

# THANK YOU FOR CHOOSING ROBOTIQ

This step-by-step guide will allow you to **install** your **FT 300-S Force Torque Sensor** on **Techman Robot**.



## 1. WHAT IS SUPPLIED?

Standard Techman Robot Kit (FTS-300-S-TM-KIT)	
FT 300-S Force Torque Sensor	<a href="#">FTS-300-S-SEN-001</a>
Mechanical Coupling	<a href="#">FTS-300-S-CPL-014</a>
Device cable	<a href="#">CBL-COM-2073-10-HF</a>
USB to RS485 Adapter	<a href="#">ACC-ADT-USB-RS485</a>
RS232 to RS485 Adapter	<a href="#">ACC-ADT-RS232-RS485</a>
Required hardware	



## 2. TOOLS NEEDED



2 mm slotted screwdriver



3 mm hex key



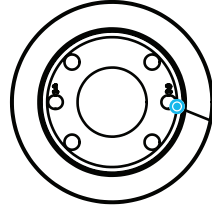
4 mm hex key



## 3. MOUNTING

**i** For easier mounting, move the robot tool flange to make it point upwards.

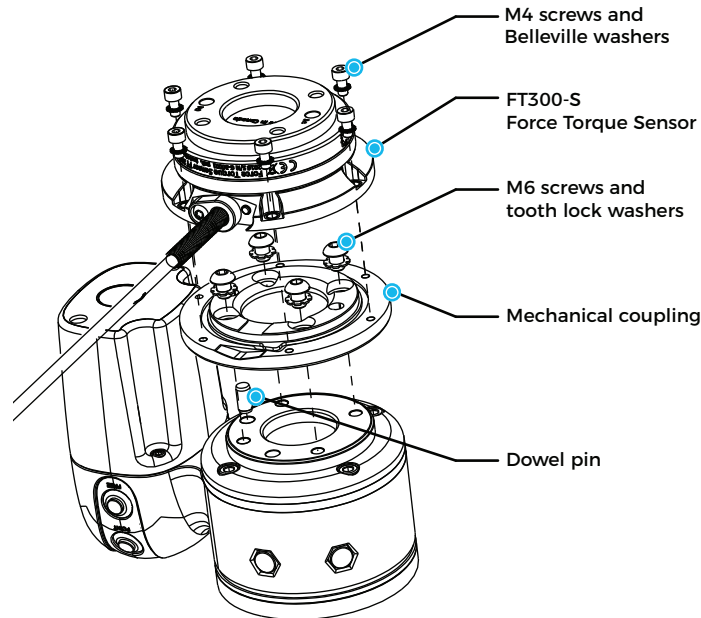
1. **Place** the provided dowel pin in the robot tool flange hole that is near the camera.
2. **Mount** the mechanical coupling on your robot arm. Align marked hole #2 with the dowel pin.



Use hole #2 for Dowel pin  
Use robot tool flange hole near the camera

Bottom view - Mechanical coupling

3. **Secure** by inserting the M6 screws and tooth lock washers
4. **Mount** the Force Torque Sensor on the mechanical coupling.
5. **Secure** by inserting the M4 screws and the Belleville washers (with the convex side upward) in a cross pattern to properly compress the O-ring.
6. **Plug** the device cable into the sensor's pigtail and attach the cable along the robot arm using a cable routing system.



**LEAVE ENOUGH EXCESS CABLE TO ALLOW FULL ROBOT MOVEMENT.**



The Force Torque Sensor must be aligned with the robot arm using the dowel pin. This ensures that the feature will work correctly.



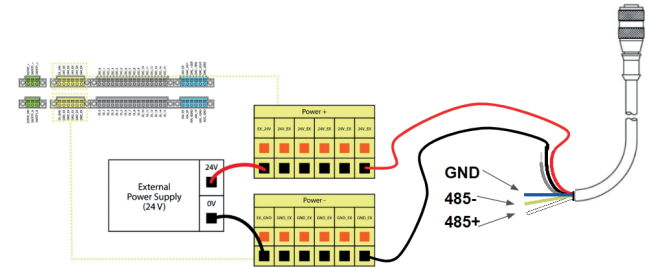
The IP Rating of the FT 300-S Force Torque Sensor is **IP65**. Its is strongly recommended to cover the sensor and the robot when it is used with an application that requires a higher rating.



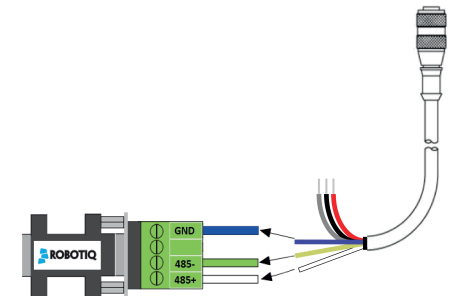
## 4. WIRING

The red (24V) and black (0V) wire of the device cable (CBL-COM-2073-10-HF) provide power to the sensor.

1. **Connect** the red wire to a 24V pin.
2. **Connect** the black wire to a 0V pin.



3. **Connect** the white (1), green (2) and blue (3) wires to the RS232-RS485 adapter (ACC-ADT-RS232-RS485) as shown. **Do not connect** the gray wire.



4. **Connect** the RS232-RS485 adapter to the **TM** controller.



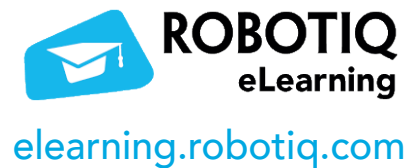
**BEFORE OPERATING THE FORCE SENSOR, PLEASE READ INSTRUCTION MANUAL.**



## FT 300-S FORCE TORQUE SENSOR

### QUICK START GUIDE

For installation on  
Techman Robot



New product has a one (1) year warranty.  
Refer to your product instruction manual for details.

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