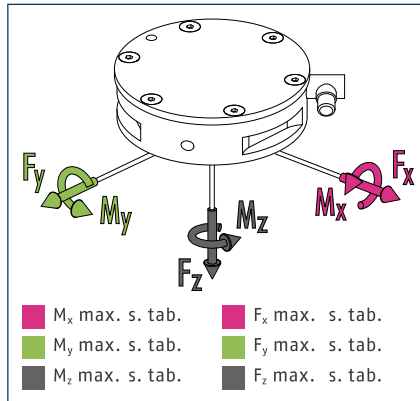


FT Omega160

Measuring | Force / Torque Sensor

Forces and Moments



① For load index see technical data table.

Technical data FTN

Description		FTN-Omega-160	FTN-Omega-160	FTN-Omega-160
Calibration		SI-1000-120	SI-1500-240	SI-2500-400
Evaluation via		Ethernet	Ethernet	Ethernet
Weight	[kg]	2.72	2.72	2.72
Measuring range F_x, F_y	[N]	±1000	±1500	±2500
Measuring range F_z	[N]	±2500	±3750	±6250
Measuring range M_x, M_y	[Nm]	±120	±240	±400
Measuring range M_z	[Nm]	±120	±240	±400
Overload F_x, F_y	[N]	±18000	±18000	±18000
Overload F_z	[N]	±48000	±48000	±48000
Overload M_x, M_y	[Nm]	±1700	±1700	±1700
Overload M_z	[Nm]	±1900	±1900	±1900
Resonant Frequency F_x, F_y, M_z	[Hz]	1300	1300	1300
Resonant Frequency F_z, M_x, M_y	[Hz]	1000	1000	1000
Resolution F_x, F_y	[N]	1/4	1/4	1/2
Resolution F_z	[N]	1/4	1/2	3/4
Resolution M_x, M_y	[Nm]	1/40	1/20	1/20
Resolution M_z	[Nm]	1/80	1/40	1/20

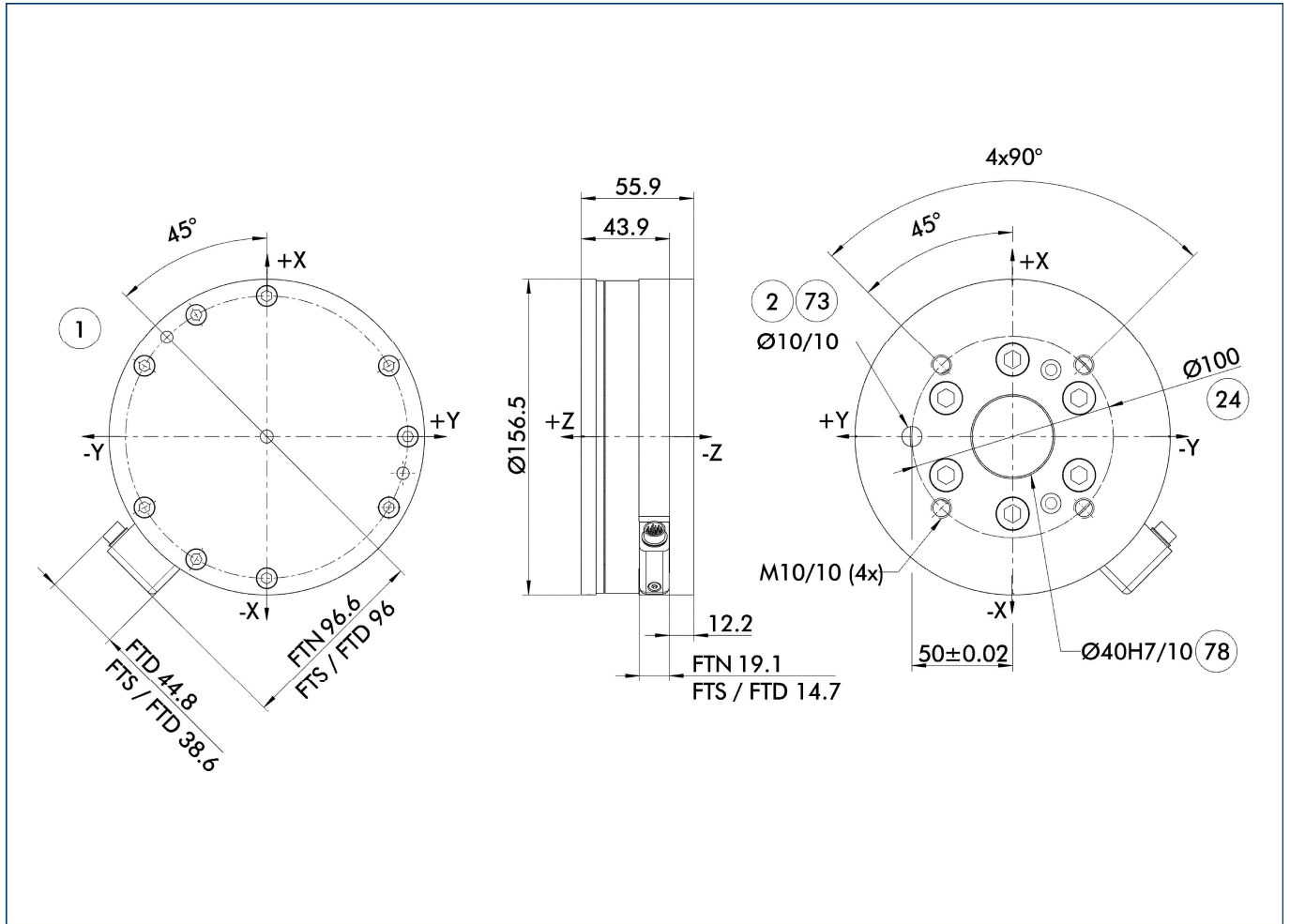
Technical data deviating from FTD

Description		FTD-Omega-160	FTD-Omega-160	FTD-Omega-160
Evaluation via		DAQ	DAQ	DAQ
Resolution F_x, F_y	[N]	1/4	1/4	1/2
Resolution F_z	[N]	1/4	1/2	3/4
Resolution M_x, M_y	[Nm]	1/40	1/20	1/20
Resolution M_z	[Nm]	1/80	1/40	1/20

Technical data deviating from FTS

Description		FTS-Omega-160	FTS-Omega-160	FTS-Omega-160
Evaluation via		Stand-Alone	Stand-Alone	Stand-Alone
Resolution F_x, F_y	[N]	1/2	1/2	1/1
Resolution F_z	[N]	1/2	1/1	3/2
Resolution M_x, M_y	[Nm]	1/20	1/10	1/10
Resolution M_z	[Nm]	1/40	1/20	1/10

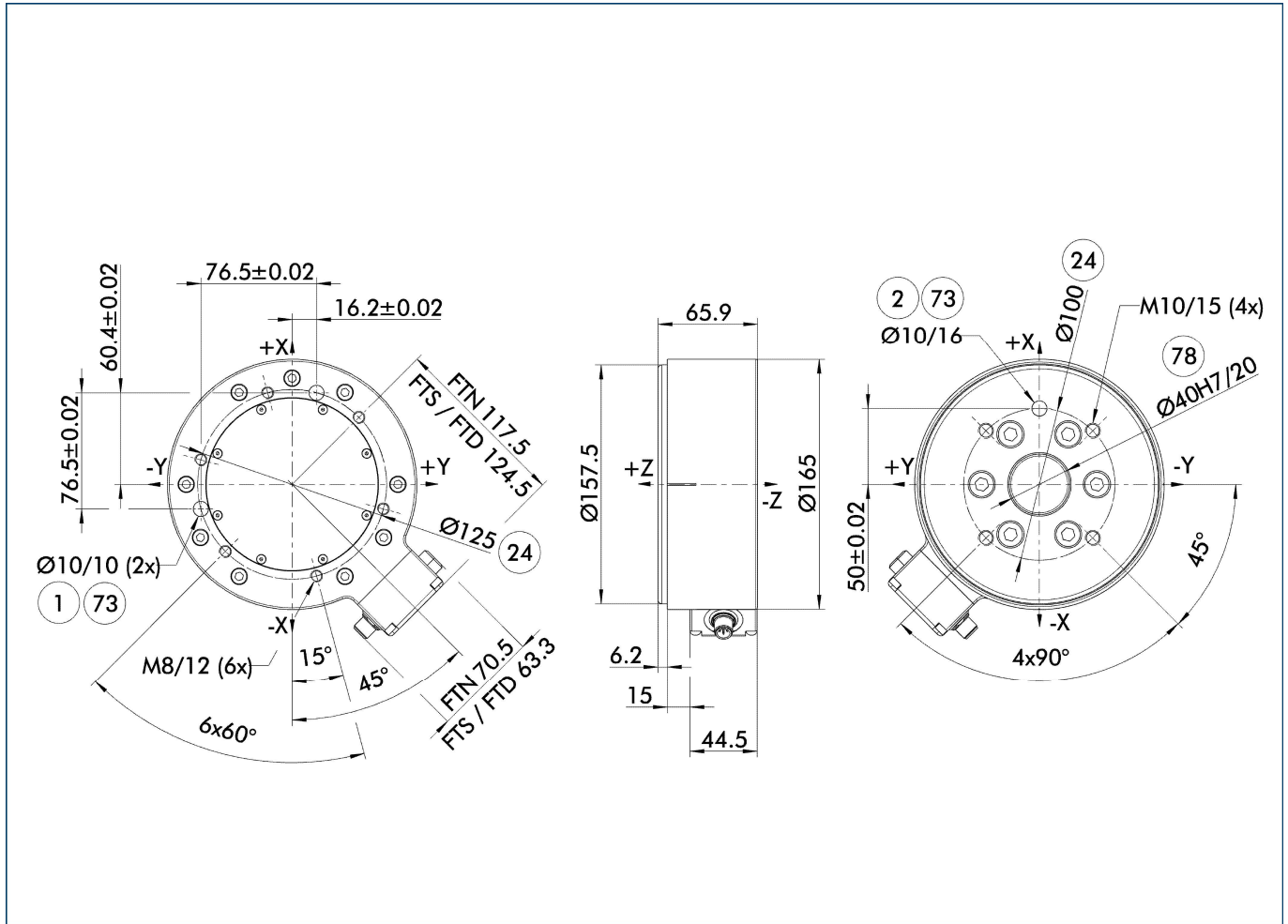
Main view



The main view shows the unit in its basic version.

- ① Robot side connection
- ② Tool side connection
- ③ Fit for a centering pin
- ④ Bolt circle
- ⑤ Fitting for centering

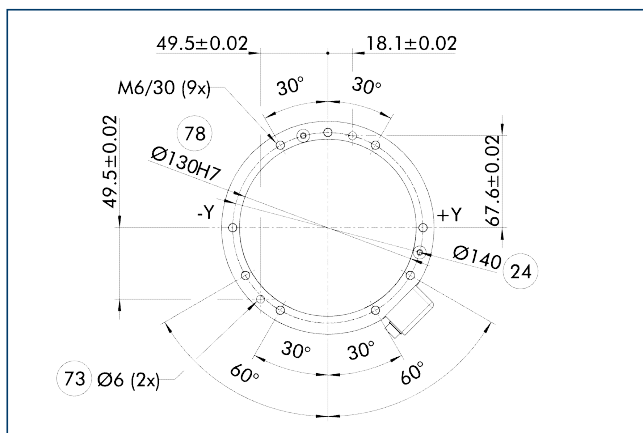
IP65 / IP68 main view



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.