



Aluminium endmill

EPN-AL • EPA-AL

Volume 1.2

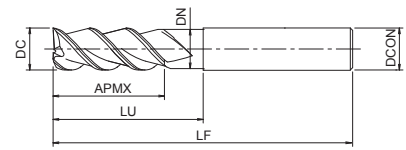
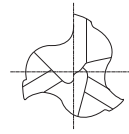


KEY FEATURES: EPN-AL • EPA-AL SERIES



EPN-AL-3FS

Milling | Solid carbide



- Carbide end mill, bright finish
- For aluminium and copper alloys
- 3 flutes, short length of cut

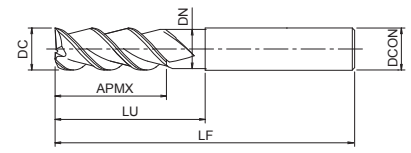
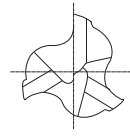


| EDP | ZEFP | DC | CHW | LU | LF | APMX | DCON | DN |
|----------|------|----|------|----|----|------|------|------|
| EP019703 | 3 | 3 | 0,05 | 7 | 50 | 4 | 6 | 2,8 |
| EP019704 | 3 | 4 | 0,05 | 8 | 54 | 5 | 6 | 3,8 |
| EP019705 | 3 | 5 | 0,1 | 9 | 54 | 6 | 6 | 4,8 |
| EP019706 | 3 | 6 | 0,1 | 15 | 54 | 7 | 6 | 5,8 |
| EP019708 | 3 | 8 | 0,1 | 17 | 55 | 9 | 8 | 7,8 |
| EP019710 | 3 | 10 | 0,1 | 20 | 60 | 11 | 10 | 9,8 |
| EP019712 | 3 | 12 | 0,2 | 24 | 70 | 12 | 12 | 11,8 |
| EP019716 | 3 | 16 | 0,2 | 28 | 80 | 16 | 16 | 15,8 |
| EP019720 | 3 | 20 | 0,2 | 32 | 82 | 20 | 20 | 19,8 |



EPA-AL-3FL

Milling | Solid carbide



- Carbide end mill with ALC coating
- For aluminium and copper alloys
- 3 flutes, long length of cut



CARBIDE
ALC
40°
h6
 $D=3$
 $-0,004 \sim +0,006$
 $6 \geq D > 3$
 $-0,006 \sim +0,006$
 $10 \geq D \geq 8$
 $-0,007 \sim +0,006$
 $16 \geq D \geq 12$
 $-0,009 \sim +0,006$
 $D \geq 20$
 $-0,011 \sim +0,006$
45°

| EDP | ZEFP | DC | CHW | LU | LF | APMX | DCON | DN |
|----------|------|----|------|----|-----|------|------|------|
| EP020003 | 3 | 3 | 0,05 | 12 | 57 | 9 | 6 | 2,9 |
| EP020004 | 3 | 4 | 0,05 | 16 | 57 | 11 | 6 | 3,8 |
| EP020005 | 3 | 5 | 0,1 | 18 | 57 | 13 | 6 | 4,8 |
| EP020006 | 3 | 6 | 0,1 | 20 | 57 | 13 | 6 | 5,8 |
| EP020008 | 3 | 8 | 0,1 | 25 | 63 | 19 | 8 | 7,8 |
| EP020010 | 3 | 10 | 0,1 | 32 | 72 | 22 | 10 | 9,8 |
| EP020012 | 3 | 12 | 0,2 | 38 | 83 | 26 | 12 | 11,8 |
| EP020016 | 3 | 16 | 0,2 | 50 | 92 | 32 | 16 | 15,8 |
| EP020020 | 3 | 20 | 0,2 | 62 | 104 | 38 | 20 | 19,8 |
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Milling | Solid carbide




CUTTING CONDITIONS


Milling | Endmills | Cutting conditions

EPN-AL-3FS/FL

Side milling


|  | Aluminium wrought alloys | Aluminium cast alloy >5% Si <10% Si |
|---|--------------------------|--|
| | Vc | 400 - 600 (m/min) |
| Ø | fz (mm) | fz (mm) |
| 3 | 0,027 | 0,024 |
| 4 | 0,036 | 0,032 |
| 5 | 0,045 | 0,041 |
| 6 | 0,054 | 0,049 |
| 8 | 0,072 | 0,065 |
| 10 | 0,090 | 0,081 |
| 12 | 0,108 | 0,097 |
| 16 | 0,144 | 0,130 |
| 20 | 0,195 | 0,175 |
| ae max. 60% x D ap = 1xD | | |

Slotting


|  | Aluminium wrought alloys | Aluminium cast alloy >5% Si <10% Si |
|---|--------------------------|--|
| | Vc | 400 - 600 (m/min) |
| Ø | fz (mm) | fz (mm) |
| 3 | 0,019 | 0,017 |
| 4 | 0,025 | 0,022 |
| 5 | 0,032 | 0,029 |
| 6 | 0,038 | 0,034 |
| 8 | 0,050 | 0,046 |
| 10 | 0,063 | 0,057 |
| 12 | 0,076 | 0,068 |
| 16 | 0,101 | 0,091 |
| 20 | 0,137 | 0,123 |
| ap = 1xD | | |

EPA-AL-3FS/FL

Side milling

|  | Aluminium wrought alloys | Aluminium cast alloy >5% Si <10% Si |
|---|--------------------------|--|
| | Vc | 500 - 800 (m/min) |
| Ø | fz (mm) | fz (mm) |
| 3 | 0,027 | 0,024 |
| 4 | 0,036 | 0,032 |
| 5 | 0,045 | 0,041 |
| 6 | 0,054 | 0,049 |
| 8 | 0,072 | 0,065 |
| 10 | 0,090 | 0,081 |
| 12 | 0,108 | 0,097 |
| 16 | 0,144 | 0,130 |
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Slotting

|  | Aluminium wrought alloys | Aluminium cast alloy >5% Si <10% Si |
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| 12 | 0,076 | 0,068 |
| 16 | 0,101 | 0,091 |
| 20 | 0,137 | 0,123 |
| ap = 1xD | | |





shaping your dreams

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