



# DATASHEET

LIFT100

v1.2

# 1. Datasheet

## 1.1. Lift100

| General Properties                               |                                | Minimum              | Typical  | Maximum              | Unit                   |
|--|--------------------------------|----------------------|----------|----------------------|------------------------|
| Allowed torque between the Lift100 and the robot | Static (Lift100 is not moving) | -                    | -        | 3400                 | [Nm]                   |
|  | Dynamic (Lift100 is moving)    | -                    | -        | 1900                 | [Nm]                   |
| Payload  |                                | 0                    | -        | 100                  | [kg]                   |
|  |                                | 0                    | -        | 220                  | [lb]                   |
| Height above floor                               |                                | 730                  | -        | 1630                 | [mm]                   |
|  |                                | 28.74                | -        | 64.17                | [inch]                 |
| Stroke of the Lift100                            |                                | 0                    | -        | 900                  | [mm]                   |
|  |                                | 0                    | -        | 35.43                | [inch]                 |
| Lift100 speed                                    |                                | 10                   | -        | 100                  | [mm/s]                 |
|  |                                | 0.34                 | -        | 3.39                 | [in/s]                 |
| Positioning accuracy *                           |                                | -                    | +/- 3    | -                    | [mm]                   |
|  |                                | -                    | +/- 0.12 | -                    | [inch]                 |
| Positioning repeatability *                      |                                | -                    | +/- 0.5  | -                    | [mm]                   |
|  |                                | -                    | +/- 0.02 | -                    | [inch]                 |
| Noise level **                                   |                                | -                    | -        | 75                   | [dB(A)] <sub>Leq</sub> |
|  |                                | -                    | -        | 78                   | [dB(A)] <sub>Max</sub> |
| Duty cycle ***                                   |                                | 0                    | -        | 100                  | [%]                    |
| Weight   |                                | 86                   |          |                      | [kg]                   |
|  |                                | 189.6                |          |                      | [lb]                   |
| Dimensions [L x W x D]                           |                                | 730 x 325 x 492      | -        | 1630 x 325 x 492     | [mm]                   |
|  |                                | 28.74 x 12.8 x 19.37 | -        | 64.17 x 12.8 x 19.37 | [inch]                 |
| Storage temperature                              |                                | 0                    | -        | 60                   | [°C]                   |
|  |                                | 32                   | -        | 140                  | [°F]                   |
| IP Classification                                |                                | IP54                 |          |                      |                        |

\* Along the driven axis.

\*\* For more information, see the [Noise level](#) section.

\*\*\* For more information on the duty cycle, see the [Duty Cycle](#) section.

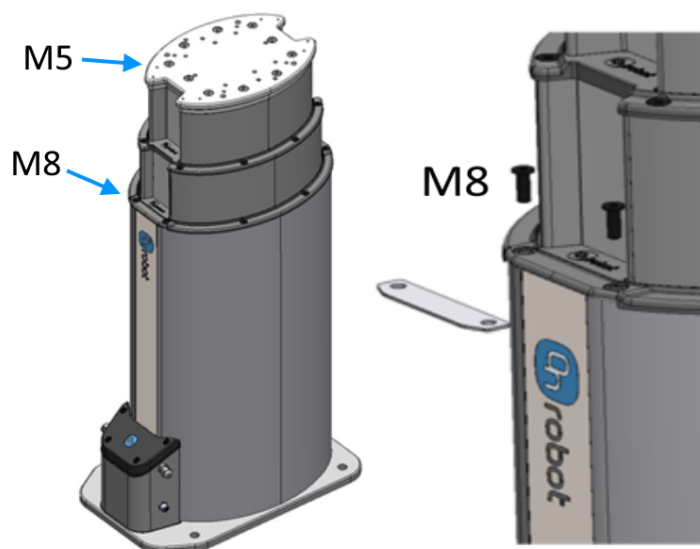
| Operating Conditions | Minimum | Typical | Maximum | Unit |
|----------------------|---------|---------|---------|------|
| Power supply         | 90      | -       | 264     | [V]  |
| Current consumption  | 0       | -       | 10.2    | [A]  |

| Operating Conditions               | Minimum   | Typical | Maximum   | Unit         |
|------------------------------------|-----------|---------|-----------|--------------|
| Frequency                          | 47        | -       | 63        | [Hz]         |
| Operating temperature              | 0<br>32   | -<br>-  | 50<br>122 | [°C]<br>[°F] |
| Relative humidity (non-condensing) | 0         | -       | 95        | [%]          |
| Calculated operation life *        | 1 000 000 | -       | -         | [cycles]     |
| Calculated lifetime *              | -         | 10      | -         | [years]      |
| Duty cycle at speed < 70 mm/s *    | 100       | -       | -         | [%]          |
| Duty cycle at speed > 70 mm/s *    | 90        | -       | -         | [%]          |

\* When used in typical palletizing applications, used in two shifts per day and five days per week.

### Interface for Mounting an Energy Chain

The Lift100 has been designed with a mechanical interface to mount an energy chain. The brackets for the energy chain can be mounted on the screw holes M5 and M8 shown below. For the bottom holes (M8), the plate can be removed to install the energy chain bracket.



### Noise Level

The noise level of the Lift100 depends on the speed and the stroke position. Higher speed and stroke increase the noise. The noise level also depends on the surroundings and other equipment.

To measure the Lift100's noise level, a test has been carried out by an external company.

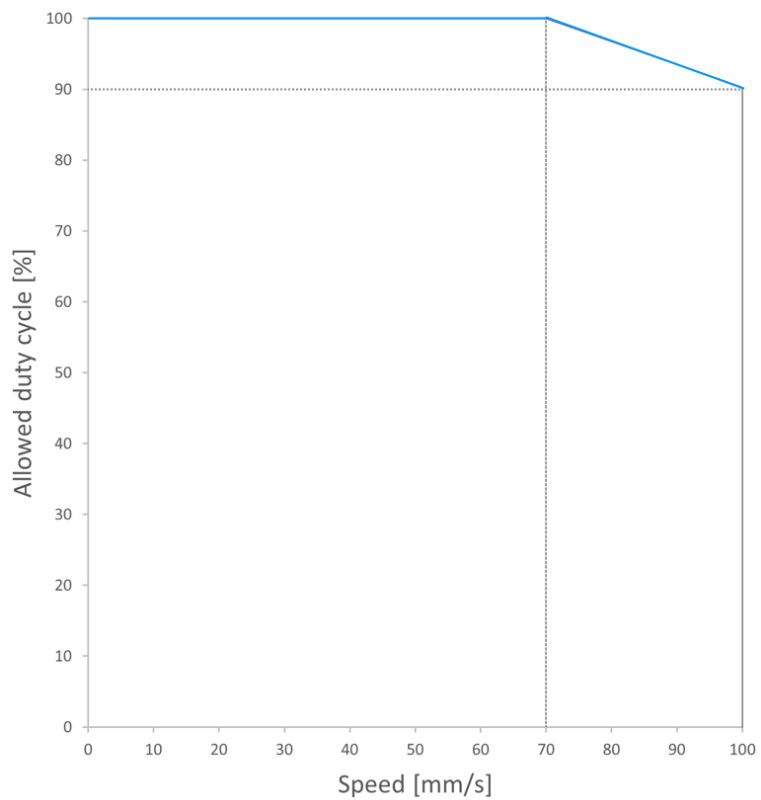
The test setup was the following:

- The test took place in a normal indoor production area.
- The Lift100 was bolted to the floor and had a 74 kg robot mounted.
- The test ran 4 cycles, full stroke up and down, 100 % speed and with no pause in between the cycles.

- The noise measurement equipment was located in 2 m distance away from the Lift100. The test concludes that the average measured noise level was 75 dB(A)<sub>Leq</sub> and the maximum noise level was 78 dB(A)<sub>Max</sub> which is below the maximum allowed noise level of (80 dB(A)). The Lift100 will run about 5-15 % of the time in a normal palletizing application, which means that the average noise level will decrease significantly.

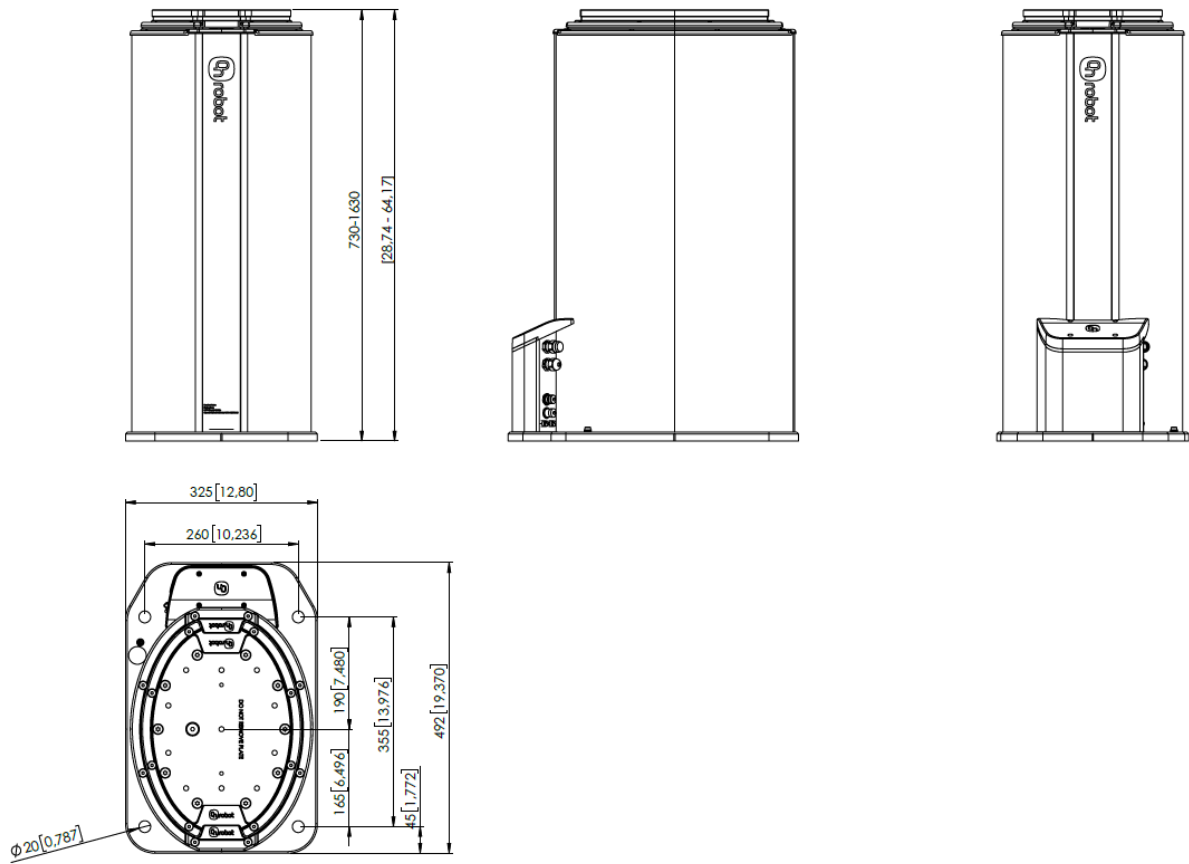
### Duty Cycle

When the speed is above 70 mm/s, it is allowed to run continuously for maximum 10 minutes followed by a pause of 70 seconds (90 % duty cycle).



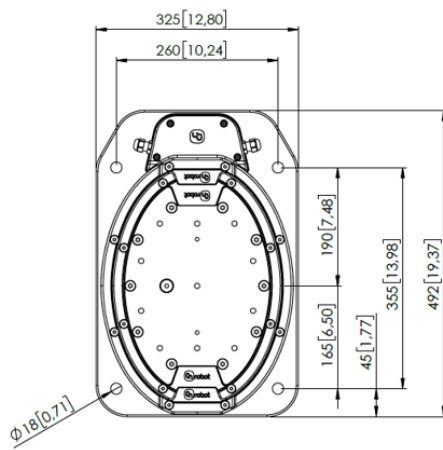
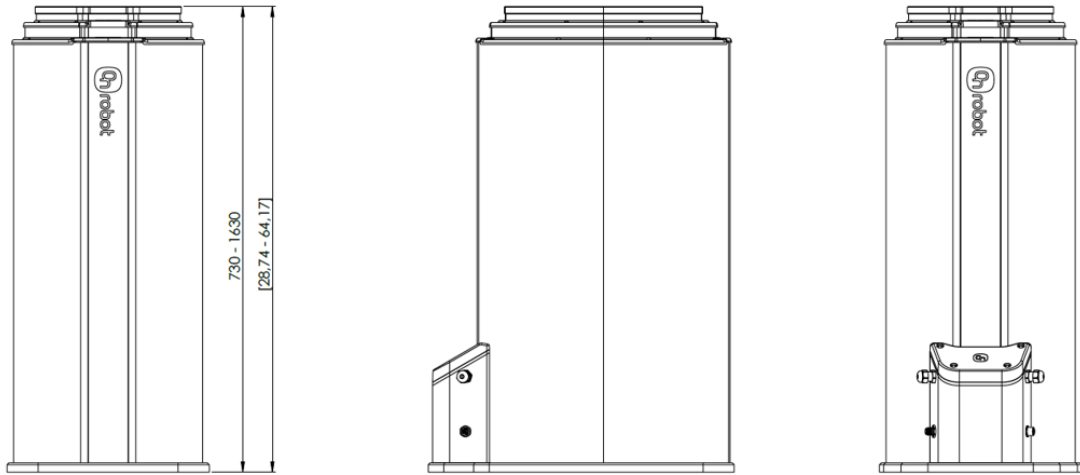
## 1.2. Lift100

### Lift100 v2



All dimensions are in mm and [inches].

Lift100 v1



All dimensions are in mm and [inches].