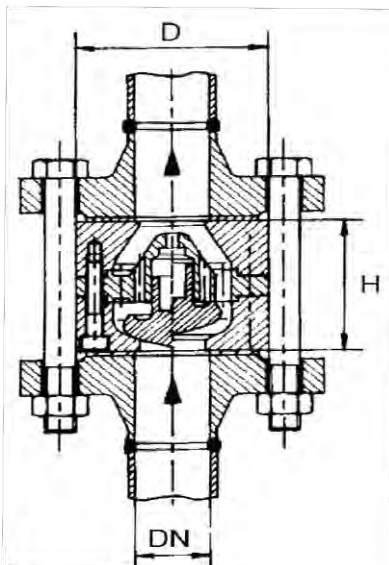


Functional elements and used materials:

1 Valve seat	1.4057 – AISI431	1.4571 – AISI 316Ti
2 Sealing body	POM -PEEK	POM-PEEK
3 Valve stop	1.4057 – AISI431	1.4571 – AISI 316Ti
4 Counter flange	1.4057 – AISI431	1.4571 – AISI 316Ti
5 Allen screw	DIN 912-A2	DIN 912-A2

Application:



The type ERV valves are designed for mounting between two standard flanges according to:

DIN 1092-1, ASME B16.5 und ASME B16.5 RTJ
and is self-centering between the connection bolts.

Medium: air, inert gases and temperatures up to 50°C = valve body 1.4057 or 1.4571 with sealing body POM
Medium: all gases and temperatures up to 180°C = valve body 1.4057 or 1.4571 with sealing body PEEK

Turbo check valve DN25 (1“)

Design	Pressure stage PN	Valve Ø D (mm)	Height H (mm)	Ring-shape	Weight (kg)	Part No.: 1.4057-POM	Part No.: 1.4057-PEEK	Part No.: 1.4571-POM	Part No.: 1.4571-PEEK
DN 25 EN 10902-1 shape B2	16	71	60		1,4	20823.3-00	20825.3-01	20883.3-00	20885.3-00
	25								
	40								
	64								
	100	71	80		1,9	30485.3-00	30486.3-00	30490.3-00	30491.3-00
	160								
	250								
320	90	95		4,0		25004.3-00		30878.3-00	
1“ ASME B16.5 RF/SF	150 lbs	63	60		1,4		30113.3-00		30146.3-00
	300 lbs	71	60			30829.3-00	20831.3-00	20889.3-00	20891.3-00
	400 lbs								
	600 lbs								
	900 lbs	71	80		1,9		30074.3-00		30118.3-00
	1500 lbs								
2500 lbs									
1“ ASME B16.5 RTJ	150 lbs								
	300 lbs	71	80	R16	1,9	20838.3-00	20840.3-00	20898.3-00	20900.3-00
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									

Turbo check valve DN32 (1 ¼“)

Design	Pressure stage PN	Valve Ø D (mm)	Height H (mm)	Ring-shape	Weight (kg)	Part No.: 1.4057-POM	Part No.: 1.4057-PEEK	Part No.: 1.4571-POM	Part No.: 1.4571-PEEK
DN 32 EN 10902-1 shape B2	16	81	60		1,7	21023.3-00	21025.3-00	21083.3-00	21085.3-00
	25								
	40								
	64								
	100	86	75		2,1				30481.3-00
	160								
	250								
320									
1 ¼“ ASME B16.5 RF/SF	150 lbs								
	300 lbs	81	60		1,7	21029.3-00	21031.3-00	21089.3-00	21091.3-00
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									
1 ¼“ ASME B16.5 RTJ	150 lbs								
	300 lbs	81	75	R18	2,2	21038.3-00	21040.3-00	21098.3-00	21100.3-00
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									

Turbo check valve DN40 (1 ½“)

Design	Pressure stage PN	Valve Ø D (mm)	Height H (mm)	Ring-shape	Weight (kg)	Part No.: 1.4057-POM	Part No.: 1.4057-PEEK	Part No.: 1.4571-POM	Part No.: 1.4571-PEEK
DN 40 EN 10902-1 shape B2	16	93	65		2,4	21223.3-00	21225.3-01	21283.3-00	21285.3-00
	25								
	40								
	64								
	100								
	160								
	250	108	85		4,8		30114.3-00		
1½“ ASME B16.5 RF/SF	150 lbs	83	65		1,7	21312.3-00	21314.3-00		30355.3-00
	300 lbs	93	65		2,4	21229.3-00	21231.3-00	21289.3-00	21291.3-00
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs	108	85		4,8		30113.3-00			
1½“ ASME B16.5 RTJ	150 lbs	94	85	R20	2,7	21238.3-00	21240.3-00	21298.3-00	21300.3-00
	300 lbs								
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									

Turbo check valve DN50 (2“)

Design	Pressure stage PN	Valve Ø D (mm)	Height H (mm)	Ring-shape	Weight (kg)	Part No.: 1.4057-POM	Part No.: 1.4057-PEEK	Part No.: 1.4571-POM	Part No.: 1.4571-PEEK								
DN 50 EN 10902-1 shape B2	16	107	70		3,3	20023.3-03	20025.3-00	20083.3-00	20085.3-00								
	25																
	40																
	64																
	100																
	160																
	250																
320																	
2“ ASME B16.5 RF/SF	150 lbs	102	70		3,1		30444.3-00		30656.3-00								
	300 lbs	107	70		3,3	20029.3-00	20031.3-00	20089.3-00	20091.3-00								
	400 lbs																
	600 lbs																
	900 lbs									141	70		7,2	20032.3-00	20034.3-00	20092.3-00	20094.3-00
	1500 lbs																
2500 lbs																	
2“ ASME B16.5 RTJ	150 lbs	109	85	R23	4,2	20038.3-00	20040.3-00	20098.3-00	20100.3-00								
	300 lbs																
	400 lbs																
	600 lbs	141	85	R24	8,2	20044.3-00	20046.3-00	20104.3-00	20106.3-00								
	900 lbs																
	1500 lbs																
2500 lbs	142	70	R26	7,2		30151.3-00											

Turbo check valve DN65 (2 ½“)

Design	Pressure stage PN	Valve Ø D (mm)	Height H (mm)	Ring-shape	Weight (kg)	Part No.: 1.4057-POM	Part No.: 1.4057-PEEK	Part No.: 1.4571-POM	Part No.: 1.4571-PEEK
DN 65 EN 10902-1 shape B2	16	128	80		4,8	20223.3-01	20225.3-01	20283.3-00	20285.3-00
	25								
	40								
	64								
	100								
	160								
	250								
320									
2½“ ASME B16.5 RF/SF	150 lbs	121	80		4,3	30601.3-00	30600.3-00	30606.3-00	30605.3-00
	300 lbs	128	80		4,8	20229.3-00	20231.3-00	20289.3-00	20291.3-00
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									
2½“ ASME B16.5 RTJ	150 lbs	129	95	R26	5,8	20238.3-00	20240.3-00	20298.3-00	20300.3-00
	300 lbs								
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									

Turbo check valve DN80 (3“)

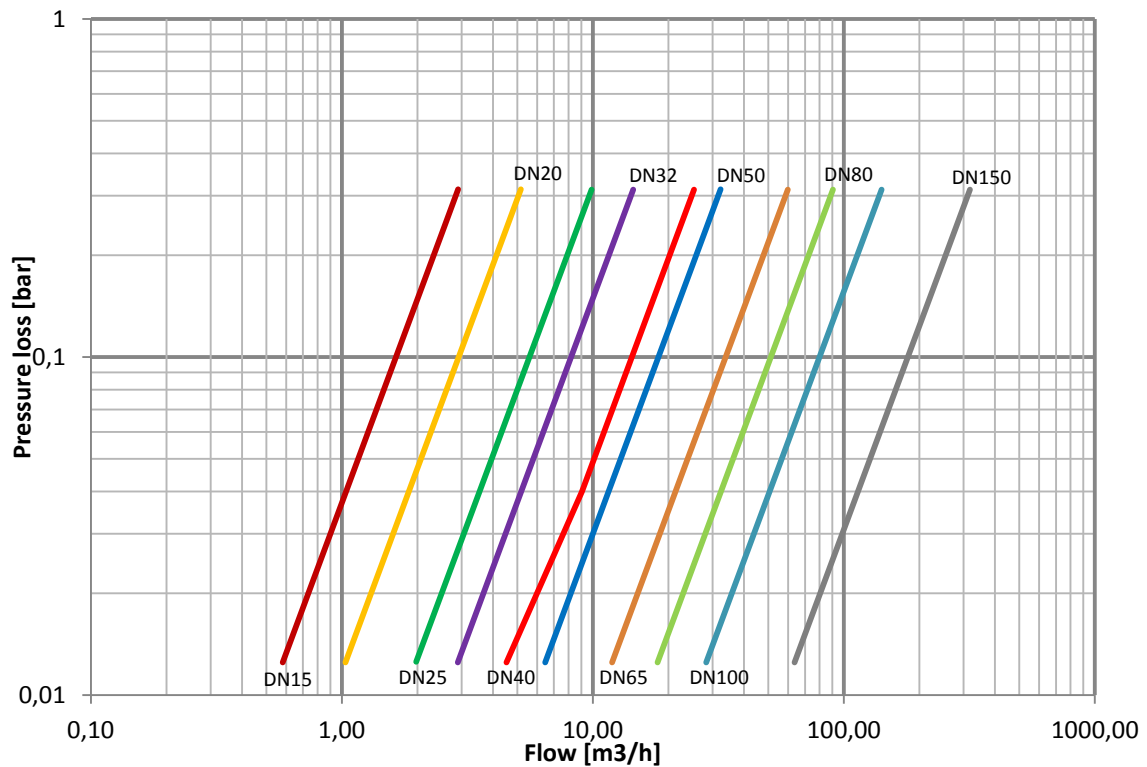
Design	Pressure stage PN	Valve Ø D (mm)	Height H (mm)	Ring-shape	Weight (kg)	Part No.: 1.4057-POM	Part No.: 1.4057-PEEK	Part No.: 1.4571-POM	Part No.: 1.4571-PEEK
DN 80 EN 10902-1 shape B2	16	143	90		6,3	20423.3-00	20425.3-00	20483.3-00	20485.3-00
	25								
	40								
	64								
	100								
	160								
	250								
320									
3“ ASME B16.5 RF/SF	150 lbs	133	90		4,7		30049.3-00		
	300 lbs	143	90		6,3	20429.3-00	20431.3-00	20489.3-00	20491.3-00
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									
3“ ASME B16.5 RTJ	150 lbs	143	90	R31	6,3	20444.3-00	20440.3-00	20498.3-00	20500.3-00
	300 lbs								
	400 lbs								
	600 lbs								
	900 lbs								
	1500 lbs								
2500 lbs									
	173	110	R35	13,9	20444.3-00	20446.3-00	20504.3-00	20506.3-00	

Spare sealing bodies

	DN 15 (1/2")	DN 20 (3/4")	DN 25 (1")	DN32 (1 1/4")	DN 40 (1 1/2")	DN50 (2")	DN65 (2 1/2")	DN80 (3")	DN 100 (4")	DN150 (6")
POM	21620.3-00	21620.3-00	20820.3-00	21020.3-00	21220.3-00	20020.3-00	20220.3-00	20420.3-00	20620.3-00	
PEEK	21622.3-00	21622.3-00	20822.3-00	21022.3-00	21222.3-00	20022.3-00	20222.3-00	20422.3-00	20622.3-00	30280.3-00
Weight (g)	10	10	15	23	41	56	110	159	328	1290

Pressure loss figure

(Pressure loss Water at full opening)



Conversion to other media, calculate the equivalent water volume flow:

$$\dot{V}_w = \dot{V} * \sqrt{\frac{\rho}{1000}}$$

$$\dot{V}_w = \text{equivalent water flow rate} \left[\frac{m^3}{h} \right]$$

\dot{V} = flow rate of the medium at operating conditions [m³/h]

ρ = density of the medium at operating conditions [kg/m³]

Additional at vertical installation, flow upwards: + 3 mbar