

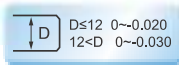
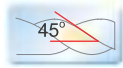
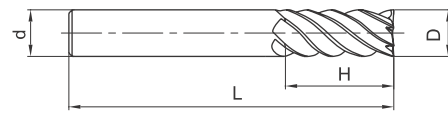
# Milling · Fräsen

Solid Carbide end mills · Vollhartmetallschaftfräser

## 6-flute flattened end mills with straight shank 6-Schneiden Eckfräser mit Zylinderschaft



**PM-6E**



| Type<br>Typ | Dimension(mm)<br>Abmessungen |    |    |     | Teeth<br>Zähne<br>Z | Grade<br>Sorte<br>KMG 405 |
|-------------|------------------------------|----|----|-----|---------------------|---------------------------|
|             | D                            | d  | H  | L   |                     |                           |
| PM-6E-D6.0  | 6.0                          | 6  | 18 | 60  | 6                   | ●                         |
| PM-6E-D8.0  | 8.0                          | 8  | 20 | 60  | 6                   | ●                         |
| PM-6E-D10.0 | 10.0                         | 10 | 30 | 75  | 6                   | ●                         |
| PM-6E-D12.0 | 12.0                         | 12 | 32 | 75  | 6                   | ●                         |
| PM-6E-D16.0 | 16.0                         | 16 | 40 | 100 | 6                   | ●                         |
| PM-6E-D20.0 | 20.0                         | 20 | 45 | 100 | 6                   | ●                         |

**B**

Solid Carbide end mills  
Vollhartmetallschaftfräser

## Material Overview · Material Übersicht

✓ = Very suitable · Sehr empfohlen  
✓ = Suitable · Empfohlen

KMG405

| Workpiece material<br>Werkstückstoff |                                   |                                                      |        |                                      |        |                                             |                                                       |                               |                              |                                |                                          |
|--------------------------------------|-----------------------------------|------------------------------------------------------|--------|--------------------------------------|--------|---------------------------------------------|-------------------------------------------------------|-------------------------------|------------------------------|--------------------------------|------------------------------------------|
| Carbon steel<br>Kohlenstoff<br>Stahl | Alloy steel<br>Legierter<br>Stahl | Quenched and<br>tempered steel ·<br>Vergüteter Stahl |        | Hardened steel ·<br>Gehärteter Stahl |        | Stainless<br>steel ·<br>Rostfreier<br>Stahl | Cast iron,<br>Nodular<br>cast iron<br>Grauguss<br>GGG | Copper<br>alloy<br>Kupfer Leg | Aluminum<br>alloy<br>Alu Leg | Titanium<br>alloy<br>Titan Leg | Heat resist<br>alloy<br>warmfeste<br>Leg |
|                                      |                                   | ~40HRC                                               | ~50HRC | ~55HRC                               | ~68HRC |                                             |                                                       |                               |                              |                                |                                          |
| ✓                                    | ✓                                 | ✓                                                    | ✓      | ✓                                    |        | ✓                                           | ✓                                                     |                               |                              | ✓                              | ✓                                        |

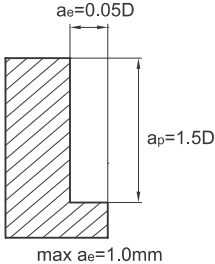
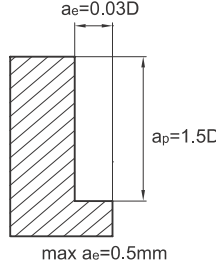
● Ex Stock / ab Lager ○ On demand / auf Anfrage

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## Recommended cutting data · Empfohlene Schnittdaten

### PM-6E

| Workpiece material<br>Werkstückmaterial | Cast iron,<br>Carbon steel, Alloy steel<br>Kohlenstoffstahl<br>Leg. Stahl<br>~30HRC |                              | Stainless steel<br>Rostfreier Stahl          |                              | Pre-hardened steel,<br>Quenched and tempered steel<br>Vergüteter Stahl<br>~40HRC |                                                                                      | Pre-hardened steel,<br>Quenched and tempered steel<br>Vergüteter Stahl<br>~50HRC |                              | Hardened steel<br>Gehärteter Stahl<br>~55HRC |                              |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------------------------|----------------------------------------------|------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------|----------------------------------------------|------------------------------|
| Diameter Ø<br>Durchmesser<br>(mm)       | Rotating<br>Drehzahl<br>(min <sup>-1</sup> )                                        | Feed<br>Vorschub<br>(mm/min) | Rotating<br>Drehzahl<br>(min <sup>-1</sup> ) | Feed<br>Vorschub<br>(mm/min) | Rotating<br>Drehzahl<br>(min <sup>-1</sup> )                                     | Feed<br>Vorschub<br>(mm/min)                                                         | Rotating<br>Drehzahl<br>(min <sup>-1</sup> )                                     | Feed<br>Vorschub<br>(mm/min) | Rotating<br>Drehzahl<br>(min <sup>-1</sup> ) | Feed<br>Vorschub<br>(mm/min) |
| 6                                       | 7000                                                                                | 1070                         | 3700                                         | 195                          | 5300                                                                             | 815                                                                                  | 4200                                                                             | 650                          | 3710                                         | 470                          |
| 8                                       | 5200                                                                                | 1070                         | 2800                                         | 195                          | 4000                                                                             | 815                                                                                  | 3200                                                                             | 660                          | 2785                                         | 485                          |
| 10                                      | 4200                                                                                | 1035                         | 2200                                         | 195                          | 3200                                                                             | 800                                                                                  | 2500                                                                             | 630                          | 2230                                         | 450                          |
| 12                                      | 3500                                                                                | 1035                         | 1850                                         | 195                          | 2650                                                                             | 800                                                                                  | 2100                                                                             | 630                          | 1855                                         | 450                          |
| 16                                      | 2600                                                                                | 975                          | 1400                                         | 180                          | 2000                                                                             | 750                                                                                  | 1600                                                                             | 590                          | 1390                                         | 435                          |
| 20                                      | 2050                                                                                | 960                          | 1100                                         | 150                          | 1600                                                                             | 740                                                                                  | 1250                                                                             | 580                          | 1115                                         | 420                          |
| Max. cutting depth<br>max Schnitttiefe  |   |                              |                                              |                              |                                                                                  |  |                                                                                  |                              |                                              |                              |

1. Please select high precise machine and tool holder.
2. Please use air blow or MQL (minimum oil mist cooling).
3. Down milling is recommended in side milling.
4. Vibration and unusual noise may be generated if the machine rigidity and workpiece fixture stability is low, please reduce the rotating speed and feed rate like mentioned above.
5. Make overhang as short as possible if no interference.

1. Bitte präzise Maschinen und Werkzeughalter verwenden.
2. Als Kühlmittel bitte Luft oder MQL (Minimalmengen) verwenden.
3. Empfohlene Fräsmethode: Gleichlaufräsen.
4. Bei Vibrationen oder unüblichen Geräuschen reduzieren Sie die Schnittdaten (wie oben empfohlen) entsprechend.
5. Werkzeugauskragung so kurz wie möglich wählen.