



# FORCE TORQUE SENSOR DESIGNED FOR UNIVERSAL ROBOTS

GIVE YOUR ROBOT THE SENSE OF TOUCH



### AUTOMATE FORCE SENSITIVE TASKS

Reliably perform:

- Precision part insertion
- Assembly and fabrication
- Product testing

### MADE FOR UNIVERSAL ROBOTS

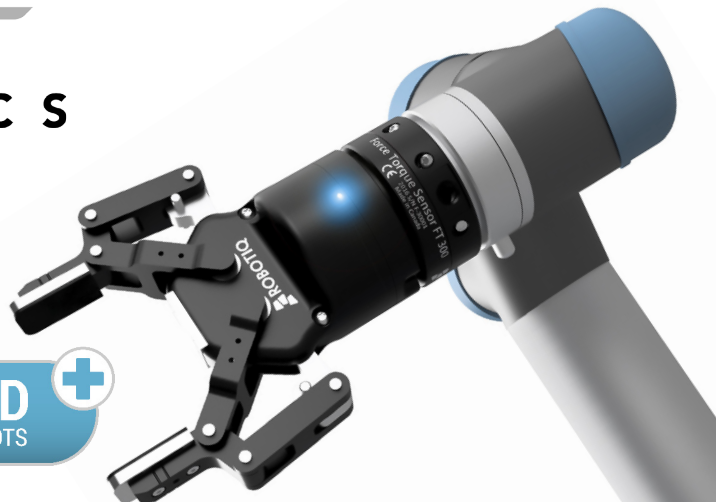
- Quick installation
- Path recording with URcap Force Torque Sensor
- Increased movement precision with ActiveDrive toolbar

### RELIABLE AND STABLE

FT 300 digital signal is not affected by external signal noise

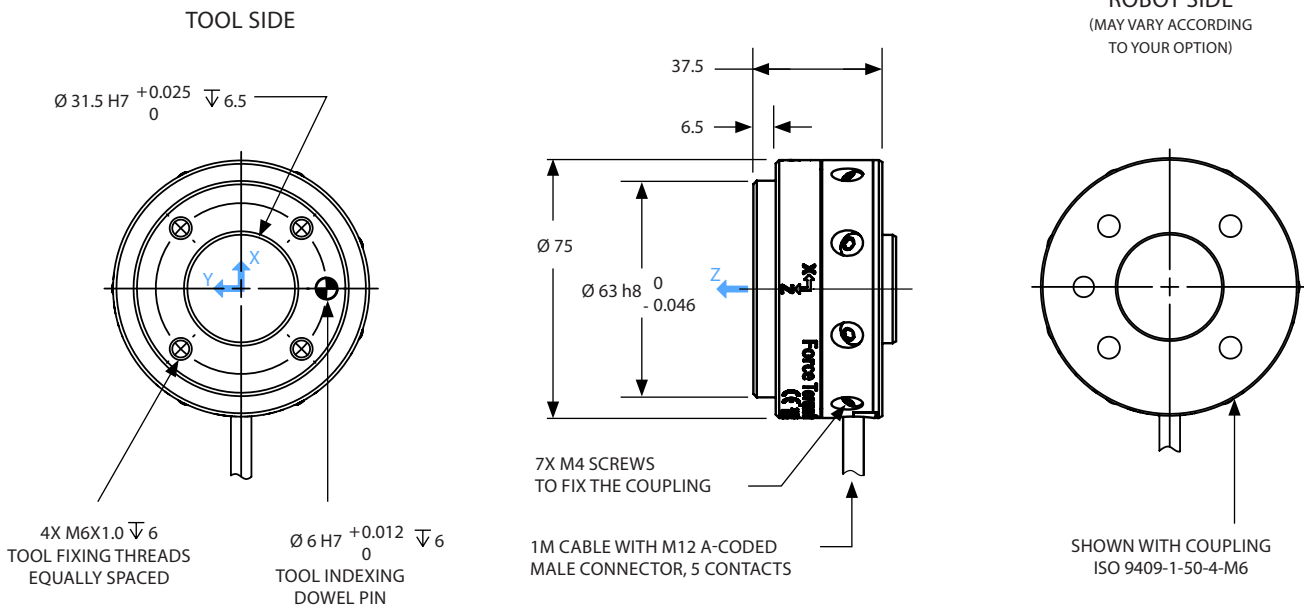


## LEAN ROBOTICS



# TECHNICAL DATA

## FT 300



UNITS: mm

SIGNAL SPECIFICATIONS	F <sub>x</sub> (N)	F <sub>y</sub> (N)	F <sub>z</sub> (N)	M <sub>x</sub> (Nm)	M <sub>y</sub> (Nm)	M <sub>z</sub> (Nm)
Measuring range	±300	±300	±300	±30	±30	±30
Signal noise*	0.1	0.1	0.1	0.005	0.005	0.003
Recommended minimum threshold for contact in robot static state	1	1	1	0.02	0.02	0.01
Recommended minimum threshold for contact during quasi-static motion	For threshold during quasi-static motion, ask your integration coach at support@robotiq.com					
External noise sensitivity**	Immune					
Data output rate	100 Hz					
Temperature compensation***	15°C - 35°C					

\* Signal noise is the standard deviation of the signal measured over a period of one (1) second.

\*\* Under normal operating conditions.

\*\*\* Within this range, the temperature fluctuation is compensated for; signal quality may be affected outside of this range.

### MECHANICAL SPECIFICATIONS

Outside diameter	75 mm
Thickness	37.5 mm
Weight	300 g
Overload capacity	A combined load exceeding 500% of the measuring range will permanently damage the Force Torque Sensor ( $F_x/300 + F_y/300 + F_z/300 + M_x/30 + M_y/30 + M_z/30 < 500\%$ )

### ELECTRICAL SPECIFICATIONS

Nominal supply voltage	4.5-28 V DC
Maximum power consumption	2 W
Electrical interface	RS-485, USB

### SOFTWARE

Sensor software package for Universal Robots available including: ActiveDrive, Path Recording and various Skills functions.

Calibration software available for PC.

Sensor development package available for PC.