

X7

7-FUNCTION MANIPULATOR

A highly dexterous manipulator for remote intervention in defence and commercial industry operations.



LIGHTWEIGHT & COMPACT

Small footprint for easy integration



RELIABLE PERFORMANCE

Engineered for tough underwater conditions



FIELD SERVICEABLE

Quick maintenance with replaceable components



EASY TO INTEGRATE

Simple mechanical and electrical interfaces

Lift Capacity
3 kg / 6.6 lb

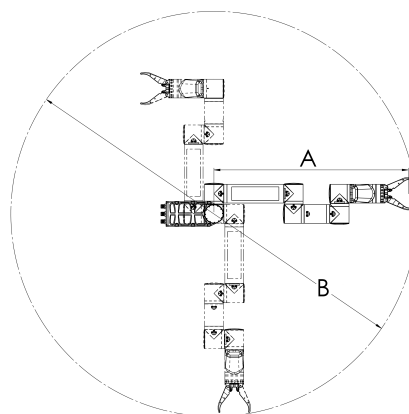
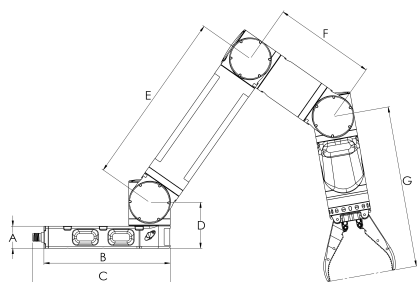
Reach
470 mm / 18.5 in

Functions
7

In-Air Weight
2.9 kg / 6.4 lb

Depth Rating
300 MSW / 980 ft

TECHNICAL DRAWINGS



COMPONENT DIMENSIONS

A	27mm
B	152mm
C	166mm
D	56mm
E	212mm
F	122mm
G	195mm

RANGE OF MOTION

A	Max Reach	516mm
B	Max Envelope	Ø1079mm

END EFFECTOR OPTIONS



CUTTER JAWS
RX-5030



PARALLEL JAWS
RX-5020



STANDARD JAWS
RX-5010

KEY FEATURES

- All-Electric.
- 7-Functions for Dextrous Manipulation.
- Designed and Tested for Harsh Environments.
- Collision Avoidance for Operator Peace of Mind.
- Intuitive User Interface with 3D Visualisation and Telemetry.
- Intelligent End-Effector Control and Collision Aware Path Planning.
- Available with Integrated Wrist Camera.

MOUNTING KITS

Contact us at sales@reachrobotics.com for mounting options.

CONTROLLER OPTIONS

Contact us at sales@reachrobotics.com for control options.

ACCESSORIES



REACH MICRO IP CAMERA

Smallest 300m IP Camera for Underwater Inspection

SPECIFICATIONS	REACH X 7 AIS	REACH X 7	REACH X 5	REACH X 3	REACH X 2	REACH X 5 AIS
Functions	7	7	5	3	2	5
Reach	470 mm / 18.5 in	470 mm / 18.5 in	365 mm / 14.4 in	280 mm / 11.0 in	190 mm / 7.5 in	365 mm / 14.4 in
Wrist Rotation Torque	6 Nm / 53 lb-in	6 Nm / 53 lb-in	6 Nm / 53 lb-in	6 Nm / 53 lb-in	6 Nm / 53 lb-in	6 Nm / 53 lb-in
Wrist Rotation Speed	140° / s	140° / s	140° / s	140° / s	140° / s	140° / s
Grab Speed	3 s	3 s	3 s	3 s	3 s	3 s
Grab Force	25 kg / 55 lb	25 kg / 55 lb	25 kg / 55 lb	25 kg / 55 lb	25 kg / 55 lb	25 kg / 55 lb
Lift Capacity	3 kg / 6.6 lb	3 kg / 6.6 lb	3 kg / 6.6 lb	3 kg / 6.6 lb	N/A	3 kg / 6.6 lb
Weight (Air)	2.9 kg / 6.4 lb	2.9 kg / 6.4 lb	2.3 kg / 5 lb	1.6 kg / 3.5 lb	0.95 kg / 2 lb	2.3 kg / 5 lb
Weight (Water)	1.8 kg / 4 lb	1.8 kg / 4 lb	1.6 kg / 3.5 lb	0.95 kg / 2 lb	0.73 kg / 1.6 lb	1.6 kg / 3.5 lb
Outer Diameter	50 mm / 2 in	50 mm / 2 in	50 mm / 2 in	50 mm / 2 in	50 mm / 2 in	50 mm / 2 in
Connector Cable	Teledyne 6 Pin IE55 Impulse Cable	Teledyne 6 Pin IE55 Impulse Cable	Teledyne 6 Pin IE55 Impulse Cable	Teledyne 6 Pin IE55 Impulse Cable	Teledyne 6 Pin IE55 Impulse Cable	Teledyne 6 Pin IE55 Impulse Cable
Control Modes	Position, Velocity, Cartesian Velocity (X, Y, Z, R, P, Y)	Position, Velocity, Cartesian Velocity (X, Y, Z, R, P, Y)	Position, Velocity, Cartesian Velocity (X, Y, Z)	Position, Velocity	Position, Velocity	Position, Velocity, Cartesian Velocity (X, Y, Z, R, P, Y)
Voltage	24 - 30V	24 - 30V	24 - 30 V	24 - 30 V	24 - 30 V	24 - 30V
Power (Nominal)	360 W	180 W	120 W	90 W	60 W	240 W
COMS	Ethernet	Serial (232 / 485) AND Ethernet	Serial (232 / 485) OR Ethernet	Serial (232 / 485) OR Ethernet	Serial (232 / 485) OR Ethernet	Ethernet
Rated Depth	300 MSW / 980 ft	300 MSW / 980 ft	300 MSW / 980 ft	300 MSW / 980 ft	300 MSW / 980 ft	300 MSW / 980 ft
Rated Temp	5 - 30 °C / 41 - 86 °F (water)	5 - 30 °C / 41 - 86 °F (water)	5 - 30 °C / 41 - 86 °F (water)	5 - 30 °C / 41 - 86 °F (water)	5 - 30 °C / 41 - 86 °F (water)	5 - 30 °C / 41 - 86 °F (water)
Storage Temp	-10 - 80 °C / 14 - 176 °F (air)	-10 - 80 °C / 14 - 176 °F (air)	-10 - 80 °C / 14 - 176 °F (air)	-10 - 80 °C / 14 - 176 °F (air)	-10 - 80 °C / 14 - 176 °F (air)	-10 - 80 °C / 14 - 176 °F (air)