How to Order

NCVA | MD | 4N 4T | 1/3 | ST | S

Series Designator by Orifice Size
- NCVA: 4.8mm Orifice
- NCVB: 7.1mm Orifice
- NCVC: 10.0mm Orifice
- NCVD: 13.3mm Orifice
- NCVE: 16.0mm Orifice
- NCVF: 18.5mm Orifice

End Connection Designator
- D: Both Ends D-LOK lube Fitting
- M: Both Ends Male Pipe Thread
- F: Both Ends Female Pipe Thread
- MD: Male Pipe Thread and D-LOK Tube Fitting
- MF: Male Pipe Thread and Female Pipe Thread

Size Designator
- Inlet/Outlet
  - NFT(ISO/BSP)
  - Tube

Nominal Cracking Pressure Designator
- 1/3:1/3 psi
- 1:1 psi
- 3:3 psi
- 10:10 psi
- 25:25 psi
- 100:100 psi

O-Ring Material Designator
- ST: Viton(Standard)
- BU: Buna N
- KZ: Kalrez
- NP: Neoprene
- EP: Ethylene Propylene
- PE: PTFE

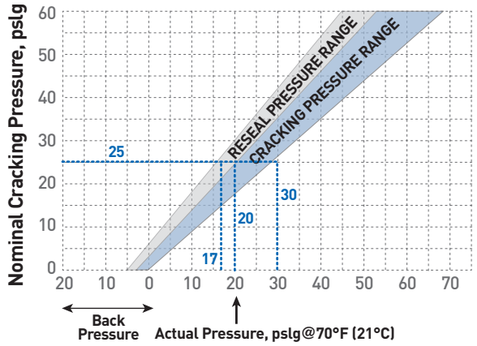
Body Material Designator
- S: SS316
- B: Brass

Thread(In.)	1/8	1/7	3/8	1/2	3/4	1
Designator	2N(R)	4N(R)	6N(R)	8N(R)	12N(R)	16N(R)

Fractional Tube	O.D.(In.)	1/8	1/4	3/8	1/2	3/4	1
	Designator	2T	4T	6T	8T	12T	16T
Metric Tube	Q.D.(mm)	3	6	8	10	12	25
	Designator	3M	6M	8M	10M	12M	25M

Cracking and Reseal Pressure

Nominal Cracking Pressure		Minimum Cracking Pressure		Maximum Cracking Pressure		Reseal Pressure	
Psi	bar	psi	bar	psi	bar	psi	bar
1/3	0.02	0	0	3	021	Up to 6 downstream pressure	0.41
1	0.07	0	0	4	0.28	Up to 5 downstream pressure	0.34
3	0.21	2	0.14	7	0.48	Up to 4 downstream pressure	0.28
10	0.69	7	0.48	15	1.03	3 or more upstream pressure	0.21
25	1.72	20	1.38	30	2.07	17 or more upstream pressure	1.17
100	6.90	80	5.51	110	7.58	70 or more upstream pressure	4.82



Example: From the graph, the actual cracking pressure of nominal cracking pressure 25 psi is shown to range between 20 psi to 30 psi, and the reseal pressure 17 psi to 20 psi.

*Cracking pressure is defined as the upstream pressure at which a detectable flow is measured.
*Reseal pressure is defined as the downstream pressure at which the check valve closes bubble-tight.

Technical Information

Series	NCVA	NCVB, NCVC, NCVD	NCVE, NCVF
Maximum Working Pressure @ 21°C (70°F)	SS316 : 3000 psig (206 bar) Brass : 3000 psig (206 bar)		SS316 : 2000 psig (137 bar) Brass: 1500 psig (103 bar)
Operating Temperature Range	Viton O-Rrg : -23°C ~ 191°C (-10°F ~ 375°F) Buna N O-Rlng :-23°C ~ 121°C (-10°F ~ 250°F) Kalrez O-Rhg : -23°C ~ 315°C (-10°F ~ 600°F) Neoprene O-Rng : -40°C ~ 121°C (-40°F ~ 250°F) Ethylene Propylene : -46°C ~ 149°C (-50°F ~ 300°F) PTFE O-Rng : -46°C ~ 232°C (-50°F ~ 450°F)		
Nominal Cracking Pressure	1/3, 1, 3,10, 25,100 psi (0.02, 0.07, 0.21, 0.69, 1.72, 6.90 bar)		1/3, 1, 3,10, 25 psi (0.02. 0.07, 0.21, 0.69, 1.72 bar)

*PTFE seated valves require a minimum back pressure of 100 psi (6.90 bar) to insure a leak-tight reseal.

D-lok®
D-LOK CORPORATION
www.d-lok.com

Factory Testing

Every NATMAN 300 Series Check Valve is adjusted for factory testing with nitrogen for cracking and reseal performance.

Cleaning and Packaging

All valves are cleaned and packaged in accordance with D-LOK standard cleaning and packaging procedures.

Safety in Valve Selection

Selections of valve function and rating, proper installation, material compatibility, operation and maintenance of these valves are the responsibility of the user.

The system design, application must be taken into consideration to ensure optimal performance and safety.

We accept no liability for any improper selection, installation, operation or maintenance.

D-lok Tube Fittings | DYCON Pipe Fittings | NATMAN VALVES

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NATMAN®

CHECK VALVES

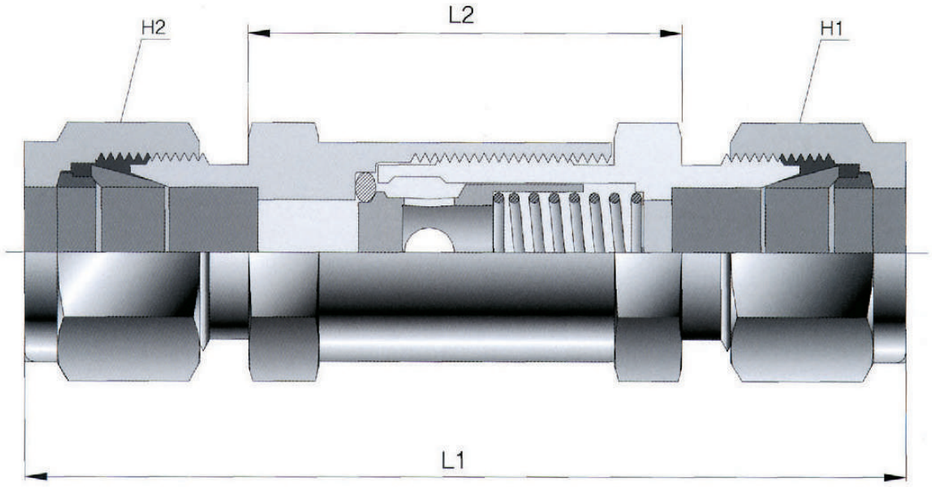
300 SERIES

Fixed cracking pressure
For working pressure up to 3000 psig (206 bar)

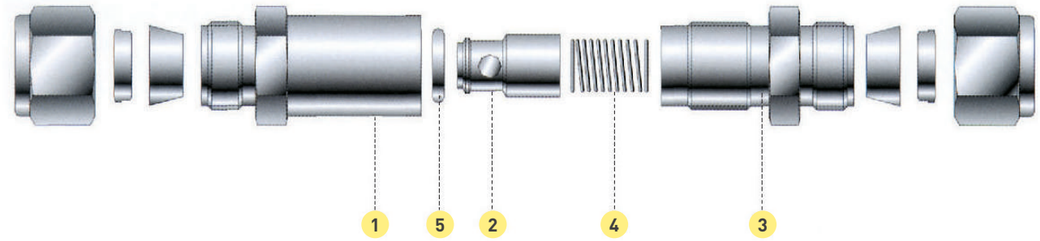
D-lok®

Design Feature

- Fixed cracking pressure.
- Pressure rating up to 3000 psig.
- Temperature rating up to 375°F (190°C).
- Various end connection.
- Body materials available in SS316 and Brass.
- O-Ring provides leak-tight seal.
- Back stopped poppet minimizes spring overstress.
- Cracking pressures include 1/3, 1, 3, 10, 25, 100 psi
- 100% factory tested for cracking and reseating.



Meterials of construction



Item	Part Description	Stainless Steel	Brass
1	Body	SS316	Brass / B16
2	Poppet		
3	Connector		
4	Spring	SS302	SS302
5	O-Ring	Viton	NBR

* Silicon-based lubricant for Poppet.
* Molybdenum dry film lubricant for SS316 body threads.

Ordering Information and Table of Dimensions

Basic Ordering Number		End Connections		Dimensions (mm)				Orifice (mm)	Cv
		Intet	Outlet	H1	H2	L1	L2		
NCVA	D-2T-	1/8" D-Lok	1/8" D-Lok	15.88	11.11	55.60	25.00	4.8	0.16
	M-2N-	1/8" Male NPT	1/8" Male NPT		-	44.50			0.47
	F-2N-	1/8" NPT	1/8" NPT		-	46.50	-		
	D-4T-	1/4" D-Lok	1/4" D-Lok		14.29	60.00	25.00		
	D-6M-	6mm D-Lok	6mm D-Lok		14.00				
	MD-4N4T-	1/4" Male NPT	1/4" Male NPT		14.29	56.40			
	M-4N-	1/4" Male NPT	1/4" Male NPT		-	53.40			
	F-4N-	1/4" Female NPT	1/4" Female NPT		-	54.60			
NCVB	D-6T-	3/8" D-Lok	3/8" D-Lok	19.05	17.46	74.80	36.20	7.1	1.48
	D-10M-	10mm D-Lok	10mm D-Lok		19.00				
	M-6N-	3/8" Male NPT	3/8" Male NPT		-	64.60			
NCVC	F-6N-	3/8" Female NPT	3/8" Female NPT	22.22	-	63.80	-	10.0	1.7
	D-8T-	1/2" D-Lok	1/2" D-Lok		22.22	80.20	36.20		
	D-12M-	12mm D-Lok	12mm D-Lok		22.00				
	M-8N-	1/2" Male NPT	1/2" Male NPT		-	74.40			
NCVD	F-8N-	1/2" Female NPT	1/2" Female NPT	28.58	-	84.70	-	13.5	2.6
	D-10T-	5/8" D-Lok	5/8" D-Lok		25.40	91.80	48.10		
NCVE	D-12T-	3/4" D-Lok	3/4" D-Lok	31.75	28.58	110.70	67.00	16.0	5.2
	M-12N-	3/4" Male NPT	3/4" Male NPT		-	106.30			
	F-12N-	3/4" Female NPT	3/4" Female NPT		-	103.00	-		
NCVF	D-16T-	1" D-Lok	1" D-Lok	34.93	38.1	121.20	68.40	18.0	8.0
	M-16N-	1" Male NPT	1" Male NPT		-	116.20			
	F-16N-	1" Female NPT	1" Female NPT	41.28	-	111.40			

*All dimensions shown are for reference purposes only, are subject to change.