

PML-2R★PM-2R

| Workpiece material | Cast iron, Carbon steel, Alloy steel ~30HRC | | Stainless steel | | Pre-hardened steel, quenched and tempered steel ~40HRC | | Pre-hardened steel, quenched and tempered steel ~50HRC | | Hardened steel ~55HRC | |
|--------------------|---|-------------------------------------|---------------------|-------------------------------------|--|-------------------------------------|--|-------------------------------------|-----------------------|-------------------------------------|
| | Diameter (mm) | Rotating speed (min ⁻¹) | Feed speed (mm/min) | Rotating speed (min ⁻¹) | Feed speed (mm/min) | Rotating speed (min ⁻¹) | Feed speed (mm/min) | Rotating speed (min ⁻¹) | Feed speed (mm/min) | Rotating speed (min ⁻¹) |
| 1 | 20000 | 240 | 20000 | 75 | 20000 | 195 | 20000 | 145 | 20000 | 95 |
| 2 | 15000 | 385 | 11150 | 100 | 15000 | 335 | 13000 | 215 | 11140 | 130 |
| 3 | 14000 | 655 | 7500 | 145 | 10600 | 505 | 8500 | 395 | 7430 | 245 |
| 4 | 10800 | 675 | 5500 | 155 | 8000 | 515 | 6500 | 405 | 5570 | 245 |
| 5 | 8200 | 695 | 4500 | 155 | 6400 | 540 | 5000 | 425 | 4460 | 260 |
| 6 | 7000 | 720 | 3700 | 170 | 5300 | 555 | 4200 | 435 | 3710 | 260 |
| 8 | 5200 | 720 | 2800 | 170 | 4000 | 555 | 3200 | 440 | 2785 | 275 |
| 10 | 4200 | 695 | 2200 | 170 | 3200 | 535 | 2500 | 420 | 2230 | 255 |
| 12 | 3500 | 695 | 1850 | 170 | 2650 | 535 | 2100 | 420 | 1855 | 255 |

| Maximum cutting depth | ae=0.1D | | ae=0.05D | | ae=0.03D | | | | | | | | | | | | | | | |
|-----------------------|------------------|---|----------------|------------------|-------------|---------|-------------|------|--------------|------|--|--|----------------|------------------|-------------|------|--------|------|--|--|
| | Diagram | ap=1.5D | Diagram | ap=1.5D | Diagram | ap=1.5D | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Diameter range</th> <th>Cutting depth ap</th> </tr> </thead> <tbody> <tr> <td>Ø1 ≤ D < Ø3</td> <td>0.15D</td> </tr> <tr> <td>Ø3 ≤ D < Ø6</td> <td>0.3D</td> </tr> <tr> <td>Ø6 ≤ D < Ø20</td> <td>0.5D</td> </tr> </tbody> </table> | Diameter range | Cutting depth ap | Ø1 ≤ D < Ø3 | 0.15D | Ø3 ≤ D < Ø6 | 0.3D | Ø6 ≤ D < Ø20 | 0.5D | | <table border="1"> <thead> <tr> <th>Diameter range</th> <th>Cutting depth ap</th> </tr> </thead> <tbody> <tr> <td>Ø1 ≤ D < Ø3</td> <td>0.1D</td> </tr> <tr> <td>Ø3 ≤ D</td> <td>0.2D</td> </tr> </tbody> </table> | Diameter range | Cutting depth ap | Ø1 ≤ D < Ø3 | 0.1D | Ø3 ≤ D | 0.2D | | |
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| Ø1 ≤ D < Ø3 | 0.1D | | | | | | | | | | | | | | | | | | | |
| Ø3 ≤ D | 0.2D | | | | | | | | | | | | | | | | | | | |

- The above table shows the standard value of side milling. When milling slot, 50%~70% of rotating speed and 40%~60% of feed speed stated above are recommended as standard.
- Please select high-precision machine and tool holder.
- Please use air blow or cutting liquid with high mist retardant property.
- Down milling is recommended in the case of side milling.
- When the machine rigidity and workpiece fixture stability is low, vibration and abnormal noise may be generated. Please reduce the rotating speed and feed speed stated above correspondingly.
- Make overhang of tool as short as possible in conditions of non-interference.