

ABC(X)

Boron Carbide Long Venturi Nozzle with Aluminium Jacket



AIRBLAST



ABC(X)

The ABC(X) range comprises of Boron Carbide lined long venturi nozzles with an Aluminum Jacket. Boron Carbide is the most durable liner available – therefore these nozzles perform especially well with aggressive abrasives such as aluminum oxide, silicon carbide and steel grit, and are therefore often used in blast rooms.

The ABC(X) nozzle has a 25 mm (1") inlet and the ABSNX has a 32 mm (1¼") inlet and are available with a standard large thread (/50) or fine thread.

Airblast high velocity venturi style nozzles have been designed to maximize blast cleaning rates and provide uniform abrasive distribution. The venturi design accelerates the air / abrasive mix as it exits the nozzle providing additional momentum – this can increase productivity and reduce abrasive consumption by up to 40% when compared with straight bore nozzles.

Airblast offers a full selection of nozzles with various orifice sizes, nozzle lengths, insert and liner materials. Contact Airblast to discuss which nozzle is most suitable for your specific application.

ABC(X) - Boron Carbide Long Venturi Nozzles with Aluminium Jacket

Part no.	Description	Orifice	Lenght	Inlet
2121900	ABC-3 BC Nozzle with fine thread	5,0 mm	140 mm	25 mm
2122000	ABC-4 BC Nozzle with fine thread	6,0 mm	140 mm	25 mm
2122100	ABC-5 BC Nozzle with fine thread	8,0 mm	140 mm	25 mm
2122200	ABC-5 BC Nozzle with fine thread	8,0 mm	165 mm	25 mm
2122300	ABC-6 BC Nozzle with fine thread	10,0 mm	165 mm	25 mm
2122400	ABC-8 BC Nozzle with fine thread	12,0 mm	165 mm	25 mm
2122600	ABC-9 BC Nozzle with fine thread	14,0 mm	220 mm	25 mm
2307000	ABCX-3 BC Nozzle with fine thread	5,0 mm	140 mm	32 mm
2307100	ABCX-4 BC Nozzle with fine thread	6,0 mm	140 mm	32 mm
2307200	ABCX-5 BC Nozzle with fine thread	8,0 mm	140 mm	32 mm
2307300	ABCX-5 BC Nozzle with fine thread	8,0 mm	165 mm	32 mm
2307400	ABCX-6 BC Nozzle with fine thread	10,0 mm	165 mm	32 mm
2307500	ABCX-8 BC Nozzle with fine thread	12,0 mm	165 mm	32 mm
2307700	ABCX-9 BC Nozzle with fine thread	14,0 mm	220 mm	32 mm
2120600	ABC-3/50 BC Nozzle with large 50 mm thread	5,0 mm	140 mm	25 mm
2120700	ABC-4/50 BC Nozzle with large 50 mm thread	6,0 mm	140 mm	25 mm
2120800	ABC-5/50 BC Nozzle with large 50 mm thread	8,0 mm	140 mm	25 mm
2120900	ABC-5/50 BC Nozzle with large 50 mm thread	8,0 mm	165 mm	25 mm
2121000	ABC-6/50 BC Nozzle with large 50 mm thread	10,0 mm	165 mm	25 mm
2121100	ABC-8/50 BC Nozzle with large 50 mm thread	12,0 mm	165 mm	25 mm
2121300	ABC-9/50 BC Nozzle with large 50 mm thread	14,0 mm	220 mm	25 mm
2307800	ABCX - 3/50 BC Nozzle with large 50 mm thread	5,0 mm	140 mm	32 mm
2307900	ABCX - 4/50 BC Nozzle with large 50 mm thread	6,0 mm	140 mm	32 mm
2308000	ABCX - 5/50 BC Nozzle with large 50 mm thread	8,0 mm	140 mm	32 mm
2308100	ABCX - 5/50 BC Nozzle with large 50 mm thread	8,0 mm	165 mm	32 mm
2308200	ABCX - 6/50 BC Nozzle with large 50 mm thread	10,0 mm	165 mm	32 mm
2308201	ABCX - 7/50 BC Nozzle with large 50 mm thread	11,0 mm	165 mm	32 mm
2308300	ABCX - 8/50 BC Nozzle with large 50 mm thread	12,0 mm	165 mm	32 mm
2308400	ABCX - 8/50 BC Nozzle with large 50 mm thread	12,0 mm	220 mm	32 mm

ORIFICE (mm) (")	NOZZLE PRESSURE / NOZZLE DIAMETER GUIDE												REQUIRED AIR	CFM	m ³ /min
	60 PSI	4.2 BAR	70 PSI	4.9 BAR	80 PSI	5.6 BAR	90 PSI	6.3 BAR	100 PSI	7.0 BAR	120 PSI	8.5 BAR			
5.0 mm 3/16"	30.0	0.85	33.0	0.93	38.0	1.08	41.0	1.16	45.0	1.27	58.0	1.64	REQUIRED AIR	CFM	m ³ /min
	171.0	77.00	196.0	89.00	216.0	96.00	238.0	108.00	264.0	120.00	375.0	170.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*
	7	5.3	8	5.6	9	6.4	10	7.1	10	7.5	12	9.0	REQUIRED POWER	hp	kw
6.5 mm 4/16"	54.0	1.53	61.0	1.73	68.0	1.93	74.0	2.10	81.0	2.29	105.0	2.97	REQUIRED AIR	CFM	m ³ /min
	312.0	141.00	354.0	160.00	408.0	185.00	448.0	203.00	494.0	224.00	660.0	300.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*
	12	9.0	14	10.1	16	11.6	17	12.4	18	13.5	22	16.2	REQUIRED POWER	hp	kw
8.0 mm 5/16"	89.0	2.52	101.0	2.86	113.0	3.20	126.0	3.57	137.0	3.88	160.0	4.53	REQUIRED AIR	CFM	m ³ /min
	534.0	242.00	604.0	274.00	672.0	305.00	740.0	335.00	850.0	385.00	1.050.0	476.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*
	20	15.0	23	19.1	26	20.2	28	21.0	31	22.9	37	27.5	REQUIRED POWER	hp	kw
9.5 mm 6/16"	126.0	3.57	143.0	4.05	161.0	4.56	173.0	4.90	196.0	5.55	235.0	6.65	REQUIRED AIR	CFM	m ³ /min
	764.0	346.00	864.0	392.00	960.0	425.00	1.052.0	477.00	1.152.0	523.00	1.475.0	669.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*
	28	21.0	32	24.0	36	27.0	39	28.9	44	33.0	52	39.6	REQUIRED POWER	hp	kw
11.0 mm 7/16"	170.0	4.81	184.0	5.21	217.0	6.14	240.0	6.80	254.0	7.19	315.0	8.92	REQUIRED AIR	CFM	m ³ /min
	1.032.0	468.00	1.176.0	533.00	1.312.0	595.00	1.448.0	657.00	1.584.0	719.00	2.050.0	930.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*
	38	28.5	44	32.6	49	36.4	54	40.1	57	42.4	69	50.9	REQUIRED POWER	hp	kw
12.5 mm 8/16"	224.0	6.34	252.0	7.14	280.0	7.93	309.0	8.75	338.0	9.57	410.0	11.61	REQUIRED AIR	CFM	m ³ /min
	1.336.0	606.00	1.512.0	686.00	1.680.0	762.00	1.856.0	842.00	2.024.0	918.00	2.650.0	1.202.00	REQUIRED ABRASIVE	Lbs./hr.	KG/hr.*
	50	37.5	56	42.0	63	46.9	69	51.8	75	56.3	90	67.6	REQUIRED POWER	hp	kw

Chart shows calculated consumption rates of air and abrasive for new nozzles. When selecting a compressor add 50% to above figures to allow for normal nozzle wear and friction loss.

* Based on abrasive density of 1,5 kgs. per liter.

NOTE: Figures may vary depending upon working conditions. To maintain desired air pressure as nozzle orifice wears, air consumption increases. The effects of nozzle wear on air consumption must be considered when selecting nozzles and the compressors that support them.