Binary Swirl Chamber Nozzle ZP-W

Internal-mixing pressure system

Characteristics

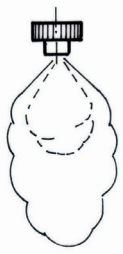
Type **ZP-W** is a rectangular design. Thanks to large air flow cross-sections the nozzle is clog-resistant. Droplet size corresponds to medium and air pressure. The result of swirl mixing, as well as primary and secondary atomization are very fine droplets and an outstanding atomization factor for a large performance range.

Application

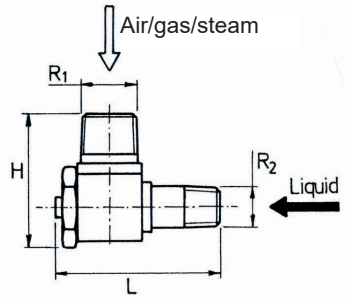
Desuperheating steam
Combustion
Spray-drying
Atomization
Moistening

Material

Brass
Stainless steels 1.4305, 1.4404
Heat-resistant stainless steels
Inconel
Other materials on request



Hollow cone spray pattern

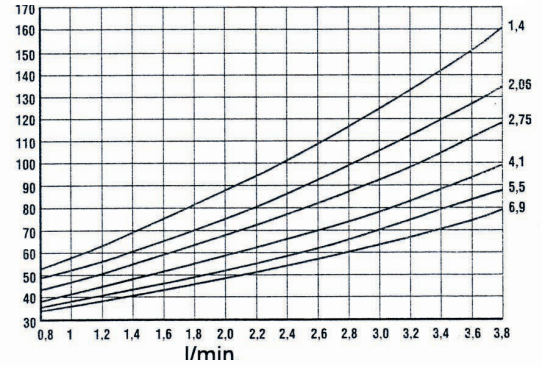


Type and size*	Dimensions in mm				
	R1 (NPT)	R2 (NPT)	L	H	Width
ZP-W 1, 2, 3	1/4“	1/8“	39	29	16
ZP-W 4	3/8“	1/8“	42	35	20
ZP-W 5	1/2“	1/4“	53	45	25
ZP-W 6	3/4“	1/4“	58	54	30
ZP-W 7	3/4“	3/8“	64	66	40

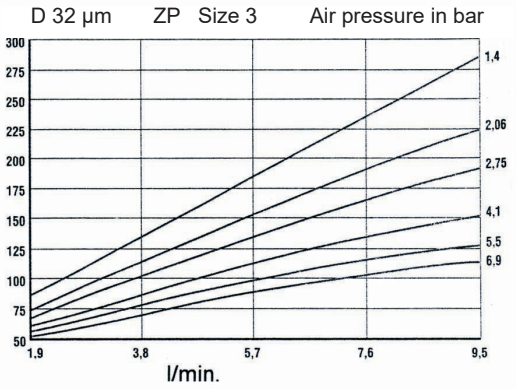
* For technical data see page 10.22, size 1 to size 7

Sauter mean diameters (D 32 µm) for swirl chamber nozzles

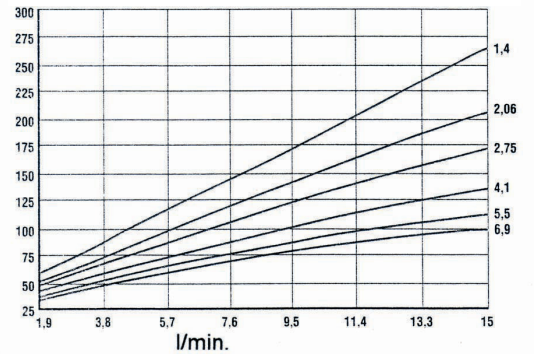
D 32 µm ZP Size 2 Air pressure in bar



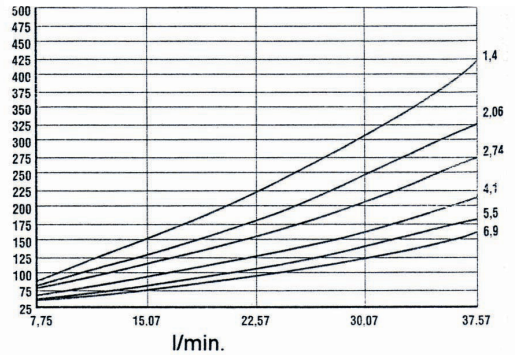
D 32 µm ZP Size 3 Air pressure in bar



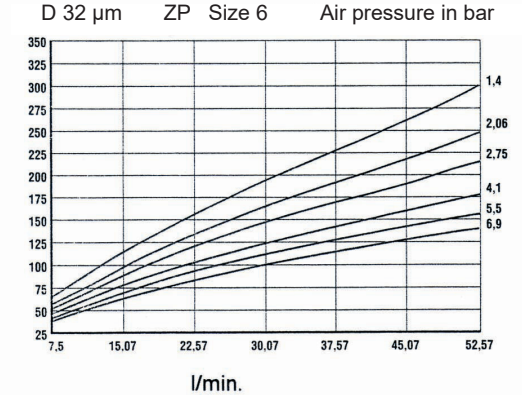
D 32 µm ZP Size 4 Air pressure in bar



D 32 µm ZP Size 5 Air pressure in bar



D 32 µm ZP Size 6 Air pressure in bar



Setting and adjusting swirl chamber nozzles

First, the air inlet is adjusted, then the required amount of liquid brought up. Liquid and air volume adapt so that the atomization quality remains constant. At the end of working with the swirl chamber nozzle, always shut off the liquid intake first.

Subject to technical alterations!