

Axial Flow Full-Cone Spray Nozzles

Spadflow Series 3L 490 – 3L 491



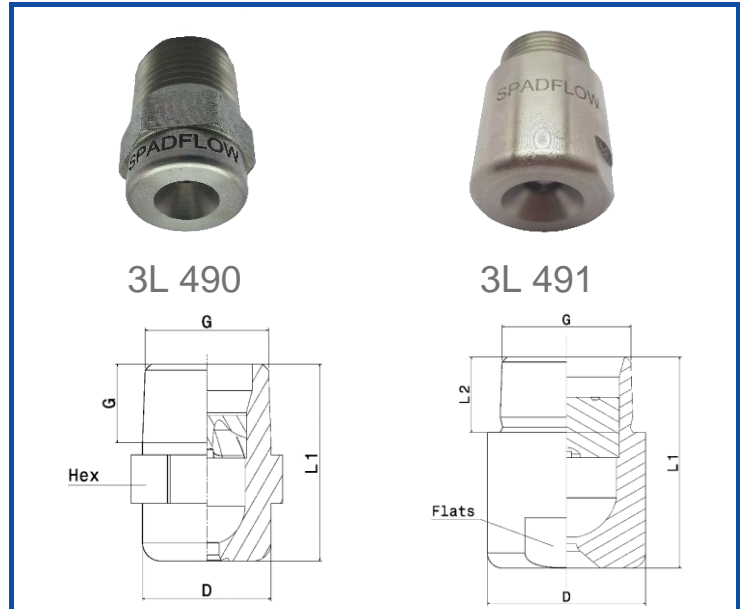
Standard S-Type Nozzle

Applications:

- Cleaning and washing
- Surface spraying
- Container cleaning
- Foam precipitation
- Degassing of liquids

Properties:

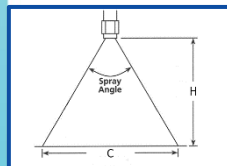
- Non-clogging nozzle
- Very stable spray angle
- Even liquid distribution
- Large free cross sections



Conn. code	Dimensions [mm]				Hex/Flats	Weight
	G	L ₁	L ₂	D		
018	1/8 BSPT	18.0	6.5	10.0	11	13 g
014	1/4 BSPT	22.0	10.0	13.0	14	16 g
038	3/8 BSPT	24.5	10.0	16.0	17	30 g
038	3/8 BSPT	30.0	10.0	16.0	17	50 g
012	1/2 BSPT	32.5	13.0	21.0	22	60 g
012	1/2 BSPT	43.5	13.0	21.0	22	85 g
034	3/4 BSPP	42.0	15.0	32.0	27	190 g
100	1 BSPP	56.0	17.0	40.0	36	350 g

Material*	Code
Brass	1
S.S.304	2
S.S.316	3

α	C [mm] (range)
	@ H=200 mm
45°	160
60°	220
90°	380-390
120°	680



For higher lengths: $C_2 = \frac{C \times H^2}{200}$

Spray angle (α)	Code	Connection** [inch]	B Ø [mm]	E Ø [mm]	Flow rate [l/min]						
					P [bar]						
					0.5	1.0	2.0	3.0	5.0	7.0	10.0
45°	3L 490 40 . 045	1/8"-1/4"	1.25	1.25	0.57	0.76	1.00	1.18	1.44	1.65	1.90
	3L 490 52 . 045	1/8"-1/4"	1.70	1.70	1.15	1.52	2.00	2.35	2.89	3.30	3.81
	3L 490 60 . 045	1/4"-3/8"	2.00	2.00	1.81	2.39	3.15	3.70	4.54	5.20	6.00
	3L 490 64 . 045	1/4"-3/8"	2.45	2.45	2.30	3.03	4.00	4.70	5.77	6.60	7.61
	3L 490 68 . 045	3/8"	2.55	2.55	2.87	3.79	5.00	5.88	7.21	8.25	9.52
	3L 490 70 . 045	3/8"	2.65	2.65	3.22	4.24	5.60	6.59	8.08	9.24	10.66
	3L 490 72 . 045	3/8"	2.85	2.85	3.62	4.77	6.30	7.41	9.09	10.40	11.99
	3L 490 78 . 045	1/2"	3.45	3.45	5.17	6.82	9.00	10.58	12.98	14.85	17.12
3L 490 84 . 045	1/2"	3.80	3.80	7.18	9.47	12.50	14.70	18.03	20.63	23.80	
60°	3L 490 40 . 060	1/8"-1/4"	1.15	1.15	0.57	0.76	1.00	1.18	1.44	1.65	1.90
	3L 490 44 . 060	1/8"-1/4"	1.25	1.25	0.72	0.95	1.25	1.47	1.80	2.06	2.38
	3L 490 48 . 060	1/8"-1/4"	1.45	1.45	0.92	1.21	1.60	1.88	2.31	2.64	3.05
	3L 490 52 . 060	1/8"-1/4"	1.60	1.60	1.15	1.52	2.00	2.35	2.89	3.30	3.81
	3L 490 56 . 060	1/8"-1/4"	1.80	1.80	1.44	1.89	2.50	2.94	3.61	4.13	4.76

Order No.: CODE . CONNETION . MATERIAL

Example.: 3L 490 40 . 060 . 014 . 2

Type 3L 490 with mentioned Q(lpm)@P(bar), Spray angle: 60°, 1/4", S.S.316

Axial Flow Full-Cone Spray Nozzles Spadflow Series 3L 490 – 3L 491



3L 490
3L 491

Spray angle (α)	Code	Connection** [inch]	B Ø [mm]	E Ø [mm]	Flow rate [l/min]						
					P [bar]						
					0.5	1.0 <i>K factor</i>	2.0	3.0	5.0	7.0	10.0
60°	3L 490 60 . 060	1/8"-1/4"-3/8"	2.05	2.05	1.81	2.39	3.15	3.70	4.54	5.20	6.00
	3L 490 64 . 060	1/4"-3/8"	2.30	2.30	2.30	3.03	4.00	4.70	5.77	6.60	7.61
	3L 490 68 . 060	1/4"-3/8"	2.60	2.60	2.87	3.79	5.00	5.88	7.21	8.25	9.52
	3L 490 72 . 060	1/4"-3/8"	2.95	2.80	3.62	4.77	6.30	7.41	9.09	10.40	11.99
	3L 490 76 . 060	3/8"	3.25	3.25	4.59	6.06	8.00	9.41	11.54	13.20	15.22
	3L 490 80 . 060	3/8"	3.70	3.70	5.74	7.58	10.00	11.76	14.43	16.51	19.04
	3L 490 84 . 060	1/2"	4.05	4.05	7.18	9.47	12.50	14.70	18.03	20.63	23.80
	3L 490 88 . 060	1/2"	4.65	4.65	9.19	12.13	16.00	18.82	23.08	26.41	30.46
	3L 490 92 . 060	3/4"	5.20	5.20	11.49	15.16	20.00	23.52	28.85	33.01	38.07
	3L 490 96 . 060	3/4"	5.80	5.80	14.36	18.95	25.00	29.40	36.07	41.26	47.59
	3L 491 04 . 060	1"	7.25	7.25	22.97	30.31	40.00	47.04	57.71	66.02	76.15
3L 491 08 . 060	1"	8.15	8.15	28.72	37.89	50.00	58.80	72.14	82.53	95.18	
90°	3L 490 40 . 090	1/8"-1/4"	1.20	1.20	0.57	0.76	1.00	1.18	1.44	1.65	1.90
	3L 490 44 . 090	1/8"-1/4"	1.30	1.30	0.72	0.95	1.25	1.47	1.80	2.06	2.38
	3L 490 48 . 090	1/8"-1/4"	1.45	1.45	0.92	1.21	1.60	1.88	2.31	2.64	3.05
	3L 490 52 . 090	1/8"-1/4"	1.70	1.55	1.15	1.52	2.00	2.35	2.89	3.30	3.81
	3L 490 56 . 090	1/8"-1/4"	1.90	1.90	1.44	1.89	2.50	2.94	3.61	4.13	4.76
	3L 490 60 . 090	1/8"-3/8"	2.10	2.05	1.81	2.39	3.15	3.70	4.54	5.20	6.00
	3L 490 64 . 090	1/4"-3/8"	2.40	2.40	2.30	3.03	4.00	4.70	5.77	6.60	7.61
	3L 490 68 . 090	1/4"-3/8"	2.70	2.70	2.87	3.79	5.00	5.88	7.21	8.25	9.52
	3L 490 72 . 090	1/4"-3/8"	3.20	2.80	3.62	4.77	6.30	7.41	9.09	10.40	11.99
	3L 490 74 . 090	3/8"	3.15	3.15	4.08	5.38	7.10	8.35	10.24	11.72	13.52
	3L 490 76 . 090	3/8"	3.40	3.40	4.59	6.06	8.00	9.41	11.54	13.20	15.22
	3L 490 80 . 090	3/8"	3.90	3.90	5.74	7.58	10.00	11.76	14.43	16.51	19.04
	3L 490 84 . 090	3/8"	4.65	4.00	7.18	9.47	12.50	14.70	18.03	20.63	23.80
	3L 490 88 . 090	1/2"	5.45	4.50	9.19	12.13	16.00	18.82	23.08	26.41	30.46
	3L 490 92 . 090	1/2"	5.90	4.50	11.49	15.16	20.00	23.52	28.85	33.01	38.07
	3L 490 96 . 090	1/2"-3/4"	6.55	4.85	14.36	18.95	25.00	29.40	36.07	41.26	47.59
	3L 491 00 . 090	3/4"	7.55	5.50	18.09	23.87	31.50	37.05	45.45	51.99	59.97
	3L 491 04 . 090	3/4"	8.60	6.60	22.97	30.31	40.00	47.04	57.71	66.02	76.15
	3L 491 08 . 090	1"	9.45	7.25	28.72	37.89	50.00	58.80	72.14	82.53	95.18
	3L 491 12 . 090	1"	10.40	8.00	36.18	47.75	63.00	74.09	90.89	103.98	119.93
3L 491 14 . 090	1"	11.00	7.50	40.78	53.81	71.00	83.50	102.43	117.19	135.16	
120°	3L 490 36 . 120	1/8"-1/4"	0.85	0.65	0.36	0.48	0.63	0.74	0.91	1.04	1.20
	3L 490 40 . 120	1/8"-1/4"	1.20	1.20	0.57	0.76	1.00	1.18	1.44	1.65	1.90
	3L 490 44 . 120	1/8"-1/4"	1.30	1.30	0.72	0.95	1.25	1.47	1.80	2.06	2.38
	3L 490 48 . 120	1/8"-1/4"	1.45	1.45	0.92	1.21	1.60	1.88	2.31	2.64	3.05
	3L 490 52 . 120	1/8"-1/4"	1.70	1.70	1.15	1.52	2.00	2.35	2.89	3.30	3.81
	3L 490 56 . 120	1/8"-1/4"	1.90	1.90	1.44	1.89	2.50	2.94	3.61	4.13	4.76
	3L 490 60 . 120	1/8"-1/4"	2.10	2.05	1.81	2.39	3.15	3.70	4.54	5.20	6.00
	3L 490 64 . 120	1/4"-3/8"	2.40	2.40	2.30	3.03	4.00	4.70	5.77	6.60	7.61
	3L 490 68 . 120	1/4"-3/8"	2.75	2.75	2.87	3.79	5.00	5.88	7.21	8.25	9.52
	3L 490 72 . 120	1/4"-3/8"	3.20	2.80	3.62	4.77	6.30	7.41	9.09	10.40	11.99
	3L 490 74 . 120	3/8"	3.20	3.20	4.08	5.38	7.10	8.35	10.24	11.72	13.52
	3L 490 76 . 120	3/8"	3.45	3.45	4.59	6.44	8.00	9.41	11.54	13.20	15.22
	3L 490 80 . 120	3/8"	3.90	3.90	5.74	7.58	10.00	11.76	14.43	16.51	19.04
	3L 490 84 . 120	3/8"	4.70	4.00	7.18	9.47	12.50	14.70	18.03	20.63	23.80
	3L 490 88 . 120	1/2"	5.10	4.50	9.19	12.13	16.00	18.82	23.08	26.41	30.46
	3L 490 92 . 120	1/2"	5.80	4.75	11.49	15.16	20.00	23.52	28.85	33.01	38.07
	3L 490 96 . 120	1/2"-3/4"	6.65	4.85	14.36	18.95	25.00	29.40	36.07	41.26	47.59
	3L 491 04 . 120	3/4"	9.20	5.85	22.97	30.31	40.00	47.04	57.71	66.02	76.15
	3L 491 12 . 120	1"	10.80	7.75	36.18	47.75	63.00	74.09	90.89	103.98	119.93
	3L 491 14 . 120	1"	11.40	7.65	40.78	53.81	71.00	83.50	102.43	117.19	135.16

* Different materials are available upon request

** Different connection sizes are available upon request

B = bore diameter E = narrowest free cross section

Order No.: CODE . CONNETION . MATERIAL

Example.: 3L 490 40 . 060 . 014 . 2

Type 3L 490 with mentioned Q(lpm)@P(bar), Spray angle: 60°, 1/4", S.S.316