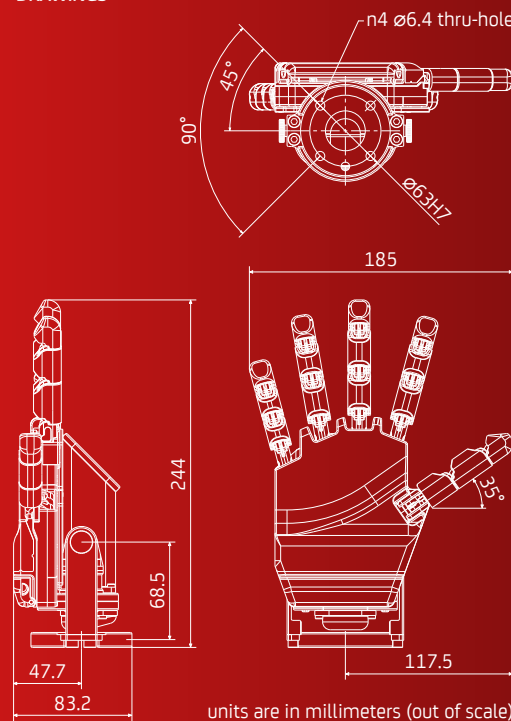




DRAWINGS



technical data

MECHANICAL	UNIT	NOMINAL	MIN	MAX
weight	[kg]	0.99	—	—
wrist mounting range	[deg]	—	0	90
wrist mounting resolution	[deg]	7.5	—	—
power grasp payload	[kg]	—	—	2.0
pinch grasp payload	[kg]	—	—	0.6
hanging payload	[kg]	—	—	5.0
full closing time	[s]	—	—	1.2

INERTIAL <sup>1</sup>	UNIT	X	Y	Z
center of mass, open	[mm]	2.4	80.5	14.3
center of mass, closed	[mm]	1.1	75.3	17.5

<sup>1</sup> all values refer to the right version, mirrors the x value for the left one

ENVIRONMENTAL	UNIT	NOMINAL	MIN	MAX
operating temperature	[°C]	20	-5	50
storage temperature	[°C]	—	-20	50
noise level	[dB]	52	40	61

ELECTRICAL	UNIT	NOMINAL	MIN	MAX
operating voltage	[V]	24	12	50
power consumption	[W]	13	3	15

CONTROL

communication protocols: EtherCAT, UDP, Digital I/Os

FEATURES

- plug-and-play <sup>2</sup>
- soft, human-like fingers
- right and left versions
- adjustable wrist mounting position
- splash, water, and dust resistance: IP65
- interchangeable gloves for special applications

<sup>2</sup> external driver for best integration

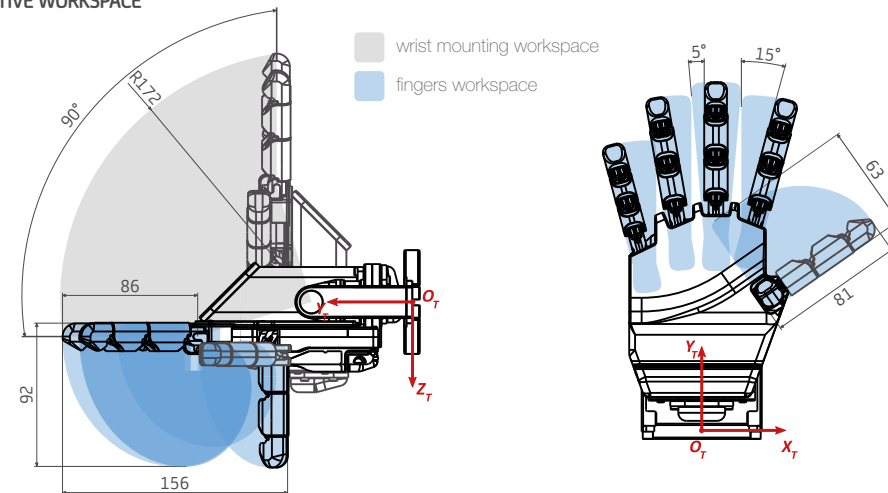
NORMATIVE COMPLIANCE

ISO 12100	ISO 9409-1-50-4-M6
ISO/TS 15066	ISO/TR 20218-1
ISO 13849-1/-2	IEC 60529
ISO 10218-1/-2	IEC 61000-6-2/-6-4



additional technical data

OPERATIVE WORKSPACE



KINEMATICS

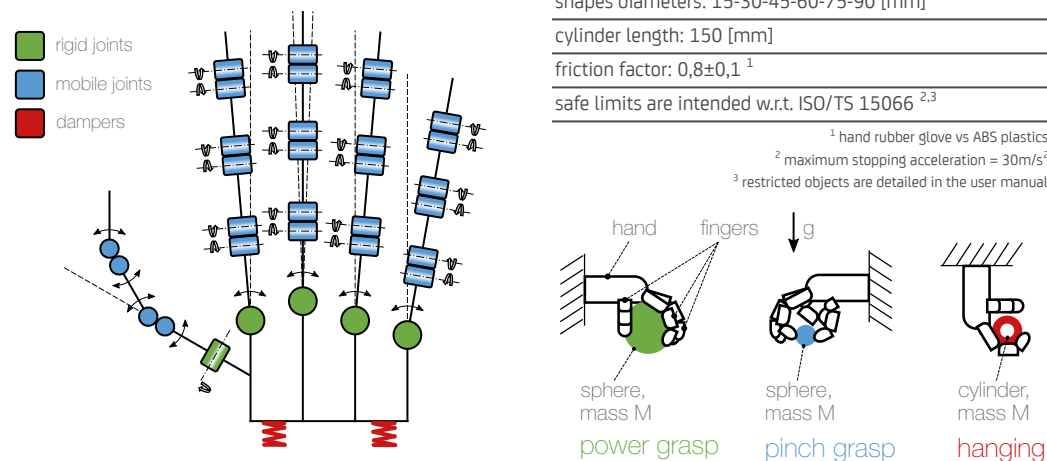


CHART NOTES

- shapes diameters: 15-30-45-60-75-90 [mm]
- cylinder length: 150 [mm]
- friction factor:  $0,8 \pm 0,1$  <sup>1</sup>
- safe limits are intended w.r.t. ISO/TS 15066 <sup>2,3</sup>

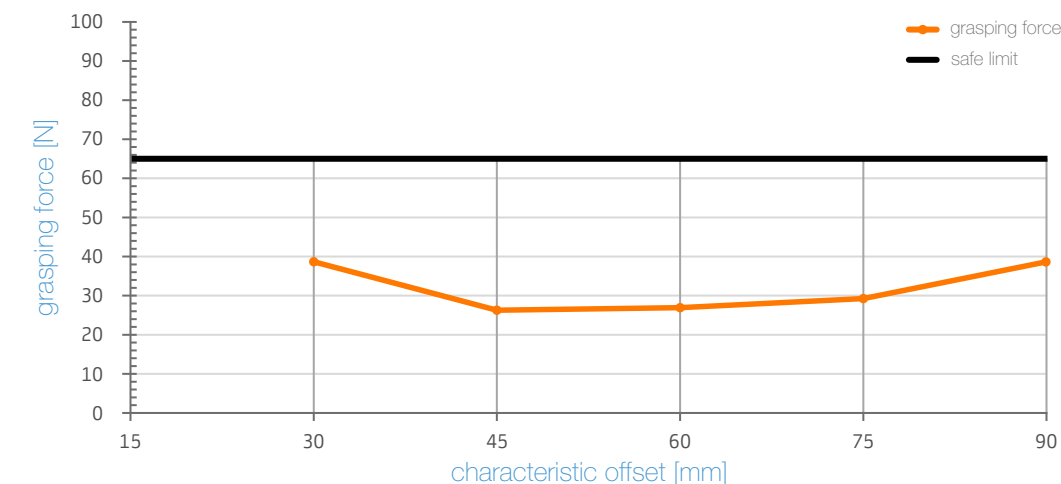
<sup>1</sup> hand rubber glove vs ABS plastics

<sup>2</sup> maximum stopping acceleration =  $30m/s^2$

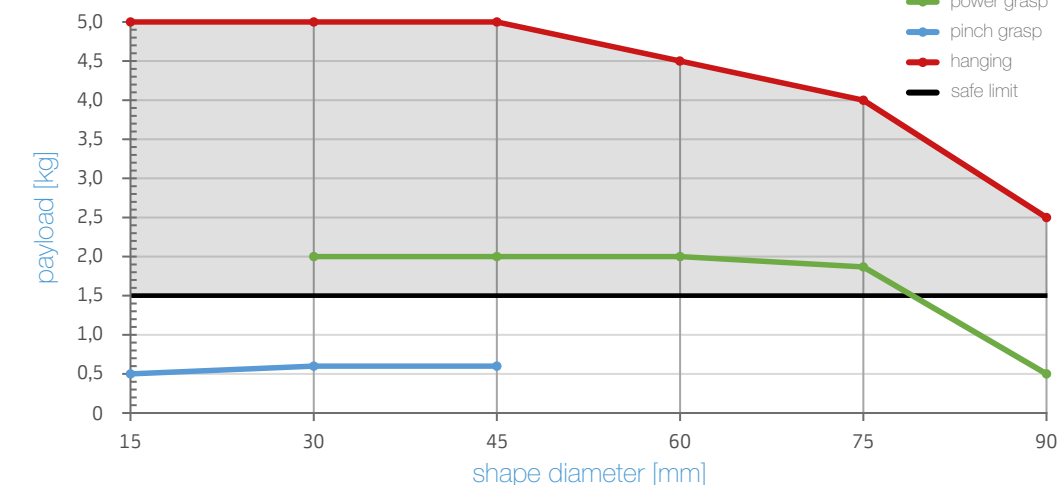
<sup>3</sup> restricted objects are detailed in the user manual

MAXIMUM GRASPING FORCE CHART \*

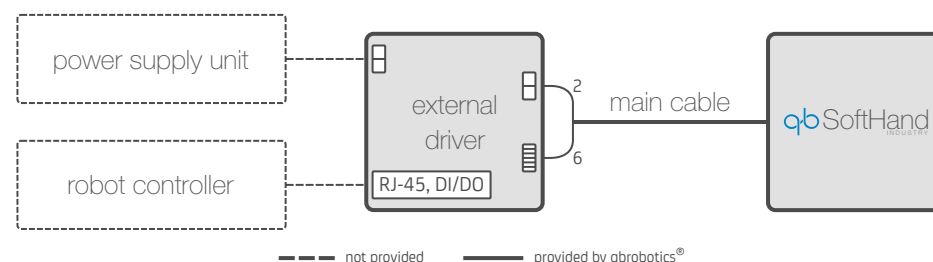
\* tests have been carried out using Commander Echo grip tester CM306



MAXIMUM PAYLOAD CHART



ELECTRICAL CONNECTIONS



--- not provided — provided by qrobotics®

CONNECTOR PIN-OUT

