

PRODUCT DESCRIPTION:

The volumetric lobe vacuum pumps “B” series are machines that, thanks to the conjugated rotation without contact of two rotors (with two lobes) within a suitably shaped chamber, create volumes and transfer air through the inlet manifold to the outlet one. They operate completely dry without any lubrication or residues generated by brushing or contact during rotation. These pumps do not actually compress the gas they elaborate, but transfer it from the inlet mouth to the outlet one.

In the vacuum sector, the volumetric lobe vacuum pumps should always be inserted in series with other pumps, normally of a lower flow, known as primary pumps (“L” series lubricated pumps). With such combinations it is possible to reach high degree of vacuum.

Volumetric lobe vacuum pumps have a crankshaft connected to the electric motor through an elastic element.

The crankshaft is sealed from outside through the oil chamber, that works both as lubricant and sealant.

The BCA pumps can be supplied with motors in accordance with IEC 72 B5, with three various configurations:

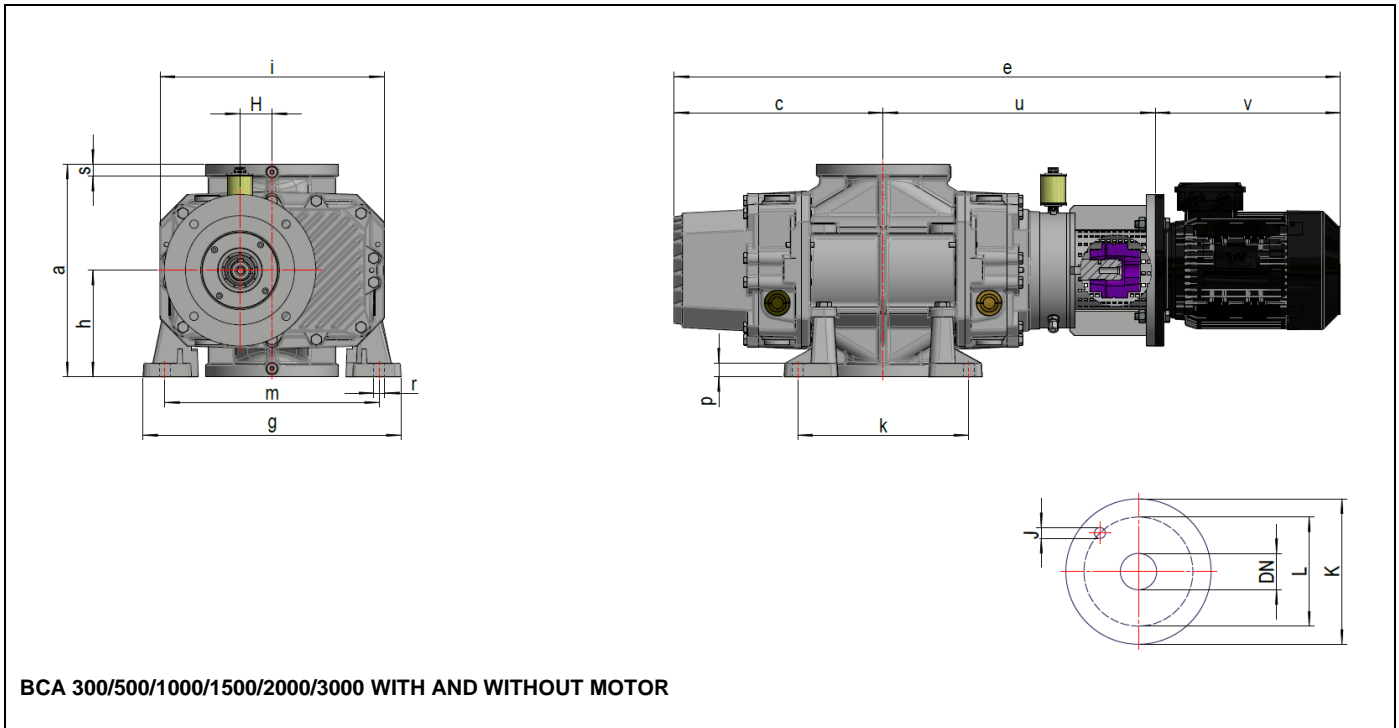
- BCA pump without motor
- BCA pump with IE3 motor
- BCA pump with IE3 motor + AdaptShield

The AdaptShield system integrates the pump BCA function with highest efficiency standards through an algorithm that controls the pressure range monitored by two sensors, both placed on the pump’s inlet and outlet.

The system is integrated within the inverter, and it continuously sends data in order to manage the electric motor speed variation. This procedure allows the system to fully use the volumetric capacity of BCA pump. Moreover, the AdaptShield system protects the BCA pump from possible malfunctions.

Subject to change without prior notice

Main accessories	BCA 300	BCA 500/1000	BCA 1500/2000/3000
Inlet filter	9001108	9001109	9001110



Subject to change without prior notice

MODEL	DN (mm)	a (mm)	c (mm)	e (mm)	g (mm)	h (mm)	i (mm)	k (mm)	m (mm)	p (mm)	r (mm)	s (mm)	u (mm)	v (mm)	H (mm)	J		K (mm)	L (mm)
																Ø (mm)	N°		
BCA 300	80	276	235	786	313	138	255	158	253	20	14	20	312	234	37,5	18	4	200	160
BCA 500	100	320	292	945	360	160	290	230	290	23	18	20	377	277	43	18	4	220	180
BCA 1000	100	350	357	1100	426	175	356	282	354	30	19	20	449	306	53	18	8	220	180
BCA 1500	150	350	413	1212	426	175	356	394	354	30	19	22	503	306	53	23	8	285	240
BCA 2000	150	400	396	1280	522	200	430	362	445	35	24	22	498	365	67	23	8	285	240
BCA 3000	150	400	466	1440	522	200	430	502	445	35	24	22	584	385	67	23	8	285	240

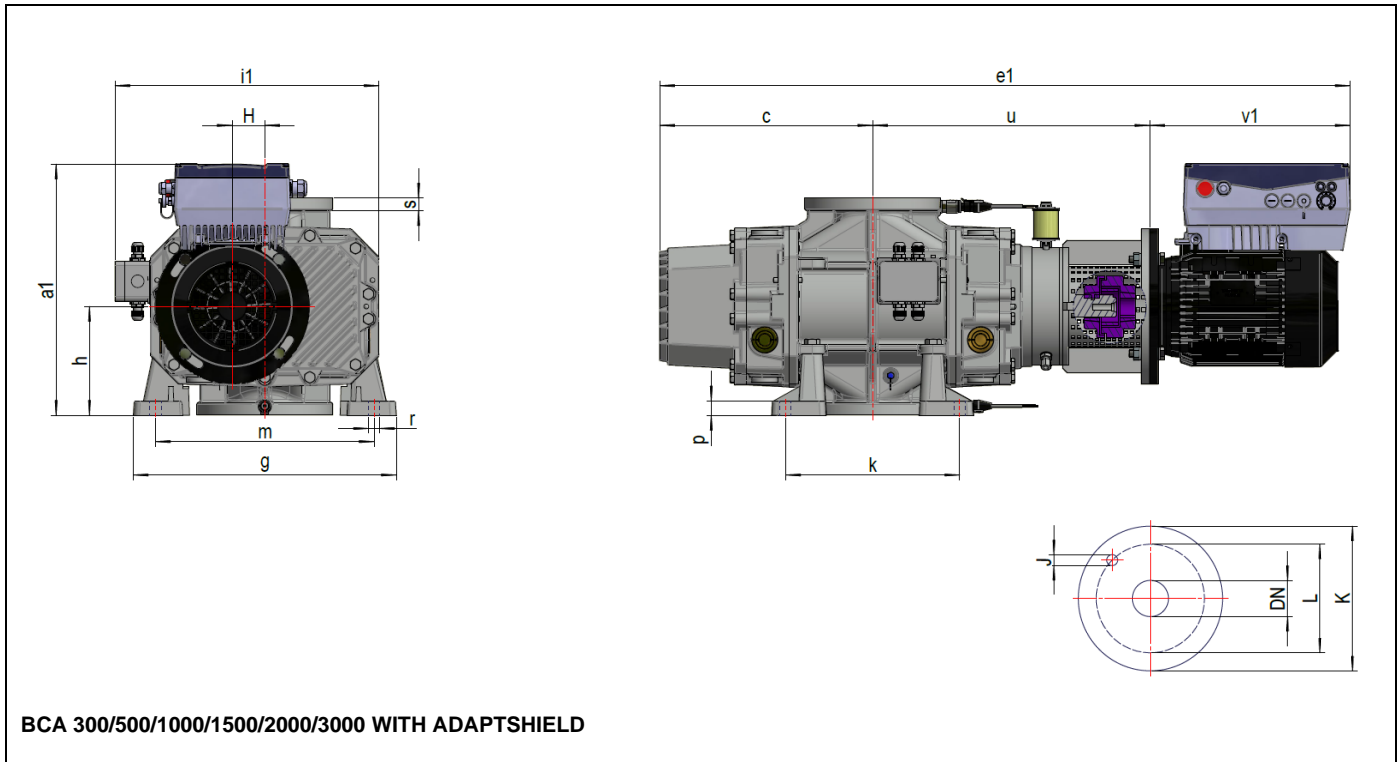
		BCA 300/500/1000/1500/2000/3000 WITH AND WITHOUT MOTOR											
		BCA 300		BCA 500		BCA 1000		BCA 1500		BCA 2000		BCA 3000	
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Nominal capacity	m ³ /h	279	334	504	605	1008	1210	1433	1720	2045	2454	2887	3465
Max pressure difference during continuous operation	mbar	80				66				50		40	
Motor power	kW (3~)	1,1	1,5	2,2	3	4	5,5	4	5,5	5,5	7,5	7,5	11
Nominal r.p.m.	n/min	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600
Noise level (@ 1 mbar)*	dB(A)	71	73	71	73	72	74	72	74	72	74	73	75
Weight without / with motor	kg	76 / 85		115 / 130		208/240		245 / 270		320 / 360		360 / 400	
Oil type**		Olio sintetico ISO VG-220 Synthetic oil ISO VG-220											
Oil capacity (gears and bearings)	dm ³	0,67		1,05		1,65		1,65		3,11			
Oil capacity (shaft passage seal)	dm ³	0,31		0,56		0,8		0,8		1,58			
Pump intake / Outlet	DN	80		100				150					
Required room temperature for installation place	°C	12 ÷ 40											
Fluid temperature	°C	12 ÷ 40											
Ambient temperature for storage and transport	°C	-20 ÷ 50											
Max humidity / altitude		80% RH / 1000m s.l.m. / a.s.l.***											

(*) Measured according to EN ISO 2151, K = 3 dB(A)

(**) In case of PFPE pump version use oil KLUBER TYRENO FLUID PFPE 1225.

(***) Please contact us if environmental conditions are different from those prescribed.

Subject to change without prior notice



Subject to change without prior notice

MODEL	DN (mm)	a1 (mm)	c (mm)	e1 (mm)	g (mm)	h (mm)	i1 (mm)	k (mm)	m (mm)	p (mm)	r (mm)	s (mm)	u (mm)	v1 (mm)	H (mm)	J		K (mm)	L (mm)
																Ø (mm)	N°		
BCA 300	80	277	235	822	313	138	328	158	253	20	14	20	312	270	37,5	18	4	200	160
BCA 500	100	384	292	980	360	160	361	230	290	23	18	20	377	312	43	18	4	220	180
BCA 1000	100	406	357	1119	426	175	428	282	354	30	19	20	449	325	53	18	8	220	180
BCA 1500	150	406	413	1231	426	175	428	394	354	30	19	22	503	325	53	23	8	285	240
BCA 2000	150	506	396	1280	522	200	502	362	445	35	24	22	498	365	67	23	8	285	240
BCA 3000	150	506	466	1440	522	200	502	502	445	35	24	22	584	385	67	23	8	285	240

		BCA 300/500/1000/1500/2000/3000 WITH ADAPTSIELD					
		BCA 300	BCA 500	BCA 1000	BCA 1500	BCA 2000	BCA 3000
		50 Hz ÷ 60 Hz	50 Hz ÷ 60 Hz	50 Hz ÷ 60 Hz	50 Hz ÷ 60 Hz	50 Hz ÷ 60 Hz	50 Hz ÷ 60 Hz
Nominal capacity	m ³ /h	279 ÷ 334	504 ÷ 605	1008 ÷ 1210	1433 ÷ 1720	2045 ÷ 2454	2887 ÷ 3465
Motor power	kW (3~)	1,1	2,2	4	4	5,5	7,5
Nominal r.p.m.	n/min	3000 ÷ 3600	3000 ÷ 3600	3000 ÷ 3600	3000 ÷ 3600	3000 ÷ 3600	3000 ÷ 3600
Noise level (@ 1 mbar)*	dB(A)	71 ÷ 73	71 ÷ 73	72 ÷ 74	72 ÷ 74	72 ÷ 74	73 ÷ 75
Weight	kg	89	135	245	275	369	409
Oil type**		Olio sintetico ISO VG-220 Synthetic oil ISO VG-220					
Oil capacity (gears and bearings)	dm ³	0,67	1,05	1,65	1,65	3,11	
Oil capacity (shaft passage seal)	dm ³	0,31	0,56	0,8	0,8	1,58	
Pump intake / Outlet	DN	80	100		150		
Required room temperature for installation place	°C	12 ÷ 40					
Fluid temperature	°C	12 ÷ 40					
Ambient temperature for storage and transport	°C	-20 ÷ 50					
Max humidity / altitude		80% RH / 1000m s.l.m. / a.s.l.***					

(*) Measured according to EN ISO 2151, K = 3 dB(A)

(**) In case of PFPE pump version use oil KLUBER TYRENO FLUID PFPE 1225.

(***) Please contact the manufacturer if environmental conditions are different from those prescribed.

Subject to change without prior notice