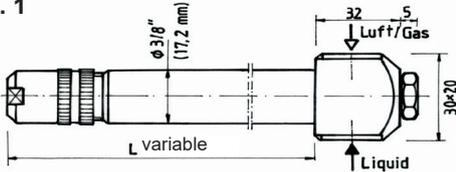


Characteristics

MC designs and manufactures nozzle lances in a modular system with corresponding binary nozzles in various materials and according to your needs and requirements.

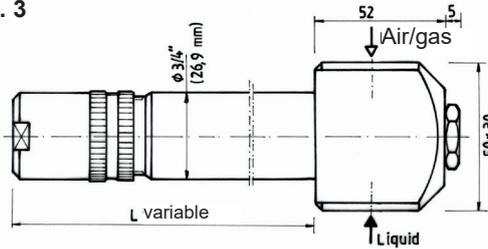
Binary nozzle lances:

Illu. 1



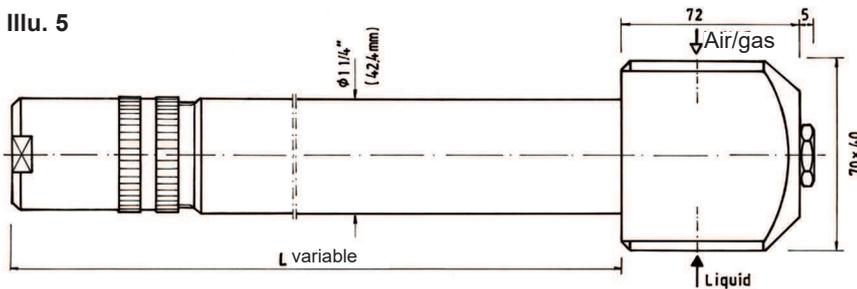
Binary nozzle lance type **ZL 3/8"** (17.2 mm) ...
L = variable, connections 1/8"

Illu. 3



Binary nozzle lances type **ZL 3/4"** (26.9 mm) ...
L = variable, connections 3/8" or 1/2"

Illu. 5



Binary nozzle lances
Type **ZL 1 1/4"** (42.4 mm) ...
L = variable, connections 3/4" or 1"

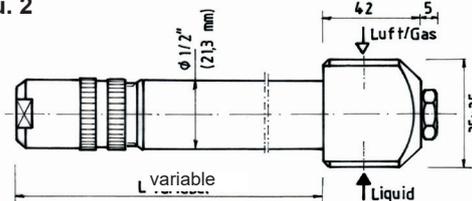
Application

Spray-drying,
flue gas cooling,
desuperheating steam,
process technology, burners,
granulation, thickening.

Material

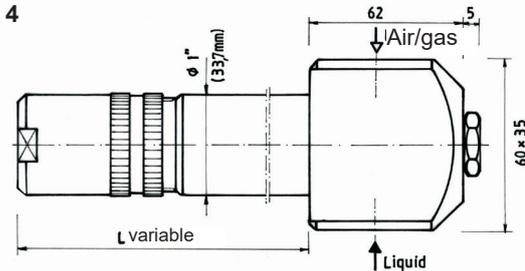
Stainless steel,
acid or heat
resistant
stainless steels

Illu. 2



Binary nozzle lance type **ZL 1/2"** (21.3 mm) ...
L = variable, connections 1/8" or 1/4"

Illu. 4



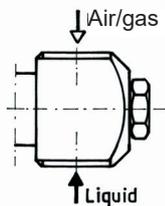
Binary nozzle lances type **ZL 1"** (33.7 mm) ...
L = variable, connections 1/2" or 3/4"

Connection variants:

Variant 1

Standard

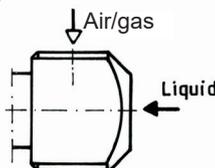
Illu. 6



Variant 2

Most cost-efficient variant; comes, however, without closing and cleaning needle

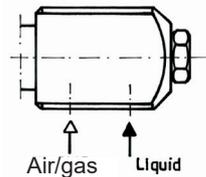
Illu. 7



Variant 3

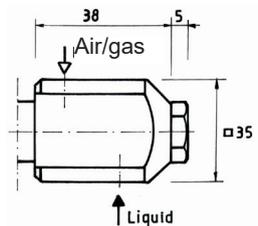
Both connections on one side

Illu. 8



Variant 7

Illu. 9



Controlling:

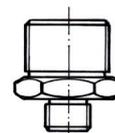
Illu. 10



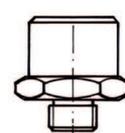
A) Plug

Adapter with male and female thread
(on request)

Illu. 11
Female thread
adapter



Illu. 12
Male thread
adapter



B) Manual
control needle
with extension

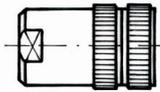
C) manual
cleaning needle
with extension

Pneumatic control (see page 10.4)

Air caps:

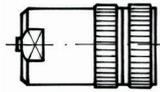
Based on your requirements, different air caps and liquid circuits can be installed to optimize spray pattern and droplet size.

Illu. 10



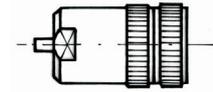
Internal-mixing round spray air cap pressure system, type **ZL...-R** see page 10.5 - 10.13 - 10.16

Illu. 11



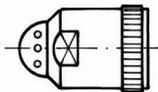
External-mixing round spray air cap with adjustable spray cone 10°-30°, inlet principle, type **ZL...-RA** see page 10.11 - 10.15

Illu. 12



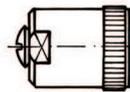
External-mixing round spray air cap with extended liquid circuit, with adjustable spray cone 10°-30°, pressure system, type **ZL...-RAS** see page 10.11 - 10.15

Illu. 13



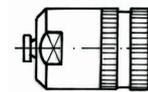
Internal-mixing wide-angle air cap pressure system, type **ZL...-W** see page 10.6 - 10.13 - 10.16

Illu. 14



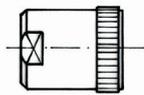
Internal-mixing hollow cone deflector air cap pressure system, type **ZL...-H** see page 10.9

Illu. 15



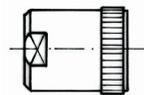
Internal-mixing swirl chamber air cap with 2-fold baffle plate pressure system, type **ZL...-P** see pages 10.21 to 10.23

Illu. 16



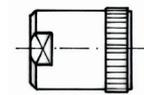
Internal-mixing round spray air cap with rotating air-liquid-mixture, pressure system, type **ZL...-N** see page 10.19 - 10.20

Illu. 17



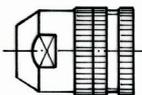
External-mixing round spray air cap with rotating air flow, inlet principle type **ZL...-NA** see page 10.17 - 10.18

Illu. 18



Internal-mixing round spray air cap following the Laval-principle type **ZL...-L** see page 10.24

Illu. 19



Internal- or external-mixing round spray air cap with dual guidance of air flow (middle air), produces finest droplets at higher energy expenditure type **ZL...-D** see page 10.24

Illu. 20



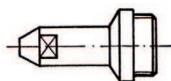
Lock nut **ZL-K** for adjustment of air cap position

The air cap position can be varied as required. Air consumption and spray angle decrease when turned back or increase when turned forward.

Different liquid circuits:

Illu. 21

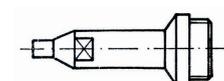
Type I



Internal-mixing, finest droplets, control is subject to outlet opening

Illu. 22

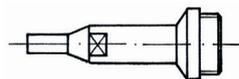
Type ZF-A



External-mixing, clog-resistant, easy to control

Illu. 23

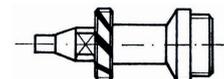
Type AL



External-mixing, with extended liquid outlet, prevents clogging of the air outlet opening with viscid fluids, easy to control

Illu. 24

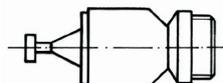
Type AN



External-mixing, rotating air flow, increases spray angle, easy to control

Illu. 25

Type P



Internal-mixing swirl chamber with 2-fold baffle plate, increases spray angle

Accessories:

X-swirler for pre-atomization of liquids

Illu. 26



Order example: (lances- Ø - connection variant - thread - spray pattern + size - poss. spray angle - material)
ZL 3/4" - 2 3/8" - P 3 - 75° - 1.4404