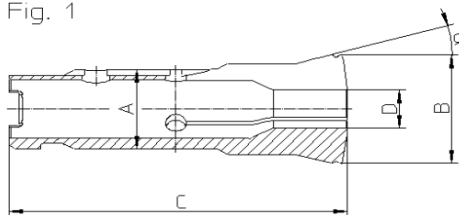


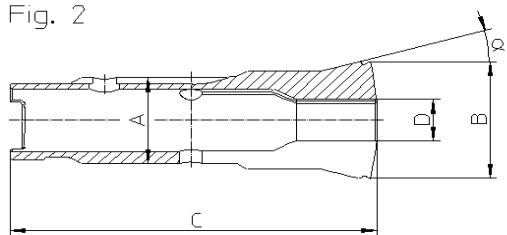
Pincés tirées à changement rapide Schnellwechsel-Zugspannzangen Quick change pull-type collets

Fig. 1



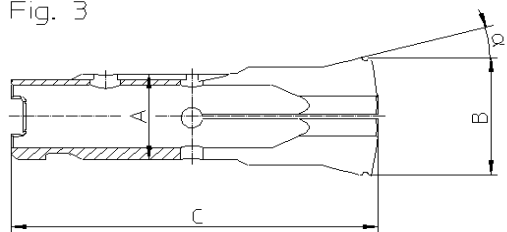
Entrée de clavette orientée sur coin du profil
Keilnut auf Profillecke ausgerichtet
Keyway oriented on the corner of the profile

Fig. 2



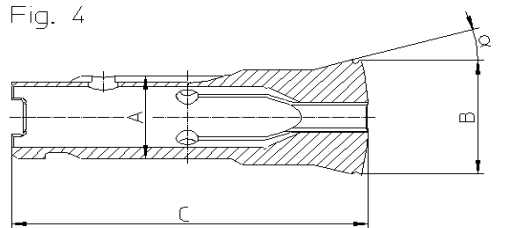
Entrée de clavette orientée sur plat du profil
Keilnut auf Profilfläche ausgerichtet
Keyway oriented on the flat of the profile

Fig. 3



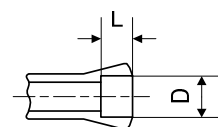
Entrée de clavette orientée sur coin du profil
Keilnut auf Profillecke ausgerichtet
Keyway oriented on the corner of the profile

Fig. 4



Entrée de clavette orientée sur plat du profil
Keilnut auf Profilfläche ausgerichtet
Keyway oriented on the flat of the profile

Alésage à cran
Stufenbohrung
Step bore

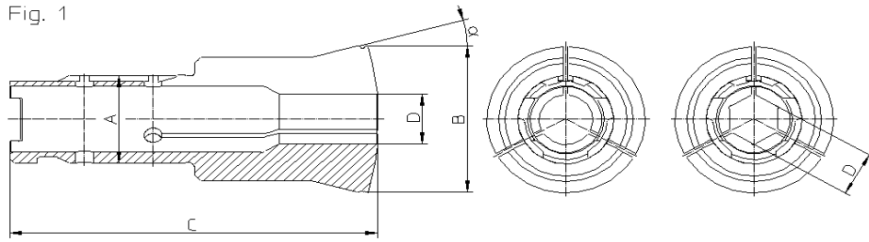


| Type | Art. | A | B | C | α | D min.-max | L | Fig. |
|-------|----------------|----|------|------|----------|-----------------------------------|---------|------|
| HWR25 | 80-2034 26) | 25 | 33.7 | 97.6 | 15° | ○ 0.30...17.79 ○ 17.80...25.40 | - 31 | 1 |
| | | 25 | 33.7 | 97.6 | 15° | ⬡ 1.00...15.29 ⬡ 15.30...22.00 | - 31 | 1 |
| | 80-2035 26) | 25 | 33.7 | 97.6 | 15° | ○ 0.30...17.79 ○ 17.80...25.40 | - 31 | 2 |
| | | 25 | 33.7 | 97.6 | 15° | ⬡ 1.00...15.29 ⬡ 15.30...22.00 | - 31 | 2 |
| | 80-2044 26) | 25 | 33.7 | 97.6 | 15° | □ 3.00...12.59 □ 12.60...19.05 | - 31 | 3 |
| | 80-2045 26) | 25 | 33.7 | 97.6 | 15° | □ 3.00...12.59 □ 12.60...19.05 | - 31 | 4 |

26) Sur demande - Auf Anfrage - On request

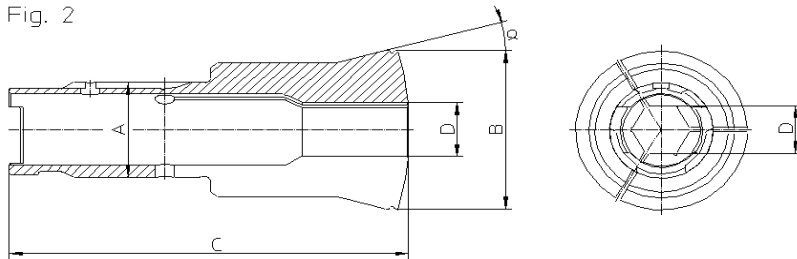
Pincés tirées à changement rapide Schnellwechsel-Zugspannzangen Quick change pull-type collets

Fig. 1



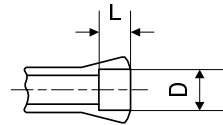
Entrée de clavette orientée sur coin du profil
Keilnut auf Profitecke ausgerichtet
Keyway oriented on the corner of the profile

Fig. 2



Entrée de clavette orientée sur plat du profil
Keilnut auf Profilfläche ausgerichtet
Keyway oriented on the flat of the profile

Alésage à cran
Stufenbohrung
Step bore



| Type | Art. | A | B | C | α | D min.-max | L | Fig. |
|---------------|----------------|----|----|-------|----------|---------------|----|------|
| HBR32/45 | 72-2034 26) | 32 | 53 | 123.5 | 15° | 3.00...23.79 | - | 1 |
| | | | | | | 23.80...40.99 | 52 | |
| | | | | | | 41.00...41.99 | 16 | |
| | | | | | | 42.00...42.99 | 14 | |
| | | | | | | 43.00...43.99 | 12 | |
| | 44.00...45.00 | 10 | | | | | | |
| | 72-2035 26) | 32 | 53 | 123.5 | 15° | 3.00...20.59 | - | 1 |
| | | | | | | 20.60...34.99 | 52 | |
| | | | | | | 35.00...35.99 | 16 | |
| | | | | | | 36.00...36.99 | 14 | |
| 37.00...37.99 | | | | | | 12 | | |
| 38.00...38.50 | 10 | | | | | | | |
| HBR32/45 | 72-2034 26) | 32 | 53 | 123.5 | 15° | 3.00...23.79 | - | 2 |
| | | | | | | 23.80...40.99 | 52 | |
| | | | | | | 41.00...41.99 | 16 | |
| | | | | | | 42.00...42.99 | 14 | |
| | | | | | | 43.00...43.99 | 12 | |
| | 44.00...45.00 | 10 | | | | | | |
| | 72-2035 26) | 32 | 53 | 123.5 | 15° | 3.00...20.59 | - | 2 |
| | | | | | | 20.60...34.99 | 52 | |
| | | | | | | 35.00...35.99 | 16 | |
| | | | | | | 36.00...36.99 | 14 | |
| 37.00...37.99 | | | | | | 12 | | |
| 38.00...38.50 | 10 | | | | | | | |

26) Sur demande - Auf Anfrage - On request

Pincés tirées à changement rapide Schnellwechsel-Zugspannzangen Quick change pull-type collets

Alésage à cran
Stufenbohrung
Step bore

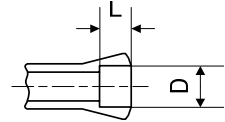
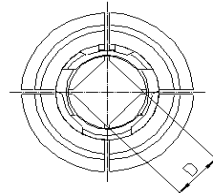
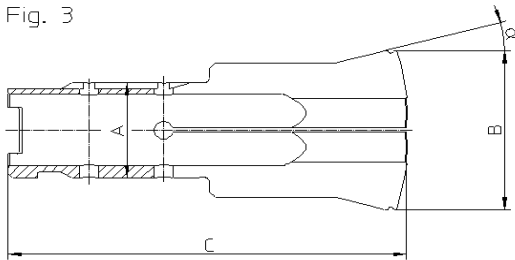
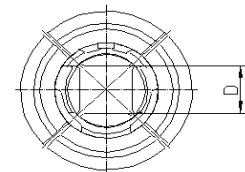
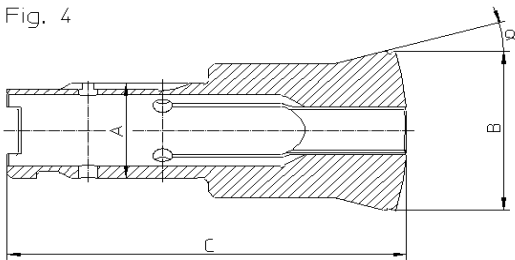


Fig. 3



Entrée de clavette orientée sur coin du profil
Keilnut auf Profillecke ausgerichtet
Keyway oriented on the corner of the profile

Fig. 4



Entrée de clavette orientée sur plat du profil
Keilnut auf Profilfläche ausgerichtet
Keyway oriented on the flat of the profile

| Type | Art. | A | B | C | α | D min.-max | L | Fig. |
|----------|-----------------------|----|----|-------|----------|---------------|----|------|
| HBR32/45 | 72-2044 26) | 32 | 53 | 123.5 | 15° | 3.00...16.79 | - | 3 |
| | | | | | | 16.80...28.99 | 52 | |
| | | | | | | 29.00...29.99 | 14 | |
| | | | | | | 30.00...30.99 | 12 | |
| | | | | | | 31.00...31.75 | 10 | |
| | 72-2045 26) | 32 | 53 | 123.5 | 15° | 3.00...16.79 | - | 4 |
| | | | | | | 16.80...28.99 | 52 | |
| | | | | | | 29.00...29.99 | 14 | |
| | | | | | | 30.00...30.99 | 12 | |
| | | | | | | 31.00...31.75 | 10 | |

26) Sur demande - Auf Anfrage - On request

Pincés tirées à changement rapide Schnellwechsel-Zugspannzangen Quick change pull-type collets

Fig. 1

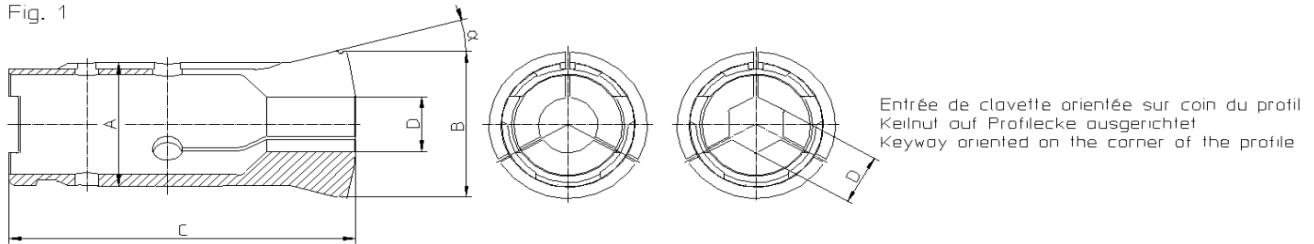
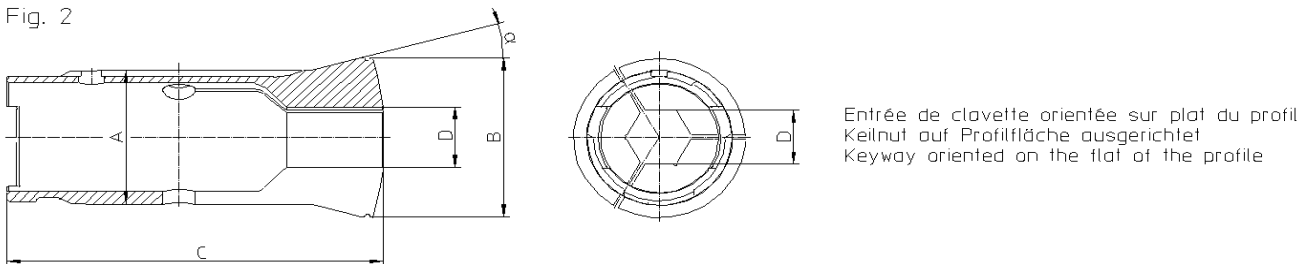
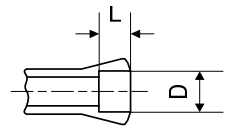


Fig. 2



Alésage à cran
Stufenbohrung
Step bore



| Type | Art. | A | B | C | α | D min.-max | L | Fig. |
|----------------|----------------|----|-------|-------|---------------|---------------|----|------|
| HBR45 | 72-2037 26) | 45 | 53 | 116.5 | 15° | 3.00...36.00 | - | 1 |
| | | | | | | 36.01...40.99 | 55 | |
| | | | | | | 41.00...41.99 | 16 | |
| | | | | | | 42.00...42.99 | 14 | |
| | | | | | | 43.00...43.99 | 12 | |
| | | | | | | 44.00...45.00 | 10 | |
| | 72-2038 26) | 45 | 53 | 116.5 | 15° | 3.00...31.00 | - | 1 |
| | | | | | | 31.01...34.99 | 55 | |
| | | | | | | 35.00...35.99 | 16 | |
| | | | | | | 36.00...36.99 | 14 | |
| | | | | | | 37.00...37.99 | 12 | |
| | | | | | | 38.00...38.50 | 10 | |
| 72-2037 26) | 45 | 53 | 116.5 | 15° | 3.00...36.00 | - | 2 | |
| | | | | | 36.01...40.99 | 55 | | |
| | | | | | 41.00...41.99 | 16 | | |
| | | | | | 42.00...42.99 | 14 | | |
| | | | | | 43.00...43.99 | 12 | | |
| | | | | | 44.00...45.00 | 10 | | |
| 72-2038 26) | 45 | 53 | 116.5 | 15° | 3.00...31.00 | - | 2 | |
| | | | | | 31.01...34.99 | 55 | | |
| | | | | | 35.00...35.99 | 16 | | |
| | | | | | 36.00...36.99 | 14 | | |
| | | | | | 37.00...37.99 | 12 | | |
| | | | | | 38.00...38.50 | 10 | | |

26) Sur demande - Auf Anfrage - On request

Pincés tirées à changement rapide Schnellwechsel-Zugspannzangen Quick change pull-type collets

Alésage à cran
Stufenbohrung
Step bore

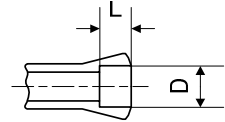
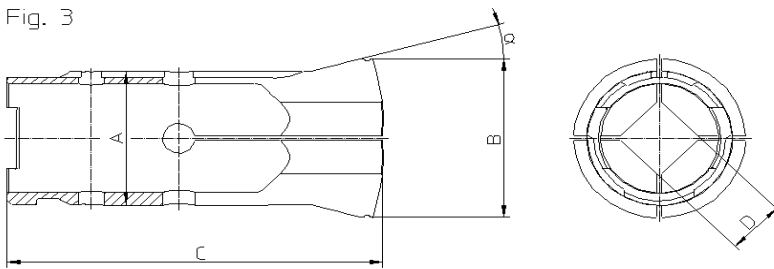
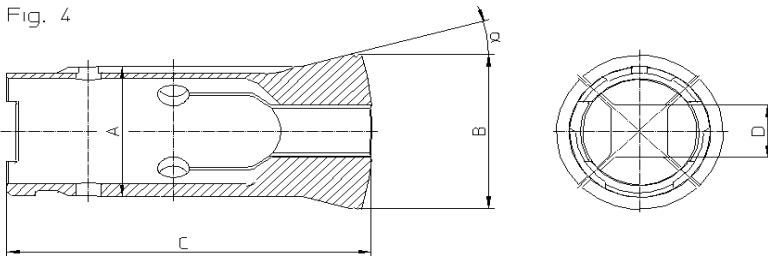


Fig. 3



Entrée de clavette orientée sur coin du profil
Keilnut auf Profillecke ausgerichtet
Keyway oriented on the corner of the profile

Fig. 4



Entrée de clavette orientée sur plat du profil
Keilnut auf Profilfläche ausgerichtet
Keyway oriented on the flat of the profile

| Type | Art. | A | B | C | α | D min.-max | L | Fig. |
|-------|-----------------------|----|----|-------|----------|---------------|----|------|
| HBR45 | 72-2047 26) | 45 | 53 | 116.5 | 15° | 3.00...25.40 | - | 3 |
| | | | | | | 25.41...28.99 | 55 | |
| | | | | | | 29.00...29.99 | 14 | |
| | | | | | | 30.00...30.99 | 12 | |
| | | | | | | 31.00...31.75 | 10 | |
| | 72-2048 26) | 45 | 53 | 116.5 | 15° | 3.00...25.40 | - | 4 |
| | | | | | | 25.41...28.99 | 55 | |
| | | | | | | 29.00...29.99 | 14 | |
| | | | | | | 30.00...30.99 | 12 | |
| | | | | | | 31.00...31.75 | 10 | |

26) Sur demande - Auf Anfrage - On request