

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922) 49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Ижевск (3412)26-03-58
Иваново (4932)77-34-06
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Россия (495)268-04-70

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сыктывкар (8212)25-95-17
Сургут (3462)77-98-35
Тамбов (4752)50-40-97

Казахстан (772)734-952-31

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

<https://rtvalves.nt-rt.ru> || rea@nt-rt.ru

Поворотные обратные клапаны 297, 397, 397-J, 497, 497-H, 497-K

APPLICATIONS

The swing check valves are used to prevent flow reversal in piping systems. The swing check is the most efficient non-re-turn valve due to the minimum pressure drop because his "full open" design. Typical applications are:

- § water
- § chemicals
- § petrochemicals
- § steam
- § gases
- § liquid gases (cryogenic service)

CONSTRUCTION DETAILS

Body

The body geometry is designed as the result of stress calculations to achieve the most regular distribution of the internal forces due to pressure action.

The body material is high quality cast steel.

The seat surface is covered by a wear resistance stainless steel deposited by welding overlay with a hardness difference of +50 HB in comparison with the disk seats. On request the seat surface can be covered also with stellite or other special material overlays.



Swing Check Valves



Lever and counterweight on

request the swing check valve can be provided with lever with counterweight to balance the weight of the disk and make the closing more soft.

This optional device is suggested for diameters over 200 mm where the weight of the disk is relevant. Also in vertical installation the counterweight can reduce the adverse influence of gravity on the functioning of the swing check valve.

On request the counterweight can be adjustable to be easily adapted to the specific operating conditions.

Hydraulic brake

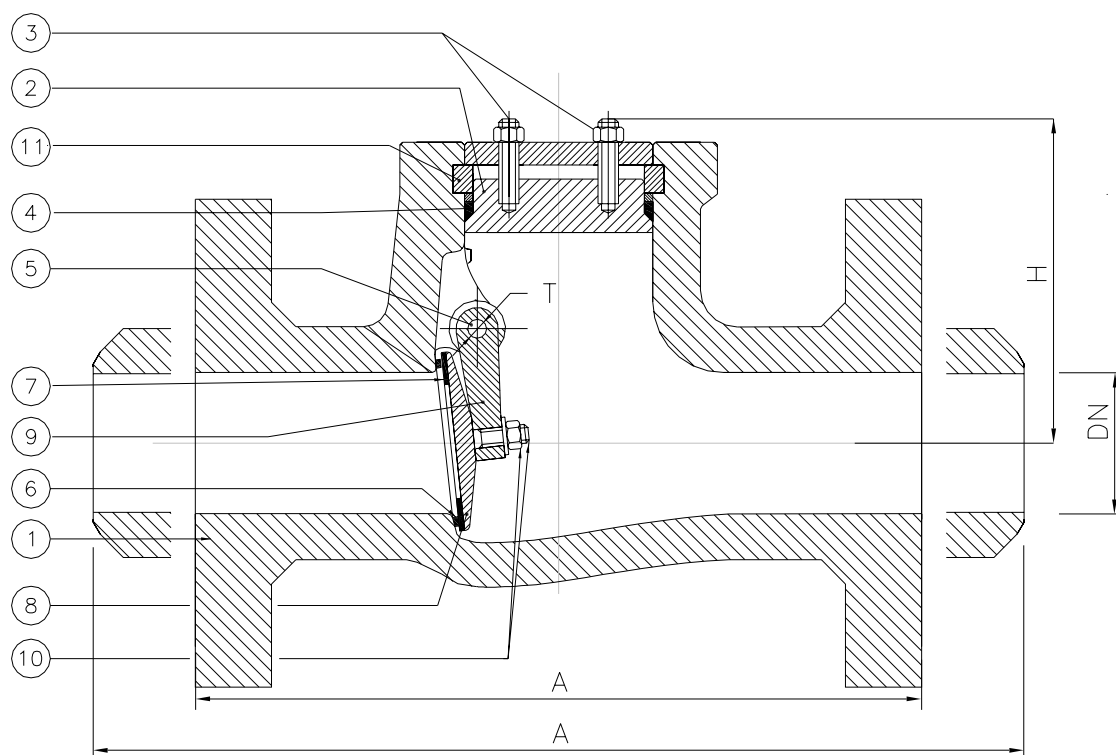
Where the flow reversal is very quick the swing check valve shall be provided with a hydraulic brake connected to the lever. The brake, lengthening the time of closing to the selected value, avoids the risk that the swing check valve, due to the quick closing of the disk, can cause a water hammer in the pipeline. Different types of brake are available depending on customer requirements.

All the brakes are provided by a pin valve to set-up the closing time to the required value.

Swing Check Valve

PN 160 DN 50 - DN 300

PD special ratings for BWE version



0948

Rel. 5.0

Standard features:

- | | |
|---|----------------------------------|
| ☒ Design | EN 12516
EN 14341 |
| ☒ Face to face | EN 558 series 91
DIN 3202 F9 |
| ☒ With flanges | EN 1092-1/21/B2 |
| ☒ Materials | EN 10213
EN 10269
EN 10088 |
| ☒ Bolts and nuts | EN 1515-1 |
| ☒ Welding overlay | AD-M HP 0 |
| ☒ Testing | EN 12266 |
| ☒ Marking | EN 19 |
| ☒ Certificates | EN 10204 |

Optional versions:

- | |
|--|
| ☐ AD 2000 – A4 |
| ☐ TRD 110 |
| ☐ DIN 3230 Part 4 |
| ☐ DIN 3230 Part 5 |
| ☐ DIN 3230 Part 6 |
| ☐ TRbF 131 |
| ☐ TRbF 301 or 302 |
| ☐ ATEX |
| ☐ TA-Luft |
| ☐ With butt welding ends EN 12627 |
| ☐ With flanges form A, B1, B2, C, D, E, F, G, H |
| ☐ With special devices (see page 52) |

	DESCRIPTION	FIG. 297	FIG. 397	FIG. 397-J	FIG. 497	FIG. 497-H	FIG. 497-K
1	Body	1.0619	1.4581	1.4308	1.7357	1.7379	1.4931
2	Cover	1.0425 ⁽⁵⁾	1.4571	1.4301	1.7335	1.7380	1.4931
3	Bolts	1.7225 ⁽⁴⁾	1.4301 ⁽⁴⁾	1.4301 ⁽⁴⁾	1.7711 ⁽⁴⁾	1.7711 ⁽⁴⁾	1.7225 ⁽⁴⁾
3	Nuts	1.1191 ⁽⁴⁾	1.4301 ⁽⁴⁾	1.4301 ⁽⁴⁾	1.7225 ⁽⁴⁾	1.7225 ⁽⁴⁾	1.7225 ⁽⁴⁾
4	O Gasket	Graphite + SS ⁽³⁾	Graphite + SS ⁽³⁾	PTFE ⁽³⁾	Graphite + SS ⁽³⁾	Graphite + SS ⁽³⁾	Graphite + SS ⁽³⁾
5	X Hinge pin	1.4021 ⁽¹⁾	1.4571 ⁽¹⁾	1.4301 ⁽¹⁾	1.4021 ⁽¹⁾	1.4021 ⁽¹⁾	1.4923 ⁽¹⁾
6	Body seats	1.4502 ⁽²⁾	1.4581 ⁽²⁾	1.4308 ⁽²⁾	1.4502 ⁽²⁾	Stellite ⁽²⁾	Stellite ⁽²⁾
7	Disk seats	1.4502 ⁽²⁾	1.4430 ⁽²⁾	1.4301 ⁽²⁾	1.4502 ⁽²⁾	Stellite ⁽²⁾	Stellite ⁽²⁾
8	X Disk	1.0425 ⁽⁵⁾	1.4571	1.4301	1.7335	1.7380	1.4903
9	Hinge	1.0619	1.4581	1.4308	1.7357	1.7379	1.4903
10	Stud	1.7225 ⁽⁴⁾	1.4401 ⁽⁴⁾	1.4301 ⁽⁴⁾	1.7711 ⁽⁴⁾	1.7711 ⁽⁴⁾	1.7225 ⁽⁴⁾
10	Nut	1.1191 ⁽⁴⁾	1.4401 ⁽⁴⁾	1.4301 ⁽⁴⁾	1.7225 ⁽⁴⁾	1.7225 ⁽⁴⁾	1.7225 ⁽⁴⁾
11	Segmented ring	1.0425 ⁽⁵⁾	1.4571	1.4301	1.7335	1.7380	1.4903

⁽¹⁾ Also available on request 1.4571, 1.4301, 1.3964, Hastelloy, or other materials.

⁽²⁾ Also available on request stellite, 1.4462 (duplex), 1.4430, 1.4316, Hastelloy, or other materials.

⁽³⁾ Also available on request PTFE, Gore-tex, graphite, or other materials.

⁽⁴⁾ Also available on request 1.7225 / 1.1191, 1.7711 / 1.7225, 1.4401, 1.4301, A4-70 or other materials.

⁽⁵⁾ 1.0044 for swing check valves with DN over 125 mm.

O recommended spare parts for 2 years standard service; x recommended spare parts for 5 years standard service.

Dimensions

	DN	A	D	H	T	Kg
PN 320	50	350	210	190	10	65
	80	470	275	225	15	140
	100	550	335	300	15	240
	125	650	380	350	18	460
	150	750	425	370	18	540
	200	950	525	460	18	1150
	250	1150	640	560	24	1680
	300	1350	780	630	24	2240

Pressure Temperature Ratings (°C / bar)

	PN	-195	-150	-100	-50	-10	0	20	100	150	200	250	300	350	400	425	450	475	500	525	550	575	600
Fig. 297 ⁽⁶⁾	320					320	320	316	299	274	249	228	206	192	185	151	118						
Fig. 397 ⁽⁷⁾	320			320	320	320	320	309	263	245	228	217	206	196	185	181	178	174	171	167	164		
Fig. 397-J	320	320	320	320	320	320	320	302	228	203	178	167	156										
Fig. 497 ⁽⁸⁾	320					320	320	320	320	320	320	320	320	306	284	277	270	218	166	122	78		
Fig. 497-H ⁽⁸⁾	320					320	320	320	320	320	320	320	320	320	320	315	310	252	193	144	94	67	40
Fig. 497-K ⁽⁸⁾	320					320	320	320	320	320	320	320	320	320	320	320	320	307	294	231	168	119	70

Special ratings for butt welding ends versions only (desing pressure)

	PD	-195	-150	-100	-50	-10	0	20	100	150	200	250	300	350	400	425	450	475	500	525	550	575	600
Fig. 497-BW ⁽⁸⁾	448					448	448	448	448	402	356	341	327	306	284	277	270	218	166	122	78		
Fig. 497-H-BW ⁽⁸⁾	569					569	569	569	569	537	505	498	491	469	448	379	310	252	193	144	94	67	40
Fig. 497-K-BW ⁽⁸⁾	768					768	768	768	768	704	640	626	612	583	555	497	439	367	294	231	168	119	70

Please, in the inquiry and in the order, specify always the maximum service temperature when it's over 100 °C.

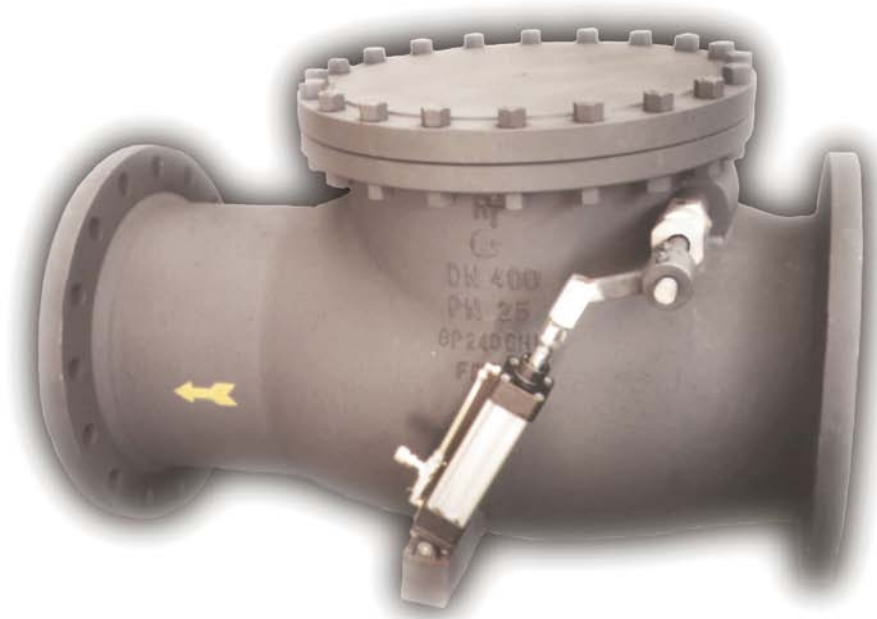
If the valves are provided with flanged connection PN 100 the maximum allowable pressure should be proportionally reduced.

⁽⁶⁾ Supplied suitable for service temperature up to 300°C and for higher temperatures only on request.

⁽⁷⁾ Suitable over 450 °C only if provided with stellite seats. ⁽⁸⁾ Suitable over 530 °C only if provided with 1.3964 pin.

General sale and delivery conditions and product guarantee as specified at pages 56 and 57.

Due to constant improvement all data and details contained in this catalogue are purely indicative and they can be subjected to change without notice.



Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922) 49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Ижевск (3412)26-03-58
Иваново (4932)77-34-06
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Киргизия (996)312-96-26-47

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Россия (495)268-04-70

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сыктывкар (8212)25-95-17
Сургут (3462)77-98-35
Тамбов (4752)50-40-97

Казахстан (772)734-952-31

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93