



NON-RETURN VALVES RT25

DESCRIPTION

The RT25 all stainless steel disc check valves have a compact design and were specially designed for use with steam and hot condensate.

MAIN FEATURES

Low pressure drop.
Simple and compact design.

OPTIONS: Various soft sealing options:
EPDM (E), NBR (N), VITON (V), PTFE (T).
Inconel springs.

USE: Saturated steam, water and other gases
compatible with the construction.

AVAILABLE MODELS: RT25 – stainless steel.

SIZES: 1/4" to 2".

CONNECTIONS: Female threaded ISO 7 Rp or NPT.

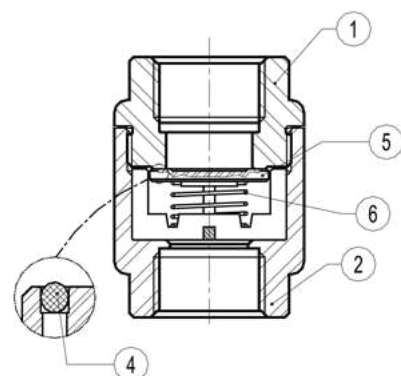
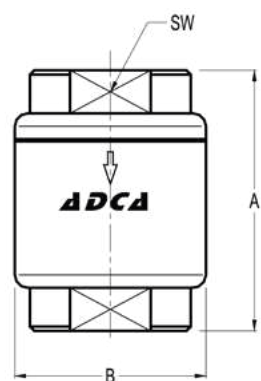
INSTALLATION: Horizontal or vertical installation.
See IMI – Installation and maintenance
instructions.



RECOMMENDED LIMITS OF OPERATION WITH SOFT SEALS			
EPDM (E)	NBR (N)	VITON (V)	PTFE (T)
130 °C	95 °C	180 °C	180 °C

CE MARKING – GROUP 2 (PED – European Directive)	
PN 25	Category
1/4" to 1 1/2"	SEP
2"	1 (CE marked)

LIMITING CONDITIONS	
Body design conditions	PN 25
Maximum allowable pressure	25 bar
Maximum allowable temperature	250 °C
Maximum operating pressure	21 bar
Maximum operating temperature	220 °C



DIMENSIONS				
SIZE	A	B	SW	WEIGHT (kg)
1/4"	55	40	27	0,3
3/8"	55	40	27	0,3
1/2"	55	40	27	0,3
3/4"	60	45	32	0,38
1"	70	50	41	0,54
1 1/4"	61	65	50	0,68
1 1/2"	72	80	55	0,96
2"	72	80	70	1,13

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	AISI 316 / 1.4401
2	Cover	AISI 316 / 1.4401
4	* Soft seal	EPDM; NBR; VITON; PTFE
5	* Valve disc	AISI 316 / 1.4401
6	* Spring	AISI 302 / 1.4300

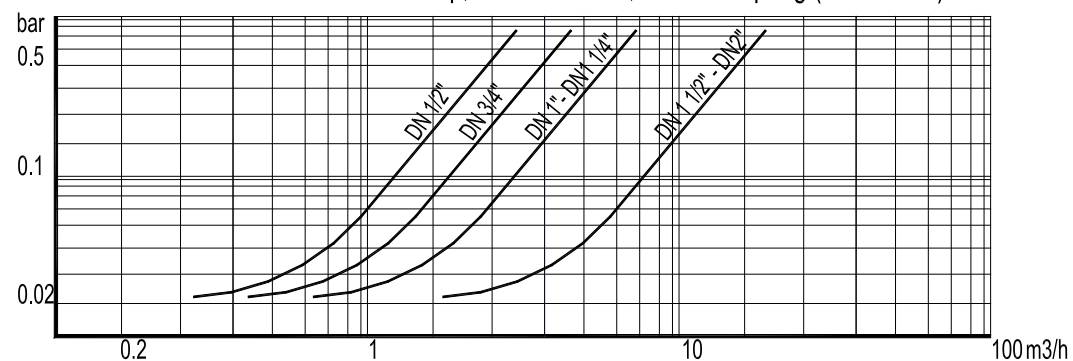
* Available spare parts.

MINIMUM OPENING PRESSURES WITH STANDARD SPRING (mbar)					
SIZE	D.P. ↑	D.P. →	D.P. ↓	D.P. * ↑	
1/4"	25	23	21	2	
3/8"	25	23	21	2	
1/2"	25	23	21	2	
3/4"	25	23	21	2	
1"	25	23	21	2	
1 1/4"	25	24	21	3	
1 1/2"	28	25	21	4	
2"	29	25	21	4	

→ : Flow direction.

* Vertical installation without springs (bottom to top).

Pressure drop, horizontal flow, standard spring (water - 20°)



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated:

$$V_w = \sqrt{\frac{Q}{1000}} \times V$$

V_w = Equivalent water flow volume in m³/h; Q = Density in kg/m³; V = Flow volume in m³/h

**WAFFER-TYPE NON-RETURN VALVE
RD40
DN 15 – DN 100**

DESCRIPTION

The RD40 all stainless steel disc check valves have a compact design and are specially designed for use with steam and hot condensate.

MAIN FEATURES

Low pressure drop.
Simple and compact design.
Overall lengths according to DIN EN 558-1 (DIN 3202 part 3, series K4).

OPTIONS: Various soft sealing options:
EPDM (E), NBR (N), VITON (V), PTFE (T).
Inconel springs.

USE: Saturated steam, water and other gases and liquids compatible with the construction.

AVAILABLE MODELS: RD40 – stainless steel.

SIZES: 1/2" to 4"; DN 15 to DN 100.

CONNECTIONS: Sandwiched between flanges as per EN 1092 or ASME.

INSTALLATION: Horizontal or vertical installation.
See IMI – Installation and maintenance instructions.

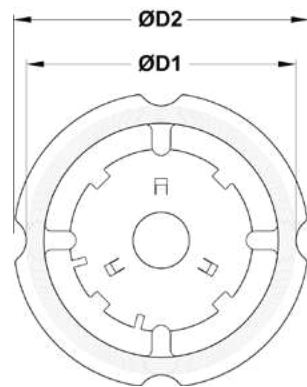
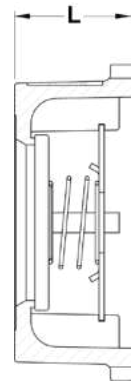


RECOMMENDED LIMITS OF OPERATION WITH SOFT SEALS			
EPDM (E)	NBR (N)	VITON (V)	PTFE (T)
130 °C	95 °C	180 °C	180 °C

CE MARKING – GROUP 2 (PED – European Directive)	
PN 40	Category
1/2" to 1 1/4" – DN 15 to 32	SEP
1 1/2" to 4" – DN 40 to 100	1 (CE marked)

BODY LIMITING CONDITIONS	
WAFFER PN 40 *	
ALLOWABLE PRESSURE	RELATED TEMPERATURE
40 bar	100 °C
33,7 bar	200 °C
31,8 bar	250 °C
29,7 bar	300 °C

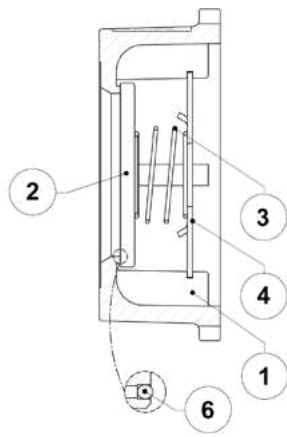
* According to EN 1092.
Minimum operating temperature: - 10 °C.



DIMENSIONS				
SIZE	D1	D2	L	WEIGHT (kg)
1/2" – DN 15	43	50	16	0,18
3/4" – DN 20	53	60	19	0,2
1" – DN 25	62	70	22	0,25
1 1/4" – DN 32	75	81	28	0,5
1 1/2" – DN 40	86	91	32	0,7
2" – DN 50	96	105	40	1,3
2 1/2" – DN 65	115	125	46	1,7
3" – DN 80	133	147	50	2,5
4" – DN 100	154	167	60	3,5

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	A351 CF8M / 1.4408
2	* Disc	AISI 316 / 1.4401
3	* Spring	AISI 302 / 1.4300
4	Star	AISI 316 / 1.4401
6	* Soft seal	EPDM; NBR; VITON; PTFE

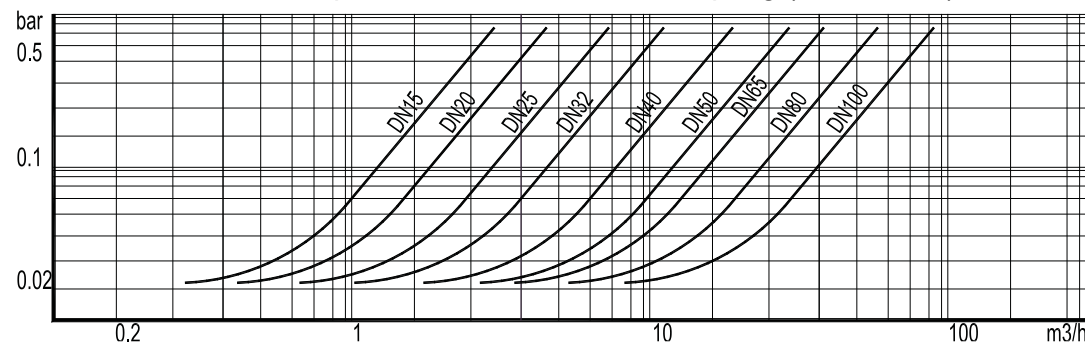
* Available spare parts.



MINIMUM OPENING PRESSURES WITH STANDARD SPRING (mbar)					
SIZE	D.P. ↑	D.P. →	D.P. ↓	D.P. * ↑	
1/2" – DN 15	25	23	21	2	
3/4" – DN 20	25	23	21	2	
1" – DN 25	25	23	21	2	
1 1/4" – DN 32	27	24	21	3	
1 1/2" – DN 40	28	25	21	4	
2" – DN 50	29	25	21	4	
2 1/2" – DN 65	30	26	21	5	
3" – DN 80	31	26	21	5	
4" – DN 100	33	27	21	6	

→ : Flow direction.
* Vertical installation without springs (bottom to top).

Pressure drop, horizontal flow, standard spring (water – 20°)



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated: $V_w = \sqrt{\frac{Q}{1000}} \times V$

Vw = Equivalent water flow volume in m³/h; Q = Density in kg/m³; V = Flow volume in m³/h

WAFER-TYPE NON-RETURN VALVE RD40 DN 125 – DN 200

DESCRIPTION

The RD40 disc check valves have a compact design and are specially designed for use with steam and hot condensate.

MAIN FEATURES

Low pressure drop.
Simple and compact design.
Overall lengths according to DIN EN 558-1 (DIN 3202 part 3, series K4).

OPTIONS: Various soft sealing options:
EPDM (E), NBR (N), VITON (V), PTFE (T).
Inconel springs.

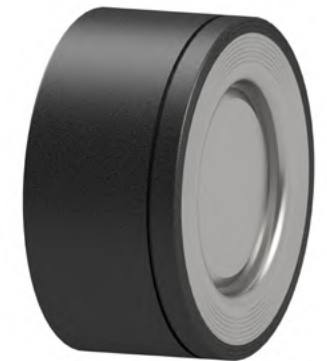
USE: Saturated steam, water and other gases and liquids compatible with the construction.

AVAILABLE MODELS: RD40 – carbon steel body, stainless steel disc and seat.

SIZES: 5" to 8"; DN 125 to DN 200.

CONNECTIONS: Sandwiched between flanges as per EN 1092 or ASME.

INSTALLATION: Horizontal or vertical installation.
See IMI – Installation and maintenance instructions.

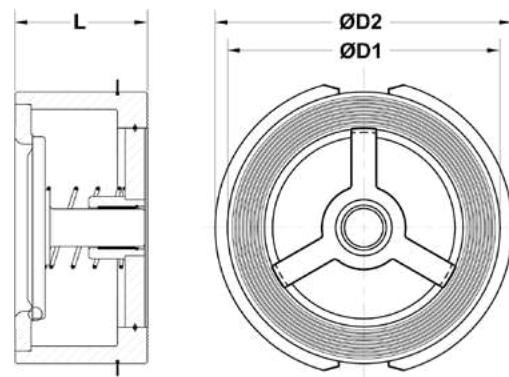


RECOMMENDED LIMITS OF OPERATION WITH SOFT SEALS			
EPDM (E)	NBR (N)	VITON (V)	PTFE (T)
130 °C	95 °C	180 °C	180 °C

CE MARKING – GROUP 2 (PED – European Directive)	
PN 40	Category
DN 125 to 200	2 (CE marked)

BODY LIMITING CONDITIONS	
WAFER PN 40 *	
ALLOWABLE PRESSURE	RELATED TEMPERATURE
40 bar	100 °C
33,7 bar	200 °C
31,8 bar	250 °C
29,7 bar	300 °C

* According to EN 1092.
Minimum operating temperature: - 10 °C.

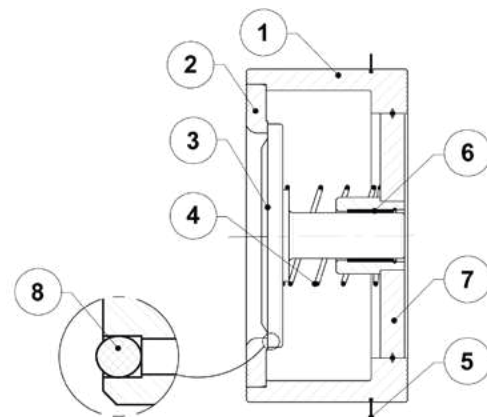


DIMENSIONS							
SIZE	PN 10/16	PN 40		CLASS 150	CLASS 300	L	WEIGHT (kg)
	D1	D1	D2 *	D1	D2 *		
5" – DN 125	192	192	-	192	212	90	10
6" – DN 150	218	-	226	218	247	106	14
8" – DN 200	273	-	290	273	304	140	24

* Centering ring required

MATERIALS		
POS. N°	DESIGNATION	MATERIAL
1	Body	S355JR / 1.0045
2	Seat	AISI 316 / 1.4401
3	* Disc	AISI 316 / 1.4401
4	* Spring	AISI 302 / 1.4300
5	Centering ring	AISI 304 / 1.4301
6	Bearing	Steel Fe Zn
7	Star	S355JR / 1.0045
8	* Soft seal	EPDM; NBR; VITON; PTFE

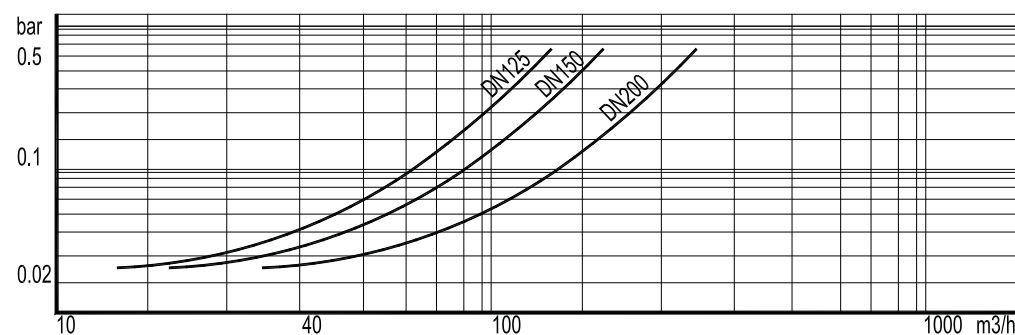
* Available spare parts.



MINIMUM OPENING PRESSURES WITH STANDARD SPRING (mbar)						
SIZE	D.P.	↑	D.P.	→	D.P.	↓
5" – DN 125	37		22		7	
6" – DN 150	40		25		10	
8" – DN 200	46		28		10	

→ : Flow direction.

Pressure drop, horizontal flow, standard spring (water – 20°)



To determine the pressure drop of other mediums the equivalent water flow volume has to be calculated: $V_w = \sqrt{\frac{Q}{1000}} \times V$

Vw = Equivalent water flow volume in m³/h; Q = Density in kg/m³; V = Flow volume in m³/h