

www.sigmaaldrich.com

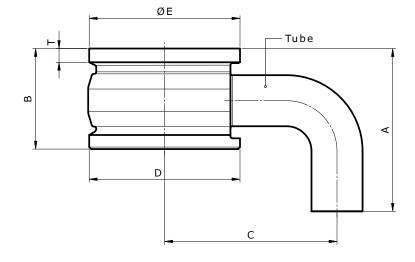
Catalogue Number: NU###/441-321

Specification Sheet

NovAseptic[®] Valve, Valve Body, Tank Outlet Valve 90°, Elbow 90°

Product Description

The NovAseptic[®] valve is specifically designed for aseptic applications and complies with the most stringent cleanability and sterilization requirements. The focus on aseptic design is a significant feature for all valves. The NovAseptic[®] valve is designed for minimum dead leg, complete drainability and high chemical resistance.



Catalogue No. Structure NU###/441-321 ### = tube size

Nominal Dimensions in mm (in.)

Catalogue No.	А	В	С	D*	E	т	Size	Tube
NU050/441-321	50.0 (1.969)	31.5 (1.240)	62.0 (2.441)	TR40x2	40.0 (1.575)	6.4 (0.252)	¹ / ₂ "	12.7 x 1.65 (0.50 x 0.065)
NU075/441-321	68.0 (2.677)	39.0 (1.535)	75.0 (2.953)	TR55x2	55.0 (2.165)	7.2 (0.283)	³ / ₄ "	19.1 x 1.65 (0.75 x 0.065)
NU100/441-321	81.0 (3.189)	50.0 (1.969)	83.0 (3.268)	TR75x2	75.0 (2.953)	6.8 (0.268)	1"	25.4 x 1.65 (1.0 x 0.065)
NU150/441-321	104.0 (4.094)	64.0 (2.520)	105.0 (4.134)	TR85x2	85.0 (3.346)	6.9 (0.272)	1 ¹ / ₂ "	38.1 x 1.65 (1.5 x 0.065)
NU200/441-321	123.0 (4.843)	77.0 (3.031)	135.5 (5.335)	TR109x2	110.0 (4.331)	6.7 (0.264)	2"	50.8 x 1.65 (2.0 x 0.065)
NU300/441-321	208.0 (8.189)	115.0 (4.528)	200.0 (7.874)	TR146x2	150.0 (5.906)	10.0 (0.394)	3"	76.2 x 1.65 (3.0 x 0.065)

* Note: Non-standard thread, special thread to fit NovAseptic® actuators.



Specifications

Net Volume (va	lve cavity, diaphra	igm applied)				
Valve Body	NU050	NU075	NU100	NU150	NU200	NU300
Volume mL	4	10	30	80	200	470

Net Weight (ap	proximate)					
Valve Body	NU050	NU075	NU100	NU150	NU200	NU300
Weight kg (lb)	0.2 (0.44)	0.5 (1.1)	1.0 (2.20)	1.4 (3.09)	2.8 (6.17)	7.4 (16.3)

Material					
	Bar Stainless Steel in Compliance with		Tubing Stainless Steel in Compliance with		
Material Code	316L	EN 1.4435	TP316L	EN 1.4435	
Technical Requirements	ASME [®] SA-479	EN 10272	ASTM® A269/270	EN 10217-7/EN 10216-5	

Specifications	
Surface Roughness	Internal surface (electropolished) Ra ≤ 0.38 μm (15 μin) External surface Ra ≤ 1.6 μm (63 μin)
Design Temperature, Valve Body	-80 to 200 °C (-112 to 392 °F)
Design Pressure, Valve Body	-1.03 to 10 bar(g) (-15 to 145 psi(g))
Note	The weakest component in the assembled product determines the maximum operating/design temperature and pressure limits. The applied diaphragm and actuator have different design temperature and/or pressure limits. The valve body can only be used with NovAseptic [®] diaphragm, actuator and position indicator (optional).
Labeling	Each valve body is individually labeled for full traceability and heat No. according to our QA routines.
Packaging	All open ends on the valve body are protected with plastic covers on delivery and packaged in a closed box.
Quality Control	Our quality assurance system guarantees the control and traceability at all stages of the manufacturing.
Regulatory	 The NovAseptic[®] valves, used with gas group 2 and liquid group 1, fall under the art. 4 § 3 of the Pressure Equipment Directive (2014/68/EU). They are not CE marked. However, the design has been evaluated for assembly by welding at a bottom of a vessel with a max allowable pressure of 10 bar and a max allowable temperature of 200 °C, with gas group 2 and liquid group 1. NovAseptic[®] valves follow the applicable ASME BPE guideline sections.
Options	For non-standard NovAseptic® valve body options, please contact us for further information.

Technical Assistance

For more information, please visit **SigmaAldrich.com** for up-to-date worldwide contact information

© 2021 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M, Millipore, Sigma-Aldrich, and NovAseptic are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.