

Without interfering swirl insert

Characteristics

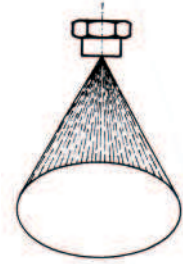
This is the most clog-resistant axial-flow full cone nozzle of all, Without swirl insert, but with special swirl chamber. Several tangential inlet bores cause the liquid flow to rotate, and atomize at spray angles of 60° to 120°.

Application

In all settings requiring a full cone spray pattern with free flow cross-section.
 Cleaning
 Cooling
 Gas and air washing
 Process engineering

Material

Brass
 Stainless steel
 POM

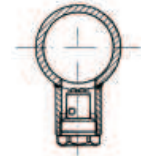


Full cone spray pattern

Typical installations



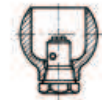
Typical, direct installation in thick-walled pipe



Type VLR with adapter and conic thread R DIN 2999 avail. from 1/8" to 1/2"



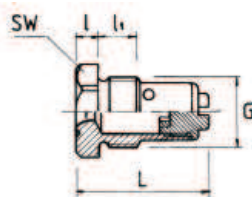
Sleeve VL, short



1/8" - 1/4" - 3/8" Clip ball QK (see page 8.4)

Type VL	Dimensions in mm			
	L	L1	l	SW
G 1/8"	19	5	3	10
G 1/4"	22	7	4	14
G 3/8"	25	7	4	17
G 1/2"	28	9	5	22
G 3/4"	30	10	5	30
G 1"	34	12	6	36

Illu. 1



Type VL

Order example: (thread - type - material) 1/4" - VL 4 - 90° - V2A

B = bore, E = smallest section, bores vary slightly for different spray angles

Spray angles available: 60°-90°-120°

Male thread G ISO 228						Type	B Ø (mm)	E Ø (mm)	Flow rate \dot{V} (l/min.) at pressure p (bar)						
1/8"	1/4"	3/8"	1/2"	3/4"	1"				bar 0.5	bar 1	bar 2	bar 3	bar 5	bar 7	bar 10
*	*					VL 1.0	1.20	0.85	0.57	0.76	1.00	1.18	1.44	1.65	1.90
*	*					VL 1.2	1.30	0.90	0.72	0.95	1.25	1.47	1.80	2.06	2.38
*	*					VL 1.6	1.50	1.00	0.92	1.21	1.60	1.88	2.31	2.64	3.05
*	*					VL 1.8	1.60	1.10	1.03	1.36	1.80	2.12	2.60	2.97	3.43
*	*					VL 2.0	1.65	1.20	1.15	1.52	2.00	2.35	2.89	3.30	3.81
*	*					VL 2.5	1.90	1.35	1.44	1.89	2.50	2.94	3.61	4.13	4.76
*	*	*				VL 3.1	2.10	1.40	1.81	2.39	3.15	3.70	4.54	5.20	6.00
*	*	*				VL 4.0	2.45	1.60	2.30	3.03	4.00	4.70	5.77	6.60	7.61
*	*	*				VL 5.0	2.75	1.80	2.87	3.79	5.00	5.88	7.21	8.25	9.52
*	*	*	*			VL 5.6	3.00	1.80	3.22	4.24	5.60	6.59	8.08	9.24	10.7
	*	*	*			VL 6.3	3.10	1.90	3.62	4.77	6.30	7.41	9.09	10.4	12.0
	*	*	*			VL 7.1	3.30	1.90	4.08	5.38	7.10	8.35	10.2	11.7	13.5
	*	*	*			VL 8.0	3.50	1.90	4.59	6.06	8.00	9.41	11.5	13.2	15.2
	*	*	*			VL 8.5	3.60	1.90	4.88	6.44	8.50	10.0	12.3	14.0	16.2
	*	*	*			VL 9.0	3.70	2.30	5.17	6.82	9.00	10.6	13.0	14.9	17.1
	*	*	*			VL 10	3.80	2.40	5.74	7.58	10.0	11.8	14.4	16.5	19.0
	*	*	*			VL 13	4.20	2.70	7.18	9.47	12.5	14.7	18.0	20.6	23.8
		*	*			VL 14	4.40	2.70	8.04	10.6	14.0	16.5	20.2	23.1	26.7
		*	*	*		VL 16	4.60	3.10	9.19	12.1	16.0	18.8	23.1	26.4	30.5
		*	*	*		VL 20	5.30	3.30	11.5	15.2	20.0	23.5	28.9	33.0	38.1
		*	*	*		VL 25	5.90	4.10	14.4	19.0	25.0	29.4	36.1	41.3	47.6
		*	*	*		VL 32	6.60	4.70	18.1	23.9	31.5	37.1	45.5	52.0	60.0
		*	*	*	*	VL 40	7.60	4.90	23.0	30.3	40.0	47.0	57.7	66.0	76.2
		*	*	*	*	VL 50	8.50	5.60	28.7	37.9	50.0	58.8	72.1	82.5	95.2
			*	*	*	VL 63	9.60	6.60	36.2	47.8	63.0	74.1	90.9	104	120
				*	*	VL 71	10.0	6.60	40.8	53.8	71.0	83.5	102	117	135
				*	*	VL 87	11.8	6.80	50.0	65.5	87.0	102	125	143	165
				*	*	VL 103	13.2	7.40	59.2	77.6	103	125	148	170	196