technical data

january 2020, release 1.1.0

n4 ø6.4 thru-hole

units are in millimeters (out of scale)

96 SoftHand

DRAWINGS

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 1	UNIT	Х	Υ	Z
center of mass, open	[mm]	2.4	80.5	14.3
center of mass, closed	[mm]	1.1	75.3	17.5
1				

UNIT	NOMINAL	MIN	MAX
[°C]	20	-5	50
[°C]	_	-20	50
[dB]	52	40	61
	[°C]	[°C] 20 [°C] —	[°C] 20 -5 [°C] — -20

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

soft, human-like fingers

right and left versions

adjustable wrist mounting position

splash, water, and dust resistance: IP65

interchangeable gloves for special applications

external driver for best integration

NORMATIVE COMPLIANCE

ISO 12100

ISO/TS 15066 ISO 13849-1/-2

ISO 10218-1/-2

ISO 9409-1-50-4-M6 IEC 60529





OPERATIVE WORKSPACE wrist mounting workspace fingers workspace

additional technical data

156

power supply unit

robot controller

KINEMATICS

shapes diameters: 15-30-45-60-75-90 [mm] cylinder length: 150 [mm] friction factor: 0,8±0,1 1 safe limits are intended w.r.t. ISO/TS 15066 ^{2,3} ¹ hand rubber glove vs ABS plastics ² maximum stopping acceleration = 30m/s² ³ restricted objects are detailed in the user manual sphere. sphere, cylinder,

mass M

external

driver

— — not provided — — provided by qbrobotics[®]

RJ-45, DI/DO

power grasp

main cable

mass M

pinch grasp

obSoftHand

mass M

hanging

CHART NOTES

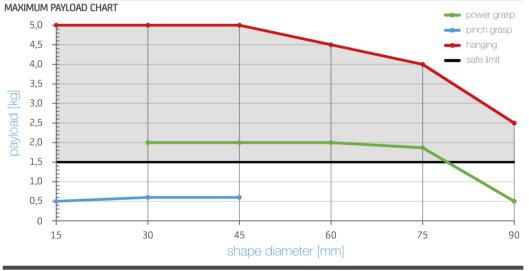
80 70 60 50 40 30 20 10 30 45 75 characteristic offset [mm]

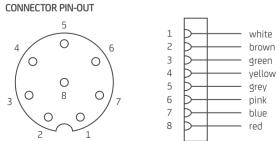
The Seller grants the conformity of the product. A slight — non essential approximation of the technical characteristics of the Product as represented in Seller's catalogues, price lists, advertisements or any other publications shall not be considered as lack of conformity.

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

- grasping force

- safe limit





MAXIMUM GRASPING FORCE CHART *

100

90

#	WIRE COLOR	PURPOSE
1	white	SSI 5 VDC
2	brown	SSI GND
3	green	SSI clock +
4	yellow	SSI clock -
5	grey	SSI data +
6	pink	SSI data -
7	blue	motor phase 1
8	red	motor phase 2

ELECTRICAL CONNECTIONS

ISO/TR 20218-1

IEC 61000-6-2/-6-4



