ABSN(X)

Silicon Nitride Long Venturi Nozzle with Polyurethane Jacket

AIRBLAST

ABSN(X)

The ABSN(X) range comprises of Silicon Nitride lined long venturi nozzles with Polyurethane Jackets. The use of the Silicon Nitride liner reduces the weight of the nozzle by approximately 50% when compared to a standard nozzles of the same size – this reduces operator fatigue. Silicon Nitride is also more durable than other nozzle liners making and operating life of over 500 hours possible. The Polyurethane Jacket cushions the liner in tough job site conditions. The molding of the polyurethane is carried out by vacuum which guarantees an accurate fit into the nozzle holder.

The ABSN 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.

ABSNX - Silicon Nitride, Long Venturi Nozzles, Polyurethane Jacket with large 50mm thread

Part no.	Description	Orifice	Lenght	Inlet
2026100	ABSN – 3/50 Silicon Nitride Nozzle	4,8 mm	115 mm	25 mm
2026200	ABSN – 4/50 Silicon Nitride Nozzle	6,5 mm	135 mm	25 mm
2026300	ABSNX – 5/50 Silicon Nitride Nozzle	8 mm	150 mm	32 mm
2026400	ABSNX – 6/50 Silicon Nitride Nozzle	9,5 mm	170 mm	32 mm
2026500	ABSNX – 7/50 Silicon Nitride Nozzle	11 mm	205 mm	32 mm
2026700	ABSNX – 8/50 Silicon Nitride Nozzle	13 mm	235 mm	32 mm

COMPATIBILITY GUIDE

No.	Nozzle Orifice	Recommended range		Minimum Blast Machine capacity	Minimum Pipe ID	Blast Hose ID	Minimum Air Hose ID
		m³/min	CFM				
3	5.0 mm	1.27 - 2.29	45 - 81	60 ltr.	1″	¾″	1″
4	6.5 mm	2.29 - 3.88	81 - 137	60 ltr.	1″	1″ - 1¼″	1¼″
5	8.0 mm	3.88 - 5.55	137 - 196	100 ltr.	1″	1″ - 1¼″	1¼″
6	9.5 mm	5.55 - 7.19	196 - 254	200 ltr.	1¼″	1¼″	1½″
7	11.0 mm	7.19 - 9,57	254 - 338	200 ltr.	1¼″	1¼″ - 1½″	2″
8	12.5 mm	9.57 - 15.52	338 - 548	200 ltr.	1¼″	1½″	2″

Note: Best performance is obtained when sizes of nozzle, blast machine piping, blast hose and air hose are properly matched.
- m³/min and CFM range is based on blasting at 7 bar (100 psi) for the life of the nozzle.
- Blast machine capacity should allow 20 to 30 minutes of blasting.
- Hose ID should be three to four times the size of the nozzle orifice.

NOZZLE PRESSURE / NOZZLE DIAMETER GUIDE

ORIFICE (mm) (“)	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	m³/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	m³/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	m³/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	m³/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	m³/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	m³/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 slecting 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.

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