

internal-mixing pressure system

Characteristics

Type ZP features a linear design. Thanks to large liquid and air flow diameters, the nozzle is clog-resistant. Droplet size depends on 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

Spray-drying
Industrial burners
Smelting processes
Cooling and quenching
Gas treatment, Coating,
Granulation, Pelleting

Material

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

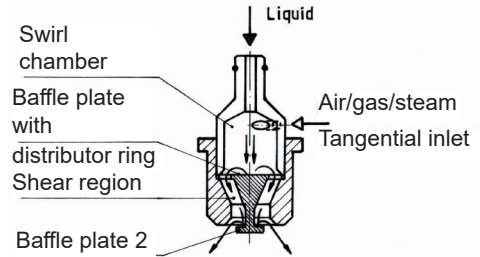
Function:

Air is guided tangentially into a low-pressure swirl chamber and causes the injected medium to swirl, causing extreme turbulences and primary atomization. The mixture collides with a baffle plate in the distributor ring which guarantees for spray's uniformity.

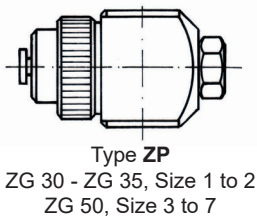
The droplets are separated once more by the additional shear forces (secondary atomization).

The second baffle plate regulates the spray angle of type ZP. It is not part of type ZP-R.

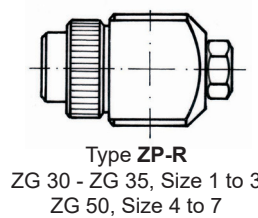
Types ZP-F and ZP-Z differ in air cap design and produce a flat fan resp. deflected flat fan.



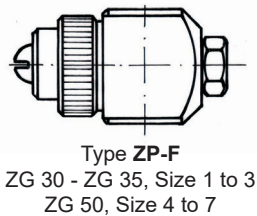
Spray patterns:



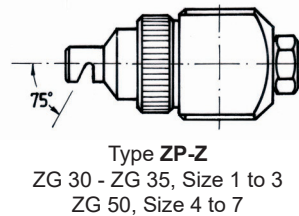
Wide-angle hollow cone
50°-75°-100° resp. 180°,
angle divergence ± 10°,
selectable spray angle



Round spray
spray angle 15-20°

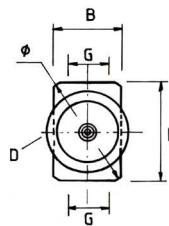
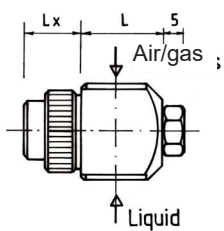


Flat fan
spray angle 70°-80°



Deflected flat fan
spray angle 50°-60°

Dimensions:

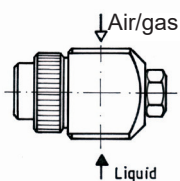


Type	G	L	L1*	H	W	Ø	Varies with air cap Lx	D
ZG-30	1/8"	25	45	30	20	34	17 to 21	24
ZG-35	1/4"	25	45	35	25	42	17 to 21	24
ZG-50	3/8" or 1/2"	38	68	50	30	52	20 to 28	33

* Length of variant 3

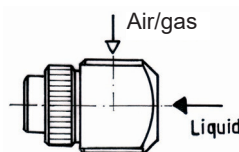
Connection possibilities:

Variant 1
Standard



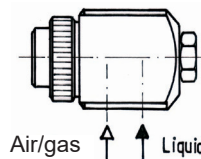
Variant 2

most cost-efficient variant, no control needle possible



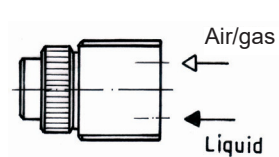
Variant 3

both connections on one side

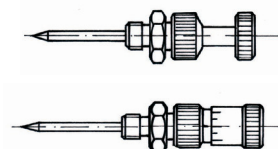


Variant 4

connections in the back



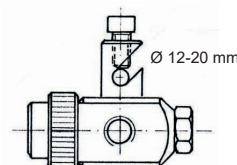
Accessories:



B Shut-off and control needle

E Shut-off and control needle with scale

pneumatic control - see page 10.4



Nozzle holder
DH-12
DH-16
DH-18
DH-20

