



MFM series

Universally compatible, multi-sector grinding spindle with maximum performance.

- Compact, robust design
- High performance and torque over a wide rotational speed range
- Excellent stability and concentricity for the best Dimensional and form tolerances
- Designed for high radial and axial loads
- Air seal supported sealing system
- Various interfaces available

MFM models

| Type | Taper | Lubrication | D [mm] | L [mm] | Max. Speed [rpm] | Voltage [V] | Current [A] | Max. Power [kW] S6 60% | | Max. Torque [Nm] | | Static rigidity | | Option | |
|-------------|----------------|-------------|--------|--------|------------------|-------------|-------------|------------------------|------|------------------|------|-----------------|---------------|--------|----|
| | | | | | | | | S1 | S6 | S1 | S6 | axial [N/μm] | radial [N/μm] | DDF | S1 |
| MFM-1022/45 | HJND-21 | Oil-air | 100 | 288 | 45'000 | 380 | 18 | 7.5 | 8.6 | 3.36 | 3.85 | 100 | 127 | | X |
| MFM-1032/60 | HJND-28 | Oil-air | 100 | 250 | 60'000 | 380 | 17 | 7.5 | 8.6 | 2.24 | 2.76 | 77 | 90 | | X |
| MFM-1050 | HJND-50 | Grease | 100 | 222 | 50'000 | 380 | 5.3 | 2.5 | 3.1 | 0.5 | 0.6 | 31 | 26 | | X |
| MFM-1090 | HJND-50 | Oil-air | 100 | 222 | 90'000 | 380 | 9 | 4.2 | 5.4 | 0.4 | 0.6 | 50 | 35 | | X |
| MFM-10120 | HJND-60 | Oil-air | 100 | 207 | 120'000 | 380 | 8.9 | 3.5 | 4.5 | 0.28 | 0.36 | 42 | 32 | O | X |
| MFM-1224 | HJND-21 | Grease | 120 | 337 | 24'000 | 350 | 38 | 15 | 17 | 6.0 | 6.8 | 59 | 80 | X | X |
| | HSK-C40 | Grease | 120 | 337 | 24'000 | 350 | 38 | 15 | 17 | 6.0 | 6.8 | 59 | 80 | X | X |
| MFM-1236 | HJND-28 | Grease | 120 | 289 | 36'000 | 364 | 31 | 12 | 13.5 | 3.2 | 3.6 | 47 | 47 | | X |
| | HSK-C25 | Grease | 120 | 289 | 36'000 | 364 | 31 | 12 | 13.5 | 3.2 | 3.6 | 47 | 47 | | X |
| MFM-1224/42 | HJND-21 | Oil-air | 120 | 336 | 42'000 | 380 | 38 | 15 | 17 | 6.0 | 6.8 | 100 | 140 | X | X |
| | HSK-C40 | Oil-air | 120 | 336 | 42'000 | 380 | 38 | 15 | 17 | 6.0 | 6.8 | 100 | 140 | X | X |
| MFM-1242/60 | HJND-28 | Oil-air | 120 | 288.5 | 60'000 | 380 | 28 | 10 | 11.5 | 2.3 | 2.6 | 70 | 88 | | X |
| | HSK-C25 | Oil-air | 120 | 288.5 | 60'000 | 380 | 28 | 10 | 11.5 | 2.3 | 2.6 | 70 | 88 | | X |
| MFM-1406/12 | HJND-16 | Grease | 140 | 388 | 12'000 | 350 | 32 | 10 | 12 | 15 | 18 | | | O | X |
| | External taper | Grease | 140 | 388 | 12'000 | 350 | 32 | 10 | 12 | 15 | 18 | | | O | X |
| | HSK-C50 | Grease | 140 | 388 | 12'000 | 350 | 32 | 10 | 12 | 15 | 18 | | | O | X |
| MFM-1418/36 | HJND-16 | Oil-air | 140 | 388 | 36'000 | 350 | 38 | 18 | 22 | 9.5 | 11.9 | | | O | X |
| | HSK-C50 | Oil-air | 140 | 388 | 36'000 | 350 | 38 | 18 | 22 | 9.5 | 11.9 | | | O | X |
| MFM-1709/15 | HSK-C63 | Grease | 170 | 401 | 15'000 | 350 | 56 | 20 | 22 | 18.7 | 23.3 | 184 | 214 | X | X |
| MFM-1709/30 | HSK-C63 | Oil-air | 170 | 401 | 30'000 | 350 | 56 | 20 | 22 | 18.7 | 23.3 | 249 | 287 | X | X |

Options:
 DDF = rotary feedthrough
 PNP = standstill sensor S1
 X = available
 O = on request

Rotational speed performance diagrams

The motor concept for trendsetting grinding technologies: UniDrive spindles offer high performance over the entire rotational speed range and are particularly suitable for universal use with high-performance cutting materials, such as CBN and PKD. In this way, the rotational speed range up to 120,000 rpm can be used with only a few spindles. With the VC open, closed loop control system, the torque in the lower rotational speed range can also be further increased.

MFM rotational speed performance diagrams

