ROBOTIQ

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

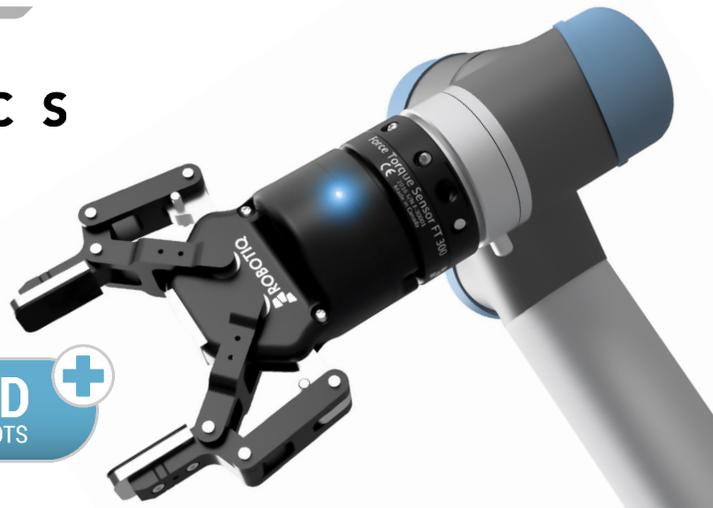### MADE FOR
UNIVERSAL ROBOTS

• Quick installation
• Path recording with URCap
  Force Torque Sensor
• Increased movement precision
  with ActiveDrive toolbar

RELIABLE
AND STABLE

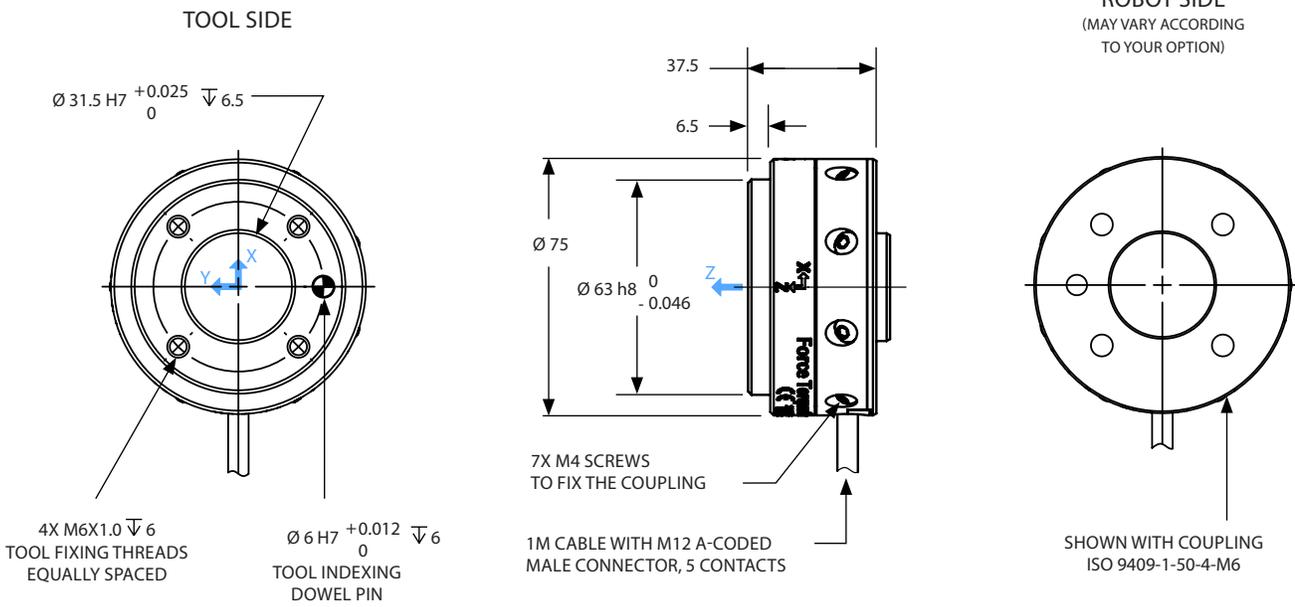FT 300 digital signal
is not affected by external
signal noise

L E A N
R O B O T I C S

CERTIFIED
BY UNIVERSAL ROBOTS

TECHNICAL DATA

FT 300

TOOL SIDE

ROBOT SIDE
(MAY VARY ACCORDING
TO YOUR OPTION)

Ø 31.5 H7 $^{+0.025}_{0}$ ⊽ 6.5

37.5

6.5

Ø 75

Ø 63 h8 $^{0}_{-0.046}$

4X M6X1.0 ⊽ 6
TOOL FIXING THREADS
EQUALLY SPACED

Ø 6 H7 $^{+0.012}_{0}$ ⊽ 6
TOOL INDEXING
DOWEL PIN

7X M4 SCREWS
TO FIX THE COUPLING

1M CABLE WITH M12 A-CODED
MALE CONNECTOR, 5 CONTACTS

SHOWN WITH COUPLING
ISO 9409-1-50-4-M6

UNITS: mm

SIGNAL SPECIFICATIONS	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (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***	15ºC - 35ºC					

* 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 (Fx/300 + Fy/300 + Fz/300 + Mx/30 + My/30 + Mz/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.

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Specifications subject to change without notice