Hex-E Quick Changer Force/Torque Sensor – OnRobot

OnRobot's 6-axis force torque sensor provides an accurate force and torque measurement along all 6 axes.

This gives you precise control when it comes to difficult jobs. Additionally, the HEX software includes path recording, force control (on UR and Kuka) and special features for insertion tasks (UR only). This means reduced integration time for your production line. The sensors are designed to fit most of the current industrial robot arms.

Utilizing the included URCap HEX commands, you can teach your robot the exact location, force, and speed of operations such as **insert-loading** and **degating** of larger gates.

Try It Risk Free!

TMPlug&Play CERTIFIED

*Contact us for details

Quick#	Part#	Wt.	Price
8223	OR-102111	347g	$4,342.00

OnRobot pricing effective 05/01/24 and subject to change.

- Plastic applications include degating and insert loading using the advanced control and force feedback.

- Common applications are polishing, sanding, deburring, grinding and assembly, but it can also be used for teach-in and crash detection.

- Unique optical based technology allows for high precision and repeatability.

- Keeps constant force while moving.

- Easy to use interface, no programming skills are needed (UR only).

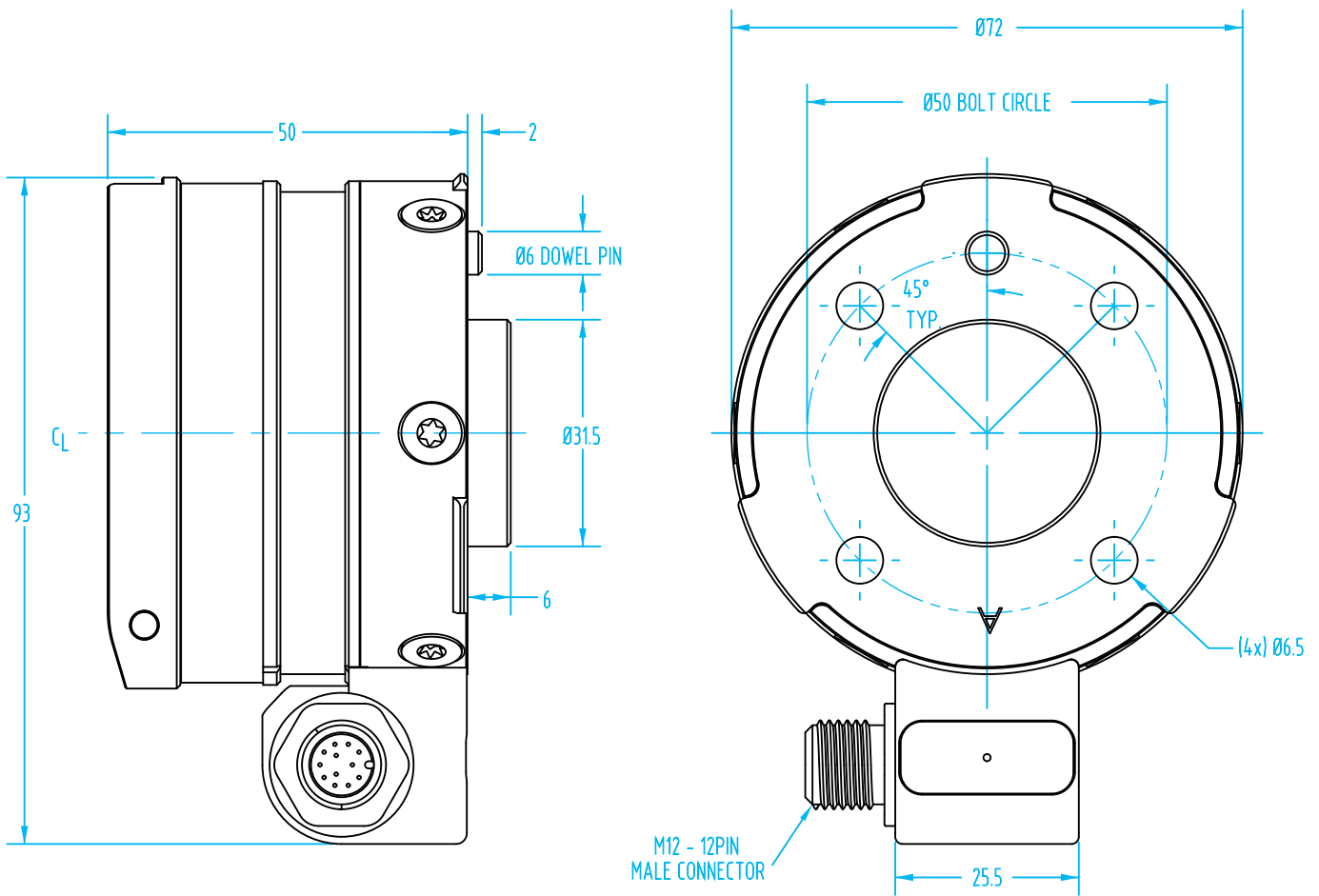- **Requires a Compute Box for all applications and robot models. See page 270.**

Technical Specs	Fx & Fy	Fz	Tx & Ty	Tz
Nominal capacity (N.C.)	200 N	200 N	10 Nm	6.5 Nm
Single axis deformation at N.C. (typical)	±1.7mm	±0.3mm	±2.5mm	±5mm
Single axis overload	500%	500%	500%	500%
Signal noise* (typical)	0.035 N	0.15 N	0.002 Nm	0.001 Nm
Noise-free resolution (typical)	0.2 N	0.8 N	0.01 Nm	0.002 Nm
Full scale nonlinearity	< 2%	< 2%	< 2%	< 2%
Hysteresis (measured on Fz axis, typical)	< 2%	< 2%	< 2%	< 2%
Crosstalk (typical)	< 5%	< 5%	< 5%	< 5%

* Signal noise is defined as the standard deviation (1sigma) of a typical one second no-load signal.

Operating Conditions	
Power supply	7V– 24V
Maximum current consumption	0.8W
Operating temperature	32° – 131°F

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(Dimensioned drawings shown full scale)

50

2

Ø6 DOWEL PIN

C_L

93

Ø31.5

6

Ø72

Ø50 BOLT CIRCLE

45°
TYP

(4x) Ø6.5

M12 – 12PIN
MALE CONNECTOR

25.5

CU

QC

VG

VC

VA

SG

GR

MT

AC

CS

CC

OnRobot HEX Force / Torque Sensor with Gimatic Hot Blade (Q#7286). Degate by teaching your cobot the gate location, force required and part geometry.