working pressure	Flow coefficient Cv
-4~150 °F (-20~65°C)	2500 psig (172 bar)	0.53

## Standard Materials Of Construction

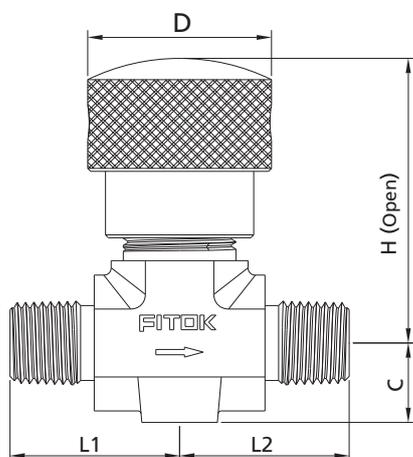


Item	Component	Valve Material 316 SS
		Material Grade/ASTM Specification
1	Handle	C36000/B16
2	Stop Pin	Stainless Steel
3	Set Screw	Steel
4	Spool	Aluminum
5	Packing Bolt	316SS/A479
6	<i>O-Ring</i>	Buna-N(NBR) or Ethylene Propylene Diene Monomer (EPDM)
7	<i>Backup Ring</i>	PTFE/D1710
8	<i>Washer</i>	316SS/A479
9	<i>Stem</i>	316SS/A479
	<i>Stem Tip</i>	PEEK
10	<i>Body</i>	316SS/A182
	Lubricant	thread: Molybdenum disulfide-based O-ring: silicon-based

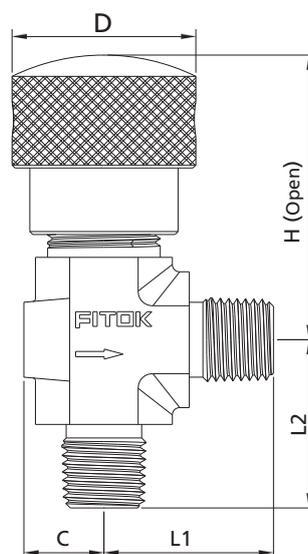
Note: Wetted components listed in italics.

## Dimensions

### Straight Pattern



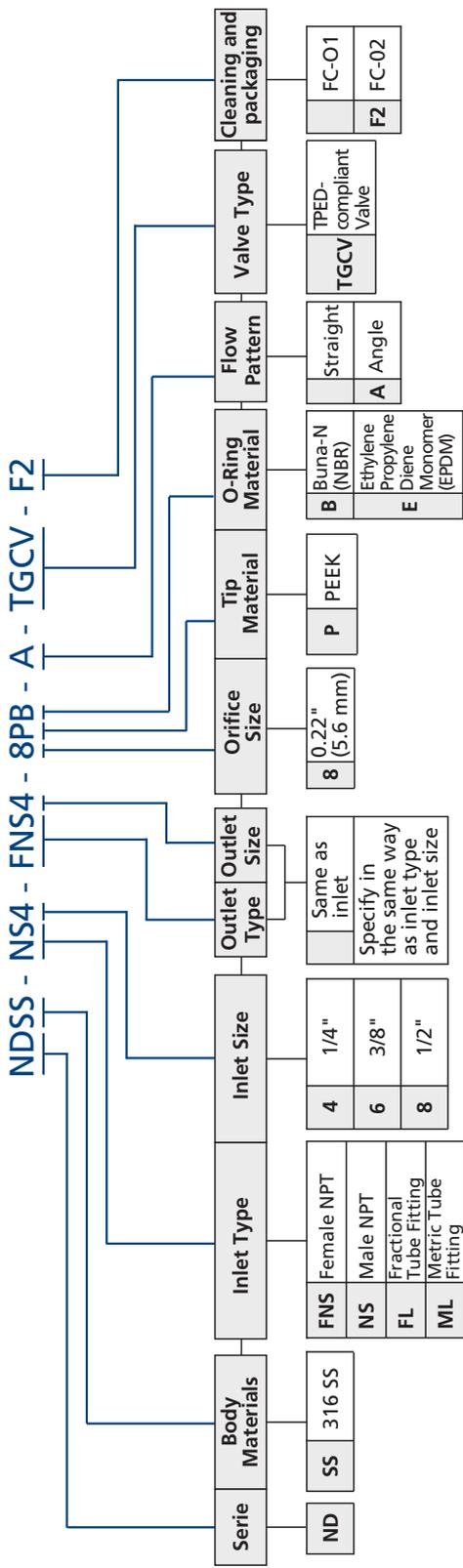
### Angle Pattern



Basic Ordering Number		Connection Type and Size		Orifice in.(mm)	Dimensions, in.(mm)				
Buna N O-Ring	Ethylene Propylene O-Ring	Inlet	Outlet		L1	L2	C	D	H
NDSS-FNS4-8PB-TGCV NDSS-FNS4-8PB-A-TGCV	NDSS-FNS4-8PE-TGCV NDSS-FNS4-8PE-A-TGCV	1/4 Female NPT	1/4 Female NPT	0.22 (5.6)	1.06 (26.9)		0.53 (13.5)	1.22 (31)	2.04 (51.8)
NDSS-NS4-8PB-TGCV NDSS-NS4-8PB-A-TGCV	NDSS-NS4-8PE-TGCV NDSS-NS4-8PE-A-TGCV	1/4 Male NPT	1/4 Male NPT		1.13 (28.6)				
NDSS-NS6-8PB-TGCV NDSS-NS6-8PB-A-TGCV	NDSS-NS6-8PE-TGCV NDSS-NS6-8PE-A-TGCV	3/8 Male NPT	3/8 Male NPT		1.32 (33.5)				
NDSS-NS4-FNS4-8PB-TGCV NDSS-NS4-FNS4-8PB-A-TGCV	NDSS-NS4-FNS4-8PE-TGCV NDSS-NS4-FNS4-8PE-A-TGCV	1/4 Male NPT	1/4 Female NPT		1.13 (28.6)	1.29 (32.8)	0.53 (13.5)	2.04 (51.8)	
NDSS-NS8-FNS4-8PB-TGCV NDSS-NS8-FNS4-8PB-A-TGCV	NDSS-NS8-FNS4-8PE-TGCV NDSS-NS8-FNS4-8PE-A-TGCV	1/2 Male NPT	1/4 Female NPT		1.29 (32.8)				
NDSS-NS4-FL6-8PB-TGCV NDSS-NS4-FL6-8PB-A-TGCV	NDSS-NS4-FL6-8PE-TGCV NDSS-NS4-FL6-8PE-A-TGCV	1/4 Male NPT	3/8 in. FITOK						
NDSS-FL6-8PB-TGCV NDSS-FL6-8PB-A-TGCV	NDSS-FL6-8PE-TGCV NDSS-FL6-8PE-A-TGCV	3/8 in. FITOK	3/8 in. FITOK						

1. Connection type of "FITOK" means FITOK double ferrule tube fittings. When the connection type of valves is FITOK double ferrule tube fitting, the working pressures of the valves are related to the wall thickness of the tubing applied. For specific working pressure of the valves, please refer to the allowable working pressure in FITOK Catalog *Tubing*.
2. Sizes and types listed are standard.
3. Dimensions are shown with FITOK tube fitting nuts finger-tight. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact FITOK Group or our authorized distributors.

# Ordering Number Description



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combination is available. If any questions, please contact FITOK Group or our authorized distributors.

1. Cleaning and Packing:  
 FC-01: Standard cleaning and packaging for general industrial procedures.  
 FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement of ASTM G93 Level C.

## NU Series Cylinder Valves



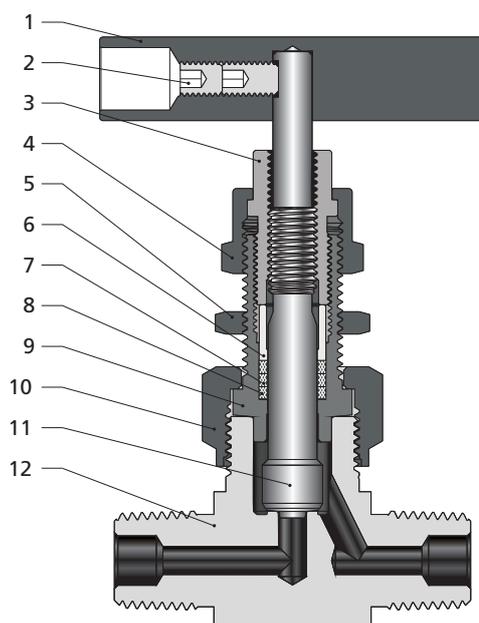
### Features

- ⦿ One-piece forged body
- ⦿ Simple stem to operate stably
- ⦿ Soft tip design to seal easily
- ⦿ Safety back seating seal in the fully open position
- ⦿ Union bonnet construction to avoid accidental valve disassembly
- ⦿ Stem thread lubricant isolated from system media
- ⦿ Panel mounting available

### Technical Data

Rated working temperature	Rated working pressure	Flow coefficient Cv
-4~150 °F (-20~65°C)	5000 psig (345 bar)	0.35

### Standard Materials of Construction

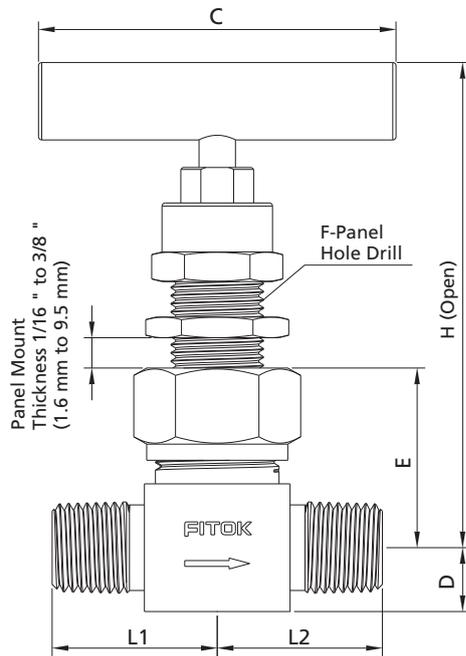


Item	Component	Valve Material 316 SS
		Material Grade/ASTM Specification
1	Handle	Stainless Steel
2	Set Screw	Steel
3	Packing Bolt	304SS/A479
4	Lock Nut	304SS/A479
5	Panel Nut	316SS/A479
6	Gland	316SS/A479
7	<i>Packing</i>	PEEK
8	<i>Packing Washer</i>	PEEK
9	<i>Bonnet</i>	316SS/A479
10	Union Nut	316SS/A479
11	<i>Stem</i>	316SS/A479
	<i>Stem Tip</i>	PEEK
12	<i>Body</i>	316/A182
	Lubricant	Molybdenum disulfide-based

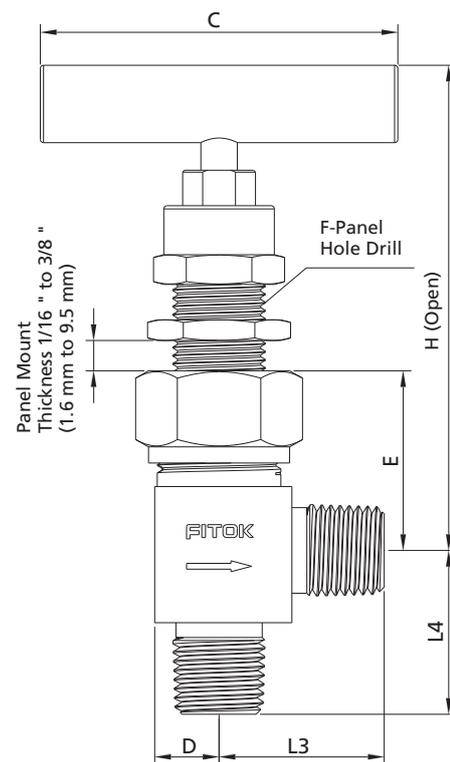
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## Dimensions

### Straight Pattern

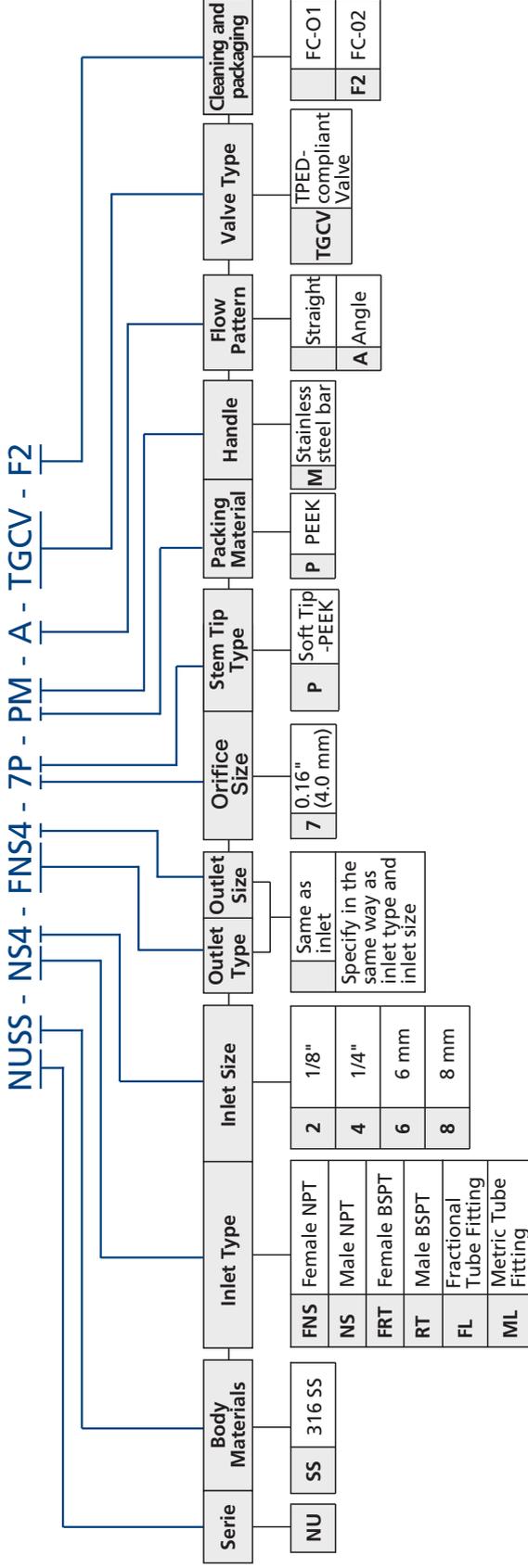


### Angle Pattern



Basic Ordering Number	Connection Type and Size		Orifice in.(mm)	Dimensions, in.(mm)								
	Inlet	Outlet		L1	L2	L3	L4	C	D	E	F	H
NUSS-FNS2-7P-PM-TGCV NUSS-FNS2-7P-PM-A-TGCV	1/8 Female NPT	1/8 Female NPT	0.16 (4.0)	1.00 (25.4)		0.85 (21.6)	1.00 (25.4)	2.17 (55)	0.39 (9.9)	1.1 (27.9)	0.59 (15)	3.08 (78.2)
NUSS-FNS4-7P-PM-TGCV NUSS-FNS4-7P-PM-A-TGCV	1/4 Female NPT	1/4 Female NPT		1.03 (26.2)								
NUSS-NS4-7P-PM-TGCV NUSS-NS4-7P-PM-A-TGCV	1/4 Male NPT	1/4 Male NPT		1.00 (25.4)		1.00 (25.4)						
NUSS-NS4-FNS4-7P-PM-TGCV NUSS-NS4-FNS4-7P-PM-A-TGCV	1/4 Male NPT	1/4 Female NPT		1.00 (25.4)	1.03 (26.2)	0.85 (21.6)						
NUSS-RT4-FRT4-7P-PM-TGCV NUSS-RT4-FRT4-7P-PM-A-TGCV	R 1/4 Male BSPT	R 1/4 Female BSPT		1.14 (29)	1.22 (30.9)		1.16 (29.5)					
NUSS-FL4-7P-PM-TGCV NUSS-FL4-7P-PM-A-TGCV	1/4 in. FITOK	1/4 in. FITOK		1.17 (29.7)		1.22 (30.9)						
NUSS-ML6-7P-PM-TGCV NUSS-ML6-7P-PM-A-TGCV	6 mm FITOK	6 mm FITOK										
NUSS-ML8-7P-PM-TGCV NUSS-ML8-7P-PM-A-TGCV	8 mm FITOK	8 mm FITOK										

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