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scan the QR code below
for further information
about the qb SoftHand

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qb SoftHand RESEARCH

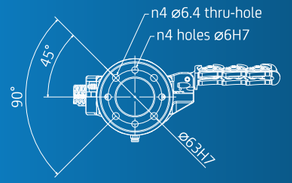
datasheet

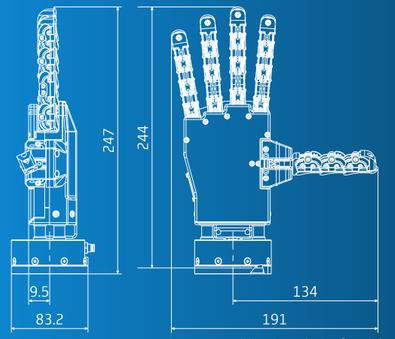
technical data

qb SoftHand RESEARCH

june 2024, release 2.1.0

DRAWINGS





units are in millimeters (out of scale)

MECHANICAL	UNIT	NOMINAL	MIN	MAX
weight	[kg]	0.77	—	—
joints	[#]	19	—	—
motor	[#]	1	—	—
power grasp payload	[kg]	—	—	2.1
pinch grasp payload	[kg]	—	—	1.1
hanging payload	[kg]	—	—	5.0
full closing time	[s]	—	—	1.1

INERTIAL [1]	UNIT	X	Y	Z
center of mass, open	[mm]	2.7	82.9	-0.5
center of mass, closed	[mm]	1.3	76.6	3.5

[1] For left hand, "x" has same values but opposite in sign

RESILIENCE	UNIT	1-FINGER	4-FINGER	5-FINGER
impact energy	[J]	98	98	19
impact speed	[m/s]	4.7	4.7	—
impact force	[N]	—	—	200

ENVIRONMENTAL	UNIT	NOMINAL	MIN	MAX
operating temperature	[°C]	20	-5	40
storage temperature	[°C]	—	-20	50
noise level	[dB]	50	—	—

ELECTRICAL	UNIT	NOMINAL	MIN	MAX
operating voltage	[V]	24	23.1	24.8
power consumption	[W]	18	1.4	30

CONTROL

communication protocol: RS485

FEATURES

- plug-and-play
- ROS & ROS 2 packages
- soft, human-like fingers
- right and left versions

NORMATIVE COMPLIANCE

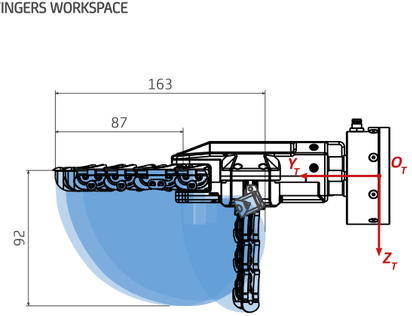
ISO 9409-1-50-4-M6

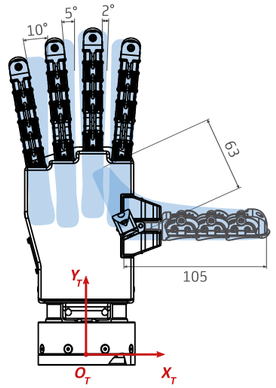
Visit the product page for robot compatibility

additional technical data

The Seller grants the conformity of the product. A slight — non essential approximation of the technical characteristics of the Product as represented in Seller's catalogues, price lists, advertisements or any other publications shall not be considered as lack of conformity.

FINGERS WORKSPACE





Tool Coordinate System Σ_T (O_T; X_T, Y_T, Z_T) of the SoftHand.
The center O_T, coincides with O_M define by ISO 9787:2013

KINEMATICS

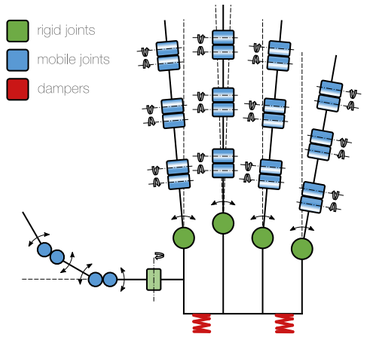
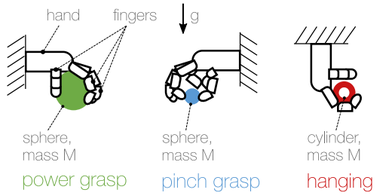


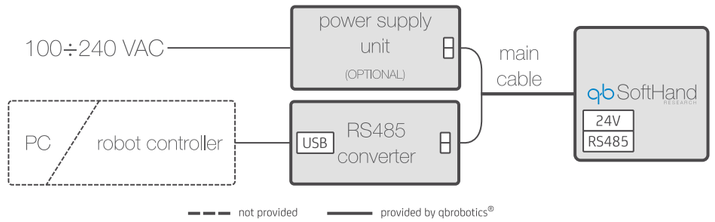
CHART NOTES

- shapes diameters: 15-30-45-60-75-90 [mm]
- cylinder length: 150 [mm]
- friction factor: 0,8±0,1 [1]

[1] hand rubber glove vs ABS plastics

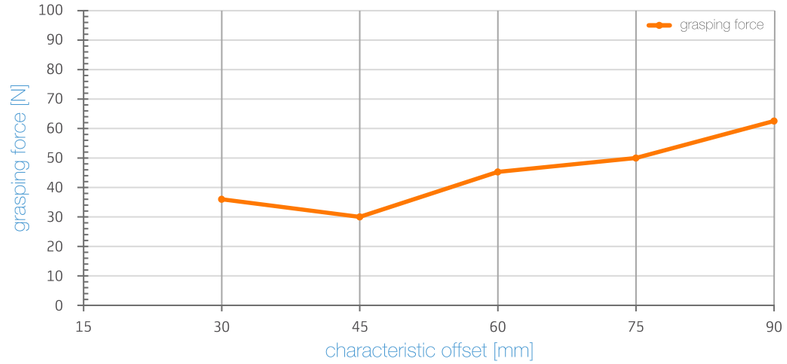


ELECTRICAL CONNECTIONS

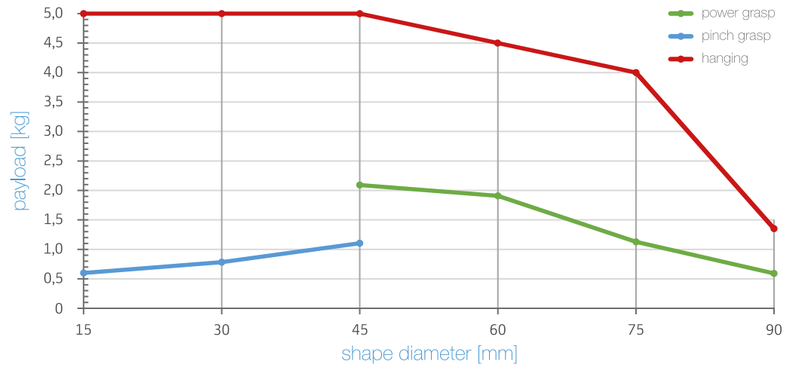


MAXIMUM GRASPING FORCE CHART *

* tests have been carried out using Commander Echo grip tester CM306



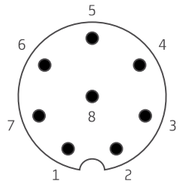
MAXIMUM PAYLOAD CHART



OTHER AVAILABLE INTERFACES

ISO 9409-1-31.5-4-M5	
ISO 9409-1-40-4-M6	
SCHUNK SWS-007	tool changer
SCHUNK SWS-011	tool changer
KINOVA GEN 3	

M8 CONNECTOR PIN-OUT



#	WIRE COLOR	PURPOSE
1	white	RS485 +
2	brown	RS485 -
3	green	—
4	yellow	Digital output
5	grey	24V DC
6	pink	—
7	blue	—
8	red	GND