

# Werkzeugaufnahmen • Adaptors

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## DIN 69871 • MAS BT • DIN 2080



# DIN EN ISO 9001:2000 - Zertifikat 2010



## ZERTIFIKAT

Die TÜV CERT-Zertifizierungsstelle  
der TÜV Rheinland Industrie Service GmbH

bescheinigt gemäß  
TÜV CERT-Verfahren, dass das Unternehmen



**Johne & Co. Präzisionswerkzeuge GmbH**  
Köhler Straße 41-43  
D - 46286 Dorsten

für den Geltungsbereich

**Konstruktion und Fertigung von Werkzeugen sowie CNC-Lohnfertigung**

ein Qualitätsmanagementsystem eingeführt hat und anwendet.

Durch ein Audit, Bericht Nr. **071750**  
wurde der Nachweis erbracht, dass die Forderungen der  
**DIN EN ISO 9001:2000**  
erfüllt sind.

Dieses Zertifikat ist gültig bis **2010-04-18**.  
Zertifikat-Registrier-Nr. **01 100 071750**



Wuppertal, 2007-04-19



**TÜVRheinland®** *L. Dierkes*  
TÜV CERT-Zertifizierungsstelle  
der TÜV Rheinland Industrie  
Service GmbH

[www.tuv.com](http://www.tuv.com)



## CERTIFICATE

TÜV CERT Certification Body  
Rheinland Industrie Service GmbH

certifies in accordance with  
TÜV CERT procedures that


**Johne & Co. Präzisionswerkzeuge GmbH**  
Köhler Straße 41-43  
D - 46286 Dorsten

has established and applies a quality management system for

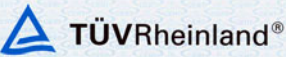
**design and manufacture of tools and CNC contract manufacture.**

An audit was performed, Report No. **071750**.  
Proof has been furnished that the requirements according to  
**DIN EN ISO 9001:2000**  
are fulfilled.

The certificate is valid until **2010-04-18**.  
Certificate Registration No. **01 100 071750**



Wuppertal, 2007-04-19



**TÜVRheinland®** *L. Dierkes*  
TÜV CERT Certification Body of  
TÜV Rheinland Industrie Service  
GmbH

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**JOHNE + CO**  
PRÄZISIONSWERKZEUGE GmbH

# Werkzeugaufnahmen Adaptors

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## Technische Daten der Steilkegelwerkzeuge

### Ausführung

Gehärtet nach einem speziellen, besonders verzugsarmen Härteverfahren.

Vickershärte

670 ± 40 HV 30 (HRc 58 ± 2)

Härtetiefe Eht = min. 0,5 mm

Kegelwinkel – Toleranzqualität AT 3  
nach DIN 2080-1

Oberflächenrauigkeit des Kegels  $R_z \leq 0,001$  mm.

Rundlaufgenauigkeit zwischen Steilkegel und Werkzeugaufnahme entnehmen Sie bitte dem jeweiligen Katalogblatt.

### Werkstoff

Legierter Einsatzstahl mit einer Zugfestigkeit im Kern nach der Einsatzhärtung von min. 980 N/mm<sup>2</sup>.

## Technical Data of Taper Tools

### Manufacturing Specification

Hardened by a special low-distortion method.

Vickers hardness

670 ± 40 HV 30 (HRc 58 ± 2)

Hardness depth Eht = min. 0.5 mm

Taper angle – tolerance quality AT 3  
to DIN 2080-1

Surface roughness of taper  $R_z \leq 0.001$  mm.

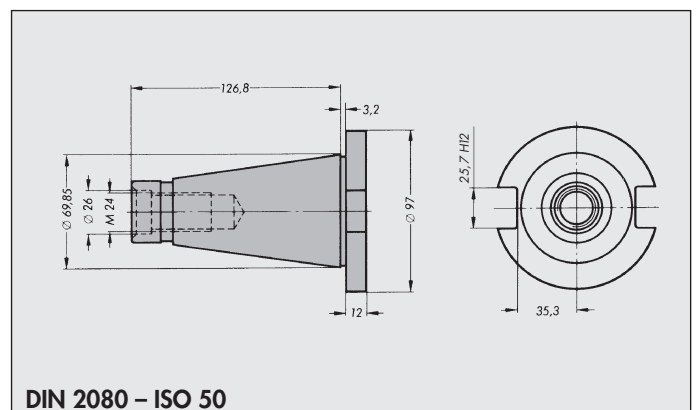
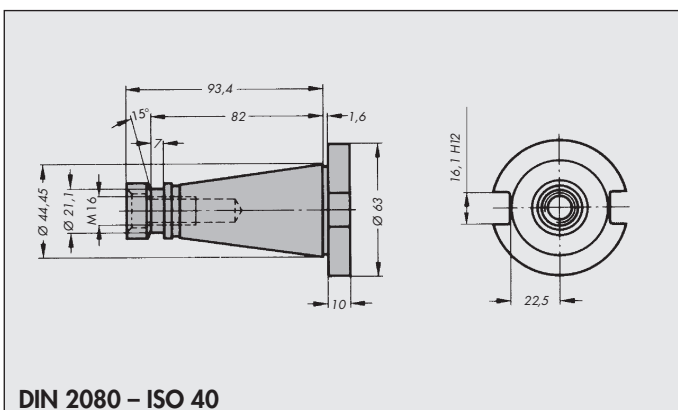
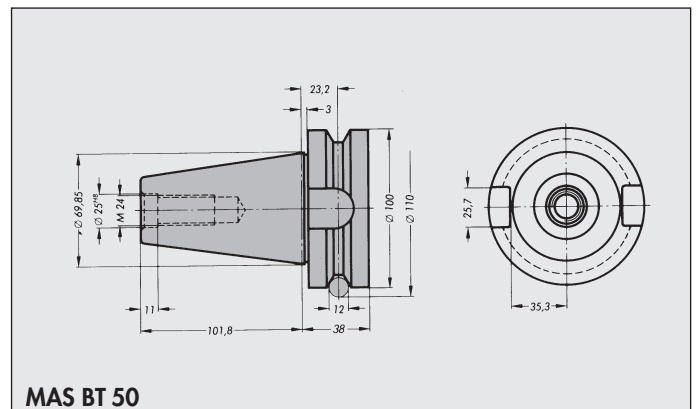
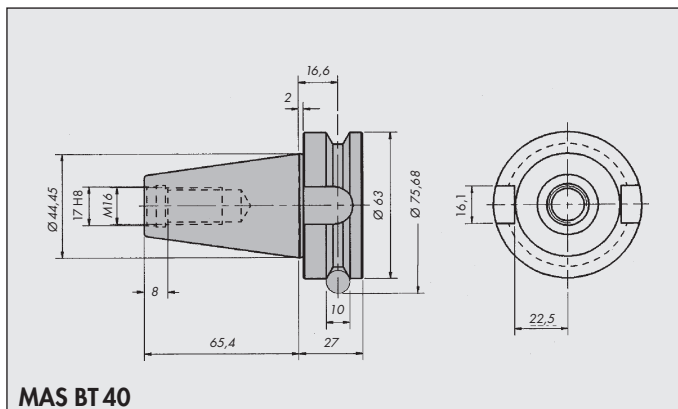
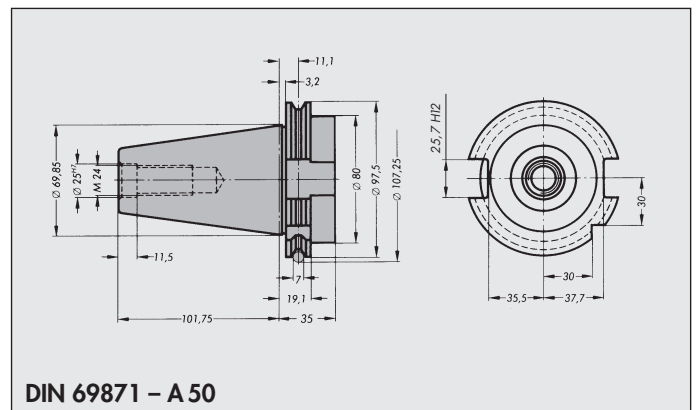
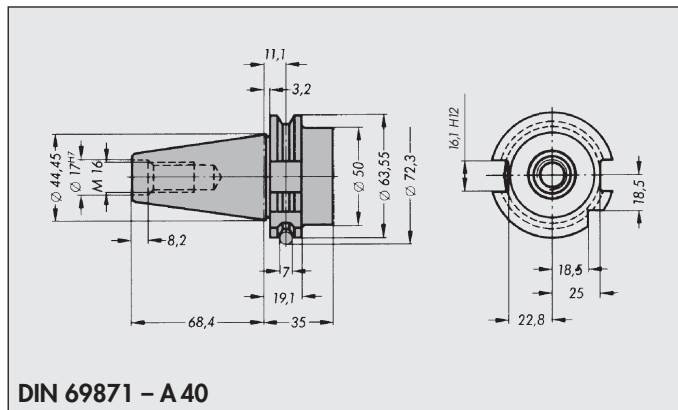
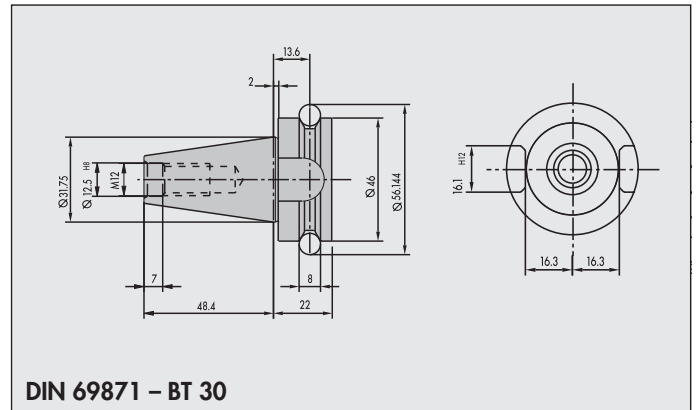
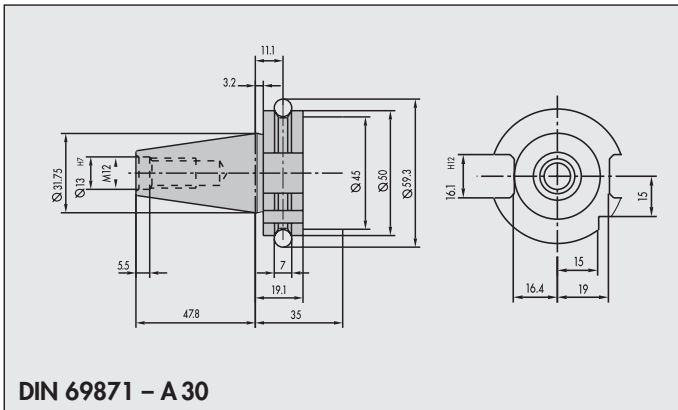
For true running accuracy between taper shank and toolholder please consult the relevant catalogue page.

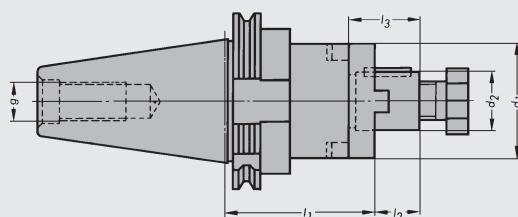
### Material

Alloyed case hardening steel with a tensile strength in the core after case hardening of at least 980 N/mm<sup>2</sup>.

Bitte beachten Sie: Alle Maße in diesem Katalog sind in mm angegeben.

Please notice: All dimensions in this catalogue are indicated in mm.





Kombi-Aufsteckfräserdorne · Combination Adaptors

## SK 40-A

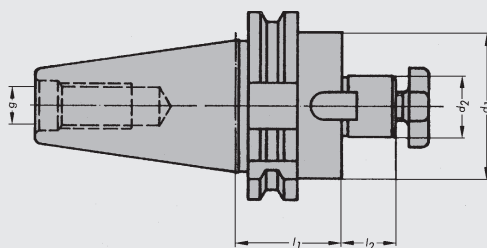
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
TC40-H55-D16	40	16	32	55	17	27	M 16
TC40-H100-D16	40	16	32	100	17	27	M 16
TC40-H55-D22	40	22	40	55	19	31	M 16
TC40-H100-D22	40	22	40	100	19	31	M 16
TC40-H55-D27	40	27	50	55	21	33	M 16
TC40-H100-D27	40	27	50	100	21	33	M 16
TC40-H60-D32	40	32	63	60	24	38	M 16
TC40-H100-D32	40	32	63	100	24	38	M 16
TC40-H60-D40	40	40	80	60	27	41	M 16
TC40-H100-D40	40	40	80	100	27	41	M 16

## SK 50-A

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
TC50-H55-D16	50	16	32	55	17	27	M 24
TC50-H100-D16	50	16	32	100	17	27	M 24
TC50-H55-D22	50	22	40	55	19	31	M 24
TC50-H100-D22	50	22	40	100	19	31	M 24
TC50-H55-D27	50	27	50	55	21	33	M 24
TC50-H100-D27	50	27	50	100	21	33	M 24
TC50-H55-D32	50	32	63	55	24	38	M 24
TC50-H100-D32	50	32	63	100	24	38	M 24
TC50-H55-D40	50	40	80	55	27	41	M 24
TC50-H100-D40	50	40	80	100	27	41	M 24

## SK 30-A

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
TC30-H50-D16	30	16	32	50	17	27	M12
TC30-H50-D22	30	22	40	50	19	31	M12
TC30-H55-D27	30	27	50	55	21	33	M12



Quernutdorne · Shell Mill Adaptors

## SK 40-A

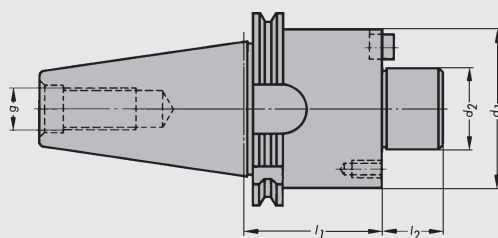
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
TC40-H40-D16SP	40	16	38	40	17	M 16
TC40-H40-D22SP	40	22	48	40	19	M 16
TC40-H50-D27SP	40	27	58	50	21	M 16
TC40-H55-D32SP	40	32	78	55	24	M 16
TC40-H60-D40SP	40	40	88	60	27	M 16

## SK 50-A

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
TC50-H40-D16SP	50	16	38	40	17	M 24
TC50-H40-D22SP	50	22	48	40	19	M 24
TC50-H40-D27SP	50	27	58	40	21	M 24
TC50-H40-D32SP	50	32	78	40	24	M 24
TC50-H60-D40SP	50	40	88	60	27	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Zentrierzapfen  $d_2 = 0,01$  mm.

**Accuracy:** Admissible concentricity deviation of the external taper to the journal  $d_2 = 0,01$  mm.



Messerkopfaufnahmen · Centring Arbors

## SK 40-A

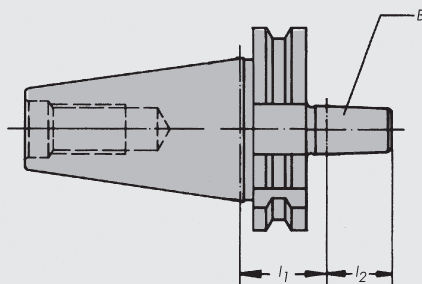
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
TC40-H60-D40FS	40	40	89,3	60	30	M 16

## SK 50-A

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
TC50-H50-D40FS	50	40	89,3	50	30	M 24
TC50-H70-D60FS	50	60	129	70	40	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Zentrierzapfen  $d_2 = 0,01$  mm.

**Accuracy:** Admissible concentricity deviation of the external taper to the journal  $d_2 = 0,01$  mm.



Bohrfutteraufnahmen · Taper Shafts for Drill Chucks

## SK 40-A

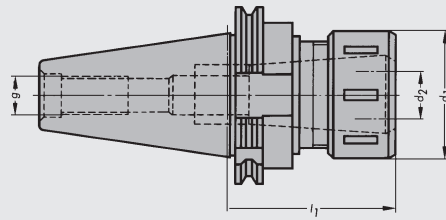
Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
TC40-H25-B12	40	12	25	24	M 16
TC40-H25-B16	40	16	25	24	M 16
TC40-H25-B18	40	18	25	32	M 16

## SK 50-A

Code	SK	B	d <sub>1</sub>	l <sub>1</sub>	g
TC50-H25-B16	50	16	25	24	M 24
TC50-H25-B18	50	18	25	32	M 24

## SK 30-A

Code	SK	B	d <sub>1</sub>	l <sub>1</sub>	g
TC30-H25-B12	30	12	25	24	M 12
TC30-H25-B16	30	16	25	24	M 12



Spannzangenfutter · Collet Chucks

## SK 40-AD für Spannzangen DIN 6499 ER (Typ Regofix) for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
TC40-H60-ER16	40	0,5-10	28	60	M 16	426E
TC40-H100-ER16	40	0,5-10	28	100	M 16	426E
TC40-H60-ER25	40	1,0-16	42	60	M 16	430E
TC40-H100-ER25	40	1,0-16	42	100	M 16	430E
TC40-70-ER32	40	2,0-20	50	70	M 16	470E
TC40-H100-ER32	40	2,0-20	50	100	M 16	470E
TC40-H80-ER40	40	3,0-26	63	80	M 16	472E
TC40-H100-ER40	40	3,0-26	63	100	M 16	472E

## SK 50-AD für Spannzangen DIN 6499 ER (Typ Regofix) for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
TC50-H60-ER16	50	0,5-10	28	60	M 24	426E
TC50-H100-ER16	50	0,5-10	28	100	M 24	426E
TC50-H60-ER25	50	1,0-16	42	60	M 24	430E
TC50-H100-ER25	50	1,0-16	42	100	M 24	430E
TC50-H70-ER32	50	2,0-20	50	70	M 24	470E
TC50-H100-ER32	50	2,0-20	50	100	M 24	470E
TC50-H80-ER40	50	3,0-26	63	80	M 24	472E
TC50-H100-ER40	50	3,0-26	63	100	M 24	472E
TC50-H100-ER50	50	10-34	78	100	M 24	474E

## SK 30-AD für Spannzangen DIN 6499 ER (Typ Regofix) for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
TC30-H60-ER16	30	0,5-10	28	60	M 12	426E
TC30-H60-ER25	30	1,0-16	42	60	M 12	430E
TC30-H60-ER 32	30	2,0-20	50	60	M 12	470E

## SK 40-AD für Spannzangen DIN 6388 OZ (Typ Ortlieb) for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
TC40-H70-OZ16	40	2,0-16	43	70	M 16	415E
TC40-H100-OZ16	40	2,0-16	43	100	M 16	415E
TC40-H70-OZ25	40	2,0-25	60	70	M 16	462E
TC40-H100-OZ25	40	2,0-25	60	100	M 16	462E
TC40-H100-OZ32	40	3,0-32	72	100	M 16	467E

## SK 50-AD für Spannzangen DIN 6388 OZ (Typ Ortlieb) for collet chucks DIN 6388 OZ (type Ortlieb)

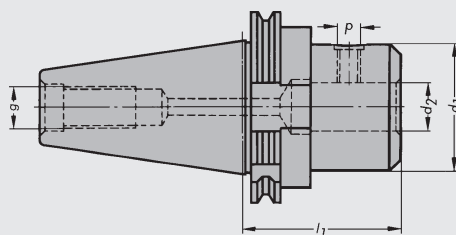
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
TC50-H70-OZ16	50	2,0-16	43	70	M 24	415E
TC50-H100-OZ16	50	2,0-16	43	100	M 24	415E
TC50-H70-OZ25	50	2,0-25	60	70	M 24	462E
TC50-H100-OZ25	50	2,0-25	60	100	M 24	462E
TC50-H73-OZ32	50	3,0-32	72	73	M 24	467E
TC50-H90-OZ40	50	6,0-40	85	90	M 24	468E

## SK 30-AD für Spannzangen DIN 6388 OZ (Typ Ortlieb) for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
TC30-H60-OZ16	30	2,0-16	43	60	M 12	415E
TC30-H70-OZ25	30	2,0-25	60	70	M 12	462E

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zur Bohrung d<sub>2</sub> = 0,005 mm.

**Accuracy:** Admissible concentricity deviation of the external taper to the bore d<sub>2</sub> = 0,005 mm.



Zylinderschaftaufnahmen · Straight Shank Adaptors

## SK 40-AD (Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC40-H50-WE6	40	6	25	50	M 16	M 6
TC40-H100-WE6	40	6	25	100	M 16	M 6
TC40-H50-WE8	40	8	28	50	M 16	M 8
TC40-H100-WE8	40	8	28	100	M 16	M 8
TC40-H50-WE10	40	10	35	50	M 16	M 10
TC40-H100-WE10	40	10	35	100	M 16	M 10
TC40-H50-WE12	40	12	42	50	M 16	M 12
TC40-H100-WE12	40	12	42	100	M 16	M 12
TC40-H63-WE14	40	14	48	63	M 16	M 12
TC40-H100-WE14	40	14	48	100	M 16	M 12
TC40-H63-WE16	40	16	48	63	M 16	M 14
TC40-H100-WE16	40	16	48	100	M 16	M 14
TC40-H63-WE18	40	18	52	63	M 16	M 14
TC40-H100-WE18	40	18	52	100	M 16	M 14
TC40-H63-WE20	40	20	52	63	M 16	M 16
TC40-H100-WE20	40	20	25	100	M 16	M 16
TC40-H100-WE25	40	25	65	100	M 16	M 18X2
TC40-H100-WE32	40	32	72	100	M 16	M 20X2
TC40-H120-WE40	40	40	90	120	M 16	M 20X2

## SK 50-AD (Weldon/DIN 1835 B)

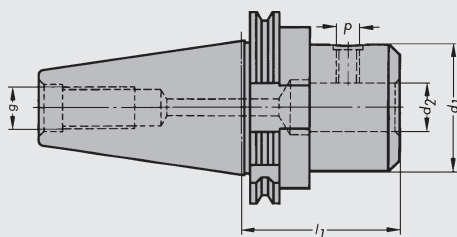
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC50-H63-WE6	50	6	25	63	M 24	M 6
TC50-H100-WE6	50	6	25	100	M 24	M 6
TC50-H63-WE8	50	8	28	63	M 24	M 8
TC50-H100-WE8	50	8	28	100	M 24	M 8
TC50-H63-WE10	50	10	35	63	M 24	M 10
TC50-H100-WE10	50	10	35	100	M 24	M 10
TC50-H63-WE12	50	12	42	63	M 24	M 12
TC50-H100-WE12	50	12	42	100	M 24	M 12
TC50-H63-WE14	50	14	48	63	M 24	M 12
TC50-H100-WE14	50	14	48	100	M 24	M 12
TC50-H63-WE16	50	16	48	63	M 24	M 14
TC50-H100-WE16	50	16	48	100	M 24	M 14
TC50-H63-WE18	50	18	52	63	M 24	M 14
TC50-H100-WE18	50	18	52	100	M 24	M 14
TC50-H63-WE20	50	20	52	63	M 24	M 16
TC50H100-WE20	50	20	52	100	M 24	M 16
TC50-H80-WE25	50	25	65	80	M 24	M 18X2
TC50-H100-WE32	50	32	72	100	M 24	M 20X2
TC50-H100-WE40	50	40	90	100	M 24	M 20X2

## SK 30-AD (Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC30-H45-WE6	30	6	25	45	M 12	M 6
TC30-H45-WE8	30	8	28	45	M 12	M 8
TC30-H50-WE10	30	10	35	50	M 12	M 10
TC30-H50-WE12	30	12	42	50	M 12	M 12
TC30-H70-WE14	30	14	44	70	M 12	M 12
TC30-H70-WE16	30	16	48	70	M 12	M 14
TC30-H70-WE18	30	18	50	70	M 12	M 14
TC30-H70-WE20	30	20	52	70	M 12	M 16

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,003 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,003 mm.



Zylinderschaftaufnahmen · Straight Shank Adaptors

## SK 40-AD (Weldon/DIN 1835 B) kurz - short

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC40-H35-WE16	40	16	48	35	M 16	M 14
TC40-H35-WE20	40	20	52	35	M 16	M 16
TC40-H35-WE25	40	25	65	35	M 16	M 18 x 2

## SK 50-AD (Weldon/DIN 1835 B) kurz - short

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC50-H35-WE16	50	16	48	35	M 24	M 14
TC50-H35-WE20	50	20	52	35	M 24	M 16
TC50-H35-WE25	50	25	65	35	M 24	M 18 x 2
TC50-H35-WE32	50	32	72	35	M 24	M 20 x 2

## SK 40-AD (Whistle-Notch/DIN 1835 E)

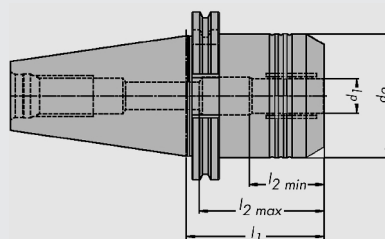
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC40-H50-WN6	40	6	25	50	M 16	M 6
TC40-H50-WN8	40	8	28	50	M 16	M 8
TC40-H50-WN10	40	10	35	50	M 16	M 10
TC40-H50-WN12	40	12	42	50	M 16	M 12
TC40-H50-WN14	40	14	44	50	M 16	M 12
TC40-H63-WN16	40	16	48	63	M 16	M 14
TC40-H63-WN18	40	18	50	63	M 16	M 14
TC40-H63-WN20	40	20	52	63	M 16	M 16
TC40-H100-WN25	40	25	65	100	M 16	M 18 x 2

## SK 50-AD (Whistle-Notch/DIN 1835 E)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
TC50-H63-WN6	50	6	25	63	M 24	M 6
TC50-H63-WN8	50	8	28	63	M 24	M 8
TC50-H63-WN10	50	10	35	63	M 24	M 10
TC50-H63-WN12	50	12	42	63	M 24	M 12
TC50-H63-WN14	50	14	44	63	M 24	M 12
TC50-H63-WN16	50	16	48	63	M 24	M 14
TC50-H63-WN18	50	18	50	63	M 24	M 14
TC50-H63-WN20	50	20	52	63	M 24	M 16
TC50-H80-WN25	50	25	65	80	M 24	M 18 x 2

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,003 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,003 mm.



Dehnspannfutter · Hydraulic Chucks

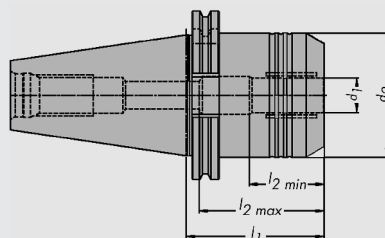
## SK 40-AD/B kurze, schwere Ausführung Short and heavy style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
TC40-HD20-H	40	20	49,5	64,5	42,5	52,5

## SK 50-AD/B kurze, schwere Ausführung Short and heavy style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
TC50-HD32-H	50	32	72	81	55	65

Zwischenbuchsen siehe Seite 28  
Slotted intermediate sleeves see page 28



Dehnspannfutter · Hydraulic Chucks

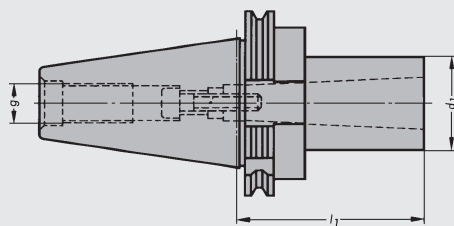
## SK 40-AD/B kurze, schlanke Ausführung Short and slim style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
TC40-HD6-S	40	6	26	80,5	27,5	37,5
TC40-HD8-S	40	8	28	80,5	27,5	37,5
TC40-HD10-S	40	10	30	80,5	32,5	42,5
TC40-HD12-S	40	12	32	80,5	37,5	47,5
TC40-HD16-S	40	16	38	80,5	42,5	52,5
TC40-HD20-S	40	20	42	80,5	42,5	52,5
TC40-HD25-S	40	25	55	80,5	51	61
TC40-HD32-S	40	32	63	80,5	55	65

## SK 50-AD/B kurze, schlanke Ausführung Short and slim style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
TC50-HD20-S	50	20	42	80,5	42,5	52,5

Zwischenbuchsen siehe Seite 28  
Slotted intermediate sleeves see page 28



Morsekegelaufnahmen · Morse Taper Adaptors

### SK 40-AD

DIN 6364 mit Anzugsgewinde  
DIN 6364 with clamping screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
TC40-H50-MK2F	40	30	50	M 16	2
TC40-H70-MK3F	40	35	70	M 16	3
TC40-H95-MK4F	40	44	95	M 16	4

### SK 50-AD

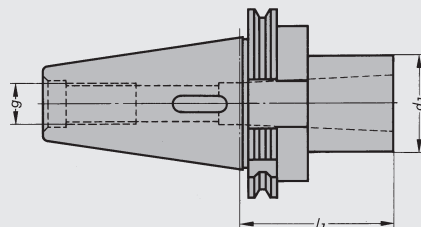
DIN 6364 mit Anzugsgewinde  
DIN 6364 with clamping screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
TC50-H60-MK2F	50	30	60	M 24	2
TC50-H65-MK3F	50	35	65	M 24	3
TC50-H70-MK4F	50	44	70	M 24	4

### SK 30-AD

DIN 6364 mit Anzugsgewinde  
DIN 6364 with clamping screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
TC30-H50-MK2F	30	30	50	M 12	2



Morsekegelaufnahmen · Morse Taper Adaptors

### SK 40-AD

DIN 6383 mit Austreibblappen  
DIN 6383 with flat tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
TC40-H50-MK2E	40	30	50	M16	2
TC40-H70-MK3E	40	35	70	M16	3
TC40-H95-MK4E	40	44	95	M16	4

### SK 50-AD

DIN 6383 mit Austreibblappen  
DIN 6383 with flat tang

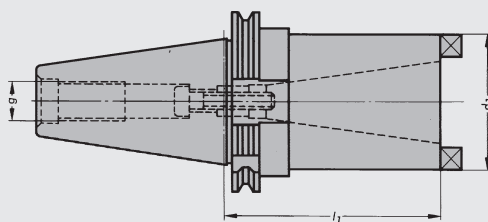
Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
TC50-H60-MK2E	50	30	60	M 24	2
TC50-H65-MK3E	50	35	65	M 24	3
TC50-H95-MK4E	50	44	95	M 24	4

### SK 30-AD

DIN 6383 mit Austreibblappen  
DIN 6383 with flat tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
TC30-H60-MK2E	30	30	60	M 12	2

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,008 mm.  
**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,008 mm.



Reduzierhülsen · Reducing Adaptors

## SK 40-AD

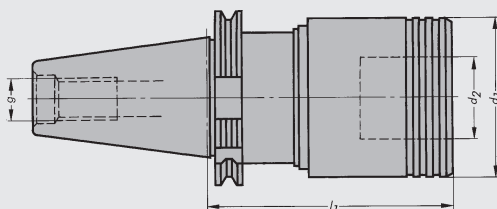
Code	SK	SK1	$d_1$	$l_1$	g
TC40-H50-SK30	40	30	50	50	M 16
TC40-H100-SK40	40	40	63	100	M 16

## SK 50-AD

Code	SK	SK1	$d_1$	$l_1$	g
TC50-H70-SK40	50	40	70	70	M 24
TC50-H120-SK50	50	50	97	120	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,008 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,008 mm.



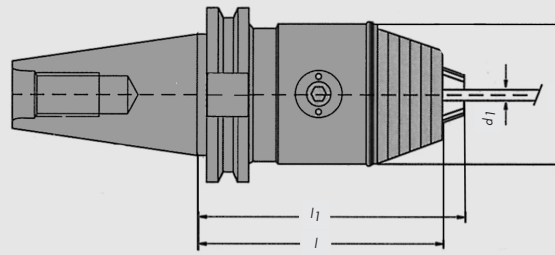
Gewindeschneid-Schnellwechselfutter · Quick-change Tapping Chucks

## SK 40-AD

Code	SK	$d_1$	$d_2$	$l_1$	g	Gewinde Thread	Größe Size
TC40-M3-M12	40	36	19	59	M 16	M 3-M 12	1
TC40-M5-M20	40	53	31	97	M 16	M 5-M 20	2
TC40-M14-M33	40	78	48	149	M 16	M 14-M 33	3

## SK 50-AD

Code	SK	$d_1$	$d_2$	$l_1$	g	Gewinde Thread	Größe Size
TC50-M3-M12	50	36	19	62	M 24	M 3-M 12	1
TC50-M5-M20	50	53	31	83	M 24	M 5-M 20	2
TC50-M14-M33	50	78	48	138	M 24	M 14-M 33	3



Präzisionsspannfutter · Precision Chucks

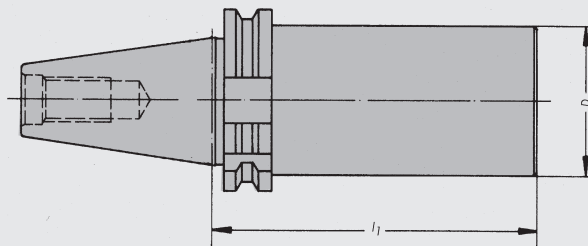
### SK 40-AD (System WTE)

Code	SK	d <sub>1</sub>	D	l <sub>1</sub>	L	g
TC40-1-13	40	1,0-13	50	96	90	M 16
TC40-3-16	40	3,0-16	57	101	90	M 16

### SK 50-AD (System WTE)

Code	SK	d <sub>1</sub>	D	l <sub>1</sub>	L	g
TC50-1-13	50	1,0-13	50	101	90	M 24
TC50-3-16	50	3,0-16	57	117	106	M 24

Form B auf Anfrage  
Form B on inquiry



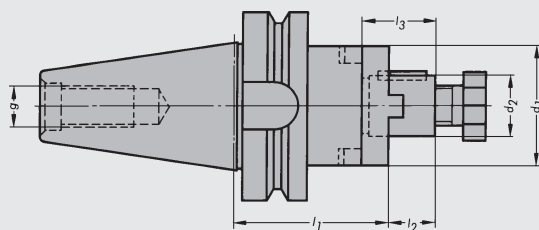
Rohlinge · Moulded Blanks

### SK 40-A

Code	SK	D	l <sub>1</sub>	g
TC40-H250-D63R	40	63	250	M 16

### SK 50-A

Code	SK	D	l <sub>1</sub>	g
TC50-H315-D97R	50	97	315	M 24



Kombi-Aufsteckfräserdorne · Combination Adaptors

## BT 40

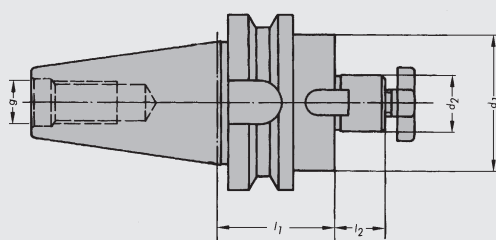
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
BT40-H55-D16	40	16	32	55	17	27	M 16
BT40-H100-D16	40	16	32	100	17	27	M 16
BT40-H55-D22	40	22	40	55	19	31	M 16
BT40-H100-D22	40	22	40	100	19	31	M 16
BT40-H55-D27	40	27	48	55	21	33	M 16
BT40-H100-D27	40	27	48	100	21	33	M 16
BT40-H60-D32	40	32	58	60	24	38	M 16
BT40-H100-D32	40	32	58	100	24	38	M 16
BT40-H60-D40	40	40	70	60	27	41	M 16
BT40-H100-D40	40	40	70	100	27	41	M 16

## BT 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
BT50-H70-D16	50	16	32	70	17	27	M 24
BT50-H100-D16	50	16	32	100	17	27	M 24
BT50-H70-D22	50	22	40	70	19	31	M 24
BT50-H100-D22	50	22	40	100	19	31	M 24
BT50-H70-D27	50	27	48	70	21	33	M 24
BT50-H100-D27	50	27	48	100	21	33	M 24
BT50-H70-D32	50	32	58	70	24	38	M 24
BT50-H100-D32	50	32	58	100	24	38	M 24
BT50-H70-D40	50	40	70	70	27	41	M 24
BT50-H100-D40	50	40	70	100	27	41	M 24

## BT 30

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
BT30-H50-D16	30	16	32	50	17	27	M 12
BT30-H50-D22	30	22	40	50	19	31	M 12
BT30-H55-D27	30	27	48	55	21	33	M 12



Quernutdorne · Shell Mill Adaptors

## BT 40

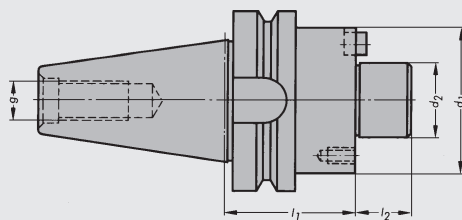
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
BT40-H45-D16SP	40	16	38	45	17	M 16
BT40-H45-D22SP	40	22	48	45	19	M 16
BT40-H45-D27SP	40	27	58	45	21	M 16
BT40-H50-D32SP	40	32	78	50	24	M 16
BT40-H60-D40SP	40	40	88	60	27	M 16

## BT 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
BT50-H60-D16SP	50	16	38	60	17	M 24
BT50-H60-D22SP	50	22	48	60	19	M 24
BT50-H60-D27SP	50	27	58	60	21	M 24
BT50-H60-D32SP	50	32	78	60	24	M 24
BT50-H60-D40SP	50	40	88	60	27	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Zentrierzapfen d<sub>2</sub> = 0,01 mm.

**Accuracy:** Admissible concentricity deviation of the external taper to the journal d<sub>2</sub> = 0,01 mm.



Messerkopfaufnahmen · Centring Arbors

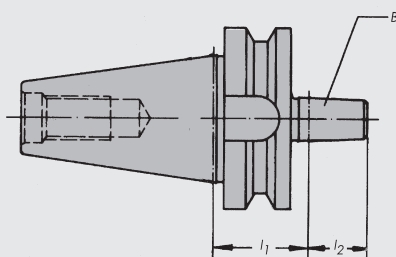
## BT 40

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
BT40-H50-D40FS	40	40	89,3	50	30	M 16

## BT 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
BT50-H50-D40FS	50	40	89,3	50	30	M 24
BT50-H80-D60FS	50	60	129	80	40	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Zentrierzapfen  $d_2 = 0,01$  mm.  
**Accuracy:** Admissible concentricity deviation of the external taper to the journal  $d_2 = 0,01$  mm.



Bohrfutteraufnahmen · Taper for Drill Chucks

## BT 40

Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
BT40-H32-B12	40	12	32	24	M 16
BT40-H32-B16	40	16	32	24	M 16
BT40-H32-B18	40	18	32	32	M 16

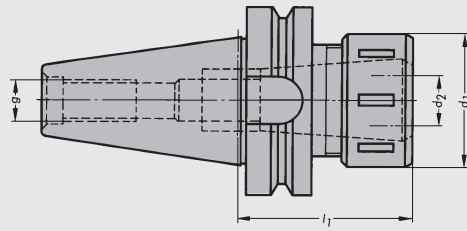
## BT 50

Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
BT50-H45-B16	50	16	45	24	M 24
BT50-H45-B18	50	18	45	32	M 24

## BT 30

Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
BT30-H28-B12	30	12	28	24	M 12
BT30-H28-B16	30	16	28	24	M 12

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,005 mm.  
**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,005 mm.



Spannzangenfutter · Collet Chucks

## BT 40

für Spannzangen DIN 6499 ER (Typ Regofix)  
for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	M	g	Spannzange collet
BT40-H60-ER16	40	0,5-10	28	60	M 16	426E
BT40-H100-ER16	40	0,5-10	28	100	M 16	426E
BT40-H60-ER25	40	1,0-16	42	60	M 16	430E
BT40-H100-ER25	40	1,0-16	42	100	M 16	430E
BT40-H70-ER32	40	2,0-20	50	70	M 16	470E
BT40-H100-ER32	40	2,0-20	50	100	M 16	470E
BT40-H80-ER40	40	3,0-26	63	80	M 16	472E
BT40-H100-ER40	40	3,0-26	63	100	M 16	472E

## BT 50

für Spannzangen DIN 6499 ER (Typ Regofix)  
for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
BT50-H70-ER16	50	0,5-10	28	70	M 24	426E
BT50-H100-ER16	50	0,5-10	28	100	M 24	426E
BT50-H75-ER25	50	1,0-16	42	75	M 24	430E
BT50-H100-ER25	50	1,0-16	42	100	M 24	430E
BT50-H75-ER32	50	2,0-20	50	75	M 24	470E
BT50-H100-ER32	50	2,0-20	50	100	M 24	470E
BT50-H80-ER40	50	3,0-26	63	80	M 24	472E
BT50-H100-ER40	50	3,0-26	63	100	M 24	472E
BT50-H100-ER50	50	10-34	78	100	M 24	474E

## BT 30

für Spannzangen DIN 6499 ER (Typ Regofix)  
for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
BT30-H55-ER16	30	0,5-10	28	55	M 12	426E
BT30-H55-ER25	30	1,0-16	42	55	M 12	430E
BT30-H60-ER32	30	2,0-20	50	60	M 12	470E

## BT 40

für Spannzangen DIN 6388 OZ (Typ Ortlieb)  
for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
BT40-H70-OZ16	40	2,0-16	43	70	M 16	415E
BT40-H100-OZ16	40	2,0-16	43	100	M 16	415E
BT40-H70-OZ25	40	2,0-25	60	70	M 16	462E
BT40-H100-OZ25	40	2,0-25	60	100	M 16	462E
BT40-H90-OZ32	40	3,0-32	72	90	M 16	467E

## BT 50

für Spannzangen DIN 6388 OZ (Typ Ortlieb)  
for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
BT50-H80-OZ16	50	2,0-16	43	80	M 24	415E
BT50-H100-OZ16	50	2,0-16	43	100	M 24	415E
BT50-H85-OZ25	50	2,0-25	60	85	M 24	462E
BT50-H100-OZ25	50	2,0-25	60	100	M 24	462E
BT50-H90-OZ32	50	3,0-32	72	90	M 24	467E
BT50-H90-OZ40	50	6,0-40	85	90	M 24	468E

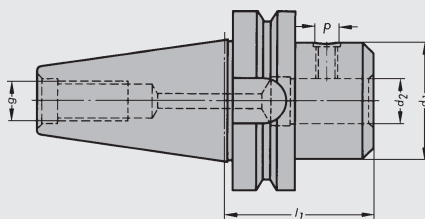
## BT 30

für Spannzangen DIN 6388 OZ (Typ Ortlieb)  
for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>1</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Spannzange collet
BT30-H70-OZ16	30	2,0-16	43	70	M 12	415E
BT30-H70-OZ25	30	2,0-25	60	70	M 12	462E

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,005 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,005 mm.



Zylinderschaftaufnahmen · Straight Shank Adaptors

## BT 40

(Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
BT40-H50-WE6	40	6	25	50	M 16	M 6
BT40-H50-WE8	40	8	28	50	M 16	M 8
BT40-H63-WE10	40	10	35	63	M 16	M 10
BT40-H63-WE12	40	12	42	63	M 16	M 12
BT40-H63-WE14	40	14	48	63	M 16	M 12
BT40-H63-WE16	40	16	48	63	M 16	M 14
BT40-H63-WE18	40	18	52	63	M 16	M 14
BT40-H63-WE20	40	20	52	63	M 16	M 16
BT40-H90-WE25	40	25	65	90	M 16	M 18 x 2
BT40-H100-WE32	40	32	72	100	M 16	M 20 x 2
BT40-H110-WE40	40	40	90	110	M 16	M 20 x 2

## BT 50

(Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
BT50-H63-WE6	50	6	25	63	M 24	M 6
BT50-H63-WE8	50	8	28	63	M 24	M 8
BT50-H70-WE10	50	10	35	70	M 24	M 10
BT50-H80-WE12	50	12	42	80	M 24	M 12
BT50-H80-WE14	50	14	48	80	M 24	M 12
BT50-H80-WE16	50	16	48	80	M 24	M 14
BT50-H80-WE18	50	18	52	80	M 24	M 14
BT50-H80-WE20	50	20	52	80	M 24	M 16
BT50-H100-WE25	50	25	65	100	M 24	M 18 x 2
BT50-H105-WE32	50	32	72	105	M 24	M 20 x 2
BT50-H120-WE40	50	40	90	120	M 24	M 20 x 2

## BT 30

(Weldon / DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
BT30-H50-WE6	30	6	25	50	M 12	M6
BT30-H50-WE8	30	8	28	50	M 12	M8
BT30-H50-WE10	30	10	35	50	M 12	M10
BT30-H55-WE12	30	12	41	55	M 12	M12
BT30-H55-WE14	30	14	44	55	M 12	M12
BT30-H55-WE16	30	16	48	55	M 12	M14
BT30-H60-WE18	30	18	50	60	M 12	M14
BT30-H60-WE20	30	20	50	60	M 12	M16

## BT 40

(Whistle-Notch / DIN 1835 E)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
BT40-H50-WN6	40	6	25	50	M 16	M 6
BT40-H50-WN8	40	8	28	50	M 16	M 8
BT40-H63-WN10	40	10	35	63	M 16	M 10
BT40-H63-WN12	40	12	42	63	M 16	M 12
BT40-H63-WN14	40	14	48	63	M 16	M 12
BT40-H63-WN16	40	16	48	63	M 16	M 14
BT40-H63-WN18	40	18	52	63	M 16	M 14
BT40-H63-WN20	40	20	52	63	M 16	M 16
BT40-H90-WN25	40	25	65	90	M 16	M 18 x 2

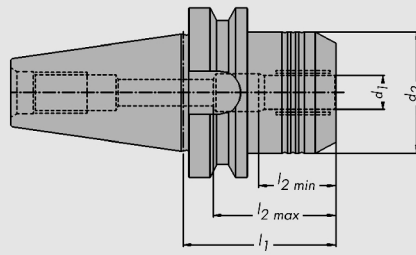
## BT 50

(Whistle-Notch / DIN 1835 E)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
BT50-H63-WN6	50	6	25	63	M 24	M 6
BT50-H63-WN8	50	8	28	63	M 24	M 8
BT50-H70-WN10	50	10	35	70	M 24	M 10
BT50-H80-WN12	50	12	42	80	M 24	M 12
BT50-H80-WN14	50	14	48	80	M 24	M 12
BT50-H80-WN16	50	16	48	80	M 24	M 14
BT50-H80-WN18	50	18	52	80	M 24	M 14
BT50-H80-WN20	50	20	52	80	M 24	M 16
BT50-H100-WN25	50	25	65	100	M 24	M 18 x 2

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zur Bohrung d<sub>2</sub> = 0,003 mm.

**Accuracy:** Admissible concentricity deviation of the external taper to the bore d<sub>2</sub> = 0,003 mm.



Dehnspannfutter · Hydraulic Chucks

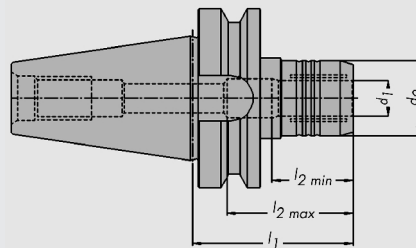
## BT 40 kurze, schwere Ausführung Short and heavy style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
BT40-HD20-H	40	20	49,5	72,5	42,5	52,5

## BT 50 kurze, schwere Ausführung Short and heavy style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
BT50-HD32-H	50	32	72	90	55	65

Zwischenbuchsen siehe Seite 28  
Slotted intermediate sleeves see page 28



Dehnspannfutter · Hydraulic Chucks

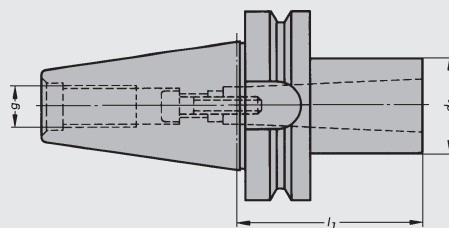
## BT 40 kurze, schlanke Ausführung Short and slim style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
BT40-HD6-S	40	6	26	90	27,5	37,5
BT40-HD8-S	40	8	28	90	27,5	37,5
BT40-HD10-S	40	10	30	90	32,5	42,5
BT40-HD12-S	40	12	32	90	37,5	47,5
BT40-HD16-S	40	16	38	90	42,5	52,5
BT40-HD20-S	40	20	42	90	42,5	52,5
BT40-HD32-S	40	32	63	83	55	65

## BT 50 kurze, schlanke Ausführung Short and slim style

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	l <sub>2 min</sub>	l <sub>2 max</sub>
BT50-HD12-S	50	12	32	105	37,5	47,5
BT50-HD20-S	50	20	42	90	42,5	52,5

Zwischenbuchsen siehe Seite 28  
Slotted intermediate sleeves see page 28



Morsekegelaufnahmen · Morse Taper Adaptors

### BT 40

DIN 6364 mit Anzugsgewinde  
DIN 6364 with Clamping Screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
BT40-H50-MK2F	40	30	50	M 16	2
BT40-H70-MK3F	40	35	70	M 16	3
BT40-H95-MK4F	40	44	95	M 16	4

### BT 50

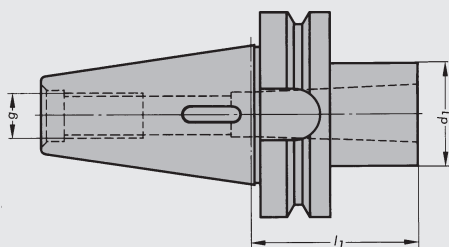
DIN 6364 mit Anzugsgewinde  
DIN 6364 with Clamping Screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
BT50-H60-MK2F	59	30	60	M 24	2
BT50-H65-MK3F	50	35	65	M 24	3
BT50-H70-MK4F	50	44	70	M 24	4

### BT 30

DIN 6364 mit Anzugsgewinde  
DIN 6364 with Clamping Screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
BT30-H60-MK2F	30	30	60	M 12	2



Morsekegelaufnahmen · Morse Taper Adaptors

### BT 40

DIN 6383 mit Austreibblappen  
DIN 6383 with Flat Tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
BT40-H50-MK2E	40	30	50	M 16	2
BT40-H70-MK3E	40	35	70	M 16	3
BT40-H95-MK4E	40	44	95	M 16	4

### BT 50

DIN 6383 mit Austreibblappen  
DIN 6383 with Flat Tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
BT50-H60-MK2E	50	30	60	M 24	2
BT50-H65-MK3E	50	35	65	M 24	3
BT50-H95-MK4E	50	44	95	M 24	4

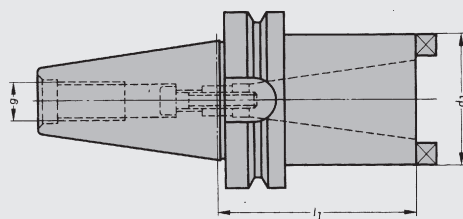
### BT 30

DIN 6383 mit Austreibblappen  
DIN 6383 with Flat Tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
BT30-H60-MK2E	30	30	60	M 12	2

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,008 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,008 mm.



Reduzierhülse · Reducing Adaptors

## BT 40

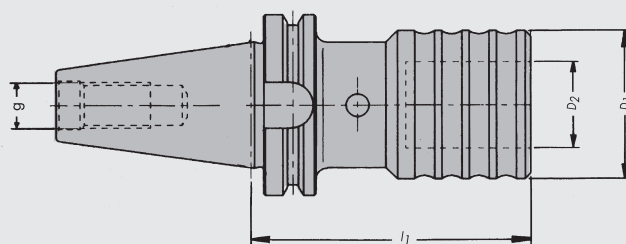
Code	SK	SK1	d <sub>1</sub>	l <sub>1</sub>	g
BT40-H60-SK30	40	30	50	60	M 16
BT40-H100-SK40	40	40	63	100	M 16

## BT 50

Code	SK	SK1	d <sub>1</sub>	l <sub>1</sub>	g
BT50-H70-SK40	50	40	70	70	M 24
BT50-H120-SK50	50	50	97	120	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,008 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,008 mm.



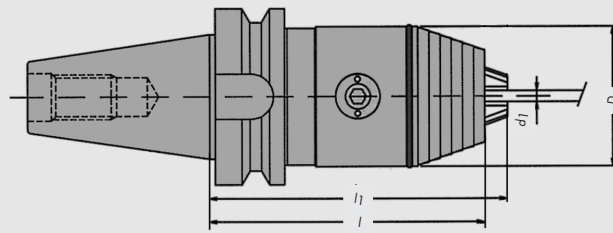
Gewindeschneid-Schnellwechselfutter · Quick-change Tapping Chucks

## BT 40

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Gewinde Thread	Größe Size
BT40-M3-M12	40	19	36	66,5	M16	M3-M12	1
BT40-M5-M20	40	31	53	93,5	M16	M5-M20	2
BT40-M14-M33	40	48	78	162,5	M16	M14-M33	3

## BT 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Gewinde Thread	Größe Size
BT50-M3-M12	50	19	36	78	M24	M3-M12	1
BT50-M5-M20	50	31	53	101,5	M24	M5-M20	2
BT50-M14-M33	50	48	78	141,1	M24	M14-M33	3



Präzisionsspannfutter · Precision Chucks

### BT 40

System WTE

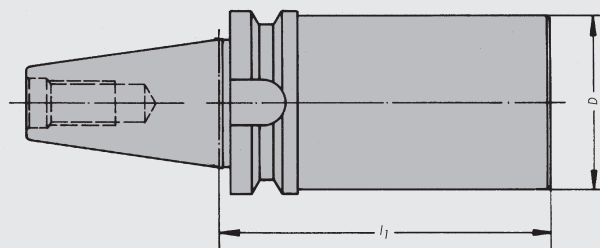
Code	SK	d <sub>1</sub>	D	l <sub>1</sub>	L	g
BT40-1-13	40	1,0-13	50	104	98	M 16
BT40-3-16	40	3,0-16	57	109	98	M 16

### BT 50

System WTE

Code	SK	d <sub>1</sub>	D	l <sub>1</sub>	L	g
BT50-1-13	50	1,0-13	50	106	100	M 24
BT50-3-16	50	3,0-16	57	111	100	M 24

Form B auf Anfrage  
Form B on inquiry



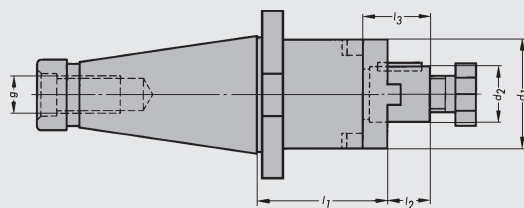
Rohlinge · Moulded Blanks

### BT 40

Code	SK	D	l <sub>1</sub>	g
BT40-H250-D63R	40	63	250	M 16

### BT 50

Code	SK	D	l <sub>1</sub>	g
BT50-H315-D97R	50	97	315	M 24



Kombi-Aufsteckfräserdorne · Combination Adaptors

## ISO 40

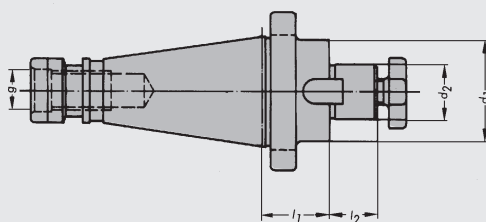
Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
ISO40-H52-D16	40	16	32	52	17	27	M 16
ISO40-H100-D16	40	16	32	100	17	27	M 16
ISO40-H52-D22	40	22	40	52	19	31	M 16
ISO40H100-D22	40	22	40	100	19	31	M 16
ISO40-H52-D27	40	27	50	52	21	33	M 16
ISO40-H100-D27	40	27	50	100	21	33	M 16
ISO40-H52-D32	40	32	63	52	24	38	M 16
ISO40-H100-D32	40	32	63	100	24	38	M 16
ISO40-H52-D40	40	40	80	52	27	41	M 16
ISO40-H100-D40	40	40	80	100	27	41	M 16

## ISO 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
ISO50-H55-D16	50	16	32	55	17	27	M 24
ISO50-H100-D16	50	16	32	100	17	27	M 24
ISO50-H55-D22	50	22	40	55	19	31	M 24
ISO50-H100-D22	50	22	40	100	19	31	M 24
ISO50-H55-D27	50	27	50	55	21	33	M 24
ISO50-H100-D27	50	27	50	100	21	33	M 24
ISO50-H55-D32	50	32	63	55	24	38	M 24
ISO50-H100-D32	50	32	63	100	24	38	M 24
ISO50-H55-D40	50	40	80	55	27	41	M 24
ISO50-H100-D40	50	40	80	100	27	41	M 24

## ISO 30

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	g
ISO30-H35-D16	30	16	32	35	17	27	M 12
ISO30-H35-D22	30	22	40	35	19	31	M 12
ISO30-H35-D27	30	27	50	35	21	33	M 12



Quernutdorne · Shell Mill Adaptors

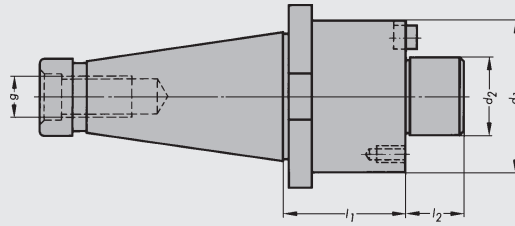
## ISO 40

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
ISO40-H30-D16SP	40	16	38	30	17	M 16
ISO40-H30-D22SP	40	22	48	30	19	M 16
ISO40-H30-D27SP	40	27	58	30	21	M 16
ISO40-H30-D32SP	40	32	78	30	24	M 16
ISO40-H40-D40SP	40	40	88	40	27	M 16

## ISO 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
ISO50-H30-D16SP	50	16	38	30	17	M 24
ISO50-H30-D22SP	50	22	48	30	19	M 24
ISO50-H30-D27SP	50	27	58	30	21	M 24
ISO50-H40-D32SP	50	32	78	40	24	M 24
ISO50-H40-D40SP	50	40	88	40	27	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Zentrierzapfen  $d_2 = 0,01$  mm.  
**Accuracy:** Admissible concentricity deviation of the external taper to the journal  $d_2 = 0,01$  mm.



Messerkopfaufnahmen · Centring Arbors

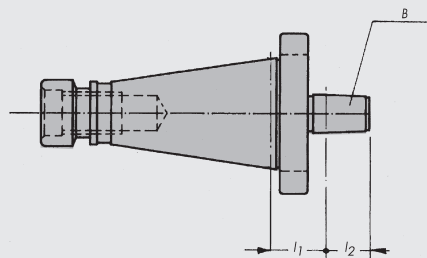
## ISO 40

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
ISO40-H30-D40FS	40	40	89,3	30	30	M 16

## ISO 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	g
ISO50-H40-D40FS	50	40	89,3	40	30	M 24
ISO50-H55-D60FS	50	60	129	55	40	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Zentrierzapfen  $d_2 = 0,01$  mm.  
**Accuracy:** Admissible concentricity deviation of the external taper to the journal  $d_2 = 0,01$  mm.



Bohrfutteraufnahmen · Taper Shafts for Drill Chucks

## ISO 40

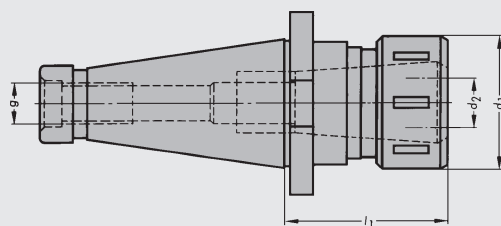
Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
ISO40-H17-B12	40	12	17	24	M 16
ISO40-H17-B16	40	16	17	24	M 16
ISO40-H17-B18	40	18	17	32	M 16

## ISO 50

Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
ISO50-H20-B16	50	16	20	24	M 24
ISO50-H20-B18	50	18	20	32	M 24

## ISO 30

Code	SK	B	l <sub>1</sub>	l <sub>2</sub>	g
ISO30-H15-B12	30	12	15	24	M 12
ISO30-H15-B16	30	16	15	24	M 12



Spannzangenfutter · Collet Chucks

## ISO 40

für Spannzangen DIN 6499 ER (Typ Regofix)  
for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	g	Spannzange collet
ISO40-H60-ER16	40	0,5-10	28	60	M 16	426E
ISO40-H100-ER16	40	0,5-10	28	100	M 16	426E
ISO40-H60-ER25	40	1,0-16	42	60	M 16	430E
ISO40-H100-ER25	40	1,0-16	42	100	M 16	430E
ISO40-H60-ER32	40	2,0-20	50	60	M 16	470E
ISO40-H100-ER32	40	2,0-20	50	100	M 16	470E
ISO40-H63-ER40	40	3,0-26	63	63	M 16	472E
ISO40-H100-ER40	40	3,0-26	63	100	M 16	472E

## ISO 50

für Spannzangen DIN 6499 ER (Typ Regofix)  
for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	g	Spannzange collet
ISO50-H60-ER16	50	0,5-10	28	60	M 24	426E
ISO50-H100-ER16	50	0,5-10	28	100	M 24	426E
ISO50-H60-ER25	50	1,0-16	42	60	M 24	430E
ISO50-H100-ER25	50	1,0-16	42	100	M 24	430E
ISO50-H63-ER32	50	2,0-20	50	63	M 24	470E
ISO50-H100-ER32	50	2,0-20	50	100	M 24	470E
ISO50-H63-ER40	50	3,0-26	63	63	M 24	472E
ISO50-H100-ER40	50	3,0-26	63	100	M 24	472E
ISO50-H100-ER50	50	10-34	78	100	M 24	474E

## ISO 30

für Spannzangen DIN 6499 ER (Typ Regofix)  
for collet chucks DIN 6499 ER (type Regofix)

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	g	Spannzange collet
ISO30-H60-ER16	30	0,5-10	28	60	M 12	426E
ISO30-H60-ER25	30	1,0-16	42	60	M 12	430E
ISO30-H60-ER32	30	2,0-20	50	60	M 12	470E

## ISO 40

für Spannzangen DIN 6388 OZ (Typ Ortlieb)  
for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	g	Spannzange collet
ISO40-H50-OZ16	40	2,0-16	43	50	M 16	415E
ISO40-H100-OZ16	40	2,0-16	43	100	M 16	415E
ISO40-H60-OZ25	40	2,0-25	60	60	M 16	462E
ISO40-H100-OZ25	40	2,0-25	60	100	M 16	462E
ISO40-H90-OZ32	40	3,0-32	72	90	M 16	467E

## ISO 50

für Spannzangen DIN 6388 OZ (Typ Ortlieb)  
for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	g	Spannzange collet
ISO50-H50-OZ16	50	2,0-16	43	50	M 24	415E
ISO50-H100-OZ16	50	2,0-16	43	100	M 24	415E
ISO50-H60-OZ25	50	2,0-25	60	60	M 24	462E
ISO50-H100-OZ25	50	2,0-25	60	100	M 24	462E
ISO50-H70-OZ32	50	3,0-32	72	70	M 24	467E
ISO50-H80-OZ40	50	6,0-40	85	80	M 24	468E

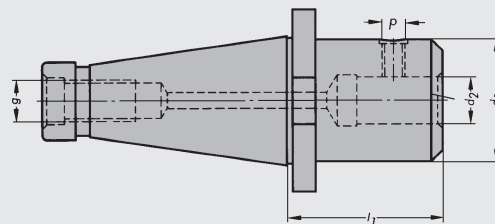
## ISO 30

für Spannzangen DIN 6388 OZ (Typ Ortlieb)  
for collet chucks DIN 6388 OZ (type Ortlieb)

Code	SK	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>	g	Spannzange collet
ISO30-H50-OZ16	30	2,0-16	43	50	M 12	415E
ISO30-H70-OZ25	30	2,0-25	60	70	M 12	462E

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,005 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,005 mm.



Zylinderschaftaufnahmen · Straight Shank Adaptors

## ISO 40

(Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
ISO40-H50-WE6	40	6	25	50	M 16	M 6
ISO40-H50-WE8	40	8	28	50	M 16	M 8
ISO40-H50-WE10	40	10	35	50	M 16	M 10
ISO40-H50-WE12	40	12	42	50	M 16	M 12
ISO40-H63-WE14	40	14	48	63	M 16	M 12
ISO40-H63-WE16	40	16	48	63	M 16	M 14
ISO40-H63-WE18	40	18	52	63	M 16	M 14
ISO40-H63-WE20	40	20	52	63	M 16	M 16
ISO40-H80-WE25	40	25	65	80	M 16	M 18 x 2
ISO40-H80-WE32	40	32	72	80	M 16	M 20 x 2
ISO40-H95-WE40	40	40	90	95	M 16	M 20 x 2

## ISO 50

(Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
ISO50-H63-WE6	50	6	25	63	M 24	M 6
ISO50-H63-WE8	50	8	28	63	M 24	M 8
ISO50-H63-WE10	50	10	35	63	M 24	M 10
ISO50-H63-WE12	50	12	42	63	M 24	M 12
ISO50-H63-WE14	50	14	48	63	M 24	M 12
ISO50-H63-WE16	50	16	48	63	M 24	M 14
ISO50-H63-WE18	50	18	52	63	M 24	M 14
ISO50-H63-WE20	50	20	52	63	M 24	M 16
ISO50-H80-WE25	50	25	65	80	M 24	M 18 x 2
ISO50-H80-WE32	50	32	72	80	M 24	M 20 x 2
ISO50-H105WE40	50	40	90	105	M 24	M 20 x 2

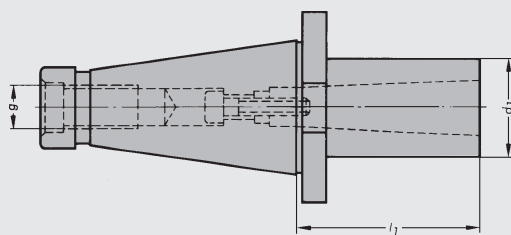
## ISO 30

(Weldon/DIN 1835 B)

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	p
ISO30-H50-WE6	30	6	25	50	M 12	M 6
ISO30-H50-WE8	30	8	28	50	M 12	M 8
ISO30-H50-WE10	30	10	35	50	M 12	M 10
ISO30-H50-WE12	30	12	42	50	M 12	M 12
ISO30-H63-WE14	30	14	44	63	M 12	M 12
ISO30-H63-WE16	30	16	48	63	M 12	M 14
ISO30-H63-WE18	30	18	50	63	M 12	M 14
ISO30-H63-WE20	30	20	50	63	M 12	M 16

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zur Bohrung d<sub>2</sub> = 0,003 mm.

**Accuracy:** Admissible concentricity deviation of the external taper to the bore d<sub>2</sub> = 0,003 mm.



Morsekegelaufnahmen · Morse Taper Adaptors

### ISO 40

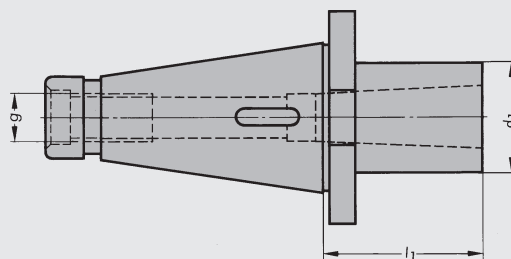
DIN 6364 mit Anzugsgewinde  
DIN 6364 with Clamping Screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
ISO40-H60-MK2F	40	30	60	M 16	2

### ISO 50

DIN 6364 mit Anzugsgewinde  
DIN 6364 with Clamping Screw

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
ISO50-H60-MK2F	50	30	60	M 24	2
ISO50-H65-MK3F	50	35	65	M 24	3
ISO50-H70-MK4F	50	44	70	M 24	4



Morsekegelaufnahmen · Morse Taper Adaptors

### ISO 40

DIN 6383 mit Austreibklappen  
DIN 6383 with Flat Tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
ISO40-H50-MK2E	40	30	50	M 16	2
ISO40-H65-MK3E	40	35	65	M 16	3
ISO40-H95-MK4E	40	44	95	M 16	4

### ISO 50

DIN 6383 mit Austreibklappen  
DIN 6383 with Flat Tang

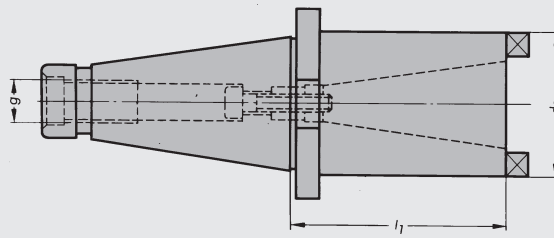
Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
ISO50-H60-MK2E	50	30	60	M 24	2
ISO50-H65-MK3E	50	35	65	M 24	3
ISO50-H70-MK4E	50	44	70	M 24	4

### ISO 30

DIN 6383 mit Austreibklappen  
DIN 6383 with Flat Tang

Code	SK	d <sub>1</sub>	l <sub>1</sub>	g	MK
ISO30-H60-MK2E	30	30	60	M 12	2

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,008 mm.  
**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,008 mm.



Reduzierhülsen · Reducing Adaptors

## ISO 40

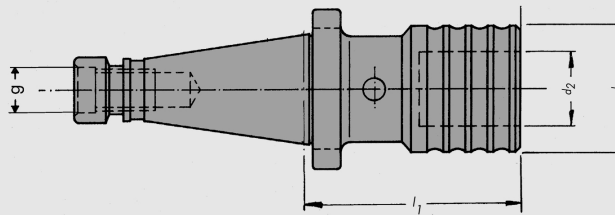
Code	SK	SK1	d <sub>1</sub>	l <sub>1</sub>	g
ISO40-H50-SK30	40	30	50	50	M 16
ISO40-H100-SK40	40	40	63	100	M 16

## ISO 50

Code	SK	SK1	d <sub>1</sub>	l <sub>1</sub>	g
ISO50-H50-SK40	50	40	70	50	M 24
ISO50-H125-SK50	50	50	97	125	M 24

**Ausführung:** Zulässige Rundlaufabweichung des Steilkegels zum Innenkegel = 0,008 mm.

**Accuracy:** Admissible concentricity deviation of the external to the internal taper = 0,008 mm.



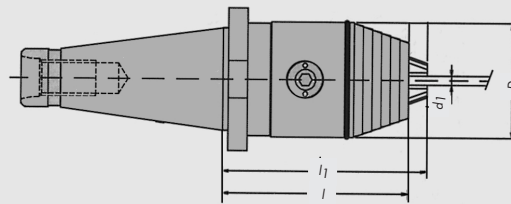
Gewindeschneid-Schnellwechselfutter · Quick-change Tapping Chucks

## ISO 40

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Gewinde Thread	Größe Size
ISO40-M3-M12	40	19	36	50	M 16	M3-M12	1
ISO40-M5-M20	40	31	53	78	M 16	M5-M20	2
ISO40-M14-M33	40	48	78	143	M 16	M14-M33	3

## ISO 50

Code	SK	d <sub>2</sub>	d <sub>1</sub>	l <sub>1</sub>	g	Gewinde Thread	Größe Size
ISO50-M3-M12	50	19	36	55	M 24	M3-M12	1
ISO50-M5-M20	50	31	53	80	M 24	M5-M20	2
ISO50-M14-M33	50	48	78	130	M 24	M14-M33	3



Präzisionsspannfutter · Precision Chucks

### ISO 40

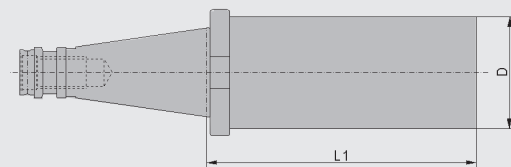
System WTE

Code	SK	d <sub>1</sub>	D	l <sub>1</sub>	L	g
ISO40-1-13	40	1,0-13	50	104	98	M 16
ISO40-3-16	40	3,0-16	57	109	98	M 16

### ISO 50

System WTE

Code	SK	d <sub>1</sub>	D	l <sub>1</sub>	L	g
ISO50-1-13	50	1,0-13	50	106	100	M 24
ISO50-3-16	50	3,0-16	57	111	100	M 24



Rohlinge · Moulded blanks

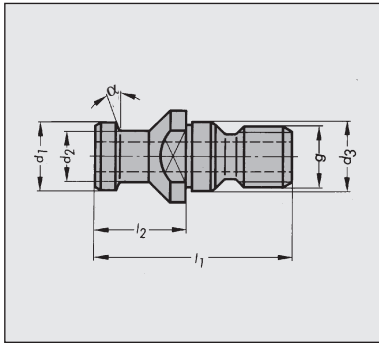
### ISO 40

Code	SK	D	l <sub>1</sub>	g
ISO40-H250-D63R	40	63	250	M 16

### ISO 50

Code	SK	D	l <sub>1</sub>	g
ISO50-H315-D97R	50	97	315	M 24

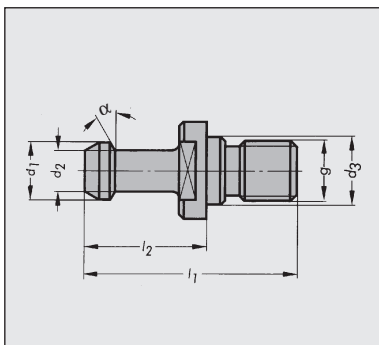
### DIN 69872



Code	SK	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	g	L <sub>1</sub>	L <sub>2</sub>	Typ
A 33 908	30	13	9	13	M12	44	24	DIN 69872A
A 34 909	40	19	14	17	M16	54	26	DIN 69872A
A 35 910	50	28	21	25	M24	74	34	DIN 69872A
B 33 908	30	13	9	13	M12	44	24	DIN 69872B*
B 34 909	40	19	14	17	M16	54	26	DIN 69872B*
B 35 910	50	28	21	25	M24	74	34	DIN 69872B*
G 34 909	40	18,80	12,4	17	M16	41,3	16,26	Ansi Cat
G 35 910	50	28,95	20,8	25	M 24	65,4	25,4	Ansi Cat

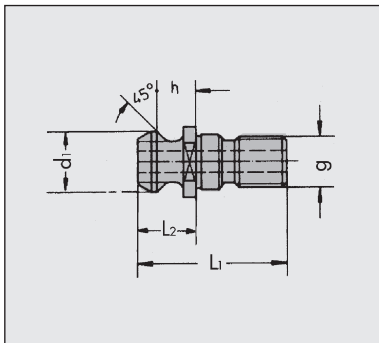
\*] ohne Bohrung · without hole

### MAS



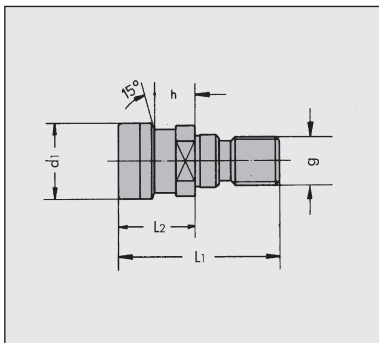
Code	SK	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	g	L <sub>1</sub>	L <sub>2</sub>	α	Typ
J 23 924	30	11	7	12,5	M12	43	24	45	MAS-BT30-I
J 24 925	40	15	10	17	M16	60	35	45	MAS-BT40-I
J 25 926	50	23	17	25	M24	85	45	45	MAS-BT50-I
J 23 932	30	11	7	12,5	M12	43	24	60	MAS-BT30-II
J 24 933	40	15	10	17	M16	60	35	60	MAS-BT40-II
J 25 934	50	23	17	25	M24	85	45	60	MAS-BT50-II
J 23 940	30	11	7	12,5	M12	43	24	90	MAS-BT30-III
J 24 941	40	15	10	17	M16	60	35	90	MAS-BT40-III
J 25 942	50	23	17	25	M24	85	45	90	MAS-BT50-III

### ISO 7388 II

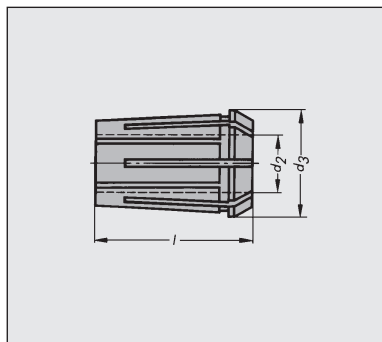


Code	SK	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	g	L <sub>1</sub>	L <sub>2</sub>	Typ
B 34 917	40	19	14	17	M16	54	26	ISO7388 II A
B 35 918	50	28	21	25	M24	74	34	ISO7388 II A
A 34 917	40	18,95	12,95	17	M16	44,5	16,4	ISO7388 II B
A 35 918	50	29,1	19,8	25	M24	65,5	25,56	ISO7388 II B

### OTT



Code	SK	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	g	L <sub>1</sub>	L <sub>2</sub>	Typ
A 34 901	40	25	21,1	17	M16	53	25	mit Schutzring
A 35 902	50	39,5	32	25	M24	65	25	with protecting ring
I 34 901	40	25	21,1	17	M16	53	25	Innengewinde
I 35 902	50	39,5	32	25	M24	65	25	internal thread



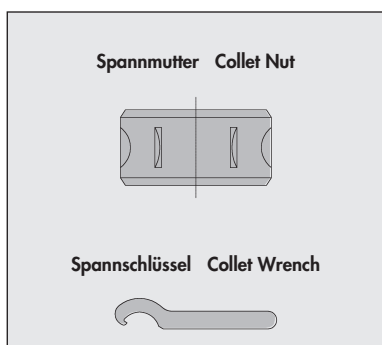
**Spannzange**  
Collet

doppelt geschlitzt  
double slotted

Code	ER	D2	D3	L	Abstufung Increments	Spanntoleranz Clamping tolerance
426 E . . .	16	1,0-10	16,75	27	0.5	-0.5
430 E . . .	25	2,0-16	25,75	34	0.5	-1.0
470 E . . .	32	2,0-20	32,75	40	0.5	-1.0
472 E . . .	40	3,0-26	40,75	46	1	-1.0
474 E . . .	50	6,0-3,4	51,75	60	2	-1.0

Bestellbeispiel: Spannzange Typ 470 E und D2=3.0:  
Order example: Collet type 470 E and D2=3.0:

**470 E 030**



**Spannmutter** Collet Nut

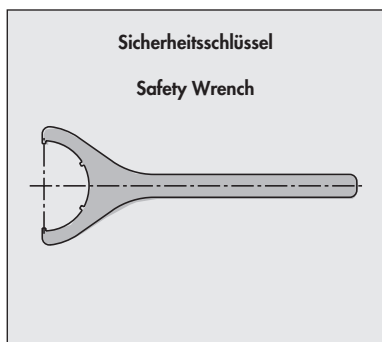
**Spannmutter**  
Collet Nut

**Spannschlüssel**  
Collet Wrench

**Spannschlüssel** Collet Wrench

Code	ER		
234 62 612	16		
234 62 614	25		
234 62 615	32		
234 62 616	40		
234 62 617	50		

Code	ER		
214 78 089	16		
214 76 961	25		
214 76 605	32		
214 76 606	40		
234 62 636	50		

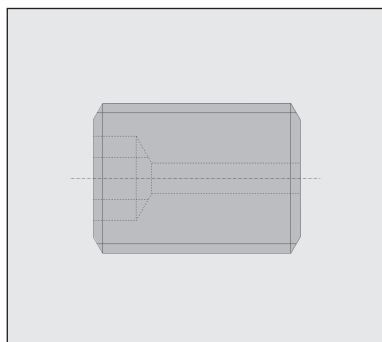


**Sicherheitsschlüssel**

Safety Wrench

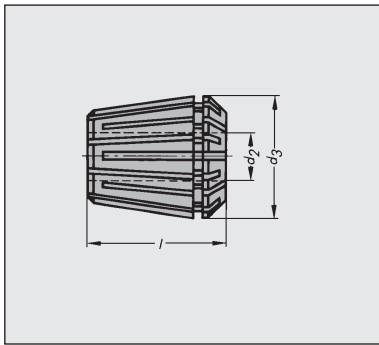
**Sicherheitsschlüssel**  
Safety Wrench

Code	ER		
234 62 630	16		
234 62 632	25		
234 62 633	32		
234 62 634	40		
234 62 635	50		



**Gewindestift**  
Hex. Socket

Code	OZ	ER	
234 62 620	16	16	
234 62 621	25	25	
234 62 622	32	32	
234 62 623	40	40	

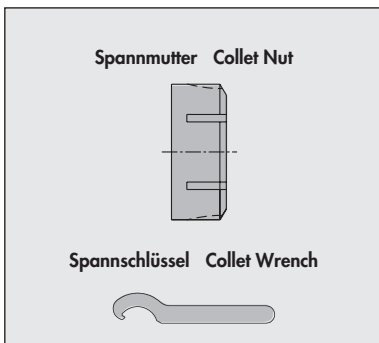


**Spannzange** doppelt geschlitzt  
**Collet** double slotted

Code	OZ	D2	D3	L	Abstufung Increments	Spanntoleranz Clamping tolerance
415 E . . .	16	2,0-16	25.5	40	0.5	-0.5
462 E . . .	25	3,0-25	35.05	52	1	-0.5
467 E . . .	32	4,0-32	43.7	60	1	-0.5
468 E . . .	40	6,0-40	52.2	68	1	-0.5

Bestellbeispiel: Spannzange Typ 415 E und D2=3.0:  
Order example: Collet type 415 E and D2=3.0:

**415 E 030**

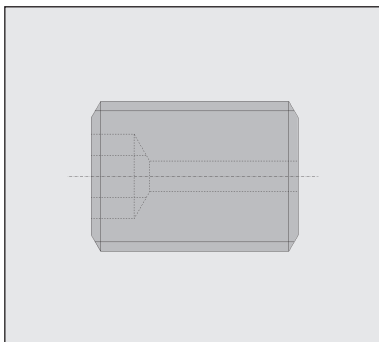


**Spannmutter**  
**Collet Nut**

Code	OZ		
234 62 605	16		
234 62 607	25		
234 62 608	32		
234 62 609	40		

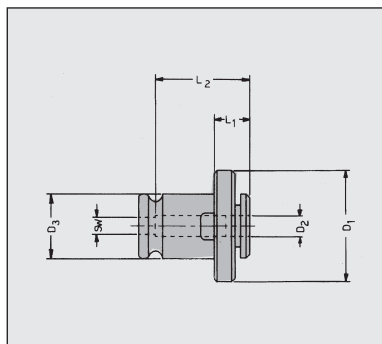
**Spannschlüssel**  
**Collet Wrench**

Code	OZ		
214 76 600	16		
214 80 578	25		
214 80 579	32		
214 80 580	40		



**Gewindestift**  
**Hex. Socket**

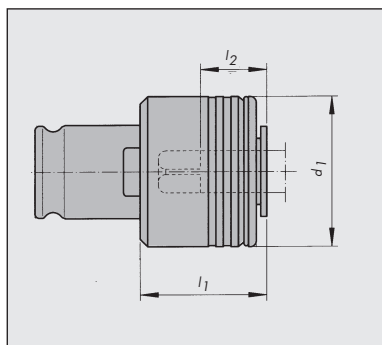
Code	OZ	ER	
234 62 620	16	16	
234 62 621	25	25	
234 62 622	32	32	
234 62 623	40	40	



ohne Rutschkupplung  
without Safety Clutch

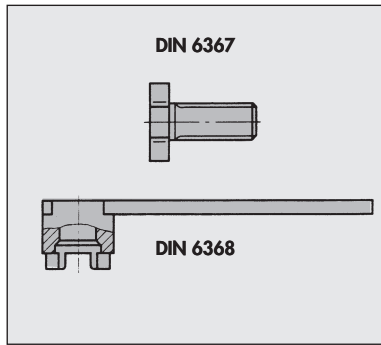
### System Bilz

Code	Größe Size	DIN 371	DIN 374	DIN 376	D1	D2	SW	L1	L2
WE1 - 3.5x2.7	1	M 3	M 5	M 5	30	3.5	2.7	7	21
WE1 - 4 x 3	1	M 3.5		M 5.5	30	4	3	7	22
WE1 - 4.5x3.4	1	M 4	M 6	M 6	30	4.5	3.4	7	23
WE1 - 6 x 4.9	1	M5/M6	M 8	M 8	30	6	6	7	25
WE1 - 7 x 5.5	1	M 7		M9/M10	30	7	5.5	7	25
WE1 - 8 x 6.2	1	M 8		M 11	30	8	6.2	7	26
WE1 - 9 x 7.1	1	M 9		M 12	30	9	7.1	7	27
WE1 - 10 x 8	1	M 10			30	10	8	7	28
WE2 - 7 x 5.5	2	M 7	G 1/8	M 10	48	7	5.5	11	38
WE2 - 8 x 6.2	2	M 8		M 11	48	8	6.2	11	39
WE2 - 9 x 7.1	2	M 9		M 12	48	9	7.1	11	40
WE2 - 10 x 8	2	M 10			48	10	8	11	41
WE2 - 11 x 9	2	M 11	G 1/4	M 14	48	11	9	11	42
WE2 - 12 x 9	2	M 12		M 16	48	12	9	11	43
WE2 - 14 x 11	2			M 18	48	14	11	11	44
WE2 - 16 x 12	2		G 1/2	M 20	48	16	12	11	45
WE3 - 11 x 9	3		G 1/4	M 14	70	11	9	14	56
WE3 - 12 x 9	3		G3/8	M16	70	12	9	14	56
WE3 - 14 x 11	3			M 18	70	14	11	14	58
WE3 - 16 x 12	3		G 1/2	M 20	70	16	12	14	59
WE3 - 18x14.5	3		G 5/8	M22/M24	70	18	14.4	14	61
WE3 - 20 x 16	3		G 3/4	M 27	70	20	16	14	63
WE3 - 22 x 18	3		G 7/8	M 30	70	22	18	14	65
WE3 - 25 x 20	3			M 33	70	25	20	14	67
WE3 - 28 x 22	3		G 1	M 36	70	28	22	14	69



mit Rutschkupplung  
with Safety Clutch

Code	Größe Size	DIN 371	DIN 374	DIN 376	D1	D2	SW	L1	L2
WES1 - 3.5x2.7	1	M 3	M 5	M 5	32	3.5	2.7	17	21
WES1 - 4 x 3	1	M 3.5		M 5.5	32	4	3	17	22
WES1 - 4.5x3.4	1	M 4	M 6	M 6	32	4.5	3.4	17	23
WES1 - 6 x 4.9	1	M5/M6	M 8	M 8	32	6	6	17	25
WES1 - 7 x 5.5	1	M 7		M9/M10	32	7	5.5	17	25
WES1 - 8 x 6.2	1	M 8		M 11	32	8	6.2	17	26
WES1 - 9 x 7.1	1	M 9		M 12	32	9	7.1	17	27
WES1 - 10 x 8	1	M 10			32	10	8	17	28
WES2 - 7 x 5.5	2	M 7	G 1/8	M 10	50	7	5.5	30	38
WES2 - 8 x 6.2	2	M 8		M 11	50	8	6.2	30	39
WES2 - 9 x 7.1	2	M 9		M 12	50	9	7.1	30	40
WES2 - 10 x 8	2	M 10			50	10	8	30	41
WES2 - 11 x 9	2	M 11	G 1/4	M 14	50	11	9	30	42
WES2 - 12 x 9	2	M 12		M 16	50	12	9	30	43
WES2 - 14 x 11	2			M 18	50	14	11	30	44
WES2 - 16 x 12	2		G 1/2	M 20	50	16	12	30	45
WES3 - 11 x 9	3		G 1/4	M 14	72	11	9	44	56
WES3 - 12 x 9	3		G3/8	M16	72	12	9	44	56
WES3 - 14 x 11	3			M 18	72	14	11	44	58
WES3 - 16 x 12	3		G 1/2	M 20	72	16	12	44	59
WES3 - 18x14.5	3		G 5/8	M22/M24	72	18	14.4	44	61
WES3 - 20 x 16	3		G 3/4	M 27	72	20	16	44	63
WES3 - 22 x 18	3		G 7/8	M 30	72	22	18	44	65
WES3 - 25 x 20	3			M 33	72	25	20	44	67
WES3 - 28 x 22	3		G 1	M 36	72	28	22	44	69

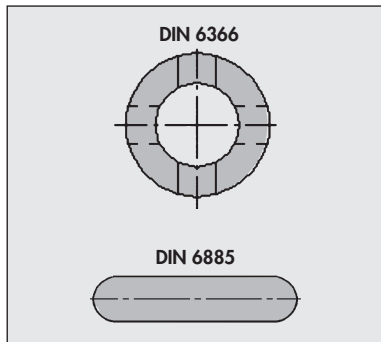


**Fräseranzugschraube DIN 6367**  
**Cutter Mounting Bolt DIN 6367**

Code	D1	L1	
214 75 222	M8	16	
214 75 223	M10	18	
214 75 224	M12	22	
214 75 225	M16	26	
214 75 226	M20	30	
214 75 227	M24	36	

**Spannschlüssel DIN 6368**  
**Wrench DIN 6368**

Code	Größe Size		
214 75 228	16		
214 75 229	22		
214 75 230	27		
214 75 231	32		
214 75 232	40		
214 75 233	50		

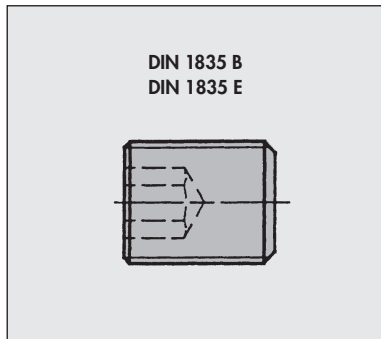


**Mitneherring DIN 6366**  
**Clutch Drive Ring DIN 6366**

Code	D1	L1	
214 76 191	16	10	
214 76 192	22	12	
214 76 193	27	12	
214 76 194	32	14	
214 76 195	40	14	

**Paßfeder DIN 6885**  
**Feather Key DIN 6885**

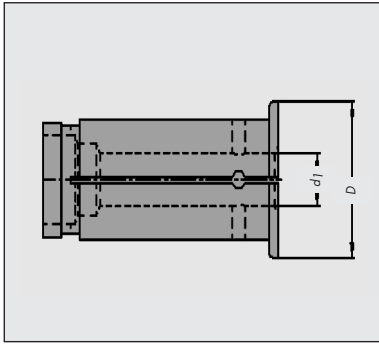
Code	Abmessungen Dimensions	
214 77 645	4 x 4 x 20	
214 77 646	6 x 6 x 25	
214 77 647	7 x 7 x 25	
214 77 648	8 x 7 x 28	
214 77 649	10 x 8 x 32	



**Spannschraube für Zylinderschaftaufnahme**  
**Clamping Screw for Straight Shank Adaptor**

Code	Abmessungen Dimensions	Stück piece
234 62 150	M 6 x 10	1
234 62 500	M 8 x 10	1
214 76 926	M 10 x 12	1
214 76 927	M 12 x 16	1
234 62 151	M 14 x 16	1

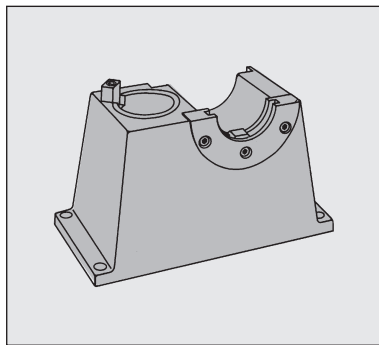
Code	Abmessungen Dimensions	Stück piece
214 76 928	M 16 x 16	1
214 76 929	M 18 x 2 x 20	2
234 62 152	M 20 x 2 x 20	2
234 62 501	M 20 x 2 x 25	2



**Zwischenbuchse**  
**Slotted Intermediate Sleeve**

Code	D	D1	
HD 12-3	12	3	
HD 12-4	12	4	
HD 12-5	12	5	
HD 12-6	12	6	
HD 12-8	12	8	
HD 20-3	20	3	
HD 20-4	20	4	
HD 20-5	20	5	
HD 20-6	20	6	
HD 20-8	20	8	
HD 20-9	20	9	
HD 20-10	12	3	
HD 20-11	12	4	
HD 20-12	12	5	

Code	D	D1	
HD 20-13	12	6	
HD 20-14	12	3	
HD 20-15	12	4	
HD 20-16	12	5	
HD 20-17	12	6	
HD 32-6	12	8	
HD 32-8	20	3	
HD 32-10	20	4	
HD 32-12	20	5	
HD 32-14	20	6	
HD 32-14	20	8	
HD 32-18	20	9	
HD 32-20	20	5	
HD 32-25	20	6	



**Montagevorrichtung**  
**Mounting Fixture**

Code	Abmessungen Dimensions	Stück piece
	nur auf Anfrage only on inquiry	