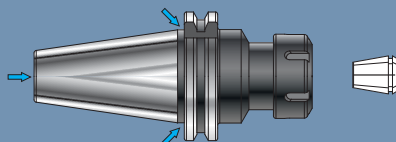


## PORTAPINZA STANDARD

- COLLET HOLDER STANDARD
- SPANNFUTTER STANDARD
- MANDRIN PORTE-PINCE STANDARD

ISO.B.. ER..  
... /AD - B

ER-DIN 6499



PAG F 28



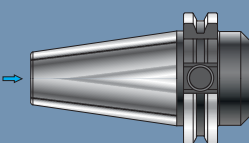
DIN 1835 A - DIN 6535 HA



## MANDRINO CORTO PER ATTACCHI TIPO WELDON

- END-MILL HOLDER FOR WELDON CONNECTION SHORT-TYPE
- AUFNAHME FÜR WELDON-TYPE, KURZE AUSFÜHRUNG
- MANDRIN POUR ATTACHEMENT WELDON, SERIE COURTE

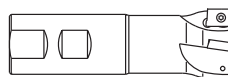
ISO.A.. WEC..  
... /AD



PAG F 29



WELDON - DIN1835B - DIN6535HB

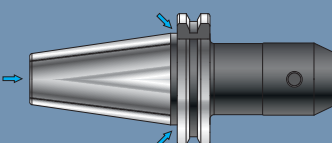


## MANDRINO PER ATTACCHI TIPO WELDON

- END MILL HOLDER FOR WELDON CONNECTION
- WERKZEUGAUFNAHME FÜR WELDON-TYPE
- MANDRIN POUR ATTACHEMENT WELDON

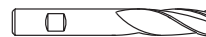
ISO.B.. WE..  
... /AD - B

DIN 6359 B



PAG F 30-31

WELDON - DIN1835B - DIN6535HB



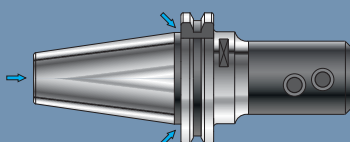
ISO 9766



## PORTAPUNTA UNIVERSALE

- UNIVERSAL ADAPTER FOR DRILLING TOOLS
- WELDON-AUFNAHME FÜR VOLLBOHRER
- PORTE-FORET UNIVERSEL

ISO.B.. PUH..  
... /AD - B



PAG F 32

WHISTLE-NOTCH - DIN1835E - DIN6535HE



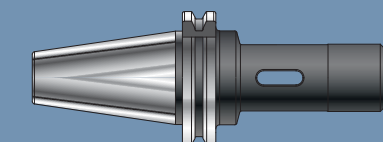
ISO 9766



## ADATTATORE PER CONO MORSE CON TENONE

- ADAPTER FOR MORSE TAPER WITH TENON
- ADAPTER FÜR MORSE-KEGEL MIT LAPPEN
- ADAPTATEUR POUR CONE MORSE AVEC TENON

ISO.A.. RP..  
... /AD



PAG F 33

DIN 228 B

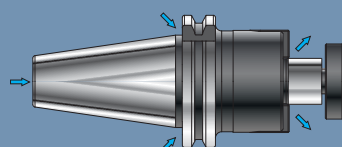


## PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE

- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- ADAPTATEUR POUR CONE MORSE AVEC TENON

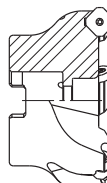
ISO.B.. FSW..  
... /AD - B

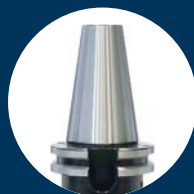
ISO 3937



PAG F 34

DIN 8030 A+B





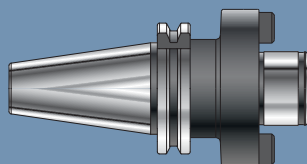
#### PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE

- SHELL END-MILL HOLDERS WITH TENON
- FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN
- ADAPTEUR POUR CONE MORSE AVEC TENON

ISO.A.. FF..  
... /A

DIN 6357 B

DIN 8030 C



PAG F 35

#### PORTAFRESA A TRASCINAMENTO COMBINATO PER FRESE A MANICOTTO E A DISCO

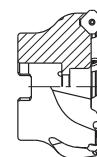
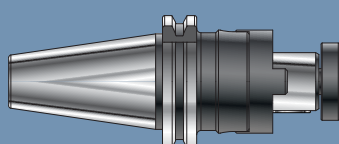
- COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS
- FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER
- MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÉ POUR FRAISES À MANCHON ET DE DISQUE

ISO.A.. FC..  
... /A

DIN 6358 B

DIN 8030 A+B

DIN 138

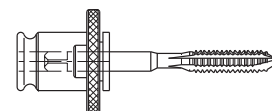
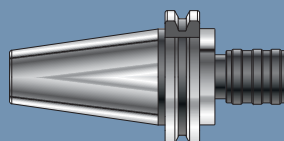


PAG F 36

#### PORTAMASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE

- QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH
- MANDRINS DE TARAUDAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION

ISO.A.. MC..  
... /A

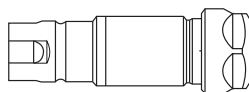
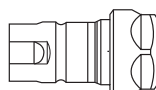
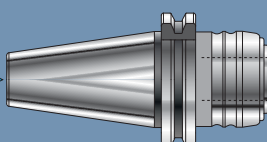


PAG F 37

#### PORTAMASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA

- QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
- APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

ISO.A.. MS..  
... /AD

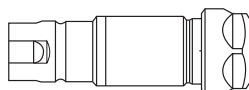
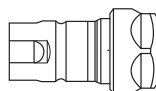
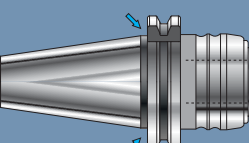


PAG F 38

#### PORTAMASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA

- QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING
- GEWINDESCHNEID-SCHNELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN
- APPAREIL PORTE-TARAUDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

ISO.B.. MS..  
... /AD - B

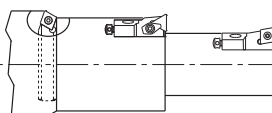
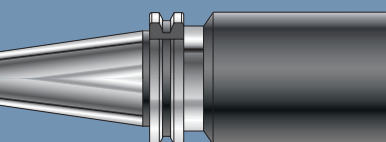


PAG F 39

#### BARRA CON CONO FINITO E STELO TENERO

- BORING BARS WITH FINISHED TAPER AND BLANK SHAFT
- ROHLINGE
- BARRE AVEC CONE FINI ET BOUT DOUX

ISO.A.. SF..  
... /A



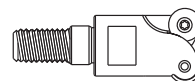
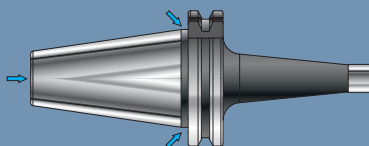
PAG F 40

## PORTAFRESA CON ATTACCO MODULARE FILETTATO

- CUTTER-HOLDER WITH MODULAR THREADED CONNECTION
- FRASERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME
- MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ

ISO.B.. MD..  
... /AD - B

**NEW**



PAG F 41

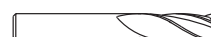
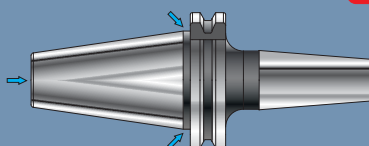
## MANDRINO A CALETTAMENTO TERMICO

- SHRINKING-ON TAPER SHANKS
- WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG
- MANDRIN À EMBOÎTEMENT THERMIQUE

ISO.B.. CTN..  
... /AD - B

DIN 69882-8

**NEW**



DIN 1835 A - DIN 6535 HA



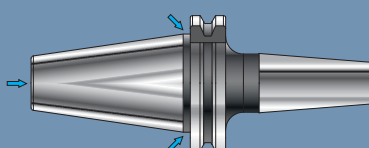
PAG F 42

## MANDRINO A CALETTAMENTO TERMICO PROLUNGABILE

- EXTENSIBLE SHRINK FIT
- VERLÄNGERBARES SCHRUMPFUTTER
- MANDRIN PROLONGEABLE À EMBOÎTEMENT THERMIQUE.

ISO.B.. CTPN..  
... /AD - B

**NEW**



DIN 1835 A - DIN 6535 HA

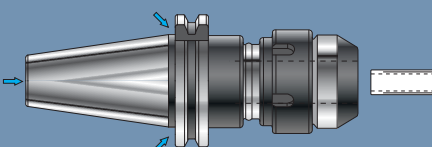


PAG F 43

## MANDRINO A FORTE SERRAGGIO

- HIGH CLAMPING CHUCKS
- KRAFTSPANNFUTTER
- MANDRIN À FORT SERRAGE

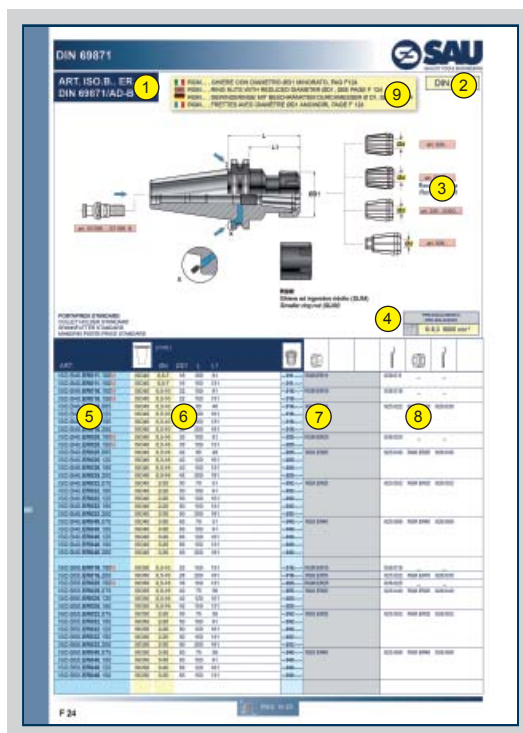
ISO.B.. MFS..  
... /AD - B



DIN 1835 A - DIN 6535 HA



PAG F 44



- 1 = NORMA ATTACCO
- 2 = NORMA PARTE ANTERIORE
- 3 = ACCESSORI OPZIONALI A RICHIESTA
- 4 = CARATTERISTICHE TECNICHE
- 5 = ARTICOLO
- 6 = MISURE, DATI, INDICAZIONI
- 7 = ACCESSORI E RICAMBI IN DOTAZIONE
- 8 = ACCESSORI E RICAMBI OPZIONALI A RICHIESTA
- 9 = NOTE E AVVERTIMENTI



- 1 = SHANK STANDARD
- 2 = TOOL-HOLDER STANDARD
- 3 = OPTIONAL ACCESSORIES ON REQUEST.
- 4 = TECHNICAL FEATURES
- 5 = ITEM
- 6 = MEASURES, DATA, INDICATIONS
- 7 = ACCESORIES AND SPARE PARTS EQUIPMENT
- 8 = OPTIONAL ACCESORIES AND SPARE PARTS ON REQUEST
- 9 = NOTES AND WARNINGS



- 1 = KEGEL-NORM
- 2 = AUFNAHME-NORM
- 3 = OPTIONALZUBEHÖR AUF ANFRAGE
- 4 = TECHNISCHE HAUPTMERKMALE
- 5 = ARTKEL
- 6 = ABMESSUNGEN, DATEN, HINWEISE
- 7 = ZUBEHÖR UND ERSATZTEIL AUSSTATTUNG
- 8 = OPTIONALZUBEHÖR UND -ERSATZTEILE AUF ANFRAGE
- 9 = ANMERKUNGEN UND HINWEISE

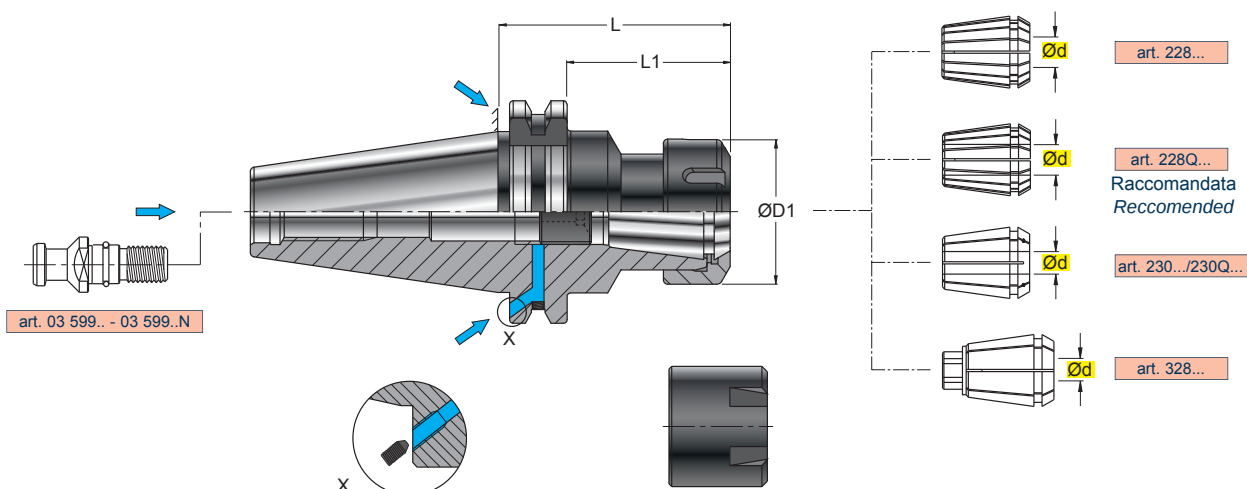


- 1 = NORMES POUR ATTACHEMENT
- 2 = NORME POUR MANDRIN
- 3 = ACCESSOIRES OPTIONNELS SUR DEMANDE
- 4 = CARACTERISTIQUES TECHNIQUES
- 5 = ARTICLE
- 6 = DIMENSIONES, DONNÉES, INDICATIONS
- 7 = ACCESSOIRES ET RECHANGE EN DOTATION
- 8 = ACCESSOIRES ET RECHANGES OPTIONNELS SUR DEMANDE
- 9 = NOTES ET AVERTISSEMENTS

**ART. ISO.B.. ER..  
DIN 69871/AD-B**

DIN 6499

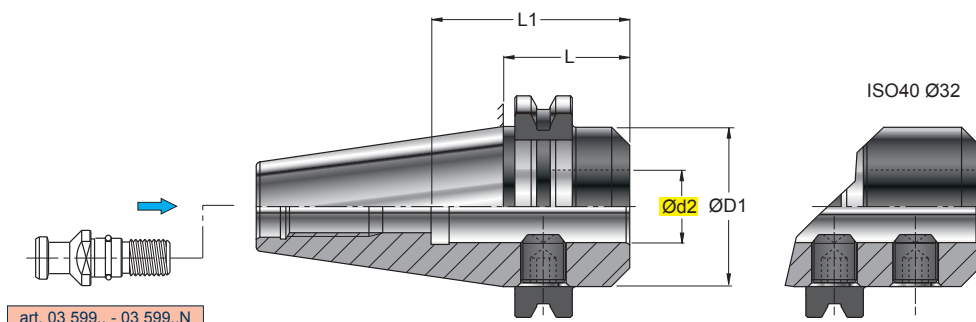
 RGM..., GHIERE CON DIAMETRO ØD1 MINORATO, PAG F 130  
 RGM..., RING NUTS WITH REDUCED DIAMETER ØD1, SEE PAGE F 130  
 RGM..., GEWINDERINGE MIT BESCHRÄNKTEM DURCHMESSER Ø D1, SEITE F 130  
 RGM..., FRETES AVEC DIAMÈTRE ØD1 AMOINDRI, PAGE F 130



PORTAPINZA STANDARD  
 COLLET HOLDER STANDARD  
 SPANNFUTTER STANDARD  
 MANDRIN PORTE-PINCE STANDARD

PRE-EQUILIBRATO  
 PRE-BALANCED  
 G 6,3 8000 min<sup>-1</sup>

| ART.               |  | (mm)   |     |     |     |           |  |  |  |  |  |  |  |  |
|--------------------|-------------------------------------------------------------------------------------|--------|-----|-----|-----|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
|                    |                                                                                     | Ød     | ØD1 | L   | L1  |           |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER011.100M | ISO40                                                                               | 0,5-7  | 16  | 100 | 81  | --.011.-- | RGM ER11                                                                            |                                                                                     |  |  | 938.011                                                                               | —                                                                                     | —                                                                                     |  |
| ISO.B40.ER011.150M | ISO40                                                                               | 0,5-7  | 16  | 150 | 131 | --.011.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER016.100M | ISO40                                                                               | 0,5-10 | 22  | 100 | 81  | --.016.-- | RGM ER16                                                                            |                                                                                     |  |  | 938.016                                                                               | —                                                                                     | —                                                                                     |  |
| ISO.B40.ER016.150M | ISO40                                                                               | 0,5-10 | 22  | 150 | 131 | --.016.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER016.065  | ISO40                                                                               | 0,5-10 | 28  | 65  | 46  | --.016.-- | RGS ER16                                                                            |                                                                                     |  |  | 925.022                                                                               | RGK ER16                                                                              | 926.030                                                                               |  |
| ISO.B40.ER016.120  | ISO40                                                                               | 0,5-10 | 28  | 120 | 101 | --.016.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER016.150  | ISO40                                                                               | 0,5-10 | 28  | 150 | 131 | --.016.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER016.200  | ISO40                                                                               | 0,5-10 | 28  | 200 | 181 | --.016.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER025.100M | ISO40                                                                               | 0,5-16 | 35  | 100 | 81  | --.025.-- | RGM ER25                                                                            |                                                                                     |  |  | 938.025                                                                               | —                                                                                     | —                                                                                     |  |
| ISO.B40.ER025.150M | ISO40                                                                               | 0,5-16 | 35  | 150 | 131 | --.025.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER025.065  | ISO40                                                                               | 0,5-16 | 42  | 65  | 46  | --.025.-- | RGS ER25                                                                            |                                                                                     |  |  | 925.040                                                                               | RGK ER25                                                                              | 926.040                                                                               |  |
| ISO.B40.ER025.120  | ISO40                                                                               | 0,5-16 | 42  | 120 | 101 | --.025.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER025.150  | ISO40                                                                               | 0,5-16 | 42  | 150 | 131 | --.025.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER025.200  | ISO40                                                                               | 0,5-16 | 42  | 200 | 181 | --.025.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER032.070  | ISO40                                                                               | 2-20   | 50  | 70  | 51  | --.032.-- | RGS ER32                                                                            |                                                                                     |  |  | 925.052                                                                               | RGK ER32                                                                              | 926.052                                                                               |  |
| ISO.B40.ER032.100  | ISO40                                                                               | 2-20   | 50  | 100 | 81  | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER032.120  | ISO40                                                                               | 2-20   | 50  | 120 | 101 | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER032.150  | ISO40                                                                               | 2-20   | 50  | 150 | 131 | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER032.200  | ISO40                                                                               | 2-20   | 50  | 200 | 181 | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER040.070  | ISO40                                                                               | 3-30   | 63  | 70  | 51  | --.040.-- | RGS ER40                                                                            |                                                                                     |  |  | 925.068                                                                               | RGK ER40                                                                              | 926.068                                                                               |  |
| ISO.B40.ER040.100  | ISO40                                                                               | 3-30   | 63  | 100 | 81  | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER040.120  | ISO40                                                                               | 3-30   | 63  | 120 | 101 | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER040.150  | ISO40                                                                               | 3-30   | 63  | 150 | 131 | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B40.ER040.200  | ISO40                                                                               | 3-30   | 63  | 200 | 181 | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER016.150M | ISO50                                                                               | 0,5-10 | 22  | 150 | 131 | --.016.-- | RGM ER16                                                                            |                                                                                     |  |  | 938.016                                                                               | —                                                                                     | —                                                                                     |  |
| ISO.B50.ER016.200  | ISO50                                                                               | 0,5-10 | 28  | 200 | 181 | --.016.-- | RGS ER16                                                                            |                                                                                     |  |  | 925.022                                                                               | RGK ER16                                                                              | 926.030                                                                               |  |
| ISO.B50.ER025.150M | ISO50                                                                               | 0,5-16 | 35  | 150 | 131 | --.025.-- | RGM ER25                                                                            |                                                                                     |  |  | 938.025                                                                               | —                                                                                     | —                                                                                     |  |
| ISO.B50.ER025.075  | ISO50                                                                               | 0,5-16 | 42  | 75  | 56  | --.025.-- | RGS ER25                                                                            |                                                                                     |  |  | 925.040                                                                               | RGK ER25                                                                              | 926.040                                                                               |  |
| ISO.B50.ER025.120  | ISO50                                                                               | 0,5-16 | 42  | 120 | 101 | --.025.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER025.150  | ISO50                                                                               | 0,5-16 | 42  | 150 | 131 | --.025.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER032.075  | ISO50                                                                               | 2-20   | 50  | 75  | 56  | --.032.-- | RGS ER32                                                                            |                                                                                     |  |  | 925.052                                                                               | RGK ER32                                                                              | 926.052                                                                               |  |
| ISO.B50.ER032.100  | ISO50                                                                               | 2-20   | 50  | 100 | 81  | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER032.120  | ISO50                                                                               | 2-20   | 50  | 120 | 101 | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER032.150  | ISO50                                                                               | 2-20   | 50  | 150 | 131 | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER032.200  | ISO50                                                                               | 2-20   | 50  | 200 | 181 | --.032.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER040.075  | ISO50                                                                               | 3-30   | 63  | 75  | 56  | --.040.-- | RGS ER40                                                                            |                                                                                     |  |  | 925.068                                                                               | RGK ER40                                                                              | 926.068                                                                               |  |
| ISO.B50.ER040.100  | ISO50                                                                               | 3-30   | 63  | 100 | 81  | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER040.120  | ISO50                                                                               | 3-30   | 63  | 120 | 101 | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |
| ISO.B50.ER040.150  | ISO50                                                                               | 3-30   | 63  | 150 | 131 | --.040.-- |                                                                                     |                                                                                     |  |  |                                                                                       |                                                                                       |                                                                                       |  |

**ART. ISO.A.. WEC..  
DIN 69871/AD**


MANDRINO CORTO PER ATTACCHI TIPO WELDON  
 END-MILL HOLDER FOR WELDON CONNECTION-SHORT TYPE  
 AUFNAHME FÜR WELDON-TYPE, KURZE AUSFÜHRUNG  
 MANDRIN POUR ATTACHEMENT WELDON, SERIE COURTE

 Ød2 H5

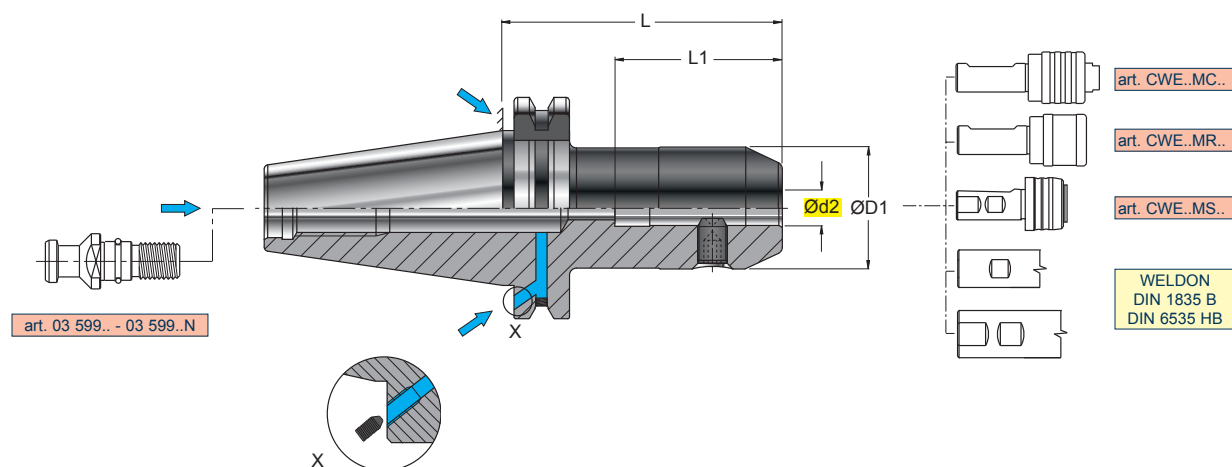
 0,005

PRE-EQUILIBRATO  
 PRE-BALANCED  
 G 6,3 8000 min<sup>-1</sup>

| ART.               |  | (mm) |     |    |    |  |  |  |  |  |  |
|--------------------|-------------------------------------------------------------------------------------|------|-----|----|----|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|--|
|                    |                                                                                     | Ød2  | ØD1 | L  | L1 |                                                                                       |                                                                                       |                                                                                       |                                                                                       |  |  |
| ISO.A40.WEC016.035 | ISO40                                                                               | 16   | 44  | 35 | 45 | GR1415                                                                                | —                                                                                     | 5006                                                                                  | —                                                                                     |  |  |
| ISO.A40.WEC020.035 | ISO40                                                                               | 20   | 44  | 35 | 45 |                                                                                       |                                                                                       |                                                                                       |                                                                                       |  |  |
| ISO.A40.WEC025.035 | ISO40                                                                               | 25   | 44  | 35 | 55 |                                                                                       |                                                                                       |                                                                                       |                                                                                       |  |  |
| ISO.A40.WEC032.070 | ISO40                                                                               | 32   | 72  | 70 | 60 | GR1610                                                                                | GR2015                                                                                | 5008                                                                                  | 5010                                                                                  |  |  |
| ISO.A50.WEC016.035 | ISO50                                                                               | 16   | 70  | 35 | 45 | GR1415                                                                                | —                                                                                     | 5006                                                                                  | —                                                                                     |  |  |
| ISO.A50.WEC020.035 | ISO50                                                                               | 20   | 70  | 35 | 45 | GR1615                                                                                | —                                                                                     | 5008                                                                                  | —                                                                                     |  |  |
| ISO.A50.WEC025.035 | ISO50                                                                               | 25   | 70  | 35 | 55 | GR1815                                                                                | —                                                                                     | 5008                                                                                  | —                                                                                     |  |  |
| ISO.A50.WEC032.035 | ISO50                                                                               | 32   | 70  | 35 | 60 | GR2015                                                                                | —                                                                                     | 5010                                                                                  | —                                                                                     |  |  |
| ISO.A50.WEC040.052 | ISO50                                                                               | 40   | 74  | 52 | 33 | GR2016                                                                                | —                                                                                     | 5010                                                                                  | —                                                                                     |  |  |

**ART. ISO.B40.WE..  
DIN 69871/AD-B**

DIN 6359 B



**MANDRINO PER ATTACCHI TIPO WELDON**  
 END MILL HOLDER FOR WELDON CONNECTION  
 WERKZEUGAUFNAHME FÜR WELDON-TYPE  
 MANDRIN POUR ATTACHEMENT WELDON

  $\varnothing d2$  H5

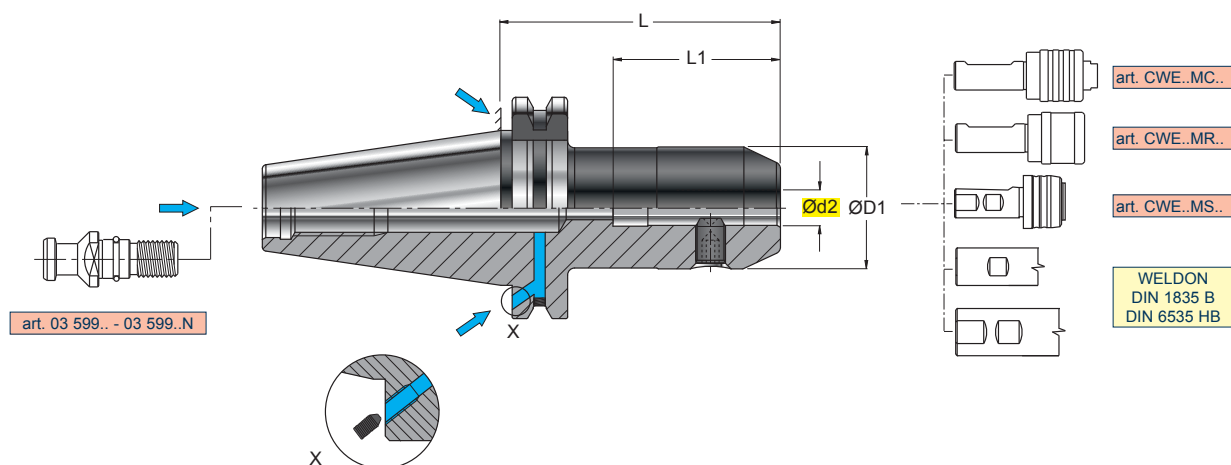
 0,005

PRE-EQUILIBRATO  
PRE-BALANCED  
 G 6,3 8000 min<sup>-1</sup>

| ART.              |  | (mm) | $\varnothing d2$ | $\varnothing D1$ | L  | L1 |  |  |  |      |  |  |
|-------------------|-------------------------------------------------------------------------------------|------|------------------|------------------|----|----|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|------|--|--|
| ISO.B40.WE006.050 | ISO40                                                                               | 6    | 25               | 50               | 35 |    | GR06                                                                                |  |                                                                                       | 5003 |  |  |
| ISO.B40.WE006.100 | ISO40                                                                               | 6    | 25               | 100              | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE006.150 | ISO40                                                                               | 6    | 25               | 150              | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE008.050 | ISO40                                                                               | 8    | 28               | 50               | 35 |    | GR08                                                                                |  |                                                                                       | 5004 |  |  |
| ISO.B40.WE008.100 | ISO40                                                                               | 8    | 28               | 100              | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE008.150 | ISO40                                                                               | 8    | 28               | 150              | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE010.050 | ISO40                                                                               | 10   | 35               | 50               | 39 |    | GR10                                                                                |  |                                                                                       | 5005 |  |  |
| ISO.B40.WE010.100 | ISO40                                                                               | 10   | 35               | 100              | 39 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE010.150 | ISO40                                                                               | 10   | 35               | 150              | 39 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE012.050 | ISO40                                                                               | 12   | 42               | 50               | 44 |    | GR1215                                                                              |  |                                                                                       | 5006 |  |  |
| ISO.B40.WE012.100 | ISO40                                                                               | 12   | 42               | 100              | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE012.150 | ISO40                                                                               | 12   | 42               | 150              | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE014.063 | ISO40                                                                               | 14   | 44               | 63               | 44 |    | GR1215                                                                              |  |                                                                                       | 5006 |  |  |
| ISO.B40.WE014.100 | ISO40                                                                               | 14   | 44               | 100              | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE014.150 | ISO40                                                                               | 14   | 44               | 150              | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE016.063 | ISO40                                                                               | 16   | 48               | 63               | 47 |    | GR1415                                                                              |  |                                                                                       | 5006 |  |  |
| ISO.B40.WE016.100 | ISO40                                                                               | 16   | 48               | 100              | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE016.150 | ISO40                                                                               | 16   | 48               | 150              | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE018.063 | ISO40                                                                               | 18   | 50               | 63               | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE018.100 | ISO40                                                                               | 18   | 50               | 100              | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE018.150 | ISO40                                                                               | 18   | 50               | 150              | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE020.063 | ISO40                                                                               | 20   | 52               | 63               | 49 |    | GR1615                                                                              |  |                                                                                       | 5008 |  |  |
| ISO.B40.WE020.100 | ISO40                                                                               | 20   | 52               | 100              | 49 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE020.150 | ISO40                                                                               | 20   | 52               | 150              | 49 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE025.085 | ISO40                                                                               | 25   | 65               | 85               | 54 |    | GR1815                                                                              |  |                                                                                       | 5008 |  |  |
| ISO.B40.WE025.150 | ISO40                                                                               | 25   | 65               | 150              | 54 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE032.085 | ISO40                                                                               | 32   | 72               | 85               | 58 |    | GR2015                                                                              |  |                                                                                       | 5010 |  |  |
| ISO.B40.WE032.150 | ISO40                                                                               | 32   | 72               | 150              | 58 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B40.WE040.115 | ISO40                                                                               | 40   | 80               | 115              | 68 |    |                                                                                     |  |                                                                                       |      |  |  |
|                   |                                                                                     |      |                  |                  |    |    |                                                                                     |  |                                                                                       |      |  |  |

**ART. ISO.B.50.WE..  
DIN 69871/AD-B**

DIN 6359 B



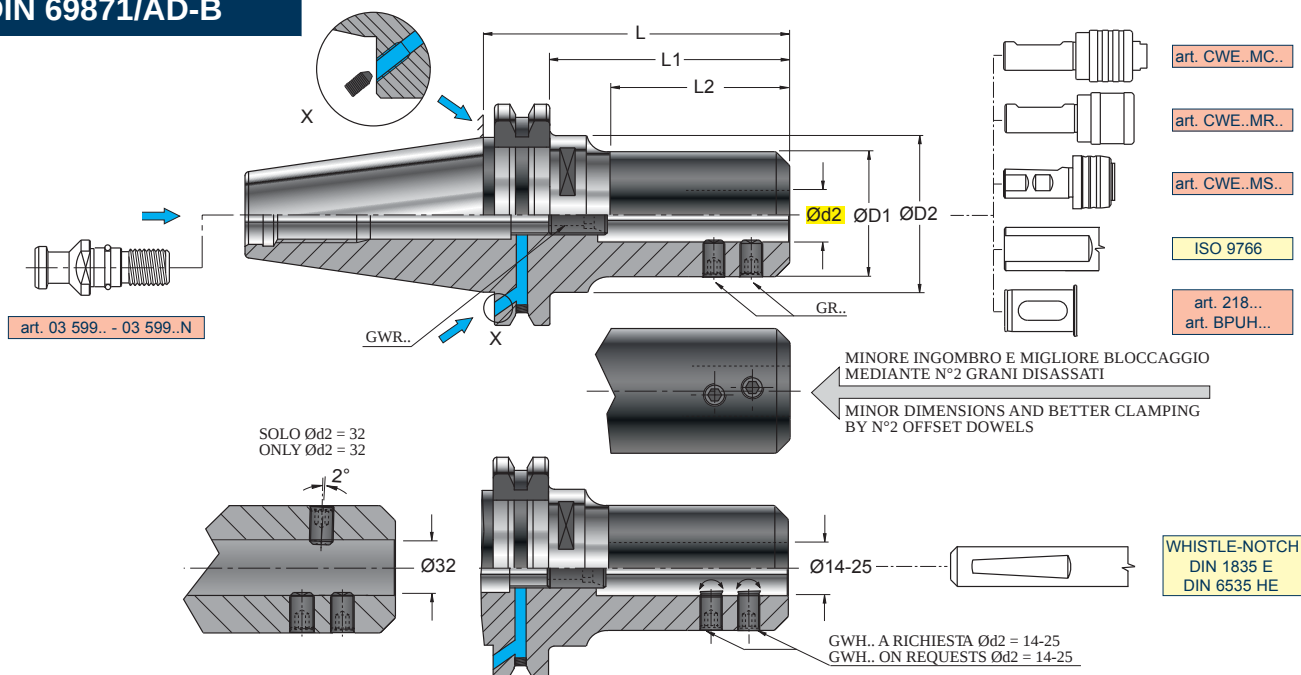
**MANDRINO PER ATTACCHI TIPO WELDON**  
 END MILL HOLDER FOR WELDON CONNECTION  
 WERKZEUGAUFNAHME FÜR WELDON-TYPE  
 MANDRIN POUR ATTACHEMENT WELDON


 Ød2 H5


 0,005

PRE-EQUILIBRATO  
PRE-BALANCED  
G 6,3 8000 min<sup>-1</sup>

| ART.              |  | (mm) | Ød2 | ØD1 | L  | L1 |  |  |  |      |  |  |
|-------------------|-------------------------------------------------------------------------------------|------|-----|-----|----|----|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|------|--|--|
| ISO.B50.WE006.063 | ISO50                                                                               | 6    | 25  | 63  | 35 |    | GR06                                                                                |  |                                                                                       | 5003 |  |  |
| ISO.B50.WE006.100 | ISO50                                                                               | 6    | 25  | 100 | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE006.150 | ISO50                                                                               | 6    | 25  | 150 | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE008.063 | ISO50                                                                               | 8    | 28  | 63  | 35 |    | GR08                                                                                |  |                                                                                       | 5004 |  |  |
| ISO.B50.WE008.100 | ISO50                                                                               | 8    | 28  | 100 | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE008.150 | ISO50                                                                               | 8    | 28  | 150 | 35 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE010.063 | ISO50                                                                               | 10   | 35  | 63  | 39 |    | GR10                                                                                |  |                                                                                       | 5005 |  |  |
| ISO.B50.WE010.100 | ISO50                                                                               | 10   | 35  | 100 | 39 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE010.150 | ISO50                                                                               | 10   | 35  | 150 | 39 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE012.063 | ISO50                                                                               | 12   | 42  | 63  | 44 |    | GR1215                                                                              |  |                                                                                       | 5006 |  |  |
| ISO.B50.WE012.100 | ISO50                                                                               | 12   | 42  | 100 | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE012.150 | ISO50                                                                               | 12   | 42  | 150 | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE014.063 | ISO50                                                                               | 14   | 44  | 63  | 44 |    | GR1215                                                                              |  |                                                                                       | 5006 |  |  |
| ISO.B50.WE014.100 | ISO50                                                                               | 14   | 44  | 100 | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE014.150 | ISO50                                                                               | 14   | 44  | 150 | 44 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE016.063 | ISO50                                                                               | 16   | 48  | 63  | 47 |    | GR1415                                                                              |  |                                                                                       | 5006 |  |  |
| ISO.B50.WE016.100 | ISO50                                                                               | 16   | 48  | 100 | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE016.150 | ISO50                                                                               | 16   | 48  | 150 | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE018.063 | ISO50                                                                               | 18   | 50  | 63  | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE018.100 | ISO50                                                                               | 18   | 50  | 100 | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE018.150 | ISO50                                                                               | 18   | 50  | 150 | 47 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE020.063 | ISO50                                                                               | 20   | 52  | 63  | 49 |    | GR1615                                                                              |  |                                                                                       | 5008 |  |  |
| ISO.B50.WE020.100 | ISO50                                                                               | 20   | 52  | 100 | 49 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE020.150 | ISO50                                                                               | 20   | 52  | 150 | 49 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE025.085 | ISO50                                                                               | 25   | 65  | 85  | 54 |    | GR1815                                                                              |  |                                                                                       | 5008 |  |  |
| ISO.B50.WE025.100 | ISO50                                                                               | 25   | 65  | 100 | 54 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE025.150 | ISO50                                                                               | 25   | 65  | 150 | 54 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE032.085 | ISO50                                                                               | 32   | 72  | 85  | 58 |    | GR2015                                                                              |  |                                                                                       | 5010 |  |  |
| ISO.B50.WE032.150 | ISO50                                                                               | 32   | 72  | 150 | 58 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE040.100 | ISO50                                                                               | 40   | 80  | 100 | 68 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE040.150 | ISO50                                                                               | 40   | 80  | 150 | 68 |    |                                                                                     |  |                                                                                       |      |  |  |
| ISO.B50.WE050.105 | ISO50                                                                               | 50   | 90  | 105 | 78 |    | GR2420                                                                              |  |                                                                                       | 5017 |  |  |
|                   |                                                                                     |      |     |     |    |    |                                                                                     |  |                                                                                       |      |  |  |

**ART. ISO.B.. PUH..  
DIN 69871/AD-B**


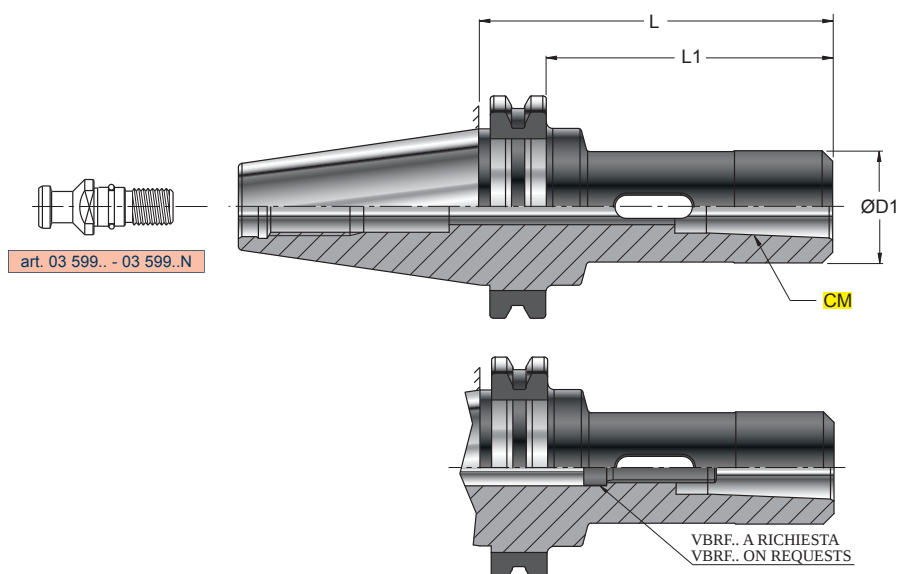
**PORTAPUNTA UNIVERSALE**  
UNIVERSAL ADAPTER FOR DRILLING TOOLS  
WELDON-AUFNAHME FÜR VOLLBOHRER  
PORTE-FORÉT UNIVERSEL

Ød2 H5

|       |         |
|-------|---------|
| 0,003 | L ≤ 140 |
| 0,005 | L ≤ 200 |

| PRE-EQUILIBRATO                    | PRE-BALANCED |
|------------------------------------|--------------|
| SK40 = G6,3 8000 min <sup>-1</sup> |              |
| SK50 = G6,3 6000 min <sup>-1</sup> |              |

| ART.               | (mm)  | Ød2 | ØD1 | ØD2  | L   | L1  | L2  |          |       |      |      |       |      |
|--------------------|-------|-----|-----|------|-----|-----|-----|----------|-------|------|------|-------|------|
| ISO.B40.PUH016.100 | ISO40 | 16  | 38  | 44,7 | 100 | 81  | —   | n°2 GR10 | GWR12 | 5005 | 5006 | GWH10 | 5005 |
| ISO.B40.PUH020.100 | ISO40 | 20  | 42  | 44,7 | 100 | 81  | —   | n°2 GR10 | GWR16 | 5005 | 5008 | GWH10 | 5005 |
| ISO.B40.PUH025.100 | ISO40 | 25  | 48  | 50   | 100 | 81  | —   | n°2 GR10 | GWR20 | 5005 | 5010 | GWH10 | 5005 |
| ISO.B40.PUH032.080 | ISO40 | 32  | 58  | 50   | 80  | 61  | —   | n°3 GR14 | —     | 5006 | —    | —     | —    |
| ISO.B40.PUH040.080 | ISO40 | 40  | 68  | 50   | 80  | 61  | —   | n°2 GR14 | —     | 5006 | —    | —     | —    |
| ISO.B50.PUH014.140 | ISO50 | 14  | 36  | 70   | 140 | 121 | 80  | n°2 GR10 | GWR12 | 5005 | 5006 | GWH10 | 5005 |
| ISO.B50.PUH014.200 | ISO50 | 14  | 36  | 70   | 200 | 181 | 130 |          |       |      |      |       |      |
| ISO.B50.PUH016.140 | ISO50 | 16  | 38  | 70   | 140 | 121 | 80  |          |       |      |      |       |      |
| ISO.B50.PUH016.200 | ISO50 | 16  | 38  | 70   | 200 | 181 | 130 |          |       |      |      |       |      |
| ISO.B50.PUH018.140 | ISO50 | 18  | 40  | 70   | 140 | 121 | 80  | n°2 GR10 | GWR16 | 5005 | 5008 | GWH10 | 5005 |
| ISO.B50.PUH018.200 | ISO50 | 18  | 40  | 70   | 200 | 181 | 130 |          |       |      |      |       |      |
| ISO.B50.PUH020.140 | ISO50 | 20  | 42  | 70   | 140 | 121 | 80  |          |       |      |      |       |      |
| ISO.B50.PUH025.140 | ISO50 | 25  | 48  | 70   | 140 | 121 | 90  | n°2 GR10 | GWR20 | 5005 | 5010 | GWH10 | 5005 |
| ISO.B50.PUH032.080 | ISO50 | 32  | 58  | 70   | 80  | 61  | 40  | n°3 GR14 | —     | 5006 | —    | —     | —    |
| ISO.B50.PUH032.140 | ISO50 | 32  | 58  | 70   | 140 | 121 | 95  |          |       |      |      |       |      |
| ISO.B50.PUH040.090 | ISO50 | 40  | 68  | 80   | 90  | 71  | —   | n°2 GR16 | —     | 5008 | —    | —     | —    |
| ISO.B50.PUH040.140 | ISO50 | 40  | 68  | 80   | 140 | 121 | —   |          |       |      |      |       |      |
| ISO.B50.PUH050.090 | ISO50 | 50  | 76  | 80   | 90  | 71  | —   |          |       |      |      |       |      |

**ART. ISO.A.. RP..  
DIN 69871/AD**


**ADATTATORE PER CONO MORSE CON TENONE**  
 ADAPTER FOR MORSE TAPER WITH TENON  
 ADAPTER FÜR MORSE-KEGEL MIT LAPPEN  
 ADAPTATEUR POUR CONE MORSE AVEC TENON

| PRE-EQUILIBRATO                                                                     | PRE-BALANCED                       |
|-------------------------------------------------------------------------------------|------------------------------------|
|  | SK40 = G6,3 8000 min <sup>-1</sup> |
|                                                                                     | SK50 = G6,3 6000 min <sup>-1</sup> |

| ART.              |  |  | (mm) |     |     |  |  |                                                                                       |                                                                                       |
|-------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-----|-----|--|--|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                   |                                                                                     |                                                                                     | ØD1  | L   | L1  |  |  |  |  |
| ISO.A40.RP001.040 | ISO40                                                                               | C.M.1                                                                               | 25   | 40  | 21  |  |  | VBRF060                                                                               | CTE05                                                                                 |
| ISO.A40.RP001.120 | ISO40                                                                               | C.M.1                                                                               | 25   | 120 | 101 |  |  |                                                                                       |                                                                                       |
| ISO.A40.RP002.050 | ISO40                                                                               | C.M.2                                                                               | 32   | 50  | 31  |  |  | VBRF100                                                                               | CTE08                                                                                 |
| ISO.A40.RP002.135 | ISO40                                                                               | C.M.2                                                                               | 32   | 135 | 116 |  |  |                                                                                       |                                                                                       |
| ISO.A40.RP003.063 | ISO40                                                                               | C.M.3                                                                               | 40   | 63  | 44  |  |  | VBRF120                                                                               | CTE10                                                                                 |
| ISO.A40.RP003.150 | ISO40                                                                               | C.M.3                                                                               | 40   | 150 | 131 |  |  |                                                                                       |                                                                                       |
| ISO.A40.RP004.090 | ISO40                                                                               | C.M.4                                                                               | 50   | 90  | 71  |  |  | VBRF160                                                                               | CTE14                                                                                 |
| ISO.A50.RP001.040 | ISO50                                                                               | C.M.1                                                                               | 25   | 40  | 21  |  |  | VBRF101                                                                               | CTE08                                                                                 |
| ISO.A50.RP001.120 | ISO50                                                                               | C.M.1                                                                               | 25   | 120 | 101 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP001.180 | ISO50                                                                               | C.M.1                                                                               | 25   | 180 | 161 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP002.050 | ISO50                                                                               | C.M.2                                                                               | 32   | 50  | 31  |  |  | VBRF100                                                                               | CTE08                                                                                 |
| ISO.A50.RP002.135 | ISO50                                                                               | C.M.2                                                                               | 32   | 135 | 116 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP002.180 | ISO50                                                                               | C.M.2                                                                               | 32   | 180 | 161 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP003.063 | ISO50                                                                               | C.M.3                                                                               | 40   | 63  | 44  |  |  | VBRF120                                                                               | CTE10                                                                                 |
| ISO.A50.RP003.150 | ISO50                                                                               | C.M.3                                                                               | 40   | 150 | 131 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP003.180 | ISO50                                                                               | C.M.3                                                                               | 40   | 180 | 161 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP004.080 | ISO50                                                                               | C.M.4                                                                               | 50   | 80  | 61  |  |  | VBRF160                                                                               | CTE14                                                                                 |
| ISO.A50.RP004.180 | ISO50                                                                               | C.M.4                                                                               | 50   | 180 | 161 |  |  |                                                                                       |                                                                                       |
| ISO.A50.RP005.105 | ISO50                                                                               | C.M.5                                                                               | 70   | 105 | 86  |  |  |                                                                                       |                                                                                       |



È POSSIBILE INSERIRE FRESE CON FILETTO TRAMITE L'AUSILIO DEL RICAMBIO OPZIONALE VBRF...



POSSIBLE FITTING OF CUTTERS WITH THREAD BY MEANS OF THE OPTIONAL SPARE PART VBRF...



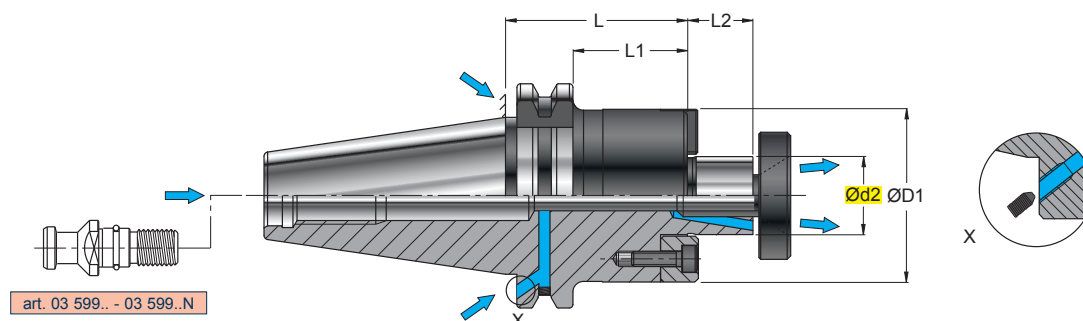
MÖGLICHER EINSATZ VON FRÄSERN MIT GEWINDE MIT HILFE DES OPTIONELLEN ERSATZTEILS VBRF...



IL EST POSSIBLE D'INSERER DES FRAISES AVEC FILET AU MOYEN DE LA PIECE DE RECHANGE EN OPTION VBRF...

**ART. ISO.B.. FSW..  
DIN 69871/AD-B**

ISO 3937



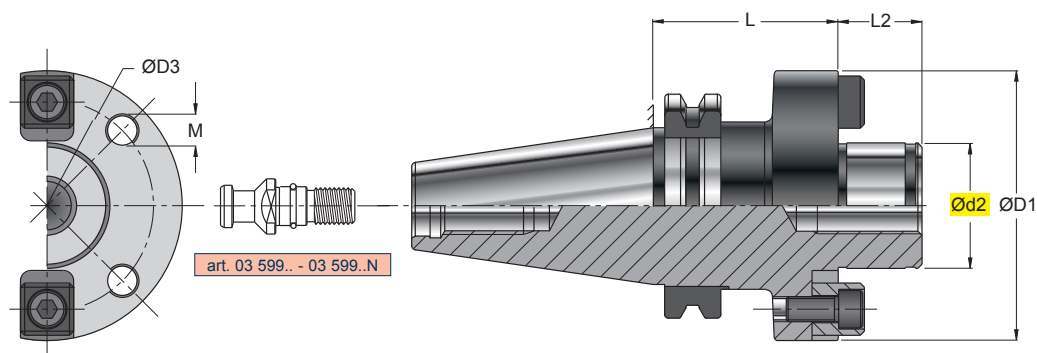
**PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE**  
 SHELL END-MILL HOLDERS WITH TENON  
 FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN  
 ADAPTATEUR POUR CONE MORSE AVEC TENON

| PRE-EQUILIBRATO                                                                     | PRE-BALANCED                       |
|-------------------------------------------------------------------------------------|------------------------------------|
|  | SK40 = G6,3 8000 min <sup>-1</sup> |
|                                                                                     | SK50 = G6,3 6000 min <sup>-1</sup> |

| ART.                          |  | (mm) |     |     |     |    |  |  |  |  |  |  |
|-------------------------------|-------------------------------------------------------------------------------------|------|-----|-----|-----|----|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                               |                                                                                     | Ød2  | ØD1 | L   | L1  | L2 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW016.035            | ISO40                                                                               | 16   | 40  | 35  | 16  | 17 | RS 16                                                                               | VBS08                                                                                 | TSFS16                                                                                | VB02                                                                                  | CTE05                                                                                 | 5015                                                                                  |
| ISO.B40.FSW016.050 <b>New</b> | ISO40                                                                               | 16   | 40  | 50  | 31  | 17 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW016.090 <b>New</b> | ISO40                                                                               | 16   | 40  | 90  | 81  | 17 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW022.035            | ISO40                                                                               | 22   | 50  | 35  | 16  | 19 | RS 22                                                                               | VBS10                                                                                 | TSFS22                                                                                | VB04                                                                                  | CTE06                                                                                 | 5003                                                                                  |
| ISO.B40.FSW022.050 <b>New</b> | ISO40                                                                               | 22   | 49  | 50  | 31  | 19 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW022.090 <b>New</b> | ISO40                                                                               | 22   | 49  | 90  | 81  | 19 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW027.060            | ISO40                                                                               | 27   | 60  | 60  | 41  | 21 | RS 27                                                                               | VBS12                                                                                 | TSFS27                                                                                | VB05                                                                                  | CTE08                                                                                 | 5005                                                                                  |
| ISO.B40.FSW027.090 <b>New</b> | ISO40                                                                               | 27   | 60  | 90  | 81  | 21 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW032.060            | ISO40                                                                               | 32   | 65  | 60  | 41  | 24 | RS 32                                                                               | VBS16                                                                                 | TSFS32                                                                                | VB05                                                                                  | CTE10                                                                                 | 5004                                                                                  |
| ISO.B40.FSW032.090 <b>New</b> | ISO40                                                                               | 32   | 65  | 90  | 71  | 24 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B40.FSW040.060            | ISO40                                                                               | 40   | 75  | 60  | 41  | 27 | RS 40                                                                               | VBS20                                                                                 | TSFS40                                                                                | VB06                                                                                  | CTE12                                                                                 | 5005                                                                                  |
| ISO.B40.FSW040.090 <b>New</b> | ISO40                                                                               | 40   | 75  | 90  | 71  | 27 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW016.063 <b>New</b> | ISO50                                                                               | 16   | 40  | 63  | 44  | 17 | RS16                                                                                | VBS08                                                                                 | TSFS16                                                                                | VB02                                                                                  | CTE05                                                                                 | 5015                                                                                  |
| ISO.B50.FSW016.100            | ISO50                                                                               | 16   | 40  | 100 | 81  | 17 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW022.035            | ISO50                                                                               | 22   | 50  | 35  | 16  | 19 | RS 22                                                                               | VBS10                                                                                 | TSFS22                                                                                | VB04                                                                                  | CTE06                                                                                 | 5003                                                                                  |
| ISO.B50.FSW022.063 <b>New</b> | ISO50                                                                               | 22   | 49  | 63  | 44  | 19 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW022.100            | ISO50                                                                               | 22   | 50  | 100 | 81  | 19 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW022.169 <b>New</b> | ISO50                                                                               | 22   | 49  | 169 | 150 | 19 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW022.219 <b>New</b> | ISO50                                                                               | 22   | 49  | 219 | 200 | 19 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW027.035            | ISO50                                                                               | 27   | 60  | 35  | 16  | 21 | RS 27                                                                               | VBS12                                                                                 | TSFS27                                                                                | VB05                                                                                  | CTE08                                                                                 | 5005                                                                                  |
| ISO.B50.FSW027.063 <b>New</b> | ISO50                                                                               | 27   | 60  | 63  | 44  | 21 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW027.100            | ISO50                                                                               | 27   | 60  | 100 | 81  | 21 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW027.169 <b>New</b> | ISO50                                                                               | 27   | 60  | 169 | 150 | 21 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW027.219 <b>New</b> | ISO50                                                                               | 27   | 60  | 219 | 200 | 21 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW032.035            | ISO50                                                                               | 32   | 75  | 35  | 16  | 24 | RS 32                                                                               | VBS16                                                                                 | TSFS32                                                                                | VB05                                                                                  | CTE10                                                                                 | 5004                                                                                  |
| ISO.B50.FSW032.063 <b>New</b> | ISO50                                                                               | 32   | 75  | 63  | 44  | 24 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW032.100            | ISO50                                                                               | 32   | 75  | 100 | 81  | 24 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.B50.FSW040.063 <b>New</b> | ISO50                                                                               | 40   | 85  | 63  | 44  | 27 | RS 40                                                                               | VBS20                                                                                 | TSFS40                                                                                | VB06                                                                                  | CTE12                                                                                 | 5005                                                                                  |
| ISO.B50.FSW040.100 <b>New</b> | ISO50                                                                               | 40   | 85  | 100 | 81  | 27 |                                                                                     |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |

**ART. ISO.A.. FF..  
DIN 69871/A**

DIN 6357 B



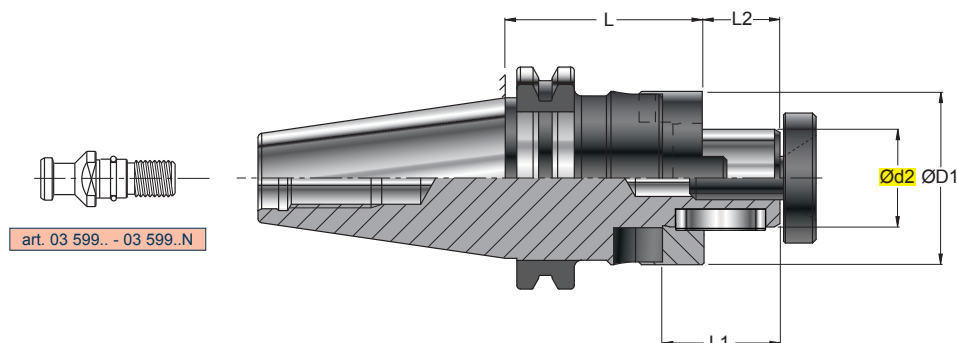
**PORTAFRESA A TRASCINAMENTO FRONTALE CON TENONE**  
 SHELL END-MILL HOLDERS WITH TENON  
 FRÄSERAUFNAHME MIT QUERNUT UND LAPPEN  
 ADAPTATEUR POUR CONE MORSE AVEC TENON

 0,01

| ART.                         |  | (mm) |     |     |       |    |    |  |  |  |  |  |  |
|------------------------------|-------------------------------------------------------------------------------------|------|-----|-----|-------|----|----|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                              |                                                                                     | Ød2  | M   | ØD1 | ØD3   | L  | L2 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A40.FF040.055            | ISO40                                                                               | 40   | M12 | 89  | 66,7  | 55 | 25 | TSFF40                                                                               | VB06                                                                                  | 5005                                                                                  | RS 40                                                                                 | VBS20                                                                                 | CTE12                                                                                 |
| ISO.A40.FF060.055            | ISO40                                                                               | 60   | M16 | 129 | 101,6 | 55 | 35 | TSFF60                                                                               | VB12C                                                                                 | 5010                                                                                  | RS 60                                                                                 | VBS24                                                                                 | CTE14                                                                                 |
| ISO.A50.FF040.070 <b>New</b> | ISO50                                                                               | 40   | M12 | 89  | 66,7  | 70 | 25 | TSFF40                                                                               | VB06                                                                                  | 5005                                                                                  | RS 40                                                                                 | VBS20                                                                                 | CTE12                                                                                 |
| ISO.A50.FF060.070 <b>New</b> | ISO50                                                                               | 60   | M16 | 129 | 101,6 | 70 | 35 | TSFF60                                                                               | VB12C                                                                                 | 5010                                                                                  | RS 60                                                                                 | VBS24                                                                                 | CTE14                                                                                 |

**ART. ISO.A.. FC..  
DIN 69871/A**

DIN 6358 B



**PORTAFRESA A TRASCINAMENTO COMBINATO PER FRESE A MANICOTTO E A DISCO**  
 COMBI FACE MILL HOLDERS FOR SHELL-END AND DISC MILLING CUTTERS  
 FRÄSERAUFNAHME KOMBINIERT FÜR AUFSTECK-UND SCHEIBENFRÄSER  
 MANDRIN PORTE-FRAISE À ENTRAÎNEMENT COMBINÉ POUR FRAISES À MANCHON ET DE DISQUE

 0,01

PRE-EQUILIBRATO  
PRE-BALANCED  
 G 6,3 8000 min<sup>-1</sup>

| ART.              |  | (mm) |     |     |    |    |  |  |  |  |  |
|-------------------|-------------------------------------------------------------------------------------|------|-----|-----|----|----|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                   |                                                                                     | Ød2  | ØD1 | L   | L1 | L2 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A40.FC016.055 | ISO40                                                                               | 16   | 32  | 55  | 27 | 17 | RS 16                                                                                | VBS08                                                                                 | CT0420                                                                                | 08.3501.016.AT                                                                        | CTE05                                                                                 |
| ISO.A40.FC016.090 | ISO40                                                                               | 16   | 32  | 90  | 27 | 17 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A40.FC022.055 | ISO40                                                                               | 22   | 40  | 55  | 31 | 19 | RS 22                                                                                | VBS10                                                                                 | CT0625                                                                                | 08.3502.022.AT                                                                        | CTE06                                                                                 |
| ISO.A40.FC022.090 | ISO40                                                                               | 22   | 40  | 90  | 31 | 19 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A40.FC027.055 | ISO40                                                                               | 27   | 48  | 55  | 33 | 21 | RS 27                                                                                | VBS12                                                                                 | CT0725                                                                                | 08.3503.027.AT                                                                        | CTE08                                                                                 |
| ISO.A40.FC027.090 | ISO40                                                                               | 27   | 48  | 90  | 33 | 21 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A40.FC032.063 | ISO40                                                                               | 32   | 58  | 63  | 38 | 24 | RS 32                                                                                | VBS16                                                                                 | CT0828                                                                                | 08.3504.032.AT                                                                        | CTE10                                                                                 |
| ISO.A40.FC032.090 | ISO40                                                                               | 32   | 58  | 90  | 38 | 24 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A40.FC040.063 | ISO40                                                                               | 40   | 70  | 63  | 41 | 27 | RS 40                                                                                | VBS20                                                                                 | CT1032                                                                                | 08.3505.040.AT                                                                        | CTE12                                                                                 |
| ISO.A40.FC040.090 | ISO40                                                                               | 40   | 70  | 90  | 41 | 27 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A50.FC016.063 | ISO50                                                                               | 16   | 32  | 63  | 27 | 17 | RS 16                                                                                | VBS08                                                                                 | CT0420                                                                                | 08.3501.016.AT                                                                        | CTE05                                                                                 |
| ISO.A50.FC016.090 | ISO50                                                                               | 16   | 32  | 90  | 27 | 17 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A50.FC022.063 | ISO50                                                                               | 22   | 40  | 63  | 31 | 19 | RS 22                                                                                | VBS10                                                                                 | CT0625                                                                                | 08.3502.022.AT                                                                        | CTE06                                                                                 |
| ISO.A50.FC022.090 | ISO50                                                                               | 22   | 40  | 90  | 31 | 19 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A50.FC027.063 | ISO50                                                                               | 27   | 48  | 63  | 33 | 21 | RS 27                                                                                | VBS12                                                                                 | CT0725                                                                                | 08.3503.027.AT                                                                        | CTE08                                                                                 |
| ISO.A50.FC027.090 | ISO50                                                                               | 27   | 48  | 90  | 33 | 21 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A50.FC032.063 | ISO50                                                                               | 32   | 58  | 63  | 38 | 24 | RS 32                                                                                | VBS16                                                                                 | CT0828                                                                                | 08.3504.032.AT                                                                        | CTE10                                                                                 |
| ISO.A50.FC032.090 | ISO50                                                                               | 32   | 58  | 90  | 38 | 24 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A50.FC040.063 | ISO50                                                                               | 40   | 70  | 63  | 41 | 27 | RS 40                                                                                | VBS20                                                                                 | CT1032                                                                                | 08.3505.040.AT                                                                        | CTE12                                                                                 |
| ISO.A50.FC040.100 | ISO50                                                                               | 40   | 70  | 100 | 41 | 27 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
| ISO.A50.FC050.075 | ISO50                                                                               | 50   | 90  | 75  | 46 | 30 | RS 50                                                                                | VBS24                                                                                 | CT1236                                                                                | 08.3506.050.AT                                                                        | CTE14                                                                                 |
| ISO.A50.FC050.100 | ISO50                                                                               | 50   | 90  | 100 | 46 | 30 |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |

Technical drawing of a 1/2" BSP female plug with various accessories.

The main drawing shows a conical plug with dimensions:

- $L$ : Total length
- $L1$ : Length of the conical part
- $C$ : Width of the shoulder
- $T$ : Thickness of the shoulder
- $\varnothing D1$ : Diameter of the threaded part

To the left, a detail of the 1/2" BSP thread is shown.

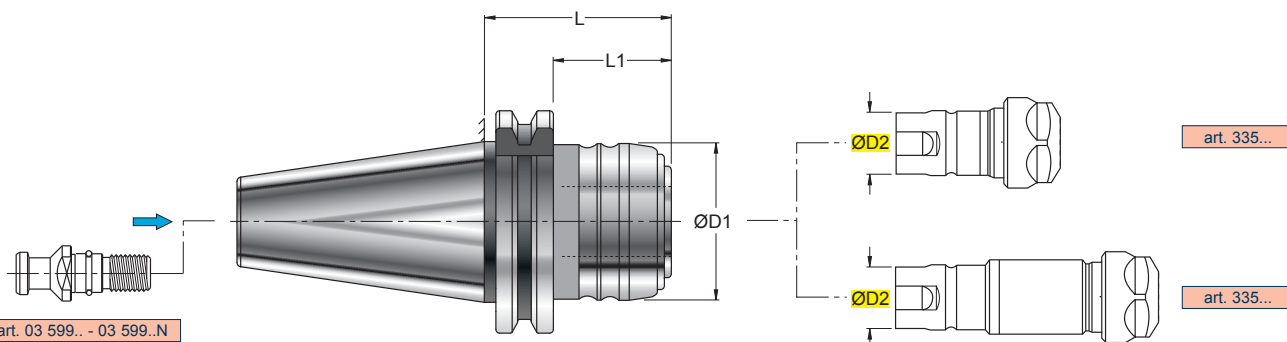
To the right, five alternative accessories are shown, each with a diameter of  $\varnothing D2$ :

- art. 03 599.. - 03 599..N
- art. 03 331...
- art. 03 334...
- art. 03 332...
- art. 03 333...
- art. 03 336...

**PORTA MASCHIO A CAMBIO RAPIDO CON DOPPIA COMPENSAZIONE**  
**QUICK-CHANGE TAP HOLDER WITH DOUBLE COMPENSATION**  
**GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT DOPPELAUSGLEICH**  
**MANDRINS DE TAURAGE À CHANGEMENT RAPIDE À DOUBLE COMPENSATION**

[illegible]

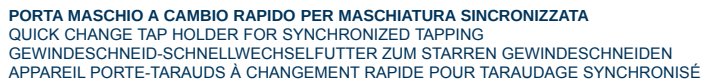
## art. 03 599.. - 03 599..N



**PORTA MASCHIO A CAMBIO RAPIDO PER MASCHIATURA SINCRONIZZATA**  
 QUICK CHANGE TAP HOLDER FOR SYNCHRONIZED TAPPING  
 GEWINDESCHNEID-SCHELLWECHSELFUTTER ZUM STARREN GEWINDESCHNEIDEN  
 APPAREIL PORTE-TRAUSARDS À CHANGEMENT RAPIDE POUR TARAUDAGE SYNCHRONISÉ

[illegible]

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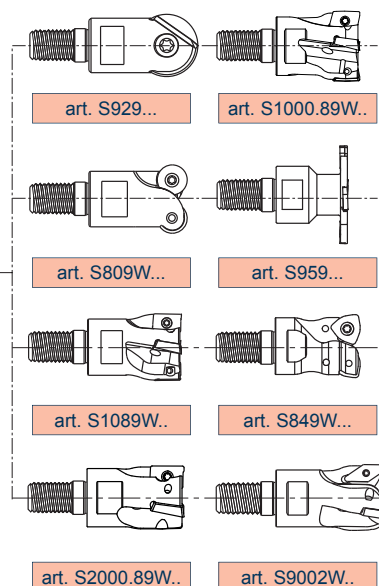
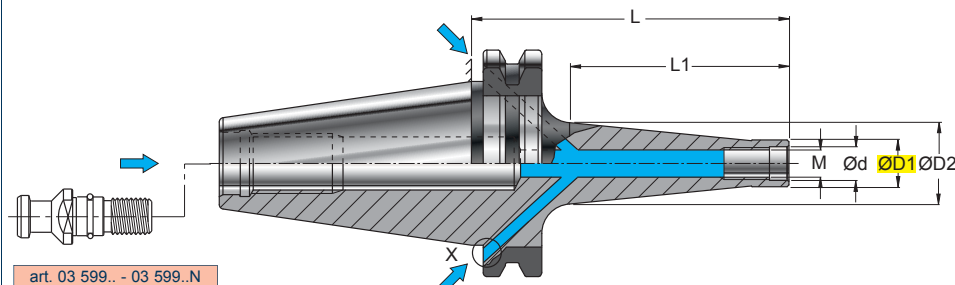


PAG. 1153

Technical drawing of a drill bit assembly. The drawing shows a side view of the drill bit with dimensions L, L1, and L2. The drill bit is labeled with ØD1 and ØG. The material specifications are listed as HRC 30-38 (r 96/120 kg/mm²) for the section without casehardening. A detail view of the drill bit tip is shown on the left, labeled art. 03 599.. - 03 599..N.

**BARRA CON CONO FINITO E STELO TENERO**  
BORING BARS WITH FINISHED TAPER AND BLANK SCHAFT  
ROHLINGE  
BARRE AVEC CONE FINI ET BOUT DOUX

[illegible]

**ART. ISO.B.. MD..  
DIN 69871/AD-B**
**NEW**


**PORTAFRESA CON ATTACCO MODULARE- FILETTATO**  
**CUTTER-HOLDER WITH MODULAR THREADED CONNECTION**  
**FRÄSERAUFNAHME MIT MODULAR-GEWINDEAUFNAHME**  
**MANDRIN PORTE-FRAISE AVEC ATTACHEMENT MODULAIRE FILETÉ**

 0,005

|                              |          |
|------------------------------|----------|
| EQUILIBRATO                  | BALANCED |
| G6,3 15000 min <sup>-1</sup> |          |

| ART.              |  | (mm) |      |      |     |     |     |  |  |  |  |  |  |
|-------------------|-------------------------------------------------------------------------------------|------|------|------|-----|-----|-----|--|--|--|--|--|--|
|                   |                                                                                     | M    | Ød   | ØD1  | ØD2 | L   | L1  |  |  |  |  |  |  |
| ISO.B40.MD008.058 | ISO40                                                                               | 8    | 8,5  | 12,7 | 15  | 58  | 30  |  |  |  |  |  |  |
| ISO.B40.MD008.078 | ISO40                                                                               | 8    | 8,5  | 12,7 | 23  | 78  | 50  |  |  |  |  |  |  |
| ISO.B40.MD008.098 | ISO40                                                                               | 8    | 8,5  | 12,7 | 23  | 98  | 70  |  |  |  |  |  |  |
| ISO.B40.MD008.118 | ISO40                                                                               | 8    | 8,5  | 12,7 | 23  | 118 | 90  |  |  |  |  |  |  |
| ISO.B40.MD010.058 | ISO40                                                                               | 10   | 10,5 | 17,7 | 20  | 58  | 30  |  |  |  |  |  |  |
| ISO.B40.MD010.078 | ISO40                                                                               | 10   | 10,5 | 17,7 | 25  | 78  | 50  |  |  |  |  |  |  |
| ISO.B40.MD010.098 | ISO40                                                                               | 10   | 10,5 | 17,7 | 28  | 98  | 70  |  |  |  |  |  |  |
| ISO.B40.MD010.118 | ISO40                                                                               | 10   | 10,5 | 17,7 | 28  | 118 | 90  |  |  |  |  |  |  |
| ISO.B40.MD012.058 | ISO40                                                                               | 12   | 12,5 | 20,7 | 24  | 58  | 30  |  |  |  |  |  |  |
| ISO.B40.MD012.078 | ISO40                                                                               | 12   | 12,5 | 20,7 | 24  | 78  | 50  |  |  |  |  |  |  |
| ISO.B40.MD012.098 | ISO40                                                                               | 12   | 12,5 | 20,7 | 31  | 98  | 70  |  |  |  |  |  |  |
| ISO.B40.MD012.118 | ISO40                                                                               | 12   | 12,5 | 20,7 | 31  | 118 | 90  |  |  |  |  |  |  |
| ISO.B40.MD016.058 | ISO40                                                                               | 16   | 17   | 28,7 | 29  | 58  | 30  |  |  |  |  |  |  |
| ISO.B40.MD016.078 | ISO40                                                                               | 16   | 17   | 28,7 | 34  | 78  | 50  |  |  |  |  |  |  |
| ISO.B40.MD016.098 | ISO40                                                                               | 16   | 17   | 28,7 | 34  | 98  | 70  |  |  |  |  |  |  |
| ISO.B40.MD016.118 | ISO40                                                                               | 16   | 17   | 28,7 | 34  | 118 | 90  |  |  |  |  |  |  |
| ISO.B50.MD010.058 | ISO50                                                                               | 10   | 10,5 | 17,7 | 20  | 58  | 30  |  |  |  |  |  |  |
| ISO.B50.MD010.078 | ISO50                                                                               | 10   | 10,5 | 17,7 | 25  | 78  | 50  |  |  |  |  |  |  |
| ISO.B50.MD010.098 | ISO50                                                                               | 10   | 10,5 | 17,7 | 28  | 98  | 70  |  |  |  |  |  |  |
| ISO.B50.MD010.128 | ISO50                                                                               | 10   | 10,5 | 17,7 | 31  | 128 | 100 |  |  |  |  |  |  |
| ISO.B50.MD012.058 | ISO50                                                                               | 12   | 12,5 | 20,7 | 24  | 58  | 30  |  |  |  |  |  |  |
| ISO.B50.MD012.078 | ISO50                                                                               | 12   | 12,5 | 20,7 | 24  | 78  | 50  |  |  |  |  |  |  |
| ISO.B50.MD012.098 | ISO50                                                                               | 12   | 12,5 | 20,7 | 31  | 98  | 70  |  |  |  |  |  |  |
| ISO.B50.MD012.128 | ISO50                                                                               | 12   | 12,5 | 20,7 | 31  | 128 | 100 |  |  |  |  |  |  |
| ISO.B50.MD016.058 | ISO50                                                                               | 16   | 17   | 28,7 | 29  | 58  | 30  |  |  |  |  |  |  |
| ISO.B50.MD016.078 | ISO50                                                                               | 16   | 17   | 28,7 | 34  | 78  | 50  |  |  |  |  |  |  |
| ISO.B50.MD016.098 | ISO50                                                                               | 16   | 17   | 28,7 | 34  | 98  | 70  |  |  |  |  |  |  |
| ISO.B50.MD016.128 | ISO50                                                                               | 16   | 17   | 28,7 | 41  | 128 | 100 |  |  |  |  |  |  |



PER UNA PERFETTA TENUTA SULL'ASSE DEL MANDRINO SI CONSIGLIA DI AVERE UN TIRANTE CON ANELLO DI TENUTA.

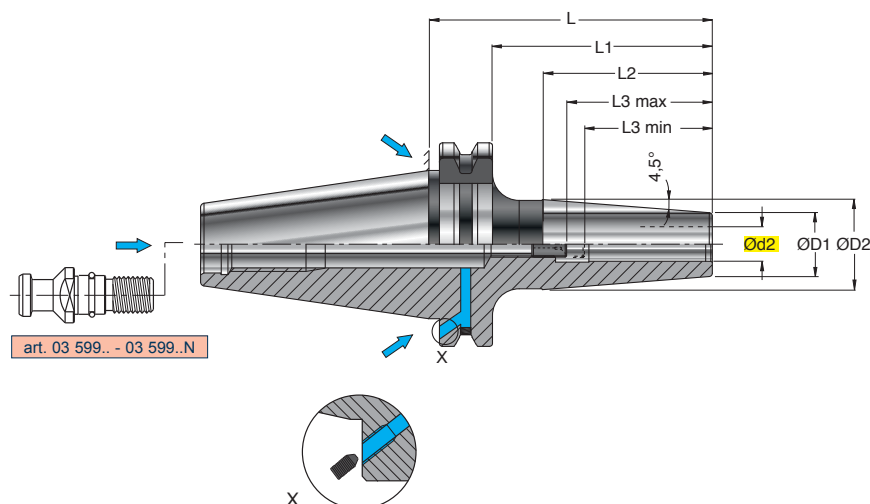
WE RECOMMEND THE APPLICATION OF A RETENTION KNOB WITH AN O-RING FOR A PERFECT STABILITY ON THE TAPER SHANK AXIS

FÜR EINE GUTE ABDICHTUNG AUF DER ACHSE DER AUFNAHME EMPFEHLEN WIR EINEN ANZUGSBOLZEN MIT DICHTUNGSRING

POUR UNE PARFAITE TENUE SUR L'AX DU MANDRIN IL EST CONSEILLÉ D'AVOIR UN TIRANT AVEC UNE BAGUE DE TENUE

**ART. ISO.B.. CTN..**  
**DIN 69871/AD-B**

DIN 69882-8

**NEW**

DIN 1835 A - DIN 6535 HA

art. CIL...CTPN..W

art. 253...W

CIL...MF..W

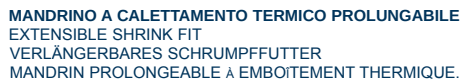
**MANDRINO A CALETTAMENTO TERMICO**  
 SHRINKING-ON TAPER SHANKS  
 WERKZEUGAUFNAHMEN MIT SCHRUMPFVERBINDUNG  
 MANDRIN A EMBOITEMENT TERMIQUE

0,003

EQUILIBRATO  
BALANCED  
G 6,3 25000 min-1

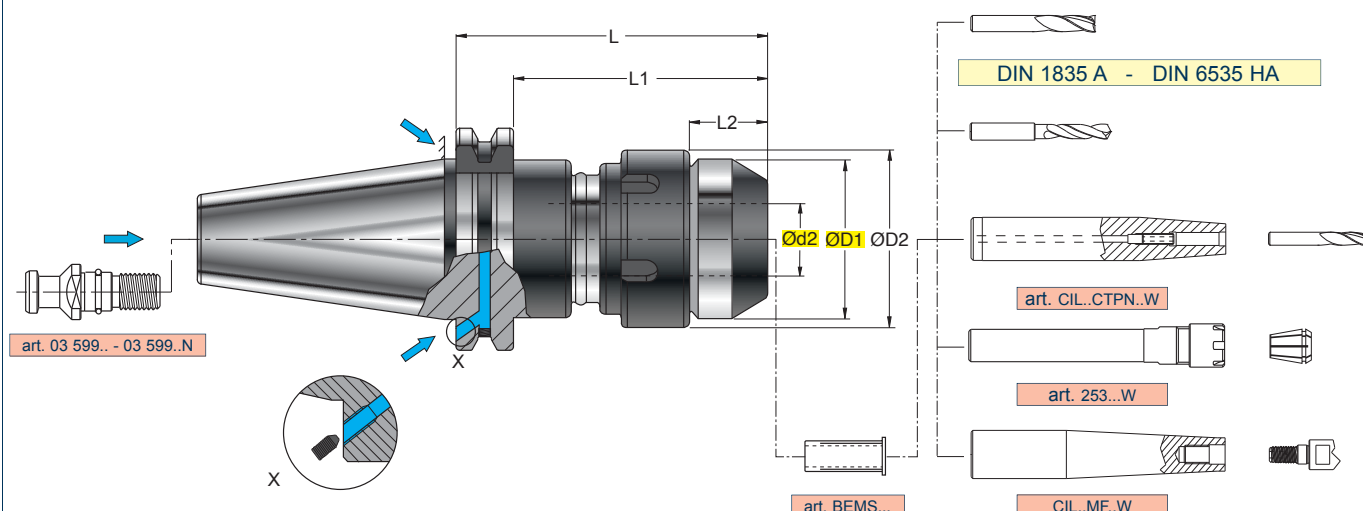
| ART.               |       | Ød2 | ØD1 | ØD2 | L   | L1  | L2  | L3 min | L3 max |           |  |  |      |
|--------------------|-------|-----|-----|-----|-----|-----|-----|--------|--------|-----------|--|--|------|
| ISO.B40.CTN006.080 | ISO40 | 6   | 21  | 27  | 80  | 61  | -   | 26     | 36     | GWR 05L   |  |  | 5025 |
| ISO.B40.CTN006.120 | ISO40 | 6   | 21  | 27  | 120 | 101 | -   | 26     | 36     |           |  |  |      |
| ISO.B40.CTN006.160 | ISO40 | 6   | 21  | 27  | 160 | 141 | 100 | 26     | 36     |           |  |  |      |
| ISO.B40.CTN008.080 | ISO40 | 8   | 21  | 27  | 80  | 61  | -   | 26     | 36     | GWR 06L   |  |  | 5003 |
| ISO.B40.CTN008.120 | ISO40 | 8   | 21  | 27  | 120 | 101 | -   | 26     | 36     |           |  |  |      |
| ISO.B40.CTN008.160 | ISO40 | 8   | 21  | 27  | 160 | 141 | 100 | 26     | 36     |           |  |  |      |
| ISO.B40.CTN010.080 | ISO40 | 10  | 24  | 32  | 80  | 61  | -   | 31     | 41     | GWR 08CTD |  |  | 5004 |
| ISO.B40.CTN010.120 | ISO40 | 10  | 24  | 32  | 120 | 101 | -   | 31     | 41     |           |  |  |      |
| ISO.B40.CTN010.160 | ISO40 | 10  | 24  | 32  | 160 | 141 | 100 | 31     | 41     |           |  |  |      |
| ISO.B40.CTN012.080 | ISO40 | 12  | 24  | 32  | 80  | 61  | -   | 36     | 46     | GWR 10CTD |  |  | 5005 |
| ISO.B40.CTN012.120 | ISO40 | 12  | 24  | 32  | 120 | 101 | -   | 36     | 46     |           |  |  |      |
| ISO.B40.CTN012.160 | ISO40 | 12  | 24  | 32  | 160 | 141 | 100 | 36     | 46     |           |  |  |      |
| ISO.B40.CTN014.080 | ISO40 | 14  | 27  | 34  | 80  | 61  | -   | 36     | 46     |           |  |  |      |
| ISO.B40.CTN014.120 | ISO40 | 14  | 27  | 34  | 120 | 101 | -   | 36     | 46     |           |  |  |      |
| ISO.B40.CTN014.160 | ISO40 | 14  | 27  | 34  | 160 | 141 | 100 | 36     | 46     |           |  |  |      |
| ISO.B40.CTN016.080 | ISO40 | 16  | 27  | 34  | 80  | 61  | -   | 39     | 49     | GWR 12CTD |  |  | 5006 |
| ISO.B40.CTN016.120 | ISO40 | 16  | 27  | 34  | 120 | 101 | -   | 39     | 49     |           |  |  |      |
| ISO.B40.CTN016.160 | ISO40 | 16  | 27  | 34  | 160 | 141 | 100 | 39     | 49     |           |  |  |      |
| ISO.B40.CTN018.080 | ISO40 | 18  | 33  | 42  | 80  | 61  | -   | 39     | 49     |           |  |  |      |
| ISO.B40.CTN018.120 | ISO40 | 18  | 33  | 42  | 120 | 101 | -   | 39     | 49     |           |  |  |      |
| ISO.B40.CTN018.160 | ISO40 | 18  | 33  | 42  | 160 | 141 | 100 | 39     | 49     |           |  |  |      |
| ISO.B40.CTN020.080 | ISO40 | 20  | 33  | 42  | 80  | 61  | -   | 41     | 51     | GWR 16CTD |  |  | 5008 |
| ISO.B40.CTN020.120 | ISO40 | 20  | 33  | 42  | 120 | 101 | -   | 41     | 51     |           |  |  |      |
| ISO.B40.CTN020.160 | ISO40 | 20  | 33  | 42  | 160 | 141 | 100 | 41     | 51     |           |  |  |      |
| ISO.B40.CTN025.100 | ISO40 | 25  | 44  | 53  | 100 | 81  | -   | 47     | 57     |           |  |  |      |
| ISO.B50.CTN006.080 | ISO50 | 6   | 21  | 27  | 80  | 61  | -   | 26     | 36     | GWR 05L   |  |  | 5025 |
| ISO.B50.CTN006.120 | ISO50 | 6   | 21  | 27  | 120 | 101 | -   | 26     | 36     |           |  |  |      |
| ISO.B50.CTN006.160 | ISO50 | 6   | 21  | 27  | 160 | 141 | 100 | 26     | 36     |           |  |  |      |
| ISO.B50.CTN008.080 | ISO50 | 8   | 21  | 27  | 80  | 61  | -   | 26     | 36     | GWR 06L   |  |  | 5003 |
| ISO.B50.CTN008.120 | ISO50 | 8   | 21  | 27  | 120 | 101 | -   | 26     | 36     |           |  |  |      |
| ISO.B50.CTN008.160 | ISO50 | 8   | 21  | 27  | 160 | 141 | 100 | 26     | 36     |           |  |  |      |
| ISO.B50.CTN010.080 | ISO50 | 10  | 24  | 32  | 80  | 61  | -   | 31     | 41     | GWR 08CTD |  |  | 5004 |
| ISO.B50.CTN010.120 | ISO50 | 10  | 24  | 32  | 120 | 101 | -   | 31     | 41     |           |  |  |      |
| ISO.B50.CTN010.160 | ISO50 | 10  | 24  | 32  | 160 | 141 | 100 | 31     | 41     |           |  |  |      |
| ISO.B50.CTN012.080 | ISO50 | 12  | 24  | 32  | 80  | 61  | -   | 36     | 46     | GWR 10CTD |  |  | 5005 |
| ISO.B50.CTN012.120 | ISO50 | 12  | 24  | 32  | 120 | 101 | -   | 36     | 46     |           |  |  |      |
| ISO.B50.CTN012.160 | ISO50 | 12  | 24  | 32  | 160 | 141 | 100 | 36     | 46     |           |  |  |      |
| ISO.B50.CTN014.080 | ISO50 | 14  | 27  | 34  | 80  | 61  | -   | 36     | 46     |           |  |  |      |
| ISO.B50.CTN014.120 | ISO50 | 14  | 27  | 34  | 120 | 101 | -   | 36     | 46     |           |  |  |      |
| ISO.B50.CTN014.160 | ISO50 | 14  | 27  | 34  | 160 | 141 | 100 | 36     | 46     |           |  |  |      |
| ISO.B50.CTN016.080 | ISO50 | 16  | 27  | 34  | 80  | 61  | -   | 39     | 49     | GWR 12CTD |  |  | 5006 |
| ISO.B50.CTN016.120 | ISO50 | 16  | 27  | 34  | 120 | 101 | -   | 39     | 49     |           |  |  |      |
| ISO.B50.CTN016.160 | ISO50 | 16  | 27  | 34  | 160 | 141 | 100 | 39     | 49     |           |  |  |      |
| ISO.B50.CTN018.080 | ISO50 | 18  | 33  | 42  | 80  | 61  | -   | 39     | 49     |           |  |  |      |
| ISO.B50.CTN018.120 | ISO50 | 18  | 33  | 42  | 120 | 101 | -   | 39     | 49     |           |  |  |      |
| ISO.B50.CTN018.160 | ISO50 | 18  | 33  | 42  | 160 | 141 | 100 | 39     | 49     |           |  |  |      |
| ISO.B50.CTN020.080 | ISO50 | 20  | 33  | 42  | 80  | 61  | -   | 41     | 51     | GWR 16CTD |  |  | 5008 |
| ISO.B50.CTN020.120 | ISO50 | 20  | 33  | 42  | 120 | 101 | -   | 41     | 51     |           |  |  |      |
| ISO.B50.CTN020.160 | ISO50 | 20  | 33  | 42  | 160 | 141 | 100 | 41     | 51     |           |  |  |      |
| ISO.B50.CTN025.120 | ISO50 | 25  | 44  | 53  | 120 | 101 | -   | 47     | 57     |           |  |  |      |
| ISO.B50.CTN025.160 | ISO50 | 25  | 44  | 53  | 160 | 141 | 100 | 47     | 57     |           |  |  |      |
| ISO.B50.CTN032.120 | ISO50 | 32  | 44  | 53  | 120 | 101 | -   | 51     | 61     |           |  |  |      |
| ISO.B50.CTN032.160 | ISO50 | 32  | 44  | 53  | 160 | 141 | 100 | 51     | 61     |           |  |  |      |

## NEW

[illegible]

**ART. ISO.B.. MFS..  
DIN 69871/AD-B**

 PER GLI ANELLI DI TENUTA ANDARE A PAG F 133  
 SEE PAGE F 133 FOR THE SEALING RINGS  
 FÜR DICHUNGSRINGE AUF SEITE F 133 GEHEN  
 POUR LES BAGUES D'ÉTANCHÉITÉ ALLER PAGE F 133



**MANDRINO A FORTE SERRAGGIO**  
 HIGH CLAMPING CHUCKS  
 KRAFTSPANNFUTTER  
 MANDRIN À FORT SERRAGE

|                                                                                   |       |          |
|-----------------------------------------------------------------------------------|-------|----------|
|  | 0,003 | Ød2 ≤ 20 |
|  | 0,004 | Ød2 ≥ 25 |

|                                                                                     |                         |
|-------------------------------------------------------------------------------------|-------------------------|
|  | EQUILIBRATO<br>BALANCED |
|  | G 2,5 20000 min-1       |

| ART.               |  | (mm) | Ød2 | ØD1 | ØD2 | L   | L1 | L2        |  |  |  |  |  |  |
|--------------------|-------------------------------------------------------------------------------------|------|-----|-----|-----|-----|----|-----------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| ISO.B40.MFS006.074 | ISO40                                                                               | 6    | 26  | 32  | 74  | 55  | 11 | -         | RGMS006                                                                              | -                                                                                     | 927.027MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B40.MFS008.075 | ISO40                                                                               | 8    | 27  | 32  | 75  | 56  | 11 | -         | RGMS008                                                                              | -                                                                                     | 927.027MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B40.MFS010.079 | ISO40                                                                               | 10   | 32  | 37  | 79  | 60  | 13 | -         | RGMS010                                                                              | -                                                                                     | 927.032MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B40.MFS012.085 | ISO40                                                                               | 12   | 35  | 37  | 85  | 66  | 20 | -         | RGMS012                                                                              | -                                                                                     | 927.032MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B40.MFS016.088 | ISO40                                                                               | 16   | 40  | 44  | 88  | 69  | 21 | -         | RGMS016                                                                              | -                                                                                     | 927.039MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B40.MFS020.090 | ISO40                                                                               | 20   | 46  | 49  | 90  | 71  | 23 | BEMS.20.. | RGMS020                                                                              |                                                                                       | RGMSB020                                                                              | 927.044MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B40.MFS020.150 | ISO40                                                                               | 20   | 46  | 49  | 150 | 131 | 23 | BEMS.20.. | RGMS020                                                                              |                                                                                       | RGMSB020                                                                              | 927.044MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B40.MFS025.097 | ISO40                                                                               | 25   | 52  | 54  | 97  | 78  | 26 | -         | RGMS025                                                                              | -                                                                                     | 927.049MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B40.MFS032.105 | ISO40                                                                               | 32   | 67  | 68  | 105 | 86  | 33 | BEMS.32.. | RGMS032                                                                              |                                                                                       | RGMSB032                                                                              | 927.063MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B40.MFS032.150 | ISO40                                                                               | 32   | 67  | 68  | 150 | 131 | 33 | BEMS.32.. | RGMS032                                                                              |                                                                                       | RGMSB032                                                                              | 927.063MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B50.MFS006.074 | ISO50                                                                               | 6    | 26  | 32  | 74  | 55  | 11 | -         | RGMS006                                                                              | -                                                                                     | 927.027MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B50.MFS008.075 | ISO50                                                                               | 8    | 27  | 32  | 75  | 56  | 11 | -         | RGMS008                                                                              | -                                                                                     | 927.027MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B50.MFS010.079 | ISO50                                                                               | 10   | 32  | 37  | 79  | 60  | 13 | -         | RGMS010                                                                              | -                                                                                     | 927.032MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B50.MFS012.085 | ISO50                                                                               | 12   | 35  | 37  | 85  | 66  | 20 | -         | RGMS012                                                                              | -                                                                                     | 927.032MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B50.MFS016.088 | ISO50                                                                               | 16   | 40  | 44  | 88  | 69  | 21 | -         | RGMS016                                                                              | -                                                                                     | 927.039MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B50.MFS020.090 | ISO50                                                                               | 20   | 46  | 49  | 90  | 71  | 23 | BEMS.20.. | RGMS020                                                                              |                                                                                       | RGMSB020                                                                              | 927.044MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B50.MFS020.150 | ISO50                                                                               | 20   | 46  | 49  | 150 | 131 | 23 | BEMS.20.. | RGMS020                                                                              |                                                                                       | RGMSB020                                                                              | 927.044MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B50.MFS025.097 | ISO50                                                                               | 25   | 52  | 54  | 97  | 78  | 26 | -         | RGMS025                                                                              | -                                                                                     | 927.049MS                                                                             | ESMS.010                                                                              |                                                                                       |                                                                                       |
| ISO.B50.MFS032.103 | ISO50                                                                               | 32   | 67  | 68  | 103 | 84  | 33 | BEMS.32.. | RGMS032                                                                              |                                                                                       | RGMSB032                                                                              | 927.063MS                                                                             | ESMS.010                                                                              |                                                                                       |
| ISO.B50.MFS032.150 | ISO50                                                                               | 32   | 67  | 68  | 150 | 131 | 33 | BEMS.32.. | RGMS032                                                                              |                                                                                       | RGMSB032                                                                              | 927.063MS                                                                             | ESMS.010                                                                              |                                                                                       |

**CARATTERISTICHE TECNICHE - TECHNICAL CHARACTERISTICS**

1. Ridotte dimensioni di ingombro (lunghezza e diametro esterno) che consentono una migliore equilibratura (G 2,5 fino a 20000 rpm)
2. Aumento della rigidità del mandrino per una resa migliore in lavorazione
3. Perfetta centratura dell'utensile (0,003/0,004 mm) che determinano un incremento della durata degli inserti fino a raddoppiare la durata
4. Aumento della potenza di serraggio Max 800 Nm
5. Adatto anche per frese con attacco cilindrico, weldon, whistle notch e punte in metallo duro
6. Possibilità di registrazione assiale della posizione dell'utensile tramite una vite di registrazione a doppio esagono con bloccaggio della posizione scelta
7. Passaggio del lubrificante attraverso l'utensile fino a 100 bar

1. Reduced dimensions (length and external diameter) for a better balancing (G 2,5 till to 20000 rpm)
2. High rigidity of the chuck for a better performance
3. Perfect concentricity (0,003/0,004 mm) for an increase in tool life
4. Increase of tightening force Max 800 Nm
5. Suitable for endmills tools with cylindrical, weldon and whistle notch shank and for carbide drills
6. Axial adjustment of the tools holders through a double hexagon screw with locking on the chosen position
7. Coolant through the tool till 100 bar

