

Application

for liquids, gases, vapours, aggressive fluids and low temperatures.

Weight and Dimensions

Type	PN	DN [mm]	Dimensions [mm]			Weight [kg]
			D	L	A	
526 620/30 528 620/30	10 – 40	40	84	33	15	1.2
		50	92	43	5	1.7
		65	108	46	12	1.7
		80	128	64	16	3
		100	158	64	26	5
		125	180	70	36	7
		150	203	76	51	9
		200	263	89	71	16
526 520/30 528 520/30	10 – 25	300	370	114	125	41
		350	432	127	146	48
		400	480	140	175	65
		450	530	152	188	94
		500	592	152	228	115
		600	692	178	282	192
		700	804	229	301	270
		800	911	241	374	402
526 822/32	40 – 100	65	125	46	12	3
		80	138	64	16	4
		100	158	64	26	5
		125	188	70	39	9
		150	222	76	52	11
		200	275	89	73	23
		250	335	114	93	45
		300	394	114	131	57
		350	435	127	151	75
		400 ⁴⁾	490	140	177	98

Materials

Design	Part designation	Nominal size DN [mm]	NAF-specification	DIN ¹⁾ equivalent
Steel	Body	40 + 50	SS 2343	1.4436 ²⁾
		65 – 250	ASTMA 351 CF 8M	1.4581
		300 – 1000	ASTMA 216 WCC	1.0619
Steel	Disc	40 + 50	SS 2395	1.4439
		65 – 1000	SS 2387	1.4418 ²⁾
Stainless steel	Body	40 + 50	SS 2343	1.4436 ²⁾
		65 – 1000	ASTMA 351 CF 8M	1.4581
Stainless steel	Disc	40 – 1000	SS 2324	1.4460
High-temperature steel	Body	65 – 400	ASTMA 217 WC 6	1.7357
		Disc	65 – 400	ASTMA 217 WC 6

1) Physical and chemical properties comply with NAF specification.

2) Cast steel.

4) DN 400 mm only for PN 40/63.

Pressure/Temperature Ratings

Design	Type	PN	DN [mm]	Max. service pressure [bar] / related temperatures [°C] ³⁾										
				20	100	150	200	250	300	350	400	450	500	525
Steel down to –10 °C at nominal pressure	526 620/30	40	40 – 250	40	40	40	38	36	32	25	18	11	–	–
	526 520/30	25	300 – 1000	25	25	25	24	22	20	15	11	6	–	–
Stainless steel down to –40 °C at nominal pressure	528 620/30	40	40 – 250	40	33	31	29	28	26	26	–	–	–	–
	528 520/30	25	300 – 1000	25	20	19	18	17	16	16	–	–	–	–
High-temperature steel down to –10 °C at nominal pressure	526 822/32	100	65 – 400	100	100	100	100	100	100	100	97	85	54	37

3) Max. service temperature for valve with spring + 300 °C.

NAF-Check Valves

DN 40 – 1000 mm, PN 10 – 100



Pressure Drop Chart

The curves given in the chart are valid for water at 20 °C. To read the pressure drop for other fluids the equivalent water volume flowrate must be calculated and used in the graph. The values indicated in the chart are applicable to valves with horizontal flow. With vertical flow insignificant deviations occur only within the range of partial openings.

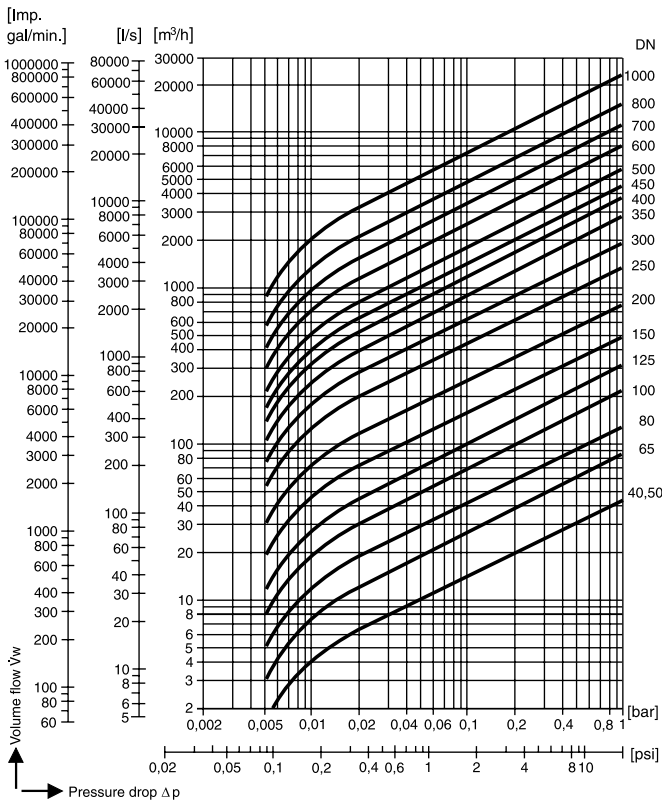
The chart and flow characteristics are available up to and including PN 40. Higher PN increase the zeta values and pressure drops at the same flowrates by approx. 20%. The k_{vs} values decrease accordingly.

$$\dot{V}_W = \dot{V} \cdot \sqrt{\frac{\rho}{1000}}$$

\dot{V}_W = Equivalent water volume flow in [l/s] or [m³/h]

ρ = Density of fluid (operating condition) in [kg/m³]

\dot{V} = Volume flow of fluid (operating condition) in [l/s] or [m³/h]



Stock codes

Material	Type	Nom. press. PN	Design	Nominal size		Stock code
				DN	inch	
Steel	526 620	10-40	without spring	40	1 1/2"	4481701
	526 620	10-40	without spring	50	2"	4481801
	526 620	10-40	without spring	65	2 1/2"	4481901
	526 620	10-40	without spring	80	3"	4482001
	526 620	10-40	without spring	100	4"	4482101
	526 620	10-40	without spring	125	5"	4482201
	526 620	10-40	without spring	150	6"	4482301
	526 620	10-40	without spring	200	8"	4482501
	526 620	10-40	without spring	250	10"	4482601
Steel	526 520	25	without spring	300	12"	4482702
	526 520	25	without spring	350	14"	4482802
	526 520	25	without spring	400	16"	4482902
	526 520	25	without spring	450	18"	4483002
	526 520	25	without spring	500	20"	4483102
	526 520	25	without spring	600-1000	24"-40"	on request
Steel	526 630	10-40	with spring	65	2 1/2"	4481903
	526 630	10-40	with spring	80	3"	4482003
	526 630	10-40	with spring	100	4"	4482103
	526 630	10-40	with spring	125	5"	4482203
	526 630	10-40	with spring	150	6"	4482303
	526 630	10-40	with spring	200	8"	4482503
	526 630	10-40	with spring	250	10"	4482603
Steel	526 530	25	with spring	300	12"	4482704
	527 530	25	with spring	350	14"	4482804
	528 530	25	with spring	400	16"	4482904
	529 530	25	with spring	450	18"	4483004
	530 530	25	with spring	500	20"	4483104
	531 530	25	with spring	600-1000	24"-40"	on request

NAF-Check Valves

DN 40 – 1000 mm, PN 10 – 100



Stock Codes

Material	Type	Nom. press. PN	Design	Nominal size		Stock code
				DN	inch	
Stainless steel	528 620	10-40	without spring	40	1½"	4481705
	528 620	10-40	without spring	50	2"	4481805
	528 620	10-40	without spring	65	2½"	4481905
	528 620	10-40	without spring	80	3"	4482005
	528 620	10-40	without spring	100	4"	4482105
	528 620	10-40	without spring	125	5"	4482205
	528 620	10-40	without spring	150	6"	4482305
	528 620	10-40	without spring	200	8"	4482505
	528 620	10-40	without spring	250	10"	4482605
Stainless steel	528 520	25	without spring	300	12"	4482706
	528 520	25	without spring	350	14"	4482806
	528 520	25	without spring	400	16"	4482906
	528 520	25	without spring	450	18"	4483006
	528 520	25	without spring	500	20"	4483106
Stainless steel	528 630	10-40	with spring	65	2½"	4481907
	528 630	10-40	with spring	80	3"	4482007
	528 630	10-40	with spring	100	4"	4482107
	528 630	10-40	with spring	125	5"	4482207
	528 630	10-40	with spring	150	6"	4482307
	528 630	10-40	with spring	200	8"	4482507
	528 630	10-40	with spring	250	10"	4482607
Stainless steel	528 530	25	with spring	300	12"	4482708
	528 530	25	with spring	350	14"	4482808
	528 530	25	with spring	400	16"	4482908
	528 530	25	with spring	450	18"	4483008
	528 530	25	with spring	500	20"	4483108
	528 530	25	with spring	600-1000	24"-40"	on request

Material	Type	Nom. press. PN	Design	Nominal size		Stock code
				DN	inch	
High-temperature steel	526 822	40-100	without spring	65	2½"	4481909
	526 822	40-100	without spring	80	3"	4482009
	526 822	40-100	without spring	100	4"	4482109
	526 822	40-100	without spring	125	5"	4482209
	526 822	40-100	without spring	150	6"	4482309
	526 822	40-100	without spring	200	8"	4482509
	526 822	40-100	without spring	250	10"	4482609
	526 822	40-100	without spring	300	12"	4482709
	526 822	40-100	without spring	350	14"	4482809
	526 822	60/63	without spring	400	16"	4482909
High-temperature steel	526 832	40-100	with spring	65	2½"	4481910
	526 832	40-100	with spring	80	3"	4482010
	526 832	40-100	with spring	100	4"	4482110
	526 832	40-100	with spring	125	5"	4482210
	526 832	40-100	with spring	150	6"	4482310
	526 832	40-100	with spring	200	8"	4482510
	526 832	40-100	with spring	250	10"	4482610
	526 832	40-100	with spring	300	12"	4482710
	526 832	40-100	with spring	350	14"	4482810
	526 832	60/63	with spring	400	16"	4482910