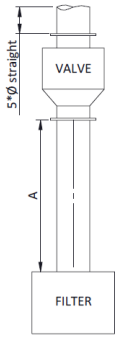
SAFETY NOT RETURN VALVES
NRV METAL Ø200÷550 ATEX CERTIFIED (EN 16447)

CE 1370 EPT 21 ATEX 4514 X Ex II D

WITH 1 ELBOW, 2 ELBOWS OR STRAIGHT DUCT

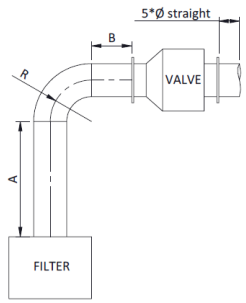
Aircom's safety not return valves are a passive protection system **ATEX CERTIFIED EN 16447** against the propagation of explosion in suction lines**.**
They are the sure solution to isolate the environments in case of explosion in the suction plants stopping the explosive effect in the suction line. They are produced in carbon steel painted standard **RAL 3020** or stainless steel AISI 304 or AISI 316, welded in all the unions and the structure is reinforced to withstand high pressures. Our standard production is equipped with flanges and counterflanges compatible with DIN 24154-R1 except for Ø350, 550 and with locking mechanism. The gasket assures the sealing in closed position. Equipped with supporting slots for Ø350÷550.

EQUIVALENT LENGTH CALCULATION (STRAIGHT DUCT)
For Ø200÷400 and Ø550



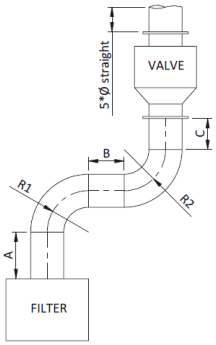
L = A
Lmin < L < Lmax

EQUIVALENT LENGTH CALCULATION (WITH ONE ELBOW)
Only for Ø200÷400



$L = A + R * \frac{\pi}{2} + B$
Lmin < L < Lmax
Note:
The dimensions A or B or both can be also = 0

EQUIVALENT LENGTH CALCULATION (WITH TWO ELBOWS)
Only for Ø200÷400



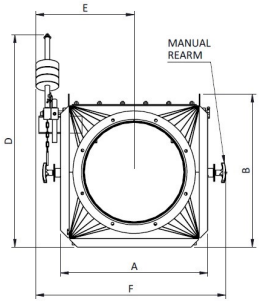
$L = A + R1 * \frac{\pi}{2} + B + R2 * \frac{\pi}{2} + C$
Lmin < L < Lmax
Note:
The dimensions A, B, C or all them can be also = 0

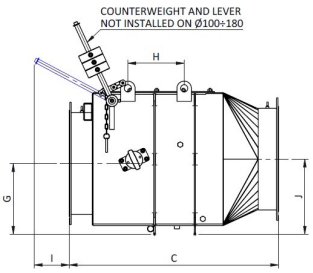
TECHNICAL DATA:

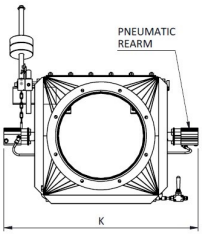
Pipe asset: Horizontal
Working temperature: from -20°C to +60°C
Process flux: pull flow
Dust type: metallic or not metallic
Minimum applicable volume: see table (V_{min})
ATEX class: 3 - k_{st} = 400 bar*m/s
$P_{red, max}$: see table
P_{max}: 9,9 bar
MIE: 2 mJ
MIT: 540 °C
Maximum air speed: 30 m/s
Minimum and maximum installation distance: see table (L_{min} / L_{max})

ACCESSORIES ON DEMAND:

Microswitch for closed position
Capacitive sensor for dust deposit detection
Siliconcel gasket
Pneumatic cleaning system
Pneumatic rearm for anti-opening lock (standard for Ø550)







ALLOWED CONFIGURATIONS:

Ø NRV METAL [mm]	STRAIGHT PIPE	WITH N°1 ELBOW	WITH N°2 ELBOWS
200	YES	YES	YES
250	YES	YES	YES
300	YES	YES	YES
350	YES	YES	YES
400	YES	YES	YES
550	YES	NO	NO

Ø NRV METAL [mm]	L_{min}/ L_{max} [m]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	m [kg]	V_{min} [m³]	$P_{red, max}$ [bar/psi]	Pressure drop @ 20 m/s [mm H_2O]
200	3 / 5	360	360	575	590	270	510	140	-	125	155	575	31	1,2	1.0/14.5	34
250	3 / 5	410	410	625	640	295	560	165	-	125	180	625	38	1,2	1.0/14.5	34
300	3 / 5	460	460	675	690	320	610	190	-	125	205	675	48	1,2	1.0/14.5	33
350	3 /5	510	530	725	740	345	660	215	305	125	230	725	58	1,2	1.0/14.5	32
400	3 / 5	560	580	775	790	370	710	240	350	125	255	775	68	1,2	1.0/14.5	32
550	3.5 / 5	710	730	925	1065	465	880	345	505	255	345	925	112	2,5	0.6/8.7	40

aircom COMPONENTI PER IMPIANTI ASPIRAZIONE COMPRESSORI SILENZIOSI

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