

# PASSIVE SAFETY CHECK VALVE

NRV COMBO Ø100÷700 ATEX CERTIFIED  
(EN 16447)



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# NRV COMBO Ø100÷700 ATEX CERTIFIED (EN 16447)

## **PASSIVE SAFETY CHECK VALVE**



Passive safety check valves are ATEX EN 16447 CERTIFIED against the spread of explosion in the suction line.

They are the safe solution for isolating the area in the event of an explosion in the suction system, by blocking the explosive effect in the suction line.

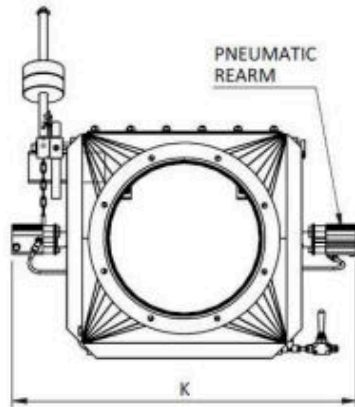
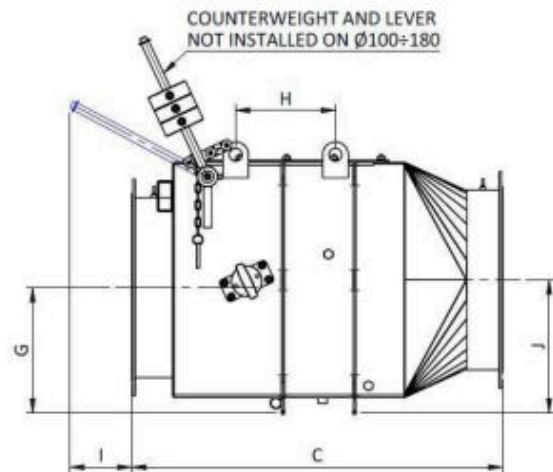
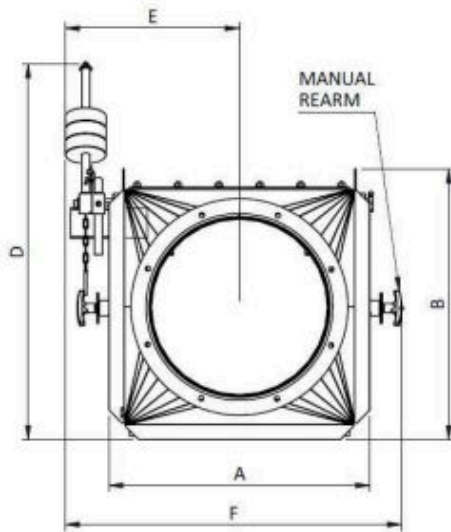
They are made of carbon steel with standard RAL 3020 paint or in AISI 304 or AISI 304 stainless steel, welded on all joints and feature a reinforced structure to withstand high pressure. They feature flat flanges and counter-flanges compatible with DIN 24154-R1, with the exception of Ø350-550-650-700, and an anti-opening safety lock. A seal ensures airtightness in the closed position. Fitted with support slots for Ø350÷700

### Technical specifications

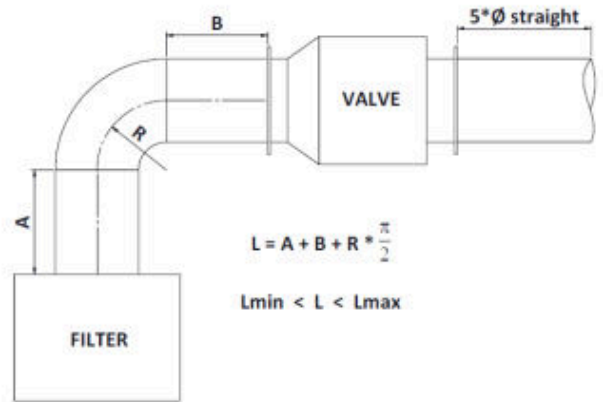
Piping: horizontal  
Operating temperature : -20°C to +60°C  
Flow type: suction flow  
Dust type: non-metallic  
Minimum applicable volume :  
see V<sub>min</sub> in table  
ATEX class: 3 - kst = 325 bar\*m/s  
Pred, max : see table  
P<sub>max</sub> : 9,5 bar  
MIE : 10÷30 mJ  
MIT : 400 °C  
Maximum air speed: 30 m/s  
Minimum and maximum installation distance :  
L<sub>min</sub> = 3m / L<sub>max</sub> = 5m with or without elbow

### Accessories upon request

Closed position microswitch  
Capacitive dust detection sensor  
Silicone seal  
Pneumatic cleaning system  
Pneumatic reset of anti-opening block  
(standard for Ø450÷700)



EQUIVALENT LENGTH CALCULATION



Ø NRV COMBO [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	m [kg]	Vmin [m <sup>2</sup> ]	Pred.max [bar/psi]	Pressure loss at 20m/s [mm H <sub>2</sub> O]
100	150	185	415	-	170	340	75	-	-	90	425	10	1,2	1.0/14.5	67
125	175	210	440	-	180	360	88	-	-	103	445	11	1,2	1.0/14.5	65
150	200	235	465	-	195	390	100	-	-	115	475	12	1,2	1.0/14.5	63
160	210	245	475	-	200	400	105	-	-	120	485	13	1,2	1.0/14.5	61
180	230	265	495	-	210	420	115	-	-	130	505	14	1,2	1.0/14.5	59
200	360	360	575	590	270	510	140	-	125	155	575	31	1,2	0.6/8.7	34
250	410	410	625	640	295	560	165	-	125	180	625	38	1,2	0.6/8.7	34
300	460	460	675	690	320	610	190	-	125	205	675	48	1,2	0.6/8.7	33
350	510	530	725	740	345	660	215	305	125	230	725	58	1,2	0.6/8.7	32
400	560	580	775	790	370	710	240	350	125	255	775	68	1,2	0.6/8.7	32
450	610	630	825	970	415	780	295	400	255	295	825	88	5,0	0.6/8.7	34
500	660	680	875	1015	440	830	320	455	255	320	875	100	5,0	0.6/8.7	37
550	710	730	925	1065	465	880	345	505	255	345	925	112	5,0	0.6/8.7	40
600	760	780	975	1115	490	930	370	555	255	370	975	130	5,0	0.6/8.7	43
630	810	830	1025	1165	515	980	395	605	255	395	1025	155	5,0	0.6/8.7	45
650	810	830	1025	1165	515	980	395	605	255	395	1025	155	5,0	0.6/8.7	45
700	860	880	1075	1215	540	1030	420	655	255	420	1075	176	5,0	0.6/8.7	47