

HOCHDRUCK

KÜHL-SCHMIERSTOFF-

LEITUNGSSYSTEME

AUS ROSTFREIEM STAHL



Typ0

1/8" System
innen Ø 3,2 mm

Typ1

1/4" System
innen Ø 5,8 mm

Typ2

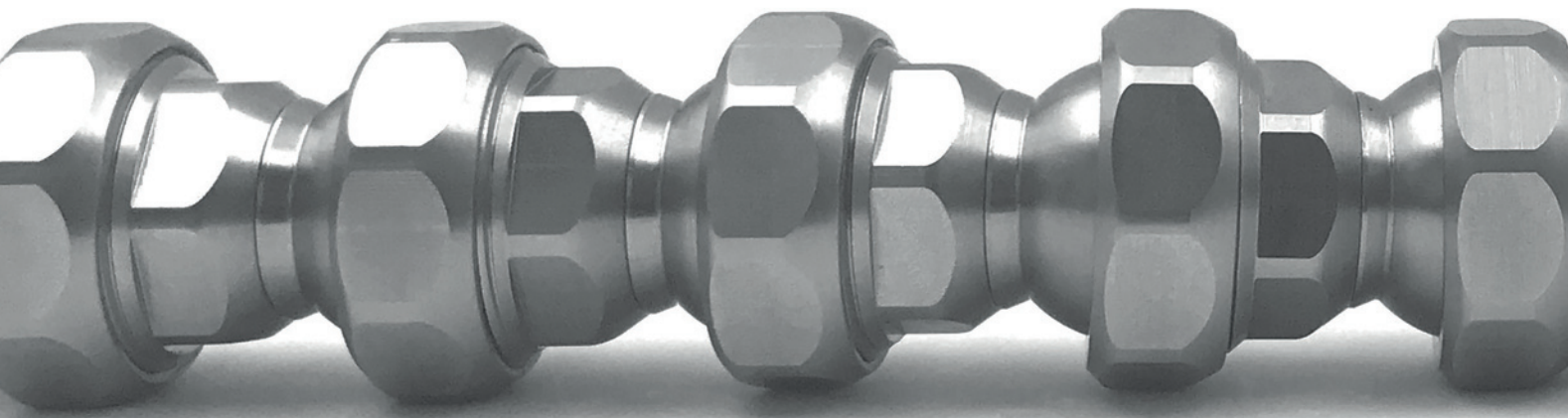
1/2" System
innen Ø 11 mm

Typ 3

3/4" System
innen Ø 19 mm

INDIVIDUELL & FLEXIBEL

Hirt[®]
LINE



Das Original Gelenkschlauch System | Hirt-Line®

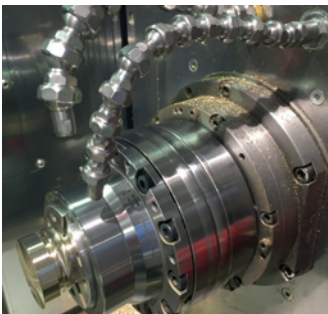
Unser Gelenkschlauchsystem ist beliebig ausbaubar, rostfrei und bietet eine hohe Lebensdauer. Die Einzelteile sind präzisionsgefertigt und unempfindlich gegen Wärme und chemische Substanzen. Lässt sich einfach von Hand zusammenschrauben, anpassen, verlängern und kürzen. Weder Kühlmitteldruck noch Maschinenvibrationen können die Position verändern.

Druckbeständig über 100 bar. Einsetzbar an Werkzeugmaschinen und Fertigungsanlagen, vorwiegend an Drehmaschinen, Fräsmaschinen,

Schleifmaschinen, Sägemaschinen und Abfüllanlagen. Geeignet für Emulsionen, Kühl- und Schneidöle, chemische Substanzen und zur Luftkühlung.

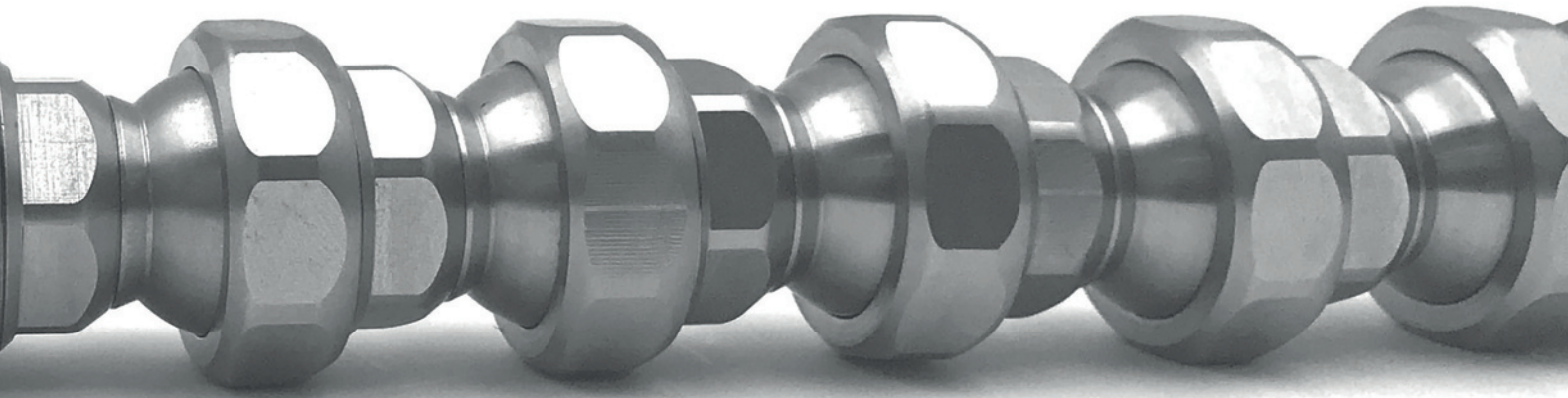
Durch das Hirt-Line® System wird der Durchfluss effizienter gestaltet, was den Bedarf an Pumpenleistung verringert. Dies führt zu einem geringeren Energieverbrauch und einer spürbaren Reduzierung der Stromkosten. So profitieren Sie von einem optimierten Betrieb und sparen zugleich Energie und Kosten.

Eigenschaften:



- Strahl punktgenau einstell-/ und fixierbar (verschraubbar)
- Resistent gegen hohe Temperaturen, chemischen Substanzen, Späne, Druck und Vibrationen
- Korrosionsbeständiges Material 1.4305 V2A (auf Anfrage in V4A)
- Verschleißfest
- Druckstabil über 100 bar
- Einsatzbereich -100°C bis +300°C
- ohne Dichtringe
- 4 Systemgrößen, alle untereinander kompatibel
- Hohe Lebensdauer
- Direkt am Werkzeug einsetzbar (AGW-Anschluss)
- Vielseitig kombinierbar
- Durchdachtes und effektives Sortiment
- Einsetzbar in der Lebensmittelindustrie und Medizintechnik
- Anschlusselemente für jede Maschine
- Grundsets in jedem System vorhanden





Höhere Werkzeugstandzeiten und weniger Maschinenstillstand für Werkzeugmaschinen

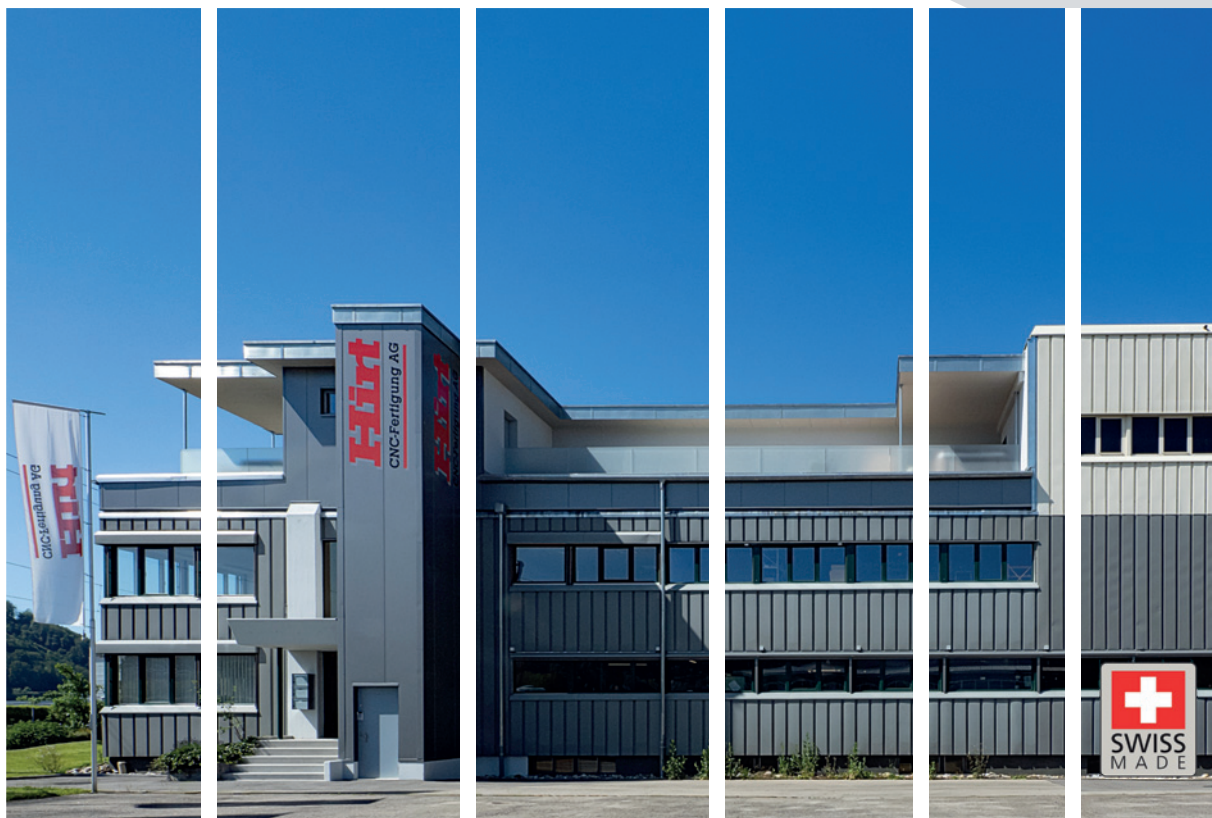
Kunststoff-Gelenkschläuche sind zwar sehr flexible Kühlmittel-Leitungen, bieten aber nur bedingt die geforderte Betriebs-sicherheit. Standard Gelenkschläuche werden häufig durch Vibrationen oder Späne verstellt und das Kühlmittel gelangt nicht mehr dahin, wo es von

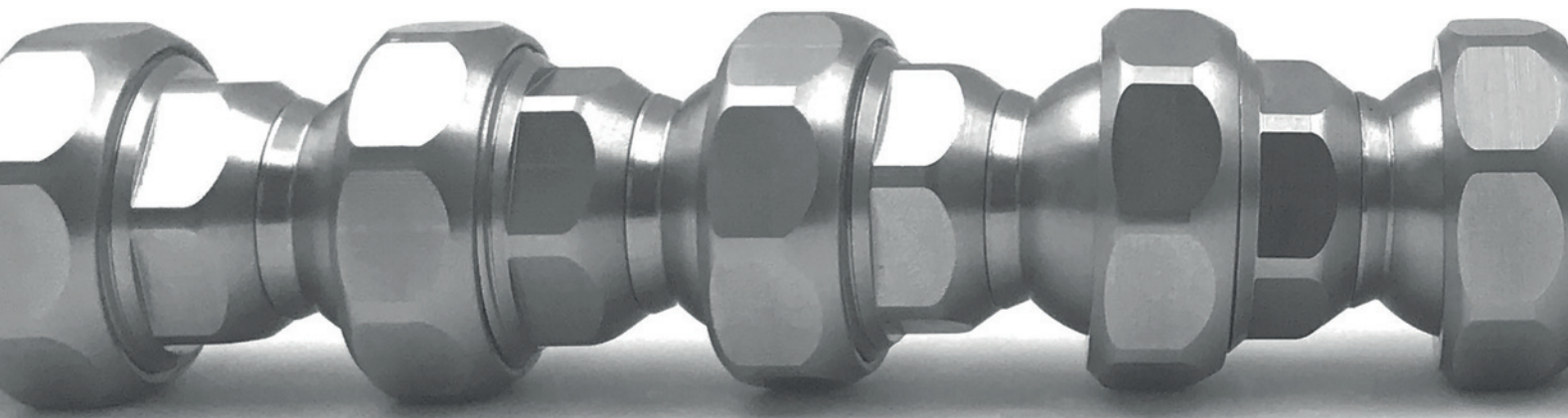
Nutzen ist. Maschinenstillstände bis hin zu Werkzeugschäden sind teuer und können vermieden werden. Mit unserem herstellerunabhängigen Hirt-Line® Kühl-Schmierstoff-Leitungssystem für Dreh-, Fräs- und Schleifmaschinen steigern Sie Ihre Produktivität.

MADE IN SWITZERLAND ist das Qualitätsversprechen von Hirt-Line®

Dem verpflichten wir uns durch die eigene, flexible Fertigung und einem hohen Qualitätsanspruch. Ob Serienfertigung

von Standardprodukten oder Einzelanfertigung von Sonderlösungen - wir sind gerne für Sie da!





4 Systemgrößen

Typ0 | 1/8" | Durchlass Ø 3,2 mm | Gewinde M8 x 0,75

Typ1 | 1/4" | Durchlass Ø 5,8 mm | Gewinde M14 x 1,0

Typ2 | 1/2" | Durchlass Ø 11,0 mm | Gewinde M24 x 1,25

Typ3 | 3/4" | Durchlass Ø 19,0 mm | Gewinde M34 x 1,25

Alle untereinander kompatibel



Maschinenadapter

Neben den Standard Rohrgewinde G1/8", G1/4", G3/8", G1/2", G3/4", G1" sowie Metrischen M5 x 0,8 über M14 x 1,0 bis M20 x 1,5, bieten wir auch konische Gewinde und Kugelkopfadapter mit den Maßen Ø10 mm, Ø12 mm, Ø14 mm, Ø15 mm an, dazu diverse Spezial-Adapter.

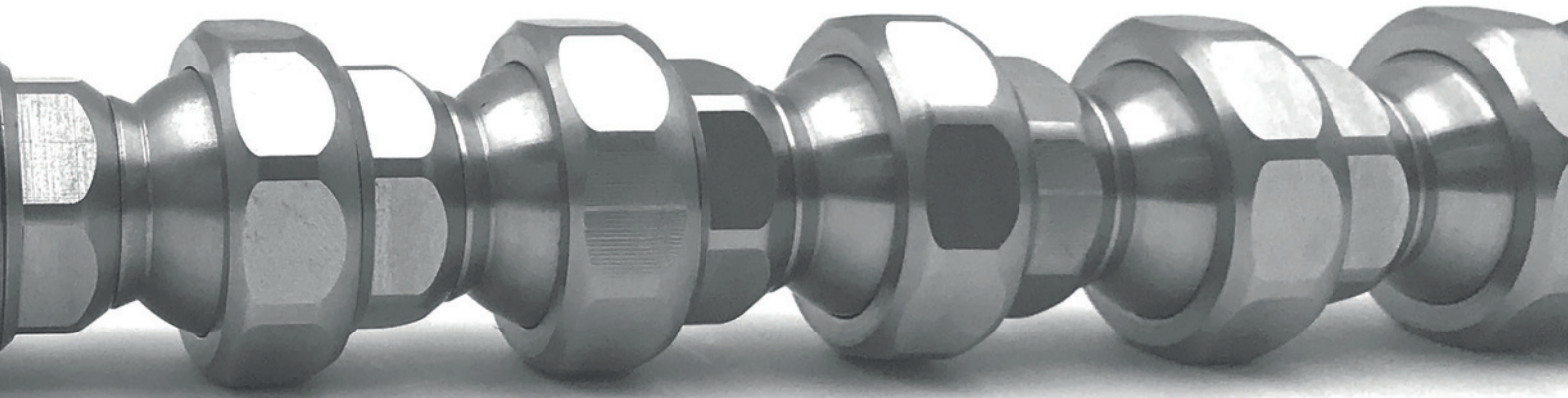
Auf Anfrage erhalten Sie Ihren Spezial-Anschlussadapter!



Grundelemente

3,2 mm, 5,8 mm, 11,0 mm und 19,0 mm Innendurchmesser messen die Grundelemente des Hirt-Line Systems. Die Vielzahl verschiedener Standard Längen von 9,3 mm über 100 mm bis hin zu 1000 mm machen ein exaktes Einrichten und Fixieren des Kühlstrahls an der gewünschten Stelle möglich. Und sorgen so für ein effektives und einfaches Anpassen. Andere Längen auf Spezialanfertigung möglich.





Winkelelemente

Das Hirt-Line® System bietet viele verschiedene Winkelelemente in jeder Systemgröße, ob Typ 0, Typ 1, Typ 2, oder Typ 3 wir haben das Passende wie z.B. Winkelstücke 90°, Mehrfachverbindungen, T- und Y-Stücke. Durch die große Auswahl sorgen wir so für eine möglichst große Flexibilität des Systems. Spezial-Verschraubungen auf Anfrage!



Düsen

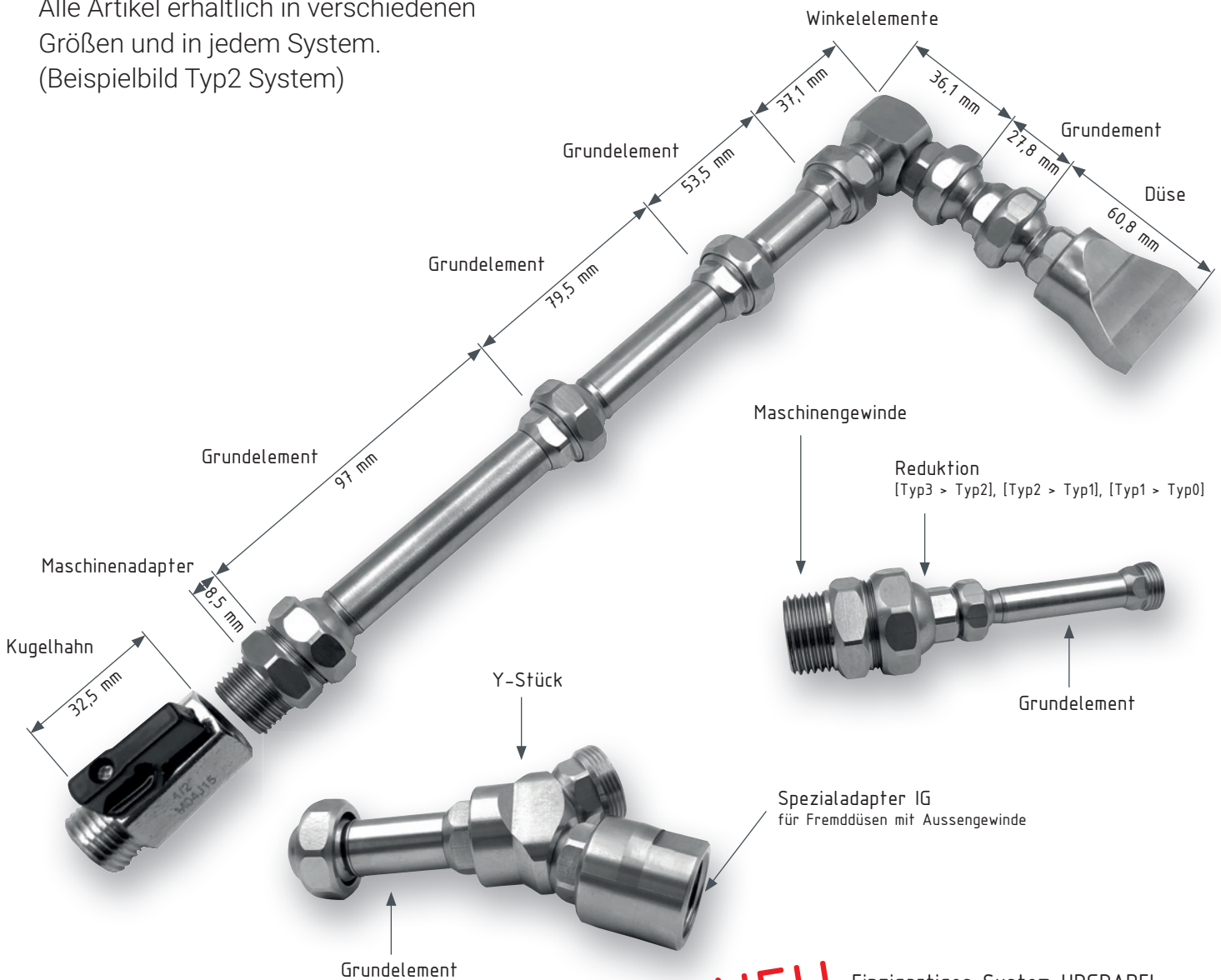
Die Düsen aus einem Werkstoff 1.4305 (V2A) sind gegen Wärme unempfindlich und ab Ø0,5 mm, über Ø10,0 mm bis hin zu Ø19,0 mm Durchlass erhältlich. Unsere zahlreichen Flachdüsen mit verschiedenen Schlitzbreiten lassen keine Wünsche offen; zum schwemmen oder kühlen sowie Flach- und Rundscheifen bestens geeignet. Hinzu kommen einige special Düsen, entweder mit mehreren Bohrungen oder Mini-Schlitzten. Optimiert für eine perfekte Kühlung!

Zubehör

Das Hirt-Line® Zubehör besteht aus eigenen Produkten wie Schnellkupplungen, Rändelmuttern oder Verschlusskappen, dazu Reduktionen um die einzelnen Systeme miteinander zu kombinieren. Passende externe Artikel z.B. Kugelhähne und Maulschlüssel bieten wir mit an. Mit diesem Sortiment sichern Sie sich auch für die Zukunft eine optimale und stabile Kühlmittelzufuhr, besonders für individuelle Anwendungen.



Alle Artikel erhältlich in verschiedenen Größen und in jedem System.
(Beispielbild Typ2 System)



Ein Baukasten, der überzeugt!

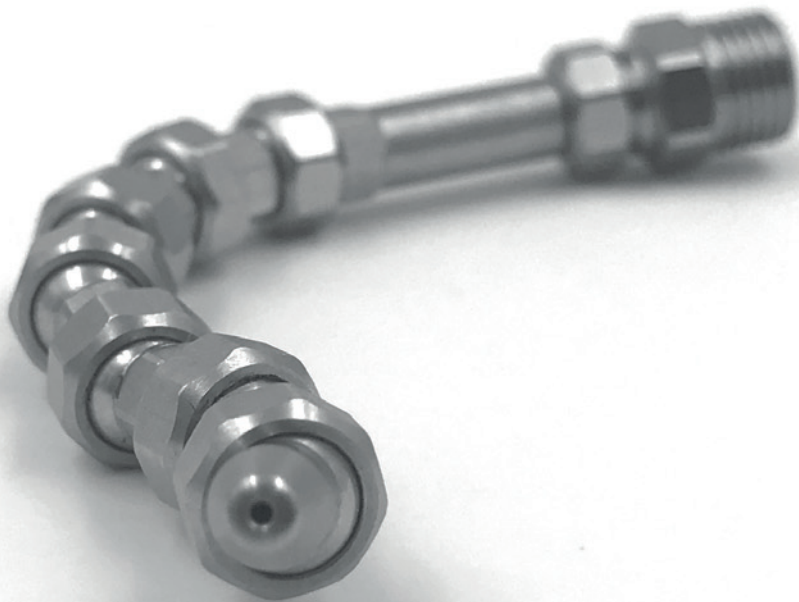
Das Hirt-Line® System kann die Basis einer erfolgreichen Produktion sein. Die Basis für das System wiederum sind seine einzelnen Komponenten. Um Kunden die Möglichkeit zu eröffnen, bei der Gestaltung und Umsetzung ihrer Anlagen ganz eigene Wege zu gehen, macht Hirt-Line® alle Komponenten und deren Daten hier einzeln verfügbar. Hirt-Line® hat alle seine Elemente in einem Katalog für schnelle und einfache Bestellung zusammengestellt.

NEU Einzigartiges System UPGRADE!
Relevante System Elemente geschweißt.
Für eine höhere mechanische Belastung
und bis zu 300°C stabil.



PRODUKTÜBERSICHT

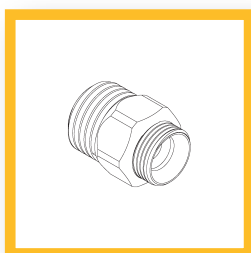
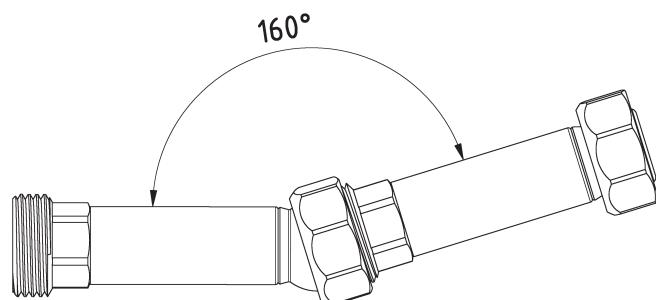
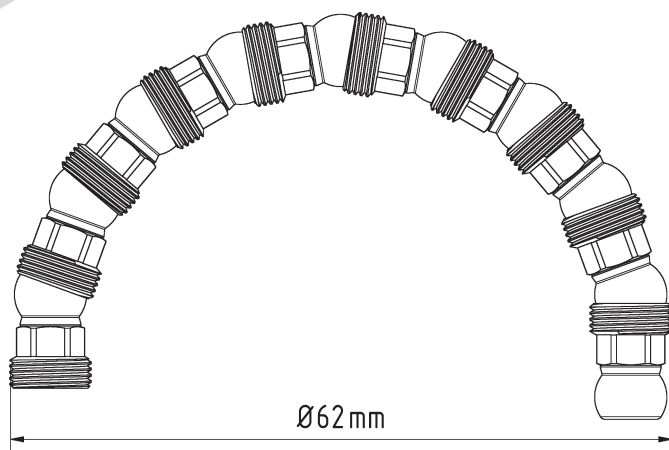
Typ0 [1/8"]



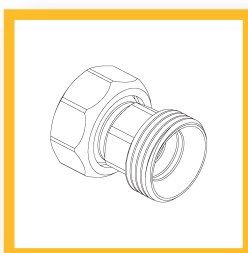
Das neueste Typ0-System zeichnet sich durch eine einfache Montage und unkomplizierte Einrichtung auf dem Werkzeug aus. Es umfasst eine Vielzahl von Düsen, die von einem Durchmesser von $\text{\O}0,5$ mm bis $\text{\O}3,0$ mm reichen, sowie Düsen mit mehreren Auslässen. Ein umfangreiches Sortiment an Maschinenadaptern, darunter M5x0,8, M10x1,5 und Kugeladapter mit $\text{\O}10,0$ mm, bietet dem Anwender die nötige Flexibilität und Vielseitigkeit. Ergänzt wird dies durch diverse Grund- und Winkelelemente, die eine variable Anpassung an die spezifischen Anforderungen der Produktbearbeitung ermöglichen.

TECHNISCHE DATEN:

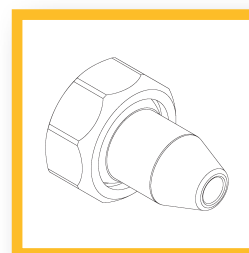
- Größe Typ0 (1/8")
- Durchlass \varnothing 3,2 mm
- Druckbeständig bis 80 bar
- Einsatzbereich -100°C bis +300°C
- Gewinde (Elemente) M 8 x 0,75
- Material 1.4305 (V2A)



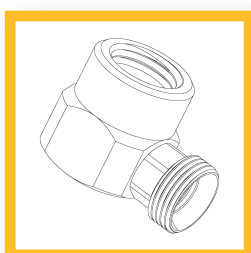
MASCHINENADAPTER



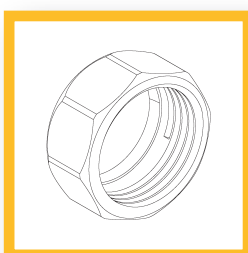
GRUNDELEMENTE



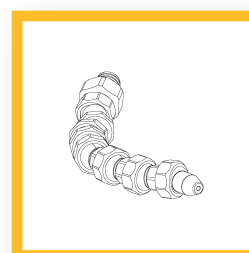
DÜSEN



WINKELELEMENTE



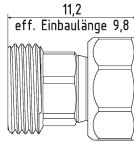
ZUBEHÖR



GRUNDSSET Typ0

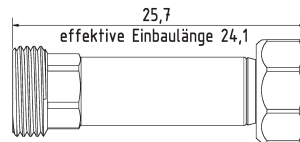
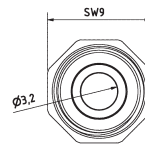
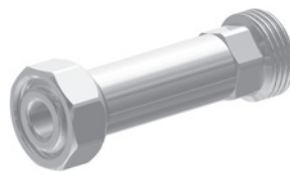
Typ0 [1/8" System]

Grundelemente | Basic Elements



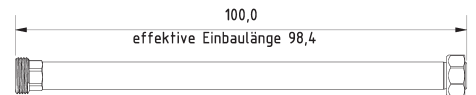
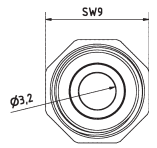
0-GE

$l = 11,2$ mm effektiv $l = 9,8$ mm
 $l = 11,2$ mm effective $l = 9,8$ mm



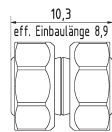
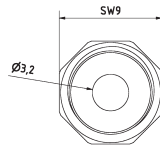
0-GE-25

$l = 25,7$ mm effektiv $l = 24,1$ mm
 $l = 25,7$ mm effective $l = 24,1$ mm



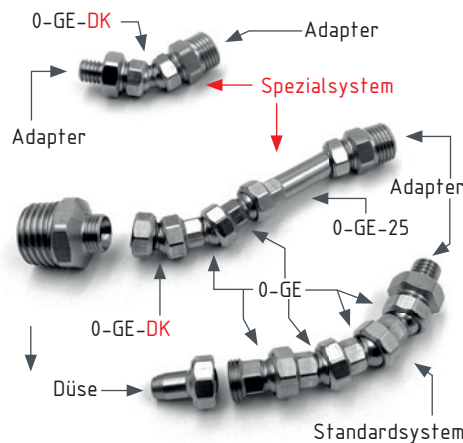
0-GE-100

$l = 100$ mm effektiv $l = 98,4$ mm
 $l = 100$ mm effective $l = 98,4$ mm

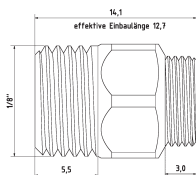


0-GE-DK Spezial Element

$l = 10,3$ mm effektiv $l = 8,9$ mm Doppelkugel
 $l = 10,3$ mm effective $l = 8,9$ mm double ball

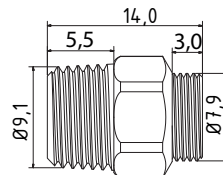
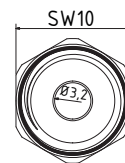


Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



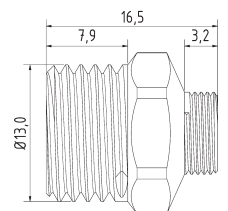
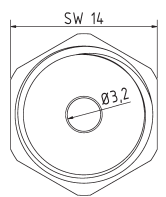
0-AD-18

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



0-AD-18-PT

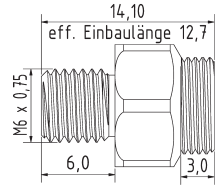
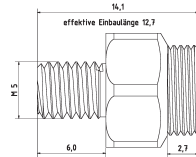
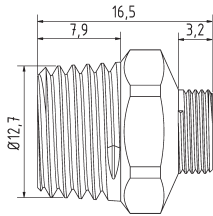
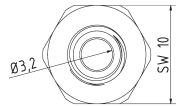
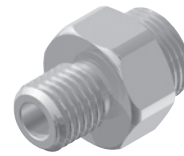
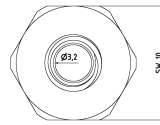
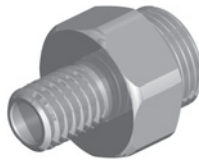
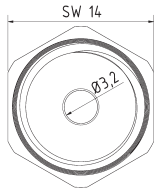
Adapterstück G 1/8" PT (Withworth-Gewinde)
 adaptor piece thread 1/8" PT (NPT thread)



0-AD-14

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

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



0-AD-14-PT

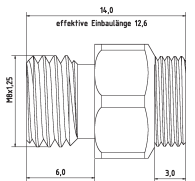
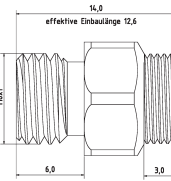
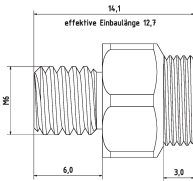
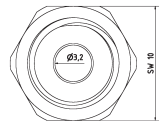
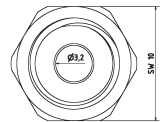
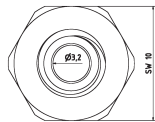
Adapterstück G 1/4" PT (Withworth-Gewinde)
adaptor piece thread 1/4" PT (NPT thread)

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

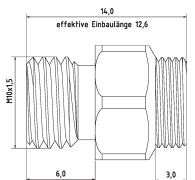
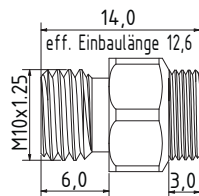
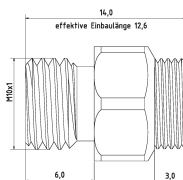
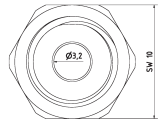
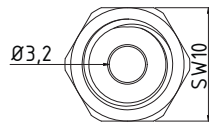
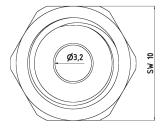
Adapterstück M 6 x 1
adaptor piece M 6 x 1 metric thread

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

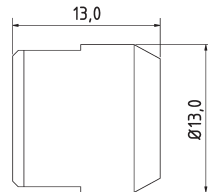
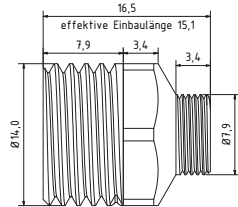
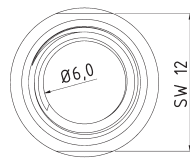
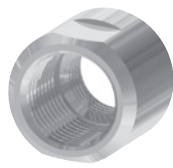
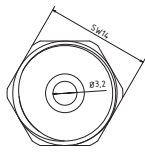
Adapterstück M 10x1,25
adaptor piece M 10 x 1,25 metric thread

0-AD-M10

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

Typ0 [1/8" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter

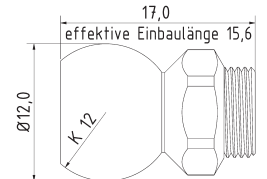
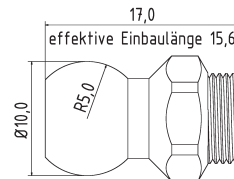
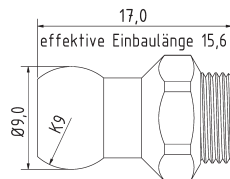
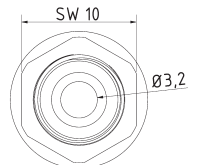
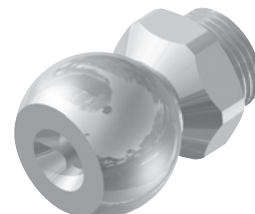
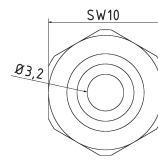
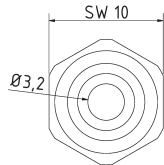


0-AD-141

Adapterstück M 14x1
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

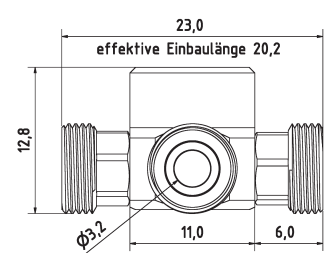
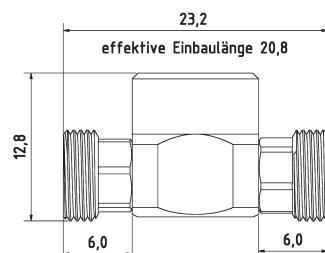
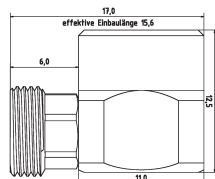
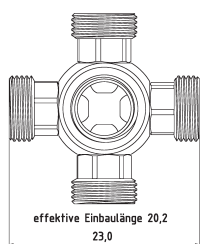
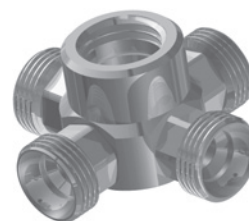
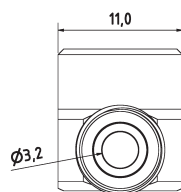
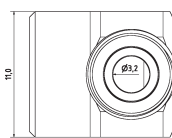
0-AD-K10

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

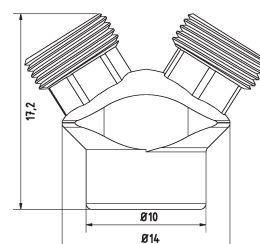
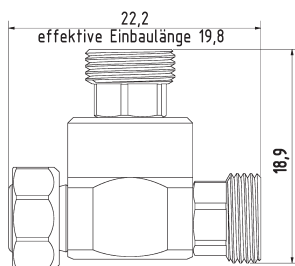
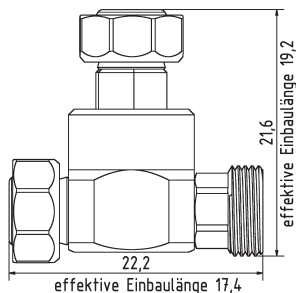
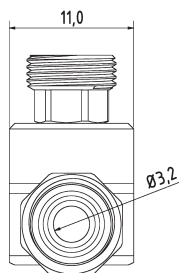
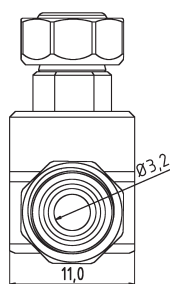
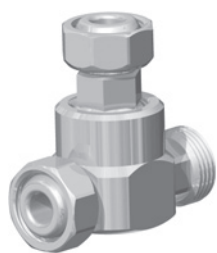
0-WV-2

T-Stück
T-piece fixed

0-WV-4

Mehrfachverteiler
Manifold

Winkelelemente | Elbows



0-WV-R

Verschlussstück zu Ringdüse
locking tappet to ring nozzle

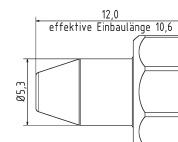
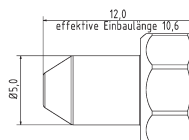
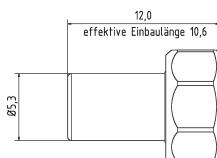
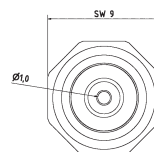
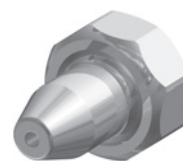
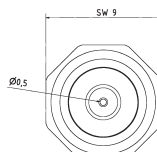
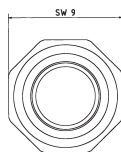
0-WV-R-2K

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

0-YV

Y-Stück
Y-piece fixed

Düsen | Nozzles



0-DU-0

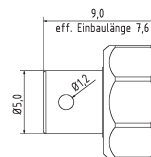
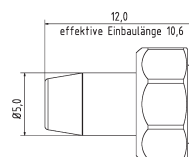
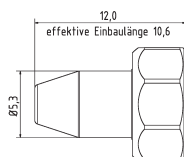
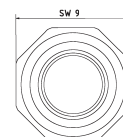
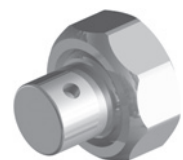
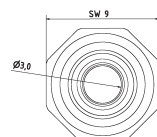
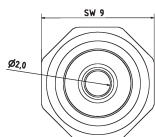
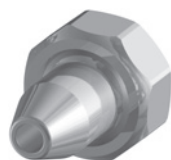
Düse ohne Bohrung
nozzle straight without drilling

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

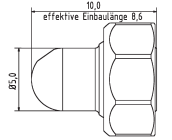
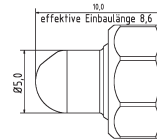
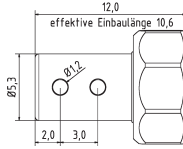
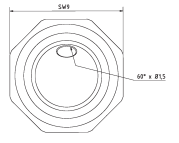
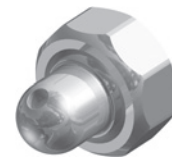
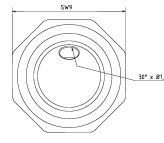
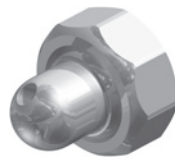
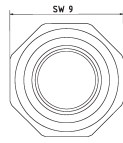
Düse gerade Bohrung Ø 3,0 mm
nozzle straight Ø 3,0 mm

0-DU-90-1

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

Typ0 [1/8" System]

Düsen | Nozzles



0-DU-90-2

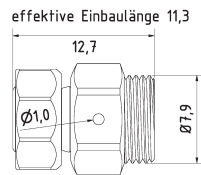
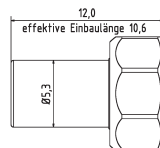
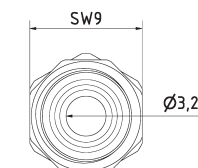
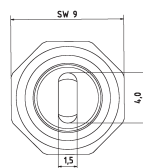
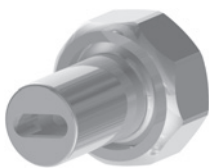
Düse 90° Bohrung 2 x Ø 1,2 mm
nozzle 90° drill hole 2 x Ø 1,2 mm

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



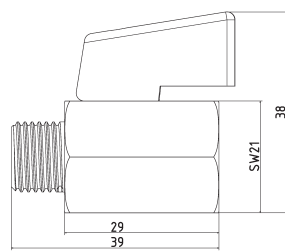
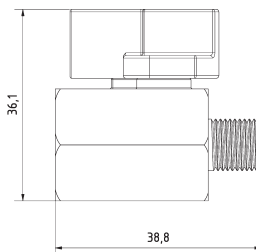
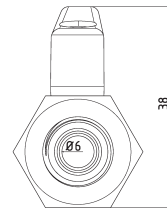
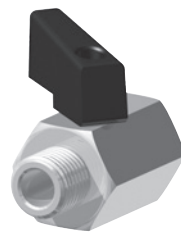
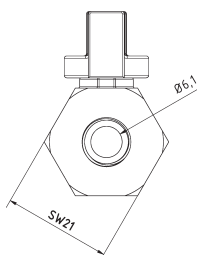
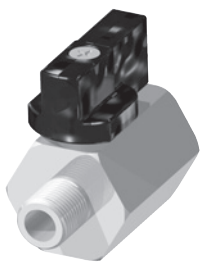
0-DU-415

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

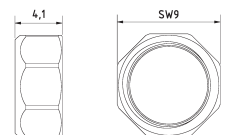
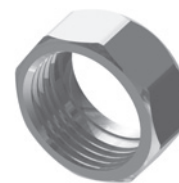
Mini-Kugelhahn G1/8" Edelstahl
mini ball valve thread 1/8" stainless steel

KH-14

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

KH-14-SS

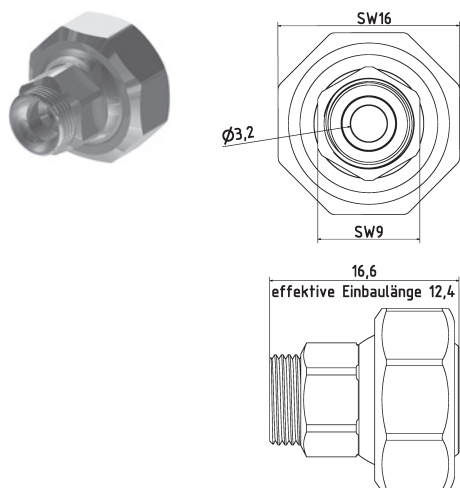
Mini-Kugelhahn G1/4" Edelstahl
mini ball valve thread 1/4" stainless steel



0-MU

Mutter Standard
screw nut (default)

Zubehör | Accessories



RE-1-0

Reduktion Typ1 auf Typ0
reduction Type1 to Type0



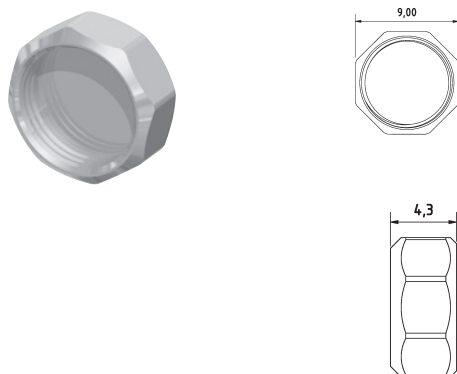
SW-6

Schlüssel aus Stahl SW6
open end wrench SW6



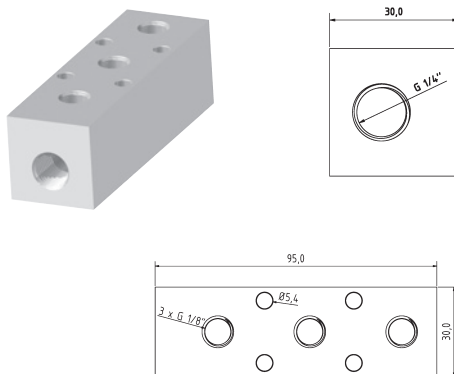
SW-9

Schlüssel aus Stahl SW9
open end wrench SW9



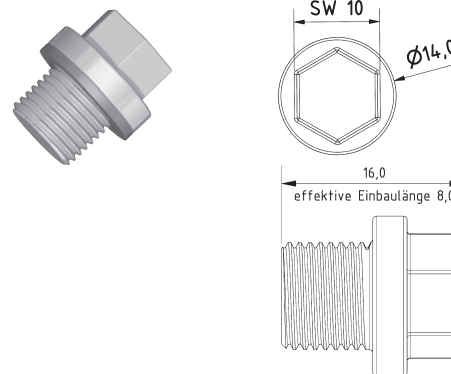
0-VK

Verschlusskappe Typ0
cap type0



VB-3-18

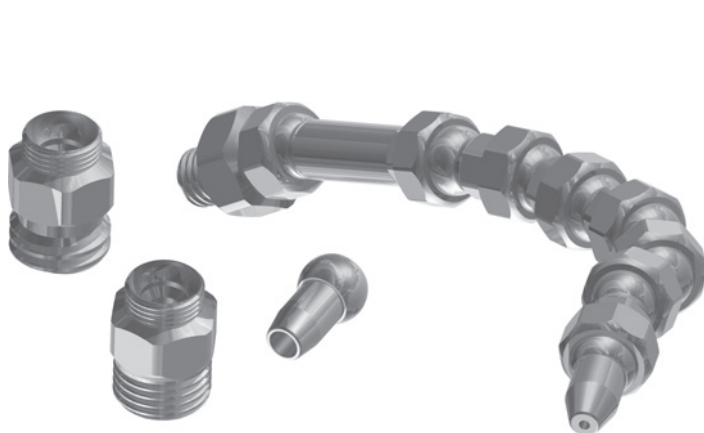
Verteilerblock Eingang Stirnseite G1/4"
manifold block entrance front end 1/4"



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

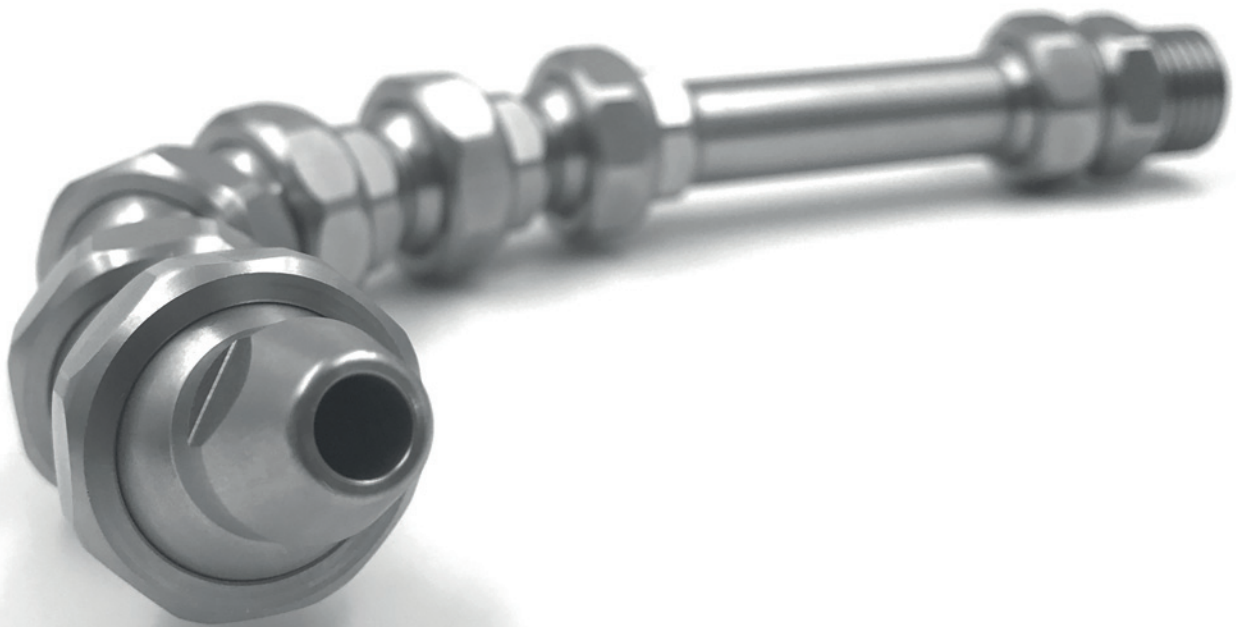
(1 x 0-WV-R, 20 x 0-DU-R)

ring nozzle set Ø = 60 mm

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

PRODUKTÜBERSICHT

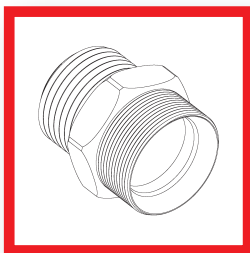
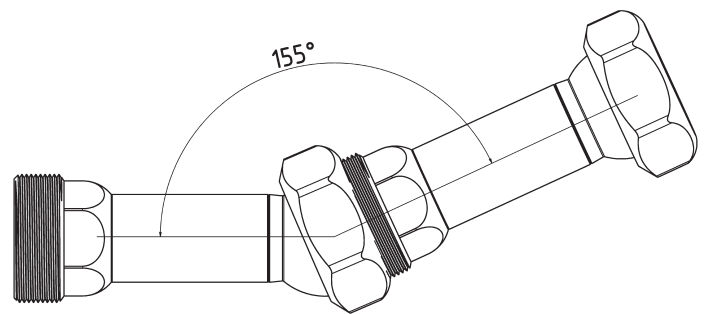
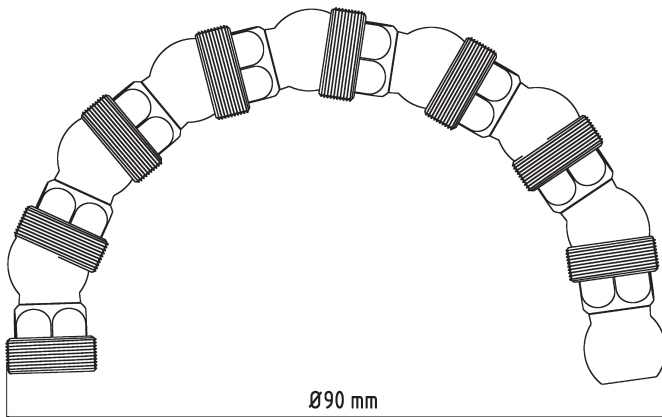
Typ1 [1/4"]



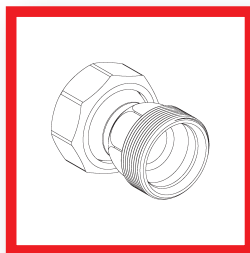
Das Typ1-System ist für alle Maschinenanwendungen bis zu einem maximalen Durchfluss von ± 170 l/min konzipiert. Es umfasst Runddüsen in Größen von $\text{Ø}1,6$ mm bis $\text{Ø}5,0$ mm sowie eine Vielzahl an Flachstrahldüsen und Mehrlochdüsen, wodurch es zum Standard für jede Maschine wird. Ein umfangreiches Sortiment an Maschinenadaptern, darunter G1/4", G3/8", metrische Adapter M8x1,0 und M14x1,5 sowie Kugeladapter, steht zur Verfügung. Zusätzlich bietet das System Schnellkupplungen sowie eine Vielzahl an Grund- und Winkelelementen, die eine reibungslose Installation gewährleisten.

TECHNISCHE DATEN:

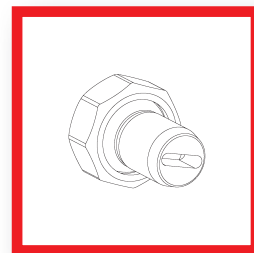
- Größe Typ1 (1/4")
- Durchlass \varnothing 5,8 mm
- Druckbeständig über 100 bar
- Einsatzbereich -100°C bis +300°C
- Gewinde (Elemente) M 14 x 1
- Material 1.4305 (V2A)



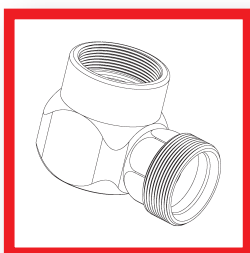
MASCHINENADAPTER



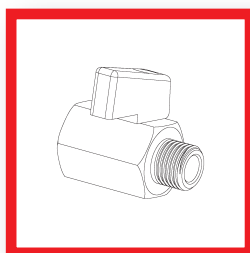
GRUNDELEMENTE



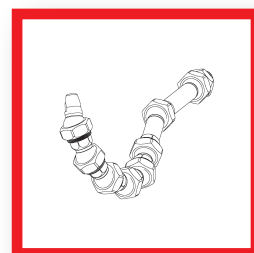
DÜSEN



WINKELELEMENTE



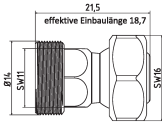
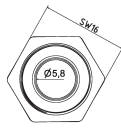
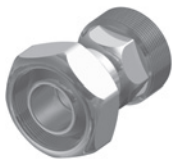
ZUBEHÖR



GRUNSET Typ1

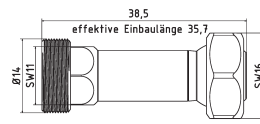
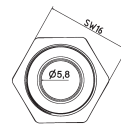
Typ1 [1/4" System]

Grundelemente | Basic Elements



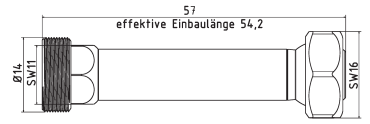
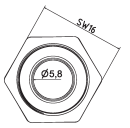
1-GE-1

$l = 21,5$ mm effektiv $l = 18,7$ mm
 $l = 21,5$ mm effective $l = 18,7$ mm



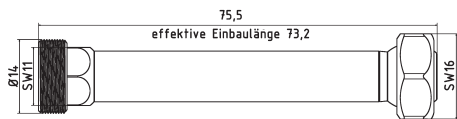
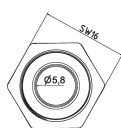
1-GE-2

$l = 38,5$ mm effektiv $l = 35,7$ mm
 $l = 38,5$ mm effective $l = 35,7$ mm



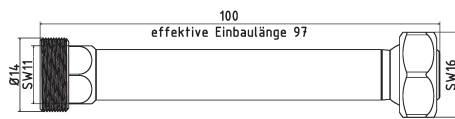
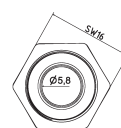
1-GE-3

$l = 57$ mm effektiv $l = 54,2$ mm
 $l = 57$ mm effective $l = 54,2$ mm



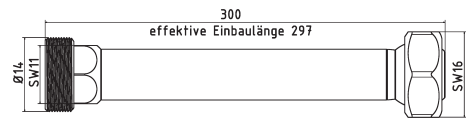
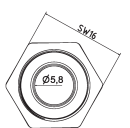
1-GE-4

$l = 75,5$ mm effektiv $l = 73,2$ mm
 $l = 75,5$ mm effective $l = 73,2$ mm



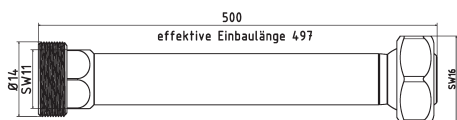
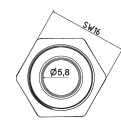
1-GE-100

$l = 100$ mm effektiv $l = 97$ mm
 $l = 100$ mm effective $l = 97$ mm



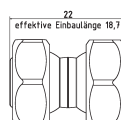
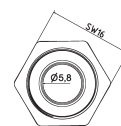
1-GE-300

$l = 300$ mm effektiv $l = 297$ mm
 $l = 300$ mm effective $l = 297$ mm



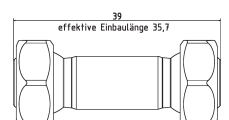
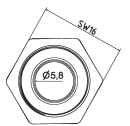
1-GE-500

$l = 500$ mm effektiv $l = 497$ mm
 $l = 500$ mm effective $l = 497$ mm



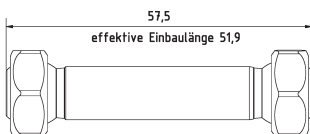
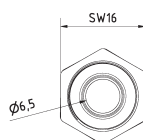
1-GE-DK Spezial Element

$l = 22$ mm effektiv $l = 18,7$ mm Doppelkugel
 $l = 22$ mm effective $l = 18,7$ mm double ball



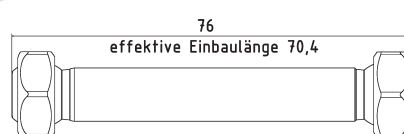
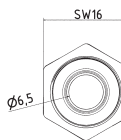
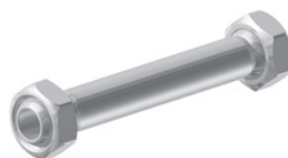
1-GE-2-DK Spezial Element

$l = 39$ mm effektiv $l = 35,7$ mm Doppelkugel
 $l = 39$ mm effective $l = 35,7$ mm double ball



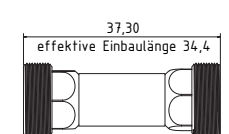
1-GE-3-DK Spezial Element

$l = 57,5$ mm effektiv $l = 51,9$ mm Doppelkugel
 $l = 57,5$ mm effective $l = 51,9$ mm double ball



1-GE-4-DK Spezial Element

$l = 76$ mm effektiv $l = 70,4$ mm Doppelkugel
 $l = 76$ mm effective $l = 70,4$ mm double ball

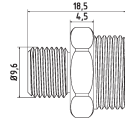


1-GE-2-DK Spezial Element

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

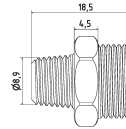
Grundelemente | Basic Elements

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



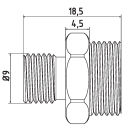
1-AD-18

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



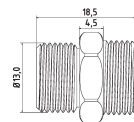
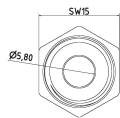
1-AD-18-PT

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



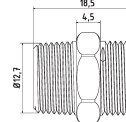
1-AD-18-U

Adapterstück G 1/8" U (Gewinde unterschritten)
adaptor piece thread 1/8" U (Undercut thread)



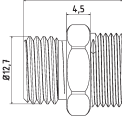
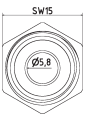
1-AD-14

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



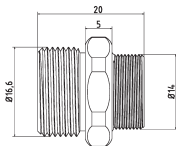
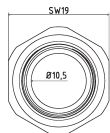
1-AD-14-PT

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



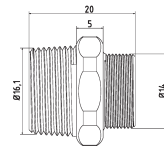
1-AD-14-U

Adapterstück G 1/4" U (Gewinde unterschritten)
adaptor piece thread 1/4" U (Undercut thread)



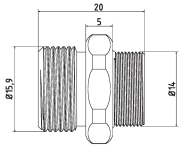
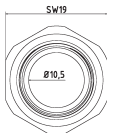
1-AD-38

Adapterstück G 3/8"
adaptor piece thread 3/8"



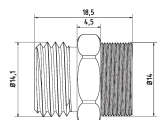
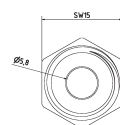
1-AD-38-PT

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



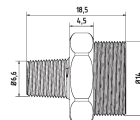
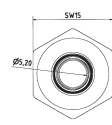
1-AD-38-U

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"

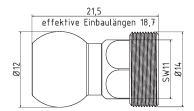
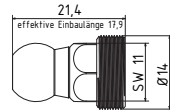
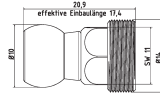


1-AD-1-16PT

Adapterstück G 1/16" PT (Withworth-Gewinden)
adaptor piece thread 1/16" PT (NPT thread)

Typ1 [1/4" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



1-AD-K10

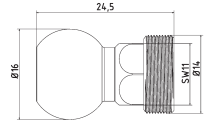
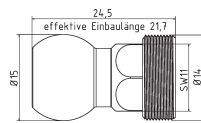
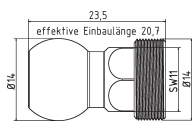
Adapterstück Kugel Ø 10 mm (z.B. Traub)
adaptor piece ball Ø 10 mm (e.g. Traub)

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

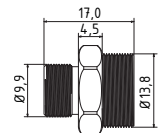
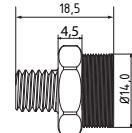
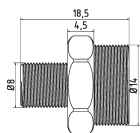
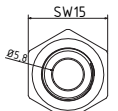
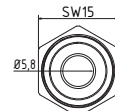
Adapterstück Kugel Ø 14 mm (z.B. Wenk)
adaptor piece ball Ø 14 mm (e.g. Wenk)

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

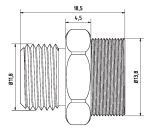
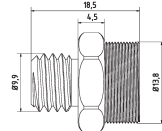
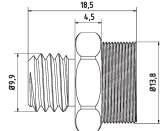
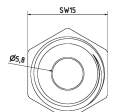
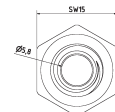
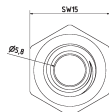
Adapterstück M8 x 1
adaptor piece M8 x 1 metric thread

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 M10 x 0,5 metric thread



1-AD-101

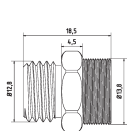
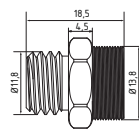
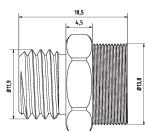
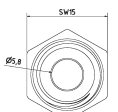
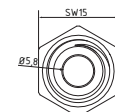
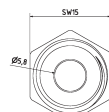
Adapterstück M 10 x 1
adaptor piece M 10 x 1 metric thread

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

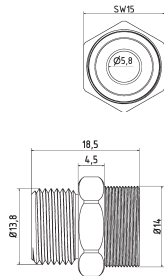
1-AD-121.75

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

1-AD-131.5

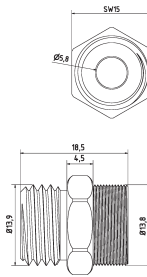
Adapterstück M 13 x 1,5
adaptor piece M 13 x 1,5 metric thread

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



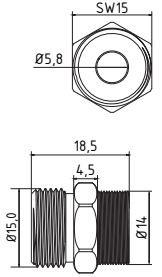
1-AD-141

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



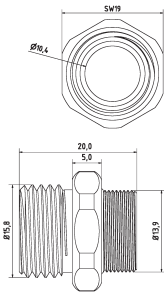
1-AD-141.5

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



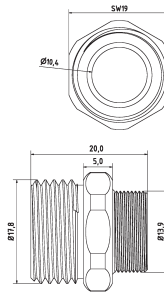
1-AD-151

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



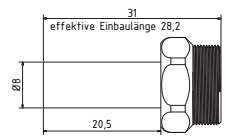
1-AD-161.5

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



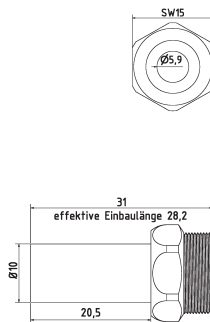
1-AD-181.5

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



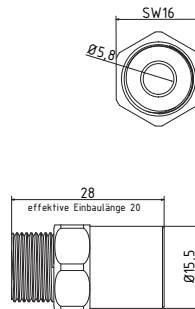
1-AD-8L

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-1121-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-1121-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



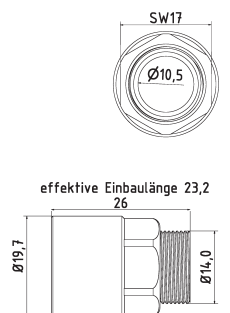
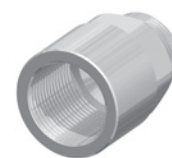
1-AD-1121.5-Typ1

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-1141.5-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

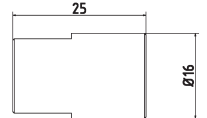
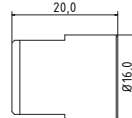
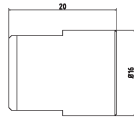
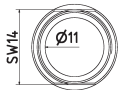
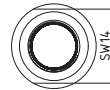
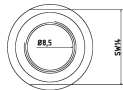


1-AD-1161.5-Typ1

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

Typ1 [1/4" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



1-AD-1GE-18

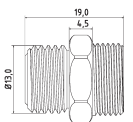
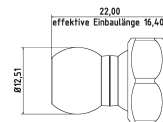
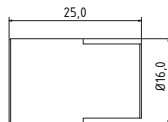
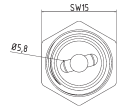
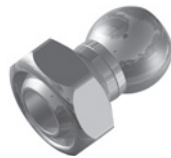
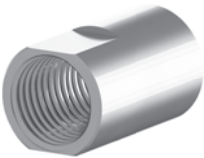
Adapterstück für Fremddüsen mit Außengewinde, IG 1-GE auf IG 1/8"
adapter piece for external nozzles with male thread, female 1-GE to female 1/8"

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

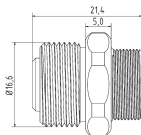
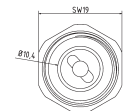
Adapterstück / Muffe IG 1-GE zu IG 1/4" PT (Withworth-Gewinden)
adapter piece for external nozzles with male thread, female 1-GE to female 1/4" (NPT thread)

1-AD-LL

Adapterstück Loc-Line Typ1
adaptor piece Loc-Line Type1

1-AD-RSV-14

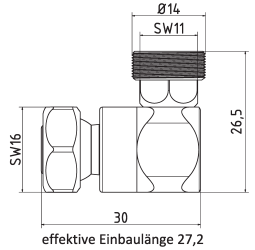
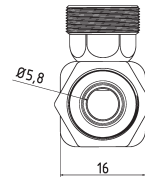
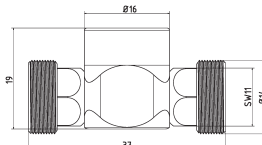
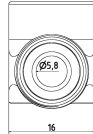
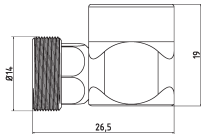
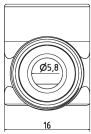
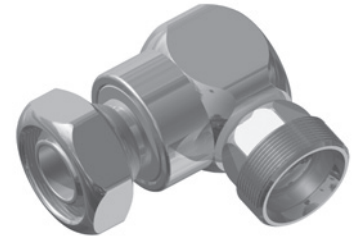
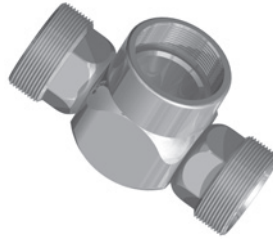
Adapterstück mit Rückschlagventil G1/4"
adapter piece with check valve G1/4"



1-AD-RSV-38

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

Winkelemente | Elbows



1-WV-1

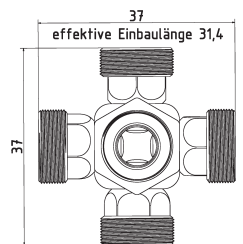
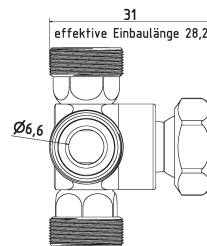
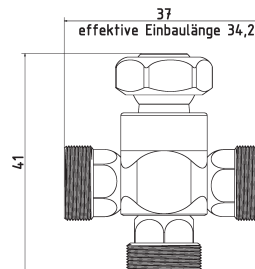
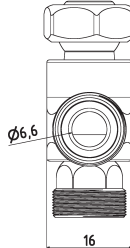
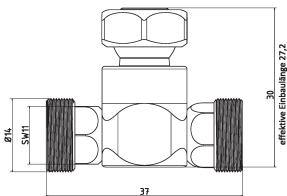
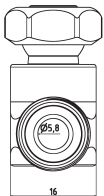
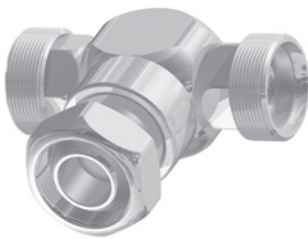
Winkelverschraubung
elbow piece fixed

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

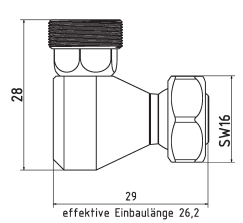
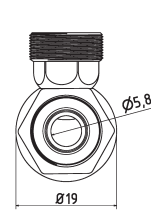
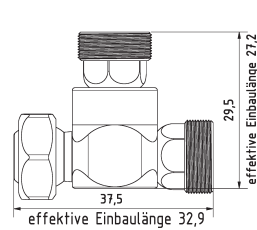
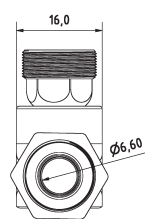
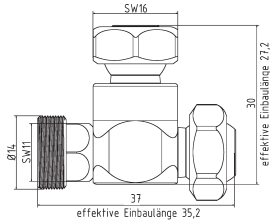
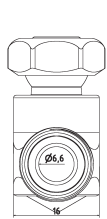
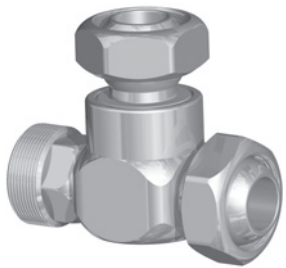
Kreuz-Stück mit Kugelstück
cross piece moveable

1-WV-4K

Stern-Stück mit Kugelstück
star piece moveable

Typ1 [1/4" System]

Winkelelemente | Elbows



1-WV-R

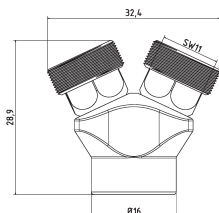
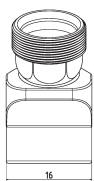
Verschlussstück zu Ringdüse
locking tappet to ring nozzle

1-WV-R-2K

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

1-WI

Winkelstück für Leitungen
corner piece for pipelines

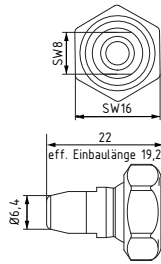
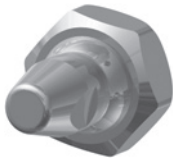


1-YV

Y-Stück 50°
Y-piece 50°

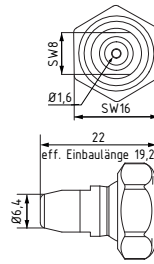
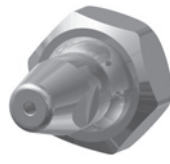


Düsen | Nozzles



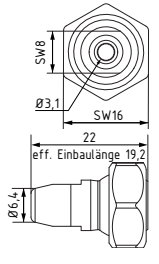
1-DU-0

Düse ohne Bohrung
nozzle straight without drilling



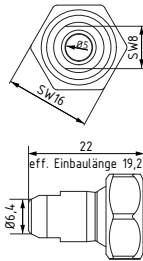
1-DU-16

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



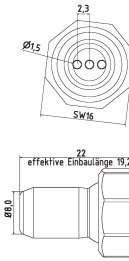
1-DU-32

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



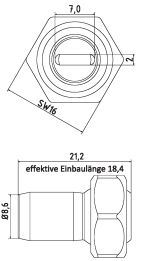
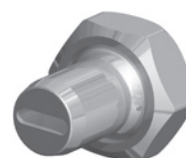
1-DU-50

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



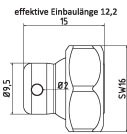
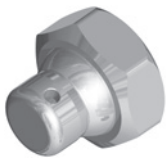
1-DU-3-16

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



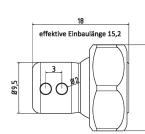
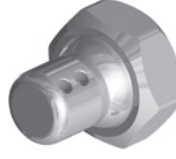
1-DU-72

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



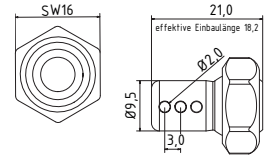
1-DU-90-1

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



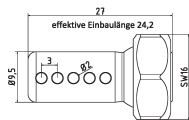
1-DU-90-2

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



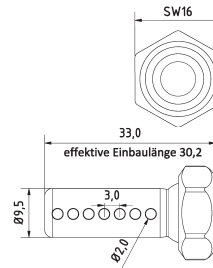
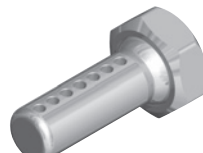
1-DU-90-3

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



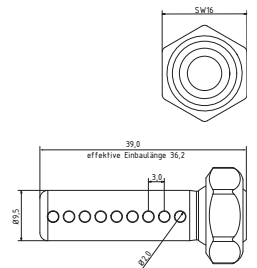
1-DU-90-5

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



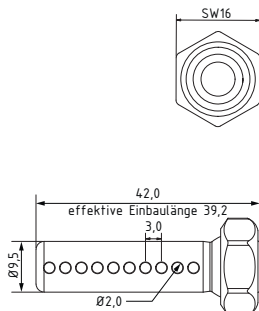
1-DU-90-7

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



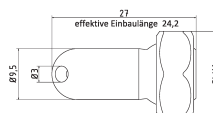
1-DU-90-9

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



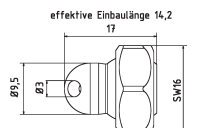
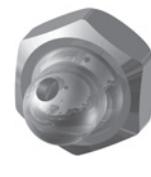
1-DU-90-10

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

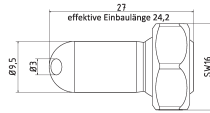
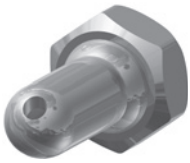


1-DU-30-EK

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

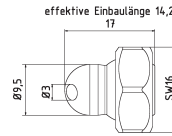
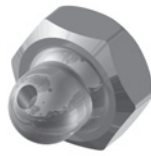
Typ1 [1/4" System]

Düsen | Nozzles



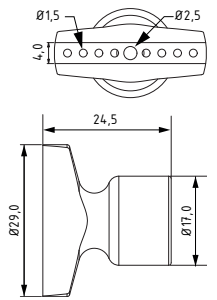
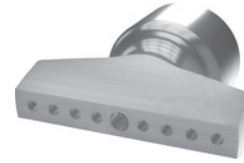
1-DU-60

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



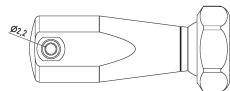
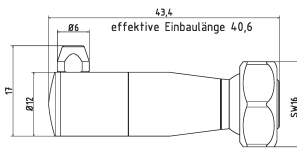
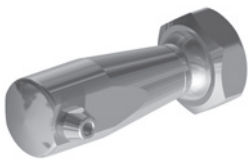
1-DU-60-EK

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



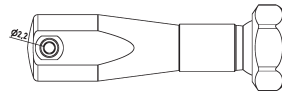
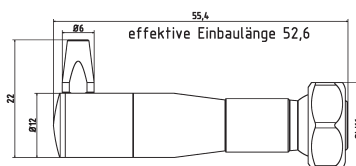
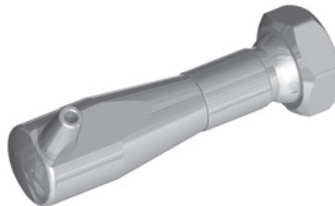
1-DU-BL

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



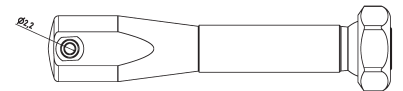
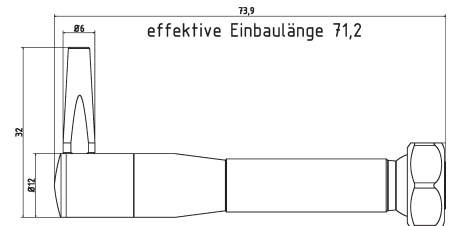
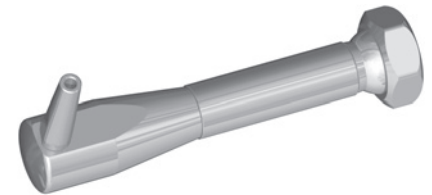
1-HA-DU

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



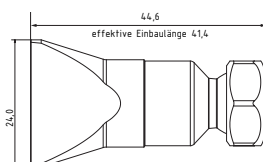
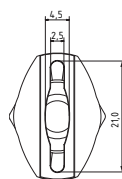
1-HA-DU-2

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



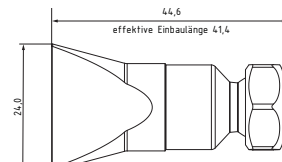
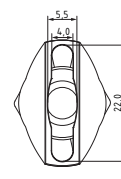
1-HA-DU-3

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



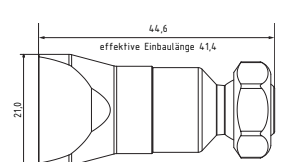
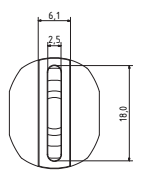
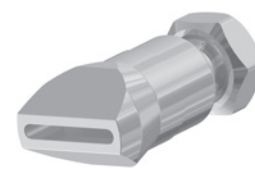
1-DU-SL-SS

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

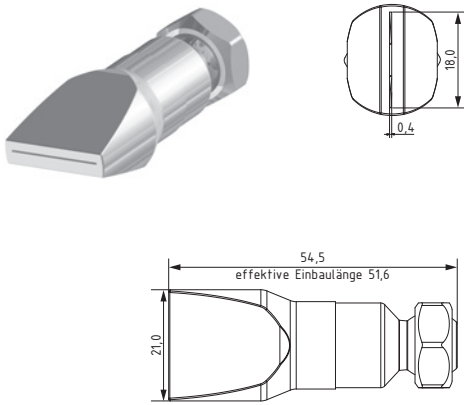
Flachdüse Breit mit Schlitz 22 x 4,0 mm
Streustrahl zum Schwemmen
flat nozzle broadly with slit 22 x 4,0 mm
scattered beam



1-DU-SL-GS

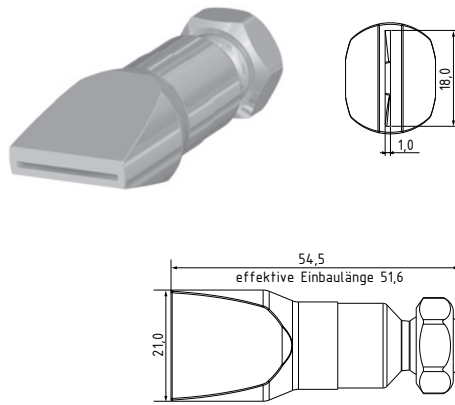
Flachdüse Breit mit Schlitz 18 x 2,5 mm
gerader Strahl
flat nozzle broadly with slit 18 x 2,5 mm
straight jet

Düsen | Nozzles



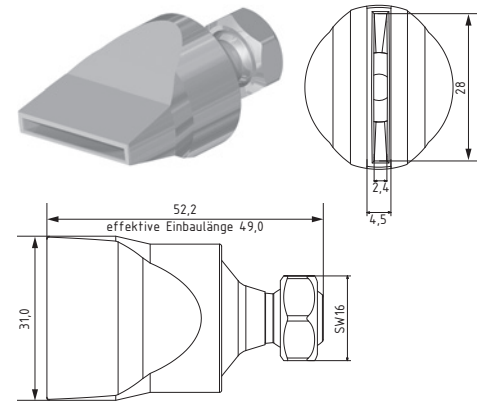
1-DU-SL-25-GS-0.4

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



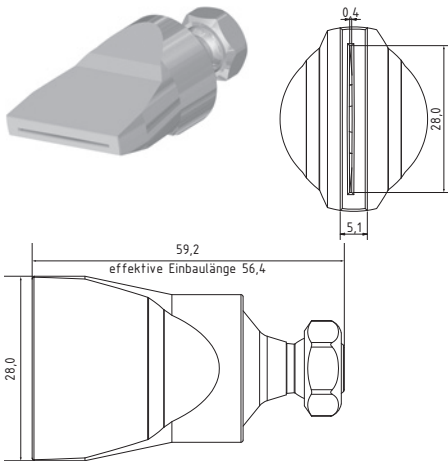
1-DU-SL-25-GS-1.0

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



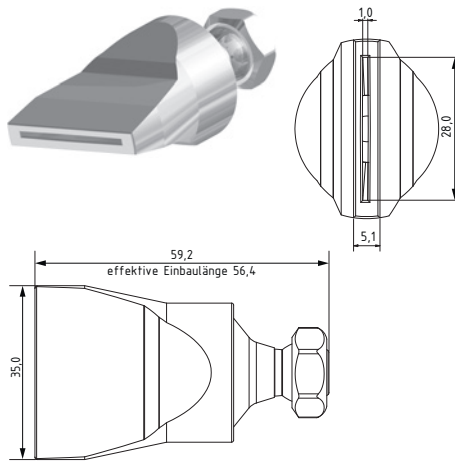
1-DU-SL-31-GS

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



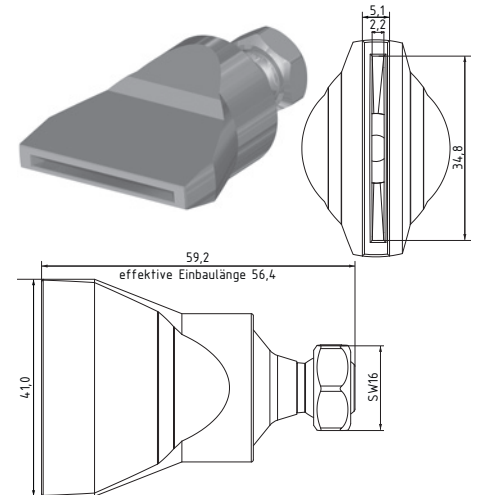
1-DU-SL-40-GS-0.4

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



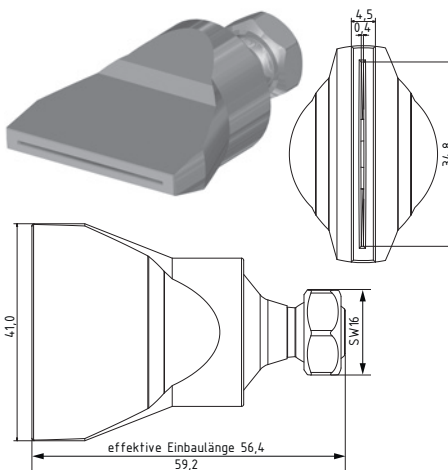
1-DU-SL-40-GS-1.0

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



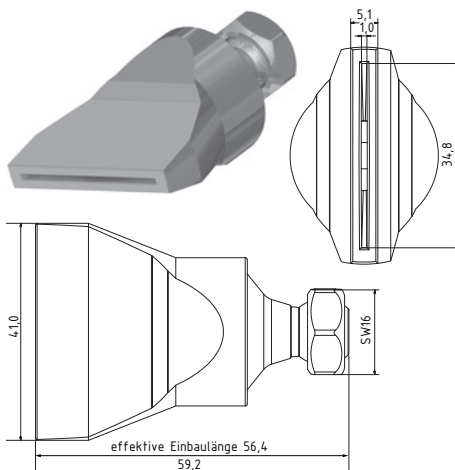
1-DU-SL-50-GS

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



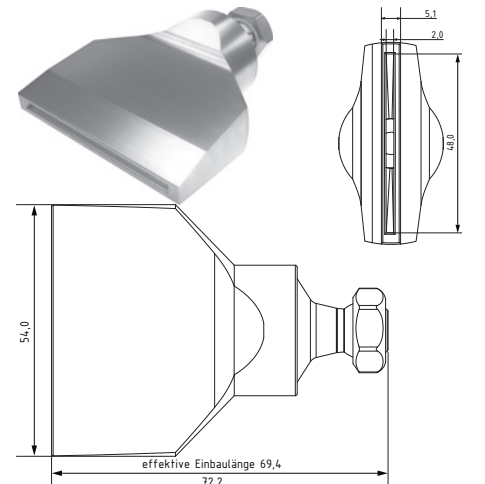
1-DU-SL-50-GS-0.4

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*

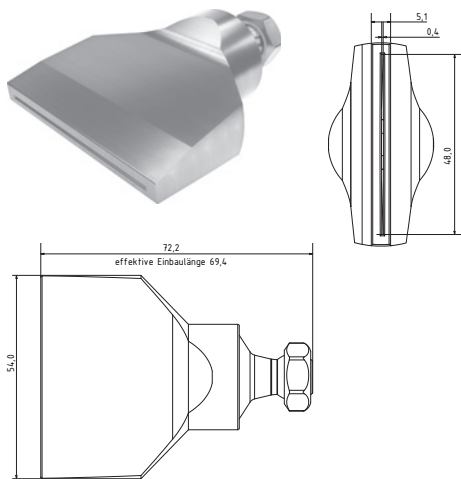


1-DU-SL-55-GS

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

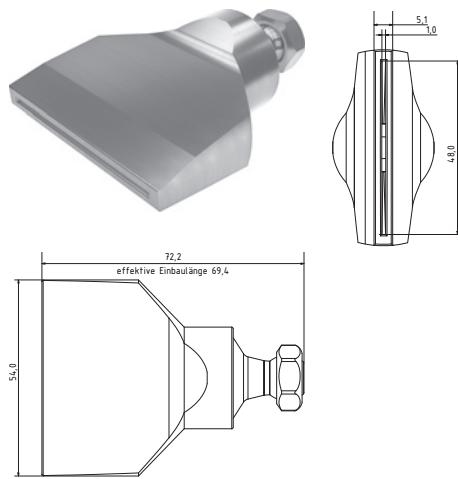
Typ1 [1/4" System]

Düsen | Nozzles



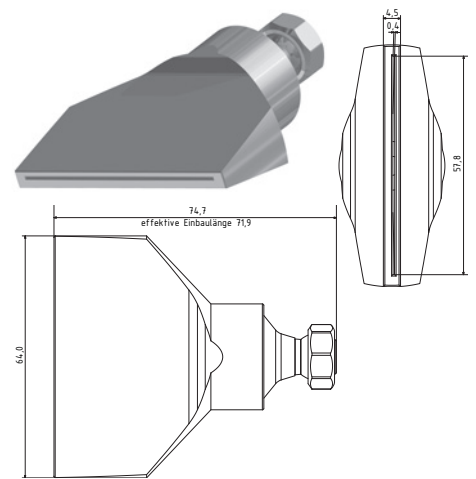
1-DU-SL-55-GS-0.4

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



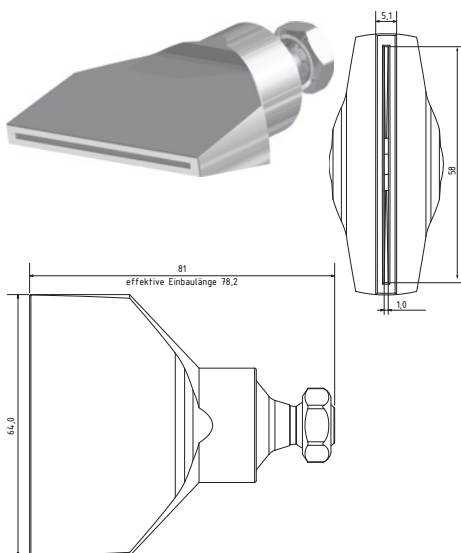
1-DU-SL-55-GS-1.0

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



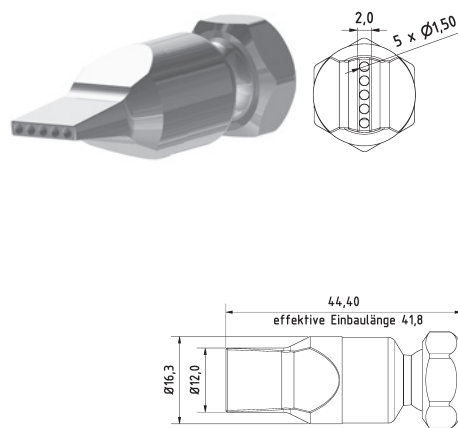
1-DU-SL-65-GS-0.4

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



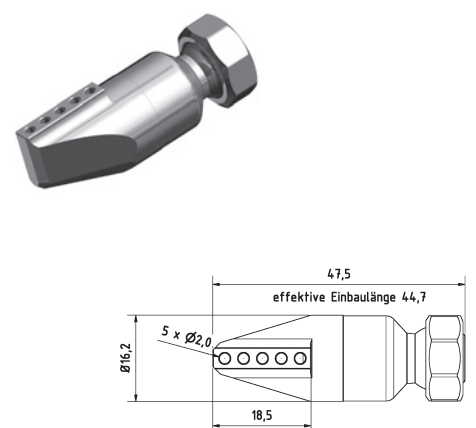
1-DU-SL-65-GS-1.0

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



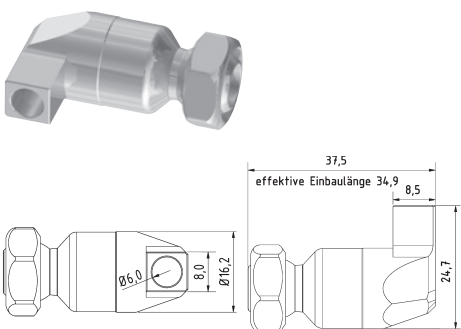
1-DU-LL-5-15

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



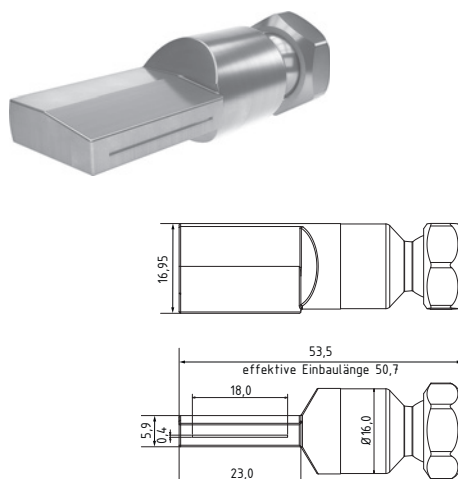
1-DU-LL-90-5-2

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



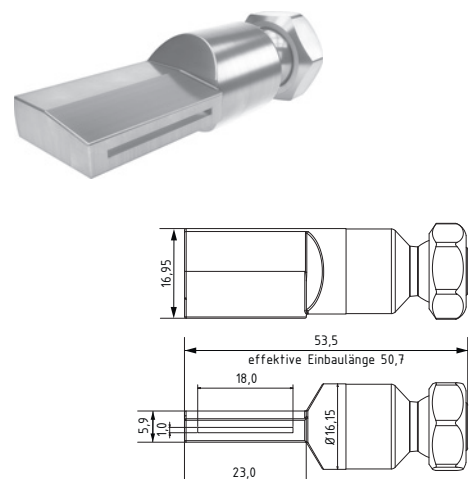
1-DU-LL-90-1-6

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

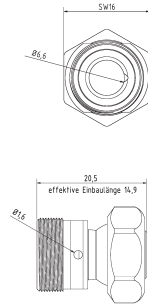
Innenschleifdüse Schlitzbreite 18 x 0,4 mm
gerader Strahl
Internal grinding nozzle with slit 18 x 0,4 mm
straight jet



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

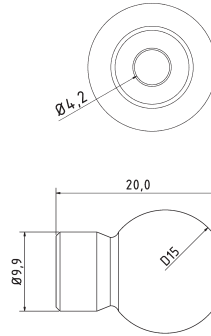
Düsen | Nozzles



1-DU-R

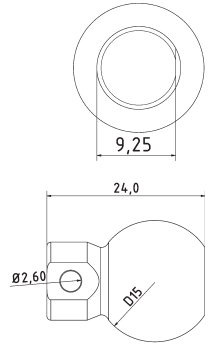
Ringdüsen Element Bohrung Ø 1,6 mm
ring nozzle element drill hole Ø 1,6 mm

Kugeldüsen | Ball Nozzles



1-DU-K15-4.2

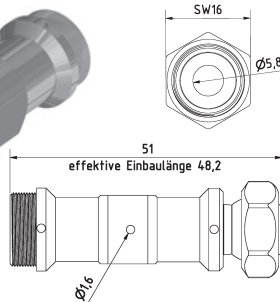
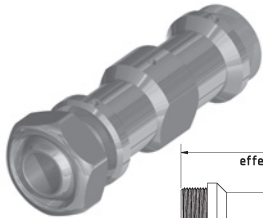
Düse für Werkzeughalter
gerade Bohrung Ø 4,2 mm Kugel Ø 15 mm
Nozzle for tool holder
straight bore Ø 4,2 mm ball Ø 15 mm



1-DU-K15-90-2.6

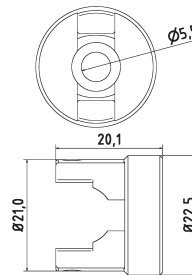
Düse für Werkzeughalter 90° Bohrung Ø 2,6 mm
Kugel Ø 15 mm
Nozzle for tool holder 90° bore Ø 2,6 mm
ball Ø 15 mm

Düsen und Halterungen | Nozzles and Holder



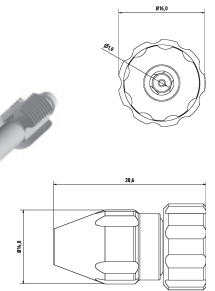
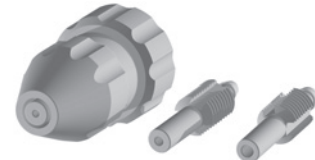
1-DU-EL3

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



1-DU-ELH

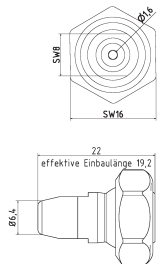
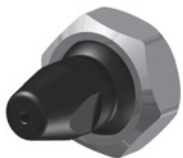
Halterung zu Duschelement (inkl. Feststellschrauben)
holder to shower element (incl. Screws)



1-DU-Mini

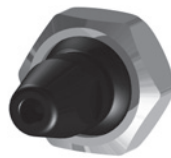
Düse Minimalmengenschmiersystem Set
für 2 mm, 2,5 mm und 3 mm Schlauch
nozzle minimum lubrication system set
for 2 mm, 2,5 mm and 3 mm pipe

Kunststoff-Düsen | Plastic Nozzles



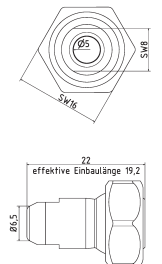
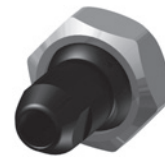
KU-1-DU-16

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



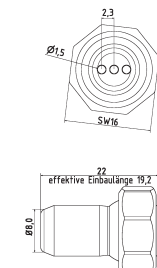
KU-1-DU-32

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



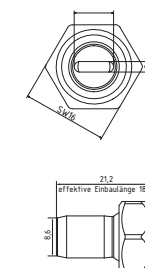
KU-1-DU-50

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



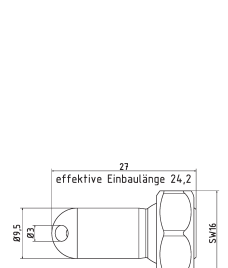
KU-1-DU-3-16

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

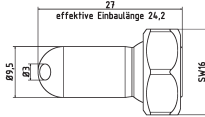


KU-1-DU-30

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

Typ1 [1/4" System]

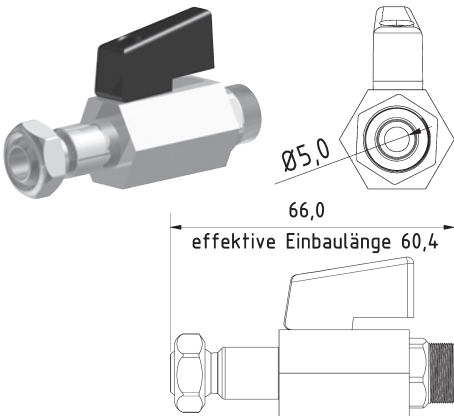
Kunststoff-Düsen | Plastic Nozzles



KU-1-DU-60

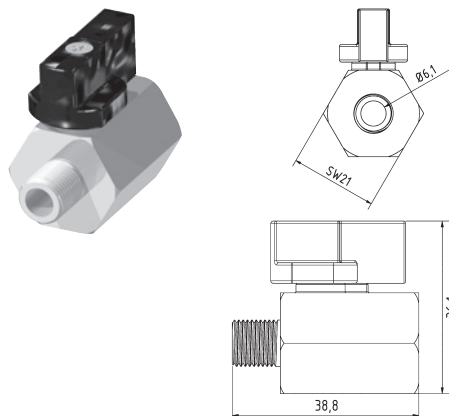
Kunststoff-Düse 60° Bohrung Ø 3 mm
 plastic nozzle 60° drill hole Ø 3 mm

Zubehör | Accessories



1-KH-Z

Kugelhahn Zwischenelement Typ1
 ball valve intermediate element type1

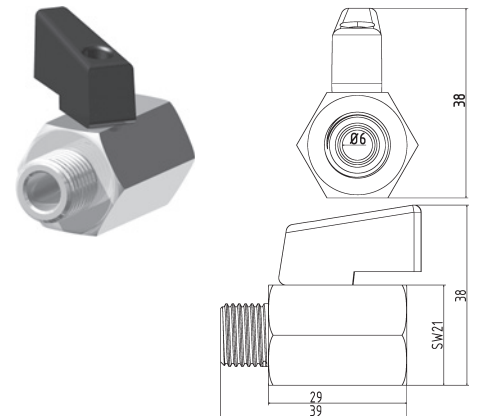


KH-18

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

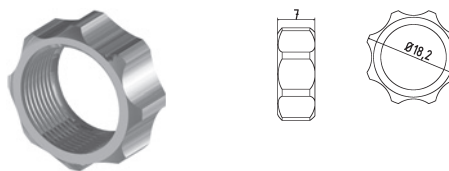
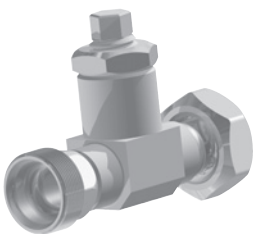


KH-14

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

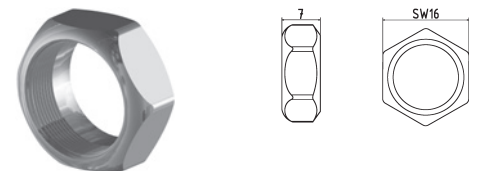
KH-14-SS

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



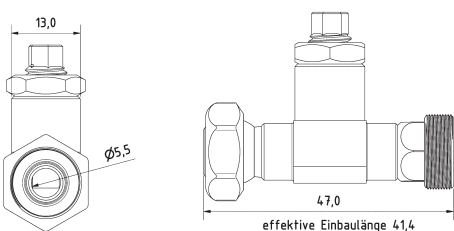
1-MU-HA

Mutter für Handverstellung
 screw nut (hand feed)



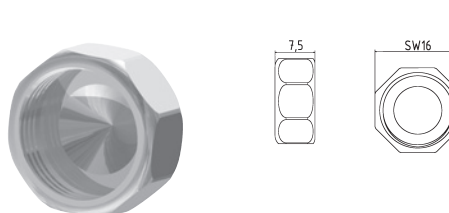
1-MU

Mutter Standard
 screw nut (default)



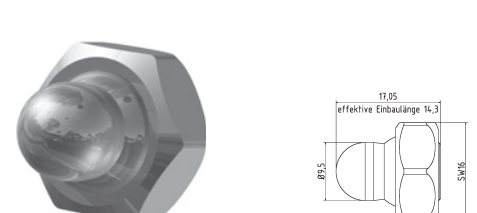
1-DRV

Drosselventil Typ1
 throttle valve type1



1-VK

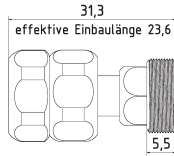
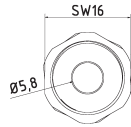
Verschlusskappe Typ1
 cap type1



1-VER

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

Zubehör | Accessories



1-FP

Zwischenelement mit fester Position
(Schnellkupplung)

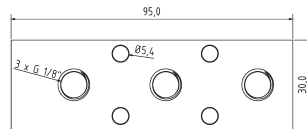
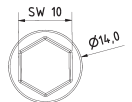
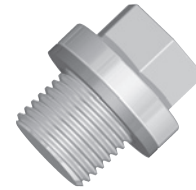
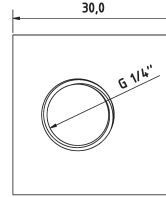
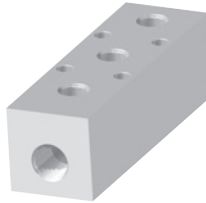
*Intermediate element with fixed position
(quick coupling)*

SW-11

Schlüssel aus Stahl SW11
open end wrench SW11

SW-16

Schlüssel aus Stahl SW16
open end wrench SW16

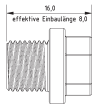


VB-3-18

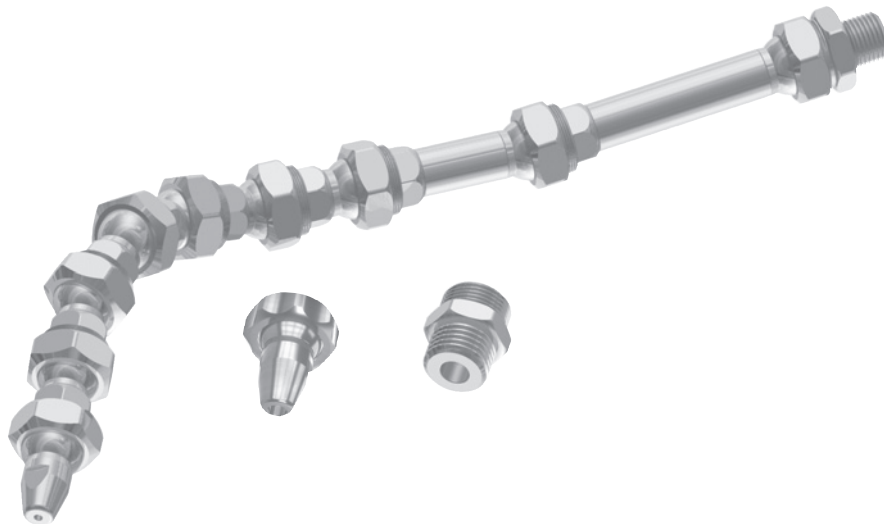
Verteilerblock Eingang Stirnseite G1/4"
manifold block entrance front end 1/4"

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

PRODUKTÜBERSICHT

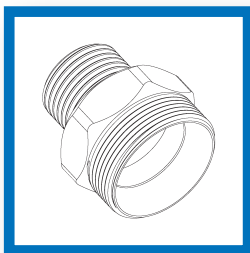
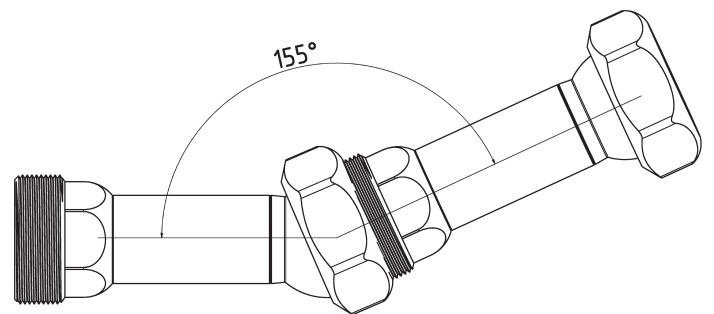
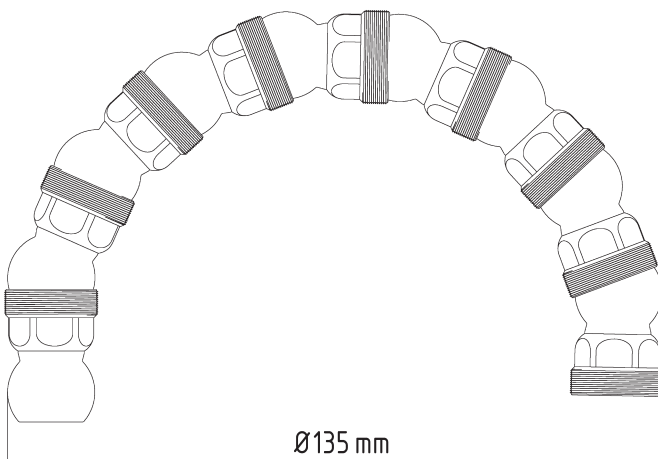
Typ2 [1/2"]



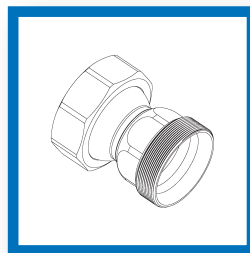
Mit dem Typ2 System optimieren Sie Ihren Maschinenprozess um $\pm 12\%$. Nutzen Sie die Vielfalt des Düsen Sortiments und passen Sie die Kühlung an Ihre Bedürfnisse an. Ob Flachdüsen, Runddüsen oder Düsen mit mehreren Auslässen, zum Schleifen, Drehen, Fräsen oder der Luftkühlung, finden Sie hier die passenden Elemente. Die Typ2 Grundelemente und Maschinenadapter sorgen für ein Rundes Sortiment, welches Ihnen die Sicherheit bietet, Werkzeugverschleiß zu optimieren und garantieren für eine stabile Kühlung.

TECHNISCHE DATEN:

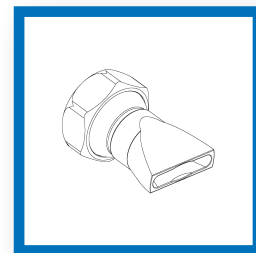
- Größe Typ2 (1/2")
- Durchlass \varnothing 11,0 mm
- Druckbeständig über 100 bar
- Einsatzbereich -100°C bis +300°C
- Gewinde (Elemente) M 24 x 1,25
- Material 1.4305 (V2A)



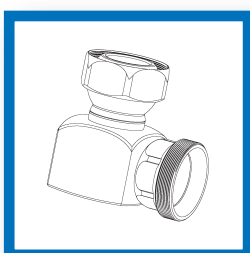
MASCHINENADAPTER



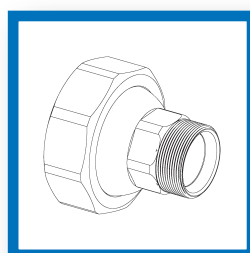
GRUNDELEMENTE



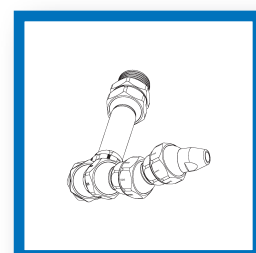
DÜSEN



WINKELELEMENTE



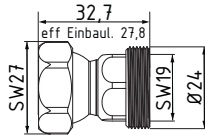
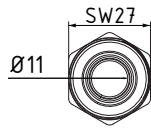
ZUBEHÖR



GRUNDSET Typ2

Typ2 [1/2" System]

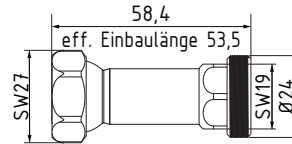
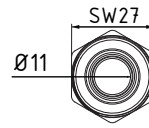
Grundelemente | Basic Elements



2-GE

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

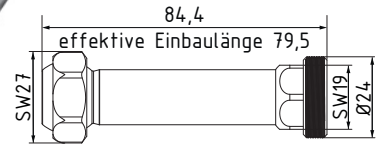
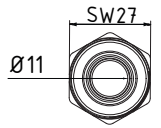
$l = 32,7 \text{ mm}$ effective $l = 27,8 \text{ mm}$



2-GE-2

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

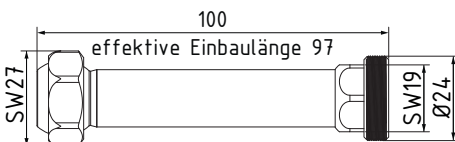
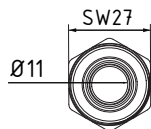
$l = 58,4 \text{ mm}$ effective $l = 53,5 \text{ mm}$



2-GE-3

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

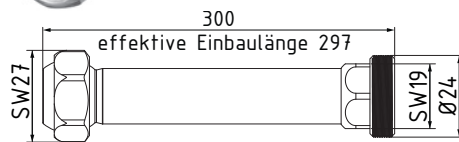
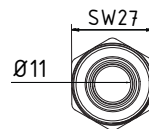
$l = 84,4 \text{ mm}$ effective $l = 79,5 \text{ mm}$



2-GE-100

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

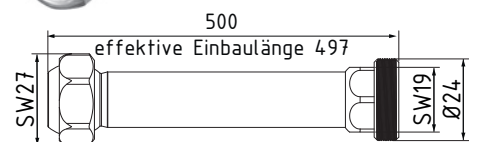
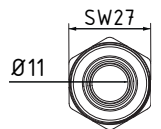
$l = 100 \text{ mm}$ effective $l = 97 \text{ mm}$



2-GE-300

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

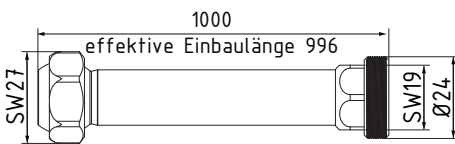
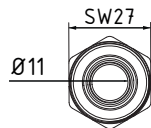
$l = 300 \text{ mm}$ effective $l = 297 \text{ mm}$



2-GE-500

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

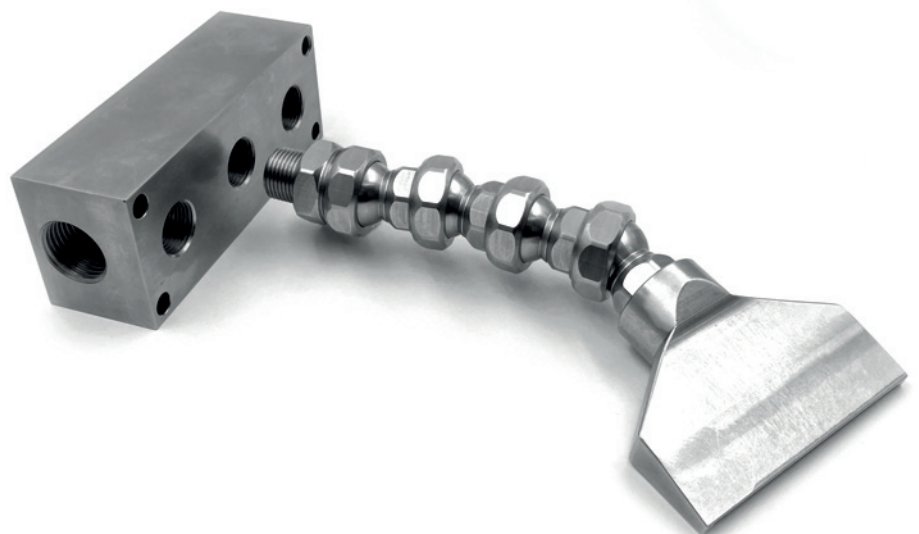
$l = 500 \text{ mm}$ effective $l = 497 \text{ mm}$



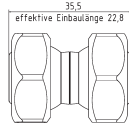
2-GE-1000

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

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

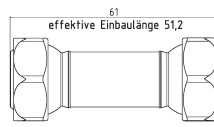
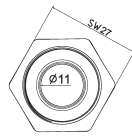
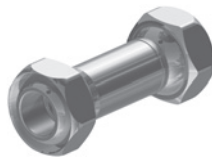


Spezial Grundelemente | Basic Elements



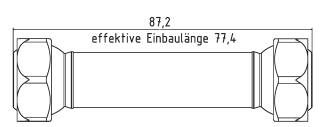
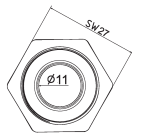
2-GE-DK Spezial Element

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



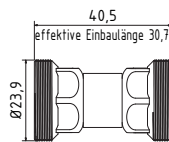
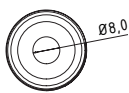
2-GE-2-DK Spezial Element

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



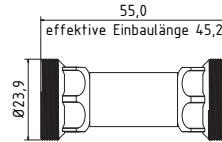
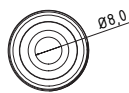
2-GE-3-DK Spezial Element

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



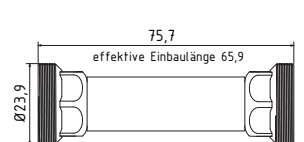
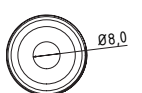
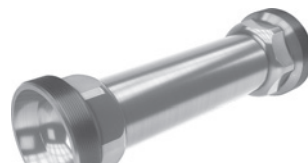
2-GE-DKS Spezial Element

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



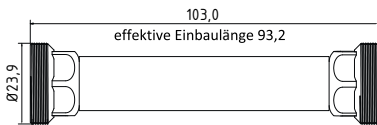
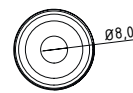
2-GE-2-DKS Spezial Element

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



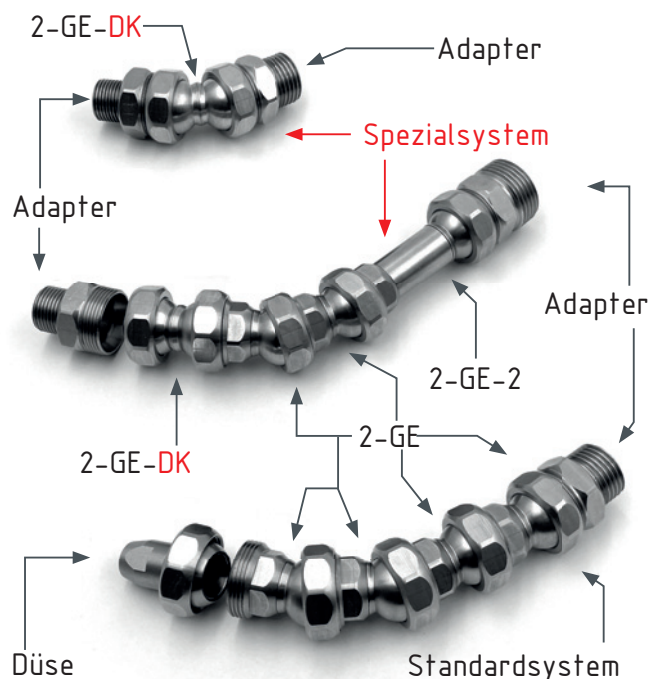
2-GE-3-DKS Spezial Element

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



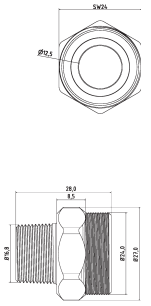
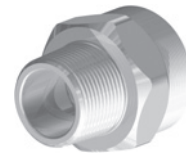
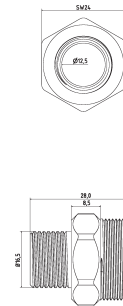
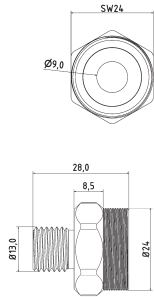
2-GE-100-DKS Spezial Element

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



Typ2 [1/2" System]

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



2-AD-14

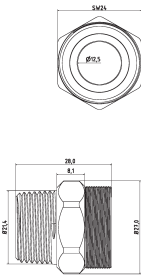
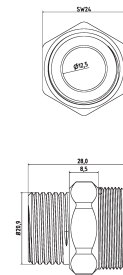
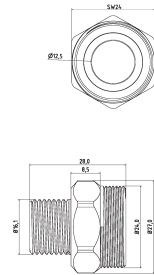
Adapterstück G 1/4"
adaptor piece thread 1/4"

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

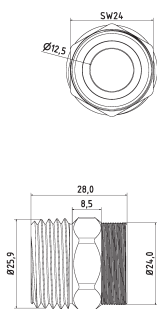
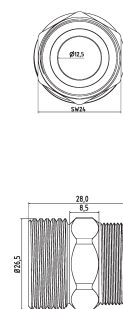
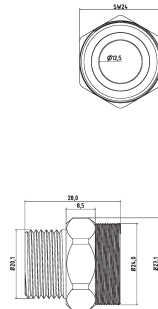
Adapterstück G 3/8" U (Gewinde unterschritten)
adaptor piece thread 3/8" U (Undercut thread)

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

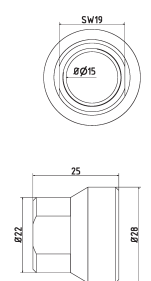
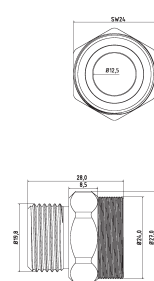
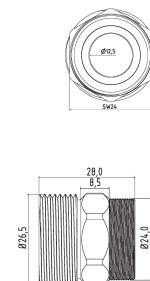
Adapterstück G 1/2" U (Gewinde unterschritten)
adaptor piece thread 1/2" U (Undercut thread)

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)

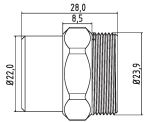
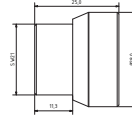
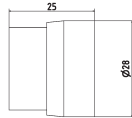
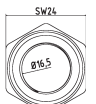
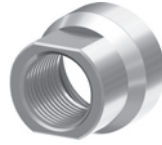
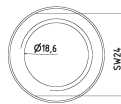
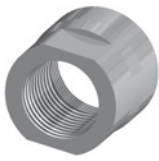
2-AD-201.5

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"
adaptor piece for external nozzles with
male thread, female 2-GE to female 3/8"

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



2-AD-2GE-12

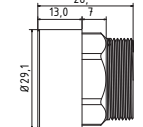
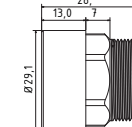
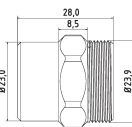
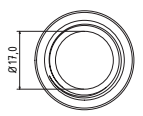
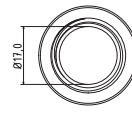
Adapterstück für Fremddüsen mit Außengewinde, IG 2-GE auf IG 1/2"
adapter piece for external nozzles with male thread, female 2-GE to female 1/2"

2-AD-1181.5

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-1161.5-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-1181.5-Typ2

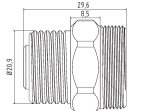
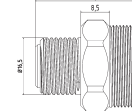
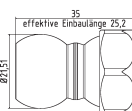
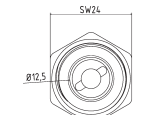
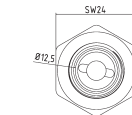
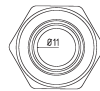
Adapterstück M 18 x 1,5 Innengewinde auf Hirt-Line Typ2 Aussengewinde
adaptor piece M 18 x 1,5 female thread to Hirt-Line type2 male thread

2-AD-1221.5-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-112-Typ2

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



2-AD-LL

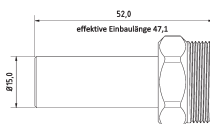
Adapterstück Loc-Line Typ2
adaptor piece Loc-Line Type2

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"

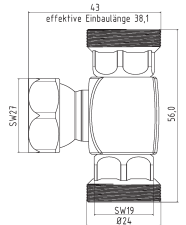
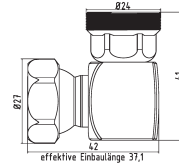
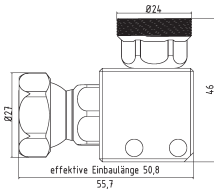
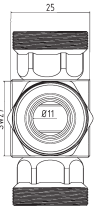
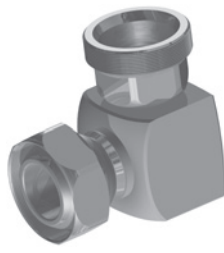
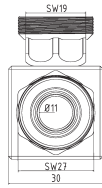
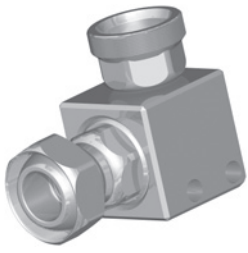


2-AD-15L

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

Typ2 [1/2" System]

Winkelemente | Elbows



2-WI

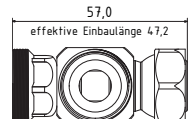
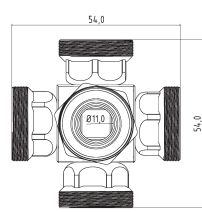
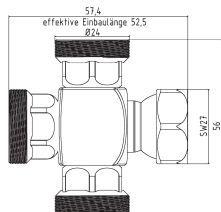
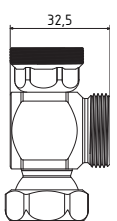
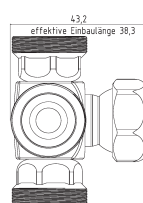
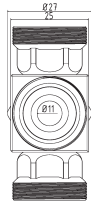
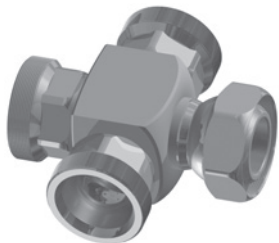
Winkelstück für Leitungen mit 2 Bohrungen
corner piece for pipelines with 2 bore hole

2-WV-1K

Winkelstück
elbow piece

2-WV-2K

T-Stück
T-piece



2-WV-3K

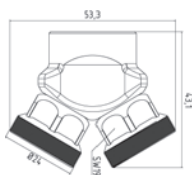
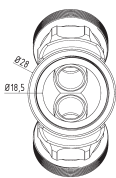
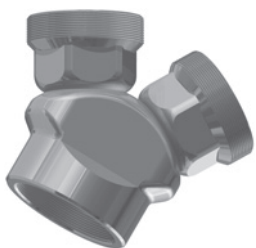
Kreuz-Stück
cross piece

2-WV-4K

Stern-Stück
star piece

2-WV-R-2K

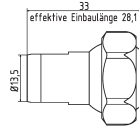
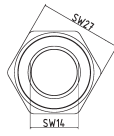
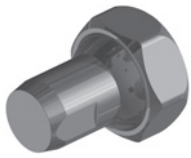
T-Stück für Ring und Düse
T-piece for ring and nozzle



2-YV

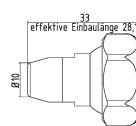
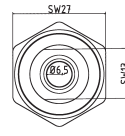
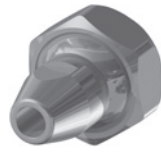
Y-Stück 50°
Y-piece 50°

Düsen | Nozzles



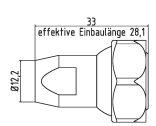
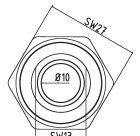
2-DU-0

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



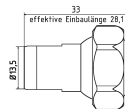
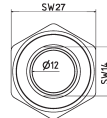
2-DU-65

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



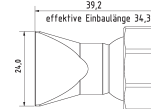
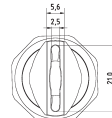
2-DU-10

Düse gerade Bohrung Ø 10 mm
nozzle straight Ø 10 mm



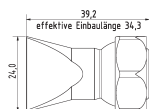
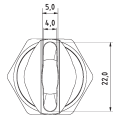
2-DU-12

Düse gerade Bohrung Ø 12 mm
nozzle straight Ø 12 mm



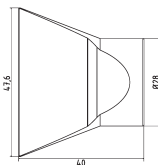
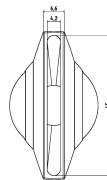
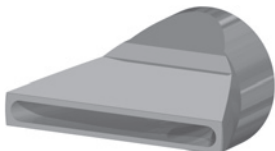
2-DU-SL-25-SS

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



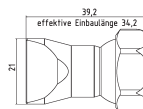
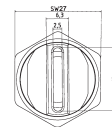
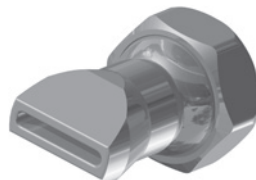
2-DU-SL-25

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



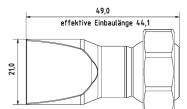
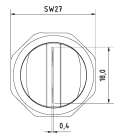
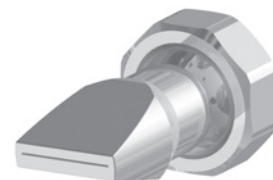
2-DU-SL-50

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



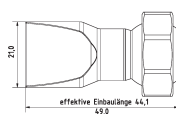
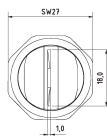
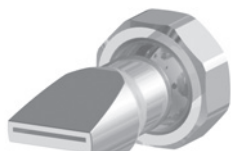
2-DU-SL-25-GS

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



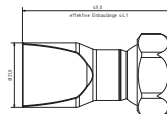
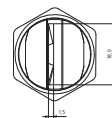
2-DU-SL-25-GS-0.4

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

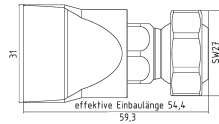
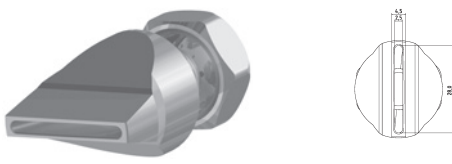


2-DU-SL-25-GS-1.5

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

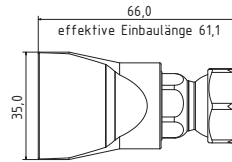
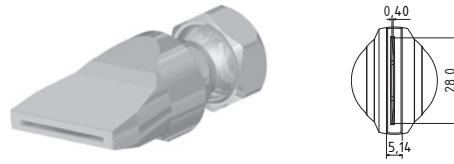
Typ2 [1/2" System]

Düsen | Nozzles



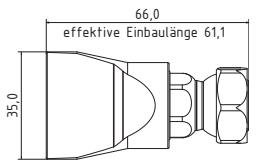
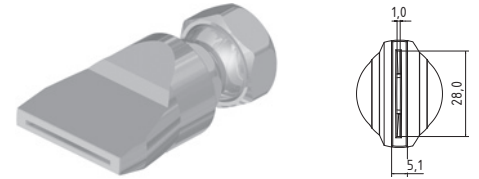
2-DU-SL-31-GS

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



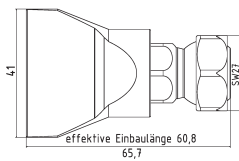
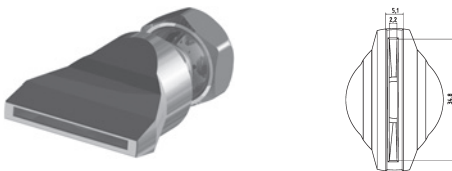
2-DU-SL-40-GS-0.4

Flachdüse Schlitzbreite 28 x 2,0 mm
gerader Strahl
*flat nozzle broadly with slit 28 x 2,0 mm
straight jet*



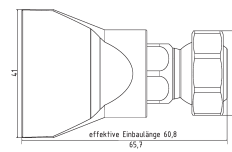
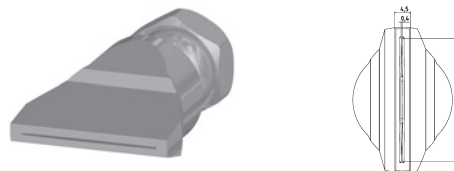
2-DU-SL-40-GS-1.0

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



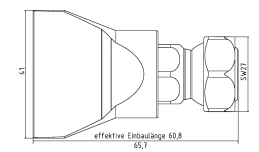
2-DU-SL-50-GS

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



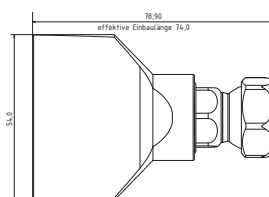
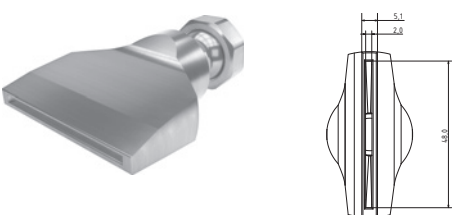
2-DU-SL-50-GS-0.4

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



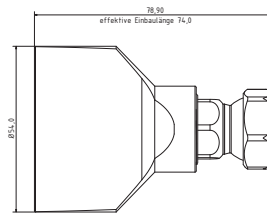
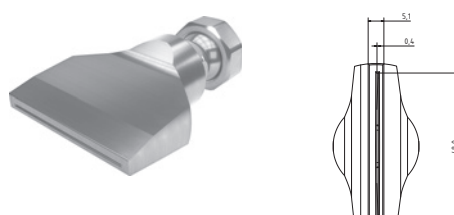
2-DU-SL-50-GS-1.0

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



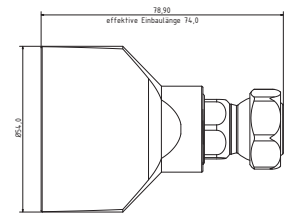
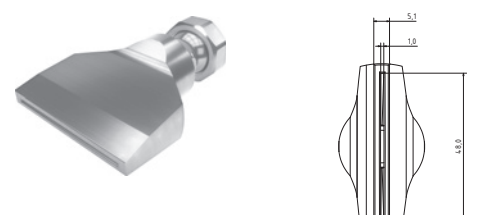
2-DU-SL-55-GS

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

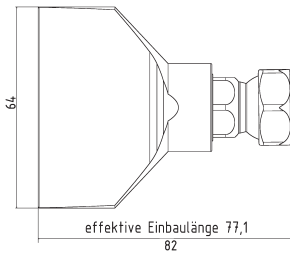
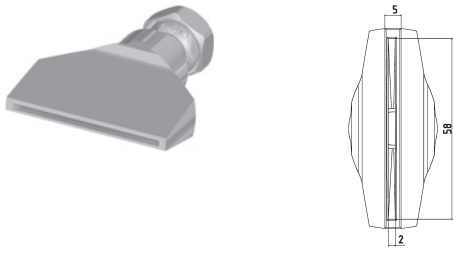
Flachdüse Schlitzbreite 48 x 0,4 mm
gerader Strahl
*flat nozzle broadly with slit 48 x 0,4 mm
straight jet*



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*

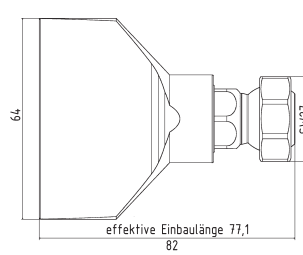
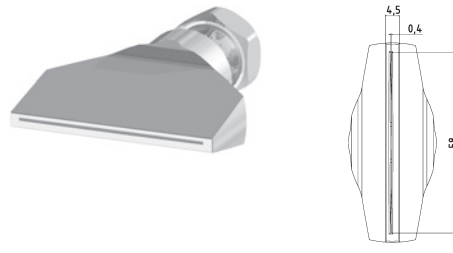
Düsen | Nozzles



2-DU-SL-65-GS

Flachdüse Schlitzbreite 58 x 2,0 mm
gerader Strahl

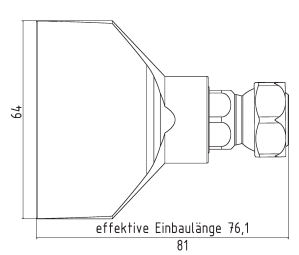
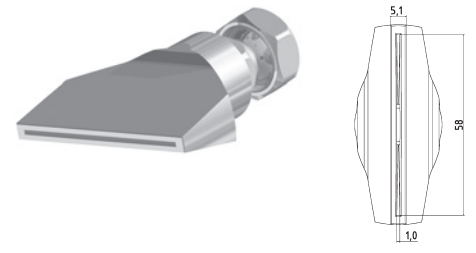
*flat nozzle broadly with slit 58 x 2,0 mm
straight jet*



2-DU-SL-65-GS-0.4

Flachdüse Schlitzbreite 58 x 0,4 mm
gerader Strahl

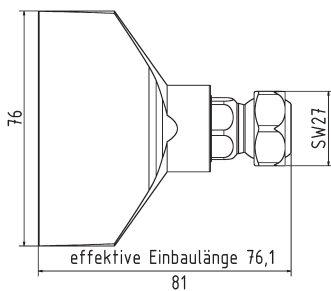
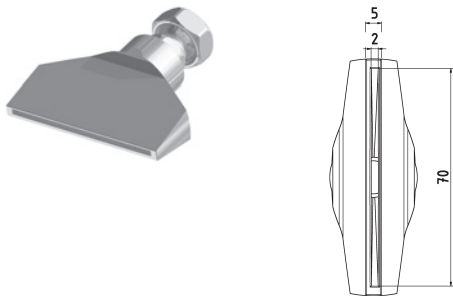
*flat nozzle broadly with slit 58 x 0,4 mm
straight jet*



2-DU-SL-65-GS-1.0

Flachdüse Schlitzbreite 58 x 1,0 mm
gerader Strahl

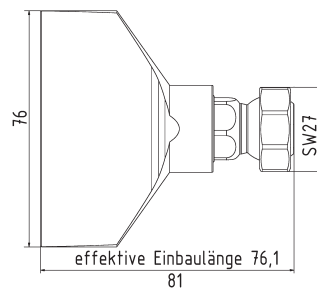
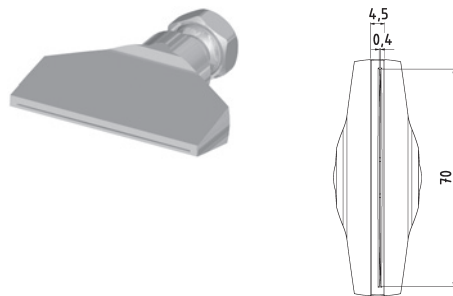
*flat nozzle broadly with slit 58 x 1,0 mm
straight jet*



2-DU-SL-76-GS

Flachdüse Schlitzbreite 70 x 2,0 mm
gerader Strahl

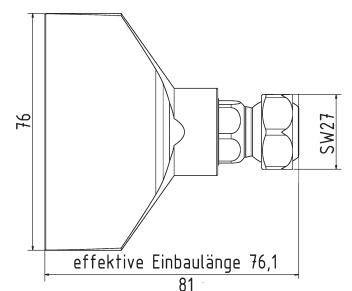
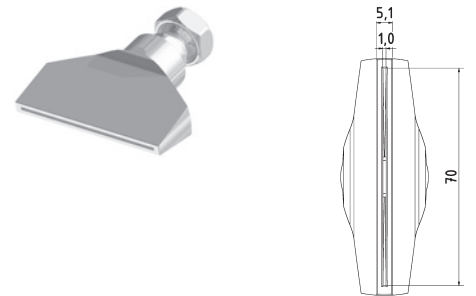
*flat nozzle broadly with slit 70 x 2,0 mm
straight jet*



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*



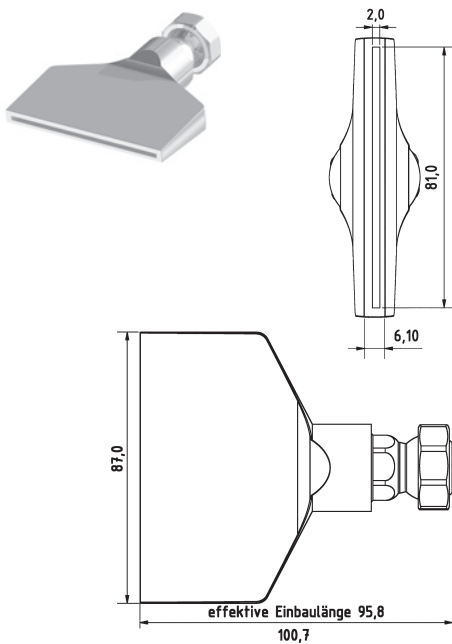
2-DU-SL-76-GS-1.0

Flachdüse Schlitzbreite 70 x 1,0 mm
gerader Strahl

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

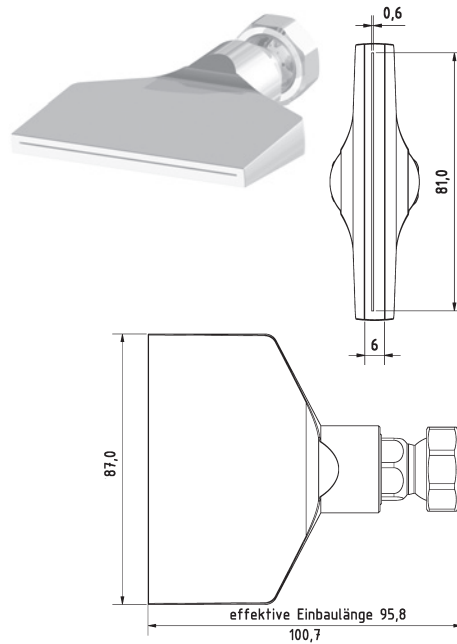
Typ2 [1/2" System]

Düsen | Nozzles



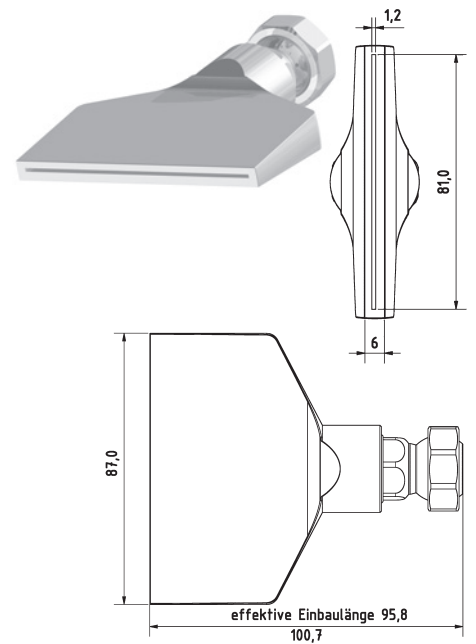
2-DU-SL-87-GS

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



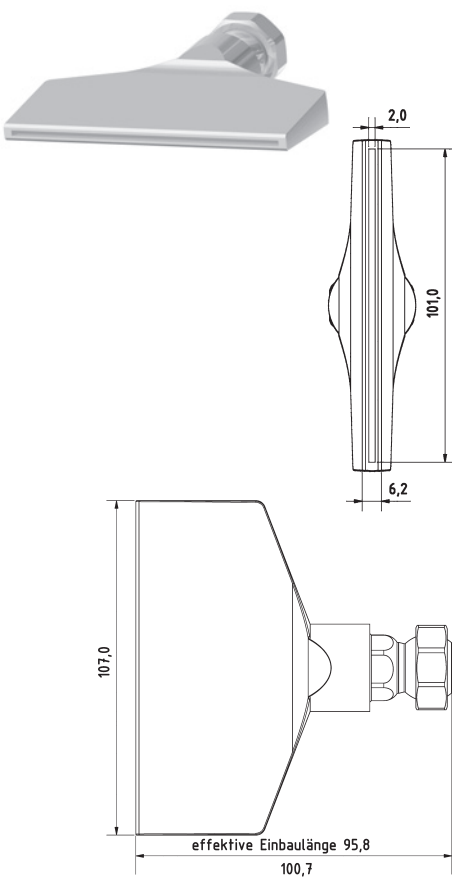
2-DU-SL-87-GS-0.6

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



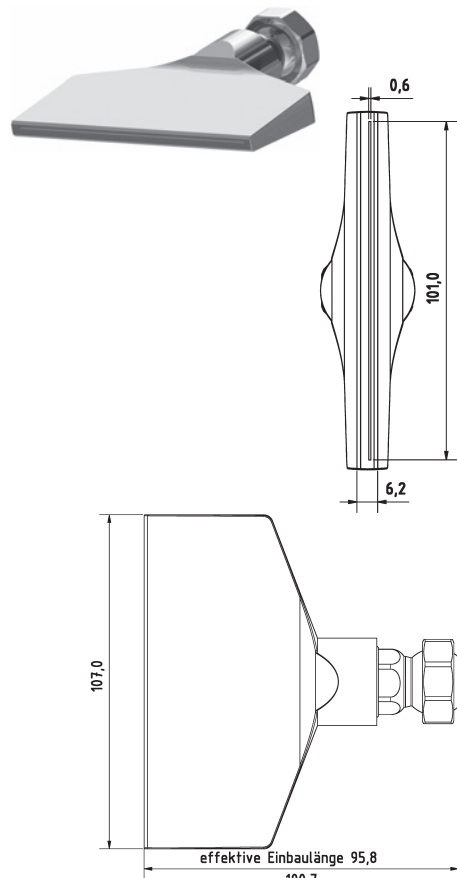
2-DU-SL-87-GS-1.2

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



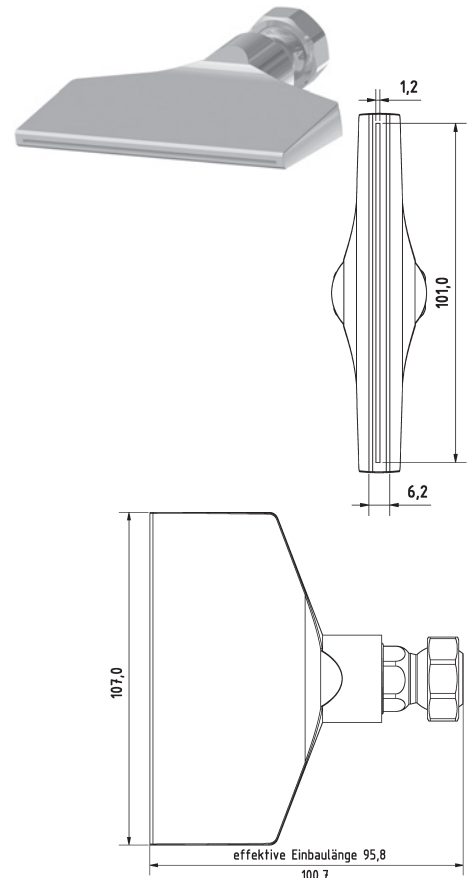
2-DU-SL-107-GS

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



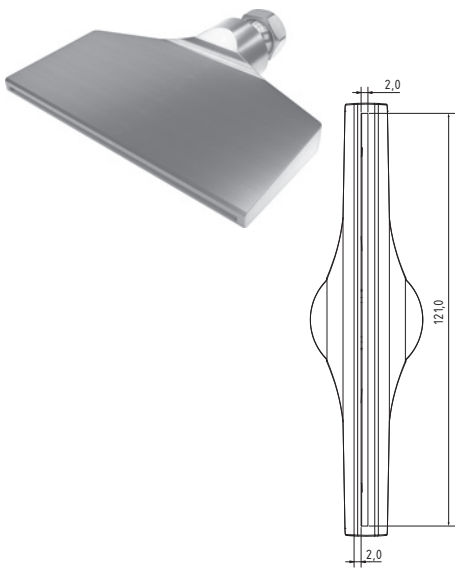
2-DU-SL-107-GS-0.6

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



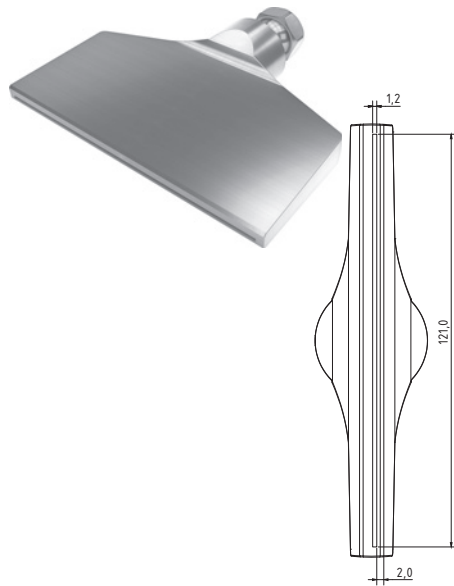
2-DU-SL-107-GS-1.2

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



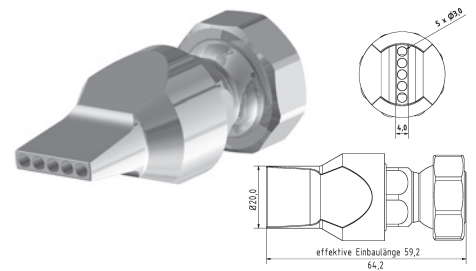
2-DU-SL-127-GS

Flachdüse Schlitzbreite 121 x 2,0 mm
gerader Strahl
*flat nozzle broadly with slit 121 x 2,0 mm
straight jet*



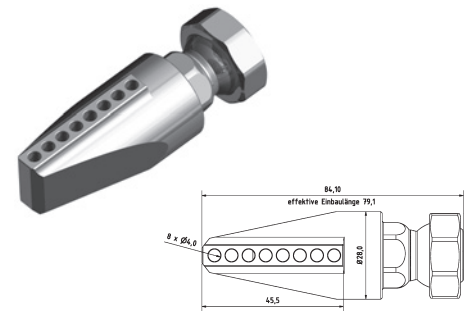
2-DU-SL-127-GS-1.2

Flachdüse Schlitzbreite 121 x 1,2 mm
gerader Strahl
*flat nozzle broadly with slit 121 x 1,2 mm
straight jet*



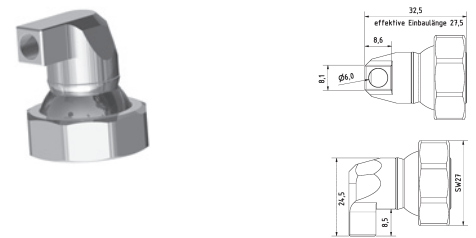
2-DU-LL-5-3

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



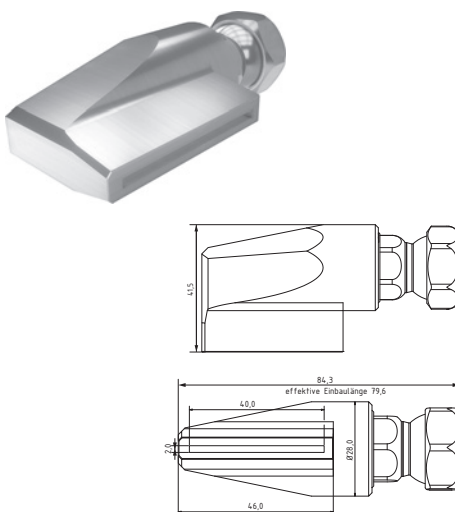
2-DU-LL-90-8

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



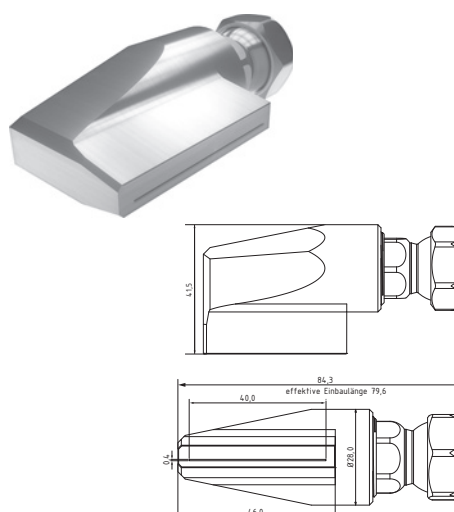
2-DU-LL-90-1-6

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



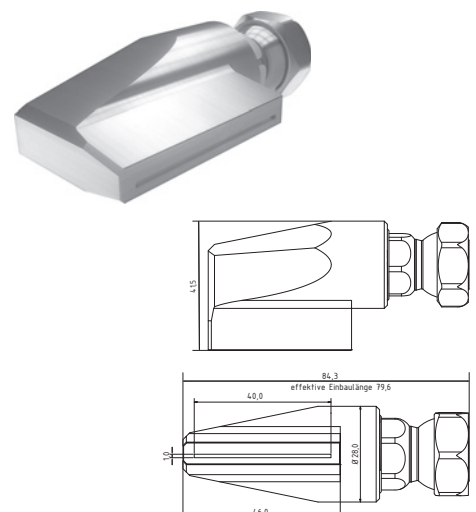
2-DU-I-SL-40-GS

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*

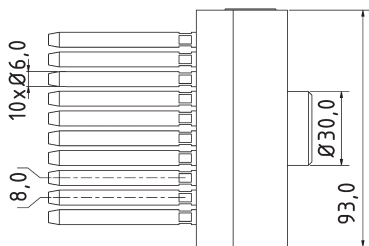
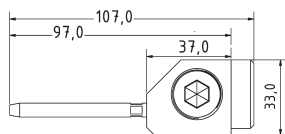
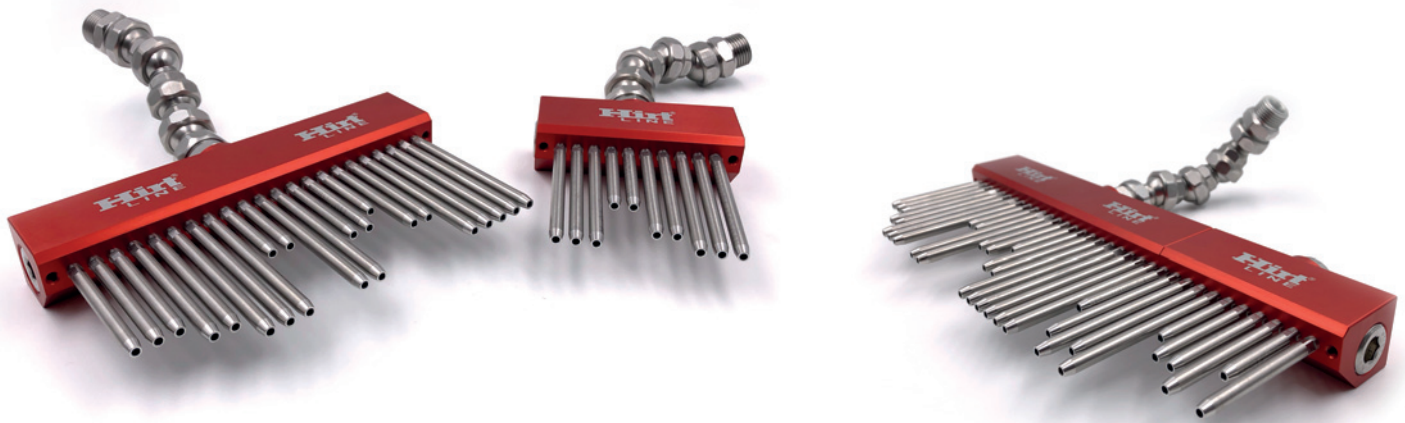


2-DU-I-SL-40-GS-1.0

Innenschleifdüse Schlitzbreite 40 x 1,0 mm
gerader Strahl
*Internal grinding nozzle with slit 40 x 1,0 mm
straight jet*

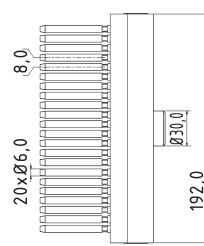
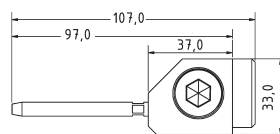
Typ2 [1/2" System]

Nadel Düsen | Needle Nozzles



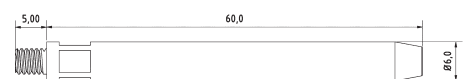
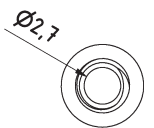
2-NA-DU-96

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



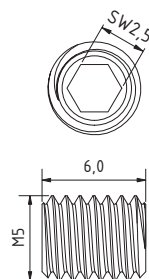
2-NA-DU-192

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

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



2-NA-Blindstopfen-M5

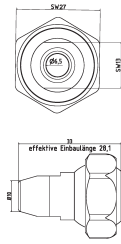
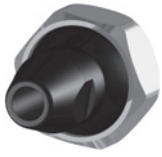
Blindstopfen M5, Madenschraube für
2-NA-DU-96 und 2-NA-DU-192
Blanking plug M5, grub screw for
2-NA-DU-96 and 2-NA-DU-192



2-NA-ANB-SET

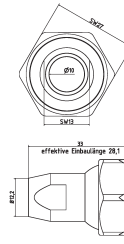
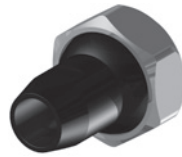
Anbausatz zum beliebig verlängern
der Nadeldüsen
attachment set for extending the needle
nozzles as required

Kunststoff-Düsen | Plastic Nozzles



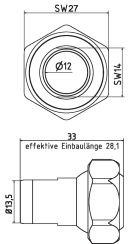
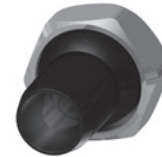
KU-2-DU-65

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



KU-2-DU-10

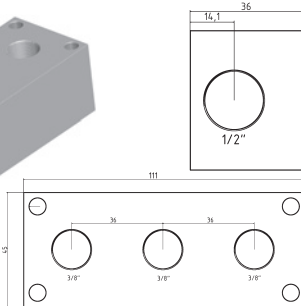
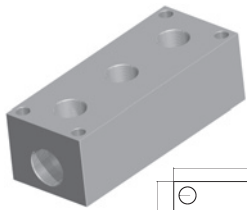
Kunststoff-Düse gerade Bohrung Ø 10 mm
plastic nozzle straight Ø 10 mm



KU-2-DU-12

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

Zubehör | Accessories

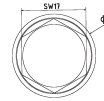


VB-3-38

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

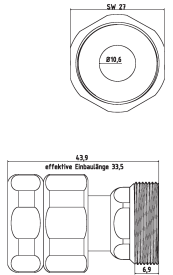


VB-3-38-BS

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

VB-3-38-PT-BS

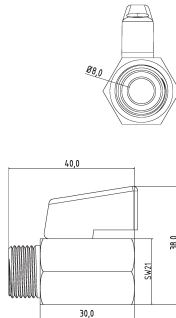
Blindstopfen mit G3/8" PT Gewinde
blank plug with thread 3/8" NPT



2-FP

Zwischenelement mit fester Position
(Schnellkupplung)

Intermediate element with fixed position
(quick coupling)

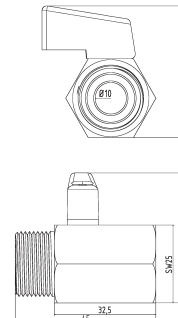


KH-38

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

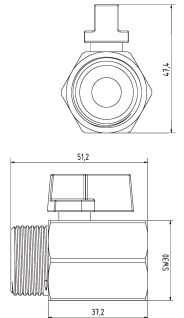


KH-12

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

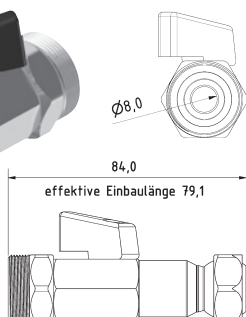
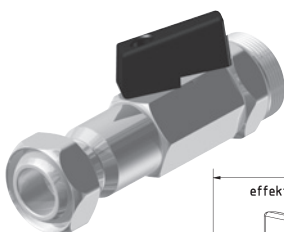
KH-12-SS

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"

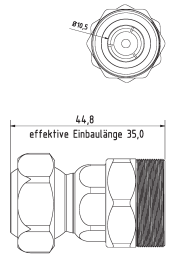
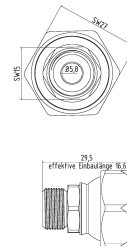
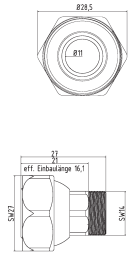


2-KH-Z

Kugelhahn Zwischenelement Typ2
ball valve intermediate element type2

Typ2 [1/2" System]

Zubehör | Accessories



RE-2-1

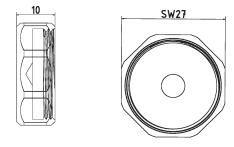
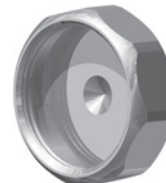
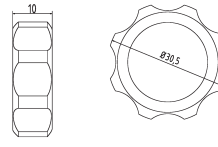
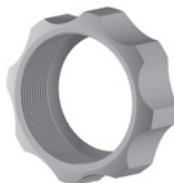
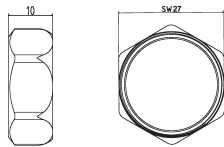
Reduktion Typ2 auf Typ1
reduction Type2 to Type1

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



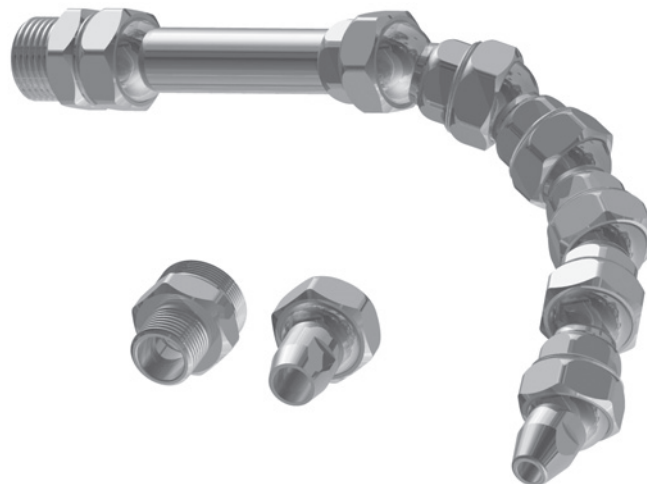
SW-19

Schlüssel aus Stahl SW19
open end wrench SW19



SW-27

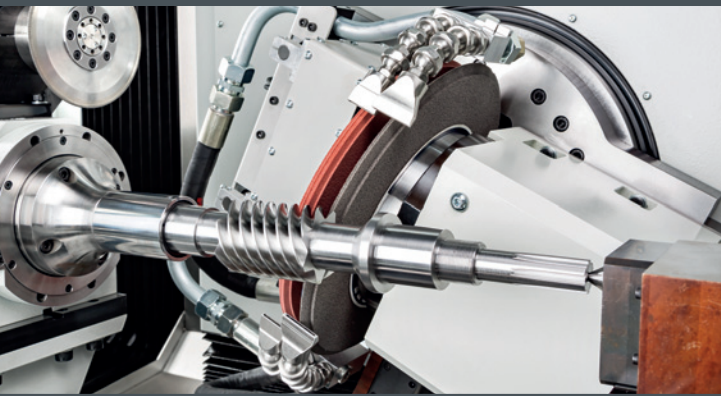
Schlüssel aus Stahl SW27
open end wrench SW27



2-GS

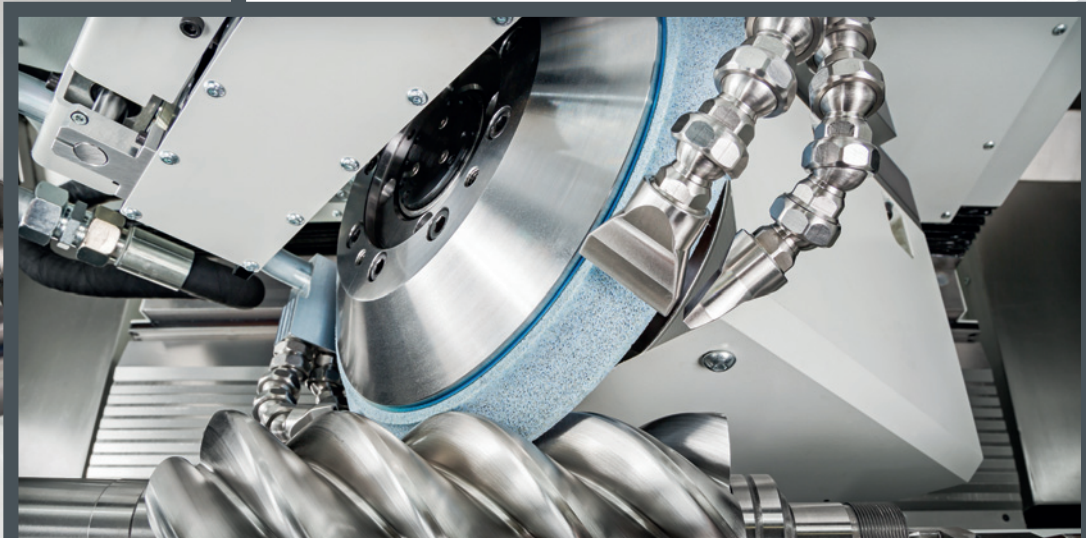
Grundset Typ2 1/2" System L = 240 mm
5 x 2-GE, 1 x 2-GE-3, 1 x 2-AD-38, 1 x 2-AD-12, 1 x 2-DU-65 1 x 2-DU-10, 1 x SW-19, 1 x SW-27
basic set Type2 1/2" system l = 240 mm
5 x 2-GE, 1 x 2-GE-3, 1 x 2-AD-38, 1 x 2-AD-12, 1 x 2-DU-65 1 x 2-DU-10, 1 x SW-19, 1 x SW-27

INNOVATIVE DÜSEN FÜR SPITZENLEISTUNG



“ Um Schleifresultate höchster Güte zu erzielen ist eine optimale Kühlung unabdingbar. Nur Düsen mit Schlitz erfüllen im Gegensatz zu solchen mit Bohrungen diese hohen Anforderungen, weil der KSS Strahl verwirbelungsfrei ohne Rückstau und frei von Lufteinschlüssen zwischen Werkstück und Schleifscheibe „reingezogen“ wird.

Hirt-Line® bietet Ihnen eine einzigartige Auswahl an präzisionsgefertigten Düsen aus rostfreiem Stahl für Schleifoperationen höchster Qualität für Scheibenbreiten von 18-121 mm und Strahldicken ab 0,4-2,2 mm. ”



PRODUKTÜBERSICHT

Typ3 [3/4"]

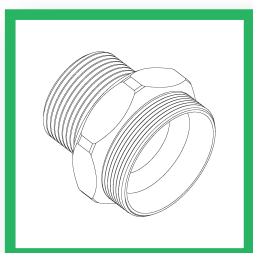
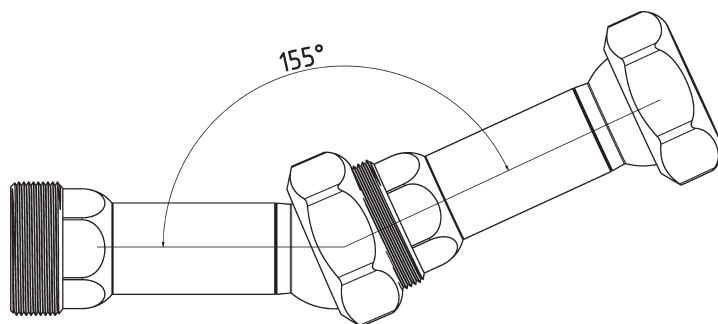
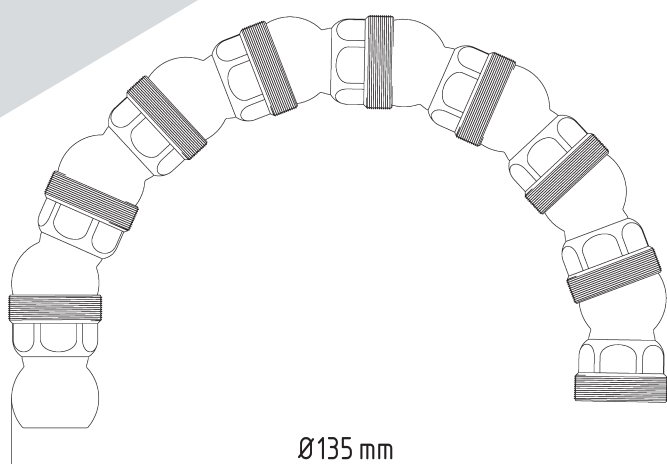


Das System Typ3 oder auch 3/4" genannt, verspricht neben der bewährten und zuverlässigen Qualität die passende Stabilität für Ihre Maschinen. Der Durchlass mit Ø19 mm bringt die nötige Literleistung (über 200l/Min) präzise und stabil (bis 100 bar) von der Pumpe bis zum Werkzeug. Passend in diesem System gibt es aktuell 32 verschiedene Düsen, von einfachen Runddüsen ab Ø12 mm, Ø15 mm und Ø19 mm bis hin zur größten Flachdüse 121 mm x 2 mm welche auch für den Schleifprozess optimiert sind. Alle Düsen werden

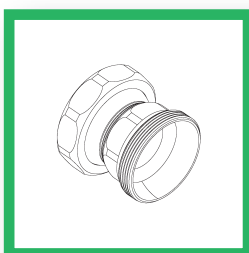
in einer hohen Präzision gefertigt und sind für jede Anwendung einfach auswechselbar. Mit den Adapter 3/8", 3/4" und 1" ist es ein Leichtes, dieses System an jeder Maschine zu installieren. Wie gewohnt gibt es verschiedene Grund- und Winkelelemente, welche es erlauben, das System flexibel und nach Wünschen zu konfigurieren. Optional kann ein Kugelhahn und weiteres Zubehör erworben werden.

TECHNISCHE DATEN:

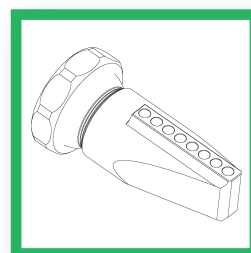
- Größe Typ3 (3/4")
- Durchlass Ø 19,0 mm
- Druckbeständig bis 100 bar
- Einsatzbereich -100°C bis +300°C
- Gewinde (Elemente) M34 x 1,25
- Material 1.4305 (V2A)



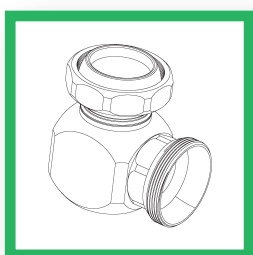
MASCHINENADAPTER



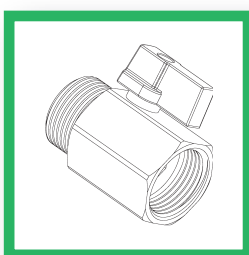
GRUNDELEMENTE



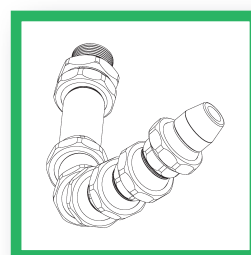
DÜSEN



WINKELELEMENTE



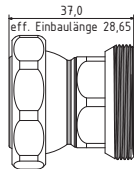
ZUBEHÖR



GRUNSET Typ3

Typ3 [3/4" System]

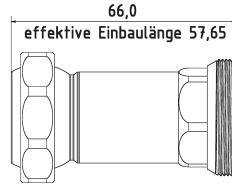
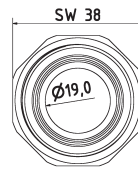
Grundelemente | Basic Elements



3-GE

$l = 37$ mm effektiv $l = 28,6$ mm

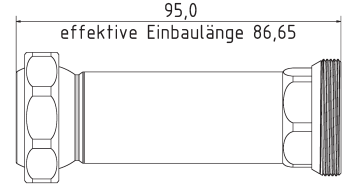
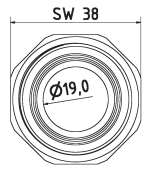
$l = 37$ mm effective $l = 28,6$ mm



3-GE-2

$l = 66$ mm effektiv $l = 57,6$ mm

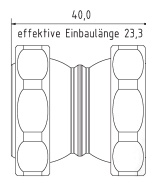
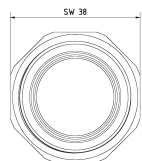
$l = 66$ mm effective $l = 57,6$ mm



3-GE-3

$l = 95$ mm effektiv $l = 86,6$ mm

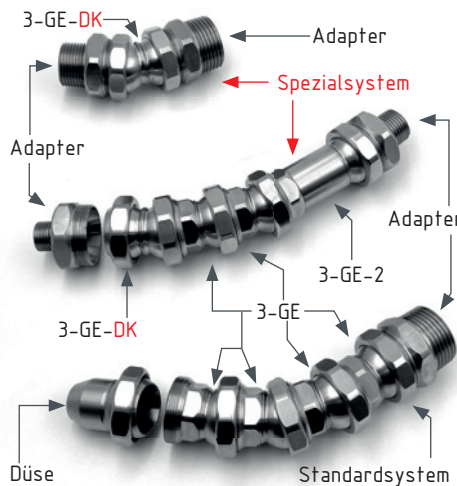
$l = 95$ mm effective $l = 86,6$ mm



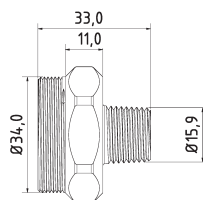
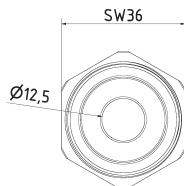
3-GE-DK Spezial Element

Grundelement $l = 40$ mm effektiv $l = 23,3$ mm

basic element $l = 40$ mm effective $l = 23,3$ mm

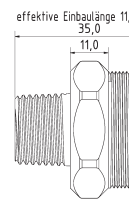
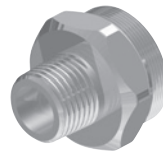


Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



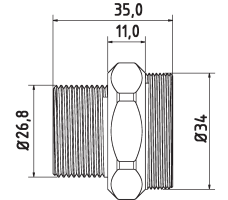
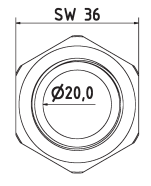
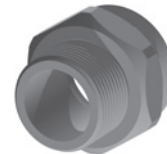
3-AD-38-PT

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



3-AD-12-PT

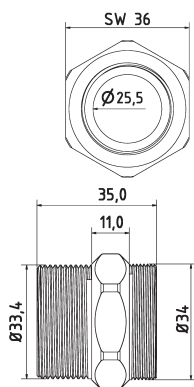
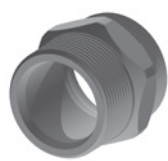
Adapterstück G 1/2" PT (Withworth-Gewinde)
adaptor piece thread 1/2" PT (NPT thread)



3-AD-34-PT

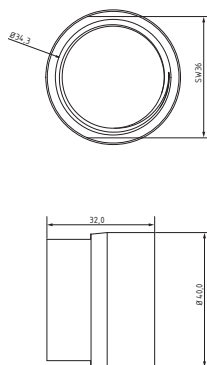
Adapterstück G 3/4" PT (Withworth-Gewinde)
adaptor piece thread 3/4" PT (NPT thread)

Maschinen-/Düsenadapter | Machine-/Nozzle Adapter



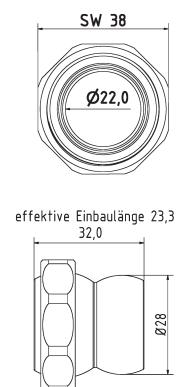
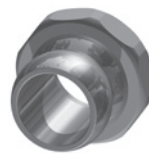
3-AD-10-PT

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



3-AD-3GE-1

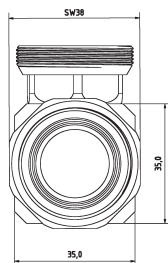
Adapterstück für Fremddüsen mit
Außengewinde, IG 3-GE auf IG 1"
adapter piece for external nozzles with male
thread, female 3-GE to female 1"



3-AD-LL

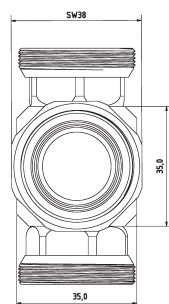
Adapterstück Loc-Line Typ3
adaptor piece Loc-Line Type3

Winklelemente | Elbows



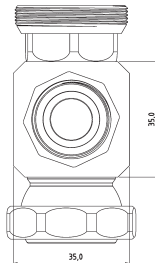
3-WV-1K

Winkerverschraubung mit Kugelstück
elbow piece movable



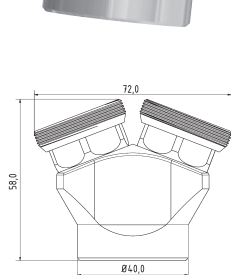
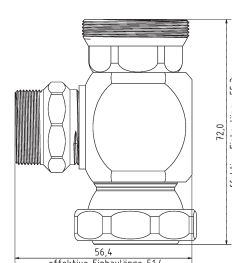
3-WV-2K

T-Stück mit Kugelstück
T-piece movable



3-WV-R-2K

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

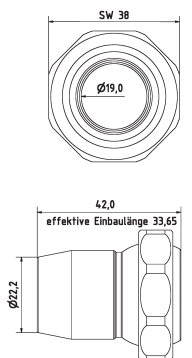
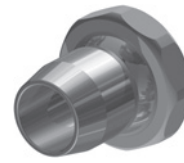
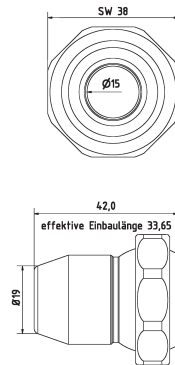
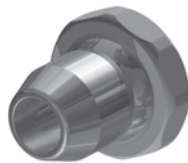
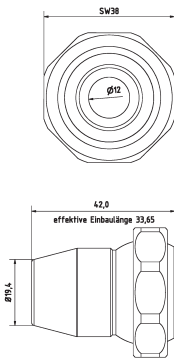
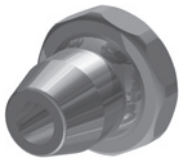


3-YV

Y-Stück 50°
Y-piece 50°

Typ3 [3/4" System]

Düsen | Nozzles



3-DU-12

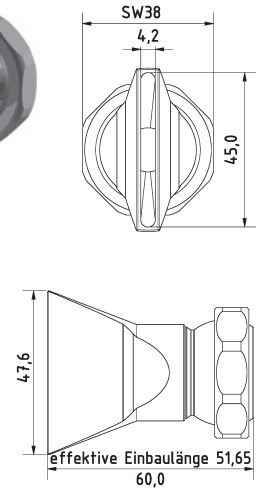
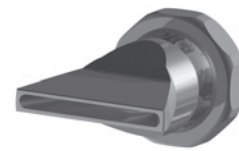
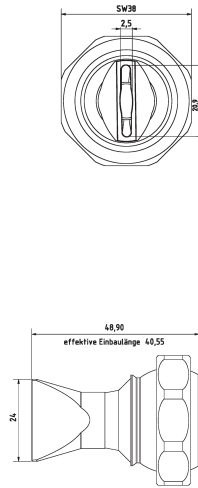
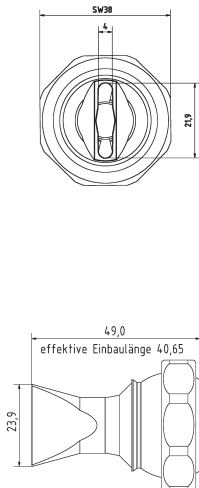
Düse gerade Bohrung Ø 12 mm
nozzle straight Ø 12 mm

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

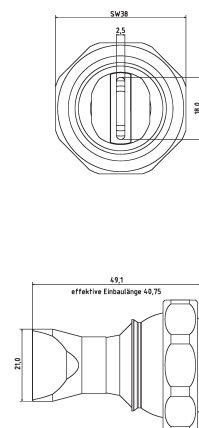
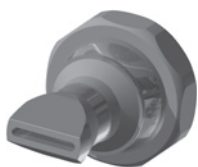
Flachdüse Schlitzbreite 22 x 4,0 mm
Streustrahl
flat nozzle broadly with slit 22 x 4,0 mm
scattered beam

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

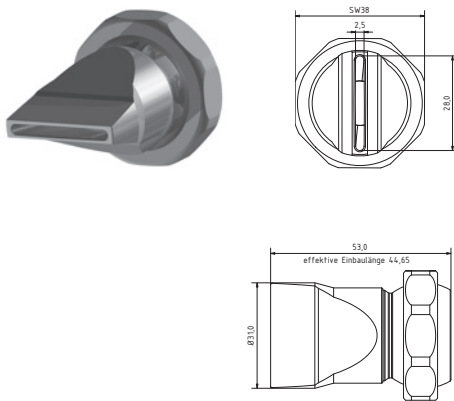


3-DU-SL-25-GS

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

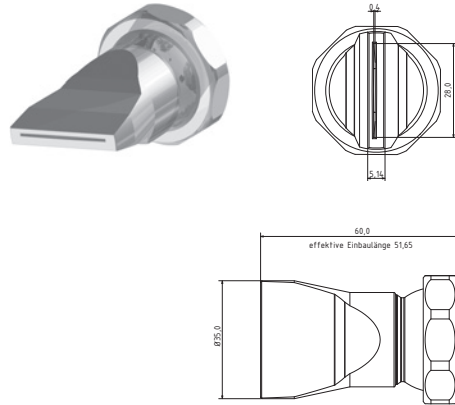


Düsen | Nozzles



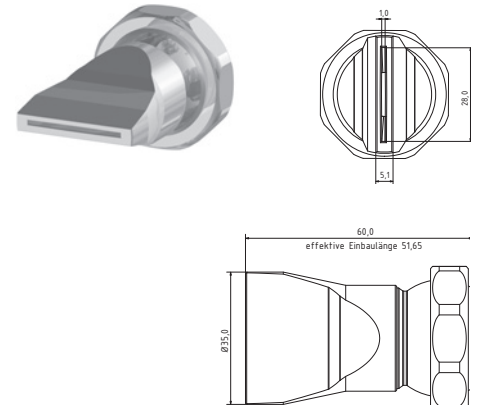
3-DU-SL-31-GS

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



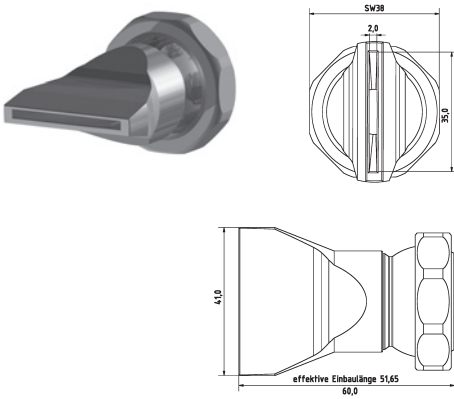
3-DU-SL-40-GS-0.4

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



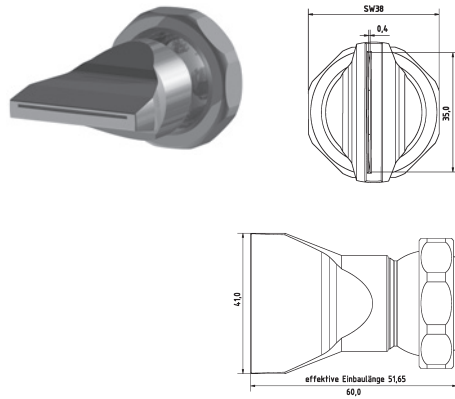
3-DU-SL-40-GS-1.0

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



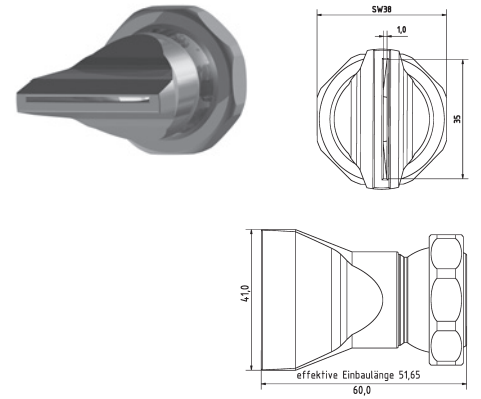
3-DU-SL-50-GS

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



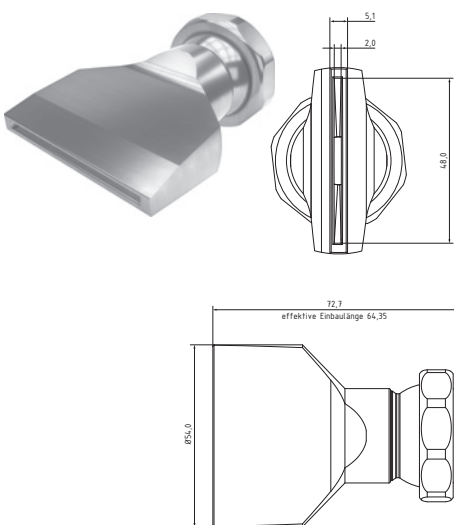
3-DU-SL-50-GS-0.4

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



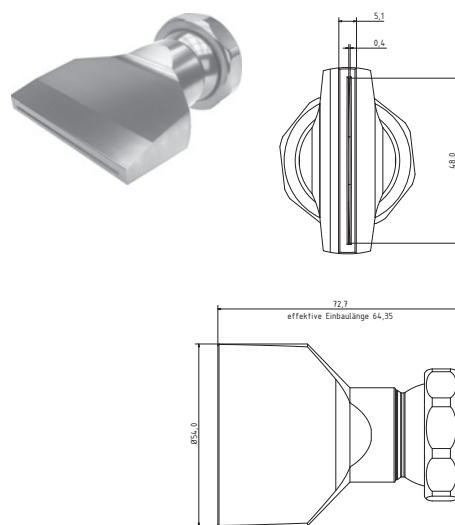
3-DU-SL-50-GS-1.0

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



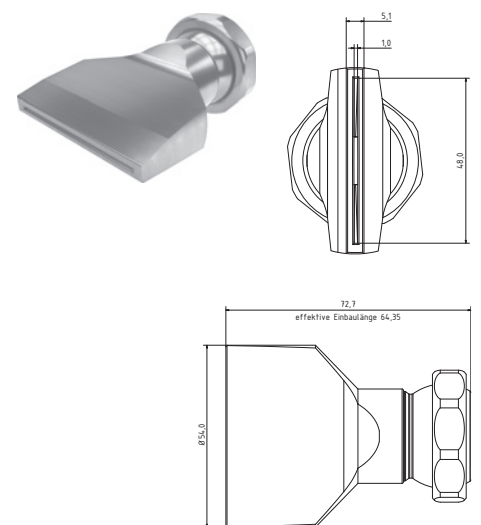
3-DU-SL-55-GS

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*

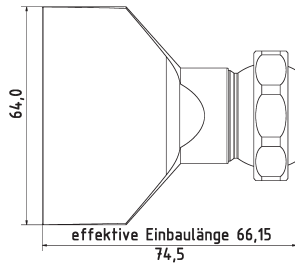
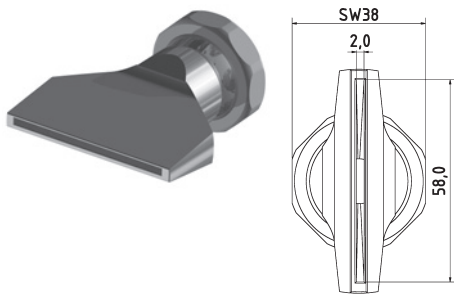


3-DU-SL-55-GS-1.0

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

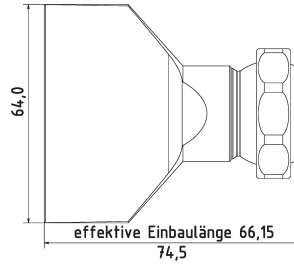
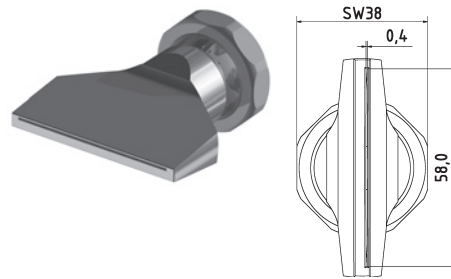
Typ3 [3/4" System]

Düsen | Nozzles



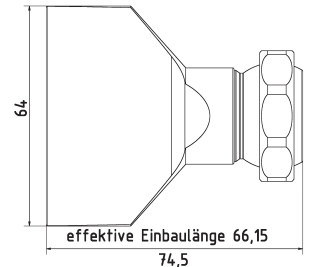
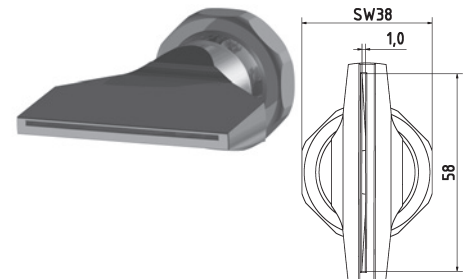
3-DU-SL-65-GS

Flachdüse Schlitzbreite 58 x 2,0 mm
gerader Strahl
*flat nozzle broadly with slit 58 x 2,0 mm
straight jet*



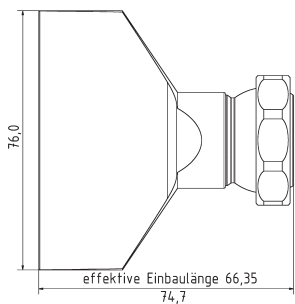
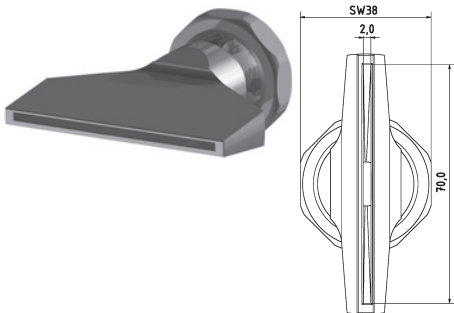
3-DU-SL-65-GS-0.4

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



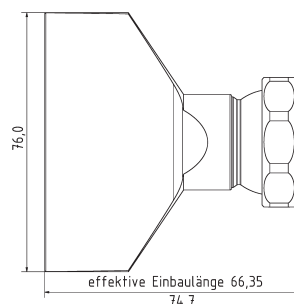
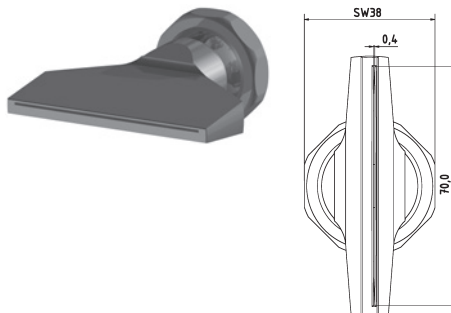
3-DU-SL-65-GS-1.0

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



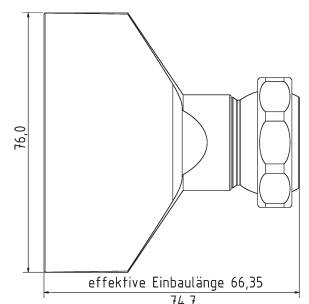
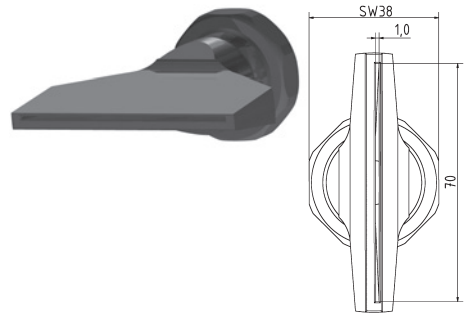
3-DU-SL-76-GS

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

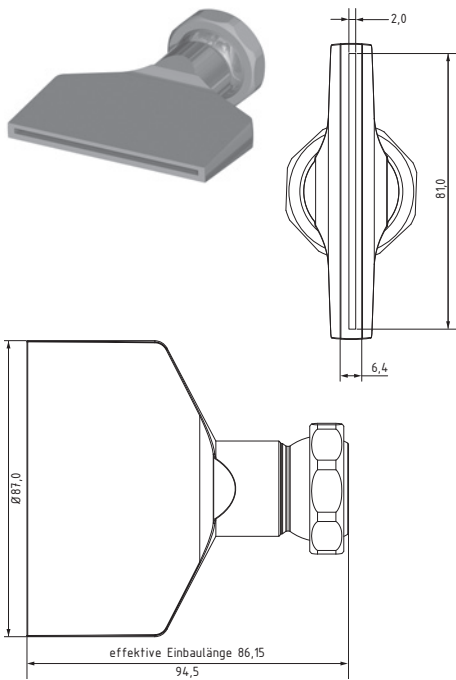
Flachdüse Schlitzbreite 70 x 0,4 mm
gerader Strahl
*flat nozzle broadly with slit 70 x 0,4 mm
straight jet*



3-DU-SL-76-GS-1.0

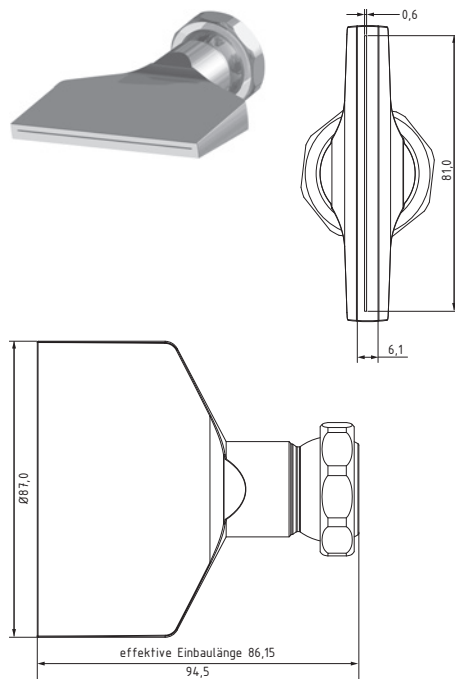
Flachdüse Schlitzbreite 70 x 1,0 mm
gerader Strahl
*flat nozzle broadly with slit 70 x 1,0 mm
straight jet*

Düsen | Nozzles



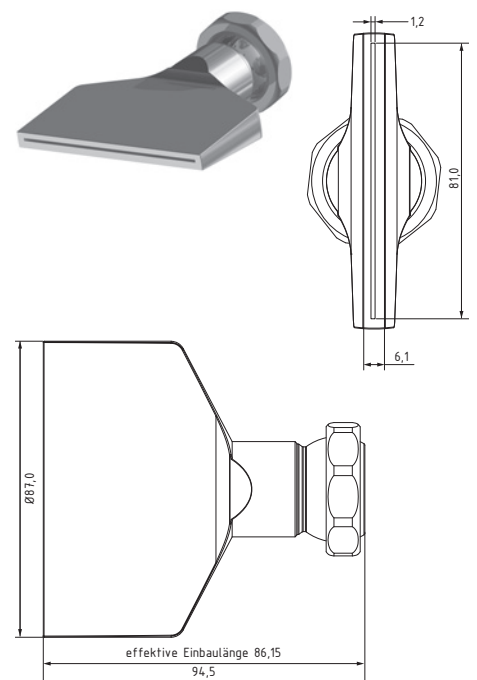
3-DU-SL-87-GS

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



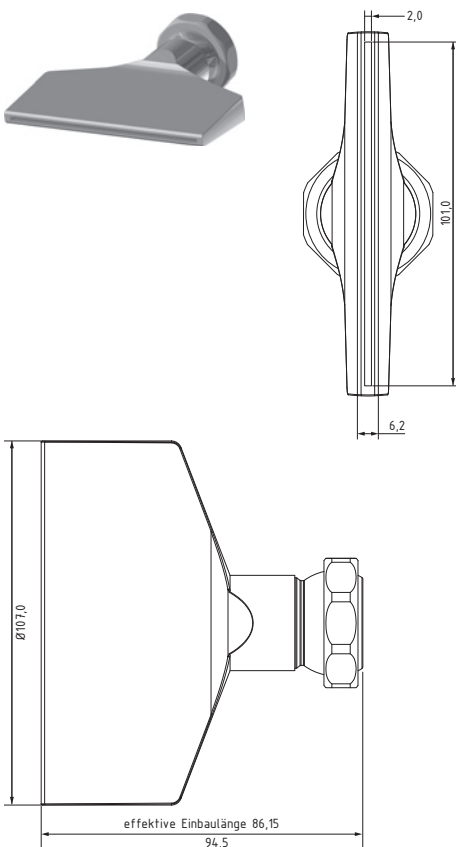
3-DU-SL-87-GS-0.6

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



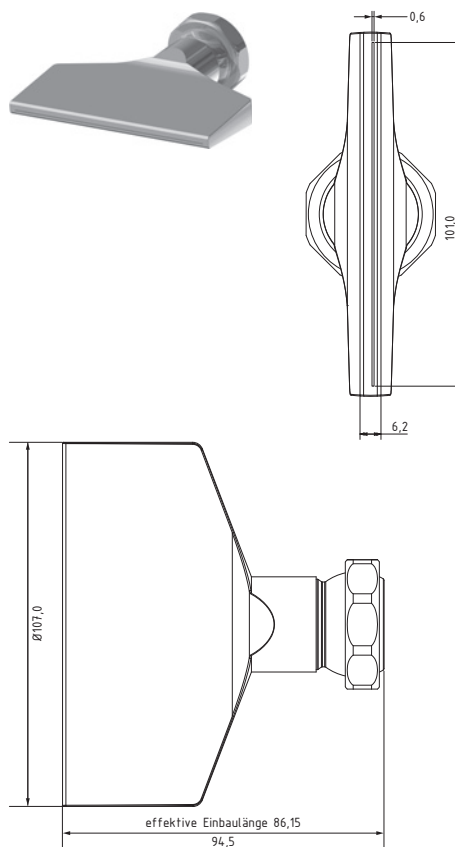
3-DU-SL-87-GS-1.2

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



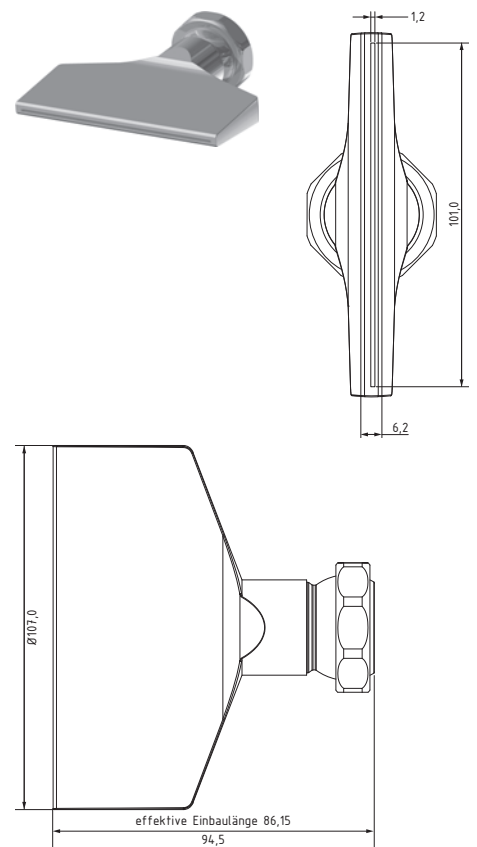
3-DU-SL-107-GS

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*

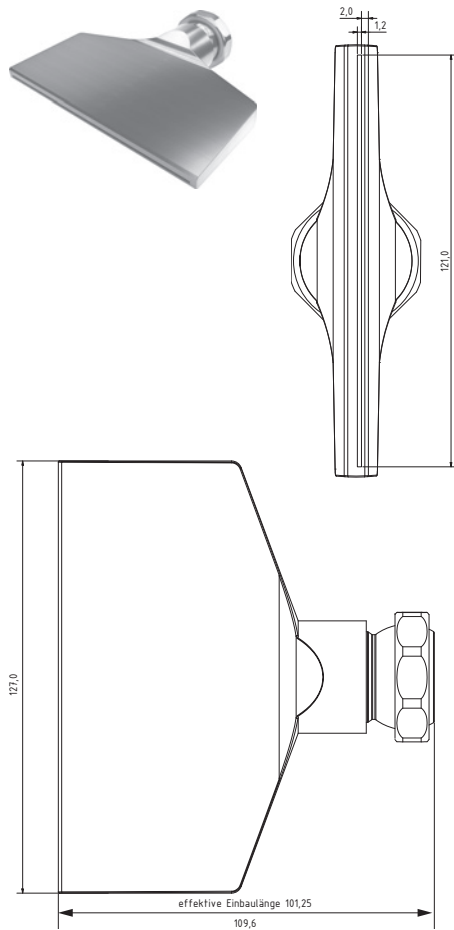
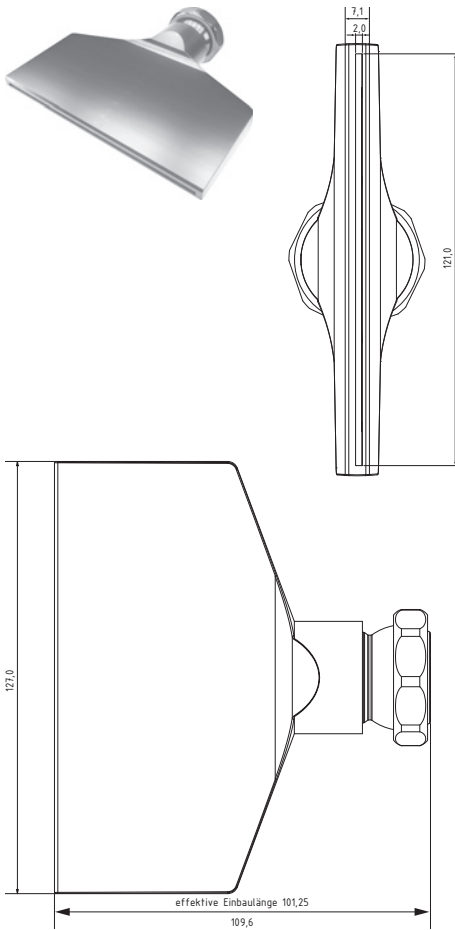


3-DU-SL-107-GS-1.2

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

Typ3 [3/4" System]

Düsen | Nozzles

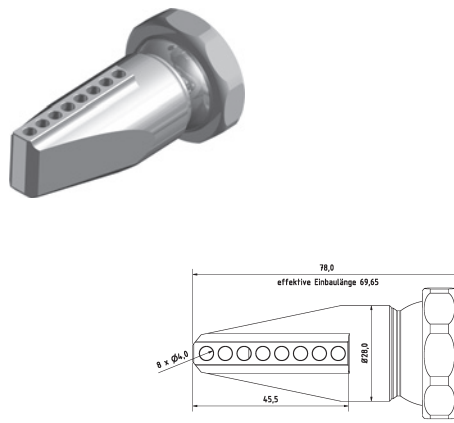
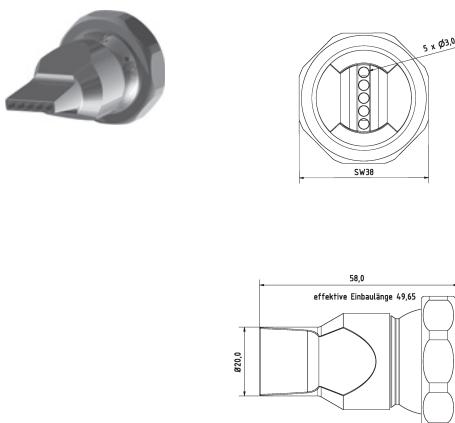


3-DU-SL-127-GS

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



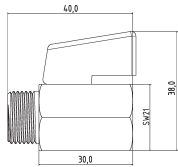
3-DU-LL-5-3

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

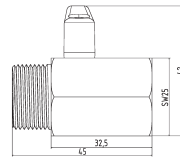
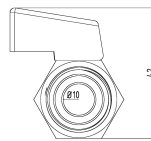
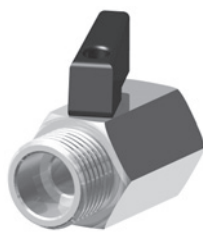


KH-38

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

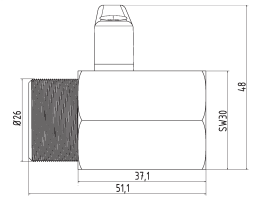
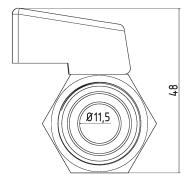
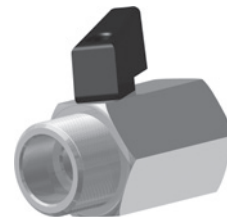


KH-12

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



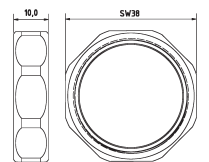
3-SW-27

Schlüssel aus Stahl SW27
open end wrench SW27



3-SW-38

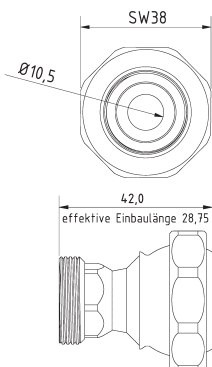
Schlüssel aus Stahl SW38
open end wrench SW38



3-MU

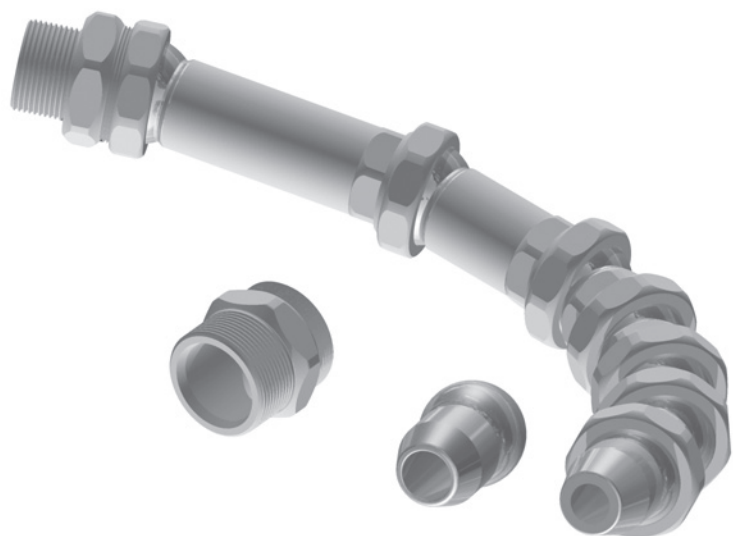
Mutter Standard
screw nut (default)

Grundset | Basic Set



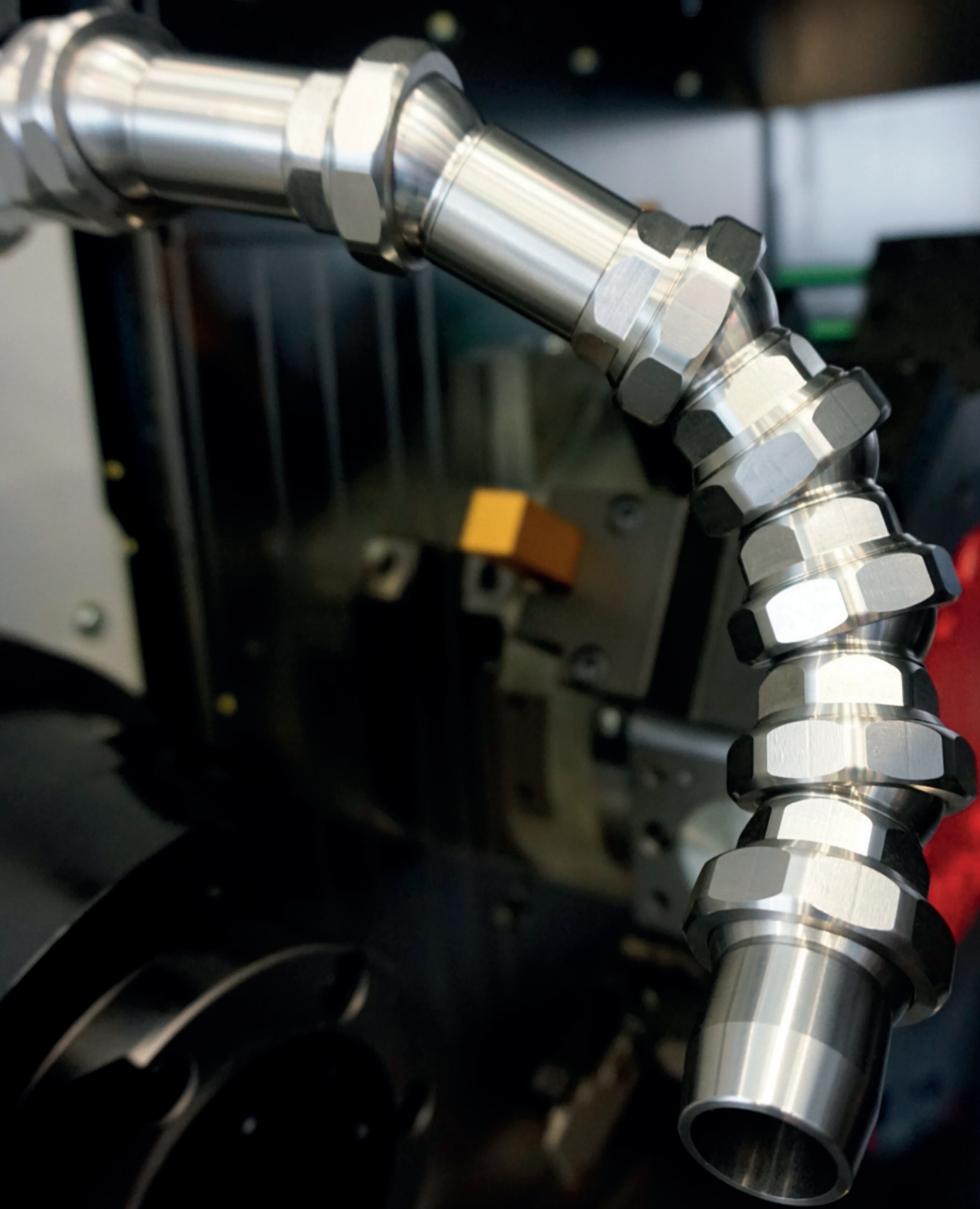
RE-3-2

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



PROFI-EMULSIONSMISCHGERÄT

Die Befüllstation für
Ihre Werkzeugmaschine!

TAFAN 5000

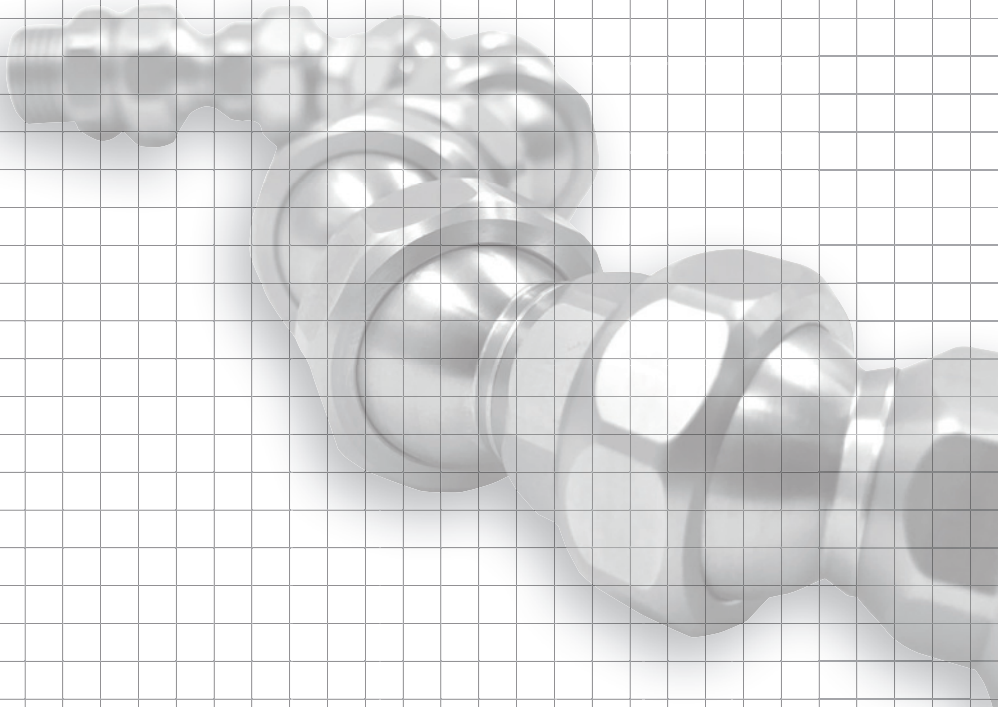


- Kein Überlaufen (Überlaufschutz)
- Vakuum Emulsionsansaugung
- einstellbares Mischverhältnis
- erhöhter Druck (schnelles befüllen)
- hohe Lebensdauer (Grundkörper Edelstahl)
- präzisionsgefertigt
- geeignet für Hauswassranschluß 2-8 bar

Die Profi-Füllstation Tafan-5000 eignet sich perfekt um Werkzeugmaschinen aller Art professionell und schnell zu befüllen. Mit unserem Profi-Mischgerät Tafan-5000 lässt sich das Ansetzen von Maschinen-Emulsion und das Befüllen der Anlagen in einem Arbeitsgang erledigen.

Durch die Selbstansaugung (Vakuum) wird das Kühlschmierstoff-Konzentrat problemlos angesaugt und mit dem Leitungswasser zur Emulsion vermischt. Die automatische Zapfpistole verhindert das überlaufen an der Maschine.





SCHNELLER UND LEISTUNGSFÄHIGER SUPPORT

Wir beraten Sie gerne persönlich
über die Vorteile unserer
Kühl-Schmierstoff-Leitungssysteme

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LINE

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Fax: +41 71 53 43 953
info@hirt-line-europe.com

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