Productive. Compliant. Robust.

MFT Polishing Spindle

Compliant polishing spindle for use on a robot.

Field of Application

Standard solution for flexible and robot guided polishing of various workpieces and for different surfaces

Advantages – Your benefit

Flexible high-frequency spindle for maximum flexibility when polishing

Adjustable rigidity of the spindle via air pressure for smooth surfaces in every installation position

High speeds for high feed rates

Sensor system optional for stroke retracted / extended and rotational speed monitoring

Sizes	Idle speed max.	Power
Quantity: 1	5600 1/min	390 W

Functional Description

Different tools such as wire brushes, grinding wheels, polishing brushes or deburring tools can be secured via the tool mounting on the MFT. The application pressure can be regulated via air pressure and ranges from 14 N (3.1 lbf) at 0.34 bar to 74 N at 4.1 bar. The MFT is also optimal for uneven surfaces since it can compensate in the axial direction up to 15 mm while still applying a constant application pressure. This force control guarantees high stiffness perpendicular to the surface and the desired compensation in the machining direction.

① **Tool mounting**
for different tool diameters

② **Dust cover**
protects the bearings from contamination

③ **Pneumatic spindle**
High performance spindle with up to 5,600 1/min

④ **Bearing**
for compensation of the pneumatic spindle

⑤ **Silencer**
for exhaust

CAD data, operating manuals and other current product documents are available at **www.schunk.com**

General Notes to the Series

Actuation: pneumatic, via dry, filtered and lubricated air

Environmental conditions: Please note that the unit is not suitable for use in an area where coolants or cutting fluids are present.

Application example

Robot application for deburring a workpiece after machining

1. MFT Polishing Spindle
2. SWS Quick-change System
3. Clamping Force Block

SCHUNK offers more ...

The following components make the MFT even more productive – the perfect complement for highest functionality, flexibility, and process reliability.

Adapter Plates

Fittings

SWS Quick-change System

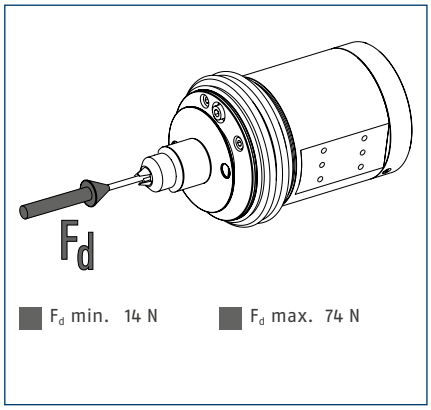
HWS Manual Gripper Change System

ⓘ Further information regarding the products can be found on the following products pages or at www.schunk.com. Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696

MFT 390

Robot Accessories | Finishing | Polishing Spindle

Forces and moments



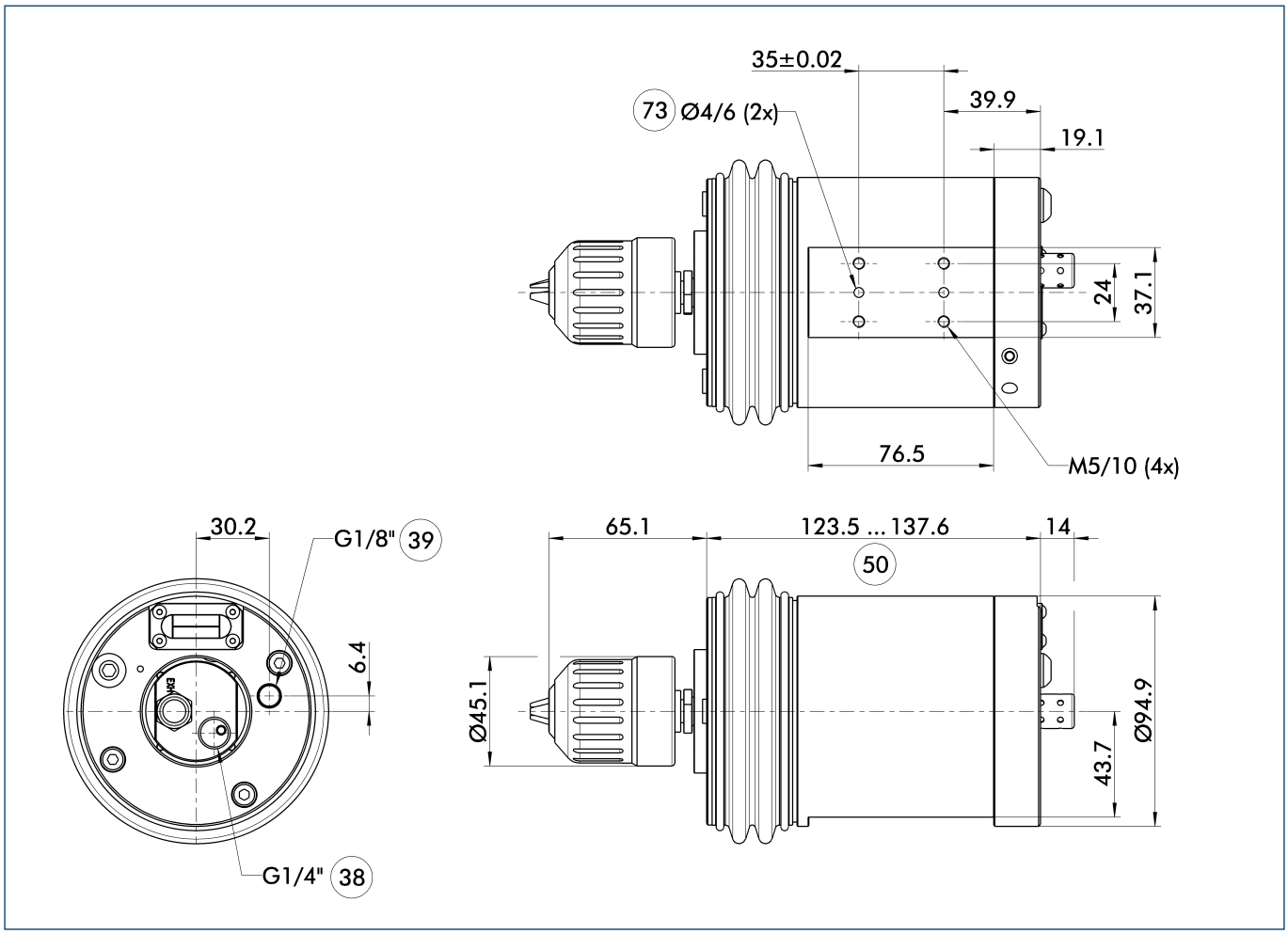
ⓘ The shown force shows the maximum compensation force.

Technical data

Description		MFT-390-F-0-0	MFT-390-F-R-0	MFT-390-F-0-T	MFT-390-F-R-T
ID		0322250	0322251	0322252	0322253
Power	[W]	390	390	390	390
max. compensation	[mm]	15	15	15	15
Recommended compensation	[mm]	±7.5	±7.5	±7.5	±7.5
min. compliance force	[N]	14	14	14	14
max. compliance force	[N]	74	74	74	74
Idle speed	[1/min]	5600	5600	5600	5600
Mass	[kg]	3.3	3.3	3.3	3.3
Air consumption	[l/s]	9	9	9	9
Stroke monitoring, retracted*		no	yes	no	yes
Stroke monitoring, extended*		yes	yes	yes	yes
Tachometer sensor*		no	no	yes	yes
max. clamping diameter	[mm]	9.5	9.5	9.5	9.5

* Inductive sensors are included in the scope of delivery

Main view



38 Spindle air connection
39 Compensation air connection
50 Axial compensation
73 Fit for a centering pin