

# **FLEXIBLE ROBOT GRIPPERS**

DESIGNED FOR IR



## **UNIVERSAL ROBOTS**

FAST, EASY, PLUG AND PLAY INTEGRATION

#### **ADAPTIVE GRIPPERS**

2-FINGER 85 & 140





#### **EASY INSTALLATION**

**Everything you'll need for** a quick installation from hardware to software.

#### **GET THE MOST OUT OF YOUR ROBOT**

This robot and grippers team thrives on fast set up runs and flexibility.

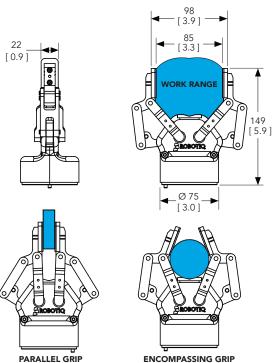
#### **EASY PROGRAMMING**

Ready-made gripper programming templates for Universal Robots.

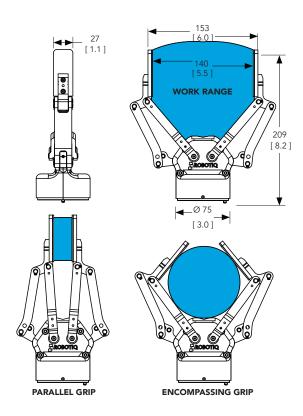




## **2-FINGER 85**



### **2-FINGER 140**



UNITS:	mm
	[ in. ]

MECHANICAL SPECIFICATIONS* 2-FINGER 85		2-FINGER 85 2-FINGER 140		ER 140
Gripper opening (see figure)	0 to 85 mm	0 to 3.3 in	0 to 140 mm	0 to 5.5 in
Object diameter for encompassing grip	43 to 85 mm	1.7 to 3.3 in	90 to 140 mm	3.5 to 5.5 in
Gripper weight with mechanical coupling	900 g	2 lbs	1000 g	2.2 lbs
Maximum recommended payload 0.3 friction coefficient between finger and steel part, safety factor of 2.6	5 kg	11 lbs	2.5 kg	5.5 lbs
Grip force**	5 to 220 N	1.1 to 49.45 lbf	10 to 110 N	2.2 to 24.7 lbf
Closing speed	20 to 150 mm/s	0.8 to 5.9 in/s	30 to 250 mm/s	1.2 to 9.8 in/s
Operating temperature	-10°C to 50°C	14°F to 122°F	-10°C to 50°C	14°F to 122°F
Parallel grip repeatability	0.05 mm	0.002 in	0.08 mm	0.003 in

 $<sup>{}^\</sup>star$  Using Flat Silicone Fingertips for 2-Finger 85 and 2-Finger 140 Adaptive Grippers

#### **CONTROL**

Communication protocol	Modbus RTU (RS-485, Half-duplex)
Communication protocol options with controller	Ethernet/IP, Modbus TCP, PROFINET, DeviceNet, CANopen, EtherCAT
Programmable gripping parameters	Position, speed and force control
Status LED	Power, communication and fault status
Feedback	Grip detection, gripper position and motor current

#### **ELECTRICAL SPECIFICATIONS**

Nominal supply voltage	24 V DC ±10%	robotiq.com fpeautomation.com
Absolute maximum supply voltage	28 V DC	T: 1.418.380.2788 T: 1.847.364.7455
Quiescent power (minimum power consumption)	<1 W	
Peak current	1 A	Updated on November 16, 2015







Specifications subject to change without notice

<sup>\*\*</sup>  $\pm 10\%$ , varies with speed and force parameters