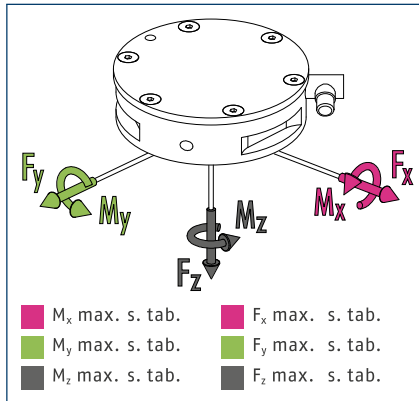


# FT Mini45

Measuring | Force / Torque Sensor

## Forces and Moments

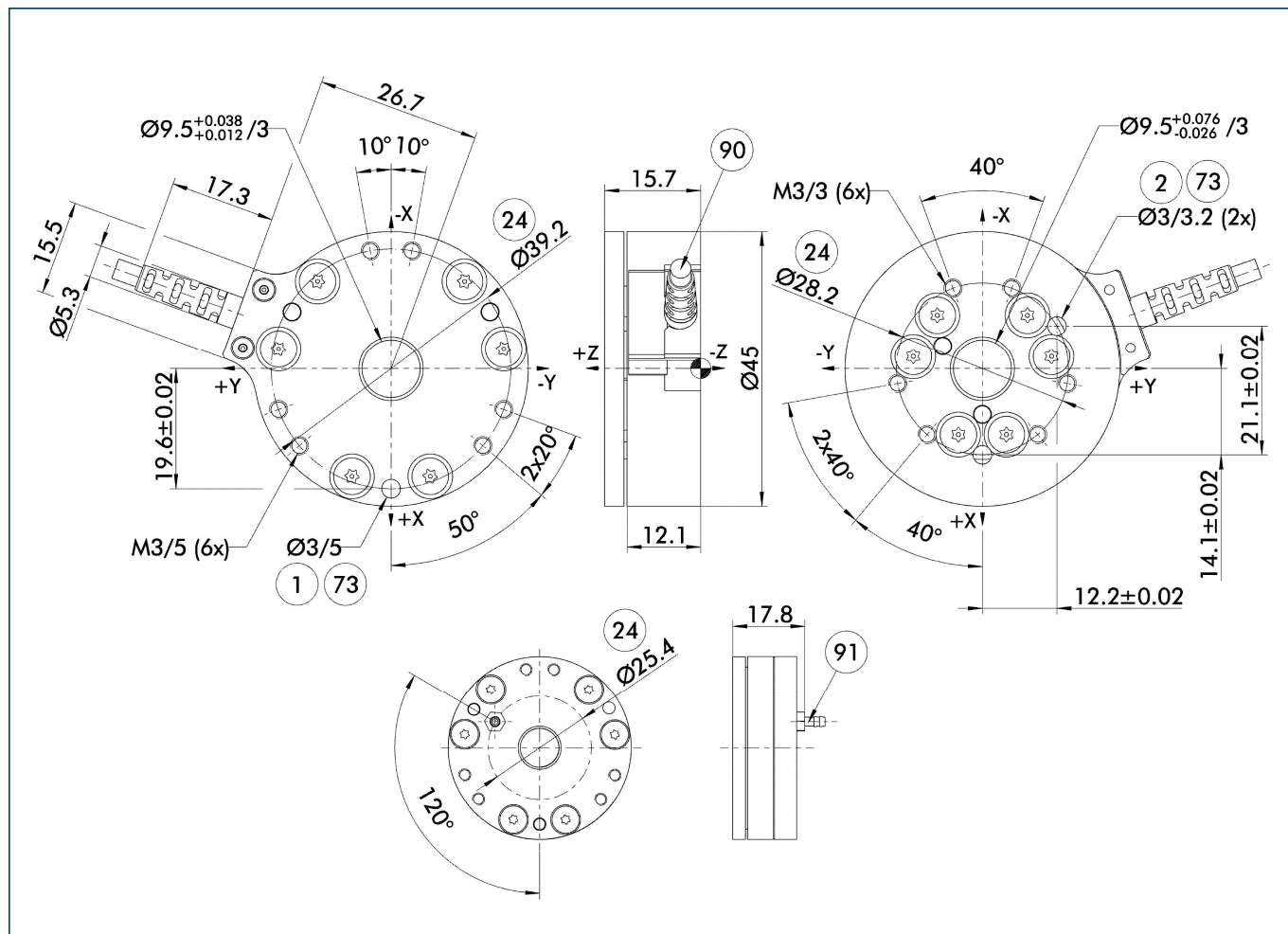


① For load index see technical data table.

## Technical data FTN

Description		FTN-Mini-45	FTN-Mini-45	FTN-Mini-45
Calibration		SI-145-5	SI-290-10	SI-580-20
Evaluation via		Ethernet	Ethernet	Ethernet
Weight	[kg]	0.091	0.091	0.091
Measuring range $F_x, F_y$	[N]	±145	±290	±580
Measuring range $F_z$	[N]	±290	±580	±1160
Measuring range $M_x, M_y$	[Nm]	±5	±10	±20
Measuring range $M_z$	[Nm]	±5	±10	±20
Overload $F_x, F_y$	[N]	±5100	±5100	±5100
Overload $F_z$	[kN]	±10000	±10000	±10000
Overload $M_x, M_y$	[Nm]	±110	±110	±110
Overload $M_z$	[Nm]	±140	±140	±140
Resonant Frequency $F_x, F_y, M_z$	[Hz]	5600	5600	5600
Resonant Frequency $F_z, M_x, M_y$	[Hz]	5400	5400	5400
Resolution $F_x, F_y$	[N]	1/16	1/8	1/4
Resolution $F_z$	[N]	1/16	1/8	1/4
Resolution $M_x, M_y$	[Nm]	1/752	1/376	1/188
Resolution $M_z$	[Nm]	1/1504	1/752	1/376
<b>Technical data deviating from FTD</b>				
Description		FTD-Mini-45	FTD-Mini-45	FTD-Mini-45
Evaluation via		DAQ	DAQ	DAQ
Resolution $F_x, F_y$	[N]	1/16	1/8	1/4
Resolution $F_z$	[N]	1/16	1/8	1/4
Resolution $M_x, M_y$	[Nm]	1/752	1/376	1/188
Resolution $M_z$	[Nm]	1/1504	1/752	1/376
<b>Technical data deviating from FTS</b>				
Description		FTS-Mini-45	FTS-Mini-45	FTS-Mini-45
Evaluation via		Stand-Alone	Stand-Alone	Stand-Alone
Resolution $F_x, F_y$	[N]	1/8	1/4	1/2
Resolution $F_z$	[N]	1/8	1/4	1/2
Resolution $M_x, M_y$	[Nm]	1/376	1/188	1/94
Resolution $M_z$	[Nm]	1/752	1/376	1/188

## Main view



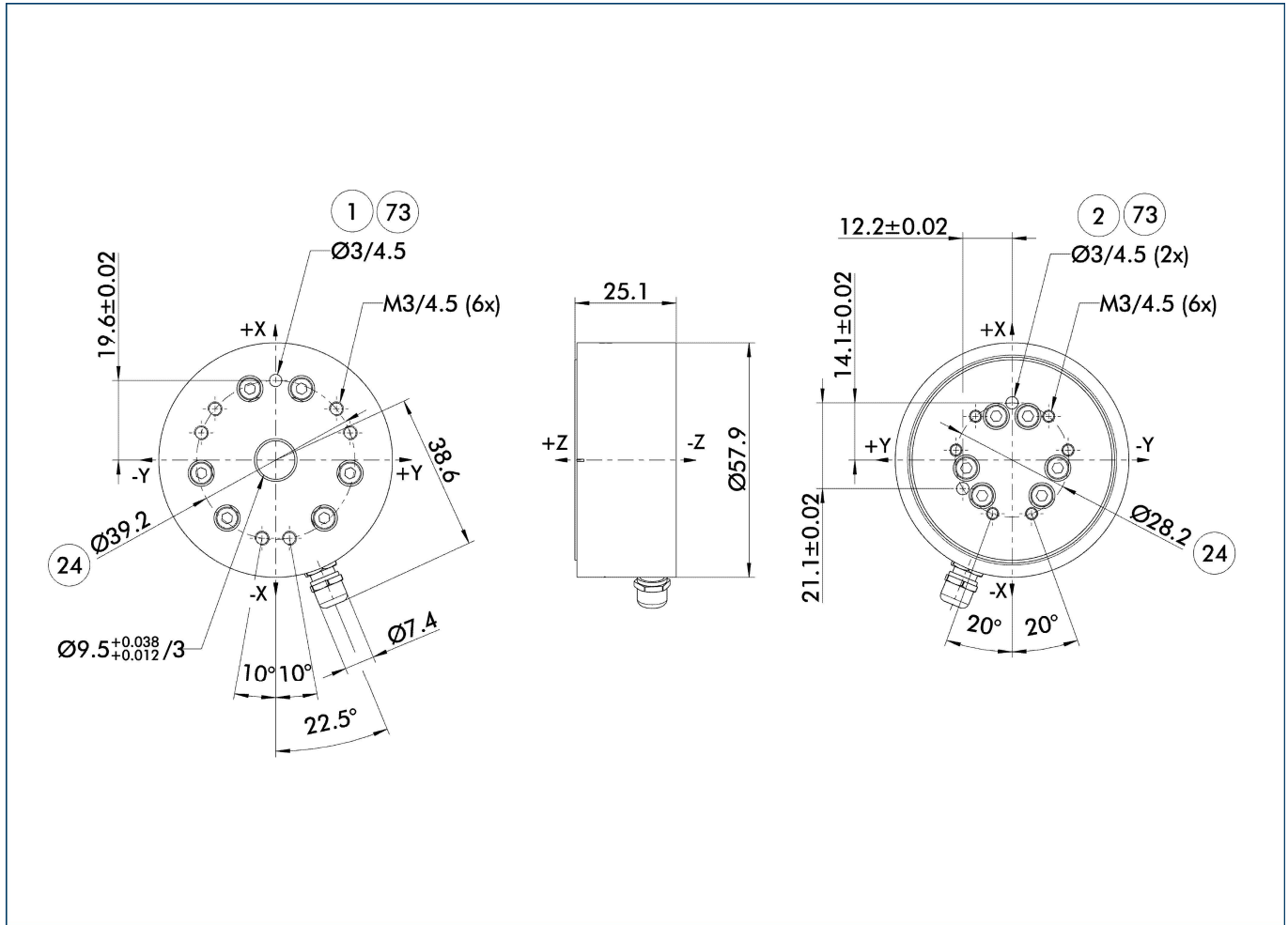
The main view shows the unit in its basic version.

- |                         |   |
|-------------------------|---|
| ① Robot side connection | ⑦③ Fit for a centering pin                |
| ② Tool side connection  | ⑨⑩ Radial cable outlet with strain relief |
| ②④ Bolt circle          | ⑨① Axial cable outlet                     |

# FT Mini45

Measuring | Force / Torque Sensor

## IP65 / IP68 main view



The main view shows the product with IP-protection.

- ① Robot side connection
- ② Tool side connection
- ④ Bolt circle
- ⑦ Fit for a centering pin