

HIGH-PRESSURE

COOLING-LUBRICANT-

SUPPLY SYSTEMS

IN STAINLESS STEEL



Type0

1/8" System
inside Ø 3,2 mm

Type1

1/4" System
inside Ø 5,8 mm

Type2

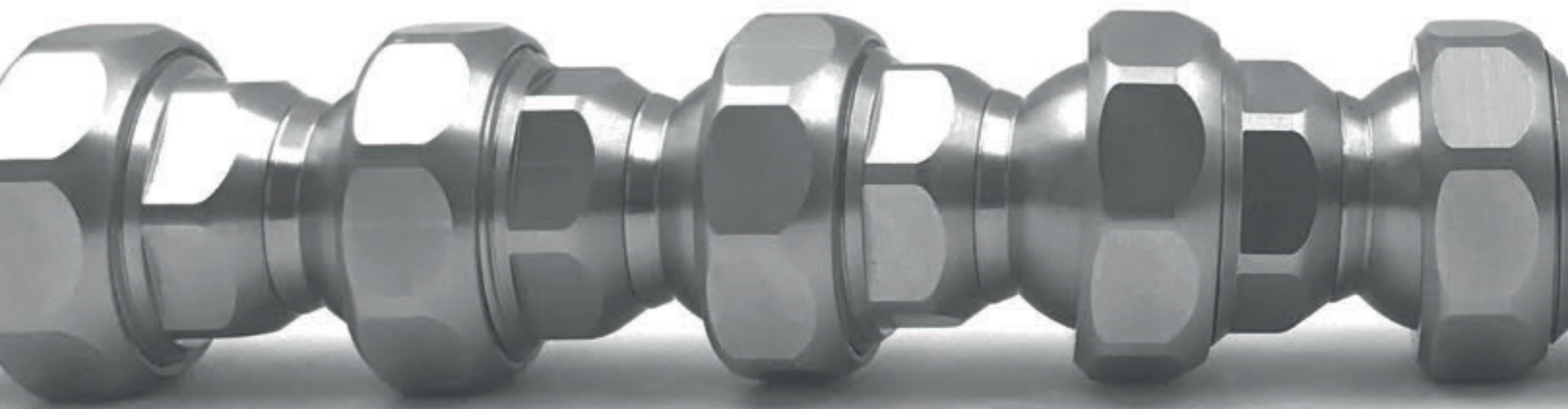
1/2" System
inside Ø 11 mm

Type3

3/4" System
inside Ø 19 mm

INDIVIDUAL & FLEXIBLE

Hirt[®]
LINE



The Original Modular Hose System | Hirt-Line®

Our joint hose system can be extended as required, is stainless and offers a long service life. The individual parts are precision-manufactured and insensitive to heat and chemical substances. Can be easily screwed together, adjusted, lengthened and shortened by hand. Neither coolant pressure nor machine vibrations can change the position. Pressure resistant over 100 bar. Can be used on machine tools and production plants, mainly on turning machines, milling machines, grinding ma-

chines, sawing machines and filling plants. Suitable for emulsions, cooling and cutting oils, chemical substances and for air cooling.

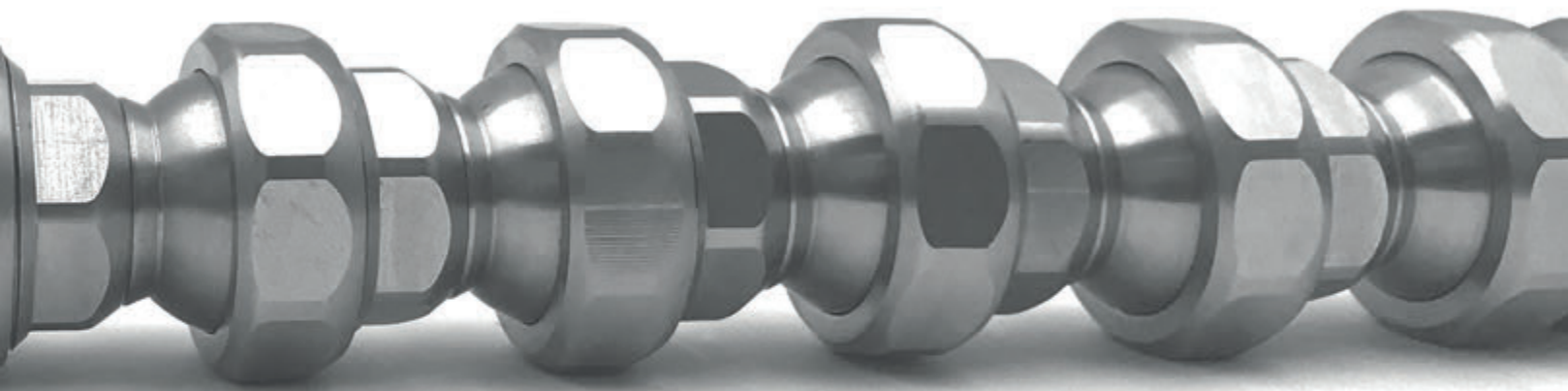
The Hirt-Line® system optimizes flow efficiency, reducing the need for pump power. This results in lower energy consumption and a noticeable decrease in electricity costs. You benefit from an optimized operation while simultaneously saving energy and expenses.

Properties:



- Jet precisely adjustable and fixable (screwable)
- Resistant to high temperatures, chemical substances, chips, pressure and vibrations
- Corrosion-resistant material 1.4305 V2A (on request in V4A)
- Wear resistant
- Pressure stable above 100 bar
- Application range -100°C to +300°C
- Without seal rings
- 4 system sizes, all among each other compatible
- Long service life
- Can be used directly on the tool (tool connections)
- Versatile in combination
- Sophisticated and effective assortment
- Applicable in the food industry and medical technology
- Connection elements for each machine
- Basic sets available in every system





Longer tool lifespans and less machine downtime for manufacturing systems

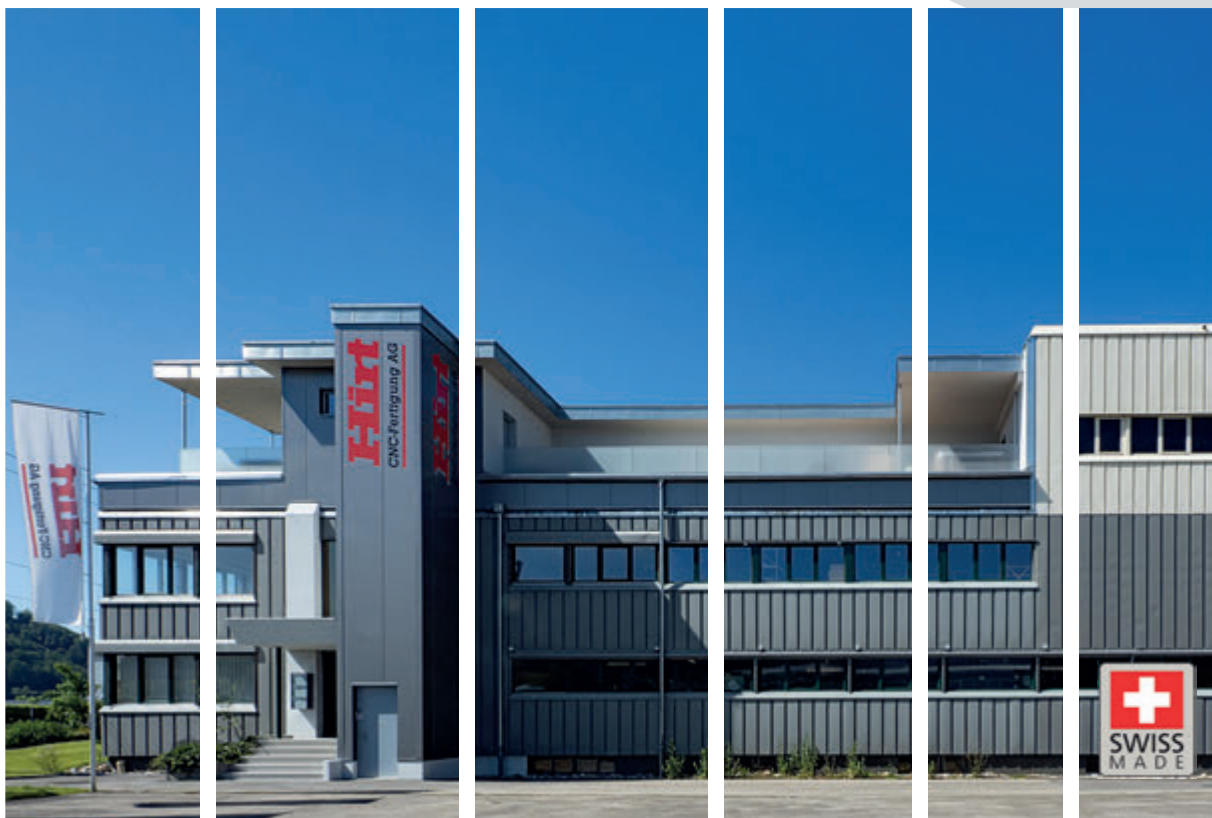
Although plastic joint hoses are very flexible coolant lines, they only offer the required operational reliability to a limited extent. Standard joint hoses are often misaligned by vibrations or chips and the coolant no longer gets to where it is

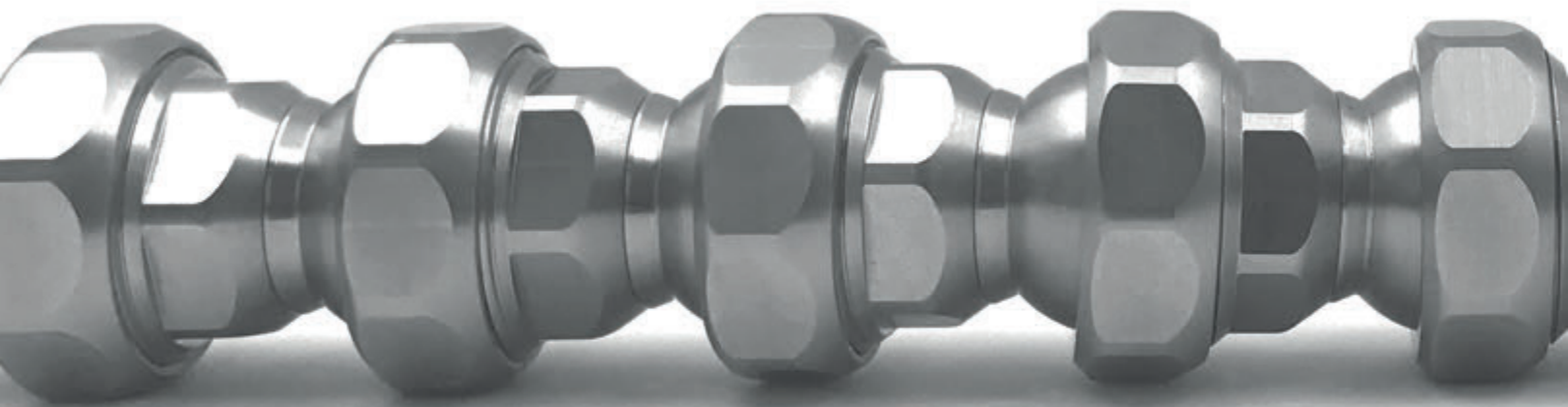
needed. Machine downtimes and even tool damage are expensive and can be avoided. Increase your productivity with our manufacturer-independent Hirt-Line® coolant and lubricant line system for turning, milling and grinding machines.

MADE IN SWITZERLAND is the quality promise of Hirt-Line®

We are committed to this through our own flexible production and high quality standards. Whether series production of

standard products or custom-made special solutions - we are here for you!





4 System sizes

Type0 | 1/8" | passage Ø 3,2 mm | thread M8 x 0,75

Type1 | 1/4" | passage Ø 5,8 mm | thread M14 x 1,0

Type2 | 1/2" | passage Ø 11,0 mm | thread M24 x 1,25

Type3 | 3/4" | passage Ø 19,0 mm | thread M34 x 1,25

All compatible with each other!



Machine adapter

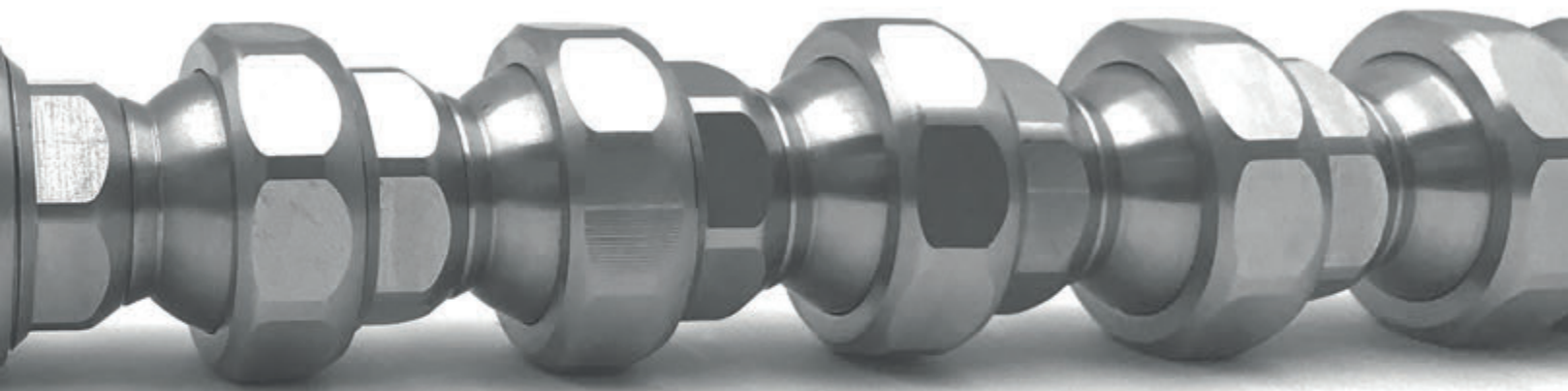
In addition to the standard pipe thread G1/8", G1/4", G3/8", G1/2", G3/4", G1" as well as metric threads M5 x 0,8 over M14 x 1,0 to M20 x 1,5, we also offer conical threads and ball head adapters with the dimensions of Ø10 mm, Ø12 mm, Ø14 mm, Ø15 mm, to various special adapters.

On request you will receive your special connection adapter!

Basic elements

3,2 mm, 5,8 mm, 11,0 mm and 19,0 mm inside diameter measure the basic elements of the Hirt-Line system. The variety of different standard lengths of 9.3 mm over 100 mm up to 1000 mm make a precise setting up and fixing the cooling jet to the desired place possible. And so make for an effective and easy customization. Other lengths on custom production possible.





Elbows

The Hirt-Line® system offers many different elbow elements in every system size, whether type 0, type 1, type 2, or type 3 we have the right e.g. elbows 90°, multiple connections, T- and Y-pieces. Due to the large selection, we ensure the greatest possible flexibility of the system. Special fittings on request!



Nozzles

The nozzles made of a material 1.4305 (V2A) are insensitive to heat and are available from Ø0.5 mm, over Ø10.0 mm up to Ø19.0 mm passage. Our numerous flat nozzles with different slot widths leave nothing to be desired; ideally suited for washing or cooling as well as flat and cylindrical grinding. There are also some special nozzles, either with several holes or mini-slots. Optimized for perfect cooling!

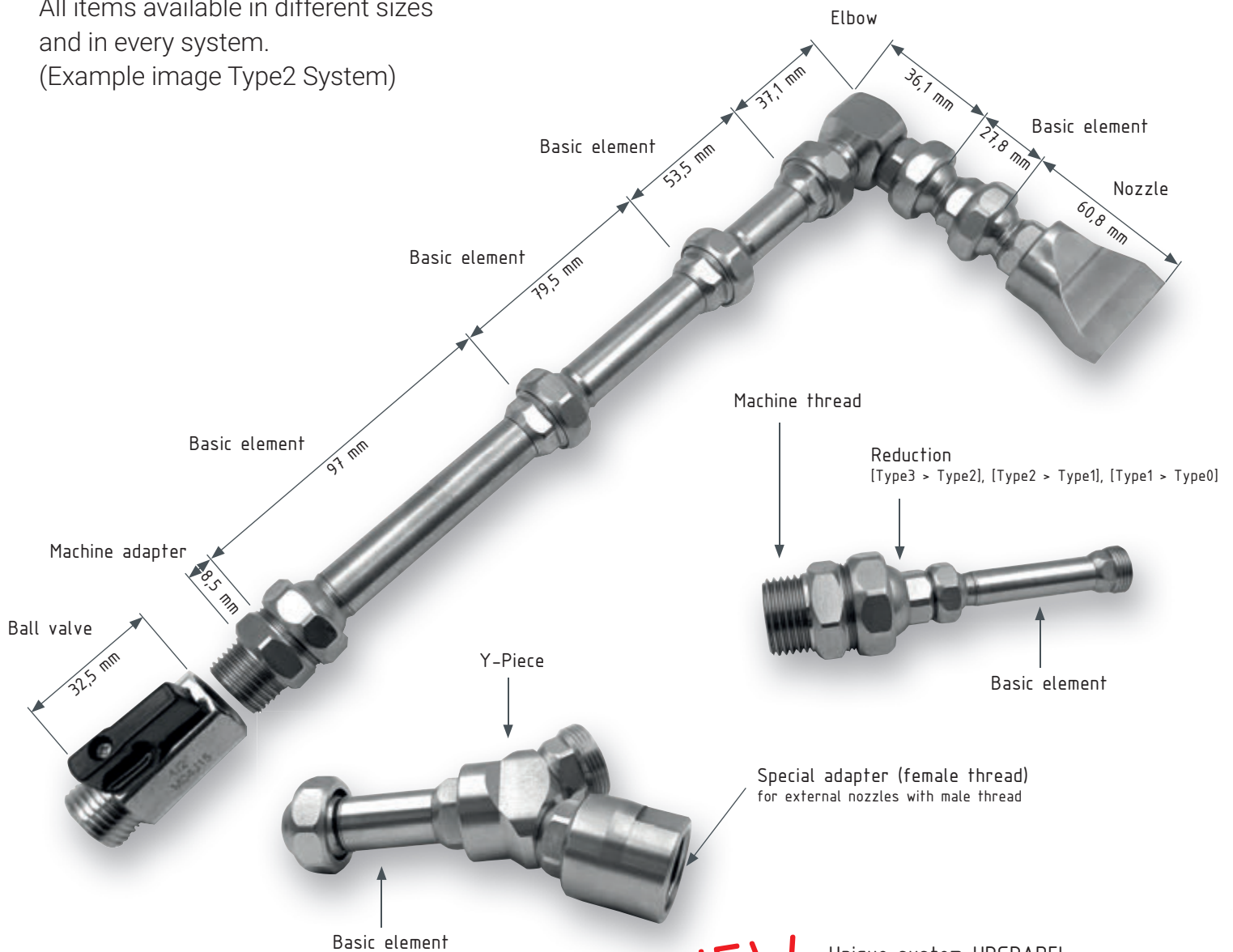


Accessories

The Hirt-Line® accessories consist of our own products such as quick couplings, knurled nuts or locking caps, plus reductions to combine the individual systems with each other. We also offer suitable external articles, e.g. ball valves and open-end wrenches. With this range you ensure an optimal and stable coolant supply for the future, especially for individual applications.



All items available in different sizes
and in every system.
(Example image Type2 System)

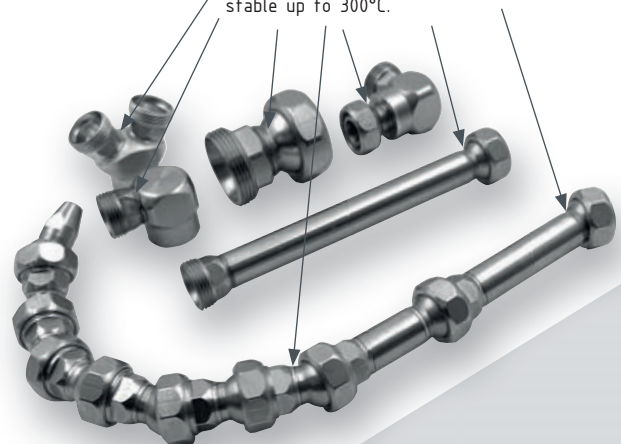


A construction kit, the convinces!

The Hirt-Line[®] system can be the basis for successful production. The basis for the system in turn are its individual components. Hirt-Line[®] makes all components and their data available here individually in order to give customers the opportunity to go their own way in the design and implementation of their systems. Hirt-Line[®] has compiled all its elements in a catalogue for quick and easy ordering.

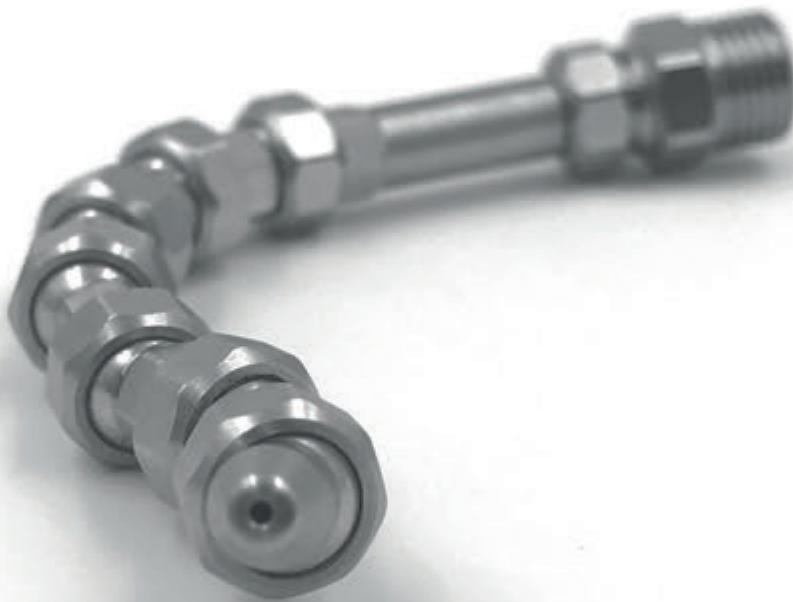
NEW

Unique system UPGRADE!
Relevant system elements welded.
For a higher mechanical load and
stable up to 300°C.



PRODUCT OVERVIEW

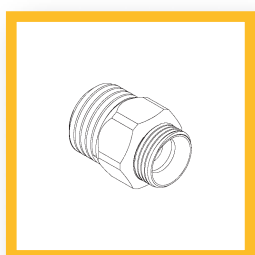
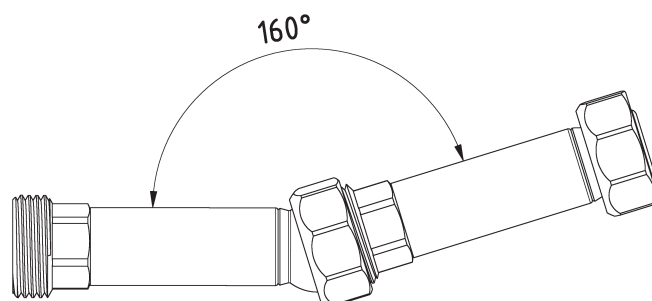
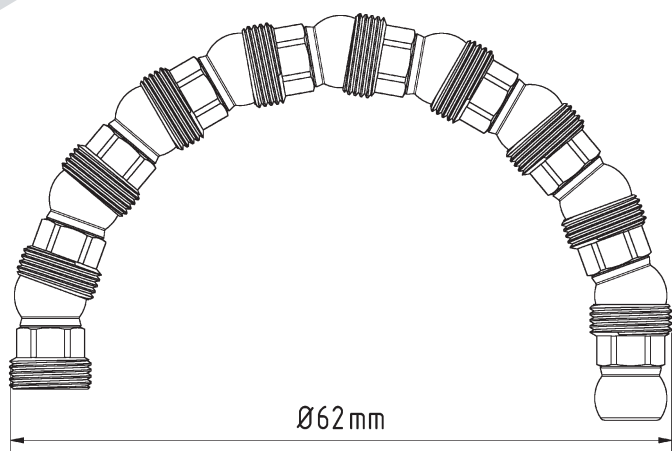
Type0 [1/8"]



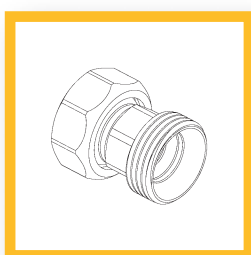
The latest Type0 system is characterized by easy assembly and straightforward setup on the tool. It includes a variety of nozzles ranging from Ø0.5 mm to Ø3.0 mm, as well as nozzles with multiple outlets. A comprehensive range of machine adapters, including M5x0.8, M10x1.5, and ball adapters with Ø10.0 mm, provides the user with the necessary flexibility and versatility. This is complemented by various base and angle elements, allowing for variable adjustments to meet the specific requirements of product processing.

TECHNICAL SPECIFICATIONS:

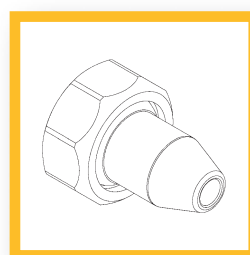
- Size Type0 (1/8")
- Passage Ø 3,2 mm
- Pressure resistant up to 80 bar
- Application range -100°C to +300°C
- Thread (Elements) M 8 x 0,75
- Material 1.4305 (V2A)



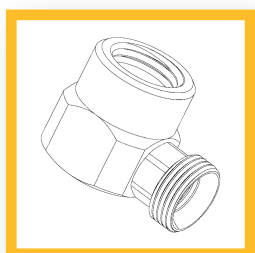
MACHINE ADAPTER



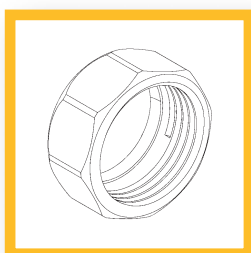
BASIC ELEMENTS



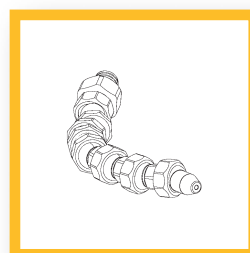
NOZZLES



ELBOWS



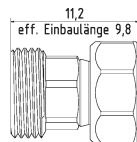
ACCESSORIES



BASIC SET Type0

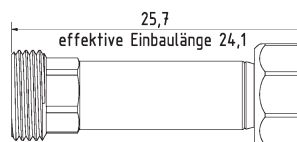
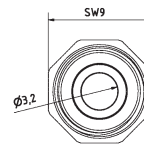
Type0 [1/8" System]

Grundelemente | Basic Elements



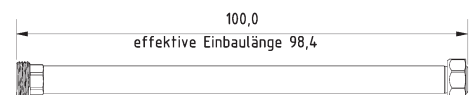
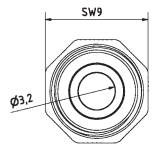
0-GE

$l = 11,2 \text{ mm}$ effektiv $l = 9,8 \text{ mm}$
 $l = 11,2 \text{ mm}$ effective $l = 9,8 \text{ mm}$



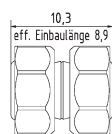
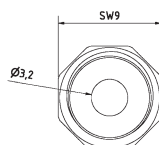
0-GE-25

$l = 25,7 \text{ mm}$ effektiv $l = 24,1 \text{ mm}$
 $l = 25,7 \text{ mm}$ effective $l = 24,1 \text{ mm}$



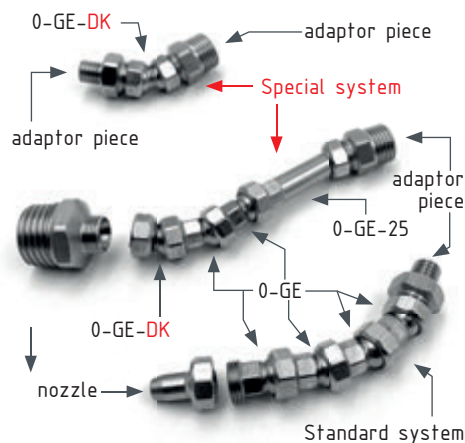
0-GE-100

$l = 100 \text{ mm}$ effektiv $l = 98,4 \text{ mm}$
 $l = 100 \text{ mm}$ effective $l = 98,4 \text{ mm}$

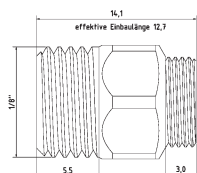
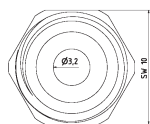


0-GE-DK Special element

$l = 10,3 \text{ mm}$ effektiv $l = 8,9 \text{ mm}$ Doppelkugel
 $l = 10,3 \text{ mm}$ effective $l = 8,9 \text{ mm}$ double ball

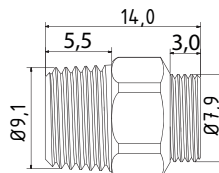
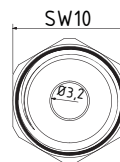


Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



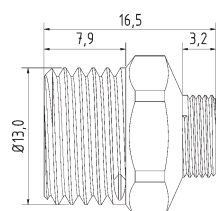
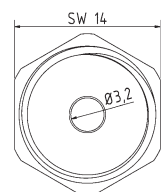
0-AD-18

Adapterstück G 1/8"
adaptor piece thread 1/8"



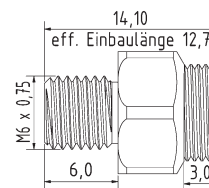
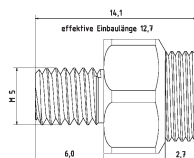
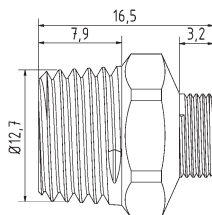
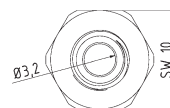
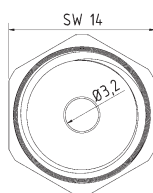
0-AD-18-PT

Adapterstück G 1/8" PT (Withworth-Gewinde)
adaptor piece thread 1/8" PT (NPT thread)



0-AD-14

Adapterstück G 1/4"
adaptor piece thread 1/4"

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter

0-AD-14-PT

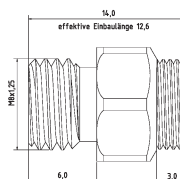
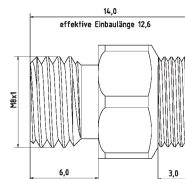
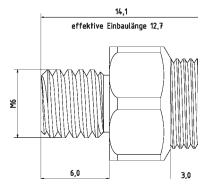
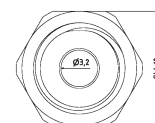
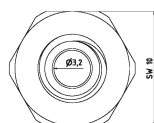
Adapterstück G 1/4" PT (Withworth-Gewinde)
 adaptor piece thread 1/4" PT (NPT thread)

0-AD-M5

Adapterstück M 5 x 0,8
 adaptor piece M 5 x 0,8 metric thread

0-AD-6075

Adapterstück M 6 x 0,75
 adaptor piece M 6 x 0,75 metric thread


0-AD-M6

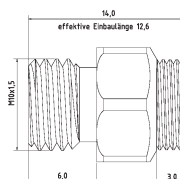
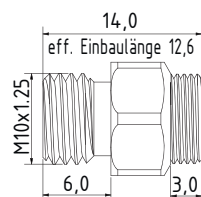
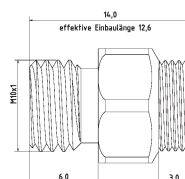
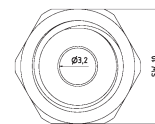
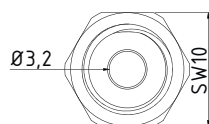
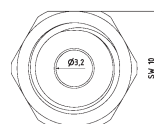
Adapterstück M 6 x 1
 adaptor piece M 6 x 1 metric thread

0-AD-81

Adapterstück M 8 x 1
 adaptor piece M 8 x 1 metric thread

0-AD-M8

Adapterstück M 8 x 1,25
 adaptor piece M 8 x 1,25 metric thread


0-AD-M101

Adapterstück M 10 x 1
 adaptor piece M 10 x 1 metric thread

0-AD-101.25

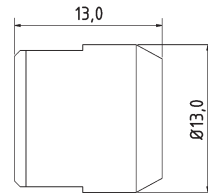
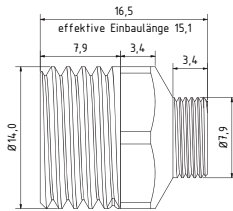
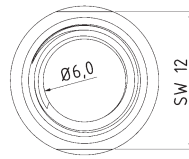
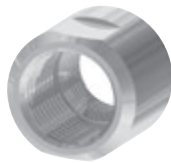
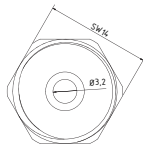
Adapterstück M 10 x 1,25
 adaptor piece M 10 x 1,25 metric thread

0-AD-M10

Adapterstück M 10 x 1,5
 adaptor piece M 10 x 1,5 metric thread

Type0 [1/8" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



0-AD-141

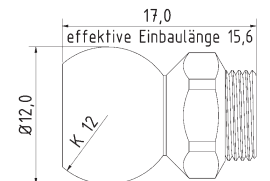
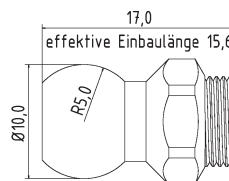
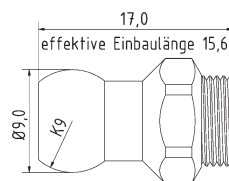
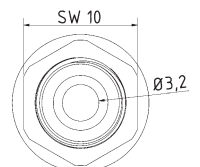
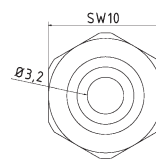
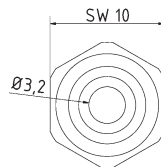
Adapterstück M 14 x 1

adaptor piece M 14 x 1 metric thread

0-AD-0GE-18

Adapterstück für Fremddüsen mit Außengewinde, IG 0-GE auf IG 1/8"

adapter piece for external nozzles with male thread, female 0-GE to female 1/8"



0-AD-K9

Adapterstück Kugel Ø 9 mm

adaptor piece ball Ø 9 mm

0-AD-K10

Adapterstück Kugel Ø 10 mm

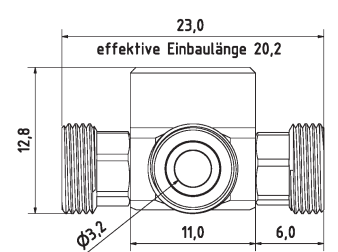
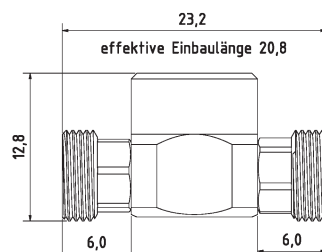
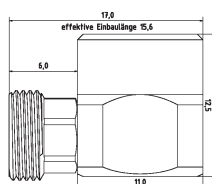
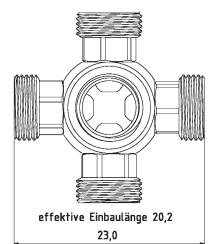
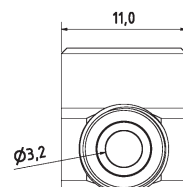
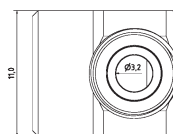
adaptor piece ball Ø 10 mm

0-AD-K12

Adapterstück Kugel Ø 12 mm (z.B. MORI SEIKI)

adaptor piece ball Ø 12 mm (e.g. MORI SEIKI)

Winklelemente | Elbows



0-WV-1

Winkelverschraubung

elbow piece fixed

0-WV-2

T-Stück

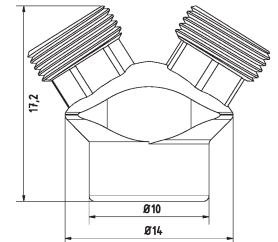
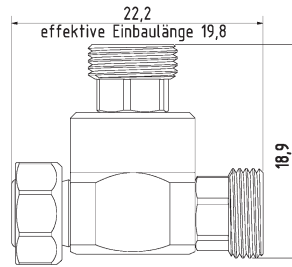
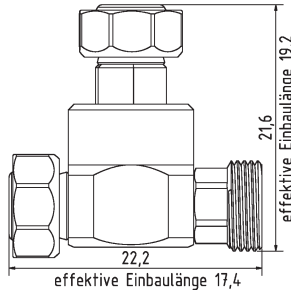
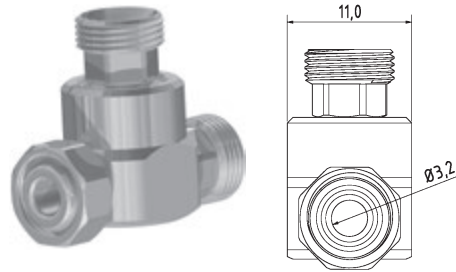
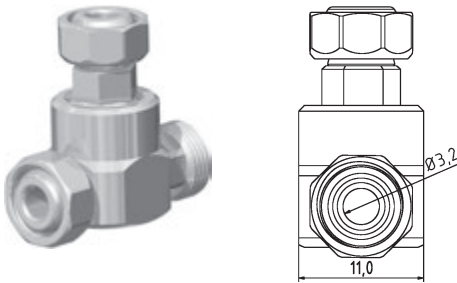
T-piece fixed

0-WV-4

Mehrfachverteiler

Manifold

Winkelelemente | Elbows



0-WV-R

Verschlussstück zu Ringdüse
locking tappet to ring nozzle

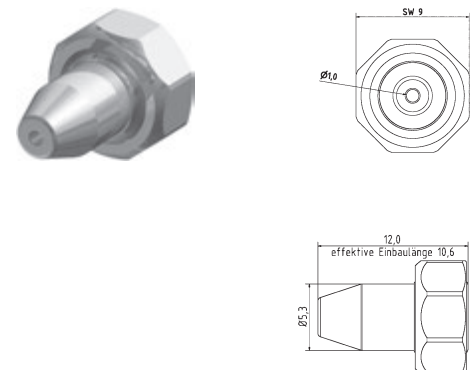
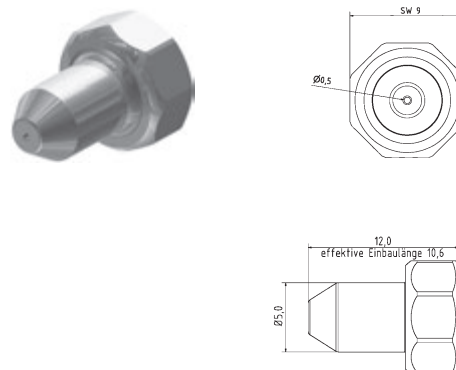
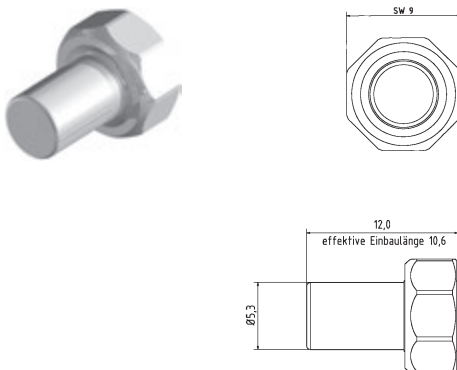
0-WV-R-2K

T-Stück für Ring und Düse
T-piece for ring and nozzle

0-YV

Y-Stück
Y-piece fixed

Düsen | Nozzles



0-DU-0

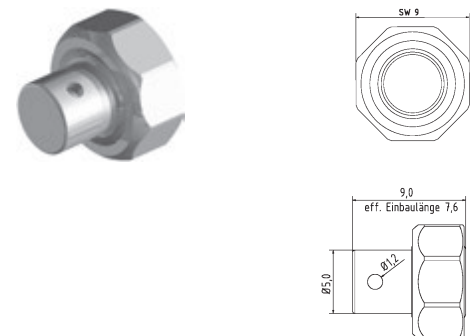
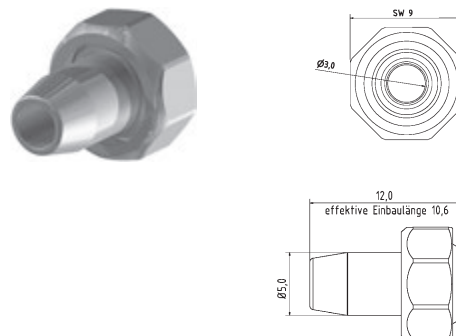
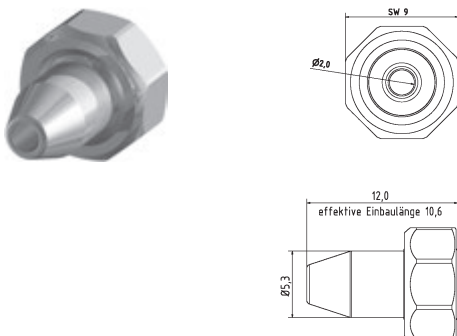
Düse ohne Bohrung
nozzle straight without drilling

0-DU-05

Düse gerade Bohrung Ø 0,5 mm
nozzle straight Ø 0,5 mm

0-DU-10

Düse gerade Bohrung Ø 1,0 mm
nozzle straight Ø 1,0 mm



0-DU-20

Düse gerade Bohrung Ø 2,0 mm
nozzle straight Ø 2,0 mm

0-DU-30

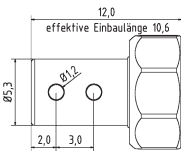
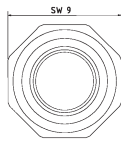
Düse gerade Bohrung Ø 3,0 mm
nozzle straight Ø 3,0 mm

0-DU-90-1

Düse 90° Bohrung 1 x Ø 1,2 mm
nozzle 90° drill hole 1 x Ø 1,2 mm

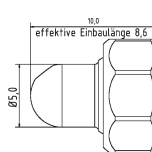
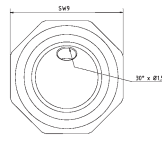
Type0 [1/8" System]

Düsen | Nozzles



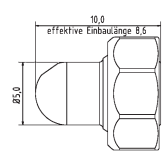
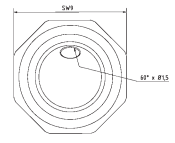
0-DU-90-2

Düse 90° Bohrung 2 x Ø 1,2 mm
nozzle 90° drill hole 2 x Ø 1,2 mm



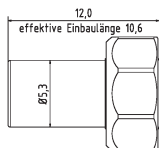
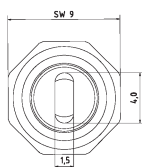
0-DU-30-1.5

Düse 30° Bohrung Ø 1,5 mm
nozzle 30° drill hole Ø 1,5 mm



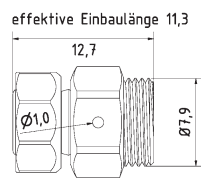
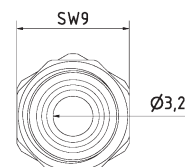
0-DU-60-1.5

Düse 60° Bohrung Ø 1,5 mm
nozzle 60° drill hole Ø 1,5 mm



0-DU-415

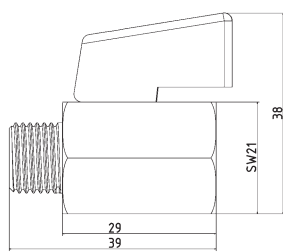
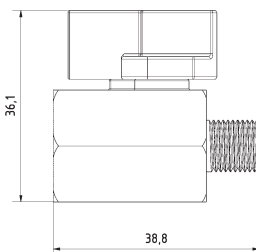
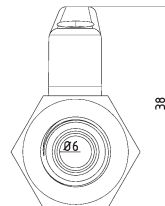
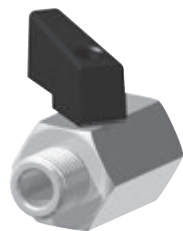
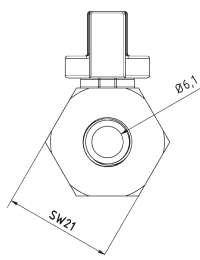
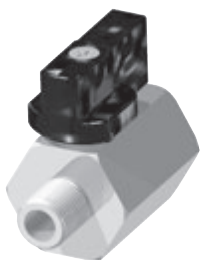
Düse mit Schlitz 4 x 1,5 mm
nozzle straight with slit 4 x 1,5 mm



0-DU-R

Ringdüsen Element Bohrung Ø 1,0 mm
ring nozzle element drill hole Ø 1,0 mm

Zubehör | Accessories



KH-18

Mini-Kugelhahn G1/8" Messing Verchromt
mini ball valve thread 1/8" brass chrome-plated

KH-18-SS

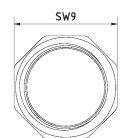
Mini-Kugelhahn G1/8" Edelstahl
mini ball valve thread 1/8" stainless steal

KH-14

Mini-Kugelhahn G1/4" Messing Verchromt
mini ball valve thread 1/4" brass chrome-plated

KH-14-SS

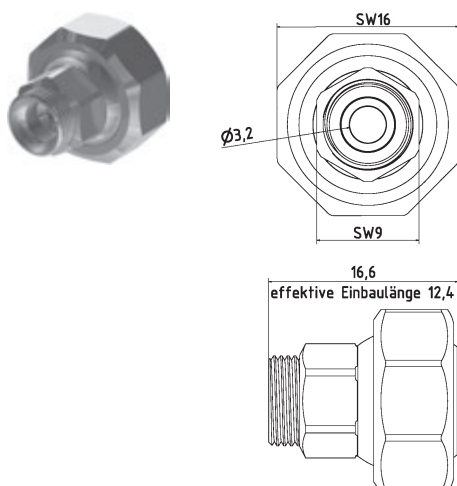
Mini-Kugelhahn G1/4" Edelstahl
mini ball valve thread 1/4" stainless steal



0-MU

Mutter Standard
screw nut (default)

Zubehör | Accessories



RE-1-0

Reduktion Typ1 auf Typ0
reduction Type1 to Type0



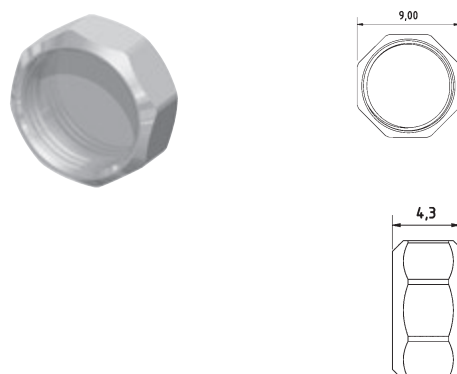
SW-6

Schlüssel aus Stahl SW6
open end wrench SW6



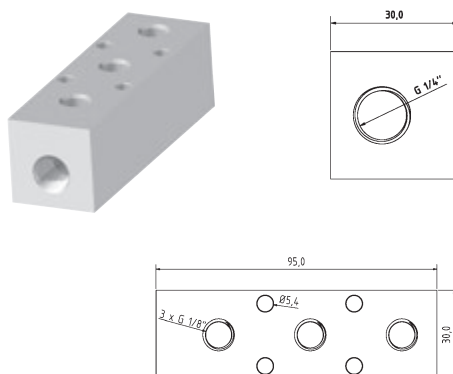
SW-9

Schlüssel aus Stahl SW9
open end wrench SW9



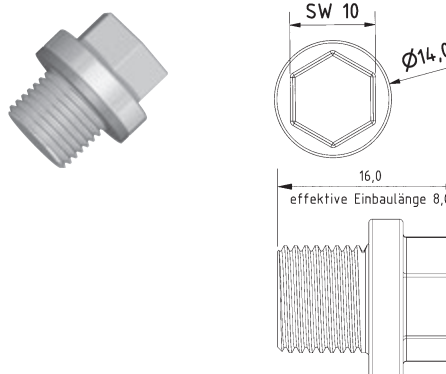
0-VK

Verschlusskappe Typ0
cap type0



VB-3-18

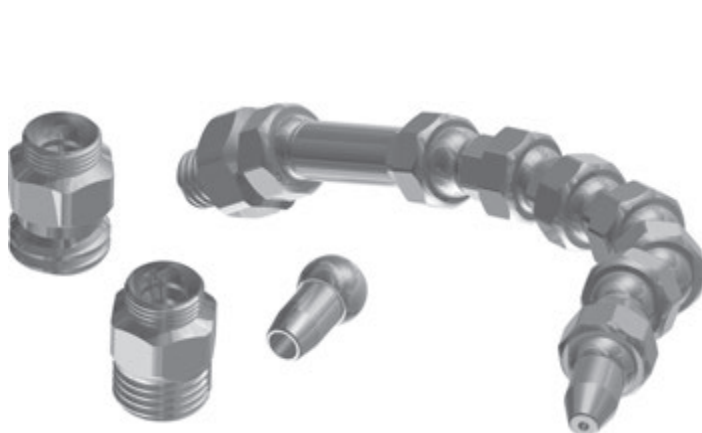
Verteilerblock Eingang Stirnseite G1/4"
manifold block entrance front end 1/4"



VB-3-18-BS

Blindstopfen G1/8"
blank plug with thread 1/8"

Grundset | Basic Set



0-GS

Grundset Typ0 1/8" Zoll System L = 110 mm

basic set Type0 1/8" system l = 110 mm

6 x 0-GE, 1 x 0-GE-25, 1 x 0-AD-18, 1 x 0-AD-M6, 1 x 0-AD-101, 1 x 0-DU-10

1 x 0-DU-30, 1 x SW-6, 1 x SW-9



0-GS-R

Ringdüsen Set Ø = 60 mm

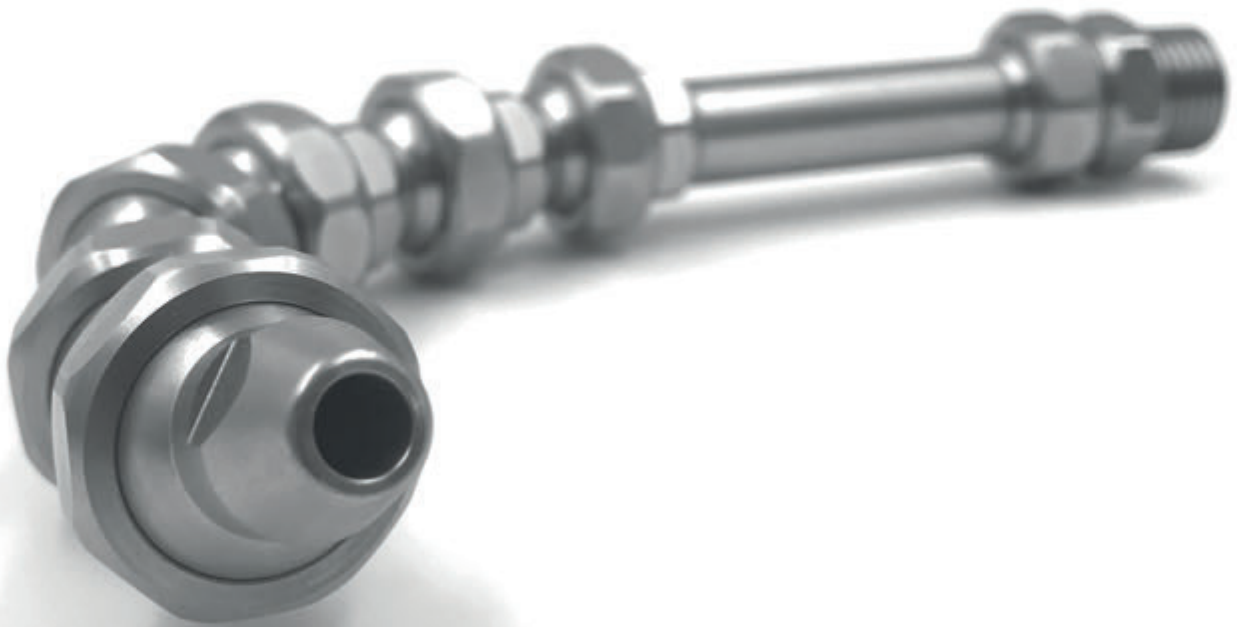
(1 x 0-WV-R, 20 x 0-DU-R)

ring nozzle set Ø = 60 mm

(1 x 0-WV-R, 20 x 0-DU-R)

PRODUCT OVERVIEW

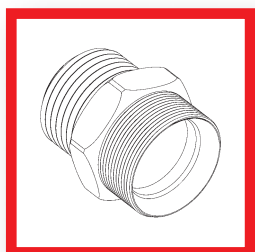
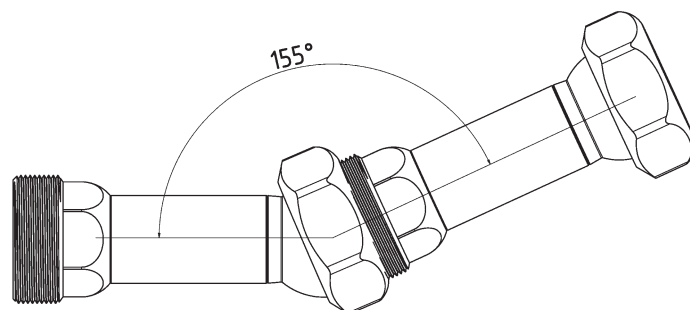
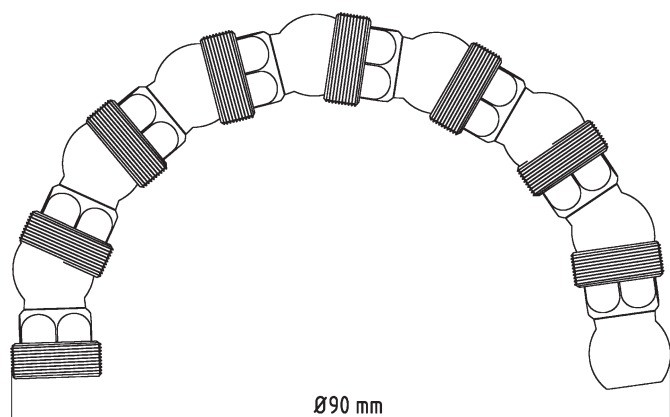
Type1 [1/4"]



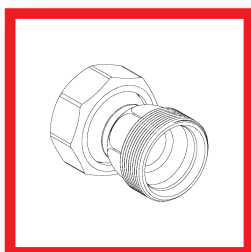
The Type1 system is designed for all machine applications with a maximum flow rate of ± 170 l/min. It includes round nozzles in sizes ranging from $\varnothing 1.6$ mm to $\varnothing 5.0$ mm, as well as a variety of flat spray nozzles and multi-hole nozzles, making it a standard for any machine. A comprehensive range of machine adapters, including G1/4", G3/8", metric adapters M8x1.0 and M14x1.5, and ball adapters, is available. Additionally, the system offers quick couplings and a variety of base and angle elements, ensuring a smooth installation.

TECHNICAL SPECIFICATIONS:

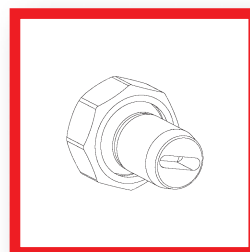
- Size Type1 (1/4")
- Passage Ø 5,8 mm
- Pressure resistant over 100 bar
- Application range -100°C to +300°C
- Thread (Elements) M 14 x 1
- Material 1.4305 (V2A)



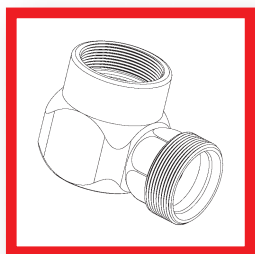
MACHINE ADAPTER



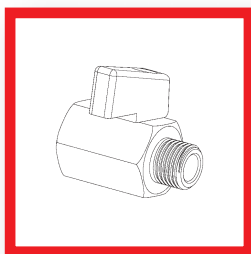
BASIC ELEMENTS



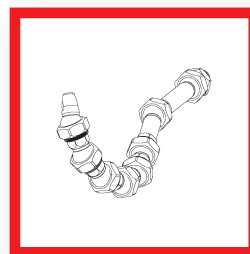
NOZZLES



ELBOWS



ACCESSORIES

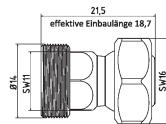
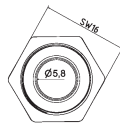


BASIC SET Type1

Type1 [1/4" System]

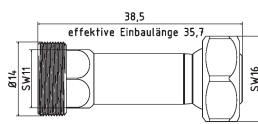
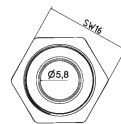
Hirt
LINE

Grundelemente | Basic Elements



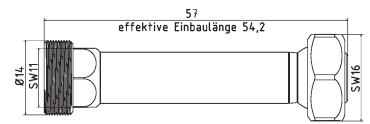
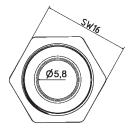
1-GE

$l = 21,5 \text{ mm}$ effektiv $l = 18,7 \text{ mm}$
 $l = 21,5 \text{ mm}$ effective $l = 18,7 \text{ mm}$



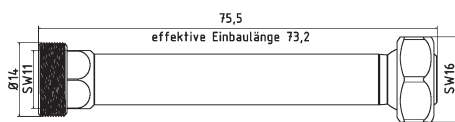
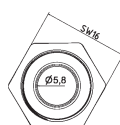
1-GE-2

$l = 38,5 \text{ mm}$ effektiv $l = 35,7 \text{ mm}$
 $l = 38,5 \text{ mm}$ effective $l = 35,7 \text{ mm}$



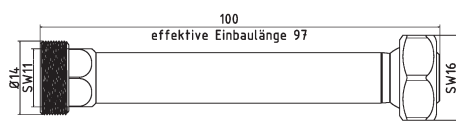
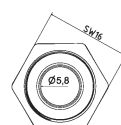
1-GE-3

$l = 57 \text{ mm}$ effektiv $l = 54,2 \text{ mm}$
 $l = 57 \text{ mm}$ effective $l = 54,2 \text{ mm}$



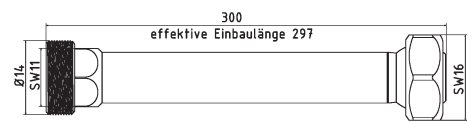
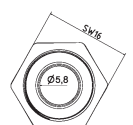
1-GE-4

$l = 75,5 \text{ mm}$ effektiv $l = 73,2 \text{ mm}$
 $l = 75,5 \text{ mm}$ effective $l = 73,2 \text{ mm}$



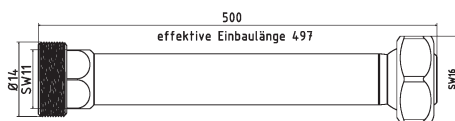
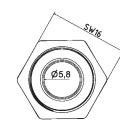
1-GE-100

$l = 100 \text{ mm}$ effektiv $l = 97 \text{ mm}$
 $l = 100 \text{ mm}$ effective $l = 97 \text{ mm}$



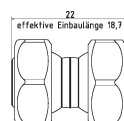
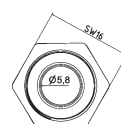
1-GE-300

$l = 300 \text{ mm}$ effektiv $l = 297 \text{ mm}$
 $l = 300 \text{ mm}$ effective $l = 297 \text{ mm}$



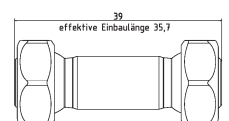
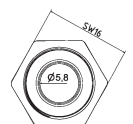
1-GE-500

$l = 500 \text{ mm}$ effektiv $l = 497 \text{ mm}$
 $l = 500 \text{ mm}$ effective $l = 497 \text{ mm}$



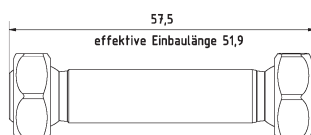
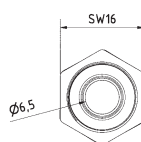
1-GE-DK Special element

$l = 22 \text{ mm}$ effektiv $l = 18,7 \text{ mm}$ Doppelkugel
 $l = 22 \text{ mm}$ effective $l = 18,7 \text{ mm}$ double ball



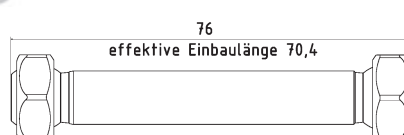
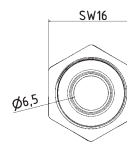
1-GE-2-DK Special element

$l = 39 \text{ mm}$ effektiv $l = 35,7 \text{ mm}$ Doppelkugel
 $l = 39 \text{ mm}$ effective $l = 35,7 \text{ mm}$ double ball



1-GE-3-DK Special element

$l = 57,5 \text{ mm}$ effektiv $l = 51,9 \text{ mm}$ Doppelkugel
 $l = 57,5 \text{ mm}$ effective $l = 51,9 \text{ mm}$ double ball



1-GE-4-DK Special element

$l = 76 \text{ mm}$ effektiv $l = 70,4 \text{ mm}$ Doppelkugel
 $l = 76 \text{ mm}$ effective $l = 70,4 \text{ mm}$ double ball

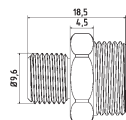


1-GE-2-DKS Special element

$l = 37,3 \text{ mm}$ effektiv $l = 34,4 \text{ mm}$
beidseitig Kalotte
 $l = 37,3 \text{ mm}$ effektiv $l = 34,4 \text{ mm}$
both sides Spherical cap

Grundelemente | Basic Elements

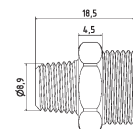
Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



1-AD-18

Adapterstück G 1/8"

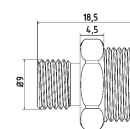
adaptor piece thread 1/8"



1-AD-18-PT

Adapterstück G 1/8" PT (Withworth-Gewinde)

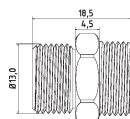
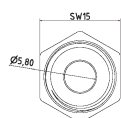
adaptor piece thread 1/8" PT (NPT thread)



1-AD-18-U

Adapterstück G 1/8" U (Gewinde unterschritten)

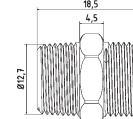
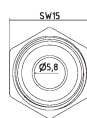
adaptor piece thread 1/8" U (Undercut thread)



1-AD-14

Adapterstück G 1/4"

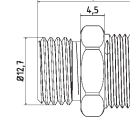
adaptor piece thread 1/4"



1-AD-14-PT

Adapterstück G 1/4" PT (Withworth-Gewinde)

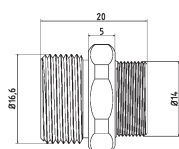
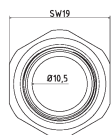
adaptor piece thread 1/4" PT (NPT thread)



1-AD-14-U

Adapterstück G 1/4" U (Gewinde unterschritten)

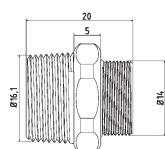
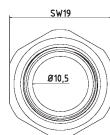
adaptor piece thread 1/4" U (Undercut thread)



1-AD-38

Adapterstück G 3/8"

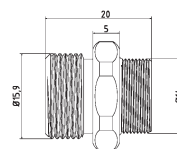
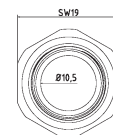
adaptor piece thread 3/8"



1-AD-38-PT

Adapterstück G 3/8" PT (Withworth-Gewinde)

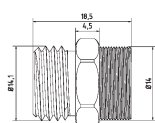
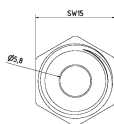
adaptor piece thread 3/8" PT (NPT thread)



1-AD-38-U

Adapterstück G 3/8" U (Gewinde unterschritten)

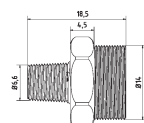
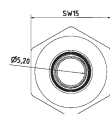
adaptor piece thread 3/8" U (Undercut thread)



1-AD-9-16-18UNF

Adapterstück G 9/16"

adaptor piece thread 9/16"



1-AD-1-16PT

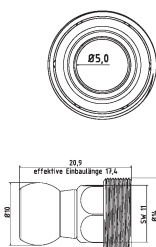
Adapterstück G 1/16" PT (Withworth-Gewinden)

adaptor piece thread 1/16" PT (NPT thread)

Type1 [1/4" System]

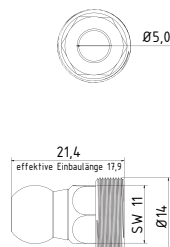
Hirt
LINE

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



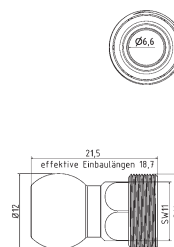
1-AD-K10

Adapterstück Kugel Ø 10 mm (z.B. Traub)
adaptor piece ball Ø 10 mm (e.g. Traub)



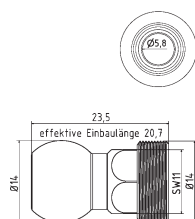
1-AD-K11

Adapterstück Kugel Ø 11 mm
adaptor piece ball Ø 11 mm



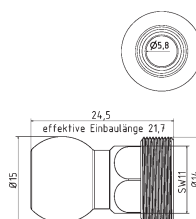
1-AD-K12

Adapterstück Kugel Ø 12 mm (z.B. MORI SEIKI)
adaptor piece ball Ø 12 mm (e.g. MORI SEIKI)



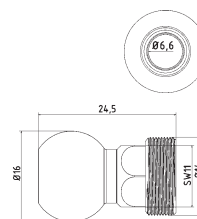
1-AD-K14

Adapterstück Kugel Ø 14 mm (z.B. Wenk)
adaptor piece ball Ø 14 mm (e.g. Wenk)



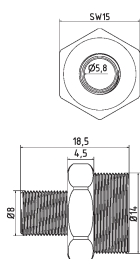
1-AD-K15

Adapterstück Kugel Ø 15 mm (z.B. Okuma)
adaptor piece ball Ø 15 mm (e.g. Okuma)



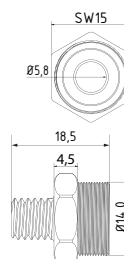
1-AD-K16

Adapterstück Kugel Ø 16 mm (z.B. Okuma)
adaptor piece ball Ø 16 mm (e.g. Okuma)



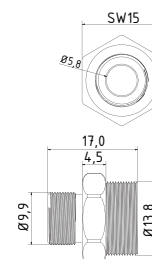
1-AD-81

Adapterstück M 8 x 1
adaptor piece M 8 x 1 metric thread



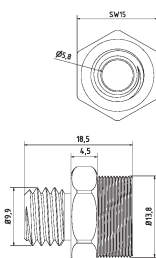
1-AD-8125

Adapterstück M 8 x 1,25
adaptor piece M 8 x 1,25 metric thread



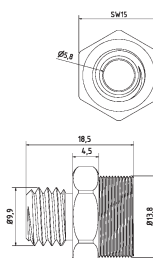
1-AD-100.5

Adapterstück M 10 x 0,5
adaptor piece M 10 x 0,5 metric thread



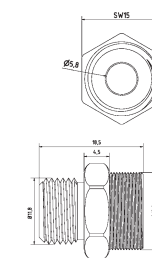
1-AD-101

Adapterstück M 10 x 1
adaptor piece M 10 x 1 metric thread



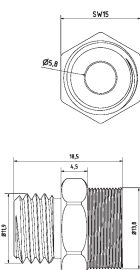
1-AD-101.5

Adapterstück M 10 x 1,5
adaptor piece M 10 x 1,5 metric thread



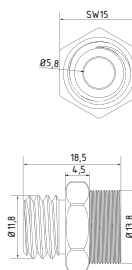
1-AD-121

Adapterstück M 12 x 1
adaptor piece M 12 x 1 metric thread



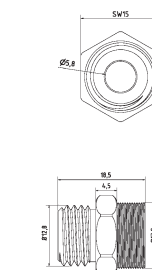
1-AD-121.5

Adapterstück M 12 x 1,5
adaptor piece M 12 x 1,5 metric thread



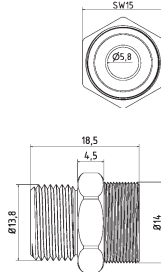
1-AD-121.75

Adapterstück M 12 x 1,75
adaptor piece M 12 x 1,75 metric thread

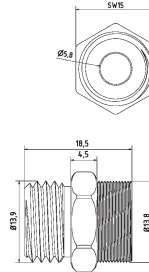


1-AD-131.5

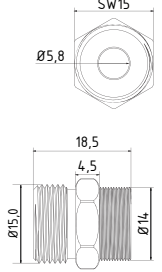
Adapterstück M 13 x 1,5
adaptor piece M 13 x 1,5 metric thread


1-AD-141

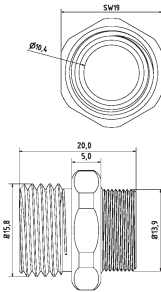
Adapterstück M 14 x 1
adaptor piece M 14 x 1 metric thread


1-AD-141.5

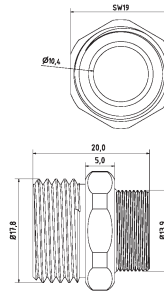
Adapterstück M 14 x 1,5
adaptor piece M 14 x 1,5 metric thread


1-AD-151

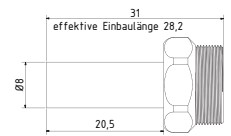
Adapterstück M 14 x 1
adaptor piece M 15 x 1 metric thread


1-AD-161.5

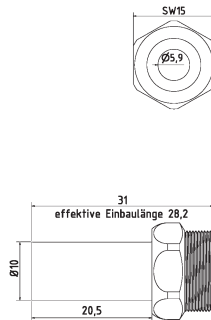
Adapterstück M 16 x 1,5
adaptor piece M 16 x 1,5 metric thread


1-AD-181.5

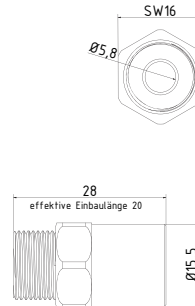
Adapterstück M 18 x 1,5
adaptor piece M 18 x 1,5 metric thread


1-AD-8L

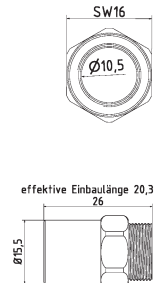
Adapterstück zu Hydraulik-Verschraubung 8 L
adaptor piece to hydraulic system 8 L


1-AD-10L

Adapterstück zu Hydraulik-Verschraubung 10 L
adaptor piece to hydraulic system 10 L


1-AD-I121-G1/4

Adapterstück IG M 12 x 1 zu AG 1/4"
adaptor piece M 12 x 1 female thread to 1/4" male thread


1-AD-I121-Typ1

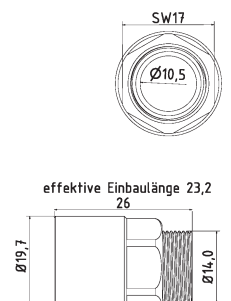
Adapterstück M 12 x 1 Innengewinde
 auf Hirt-Line Typ1 Aussengewinde
adaptor piece M 12 x 1 female thread to Hirt-Line type1 male thread


1-AD-I121.5-Typ1

Adapterstück M 12 x 1,5 Innengewinde
 auf Hirt-Line Typ1 Aussengewinde
adaptor piece M 12 x 1,5 female thread to Hirt-Line type1 male thread


1-AD-I141.5-Typ1

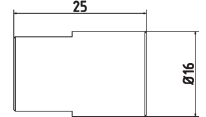
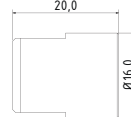
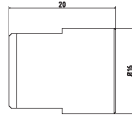
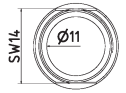
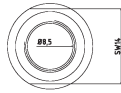
Adapterstück M 14 x 1,5 Innengewinde
 auf Hirt-Line Typ1 Aussengewinde
adaptor piece M 14 x 1,5 female thread to Hirt-Line type1 male thread


1-AD-I161.5-Typ1

Adapterstück M 16 x 1,5 Innengewinde auf
 Hirt-Line Typ1 Aussengewinde
adaptor piece M 16 x 1,5 female thread to Hirt-Line type1 male thread

Type1 [1/4" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



1-AD-1GE-18

Adapterstück für Fremddüsen mit Außengewinde, IG 1-GE auf IG 1/8"

adapter piece for external nozzles with male thread, female 1-GE to female 1/8"

1-AD-1GE-18-PT

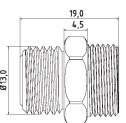
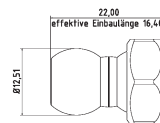
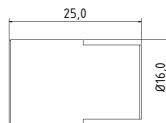
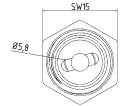
Adapterstück / Muffe IG 1-GE zu IG 1/8" PT (Withworth-Gewinden)

adapter piece for external nozzles with male thread, female 1-GE to female 1/8" (NPT thread)

1-AD-1GE-14

Adapterstück für Fremddüsen mit Außengewinde, IG 1-GE auf IG 1/4"

adapter piece for external nozzles with male thread, female 1-GE to female 1/4"



1-AD-1GE-14-PT

Adapterstück / Muffe IG 1-GE zu IG 1/4" PT (Withworth-Gewinden)

adapter piece for external nozzles with male thread, female 1-GE to female 1/4" (NPT thread)

1-AD-LL

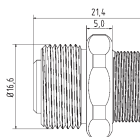
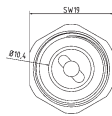
Adapterstück Loc-Line Typ1

adapter piece Loc-Line Type1

1-AD-RSV-14

Adapterstück mit Rückschlagventil G1/4"

adapter piece with check valve G1/4"

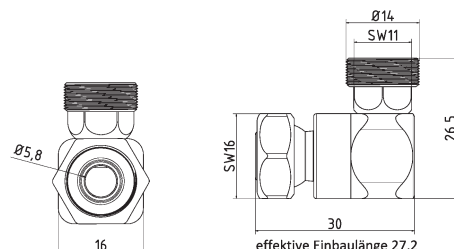
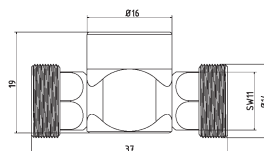
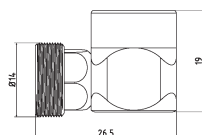
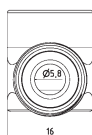


1-AD-RSV-38

Adapterstück mit Rückschlagventil G3/8"

adapter piece with check valve G3/8"

Winkelemente | Elbows



1-WV-1

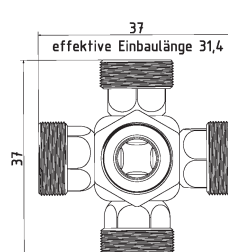
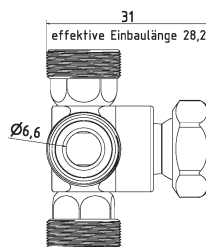
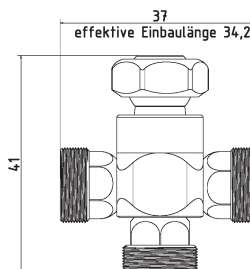
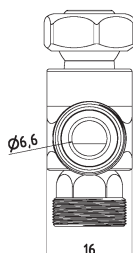
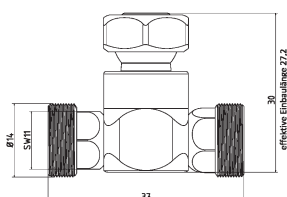
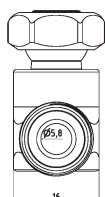
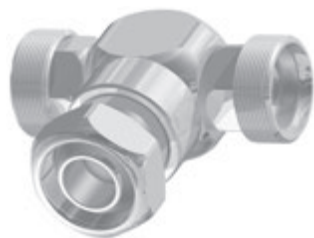
Winkelverschraubung
elbow piece fixed

1-WV-2

T-Stück
T-piece fixed

1-WV-1K

Winkelverschraubung mit Kugelstück
elbow piece moveable



1-WV-2K

T-Stück mit Kugelstück
T-piece moveable

1-WV-3K

Kreuz-Stück mit Kugelstück
cross piece moveable

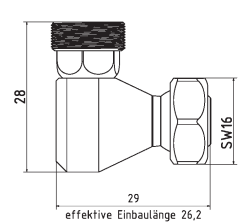
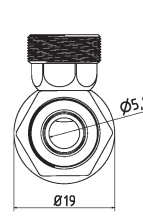
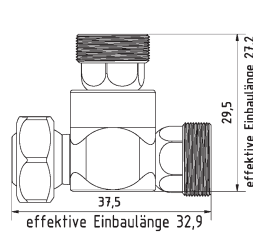
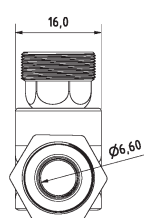
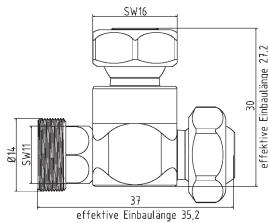
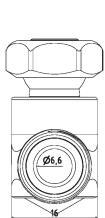
1-WV-4K

Stern-Stück mit Kugelstück
star piece moveable

Type1 [1/4" System]

Hirt
LINE

Winkelemente | Elbows



1-WV-R

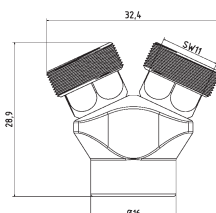
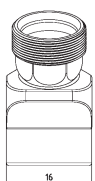
Verschlussstück zu Ringdüse
locking tappet to ring nozzle

1-WV-R-2K

T-Stück für Ring und Düse
T-piece for ring and nozzle

1-WI

Winkelstück für Leitungen
corner piece for pipelines

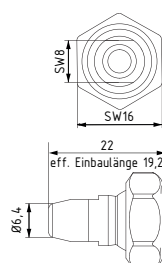


1-YV

Y-Stück 50°
Y-piece 50°

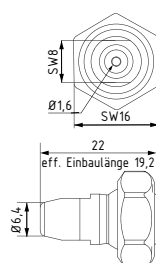


Düsen | Nozzles



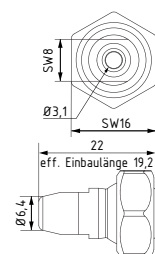
1-DU-0

Düse ohne Bohrung
nozzle straight without drilling



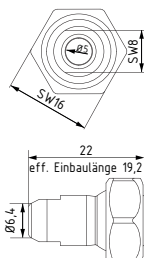
1-DU-16

Düse gerade Bohrung Ø 1,6 mm
nozzle straight Ø 1,6 mm



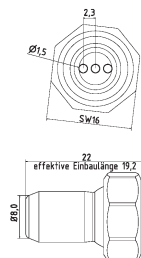
1-DU-32

Düse gerade Bohrung Ø 3,2 mm
nozzle straight Ø 3,2 mm



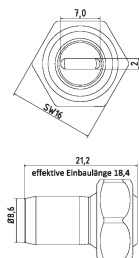
1-DU-50

Düse gerade Bohrung Ø 5,0 mm
nozzle straight Ø 5,0 mm



1-DU-3-16

Düse gerade Bohrung 3 x Ø 1,6 mm
nozzle straight 3 x Ø 1,6 mm



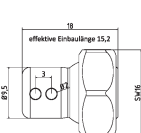
1-DU-72

Düse mit Schlitz 7 x 2,0 mm
nozzle straight with slit 7 x 2,0 mm



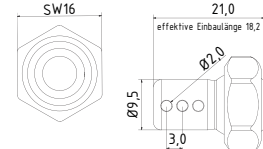
1-DU-90-1

Düse 90° Bohrung 1 x Ø 2 mm
nozzle 90° drill hole 1 x Ø 2 mm



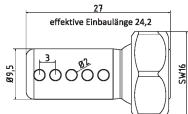
1-DU-90-2

Düse 90° Bohrung 2 x Ø 2 mm
nozzle 90° drill hole 2 x Ø 2 mm



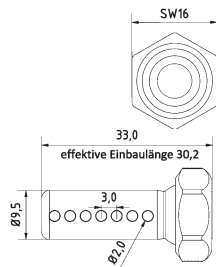
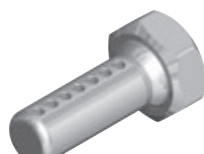
1-DU-90-3

Düse 90° Bohrung 3 x Ø 2 mm
nozzle 90° drill hole 3 x Ø 2 mm



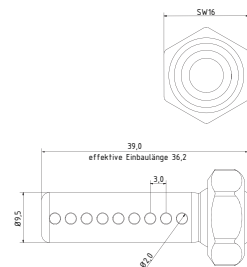
1-DU-90-5

Düse 90° Bohrung 5 x Ø 2 mm
nozzle 90° drill hole 5 x Ø 2 mm



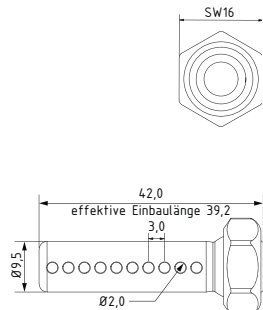
1-DU-90-7

Düse 90° Bohrung 7 x Ø 2 mm
nozzle 90° drill hole 7 x Ø 2 mm



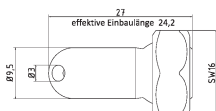
1-DU-90-9

Düse 90° Bohrung 9 x Ø 2 mm
nozzle 90° drill hole 9 x Ø 2 mm



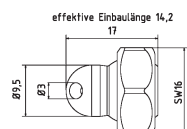
1-DU-90-10

Düse 90° Bohrung 10 x Ø 2 mm
nozzle 90° drill hole 10 x Ø 2 mm



1-DU-30

Düse 30° Bohrung Ø 3 mm
nozzle 30° drill hole Ø 3 mm



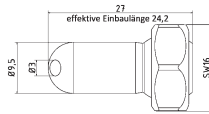
1-DU-30-EK

Düse 30° Bohrung Ø 3 mm extra kurz
nozzle 30° drill hole Ø 3 mm extra short

Type1 [1/4" System]

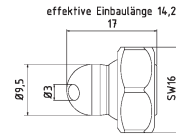
Hirt
LINE

Düsen | Nozzles



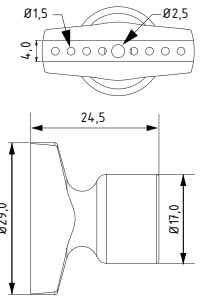
1-DU-60

Düse 60° Bohrung Ø 3 mm
nozzle 60° drill hole Ø 3 mm



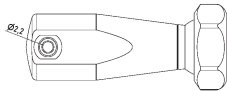
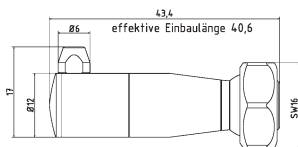
1-DU-60-EK

Düse 60° Bohrung Ø 3 mm extra kurz
nozzle 60° drill hole Ø 3 mm extra short



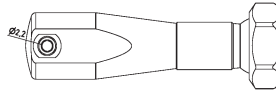
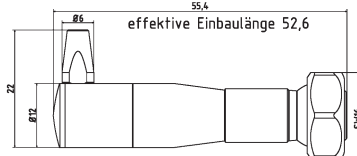
1-DU-BL

Düse Breit mit Bohrungen 8 x Ø 1,5 mm,
1 x Ø 2,5 mm
nozzle broadly with drillings 8 x Ø 1,5 mm,
1 x Ø 2,5 mm



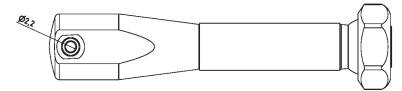
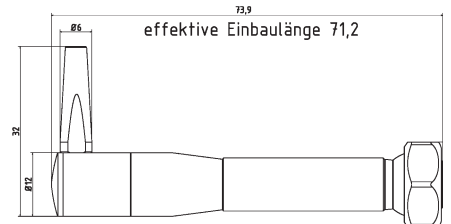
1-HA-DU

Halterung Düse klein l = 40 inkl. 3 Düsen
small nozzle holder l = 40 incl. 3 nozzles



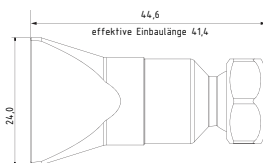
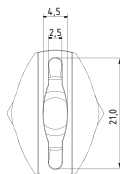
1-HA-DU-2

Halterung Düse klein l = 55 inkl. 3 Düsen
small nozzle holder l = 55 incl. 3 nozzles



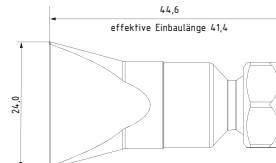
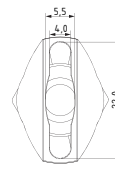
1-HA-DU-3

Halterung Düse klein l = 70 inkl. 3 Düsen
small nozzle holder l = 70 incl. 3 nozzles



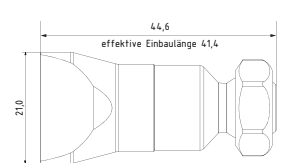
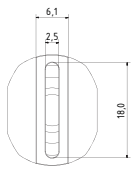
1-DU-SL-SS

Flachdüse Breit mit Schlitz 21 x 2,5 mm
Streustrahl
flat nozzle broadly with slit 21 x 2,5 mm
scattered beam



1-DU-SL-25

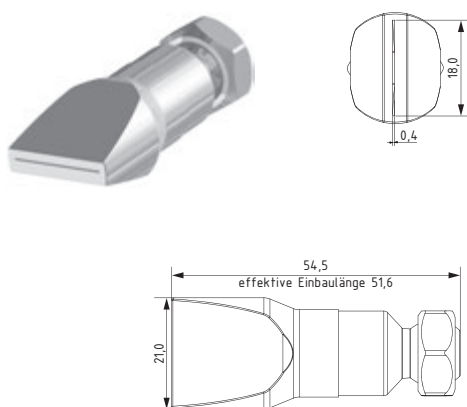
Flachdüse Breit mit Schlitz 22 x 4,0 mm
Streustrahl zum Schwemmen
flat nozzle broadly with slit 22 x 4,0 mm
scattered beam



1-DU-SL-GS

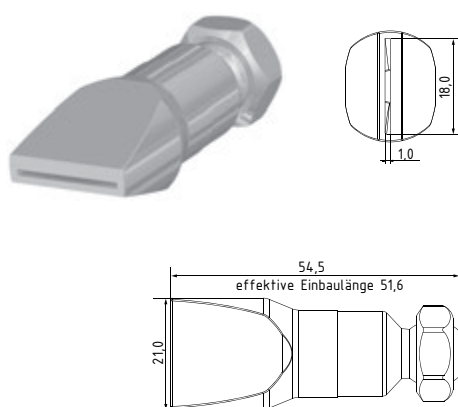
Flachdüse Breit mit Schlitz 18 x 2,5 mm
gerader Strahl
flat nozzle broadly with slit 18 x 2,5 mm
straight jet

Düsen | Nozzles



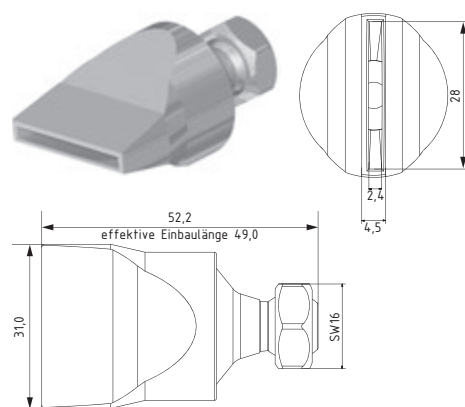
1-DU-SL-25-GS-0.4

Flachdüse Breit mit Schlitz 18 x 0,4 mm
gerader Strahl
flat nozzle broadly with slit 18 x 0,4 mm
straight jet



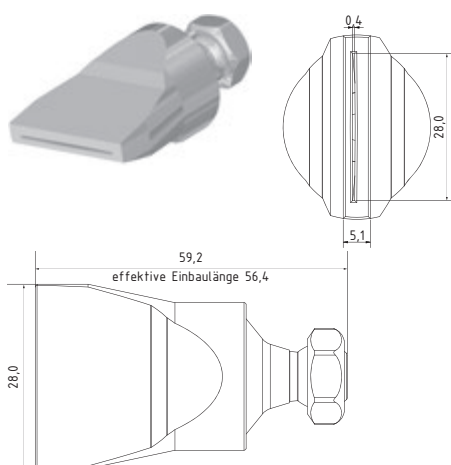
1-DU-SL-25-GS-1.0

Flachdüse Breit mit Schlitz 18 x 1,0 mm
gerader Strahl
flat nozzle broadly with slit 18 x 1,0 mm
straight jet



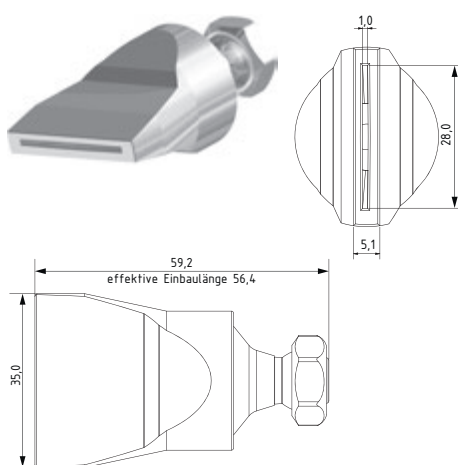
1-DU-SL-31-GS

Flachdüse Breit mit Schlitz 28 x 2,5 mm
gerader Strahl
flat nozzle broadly with slit 28 x 2,5 mm
straight jet



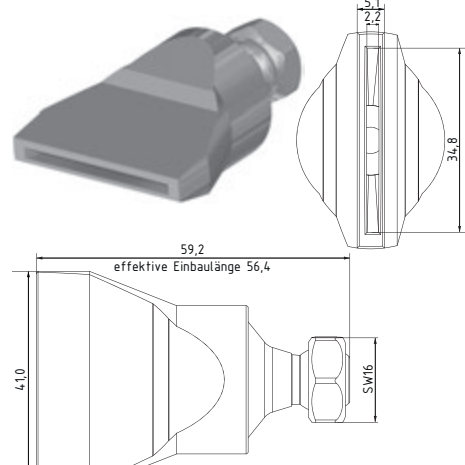
1-DU-SL-40-GS-0.4

Flachdüse Schlitzbreite 28 x 0,4 mm
gerader Strahl
flat nozzle broadly with slit 28 x 0,4 mm
straight jet



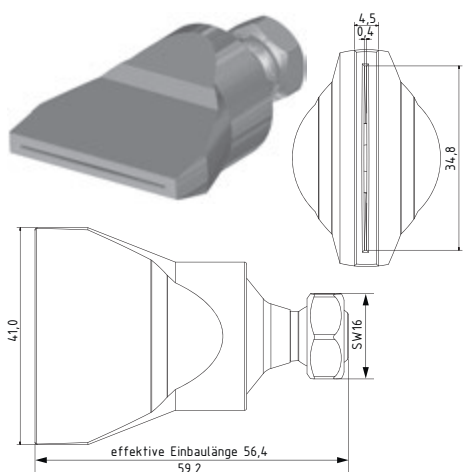
1-DU-SL-40-GS-1.0

Flachdüse Schlitzbreite 28 x 1,0 mm
gerader Strahl
flat nozzle broadly with slit 28 x 1,0 mm
straight jet



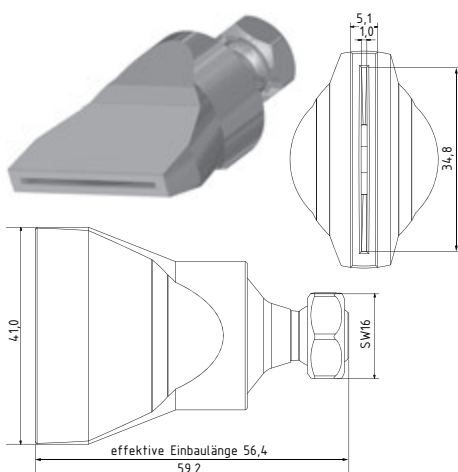
1-DU-SL-50-GS

Flachdüse Schlitzbreite 35 x 2,2 mm
gerader Strahl
flat nozzle broadly with slit 35 x 2,2 mm
straight jet



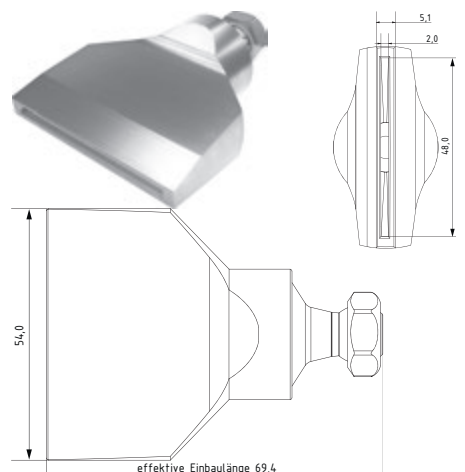
1-DU-SL-50-GS-0.4

Flachdüse Schlitzbreite 35 x 0,4 mm
gerader Strahl
flat nozzle broadly with slit 35 x 0,4 mm
straight jet



1-DU-SL-50-GS-1.0

Flachdüse Schlitzbreite 35 x 1,0 mm
gerader Strahl
flat nozzle broadly with slit 35 x 1,0 mm
straight jet



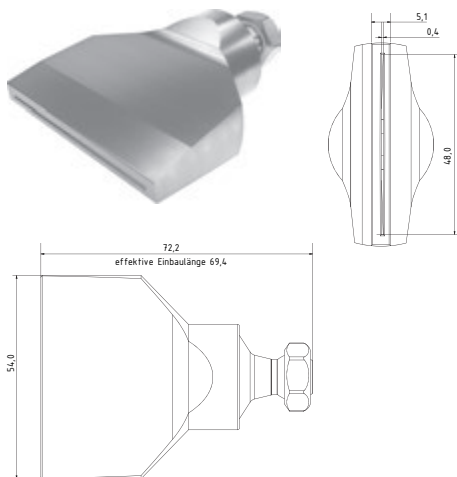
1-DU-SL-55-GS

Flachdüse Schlitzbreite 48 x 2,0 mm
gerader Strahl
flat nozzle broadly with slit 48 x 2,0 mm
straight jet

Type1 [1/4" System]

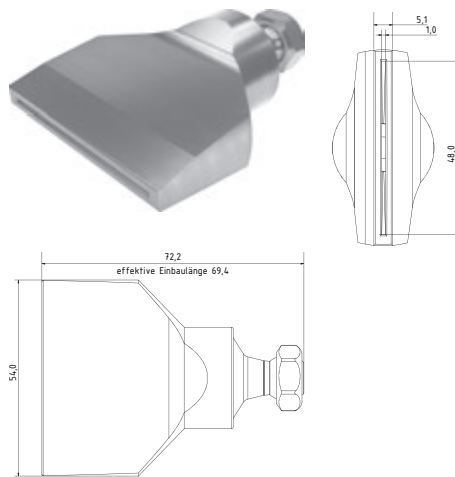
Hirt
LINE

Düsen | Nozzles



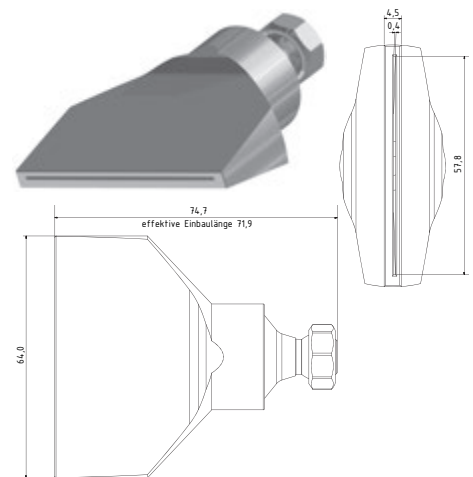
1-DU-SL-55-GS-0.4

Flachdüse Schlitzbreite 48 x 0,4 mm
gerader Strahl
flat nozzle broadly with slit 48 x 0,4 mm
straight jet



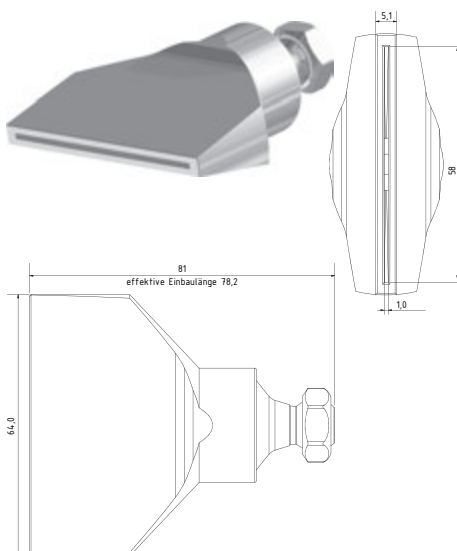
1-DU-SL-55-GS-1.0

Flachdüse Schlitzbreite 48 x 1,0 mm
gerader Strahl
flat nozzle broadly with slit 48 x 1,0 mm
straight jet



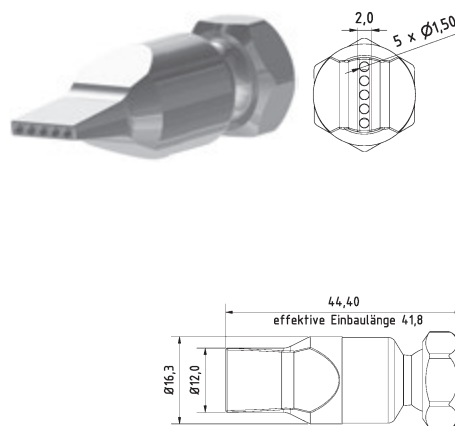
1-DU-SL-65-GS-0.4

Flachdüse Schlitzbreite 58 x 0,4 mm
gerader Strahl
flat nozzle broadly with slit 58 x 0,4 mm
straight jet



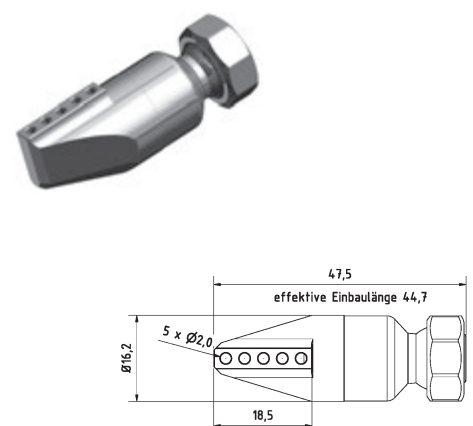
1-DU-SL-65-GS-1.0

Flachdüse Schlitzbreite 58 x 1,0 mm
gerader Strahl
flat nozzle broadly with slit 58 x 1,0 mm
straight jet



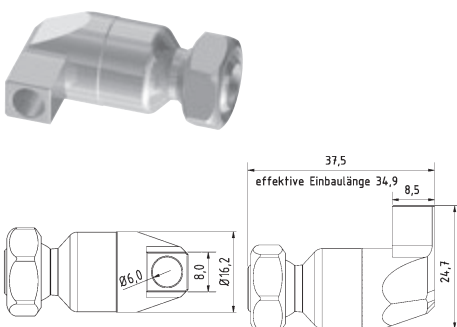
1-DU-LL-5-15

Düse gerade Bohrungen 5 x Ø 1,5 mm
nozzle straight drill hole 5 x Ø 1,5 mm



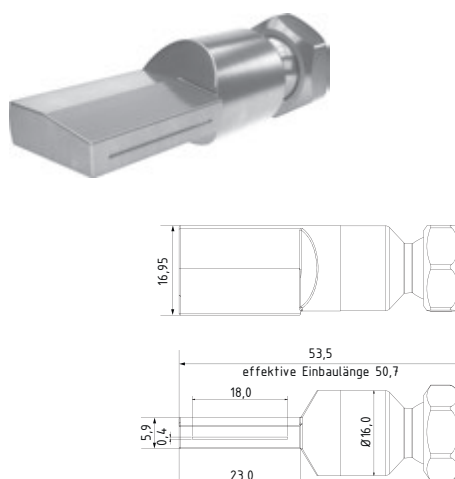
1-DU-LL-90-5-2

Düse 90° Bohrungen 5 x Ø 2 mm
nozzle 90° drill hole 5 x Ø 2 mm



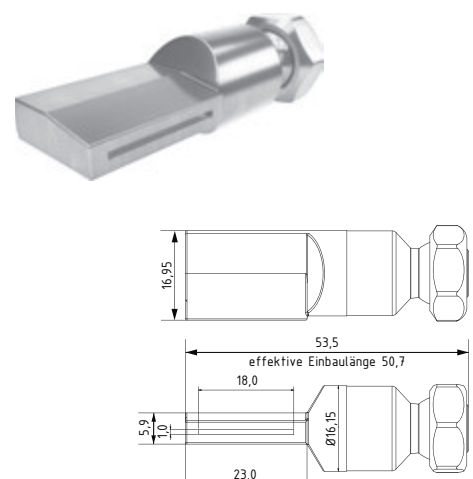
1-DU-LL-90-1-6

Düse 90° Bohrung 1 x Ø 6 mm
nozzle 90° drill hole 1 x Ø 6 mm



1-DU-I-SL-18-GS-0.4

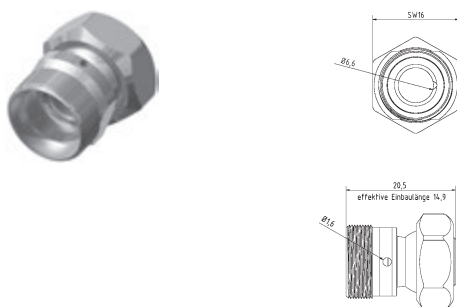
Innenschleifdüse Schlitzbreite 18 x 0,4 mm
gerader Strahl
Internal grinding nozzle with slit 18 x 0,4 mm
straight jet



1-DU-I-SL-18-GS-1.0

Innenschleifdüse Schlitzbreite 18 x 1,0 mm
gerader Strahl
Internal grinding nozzle with slit 18 x 1,0 mm
straight jet

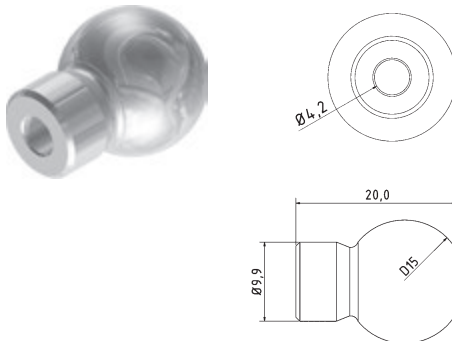
Düsen | Nozzles



1-DU-R

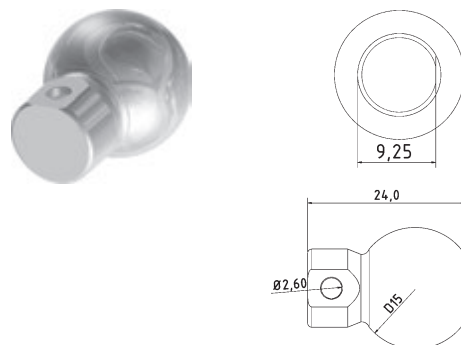
Ringdüsen Element Bohrung Ø 1,6 mm
ring nozzle element drill hole Ø 1,6 mm

Kugeldüsen | Ball Nozzles



1-DU-K15-4.2

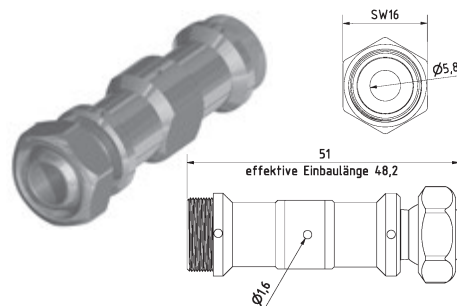
Düse für Werkzeughalter
 gerade Bohrung Ø 4,2 mm Kugel Ø 15 mm
*Nozzle for tool holder
 straight bore Ø 4,2 mm ball Ø 15 mm*



1-DU-K15-90-2.6

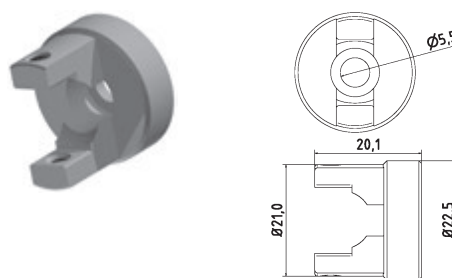
Düse für Werkzeughalter 90° Bohrung Ø 2,6 mm
 Kugel Ø 15 mm
*Nozzle for tool holder 90° bore Ø 2,6 mm
 ball Ø 15 mm*

Düsen und Halterungen | Nozzles and Holder



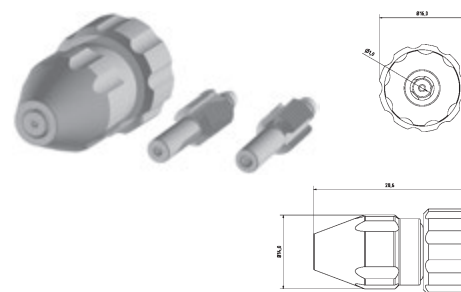
1-DU-EL3

Duschelement mit Bohrungen 3 x Ø 1,6 mm
shower element drillings 3 x Ø 1,6 mm



1-DU-ELH

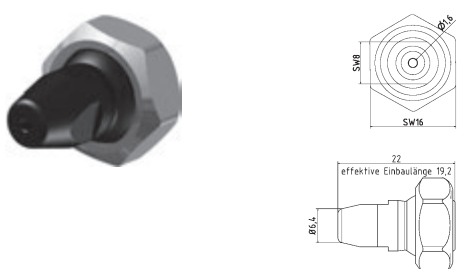
Halterung zu Duschelement (inkl. Feststellschrauben)
holder to shower element (incl. Screws)



1-DU-Mini

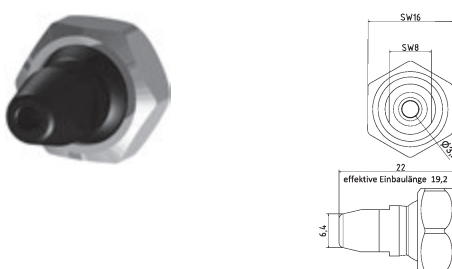
Düse Minimalmengenschmiersystem Set
 für 2 mm, 2,5 mm und 3 mm Schlauch
*nozzle minimum lubrication system set
 for 2 mm, 2,5 mm and 3 mm pipe*

Kunststoff-Düsen | Plastic Nozzles



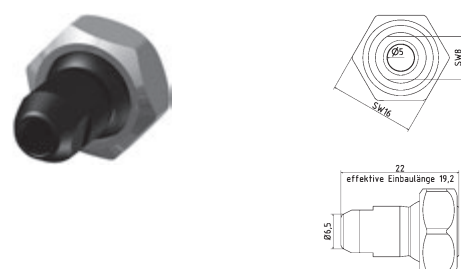
KU-1-DU-16

Kunststoff-Düse gerade Bohrung Ø 1,6 mm
plastic nozzle straight Ø 1,6 mm



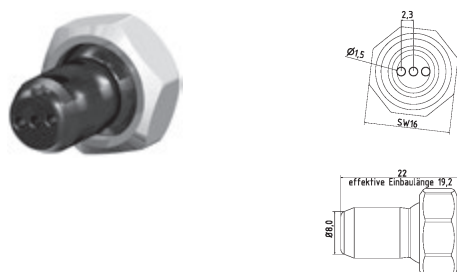
KU-1-DU-32

Kunststoff-Düse gerade Bohrung Ø 3,2 mm
plastic nozzle straight Ø 3,2 mm



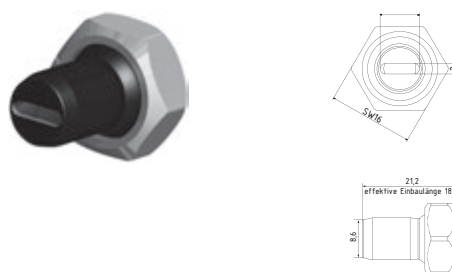
KU-1-DU-50

Kunststoff-Düse gerade Bohrung Ø 5,0 mm
plastic nozzle straight Ø 5,0 mm



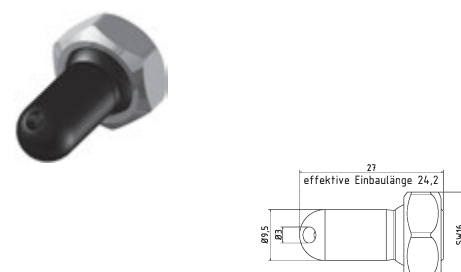
KU-1-DU-3-16

Kunststoff-Düse gerade Bohrung 3 x Ø 1,6 mm
plastic nozzle straight 3 x Ø 1,6 mm



KU-1-DU-72

Kunststoff-Düse mit Schlitz 7 x 2,0 mm
plastic nozzle straight with slit 7 x 2,0 mm



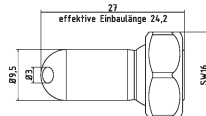
KU-1-DU-30

Kunststoff-Düse 30° Bohrung Ø 3 mm
plastic nozzle 30° drill hole Ø 3 mm

Type1 [1/4" System]

Hirt
LINE

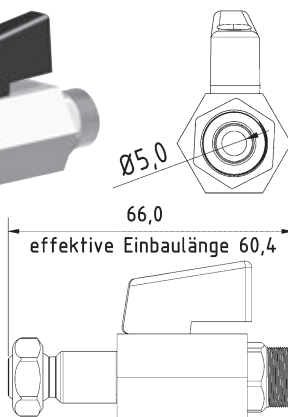
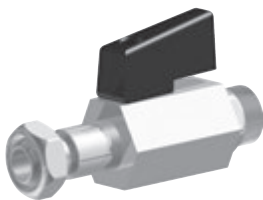
Kunststoff-Düsen | Plastic Nozzles



KU-1-DU-60

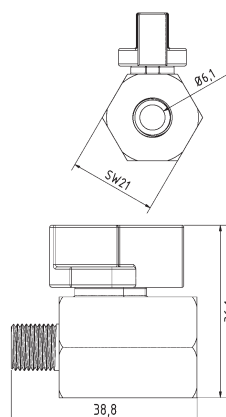
Kunststoff-Düse 60° Bohrung Ø 3 mm
plastic nozzle 60° drill hole Ø 3 mm

Zubehör | Accessories



1-KH-Z

Kugelhahn Zwischenelement Typ1
ball valve intermediate element type1

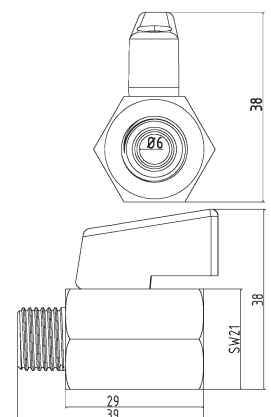


KH-18

Mini-Kugelhahn G1/8" Messing Verchromt
mini ball valve thread 1/8" brass chrome-plated

KH-18-SS

Mini-Kugelhahn G1/8" Edelstahl
mini ball valve thread 1/8" stainless steel

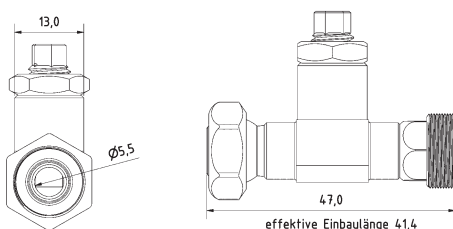
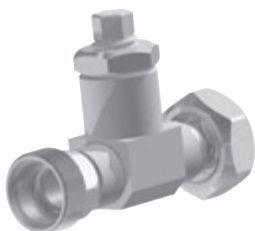


KH-14

Mini-Kugelhahn G1/4" Messing Verchromt
mini ball valve thread 1/4" brass chrome-plated

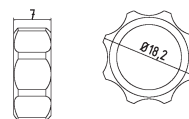
KH-14-SS

Mini-Kugelhahn G1/4" Edelstahl
mini ball valve thread 1/4" stainless steel



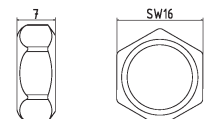
1-DRV

Drosselventil Typ1
throttle valve type1



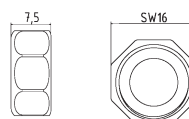
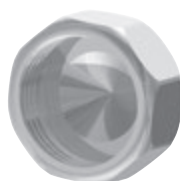
1-MU-HA

Mutter für Handverstellung
screw nut (hand feed)



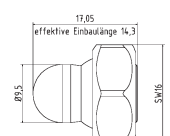
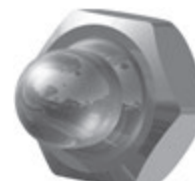
1-MU

Mutter Standard
screw nut (default)



1-VK

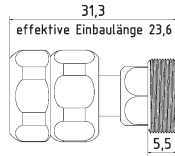
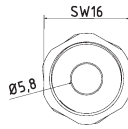
Verschlusskappe Typ1
cap type1



1-VER

Verschlussstopfen m. Mutter für Duschelement
seal plug with screw nut for shower element

Zubehör | Accessories



1-FP

Zwischenelement mit fester Position
(Schnellkupplung)

Intermediate element with fixed position
(quick coupling)



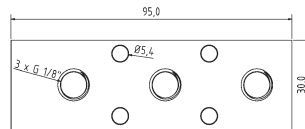
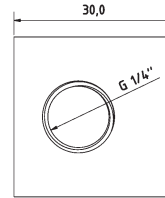
SW-11

Schlüssel aus Stahl SW11
open end wrench SW11



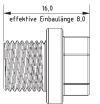
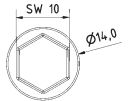
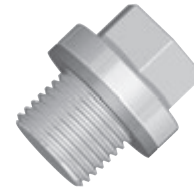
SW-16

Schlüssel aus Stahl SW16
open end wrench SW16



VB-3-18

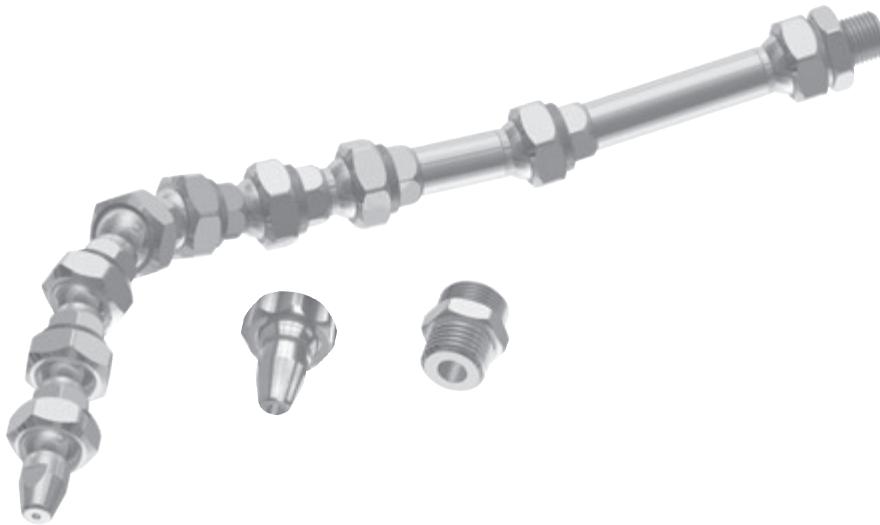
Verteilerblock Eingang Stirnseite G1/4"
manifold block entrance front end 1/4"



VB-3-18-BS

Blindstopfen G1/8"
blank plug with thread 1/8"

Grundset | Basic Set



1-GS

Grundset Typ1 1/4" System L = 230 mm

6 x 1-GE, 1 x 1-GE-2, 1 x 1-GE-3, 1 x 1-AD-18, 1 x 1-AD-14, 1 x 1-DU-16, 1 x 1-DU-32, 1 x 1-MU-HA

basic set Type1 1/4" system l = 230 mm:

6 x 1-GE, 1 x 1-GE-2, 1 x 1-GE-3, 1 x 1-AD-18, 1 x 1-AD-14, 1 x 1-DU-16, 1 x 1-DU-32, 1 x 1-MU-HA



1-GS-R

Ringdüsen Set (17 x 1-DU-R + 1 x 1-WV-R)

Ø = 80 mm erweiterbar

ring nozzle set (17 x 1-DU-R + 1 x 1-WV-R)

Ø = 80 mm expendable

PRODUCT OVERVIEW

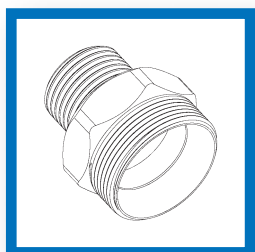
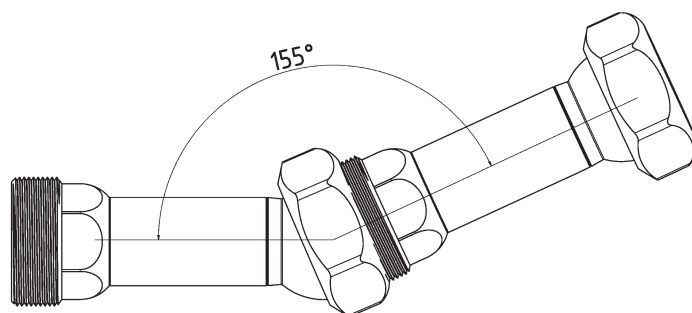
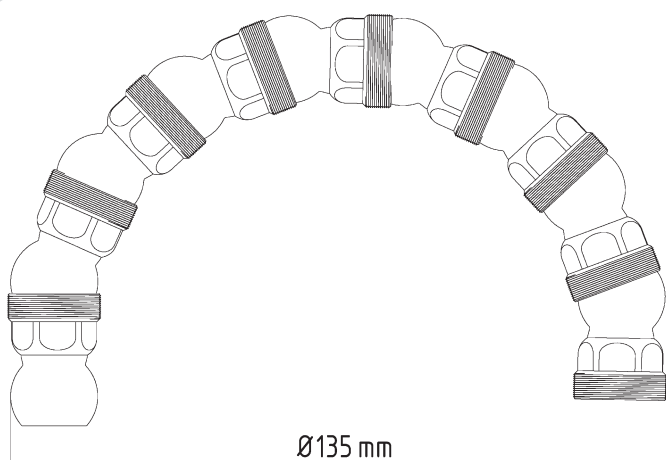
Type2 [1/2"]



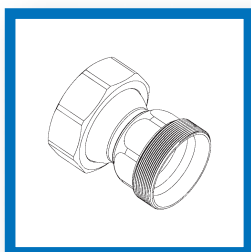
With the Type2 system you can optimize your machine process by $\pm 12\%$. Take advantage of the wide range of nozzles and adapt the cooling to your needs. Whether flat nozzles, round nozzles or nozzles with several outlets, for grinding, turning, milling or air cooling, you will find the suitable elements here. The Type 2 basic elements and machine adapters ensure a round range, which offers you the security of optimizing tool wear and guarantee stable cooling.

TECHNICAL SPECIFICATIONS:

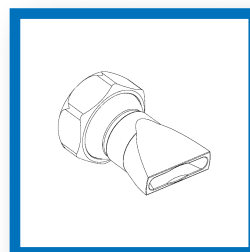
- Size Type2 (1/2")
- Passage Ø 11,0 mm
- Pressure resistant over 100 bar
- Application range -100°C to +300°C
- Thread (Elements) M 24 x 1,25
- Material 1.4305 (V2A)



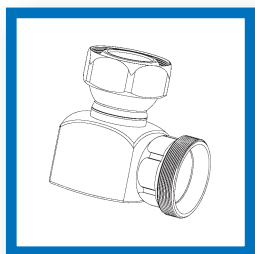
MACHINE ADAPTER



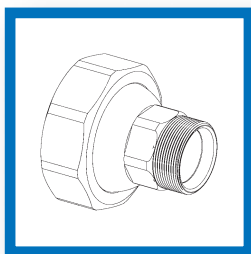
BASIC ELEMENTS



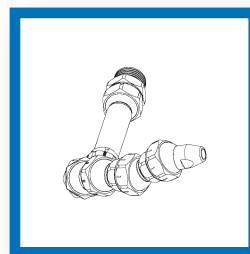
NOZZLES



ELBOWS



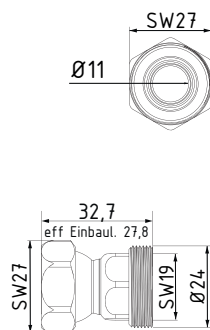
ACCESSORIES



BASIC SET Type2

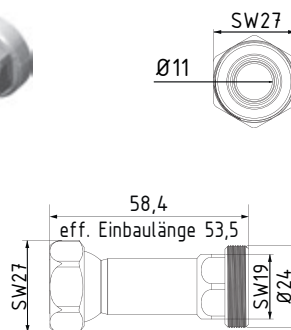
Type2 [1/2" System]

Grundelemente | Basic Elements



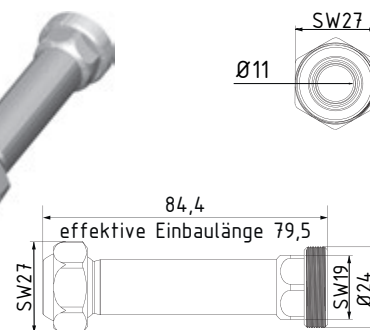
2-GE

$l = 32,7 \text{ mm}$ effektiv $l = 27,8 \text{ mm}$
 $l = 32,7 \text{ mm}$ effective $l = 27,8 \text{ mm}$



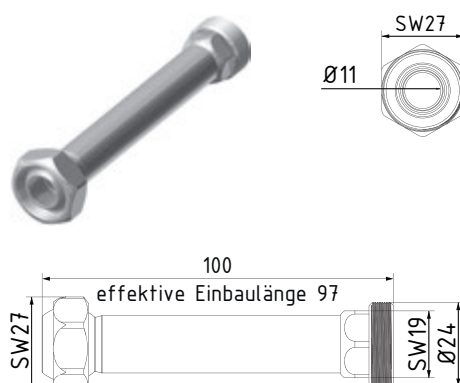
2-GE-2

$l = 58,4 \text{ mm}$ effektiv $l = 53,5 \text{ mm}$
 $l = 58,4 \text{ mm}$ effective $l = 53,5 \text{ mm}$



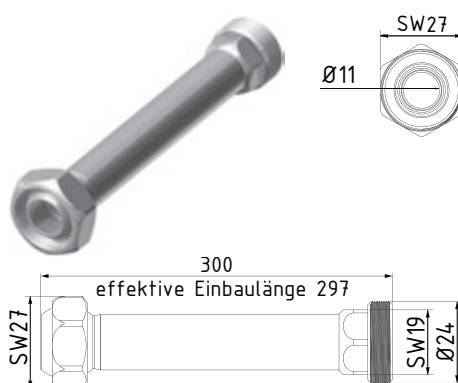
2-GE-3

$l = 84,4 \text{ mm}$ effektiv $l = 79,5 \text{ mm}$
 $l = 84,4 \text{ mm}$ effective $l = 79,5 \text{ mm}$



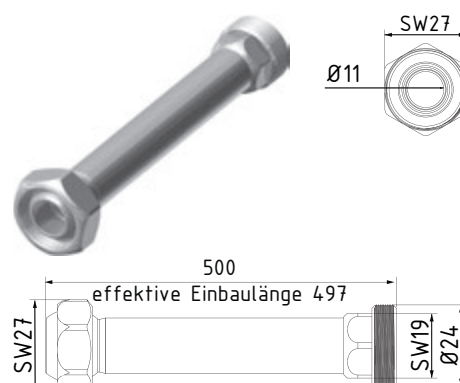
2-GE-100

$l = 100 \text{ mm}$ effektiv $l = 97 \text{ mm}$
 $l = 100 \text{ mm}$ effective $l = 97 \text{ mm}$



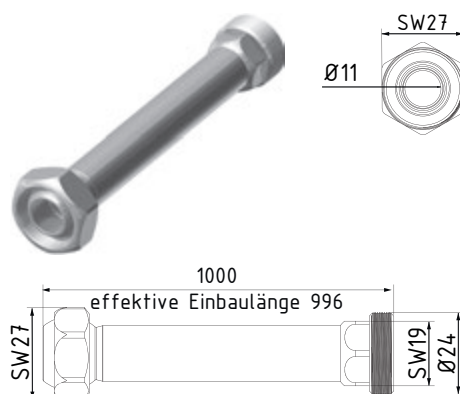
2-GE-300

$l = 300 \text{ mm}$ effektiv $l = 297 \text{ mm}$
 $l = 300 \text{ mm}$ effective $l = 297 \text{ mm}$



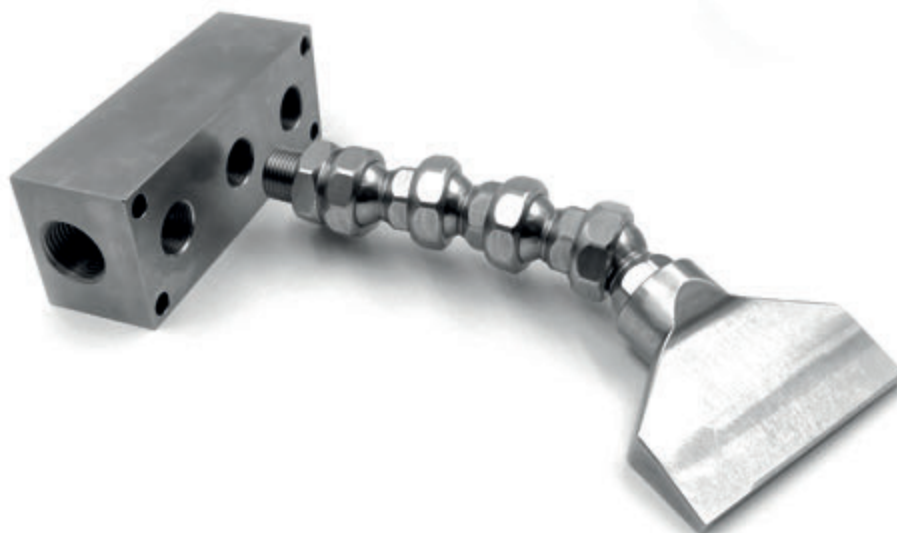
2-GE-500

$l = 500 \text{ mm}$ effektiv $l = 497 \text{ mm}$
 $l = 500 \text{ mm}$ effective $l = 497 \text{ mm}$

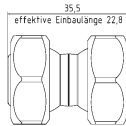
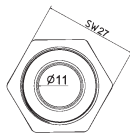


2-GE-1000

$l = 1000 \text{ mm}$ effektiv $l = 996 \text{ mm}$
 $l = 1000 \text{ mm}$ effective $l = 996 \text{ mm}$

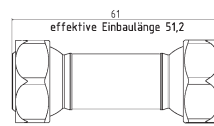
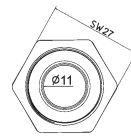


Spezial Grundelemente | Basic Elements



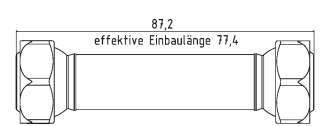
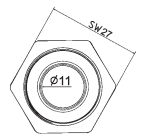
2-GE-DK Special element

$l = 35,5 \text{ mm}$ effektiv $l = 22,8 \text{ mm}$ Doppelkugel
 $l = 35,5 \text{ mm}$ effective $l = 22,8 \text{ mm}$ double ball



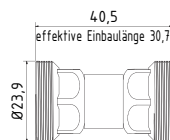
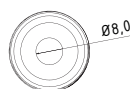
2-GE-2-DK Special element

$l = 61 \text{ mm}$ effektiv $l = 51,2 \text{ mm}$ Doppelkugel
 $l = 61 \text{ mm}$ effective $l = 51,2 \text{ mm}$ double ball



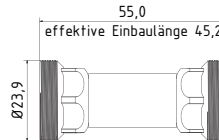
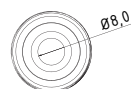
2-GE-3-DK Special element

$l = 87,2 \text{ mm}$ effektiv $l = 77,4 \text{ mm}$ Doppelkugel
 $l = 87,2 \text{ mm}$ effective $l = 77,4 \text{ mm}$ double ball



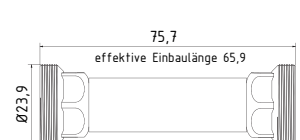
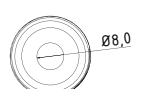
2-GE-DKS Special element

$l = 40,5 \text{ mm}$ effektiv $l = 30,7 \text{ mm}$ beidseitig Kalotte
 $l = 40,5 \text{ mm}$ effektiv $l = 30,7 \text{ mm}$ both sides Spherical cap



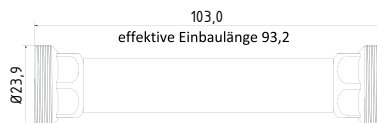
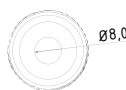
2-GE-2-DKS Special element

$l = 55,0 \text{ mm}$ effektiv $l = 45,2 \text{ mm}$ beidseitig Kalotte
 $l = 55,0 \text{ mm}$ effektiv $l = 45,2 \text{ mm}$ both sides Spherical cap



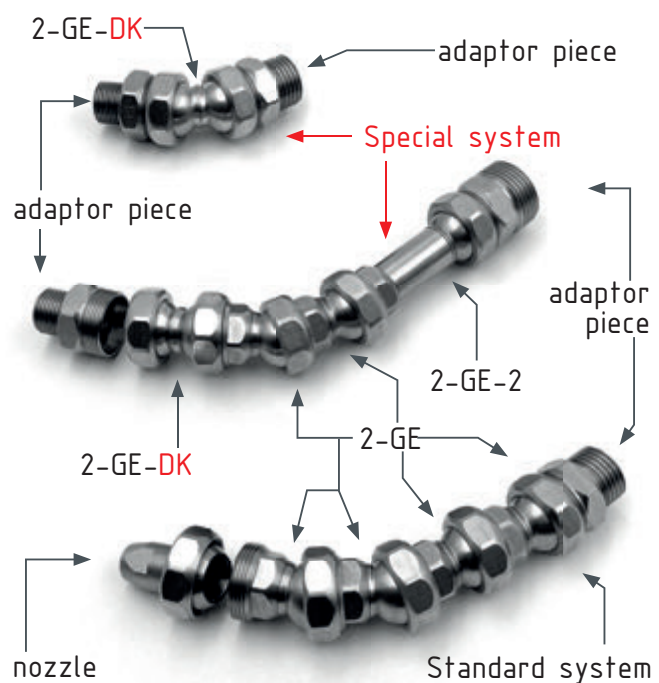
2-GE-3-DKS Special element

$l = 75,7 \text{ mm}$ effektiv $l = 65,9 \text{ mm}$ beidseitig Kalotte
 $l = 75,7 \text{ mm}$ effektiv $l = 65,9 \text{ mm}$ both sides Spherical cap



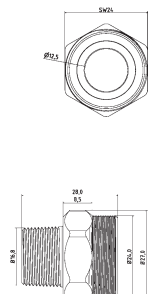
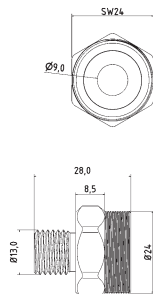
2-GE-100-DKS Special element

$l = 103,0 \text{ mm}$ effektiv $l = 93,2 \text{ mm}$ beidseitig Kalotte
 $l = 103,0 \text{ mm}$ effektiv $l = 93,2 \text{ mm}$ both sides Spherical cap



Type2 [1/2" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



2-AD-14

Adapterstück G 1/4"

adaptor piece thread 1/4"

2-AD-38

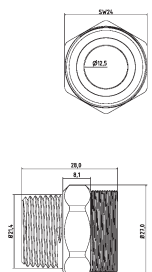
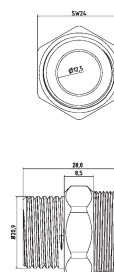
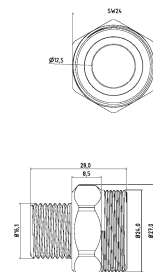
Adapterstück G 3/8"

adaptor piece thread 3/8"

2-AD-38-PT

Adapterstück G 3/8" PT (Withworth-Gewinde)

adaptor piece thread 3/8" PT (NPT thread)



2-AD-38-U

Adapterstück G 3/8" U (Gewinde unterschritten)

adaptor piece thread 3/8" U (Undercut thread)

2-AD-12

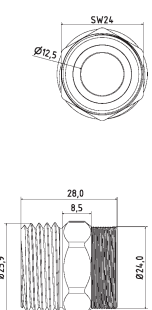
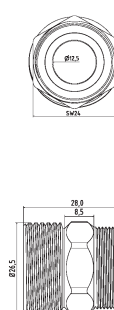
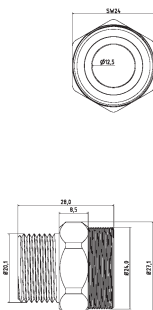
Adapterstück G 1/2"

adaptor piece thread 1/2"

2-AD-12-PT

Adapterstück G 1/2" PT (Withworth-Gewinde)

adaptor piece thread 1/2" PT (NPT thread)



2-AD-12-U

Adapterstück G 1/2" U (Gewinde unterschritten)

adaptor piece thread 1/2" U (Undercut thread)

2-AD-34

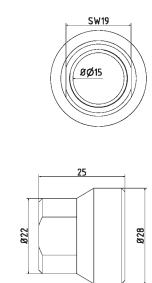
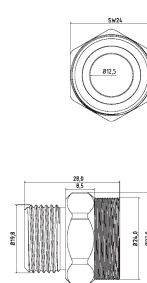
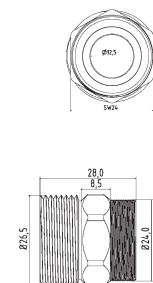
Adapterstück G 3/4"

adaptor piece thread 3/4"

2-AD-34-PT

Adapterstück G 3/4" PT (Withworth-Gewinde)

adaptor piece thread 3/4" PT (NPT thread)



2-AD-34-U

Adapterstück G 3/4" U (Gewinde unterschritten)

adaptor piece thread 3/4" U (Undercut thread)

2-AD-201.5

Adapterstück M 20 x 1,5

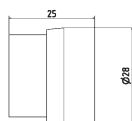
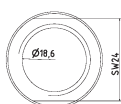
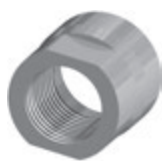
adaptor piece thread M 20 x 1,5

2-AD-2GE-38

Adapterstück für Fremddüsen mit

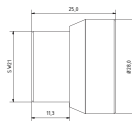
Außengewinde, IG 2-GE auf IG 3/8"
*adapter piece for external nozzles with
male thread, female 2-GE to female 3/8"*

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



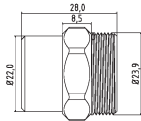
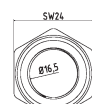
2-AD-2GE-12

Adapterstück für Fremddüsen mit Außengewinde, IG 2-GE auf IG 1/2"
adapter piece for external nozzles with male thread, female 2-GE to female 1/2"



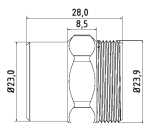
2-AD-I181.5

Adapterstück / Muffe IG 2-GE auf IG M 18 x 1,5
adapter piece for external nozzles with male thread, female 2-GE to female M 18 x 1,5



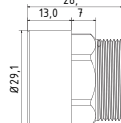
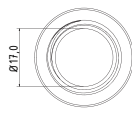
2-AD-I161.5-Typ2

Adapterstück M 16 x 1,5 Innengewinde auf Hirt-Line Typ2 Aussengewinde
adaptor piece M 16 x 1,5 female thread to Hirt-Line type2 male thread



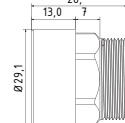
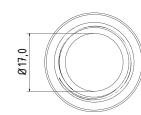
2-AD-I181.5-Typ2

Adapterstück M 18 x 1,5 Innengewinde auf Hirt-Line Typ2 Aussengewinde
adaptor piece M 18 x 1,5 female thread to Hirt-Line type2 male thread



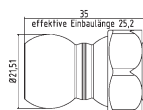
2-AD-I221.5-Typ2

Adapterstück M 22 x 1,5 Innengewinde auf Hirt-Line Typ2 Aussengewinde
adaptor piece M 22 x 1,5 female thread to Hirt-Line type2 male thread



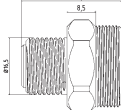
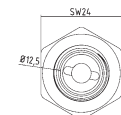
2-AD-I12-Typ2

Adapterstück G1/2" Innengewinde auf Hirt-Line Typ2 Aussengewinde
adaptor piece 1/2" female thread to Hirt-Line type2 male thread



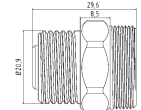
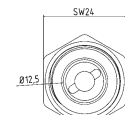
2-AD-LL

Adapterstück Loc-Line Typ2
adaptor piece Loc-Line Type2



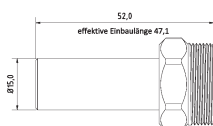
2-AD-RSV-38

Adapterstück mit Rückschlagventil G3/8"
adapter piece with check valve G3/8"



2-AD-RSV-12

Adapterstück mit Rückschlagventil G1/2"
adapter piece with check valve G1/2"

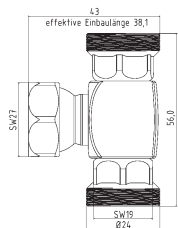
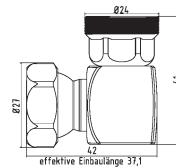
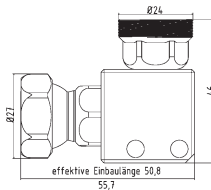
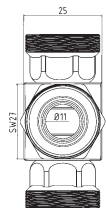
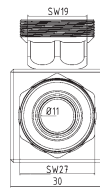


2-AD-15L

Adapterstück zu Hydraulik-Verschraubung 15 L
adaptor piece to hydraulic system 15 L

Type2 [1/2" System]

Winkelemente | Elbows



2-WI

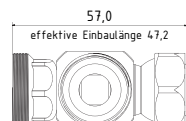
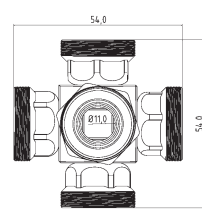
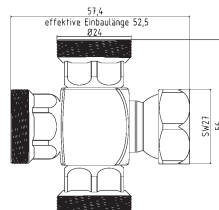
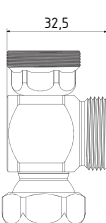
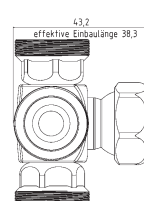
Winkelstück für Leitungen mit 2 Bohrungen
corner piece for pipelines with 2 bore hole

2-WV-1K

Winkelstück
elbow piece

2-WV-2K

T-Stück
T-piece



2-WV-3K

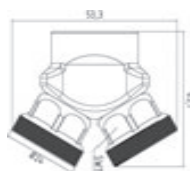
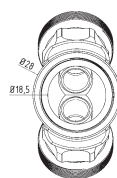
Kreuz-Stück
cross piece

2-WV-4K

Stern-Stück
star piece

2-WV-R-2K

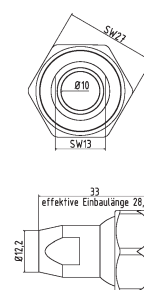
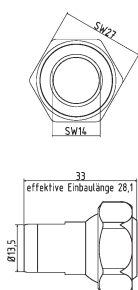
T-Stück für Ring und Düse
T-piece for ring and nozzle



2-YV

Y-Stück 50°
Y-piece 50°

Düsen | Nozzles



2-DU-0

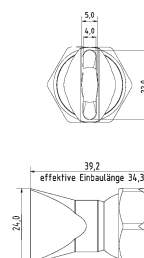
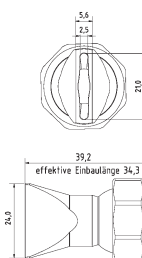
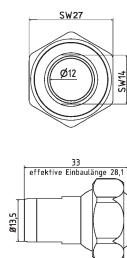
Düse ohne Bohrung (für Spezialanwendungen)
nozzle without hole (for special applications)

2-DU-65

Düse gerade Bohrung Ø 6,5 mm
nozzle straight Ø 6,5 mm

2-DU-10

Düse gerade Bohrung Ø 10 mm
nozzle straight Ø 10 mm



2-DU-12

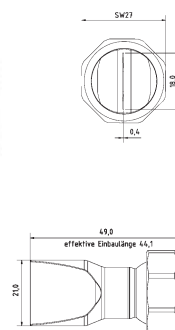
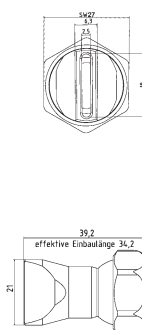
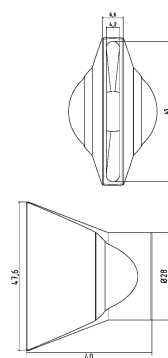
Düse gerade Bohrung Ø 12 mm
nozzle straight Ø 12 mm

2-DU-SL-25-SS

Flachdüse Schlitzbreite 20 x 2,5 mm
Streustrahl
flat nozzle broadly with slit 20 x 2,5 mm
scattered beam

2-DU-SL-25

Flachdüse Schlitzbreite 22 x 4,0 mm
Streustrahl
flat nozzle broadly with slit 22 x 4,0 mm
scattered beam



2-DU-SL-50

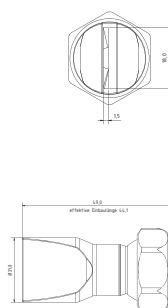
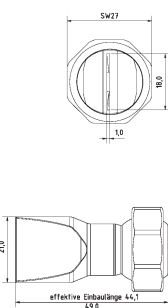
Flachdüse Schlitzbreite 45 x 4,2 mm
Streustrahl
flat nozzle broadly with slit 45 x 4,2 mm
scattered beam

2-DU-SL-25-GS

Flachdüse Schlitzbreite 18 x 2,5 mm
gerader Strahl
flat nozzle broadly with slit 18 x 2,5 mm
straight jet

2-DU-SL-25-GS-0.4

Flachdüse Schlitzbreite 18 x 0,4 mm
gerader Strahl
flat nozzle broadly with slit 18 x 0,4 mm
straight jet



2-DU-SL-25-GS-1.0

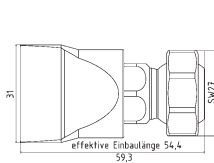
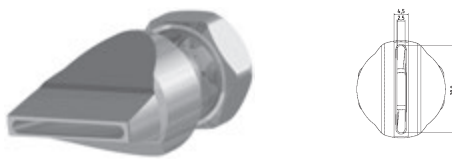
Flachdüse Schlitzbreite 18 x 1,0 mm
gerader Strahl
flat nozzle broadly with slit 18 x 1,0 mm
straight jet

2-DU-SL-25-GS-1.5

Flachdüse Schlitzbreite 18 x 1,5 mm
gerader Strahl
flat nozzle broadly with slit 18 x 1,5 mm
straight jet

Type2 [1/2" System]

Düsen | Nozzles

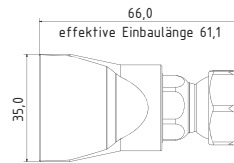


2-DU-SL-31-GS

Flachdüse Schlitzbreite 28 x 2,5 mm

gerader Strahl

*flat nozzle broadly with slit 28 x 2,5 mm
straight jet*

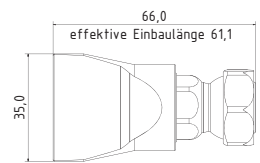
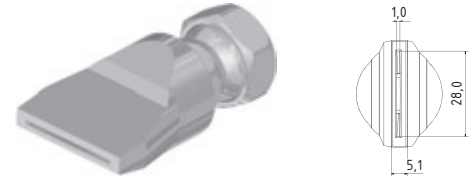


2-DU-SL-40-GS-0.4

Flachdüse Schlitzbreite 28 x 2,0 mm

gerader Strahl

*flat nozzle broadly with slit 28 x 2,0 mm
straight jet*

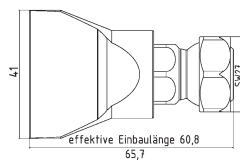
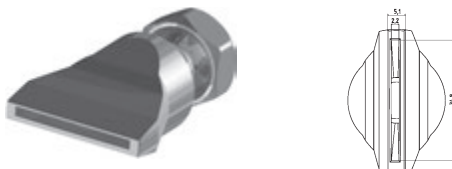


2-DU-SL-40-GS-1.0

Flachdüse Schlitzbreite 28 x 1,0 mm

gerader Strahl

*flat nozzle broadly with slit 28 x 1,0 mm
straight jet*

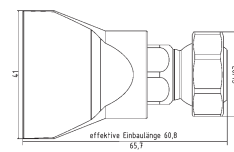


2-DU-SL-50-GS

Flachdüse Schlitzbreite 35 x 2,2 mm

gerader Strahl

*flat nozzle broadly with slit 35 x 2,2 mm
straight jet*

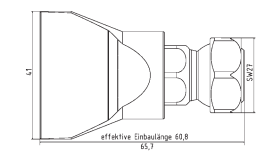


2-DU-SL-50-GS-0.4

Flachdüse Schlitzbreite 35 x 0,4 mm

gerader Strahl

*flat nozzle broadly with slit 35 x 0,4 mm
straight jet*

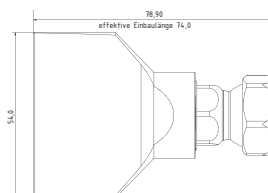
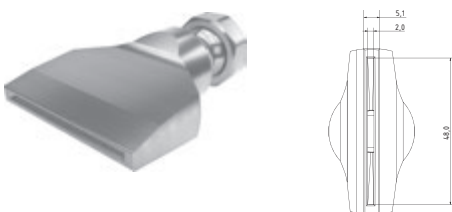


2-DU-SL-50-GS-1.0

Flachdüse Schlitzbreite 35 x 1,0 mm

gerader Strahl

*flat nozzle broadly with slit 35 x 1,0 mm
straight jet*

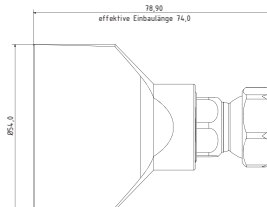
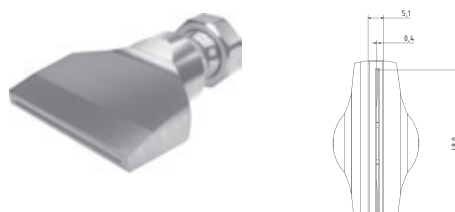


2-DU-SL-55-GS

Flachdüse Schlitzbreite 48 x 2,0 mm

gerader Strahl

*flat nozzle broadly with slit 48 x 2,0 mm
straight jet*

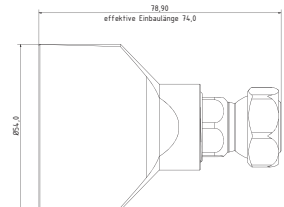
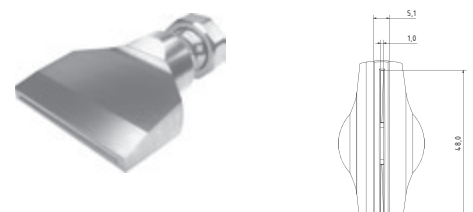


2-DU-SL-55-GS-0.4

Flachdüse Schlitzbreite 48 x 0,4 mm

gerader Strahl

*flat nozzle broadly with slit 48 x 0,4 mm
straight jet*



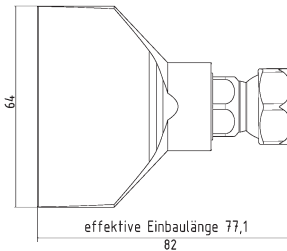
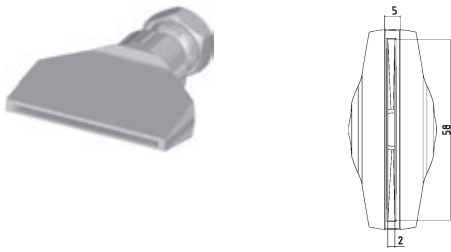
2-DU-SL-55-GS-1.0

Flachdüse Schlitzbreite 48 x 1,0 mm

gerader Strahl

*flat nozzle broadly with slit 48 x 1,0 mm
straight jet*

Düsen | Nozzles



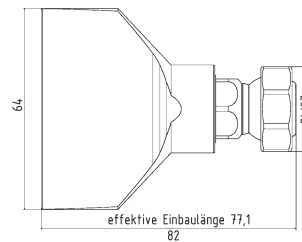
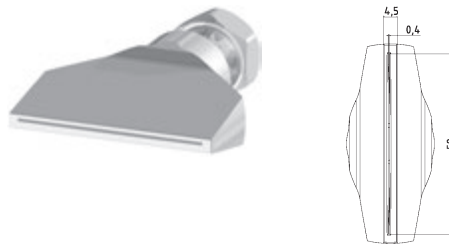
2-DU-SL-65-GS

Flachdüse Schlitzbreite 58 x 2,0 mm

gerader Strahl

flat nozzle broadly with slit 58 x 2,0 mm

straight jet



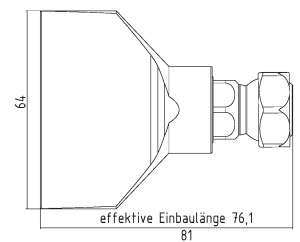
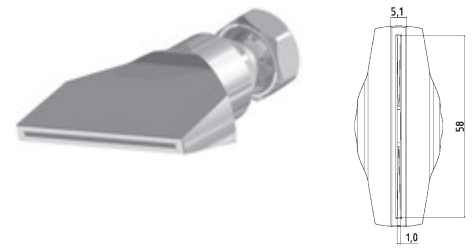
2-DU-SL-65-GS-0.4

Flachdüse Schlitzbreite 58 x 0,4 mm

gerader Strahl

flat nozzle broadly with slit 58 x 0,4 mm

straight jet



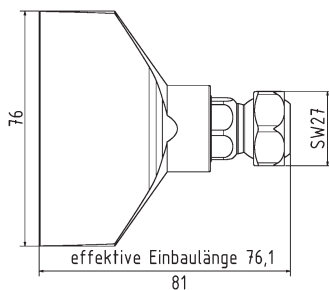
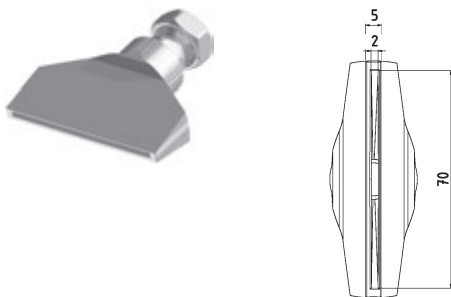
2-DU-SL-65-GS-1.0

Flachdüse Schlitzbreite 58 x 1,0 mm

gerader Strahl

flat nozzle broadly with slit 58 x 1,0 mm

straight jet



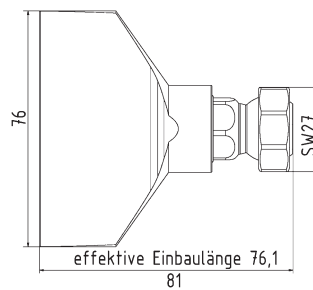
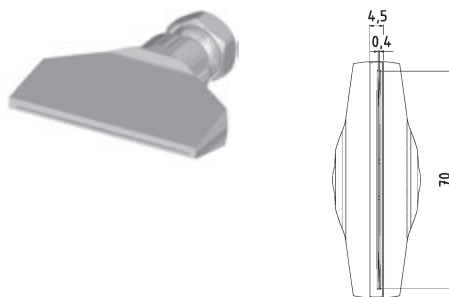
2-DU-SL-76-GS

Flachdüse Schlitzbreite 70 x 2,0 mm

gerader Strahl

flat nozzle broadly with slit 70 x 2,0 mm

straight jet



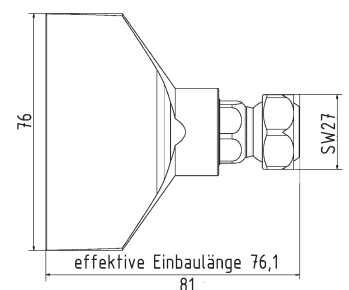
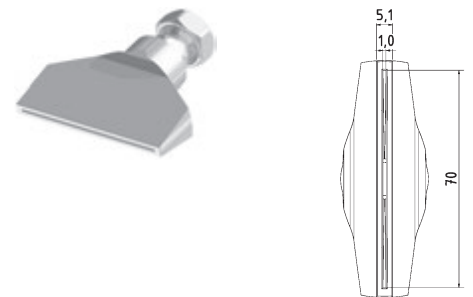
2-DU-SL-76-GS-0.4

Flachdüse Schlitzbreite 70 x 0,4 mm

gerader Strahl

flat nozzle broadly with slit 70 x 0,4 mm

straight jet



2-DU-SL-76-GS-1.0

Flachdüse Schlitzbreite 70 x 1,0 mm

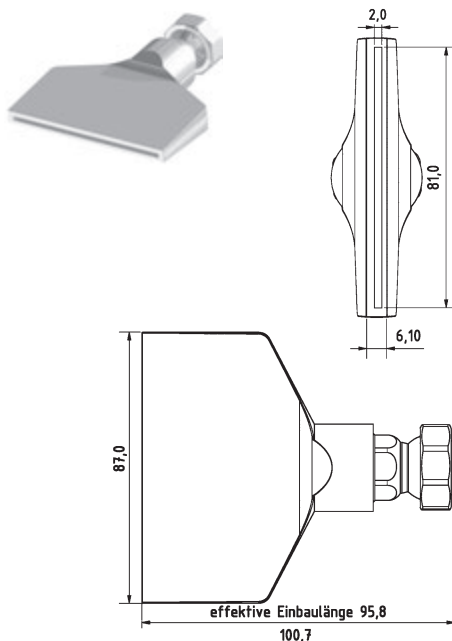
gerader Strahl

flat nozzle broadly with slit 70 x 1,0 mm

straight jet

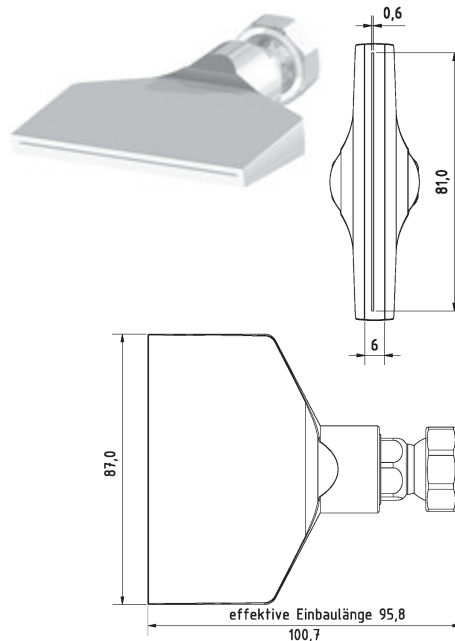
Type2 [1/2" System]

Düsen | Nozzles



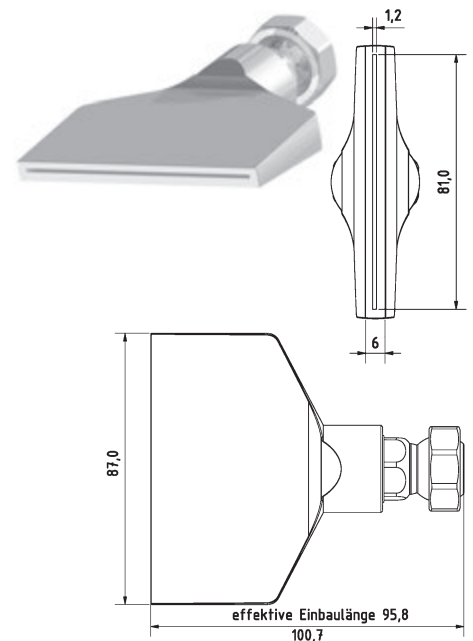
2-DU-SL-87-GS

Flachdüse Schlitzbreite 81 x 2,0 mm
gerader Strahl
flat nozzle broadly with slit 81 x 2,0 mm
straight jet



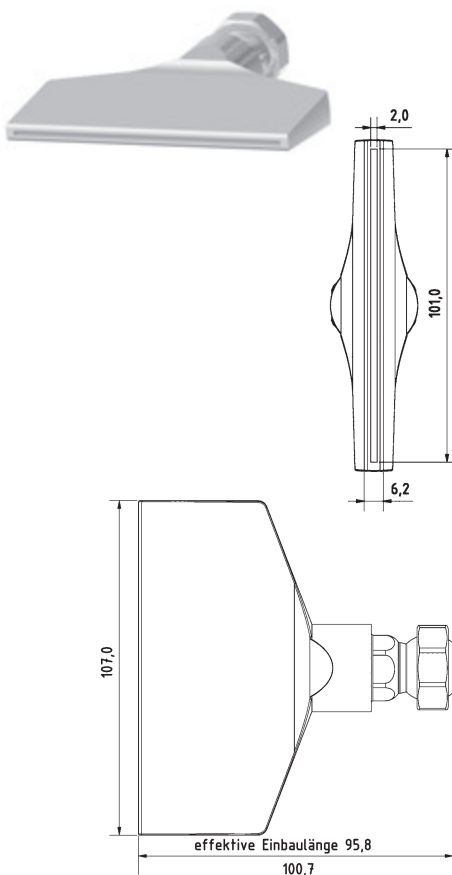
2-DU-SL-87-GS-0.6

Flachdüse Schlitzbreite 81 x 0,6 mm
gerader Strahl
flat nozzle broadly with slit 81 x 0,6 mm
straight jet



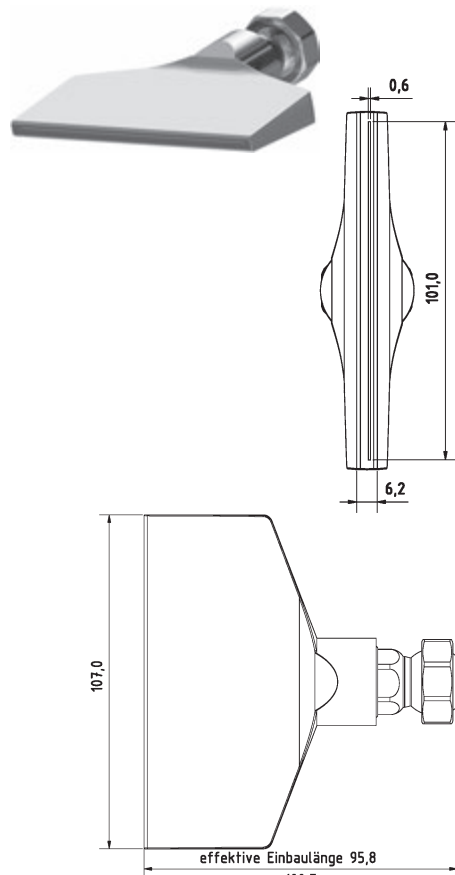
2-DU-SL-87-GS-1.2

Flachdüse Schlitzbreite 81 x 1,2 mm
gerader Strahl
flat nozzle broadly with slit 81 x 1,2 mm
straight jet



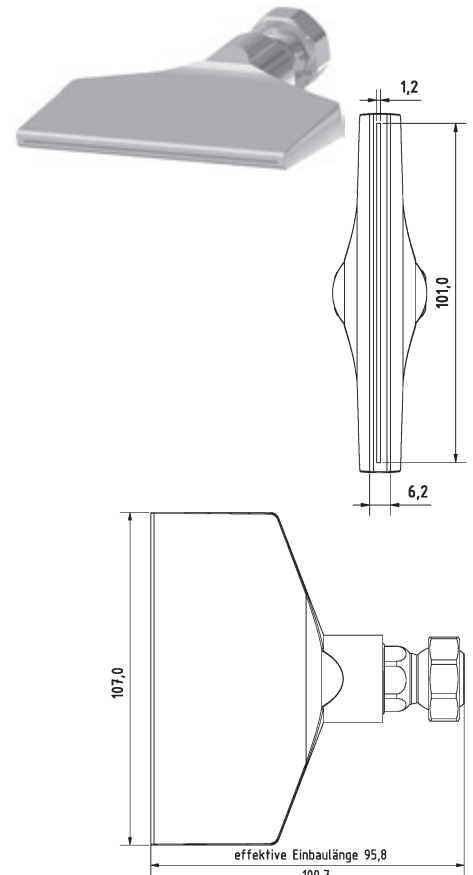
2-DU-SL-107-GS

Flachdüse Schlitzbreite 101 x 2,0 mm
gerader Strahl
flat nozzle broadly with slit 101 x 2,0 mm
straight jet



2-DU-SL-107-GS-0.6

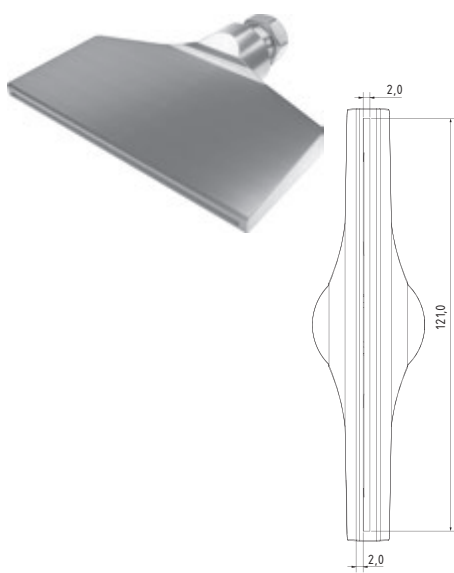
Flachdüse Schlitzbreite 101 x 0,6 mm
gerader Strahl
flat nozzle broadly with slit 101 x 0,6 mm
straight jet



2-DU-SL-107-GS-1.2

Flachdüse Schlitzbreite 101 x 1,2 mm
gerader Strahl
flat nozzle broadly with slit 101 x 1,2 mm
straight jet

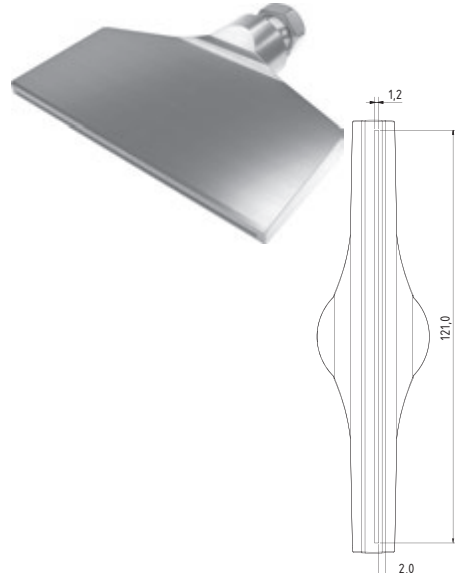
Düsen | Nozzles



2-DU-SL-127-GS

Flachdüse Schlitzbreite 121 x 2,0 mm
gerader Strahl

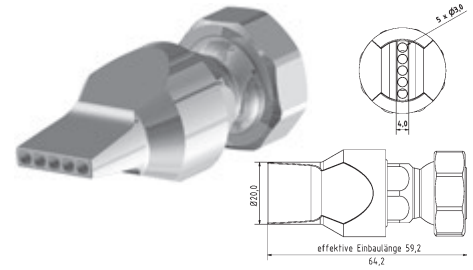
*flat nozzle broadly with slit 121 x 2,0 mm
straight jet*



2-DU-SL-127-GS-1.2

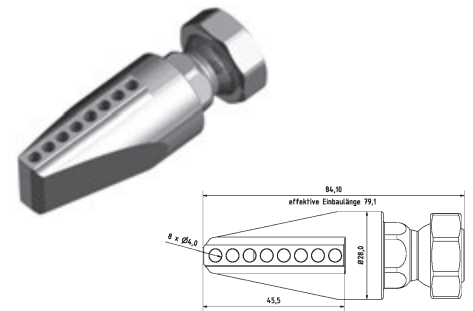
Flachdüse Schlitzbreite 121 x 1,2 mm
gerader Strahl

*flat nozzle broadly with slit 121 x 1,2 mm
straight jet*



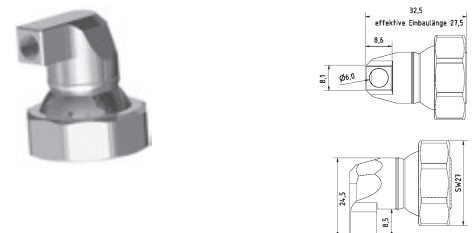
2-DU-LL-5-3

Düse gerade Bohrungen 5 x Ø 3 mm
nozzle straight drill holes 5 x Ø 3 mm



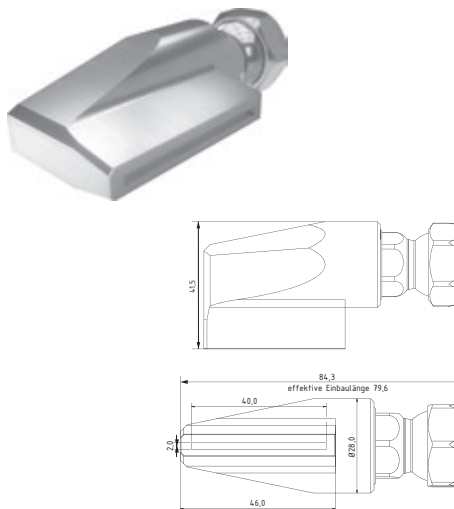
2-DU-LL-90-8

Düse 90° Bohrungen 8 x Ø 4 mm
nozzle 90° drill holes 8 x Ø 4 mm



2-DU-LL-90-1-6

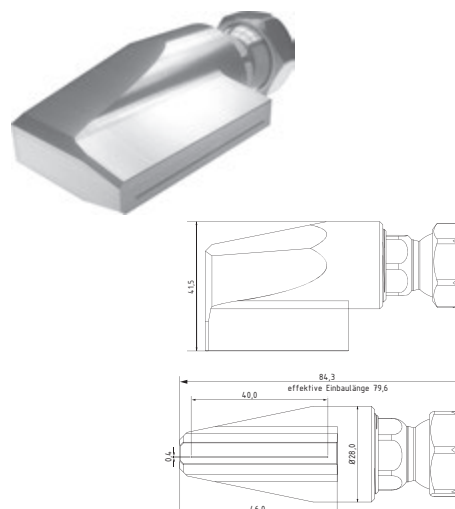
Düse 90° Bohrung 1 x Ø 6 mm
nozzle 90° drill hole 1 x Ø 6 mm



2-DU-I-SL-40-GS

Innenschleifdüse Schlitzbreite 40 x 2,0 mm
gerader Strahl

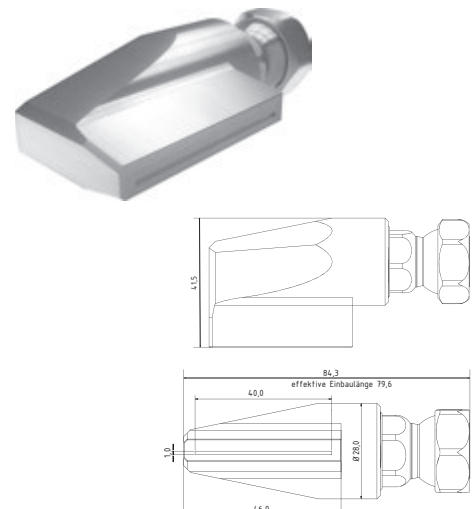
*Internal grinding nozzle with slit 40 x 2,0 mm
straight jet*



2-DU-I-SL-40-GS-0.4

Innenschleifdüse Schlitzbreite 40 x 0,4 mm
gerader Strahl

*Internal grinding nozzle with slit 40 x 0,4 mm
straight jet*



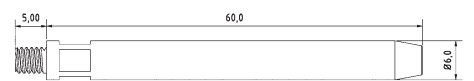
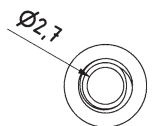
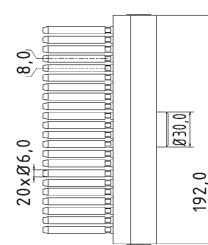
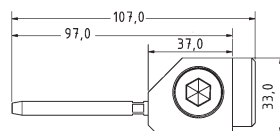
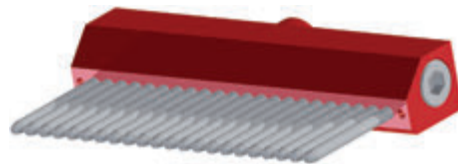
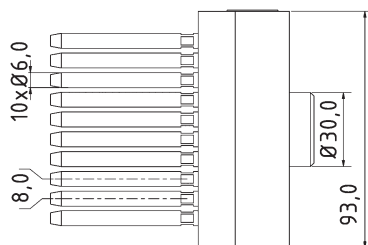
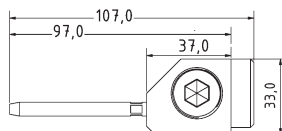
2-DU-I-SL-40-GS-1.0

Innenschleifdüse Schlitzbreite 40 x 1,0 mm
gerader Strahl

*Internal grinding nozzle with slit 40 x 1,0 mm
straight jet*

Type2 [1/2" System]

Nadel Düsen | Needle Nozzles



2-NA-DU-96

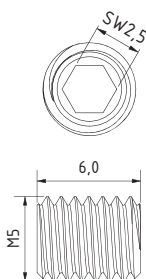
Modulare Nadeldüse l = 96 mm
inkl. 10 Nadeln nach Wahl l = 40-80 mm
Modular Needle nozzle l = 96mm
incl. 10 needles of choice l = 40-80 mm

2-NA-DU-192

Modulare Nadeldüse = 192 mm
inkl. 22 Nadeln nach Wahl l = 40-80 mm
Modular Needle nozzle l = 192 mm
incl. 22 needles of choice l = 40-80 mm

2-NA-Nadel

Einzeldüseneinsatz / Ersatznadel
l = 40/50/60/70/80 mm
single nozzle insert / spare needle
l = 40/50/60/70/80 mm



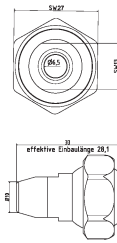
2-NA-Blindstopfen-M5

Blindstopfen M5, Madenschraube für
2-NA-DU-96 und 2-NA-DU-192
Blanking plug M5, grub screw for
2-NA-DU-96 and 2-NA-DU-192

2-NA-ANB-SET

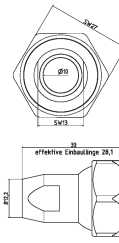
Anbauset zum beliebig verlängern
der Nadeldüsen
attachment set for extending the needle
nozzles as required

Kunststoff-Düsen | Plastic Nozzles



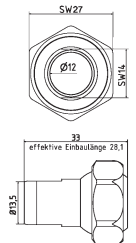
KU-2-DU-65

Kunststoff-Düse gerade Bohrung Ø 6,5 mm
 plastic nozzle straight Ø 6,5 mm



KU-2-DU-10

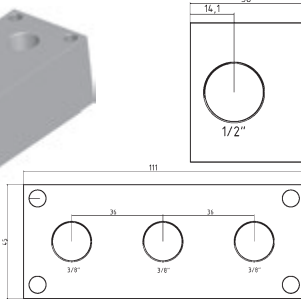
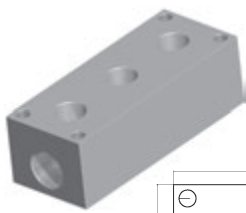
Kunststoff-Düse gerade Bohrung Ø 10 mm
 plastic nozzle straight Ø 10 mm



KU-2-DU-12

Kunststoff-Düse gerade Bohrung Ø 12 mm
 plastic nozzle straight Ø 12 mm

Zubehör | Accessories

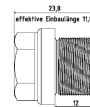
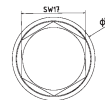


VB-3-38

Verteilerblock Eingang Stirnseite G1/2"
 manifold block entrance front end 1/2"

VB-3-38-PT

Verteilerblock Eingang Stirnseite G1/2" PT
 manifold block entrance front end 1/2" NPT

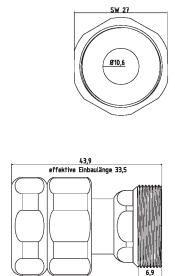


VB-3-38-BS

Blindstopfen G3/8"
 blank plug with thread 3/8"

VB-3-38-PT-BS

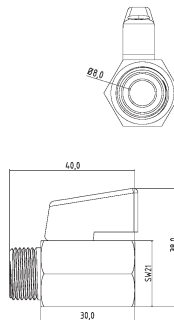
Blindstopfen mit G3/8" PT Gewinde
 blank plug with thread 3/8" NPT



2-FP

Zwischenelement mit fester Position
 (Schnellkupplung)

Intermediate element with fixed position
 (quick coupling)

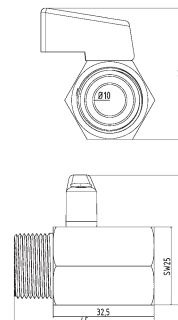


KH-38

Mini-Kugelhahn G3/8" Messing Verchromt
 mini ball valve thread 3/8" brass chrome-plated

KH-38-SS

Mini-Kugelhahn G3/8" Edelstahl
 mini ball valve thread 3/8" stainless steel

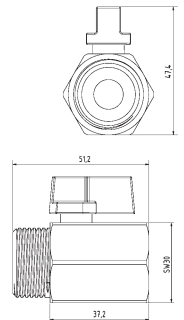


KH-12

Mini-Kugelhahn G1/2" Messing Verchromt
 mini ball valve thread 1/2" brass chrome-plated

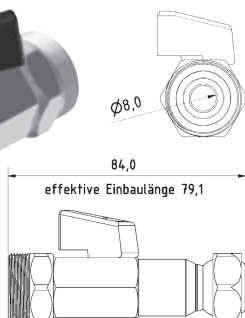
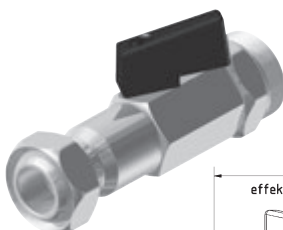
KH-12-SS

Mini-Kugelhahn G1/2" Edelstahl
 mini ball valve thread 1/2" stainless steel



KH-34

Mini-Kugelhahn G3/4" Messing Verchromt
 mini ball valve thread 3/4"

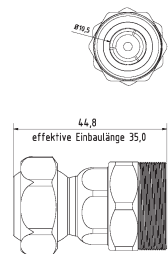
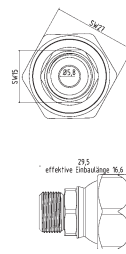
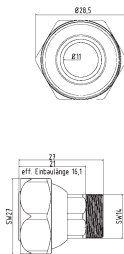


2-KH-Z

Kugelhahn Zwischenelement Typ2
 ball valve intermediate element type2

Type2 [1/2" System]

Zubehör | Accessories



RE-2-1

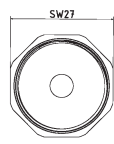
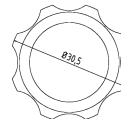
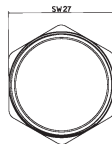
Reduktion Typ2 auf Typ1
reduction Type2 to Type1

RE-2-G1/4

Reduktion Typ2 auf G 1/4"
reduction Type2 to G 1/4"

2-RSV

Rückschlagventil (Drop-Stop)
Check valve (Drop-Stop)



2-MU

Mutter Standard
screw nut (default)

2-MU-HA

Mutter für Handverstellung
screw nut (hand feed)

2-VK

Verschlusskappe Typ2
cap type2

Grundset | Basic Set



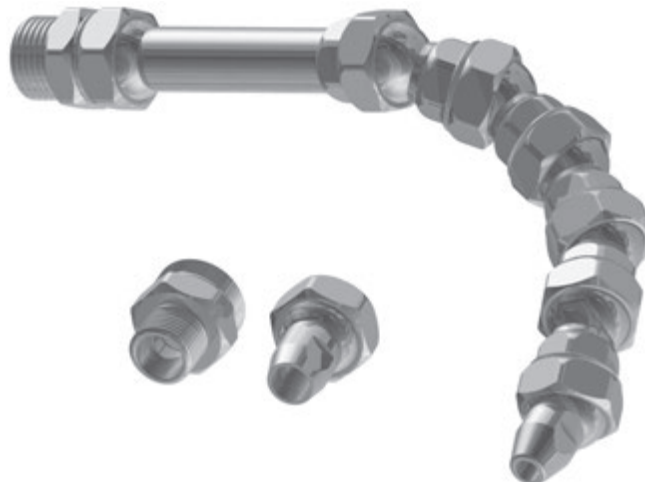
SW-19

Schlüssel aus Stahl SW19
open end wrench SW19



SW-27

Schlüssel aus Stahl SW27
open end wrench SW27



2-GS

Grundset Typ2 1/2" System L = 240 mm
5 x 2-GE, 1 x 2-GE-3, 1 x 2-AD-38, 1 x 2-AD-12, 1 x 2-DU-65 1 x 2-DU-10, 1 x SW-19, 1 x SW-27
basic set Type2 1/2" system l = 240 mm
5 x 2-GE, 1 x 2-GE-3, 1 x 2-AD-38, 1 x 2-AD-12, 1 x 2-DU-65 1 x 2-DU-10, 1 x SW-19, 1 x SW-27

INNOVATIVE NOZZLES FOR TOP PERFORMANCE



“To achieve grinding results of the highest quality, optimal cooling is essential. Only slotted nozzles, as opposed to those with holes, meet these high requirements. This is because the coolant jet is drawn in between the workpiece and grinding wheel without turbulence, backpressure, or air inclusions.

Hirt-Line® offers a unique selection of precision-engineered stainless steel nozzles for top-quality grinding operations, suitable for wheel widths from 18 to 121 mm and jet thicknesses ranging from 0.4 to 2.2 mm.

”



PRODUCT OVERVIEW

Type3 [3/4"]

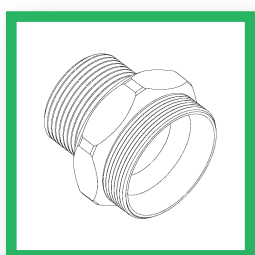
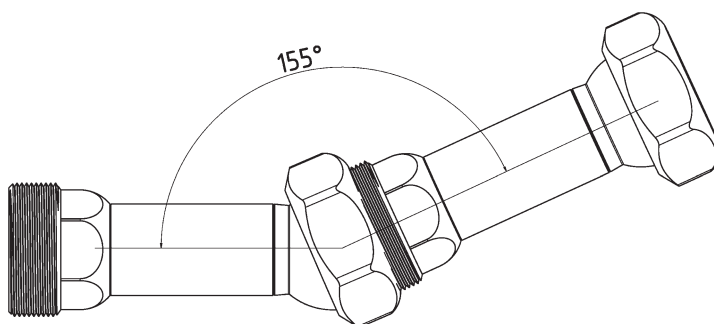
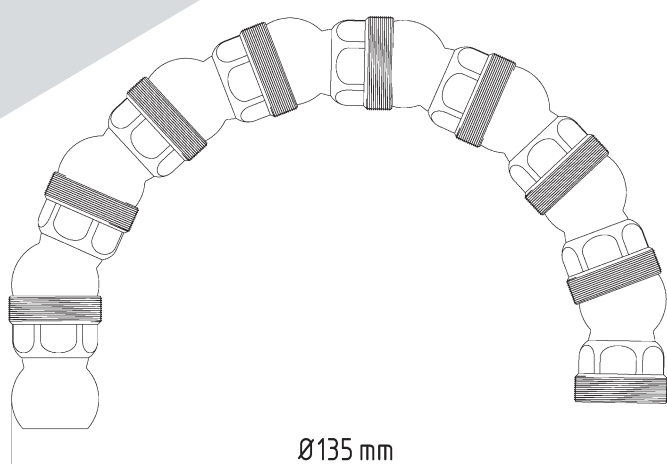


The system Type3 or also called 3/4" promises the suitable stability for your machines besides the proven and reliable quality. The 19 mm diameter diffuser provides the required litre capacity (over 200 l/min) precisely and stably (up to 100 bar) from the pump to the tool. Suitable in this system there are currently 32 different nozzles, from simple round nozzles from Ø12 mm, Ø15 mm and Ø19 mm up to the largest flat nozzle 121 mm x 2 mm which are also optimized for the grinding process. All nozzles are manufactured with high

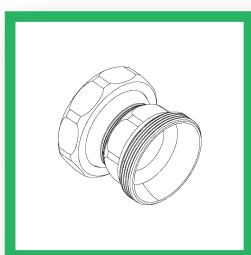
precision and can be easily replaced for any application. With the 3/8", 3/4" and 1" adapters, it is easy to install this system on any machine. As usual, there are various basic and angular elements which allow the system to be configured flexibly and as required. Optionally a ball valve and further accessories can be acquired

TECHNICAL SPECIFICATIONS:

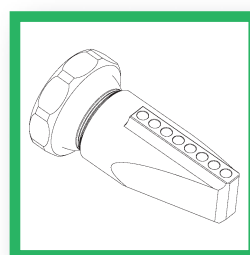
- Size Type3 (3/4")
- Passage Ø 19,0 mm
- Pressure resistant up to 100 bar
- Application range -100°C to +300°C
- Thread (Elements) M 34 x 1,25
- Material 1.4305 (V2A)



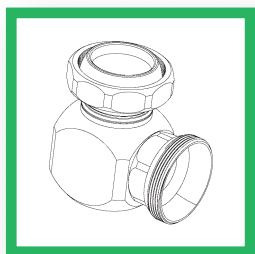
MACHINE ADAPTER



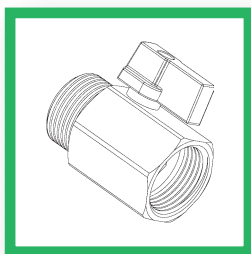
BASIC ELEMENTS



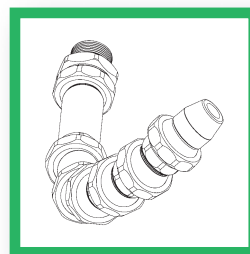
NOZZLES



ELBOWS



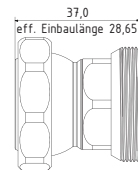
ACCESSORIES



BASIC SET Type3

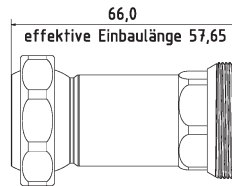
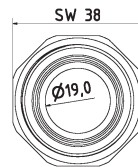
Type3 [3/4" System]

Grundelemente | Basic Elements



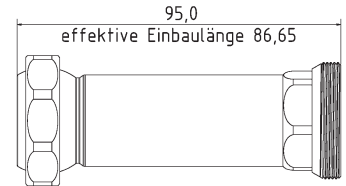
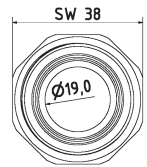
3-GE

$l = 37 \text{ mm}$ effektiv $l = 28,6 \text{ mm}$
 $l = 37 \text{ mm}$ effective $l = 28,6 \text{ mm}$



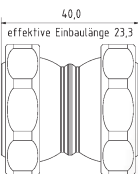
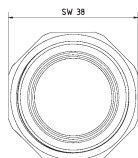
3-GE-2

$l = 66 \text{ mm}$ effektiv $l = 57,6 \text{ mm}$
 $l = 66 \text{ mm}$ effective $l = 57,6 \text{ mm}$



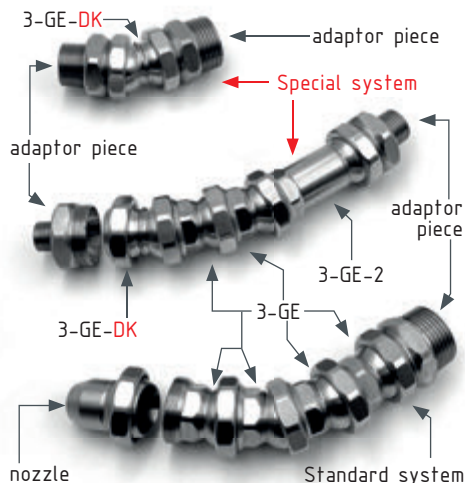
3-GE-3

$l = 95 \text{ mm}$ effektiv $l = 86,6 \text{ mm}$
 $l = 95 \text{ mm}$ effective $l = 86,6 \text{ mm}$

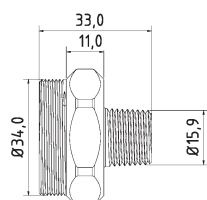
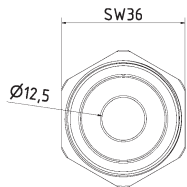


3-GE-DK Special element

Grundelement $l = 40 \text{ mm}$ effektiv $l = 23,3 \text{ mm}$
basic element $l = 40 \text{ mm}$ effective $l = 23,3 \text{ mm}$

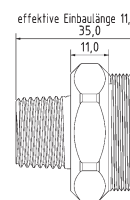
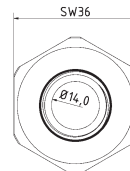


Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



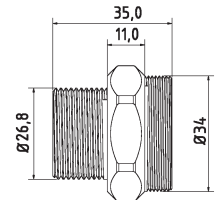
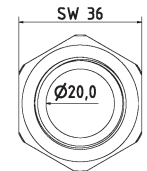
3-AD-38-PT

Adapterstück G 3/8" PT (Withworth-Gewinde)
adaptor piece thread 3/8" PT (NPT thread)



3-AD-12-PT

Adapterstück G 1/2" PT (Withworth-Gewinde)
adaptor piece thread 1/2" PT (NPT thread)

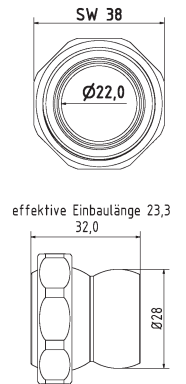
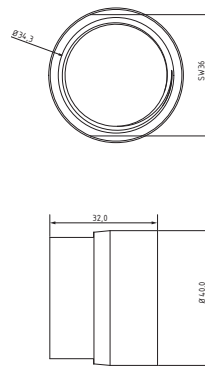
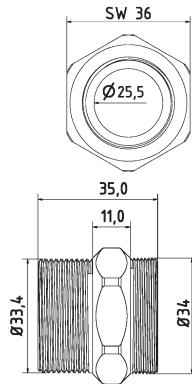


3-AD-34-PT

Adapterstück G 3/4" PT (Withworth-Gewinde)
adaptor piece thread 3/4" PT (NPT thread)

Type3 [3/4" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



3-AD-10-PT

Adapterstück G 1" PT (Withworth-Gewinde)
adaptor piece thread G 1" PT (NPT thread)

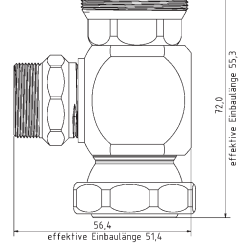
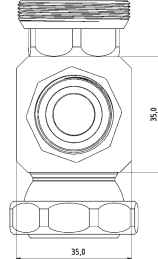
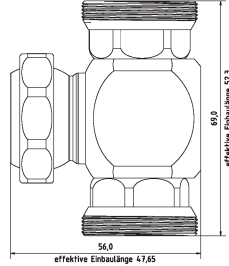
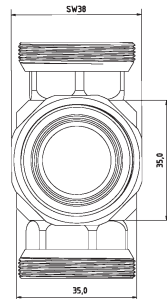
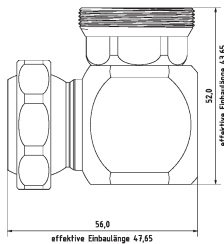
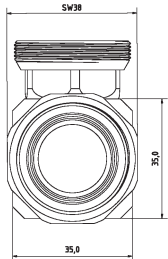
3-AD-3GE-1

Adapterstück für Fremddüsen mit
Außengewinde, IG 3-GE auf IG 1"
adaptor piece for external nozzles with male
thread, female 3-GE to female 1"

3-AD-LL

Adapterstück Loc-Line Typ3
adaptor piece Loc-Line Type3

Winkellemente | Elbows



3-WV-1K

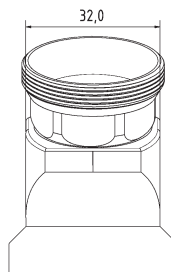
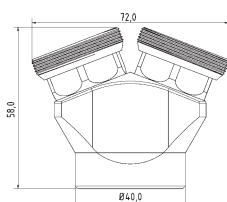
Winkelverschraubung mit Kugelstück
elbow piece movable

3-WV-2K

T-Stück mit Kugelstück
T-piece movable

3-WV-R-2K

T-Stück für Ring und Düse
T-piece for ring and nozzle

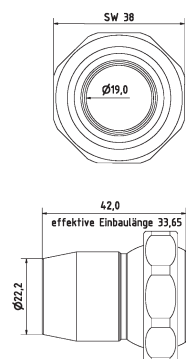
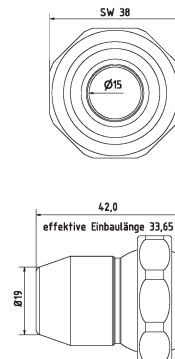
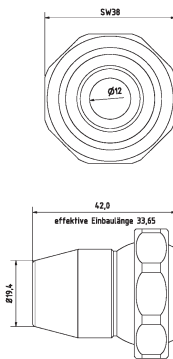


3-YV

Y-Stück 50°
Y-piece 50°

Type3 [3/4" System]

Düsen | Nozzles



3-DU-12

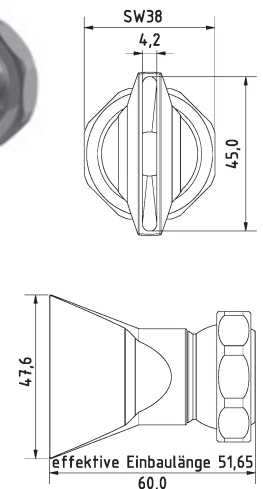
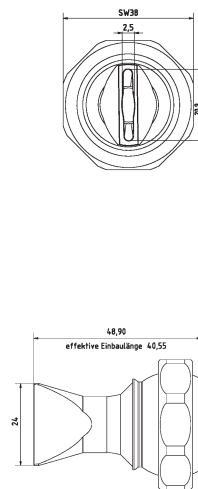
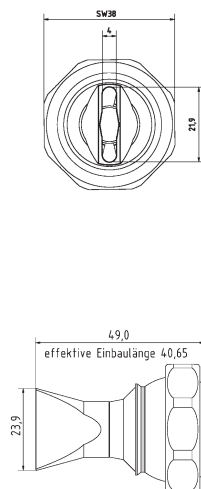
Düse gerade Bohrung Ø 12 mm
nozzle straight Ø 12 mm

3-DU-15

Düse gerade Bohrung Ø 15 mm
nozzle straight Ø 15 mm

3-DU-19

Düse gerade Bohrung Ø 19 mm
nozzle straight Ø 19 mm



3-DU-SL-25

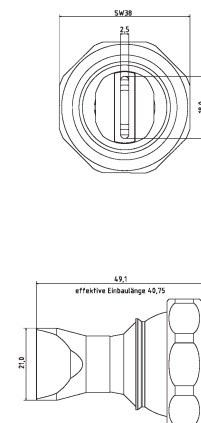
Flachdüse Schlitzbreite 22 x 4,0 mm
Streustrahl
flat nozzle broadly with slit 22 x 4,0 mm
scattered beam

3-DU-SL-25-SS

Flachdüse Schlitzbreite 20 x 2,5 mm
Streustrahl
flat nozzle broadly with slit 20 x 2,5 mm
scattered beam

3-DU-SL-50

Flachdüse Schlitzbreite 45 x 4,2 mm
Streustrahl
flat nozzle broadly with slit 45 x 4,2 mm
scattered beam

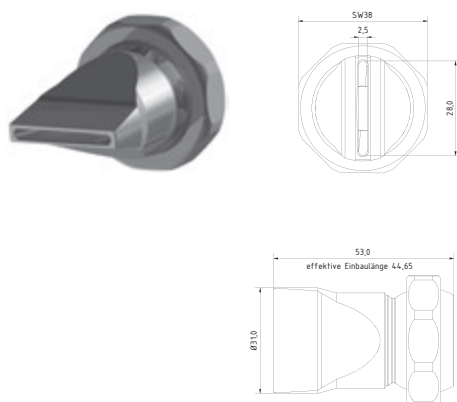


3-DU-SL-25-GS

Flachdüse Schlitzbreite 18 x 2,5 mm
gerader Strahl
flat nozzle broadly with slit 18 x 2,5 mm
straight jet

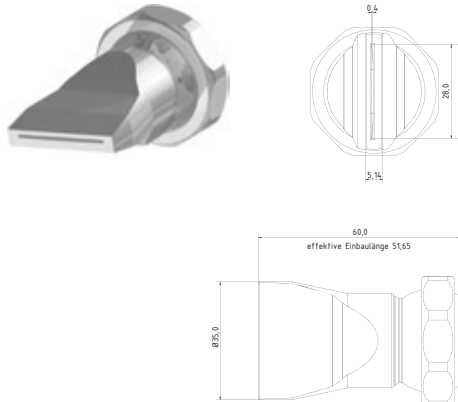


Düsen | Nozzles



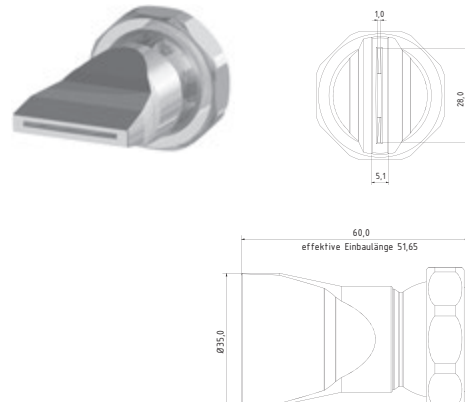
3-DU-SL-31-GS

Flachdüse Schlitzbreite 28 x 2,5 mm
gerader Strahl
*flat nozzle broadly with slit 28 x 2,5 mm
straight jet*



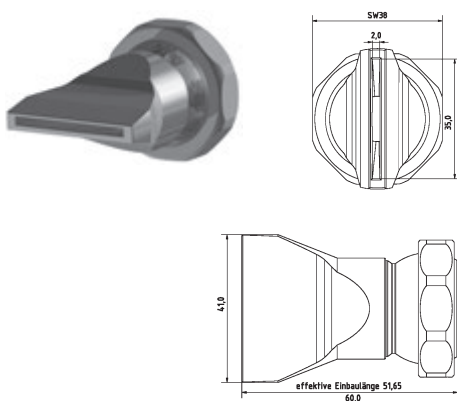
3-DU-SL-40-GS-0.4

Flachdüse Schlitzbreite 28 x 0,4 mm
gerader Strahl
*flat nozzle broadly with slit 28 x 0,4 mm
straight jet*



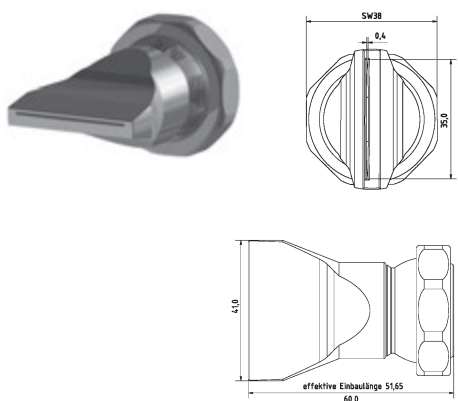
3-DU-SL-40-GS-1.0

Flachdüse Schlitzbreite 28 x 1,0 mm
gerader Strahl
*flat nozzle broadly with slit 28 x 1,0 mm
straight jet*



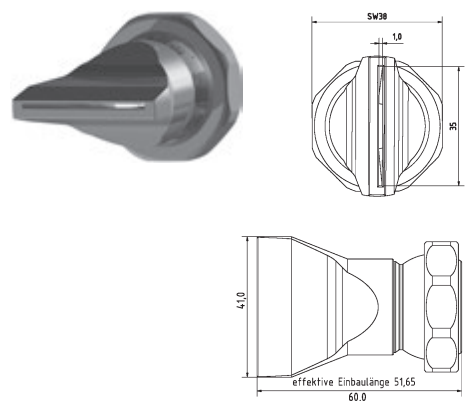
3-DU-SL-50-GS

Flachdüse Schlitzbreite 35 x 2,0 mm
gerader Strahl
*flat nozzle broadly with slit 35 x 2,0 mm
straight jet*



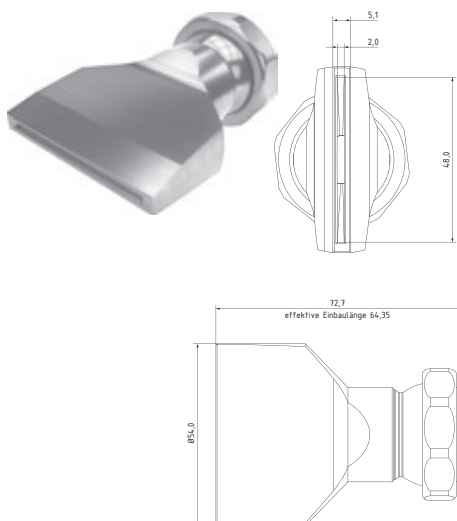
3-DU-SL-50-GS-0.4

Flachdüse Schlitzbreite 35 x 0,4 mm
gerader Strahl
*flat nozzle broadly with slit 35 x 0,4 mm
straight jet*



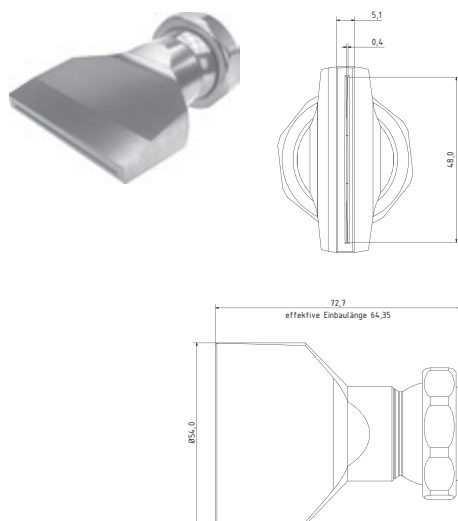
3-DU-SL-50-GS-1.0

Flachdüse Schlitzbreite 35 x 1,0 mm
gerader Strahl
*flat nozzle broadly with slit 35 x 1,0 mm
straight jet*



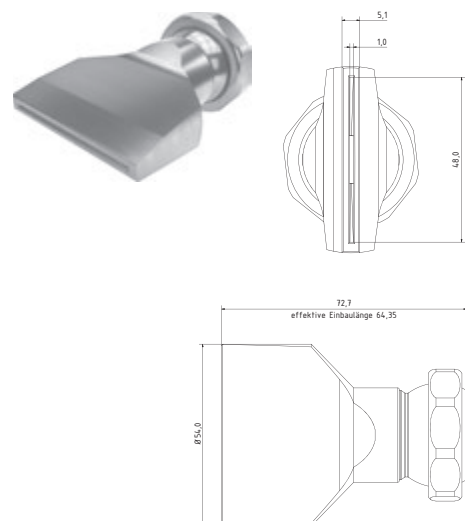
3-DU-SL-55-GS

Flachdüse Schlitzbreite 48 x 2,0 mm
gerader Strahl
*flat nozzle broadly with slit 48 x 2,0 mm
straight jet*



3-DU-SL-55-GS-0.4

Flachdüse Schlitzbreite 48 x 0,4 mm
gerader Strahl
*flat nozzle broadly with slit 48 x 0,4 mm
straight jet*



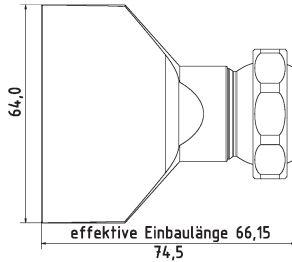
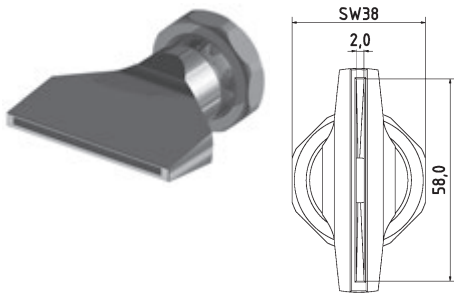
3-DU-SL-55-GS-1.0

Flachdüse Schlitzbreite 48 x 1,0 mm
gerader Strahl
*flat nozzle broadly with slit 48 x 1,0 mm
straight jet*

Type3 [3/4" System]

Hirt
LINE

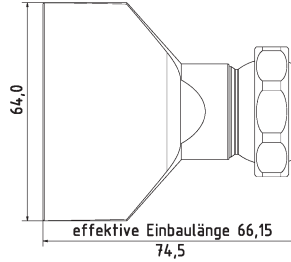
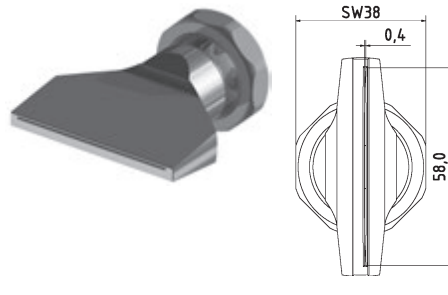
Düsen | Nozzles



3-DU-SL-65-GS

Flachdüse Schlitzbreite 58 x 2,0 mm
gerader Strahl

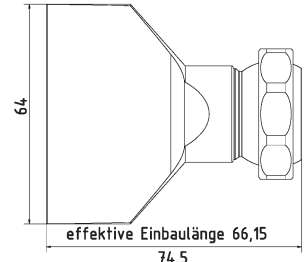
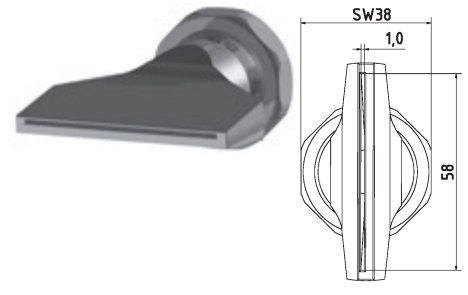
*flat nozzle broadly with slit 58 x 2,0 mm
straight jet*



3-DU-SL-65-GS-0.4

Flachdüse Schlitzbreite 58 x 0,4 mm
gerader Strahl

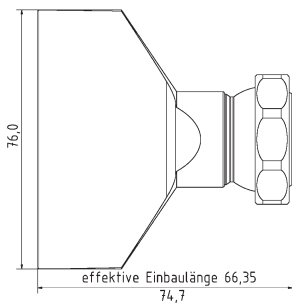
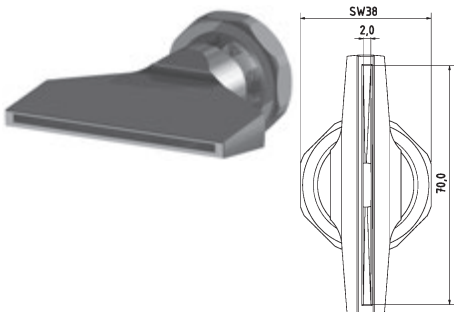
*flat nozzle broadly with slit 58 x 0,4 mm
straight jet*



3-DU-SL-65-GS-1.0

Flachdüse Schlitzbreite 58 x 1,0 mm
gerader Strahl

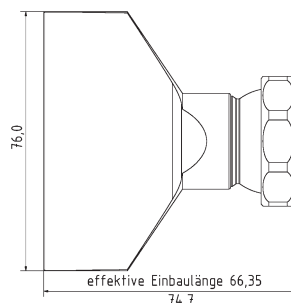
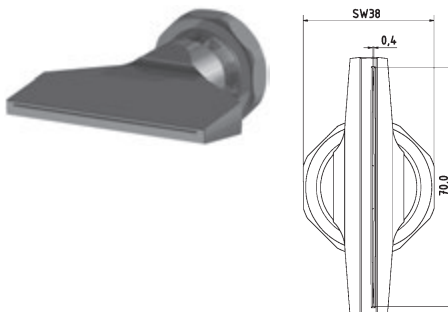
*flat nozzle broadly with slit 58 x 1,0 mm
straight jet*



3-DU-SL-76-GS

Flachdüse Schlitzbreite 70 x 2,0 mm
gerader Strahl

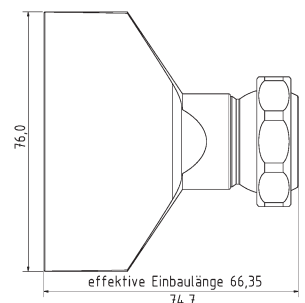
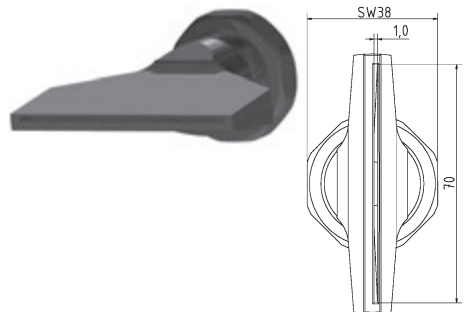
*flat nozzle broadly with slit 70 x 2,0 mm
straight jet*



3-DU-SL-76-GS-0.4

Flachdüse Schlitzbreite 70 x 0,4 mm
gerader Strahl

*flat nozzle broadly with slit 70 x 0,4 mm
straight jet*

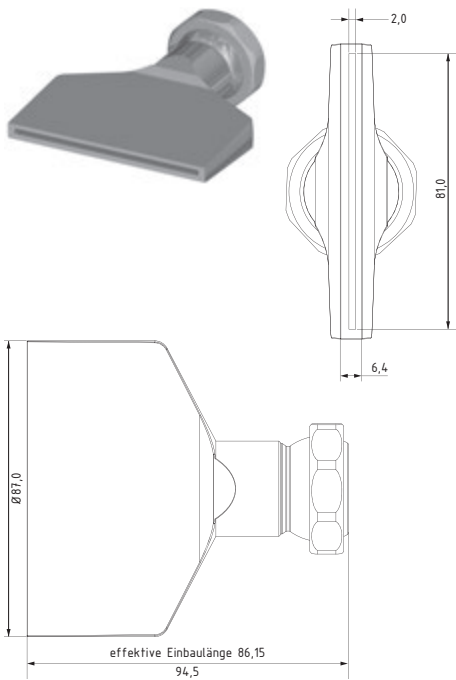


3-DU-SL-76-GS-1.0

Flachdüse Schlitzbreite 70 x 1,0 mm
gerader Strahl

*flat nozzle broadly with slit 70 x 1,0 mm
straight jet*

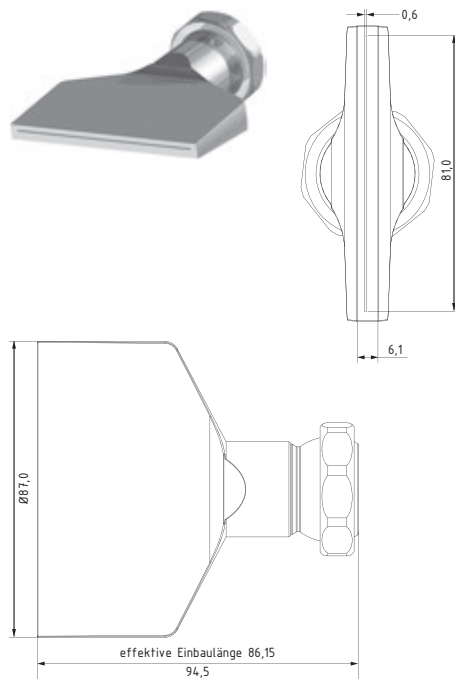
Düsen | Nozzles



3-DU-SL-87-GS

Flachdüse Schlitzbreite 81 x 2,0 mm
gerader Strahl

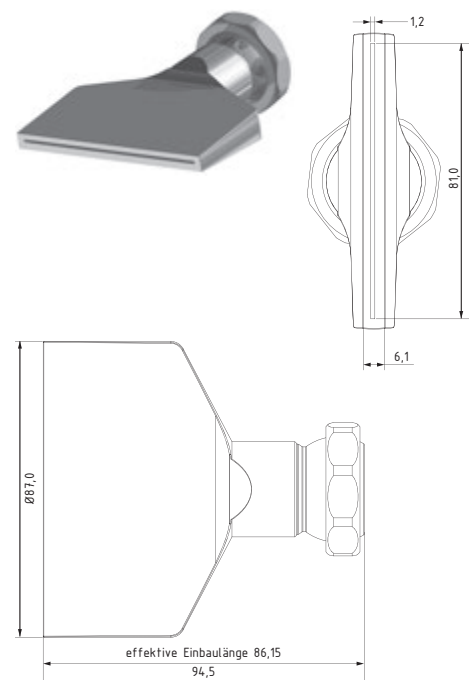
*flat nozzle broadly with slit 81 x 2,0 mm
straight jet*



3-DU-SL-87-GS-0.6

Flachdüse Schlitzbreite 81 x 0,6 mm
gerader Strahl

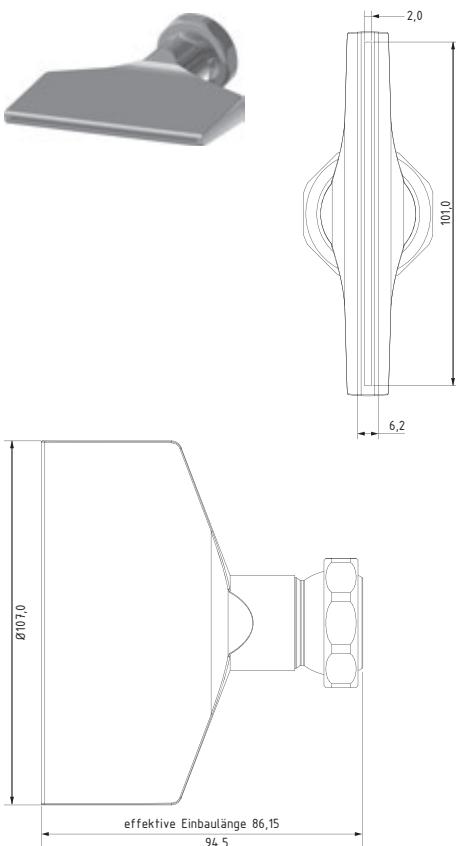
*flat nozzle broadly with slit 81 x 0,6 mm
straight je*



3-DU-SL-87-GS-1.2

Flachdüse Schlitzbreite 81 x 1,2 mm
gerader Strahl

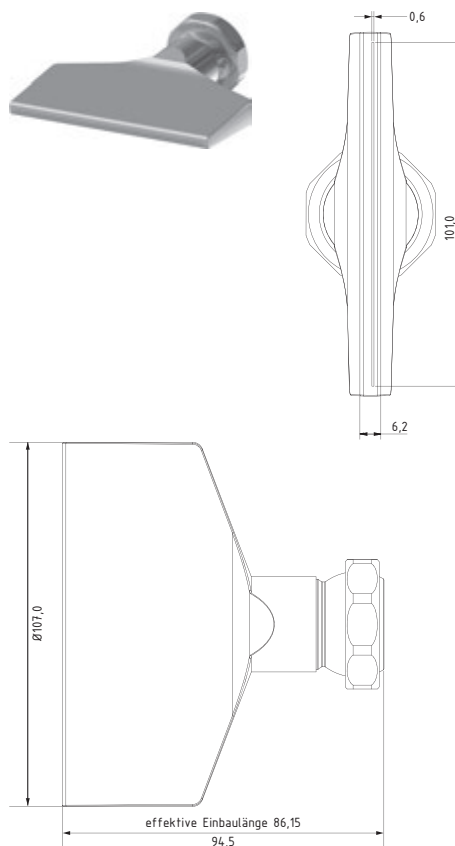
*flat nozzle broadly with slit 81 x 1,2 mm
straight je*



3-DU-SL-107-GS

Flachdüse Schlitzbreite 101 x 2,0 mm
gerader Strahl

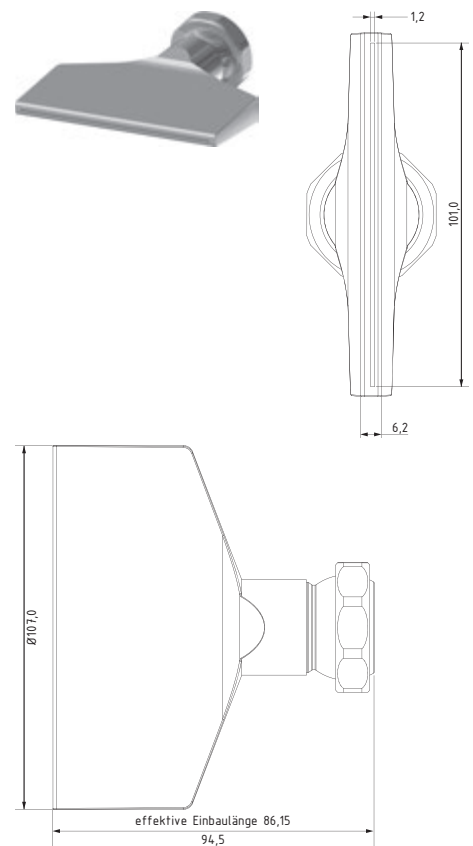
*flat nozzle broadly with slit 101 x 2,0 mm
straight jet*



3-DU-SL-107-GS-0.6

Flachdüse Schlitzbreite 101 x 0,6 mm
gerader Strahl

*flat nozzle broadly with slit 101 x 0,6 mm
straight jet*



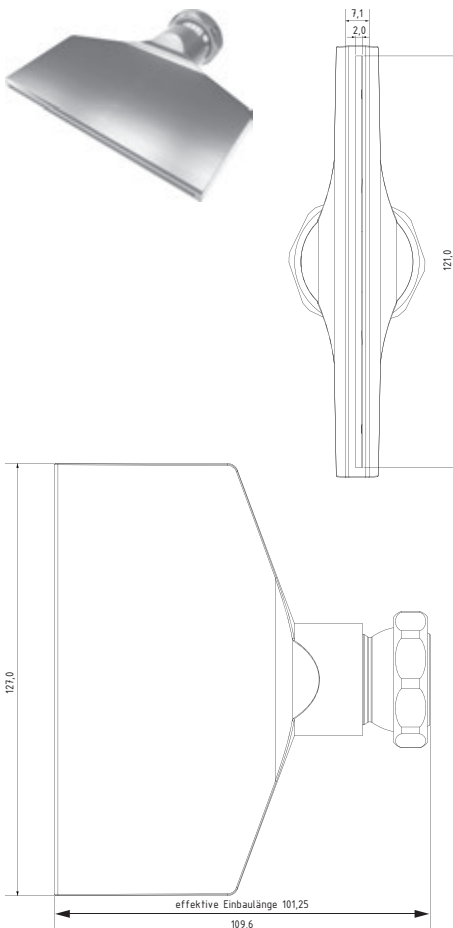
3-DU-SL-107-GS-1.2

Flachdüse Schlitzbreite 101 x 1,2 mm
gerader Strahl

*flat nozzle broadly with slit 101 x 1,2 mm
straight jet*

Type3 [3/4" System]

Düsen | Nozzles

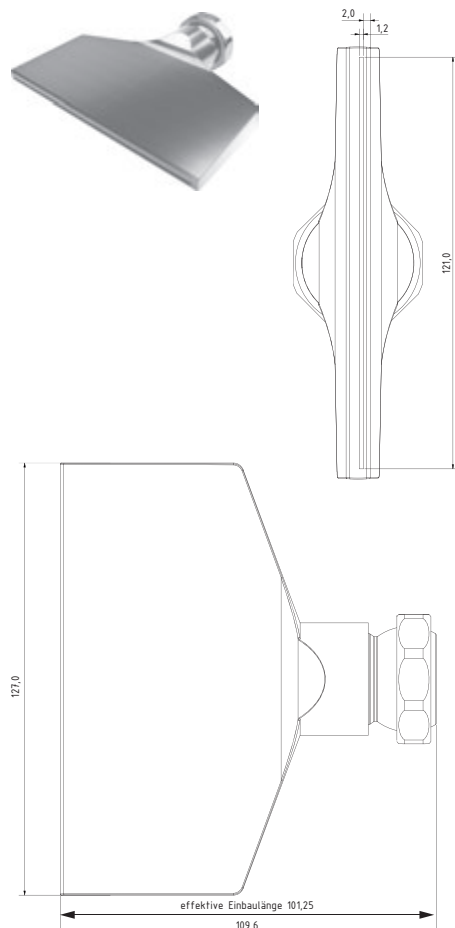


3-DU-SL-127-GS

Flachdüse Schlitzbreite 121 x 2,0 mm

gerader Strahl

flat nozzle broadly with slit 121 x 2,0 mm
straight jet

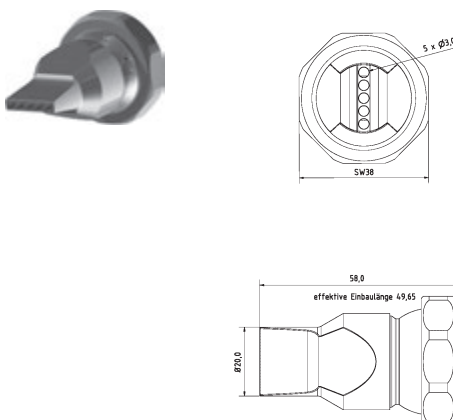


3-DU-SL-127-GS-1.2

Flachdüse Schlitzbreite 121 x 1,2 mm

gerader Strahl

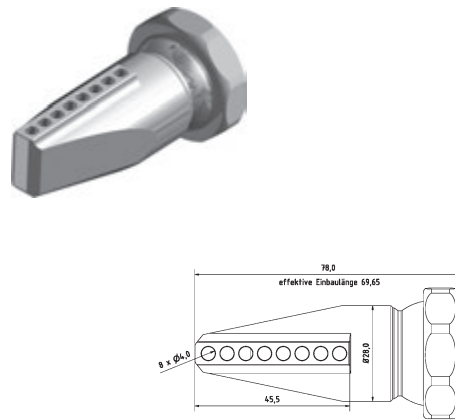
flat nozzle broadly with slit 121 x 1,2 mm
straight jet



3-DU-LL-5-3

Düse gerade mit Bohrungen 5 x Ø 3 mm

nozzle straight with holes 5 x Ø 3 mm

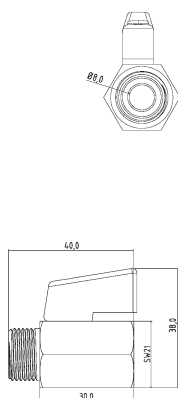


3-DU-LL-90-8

Düse 90° mit Bohrungen 8 x Ø 4 mm

nozzle 90° with holes 8 x Ø 4 mm

Zubehör | Accessories

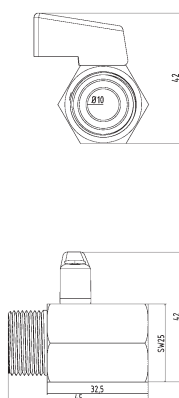


KH-38

Mini-Kugelhahn G3/8" Messing Verchromt
mini ball valve thread 3/8" brass chrome-plated

KH-38-SS

Mini-Kugelhahn G3/8" Edelstahl
mini ball valve thread 3/8" stainless steel

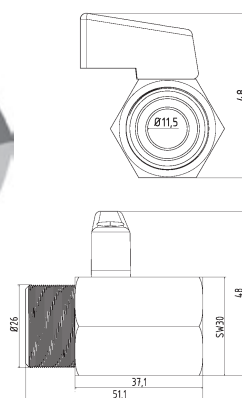


KH-12

Mini-Kugelhahn G1/2" Messing Verchromt
mini ball valve thread 1/2" brass chrome-plated

KH-12-SS

Mini-Kugelhahn G1/2" Edelstahl
mini ball valve thread 1/2" stainless steel



KH-34

Mini-Kugelhahn G3/4" Messing Verchromt
mini ball valve thread 3/4" brass chrome-plated



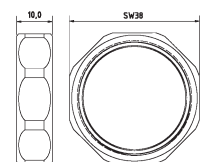
3-SW-27

Schlüssel aus Stahl SW27
open end wrench SW27



3-SW-38

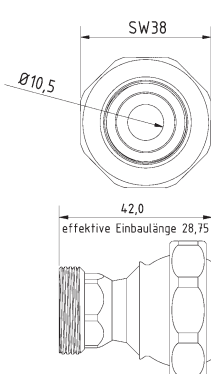
Schlüssel aus Stahl SW38
open end wrench SW38



3-MU

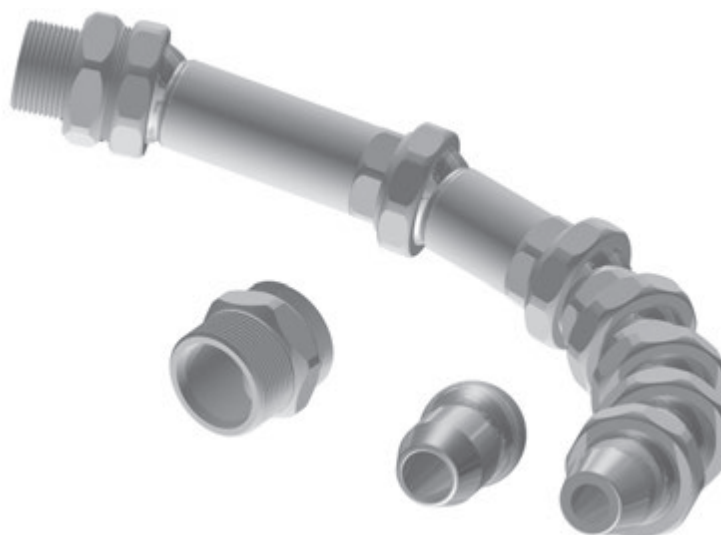
Mutter Standard
screw nut (default)

Grundset | Basic Set



RE-3-2

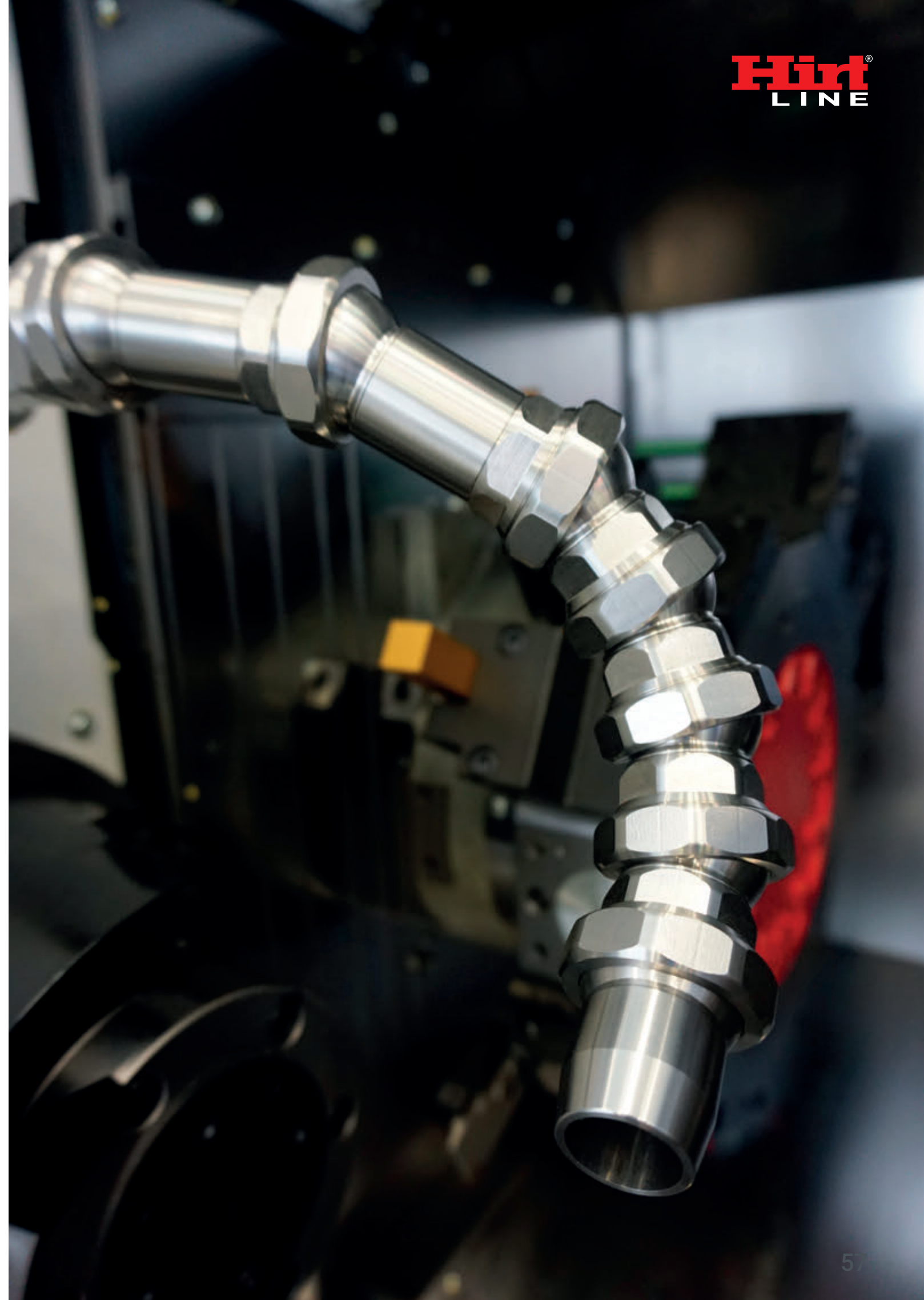
Reduktion Typ3 auf Typ2
reduction Type3 to Type2



3-GS

Grundset Typ3 3/4" Zoll System L = 320 mm
basic set Type3 3/4" system l = 320 mm

4 x 3-GE, 1 x 3-GE-2, 1 x 3-GE-3, 1 x 3-AD-34PT, 1 x 3-AD-10PT, 1 x 3-DU-12,
1 x 3-DU-15, 1 x 3-SW-27, 1 x 3-SW-38



PROFESSIONAL EMULSION MIXING UNIT

The Filling Station for your
Machine Tool!

TAFAN 5000

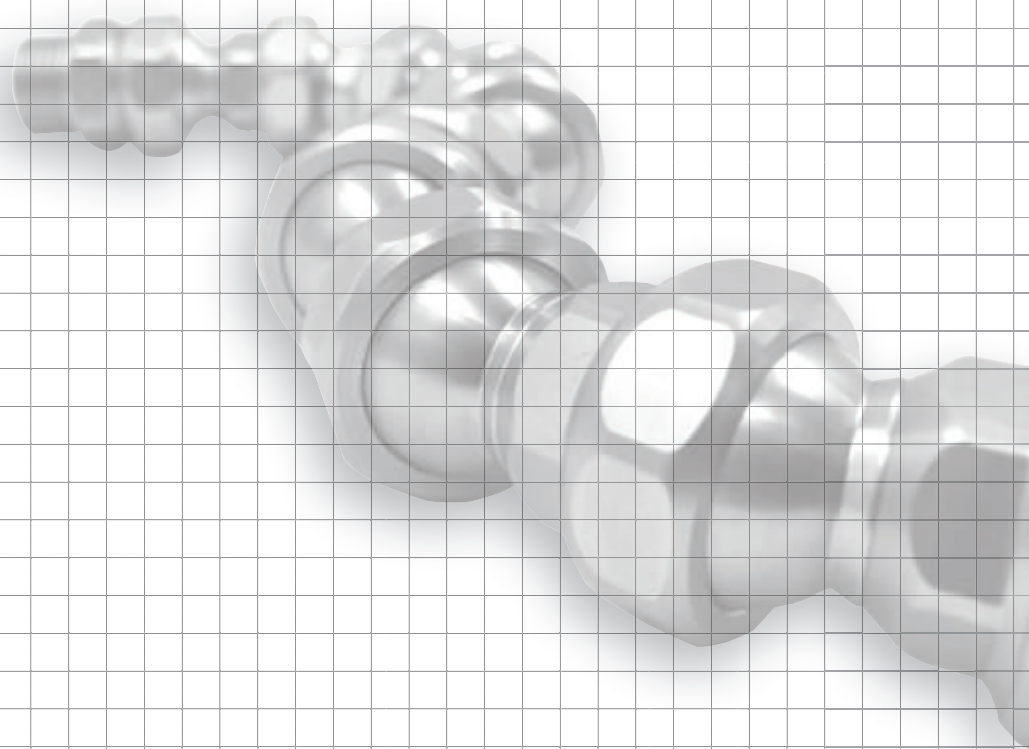


- no overflow (overflow protection)
- vacuum suction emulsion
- adjustable mixing ratio
- high pressure (fast fill)
- high life (stainless steel body)
- made in precision
- suitable for domestic water connection 2-8 bar

The professional filling station Tafan-5000 is perfect for professionally and quickly filling all types of machine tools. With our professional mixing device Tafan-5000, preparing machine emulsions and filling the systems can be done in one step.

Thanks to the self-priming (vacuum), the coolant concentrate is effortlessly drawn in and mixed with tap water to form the emulsion. The automatic dispensing gun prevents overflow at the machine.







FAST AND
POWERFUL
SUPPORT

We will advise you personally
about the benefits of our
Cooling-Lubricant-Supply Systems



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