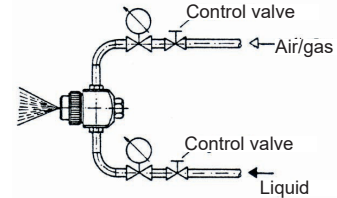
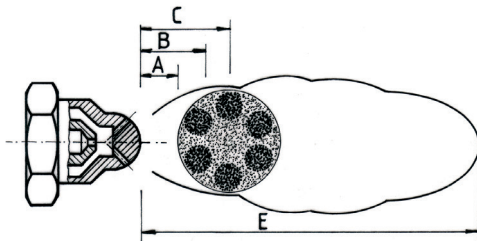


Wide-angle round spray air nozzle with internal-mixing pressure system

Characteristics

The spray exists the air cap via several circularly set drillings in a wide-angle spray pattern. Its form remains constant until C. Turbulences follow. A and B represent the spray pattern's diameter for designated distances. Dimension E constitutes the fluid mist's complete length until the spray pattern dissolves.

Connection $3/8''$ or $1/2''$
 For functions see page 10.1 - 10.2
 For dimensions and adjustment see page 10.3 - 10.4



Liquid is led into the nozzle by means of pressure. If liquid and compressed air or gas are mixed inside of the nozzle, the result is a fine atomization.

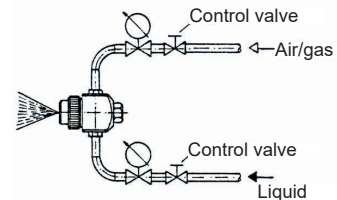
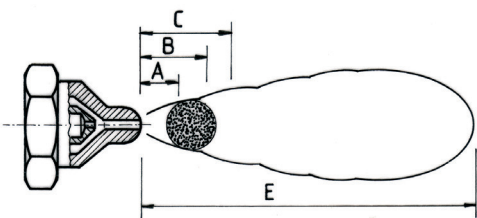
Binary Nozzles Z-R 21+22

Round spray air nozzles with internal-mixing pressure system

Characteristics

Round spray with an exit angle of $15^\circ - 20^\circ$. Its form remains fixed until C. Turbulences follow. A and B represent the spray pattern's diameter for designated distances. Dimension E constitutes the compact mist's maximum distance to the very point of dispersion.

Connection $1/8''$ or $1/2''$
 For functions see page 10.1 - 10.2
 For dimensions and adjustment see page 10.3 - 10.4



Liquid is led into the nozzle by means of pressure. If liquid and compressed air or gas are mixed inside of the nozzle, the result is a fine atomization.

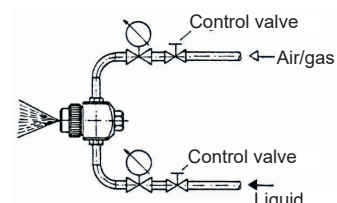
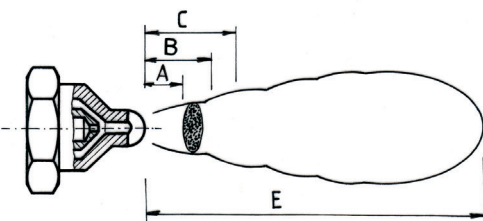
Binary Nozzles Z-F 21+22

Round spray air nozzles with internal-mixing pressure system

Characteristics

The nozzle combination's slotted outlet opening results in a flat fan spray pattern. Its form remains fixed until C. Turbulences follow. A, B and C represent the spray widths for designated distances. Distance E constitutes the fluid mist's complete length until the spray pattern dissolves.

Connection $1/8''$ or $1/2''$
 For functions see page 10.1 - 10.2
 For dimensions and adjustment see page 10.3 - 10.4



Liquid is led into the nozzle by means of pressure. If liquid and compressed air or gas are mixed inside of the nozzle, the result is a fine atomization.

Output water (l/h) - Air required(Nl/min.)

Nozzle type	Liquid pressure (bar)															Spray distribution						
	0.3			1.0			1.7			2.4			3.8			Air (bar)	Water (bar)	A 23 cm	B 46 cm	C 69 cm	E max. m	
	Air	Water	Output	Air	Water	Output	Air	Water	Output	Air	Water	Output	Air	Water	Output							
Z-W 21							1.9	124.9	237.9	2.8	109.0	320.0	4.0	249.8	345.5	2.1	1.7	34.3	48.3	67.3	6.7	
							2.1	75.0	305.9	2.9	59.1	393.6	4.1	159.0	424.8	2.8	2.4	34.3	48.3	67.3	7.3	
													4.3	95.4	515.4	4.1	3.8	35.6	49.5	68.6	8.5	
Z-W 22	0.6	102.2	184.1	1.2	159.0	198.2	2.2	177.9	311.5	3.2	161.3	512.6	4.8	306.6	835.4	0.7	0.3	33.0	47.0	64.8	6.1	
	0.7	56.8	232.2	1.4	111.3	249.2	2.3	136.3	362.5	3.3	122.6	572.1	5.2	124.9	977.0	1.4	1.0	34.3	48.3	67.3	7.9	
	0.8	31.8	277.5	1.5	76.5	297.4	2.5	95.4	416.3	3.4	97.7	628.7	5.5	84.0	1,122	2.5	1.7	33.0	47.0	64.8	6.4	
				1.7	54.5	345.5	2.6	70.4	470.1	3.6	75.0	679.7				3.4	2.4	34.3	48.3	67.3	7.3	
							2.8	52.2	526.8	3.7	59.1	730.7				5.2	3.8	35.6	48.3	68.6	8.2	
Z-W 23	0.7	129.5	322.8	1.8	174.9	572.1	2.8	237.0	778.8	3.7	286.2	923.2	5.2	480.7	1,105	0.8	0.3	35.6	49.5	68.6	7.9	
	0.8	81.8	368.2	1.9	140.8	623.0	2.9	199.9	838.3	3.9	215.8	971.4	5.5	408.8	1,201	2.1	1.0	34.3	48.3	67.3	7.3	
			45.4	416.3	2.1	107.5	671.2	3.0	165.8	894.9	4.0	172.2	1,014	5.9	371.0	1,291	3.2	1.7	33.0	47.0	66.0	7.0
	1.0				2.2	81.8	716.5	3.2	127.2	951.6	4.1	147.6	1,056				4.1	2.4	35.6	49.5	68.6	8.5
					2.3	61.3	764.6	3.3	95.4	1,008	4.3	124.9	1,099				5.5	3.8	35.6	49.5	71.1	9.1
								3.4	68.1	1,062	4.5	97.7	1,167									
Z-W 24	0.7	134.0	314.4	1.2	389.9	436.1	1.8	586.7	501.3	2.5	681.4	651.4	3.7	840.4	824.1	0.7	0.3	33.0	63.5	91.4	3.4	
	0.8	99.9	379.5	1.4	308.9	498.4	1.9	511.0	566.4	2.6	613.2	719.3	3.9	749.5	883.6	1.4	1.0	33.0	66.0	91.4	4.9	
					1.5	240.8	560.7	2.1	435.3	637.2	2.8	556.5	787.3	4.0	704.1	962.9	2.2	1.7	27.9	55.9	81.3	6.1
				1.7	186.6	640.0	2.2	378.5	710.8	2.9	495.9	855.3	4.1	681.4	1,028	3.0	2.4	27.9	53.3	73.7	6.7	
							2.3	318.0	778.8	3.0	439.1	923.2	4.3	628.4	1,102	4.4	3.8	27.9	55.9	78.7	7.6	
							2.5	263.1	849.6	3.2	382.3	994.0	4.4	583.0	1,178							
							2.6	213.5	923.2	3.3	308.5	1,065	4.6	537.5	1,249							
							2.8	173.0	999.7	3.4	286.2	1,139	4.7	492.1	1,320							
										3.6	236.2	1,209	4.8	450.5	1,396							
Z-R 21	1.2	34.1	351.2	1.9	120.0	422.0	2.6	219.6	489.9	3.3	302.8	546.6				1.4	0.3				6.7	
	1.4	25.4	388.0	2.2	85.2	481.4	3.0	142.7	589.1	3.7	209.0	668.4				2.5	1.0				7.3	
			20.4	416.3	2.5	60.2	546.6	3.4	93.5	702.3	4.1	151.4	778.8				3.4	1.7	8.9	16.5	25.4	8.2
	1.5		444.6	2.6	50.0	577.7	3.7	73.8	778.8	4.6	113.6	909.1				4.1	2.4					9.1
					2.8	42.0	608.9	4.0	60.6	855.3	5.0	87.1	1,048									
				2.9	34.8	640.0	4.1	54.9	900.6	5.4	69.3	1,195										
Z-R 22	0.7	134.0	314.4	1.2	389.9	436.1	1.8	586.7	501.3	2.5	681.4	651.4	3.7	840.4	824.1	0.7	0.3	10.2	17.8	22.9	7.0	
	0.8	99.9	379.5	1.4	308.9	498.4	1.9	511.0	566.4	2.6	613.2	719.3	3.9	749.5	883.6	1.4	1.0	15.2	25.4	33.0	6.4	
					1.5	240.8	560.7	2.1	435.3	637.2	2.8	556.5	787.3	4.0	704.1	962.9	2.2	1.7	12.7	20.3	25.4	11.3
				1.7	186.6	640.0	2.2	378.5	710.8	2.9	495.9	855.3	4.1	681.4	1,028	3.0	2.4	10.2	17.8	25.4	12.5	
							2.3	318.0	778.8	3.0	439.1	923.2	4.3	628.4	1,102	4.4	3.8	10.2	17.8	25.4	14.3	
							2.5	263.1	849.6	3.2	382.3	994.0	4.4	583.0	1,178							
							2.6	213.5	923.2	3.3	308.5	1,065	4.6	537.5	1,249							
							2.8	173.0	999.7	3.4	286.2	1,139	4.7	492.1	1,320							
										3.6	236.2	1,209	4.8	450.5	1,396							
Z-F 21				1.9	147.6	634.4	3.0	166.9	892.1	4.0	200.6	1,133				1.4	0.7	43.2	71.1	88.9	5.5	
				2.1	120.4	679.7	3.2	140.8	948.7	4.1	172.6	1,189				2.1	1.0	45.7	73.7	91.4	5.8	
				2.2	93.1	733.5	3.3	118.1	994.0	4.3	143.8	1,246				2.8	1.4	48.3	76.2	94.0	6.4	
				2.3	75.0	778.8	3.4	102.2	1,045	4.5	117.3	1,331				3.4	1.7	50.8	78.7	96.5	7.0	
				2.5	56.8	824.1	3.6	78.0	1,096	4.8	79.5	1,487				4.1	2.4	61.0	91.4	109.2	8.2	
																4.8	2.8	66.0	99.1	116.8	8.8	
Z-F 22	0.7	134.0	314.4	1.2	389.9	436.1	1.8	586.7	501.3	2.5	681.4	651.4	3.7	840.4	824.1	0.7	0.3	50.8	86.4	119.4	4.0	
	0.8	99.9	379.5	1.4	308.9	498.4	1.9	511.0	566.4	2.6	613.2	719.3	3.9	749.5	883.6	1.4	1.0	86.4	157.5	210.8	4.6	
					1.5	240.8	560.7	2.1	435.3	637.2	2.8	556.5	787.3	4.0	704.1	962.9	2.2	1.7	86.4	157.5	208.3	5.2
				1.7	186.6	640.0	2.2	378.5	710.8	2.9	495.9	855.3	4.1	681.4	1,028	3.0	2.4	91.4	167.6	215.9	5.8	
							2.3	318.0	778.8	3.0	439.1	923.2	4.3	628.4	1,102	4.4	3.8	91.4	170.2	226.1	6.4	
							2.5	263.1	849.6	3.2	382.3	994.0	4.4	583.0	1,178							
							2.6	213.5	923.2	3.3	308.5	1,065	4.6	537.5	1,249							
							2.8	173.0	999.7	3.4	286.2	1,139	4.7	492.1	1,320							
										3.6	236.2	1,209	4.8	450.5	1,396							