

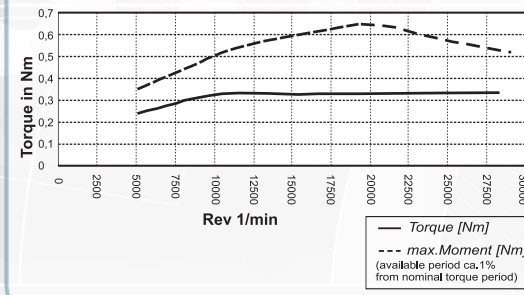
- Sturdy 2-pole three-phase motor
- Protection type IP 54, insulation class F
- Motor- shaft for collets type ER 11
- Cast sign A side, aluminium cast B side
- Nominal output 0.5 kW (S6-40% operation)
- Revolutions range 5,000 U/min. - 30,000 U/min.
- Torque at 18,000 U/min.: 0.28Nm
- Nominal voltage: 3 x 220 V
- Manual tool exchange
- Clamping range  $\varnothing$  3 mm –  $\varnothing$  6.35 mm = 1/8"

- Self-ventilating B side
  - Revolution control
  - Spindle bearing  
2 spindle ball bearing A-side (milling side)  
1 bearing B-side (vent side)
  - Rotation: 0.01 mm
  - Weight: 2.8 kg
  - Options: CoolMin® (internal und external)  
Frequency converter, different clamping tools
- Item.-No: 477004 3130 (without frequency converter and CoolMin)

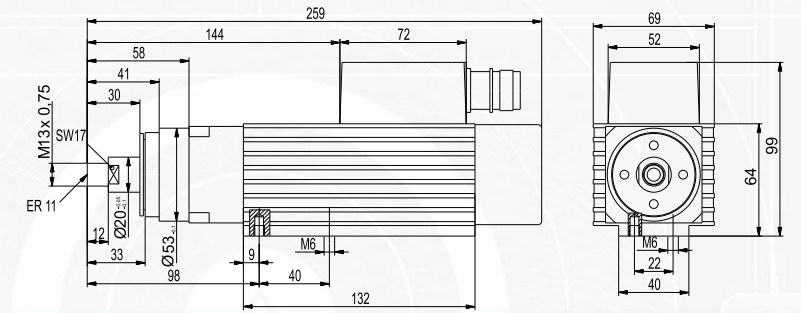
ISA 500



Torque curves



Scale drawings



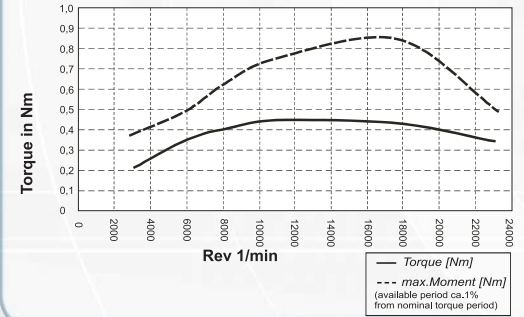
- Sturdy 2-pole three-phase motor
- Protection type IP 54, insulation class F
- Motor- shaft for collets type ER 16
- Aluminium cast A and B side
- Nominal output 0.75 kW (S6-40% operation)
- Revolutions range 3,000 U/min. - 24,000 U/min.
- Torque at 22,000 U/min.: 0.34Nm
- Nominal voltage: 3 x 220 V
- Manual tool exchange
- Clamping range  $\varnothing$  3 mm –  $\varnothing$  8 mm

- Self-ventilating B side
  - Revolution control
  - Double precision position
  - Rotation: 0.01 mm
  - Weight: 2.6 kg
  - Options: CoolMin® (internal und external)  
Frequency converter  
Different clamping tools
- Item.-No: 477008 3124 (without frequency converter and CoolMin)

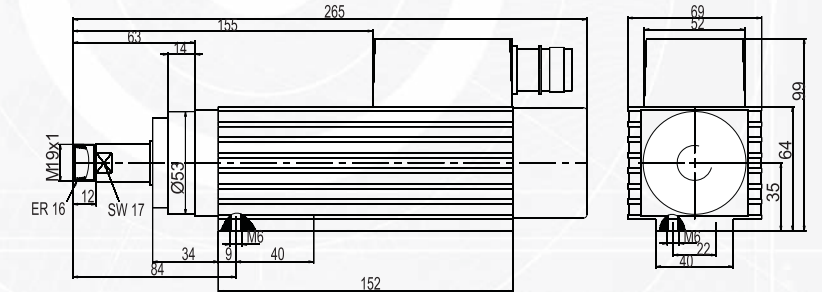
ISA 750



Torque curves



Scale drawings



- Sturdy 2-pole three-phase motor
- Protection type IP 55, insulation class F
- Cast sign A and B side
- Nominal output 0.9 kW (S6-40% operation)
- Revolutions range 6,000 U/min. - 24,000 U/min.
- Torque at 24,000 U/min.: 0.37Nm
- Nominal voltage: 220 V
- Automatic tool exchange
- Clamping range  $\varnothing$  3 mm –  $\varnothing$  6.35 mm = 1/8"

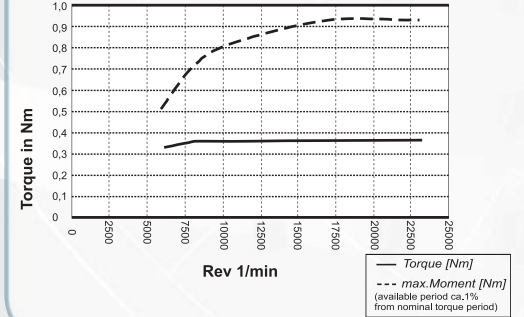
- Separately driven fan B side
  - Revolution control
  - Double precision position
  - Tool exchange SK 11 pneumatic (7,5bar)
  - Rotation: 0.01 mm
  - Weight: 5,8 kg
  - Options: CoolMin® (internal und external)  
Frequency converter, Tool exchange  
different clamping tools
- Item.-No: 477009 3324 (without frequency converter and CoolMin)

ISA 900

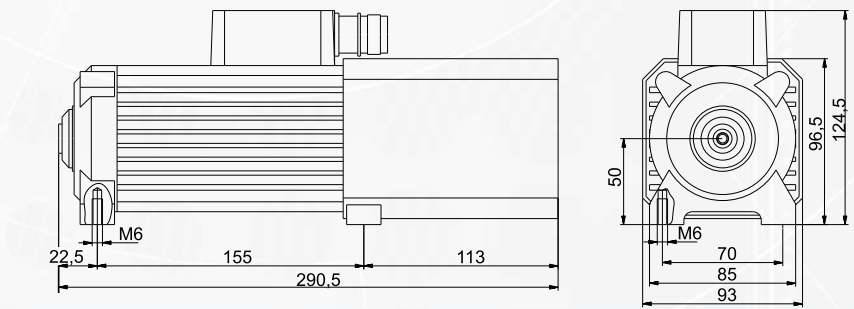


automatic tool exchange !

Torque curves



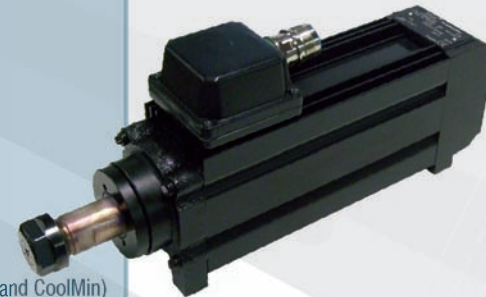
Scale drawings



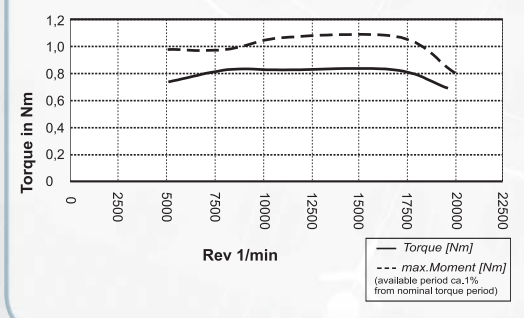
- Sturdy 2-pole three-phase motor
- Protection type IP 54, insulation class F
- Motor- shaft for collets type ER 20
- Cast sign A and B side
- Nominal output 1.5 kW (S6-40% operation)
- Revolutions range 5,000 U/min. - 20,000 U/min.
- Torque at 20,000 U/min.: 0.72 Nm
- Nominal voltage: 3 x 200 V
- Manual tool exchange
- Clamping range  $\varnothing$  3 mm –  $\varnothing$  13 mm

- Self-ventilating B side
  - Revolution control
  - Spindle bearing  
2 spindle ball bearing A-side (milling side)  
1 bearing B-side (vent side)
  - Rotation: 0.01 mm
  - Weight: 6,4 kg
  - Options: CoolMin® (internal und external)  
Tool exchange, different clamping tools
- Item.-No: 477510 3120 (without frequency converter and CoolMin)

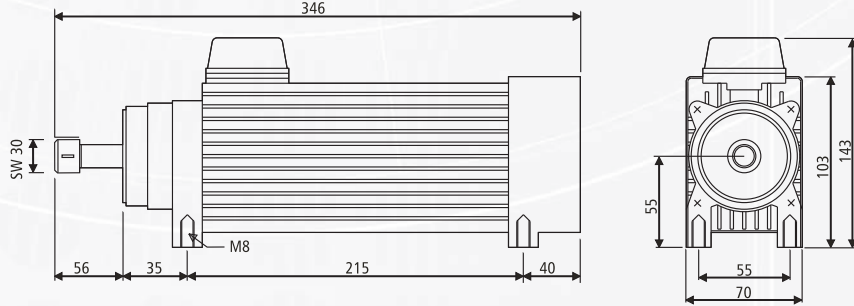
ISA 1500



Torque curves



Scale drawings



- Sturdy 2-pole three-phase motor
- Protection type IP 55, insulation class F
- Cast sign A and B side
- Nominal output 2.2 kW (S6-40% operation)
- Revolutions range 5,000 U/min. - 20,000 U/min.
- Torque at 18,000 U/min.: 1.26 Nm
- Nominal voltage: 220 V
- Automatic tool exchange
- Clamping range  $\varnothing$  3 mm –  $\varnothing$  13 mm

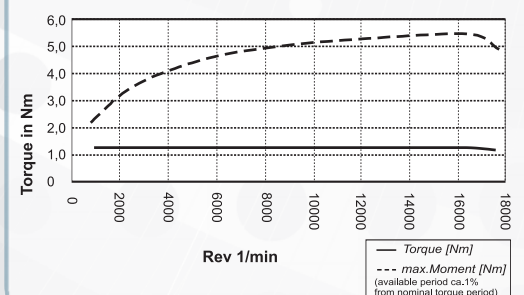
- Separately driven fan B side
  - Revolution control
  - Double precision position
  - Tool exchange SK 20 pneumatic (7,5bar)
  - Rotation: 0.01 mm
  - Weight: 14,6 kg
  - Options: CoolMin® (external)  
Frequency converter, Tool exchange  
different clamping tools
- Item.-No: 477022 3320 (without frequency converter and CoolMin)

ISA 2200



automatic tool exchange !

Torque curves



Scale drawings

