

Nozzle with reduced thread and inserted slotted swirler

Characteristics

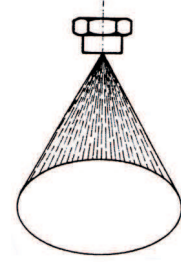
Full cone spray pattern with complete circular wetting and high force of impact due to special slotted swirler, Highly variable spray angle.

Application

Cleaning
Cooling
Foam condensation
Fire extinction
Process engineering

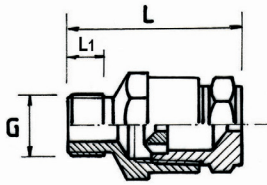
Material

Brass
Steel
Stainless steel
Plastic
Other materials on request



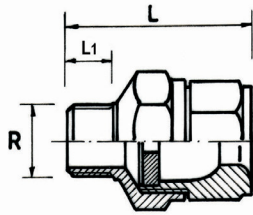
Full cone spray pattern

Illu. 1



Up to type **VR 20**
G-thread ISO 228

Illu. 2



From type **VR 21 - 26**
R-thread DIN 2999

Thread G + R	Nozzle type	Dimensions in mm		
		L	L1	SW
G 1/8"	VR 6 - VR 14	36	7	17
G 1/4"	VR 13 - VR 15	38	10	19
G 1/4"	VR 16 - VR 19	42	10	24
R 3/8"	VR 20 - VR 26	50	10	27

G = ISO 228, R = DIN 2999

Plastic nozzles can feature differing SWs.

Order example: (thread - type - spray angle - material) 1/4" - VR 19 - 90° - V2A

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

Spray angles available: **60°-90°-120°**, other spray angles on request

Male thread			Type	B Ø (mm)	E Ø (mm)	Flow rate \dot{V} (l/min.) at pressure p (bar)										
G	G	R				bar	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar
1/8"	1/4"	3/8"		0.3	0.5	1	1.5	2	3	4	5	6	7	10		
*			VR 6	2.3	1.0		1.40	1.90	2.30	2.60	3.00	3.50	3.80	4.30	4.50	5.00
*			VR 7	2.5	1.0	1.30	1.50	2.10	2.60	3.00	3.60	4.10	4.50	5.00	5.40	6.30
*			VR 8	2.8	1.2	1.60	2.00	2.60	3.10	3.50	4.10	4.60	5.00	5.50	5.90	6.80
*			VR 9	3.0	1.2	1.80	2.20	2.90	3.50	4.00	4.70	5.40	6.00	6.50	7.00	8.30
*			VR 10	3.2	1.2	2.40	2.90	3.60	4.50	5.00	5.80	6.50	7.00	7.50	8.00	9.50
*			VR 11	3.4	1.5	2.70	3.10	4.50	5.30	6.00	7.20	8.30	9.10	10.0	10.8	12.5
*			VR 12	3.2	1.5	3.70	4.20	5.10	6.10	7.00	8.20	9.40	10.0	10.9	11.6	13.4
*	*		VR 13	3.6	1.5	4.40	5.60	6.90	7.80	8.50	9.80	10.8	11.7	12.6	13.3	15.2
*	*		VR 14	4.0	2.0	5.30	6.40	7.50	8.40	9.50	11.4	13.1	14.3	15.5	16.7	19.5
	*		VR 15	4.5	2.0	5.80	6.80	9.50	11.5	12.5	15.5	18.0	20.0	22.0	24.0	28.0
	*		VR 16	4.6	2.5	7.00	8.20	11.4	13.5	15.5	18.5	21.3	23.5	25.0	27.0	32.0
	*	*	VR 17	5.3	2.5	8.50	10.0	13.8	16.8	19.0	23.5	26.0	29.0	32.0	34.0	40.0
	*	*	VR 18	6.5	3.0	10.0	12.5	17.5	20.0	23.0	28.0	33.0	37.0	40.0	43.0	50.0
	*	*	VR 19	6.7	3.0	11.0	13.5	19.0	22.5	26.0	31.0	36.0	40.0	43.0	46.0	54.0
	*	*	VR 20	7.5	3.5	12.0	15.0	21.0	25.0	29.0	35.0	40.0	44.0	48.0	51.0	60.0
		*	VR 21	8.5	4.0	14.0	18.0	23.0	30.0	36.0	46.0	57.0	65.0	73.0	80.0	95.0
		*	VR 22	8.9	4.0	17.0	22.0	29.0	36.0	42.0	51.0	60.0	65.0	71.0	86.0	95.0
		*	VR 23	9.5	4.0	20.0	25.0	35.0	43.0	49.0	58.0	68.0	75.0	82.0	90.0	105
		*	VR 24	10.5	6.0	25.0	32.0	43.0	54.0	63.0	72.0	83.0	92.0	102	111	132
		*	VR 25	11.3	6.0	31.0	37.0	51.0	62.0	71.0	86.0	98.0	109	118	128	150
		*	VR 26	11.8	6.0	39.0	46.0	64.0	77.0	87.0	104	119	133	143	155	181