



CONNECTORS

VALVES

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VALVES

NRV-Non Return Valve

Product group:	Valves
Description:	NRV-Non Return Valve
Valid standards:	TC acc. ISO 2852 with pipe connection acc. ISO 1127
Material:	Casing: Stnr.-W.: 1.4435 BN2 (Fe < 0,5%) acc. EN 10088 Springmaterial and Spider: 1.4435 / Bearing bush: 1.4435 BN2 with PTFE Seals: EPDM as standard
Working temperature:	max. 80° C
Permissible sterilization temperature:	150° C
Opening pressure:	see additional datasheet for NRV-Spring Specification
Working Overpressure:	max 10 bar g
Version / Surface quality:	Surfaces, internal: Bright finish. Surfaces, exterior: Bright finish Ra, internal < 0,4 µm
Pipe-Hygiene Classes:	H 3 / H 4 acc. DIN 11866
Marking:	Size, material number, manufacturer code, flow-direction
Certificates:	Certificate acc. EN 10204-3.1
Option:	Electro-polishing. Upon request: Material certificates and test logs NRV-Non Return Valves in inch dimensions: available on request
Remarks:	Technical contents are subject to change

Dimensions for NRV-Non Return Valve							
Sizes	A	ID	AD	L1	L	Item No.	
acc. ISO 2852 / ISO 1127							
NRV DN 8	25.0	10.3	50.5	46.0	107.0	272.008.102	
NRV DN 10	25.0	14.0	50.5	46.0	107.0	272.010.142	
NRV DN 15	50.5	18.1	64.0	51.0	117.0	272.015.181	
NRV DN 20	50.5	23.7	64.0	51.0	117.0	272.020.237	
NRV DN 25	50.5	29.7	77.5	51.0	117.0	272.025.297	
NRV DN 32	64.0	38.4	91.0	51.0	117.0	272.032.384	
NRV DN 40	64.0	44.3	91.0	51.0	117.0	272.040.443	
NRV DN 50	77.5	56.3	106.0	51.0	117.0	272.050.560	
NRV DN 65	91.0	72.1	119.0	51.0	117.0	272.065.719	
NRV DN 80	106.0	84.3	180.0	70.0	160.0	272.080.840	

All lengths in millimeters (if not specified differently).

VALVES

NRV-Non Return Valve

Product group:	Valves
Description:	NRV-Non Return Valve
Standards:	TC acc. DIN 32676 Series C (ASME BPE 2009)
Material:	Casing: Strn.-W.: 1.4435 BN2 (Fe < 0,5%) acc. EN 10088 Springmaterial and Spider: 1.4435 / Bearing bush: 1.4435 BN2 with PTFE Seals: EPDM as standard
Working temperature:	max. 80° C
Permissible sterilization temperature:	150° C
Opening pressure:	see additional datasheet for NRV-Spring Specification
Working Overpressure:	max 10 bar g
Version / Surface quality:	Surfaces, internal: Bright finish. Surfaces, external Bright finish. Ra, internal < 0.4 µm
Pipe-Hygiene Classes:	H 3 / H 4 acc. DIN 11866
Marking:	Manufacturer number, manufacturer code, flow-direction
Certificates:	Certificate according EN 10204-3.1
Option:	Electro-polishing. Upon request: Material certificates and test logs NRV-Non Return Valves in inch dimensions: on request available
Remarks:	Technical contents are subject to change

Dimensions for NRV-Non Return Valve						
Sizes	A	ID	AD	L1	L	Item No.
acc. DIN 32676 Row C (ASME BPE 2009)						
NRV 05 - 1/4"	25.0	4.57	50.5	46.0	107.0	272.005.305
NRV 05 - 1/2"	25.0	9.40	50.5	46.0	107.0	272.005.098
NRV 05 - 3/4"	25.0	15.75	50.5	46.0	107.0	272.005.016
NRV 10 - 1"	50.5	22.10	64.0	51.0	117.0	272.010.000
NRV 15 - 1 1/2"	50.5	34.80	77.5	51.0	117.0	272.015.000
NRV 20 - 2"	64.0	47.50	91.0	51.0	117.0	272.020.000
NRV 25 - 2 1/2"	77.5	60.30	106.0	51.0	117.0	272.025.000
NRV 30 - 3"	91.0	72.90	119.0	51.0	117.0	272.030.000
NRV 40 - 4"	119.0	97.40	170.0	72.0	162.0	272.040.000

NRV-Non Return Valve – Gasket-Kit

Product group:	NRV check valves
Description:	NRV-Non Return Valve - Gasket-Kit
Valid standards:	CONNECTORS Standard
Material:	As per table below
Permissible sterilization temperature:	EPDM: 132°C (150°C for a short time), Silicone, Viton® and Teflon® (PTFE): 150°C
Version / Surface quality:	CONNECTORS Standard
Marking:	-
Certificates:	FDA-Conformity
Option:	-
Remarks:	Technical contents are subject to change The Gasket-Kit can be exchanged for payment Viton® and Teflon® are registered trademarks of DuPont Dow Elastomers

Item Numbers for NRV-Non Return Valve - Gasket-Kit				
Sizes	EPDM	Silicone	Viton®	Teflon® PTFE
acc. ISO 1127 / BS 4825	Item No.	Item No.	Item No.	Item No.
NRV DN 8/10, 1/2", 3/4"	272.000.008	272.001.008	272.003.008	272.002.008
NRV DN 15/20, 1"	272.000.015	272.001.015	272.003.015	272.002.015
NRV DN 25, 1 1/2"	272.000.025	272.001.025	272.003.025	272.002.025
NRV DN 32/40, 2"	272.000.032	272.001.032	272.003.032	272.002.032
NRV DN 50, 2 1/2"	272.000.050	272.001.050	272.003.050	272.002.050
NRV DN 65, 3"	272.000.065	272.001.065	272.003.065	272.002.065
NRV DN 80, 4"	272.000.080	272.001.080	272.003.080	272.002.080

Table of Material-Resistance: Chapter Tri-Clamp Connections

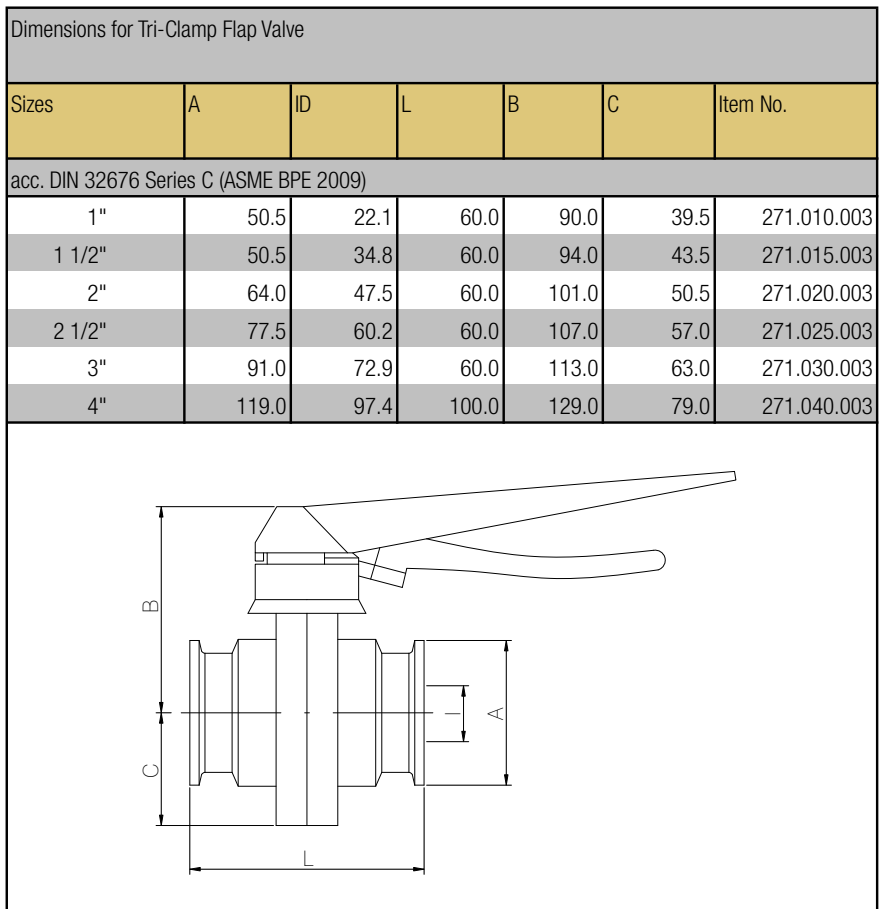
NRV Non Return Valve / Spring Forces

Product group:	Valves
Description:	NRV Check Valve / Spring Forces
Material:	Springmaterial: 1.4435
Optional Extras:	Spring-tolerances available on request
Certification:	Material certificate acc. EN 10204 2.2 or 3.1
Remarks:	Technical contents are subject to change

Spring Forces and opening pressures for NRV-Non Return Valves												
Sizes	Spring 0.3 kg	Spring 0.4 kg	Spring 0.7 kg	Spring 1 kg	Spring 1.5 kg	Spring 2 kg	Spring 2.5 kg	Spring 3.0 kg	Spring 3.5 kg	Spring 4.0 kg	Spring 6.0 kg	Spring 8.0 kg
Opening-Pressure in bar g in reference to DN												
NRV DN 8, 1/2"	0.17	0.16	0.29	0.41	0.61	0.82	1.02	1.22	1.43	1.63	2.45	3.26
NRV DN 10, 3/4"	0.17	0.16	0.29	0.41	0.61	0.82	1.02	1.22	1.43	1.63	2.45	3.26
NRV DN 15, 1"	0.09	0.10	0.17	0.24	0.36	0.48	0.60	0.72	0.84	0.97	1.45	1.93
NRV DN 20, 1"	0.09	0.10	0.17	0.24	0.36	0.48	0.60	0.72	0.84	0.97	1.45	1.93
NRV DN 25, 1 1/2"	0.03	0.04	0.07	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.60	0.79
NRV DN 32, 2"	0.02	0.02	0.04	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.33	0.44
NRV DN 40, 2"	0.02	0.02	0.04	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.33	0.44
NRV DN 50, 2 1/2"	0.01	0.01	0.02	0.03	0.05	0.07	0.09	0.10	0.12	0.14	0.21	0.28
NRV DN 65, 3"	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.07	0.08	0.09	0.14	0.19
NRV DN 80, 4"	On request.											

Tri-Clamp Flap Valve

Product group:	Ventile
Description:	Tri-Clamp Buttery Valve
Valid standards:	TC acc. DIN 32676 Series C (ASME BPE 2009)
Material:	Body: 316L, gasket material: EPDM, Handle: 1.4301
Working Temperature:	-10° C to +150° C (Depending on gasket material)
Automatization:	Manual with 5-step lock Drive unit: air-opening and spring-closing or vice-versa
Working Pressure:	-0.9 to +10 bar
Version / Surface quality:	Surface, internal: sanded and polished. Surface, external bright finish. Ra, internal < 0.8 µm
Pipe-Hygiene Classes:	H 3 acc. DIN 11866
Marking:	Marking with Manufacturer-Name and Dimension
Certificates:	Acceptance Certificate 3.1
Option:	On request: internal surface with Ra < 0.4 µm On request: gasket material: Viton® or Silicone available For pneumatic drive-unit: use Item-Number 270.061.100
Remarks:	Technical contents are subject to change Viton® is a registered trademark of DuPont Dow Elastomers



All lengths in millimeters (if not specified differently).

VALVES

Sterile-Air-Bleeder and Extraction Valve

Product group:	Valves
Description:	Sterile-Air-Bleeder and Extraction Valve
Valid standards:	CONNECTORS standard with TC according to DIN 32676
Material:	Body: 1.4435 acc. EN 10088, Valve-Sealing: Teflon® (PTFE) O-Ring-Protection Seal: Viton®
Working Temperature:	-10° C to +150° C
Version / Surface quality:	Surface, internal: Ra < 0.8 µm, Surface, external bright finish
Pipe-Hygiene Classes:	H 3 acc. DIN 11866
Marking:	Marking with manufacturer name and melt number
Certificates:	Certificate acc. EN 10204-3.1, FDA-Certificate for Seals
Option:	On request: internal surface with Ra < 0.4 µm Available with safety lock on request
Remarks:	Technical contents are subject to change Viton® and Teflon® are registered trademarks of DuPont Dow Elastomers

Dimensions for Sterile-Air-Bleeder and Extraction						
Type	A	AD	ID	L	Item No.	
With Tri-Clamp Adaption						
E-V DN 6 TC	25.0	6.0	3.0	43.0	269.010.000	
E-V DN 8 TC	25.0	8.0	4.0	53.0	269.015.000	
Type	G	AD	ID	L	Item No.	
With Thread-Connection						
E-V DN 6 R 1/8	R 1/8	6.0	3.0	35.0	269.010.006.G	
E-V DN 8 R 1/4	R 1/4	8.0	4.0	42.0	269.015.008.G	
Type	S	AD	ID	L	Item No.	
With Butt Weld End						
E-V DN 6 BW	10.0	6.0	3.0	43.0	269.010.006.A	
E-V DN 8 BW	12.5	8.0	4.0	53.0	269.015.008.A	