

CYCLONE SEPARATOR

CKL-C

DESCRIPTION

CKL-C cyclone separators have been developed for high efficient removal of bulk liquids from compressed air⁽¹⁾ and vacuum systems. Inside the housing there is an insert with vanes that creates controlled rotation of the air. As a result of centrifugal action liquids (water, oil) and large particles are forced to the housing wall, slowed down and accumulated at the bottom of separator housing as condensate. The turbulent free zone in the lower part of the filter housing prevents condensate from being picked up and “carried over” into the airstream. Because of the nature of application, it is essential to install appropriately sized condensate drain on the separator.

APPLICATIONS⁽²⁾

- Automotive
- Electronics
- Food & Beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application



⁽¹⁾For any other technical gas please contact us or your local dealer

⁽²⁾CKL-C cyclone separator can be used in variety of applications. For applications not listed please contact us or your local dealer.

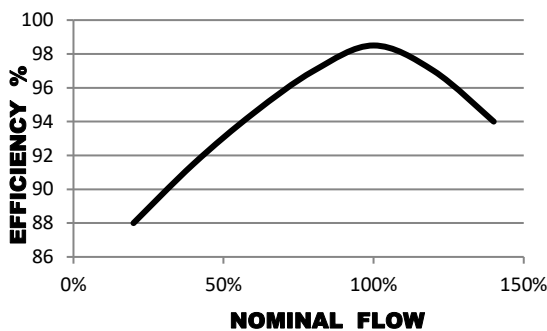
CKL-C CYCLONE SEPARATOR RATING ACCORDING TO ISO8573-1

Solid particles	Water	Oil
-	Class 8	-

TECHNICAL SPECIFICATION

Operating temperature	1,5 - 65 °C	35 - 149 °F
Operating pressure	0 - 20 bar(g)	0 - 290 psi
Efficiency ⁽³⁾	>98%	

⁽³⁾Under nominal flow, 20°C, inlet droplet size 10µm - 50µm



MATERIALS

Housing material	Aluminium
Fittings, Screws	Brass, Brass-zinc plated, Steel
Cover	ABS
Sealing	NBR
Cyclone element	PA6 30% glass fibre, Aluminium, Stainless Steel 1.4301
Corrosion protection	Anodized (optional)
Outside protection	Powder paint coated (Epoxy-polyester base)
Lubricant	Shell cassida grease RLS 2

SIZES

HOUSING	PIPE SIZE [inch]	CYCLONE ELEMENT	FLOW CAPACITY		DIMENSIONS [mm]				VOLUME [l]	WEIGHT [kg]
			[Nm ³ /h]	[scfm]	A	B	C	D		
CKL-C 20	3/8	Integrated CKL-C Cyclone element	72	42	187	88	20	80	0,47	0,7
CKL-C 21	1/2		96	56	256	88	20	80	0,6	0,8
CKL-C 30	1/2		150	88	278	106	25	100	1,2	1,3
CKL-C 31	3/4		216	127	278	106	25	100	1,2	1,3
CKL-C 40	1		282	166	252	125	32	120	1,57	2,1
CKL-C 43	1 ½		510	300	450	125	32	160	3,0	3,2
CKL-C 50	2		888	522	605	160	43	180	6,0	5,1
CKL-C 52	2 ½		1440	847	685	160	43	200	6,5	6,3
CKL-C 61 ⁽⁴⁾	3		2760	1624	800	240	60	300	19	12,9

Flow capacity at 7 bar(g), 20°C

Standard is BSP pipe connection, other pipe connection on request.

⁽⁴⁾ Stainless steel cyclone element

PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU (Fluid group 2)

CKL CF 20 – CKL CF 40	Article 4.3
CKL CF 43 – CKL CF 52	Category 1, Module A
CKL CF 61	Category 2, Module H

PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU (Fluid group 1)⁽⁵⁾

CKL CF 20 – CKL CF 31	Article 4.3
CKL CF 40	Category 1, Module A
CKL CF 43 – CKL CF 52	Category 2, Module H
CKL CF 61	Category 3, Module H

⁽⁵⁾ Fluid group must be specified in the order, if not standard fluid group 2 is selected.

CORRECTION FACTORS

To calculate the correct capacity of a given separator based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).

CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C_{OP}

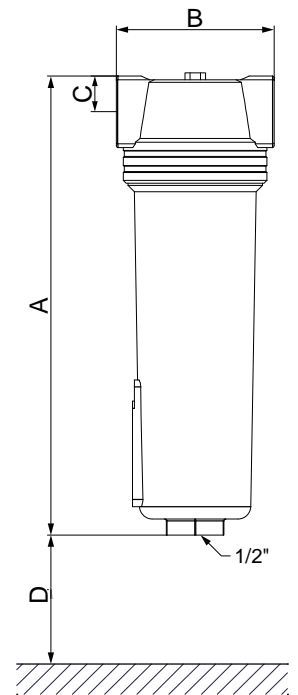
OPERATING PRESSURE


[bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
[psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232	247	261	276	290
C _{OP}	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	2,25	2,38	2,50	2,63

MAINTENANCE

Once per year make a visual check of separator housing and make sure there is no visual damage. At least every six months check if condensate drain is operating properly.

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 BUREAU VERITAS	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285	
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