

SPIN-NOZZLE®



The NLB SPIN-NOZZLE® self-rotating head (U.S. patent no. 4,821,961) turns an ordinary high-pressure lance into a superior water jetting tool. The SPIN-NOZZLE features a specially designed and balanced body, threaded for two standard jetting nozzles in an offset pattern. The SPIN-NOZZLE rotates by the reaction energy of the high-pressure water; no external driver is needed.

Features and Benefits

- Faster production rates due to wide spray pattern and force
- Reduces back thrust for operator
- Self-lubricated

VIPER 24™ AND VIPER 40™

In the Viper 24™ and Viper 40™, NLB has taken its SPIN-NOZZLE® technology to a whole new level. Our latest self-rotating heads operate at higher pressures than ever, and are field-repairable in less than 5 minutes. That's right... you don't have to return them to the factory, like our older models.

The Viper 24™ operates at the same range of pressures as the NLB 225 convertible pump unit, up to 24,000 psi (1,680 bar). The Viper 40™ operates at up to 40,000 psi (2,800 bar) and features a wider spray path. It easily attaches to a standard NLB 286 Series lance, so you no longer need a specially designed, air-driven lance or an air source.

There are two Viper 40™ heads, the standard SRH40-77 and the SRH40-77-15. The nozzles on the latter

are mounted at a 15° angle, which widens the coverage, allowing higher production rates if the material is easy to remove.

All Viper heads have round bodies, precision machined of rugged stainless steel. This minimizes nozzle strikes and eliminates the need for a protective guard. The nozzle inserts (choose from a wide range) are flush-mounted to further minimize impact.

24,000 psi



Field-repairable



SRH24-77, Viper 24™

Nozzles*	Part Number	10,000 psi (700 bar)	15,000 psi (1,035 bar)	20,000 psi (1,400 bar)	24,000 psi (1,680 bar)
#4	BN1123	11.9 gpm (45.0 lpm)	14.6 gpm (55.3 lpm)	N/A	N/A
#3	BN1122	9.4 gpm (35.6 lpm)	11.5 gpm (43.5 lpm)	13.5 gpm (51.1 lpm)	14.8 gpm (56.0 lpm)
#2	BN1121	6.8 gpm (25.7 lpm)	8.4 gpm (31.8 lpm)	9.8 gpm (37.1 lpm)	10.8 gpm (40.9 lpm)
#1.5	BN1137	5.0 gpm (18.6 lpm)	6.1 gpm (23.1 lpm)	7.2 gpm (27.3 lpm)	8 gpm (30.3 lpm)
#1	BN1135	3.5 gpm (13.2 lpm)	4.3 gpm (16.3 lpm)	5.1 gpm (19.3 lpm)	5.6 gpm (21.2 lpm)

This chart shows a few of many nozzle combinations. For more possibilities, please see our complete nozzle chart on pages 94-95.

40,000 psi



Field-repairable



SRH40-77 and SRH40-77-15, Viper 40™

Nozzles*	Part Number	40,000 psi (2,800 bar)
#24	BN10095-24	5.9 gpm (22.4 lpm)
#23	BN10095-23	5.52 gpm (20.9 lpm)
#22	BN10095-21	5.12 gpm (19.4 lpm)
#21	BN10095-21	4.76 gpm (18.3 lpm)
#20	BN10095-20	4.42 gpm (16.7 lpm)

NLB recommends two BN10095-20 nozzles if your pump produces 6 gpm @ 40,000 psi. The use of larger nozzles may keep your system from reaching its maximum pressure, but may improve productivity for some applications. Please consult NLB for other pressure and flow combinations.

*Includes 1 gpm nozzle leakage (used for lubrication)



Original SPIN-NOZZLE® with protective guard

Model No.	Maximum Pressure	Inlet	Overall Length	Diameter	Weight	Speed	Rebuild Kit	Protection Guard
SRH3-77	3,000 psi (210 bar)	1/4" NPT	3" (7.6 cm)	1-15/16" (4.9cm)	11 oz. (312 g)	3,300 rpm	N/A	BN1512
SRH5-77	5,000 psi (345 bar)	1/4" NPT	3" (7.6 cm)	1-15/16" (4.9cm)	11 oz. (312 g)	4,250 rpm	N/A	BN1512
SRH10-77	10,000 psi (700 bar)	1/2" NPT	3-13/16" (9.7 cm)	2-1/2" (6.4 cm)	1 lb. - 6 oz. (624 g)	4,000 rpm	N/A	BN1190
SRH24-77 Viper 24™	24,000 psi (1,680 bar)	9/16" NPT	4-1/4" (10.8 cm)	2-5/8" (6.7 cm)	2 lb. (908 g)	5,000 rpm	SRH24-77-RBKT	BM23604
SRH40-77 Viper 40™	40,000 psi (2,800 bar)	9/16" NPT	5" (12.7 cm)	2-3/8" (6.0 cm)	3 lbs. - 9 oz. (1.62 kg)	4,000 rpm	SRH40-77-RBKT	BM23604

*A 1/2" x 3/8" reducer bushing is required for 10,000 psi (700 bar) lances with a 3/8" NPT barrel.
Order Part No. 04-03-RB-6T-S.

NOTE: To determine flow, select a nozzle size and read across to the column headed by the pressure you will be using. Actual nozzle flow will be slightly higher due to water lubrication.

3,000 psi



SRH3-77

Nozzles*	Part Number	1,000 psi (70 bar)	2,000 psi (140 bar)	3,000 psi (210 bar)
#5	S2, 2-7M, or SA	5.0 gpm (18.95 lpm)	7.0 gpm (26.53 lpm)	8.6 gpm (32.59 lpm)
#4	S2, 2-7M, or SA	4.0 gpm (15.16 lpm)	5.6 gpm (21.2 lpm)	7.0 gpm (26.53 lpm)
#3	S2, 2-7M, or SA	3.0 gpm (11.37 lpm)	4.2 gpm (15.92 lpm)	5.2 gpm (19.71 lpm)
#2	S2, 2-7M, or SA	2.0 gpm (7.58 lpm)	2.8 gpm (10.61 lpm)	3.4 gpm (12.89 lpm)
#1	S2, 2-7M, or SA	0.6 gpm (2.35 lpm)	0.8 gpm (3.03 lpm)	1.1 gpm (4.02 lpm)

5,000 psi



SRH5-77

Nozzles*	Part Number	3,000 psi (210 bar)	4,000 psi (275 bar)	5,000 psi (345 bar)
#3	S2, 2-7M, or SA	5.2 gpm (19.71 lpm)	6.0 gpm (22.74 lpm)	6.8 gpm (25.77 lpm)
#2	S2, 2-7M, or SA	3.4 gpm (12.89 lpm)	4.0 gpm (15.16 lpm)	4.4 gpm (16.68 lpm)
#1	S2, 2-7M, or SA	1.1 gpm (4.02 lpm)	1.3 gpm (5.00 lpm)	1.5 gpm (5.69 lpm)

10,000 psi



SRH10-77

Nozzles*	Part Number	6,000 psi (415 bar)	8,000 psi (550 bar)	10,000 psi (700 bar)
#4	S2, 2-7M, or SA	9.8 gpm (37.14 lpm)	11.2 gpm (42.45 lpm)	12.6 gpm (47.75 lpm)
#3	S2, 2-7M, or SA	7.4 gpm (28.05 lpm)	8.4 gpm (31.84 lpm)	9.4 gpm (35.63 lpm)
#2	S2, 2-7M, or SA	5.0 gpm (18.95 lpm)	5.6 gpm (21.22 lpm)	6.4 gpm (24.3 lpm)