

DOOSAN 480 XLM – 2012 DATA SHEET

Technical Data

Working Area

Machining length: 3065 mm
Swing diameter over bed: 900 mm
Swing diameter over cross slide: 720 mm
Collision-free diameter: 380 mm
Maximum turning diameter: 650 mm
X-axis travel: 362 mm
Z-axis travel: 3100 mm

Main Spindle

Chuck diameter: 530 mm (21")
Spindle nose: ASA A2-15
Front spindle bearing: 240 mm
Spindle bore: 181 mm
Maximum bar capacity: 165.5 mm
Drive power (30 min / continuous): 45 / 37 kW
Maximum torque: 2957 Nm
Spindle speed: 1500 rpm
Height of spindle center above floor: 1163 mm

C-Axis on Main Spindle

Rotation movement: 360°
Resolution: 0.001°
Positioning accuracy: 0.0167°
Repeatability: ±0.006°
Maximum rapid speed: 100 min⁻¹
Maximum feed torque: 1006 Nm
Maximum braking torque: 834 Nm

Turret with Driven Tools BMT 75 P

Tool stations: 12
Driven tool stations: 12
Drive power: 11 kW
Maximum torque: 140 Nm
Speed range: up to 3000 rpm
Clamping range diameter: 3 – 25 mm
Collets: ER40
Tool shank cross section: 25 × 25 mm
Internal tool shank diameter: Ø 60 mm
Indexing time per station: 0.9 sec
Direction logic: yes

Machining Axes

X-axis FANUC AC servo motor power: 4.0 kW

Ball screw: Ø 40 × 8 mm

Maximum rapid traverse: 16 m/min

Maximum feed force: 15517 N

Z-axis FANUC AC servo motor power: 6.0 kW

Ball screw: Ø 50 × 16 mm

Maximum rapid traverse: 10 m/min

Maximum feed force: 13439 N

Bed

Slant bed angle: 45°

Distance between X-axis guideways: 360 mm

Distance between Z-axis guideways: 420 mm

Tailstock guideway distance: 300 mm

Guideway System

Hardened and ground flat bed guideways with plastic-coated counter guideways (Rulon 142), hand-scraped.

Tailstock

Manually connectable tailstock. Clamping and coupling of the tailstock is manual. The quill is actuated via foot pedal or within the program.

Quill diameter: 120 mm

Quill stroke: 120 mm

Quill taper: MK 6

Quill force: 14300 N

Coolant System

Tank capacity: 555 L

Flow rate: 40 L/min

Pressure: 4.0 bar

Pump power: 1.5 kW

Hydraulics

Tank capacity: 14 L

Flow rate: 25 L/min

Pressure: 40 bar

Pump power: 2.2 kW

Central Lubrication

Tank capacity: 1.32 L

Lubrication pressure: 16 bar

Pump power: 0.12 kW

General Data

Length: 6980 mm

Width: 2340 mm

Height: 2411 mm

Machine weight: 12,700 kg

Total power requirement: 58.1 kVA

Voltage: 400 V

Frequency: 50 Hz

Air requirement: 5 bar

Air consumption: 50 L/min

Machine Documentation

Programming, operating and maintenance manual, spare parts manual.

Operating Materials (coolant and oils supplied by the customer)

Hydraulic oil: B2 (HM 2)

Slideway oil: G (G68)