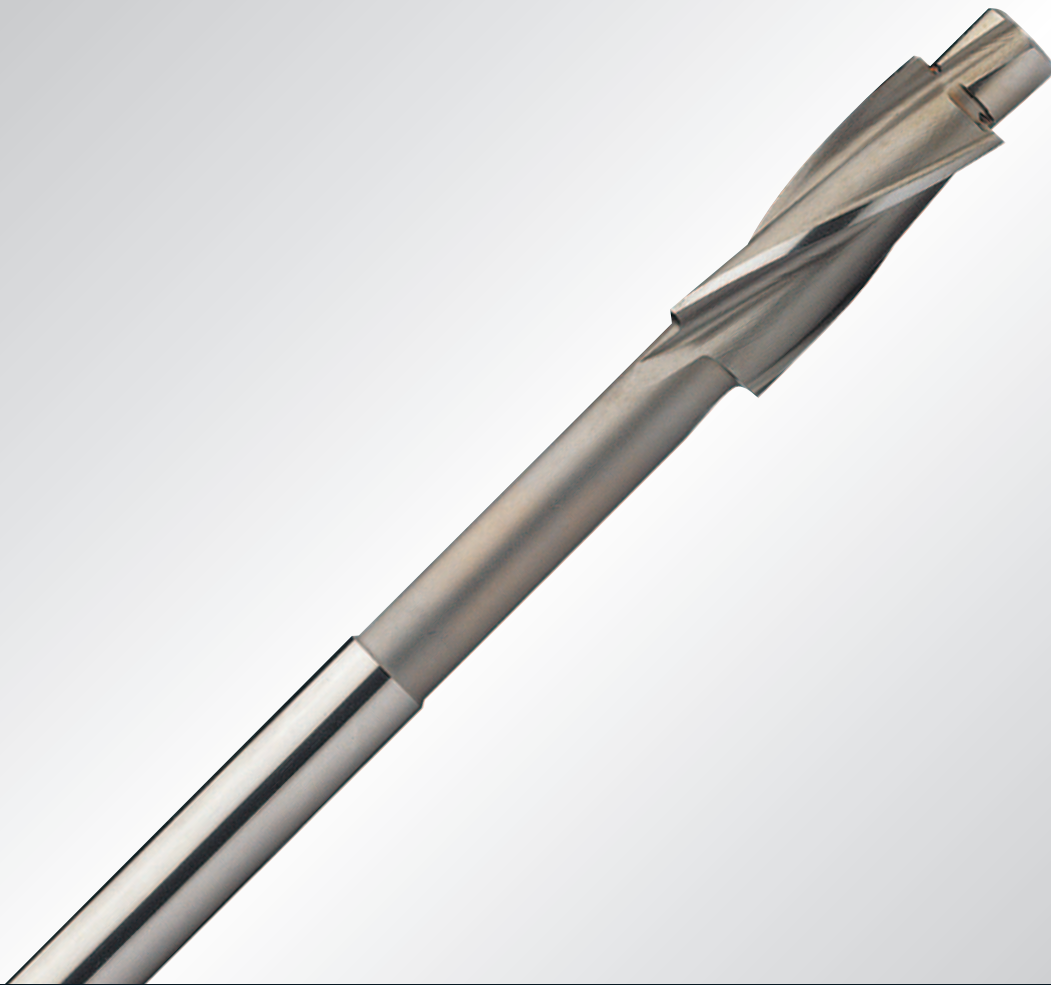


HSS



Being the best through innovation



COUNTERBORES

FLACHSENKER

- General Purpose
- Für allgemeinen Einsatz



COUNTERBORES

EL950 SERIES

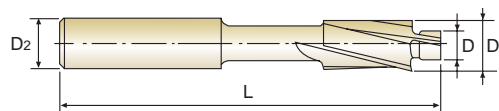
PLAIN SHANK
GLATTER ZYLINDERSCHAFT

HSS-E, 3 FLUTE COUNTERBORES for 180° CAPSCREW

HSS-E, 3 SCHNEIDEN FLACHSENKER MIT FESTEM FÜHRUNGSZAPFEN

► The counterbores with solid pilot are designed for machining as fillister screw caps or ejector caps in molds.

► Die Flachsenker mit festem Führungszapfen dienen dem 180° Ansenken für Zylinderkopfschrauben und Auswerferstiften in Formen



P1035

MEDIUM

Unit : mm

| EDP No. | ITEM No. | Screw Size | Pilot Diameter D(e8) | Cutter Diameter D1(z9) | Shank Diameter D2(h9) | Overall Length L |
|----------|------------|------------|-------------------------|---------------------------|--------------------------|---------------------|
| PLAIN | PLAIN | | | | | |
| EL950003 | YG54M3-M | M3 | 3.4 | 6.0 | 5 | 71 |
| EL950035 | YG54M3.5-M | M3.5 | 3.9 | 6.5 | 5 | 71 |
| EL950004 | YG54M4-M | M4 | 4.5 | 8.0 | 5 | 71 |
| EL950005 | YG54M5-M | M5 | 5.5 | 10.0 | 8 | 80 |
| EL950006 | YG54M6-M | M6 | 6.6 | 11.0 | 8 | 80 |
| EL950008 | YG54M8-M | M8 | 9.0 | 15.0 | 12.5 | 100 |
| EL950010 | YG54M10-M | M10 | 11.0 | 18.0 | 12.5 | 100 |
| EL950012 | YG54M12-M | M12 | 14.0 | 20.0 | 12.5 | 100 |

FINE

Unit : mm

| EDP No. | ITEM No. | Screw Size | Pilot Diameter D(e8) | Cutter Diameter D1(z9) | Shank Diameter D2(h9) | Overall Length L |
|----------|------------|------------|-------------------------|---------------------------|--------------------------|---------------------|
| PLAIN | PLAIN | | | | | |
| EL950901 | YG54M3-F | M3 | 3.2 | 6.0 | 5 | 71 |
| EL950902 | YG54M3.5-F | M3.5 | 3.7 | 6.5 | 5 | 71 |
| EL950903 | YG54M4-F | M4 | 4.3 | 8.0 | 5 | 71 |
| EL950904 | YG54M5-F | M5 | 5.3 | 10.0 | 8 | 80 |
| EL950905 | YG54M6-F | M6 | 6.4 | 11.0 | 8 | 80 |
| EL950906 | YG54M8-F | M8 | 8.4 | 15.0 | 12.5 | 100 |
| EL950907 | YG54M10-F | M10 | 10.5 | 18.0 | 12.5 | 100 |
| EL950908 | YG54M12-F | M12 | 13.0 | 20.0 | 12.5 | 100 |

BEFORE THREADING

Unit : mm

| EDP No. | ITEM No. | Screw Size | Pilot Diameter D(e8) | Cutter Diameter D1(z9) | Shank Diameter D2(h9) | Overall Length L |
|----------|------------|------------|-------------------------|---------------------------|--------------------------|---------------------|
| PLAIN | PLAIN | | | | | |
| EL950909 | YG54M3-T | M3 | 2.5 | 6.0 | 5 | 71 |
| EL950910 | YG54M3.5-T | M3.5 | 2.9 | 6.5 | 5 | 71 |
| EL950911 | YG54M4-T | M4 | 3.3 | 8.0 | 5 | 71 |
| EL950912 | YG54M5-T | M5 | 4.2 | 10.0 | 8 | 80 |
| EL950913 | YG54M6-T | M6 | 5.0 | 11.0 | 8 | 80 |
| EL950914 | YG54M8-T | M8 | 6.8 | 15.0 | 12.5 | 100 |
| EL950915 | YG54M10-T | M10 | 8.5 | 18.0 | 12.5 | 100 |
| EL950916 | YG54M12-T | M12 | 10.2 | 20.0 | 12.5 | 100 |

Tolerances according to DIN 7160 & 7161

Toleranzen nach DIN 7160 & 7161

| | Nominal-Diameter in mm / Nennmaßbereich in mm | | | | Nominal-Diameter in mm / Nennmaßbereich in mm | | | |
|----|---|-----------------------------|-------------------------------|---------------------------------|---|---------------------------------|---------------------------------|---------------------------------|
| | from 1 to 3 von 1 bis 3 | over 3 to 6 über 3 bis 6 | over 6 to 10 über 6 bis 10 | over 10 to 18 über 10 bis 18 | from 6 to 10 von 6 bis 10 | over 10 to 14 über 10 bis 14 | over 14 to 18 über 14 bis 18 | over 18 to 24 über 18 bis 24 |
| | Tolerance range in μm / Toleranzwerte in μm | | | | Tolerance range in μm / Toleranzwerte in μm | | | |
| e8 | - 14 - 28 | - 20 - 38 | - 25 - 47 | - 32 - 59 | + 78 + 42 | + 93 + 50 | + 103 + 60 | + 125 + 73 |
| h9 | 0 - 25 | 0 - 30 | 0 - 36 | 0 - 43 | | | | |

HSS-E, 3 FLUTE COUNTERBORES for 180° CAPSCREW
HSS-E, 3 SCHNEIDEN FLACHSENKER mit FESTEM FÜHRUNGSZAPFEN
EL950 SERIES

| MATERIAL | ALUMINUM & ALUMINUM ALLOYS | CARBON STEELS ALLOY STEELS | CARBON STEELS ALLOY STEELS TOOL STEELS | CARBON STEELS ALLOY STEELS TOOL STEELS | CARBON STEELS ALLOY STEELS TOOL STEELS |
|-----------------|----------------------------|----------------------------|--|--|--|
| HARDNESS | | | ~ HRC20 | HRC20 ~ HRC35 | HRC35 ~ HRC40 |
| STRENGTH | | ~ 500N/mm ² | 500 ~ 800N/mm ² | 800 ~ 1100N/mm ² | 1100 ~ 1300N/mm ² |
| CUTTER DIAMETER | RPM | RPM | RPM | RPM | RPM |
| 6.0 | 2100 | 590 | 480 | 380 | 320 |
| 6.5 | 2100 | 590 | 480 | 380 | 320 |
| 8.0 | 1700 | 470 | 380 | 300 | 250 |
| 10.0 | 1200 | 380 | 320 | 260 | 170 |
| 11.0 | 1100 | 300 | 240 | 190 | 160 |
| 15.0 | 840 | 240 | 195 | 155 | 130 |
| 18.0 | 670 | 190 | 160 | 120 | 80 |
| 20.0 | 550 | 160 | 125 | 95 | 70 |

RPM = rev./min.