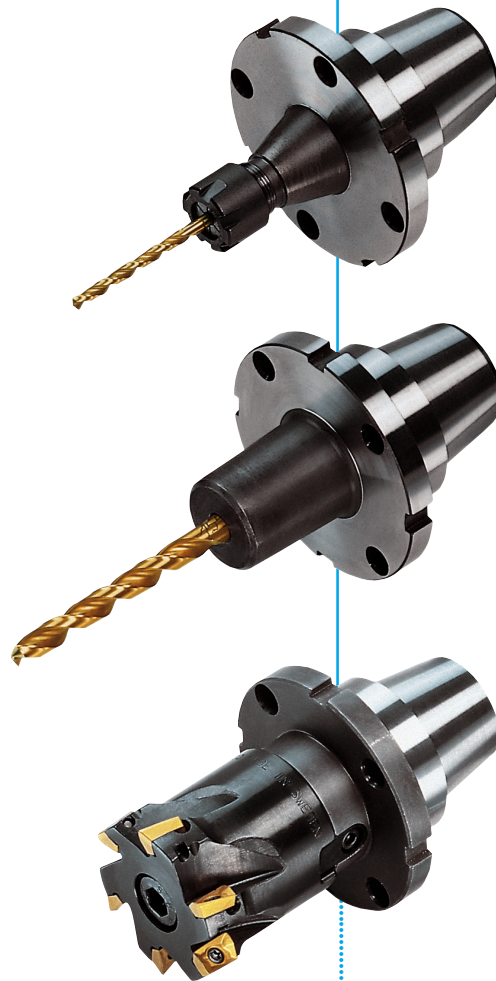


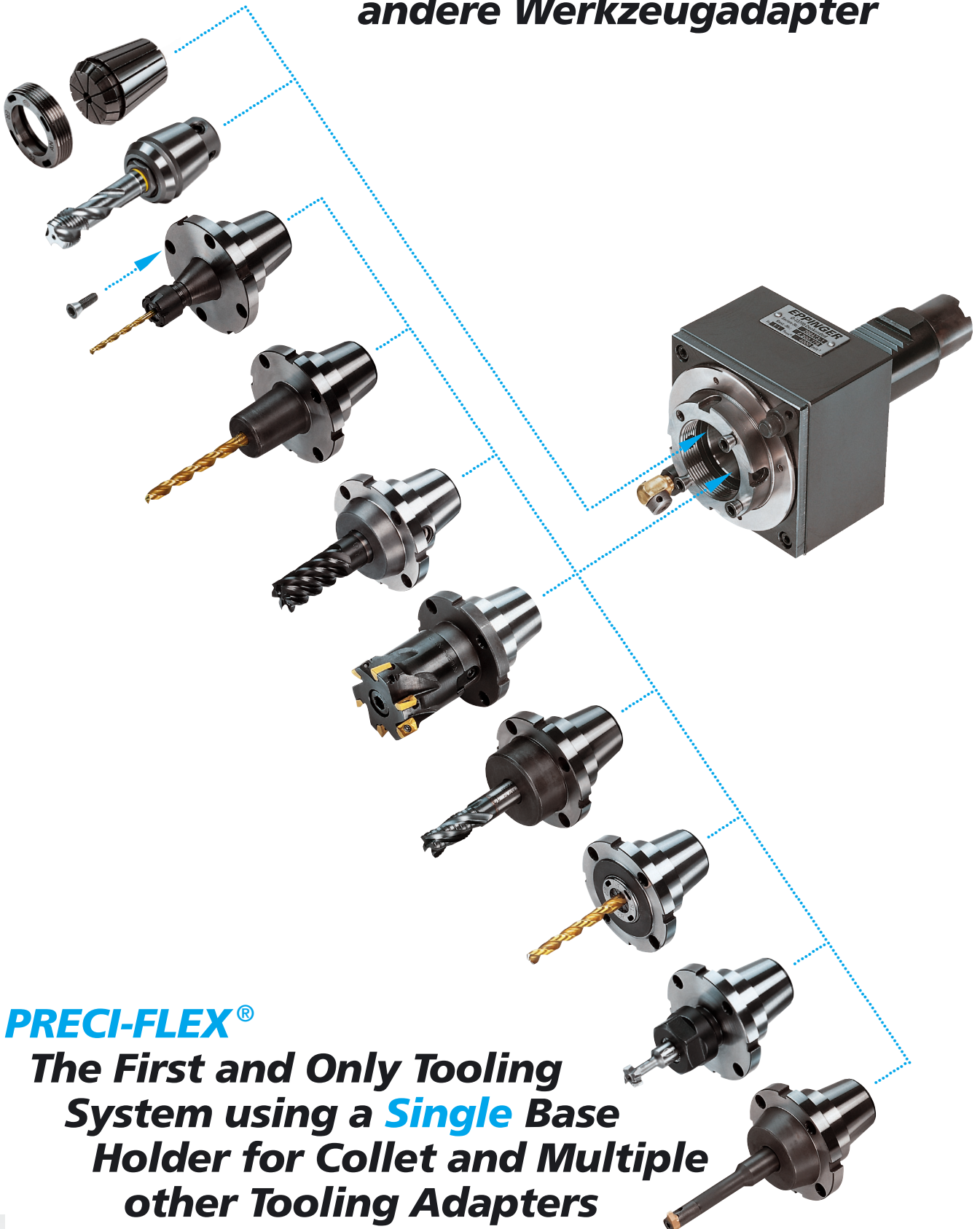
PRECI-FLEX® Adapter

Das flexible Werkzeugsystem
The Flexible Tool System



EPPINGER
SMARTER TOOLING SOLUTIONS

PRECI-FLEX® *Das erste Werkzeugsystem
mit **einem** Grundhalter
für Spannzange und viele
andere Werkzeugadapter*



PRECI-FLEX®
*The First and Only Tooling
System using a **Single** Base
Holder for Collet and Multiple
other Tooling Adapters*

PRECIFLEX® Allgemeine Produkt-Vorteile

PRECIFLEX® General Product Advantages

■ Mit **PRECIFLEX®** helfen wir Ihnen ihre Drehmaschine künftig wirklich wirtschaftlich umzurüsten.

Das neue modulare System von Eppinger eröffnet Ihnen hinsichtlich der Präzision und der Flexibilität völlig neue Dimensionen.

■ **Präzise**

Die Kegel/Plananlage-Schnittstelle gewährleistet höchste Genauigkeit und Steifigkeit.

■ **Flexibel**

Spannzange, Weldon, Dehnspannfutter, Schrumpffutter, um nur die wichtigsten zu nennen, alle können in einen Grundhalter eingesetzt werden. Die Handhabung ist einfach und praxisgerecht.

■ **Schnell**

Durch den Einsatz von Werkzeugen, die parallel zur Maschinenlaufzeit voreingestellt werden, reduziert sich die Maschinenrüstzeit nahezu auf Null. Teure Maschinenstillstandzeiten werden vermieden.

■ **Universell**

Sowohl für angetriebene als auch für feststehende Werkzeuge einsetzbar.

■ **Kompakt**

Der extrem kompakte Aufbau gewährleistet eine optimale Kraftübertragung und Systemsteifigkeit. Daraus resultieren höhere Werkstückgenauigkeiten und verbesserte Produktivität.

■ **Wirtschaftlich**

Sie benötigen weniger aufwendige, teure Sonderwerkzeughalter, die Werkzeugstandzeiten verlängern sich erheblich. Die Folge ist die deutliche Minimierung Ihrer Gesamtwerkzeugkosten.

■ The **PRECIFLEX®** interchange system makes lathe tooling changeovers quick, accurate and economical.

Eppinger's modular system adds a new dimension to high precision flexibility.

■ **Precise**

A conical and flat face planar interface ensures highest accuracy and rigidity.

■ **Flexible**

It's practical and simple to use. Collets, endmill holders, expanding collet chucks, shrink fit tooling, to name just a few, can all be mounted on a single base holder.

■ **Fast**

Interchanging pre-set tools reduce expensive machine downtime to almost nothing.

■ **Universal**

Tooling adapters may be interchanged between fixed and rotary base holders.

■ **Compact**

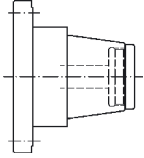
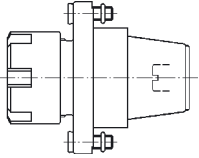
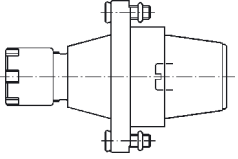
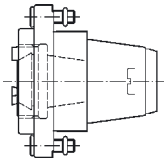
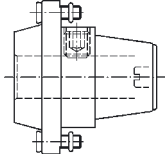
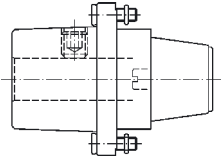
Our short design assures maximum torque transmission and rigidity, resulting in increased machining accuracy and consequently improved productivity.

■ **Economical**

Reduced requirements for special application tooling by using standard fixed and rotary base holders result in tremendously lower total tooling cost.

PRECI-FLEX® Inhaltsverzeichnis

PRECI-FLEX® Index

Übersicht / Overview	Gruppe Group	Beschreibung / Description
Type 00		
	P 1.1	Kegelgrößen-Übersicht Overview of Mounting Adapter
Type 01		
	P 2.1	Spannzangenaufnahme Collet Chuck standard
Type 02		
	P 2.2	Spannzangenaufnahme lang Collet Chuck extended
Type 15		
	P 2.3	Spannzangenaufnahme (Innenmutter) Collet Chuck (Inside Nut)
Type 03		
	P 3.1	Weldon kurz Weldon standard
Type 04		
	P 3.2	Weldon lang Weldon extended

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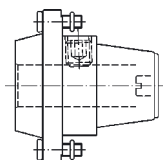
PRECI-FLEX® Index

Übersicht / Overview

**Gruppe
Group**

Beschreibung / Description

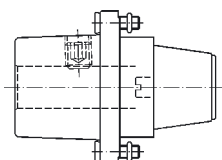
Type 05



P 3.3

Whistle Notch kurz
Whistle Notch standard

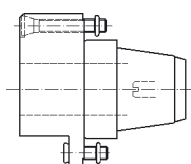
Type 06



P 3.4

Whistle Notch lang
Whistle Notch extended

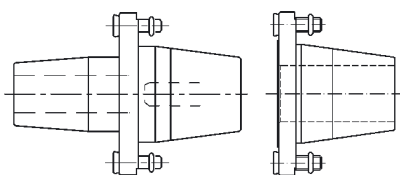
Type 13



P 3.5

Dehnspannfutter
Hydraulic Expansion Chuck

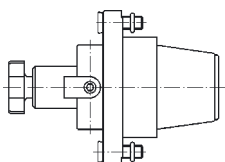
Type 14



P 3.6

Schrumpfen
Adapter Shrink Fit

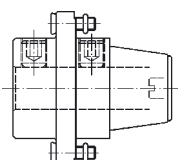
Type 07



P 4.1

Quernut Aufsteckdorn
Shell Mill Arbor
(Transverse Drive)

Type 08

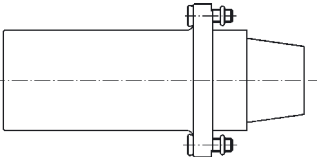
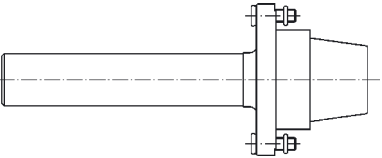
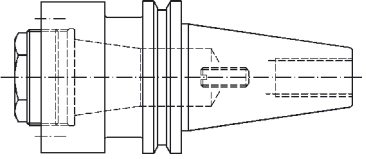
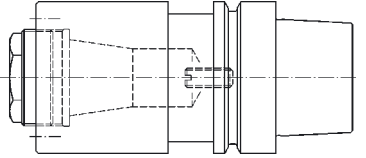
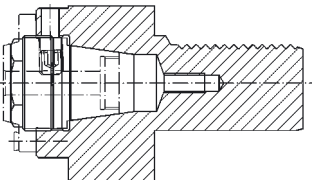
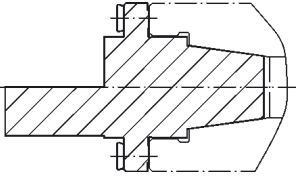


P 5.1

Bohrstangenaufnahme
Boring Bar Holder

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Type 10		
	P 6.2	Prüfdorn Test Mandrel
Type 11.1		
	P 7.1	Steilkegel-Aufnahme Machine Tool Interface ISO 40 DIN 6971 (SK) JIS-B 6339 (MAS/BT)
Type 11.2		
	P 7.2	HSK-Aufnahme Machine Tool Interface DIN 69893 (HSK)
Type 11.3		
	P 7.3	Aufnahme mit VDI Schaft DIN 69 880 Straight Shank VDI-Interface DIN 69 880
Type 11.4		
	P 7.4	Einstelladapter für Type 11.1, Type 11.2, Type 11.3 Setting Adapter for Type 11.1, Type 11.2, Type 11.3

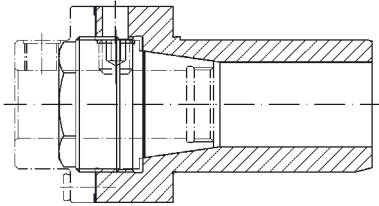
PRECI-FLEX® Inhaltsverzeichnis

Übersicht / Overview

**Gruppe
Group**

Beschreibung / Description

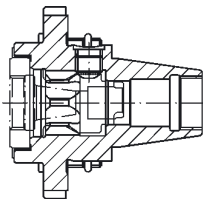
Type 12



P 7.5

Aufnahme mit zylindrischem Schaft
Straight Shank Interface

Type 17

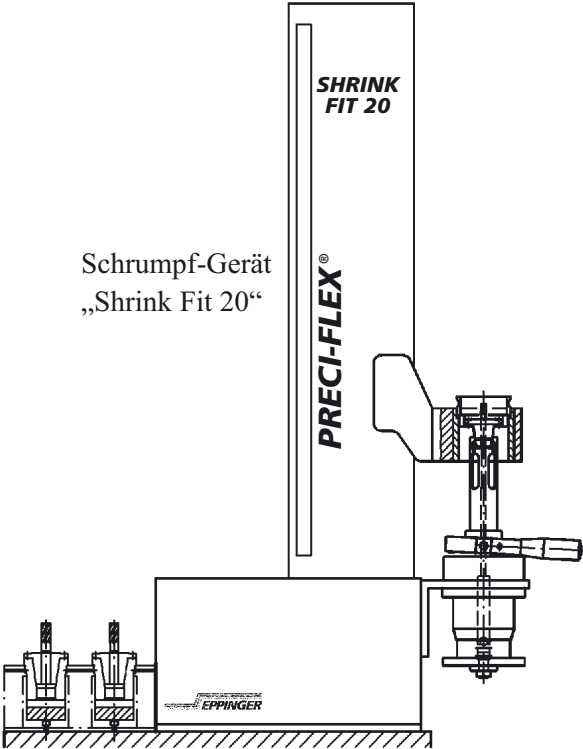


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DECOFLEX-Aufnahme
Reducer/Converter
PRECI-FLEX – DECOFLEX

PRECI-FLEX® Inhaltsverzeichnis

PRECI-FLEX® Index

Übersicht / Overview	Gruppe Group	Beschreibung / Description
Schrumpf-Gerät „Shrink Fit 20“  Kühlmodul Cooling Modul	P 50	Schrumpf-Technologie „Shrink Fit 20“ mit Kühlmodul Shrink Technologie „Shrink Fit 20“ With Cooling Modul

PRECI-FLEX® Inhaltsverzeichnis

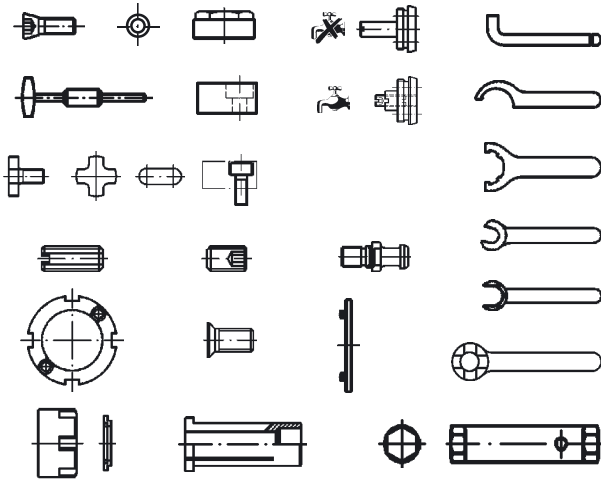
PRECI-FLEX® Index

Übersicht / Overview

**Gruppe
Group**

Beschreibung / Description

Zubehör / Accessories

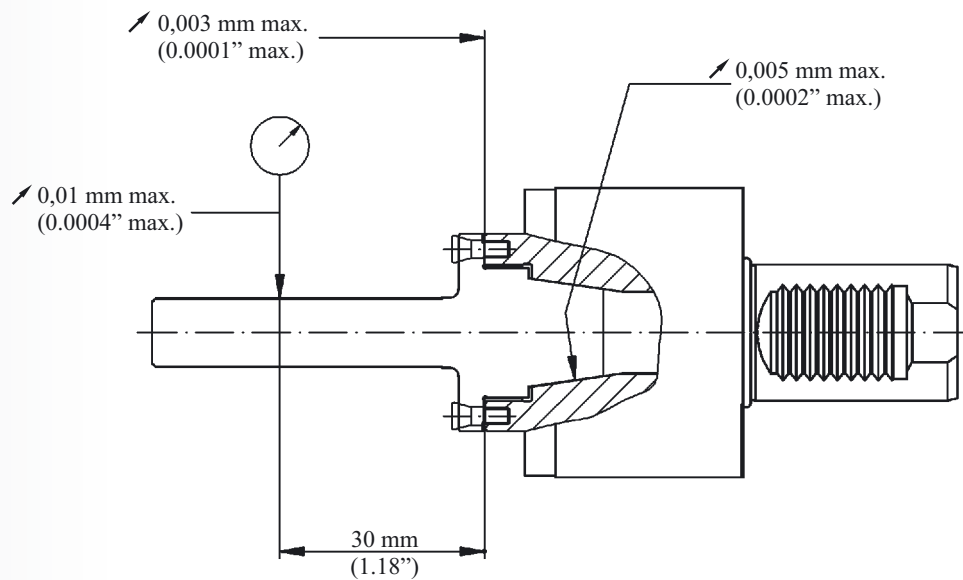


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PRECI-FLEX® Technische Merkmale

PRECI-FLEX® Technical Information

Maß- und Formtoleranzen des Systems / System Accuracy



Wiederholgenauigkeit $< 0,005 \text{ mm}$
Accuracy of repeatability $< 0,0002''$

PRECI-FLEX® Technische Merkmale

PRECI-FLEX® Technical Information

Adapter-Wechsel / Adapter Change

Verschluss-Schrauben aus Spindel entfernen;
Konus und Anlagefläche von Adapter und Spindel reinigen;
Adapter in der Spindel mit 4 Schrauben (2)
und Sechskantschlüssel (1) befestigen;
Spindel mit Hakenschlüssel (3) gegenhalten;

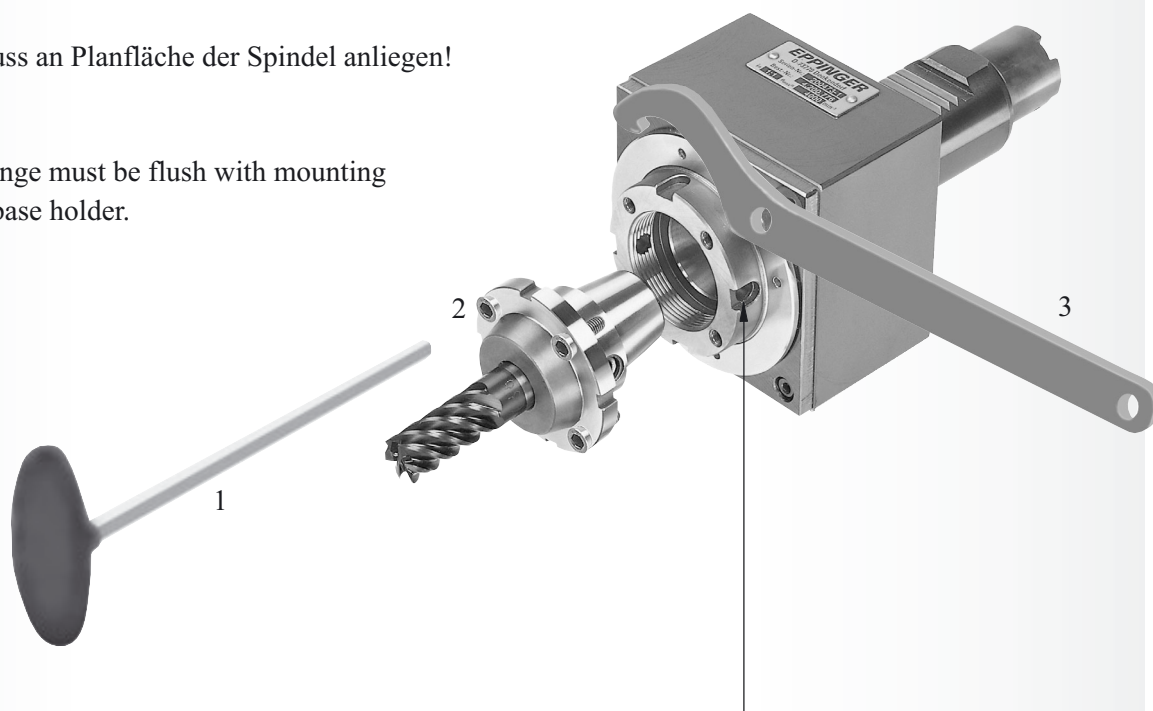
Remove four screws from base holder.
Wipe taper and flat mounting surface of adapter
and base holder.
With T-wrench (1) install and tighten four screws (2)
using hook wrench (3) to keep spindle from rotating.

Achtung:

Adapter muss an Planfläche der Spindel anliegen!

Caution:

Adapter flange must be flush with mounting
surface of base holder.

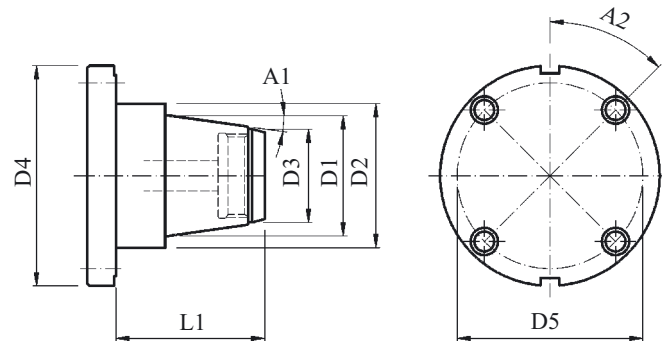


Werkzeugwechsel ohne Adapter-Wechsel
Tool Change without removing Adapter

Bemerkungen / Remarks

Siehe Eppinger Montage und Bedienungsanleitung für
Preci-Flex-Werkzeughalter auf Eppinger Homepage (www.eppinger.de)
See Eppinger Manual (Assembling and Handling) for
Preci-Flex-Toolholder at Eppinger Homepage (www.eppinger.de)

PRECI-FLEX® Adapter Kegelgrößen-Übersicht

00
PRECI-FLEX® Adapter Overview of Mounting Adapters
DIN 6499


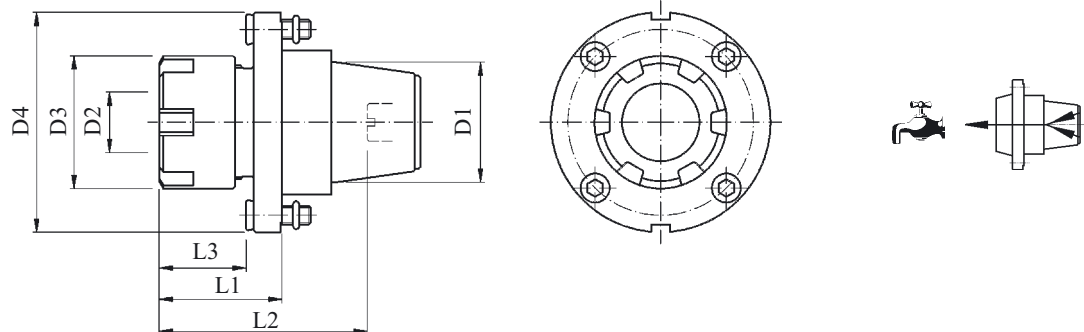
D1	Größe Size	D2	D3	D4	D5	L1	A1	A2
20	ER20	25,8	14	43	35	35	8°	45°
25	ER25	30	18	50	41	38,5	8°	45°
32	ER32	38	24,6	58	49	39,3	8°	45°
40	ER40	47	27,6	70	59	48,3	8°	45°
50	ER50	65	36	95	81	62,5	8°	45°

PRECI-FLEX® Adapter Spannzangenaufnahme

Type **01**

PRECI-FLEX® Adapter Collet Chuck Standard

DIN 6499



Größe/Size D1	Artikel-Nr. Part No.	Spannzange Collet	D2	D3	D4	L1	L2	L3
20	2001-0089	426E (ER16)	0,5-10	22	43	30	45	23,5
20	2001-0090	428E (ER20)	1-13	28	43	30	45	23,5
25	2501-0080	426E (ER16)	0,5-10	28	50	30	48,6	21,2
25	2501-0349	428E (ER20)	1-13	28	50	32	50,5	23,1
25	2501-0081	430E (ER25)	1-16	35	50	34,5	53	25,6
32	3201-0026	430E (ER25)	1-16	35	58	32,5	55	23,6
32	3201-0027	470E (ER32)	2-20	50	58	48	72	39,1
40	4001-0348	470E (ER32)	2-20	50	70	48	68	37,6
40	4001-0091	472E (ER40)	3-26	63	70	56	76	45,6
50	5001-0503	430E (ER25)	1-16	35	95	35	65	21,2
50	5001-0504	470E (ER32)	2-20	50	95	50	80	36,2
50	5001-0249	472E (ER40)	3-26	63	95	44,5	74,5	30,7



P 99.1



P 99.1



P 99.1



P 99.2



P 99.2



P 99.2



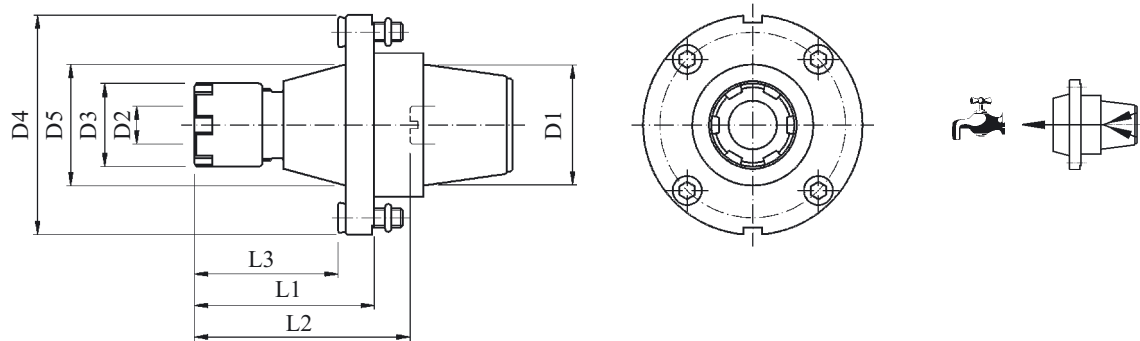
P 99.2

PRECI-FLEX® Adapter Spannzangenaufnahme lang

Type **02**

PRECI-FLEX® Adapter Collet Chuck extended

DIN 6499



Größe/Size D1	Artikel-Nr. Part No.	Spannzange Collet	D2	D3	D4	D5	L1	L2	L3
20	2002-0092	4008E (ER11)	0,5-7	16	43	17	30	40	23,5
20	2002-0666	4008E (ER11)	0,5-7	16	43	27	55	65	48,5
20	2002-0550	426E (ER16)	0,5-10	22	43	22	39	49	32,5
20	2002-0549	426E (ER16)	0,5-10	22	43	22	50	60	43,5
25	2502-0082	4008E (ER11)	0,5-7	16	50	21	40	48,5	31,1
25	2502-0419	4008E (ER11)	0,5-7	16	50	21	70	48,5	61,6
25	2502-0498	426E (ER16)	0,5-10	28	50	20	58,9	48,6	50
32	3202-0025	426E (ER16)	0,5-10	22	58	32	47,5	57	38,6
32	3202-0397	426E (ER16)	0,5-10	22	58	32	62,5	72	53,6
40	4002-0425	426E (ER16)	0,5-10	22	70	38	60	56,3	49,6
40	4002-0093	428E (ER20)	1-13	28	70	38	60	66,5	49,6
40	4002-0426	430E (ER25)	1-16	35	70	38	60	66,5	49,6



P 99.1



P 99.1



P 99.1



P 99.2

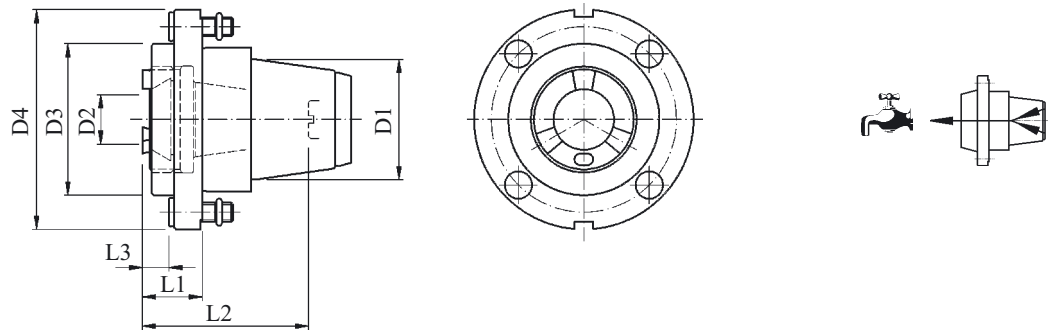


P 99.2



P 99.2

PRECI-FLEX® Adapter *Spannzangenaufn. (Innenmutter)* **Type 15** **PRECI-FLEX® Adapter Collet Chuck (Inside Nut)** **DIN 6499**



Größe/Size D1	Artikel-Nr. Part No.	Spannzange Collet	D2	D3	D4	L1	L2	L3
20	2015-0403	424E (ER11)	0,5-7	28	43	10,2	25,2	3,7
25	2515-0404	428E (ER20)	1-13	36	50	16,5	43,5	7,6
32	3215-0407	428E (ER20)	1-13	40	58	11,5	39,5	2,6
32	3215-0405	430E (ER25)	1-16	40	58	15,9	43,9	7
40	4015-0408	470E (ER32)	2-20	48	70	18,1	53,4	7,7

PRECI-FLEX® Reduktion auf PRECI-FLEX® / PRECI-FLEX® Reduction at PRECI-FLEX®

Größe/Size D1	Artikel-Nr. Part No.	Spannzange Collet	D2	D3	D4	L1	L2	L3
32	3215-0589	428E (ER20)	1-13	43	58	17,5	45,5	8,6
40	4015-0588	430E (ER25)	1-16	48,5	70	19,9	49,9	9,5

Nur für angetriebene Werkzeuge / Only for rotary tools

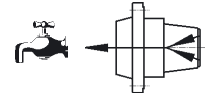
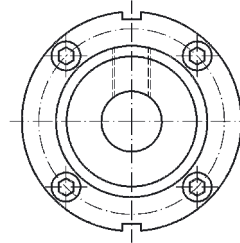
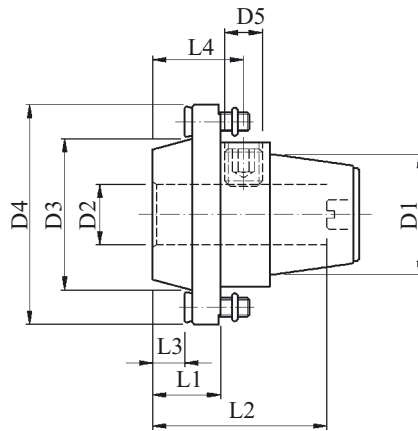


PRECI-FLEX® Adapter Weldon kurz

Type **03**

PRECI-FLEX® Adapter Weldon standard

DIN 1835-B



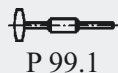
Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4
20	2003-0401	4	27	43	M6x8	14	28	7,5	18
20	2003-0094	6	27	43	M6x8	14	35,7	7,5	18
20	2003-0095	8	27	43	M6x8	14	35	7,5	18
20	2003-0096	10	27	43	M6x6	16	38,3	9,5	20
20	2003-0150	12	27	43	M6x6	18,5	42,6	12	22,5
20	2003-0097	1/4"	27	43	M6x8	14	35,7	7,5	18
20	2003-0098	3/8"	27	43	M6x6	16	38,3	9,5	20
20	2003-0151	1/2"	27	43	M6x6	18,5	42,6	12	22,5
25	2503-0056	6	25	50	M6x10	12	35,5	3,1	18
25	2503-0057	8	28	50	M8x1x10	12	35,5	3,1	18
25	2503-0058	10	32	50	M8x1x8	14	39	5,1	20
25	2503-0059	12	32	50	M8x1x8	17	43,5	7,8	22,5
25	2503-0278	14	32	50	M8x1x6	17	43,5	7,8	22,5
25	2503-0060	16	32	50	M8x1x6	18	45	9,1	24
25	2503-0099	1/4"	25	50	M6x10	12	35,5	3,1	18
25	2503-0100	3/8"	32	50	M8x1x8	14	39	5,1	20
25	2503-0101	1/2"	32	50	M8x1x8	17	43,5	7,8	22,5
25	2503-0102	5/8"	32	50	M8x1x6	18	45	9,1	24



P 99.1



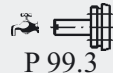
P 99.1



P 99.1



P 99.3



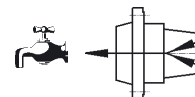
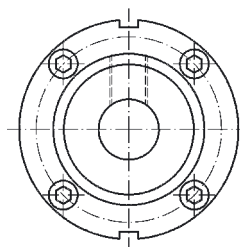
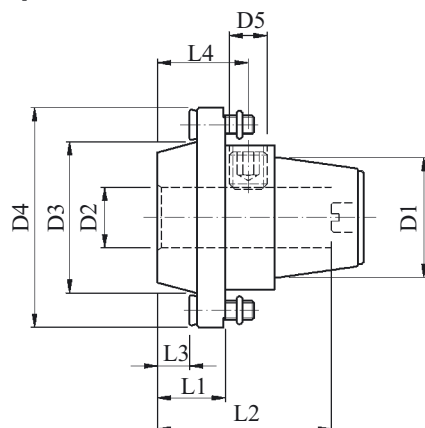
P 99.3

PRECI-FLEX® Adapter Weldon kurz

Type **03**

PRECI-FLEX® Adapter Weldon standard

DIN 1835-B



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4
32	3203-0274	5	25	58	M6x10	12	36	3,1	18
32	3203-0001	6	25	58	M6x10	12	36	3,1	18
32	3203-0002	8	28	58	M8x1x10	12	36	3,1	18
32	3203-0003	10	35	58	M10x1x10	14	40	5,1	20
32	3203-0446	11	40	58	M10x1x10	14	39,8	5,1	20
32	3203-0004	12	40	58	M10x1x10	16,5	44,3	7,6	22,5
32	3203-0275	14	40	58	M10x1x10	16,5	44,3	7,6	22,5
32	3203-0005	16	40	58	M6x10	18	46	9,1	24
32	3203-0321	18	40	58	M10x1x8	18	46	9,1	24
32	3203-0033	20	40	58	M8x1x8	19	47	10,1	25
32	3203-0103	1/4"	25	58	M6x10	12	36	3,1	18
32	3203-0104	3/8"	35	58	M10x1x10	14	40	5,1	20
32	3203-0105	1/2"	40	58	M10x1x10	16,5	44,3	7,6	22,5
32	3203-0106	5/8"	40	58	M10x1x10	18	46	9,1	24
32	3203-0107	3/4"	40	58	M8x1x8	19	47,4	10,1	25



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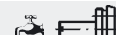
P 99.1



P 99.1



P 99.3



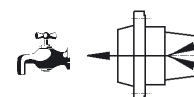
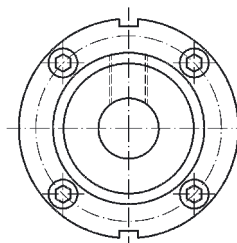
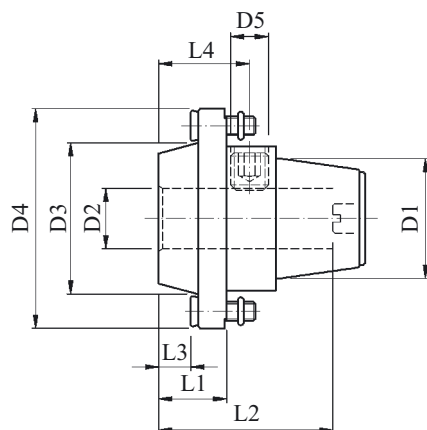
P 99.3

PRECI-FLEX® Adapter Weldon kurz

Type **03**

PRECI-FLEX® Adapter Weldon standard

DIN 1835-B



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4
40	4003-0108	6	25	70	M6x10	12	36,3	1,6	18
40	4003-0570	7	25	70	M6x10	12	36,3	1,6	18
40	4003-0109	8	28	70	M8x1x10	12	36,3	1,6	18
40	4003-0110	10	35	70	M10x1x10	14	40,3	3,6	20
40	4003-0111	12	42	70	M10x1x10	16,5	44,5	6,1	22,5
40	4003-0112	16	48	70	M10x1x10	18	46,5	7,6	24
40	4003-0113	20	48	70	M10x1x10	19	47,8	8,6	25
40	4003-0114	25	48	70	M10x1x10	18	53,3	7,6	24
40	4003-0115	1/4"	25	70	M6x10	12	36,3	1,6	18
40	4003-0116	3/8"	35	70	M10x1x10	14	40,3	3,6	20
40	4003-0117	1/2"	42	70	M10x1x10	16,5	44,5	6,1	22,5
40	4003-0118	5/8"	48	70	M10x1x10	18	46,5	7,6	24
40	4003-0119	3/4"	48	70	M10x1x10	19	48,3	8,6	25
40	4003-0120	1"	48	70	M10x1x10	18	49,9	7,6	24



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P 99.1



P 99.1

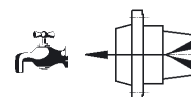
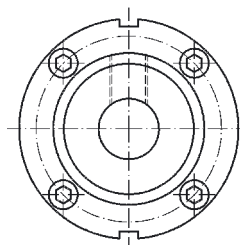
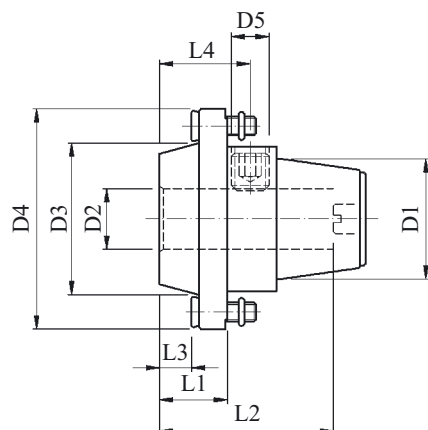


P 99.3



P 99.3

PRECI-FLEX® Adapter *Weldon kurz*

Type 03
PRECI-FLEX® Adapter Weldon standard
DIN 1835-B


Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4
50	5003-0505	6	25	95	M6x25	14	42,3	0,2	24
50	5003-0506	8	28	95	M8x1x25	14	42,3	0,2	24
50	5003-0486	10	66	95	M10x1x25	14	44,5	0,2	24
50	5003-0487	12	66	95	M10x1x25	14	46,5	0,2	24
50	5003-0488	14	66	95	M10x1x25	14	46,5	0,2	24
50	5003-0250	16	66	95	M12x1x16	14	47,7	0,2	24
50	5003-0415	18	66	95	M12x1x16	14	47,7	0,2	24
50	5003-0251	20	66	95	M12x1x16	14	47,7	0,2	24
50	5003-0252	25	66	95	M12x1x16	14	54,3	0,2	24
50	5003-0253	32	66	95	M12x1x16	14	57,3	0,2	24
50	5003-0583	1/4"	25	95	M6x25	14	42,3	0,2	24
50	5003-0304	5/8"	66	95	M12x1x16	14	47,7	0,2	24
50	5003-0584	1/2"	66	95	M10x1x25	14	46,5	0,2	24
50	5003-0305	3/4"	66	95	M12x1x16	14	48,3	0,2	24
50	5003-0306	1"	66	95	M12x1x16	14	50,7	0,2	24
50	5003-0307	1 1/4"	66	95	M12x1x16	14	50,7	0,2	24


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P 99.3

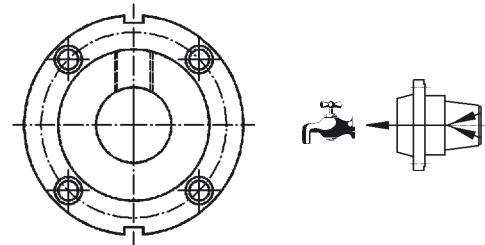
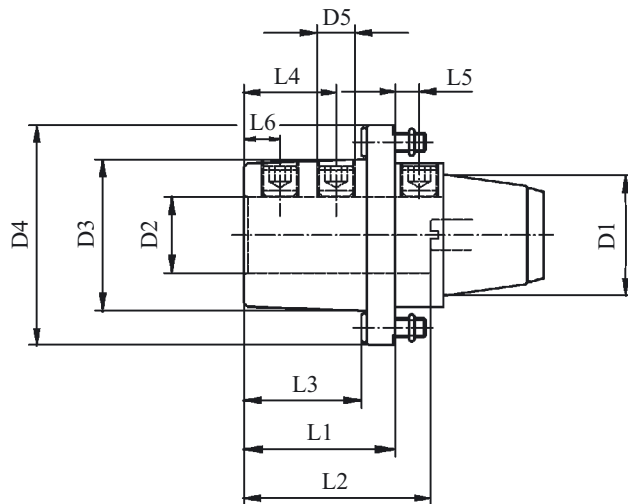
P 99.3

PRECI-FLEX® Adapter *Weldon lang*

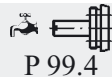
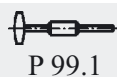
Type **04**

PRECI-FLEX® Adapter *Weldon extended*

DIN 1835-B



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4	L5	L6
20	2004-0181	6	27	43	M6x10	33	35,8	26,5	18		
20	2004-0182	8	27	43	M8x1x10	33	35,8	26,5	18		
20	2004-0183	10	27	43	M8x1x10	33	38,9	26,5	20		
20	2004-0184	12	27	43	M8x1x8	33	43,4	26,5	22,5		
20	2004-0320	14	27	43	M8x1x6	33	43,4	26,5	22,5		
20	2004-0332	16	27	43	M8x1x6	33	43,4	26,5	22		
20	2004-0185	1/4"	27	43	M6x10	33	35,8	26,5	18		
20	2004-0186	3/8"	27	43	M8x1x10	33	38,9	26,5	20		
20	2004-0187	1/2"	27	43	M8x1x8	33	43,4	26,5	22,5		
25	2504-0667	4	25	50	M6x8	40	35,8	31,1	18		8
25	2504-0061	6	25	50	M6x10	40	36	31,1	18		
25	2504-0062	8	28	50	M8x1x10	40	36	31,1	18		
25	2504-0063	10	32	50	M10x1x8	40	40	31,1	20		
25	2504-0064	12	32	50	M10x1x8	40	44,3	31,1	22,5		
25	2504-0325	14	32	50	M10x1x8	40	44,3	31,1	22,5		
25	2504-0065	16	32	50	M10x1x8	40	46	31,1	24		
25	2504-0300	18	36	50	M10x1x10	40	45,8	31,1	24		
25	2504-0301	20	40	50	M10x1x10	43	48,8	34,1	26		
25	2504-0188	1/4"	25	50	M6x10	40	36	31,1	18		
25	2504-0189	3/8"	32	50	M10x1x8	40	40	31,1	20		
25	2504-0190	1/2"	32	50	M10x1x8	40	44,5	31,1	22,5		
25	2504-0191	5/8"	32	50	M10x1x8	40	46	31,1	24		
25	2504-0323	3/4"	40	50	M10x1x10	43	48,8	34,1	25,5		

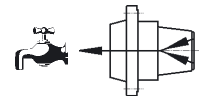
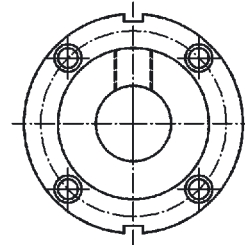
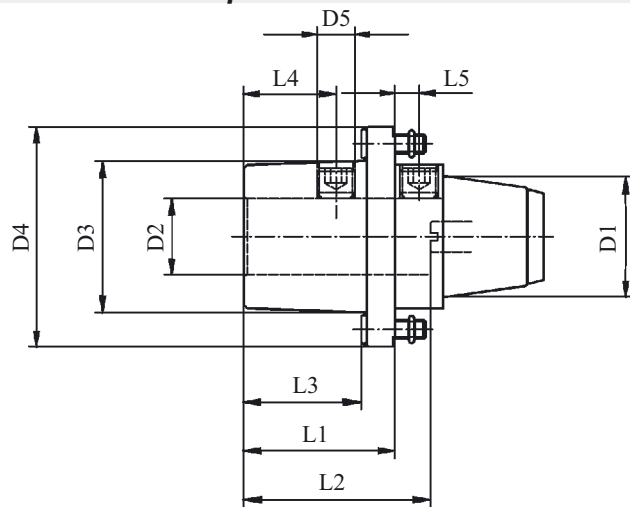


PRECI-FLEX® Adapter *Weldon lang*

Type **04**

PRECI-FLEX® Adapter *Weldon extended*

DIN 1835-B



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4	L5
32	3204-0006	6	25	58	M6x10	40	36	31,1	18	
32	3204-0398	6	25	58	M6x8	60	36	51,1	18	
32	3204-0007	8	28	58	M8x1x10	40	36	31,1	18	
32	3204-0008	10	35	58	M10x1x10	40	40	31,1	20	
32	3204-0009	12	40	58	M10x1x10	40	44,5	31,1	22,5	
32	3204-0499	14	40	58	M10x1x10	40	44,3	31,1	22,5	
32	3204-0010	16	40	58	M10x1x10	40	46	31,1	24	
32	3204-0453	18	40	58	M10x1x10	40	46	31,1	24	
32	3204-0034	20	40	58	M10x1x10	40	49	31,1	26	
32	3204-0279	25	40	58	M10x1x8	40	54	31,1	25	
32	3204-0192	1/4"	25	58	M6x10	40	36	31,1	18	
32	3204-0193	3/8"	35	58	M10x1x10	40	40	31,1	20	
32	3204-0194	1/2"	40	58	M10x1x10	40	44,5	31,1	22,5	
32	3204-0195	5/8"	40	58	M10x1x10	40	46	31,1	24	
32	3204-0196	3/4"	40	58	M10x1x10	40	49	31,1	26	
32	3204-0409	1"	40	58	M10x1x8	43	53,7	34,1	28	



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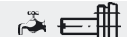
P 99.1



P 99.1



P 99.4



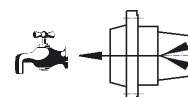
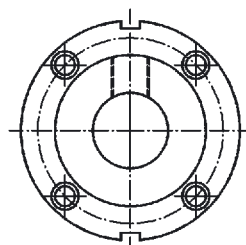
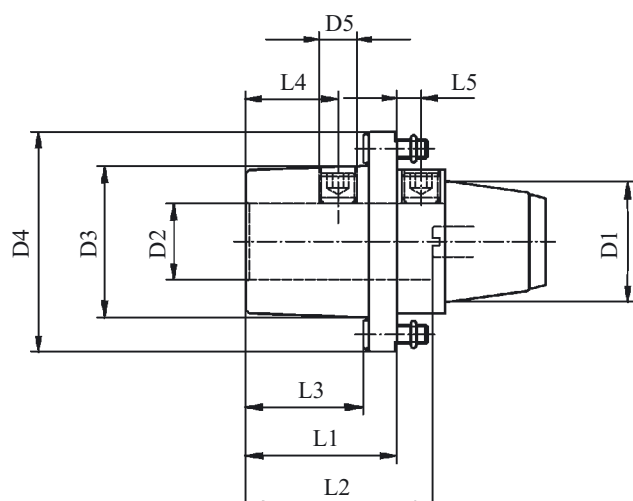
P 99.4

PRECI-FLEX® Adapter *Weldon lang*

Type **04**

PRECI-FLEX® Adapter *Weldon extended*

DIN 1835-B



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4	L5
40	4004-0197	6	25	70	M6x10	40	36	29,6	18	
40	4004-0198	8	28	70	M8x1x10	40	36	29,6	18	
40	4004-0199	10	35	70	M10x1x10	40	40	29,6	20	
40	4004-0200	12	42	70	M10x1x10	40	44,7	29,6	22,5	
40	4004-0427	14	42	70	M10x1x10	40	44,5	29,6	22,6	
40	4004-0201	16	48	70	M10x1x10	40	46,5	29,6	24	
40	4004-0202	20	48	70	M10x1x10	40	48	29,6	25	
40	4004-0203	25	48	70	M10x1x10	40	53,5	29,6	24	
40	4004-0501	32	55	70	M10x1x10	50	59,3	39,6	27	
40	4004-0204	1/4"	25	70	M6x10	40	36	29,6	18	
40	4004-0205	3/8"	35	70	M10x1x10	40	40	29,6	20	
40	4004-0206	1/2"	42	70	M10x1x10	40	44,7	29,6	22,5	
40	4004-0207	5/8"	48	70	M10x1x10	40	46,5	29,6	24	
40	4004-0208	3/4"	48	70	M10x1x10	40	48	29,6	25	
40	4004-0209	1"	48	70	M10x1x10	40	53,5	29,6	24	
50	5004-0523	14	48	95	M10x1x10	60	47,2	46,2	25	
50	5004-0524	18	48	95	M10x1x10	60	47,4	46,2	25	
50	5004-0587	40	66	95	M12x1x14	55	70,3	41,2	32,9	9



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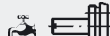
P 99.1



P 99.1

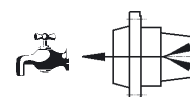
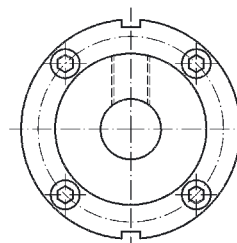
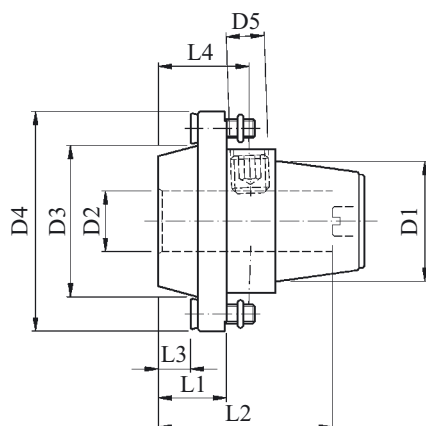


P 99.4



P 99.4

PRECI-FLEX® Adapter *Whistle Notch kurz*

Type 05
PRECI-FLEX® Adapter Whistle Notch standard
DIN 1835-E


Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2 max.	L3	L4
20	2005-0121	6	27	43	M6x8	14	37,5	7,5	18
20	2005-0122	8	27	43	M6x8	14	37,5	7,5	18
20	2005-0123	10	27	43	M6x6	16	39,5	9,5	20
20	2005-0148	12	27	43	M6x6	18,5	42	12	22,5
20	2005-0124	1/4"	27	43	M6x8	14	37,5	7,5	18
20	2005-0125	3/8"	27	43	M6x6	16	39,5	9,5	20
20	2005-0149	1/2"	27	43	M6x6	18,5	42	12	22,5
25	2505-0066	6	25	50	M6x10	12	39	3,1	18
25	2505-0067	8	28	50	M8x1x10	12	37	3,1	18
25	2505-0068	10	32	50	M8x1x8	14	41	5,1	20
25	2505-0069	12	32	50	M8x1x8	17	43,7	7,8	22,5
25	2505-0282	14	32	50	M8x1x6	17	43,7	7,8	22,5
25	2505-0070	16	32	50	M8x1x6	18	45	9,1	24
25	2505-0126	1/4"	25	50	M6x10	12	39	3,1	18
25	2505-0127	3/8"	32	50	M8x1x8	14	41	5,1	20
25	2505-0128	1/2"	32	50	M8x1x8	17	43,7	7,8	22,5
25	2505-0129	5/8"	32	50	M8x1x6	18	45	9,1	24



P 99.1



P 99.1



P 99.1



P 99.5



P 99.5

PRECI-FLEX® Adapter *Whistle Notch kurz*

Type 05
PRECI-FLEX® Adapter Whistle Notch standard
DIN 1835-E

Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2 max.	L3	L4
32	3205-0283	5	25	58	M6x10	12	36	3,1	18
32	3205-0044	6	25	58	M6x10	12	36	3,1	18
32	3205-0045	8	28	58	M8x1x10	12	36	3,1	18
32	3205-0046	10	35	58	M10x1x10	14	42	5,1	20
32	3205-0047	12	40	58	M10x1x10	16,5	44,5	7,6	22,5
32	3205-0281	14	40	58	M10x1x10	16,5	44,5	7,6	22,5
32	3205-0048	16	40	58	M10x1x10	18	46	9,1	24
32	3205-0329	18	40	58	M10x1x10	18	46	9,1	24
32	3205-0049	20	40	58	M8x1x8	19	47	10,1	25
32	3205-0130	1/4"	25	58	M6x10	12	36	3,1	18
32	3205-0131	3/8"	35	58	M10x1x10	14	42	5,1	20
32	3205-0132	1/2"	40	58	M10x1x10	16,5	44,5	7,6	22,5
32	3205-0133	5/8"	40	58	M10x1x10	18	46	9,1	24
32	3205-0134	3/4"	40	58	M8x1x8	19	47	10,1	25
40	4005-0135	6	25	70	M6x25	12	37	1,6	18
40	4005-0136	8	28	70	M8x1x10	12	37	1,6	18
40	4005-0137	10	35	70	M10x1x10	14	39	3,6	20
40	4005-0138	12	42	70	M10x1x10	16,5	45,8	6,1	22,5
40	4005-0139	16	48	70	M10x1x10	18	47,3	7,6	24
40	4005-0140	20	48	70	M10x1x10	19	48,3	8,6	25
40	4005-0141	25	48	70	M10x1x10	18	53,3	7,6	24
40	4005-0142	1/4"	25	70	M6x10	12	37	1,6	18
40	4005-0143	3/8"	35	70	M10x1x10	14	39	3,6	20
40	4005-0144	1/2"	42	70	M10x1x10	16,5	45,8	6,1	22,5
40	4005-0145	5/8"	48	70	M10x1x10	18	47,3	7,6	24
40	4005-0146	3/4"	48	70	M10x1x10	19	48,3	8,6	25
40	4005-0147	1"	48	70	M10x1x10	18	53,3	7,6	24
50	5005-0482	10	66	95	M10x1x25	14	40	0,2	24
50	5005-0483	12	66	95	M10x1x25	14	45	0,2	24
50	5005-0484	14	66	95	M10x1x25	14	45	0,2	24
50	5005-0254	16	66	95	M12x1x16	14	48	0,2	24
50	5005-0485	18	66	95	M12x1x16	14	48	0,2	24
50	5005-0255	20	66	95	M12x1x16	14	48	0,2	24
50	5005-0256	25	66	95	M12x1x16	14	57,5	0,2	24
50	5005-0257	32	66	95	M12x1x16	14	57,5	0,2	24
50	5005-0294	5/8"	66	95	M12x1x16	14	48	0,2	24
50	5005-0295	3/4"	66	95	M12x1x16	14	48	0,2	24
50	5005-0296	1"	66	95	M12x1x16	14	57,5	0,2	24
50	5005-0297	1 1/4"	66	95	M12x1x16	14	57,5	0,2	24


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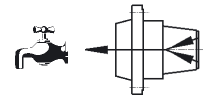
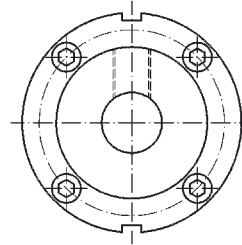
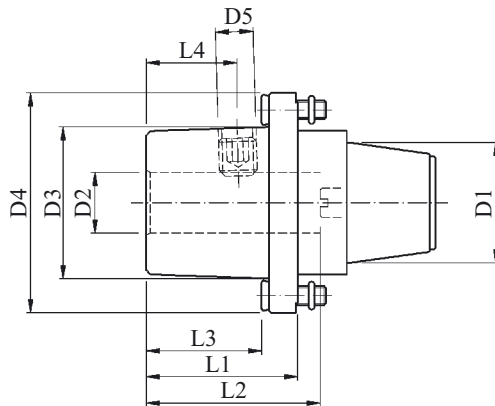
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P 99.1

P 99.5

P 99.5

PRECI-FLEX® Adapter *Whistle Notch lang*

Type 06
PRECI-FLEX® Adapter Whistle Notch extended
DIN 1835-E


Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4
20	2006-0152	6	27	43	M6x10	33	36	26,5	18
20	2006-0153	8	27	43	M8x1x10	33	36	26,5	18
20	2006-0154	10	27	43	M8x1x10	33	40	26,5	20
20	2006-0155	12	27	43	M8x1x8	33	43	26,5	22,5
20	2006-0328	14	27	43	M8x1x6	33	43	26,5	22,5
20	2006-0156	1/4"	27	43	M6x10	33	36	26,5	18
20	2006-0157	3/8"	27	43	M8x1x10	33	40	26,5	20
20	2006-0158	1/2"	27	43	M8x1x8	33	43	26,5	22,5
25	2506-0071	6	25	50	M6x10	40	36	31,1	18
25	2506-0072	8	28	50	M8x1x10	40	36	31,1	18
25	2506-0073	10	32	50	M10x1x8	40	40	31,1	20
25	2506-0074	12	32	50	M10x1x8	40	45	31,1	22,5
25	2506-0326	14	32	50	M10x1x8	40	45	31,1	22,5
25	2506-0075	16	32	50	M10x1x8	40	48,5	31,1	24
25	2506-0327	18	36	50	M10x1x10	40	45	31,1	24
25	2506-0322	20	40	50	M10x1x10	43	48	34,1	26
25	2506-0159	1/4"	25	50	M6x10	40	36	31,1	18
25	2506-0160	3/8"	32	50	M10x1x8	40	40	31,1	20
25	2506-0161	1/2"	32	50	M10x1x8	40	45	31,1	22,5
25	2506-0162	5/8"	32	50	M10x1x8	40	48,5	31,1	24
25	2506-0324	3/4"	40	50	M10x1x10	43	48	34,1	25,5



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P 99.1



P 99.6



P 99.6

PRECI-FLEX® Adapter *Whistle Notch lang*

Type 06
PRECI-FLEX® Adapter Whistle Notch extended
DIN 1835-E

Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4
32	3206-0050	6	25	58	M6x10	40	36	31,1	18
32	3206-0051	8	28	58	M8x1x10	40	36	31,1	18
32	3206-0052	10	35	58	M10x1x10	40	40	31,1	20
32	3206-0053	12	40	58	M10x1x10	40	44,5	31,1	22,5
32	3206-0410	14	40	58	M10x1x10	40	45	31,1	22,5
32	3206-0054	16	40	58	M10x1x10	40	46	31,1	24
32	3206-0451	18	40	58	M10x1x10	40	45	31,1	24
32	3206-0055	20	40	58	M10x1x10	40	49	31,1	26
32	3206-0280	25	40	58	M10x1x8	40	54	31,1	25
32	3206-0163	1/4"	25	58	M6x10	40	36	31,1	18
32	3206-0164	3/8"	35	58	M10x1x10	40	40	31,1	20
32	3206-0165	1/2"	40	58	M10x1x10	40	44,5	31,1	22,5
32	3206-0166	5/8"	40	58	M10x1x10	40	46	31,1	24
32	3206-0167	3/4"	40	58	M10x1x10	40	49	31,1	26
40	4006-0168	6	25	70	M6x10	40	36	29,6	18
40	4006-0169	8	28	70	M8x1x10	40	36	29,6	18
40	4006-0170	10	35	70	M10x1x10	40	40	29,6	20
40	4006-0171	12	42	70	M10x1x10	40	44,7	29,6	22,5
40	4006-0574	14	42	70	M10x1x10	40	45	29,6	22,6
40	4006-0172	16	48	70	M10x1x10	40	46,5	29,6	24
40	4006-0173	20	48	70	M10x1x10	40	48	29,6	25
40	4006-0174	25	48	70	M10x1x10	40	53,5	29,6	24
40	4006-0175	1/4"	25	70	M6x10	40	36	29,6	18
40	4006-0176	3/8"	35	70	M10x1x10	40	40	29,6	20
40	4006-0177	1/2"	42	70	M10x1x10	40	44,7	29,6	22,5
40	4006-0178	5/8"	48	70	M10x1x10	40	46,5	29,6	24
40	4006-0179	3/4"	48	70	M10x1x10	40	48	29,6	25
40	4006-0180	1"	48	70	M10x1x10	40	53,5	29,6	24


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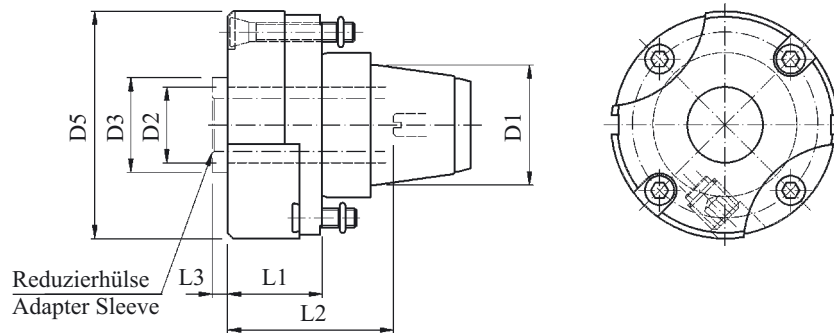
P 99.1

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PRECI-FLEX® Adapter *Dehnspannfutter*

Type 13
PRECI-FLEX® Hydraulic Expansion Chuck


Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D5	L1	L2	L3
25	2513-0315	12	16	52	20	38,5	4
32	3213-0309	20	25	60	25	47,5	4
40	4013-0312	25	30	70	25	45	4



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P 99.13



P 99.13



P 99.13



P 99.13

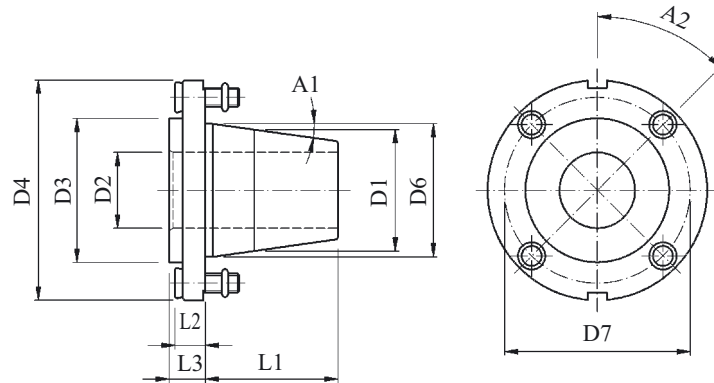


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PRECI-FLEX® Adapter Schrumpfen

Type 14

PRECI-FLEX® Adapter Shrink Fit



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D6	D7	L1	L2	L3	A1	A2
20	2014-0350	6	26,8	43	21	35	25	6,5	8,5	8°	45°
20	2014-0351	8	26,8	43	21	35	25	6,5	8,5	8°	45°
20	2014-0352	10	26,8	43	21	35	25	6,5	8,5	8°	45°
20	2014-0353	12	26,8	43	21	35	25	6,5	8,5	8°	45°
20	2014-0375	1/4"	26,8	43	21	35	25	6,5	8,5	8°	45°
20	2014-0376	3/8"	26,8	43	21	35	25	6,5	8,5	8°	45°
20	2014-0377	1/2"	26,8	43	21	35	25	6,5	8,5	8°	45°
25	2514-0354	6	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0355	8	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0356	10	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0357	12	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0358	14	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0359	16	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0378	1/4"	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0379	3/8"	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0380	1/2"	32	50	26	41	29	7,9	9,5	8°	45°
25	2514-0381	5/8"	32	50	26	41	29	7,9	9,5	8°	45°



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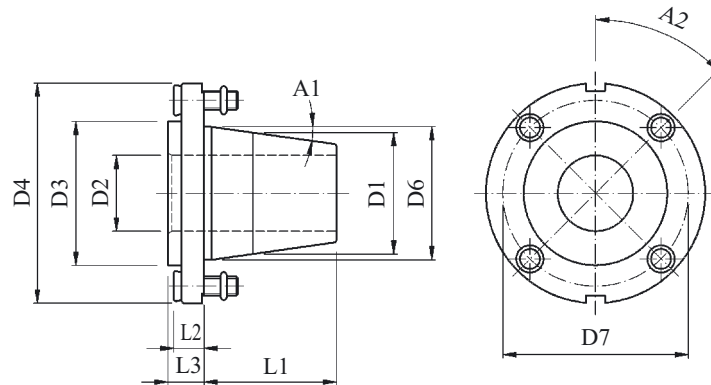


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PRECI-FLEX® Adapter *Schrumpfen*

Type 14

PRECI-FLEX® Adapter Shrink Fit



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D6	D7	L1	L2	L3	A1	A2
32	3214-0360	6	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0361	8	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0362	10	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0363	12	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0364	14	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0365	16	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0366	18	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0367	20	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0382	1/4"	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0383	3/8"	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0384	1/2"	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0385	5/8"	38	58	33,5	49	35	7,9	9,5	8°	45°
32	3214-0386	3/4"	38	58	33,5	49	35	7,9	9,5	8°	45°



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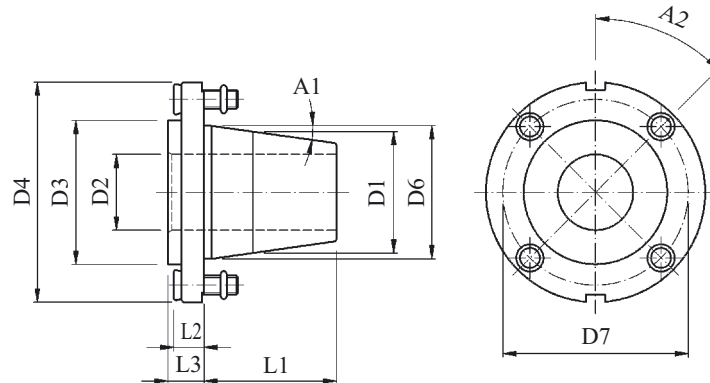


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PRECI-FLEX® Adapter *Schrumpfen*

Type 14

PRECI-FLEX® Adapter Shrink Fit



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D6	D7	L1	L2	L3	A1	A2
40	4014-0368	10	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0369	12	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0370	14	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0371	16	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0372	18	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0373	20	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0374	25	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0388	3/8"	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0389	1/2"	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0390	5/8"	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0391	3/4"	44	70	41,8	59	44	8,9	10	8°	45°
40	4014-0392	1"	44	70	41,8	59	44	8,9	10	8°	45°



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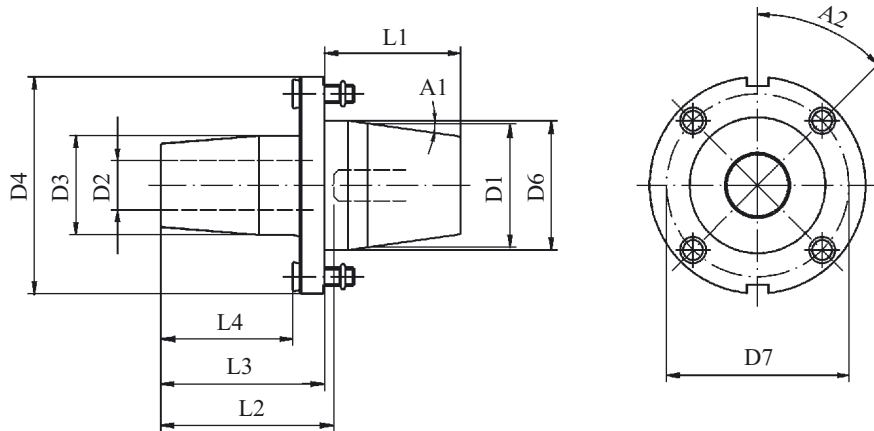


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PRECI-FLEX® Adapter *Schrumpfen*

Type 14

PRECI-FLEX® Adapter Shrink Fit



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D6	D7	L1	L2	L3	L4	A1	A2
40	4014-0591	6	27	70	41,8	59	44	37	53	42,6	8°	45°
40	4014-0592	8	27	70	41,8	59	44	41	53	42,6	8°	45°
40	4014-0593	10	30	70	41,8	59	44	46	53	42,6	8°	45°
40	4014-0594	12	30	70	41,8	59	44	52	53	42,6	8°	45°
40	4014-0595	16	32	70	41,8	59	44	55	53	42,6	8°	45°



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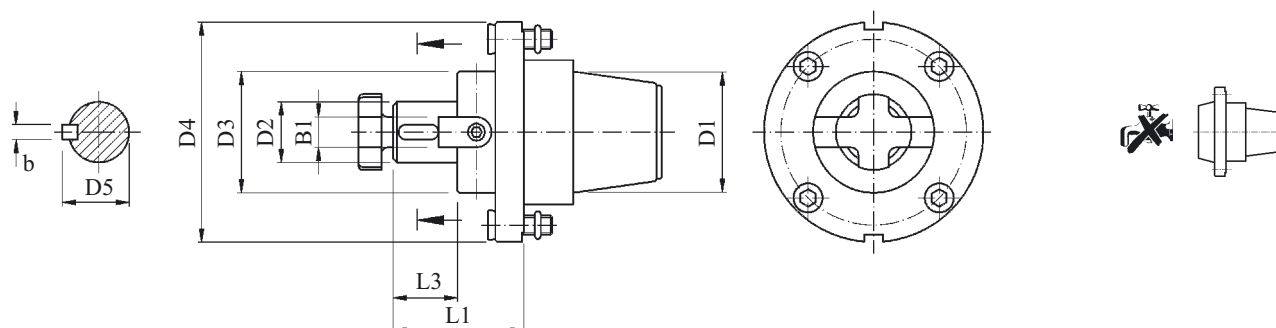


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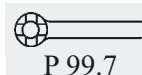
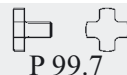
PRECI-FLEX® Adapter Längs- und Quernut-Aufsteckdorn Type **07**

PRECI-FLEX® Adapter Shell Mill Arbor (Transverse Drive and Key)

DIN 6358



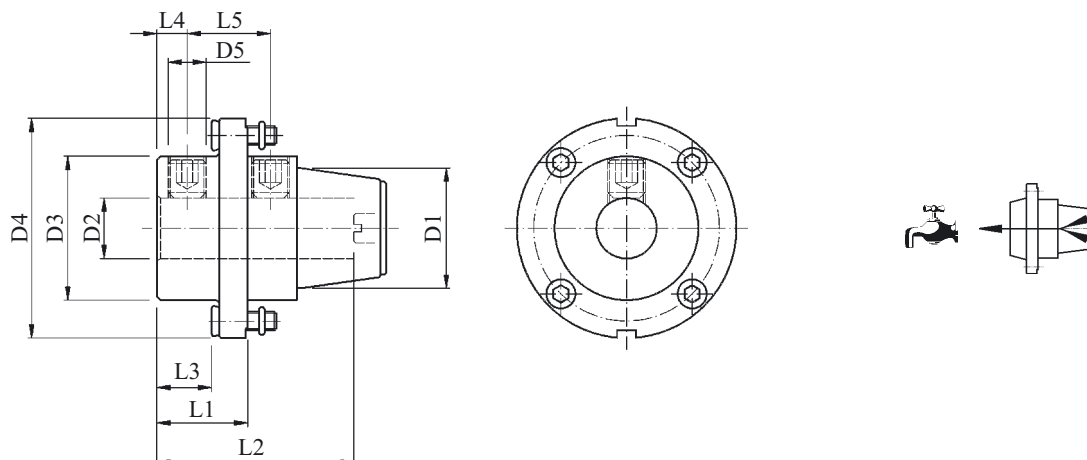
Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	L1	L3	B1	D5	b
20	2007-0234	16	32	43	34,5	17	8	17,2	4
20	2007-0235	1/2"	28	43	29,5	14	6,35	13,9	3/32"
20	2007-0412	22	40	43	36,5	19	10	23,6	6
25	2507-0317	13	32	50	34,5	17	8	14,2	3
25	2507-0083	16	32	50	34,5	17	8	17,2	4
25	2507-0084	22	40	50	38,5	19	10	23,6	6
25	2507-0669	22	40	50	47,5	28	10	23,6	6
25	2507-0395	27	46	50	41	21	12	29	7
25	2507-0236	1/2"	28	50	31,5	14	6,35	13,9	3/32"
25	2507-0262	3/4"	39	50	34,5	17	7,9	20,6	1/8"
32	3207-0023	16	32	58	34,5	17	8	17,2	4
32	3207-0024	22	39	58	38,5	19	10	23,6	6
32	3207-0331	27	48	58	41	21	12	29	7
32	3207-0240	1/2"	28	58	31,5	14	6,35	13,9	3/32"
32	3207-0237	3/4"	39	58	34,5	17	7,9	20,6	1/8"
40	4007-0238	16	32	70	35	17	8	17,2	4
40	4007-0239	22	40	70	39	19	10	23,6	6
40	4007-0276	27	48	70	41	21	12	29	7
40	4007-0436	32	58	70	45	24	14	34	8
40	4007-0241	3/4"	39	70	35	17	7,9	20,6	1/8"
50	5007-0263	16	32	95	37	17	8	17,2	4
50	5007-0258	22	40	95	41	19	10	23,6	6
50	5007-0259	27	48	95	43	21	12	29	7
50	5007-0277	32	58	95	47	24	14	34	8
50	5007-0302	3/4"	40	95	37	17	7,9	20,6	1/8"
50	5007-0303	1"	48	95	39	17	9,5	27,8	1/4"



PRECI-FLEX® Adapter Bohrstangenaufnahme

Type 08

PRECI-FLEX® Adapter Boring Bar Holder



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4	L5
20	2008-0217	6	27	43	M6x8	21	44,5	14,5	8	17
20	2008-0218	8	27	43	M6x8	21	44,5	14,5	8	17
20	2008-0219	10	27	43	M6x8	21	44,5	14,5	8	17
20	2008-0220	12	27	43	M6x6	21	44,5	14,5	8	17
20	2008-0333	14	27	43	M6x6	21	36	14,5	8	17
20	2008-0334	16	27	43	M6x6	32	38	25,5	7,5	13,5
20	2008-0221	1/4"	27	43	M6x8	21	44,5	14,5	8	17
20	2008-0222	3/8"	27	43	M6x8	21	44,5	14,5	8	17
20	2008-0223	1/2"	27	43	M6x6	21	44,5	14,5	8	17
25	2508-0335	6	32	50	M8x1x10	24	51	15,1	10	19,8
25	2508-0076	8	32	50	M8x1x10	24	51	15,1	10	19,8
25	2508-0077	10	32	50	M8x1x8	24	51	15,1	10	19,8
25	2508-0078	12	32	50	M8x1x8	24	51	15,1	10	19,8
25	2508-0079	16	32	50	M8x1x6	24	51	15,1	10	19,8
25	2508-0210	3/8"	32	50	M8x1x8	24	51	15,1	10	19,8
25	2508-0211	1/2"	32	50	M8x1x8	24	51	15,1	10	19,8
25	2508-0212	5/8"	32	50	M8x1x6	24	51	15,1	10	19,8



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P 99.8

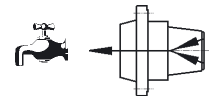
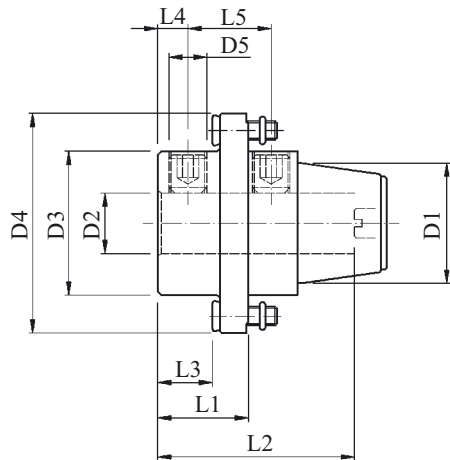


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PRECI-FLEX® Adapter Bohrstangenaufnahme

Type 08

PRECI-FLEX® Adapter Boring Bar Holder



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3	L4	L5
32	3208-0396	6	38	58	M8x1x10	24	52	15,1	10	20
32	3208-0028	8	38	58	M8x1x10	24	52	15,1	10	20
32	3208-0029	10	38	58	M10x1x10	24	52	15,1	10	20
32	3208-0030	12	38	58	M10x1x10	24	52	15,1	10	20
32	3208-0031	16	38	58	M10x1x10	24	52	15,1	10	20
32	3208-0032	20	38	58	M10x1x8	24	52	15,1	10	20
32	3208-0213	3/8"	38	58	M10x1x10	24	52	15,1	10	20
32	3208-0214	1/2"	38	58	M10x1x10	24	52	15,1	10	20
32	3208-0215	5/8"	38	58	M10x1x10	24	52	15,1	10	20
32	3208-0216	3/4"	38	58	M10x1x8	24	52	15,1	10	20
40	4008-0224	8	28	70	M8x1x10	30	52	19,6	14	22
40	4008-0225	10	35	70	M10x1x10	30	52	19,6	14	22
40	4008-0226	12	42	70	M10x1x10	30	52	19,6	14	22
40	4008-0227	16	46	70	M10x1x10	30	55	19,6	14	22
40	4008-0228	20	46	70	M10x1x10	30	55	19,6	14	22
40	4008-0229	25	46	70	M10x1x10	30	62	19,6	14	22
40	4008-0230	3/8"	35	70	M10x1x10	30	52	19,6	14	22
40	4008-0231	1/2"	42	70	M10x1x10	30	52	19,6	14	22
40	4008-0232	5/8"	46	70	M10x1x10	30	55	19,6	14	22
40	4008-0233	3/4"	46	70	M10x1x10	30	55	19,6	14	22
40	4008-0248	1"	46	70	M10x1x10	30	62	19,6	14	22



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P 99.1



P 99.8

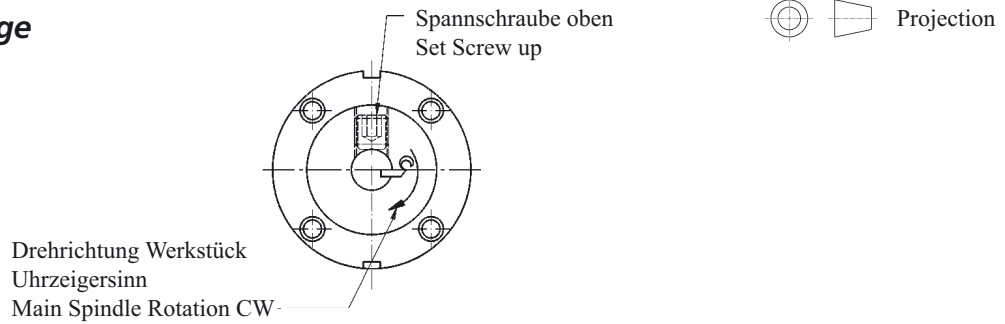


P 99.8

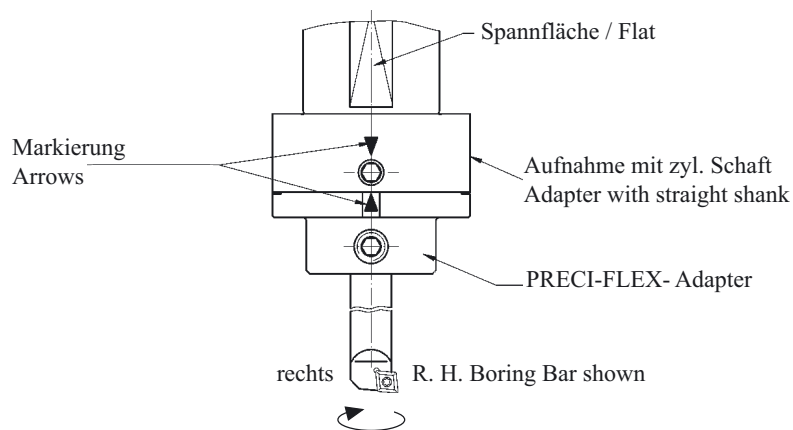
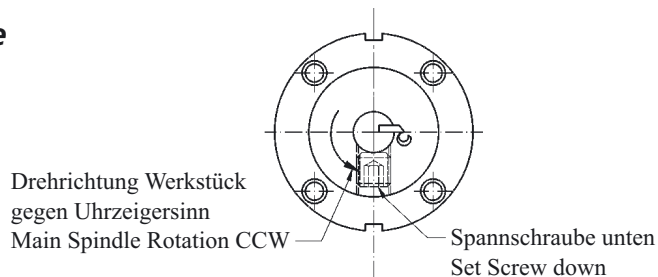
PRECIFLEX® Adapter-Positionierung für feststehende Werkzeuge Type 08

PRECIFLEX® Adapter Position for fixed tooling

Rechte Bohrstange R. H. Boring Bar



Linke Bohrstange L. H. Boring Bar



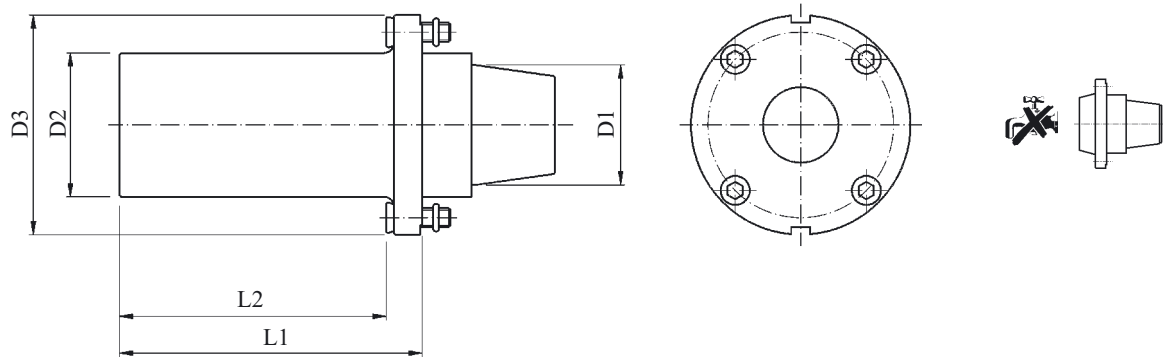
1. Markierungen müssen in Übereinstimmung gebracht werden.
2. Einbaulage der Werkzeugschneide muss in Richtung Revolvermitte zeigen.

1. Align arrows.
2. Inserts must point toward turret center.

PRECI-FLEX® Rohling

Type 09

PRECI-FLEX® Pre-machined Blank



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	L1	L2
20	2009-0242	27	43	60	53,5
25	2509-0085	30	50	66	57,1
32	3209-0012	38	58	80	71,1
32	3209-0330	38	58	100	91,1
40	4009-0243	46	70	80	69,6
50	5009-0260	66	95	100	86,2



P 99.1



P 99.1

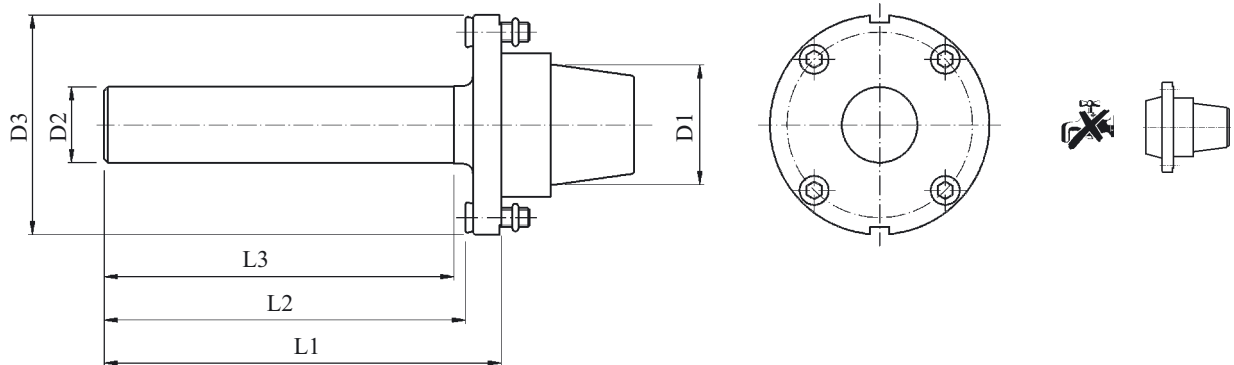


P 99.1

PRECI-FLEX® Prüfdorn

Type **10**

PRECI-FLEX® Test Mandrel



Größe/Size D1	Artikel-Nr. Part No.	D2 -0,002	D3	L1	L2	L3
20	2010-0246	20	43	110	103,5	99,5
20	2010-0247	20	43	60	53,5	49,5
25	2510-0086	20	50	110	101,1	98
25	2510-0087	20	50	60	51,1	48
32	3210-0011	20	58	110	101,1	98
32	3210-0088	20	58	60	51,1	48
40	4010-0244	25	70	110	99,6	97
40	4010-0245	25	70	60	49,6	47
50	5010-0261	25	95	110	96,2	95



P 99.1



P 99.1



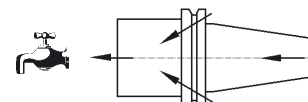
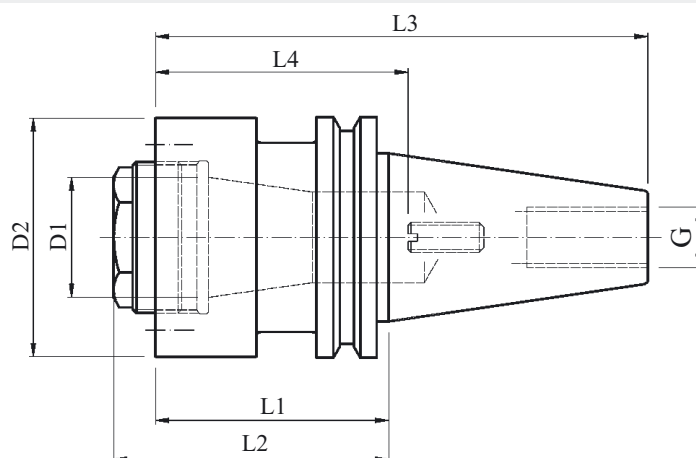
P 99.1

PRECI-FLEX® Steilkegelaufnahme

Type **11.1**

PRECI-FLEX® Machine Tool Interface

ISO DIN 69871 (SK) JIS-B 6639 (MAS/BT)



Größe/Size D1	Artikel-Nr. Part No.	Bezeichnung Type	Spannzange Collet	D2	L1	L2	L3	L4	G
20	2011-0266	SK40	428E (ER20)	43	60	68,3	128,4	60	M16
20	2011-0267	SK50	428E (ER20)	43	60	68,3	161,75	70	M24
20	2011-0268	MAS BT40	428E (ER20)	43	60	68,3	125,4	60	M16
25	2511-0015	SK40	430E (ER25)	50	70	79,4	138,4	80	M16
25	2511-0016	SK50	430E (ER25)	50	70	79,4	171,75	80	M24
25	2511-0017	MAS BT40	430E (ER25)	50	70	79,4	135,4	80	M16
32	3211-0020	SK40	470E (ER32)	63	70	79,6	138,4	80	M16
32	3211-0021	SK50	470E (ER32)	63	70	79,6	171,75	80	M24
32	3211-0022	MAS BT40	470E (ER32)	63	70	79,6	135,5	80	M16
40	4011-0271	SK40	472E (ER40)	70	70	77	138,4	75	M16
40	4011-0272	SK50	472E (ER40)	70	70	77	171,75	80	M24
40	4011-0273	MAST BT40	472E (ER40)	70	70	77	135,4	75	M16
50	5011-0286	SK40	474E (ER50)	95	90	97	158,4	85	M16
50	5011-0287	SK50	474E (ER50)	95	90	97	191,75	90	M24
50	5011-0288	MAST BT40	474E (ER50)	95	90	97	155,4	85	M16



P 99.1



P 99.1



P 99.1



P 99.11



P 99.11



P 7.4



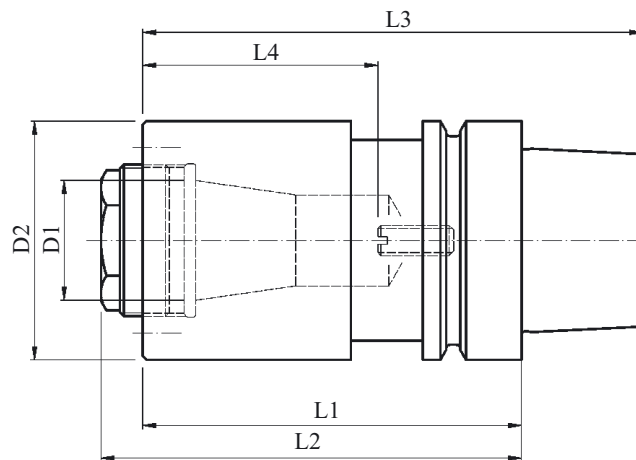
P 99.11

PRECI-FLEX® HSK-Aufnahme

Type **11.2**

PRECI-FLEX® Tool Machine Interface (HSK)

DIN 69893



Größe/Size D1	Artikel-Nr. Part No.	Bezeichnung Type	Spannzange Collet	D2	L1	L2	L3	L4
20	2011-0264	HSK A/C-63	428E (ER20)	43	85	93,3	117	50
20	2011-0265	HSK B/D-63	428E (ER20)	43	85	93,3	110	53
25	2511-0013	HSK63 A/C	430E (ER25)	50	90	99,4	122	56
25	2511-0014	HSK63 B/D	430E (ER25)	50	90	99,4	115	56
32	3211-0018	HSK A/C-63	470E (ER32)	63	100	109,6	132	65
32	3211-0019	HSK B/D-63	470E (ER32)	63	100	109,6	125	70
40	4011-0269	HSK A/C-63	472E (ER40)	70	100	107	132	60
40	4011-0270	HSK B/D-63	472E (ER40)	70	100	107	125	70
50	5011-0284	HSK A/C-63	474E (ER50)	95	120	127	152	75
50	5011-0285	HSK B/D-63	474E (ER50)	95	120	127	145	85



P 99.1



P 99.1



P 99.1



P 99.11



P 99.11

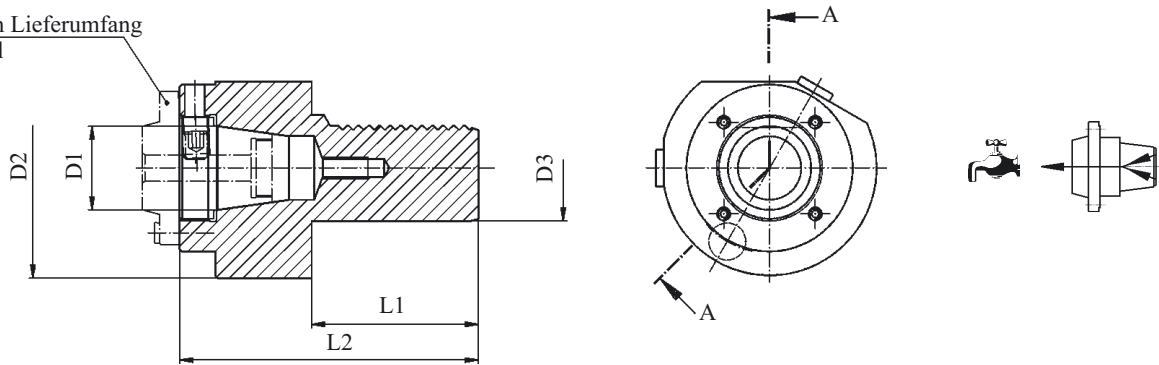


P 7.4

PRECI-FLEX® Adapter Aufn. mit VDI-Schaft DIN 69 880 Type 11.3

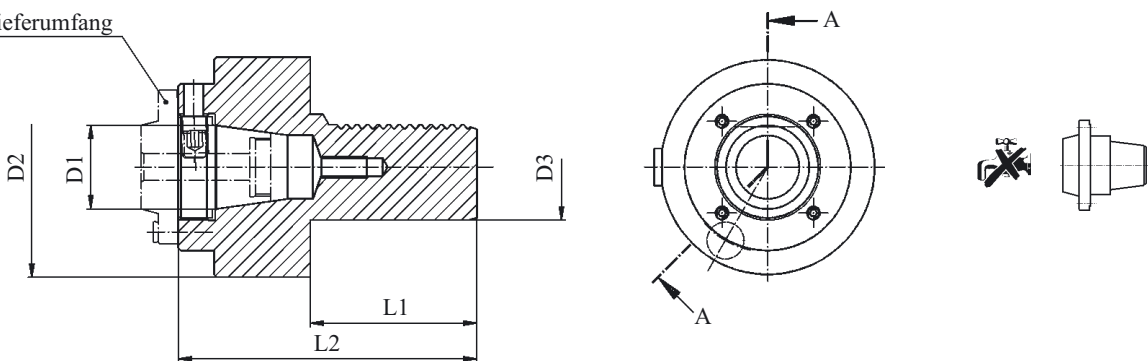
PRECI-FLEX® Adapter Straight Shank VDI-Interface DIN 69 880

nicht im Lieferumfang
optional



Größe/Size D1	Artikel-Nr. Part No.	D2	D3 VDI	L1	L2
20	2011-0424	58	25	48	86
20	2011-0289	68	30	55	103
25	2511-0290	68	30	55	106
25	2511-0291	83	40	63	113
32	3211-0292	83	40	63	113

nicht im Lieferumfang
optional



Größe/Size D1	Artikel-Nr. Part No.	D2	D3 VDI	L1	L2
40	4011-0433	102	50	78	140



P 99.1



P 99.1



P 99.1



P 99.11



P 99.11



P 7.4



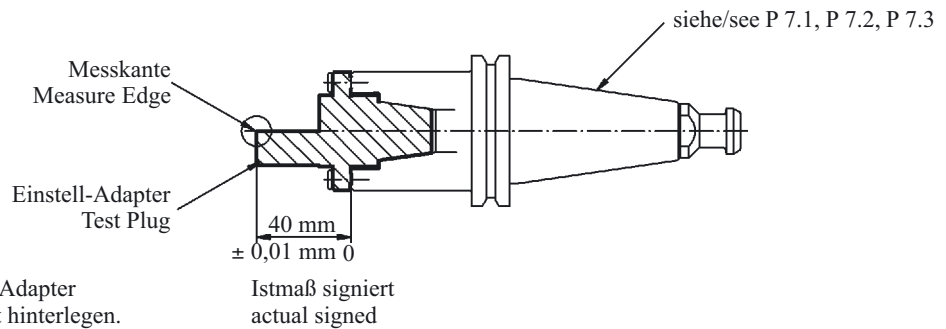
P 99.11

PRECIFLEX® Einstell-Adapter

Type **11.4**

PRECIFLEX® Setting-Adapter

Einstellen der PRECIFLEX-Adapter mit Voreinstellgerät Setup of PRECIFLEX-Adapter with Presetter

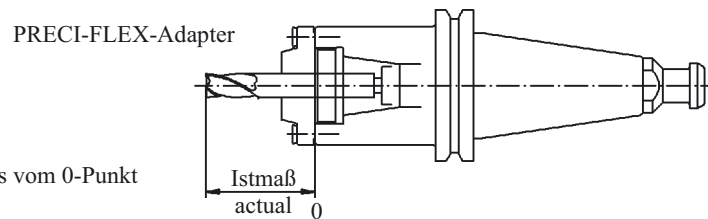


1. Messung

0-Punkt ermitteln mit Einstell-Adapter
Einstellmaß in Voreinstellgerät hinterlegen.

Step 1

Capture tool point to establish Null position.



2. Messung

Istmaß des PRECIFLEX-Adapters vom 0-Punkt
aus ermitteln.

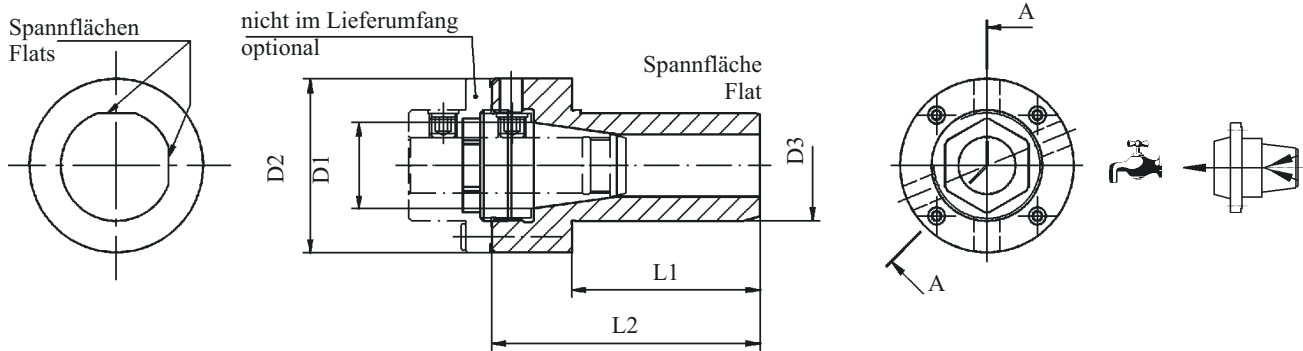
Step 2

Measure tip of tool to Null position for actual dimension.

Größe/Size			Größe/Size			Größe/Size		
D1	Type 11.1 11.2, 11.3	Artikel-Nr. Part No.	D1	Type 11.1 11.2, 11.3	Artikel-Nr. Part No.	D1	Type 11.1 11.2, 11.3	Artikel-Nr. Part No.
20	2011-0264	0.000.989	32	3211-0020	0.000.710	50	5011-0284	0.000.990
20	2011-0265	0.000.989	32	3211-0021	0.000.710	50	5011-0285	0.000.990
20	2011-0266	0.000.989	32	3211-0018	0.000.710	50	5011-0286	0.000.990
20	2011-0267	0.000.989	32	3211-0019	0.000.710	50	5011-0287	0.000.990
20	2011-0268	0.000.989	32	3211-0022	0.000.710	50	5011-0288	0.000.990
20	2011-0289	0.000.989	32	3211-0292	0.000.710			
20	2011-0424	0.000.989	40	4011-0269	0.000.702			
25	2511-0013	0.000.709	40	4011-0270	0.000.702			
25	2511-0014	0.000.709	40	4011-0271	0.000.702			
25	2511-0015	0.000.709	40	4011-0272	0.000.702			
25	2511-0016	0.000.709	40	4011-0273	0.000.702			
25	2511-0017	0.000.709						
25	2511-0290	0.000.709						
25	2511-0291	0.000.709						

PRECI-FLEX® Adapter Aufnahme mit zylindrischem Schaft Type **12**

PRECI-FLEX® Adapter Straight Shank Interface



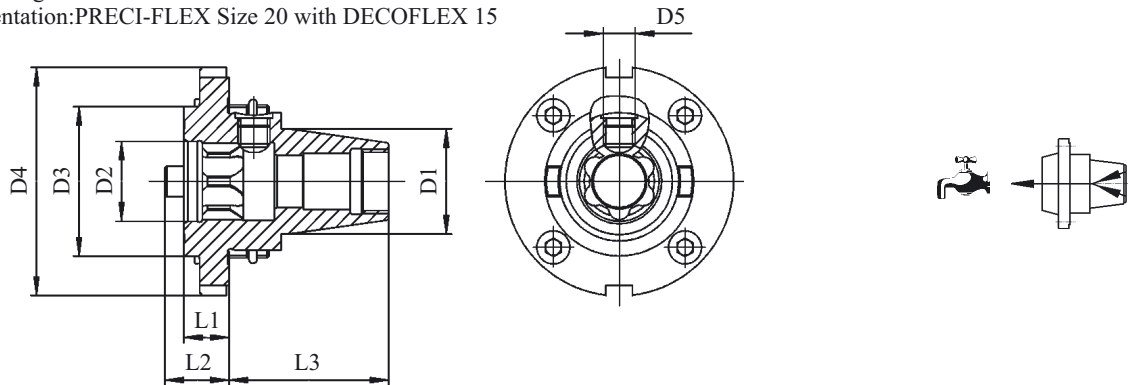
Größe/Size D1	Artikel-Nr. Part No.	D2	D3	L1	L2
20	2012-0035	43	25	49	66
20	2012-0299	43	32	54	71
20	2012-0038	43	1"	49	66
25	2512-0036	50	32	54	77
25	2512-0039	50	1 1/4"	54	77
32	3212-0037	58	40	59	82
32	3212-0040	58	1 1/2"	59	82
40	4012-0416	70	50	76	99

PRECIFLEX® Adapter DECO-FLEX-Aufnahme

Type **17**

PRECIFLEX® Adapter DECO-FLEX-Interface

Darstellung: PRECI-FLEX Größe 20 mit DECOFLEX 15
Representation: PRECI-FLEX Size 20 with DECOFLEX 15



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3
20	2017-0444	15	28	43	M6x5	8,5	12	30
25	2517-0521	20	32,4	50	M6x5	10,4	14	34



P 99.1



P 99.1



P 99.1



P 99.14

PRECI-FLEX® Adapter *Schrumpf-Technologie*

PRECI-FLEX® Adapter Shrink Technologies

Shrink Fit 20 *Schrumpfgerät 10 KW*

Shrink Unit 10 KW

Zum Ein- und Ausschrumpfen von
Werkzeugschäften aus Hartmetall, Stahl
und HSS – Schrumpfzeit ca. 4 Sekunden

For shrink and outshrink of tool shank for
carbide metal, steel – shrink time
approx. 4 seconds

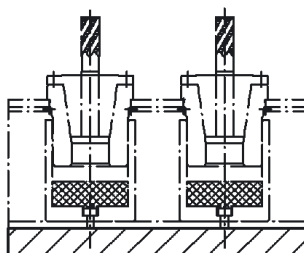
Anschluss Shrink Fit 20:
– 10 KW Wechselstrom AC 3 x 400 V
+ PE / 16 A / 50–60 Hz,
Druckluft-Minimum 3 bar
Luftanschluss G 1/8 ”

Power supply Shrink Fit 20:
– 10 KW electric alternating current
AC 3 x 400V + PE / 16 A / 50–60 Hz,
Compressed air supply Minimum 3 bar
air supply G 1/8 ”

Für PRECI-Flex Adapter
Größe 20, 25, 32, 40
Induktionserwärmung
für Ø 6 bis Ø 25

For PRECI-Flex Adapter
Size 20, 25, 32, 40
Induction heating
for Dia. 6 up to Dia. 25

Kühlmodul
nicht im Lieferumfang
cooling modul
optional



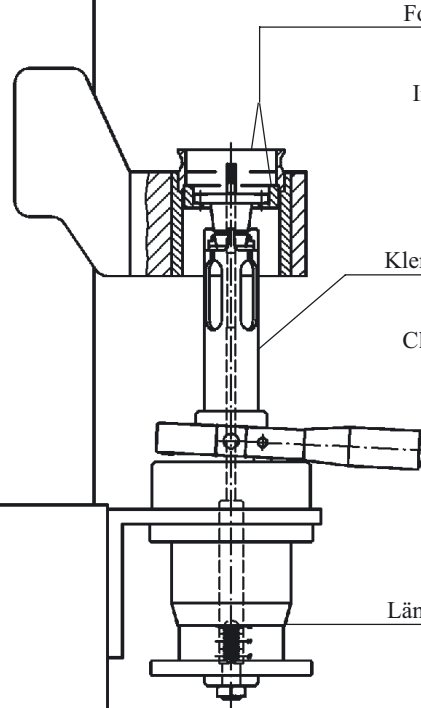
**SHRINK
FIT 20**

PRECI-FLEX®

Fokussier-Einsatz
nicht im
Lieferumfang
Insert focussing
optional

Klemmeinrichtung
nicht im
Lieferumfang
Clamping device
optional

Werkzeug
Längenverstellung
nicht im
Lieferumfang
Tool length
adjustment
optional



EPPINGER

PRECI-FLEX® Adapter Schrumpf-Technologie

PRECI-FLEX® Adapter Shrink Technologies

Shrink Fit 20 Schrumpfgerät

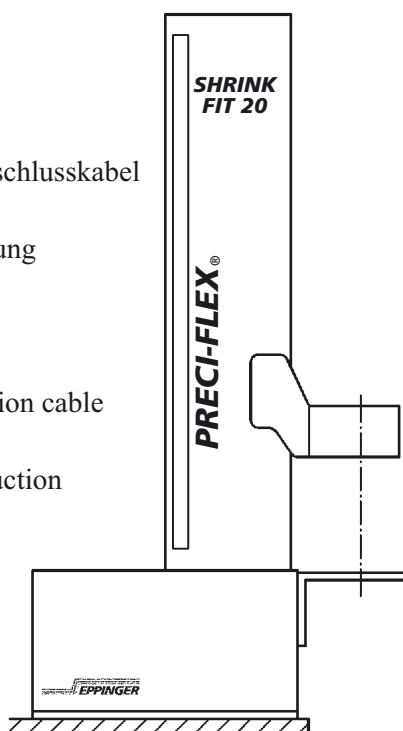
Shrink Unit

Lieferumfang

- elektrisches Anschlusskabel
- 2 Handschuhe
- Betriebsanweisung
- Abdeckhaube

Scope of delivery

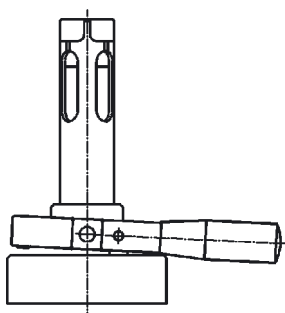
- electric connection cable
- 2 Gloves
- Operating instruction
- Covering hood



Gruppe Group	PRECI-FLEX Größe Size	Artikel-Nr. Part No.
P 50.1	20	20918
	25	
	32	
	40	
	HSK 63	
	SK 40	

Klemmeinrichtung (Preci-Flex)

Clamping Device



Gruppe Group	PRECI-FLEX Größe Size	Artikel-Nr. Part No.
P 50.2	20	0.001.190
	25	0.001.154
	32	0.001.191
	40	0.001.192

PRECI-FLEX® Adapter *Schrumpf-Technologie*

PRECI-FLEX® Adapter Shrink Technologies

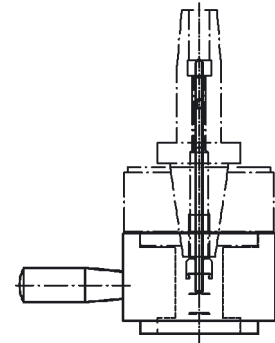
Aufnahme für Flanschadapter mit Kühlrippen

Retainer for Adapter with Fins

Gruppe Group	Kegel/Taper Größe Size	Artikel-Nr. Part No.
P 50.3	HSK 63	0.001.450 ¹⁾
	SK 40	0.001.450 ¹⁾

¹⁾ Beinhaltet Anschläge siehe P 50.1.6

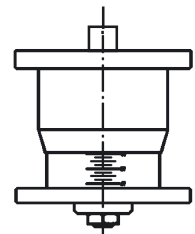
¹⁾ Includes stops see P 50.1.6



Werkzeug-Längenverstellung

Tool Length Adjustment

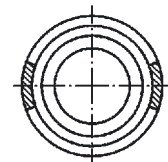
Gruppe Group	PRECI-FLEX Größe Size	Artikel-Nr. Part No.
P 50.4	20	0.001.207
	25	
	32	
	40	



Fokussier-Einsatz

Focussing Insert

Gruppe Group	PRECI-FLEX Größe Size	Artikel-Nr. Part No.	HSK 63 SK 40	Artikel-Nr. Part No.
P 50.5	20	25157	Ø 3-6	28587
	25	25158	Ø 8-14	28588
	32	25159	Ø 16-18	28589
	40	25160	Ø 20-25	28590
	40		Ø 25-32	28591



PRECI-FLEX® Adapter Schrumpf-Technologie

PRECI-FLEX® Adapter Shrink Technologies

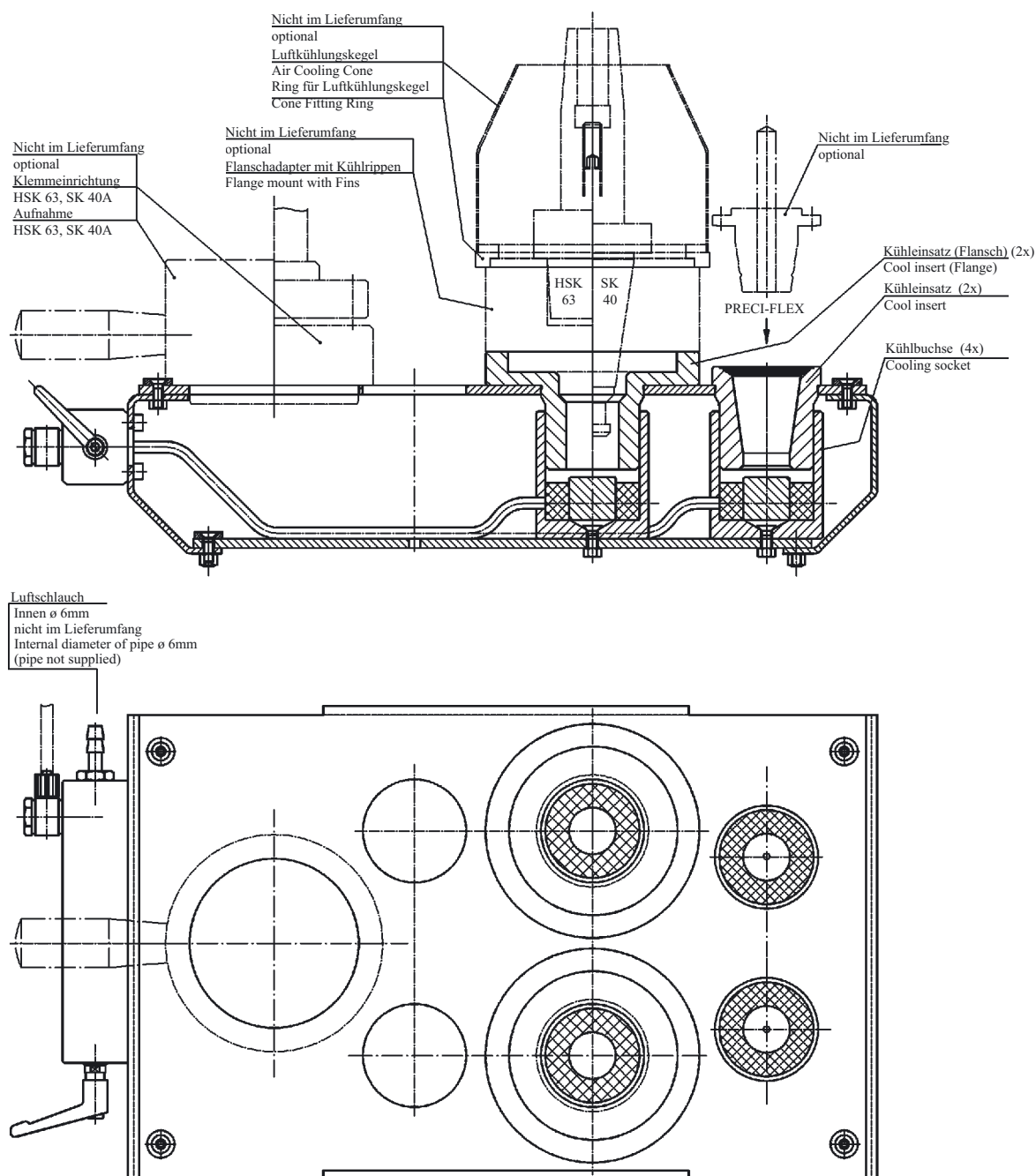
Kühlmodul

Cooling Modul

Gruppe
Group

Kühlmodul (Luftkühlung)
Cooling Modul (Air cooling)

P 50.10

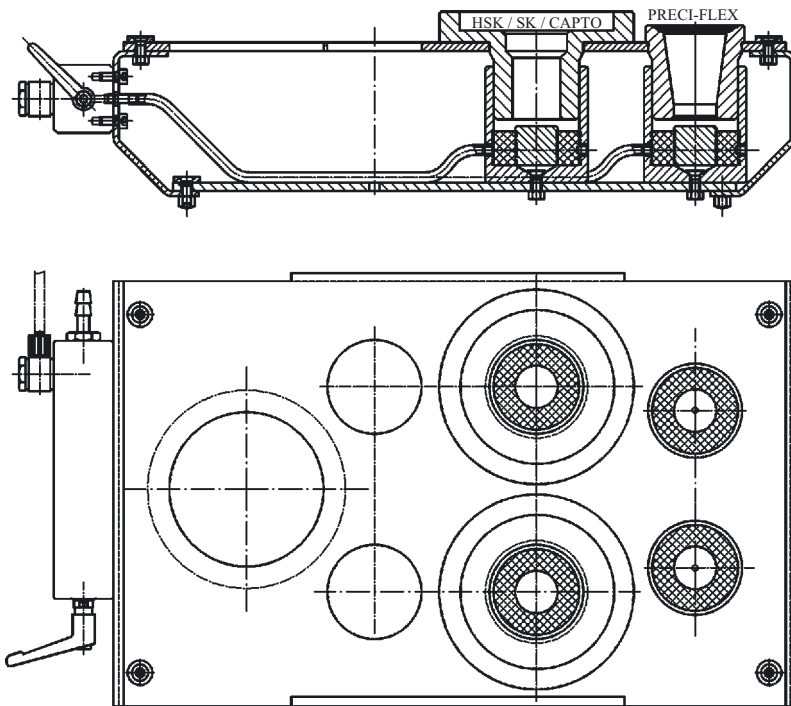


PRECI-FLEX® Adapter Schrumpf-Technologie

PRECI-FLEX® Adapter Shrink Technologies

Kühlmodul

Cooling Modul



Gruppe
Group

Artikel-Nr.
Part No.

P 50.11

0.001.447

Lieferumfang

- Kühlmodul
- 4 Kühlbuchsen
- 2 Kühleinsätze (0.001.224)
- 2 Kühleinsätze (0.001.449) (Flansch)

Scope of Delivery

- Cooling modul
- 4 Cooling sockets
- 2 Cooling insert (0.001.224)
- 2 Cooling insert (0.001.449) (Flange)

Kühlbuchse

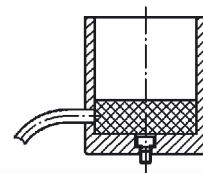
Cooling Socket

Gruppe
Group

Artikel-Nr.
Part No.

P 50.12

0.001.226



Kühleinsatz

Cooling Insert

Gruppe
Group

PRECI-FLEX
Größe
Size

Artikel-Nr.
Part No.

Größe
Size

Artikel-Nr.
Part No.

P 50.13

20

0.001.224

HSK

0.001.449

25

0.001.224

SK

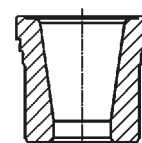
32

0.001.224

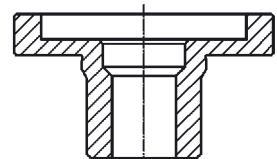
CAPTO

40

0.001.225



PRECI-FLEX



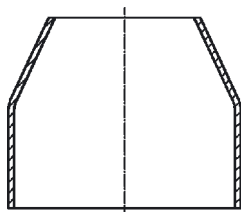
HSK / SK / CAPTO

PRECI-FLEX® Adapter *Schrumpf-Technologie*

PRECI-FLEX® Adapter Shrink Technologies

Luftkühlungskegel

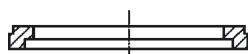
Air Cooling Cone



Gruppe Group	Artikel-Nr. Part No.
P 50.14	20874

Ring für Luftkühlungskegel

Cone Fitting Ring



Gruppe Group	Artikel-Nr. Part No.
P 50.15	20875

Flanschadapter *mit Kühlrippen*

Flange Mount with Fins

Gruppe
Group

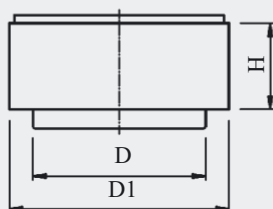
Für Schrumpfaufnahme-Kegel
For Shrinkfit Holder Taper

D

D1

H

Artikel-Nr.
Part No.



P 50.16

HSK 25 E	90	114	50	
HSK 32A/C/E & HSK 40B/D	90	114	50	
HSK 40A/C/E & HSK 50B/D/F	90	114	50	
HSK 50A/C/E & HSK 63B/D/F	90	114	50	
HSK 63A/C/E & HSK 80B/D/F	90	114	50	20872
HSK 100A/C & HSK 125B/D	90	114	50	
SK 30	90	114	50	
SK 40	90	114	50	20873
SK 50	90	114	110	21109
CAPTO C3	90	114	50	
CAPTO C4	90	114	50	
CAPTO C5	90	114	50	
CAPTO C6	90	114	50	
CAPTO C8	90	114	50	

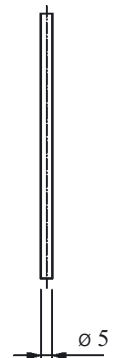
PRECI-FLEX® Adapter *Schrumpf-Technologie*

PRECI-FLEX® Adapter Shrink Technologies

Anschlagstübchen

Stop Rods

Gruppe Group	Größe Size	Länge Length	Artikel-Nr. Part No.
P 50.17	HSK 63 SK 40	150	0.001.453
		164	0.001.454
		178	0.001.455
		190	0.001.456
		214	0.001.457
		230	0.001.458



Siehe Montageanleitung 20888 / See mounting instruction 20888

Handschuh (*Wärmeschutz*)

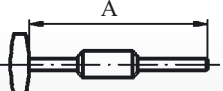
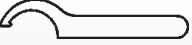
Glove (*heat insulation*)

Gruppe Group	Artikel-Nr. Part No.
P 50.18	15860



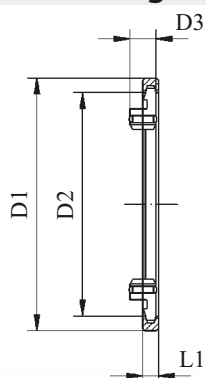
PRECI-FLEX® Adapter Zubehör für alle Anwendungen

PRECI-FLEX® Adapter Accessories for all Applications

Größe Size						
D1		Artikel-Nr. Part No.	minimales Anzugsmoment min. torque	Artikel-Nr. Part No.	A	Artikel-Nr. Part No.
20	M4 (SW3)	0.000.770	3 Nm	(3x1,5) 15703	100	0.001.075
25	M5 (SW4)	0.000.510	6 Nm	(4x1,5) 11086	150 200	0.001.076 0.001.077
32	M5 (SW4)	0.000.510	6 Nm	(4x1,5) 11086	150 200	0.001.076 0.001.077
40	M6 (SW5)	0.000.771	11 Nm	(5x1,5) 11087	150 200	0.001.078 0.001.079
50	M8 (SW6)	0.000.789	26 Nm	(7x2) 12382	150 200	0.001.080 0.001.081

Spindel-Abdichtung

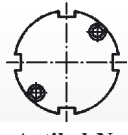
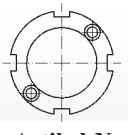
Spindle Sealing



Größe Size	D1	D2	D3	L1	Artikel-Nr. Part No.
ER20	47,1	40,7	5	3,5	0.001.285
ER25	55,5	49,1	6	3,5	0.001.286
ER32	65,5	58,1	7	4	0.001.287
ER40	75,5	69,1	7	4	0.001.288
ER50	101,6	95,1	8,2	4,5	0.001.610

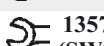
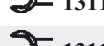
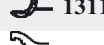
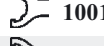
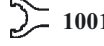
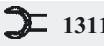
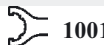
Spindel-Abdeckung

Spindle Cover

Größe Size					Für Spannmutter For Collet Nuts
D1		Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	DIN 896 B
20	M4 (SW2,5)	0.001.010	0.001.992	0.001.014	SW 22x24
25	M5 (SW3)	0.001.011	0.001.423	0.001.015	SW 22x24
32	M5 (SW3)	0.001.011	0.001.277	0.001.016	SW 27x32
40	M6 (SW4)	0.001.012		0.001.017	-
50	M8 (SW5)	0.001.013		0.001.018	-

PRECI-FLEX® Adapter Zubehör und abgedichtete Mutter **Type 01**

PRECI-FLEX® Adapter Accessories and Internal Coolant Supply

Größe Size					Für Dichtscheiben			
D1	Type 01	Größe Size	Artikel-Nr. Part No.	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2001-0089	ER16M M19x1	10117	ERMC16 M19x1	15666	 10022		0.000.918
20	2001-0090	ER20M M24x1	12155	ERMC20 M24x1	15667	 13797		0.000.918
25	2501-0080	UM/ER16 6kt M22x1,5	10099	UM/ERC16 6kt M22x1,5	15805	 13573 (SW25)		0.000.762
25	2501-0349	ER20M M24x1	12155	ERMC20 M24x1	15667	 13797		0.000.763
25	2501-0081	ER25M M30x1	0.000.753	ERMC25 M30x1	15668	 13115		0.000.763
32	3201-0026	ER25M M30x1	13116	ERMC25 M30x1	15668	 13115		0.000.671
32	3201-0027	UM/ER32 M40x1,5	10097	ERC32 M40x1,5	15810	 10012	0.000.659	0.000.672
40	4001-0348	UM/ER32 M40x1,5	10097	ERC32 M40x1,5	15810	 10012		0.000.869
40	4001-0091	UM/ER40 M50x1,5	10096	ERC40 M50x1,5	15682	 10013	0.000.772	0.000.869
50	5001-0503	ER25M M30x1	13116	ERMC25 M30x1	15668	 13115		0.000.940
50	5001-0504	UM/ER32 M40x1,5	10097	ERC32 M40x1,5	15810	 10012		0.000.940
50	5001-0249	UM/ER40 M50x1,5	10096	ERC40 M50x1,5	15682	 10013		0.000.940

PRECI-FLEX® Adapter Zubehör und abgedichtete Mutter **Type 02**

PRECI-FLEX® Adapter Accessories and Internal Coolant Supply

Größe Size								
D1	Type 02	Größe Size	Artikel-Nr. Part No.	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2002-0092	ER11M M13x0,75	10101	ERMC11 M13x0,75	219.090....	14357		0.000.920
20	2002-0550	ER16M M19x1	10117	ERMC16 M19x1	15666	10022		0.000.920
20	2002-0549	ER16M M19x1	10117	ERMC16 M19x1	15666	10022		0.000.920
25	2502-0082	ER11M M13x0,75	10101	ERMC11 M13x0,75	219.090....	14357		0.000.761
25	2502-0419	ER11M M13x0,75	10101	ERMC11 M13x0,75	219.090....	14357		0.000.761
25	2502-0498	UM/ER16 6kt M22x1,5	10099	UM/ERC16 6kt M22x1,5	15805	13573		0.001.420
32	3202-0025	ER16M M19x1	10117	ERMC16 M19x1	15666	10022		0.000.670
32	3202-0397	ER16M M19x1	10117	ERMC16 M19x1	15666	10022		0.000.670
40	4002-0425	ER16M M19x1	10117	ERMC16 M19x1	15666	10022		0.001.320
40	4002-0093	ER20M M24x1	12155	ERMC20 M24x1	15667	13797		0.000.868
40	4002-0426	ER25M M30x1	13116	ERMC25 M30x1	15668	13115	-	0.000.868

PRECI-FLEX® Adapter Zubehör und abgedichtete Mutter **Type 15**

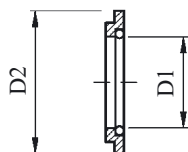
PRECI-FLEX® Adapter Accessories and Internal Coolant Supply

Größe Size				 Für Dichtscheiben			
		Größe Size	Artikel-Nr. Part No.	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
D1	Type 15						
20	2015-0403	ER11AX M18x1	15386	-	-	15879	0.000.918
25	2515-0404	ER20AX M28x1,5	15388	ER20AXC M28x1,5	15922	15830	0.001.273
32	3215-0407	ER20AX M28x1,5	15388	ER20AXC M28x1,5	15922	15830	0.001.274
32	3215-0405	ER25AX M32x1,5	15389	ER25AXC M32x1,5	15737	15562	0.001.274
40	4015-0408	ER32AX M40x1,5	15674	ER32AXC M40x1,5	15626	15672	0.001.106

Dichtringe für Spannmutter mit Innengewinde

Type 01

Sealing Rings for Collet Nuts With Internal Thread



Größe Size										
D1	Type 01	nach according	Größe Size	Artikel-Nr. Part No.	Dichtbereich Range	D1	D2	Bezeichnung Term	Artikel-Nr. Part No.	Artikel-Nr. Satz Part No. Set
20	2001-0089	DIN 6499	ERMC16 M19x1	15666	2,5– 10	2,5 ... 10	13	DS/ER16	219.091.____	219.091.000
20	2001-0090	DIN 6499	ERMC20 M24x1	15667	2,5– 13	2,5 ... 13	16	DS/ER20	218.713.____	218.713.000
25	2501-0080	DIN 6499	ERC16 M22x1,5	15665	2,5– 10	2,5 ... 10	13	DS/ER16	219.091.____	219.091.000
25	2501-0349	DIN 6499	ERMC20 M24x1	15667	2,5– 13	2,5 ... 13	16	DS/ER20	218.713.____	218.713.000
25	2501-0081	DIN 6499	ERMC25 M30x1	15668	2,5– 16	2,5 ... 16	21	DS/ER25	219.093.____	219.093.000
32	3201-0026	DIN 6499	ERMC25 M30x1	15668	2,5– 16	2,5 ... 16	21	DS/ER25	219.093.____	219.093.000
32	3201-0027	DIN 6499	ERC32 M40x1,5	15810	2,5– 20	2,5 ... 20	27	DS/ER32	219.094.____	219.094.000
40	4001-0348	DIN 6499	ERC32 M40x1,5	15810	2,5– 20	2,5 ... 20	27	DS/ER32	219.094.____	219.094.000
40	4001-0091	DIN 6499	ERC40 M50x1,5	15682	2,5– 26	2,5 ... 26	33,5	DS/ER40	219.095.____	219.095.000
50	5001-0503	DIN 6499	ERMC25 M30x1	15668	2,5– 16	2,5 ... 16	21	DS/ER25	219.093.____	219.093.000
50	5001-0504	DIN 6499	ERC32 M40x1,5	15810	2,5– 20	2,5 ... 20	27	DS/ER32	219.094.____	219.094.000
50	5001-0249	DIN 6499	ERC40 M50x1,5	15682	2,5– 26	2,5 ... 26	33,5	DS/ER40	219.095.____	219.095.000

Dichtringe für Spannmutter mit Innengewinde

Type 02

Sealing Rings for Collet Nuts With Internal Thread

Größe Size										
D1	Type 02	nach according	Größe Size	Artikel-Nr. Part No.	Dichtbereich Range	D1	D2	Bezeichnung Term	Artikel-Nr. Part No.	Artikel-Nr. Satz Part No. Set
20	2002-0092	DIN 6499	ERMC11 M13x0,75	219.090.____	2,5– 7	2,5 ... 7	-	1)	219.090.____	219.090.000
20	2002-0550	DIN 6499	ERMC16 M19x1	15666	2,5– 10	2,5 ... 10	13	DS/ER16	219.091.____	219.091.000
20	2002-0549	DIN 6499	ERMC16 M19x1	15666	2,5– 10	2,5 ... 10	13	DS/ER16	219.091.____	219.091.000
25	2502-0082	DIN 6499	ERMC11 M13x0,75	219.090.____	2,5– 7	2,5 ... 7	-	1)	219.090.____	219.090.000
32	3202-0025	DIN 6499	ERMC16 M19x1	15666	2,5– 10	2,5 ... 10	13	DS/ER16	219.091.____	219.091.000
32	3202-0397	DIN 6499	ERMC16 M19x1	15666	2,5– 10	2,5 ... 10	13	DS/ER16	219.091.____	219.091.000
40	4002-0093	DIN 6499	ERC20 M24x1	15667	2,5– 13	2,5 ... 13	16	DS/ER20	218.713.____	218.713.000

Bemerkungen / Remarks

Bei Bestellung bitte Durchmesser angeben. Bestellbeispiel: Dichtring Hi-Q/ERMC25, Durchmesser = 4 mm : 219.093.040

Please list clamping diameter when ordering. Example of an order: Sealing rings Hi-Q/ERMC25, diameter = 4 mm : 219.093.040

1) Dichtung in Spannmutter integriert

1) Sealing Rings for Collet Nuts integrated

PRECI-FLEX® Adapter Zubehör

Type 03

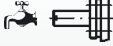
PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 03	D2	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2003-0094	6	M6x8	10752	0.000.910
20	2003-0095	8	M6x8	10752	0.000.911
20	2003-0096	10	M6x6	10751	0.000.912
20	2003-0150	12	M6x6	10751	0.000.913
20	2003-0097	1/4"	M6x8	10752	0.000.910
20	2003-0098	3/8"	M6x6	10751	0.000.912
20	2003-0151	1/2"	M6x6	10751	0.000.913
25	2503-0056	6	M6x10	10753	0.000.754
25	2503-0057	8	M8x1x10	15119	0.000.754
25	2503-0058	10	M8x1x10	15119	0.000.755
25	2503-0059	12	M8x1x8	15118	0.000.756
25	2503-0278	14	M8x1x6	15182	0.000.756
25	2503-0060	16	M8x1x6	15182	0.000.756
25	2503-0099	1/4"	M6x10	10753	0.000.754
25	2503-0100	3/8"	M8x1x10	15119	0.000.755
25	2503-0101	1/2"	M8x1x8	15118	0.000.756
25	2503-0102	5/8"	M8x1x6	15182	0.000.756
32	3203-0274	5	M6x10	10753	0.000.660
32	3203-0001	6	M6x10	10753	0.000.660
32	3203-0002	8	M8x1x10	15119	0.000.660
32	3203-0003	10	M10x1x10	14413	0.000.661
32	3203-0446	11	M10x1x10	14413	0.000.661
32	3203-0004	12	M10x1x10	14413	0.000.662
32	3203-0275	14	M10x1x10	14413	0.000.662
32	3203-0005	16	M10x1x10	14413	0.000.662
32	3203-0321	18	M10x1x8	15163	0.000.662
32	3203-0033	20	M8x1x8	15118	0.000.663
32	3203-0103	1/4"	M6x10	10753	0.000.660
32	3203-0104	3/8"	M10x1x10	14413	0.000.661
32	3203-0105	1/2"	M10x1x10	14413	0.000.662
32	3203-0106	5/8"	M10x1x10	14413	0.000.662
32	3203-0107	3/4"	M8x1x8	15118	0.000.663

PRECI-FLEX® Adapter Zubehör

Type 03

PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 03	D2	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
40	4003-0108	6	M6x10	10753	0.000.856
40	4003-0570	7	M6x10	10753	0.000.856
40	4003-0109	8	M8x1x10	15119	0.000.856
40	4003-0110	10	M10x1x10	14413	0.000.857
40	4003-0111	12	M10x1x10	14413	0.000.858
40	4003-0112	16	M10x1x10	14413	0.000.859
40	4003-0113	20	M10x1x10	14413	0.000.860
40	4003-0114	25	M10x1x10	14413	0.000.861
40	4003-0115	1/4"	M6x10	10753	0.000.856
40	4003-0116	3/8"	M10x1x10	14413	0.000.857
40	4003-0117	1/2"	M10x1x10	14413	0.000.858
40	4003-0118	5/8"	M10x1x10	14413	0.000.859
40	4003-0119	3/4"	M10x1x10	14413	0.000.875
40	4003-0120	1"	M10x1x10	14413	0.000.876
50	5003-0505	6	M6x25	10758	0.001.470
50	5003-0486	10	M10x1x25	13513	0.001.395
50	5003-0487	12	M10x1x25	13513	0.001.398
50	5003-0488	14	M10x1x25	13513	0.001.398
50	5003-0250	16	M12x1x16	14842	0.000.937
50	5003-0415	18	M12x1x16	14842	0.000.937
50	5003-0251	20	M12x1x16	14842	0.000.937
50	5003-0252	25	M12x1x16	14842	0.000.938
50	5003-0253	32	M12x1x16	14842	0.000.939
50	5003-0583	1/4"	M6x25	10758	0.001.470
50	5003-0584	1/2"	M10x1x25	13513	0.001.398
50	5003-0304	5/8"	M12x1x16	14842	0.000.937
50	5003-0305	3/4"	M12x1x16	14842	0.001.021
50	5003-0306	1"	M12x1x16	14842	0.001.024
50	5003-0307	1 1/4"	M12x1x16	14842	0.001.024

PRECI-FLEX® Adapter Zubehör

Type 04

PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 04	D2	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2004-0181	6	M6x10	10753	0.000.914
20	2004-0182	8	M8x1x10	15119	0.000.914
20	2004-0183	10	M8x1x10	15119	0.000.915
20	2004-0184	12	M8x1x8	15118	0.000.916
20	2004-0320	14	M8x1x6	15182	0.000.916
20	2004-0332	16	M8x1x6	15182	0.000.916
20	2004-0185	1/4"	M6x10	10753	0.000.914
20	2004-0186	3/8"	M8x1x10	15119	0.000.915
20	2004-0187	1/2"	M8x1x8	15118	0.000.916
25	2504-0061	6	M6x10	10753	0.000.760
25	2504-0062	8	M8x1x10	15119	0.000.760
25	2504-0063	10	M10x1x8	15163	0.000.759
25	2504-0064	12	M10x1x8	15163	0.000.758
25	2504-0325	14	M10x1x8	15163	0.000.758
25	2504-0065	16	M10x1x8	15163	0.000.757
25	2504-0300	18	M10x1x10	14413	0.000.757
25	2504-0301	20	M10x1x10	14413	0.000.757
25	2504-0445	25	M10x1x8	15163	0.000.757
25	2504-0188	1/4"	M6x10	10753	0.000.760
25	2504-0189	3/8"	M10x1x8	15163	0.000.759
25	2504-0190	1/2"	M10x1x8	15163	0.000.758
25	2504-0191	5/8"	M10x1x8	15163	0.000.757
25	2504-0323	3/4"	M10x1x10	14413	0.000.757
32	3204-0006	6	M6x10	10753	0.000.664
32	3204-0398	6	M6x8	10752	0.000.248
32	3204-0007	8	M8x1x10	15119	0.000.664
32	3204-0008	10	M10x1x10	14413	0.000.665
32	3204-0009	12	M10x1x10	14413	0.000.666
32	3204-0499	14	M10x1x10	14413	0.000.666
32	3204-0010	16	M10x1x10	14413	0.000.667
32	3204-0034	20	M10x1x10	14413	0.000.668
32	3204-0279	25	M10x1x8	15163	0.000.997
32	3204-0192	1/4"	M6x10	10753	0.000.664
32	3204-0193	3/8"	M10x1x10	14413	0.000.665
32	3204-0194	1/2"	M10x1x10	14413	0.000.666
32	3204-0195	5/8"	M10x1x10	14413	0.000.667
32	3204-0196	3/4"	M10x1x10	14413	0.000.668
32	3204-0409	1"	M10x1x8	15163	0.001.298
40	4004-0197	6	M6x10	10753	0.000.862
40	4004-0198	8	M8x1x10	15119	0.000.862
40	4004-0199	10	M10x1x10	14413	0.000.863
40	4004-0200	12	M10x1x10	14413	0.000.864
40	4004-0427	14	M10x1x10	14413	0.000.864
40	4004-0201	16	M10x1x10	14413	0.000.865
40	4004-0428	18	M10x1x10	14413	0.000.865
40	4004-0202	20	M10x1x10	14413	0.000.866
40	4004-0203	25	M10x1x10	14413	0.000.867
40	4004-0501	32	M10x1x10	14413	0.001.425
40	4004-0204	1/4"	M6x10	10753	0.000.862
40	4004-0205	3/8"	M10x1x10	14413	0.000.863
40	4004-0206	1/2"	M10x1x10	14413	0.000.864
40	4004-0207	5/8"	M10x1x10	14413	0.000.865
40	4004-0208	3/4"	M10x1x10	14413	0.000.881
40	4004-0209	1"	M10x1x10	14413	0.000.880

PRECI-FLEX® Adapter Zubehör

Type 05

PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 05	D2	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2005-0121	6	M6x8	10752	0.000.921
20	2005-0122	8	M6x8	10752	0.000.921
20	2005-0123	10	M6x6	10751	0.000.921
20	2005-0148	12	M6x6	10751	0.000.921
20	2005-0124	1/4"	M6x8	10752	0.000.921
20	2005-0125	3/8"	M6x6	10751	0.000.921
20	2005-0149	1/2"	M6x6	10751	0.000.921
25	2505-0066	6	M6x10	10753	0.000.764
25	2505-0067	8	M8x1x10	15119	0.001.099
25	2505-0068	10	M8x1x10	15119	0.000.764
25	2505-0069	12	M8x1x8	15118	0.000.764
25	2505-0282	14	M8x1x6	15182	0.000.764
25	2505-0070	16	M8x1x6	15182	0.000.764
25	2505-0126	1/4"	M6x10	10753	0.000.764
25	2505-0127	3/8"	M8x1x10	15119	0.000.764
25	2505-0128	1/2"	M8x1x8	15118	0.000.764
25	2505-0129	5/8"	M8x1x6	15182	0.000.764
32	3205-0283	5	M6x10	10753	0.001.100
32	3205-0044	6	M6x10	10753	0.001.100
32	3205-0045	8	M8x1x10	15119	0.001.100
32	3205-0046	10	M10x1x10	14413	0.000.673
32	3205-0047	12	M10x1x10	14413	0.000.673
32	3205-0281	14	M10x1x10	14413	0.000.673
32	3205-0048	16	M10x1x10	14413	0.000.673
32	3205-0329	18	M10x1x8	15163	0.000.673
32	3205-0049	20	M8x1x8	15118	0.000.673
32	3205-0130	1/4"	M6x10	10753	0.001.100
32	3205-0131	3/8"	M10x1x10	14413	0.000.673
32	3205-0132	1/2"	M10x1x10	14413	0.000.673
32	3205-0133	5/8"	M10x1x10	14413	0.000.673
32	3205-0134	3/4"	M8x1x8	15118	0.000.673
40	4005-0135	6	M6x10	10753	0.000.871
40	4005-0136	8	M8x1x10	15119	0.000.871
40	4005-0137	10	M10x1x10	14413	0.000.871
40	4005-0138	12	M10x1x10	14413	0.001.103
40	4005-0139	16	M10x1x10	14413	0.001.103
40	4005-0140	20	M10x1x10	14413	0.001.103
40	4005-0141	25	M10x1x10	14413	0.001.106
40	4005-0142	1/4"	M6x10	10753	0.000.871
40	4005-0143	3/8"	M10x1x10	14413	0.000.871
40	4005-0144	1/2"	M10x1x10	14413	0.001.103
40	4005-0145	5/8"	M10x1x10	14413	0.001.103
40	4005-0146	3/4"	M10x1x10	14413	0.001.103
40	4005-0147	1"	M10x1x10	14413	0.001.106
50	5005-0482	10	M10x1x25	13513	0.001.403
50	5005-0483	12	M10x1x25	13513	0.001.404
50	5005-0484	14	M10x1x25	13513	0.001.404
50	5005-0254	16	M12x1x16	14842	0.001.108
50	5005-0485	18	M12x1x16	14842	0.001.108
50	5005-0255	20	M12x1x16	14842	0.001.108
50	5005-0256	25	M12x1x16	14842	0.001.110
50	5005-0257	32	M12x1x16	14842	0.001.110
50	5005-0294	5/8"	M12x1x16	14842	0.001.108
50	5005-0295	3/4"	M12x1x16	14842	0.001.108
50	5005-0296	1"	M12x1x16	14842	0.001.110
50	5005-0297	1 1/4"	M12x1x16	14842	0.001.110

PRECI-FLEX® Adapter Zubehör

Type 06

PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 06	D2	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2006-0152	6	M6x10	10753	0.000.920
20	2006-0153	8	M8x1x10	15119	0.000.920
20	2006-0154	10	M8x1x10	15119	0.000.920
20	2006-0155	12	M8x1x8	15118	0.000.920
20	2006-0328	14	M8x1x6	15182	0.000.920
20	2006-0156	1/4"	M6x10	10753	0.000.920
20	2006-0157	3/8"	M8x1x10	15119	0.000.920
20	2006-0158	1/2"	M8x1x8	15118	0.000.920
25	2506-0071	6	M6x10	10753	0.001.113
25	2506-0072	8	M8x1x10	15119	0.001.113
25	2506-0073	10	M10x1x8	15163	0.001.113
25	2506-0074	12	M10x1x8	15163	0.001.113
25	2606-0326	14	M10x1x8	15163	0.001.113
25	2506-0075	16	M10x1x8	15163	0.001.113
25	2506-0327	18	M10x1x10	14413	0.001.113
25	2506-0322	20	M10x1x10	14413	0.001.113
25	2506-0159	1/4"	M6x10	10753	0.001.113
25	2506-0160	3/8"	M10x1x8	15163	0.001.113
25	2506-0161	1/2"	M10x1x8	15163	0.001.113
25	2506-0162	5/8"	M10x1x8	15163	0.001.113
25	2506-0324	3/4"	M10x1x10	14413	0.001.113
32	3206-0050	6	M6x10	10753	0.001.114
32	3206-0051	8	M8x1x10	15119	0.001.114
32	3206-0052	10	M10x1x10	14413	0.001.114
32	3206-0053	12	M10x1x10	14413	0.001.114
32	3206-0054	16	M10x1x10	14413	0.001.114
32	3206-0055	20	M10x1x10	14413	0.001.114
32	3206-0280	25	M10x1x8	15163	0.001.112
32	3206-0163	1/4"	M6x10	10753	0.001.114
32	3206-0164	3/8"	M10x1x10	14413	0.001.114
32	3206-0165	1/2"	M10x1x10	14413	0.001.114
32	3206-0166	5/8"	M10x1x10	14413	0.001.114
32	3206-0167	3/4"	M10x1x10	14413	0.001.114
40	4006-0168	6	M6x10	10753	0.001.115
40	4006-0169	8	M8x1x10	15119	0.001.115
40	4006-0170	10	M10x1x10	14413	0.001.115
40	4006-0171	12	M10x1x10	14413	0.001.115
40	4006-0172	16	M10x1x10	14413	0.001.116
40	4006-0173	20	M10x1x10	14413	0.001.116
40	4006-0174	25	M10x1x10	14413	0.001.116
40	4006-0175	1/4"	M6x10	10753	0.001.115
40	4006-0176	3/8"	M10x1x10	14413	0.001.115
40	4006-0177	1/2"	M10x1x10	14413	0.001.115
40	4006-0178	5/8"	M10x1x10	14413	0.001.116
40	4006-0179	3/4"	M10x1x10	14413	0.001.116
40	4006-0180	1"	M10x1x10	14413	0.001.116

PRECI-FLEX® Adapter Zubehör

Type 07

PRECI-FLEX® Adapter Accessories

Größe Size								
D1	Type 07	D2	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2007-0234	16	13985	0.000.535	11380	17502	10023	11397
20	2007-0235	1/2"	10653	0.000.922	0.001.029		0.001.032	
20	2007-0412	22	10659	0.000.536	11381	17503	10024	15715
25	2507-0317	13	13985	0.001.064	11379	17501	0.001.032	11391
25	2507-0083	16	13985	0.000.535	11380	17502	10023	11397
25	2507-0084	22	10659	0.000.536	11381	17503	10024	15715
25	2507-0395	27	10659	0.000.943	14416	17500	14451	11433
25	2507-0236	1/2"	10653	0.000.922	0.001.029		0.001.032	
25	2507-0262	3/4"	13985	0.000.923	0.001.030		10023	
32	3207-0023	16	13985	0.000.535	11380	17502	10023	11397
32	3207-0024	22	10659	0.000.536	11381	17503	10024	15715
32	3207-0331	27	10659	0.000.943	14416	17500	14451	11433
32	3207-0240	1/2"	10653	0.000.922	0.001.029		0.001.032	
32	3207-0237	3/4"	13985	0.000.923	0.001.030		10023	
40	4007-0238	16	13985	0.000.535	11380	17502	10023	11397
40	4007-0239	22	10659	0.000.536	11381	17503	10024	15715
40	4007-0276	27	10659	0.000.943	14416	17500	14451	11433
40	4007-0436	32	10670	0.000.982	11382	17504	10025	15720
40	4007-0241	3/4"	13985	0.000.923	0.001.030		10023	
50	5007-0263	16	13985	0.000.535	11380	17502	10023	11397
50	5007-0258	22	10659	0.000.536	11381	17503	10024	15715
50	5007-0259	27	10659	0.000.943	14416	17500	14451	11433
50	5007-0277	32	10670	0.000.982	11382	17504	10025	15720
50	5007-0302	3/4"	13985	0.000.923	0.001.030		10023	
50	5007-0303	1"	10659	0.001.028	0.001.031		10024	

PRECI-FLEX® Adapter Zubehör

Type 08

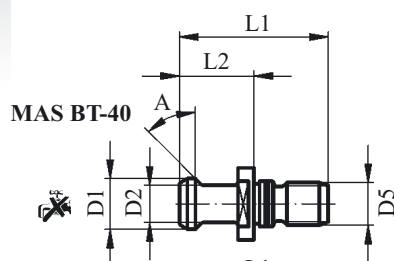
PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 08	D2	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2008-0217	6	M6x8	10752	0.000.921
20	2008-0218	8	M6x8	10752	0.000.921
20	2008-0219	10	M6x8	10752	0.000.921
20	2008-0220	12	M6x6	10751	0.000.921
20	2008-0333	14	M6x6	10751	0.000.918
20	2008-0334	16	M6x6	10751	0.000.920
20	2008-0221	1/4"	M6x8	10752	0.000.921
20	2008-0222	3/8"	M6x8	10752	0.000.921
20	2008-0223	1/2"	M6x6	10751	0.000.921
25	2508-0335	6	M8x1x10	15119	0.000.764
25	2508-0076	8	M8x1x10	15119	0.000.764
25	2508-0077	10	M8x1x8	15118	0.000.764
25	2508-0078	12	M8x1x8	15118	0.000.764
25	2508-0079	16	M8x1x6	15182	0.000.764
25	2508-0210	3/8"	M8x1x8	15118	0.000.764
25	2508-0211	1/2"	M8x1x8	15118	0.000.764
25	2508-0212	5/8"	M8x1x6	15182	0.000.764
32	3208-0396	6	M8x1x10	15119	0.000.673
32	3208-0028	8	M8x1x10	15119	0.000.673
32	3208-0029	10	M10x1x10	14413	0.000.673
32	3208-0030	12	M10x1x10	14413	0.000.673
32	3208-0031	16	M10x1x10	14413	0.000.673
32	3208-0032	20	M10x1x8	15163	0.000.673
32	3208-0213	3/8"	M10x1x10	14413	0.000.673
32	3208-0214	1/2"	M10x1x10	14413	0.000.673
32	3208-0215	5/8"	M10x1x10	14413	0.000.673
32	3208-0216	3/4"	M10x1x8	15163	0.000.673
40	4008-0224	8	M8x1x10	15119	0.000.870
40	4008-0225	10	M10x1x10	14413	0.000.870
40	4008-0226	12	M10x1x10	14413	0.000.870
40	4008-0227	16	M10x1x10	14413	0.000.871
40	4008-0228	20	M10x1x10	14413	0.000.871
40	4008-0229	25	M10x1x10	14413	0.000.872
40	4008-0230	3/8"	M10x1x10	14413	0.000.870
40	4008-0231	1/2"	M10x1x10	14413	0.000.870
40	4008-0232	5/8"	M10x1x10	14413	0.000.871
40	4008-0233	3/4"	M10x1x10	14413	0.000.871

PRECI-FLEX® Adapter Anzugsbolzen / Zubehör

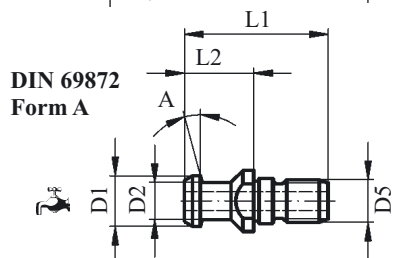
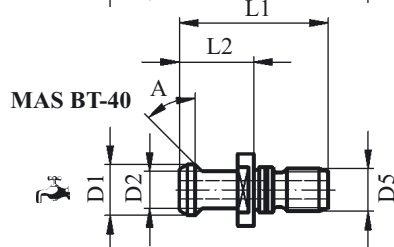
Type **11**

PRECI-FLEX® Retention Knob / Accessories



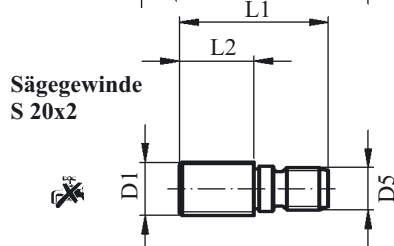
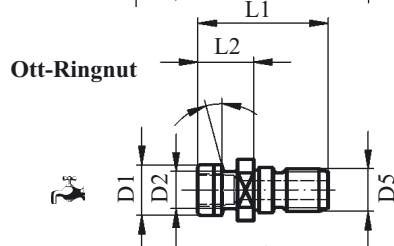
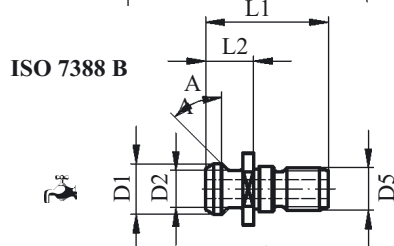
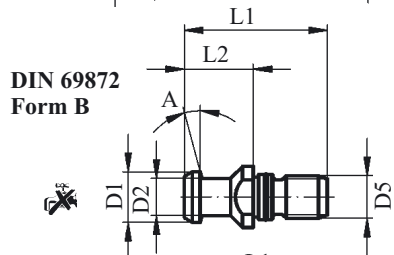
MAS BT-40

Größe Size	Artikel-Nr. Part No.	D1	D2	D5	L1	L2	A
40	15184	15	10	M16	60	35	30°
40	15185	15	10	M16	60	35	45°
40	15186	15	10	M16	60	35	90°
40	15187	15	10	M16	60	35	30°
40	15188	15	10	M16	60	35	45°
40	15189	15	10	M16	60	35	90°



DIN 69871 (SK 40, 50)
SK MAS-BT 40

Größe Size	Type	Artikel-Nr. Part No.	D1	D2	D5	L1	L2	A
40	A	15190	19	14	M16	54	26	15°
40	B	15192	19	14	M16	54	26	15°
40	ISO	15194	18,95	12,95	M16	44,26	16,4	45°
40	Ott	15196	25,3	21,1	M16	53	25	15°
40		15198	S 20x2	-	M16	53	25	-
50	A	15191	28	21	M24	74	34	15°
50	B	15193	28	21	M24	74	34	15°
50	ISO	15195	29,1	19,6	M24	65,5	25,55	45°
50	Ott	15197	39,3	32	M24	65	25	15°



PRECI-FLEX® Adapter *Zubehör*

Type 11

PRECI-FLEX® Adapter Accessories

Größe Size					
D1	Type 11	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
20	2011-0264	ER20A 6kt.	12364	4.200.230	
20	2011-0265	ER20A 6kt.	12364	4.200.230	
20	2011-0266	ER20A 6kt.	12364	4.200.230	
20	2011-0267	ER20A 6kt.	12364	4.200.230	
20	2011-0268	ER20A 6kt.	12364	4.200.230	
20	2011-0289	ER20A 6kt.	12364	4.200.230	10647
20	2011-0424	ER20A 6kt.	10106	4.200.230	12952
25	2511-0013	ER25A 6kt.	15809	4.200.230	
25	2511-0014	ER25A 6kt.	15809	4.200.230	
25	2511-0015	ER25A 6kt.	15809	4.200.230	
25	2511-0016	ER25A 6kt.	15809	4.200.230	
25	2511-0017	ER25A 6kt.	15809	4.200.230	
25	2511-0290	ER25A 6kt.	15809	4.200.230	10647
25	2511-0291	ER25A 6kt.	15809	4.200.230	10647
32	3211-0020	ER32A 6kt.	12946	4.200.230	
32	3211-0021	ER32A 6kt.	12946	4.200.230	
32	3211-0018	ER32A 6kt.	12946	4.200.230	
32	3211-0019	ER32A 6kt.	12946	4.200.230	
32	3211-0022	ER32A 6kt.	12946	4.200.230	
32	3211-0292	ER32A 6kt.	12946	4.200.230	10647
40	4011-0269	ER40AC	15812	4.200.230	
40	4011-0270	ER40AC	15812	4.200.230	
40	4011-0271	ER40AC	15812	4.200.230	
40	4011-0272	ER40AC	15812	4.200.230	
40	4011-0273	ER40AC	15812	4.200.230	
50	5011-0284	ER50A	15309	4.100.341	
50	5011-0285	ER50A	15309	4.100.341	
50	5011-0286	ER50A	15309	4.100.341	
50	5011-0287	ER50A	15309	4.100.341	
50	5011-0288	ER50A	15309	4.100.341	

PRECI-FLEX® Adapter Zubehör

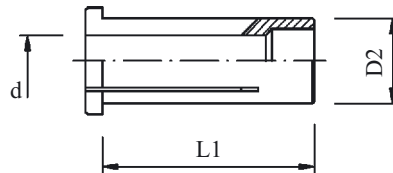
Type 13

PRECI-FLEX® Adapter Accessories

Größe Size							
D1	Type 13		Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
25	2513-0315	M5 (SW4)	0.000.510	0.001.089	(4x1,5) 11086	0.001.188	0.000.762
32	3213-0309	M5 (SW4)	0.000.510	0.001.042	(4x1,5) 11086	0.001.189	0.000.671
40	4013-0312	M6 (SW5)	0.000.771	0.001.058	(5x1,5) 11087	0.001.472	0.001.116

Reduzierhülsen

Adapter Sleeve



Größe Size					
D1	Type 13	D2	d	L1	Artikel-Nr. Part No.
25	-	12	3	40	16 638
25	2513-0315	12	6	40	15 795
25		12	8	40	15 796
25		12	10	40	15 797
32	3213-0309	20	6	50	15 798
32		20	8	50	15 799
32		20	10	50	15 800
32		20	12	50	15 801
32		20	14	50	15 802
32		20	16	50	15 803
40	4013-0312	25	20	56	20 916

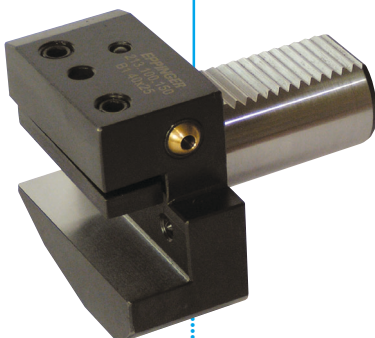
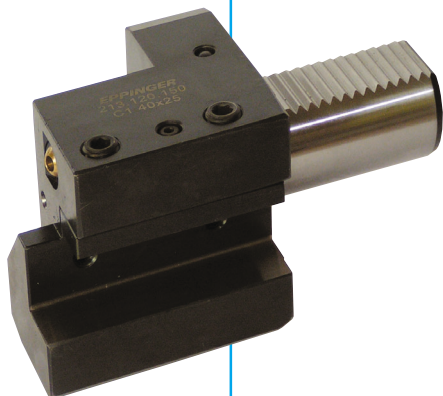
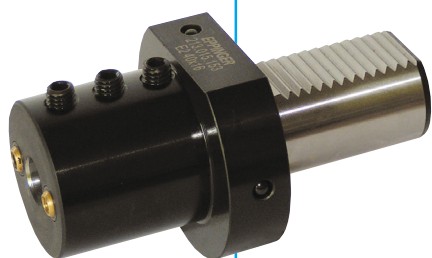
PRECIFLEX® Adapter ZubehörType **17****PRECIFLEX® Adapter Accessories**

Größe Size			
D1	Type 17		Artikel-Nr. Part No.
20	2017-0444	M6x5 (SW3)	0.001.367
25	2517-0521	M6x5 (SW3)	0.001.367



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***Werkzeughalter nach DIN ISO 10 889
(DIN 69 880)
für CNC-Drehmaschinen
Tool Holder to DIN ISO 10 889 (DIN 69 880)
For CNC Lathes***



Technische Merkmale

Technical Information

■ Die in DIN ISO 10 889 (DIN 69 880) genau definierten Werkzeughalter der verschiedenen Formen werden von Eppinger mit höchster Präzision gefertigt. Das DIN-Programm wird durch eine umfangreiche Palette von im harten Praxiseinsatz bewährten Sonderhaltern ergänzt.

Die besonderen technischen Merkmale des kompletten Eppinger-Programms sind:

- Jeder Halter komplett einsatzgehärtet.
- Oberflächenhärte 58 – 60 HRc.
- Kernfestigkeit über 1000 N/mm²
- Schaft, Kerbverzahnung, Anlagefläche, Fixierbohrung, Stahlauflege oder Aufnahmebohrung geschliffen.
- Jederzeit auf die nächst kleinere Drehmeißelhöhe nachrüstbar.
- Lage des Drehmeißels im Werkzeughalter über Anschlagsschrauben einstellbar.
- Federnde Druckplatten zur positionsgenauen Klemmung der Drehmeißel.
- Kühlmittelzufuhr über schnell und exakt einstellbare Kugeldüsen mit neuartiger Klemmung.
- Korrosionsfest gegen alle bekannten Kühl- und Schmiermittel.
- Keine Beschädigung der Oberfläche durch äussere Einflüsse.
- Entsprechend DIN ISO 10 889-1 (DIN 69 880) haben die Werkzeughalter am Schaft/Anlagefläche einen Einstich zur Aufnahme eines O-Rings.

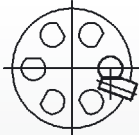
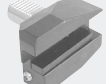
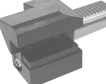
■ The various tool holder models defined in detail in DIN ISO 10 889 (DIN 69 880) are manufactured by Eppinger with ultimate precision. The DIN range is enhanced by a comprehensive line of special holders tried and tested under tough conditions.

The full Eppinger range has a number of special technical features:

- Each holder is fully case hardened.
- Surface hardness of 58 – 60 HRc.
- Core strength in excess of 1000 N/mm²
- Shaft, serration, seating face, locating bore, clamp plate or locator bore, are ground.
- Adjustable any time to the next lower cutter height.
- Position of cutter in tool holder adjustable using two stop screws.
- Spring-mounted pressure plates for clamping cutter in the exact position.
- Internal coolant supply through ball nozzles featuring quick and precise adjustment with new type of clamp fixture.
- Corrosion-resistant to all known coolants and lubricants.
- No surface damage due to external factors.
- As defined in DIN ISO 10 889-1 (DIN 69 880) the holders are equipped with an undercut at shaft/seating face to accommodate a sealing ring.

Technische Merkmale

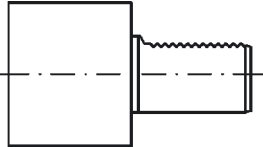
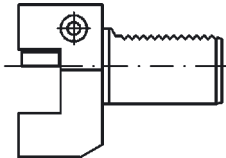
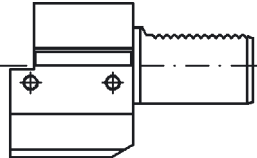
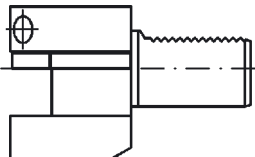
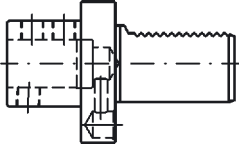
Technical Information

Hauptspindel Main spindle	 Über Mitte Over centre line				 Unter Mitte Below centre line			
Drehrichtung der Hauptspindel Direction of rotation main spindle	 M03		 M04		 M03		 M04	
VDI-Form / VDI-type	Ober. Rev. Up. turret	Unt. Rev. Low. turret	Ober. Rev. Up. turret	Unt. Rev. Low. turret	Ober. Rev. Up. turret	Unt. Rev. Low. turret	Ober. Rev. Up. turret	Unt. Rev. Low. turret
B1 			X	X				
B2 					X	X		
B3 	X	X						
B4 							X	X
B5 			X	X				
B6 					X	X		
B7 	X	X						
B8 							X	X
C1 			X	X				
C2 					X	X		
C3 	X	X						
C4 							X	X

Werkzeughalter *Inhaltsverzeichnis*

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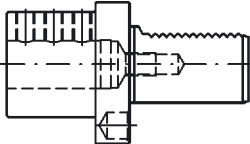
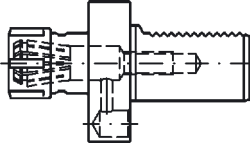
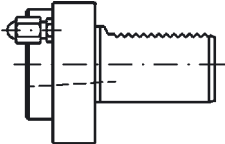
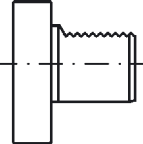
DIN ISO 10 889 (DIN 69 880)

Übersicht / Overview		Gruppe Group	Beschreibung / Description	
	Werkzeughalter Sonderausführung	V 1	V 1.1	Form A1
	Tool Holder Blank		V 1.2	Form A2
	Vierkant- Queraufnahme	V 2	V 2.1	Form B1
	Turning Tool Holder		V 2.2	Form B2
			V 2.3	Form B3
			V 2.4	Form B4
			V 2.5	Form B5
	Vierkant- Längsaufnahme	V 3	V 2.6	Form B6
	Turning Tool Holder For Square To		V 2.7	Form B7
			V 2.8	Form B8
			V 3.1	Form C1
	Vierkant- Mehrfachaufnahme	V 4	V 3.2	Form C2
	Multiple purposer Square Tool Holder		V 3.3	Form C3
			V 3.4	Form C4
			V 4.1	Form D1
	Werkzeughalter für Wendeplattenbohrer	V 5	V 4.2	Form D2
	Tool Holder For Carbide Indexable Drill		V 5.1	Form E1

Werkzeughalter Inhaltsverzeichnis

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DIN ISO 10 889 (DIN 69 880)

Übersicht / Overview		Gruppe Group	Beschreibung / Description
	Bohrstangenaufnahme	V 6	V 6.1 Form E2
	Boring Bar Holder		V 6.2 Bohrstangenaufnahme, axial versetzt
	Spannzangenaufnahme	V 7	V 7.1 Form E3 DIN 6388 Ortlieb
	Collet Chuck		V 7.2 Form E3 DIN 6345 Rubber-Flex V 7.3 Form E4 DIN 6499 Schaublin V 7.4 Form E4 DIN 6499 Schaublin höhenverstellbar
	Morsekegel-aufnahme	V 8	V 8.1 Form F1
	Morse Taper Holder		
	Klemmring	V 9	V 9.1 Form Z1
	Clamping Ring		
	Schutzstopfen	V 10	V 10.1 Form Z2
	Blanking Plug		

Werkzeughalter Inhaltsverzeichnis

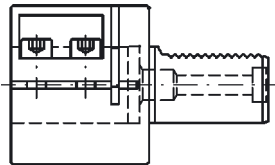
Tool holder · Index

DIN ISO 10 889 (DIN 69 880)

Übersicht / Overview

**Gruppe
Group**

Beschreibung / Description

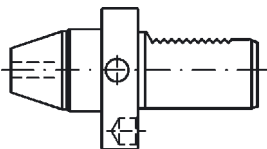


Bohrstangenhalter

Boring Bar Holder

V 11

V 11.1 Bohrstangenhalter

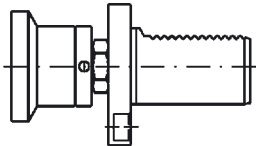


Kurzbohrfutter

Short Drilling Chuck
For Reversible
Operation

V 12

V 12.1 Kurzbohrfutter

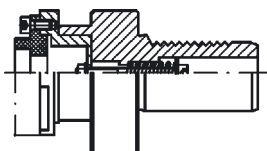


Werkstoffanschlag
mitlaufend

Revolving Stock
Stop

V 13

V 13.1 Werkstoffanschlag mitlaufend

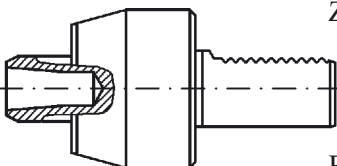


Schneideisenhalter

Extendible Die Holder

V 14

V 14.1 Schneideisenhalter



Zentrierspitze

Revolving Center Point

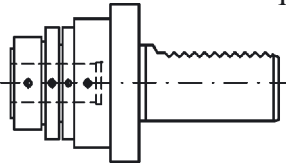
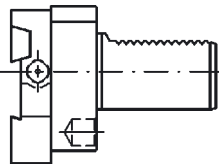
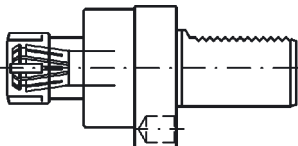
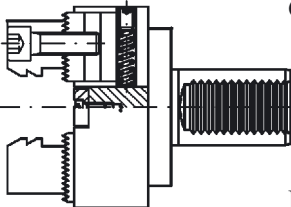
V 15

V 15.1 Zentrierspitze, mitlaufend
für Zentriereinsätze

Werkzeughalter Inhaltsverzeichnis

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DIN ISO 10 889 (DIN 69 880)

Übersicht / Overview	Gruppe Group	Beschreibung / Description
 Pendelhalter Floating Holder	V 16	V 16.1 Pendelhalter mit innerer Kühlmittelzufuhr V 16.2 Pendelhalter mit äusserer Kühlmittelzufuhr
 Abstechhalter Cut-off Tool Holder	V 17	V 17.1 Abstechhalter höhenverstellbar
 Gewindebohrhalter Tap Holder	V 18	V 18.1 Gewindebohrhalter mit Längenausgleich auf Zug und Druck für Spannzangen nach DIN 6499
 Greiferfutter Bar Puller	V 20	V 20.1 Greiferfutter

Werkzeughalter Inhaltsverzeichnis

Tool holder · Index

DIN ISO 10 889 (DIN 69 880)

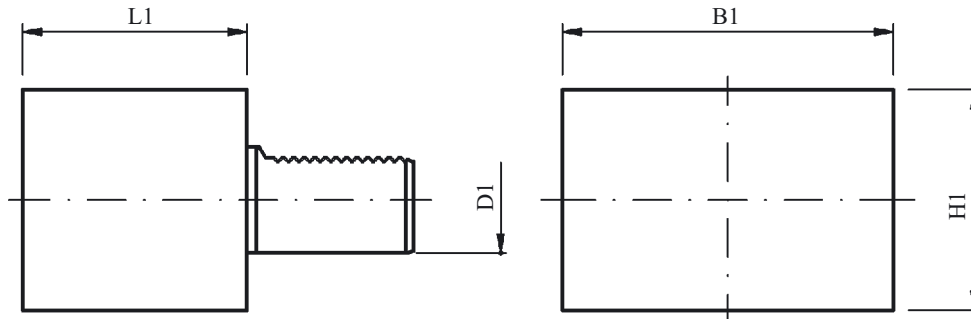
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Werkzeughalter für Sonderausführungen

Form A1

Pre-machined blank (Tool holder for special design)

DIN ISO 10 889 (DIN 69 880)



D1	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	H1	L1				
16	A1-16x44	200.075.150	78	44	44				
20	A1-20x65	201.075.150	100	60	65				
25	A1-25x75	207.075.150	100	60	75				
30	A1-30x85	202.075.150	130	76	85				
40	A1-40x100	203.075.150	151	96	100				
50	A1-50x125	204.075.150	160	120	125				
60	A1-60x160	205.075.150	165	125	160				

Bemerkungen / Remarks:

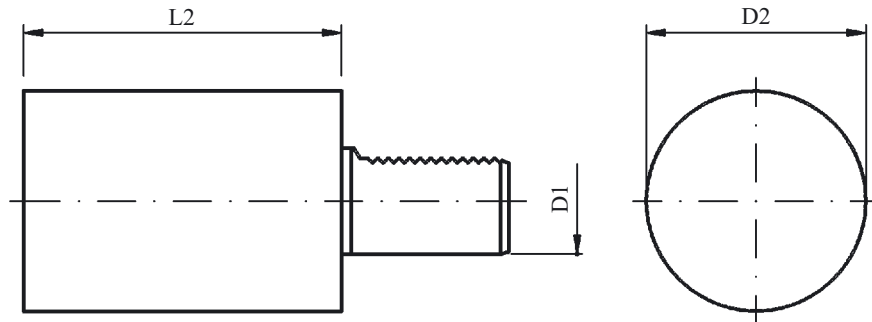
- ° Sonderabmessungen auf Anfrage
 - ° Special sizes on request
- Material: C45 / Material steel: C45

Werkzeughalter für Sonderausführungen

Form A2

Pre-machined blank (Tool holder for special design)

DIN ISO 10 889 (DIN 69 880)



D1	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D2	L2					
16	A2-16x60	200.080.150	40	60					
20	A2-20x70	201.080.150	50	70					
25	A2-25x80	207.077.150	58	80					
25	A2-25x200	207.080.150	58	200					
30	A2-30x100	202.077.150	68	100					
30	A2-30x240	202.080.150	68	240					
40	A2-40x120	203.077.150	83	120					
40	A2-40x320	203.080.150	83	320					
50	A2-50x135	204.077.150	98	135					
50	A2-50x400	204.080.150	98	400					
60	A2-60x150	205.077.150	123	150					
60	A2-60x480	205.080.150	123	480					

Bemerkungen / Remarks:

° Sonderabmessungen auf Anfrage

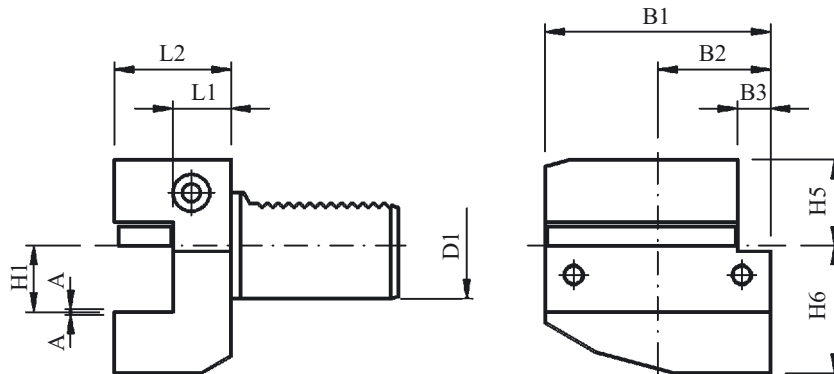
° Special sizes on request

Material: C45 / Material steel: C45

Vierkant-Queraufnahme *rechts, kurz*

Form B1

Rectangular transverse tool holder, right hand, short DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H5	H6	L1 ^{+0,5}	L2	Unterlegplatte Adapter	
16	12	B1-16x12x24	210.100.150	42	23	5	20	22	13	24	-	
20	16	B1-20x16x30	211.102.150	55	30	7	25	30	16	30	218.329.220	
20	16	B1-20x16x40	211.100.150	55	30	7	25	30	26	40	218.329.220	
20	16	B1-20x16x30	231.102.150	55	30	7	25	30	18,5	30	218.329.220	*
20	16	B1-20x16x40	231.100.150	55	30	7	25	30	25,5	40	218.329.220	*
25	16	B1-25x16x30	217.100.150	55	30	7	25	30	16	30	218.329.220	
30	20	B1-30x20x40	212.100.150	70	35	10	28	38	22	40	218.280.220	
30	20	B1-30x20x60	212.102.150	70	35	10	28	38	42	60	218.280.220	
30	20	B1-30x20x50	232.200.100	70	35	10	28	35	32	50	218.280.220	*
40	25	B1-40x25x44	213.100.150	85	42,5	12,5	32,5	48	22	44	218.286.220	
50	32	B1-50x32x55	214.100.150	100	50	16	35	60	30	55	218.290.220	
60	32	B1-60x32x60	215.100.150	125	62,5	16	42,5	62,5	30	60	218.031.220	

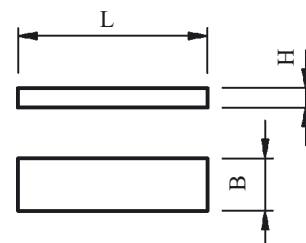
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25

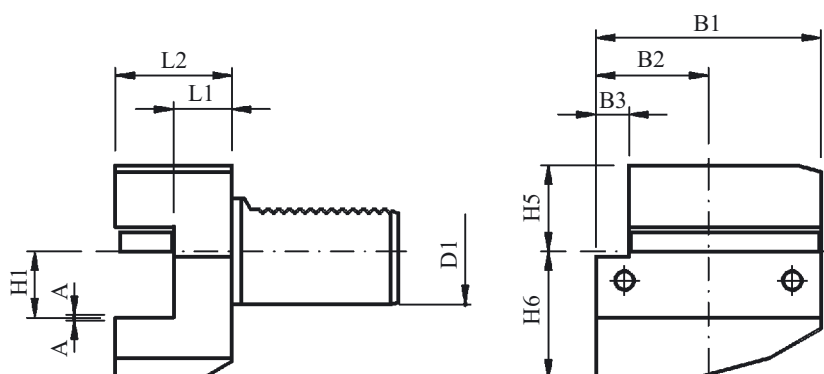


Vierkant-Queraufnahme links, kurz

Form B2

Rectangular transverse tool holder, left hand, short

DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H5	H6	L1 ^{+0,5}	L2	Unterlegplatte Adapter
16	12	B2-16x12x24	210.117.150	42	23	5	20	22	13	24	-
16	12	B2-16x12x34	210.115.150	42	23	5	20	22	23	34	-
20	16	B2-20x16x30	211.117.150	55	30	7	25	30	16	30	218.329.220
20	16	B2-20x16x30	231.117.150	55	30	7	25	30	18	30	218.275.220 *
20	16	B2-20x16x40	211.115.150	55	30	7	25	30	26	40	218.329.220
25	16	B2-25x16x30	217.115.150	55	30	7	25	30	16	30	218.329.220
25	16	B2-25x16x40	217.117.150	55	30	7	25	30	26	40	218.329.220
30	20	B2-30x20x40	212.115.150	70	35	10	28	38	22	40	218.280.220
30	20	B2-30x20x60	212.117.150	70	35	10	28	38	42	60	218.280.220
40	25	B2-40x25x44	213.115.150	85	42,5	12,5	32,5	48	22	44	218.286.220
50	32	B2-50x32x55	214.115.150	100	50	16	35	60	30	55	218.290.220
60	32	B2-60x32x60	215.115.150	125	62,5	16	42,5	62,5	30	60	218.031.220

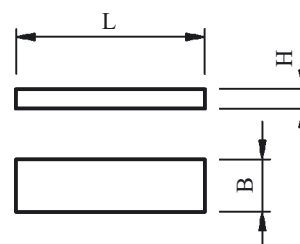
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

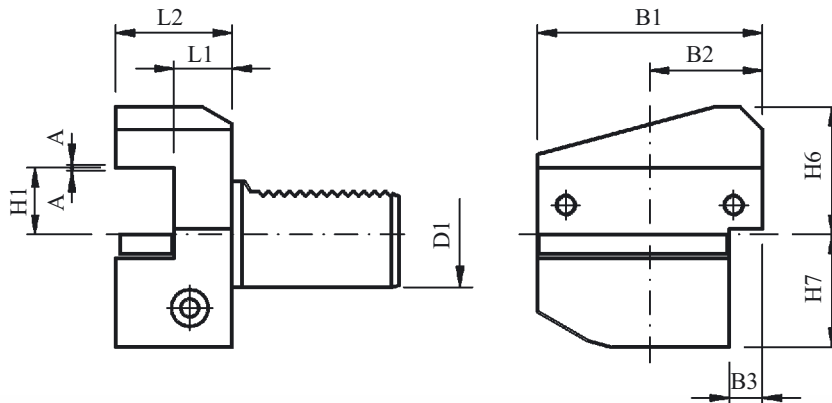
Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.329.220	4	54	14
218.275.220	4	55	12
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25



Vierkant-Queraufnahme Überkopf rechts, kurz **Form B3**

Rectangular transv. tool holder, overh. right hand, short DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H6	H7	L1 ^{+0,5}	L2	Unterlegplatte Adapter	
16	12	B3-16x12x24	210.105.150	42	23	5	22	20	13	24	-	
20	16	B3-20x16x30	211.107.150	55	30	7	30	25	16	30	218.329.220	
20	16	B3-20x16x40	211.105.150	55	30	7	30	25	26	40	218.329.220	
20	16	B3-20x16x30	231.107.150	55	30	7	30	25	18,5	30	218.329.220	*
20	16	B3-20x16x40	231.105.150	55	30	7	30	25	25,5	40	218.329.220	*
25	16	B3-25x16x30	217.105.150	55	30	7	30	25	16	30	218.329.220	
30	20	B3-30x20x40	212.105.150	70	35	10	38	35	22	40	218.280.220	
30	20	B3-30x20x60	212.107.150	70	35	10	38	35	42	60	218.280.220	
40	25	B3-40x25x44	213.105.150	85	42,5	12,5	48	42,5	22	44	218.286.220	
50	32	B3-50x32x55	214.105.150	100	50	16	60	50	30	55	218.290.220	
60	32	B3-60x32x60	215.105.150	125	62,5	16	62,5	62,5	30	60	218.031.220	

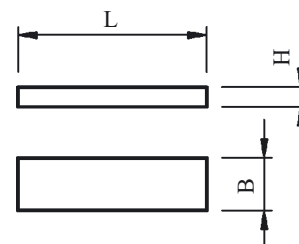
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

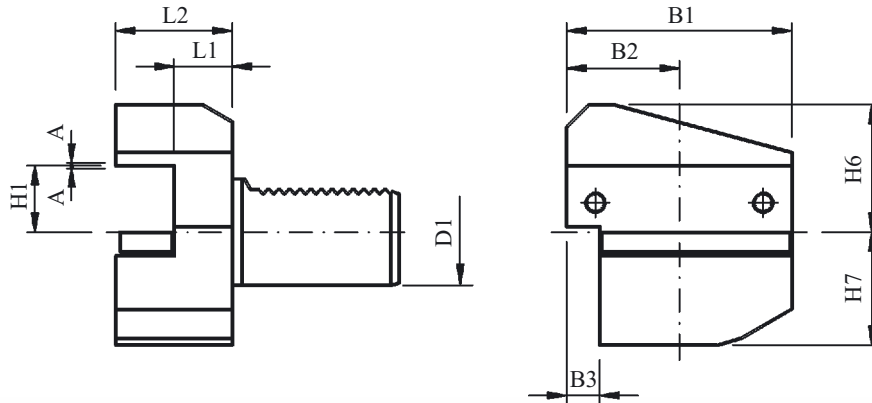
Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25



Vierkant-Queraufnahme Überkopf links, kurz **Form B4**

Rectangular transv. tool holder, overh. left hand, short DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H6	H7	L1 ^{+0,5}	L2	Unterlegplatte Adapter	
20	16	B4-20x16x30	211.112.150	55	30	7	30	25	16	30	218.329.220	
20	16	B4-20x16x40	211.110.150	55	30	7	30	25	26	40	218.329.220	
20	16	B4-20x16x30	231.112.150	55	30	7	30	25	18,5	30	218.329.220	*
20	16	B4-20x16x40	231.110.150	55	30	7	30	25	25,5	40	218.329.220	*
25	16	B4-25x16x30	217.110.150	55	30	7	30	25	16	30	218.329.220	
30	20	B4-30x20x40	212.110.150	70	35	10	38	35	22	40	218.280.220	
30	20	B4-30x20x60	212.112.150	70	35	10	38	35	42	60	218.280.220	
40	25	B4-40x25x44	213.110.150	85	42,5	12,5	48	42,5	22	44	218.286.220	
50	32	B4-50x32x55	214.110.150	100	50	16	60	50	30	55	218.290.220	
60	32	B4-60x32x60	215.110.150	125	62,5	16	62,5	62,5	30	60	218.031.220	

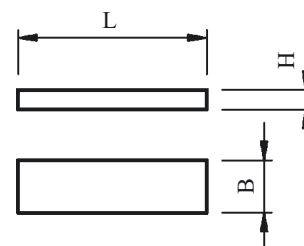
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25

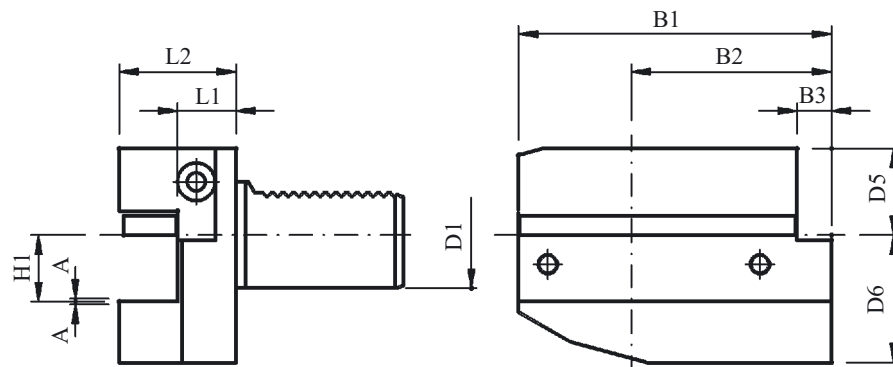


Vierkant-Queraufnahme *rechts, lang*

Form B5

Rectangular transverse tool holder, right hand, long

DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H5	H6	L1 ^{+0,5}	L2	Unterlegplatte Adapter	
20	16	B5-20x16x30	221.102.150	75	50	7	25	30	16	30	218.331.220	
20	16	B5-20x16x40	221.100.150	75	50	7	25	30	26	40	218.331.220	
20	16	B5-20x16x30	241.102.150	75	50	7	25	30	18	30	218.331.220	*
30	20	B5-30x20x40	222.100.150	100	65	10	28	38	22	40	218.281.220	
30	20	B5-30x20x60	222.102.150	100	65	10	28	38	42	60	218.281.220	
40	25	B5-40x25x44	223.100.150	118	75,5	12,5	32,5	48	22	44	218.288.220	
50	32	B5-50x32x55	224.100.150	130	80	16	35	60	30	55	218.291.220	
60	32	B5-60x32x60	225.100.150	145	82,5	16	42,5	62,5	30	60	218.349.220	

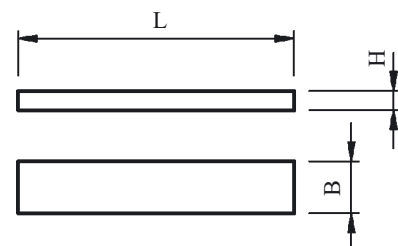
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.331.220	4	73	14
218.281.220	4	99	16
218.288.220	5	117	20
218.291.220	7	129	25
218.349.220	7	143	25

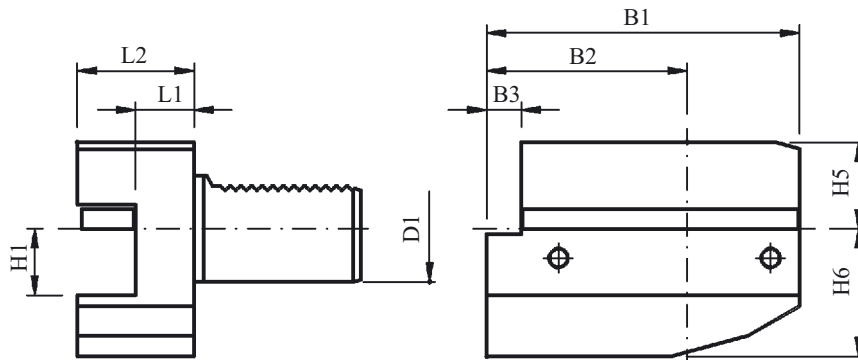


Vierkant-Queraufnahme links, lang

Form B6

Rectangular transverse tool holder, left hand, long

DIN ISO 10 889 (DIN 69 880)

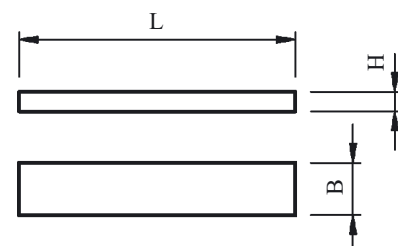


D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H5	H6	L1 ^{+0,5}	L2	Unterlegplatte Adapter
20	16	B6-20x16x30	221.117.150	75	50	7	25	30	16	30	218.331.220
20	16	B6-20x16x40	221.115.150	75	50	7	25	30	26	40	218.331.220
30	20	B6-30x20x40	222.115.150	100	65	10	28	38	22	40	218.281.220
30	20	B6-30x20x60	222.117.150	100	65	10	28	38	42	60	218.281.220
40	25	B6-40x25x44	223.115.150	118	75,5	12,5	32,5	48	22	44	218.288.220
50	32	B6-50x32x55	224.115.150	130	80	16	35	60	30	55	218.291.220
60	32	B6-60x32x60	225.115.150	145	82,5	16	42,5	62,5	30	60	218.349.220

Unterlegplatten für kleinere Drehmeißel

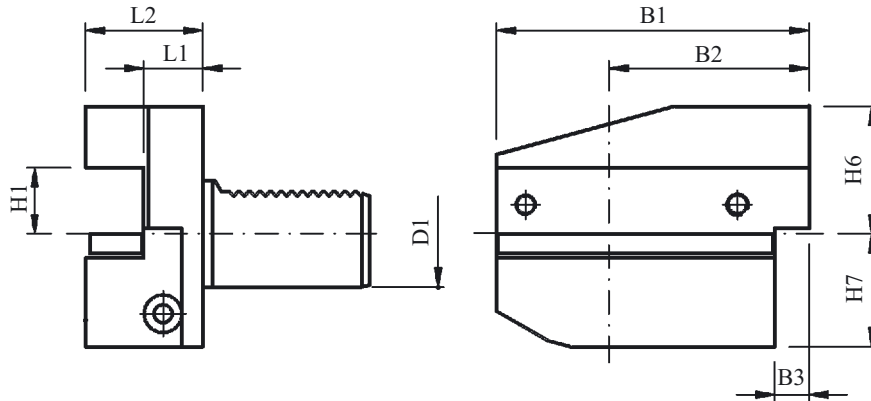
Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.331.220	4	73	14
218.281.220	4	99	16
218.288.220	5	117	20
218.291.220	7	129	25
218.349.220	7	143	25



Vierkant-Queraufnahme Überkopf rechts, lang **Form B7**

Rectangular transv. tool holder, overh. right hand, long DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H6	H7	L1 ^{+0,5}	L2	Unterlegplatte Adapter	
20	16	B7-20x16x30	221.107.150	75	50	7	30	25	16	30	218.331.220	
20	16	B7-20x16x40	221.105.150	75	50	7	30	25	26	40	218.331.220	
20	16	B7-20x16x30	241.107.150	75	50	7	30	25	18	30	218.331.220	*
30	20	B7-30x20x40	222.105.150	100	65	10	38	35	22	40	218.281.220	
30	20	B7-30x20x60	222.107.150	100	65	10	38	35	42	60	218.281.220	
40	25	B7-40x25x44	223.105.150	118	75,5	12,5	48	42,5	22	44	218.288.220	
50	32	B7-50x32x55	224.105.150	130	80	16	60	50	30	55	218.291.220	
60	32	B7-60x32x60	225.105.150	145	82,5	16	62,5	62,5	30	60	218.349.220	

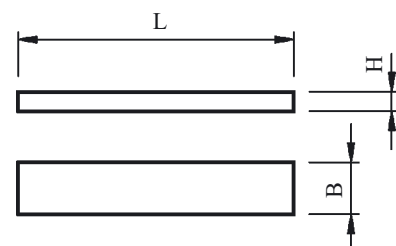
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

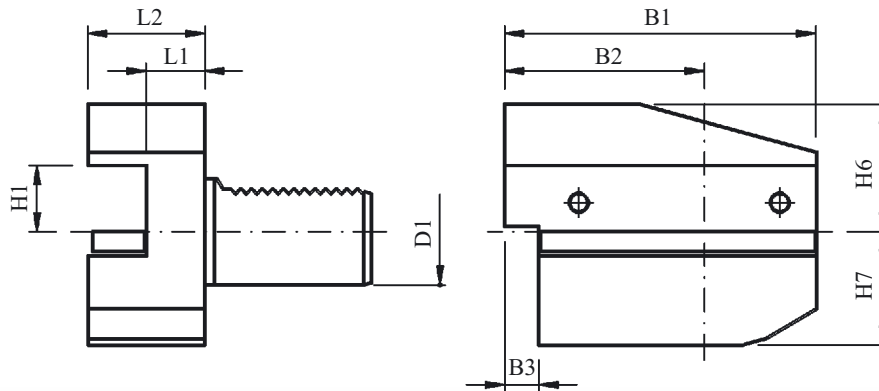
Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.331.220	4	73	14
218.281.220	4	99	16
218.288.220	5	117	20
218.291.220	7	129	25
218.349.220	7	143	25



Vierkant-Queraufnahme Überkopf links, lang **Form B8**

Rectangular transv. tool holder, overh. left hand, long **DIN ISO 10 889 (DIN 69 880)**

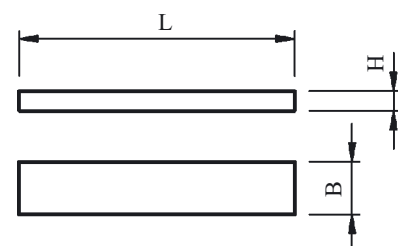


D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3	H6	H7	L1 ^{+0,5}	L2	Unterlegplatte Adapter
20	16	B8-20x16x30	221.112.150	75	50	7	30	25	16	30	218.331.220
20	16	B8-20x16x40	221.110.150	75	50	7	30	25	26	40	218.331.220
30	20	B8-30x20x40	222.110.150	100	65	10	38	35	22	40	218.281.220
30	20	B8-30x20x60	222.112.150	100	65	10	38	35	42	60	218.281.220
40	25	B8-40x25x44	223.110.150	118	75,5	12,5	48	42,5	22	44	218.288.220
50	32	B8-50x32x55	224.110.150	130	80	16	60	50	30	55	218.291.220
60	32	B8-60x32x60	225.110.150	145	82,5	16	62,5	62,5	30	60	218.349.220

Unterlegplatten für kleinere Drehmeißel

Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.331.220	4	73	14
218.281.220	4	99	16
218.288.220	5	117	20
218.291.220	7	129	25
218.349.220	7	143	25

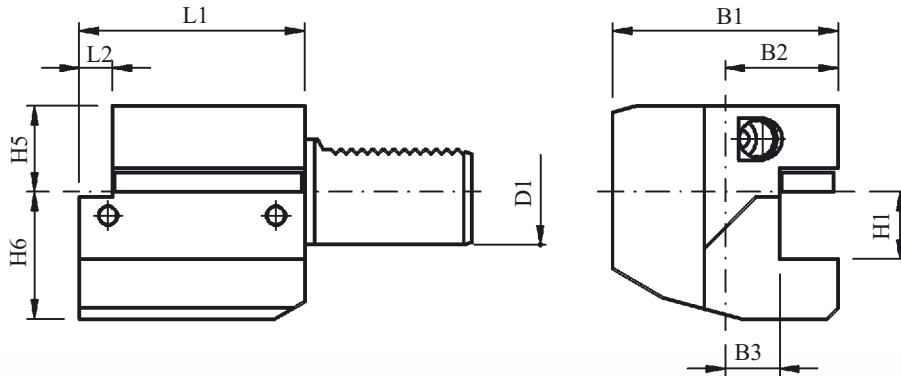


Vierkant-Längsaufnahme *rechts*

Form C1

Rectangular lengthwise tool holder, right hand

DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3 ^{+0,5}	H5	H6	L1	L2	Unterlegplatte Adapter	
16	12	C1-16x12	210.120.150	43	24	13	20	22	44	5	-	
20	16	C1-20x16	211.122.150	52	27	13	25	30	55	7	218.329.220	
20	16	C1-20x16	211.120.150	65	40	26	25	30	50	-	218.330.220	
20	16	C1-20x16	231.120.150	65	40	25,5	25	30	50	-	218.328.220	*
25	16	C1-25x16	217.120.150	58	33	19	25	30	55	7	218.329.220	
30	20	C1-30x20	212.120.150	70	35	17	28	38	70	10	218.280.220	
40	25	C1-40x25	213.120.150	85	42,5	20,5	32,5	48	85	12,5	218.286.220	
50	32	C1-50x32	214.120.150	100	50	25,5	35	60	100	16	218.290.220	
60	32	C1-60x32	215.120.150	125	62,5	32,5	42,5	62,5	125	16	218.031.220	

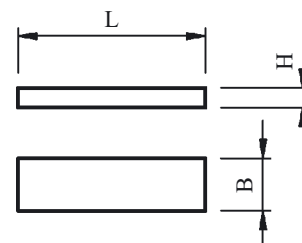
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.330.220	4	48	14
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25

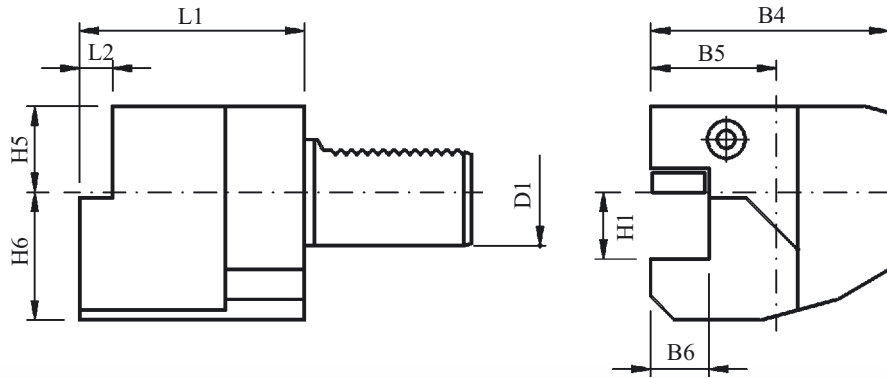


Vierkant-Längsaufnahme links

Form C2

Rectangular lengthwise tool holder, left hand

DIN ISO 10 889 (DIN 69 880)

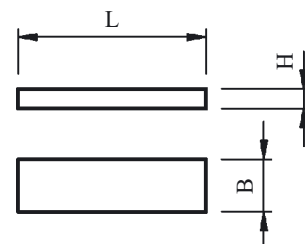


D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B4	B5	B6 ^{+0,5}	H5	H6	L1	L2	Unterlegplatte Adapter
16	12	C2-16x12	220.125.150	43	24	13	20	22	44	5	-
20	16	C2-20x16	221.125.150	65	40	26	25	30	50	-	218.330.220
25	16	C2-25x16	227.125.150	58	33	19	25	30	55	7	218.329.220
30	20	C2-30x20	222.125.150	76	41	23	28	38	70	10	218.280.220
40	25	C2-40x25	223.125.150	90	47,5	25,5	32,5	48	85	12,5	218.286.220
50	32	C2-50x32	224.125.150	105	55	30,5	35	60	100	16	218.290.220
60	32	C2-60x32	225.125.150	125	62,5	32,5	42,5	62,5	125	16	218.031.220

Unterlegplatten für kleinere Drehmeißel

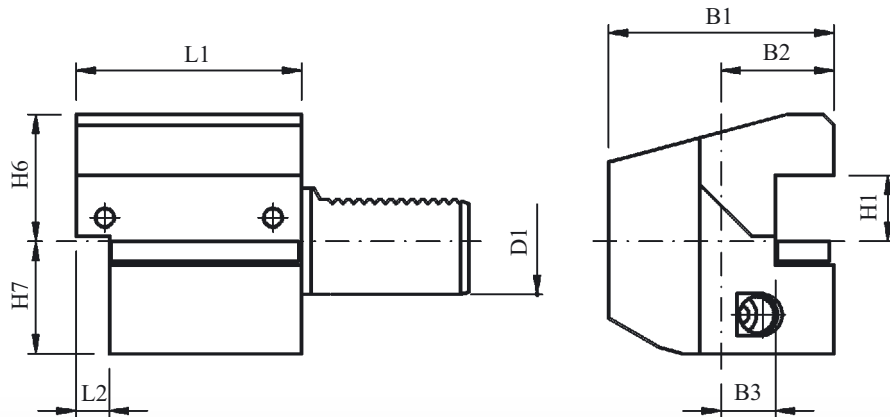
Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.330.220	4	48	14
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25



Vierkant-Längsaufnahme Überkopf rechts **Form C3**

Rectangular lengthwise tool holder, overh. right hand DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2	B3 ^{+0,5}	H6	H7	L1	L2	Unterlegplatte Adapter	
16	12	C3-16x12	210.125.150	43	24	13	22	20	44	5	-	
20	16	C3-20x16	211.127.150	52	27	13	30	25	55	7	218.329.220	
20	16	C3-20x16	211.125.150	65	40	26	30	25	50	-	218.330.220	
20	16	C3-20x16	231.125.150	65	40	26	30	25	50	-	218.328.220	*
25	16	C3-25x16	217.125.150	58	33	19	30	25	55	7	218.329.220	
30	20	C3-30x20	212.125.150	70	35	17	38	35	70	10	218.280.220	
40	25	C3-40x25	213.125.150	85	42,5	20,5	48	42,5	85	12,5	218.286.220	
50	32	C3-50x32	214.125.150	100	50	25,5	60	50	100	16	218.290.220	
60	32	C3-60x32	215.125.150	125	62,5	32,5	62,5	62,5	125	16	218.031.220	

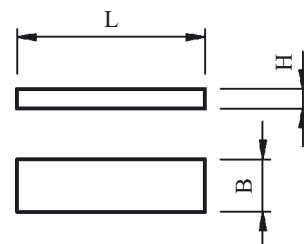
Bemerkungen / Remarks:

* höhenverstellbar / A=1 / height adjustable / A=1

Unterlegplatten für kleinere Drehmeißel

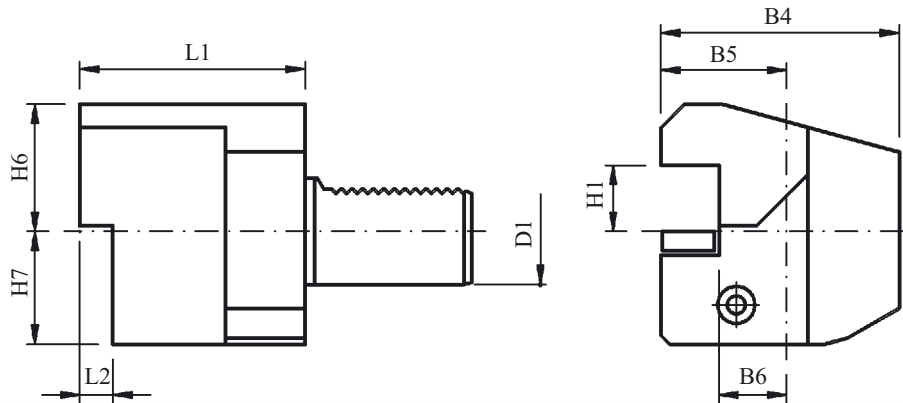
Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.330.220	4	48	14
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25



Vierkant-Längsaufnahme Überkopf links **Form C4**

Rectangular lengthwise tool holder, overh. left hand **DIN ISO 10 889 (DIN 69 880)**

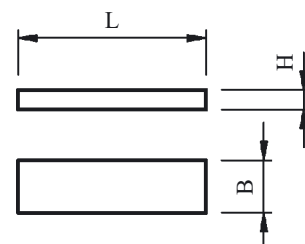


D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B4	B5	B6 ^{+0,5}	H6	H7	L1	L2	Unterlegplatte Adapter
20	16	C4-20x16	221.120.150	65	40	26	30	25	50	-	218.330.220
25	16	C4-25x16	227.120.150	58	33	19	30	25	55	7	218.329.220
30	20	C4-30x20	222.120.150	76	41	23	38	35	70	10	218.280.220
40	25	C4-40x25	223.120.150	90	47,5	25,5	48	42,5	85	12,5	218.286.220
50	32	C4-50x32	224.120.150	105	55	30,5	60	50	100	16	218.290.220
60	32	C4-60x32	225.120.150	125	62,5	32,5	62,5	62,5	125	16	218.031.220

Unterlegplatten für kleinere Drehmeißel

Adapter for smaller lathe chisel

Artikel-Nr. Part No.	H	L	B
218.330.220	4	48	14
218.329.220	4	54	14
218.280.220	4	69	16
218.286.220	5	84	20
218.290.220	7	99	25
218.031.220	7	120	25

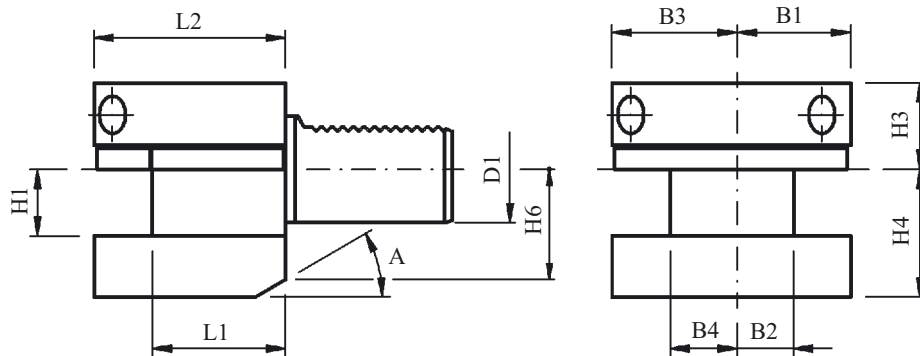


Vierkant-Mehrfachaufnahme

Form D1

Rectangular tool holder with multiple seats

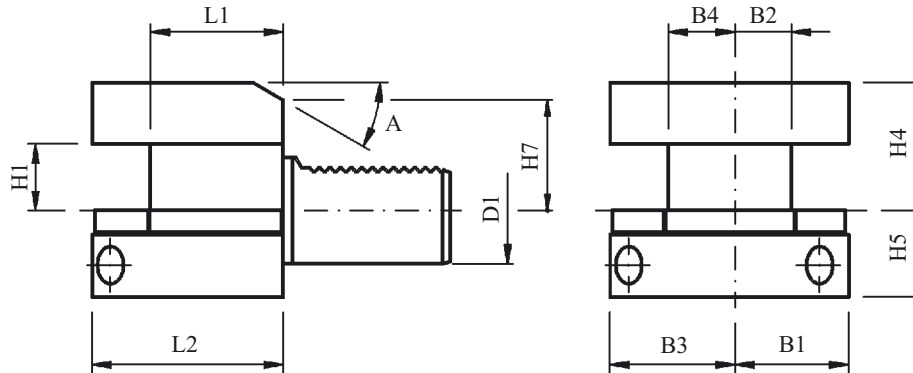
DIN ISO 10 889 (DIN 69 880)



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2 ^{+0,3}	B3	B4 ^{+0,3}	H3	H4	H6	L1 ^{+0,5}	L2	A
25	16	D1-25x16	217.135.150	33	19	33	19	25	30	25	34	48	30
30	20	D1-30x20	212.135.150	35	17	41	23	28	38	30	42	60	25
40	25	D1-40x25	213.135.150	42,5	20,5	47,5	25,5	32,5	48	-	50	72	-
50	32	D1-50x32	214.135.150	50	25,5	55	30,5	35	60	-	60	85	-
60	32	D1-60x32	215.135.150	57,5	32,5	57,5	32,5	42,5	62,5	-	85	110	-

Vierkant-Mehrfachaufnahme Überkopf **Form D2**

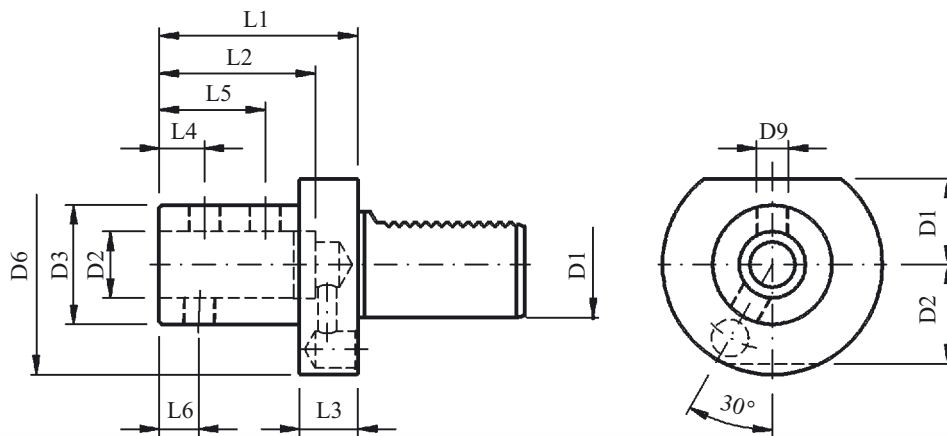
Rectangular tool holder with multiple seats, overhead **DIN ISO 10 889 (DIN 69 880)**



D1	H1 _{-0,1}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	B1	B2 ^{+0,3}	B3	B4 ^{+0,3}	H4	H5	H7	L1 ^{+0,5}	L2	A
25	16	D2-25x16	217.140.150	33	19	33	19	30	25	25	34	48	30
30	20	D2-30x20	212.140.150	35	17	41	23	38	35	28	42	60	25
40	25	D2-40x25	213.140.150	42,5	20,5	47,5	25,5	48	42,5	-	50	72	-
50	32	D2-50x32	214.140.150	50	25,5	55	30,5	60	50	-	60	85	-
60	32	D2-60x32	215.140.150	57,5	32,5	57,5	32,5	62,5	62,5	-	85	110	-

Werkzeughalter für Wendeplattenbohrer mit innerer Kühlmittelzufuhr **Form E1**

Tool holder for carbide indexable drill with int. cool. supply **DIN ISO 10 889 (DIN 69**



D1	D2 ^{H6}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D3	D6	H1	H2	L1 _{-0,2}	L2	L3	L4	L5	L6	Spannschrauben* Screws*	D9
20	16	E1-20x16	221.048.220	36	50	23	23	64	51	18	17	-	17	14413	M10x1x10
20	20	E1-20x20	221.050.150	40	50	23	23	67	54	18	15	35	13	14413	M10x1x10
20	25	E1-20x25	221.052.150	45	50	23	23	71	59	18	17	40	17	218.314.220	M12x1x12
25	16	E1-25x16	227.048.150	36	58	25	25	67	54	18	15	35	17	14413	M10x1x10
25	20	E1-25x20	227.050.150	40	58	25	25	67	54	18	15	35	13	14413	M10x1x10
25	25	E1-25x25	227.052.150	45	58	25	25	71	59	18	17	40	17	218.314.220	M12x1x12
30	16	E1-30x16	222.048.220	36	68	28	30	64	51	22	17	-	17	14413	M10x1x10
30	20	E1-30x20	222.050.150	40	68	28	30	67	54	22	15	35	13	14413	M10x1x10
30	25	E1-30x25	222.052.150	45	68	28	30	71	59	22	17	40	15	218.314.220	M12x1x12
30	32	E1-30x32	222.055.150	52	68	28	30	75	63	22	17	44	16	218.314.220	M12x1x12
30	40	E1-30x40	222.060.220	60	68	28	30	87	73	22	22	50	17	218.405.220	M16x1x13
40	16	E1-40x16	223.048.220	36	83	32,5	-	64	51	22	17	-	17	14413	M10x1x10
40	20	E1-40x20	223.050.150	40	83	32,5	-	67	54	22	15	35	13	14413	M10x1x10
40	25	E1-40x25	223.052.150	45	83	32,5	-	75	59	22	17	40	15	218.314.220	M12x1x12
40	32	E1-40x32	223.055.150	52	83	32,5	-	75	63	22	17	44	16	218.314.220	M12x1x12
40	40	E1-40x40	223.060.150	60	83	32,5	-	90	73	22	22	50	17	14413	M10x1x10
50	20	E1-50x20	224.050.150	40	98	35	-	67	54	30	15	35	13	14413	M10x1x10
50	25	E1-50x25	224.052.150	45	98	35	-	80	59	30	17	40	15	218.314.220	M12x1x12
50	32	E1-50x32	224.055.150	52	98	35	-	80	63	30	17	44	16	218.314.220	M12x1x12
50	40	E1-50x40	224.060.150	60	98	35	-	90	73	30	22	50	17	218.405.220	M16x1x13
50	50	E1-50x50	224.065.150	70	98	35	-	100	83	30	24	60	-	218.405.220	M16x1x13
60	20	E1-60x20	225.050.150	40	123	42,5	-	80	54	30	15	35	13	14413	M10x1x10
60	25	E1-60x25	225.052.150	45	123	42,5	-	80	59	30	17	40	15	218.314.220	M12x1x12
60	32	E1-60x32	225.055.150	52	123	42,5	-	80	63	30	17	44	16	218.314.220	M12x1x12
60	40	E1-60x40	225.060.150	60	123	42,5	-	90	73	30	22	50	17	218.405.220	M16x1x13
60	50	E1-60x50	225.065.150	70	123	42,5	-	100	83	30	24	60	-	218.405.220	M16x1x13

Bemerkungen / Remarks: * Ersatzteil / * Spare part

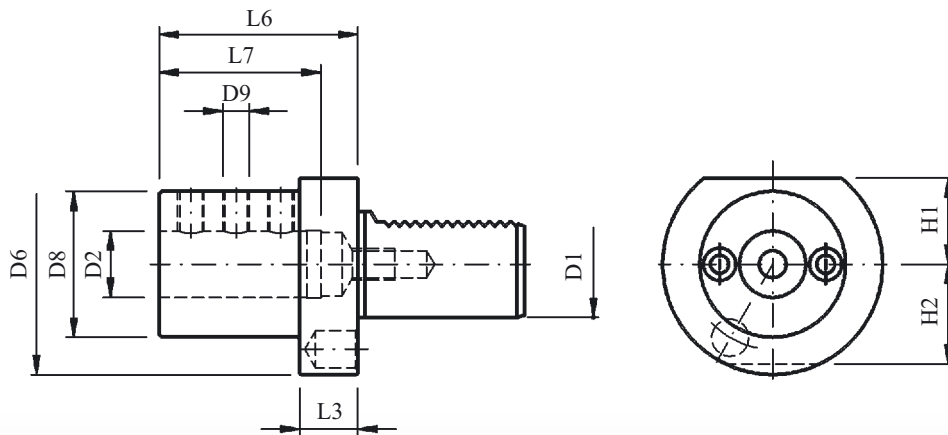
Bohrstangenaufnahme

mit äusserer und innerer Kühlmittelzufuhr

Form E2

Boring bar holder with external and int. cool. supply

DIN ISO 10 889 (DIN 69 880)



D1	D2 ^{H7}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D6	D8	H1	H2	L3	L6	L7	Spannschrauben* Screws*	D9	
16	6	E2-16x6	200.015.149	40	32	18	18	13	44	34	10817	M6x12	
16	8	E2-16x8	200.015.150	40	32	18	18	13	44	34	10817	M6x12	
16	10	E2-16x10	200.015.151	40	32	18	18	13	44	34	10817	M6x12	
16	12	E2-16x12	200.015.152	40	40	18	18	13	44	34	10823	M8x12	
16	16	E2-16x16	200.015.153	40	40	18	18	13	44	34	10823	M8x12	
20	8	E2-20x8	201.010.150	50	40	23	23	18	50	41	10818	M6x16	
20	10	E2-20x10	201.010.151	50	40	23	23	18	50	41	10824	M8x16	
20	12	E2-20x12	201.010.152	50	40	23	23	18	50	41	10824	M8x16	
20	16	E2-20x16	201.010.153	50	40	23	23	18	50	41	10823	M8x12	
20	20	E2-20x20	201.010.154	50	50	23	23	18	50	41	10823	M8x12	
20	25	E2-20x25	201.010.155	50	50	23	23	18	60	51	10822	M8x10	
20	16	E2-20x16	231.010.163	50	-	-	-	-	40	27	10757	M6x20	**
25	8	E2-25x8	217.015.150	58	40	25	25	18	50	41	10820	M6x25	
25	10	E2-25x10	217.015.151	58	40	25	25	18	50	41	10820	M6x25	
25	12	E2-25x12	217.015.152	58	40	25	25	18	50	41	10824	M8x16	
25	16	E2-25x16	217.015.153	58	40	25	25	18	50	41	10824	M8x16	
25	20	E2-25x20	217.015.154	58	58	25	25	18	50	41	10824	M8x16	
25	25	E2-25x25	217.015.155	58	58	25	25	18	60	51	10824	M8x16	
30	8	E2-30x8	212.015.150	68	55	28	30	22	60	51	10820	M6x25	
30	10	E2-30x10	212.015.151	68	55	28	30	22	60	51	10820	M6x25	
30	12	E2-30x12	212.015.152	68	55	28	30	22	60	51	10825	M8x20	
30	16	E2-30x16	212.015.153	68	55	28	30	22	60	51	10825	M8x20	
30	20	E2-30x20	212.015.154	68	55	28	30	22	60	51	10825	M8x20	
30	25	E2-30x25	212.015.155	68	55	28	30	22	60	51	10824	M8x16	
30	30	E2-30x30	212.015.156	68	68	28	30	22	75	61	10824	M8x16	
30	32	E2-30x32	212.015.157	68	68	28	30	22	75	61	10824	M8x16	

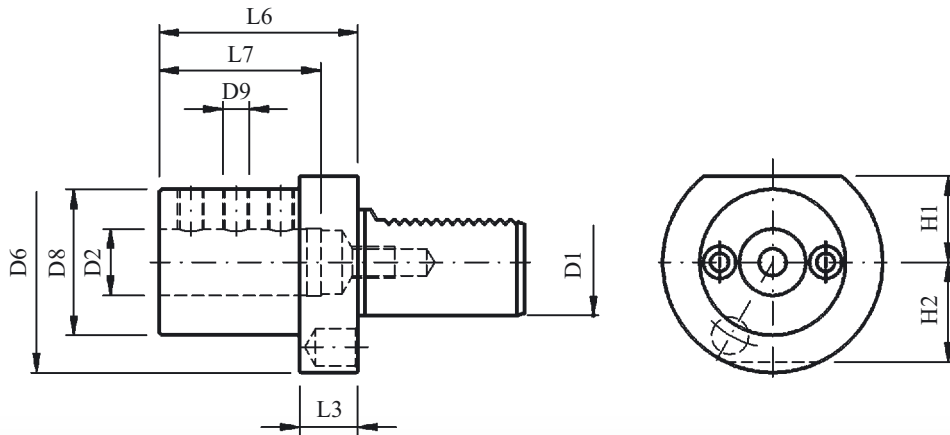
Bemerkungen / Remarks: * Ersatzteil ** höhen- und seitenverstellbar / * Spare part ** height and side adjustable

Bohrstangenaufnahme

mit äusserer und innerer Kühlmittelzufuhr

Form E2

Boring bar holder with external and int. coolant supply DIN ISO 10 889 (DIN 69 880)



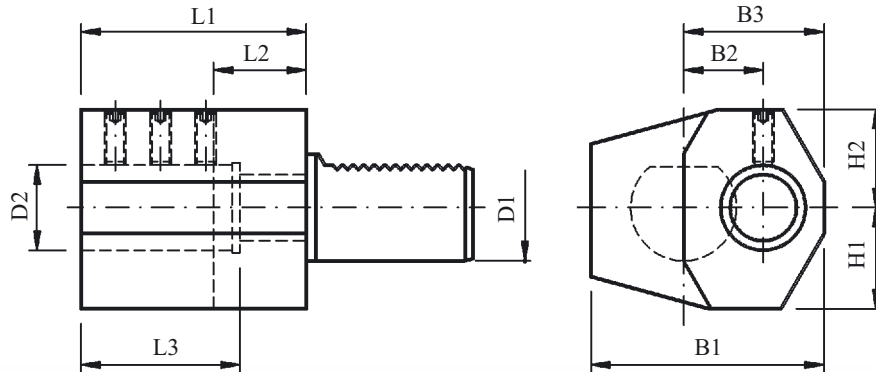
D1	D2 ^{H7}	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D6	D8	H1	H2	L3	L6	L7	Spannschrauben* Screws*	D9
40	8	E2-40x8	213.015.150	83	55	32,5	-	22	75	61	10826	M8x25
40	10	E2-40x10	213.015.151	83	55	32,5	-	22	75	61	10826	M8x25
40	12	E2-40x12	213.015.152	83	55	32,5	-	22	75	61	10826	M8x25
40	16	E2-40x16	213.015.153	83	55	32,5	-	22	75	61	10835	M10x25
40	20	E2-40x20	213.015.154	83	55	32,5	-	22	75	61	10834	M10x20
40	25	E2-40x25	213.015.155	83	55	32,5	-	22	75	61	10834	M10x20
40	30	E2-40x30	213.015.156	83	83	32,5	-	22	75	61	10834	M10x20
40	32	E2-40x32	213.015.157	83	83	32,5	-	22	75	61	10834	M10x20
40	40	E2-40x40	213.015.158	83	83	32,5	-	20	90	76	10774	M10x16
50	12	E2-50x12	214.015.152	98	68	35	-	30	90	76	10827	M8x30
50	16	E2-50x16	214.015.153	98	68	35	-	30	90	76	10777	M10x30
50	20	E2-50x20	214.015.154	98	68	35	-	30	90	76	10783	M12x25
50	25	E2-50x25	214.015.155	98	68	35	-	30	90	76	10783	M12x25
50	30	E2-50x30	214.015.156	98	68	35	-	30	90	76	10782	M12x20
50	32	E2-50x32	214.015.157	98	68	35	-	30	90	76	10782	M12x20
50	40	E2-50x40	214.015.158	98	98	35	-	30	90	76	10781	M12x16
50	50	E2-50x50	214.015.159	98	98	35	-	30	100	86	10780	M12x12
60	16	E2-60x16	215.015.153	123	68	42,5	-	30	90	76	10777	M10x30
60	20	E2-60x20	215.015.154	123	68	42,5	-	30	90	76	10783	M12x25
60	25	E2-60x25	215.015.155	123	68	42,5	-	30	90	76	10783	M12x25
60	30	E2-60x30	215.015.156	123	68	42,5	-	30	90	76	10782	M12x20
60	32	E2-60x32	215.015.157	123	68	42,5	-	30	90	76	10782	M12x20
60	40	E2-60x40	215.015.158	123	98	42,5	-	30	90	76	10782	M12x20
60	50	E2-60x50	215.015.159	123	98	42,5	-	30	100	86	10781	M12x16

Bemerkungen / Remarks: * Ersatzteil / * Spare part

Bohrstangenaufnahme *rechts, axial versetzt*

Boring bar holder, right hand, offset

DIN ISO 10 889 (DIN 69 880)



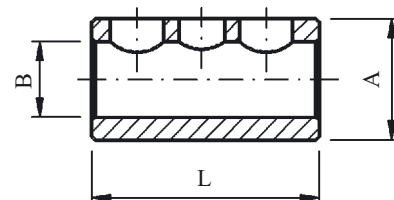
D1	D2 ^{H7}	Artikel-Nr. Part No.		B1	B2	B3	H1	H2	L1	L2	L3
30	20	7.030.084		88	30	53	37	38	71	35	45
30	25	7.030.085		88	30	53	37	38	71	35	45
30	32	7.030.086		88	30	53	37	38	85	35	60
40	32	320170	*	77,5	25	47,5	32	38	60	25	50

Bemerkungen / Remarks: * Darstellung stimmt mit Werkzeug nicht überein / * Drawing not correspondant with tool

Reduzierbuchsen

Bushing

Für Wkz.-Nr. For tool No.	212.015.157 213.015.157	213.015.158 214.015.158 215.015.158	214.015.159 215.015.159	7.030.086
A _{h6}	32	40	50	32
L	60	75	85	60
B ^{H6}	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
6	218.858.220	-	-	218.858.220
8	218.862.220	218.868.220	-	218.862.220
10	218.863.220	218.869.220	218.883.220	218.863.220
12	218.864.220	218.870.220	218.884.220	218.864.220
16	218.865.220	218.871.220	218.885.220	218.865.220
20	218.866.220	218.872.220	218.886.220	218.866.220
25	218.867.220	218.873.220	218.887.220	218.867.220
32	-	218.874.220	218.888.220	-
40	-	-	218.877.220	-



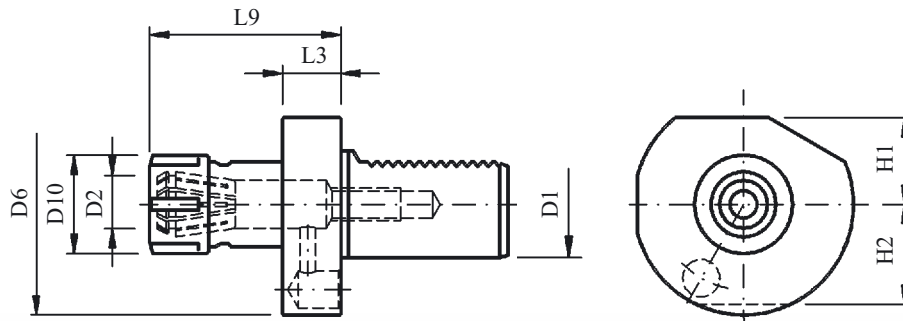
Spannzangenaufnahme

für Spannzangen nach DIN 6388 Ortlieb

Form E3

Collet chuck

DIN ISO 10 889 (DIN 69 880)



D1	D2	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D6	D10 max.	H1	H2	L3	L9 max.	Spannzangen collets	Rohrverschr. Coolant tubes
20	2-16	E3-20x16	221.010.150	50	43	23	23	18	57	NG 16	218.468.220
20	2-20	E3-20x20	221.020.150	50	50	23	23	18	62	NG 20	218.468.220
25	2-16	E3-25x16	227.005.150	58	43	25	25	18	57	NG 16	-
30	2-16	E3-30x16	222.005.150	68	43	28	30	22	57	NG 16	218.460.220
30	2-25	E3-30x25	222.010.150	68	60	28	30	22	75	NG 25	218.460.220
40	2-25	E3-40x25	223.005.150	83	60	32,5	-	22	75	NG 25	218.460.220
40	4-32	E3-40x32	223.010.150	83	72	32,5	-	22	90	NG 32	218.460.220
50	2-25	E3-50x25	224.005.150	98	60	35	-	30	75	NG 25	218.460.220
50	4-32	E3-50x32	224.010.150	98	72	35	-	30	90	NG 32	218.460.220
60	4-32	E3-60x32	225.005.150	123	72	42,5	-	30	90	NG 32	218.460.220
60	7,5-40	E3-60x40	225.010.150	123	85	42,5	-	30	100	NG 40	218.460.220

Bemerkungen:

Kühlmittelzufuhr durch Spannzange.
Spannmutter und Dichtringe für Werkzeuge mit innerer
Kühlmittelzufuhr siehe Katalog Zubehör Seite Z3.2 und Z4.1

Remarks:

Coolant supply through collet.
Collet nuts and sealing rings for drills with internal
coolant supply see catalog accessories page Z3.2 and
Z4.1

Für Wkz.-Nr. For tool No.	Spannzange collet	Spannmutter Collet nut	Spannschlüssel Spanner wrenches
NG 16 / 415 E	218.570.____	10084	10005
NG 20 / 4541 E	218.710.____	10088	10006
NG 25 / 462 E	218.530.____	10085	10008
NG 32 / 467 E	218.540.____	10086	10009
NG 40 / 468 E	218.550.____	10087	10010

Bemerkungen:

Bei Bestellung bitte Spanndurchmesser angeben.
Bestellbeispiel: Spannzange NG 40 / 468 E,
Spanndurchmesser 21,0 mm : 218.550.210

Remarks:

Please list clamping diameter when ordering.
Example of an order: Collet NG 40 / 468 E,
clamping diameter 21,0 mm : 218.550.210



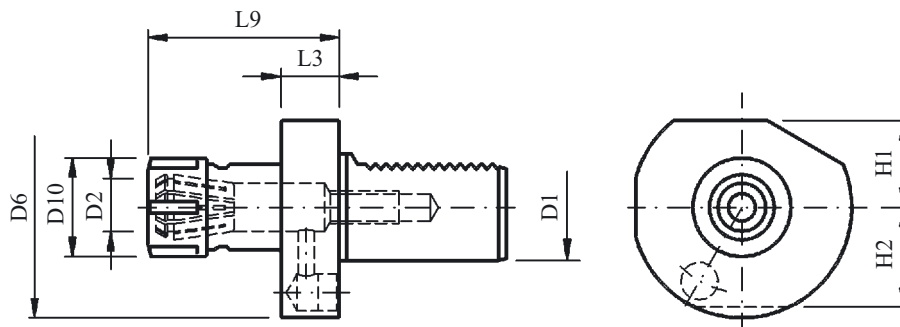
Spannzangenaufnahme

für Spannzangen nach DIN 6345 Rubber-Flex

Form E3

Collet chuck

DIN ISO 10 889 (DIN 69 880)



D1	D2	DIN Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D6	D10 max.	H1	H2	L3	L9 max.	Spannzangen Collets	Rohrverschr. Coolant tubes
20	1,8 - 13	-	221.030.160	50	40	23	23	18	50	J440, J441 J443, J444	218.460.220
30	1,8 - 13	-	222.030.220	68	40	28	30	22	57		218.460.220
40	1,8 - 13	-	223.030.100	83	40	32,5	-	22	77		218.460.220

Bemerkungen / Remarks: Kühlmittelzufuhr durch Spannzange. / Coolant supply through collet

Einh.-Nr. Standard No.	Spannbereich Range (D1)	Spannzange Collet	Spannmutter Collet nut	Spannschlüssel Spanner wrenches
J 444	1,8 - 4,5	218.620.220	10092	10016
J 443	2,8 - 7	218.630.220	10092	10016
J 441	4,5 - 10	218.635.220	10092	10016
J 440	7 - 13	218.640.220	10092	10016

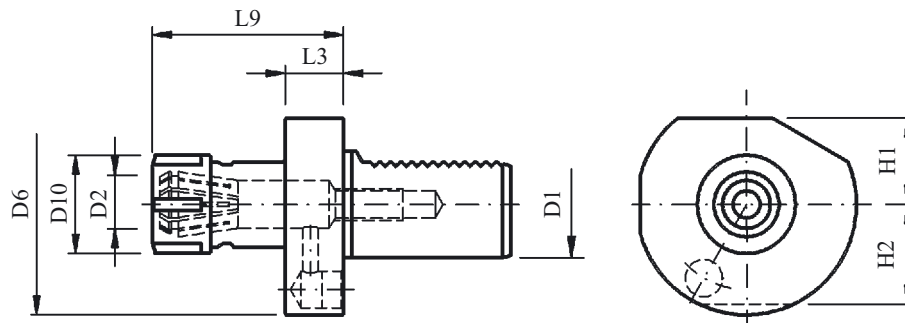


Spannzangenaufnahme für Spannzangen nach DIN 6499 Schaublin

Form E4

Collet chuck

DIN ISO 10 889 (DIN 69 880)



D1	D2	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D6	D10 max.	H1	H2	L3	L9 max.	Spannzangen collets	Rohrverschr. Coolant tubes
16	0,5-10	E4-16x16	220.000.220	40	28	18	18	14	45,5	ER 16	-
16	1-13	E4-16x20	220.000.150	40	34	18	18	14	44	ER 20	-
20	1-16	E4-20x25	221.040.090	50	42	23	23	18	57	ER 25	218.468.220
20	2-20	E4-20x32	221.035.220	50	50	23	23	18	62	ER 32	218.468.220
25	1-16	E4-25x25	227.040.090	58	42	25	25	18	57	ER 25	218.468.220
25	2-20	E4-25x32	227.035.220	58	50	25	25	18	62	ER 32	218.468.220
30	1-16	E4-30x25	222.040.090	68	42	28	30	22	57	ER 25	218.460.220
30	2-20	E4-30x32	222.035.220	68	50	28	30	22	75	ER 32	218.460.220
40	1-16	E4-40x25	223.040.220	83	42	32,5	-	22	63	ER 25	218.460.220
40	2-20	E4-40x32	223.035.220	83	50	32,5	-	22	75	ER 32	218.460.220
40	3-26	E4-40x40	223.045.220	83	63	32,5	-	22	75	ER 40	218.460.220
50	2-20	E4-50x32	224.035.220	94	50	35	-	30	75	ER 32	218.460.220
50	3-26	E4-50x40	224.045.220	94	63	35	-	30	63	ER 40	218.460.220
60	3-26	E4-60x40	225.045.220	123	63	42,5	-	30	75	ER 40	-

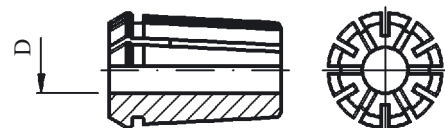
Bemerkungen:

Kühlmittelzufuhr durch Spannzange.
Spannmutter und Dichtringe für Werkzeuge mit innerer
Kühlmittelzufuhr siehe Katalog Zubehör Seite Z3.2 und Z4.1

Remarks:

Coolant supply through collet.
Collet nuts and sealing rings for drills with internal
coolant supply see catalog accessories page Z3.2 and
Z4.1

Nenngröße DIN term	Spannzange collet	Spannmutter Collet nut	Spannschlüssel Spanner wrenches
ER 20 / 428 E	218.615.____	10100	*
ER 25 / 430 E	218.600.____	10095	10011
ER 32 / 470 E	218.690.____	10097	10012
ER 40 / 472 E	218.610.____	10096	10013



Bemerkungen:

Bei Bestellung bitte Spanndurchmesser angeben.
Bestellbeispiel: Spannzange ER 40 / 472 E,
Spanndurchmesser 21,0 mm : 218.610.210
* Spannmutter hat Sechskant für Gabelschlüssel.

Remarks:

Please list clamping diameter when ordering.
Example of an order: Collet ER 40 / 472 E,
clamping diameter 21,0 mm : 218.610.210
* Collet nut has a hexagon for fork wrenches.

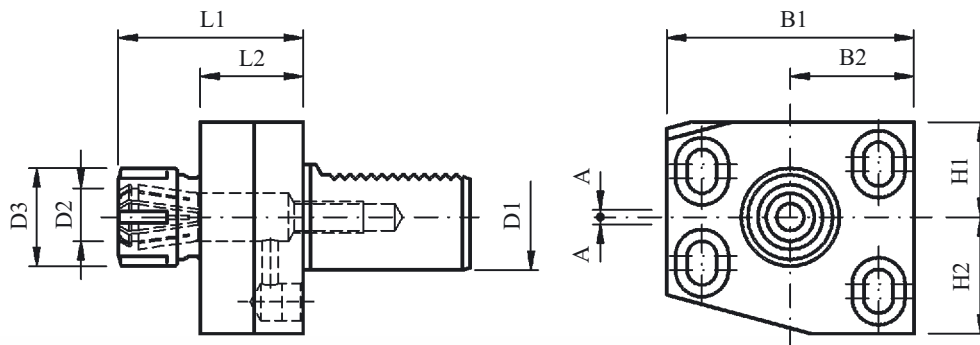
Spannzangenaufnahme

höhenverstellbar, für Spannzangen nach DIN 6499 Schaublin

Form E4

Collet chuck with height adjustment facility

DIN ISO 10 889 (DIN 69 880)



D1	D2	DIN Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D3	H1	H2	B1	B2	L1	L2	A	Spannzangen Collets
20	1-16	-	* 231.110.090	42	24	29	55	30	70	-	2	ER 25
25	1-16	-	* 237.110.090	42	24	29	55	30	70	-	2	ER 25
30	1-16	-	232.110.090	42	27	33	70	35	56	30	2	ER 25
40	2-20	-	* 233.110.090	50	31	47	85	42,5	80	-	2	ER 32

Bemerkungen:

Kühlmittelezufuhr durch Spannzange.
Spannmutter und Dichtringe für Werkzeuge mit
innerer Kühlmittelezufuhr siehe Katalog Zubehör
Seite Z3.2 und Z4.1

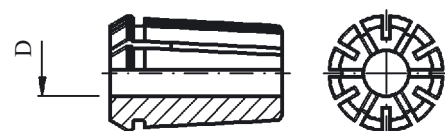
* Darstellung stimmt mit Werkzeug nicht überein.

Remarks:

Coolant supply through collet.
Collet nuts and sealing rings for drills with internal
coolant supply see catalog accessories page Z3.2
and Z4.1

* Drawing not correspondant with tool

Nenngröße DIN term	Spannzange collet	Spannmutter Collet nut	Spannschlüssel Spanner wrenches
ER 25 / 430 E	218.600.____	10095	10011
ER 32 / 470 E	218.690.____	10097	10012



Bemerkungen:

_: Bei Bestellung bitte Spanndurchmesser angeben.
Bestellbeispiel: Spannzange ER 25 / 430 E,
Spanndurchmesser 14,0 mm : 218.600.140

Remarks:

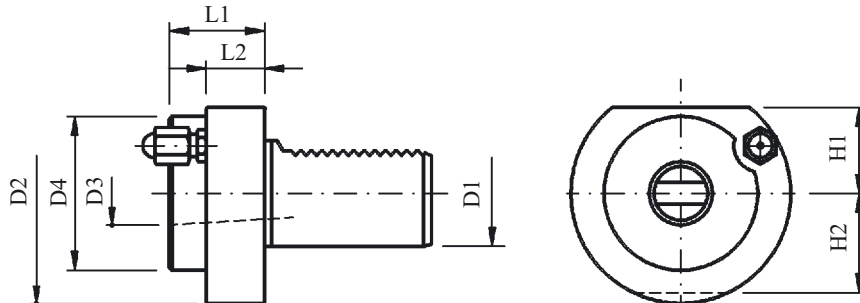
_: Please list clamping diameter when ordering.
Example of an order: Collet ER 25 / 430 E,
clamping diameter 14,0 mm : 218.600.140

Morsekegelaufnahme

Form F1

Morse taper holder

DIN ISO 10 889 (DIN 69 880)



D1	(D3) MK-DK	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D2	D4	H1	H2	L1	L2	Rohrverschr. Coolant tubes
20	1	F20-MK-DK1	201.125.150	50	-	23	23	23	-	218.825.220
20	2	F20-MK-DK2	201.130.220	50	-	23	23	87	-	218.468.220
25	1	F25-MK-DK1	207.125.220	58	-	25	25	23	-	-
25	2	F25-MK-DK2	207.130.150	58	-	25	25	27	-	-
30	1	F30-MK-DK1	202.125.150	68	-	28	30	27	-	218.825.220
30	2	F30-MK-DK2	202.130.150	68	-	28	30	27	-	218.825.220
30	3	F30-MK-DK3	202.135.220	68	58	28	30	55	40	218.825.220
40	2	F40-MK-DK2	203.130.150	83	55	32,5	-	36	22	218.825.220
40	3	F40-MK-DK3	203.135.150	83	58	32,5	-	36	22	218.825.220
40	4	F40-MK-DK4	203.140.150	83	68	32,5	-	80	22	218.460.220
50	2	F50-MK-DK2	204.130.150	98	55	35	-	36	30	218.825.220
50	3	F50-MK-DK3	204.135.150	98	58	35	-	36	30	218.825.220
50	4	F50-MK-DK4	204.140.150	98	68	35	-	50	30	218.460.220
60	2	F60-MK-DK2	205.130.220	123	55	42,5	-	36	30	218.825.220
60	3	F60-MK-DK3	205.135.150	123	58	42,5	-	36	30	218.825.220
60	4	F60-MK-DK4	205.140.150	123	68	42,5	-	50	30	218.825.220
60	5	F60-MK-DK5	205.145.150	123	98	42,5	-	63	30	218.460.220

Bemerkungen:

Innere Kühlmittelzufuhr für Kühlkanalbohrer nach DIN 228 Form BK (Kühlmittelzufuhr radial im Einstich).

Remarks:

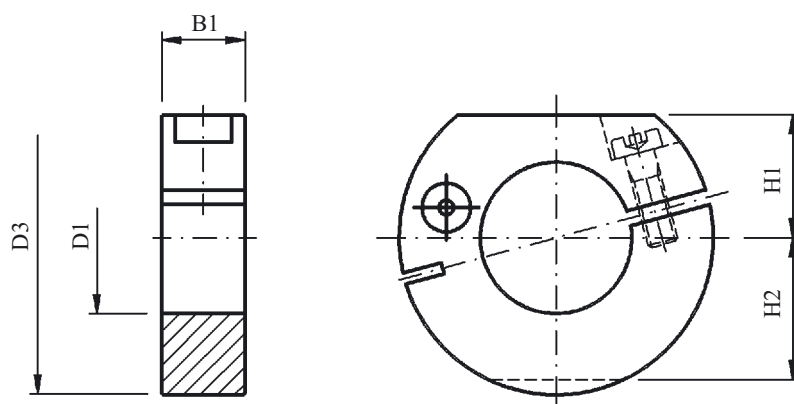
For drills with coolant through the tool to DIN 228 Form BK.

Klemmring

Form Z1

Clamping ring

DIN ISO 10 889 (DIN 69 880)



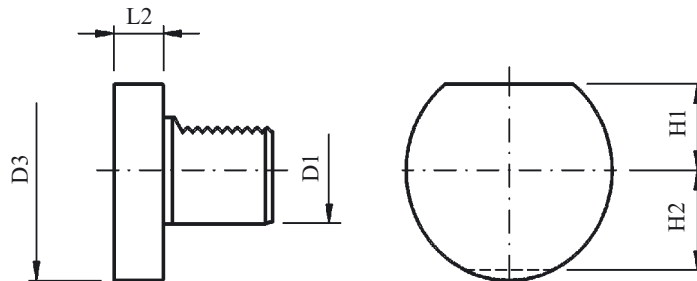
D1	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D3	H1	H2	B1	
20	Z1-20	201.020.150	50	23	23	16	
30	Z1-30	202.020.150	68	28	30	22	
40	Z1-40	203.030.150	83	32,5	-	22	
50	Z1-50	204.040.150	98	35	-	30	
60	Z1-60	205.020.150	123	42,5	-	30	

Schutzstopfen

Form Z2

Blanking plug

DIN ISO 10 889 (DIN 69 880)

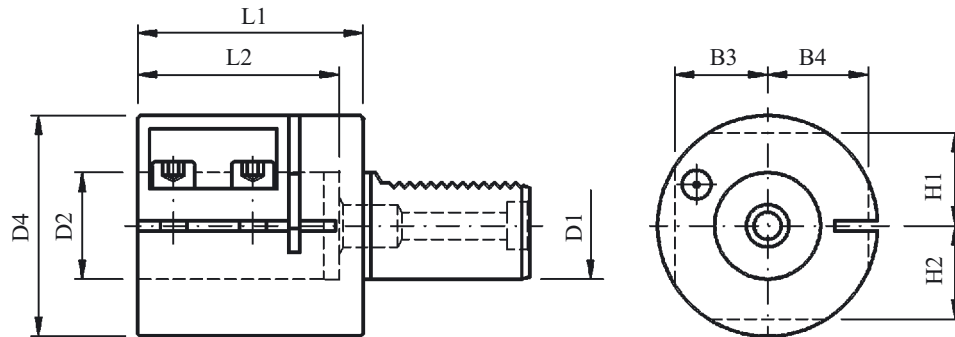


D1	DIN-Bezeichnung DIN-Designation	Artikel-Nr. Part No.	D3	H1	H2	L2	Material material
16	Z2-16	210.500.150	40	18	-	13	Stahl / steel
16	Z2-16	210.500.001	40	18	-	13	Kunststoff / plastic
20	Z2-20	211.500.150	50	23	23	16	Stahl / steel
20	Z2-20	211.500.001	50	23	23	16	Kunststoff / plastic
25	Z2-25	217.500.150	58	25	25	16	Stahl / steel
25	Z2-25	217.500.001	58	25	25	16	Kunststoff / plastic
30	Z2-30	212.500.150	68	28	30	16	Stahl / steel
30	Z2-30	212.500.001	68	28	30	16	Kunststoff / plastic
40	Z2-40	213.500.150	83	32,5	-	20	Stahl / steel
40	Z2-40	213.500.001	83	32,5	-	20	Kunststoff / plastic
50	Z2-50	214.500.150	98	35	-	20	Stahl / steel
50	Z2-50	214.500.001	98	35	-	20	Kunststoff / plastic
60	Z2-60	215.500.150	123	42,5	-	20	Stahl / steel
60	Z2-60	215.500.001	123	42,5	-	20	Kunststoff / plastic

Bohrstangenhalter *geschlitz*

Boring bar holder

DIN ISO 10 889 (DIN 69 880)

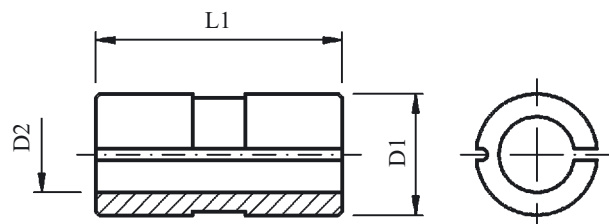


D1	D2 ^{H7}	Artikel-Nr. Part No.	D4	L1	L2	H1	H2	B3	B4
30	32	212.050.090	68	70	61				
40	32	7.040.260	83	85	75				
40	40	213.055.090	83	85	75				
40	50	213.055.159	-	85	75	41	41	41	43

Reduzierbuchsen

Bushing

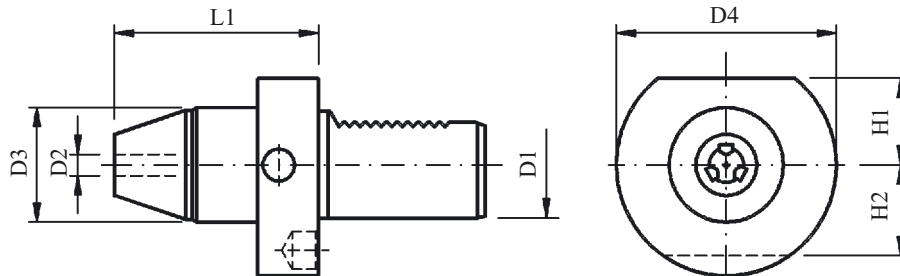
Für Wkz.-Nr. For tool No.	212.050.090	213.055.090
D1 _{h6}	32	40
L1	65	72
D2 ^{H6}	Artikel-Nr. Part No.	Artikel-Nr. Part No.
8	218.380.220	218.446.220
10	218.381.220	218.447.220
12	218.382.220	218.448.220
16	218.383.220	218.449.220
20	218.384.220	218.450.220
25	218.385.220	218.451.220
30	-	218.452.220
32	-	218.453.220



Kurzbohrfutter

Short drilling chuck for reversible operation

DIN ISO 10 889 (DIN 69 880)



D1	D2	Artikel-Nr. Part No.	D3	D4	H1	H2	L1
20	0 - 10	241.020.220	50	50	-	-	38
20	1 - 13	241.021.220	43	50	-	-	89
25	0,5 - 8	247.020.220	36	58	-	-	68
30	1 - 13	242.022.220	43	68	28	31	89
40	1 - 13	243.022.220	43	83	32,5	-	85
40	2,5 - 16	243.027.220	56	83	32,5	-	100
50	2,5 - 16	244.025.220	56	98	35	-	100
60	2,5 - 16	245.020.220	56	123	42,5	-	100

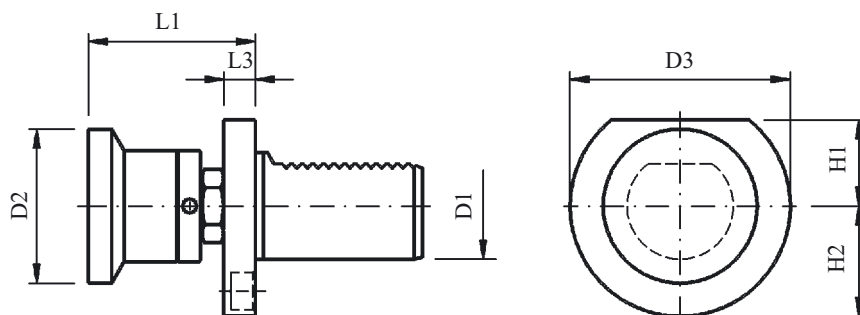
Bemerkungen / Remarks:

Kühlmittelzufuhr durch das Zentrum des Bohrfutters.
Coolant supply through the center of the drilling chuck.

Werkstoffanschlag mitlaufend

Revolving stock stop

DIN ISO 10 889 (DIN 69 880)

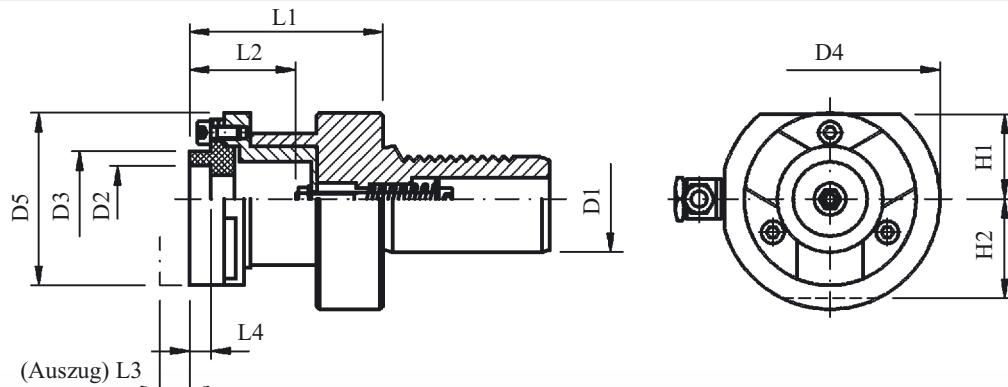


D1	D2	Artikel-Nr. Part No.	D3	H1	H2	L1	L3	
20	45	201.040.160	50	23	23	40 - 70	8	
25	45	207.045.100	58	25	25	40 - 70	15	
30	58	202.040.090	70	28	30	61 - 97	11	
30	26	202.045.100	68	28	30	62 - 95	20	
40	58	203.040.220	83	32,5	-	62 - 95	12	

Schneideisenhalter *ausziehbar*

Extensible die holder

DIN ISO 10 889 (DIN 69 880)



D1	Artikel-Nr. Part No.	D3	D4	D5	H1	H2	L1	L3
20	241.335.220	18	50	38	23	23	35	6
30	242.335.220	40	68	65	28	30	57	12
40	243.335.220	40	83	65	32,5	-	62	12

Einsätze für Schneideisenhalter

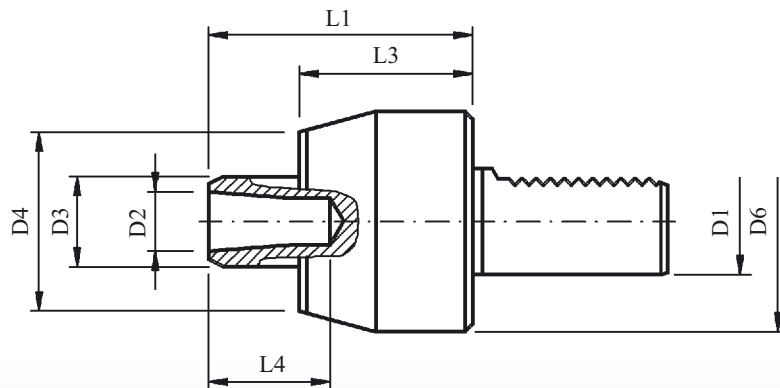
Inserts for extensible holder

Artikel-Nr. Part No.	Für Gewinde nach DIN 13 for threads to DIN 13	Für Feingewinde nach DIN 13 for fine threads to DIN 13	Abmessungen dimensions		max. Gewindelänge max. thread length		
			Aussen-Ø D2	L4	241.335.220 L2	242.335.220 L2	243.335.220 L2
113.406.220	M1 - M2,6	-	16	5	18	-	-
113.408.220	M3 - M4	M3 - M6	20	6	24,2	-	-
113.410.220	M 4,5 - M6	M6	20	7	24,2	-	-
113.412.220	M7 - M9	M7 - M9	25	9	26,2	-	-
113.414.220	M10 - M11	M10 - M11	30	11	27,2	-	-
115.406.220	M1 - M2,6	-	16	5	-	37	38
115.408.220	M3 - M4	M3 - M6	20	5	-	37	38
115.410.220	M4,5 - M6	M6	20	7	-	39	40
115.412.220	M7 - M9	M7 - M9	25	9	-	41	42
115.414.220	M10 - M11	M10 - M11	30	11	-	38	39
115.416.220	-	M12 - M14	38	10	-	42	43
115.418.220	M12 - M14	-	38	14	-	46	47
115.436.220	-	M16 - M20	45	14	-	51	52
115.438.220	M16 - M20	-	45	18	-	55	56
115.440.220	-	M22 - M24	55	16	-	53	54
115.442.220	M22 - M24	-	55	22	-	59	60

Bemerkungen / Remarks: Schneideisen nicht im Lieferumfang enthalten. / Extensible not in product range.

Zentrierspitze gefedert, mitlaufend für Zentriereinsätze

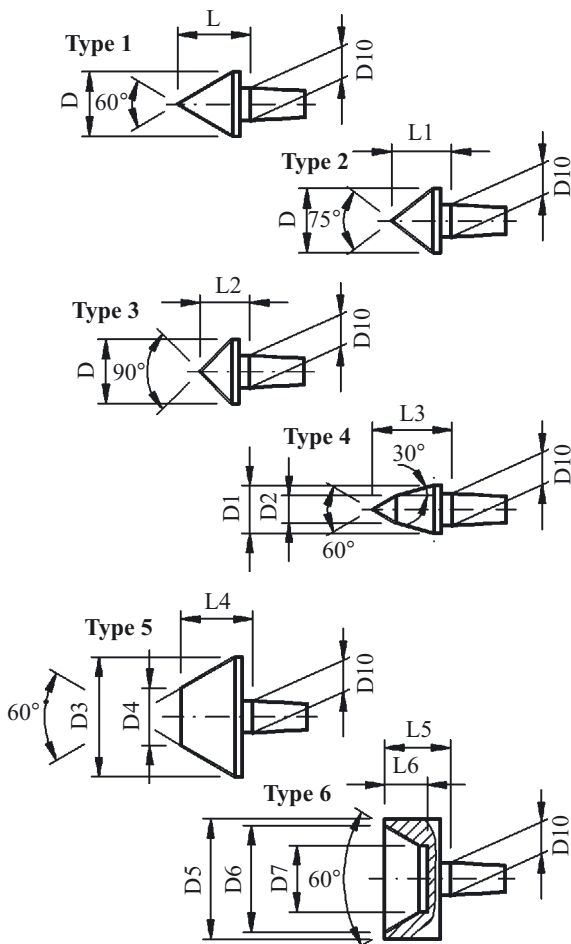
Revolving center point springy with ins. f. center. inserts DIN ISO 10 889 (DIN 69 880)



D1	D2 Kegel 1:10	Artikel-Nr. Part No.	D3	D4	D6	L1	L3	L4	N _{max}
20	7	241.201.220	18	41	50	73	64	20	7000
30	12	242.201.220	22	47	67	88	76	24	6300
40	12	243.201.220	32	56	83	111	96	24	5300

Zentriereinsatz

Centering inserts

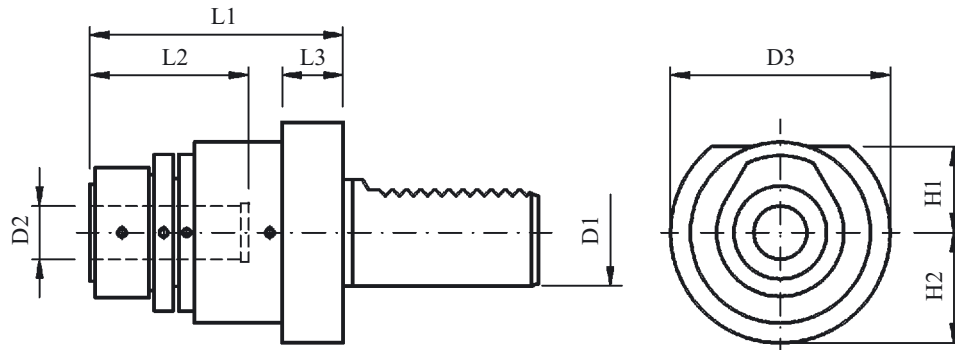


Schaft-Ø	20	30	40
D	16	20	24
D1	14	18	18
D2	6	8	8
D3	25	35	45
D4	10	15	25
D5	25	35	45
D6	20	30	40
D7	10	15	25
D10 Kegel 1:10	7	12	12
L	20	24	27,5
L1	17	19,5	22,5
L2	14,5	16,5	19
L3	25	30	30
L4	21	26	27
L5	18	24	25
L6	11	16	16
Type	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
1	218.916.021	218.916.031	218.916.041
2	218.916.022	218.916.032	218.916.042
3	218.916.023	218.916.033	218.916.043
4	218.916.024	218.916.034	218.916.044
5	218.916.025	218.916.035	218.916.045
6	218.916.026	218.916.036	218.916.046
Austreiber	218.916.020	218.916.030	218.916.040

Pendelhalter mit innerer Kühlmittelzufuhr

Floating holder with internal coolant supply

DIN ISO 10 889 (DIN 69 880)

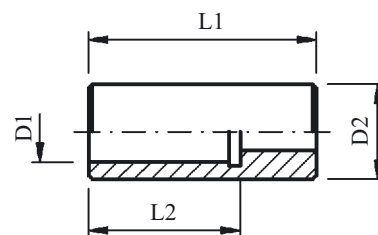


D1	D2 ^{H7}	Artikel-Nr. Part No.	D3	H1	H2	L1	L2	L3
30	25	242.310.220	68	28	30	95	60	23
40	25	243.310.220	83	32,5	-	95	60	23
50	25	244.310.220	98	35	-	95	60	23
60	25	245.310.220	123	42,5	-	95	60	23

Reduzierbuchsen

Bushing

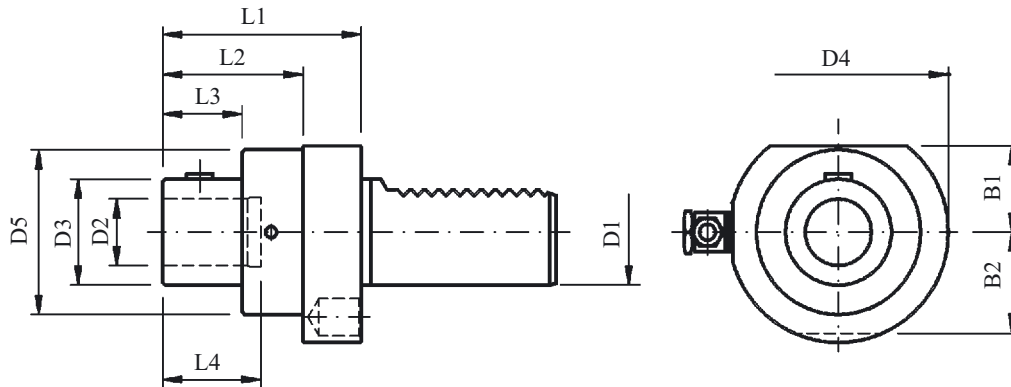
Spann.Ø D1	Artikel-Nr. Part No.	D2	L1	L2
16	218.242.220	25	60	42
20	218.241.220	25	60	40



Pendelhalter mit äusserer Kühlmittelzufuhr

Floating holder with external coolant supply

DIN ISO 10 889 (DIN 69 880)

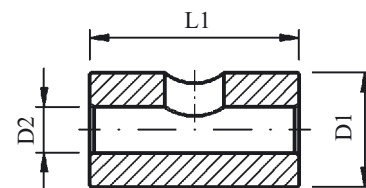


D1	D2 ^{H6}	Artikel-Nr. Part No.	D3	D4	D5	B1	B2	L1	L2	L3	L4
20	18	241.380.220	30	50	50	-	-	60	42,5	16	22

Reduzierbuchsen

Bushing

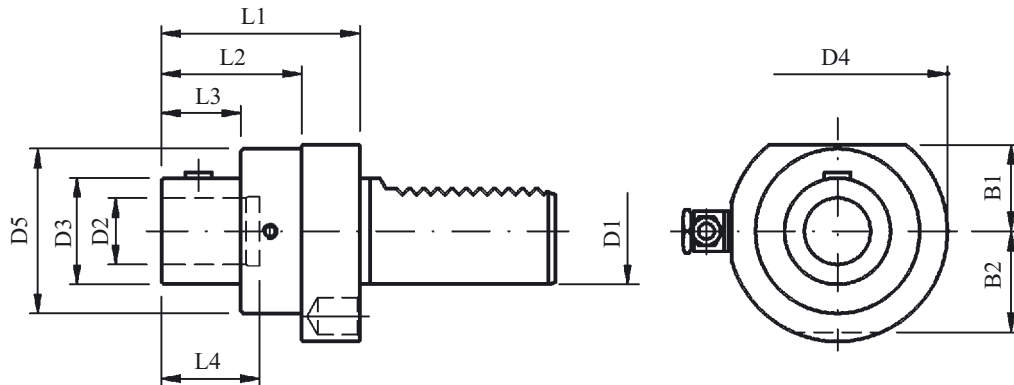
Für Wkz.-Nr. For tool No.	241.380.220		
D1 _{h6}	18		
L1	26		
D2 ^{H6}	Artikel-Nr. Part No.	D2 ^{H6}	Artikel-Nr. Part No.
2,2	-	7,1	218.854.220
2,5	-	8	218.855.220
2,8	-	9	218.856.220
3	-	10	118.220.220
3,5	218.848.220	11	-
4	218.849.220	12	-
4,5	218.850.220	12,5	118.227.220
5	218.851.220	14	118.224.220
5,6	218.852.220	16	118.226.220
6	-	18	-
6,3	218.853.220	20	-



Pendelhalter mit äusserer Kühlmittelzufuhr

Floating holder with external coolant supply

DIN ISO 10 889 (DIN 69 880)

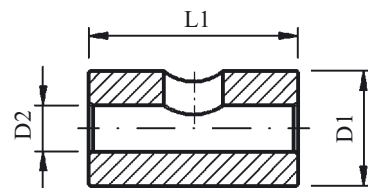


D1	D2 ^{H6}	Artikel-Nr. Part No.	D3	D4	D5	B1	B2	L1	L2	L3	L4
30	25	242.380.220	40	68	62	28	30	75	53	21	32
40	25	243.380.220	40	83	62	32,5	-	75	53	21	32
50	25	244.380.220	40	98	62	35	-	75	53	21	32

Reduzierbuchsen

Bushing

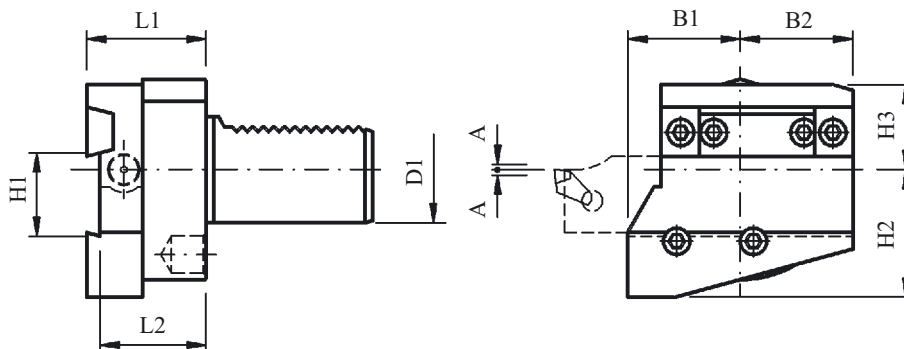
Für Wkz.-Nr. For tool No.	242.380.220	243.380.220	244.380.220
D1 _{h6}		25	
L1		36	
D2 _{h6}	Artikel-Nr. Part No.	D2 ^{H6}	Artikel-Nr. Part No.
2,2	218.246.220	7	118.237.220
2,5	218.471.220	8	118.238.220
2,8	218.247.220	9	118.239.220
3	218.473.220	10	118.240.220
3,5	218.248.220	11	118.241.220
4	118.234.220	12	118.242.220
4,5	218.249.220	12,5	218.476.220
5	118.235.220	14	118.244.220
5,6	218.474.220	16	118.246.220
6	118.236.220	18	118.248.220
6,3	218.475.220	20	118.250.220



Abstechhalter höhenverstellbar

Cut-off tool holder, height adjustable

DIN ISO 10 889 (DIN 69 880)

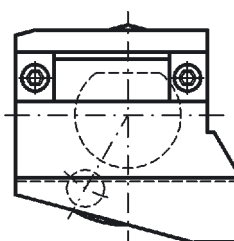


D1	Ausführung Execution	Artikel-Nr. Part No.	B1	B2	H1	H2	H3	L1	L2	A	
20	Form A	211.650.160	28	25	26	30	25	40	35	1,5	
20	Form C	211.655.220	28	25	26	30	25	40	35	1,5	
25	Form A	217.680.220	28	25	26	30	25	40	35	2	*
25	Form C	217.665.220	28	25	26	30	25	40	35	2	*
30	Form A	212.680.220	35	35	26	38	28	49	44	2	*
30	Form B	212.675.220	35	35	26	38	28	49	44	2	*
30	Form C	212.665.220	35	35	26	38	34	49	44	2	*
30	Form D	212.670.220	35	35	26	38	34	49	44	2	*
40	Form A	213.630.220	42,5	42,5	32	48	32	49	44	2	*
40	Form B	213.635.220	42,5	42,5	32	48	32	49	44	2	*
40	Form C	213.640.220	42,5	42,5	32	48	32	49	44	2	*
40	Form D	213.645.220	42,5	42,5	32	48	32	49	44	2	*

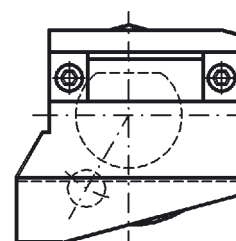
Bemerkungen / Remarks:

- Für Iscar und Coromant Schneidenträger.
For Iscar and Coromant cut-off tool.
- * Für Kühlmittelzufuhr durch den Schneidenträger.
* For coolant supply through the cut-off tool.

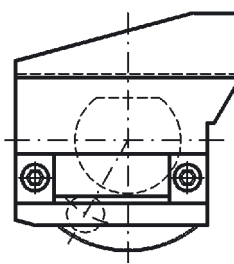
Form A



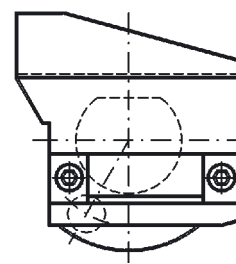
Form B



Form C



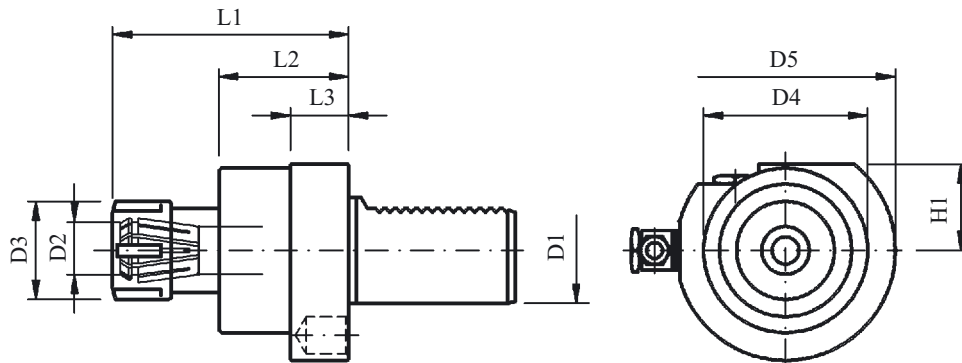
Form D



Gewindebohrhalter mit Längenausgleich auf Zug und Druck für Spannzangen nach DIN 6499

Tap holder with tension and traction compensation

DIN ISO 10 889 (DIN 69 880)



D1	D2	Artikel-Nr. Part No.	D3	D4	D5	H1	L1	L2	L3	Spannzangen collets	Längenausgleich Zug/Druck tension/traction comp.
20	0,5-10	221.390.220	28	45	50	23	65	40	18	ER 16	6 / 1,5
25	0,5-10	227.390.220	28	45	58	25	65	40	18	ER 16	6 / 1,5
30	1-16	222.390.220	42	62	68	28	90	54	22	ER 25	8 / 2
40	1-16	223.390.220	42	62	83	32,5	85	49	22	ER 25	8 / 2
50	1-16	224.390.220	42	62	98	35	85	49	22	ER 25	8 / 2

Bemerkungen:

Mitnehmer für Gewindebohrer siehe Katalog Zubehör für Werkzeughalter Seite Z10.1

Remarks:

Drivers for tap see catalog accessories for tool holder page Z10.1

Nenngröße DIN term	Spannzange Collet	Spannmutter Collet nut	Spannschlüssel Spanner wrenches
ER 16 / 426 E	218.605.____	10099	13573
ER 25 / 430 E	218.600.____	10095	10011

Bemerkungen:

Bei Bestellung bitte Spanndurchmesser angeben.
 Bestellbeispiel: Spannzange ER 16 / 426 E,
 Spanndurchmesser 10,0 mm : 218.605.100

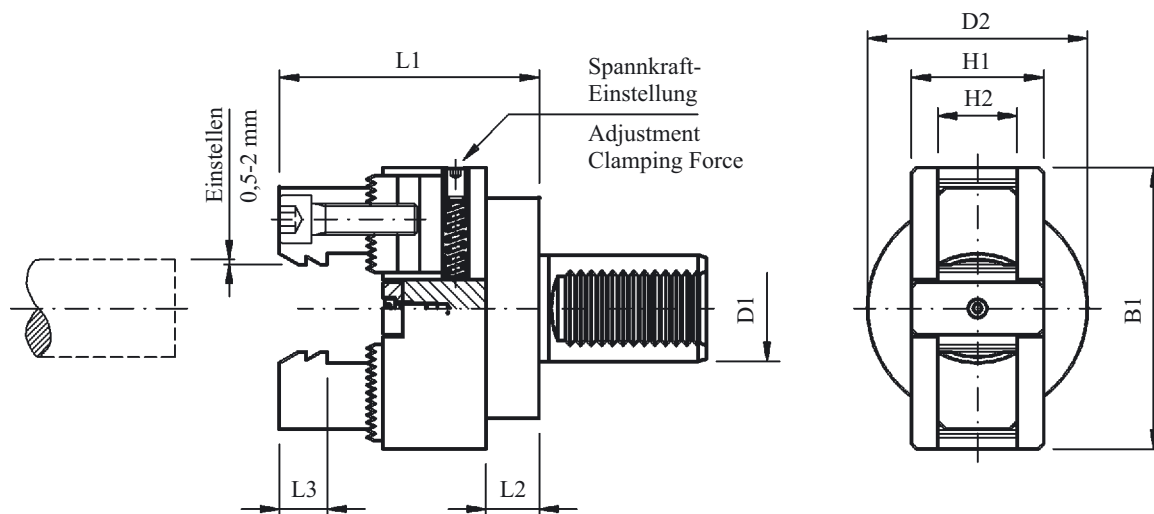
Remarks:

Please list clamping diameter when ordering.
 Example of an order: Collet ER 16 / 426 E,
 clamping diameter 10,0 mm : 218.605.100

Greiferfutter

Bar puller

DIN ISO 10 889 (DIN 69 880)



D1	Artikel-Nr. Part No.		Stangen-Ø Raw material Ø	Einstellbare Spannkraft Adjustm. clamping force	L1	L2	L3	B1	D2	H1	H2
20	241.200.220	*	4 - 68	20 - 120	89,5	16	18	106	50	50	30
25	247.200.220	*	4 - 68	20 - 120	90	16,5	18	106	58	50	30
30	242.200.220	*	4 - 68	20 - 120	90	16,5	18	106	68	50	30
40	243.200.220	*	4 - 68	20 - 120	98	16,5	18	106	83	50	30
50	244.200.220	*	4 - 68	20 - 120	116	42,5	18	106	98	50	30

Bemerkungen / Remarks:

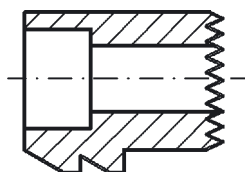
* geliefert mit 1 Satz Backen für Stangen Ø 15 - 68

* scope of delivery 1 set jaw for raw material Ø 15 - 68

Satz Backen für Greiferfutter

Jaw for bar puller

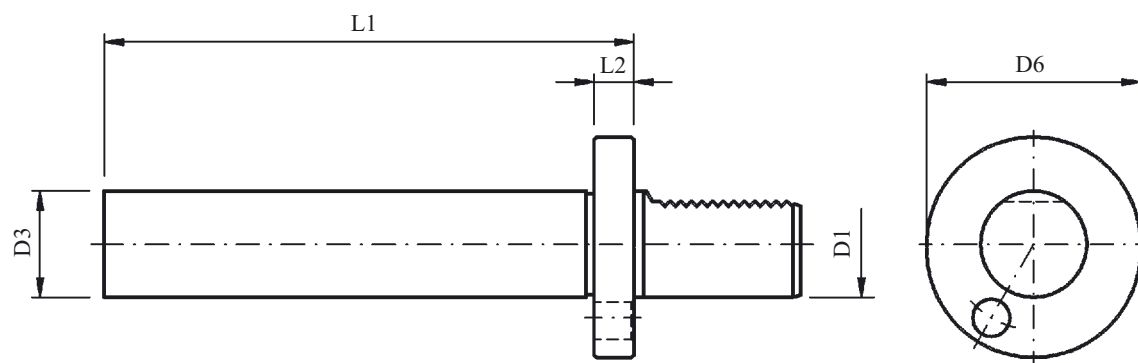
Artikel-Nr. Part No.	Stangen-Ø Raw material Ø
218.985.220	4 - 20
218.986.220	15 - 68



Prüfdorn

Test mandrel

DIN ISO 10 889 (DIN 69 880)



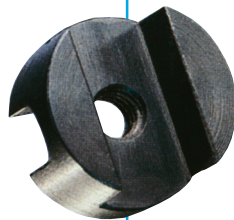
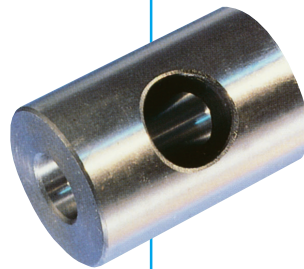
D1	D3 h5	Artikel-Nr. Part No.	D6	L1	L2	
16	30	240.204.220	40	120	15	
20	40	241.204.220	50	150	15	
25	40	247.204.220	58	150	15	
30	40	242.204.220	68	200	15	
40	40	243.204.220	83	200	15	
50	40	244.204.220	98	200	15	
60	40	245.204.220	123	200	15	



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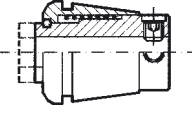
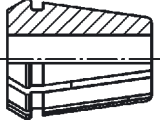
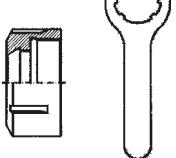
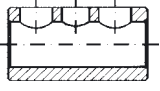
Zubehör für Werkzeughalter

Accessories For Tool Holder



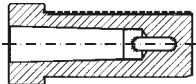
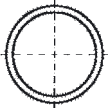
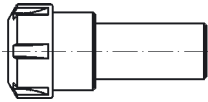
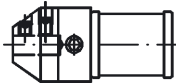
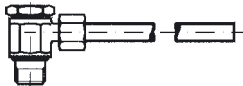
Zubehör für Werkzeughalter *Inhaltsverzeichnis*

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Übersicht / Overview		Gruppe Group	Beschreibung / Description		
	Gewindebohrzangen Tapping Collets	Z1.1	Gewindebohrzangen mit Längsausgleich auf Zug		
		Z1.2	Gewindebohrzangen ohne Längsausgleich		
	Spannzangen Collets	Z2.1	Spannzangen DIN 6499 Schaublin		
		Z2.1	Spannzangen DIN 6388 Ortlieb		
		Z2.1	Spannzangen DIN 6345 Rubber-Flex		
		Z2.2	Spannzangen DIN 6499 Schaublin abgedichtet		
	Spannmuttern und Spannschlüssel Collet Nuts And Spanner Wrenches	Z3.1	Spannmuttern mit Innengewinde		
		Z3.2	Spannmuttern mit Innengewinde für IK-Werkzeuge		
		Z3.3	Spannmuttern mit Aussengewinde		
		Z3.4	Spannmuttern mit Aussengewinde für IK-Werkzeuge		
	Dichtringe Sealing Rings	Z4.1	Dichtring für Spannmuttern mit Innen- und Aussengewinde DIN6499		
	Reduzierbuchsen Bushings	Z5.1	Type A Type B Type C Type D Type E Type F	Type G Type H Type I Type K Type L Type M	Type N Type P Type R Type S

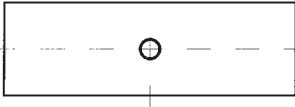
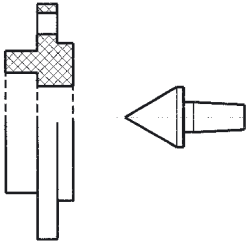
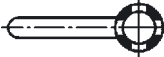
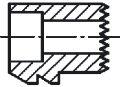
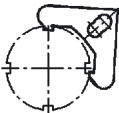
Zubehör für Werkzeughalter *Inhaltsverzeichnis*

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Übersicht / Overview		Gruppe Group	Beschreibung / Description
		Z 6.1	Reduzierhülsen mit Morsekegel Tapper Sleeves
		Z 7.1	O-Ringe Sealing Rings
		Z 8.1	Spannzangenfutter mit Zylinderschaft Collet Chucks
		Z 8.2	Nutstosshalter mit Zylinderschaft Shaping Tool
		Z 9.1	Rohrverschraubungen
		Z 9.2	Kugeldüsen / Verschlussstücke / Rohr (M6)
		Z 9.3	Ringdüsen / Verlängerung
		Z 10.1	Mitnehmer für Gewindebohrer Drivers

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Übersicht / Overview	Gruppe Group	Beschreibung / Description
 Unterlegplatten Adapter	Z 11.1	Unterlegplatten für kleinere Drehmeissel
 Einsätze Inserts	Z 12.1	Einsätze für Schneideisenhalter
	Z 12.2	Zentriereinsätze für Zentrierspitze
 Fräszubehör Milling Accessories	Z 14.1	Fräseranzugschraube
	Z 14.1	Schlüssel für Fräseranzugschraube
	Z 14.1	Mitnehmerringe für Aufsteckfräserdorne
 Backen Jaws	Z 14.1	Satz Backen für Greiferfutter
 Spannschlüssel Spanner Wrenches	Z 15.1	Spannschlüssel für Werkzeughalterspindel
 Doppel-Hakenschlüssel Double Hook Wrench	Z 15.2	Doppel-Hakenschlüssel für Werkzeughalterspindel

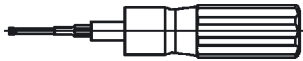
Zubehör für Werkzeughalter *Inhaltsverzeichnis*

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Übersicht / Overview

**Gruppe
Group**

Beschreibung / Description



Z 16.1

Drehmomentschraubendreher
Capto

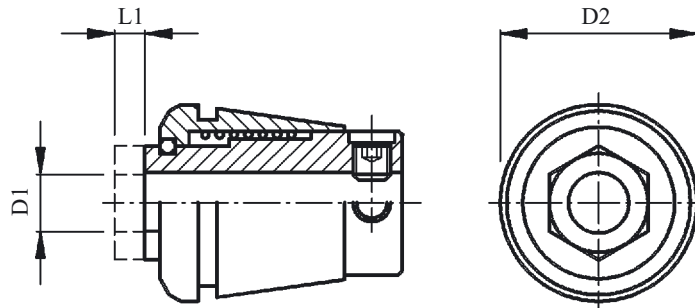
Zubehör für Werkzeughalter *Inhaltsverzeichnis*

Accessories for Tool Holder · Index

Übersicht / Overview	Gruppe Group	Beschreibung / Description
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Gewindebohrzangen mit Längenausgleich auf Zug (PCM)

Tapping Collets with Tension Compensation (PCM)

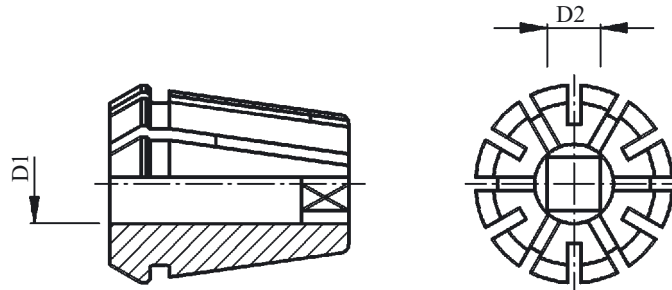


Einh.Nr. Standard No.	426 E	428 E	430 E	470 E	472 E	474 E
Nenngröße DIN term	ER 16	ER 20	ER 25	ER 32	ER 40	ER 50
D2	17	21	26	33	41	51
L1	7	7	7	9	13	20

D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
2,5	218.786.025	218.785.025	-	-	-	-
2,8	218.786.028	218.785.028	218.784.028	-	-	-
3,5	218.786.035	218.785.035	218.784.035	-	-	-
4	218.786.040	218.785.040	218.784.040	-	-	-
4,5	218.786.045	218.785.045	218.784.045	218.783.045	-	-
6	-	218.785.060	218.784.060	218.783.060	218.770.220	-
6,3	-	218.785.063	218.784.063	218.783.063	218.771.220	-
7	-	218.785.070	218.784.070	218.783.070	218.772.220	-
8	-	-	218.784.080	218.783.080	218.773.220	-
9	-	-	218.784.090	218.783.090	218.774.220	218.808.090
10	-	-	218.784.100	218.783.100	218.775.220	-
11	-	-	-	218.783.110	218.776.220	-
11,2	-	-	-	-	218.777.220	-
12	-	-	-	218.783.120	218.778.220	218.808.120
12,5	-	-	-	-	218.779.220	-
14	-	-	-	-	218.780.220	218.808.140
16	-	-	-	-	218.781.220	-
18	-	-	-	-	-	218.808.180

Gewindebohrzangen ohne Längenausgleich

Tapping Collets without Axial Compensation



Type	428 E	430 E	470 E	472 E	474 E	für Gewindebohrer nach for Tappers acc.
Einh.-Nr. Standard No.	ER 20-GB	ER 25-GB	ER 32-GB	ER 40-GB	ER 50-GB	

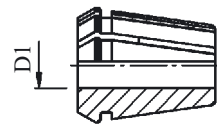
D1 Ø	D2 □	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	DIN 371	DIN 374	DIN 376
4,5	3,4	218.795.045	218.796.045	218.797.045	-		M4	M6	M6
5,5	4,3	218.795.055	218.796.055	218.797.055	-		-	M7	M7
6	4,9	218.795.060	218.796.060	218.797.060	-		M4,5 M5 M6	M8	M8
7	5,5	218.795.070	218.796.070	218.797.070	218.798.070		M7	M9, M10	M9, M10
8	6,2	218.795.080	218.796.080	218.797.080	218.798.080		M8	M11	M11
9	7	218.795.090	218.796.090	218.797.090	218.798.090		M9	M12	M12
10	8	218.795.100	218.796.100	218.797.100	218.798.100		M10	-	-
11	9	-	218.796.110	218.797.110	218.798.110		-	M14	M14
12	9	-	218.796.120	218.797.120	218.798.120		M12	M16	M16
14	11	-	-	218.797.140	218.798.140		-	M18	M18
16	12	-	-	218.797.160	218.798.160		-	M20	M20
18	14,5	-	-	-	218.798.180		-	M22, M24	M22, M24
20	16	-	-	-	218.798.200		-	M27	M27

Spannzangen

Collets

DIN 6499-B doppelseitig geschlitzt (Schaublin)

ER Nenngröße DIN term	Einh.-Nr. Standard No.	Spann- bereich Range	D1*	steigend um mm increasing by	Artikel-Nr. Part No.
ER 8	4004 E	0,5-5	1; ...; 5	0,5	218.585. __
ER 11	4008 E	0,5-7	1; ...; 7	0,5	218.595. __
ER 16	426 E	0,5-10	1; 2; ...; 10	0,5 1	218.605. __
ER 20	428 E	1 - 13	1; 1,5; 2; ...; 13	0,5 1	218.615. __
ER 25	430 E	1 - 16	1; 1,5; 2; ...; 16	0,5 1	218.600. __
ER 32	470 E	2 - 20	2; 2,5; 3; ...; 20	0,5 1	218.690. __
ER 40	472 E	3 - 26	3; 3,5; 4; ...; 26	0,5 1	218.610. __
ER 50	474 E	10 - 34	12; ...; 34	2	218.807. __



Bemerkung

__ Bei Bestellung bitte Spanndurchmesser angeben.

Bestellbeispiel: Spannzange 470 E, Spanndurchmesser = 16,0 mm : **218.690.160**

* größter Spanndurchmesser der jeweiligen Spannzange.

Remarks

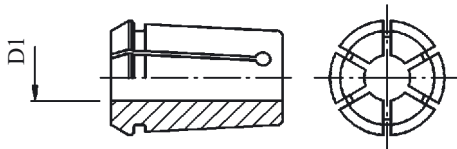
__ Please list clamping diameter when ordering.

Example of an order: Collet 470 E, clamping diameter = 16,0 mm : **218.690.160**

* maximum capacity of the corresponding collet.

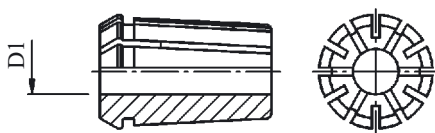
Spannzangen

Collets



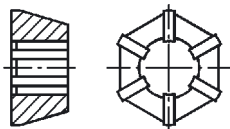
DIN 6388-A einfach geschlitzt (Ortlieb)

Nenngröße DIN term	Einh.-Nr. Standard No.	Spann- bereich Range	D1*	steigend um mm increasing by	Artikel-Nr. Part No.
NG 8	401 E	1 - 8	1,5; ...; 8	0,5	218.505. __
NG 10	404 E	1 - 10	1,5; ...; 10	0,5	218.515. __
NG 12	407 E	1 - 12	1,5; ...; 12	0,5	218.525. __



DIN 6388-B doppelseitig geschlitzt (Ortlieb)

Nenngröße DIN term	Einh.-Nr. Standard No.	Spann- bereich Range	D1*	steigend um mm increasing by	Artikel-Nr. Part No.
NG 16	415 E	1,5-16	2; ...; 16	0,5	218.570. __
NG 20	4541 E	1,5-20	2; ...; 20	0,5	218.710. __
NG 25	462 E	1,5-25	2; ...; 25	0,5	218.530. __
NG 32	467 E	3,5-32	4; ...; 32	0,5	218.540. __
NG 40	468 E	7,5-40	8; ...; 40	0,5	218.550. __



DIN 6345 Rubber Flex

Einh.-Nr. Standard No.	Spannbereich Range	Artikel-Nr. Part No.
J 444	1,8 - 4,5	218.620.220
J 443	2,8 - 7	218.630.220
J 441	4,5 - 10	218.635.220
J 440	7 - 13	218.640.220

Bemerkung

— Bei Bestellung bitte Spanndurchmesser angeben.

Bestellbeispiel: Spannzange 468 E, Spanndurchmesser = 20,5 mm : **218.550.205**

* größter Spanndurchmesser der jeweiligen Spannzange.

Remarks

— Please list clamping diameter when ordering.

Example of an order: Collet 468 E, clamping diameter = 20,5 mm : **218.550.205**

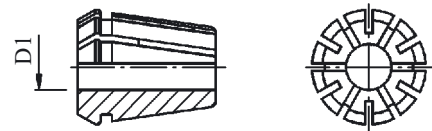
* maximum capacity of the corresponding collet.

Spannzangen *abgedichtet*

Collets with Sealing

DIN 6499 doppelseitig geschlitzt

ER Nenngröße DIN term	Einh.-Nr. Standard No.	Spann- bereich Range	steigend um mm increasing by	Artikel-Nr. Part No.
ER 11	4008 E	3 - 7*	0,5	218.800.____
ER 16	426 E	3 - 10*	1,0	218.801.____
ER 20	428 E	3 - 13*	1,0	218.802.____
ER 25	430 E	3 - 16*	1,0	218.803.____
ER 32	470 E	3 - 20*	1,0	218.804.____
ER 40	472 E	4 - 26*	2,0	218.805.____
ER 50	474 E	12 - 34*	2,0	218.806.____



Bemerkungen

__ Bei Bestellung bitte Spanndurchmesser angeben.

Bestellbeispiel: Spannzange 472 E, Spanndurchmesser = 12,7 mm : **218.805.127**

* **Achtung!** Spanndurchmesser muss Werkzeugdurchmesser sein.

Remarks

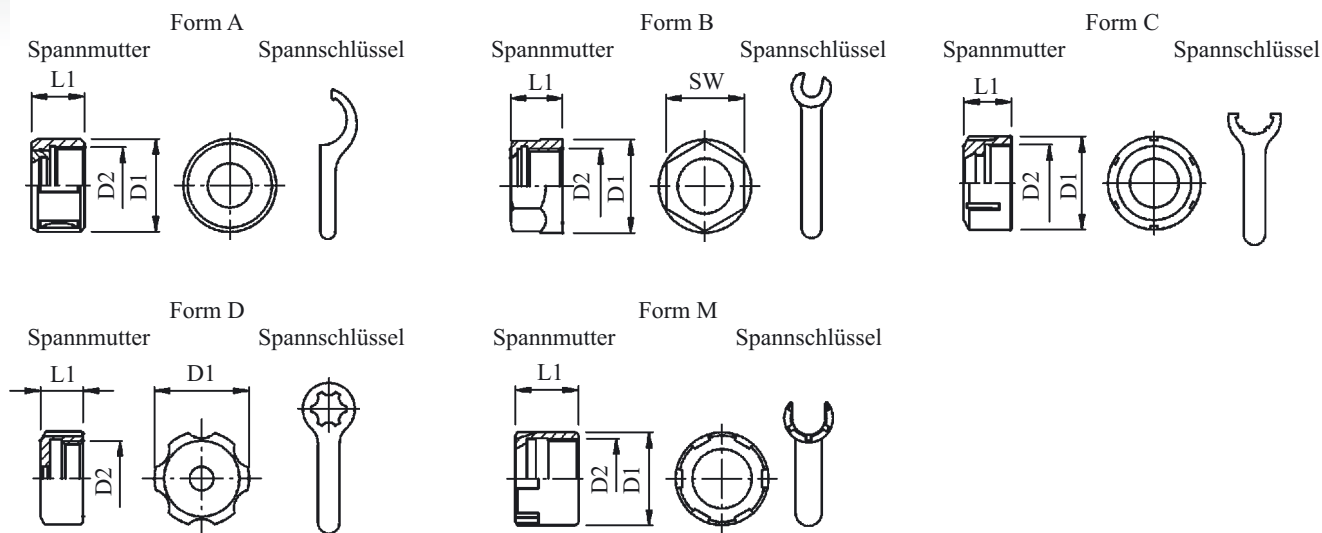
__ Please list clamping diameter when ordering.

Example of an order: Collet 472 E, clamping diameter = 12,7 mm : **218.805.127**

* **Important!** clamping and tooling diameter must be identical.

Spannmutter mit Innengewinde und Spannschlüssel

Collet Nuts with Internal Thread, Spanner Wrenches

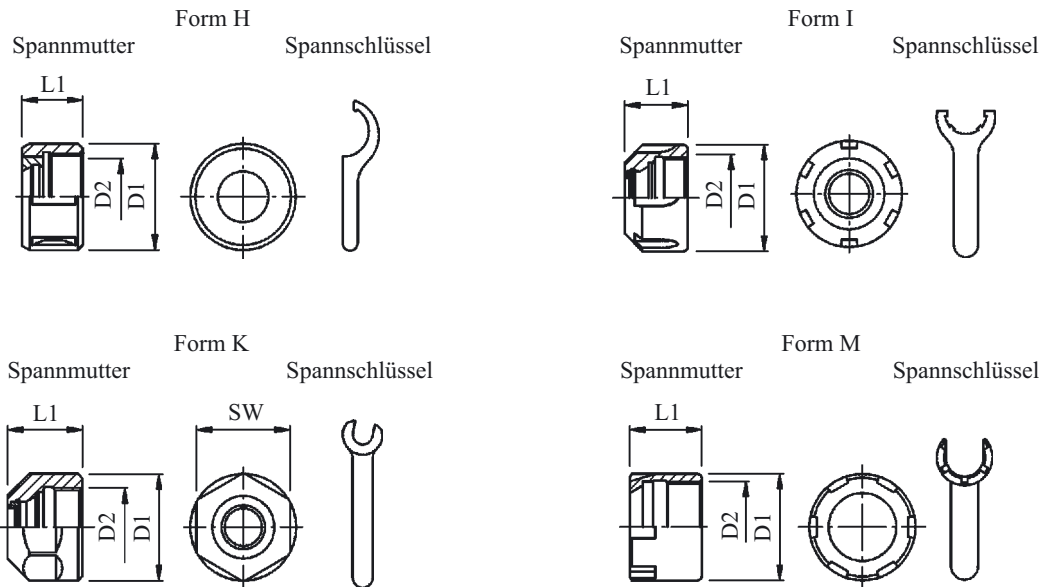


für Spannzangen for Collets			Spannmuttern Collet Nuts				Spannschlüssel Spanner Wrenches		
nach according	Nenngröße DIN term	Einh.-Nr. Standard No.	Bezeichnung Term	D1	L1	D2	Artikel-Nr. Part No.	Form	Artikel-Nr. Part No.
DIN 6388	NG 8	401 E	* OZ 1820	26	19	M20x1,5	10089	A	10002
DIN 6388	NG 10	404 E	* OZ 1821	30	19	M22x1,5	10090	A	10002
DIN 6388	NG 12	407 E	* OZ 1822	35	20	M27x1,5	10091	A	10004
DIN 6388	NG 16	415 E	OZ 1823	43	24	M33x1,5	10084	A	10005
DIN 6388	NG 20	454 E	OZ 1824	50	28	M42x2,0	10088	A	10006
DIN 6388	NG 25	462 E	OZ 1825	60	30	M48x2,0	10085	A	10008
DIN 6388	NG 32	467 E	OZ 1826	72	33,50	M60x2,5	10086	A	10009
DIN 6388	NG 40	468 E	OZ 1827	85	37	M68x2,5	10087	A	10010
DIN 6499	ER 11	424 E	ER 11 6 kt.	19	12	M14x0,75	10098	B	22294 (SW 17)
DIN 6499	ER 16	426 E	ER 16 6 kt.	28	18	M22x1,5	10099	B	13573 (SW 25)
DIN 6499	ER 16	426 E	ER 16/M	22	18	M19x1	10117	M	10022
DIN 6499	ER 20	428 E	ER 20/M	28	19,5	M24x1	12155	M	13797
DIN 6499	ER 20	428 E	ER 20 6 kt.	34	19,5	M25x1,5	10100	B	14793 (SW 30)
DIN 6499	ER 25	430 E	ER 25/M	35	21	M30x1	13116	M	13115
DIN 6499	ER 25	430 E	ER 25	42	21	M32x1,5	10095	C	10011
DIN 6499	ER 32	470 E	ER 32	50	23	M40x1,5	10097	C	10012
DIN 6499	ER 32	470 E	ER 32/GM	50	23	M40x1,5	14389	C	10012
DIN 6499	ER 40	472 E	ER 40	63	28	M50x1,5	10096	C	10013
DIN 6499	ER 40	472 E	ER 40/KM	63	26	M50x1,5	14426	C	10013
DIN 6499	ER 50	474 E	ER 50/GM	78	38,1	M64x2,0	12638	C	12740
DIN 6345 Rubber Flex		J444, J443 J441, J440	OZ 3159	40	18	M32x1,5	10092	D	10016

Bemerkungen / Remarks * einteilige Spannmutter / one part collet nut

Spannmutter (dichtend) mit Innengewinde und Spannschlüssel für Werkzeuge mit innerer Kühlmittelzufuhr

Collet Nuts (Sealing) with Internal Thread for Tools with Internal Coolant Supply



für Spannzangen for Collets			Spannmuttern Collet Nuts						Spannschlüssel Spanner Wrenches
nach according	Nenngröße DIN term	Einh.-Nr. Standard No.	Bezeichnung Term	Artikel-Nr. Part No.	L1	D1	D2	Form	Artikel-Nr. Part No.
DIN 6388	NG 16	415 E	OZ 1823	10084 ¹⁾	24	43	M33x1,5	H	10005
DIN 6388	NG 20	454 E	OZ 1824	10088 ¹⁾	28	50	M42x2,0	H	10006
DIN 6388	NG 25	462 E	OZ 1825	10085 ¹⁾	30	60	M48x2,0	H	10008
DIN 6388	NG 32	467 E	OZ 1826	10086 ¹⁾	33,5	72	M60x2,5	H	10009
DIN 6388	NG 40	468 E	OZ 1827	10087 ¹⁾	37	85	M68x2,5	H	10010
DIN 6499	ER 25	430 E	ER 25/C	15808	25	42	M32x1,5	I	10011
DIN 6499	ER 32	470 E	ER 32/C	15810	27,5	50	M40x1,5	I	10012
DIN 6499	ER 40	472 E	ER 40/C	15811	30,5	63	M50x1,5	I	10013
DIN 6499	ER 50	474 E	ER 50/GM	12638 ¹⁾	38,1	78	M64x2,0	I	12740
DIN 6499	ER 11	424 E	ER 11/M	219.090. ²⁾	14,6	16	M13x0,75	M	14357
DIN 6499	ER 16	426 E	ER 16/M	15666	24	22	M19x1,0	M	10022
DIN 6499	ER 16	426 E	ER 16/C 6 kt.	15805	22,5	28	M22x1,5	K	13573 (SW 25)
DIN 6499	ER 20	428 E	ER 20/C 6 kt.	15807	24	34	M25x1,5	K	14793 (SW 30)
DIN 6499	ER 20	428 E	ER 20/M	15667	24	28	M24x1,0	M	13797
DIN 6499	ER 25	430 E	ER 25/M	15668	27	35	M30x1,0	M	13115

Bemerkungen / Remarks

¹⁾ Abgedichtete Spannzange verwenden / To use collets with Sealing

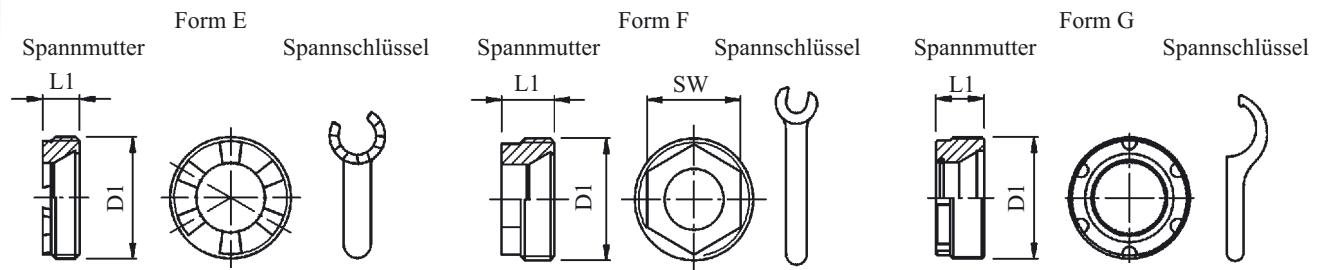
²⁾ Dichtung in Spannmutter integriert / Sealing rings for Collet Nuts integrated

Bei Bestellung bitte Durchmesser angeben: Durchmesser 3 mm = 219.090.030 (siehe Z4.1)

Please list clamping diameter when ordering: diameter 3 mm = 219.090.030 (see Z4.1)

Spannmutter mit Aussengewinde und Spannschlüssel

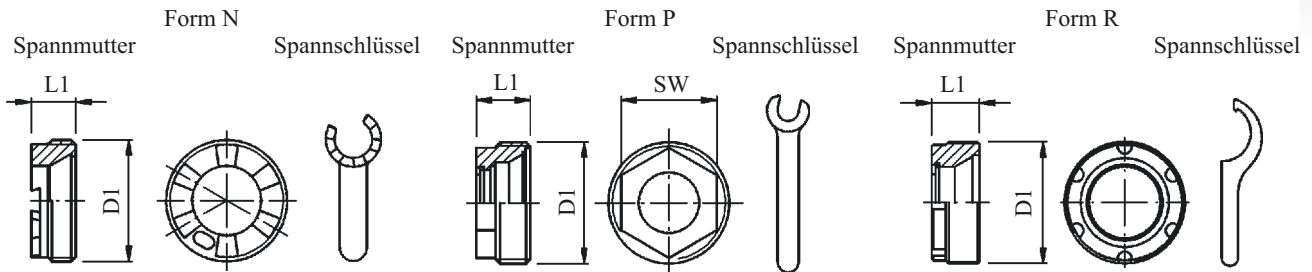
Collet Nuts with External Thread, Spanner Wrenches



für Spannzangen for Collets			Spannmuttern Collet Nuts					Spannschlüssel Spanner Wrenches
nach according	Nenngröße DIN term	Einh.-Nr. Standard No.	Bezeichnung Term	Artikel-Nr. Part No.	L1	D1	Form	Artikel-Nr. Part No.
DIN 6499	ER 11	424 E	ER 11 AX	15386	7,5	M18x1,0	E	15879
DIN 6499	ER 16	426 E	ER 16 AX	15387	7,6	M24x1,0	E	15497
DIN 6499	ER 20	428 E	ER 20 AX	15388	8,5	M28x1,5	E	15830
DIN 6499	ER 25	430 E	ER 25 AX	15389	8,8	M32x1,5	E	15562
DIN 6499	ER 32	470 E	ER 32 AX	15674	9,8	M40x1,5	E	15672
DIN 6499	ER 40	472 E	ER 40 AX	16138	11,7	M50x1,5	E	16140
DIN 6499	ER 11	424 E	ER 11 A 6 kt	12590	8	M18x1,0	F	16143 (SW 13)
DIN 6499	ER 16	426 E	ER 16 A 6 kt	15806	11	M24x1,0	F	16144 (SW 19)
DIN 6499	ER 20	428 E	ER 20 A 6 kt	12364	12,5	M28x1,5	F	14701 (SW 22)
DIN 6499	ER 25	430 E	ER 25 A 6 kt	15809	14	M32x1,5	F	15920 (SW 24)
DIN 6499	ER 32	470 E	ER 32 A 6 kt	12946	17,7	M40x1,5	F	15687 (SW 32)
DIN 6499	ER 40	472 E	ER 40 AC	15812	20	M50x1,5	G	10006
DIN 6499	ER 50	474 E	ER 50 AK	15309	27	M68x1,5	G	10008

Spannmutter (dichtend) mit Aussengewinde und Spannschlüssel für Werkzeuge mit innerer Kühlmittelzufuhr

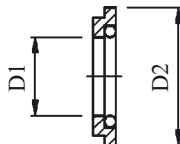
Collet Nuts (Sealing) with External Thread for Tools with Internal Coolant Supply



für Spannzangen for Collets			Spannmuttern Collet Nuts					Spannschlüssel Spanner Wrenches
nach according	Nenngröße DIN term	Einh.-Nr. Standard No.	Bezeichnung Term	Artikel-Nr. Part No.	L1	D1	Form	Artikel-Nr. Part No.
DIN 6499	ER 16	426 E	ER 16 AXC	16020	12,5	M24x1	N	15497
DIN 6499	ER 20	428 E	ER 20 AXC	15922	13,5	M28x1,5	N	15830
DIN 6499	ER 25	430 E	ER 25 AXC	15737	13,8	M32x1,5	N	15562
DIN 6499	ER 32	470 E	ER 32 AXC	15626	14,9	M40x1,5	N	15672
DIN 6499	ER 40	472 E	ER 40 AXC	16139	16,6	M50x1,5	N	16140
DIN 6499	ER 16	426 E	ER 16 AC 6 kt.	15806	11	M24x1,0	P	16144 (SW 19)
DIN 6499	ER 20	428 E	ER 20 AC 6 kt.	12364	12,5	M28x1,5	P	14701 (SW 22)
DIN 6499	ER 25	430 E	ER 25 AC 6 kt.	15809	14	M32x1,5	P	15920 (SW 24)
DIN 6499	ER 32	470 E	ER 32 AC 6 kt.	12946	17,7	M40x1,5	P	15687 (SW 32)
DIN 6499	ER 40	472 E	ER 40 AC	15812	20	M50x1,5	R	10006
DIN 6499	ER 50	474 E	ER 50 AC	15309	27	M68x1,5	R	10008

Dichtringe für Spannmuttern mit Innen- oder Aussengewinde

Sealing Rings for Collet Nuts with Internal or External Thread



Spannmutter Collet Nuts				Dichtringe Sealing Rings					
nach according		Größe Size	Artikel-Nr. Part No.	Dichtbereich Range	D1 ²⁾	D2	Bezeichnung Term	Artikel-Nr. Part No.	Artikel-Nr. Satz Part No. set
DIN 6499		ER 11 M M13x0,75	219.090. __	2,5 – 7	2,5 ... 7	-	¹⁾	219.090. __	219.090.000
DIN 6499		ER 16 C 6 kt. M22x1,5	15805	2,5 – 10	2,5 ... 10	13	DS/ER 16	219.091. __	219.091.000
DIN 6499		ER 16 M M19x1,0	15666	2,5 – 10	2,5 ... 10	13	DS/ER 16	219.091. __	219.091.000
DIN 6499		ER 16 AC 6 kt. M24x1,0	15806	2,5 – 10	2,5 ... 10	13	DS/ER 16	219.091. __	219.091.000
DIN 6499		ER 20 C 6 kt. M25x1,5	15807	2,5 – 13	2,5 ... 13	16	DS/ER 20	218.713. __	218.713.000
DIN 6499		ER 20 M M24x1,0	15667	2,5 – 13	2,5 ... 13	16	DS/ER 20	218.713. __	218.713.000
DIN 6499		ER 20 AC 6 kt. M28x1,5	12364	2,5 – 13	2,5 ... 13	16	DS/ER 20	218.713. __	218.713.000
DIN 6499		ER 25 C M32x1,5	15808	2,5 – 16	2,5 ... 16	21	DS/ER 25	219.093. __	219.093.000
DIN 6499		ER 25 M M30x1,0	15668	2,5 – 16	2,5 ... 16	21	DS/ER 25	219.093. __	219.093.000
DIN 6499		ER 25 AC 6 kt. M32x1,5	15809	2,5 – 16	2,5 ... 16	21	DS/ER 25	219.093. __	219.093.000
DIN 6499		ER 25 AXC M32x1,5	15737	2,5 – 16	2,5 ... 16	21	DS/ER 25	219.093. __	219.093.000
DIN 6499		ER 32 C M40x1,5	15810	2,5 – 20	2,5 ... 20	27	DS/ER 32	219.094. __	219.094.000
DIN 6499		ER 32 AC 6 kt. M40x1,5	12946	2,5 – 20	2,5 ... 20	27	DS/ER 32	219.094. __	219.094.000
DIN 6499		ER 32 AXC M40x1,5	15626	2,5 – 20	2,5 ... 20	27	DS/ER 32	219.094. __	219.094.000
DIN 6499		ER 40 C M50x1,5	15811	2,5 – 26	2,5 ... 26	33,5	DS/ER 40	219.095. __	219.095.000
DIN 6499		ER 40 AC M50x1,5	15812	2,5 – 26	2,5 ... 26	33,5	DS/ER 40	219.095. __	219.095.000
DIN 6499		ER 50 AC M65x1,5	18878	3,0 – 31	3; 4; .. 31	39,8	DS/ER 50	219.140. __	219.140.000
DIN 6499		ER 50	Abgedichtete Spannzangen verwenden / to use collets with sealing						

Bemerkungen

Bei Bestellung bitte Durchmesser angeben. Bestellbeispiel: Dichtring DS/ER 25, Durchmesser D1 = 3 mm : **219.093.030**

¹⁾ Für DIN 6388 Abgedichtete Spannzangen (Typ NG) verwenden

²⁾ Dichtbereich z.B.: 2,5; 3; 3,5; 4; 4,5;

Remarks

Please list clamping diameter when ordering. Example of an order: Sealing rings DS/ER 25, diameter D1 = 3 mm : **218.093.030**

¹⁾ For DIN 6388 to use collets (Type NG) with sealing

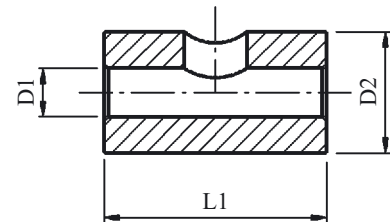
²⁾ Range Example: 2,5; 3; 3,5; 4; 4,5;

Reduzierbuchsen

Bushing

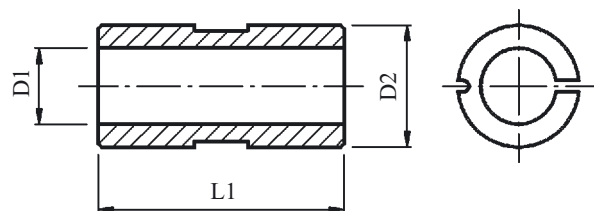
Ausführung A · Type A

D2	18	25	D2	18 h6	25 h6
L1	26	36	L1	26	36
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.
2,2		218.246.220	7	218.854.220	118.237.220
2,5		218.471.220	8	218.855.220	118.238.220
2,8		218.247.220	9	218.856.220	118.239.220
3		218.473.220	10	118.220.220	118.240.220
3,5	218.848.220	218.248.220	11		118.241.220
4	218.849.220	118.234.220	12		118.242.220
4,5	218.850.220	218.249.220	12,5	118.227.220	218.476.220
5	218.851.220	118.235.220	14	118.224.220	118.244.220
5,6	218.852.220	218.474.220	16	118.226.220	118.246.220
6		118.236.220	18		118.248.220
6,3	218.853.220	218.475.220	20		118.250.220



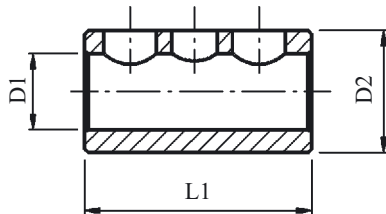
Ausführung B · Type B

D2	32	40
L1	65	72
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.
8	218.380.220	218.446.220
10	218.381.220	218.447.220
12	218.382.220	218.448.220
16	218.383.220	218.449.220
20	218.384.220	218.450.220
25	218.385.220	218.451.220
30		218.452.220
32		218.453.220



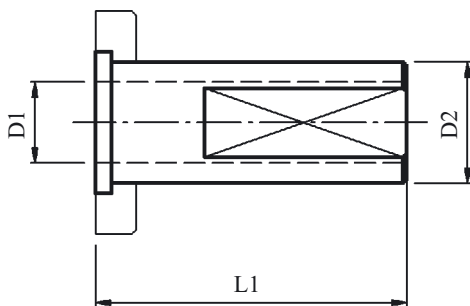
Reduzierbuchsen

Bushing



Ausführung C · Type C

D2	32	40	50	32
L1	60	75	85	60
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
6	218.858.220	-	-	-
8	218.862.220	218.868.220	-	-
10	218.863.220	218.869.220	-	-
12	218.864.220	218.870.220	-	-
16	218.865.220	218.871.220	-	-
20	218.866.220	218.872.220	-	-
25	218.867.220	218.873.220	-	218.882.220
32	-	218.874.220	-	-
40	-	-	-	-



für Verwendung mit Klemmring
DIN 69 880, Form Z1

for Use with Clamping Ring
DIN 69 880, Form Z1

Ausführung D · Type D

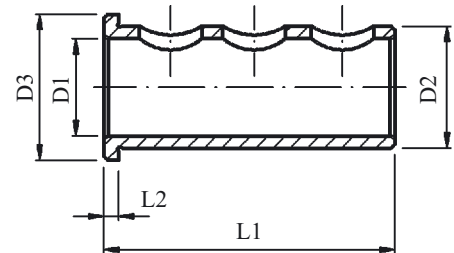
D2	20	30	40	50	60
Klemmring Clamping Ring	201.020.150	202.020.150	203.030.150	204.040.150	205.020.150
L1	55	77	85	106	88
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
6	211.001.220	-	-	-	-
8	211.002.220	-	-	-	-
10	211.003.220	211.010.220	211.022.220	-	-
12	211.004.220	211.011.220	211.023.220	-	-
16	211.005.220	211.013.220	211.025.220	-	-
20	-	211.014.220	211.026.220	211.029.220	-
25	-	211.015.220	211.027.220	211.030.220	211.033.220
32	-	-	211.028.220	211.031.220	211.034.220
40	-	-	-	211.032.220	211.035.220
50	-	-	-	-	211.036.220

Reduzierbuchsen

Bushing

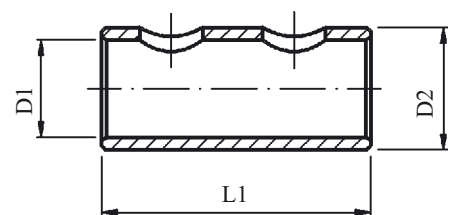
Ausführung E · Type E

D2	16	25	32	50	1 1/4"
D3	20	30	37	59	37
L1	44	60	60	60	60
L2	3	3	3	5,5	3
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
6	-	218.995.220	1012090	-	-
8	-	218.990.220	1012091	-	-
10	7.030.021	218.991.220	1012092	219.070.220	-
12	7.030.020	218.992.220	1012093	219.071.220	-
14	-	-	218.988.220	-	-
16	-	218.993.220	1012094	219.072.220	-
18	-	-	218.989.220	-	-
20	-	218.994.220	1012095	219.073.220	-
25	-	-	1012096	219.074.220	-
32	-	-	-	219.075.220	-
40	-	-	-	219.076.220	-
50	-	-	-	-	-
3/8"	-	-	-	-	218.970.220
1/2"	-	-	-	-	218.971.220
5/8"	-	-	-	-	218.972.220
3/4"	-	-	-	-	218.973.220
1"	-	-	-	-	218.974.220



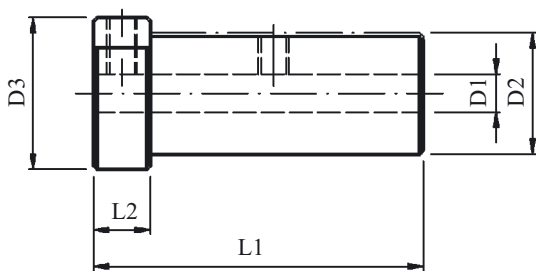
Ausführung F · Type F

D2	16	40	50
L1	36	61	75
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
6	-	-	-
8	-	219.030.220	-
10	7.040.119	219.031.220	219.020.220
12	-	219.032.220	219.021.220
16	-	219.033.220	219.022.220
20	-	219.034.220	219.023.220
25	-	219.035.220	219.024.220
32	-	219.036.220	219.025.220
40	-	-	219.026.220
50	-	-	-



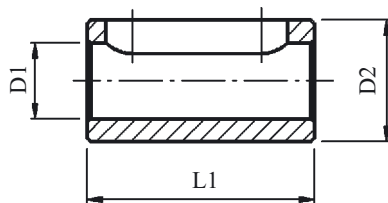
Reduzierbuchsen

Bushing



Ausführung G · Type G

D2	32	32
D3	40	40
L1	87	82
L2	15	10
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.
8	218.945.220	-
10	218.946.220	-
12	218.947.220	-
16	-	218.948.220
20	-	218.949.220
25	-	218.950.220



Ausführung H · Type H

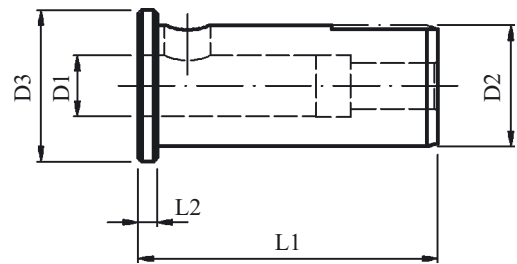
D2	32	40	50
L1			85
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
10	-	-	218.883.220
12	-	-	218.884.220
16	-	-	218.885.220
20	-	-	218.886.220
25	-	-	218.887.220
32	-	-	218.888.220
40	-	-	218.877.220

Reduzierbuchsen

Bushing

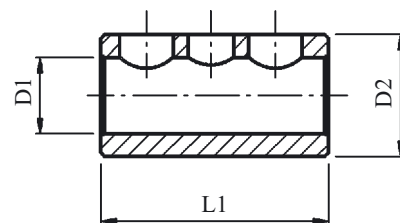
Ausführung I · Type I

D2	32	32	
D3	40	40	
L1	79	92	
L2	5	18	
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	
16	218.953.220	-	
20	218.954.220	-	
25	-	218.955.220	



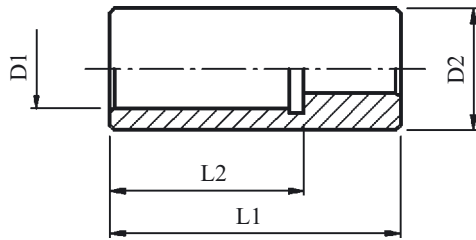
Ausführung K · Type K

D2	1 1/4"	D2	1 1/2"
L1	60	L1	85
D1	Artikel-Nr. Part No.	D1	Artikel-Nr. Part No.
-	-	6	-
3/8"	218.927.220	8	218.920.220
1/2"	218.928.220	10	218.921.220
5/8"	218.929.220	12	218.922.220
3/4"	218.930.220	16	218.923.220
7/8"	218.931.220	20	218.924.220
1"	218.932.220	25	218.925.220
-	-	32	218.926.220
-	-	40	-



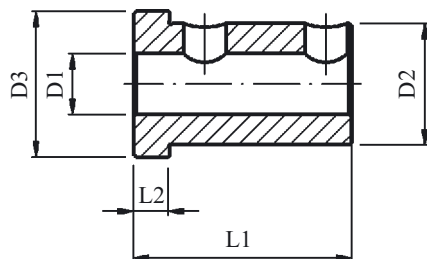
Reduzierbuchsen

Bushing



Ausführung L · Type L

Spann-Ø D1	Artikel-Nr. Part No.	D2	L1	L2
16	218.242.220	25	60	42
20	218.241.220	25	60	40



Ausführung M · Type M

D2	40	40
D3	48	48
L1	72	88
L2	12	10
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.
8	219.050.220*	219.010.220
10	219.051.220	219.011.220
12	219.052.220	219.012.220
16	219.053.220	219.013.220
20	219.054.220	219.014.220
25	219.055.220	219.015.220
32	219.056.220	219.016.220

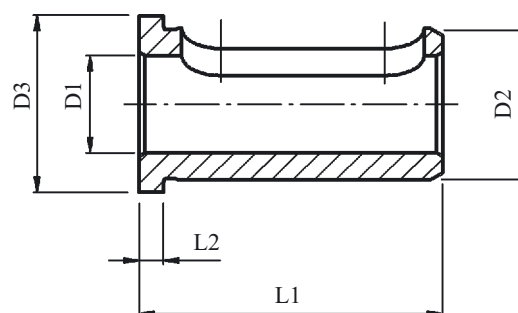
* Reduzierbuchse vorgezogen – stimmt nicht mit der Zeichnung überein.

Reduzierbuchsen

Bushing

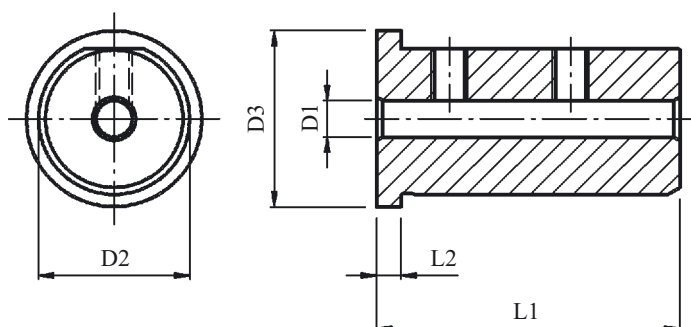
Ausführung N · Type N

D2	25	40	40
D3	29	44	44
L1	50	58	73,5
L2	4	5	8
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
8	-	-	219.130.220
10	-	-	219.131.220
12	-	-	219.132.220
16	219.114.220	219.103.220	219.133.220
20	219.115.220	219.104.220	219.134.220
25	-	219.105.220	219.135.220
32	-	219.106.220	219.136.220



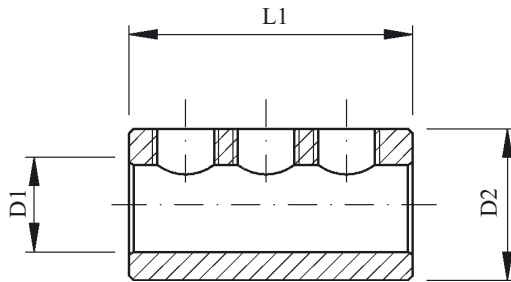
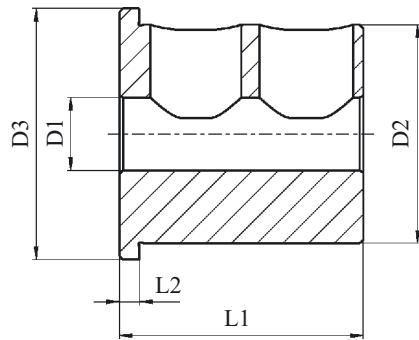
Ausführung P · Type P

D2	25	40
D3	29	44
L1	50	58
L2	4	5
D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.
6	219.110.220	-
8	219.111.220	219.100.220
10	219.112.220	219.101.220
12	219.113.220	219.102.220



Reduzierbuchsen

Bushing



Ausführung R · Type R

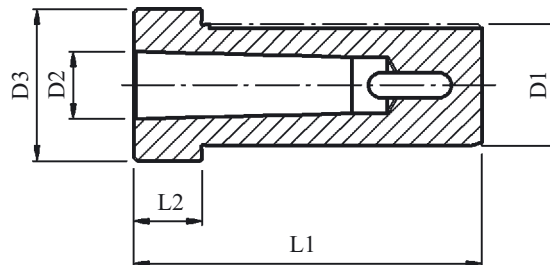
D2	60	
D3	69	
L1	67	
L2	5,5	
D1	Artikel-Nr. Part No.	
10	219.080.220	
12	219.081.220	
16	219.082.220	
20	219.083.220	
25	219.084.220	
32	219.085.220	
40	219.086.220	
50	219.087.220	

Ausführung S · Type S

D2	80	
L1	130	
D1	Artikel-Nr. Part No.	
25	219.163.220	
32	219.164.220	
40	219.165.220	
50	219.166.220	
60	219.167.220	

Reduzierhülse mit Morsekegel

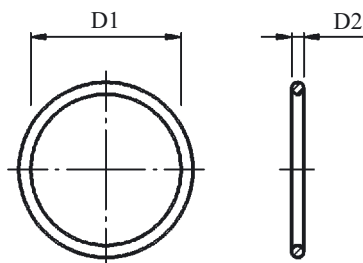
Taper Sleeves with Morse Taper



D1	(D2) MK-DK	L1	Artikel-Nr. Part No.	Klemmring Form Z1 Clamping Ring Form Z1	D3	L2	
30	1	76	202.151.220	202.020.150			
30	2	77	212.000.220	202.020.150			
30	3	90	212.161.220	202.020.150			
32	1	79	218.951.220	-	40	5	
32	2	92	218.952.220	-	40	18	
32	3	112	218.956.220	-	40	38	
40	1	115	213.024.220	203.030.150			
40	2	95	223.025.220	203.030.150			
40	3	90	213.030.220	203.030.150			
40	4	115	213.035.220	203.030.150			
40	1	79	219.057.220	-	48	9	
40	2	92	219.058.220	-	48	22	
40	3	112	219.059.220	-	48	42	
50	2	118	214.040.220	204.040.150			
50	3	118	214.045.220	204.040.150			
50	4	118	214.050.220	204.040.150			
60	3	150	215.015.220	205.020.150			
60	4	150	215.020.220	205.020.150			
60	5	150	215.025.220	205.020.150			
1 1/4"	1	79	218.957.220	-	40	5	
1 1/4"	2	92	218.958.220	-	40	18	
1 1/4"	3	112	218.959.220	-	40	38	

O-Ring

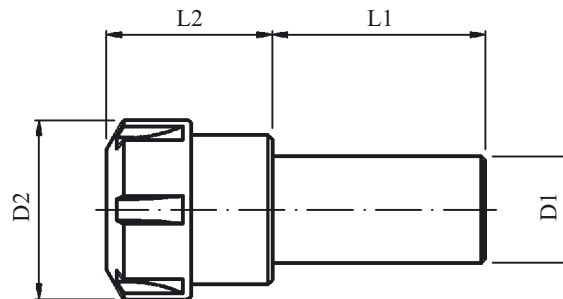
Sealing Ring



Für Schaft-Ø for Shaft-Ø	Artikel-Nr. Part No.	Abmessung D1 x D2 Dimension D1 x D2	
16	11094	Ø15,00 x 1,50	
20	11126	Ø18,77 x 1,78	
25	11128	Ø23,52 x 1,78	
30	11131	Ø28,30 x 1,78	
40	11219	Ø37,77 x 2,62	
50	11212	Ø47,29 x 2,62	
60	11236	Ø56,74 x 3,53	

Spannzangenfutter mit Zylinderschaft

Collet Chuck with Cylindrical Shank

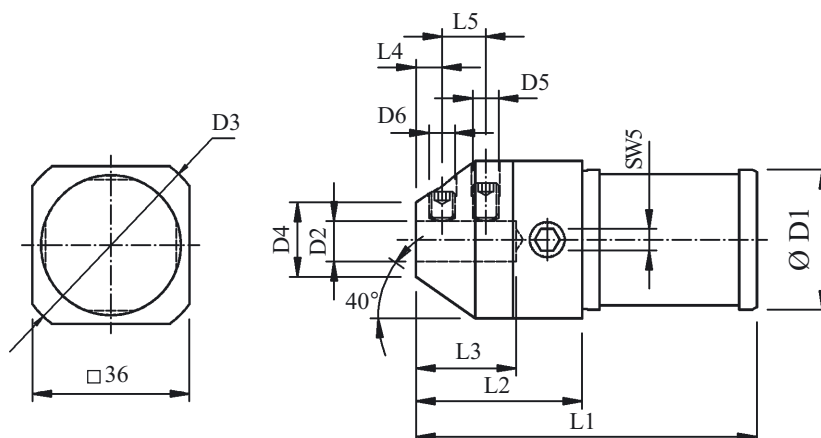


D1	Für Spannzangen for Collets			Artikel-Nr. Part No.	D2	L1	L2
	Spannbereich Range	Nenngröße DIN term	nach according				
25	0,5 - 16	ER 25	DIN 6499	218.944.220	42	50	39
32	0,5 - 16	ER 25	DIN 6499	218.942.220	42	75	20
32	1,5 - 20	ER 32	DIN 6499	218.943.220	50	60	39
32	3,0 - 26	ER 40	DIN 6499	218.939.220	63	60	39
40	1,5 - 20	ER 32	DIN 6499	218.940.220	50	80	25
40	3,0 - 26	ER 40	DIN 6499	218.941.220	63	75	37

Bemerkungen / Remarks Spannmutter siehe Z 3.1 Form C / Collet Nut see Z 3.1 Type C

Nutstosshalter mit Zylinderschaft

Shaping Tool with Cylindrical Shank

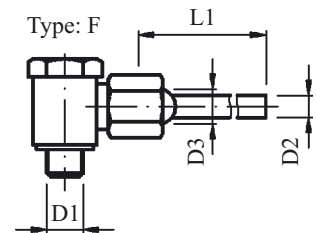
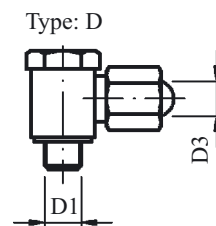
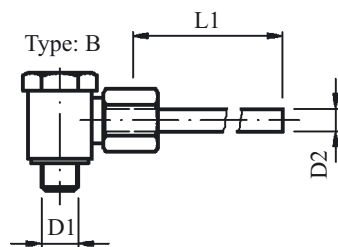
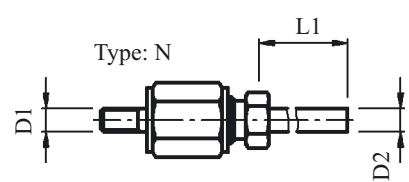
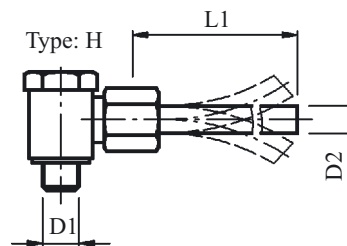
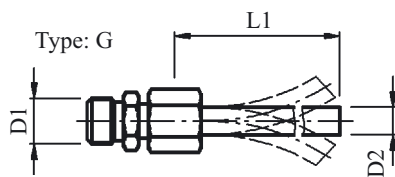
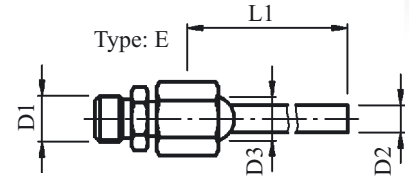
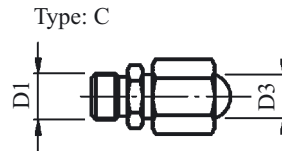
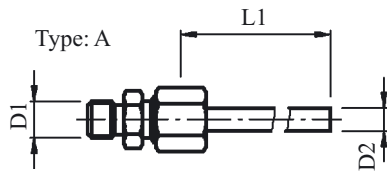


Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5
32	7.030.675	7	45	10	M5x8	M5x6	80	40	25	6	10
32	7.030.670	10	45	17	M6x8	M6x6	78	38	23	6	10

Bemerkungen / Remarks Siehe Eppinger Montage und Bedienungsanleitung für Nutstosshalter NSH auf Eppinger Homepage (www.eppinger.de)
See Eppinger Manual (Assembling and Handling) for Shaping Tool at the Eppinger Homepage (www.eppinger.de)

Rohrverschraubungen

Coolant Tubes

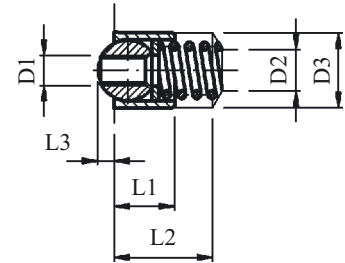


D1	Type Type	D2	D3 Kugeldüse Nozzle	L1	Artikel-Nr. Part No.
M 8x1	A	Ø6	-	90	218.844.220
M 8x1	B	Ø5	-	60	218.845.220
M 8x1	G	Ø6 (flex. Rohr)	-	100	0.000.398
M 8x1	H	Ø6 (flex. Rohr)	-	100	0.000.400
M 10x1	A	Ø6	-	90	218.469.220
M 10x1	B	Ø6	-	90	218.468.220
M 10x1	G	Ø6 (flex. Rohr)	-	100	0.000.407
M 10x1	H	Ø6 (flex. Rohr)	-	100	0.000.412
M 10x1	A	Ø8	-	100	218.445.220
M 10x1	B	Ø8	-	100	218.460.220
M 10x1	C	-	Ø10 (M 6)	-	218.825.220
M 10x1	D	-	Ø10 (M 6)	-	218.824.220
M 10x1	E	Ø6	Ø10 (M 6)	90	0.000.135
M 10x1	F	Ø6	Ø10 (M 6)	90	0.000.366
M 4	-	Ø4	-	100	0.001.159

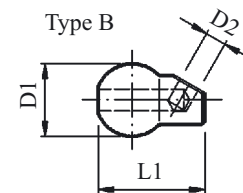
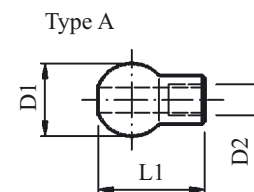
Kugeldüsen

Nozzle Unit

Kugel Ball	D1	Artikel-Nr. Part No.	D2	D3 +0,03	L1	L2	L3
Ø8	M 4	218.180.000	5,5	9,88	8	13	2,2
Ø10	M 6	218.181.000	6,8	11,88	10	15	3
Ø12	M 6	218.182.000	6,8	13,88	12	17	4



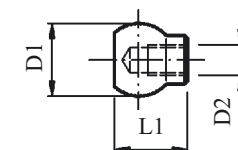
Kugel D1 Ball D1	Type Type	D2	L1	Artikel-Nr. Part No.
Ø12	A	M 5	17,5	7.070.066
Ø12	B	Ø3,5	17,5	7.070.067
Ø15	A	M 6	20	7.070.052
Ø15	B	Ø3,8	20	7.070.053



Verschlussstücke

Nozzle Unit

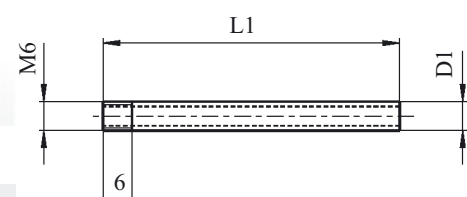
Kugel D1 Ball D1	Artikel-Nr. Part No.	D2	L1
Ø12	7.070.065	M 5	12
Ø15	7.070.051	M 5	17



Rohr

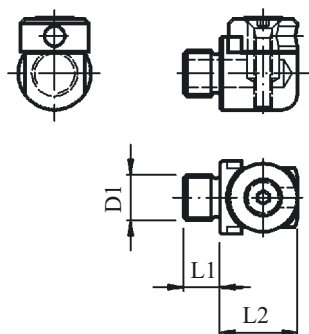
Pipe

Rohr D1 Pipe D1	Artikel-Nr. Part No.	L1
Ø6	0.000.490	61,5
Ø6	0.000.134	90



Ringdüsen

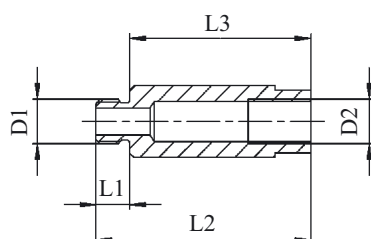
Nozzle Unit



D1	Artikel-Nr. Part No.	L1	L2	
M 8x1	0.000.377	8	14	
M 10x1	0.000.378	8	17	

Verlängerung für Ringdüsen

Nozzle Unit



D1	Artikel-Nr. Part No.	L1	L2	L3	D2
M 8x1	7.071.299	10,5	20	9,5	M 8x1
M 8x1	7.071.084	7,5	30	22,5	M 8x1
M 10x1	7.040.524	7,5	32	24,5	M 10x1
M 10x1	7.071.083	7,5	48	40,5	M 10x1

Mitnehmer für Gewindebohrer

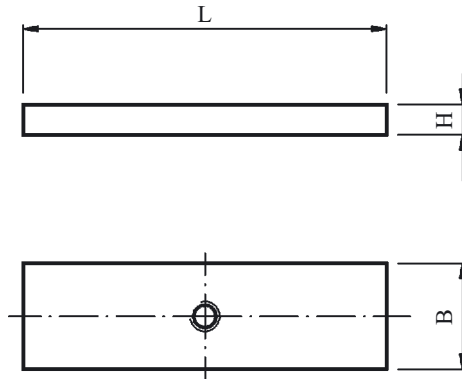
Drivers for Tap



	8.010	221.390.220						
	8.011	227.390.220						
	8.206	8.202						
	9.028	8.410						
	9.029	8.411	8.610					
	9.030	8.412	8.611					
	9.031	9.208	9.628					
Für Wkz.-Nr. for Tool No.	9.032	9.209	9.629	222.390.220	für Gewindebohrer nach for Tappers acc.			
	9.033	9.428	9.630	223.390.220				
	9.034	9.429	9.631	224.390.220				
	9.035	9.430	9.632					
	9.036	9.431	9.633					
	9.037	9.432	9.634					
	9.225	9.433	9.635					
	9.226	9.434						
	9.436	9.435						
	9.437	9.636						
	9.447	9.637						
	9.448							
□	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	DIN 371	DIN 374	DIN 376	Schaft- Ø Shank Dia.
2,7	0.000.010	0.000.137	0.000.024	-	M 3	M 5	M4,5/M 5	3,5
3	0.000.011	0.000.138	0.000.025	-	M 3,5	-	-	4
3,4	0.000.012	0.000.139	0.000.026	218.826.220	M 4	M 6	M 6	4,5
4,9	0.000.013	0.000.140	0.000.027	218.827.220	M4,5/M5/M6	M 8	M 8	6
5,5	-	0.000.141	0.000.028	218.828.220	M 7	M9/M10	M9/M10	7
6,2	-	0.000.142	0.000.029	218.829.220	M 8	M 11	M 11	8
7	-	-	0.000.030	218.830.220	M 9	M 12	M 12	9
8	-	-	-	218.831.220	M 10	-	-	10
9	-	-	0.000.228	218.832.220	M 12	M14/15/16	M14/M16	12
11	-	-	-	218.833.220	-	M 18	M 18	14
12	-	-	-	218.834.220	-	M 20	M 20	16
Artikel.Nr. Satz Part No. set	0.000.130	0.000.136	0.000.132	218.890.220	-	-	-	-

Unterlegplatten für kleinere Drehmeissel

Adapter for smaller Lathe Chisel

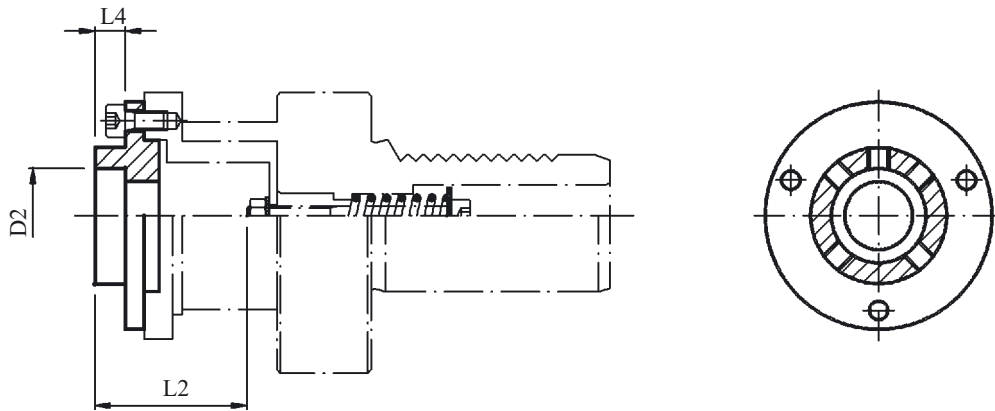


Artikel-Nr. Part No.	H	L	B
218.328.220	4	38	14
218.330.220	4	48	14
218.329.220	4	54	14
218.275.220	4	55	12
218.280.220	4	69	16
218.331.220	4	73	14
218.281.220	4	99	16
218.286.220	5	84	20
218.288.220	5	117	20
218.290.220	7	99	25
218.031.220	7	120	25
218.291.220	7	129	25
218.349.220	7	143	25

Artikel-Nr. Part No.	H	L	B
218.477.220	1/8"	38	14
218.478.220	1/8"	48	14
218.479.220	1/8"	54	14
218.480.220	1/8"	55	12
218.481.220	1/8"	69	16
218.482.220	1/8"	73	14
218.483.220	1/8"	75	12
218.484.220	1/8"	99	16
218.485.220	1/4"	84	20
218.486.220	1/4"	117	20
218.487.220	1/4"	99	25
218.488.220	1/4"	120	25
218.489.220	1/4"	129	25
218.490.220	1/4"	143	25

Einsätze für Schneideisenhalter

Inserts for Extensible Die Holder

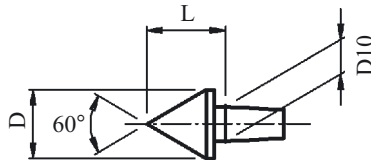


Artikel-Nr. Part No.	Für Gewinde nach DIN 13 for Thread	Für Feingewinde nach DIN 13 for fine Thread	Abmessungen Dimensions		max. Gewindelänge max. Thread Length		
			Aussen- Ø D2	L4	241.335.220 L2	242.335.220 L2	243.335.220 L2
113.406.220	M1 - M2,6	-	16	5	18	-	-
113.408.220	M3 - M4	M3 - M6	20	6	24,2	-	-
113.410.220	M4,5 - M6	M6	20	7	24,2	-	-
113.412.220	M7 - M9	M7 - M9	25	9	26,2	-	-
113.414.220	M10 - M11	M10 - M11	30	11	27,2	-	-
115.406.220	M1 - M2,6	-	16	5	-	37	38
115.408.220	M3 - M4	M3 - M6	20	5	-	37	38
115.410.220	M4,5 - M6	M6	20	7	-	39	40
115.412.220	M7 - M9	M7 - M9	25	9	-	41	42
115.414.220	M10 - M11	M10 - M11	30	11	-	38	39
115.416.220	-	M12 - M14	38	10	-	42	43
115.418.220	M12 - M14	-	38	14	-	46	47
115.436.220	-	M16 - M20	45	14	-	51	52
115.438.220	M16 - M20	-	45	18	-	55	56
115.440.220	-	M22 - M24	55	16	-	53	54
115.442.220	M22 - M24	-	55	22	-	59	60

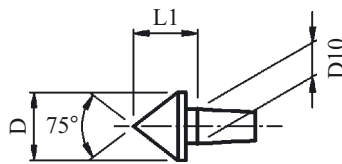
Zentriereinsätze für Zentrierspitze, mitlaufend

Centering Inserts for Revolving Center Point

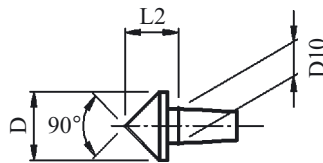
Type 1



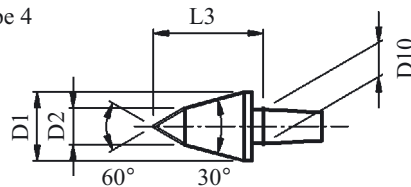
Type 2



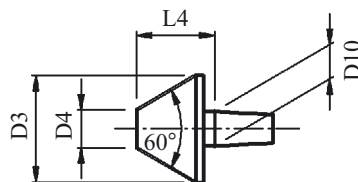
Type 3



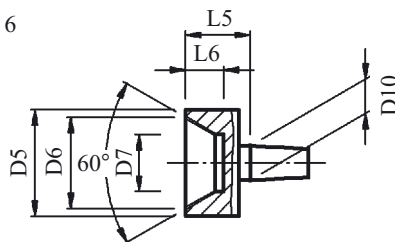
Type 4



Type 5



Type 6

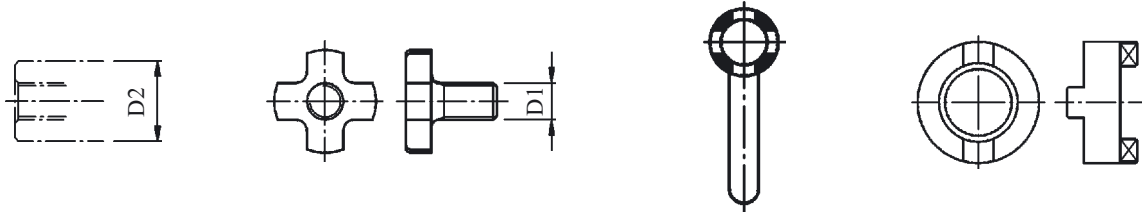


Zentrierspitze
Artikel-Nr.
Part No.
Revolving
Center Point

	241.201.220	242.201.220	243.201.220
Schaft- Ø	20	30	40
D	16	20	24
D1	14	18	18
D2	6	8	8
D3	25	35	45
D4	10	15	25
D5	25	35	45
D6	20	30	40
D7	10	15	25
D10 Kegel 1:10	7	12	12
L	20	24	27,5
L1	17	19,5	22,5
L2	14,5	16,5	19
L3	25	30	30
L4	21	26	27
L5	18	24	25
L6	11	16	16
Type	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
1	218.916.021	218.916.031	218.916.041
2	218.916.022	218.916.032	218.916.042
3	218.916.023	218.916.033	218.916.043
4	218.916.024	218.916.034	218.916.044
5	218.916.025	218.916.035	218.916.045
6	218.916.026	218.916.036	218.916.046
Austreiber	218.916.020	218.916.030	218.916.040

Fräseranzugsschraube, Schlüssel und Mitnehmerring

Clamping Bolt, Wrench and Driver Ring

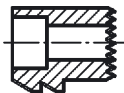


Fräserdornaufnahme DIN 6358 Chuck for Cutter Arbor	Fräseranzugschraube Clamping Bolt		Schlüssel Wrench	Mitnehmerring Driver Ring	
D2	D1	Artikel-Nr. Part No.	Artikel-Nr. Part No.	D3	Artikel-Nr. Part No.
Ø16	M8	11380	10023	Ø16	11376
Ø22	M10	11381	10024	Ø22	11377
Ø27	M12	14416	14451	Ø27	14415
Ø32	M16	11382	10025	Ø32	11378
Ø1/2 "	1/4"- 28 UNF	0.001.029	0.001.032	-	-
Ø3/4 "	3/8"- 24 UNF	0.001.030	10023	-	-
Ø1 "	1/2"- 20 UNF	0.001.031	10024	-	-

Satz Backen für Greiferfutter

Set Jaw for Bar Puller

Artikel-Nr. Part No.	Stangen- Ø
218.985.220	4 - 20
218.986.220	15 - 68



Spannschlüssel für Werkzeughalterspindel

Spanner Wrenches for Toolholder Spindle



16 - 20

Artikel-Nr.
Part No.

12885

20 - 22

13310

25 - 28

10002

30 - 32

10003

34 - 36

10004

40 - 42

10005



45 - 50

Artikel-Nr.
Part No.

10006

52 - 55

10007

58 - 62

10008

68 - 75

10009

80 - 90

10010

95 - 100

15230



40 - 42

Artikel-Nr.
Part No.

0.000.389

45 - 50

0.000.361

45 - 50

0.000.443

45 - 50

0.000.451

52 - 55

0.000.413

52 - 55

0.000.442



52 - 75

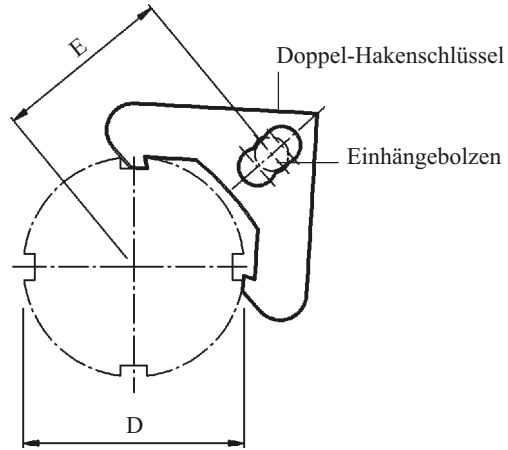
Artikel-Nr.
Part No.

0.000.349



Doppel-Hakenschlüssel für Werkzeughalterspindel

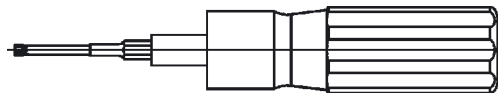
Double Hook Wrench for Toolholder Spindle



D	E	Artikel-Nr. Part No.
40 - 46	36,4 - 41,8	0.001.071
48 - 60	34,6 - 51,7	0.000.468
62 - 74	43,2 - 60,6	0.000.993
76 - 90	51,7 - 71,0	0.000.994
92 - 98	59,5 - 72,2	0.000.995

Drehmoment-Schraubendreher für Capto

Torque-screwdriver



Für angetriebene Werkzeughalter
For Rotary Tool Holders

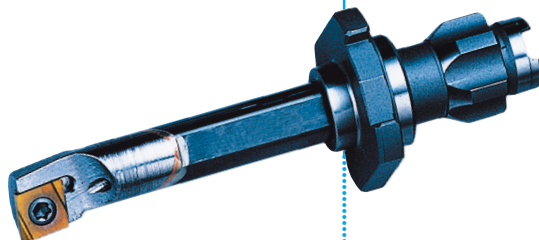
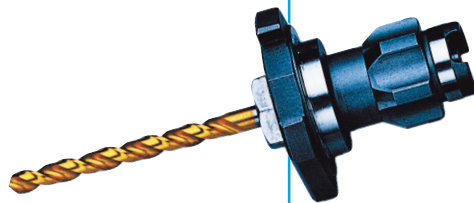
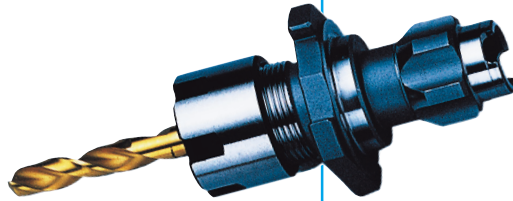
Größe/Size	Artikel-Nr. Part No.	Nm	TORX
C3	0.001.886	5	T15
C4	0.001.792	9	T20
C5	-		



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E-Mail: info@eppinger.de · Internet: <http://www.eppinger.de>

DECOFLEX[®] Adapter

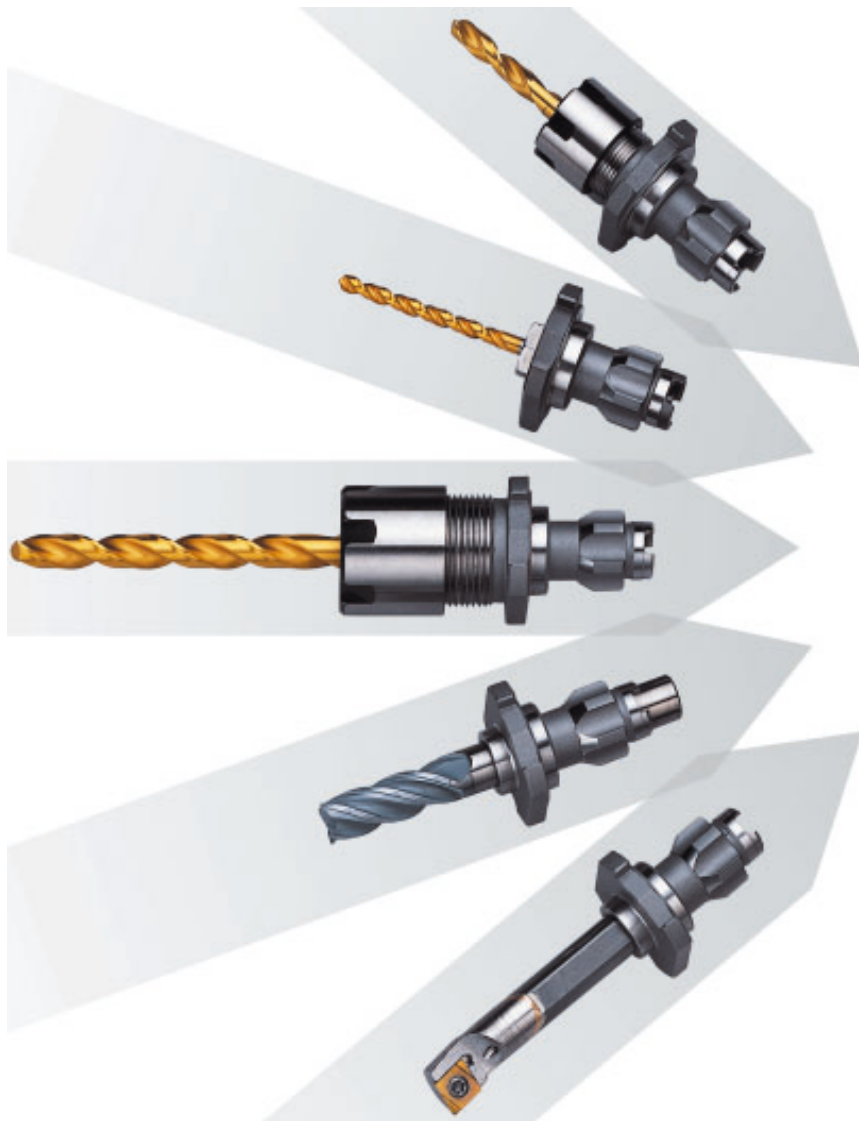
Das flexible Werkzeugsystem
The Flexible Tool System



EPPINGER
SMARTER TOOLING SOLUTIONS

Klein und Fein: Das Neue Werkzeugsystem für den Miniaturbereich

Small In Size, Big On Savings New Tooling System for the Miniature Range



Bisher konnte kein Werkzeugsystem Präzision und Flexibilität auf so engem Raum vereinen.

Until now no tooling system could combine precision and space in such a small area.



...DECOFLEX® steigert die Effizienz Ihrer Dreh-Fräs-Automaten erheblich: Smarter Tooling Solutions Made by Eppinger.

...DECOFLEX™ tremendously increases the efficiency of your machine tool. Smarter Tooling Solutions Made by Eppinger.

■ Mit diesem neu entwickelten, überaus kompakten Werkzeugsystem erschließen sich der Zerspanungstechnik völlig neue Möglichkeiten in der Produktion kleiner und kleinster Teile.

■ With this newly developed, extremely compact tooling system, we are offering new possibilities for the production of your smallest components.

■ **DECOFLEX®** ist eine neuartige Werkzeugaufnahme mit minimalen Abmessungen und damit besonders für den Einsatz auf kleindimensionierten Dreh-Fräs-Automaten geeignet.

■ **DECOFLEX™** is a new type of tooling interface designed for compact space and is especially useful on Turning & Milling Centers with limited working areas.

DECOFLEX® Allgemeine Produkt-Vorteile

DECOFLEX™ General Product Advantages

DECOFLEX® setzt als Werkzeugsystem für den Miniaturbereich neue Maßstäbe – die Vorteile werden Sie überzeugen.

DECOFLEX™ has raised the bar for manufacturing in the miniature range – discover the difference.

■ Schnellwechsel

Die Handhabung ist einfach und sicher. Der Adapter-/Werkzeugwechsel erfolgt innerhalb weniger Sekunden.

■ Quick change

Utilization made simple and accurate. Adapter/tool change-over performed in seconds.

■ Präzise

Die besondere Schnittstelle nach dem Kegel/Plananlageprinzip gewährleistet höchste Rundlauf- und Wiederholgenauigkeit.

■ Precise

Proven conical/flat face interface guarantees best possible concentricity and repeatability.

■ Kompakt

Bisher unerreichte Minimalabmessungen erschließen neue Fertigungsmöglichkeiten.

■ Compact

Minimal envelope dimensions, not available until now, open up new manufacturing approaches.

■ Flexibel

Verschiedene Adapter in Kombination mit unterschiedlichen feststehenden und/oder angetriebenen Werkzeugaufnahmen ermöglichen den optimalen Werkzeugeinsatz.

■ Flexible

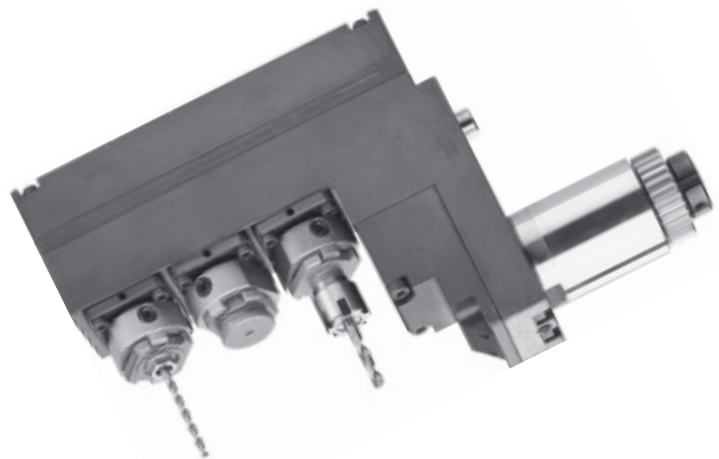
Specific adapters designed to combine with fixed and/or rotary tool holders optimize tool performance to the highest degree.

■ Wirtschaftlich

Voreingestellte Werkzeuge in einem Montageblock reduzieren die Maschinenrüstzeiten und tragen damit erheblich zur Sicherung der Produktion bei.

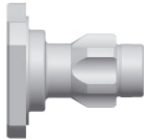
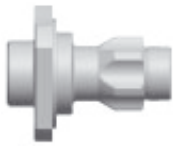
■ Economical

Ability to pre-set tools off the machine delivers reduced set-up time and increased machine up-time.



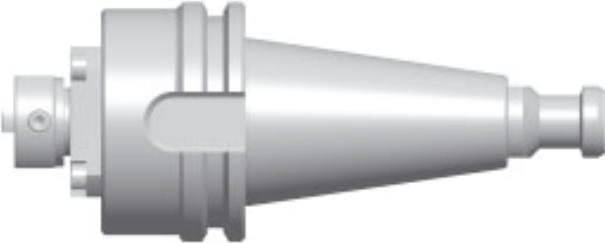
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Type 15		
	D 2.2	Spannzangenaufnahme (Innenmutter) Collet Chuck (Inside Nut)
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	D 3.6	Presssitzaufnahme Press Fit
Type 07		
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Type 08		
	D 5.1	Bohreraufnahme Drill Holder
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	D 5.4	Meisselaufnahme Turning Tool Holder For Lathe Chisel

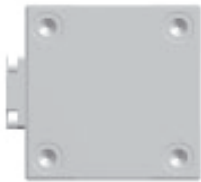
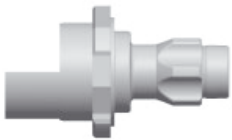
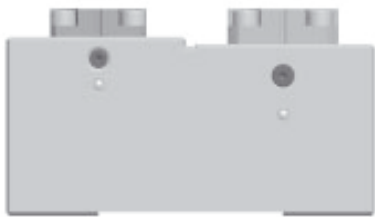
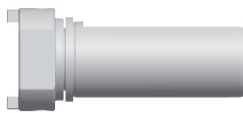
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Übersicht / Overview

Gruppe
Group

Beschreibung / Description

Zubehör / Accessories



D 50

Einpressvorrichtung für Press-Fit
Press Fit Press-In Device

DECOFLEX® Inhaltsverzeichnis

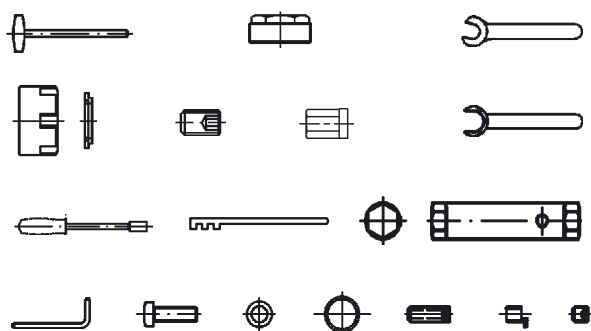
DECOFLEX™ Index

Übersicht / Overview

Gruppe
Group

Beschreibung / Description

Zubehör / Accessories

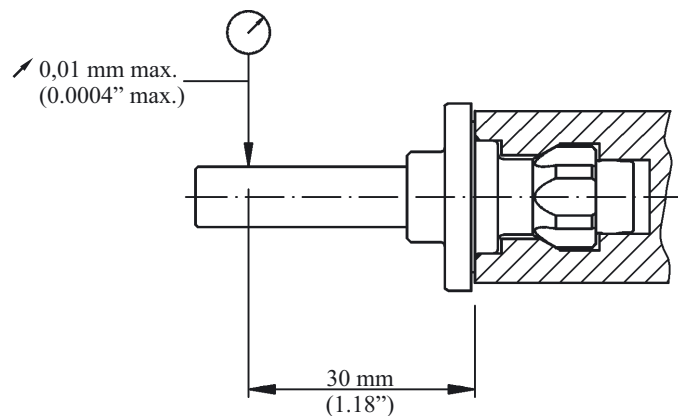


D 99

DECOFLEX® Technische Merkmale

DECOFLEX™ Technical Information

Maß- Und Formtoleranzen des Systems / System Accuracy



Wiederholgenauigkeit < 0,005 mm
Accuracy of repeatability < 0,0002"

DECOFLEX® Technische Merkmale

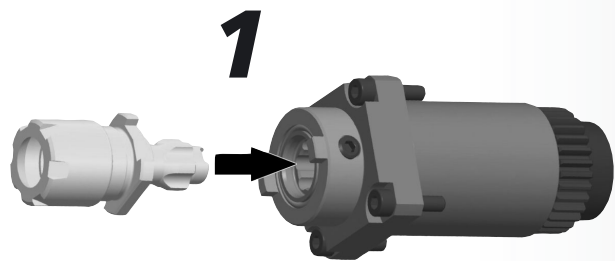
DECOFLEX™ Technical Information

Adapter-Wechsel / Adapter Change

Wechsel in Sekunden – Change in Seconds

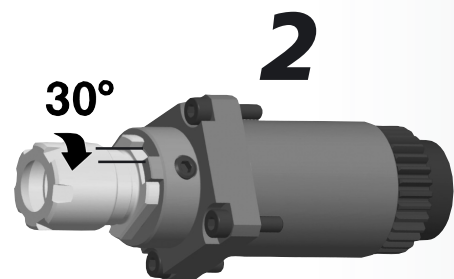
Konus und Anlagefläche von Adapter und Spindel reinigen. Adapter in die Spindel einbringen.

Wipe cone, adapter bearing surface and spindle.
Insert adapter into spindle



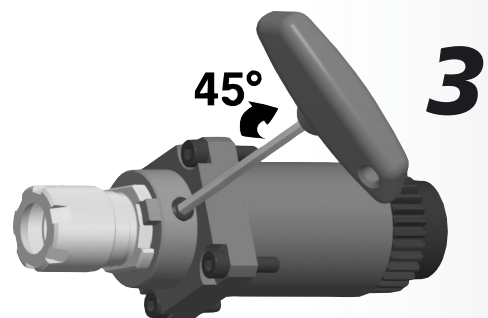
Adapter bis zum Anschlag Nase Kopfring drehen – ca. 30°

Rotate adapter to stop, approx. 30° turn.



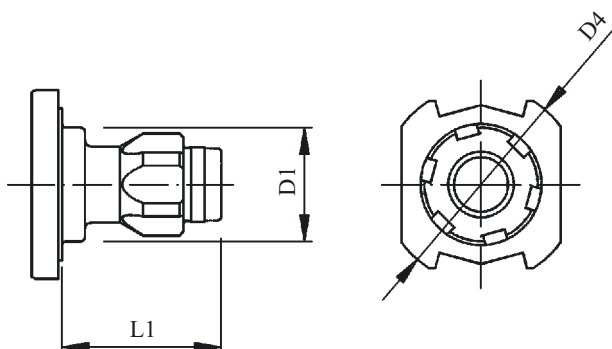
Adapter klemmen mit Sechskant-Schraubendreher SW 3.
Anzugsdrehmoment max. 2Nm. (öffnen – schließen ca. 45°)

Lock adapter with 3mm hex wrench.
Tightening torque max 2 Nm, lock and unlock turn approx. 45°.



DECOFLEX® Adapter *Baugrößen-Übersicht* **DECOFLEX™ Adapter Overview of Mounting Adapters**

00



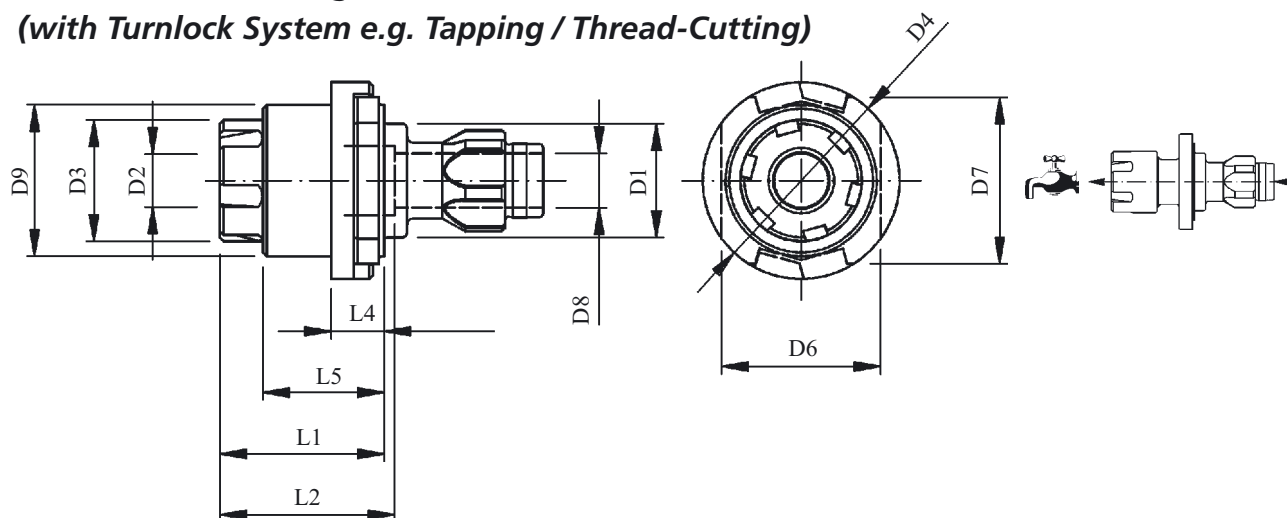
D1	Größe Size	D4	L1
15	15	26	21
20	20	30	21

DECOFLEX® Adapter Spannzangenaufn. Standardausführung Type 01

DECOFLEX™ Adapter Collet Chuck Standard Version

(mit Verdrehsicherung z.B. Gewindeschneiden)

(with Turnlock System e.g. Tapping / Thread-Cutting)



Größe/Size D1	Artikel-Nr. Part No.	Spannzange Collet	D2	D3	D4	D6	D7	D8	D9	L1 max.	L2 max.	L4	L5
15	1501-0491	4008E (ER11M)	0,5– 7	16	26	21	22	7,2	20	23,5	-	7	16
15	1501-0490	426E (ER16M)	0,5– 10	22	26	21	22	7,2	25,5	32,5	33,5	7	17,5
20	2101-0534	426E (ER16M)	0,5– 10	22	31,5	26	28	10,2	26	33,5	-	8	18,7
20	2101-0535	428E (ER20M)	1– 13	28	31,5	26	28	10,2	31	35	38	9,3	20,7



D 99.1



D 99.2

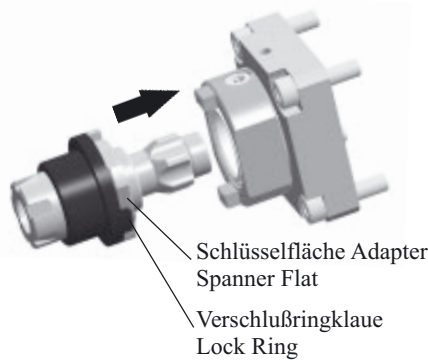


D 99.2

DECOFLEX® Adapter *Spannzangenaufn. Standardausführung Type 01*

DECOFLEX™ Adapter Collet Chuck Standard Version

Adapter-Wechsel mit Verdrehsicherung Adapter-Change with Turnlock System

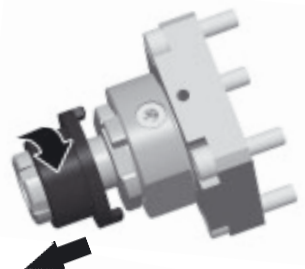


- 1** Adapter in Spindel einbringen.
Verschußringklausen muß an Schlüsselfläche Adapter eingerastet sein.

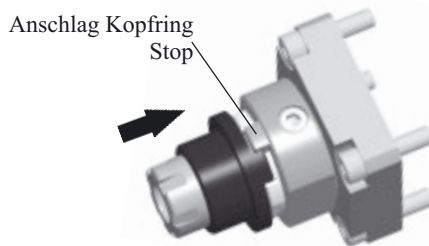
Insert adapter into spindle.
Lock ring must be fixed at spanner flat.



- 2** Adapter bis zum Anschlag Nase Kopfring drehen - ca. 30°
Rotate adapter to stop, approximately 30° turn.



- 3** Verschußringklausen durch ziehen ausrasten und im Uhrzeigersinn drehen.
Disengage lock ring by pulling, then turn clockwise.



- 4** Adapter verriegeln: Verschußringklausen muß zwischen Anschlag Nase Kopfring und Adapteraussparung einrasten. Adapter klemmen mit Sechskant-Schraubendreher SW 3

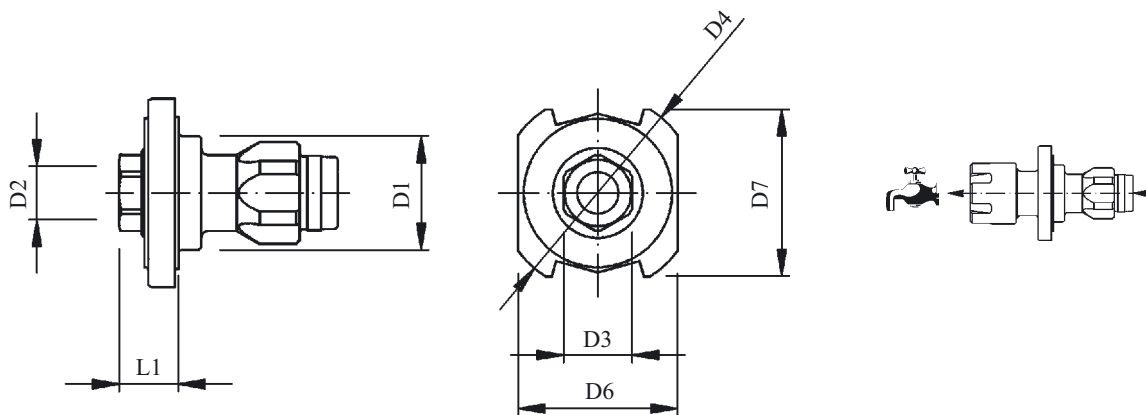
Lock Adapter: Lockring must engage between stop and spanner flat. Lock adapter with 3 mm hex wrench.

- 5** Adapter entriegeln: Verschußringklausen ausrasten und im Uhrzeigersinn drehen. Verschußringklausen an Schlüsselfläche Adapter einrasten. Adapter **gegen** Uhrzeigersinn drehen und herausnehmen.

Unlock Adapter: Disengage lock ring and turn clockwise.
Fix lock ring at spanner flat.
Turn Adapter **counter** clockwise and remove it.

Adapter-Wechsel, weitere Hinweise siehe S. 8
Adapter-change, more informations see page 8

DECOFLEX® Adapter Spannzangenaufn. (Innenmutter) **Type 15**
DECOFLEX™ Adapter collet Chuck (Internal Nut)



Größe/Size D1	Artikel-Nr. Part No.	Spannzange Collet	D2	D3	D4	D6	D7	L1 max.
15	1515-0439	4004E (ER 8)	0,5 – 5	9	26	21	22	8,1
20	2115-0586	4008E (ER11A)	0,5 – 7	13	31,5	26	28	13,8



D 99.1



D 99.2



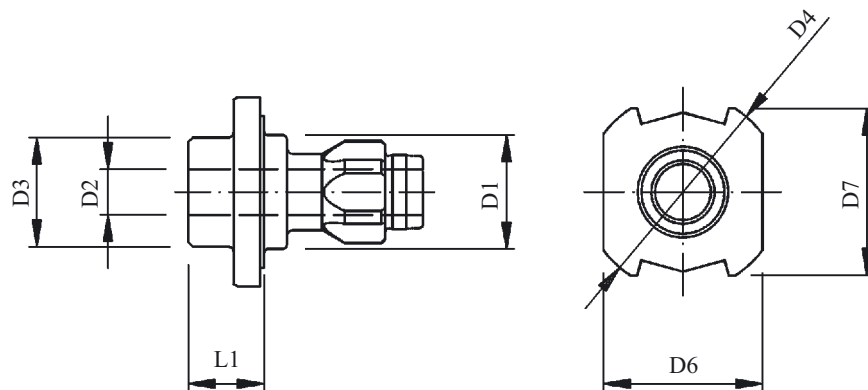
D 99.2



D 99.2

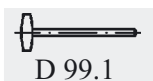
DECOFLEX® Adapter Press Fit
 DECOFLEX™ Adapter Press Fit

Type **14**



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D6	D7	L1
15	1514-0452	3	12	26	21	22	9
15	1514-0440	4	12	26	21	22	9
15	1514-0441	5	12	26	21	22	9
15	1514-0442	6	12	26	21	22	9
15	1514-0443	8	12	26	21	22	9
20	2114-0540	3	12	31,5	26	28	10
20	2114-0541	4	12	31,5	26	28	10
20	2114-0542	5	12	31,5	26	28	10
20	2114-0543	6	12	31,5	26	28	10
20	2114-0544	8	12	31,5	26	28	10
20	2114-0545	10	14	31,5	26	28	10

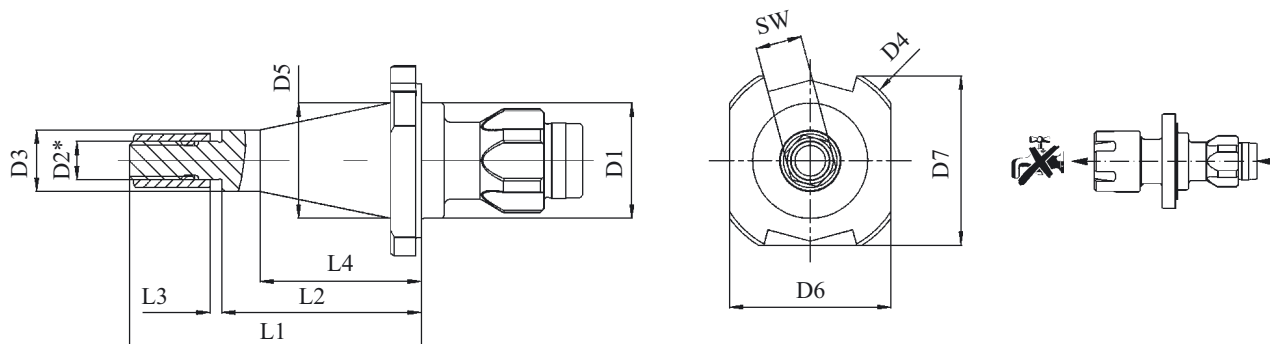
Nur für Werkzeug mit Durchmesser-Toleranz h5
 Only for tool diameter tolerance h5



DECOFLEX® Adapter Aufsteckdorn

DECOFLEX™ Adapter Mill Arbor

Type **07**



Größe/Size D1	Artikel-Nr. Part No.	D2*	D3	D4	D5	D6	D7	L1	L2	L3 max.	L4	SW
15	1507-0538	3,5	6	26	15	21	22	38	26	1	21	5
15	1507-0537	5	8	26	15	21	22	38	26	1,5	21	6
15	1507-0536	8	15	26	15	21	22	38	26	1,5	-	13

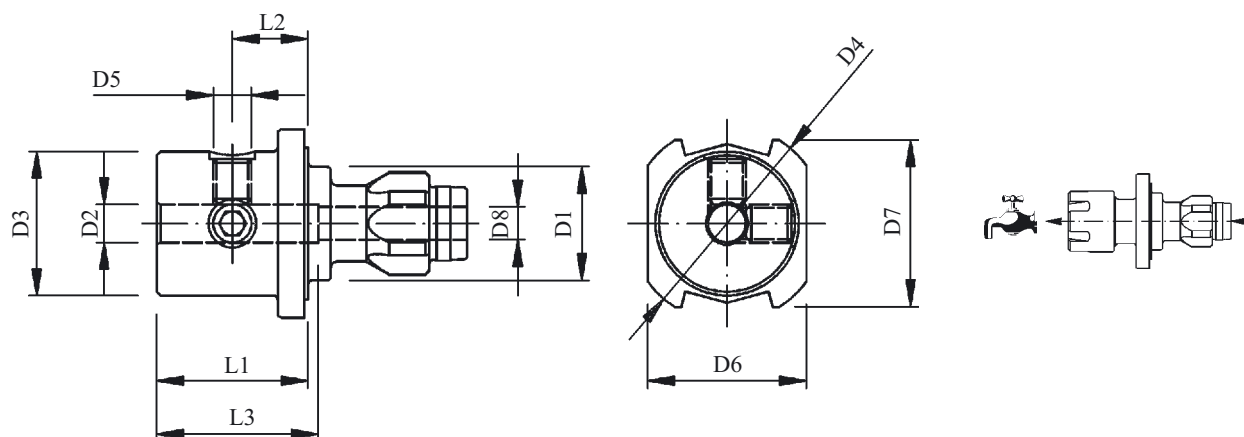
* Aufnahme



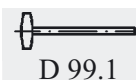
D 99.7

DECOFLEX® Adapter Bohreraufnahme
DECOFLEX™ Adapter Drill Holder

Type **08**



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	D6	D7	D8	L1	L2	L3
15	1508-0455	3	15	26	M3x5	21	22	M8x1	14	7,5	-
15	1508-0456	4	15	26	M4x5	21	22	M8x1	15	8	-
15	1508-0457	5	18	26	M5x6	21	22	M8x1	15	8	-
15	1508-0458	6	18	26	M6x6	21	22	M8x1	20	10	-
15	1508-0459	8	20	26	M8x6	21	22	M8x1	25	13	26
15	1508-0473	10	23	26	M8x6	21	22	M8x1	25	13	26
20	2108-0525	3	15	31,5	M3x5	26	28	M8x1	15	8,5	-
20	2108-0526	4	15	31,5	M4x5	26	28	M8x1	16	9	-
20	2108-0527	5	18	31,5	M5x6	26	28	M8x1	16	9	-
20	2108-0528	6	18	31,5	M6x6	26	28	M8x1	21	11	-
20	2108-0529	8	20	31,5	M8x6	26	28	M8x1	26	14	26
20	2108-0530	10	23	31,5	M8x6	26	28	M8x1	26	14	26
20	2108-0531	12	25	31,5	M8x6	26	28	M8x1	29	15	30
20	2108-0532	14	27	31,5	M8x6	26	28	M8x1	29	15	31



D 99.1

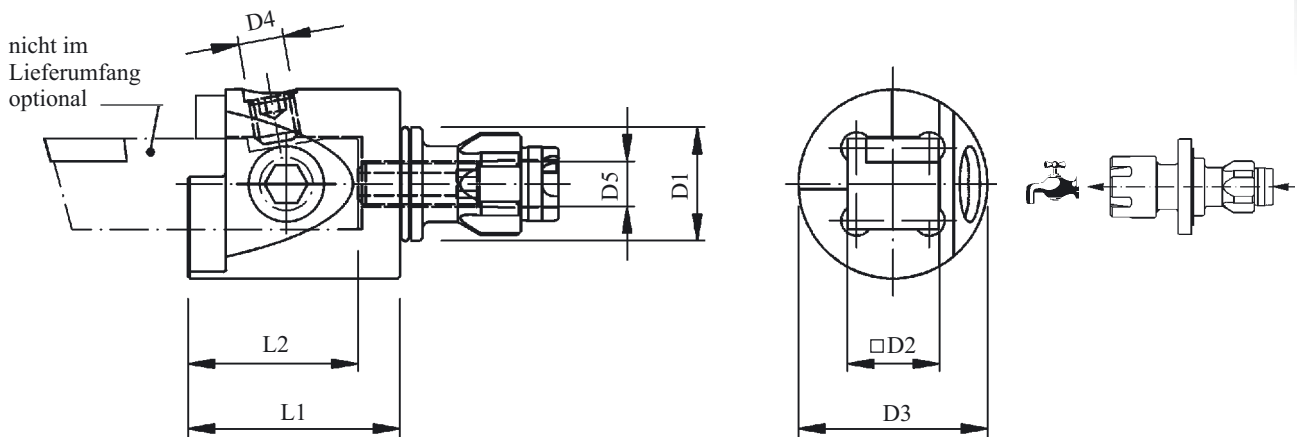


D 99.8

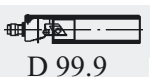
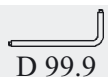
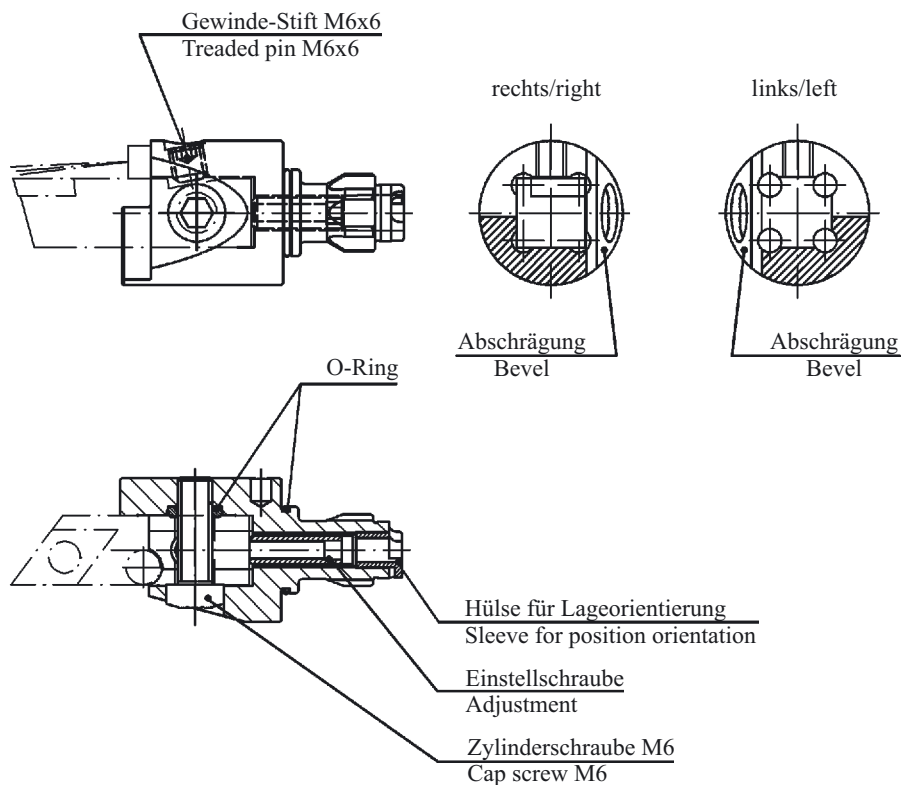
DECOFLEX® Adapter Meisselaufnahme

DECOFLEX™ Adapter Turning Tool Holder For Square

Type 20



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	Ausführung Version
15	1520-0507	12	25	M6x6	M6	28	22,5	rechts/right
20	2120-0511	16	30	M6x8	M6	30	22,5	rechts/right
20	2120-0516	16	30	M6x8	M6	30	22,5	links/left

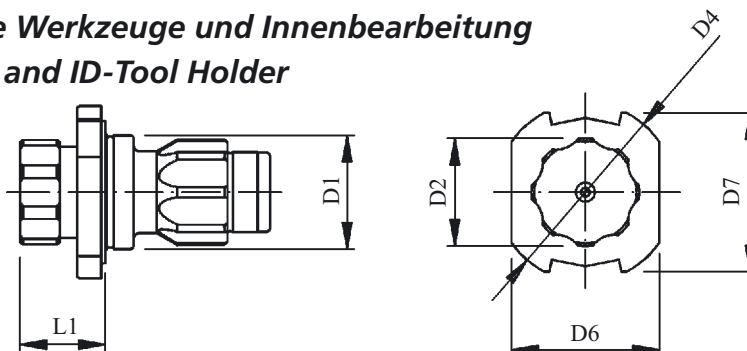


DECOFLEX® Adapter Verschlussstück

Type **16**

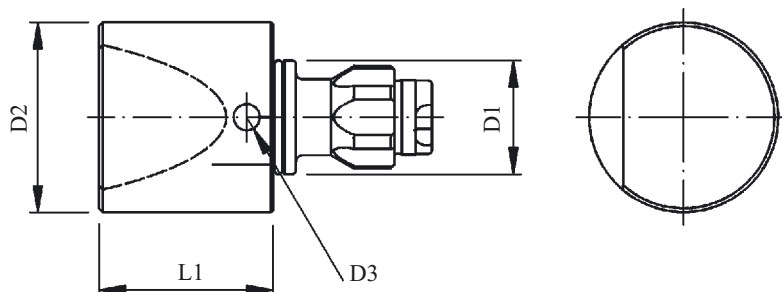
DECOFLEX™ Adapter Plug

Für Angetriebene Werkzeuge und Innenbearbeitung
For Rotary Tools and ID-Tool Holder

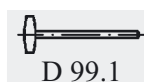
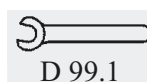
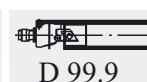


Größe/Size D1	Artikel-Nr. Part No.	D2	D4	D6	D7	L1
15	1516-0480	19	26	21	22	9
20	2116-0522	19	31,5	26	28	12

Für Meisselaufnahme / For Turning Tool Holder For Lathe Chisel

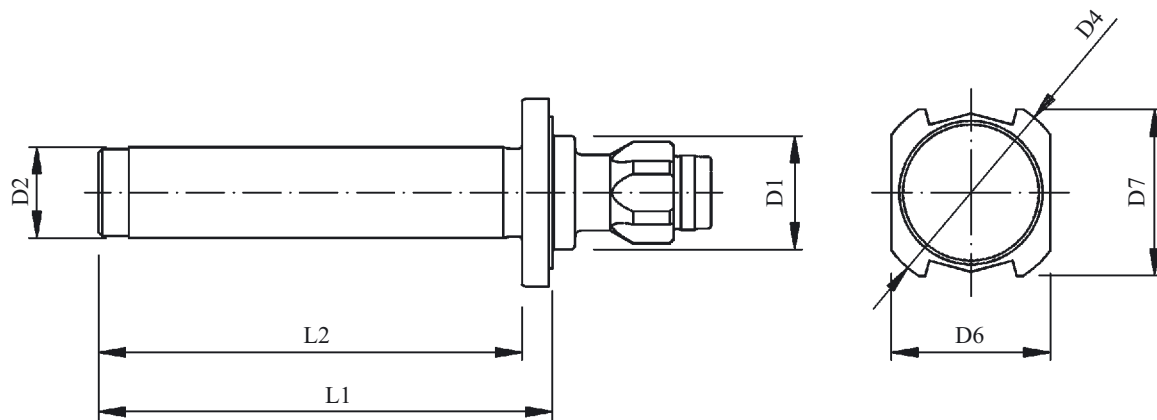


Größe/Size D1	Artikel-Nr. Part No.	D2	D3	L1
15	1516-0518	25	3,5	23
20	2116-0519	30	5	30



DECOFLEX® Adapter Prüfdorn
DECOFLEX™ Test Mandrel

Type 10



Größe/Size D1							
1) 15	1510-0454	12	26	21	22	60	56
2) 15	1510-0502	12	25	-	-	60	52
2) 20	2110-0508	12	30	-	-	60	52

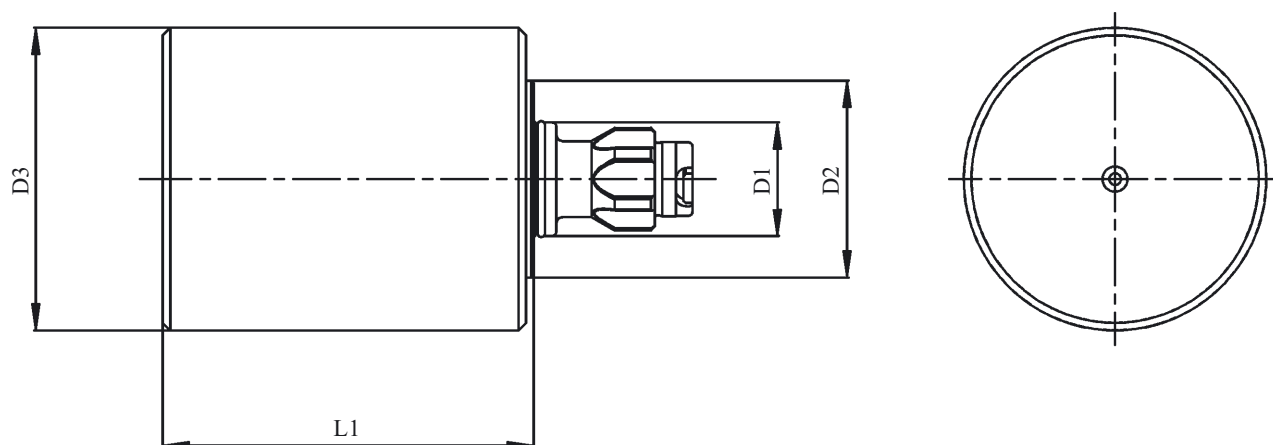
1) Für angetriebene Werkzeuge / For Rotary Tools

2) For feststehende Werkzeuge / For fixed Tools



DECOFLEX® Adapter *Rohling*
 DECOFLEX™ Pre-machined Blank

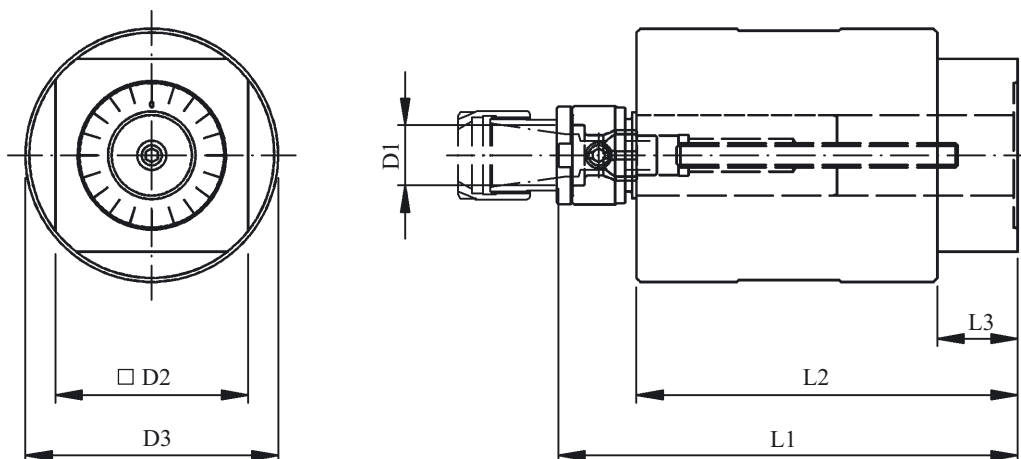
Type 09



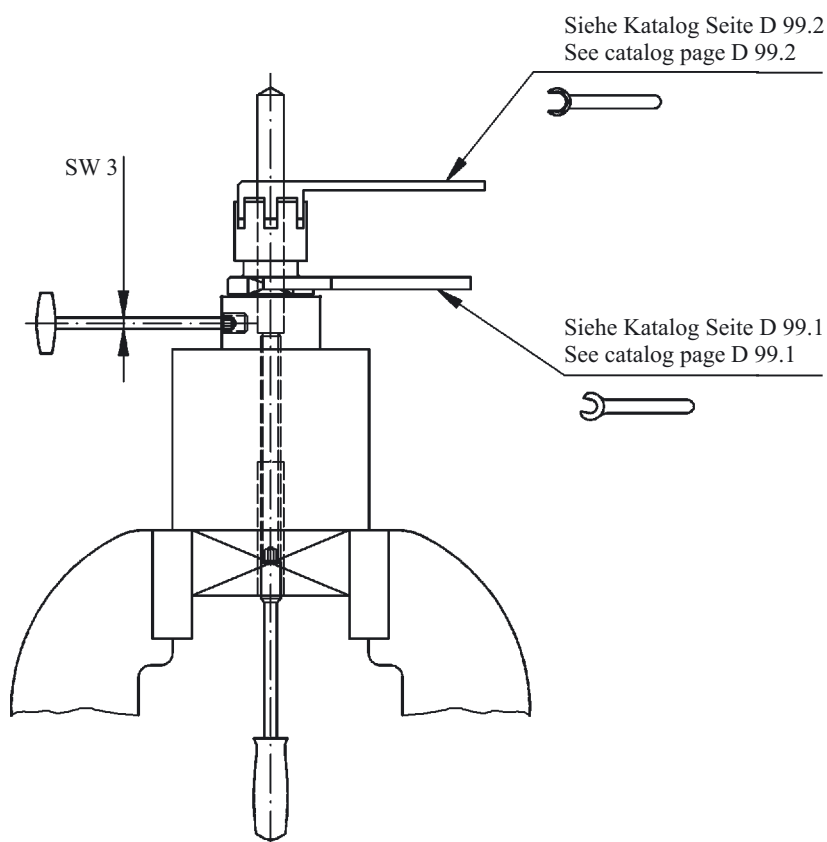
Größe/Size D1	Artikel-Nr. Part No.	D2	D3	L1
15	1509-0581	26	40	49
20	2109-0582	36	49	66

DECOFLEX® Einstellvorrichtung DECOFLEX™ Setup Fixture

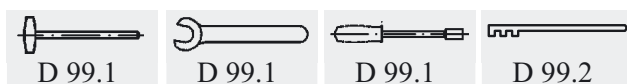
Type **11**



Größe/Size D1	Artikel-Nr. Part No.	D2	D3	L1	L2	L3
15	1511-0437	□ 48	63	111,1	95	20

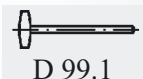
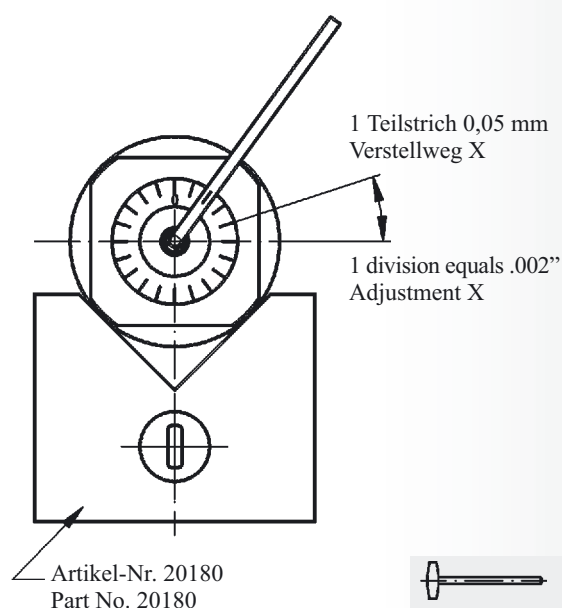
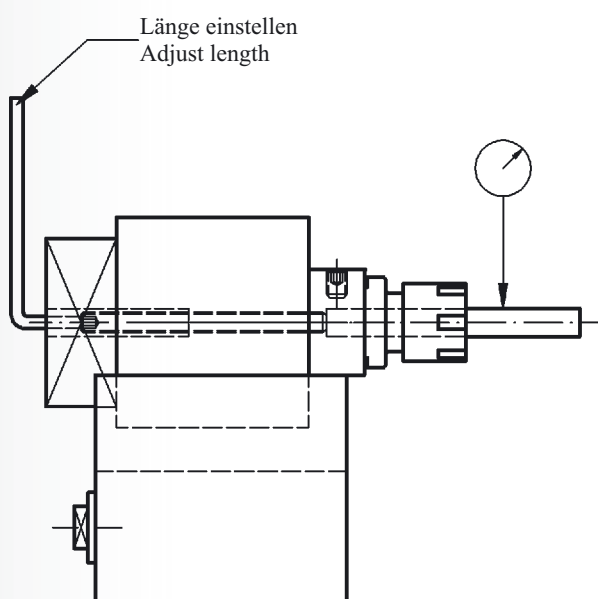
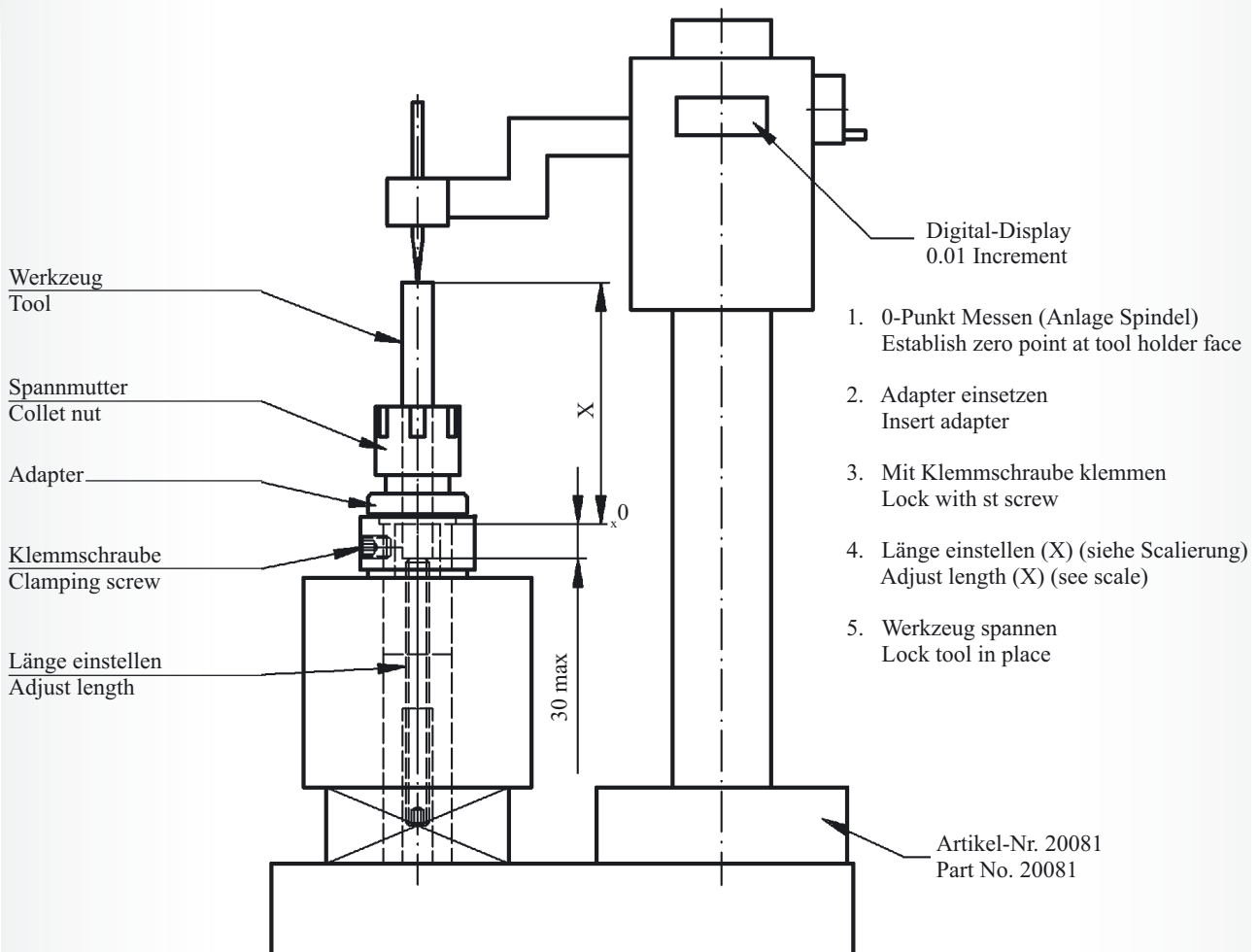


Werkzeugwechsel / Tool Change



DECOFLEX® Einstellvorrichtung
DECOFLEX™ Setup Fixture

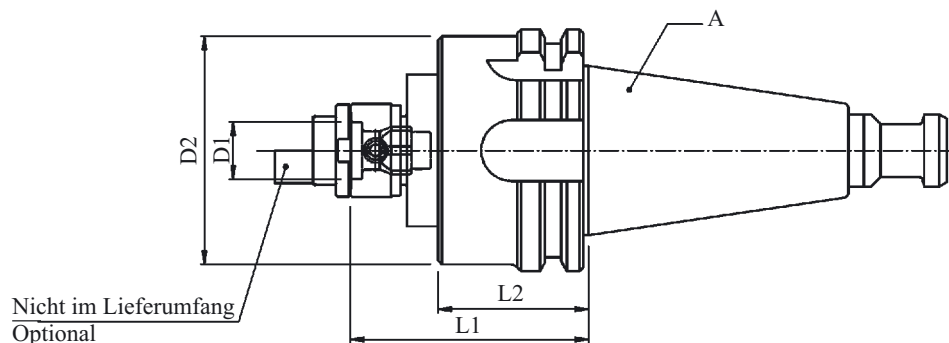
Type **11**



DECOFLEX® Steilkegelaufnahme

Type **11.1**

DECOFLEX™ Machine Tool Interface ISO DIN 69871 (SK) JIS-B 6639 (MAS/BT)



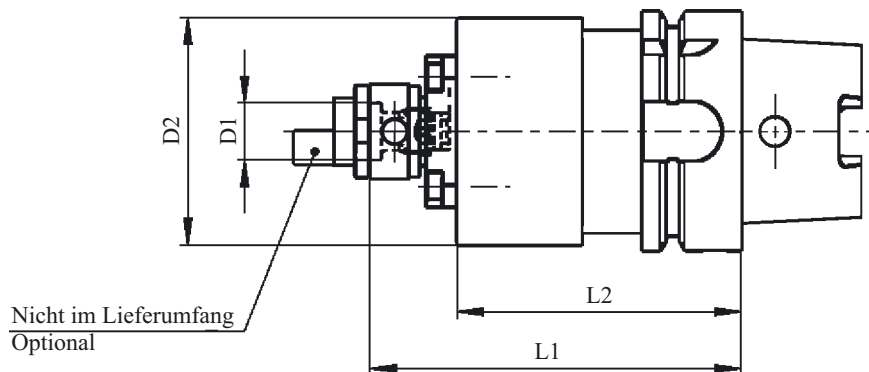
Größe/Size D1	Artikel-Nr. Part No.	Bezeichnung Type A	D2	L1	L2
15	1511-0438	SK 40	60	63	40
15	1511-0463	MAS BT 40	60	63	40



DECOFLEX® HSK-Aufnahme

Type **11.2**

DECOFLEX™ Machine Tool Interface (HSK) DIN 69893

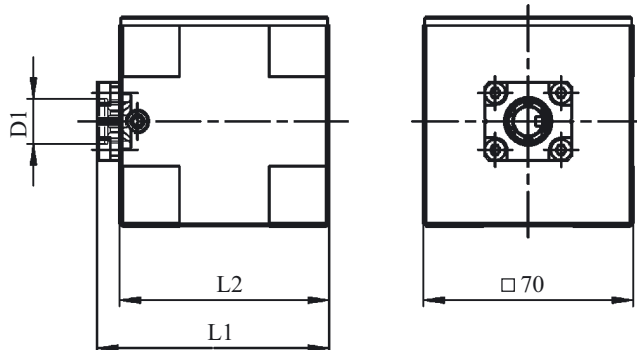


Größe/Size D1	Artikel-Nr. Part No.	Bezeichnung Type A	D2	L1	L2
15	1511-0461	HSK A/C-63	60	98	75
15	1511-0464	HSK B/D-63	60	98	75

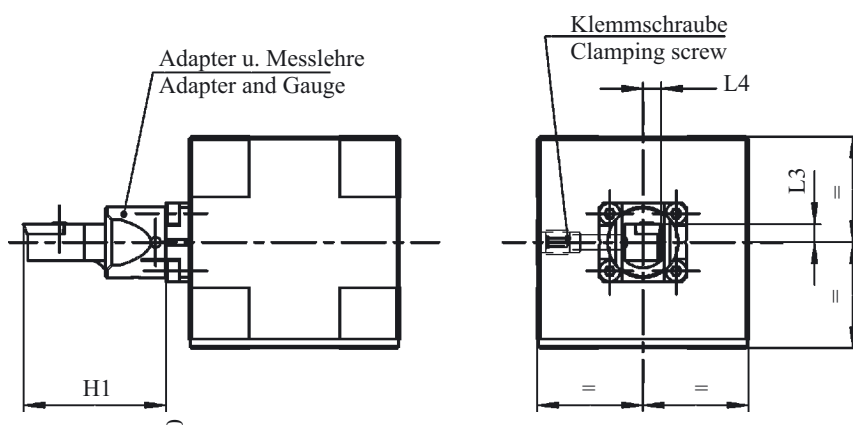


DECOFLEX® Prüfvorrichtung für Meisselaufnahme
DECOFLEX™ Checking Fixture for Turning Tool Holder

Type **11.3**



Größe/Size D1	Artikel-Nr. Part No.	L1	L2
15	1511-0668	77,5	70
20	2111-0670	79,5	70



Größe/Size D1	Artikel-Nr. Part No.
15	1510-0672
20	2110-0673

Überprüfen der Maße L1, L2, H1

1. Adapter einführen u. mit Klemmschraube klemmen
2. L3 ermitteln
3. L4 ermitteln
4. H1 ermitteln

Check dimensions L1, L2, H1

1. Insert adapter jam with clamping screw
2. determine L3
3. determine L4
4. determine H4



D 99.1

DECOFLEX® Einstell-Adapter DECOFLEX™ Setting-Adapter

Type **11.4**

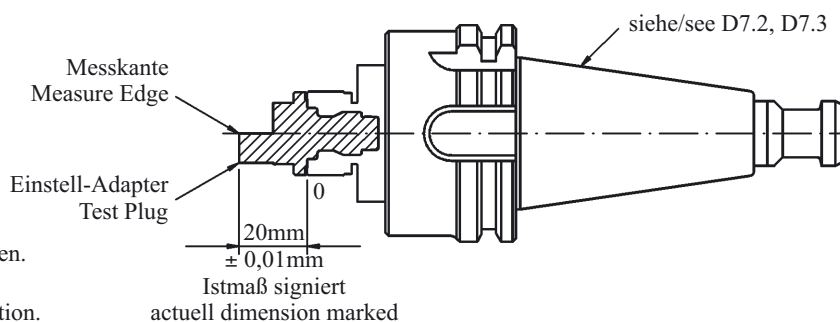
Einstellen der DECOFLEX® Adapter mit Einstell-Adapter Setup of DECOFLEX™ Adapter with Presetter

1. Messung

0-Punkt ermitteln mit Einstell-Adapter
Einstellmaß in Voreinstellgerät hinterlegen.

Step 1

Capture zero point to establish Null position.

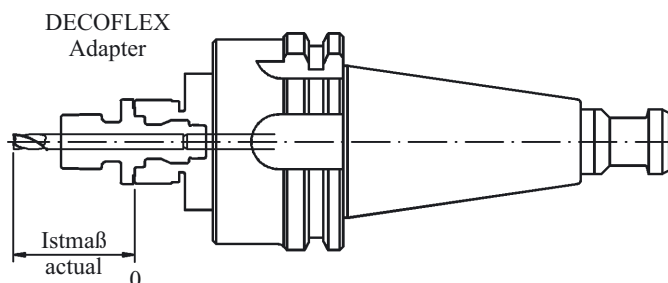


2. Messung

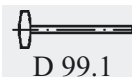
Istmaß des DECOFLEX-Adapters
vom 0-Punkt aus ermitteln.

Step 2

Measure tip of tool to Null position
for actual dimension.



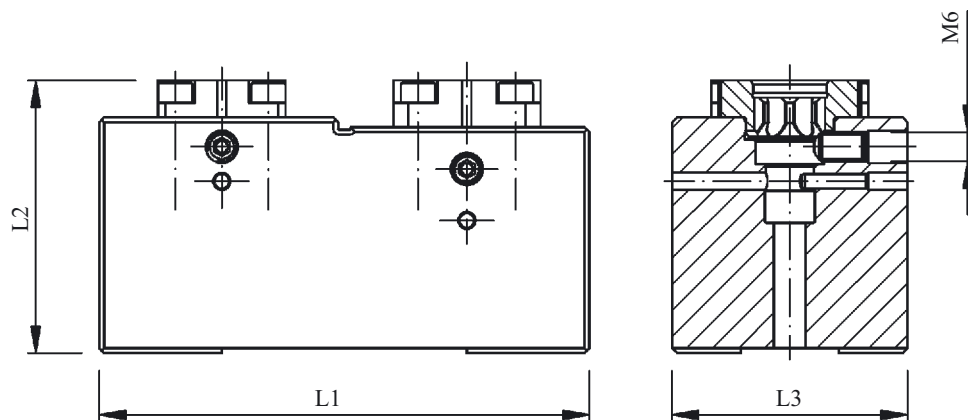
Größe/Size D1	Type 11.1 Type 11.2	Artikel-Nr. Part No.
15	1511-0438	1510-0671
15	1511-0463	1510-0671
15	1511-0461	1510-0671
15	1511-0464	1510-0671



D 99.1

DECOFLEX® Montageklotz DECOFLEX™ Assembly Aid

Type **11.5**

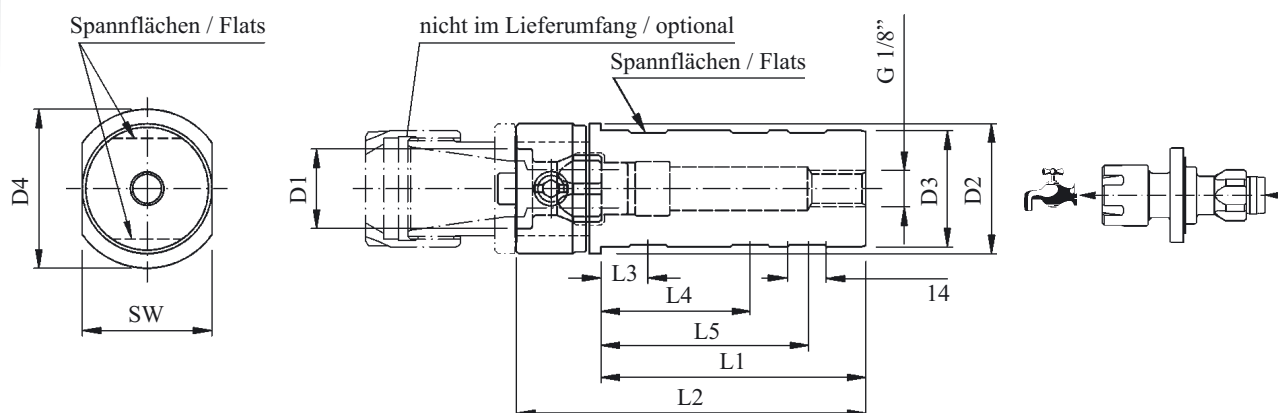


Größe/Size D1	Artikel-Nr. Part No.	L1	L2	L3
15	0.001.508	100	55,5	48
20	0.001.508	100	55,5	48

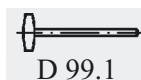


DECOFLEX® Aufnahme mit zylindrischem Schaft
DECOFLEX™ Straight Shank Interface

Type 12



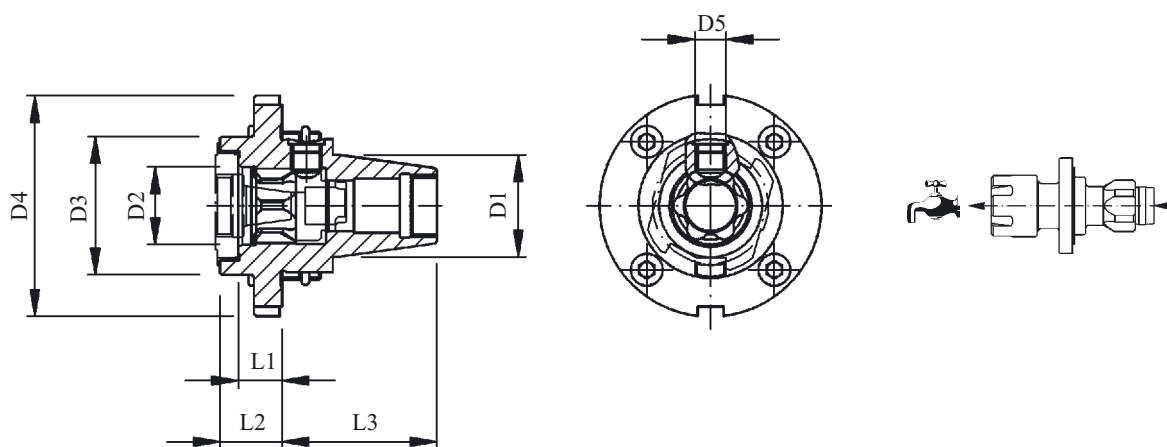
Größe/Size D1	Artikel-Nr. Part No.	D2	D3	D4	SW	L1	L2	L3	L4	L5
15	1512-0492	34,5	20	30	24,5	58	74	10	40	-
15	1512-0494	34,5	20	30	24,5	24	40	10	-	-
15	1512-0553	24,4	20	30	24,5	30	49,5	8	22	-
15	1512-0449	24,5	22	30	24,5	24	40	10	-	-
15	1512-0447	24,5	22	30	24,5	58	74	10	40	-
15	1512-0500	34,5	22	30	24,5	70	86	10	40	60
15	1512-0493	34,5	25	30	24,5	58	74	10	40	-
15	1512-0495	34,5	25	30	24,5	24	40	10	-	-
15	1512-0497	34,5	30	30	24,5	58	74	10	40	-
15	1512-0450	34,5	32	30	24,5	24	40	10	-	-
15	1512-0448	34,5	32	30	24,5	58	74	10	40	-



D 99.1

DECOFLEX® Aufnahme mit Preci-Flex DECOFLEX™ Converter Preci-Flex / DECOFLEX

Type **17**



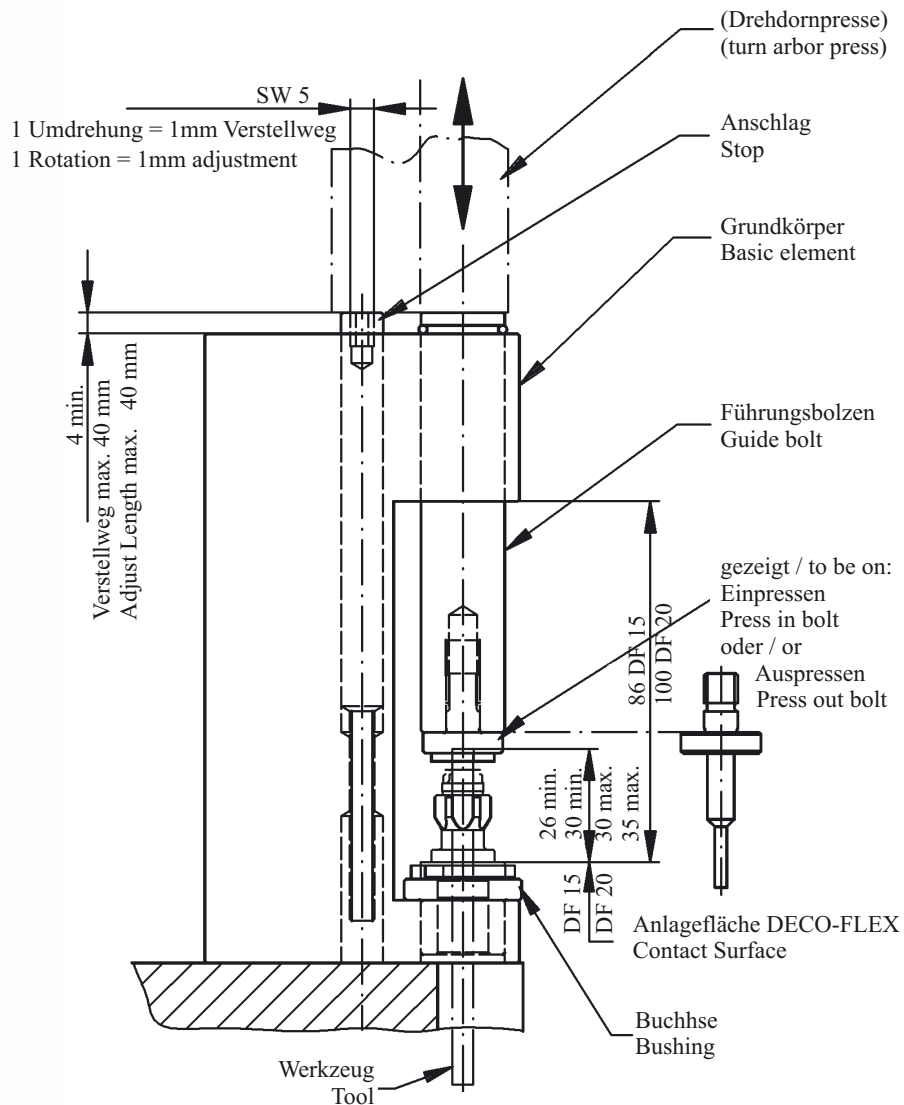
DECOFLEX Größe/Size	PRECI-FLEX Größe/Size	Artikel-Nr. Part No.	D2	D3	D4	D5	L1	L2	L3
	D1								
15	20	2017-0444	15	28	43	M6x5	8,5	12	30
20	25	2517-0521	20	32,4	50	M6x5	10,4	14	34

Siehe / See Preci-Flex-Katalog P99.1 P99.14



DECOFLEX® Einpressvorrichtung für Press-Fit

DECOFLEX™ Press Fit Press-In Device



Lieferumfang

- Grundkörper
- Führungsbolzen
- Anschlag
- Einpressführung für $\varnothing 3$; $\varnothing 4$; $\varnothing 5$; $\varnothing 6$; $\varnothing 8$; $\varnothing 10^*$
- Ausdrückbolzen für $\varnothing 3$; $\varnothing 4$; $\varnothing 5$; $\varnothing 6$; $\varnothing 8$; $\varnothing 10^*$

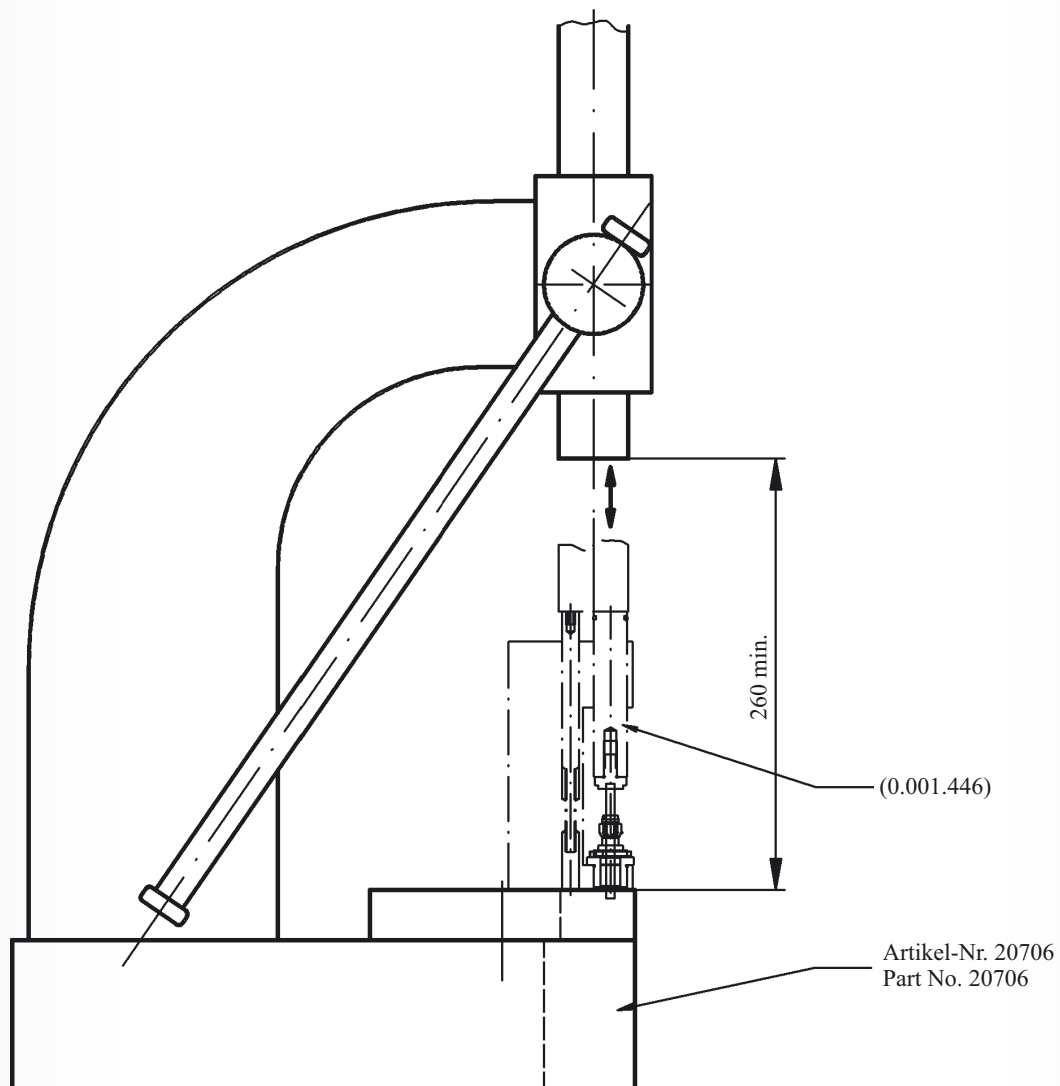
Scope of delivery

- Basic element
- Guide bolt
- Stop
- Press in bolt $\varnothing 3$; $\varnothing 4$; $\varnothing 5$; $\varnothing 6$; $\varnothing 8$; $\varnothing 10^*$
- Press out bolt $\varnothing 3$; $\varnothing 4$; $\varnothing 5$; $\varnothing 6$; $\varnothing 8$; $\varnothing 10^*$

*DECOFLEX 20

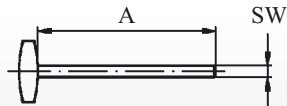
Gruppe Group	DECO-FLEX Größe/Size	Artikel-Nr. Part No.
D50.1	15	0.001.446
D50.1	20	0.001.840

DECOFLEX® Drehdornpresse
 DECOFLEX™ Turn Arbor Press



DECOFLEX® Adapter Zubehör für alle Anwendungen

DECOFLEX™ Adapter Accessories for all Applications

Größe Size								
	A	Artikel-Nr. Part No.	SW	Artikel-Nr. Part No.	SW	A	Artikel-Nr. Part No.	SW
15	100	15199	3	0.001.422	21	125	19765	4.5
20	100	15199	3	0.001.547	26			

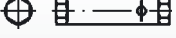
DECOFLEX® Adapter Zubehör und abgedichtete Mutter Type 01

DECOFLEX™ Adapter Accessories and Internal Coolant Nut

Größe Size				 Für Dichtscheiben		
D1	Type 01	Größe Size	Artikel-Nr. Part No.	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.
15	1501-0491	ER11M M13x0,75	10101	ERMC11 M13x0,75	219.090....	14357
15	1501-0490	ER16M M19x1	10117	ERMC16 M19x1	15666	10022
20	2101-0534	ER16M M19x1	10117	ERMC16 M19x1	15666	10022
20	2101-0535	ER20M M24x1	12155	ERMC20 M24x1	15667	13797

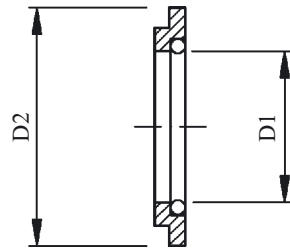
DECOFLEX® Adapter Zubehör und abgedichtete Mutter Type 15

DECOFLEX™ Adapter Accessories and Internal Coolant Nut

Größe Size				 Für Dichtscheiben			 Für Spannmuttern For Collet Nuts DIN 896 B
D1	Type 15	Größe Size	Artikel-Nr. Part No.	Größe Size	Artikel-Nr. Part No.	Artikel-Nr. Part No.	DIN 896 B
15	1515-0439	ER8 M12x1	0.001.358	-	-	SW 9	0.001.388 (SW 9x10)
20	2115-0586	ER11A M18x1	12590	-	-	SW 13	-

Dichtringe für Spannmutter mit Innengewinde Sealing Rings for Collet Nuts With Internal Thread

Type 01



Größe Size										
D1	Type 01	nach according	Größe Size	Artikel-Nr. Part No.	Dichtbereich Range	D1	D2	Bezeichnung Term	Artikel-Nr. Part No.	Art.-Nr. Satz Part No. Set
15	1501-0491	DIN 6499	ERMC11 M13x0,75	219.090. __	2,5 – 7	2,5 ... 7	-	¹⁾	219.090. __	219.090.000
15	1501-0490	DIN 6499	ERMC16 M19x1	15666	2,5 – 10	2,5 ... 10	13	DS/ER16	219.091. __	219.091.000
20	2101-0534	DIN 6499	ERMC16 M19x1	15666	2,5 – 10	2,5 ... 10	13	DS/ER16	219.091. __	219.091.000
20	2101-0535	DIN 6499	ERMC20 M24x1	15667	2,5 – 13	2,5 ... 13	16	DS/ER20	218.713. __	219.713.000

Bemerkungen / Remarks

__ Bei Bestellung bitte Durchmesser angeben. Bestellbeispiel: Dichtring Hi-Q/ERMC16, Durchmesser = 4 mm : 219.091.040

__ Please list clamping diameter when ordering. Example of an order: Sealing rings Hi-Q/ERMC16, diameter 0 4 mm : 219.091.040

¹⁾ Dichtring in Spannmutter integriert.

¹⁾ Sealing ring integrated in collet nut.

DECOFLEX® Adapter Zubehör

DECOFLEX™ Adapter Accessories

Type **07**

Größe Size				
D1	Type 08	D2	Größe Size	Artikel-Nr. Part No.
15	150-0538	3,5	M3,5	0.001.555
15	150-0537	5	M5	0.001.553
15	150-0536	8	M8	0.001.549

DECOFLEX® Adapter Zubehör

DECOFLEX™ Adapter Accessories

Type **08**

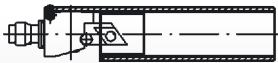
Größe Size				
D1	Type 08	D2	Größe Size	Artikel-Nr. Part No.
15	1508-0455	3	M3x5	10732
15	1508-0456	4	M4x5	10736
15	1508-0457	5	M5x6	10744
15	1508-0458	6	M6x6	10751
15	1508-0459	8	M8x6	13382
15	1508-0473	10	M8x6	13382
20	2108-0525	3	M3x5	10732
20	2108-0526	4	M4x5	10736
20	2108-0527	5	M5x6	10744
20	2108-0528	6	M6x6	10751
20	2108-0529	8	M8x6	13382
20	2108-0530	10	M8x6	13382
20	2108-0531	12	M8x6	13382
20	2108-0532	14	M8x6	13382

DECOFLEX® Adapter Zubehör

Type **20**

DECOFLEX™ Adapter Accessories

Größe Size								
D1	Artikel-Nr. Part No.	SW	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.	Artikel-Nr. Part No.
15	21186	5	7.075.394	11119 6,07x1,78	11072 13x1	7.075.398	7.075.401	10751 M6x6
20	21186	5	7.075.457	11119 6,07x1,78	14400 18x1	7.075.398	7.075.473	10752 M6x8

Gruppe Group		
D1	Type	Artikel-Nr. Part No.
15	1520-0507	0.001.492
20	2120-0511	0.001.520



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