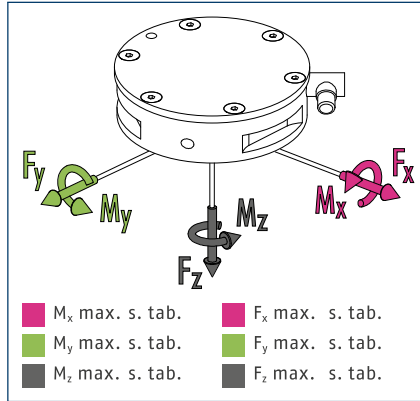


FT Delta

Measuring | Force / Torque Sensor

Forces and Moments

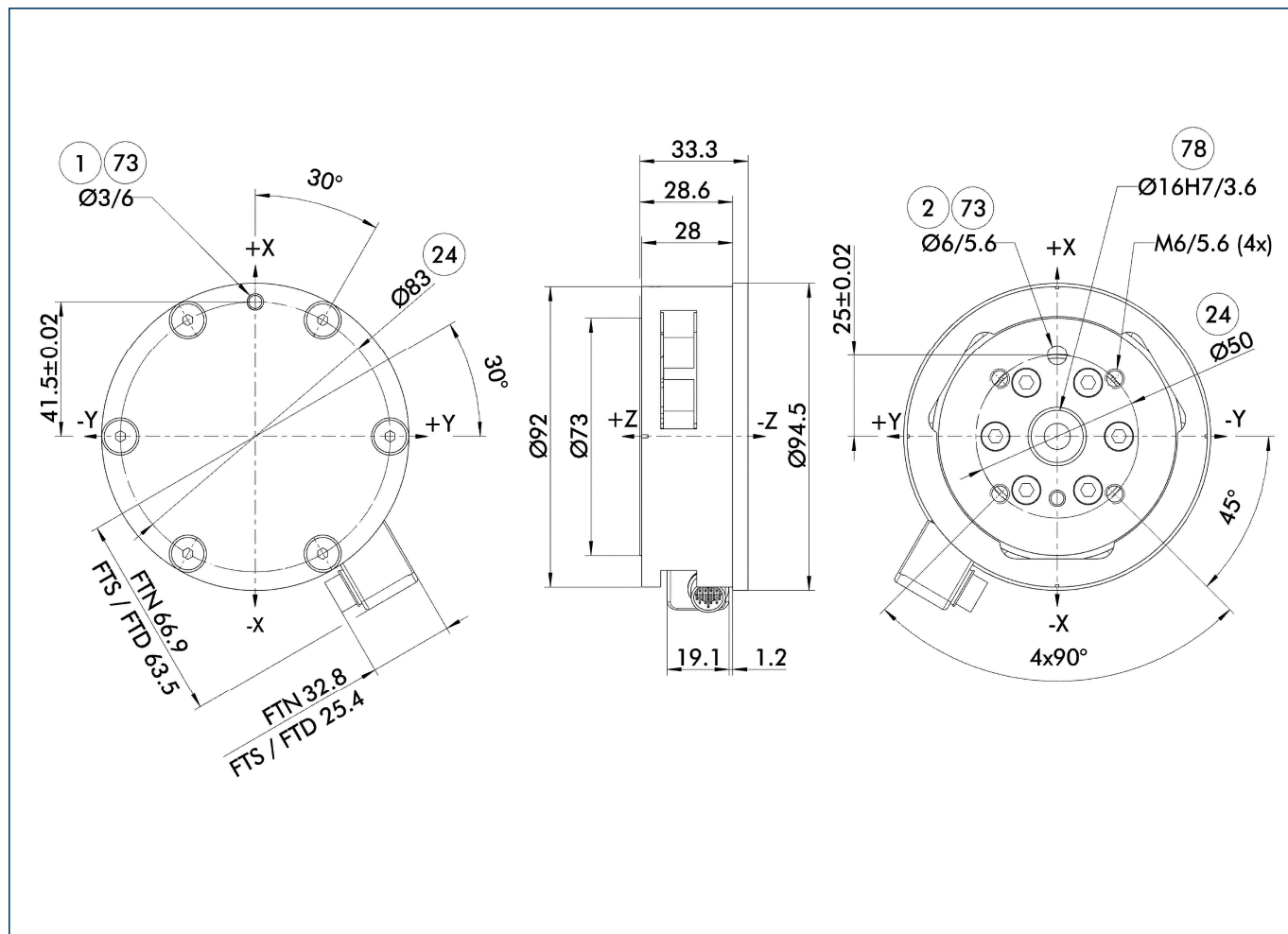


① For load index see technical data table.

Technical data FTN

Description		FTN-Delta	FTN-Delta	FTN-Delta
Calibration		SI-165-15	SI-330-30	SI-660-60
Evaluation via		Ethernet	Ethernet	Ethernet
Weight	[kg]	0.913	0.913	0.913
Measuring range F_x, F_y	[N]	±165	±330	±660
Measuring range F_z	[N]	±495	±990	±1980
Measuring range M_x, M_y	[Nm]	±15	±30	±60
Measuring range M_z	[Nm]	±15	±30	±60
Overload F_x, F_y	[N]	±3700	±3700	±3700
Overload F_z	[N]	±10000	±10000	±10000
Overload M_x, M_y	[Nm]	±280	±280	±280
Overload M_z	[Nm]	±400	±400	±400
Resonant Frequency F_x, F_y, M_z	[Hz]	1500	1500	1500
Resonant Frequency F_z, M_x, M_y	[Hz]	1700	1700	1700
Resolution F_x, F_y	[N]	1/32	1/16	1/8
Resolution F_z	[N]	1/16	1/8	1/4
Resolution M_x, M_y	[Nm]	1/528	5/1333	10/1333
Resolution M_z	[Nm]	1/528	5/1333	10/1333
Technical data deviating from FTD				
Description		FTD-Delta	FTD-Delta	FTD-Delta
Evaluation via		DAQ	DAQ	DAQ
Resolution F_x, F_y	[N]	1/32	1/16	1/8
Resolution F_z	[N]	1/16	1/8	1/4
Resolution M_x, M_y	[Nm]	1/528	5/1333	10/1333
Resolution M_z	[Nm]	1/528	5/1333	10/1333
Technical data deviating from FTS				
Description		FTS-Delta	FTS-Delta	FTS-Delta
Evaluation via		Stand-Alone	Stand-Alone	Stand-Alone
Resolution F_x, F_y	[N]	1/16	1/8	1/4
Resolution F_z	[N]	1/8	1/4	1/2
Resolution M_x, M_y	[Nm]	1/264	10/1333	5/333
Resolution M_z	[Nm]	1/264	10/1333	5/333

Main view



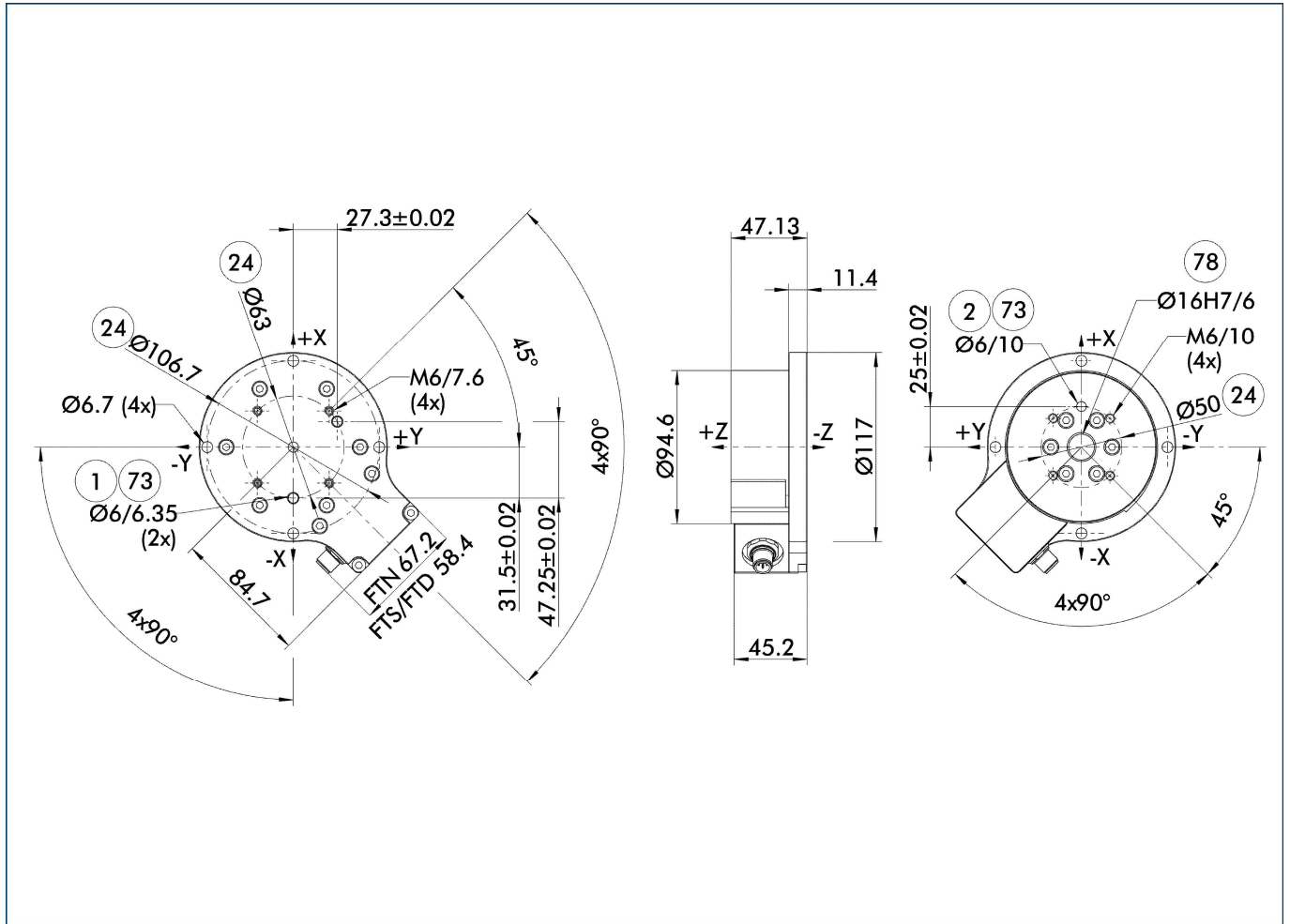
The main view shows the unit in its basic version.

- ① Robot side connection
- ② Tool side connection
- ②④ Bolt circle
- ⑦③ Fit for a centering pin
- ⑦⑧ Fitting for centering

FT Delta

Measuring | Force / Torque Sensor

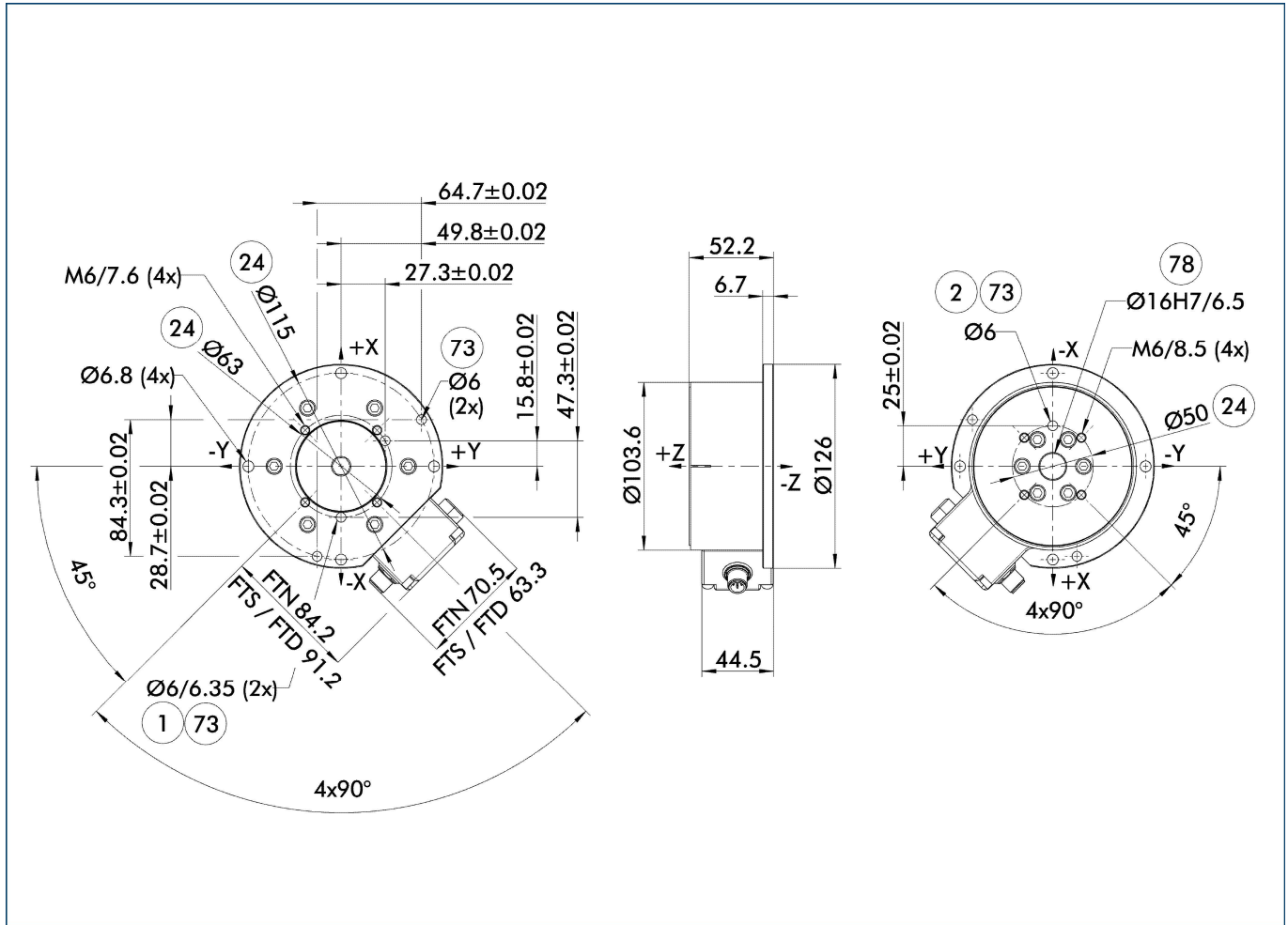
Main view IP60



The main view shows the product with IP-protection.

- ① Robot side connection
- ② Tool side connection
- ②4 Bolt circle
- ⑦3 Fit for a centering pin
- ⑦8 Fitting for centering

Main view IP65



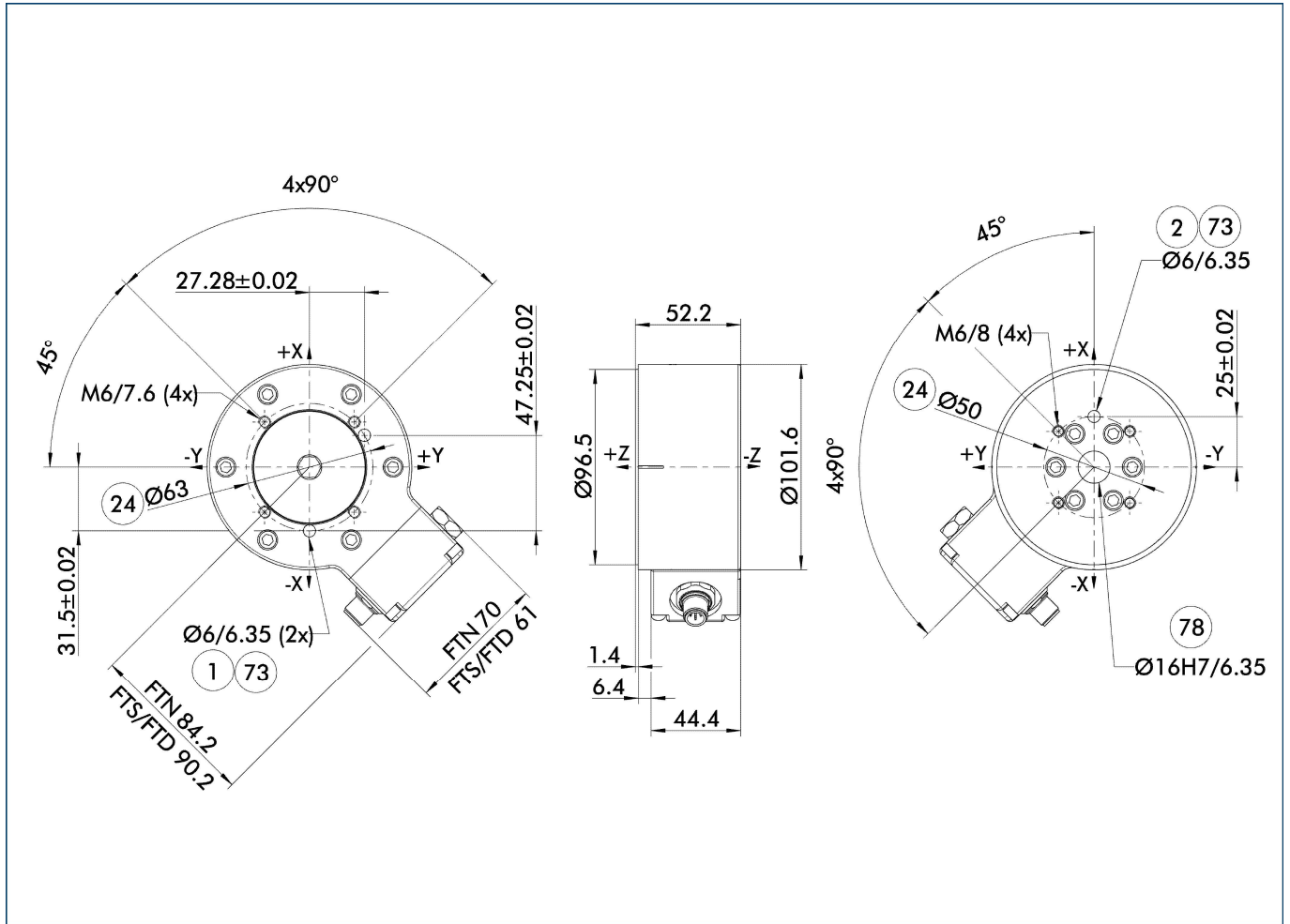
The main view shows the product with IP-protection.

- | | |
|-------------------------|----------------------------|
| ① Robot side connection | ⑦③ Fit for a centering pin |
| ② Tool side connection | ⑦⑧ Fitting for centering |
| ②④ Bolt circle | |

FT Delta

Measuring | Force / Torque Sensor

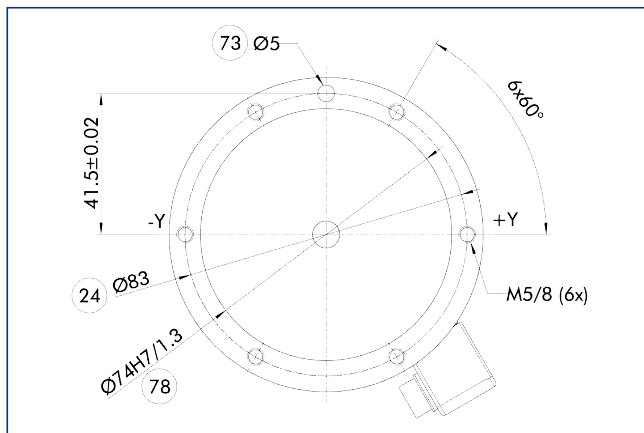
Main view IP68



The main view shows the product with IP-protection.

- ① Robot side connection
- ② Tool side connection
- ④ Bolt circle
- ⑦③ Fit for a centering pin
- ⑦⑧ Fitting for centering

Adapter plate design



- ④ Bolt circle
- ⑦③ Fit for a centering pin
- ⑦⑧ Fitting for centering

The additional view shows the product without cover plate. The adapter plate acts as a cover for the standard version.