

# Tangential-Flow Full Cone Nozzle VTL

MC

## Full cone nozzle without swirl insert - fine-dripping

### Characteristics

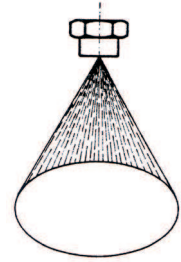
Clog-resistant,  
Without swirl insert, yet  
with castle nut deflector  
for fine droplet formation.

### Application

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

### Material

Brass  
Steel  
Stainless steel  
Plastic  
Other materials  
available on request

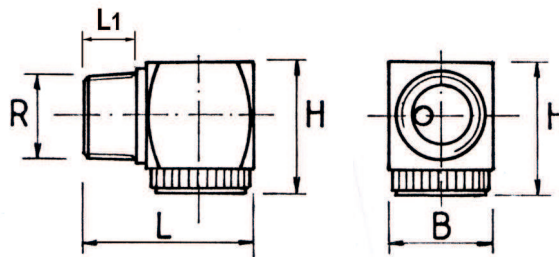


Full cone spray pattern

Thread R DIN 2999	Dimensions in mm			
	L	L1	H	B
1/8"	25	7	21	16
1/4"	28	10	21	16
3/8"	32	10	26	20
1/2"	41	13	31	25
3/4"	48	15	36	30
1"	58	17	42	36

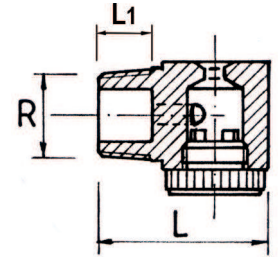
Plastic nozzles can feature  
differing dimensions.

Illu. 1



Dimensions

Illu. 2



Type VTL with  
castle nut deflector,  
fine-dripping

**Order example: (thread - type - spray angle - material) R 3/4" - VTL 25" - 120° - 1.4305**

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

Thread R - DIN 2999						Type VTL	B Ø (mm)	E Ø (mm)	Flow rate $\dot{V}$ (l/min.) at pressure p (bar)						Spray angle		
1/8"	1/4"	3/8"	1/2"	3/4"	1"				0.5	1	2	3	5	7	10	60°	90°
*	*					VTL 1.0	1.5	1.5	0.5	0.7	1.0	1.2	1.6	1.9	2.2	*	*
*	*					VTL 1.2	1.7	1.6	0.6	0.9	1.3	1.5	2.0	2.3	2.8	*	*
*	*					VTL 1.6	1.9	1.8	0.8	1.1	1.6	2.0	2.5	3.0	3.6	*	*
*	*					VTL 1.8	2.0	1.9	0.9	1.3	1.8	2.2	2.9	3.4	4.0	*	*
	*					VTL 2.0	2.1	2.0	1.0	1.4	2.0	2.5	3.2	3.7	4.5	*	*
	*					VTL 2.5	2.3	2.2	1.3	1.8	2.5	3.1	4.0	4.7	5.6	*	*
		*				VTL 3.2	2.6	2.5	1.6	2.2	3.2	3.9	5.0	5.9	7.04	*	*
		*				VTL 4.0	3.0	2.9	2.0	2.8	4.0	4.9	6.3	7.5	8.9	*	*
		*				VTL 5.0	3.3	3.2	2.5	3.5	5.0	6.1	7.9	9.4	11	*	*
		*				VTL 5.6	3.5	3.4	2.8	4.0	5.6	6.9	8.9	10	13	*	*
		*				VTL 6.3	3.7	3.6	3.2	4.5	6.3	7.7	10	12	14	*	*
		*				VTL 8.0	4.2	4.1	4.0	5.7	8.0	9.8	13	15	18	*	*
		*				VTL 9.0	4.4	4.3	4.5	6.4	9.0	11	14	17	20	*	*
		*				VTL 10	4.7	4.6	5.0	7.1	10	12	16	19	22	*	*
		*				VTL 13	5.2	5.1	6.3	8.8	13	15	20	23	28	*	*
		*				VTL 16	5.8	5.7	8.0	11	16	20	25	30	36	*	*
			*			VTL 20	7.3	7.3	10	14	20	24	32	37	45	*	*
			*			VTL 25	8.0	8.0	13	18	25	31	39	37	56	*	*
			*			VTL 32	8.7	8.7	16	22	32	39	50	59	70	*	*
				*		VTL 40	10.8	10.2	20	28	40	49	63	75	89		*
				*		VTL 50	11.4	11.0	25	35	50	61	79	94	112		*
				*		VTL 63	12.7	12.3	32	45	63	77	100	118	141		*
					*	VTL 71	14.0	13.5	36	50	71	87	112	133	159		*
					*	VTL 100	17.0	16.0	50	71	100	122	158	187	224		*