

Pick- and place units

AAE manufactures a high tech pick- and place unit utilising our combined know-how and experience in mechatronics. These High Speed Dual Handlers (HSDH) distinguish themselves in the market thanks to a number of unique properties:

- Low moving mass resulting in fast movements and reduced cycle times.
- The forces of the rotating movements and the forces of the vertical stroke do not interfere with each other. This leads to lower stress loads and therefore improved durability and reliability.
- Both vertical strokes can be controlled separately.
- Available in two standard width. Depending on the size of the products that need to be handled, the width of the handler frame can even vary within the two standard ranges.
- Total height determined upon customers request.
- Two types of motor drive for the rotational movement, depending of the shape and size of the products that are to be handled.
- Hoses and wiring can be fed through the centre of the main axis.
- The vertical side plates are both placed in an angle of 10° to the centre line. As a result, the HSDH units can easily placed in circular configuration.
- Suitable for fitting all kinds of grippers.
- The AAE pick- en place units are supplied with a manual in the English language and comply with CE regulations.

Modular concept.

The HSDH pick and place units are based on a modular concept, where based on specific customer requirements the most suitable configuration can be built. This applies to: (see picture 1)

1 Motor drive

AAE offers two types of motor drive (M10 en M15) for the rotating movement, depending on the size and mass of the products to be handled. Table 2 shows which motor drive fits in the main types of HSDH pick and place unit (SW or EW). AAE advises you to get to best possible choice!

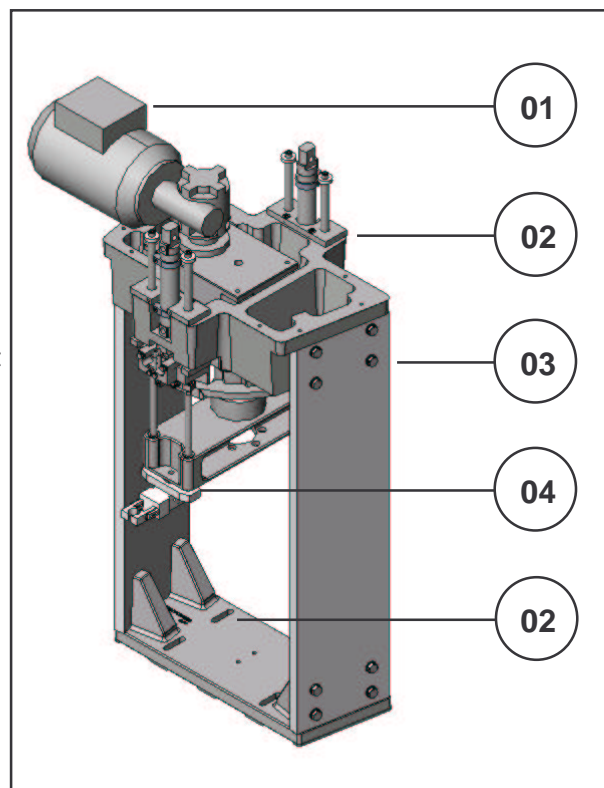
2 Bottom- and topplate

Available in type SW (standard width) or in type EW (extra width)

- Type SW : standard width between the vertical side plates.
- Type EW : extra wide version for manipulating larger products.

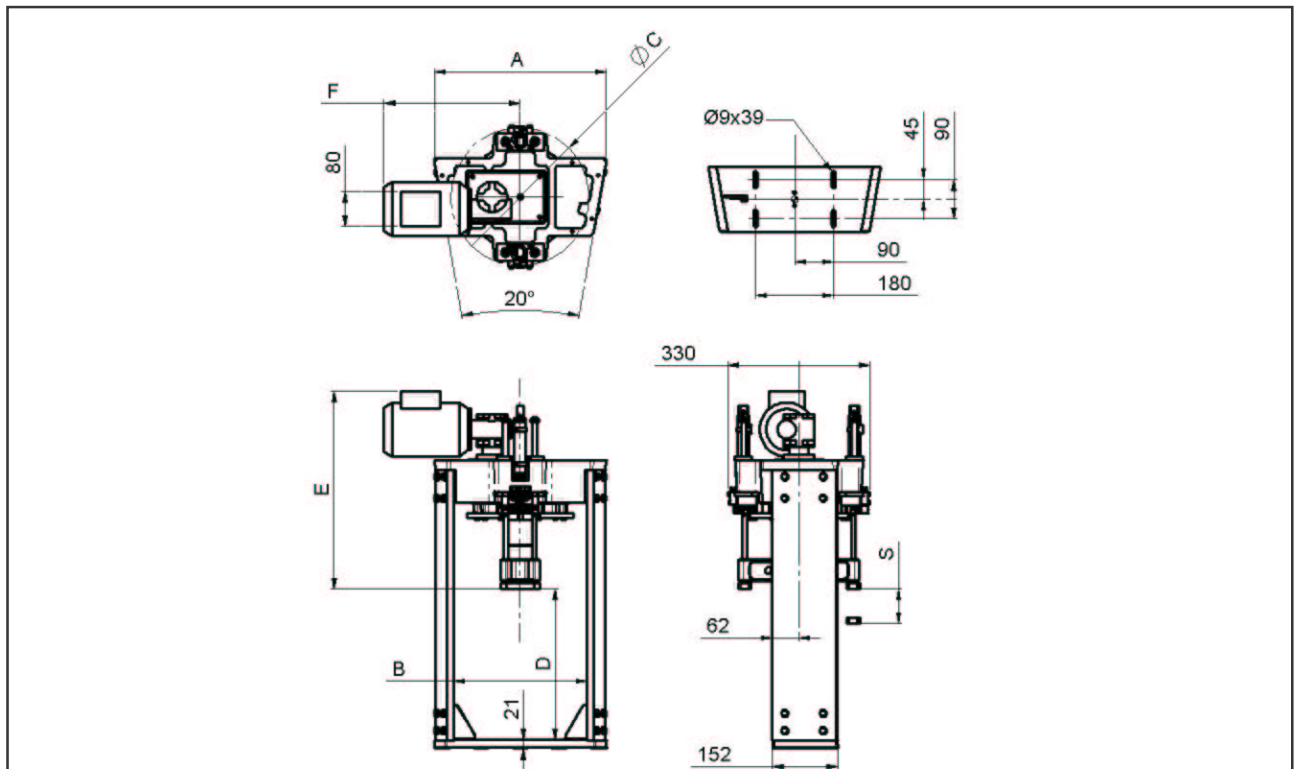
3 Vertical side plates

4 Productgripper



Picture 1 : modular construction of the HSDH pick and place unit

Technical data



Picture 2 : main dimensions HSDH handler

Model	A (mm.)	B (mm.)	ØC (mm.)	D (mm.)	E (mm.)	F (mm.)	Weight ⁽¹⁾ (kg.)
SW-10	400	308	320	free	457	315	38
EW-10	422	330	346	free	457	315	39
SW-15	400	308	320	free	423	330	39
EW-15	422	330	346	free	423	330	40

Table 1 : main dimensions HSDH handlers

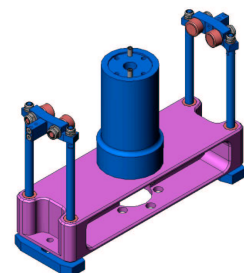
(1) Given weight is excluding the side plates and product depending parts.

Model	Rotation 180° ⁽¹⁾ (seconds)	Vertical stroke ⁽²⁾ down-stop-up (seconds)	Inertia of rotating part ⁽³⁾ (kgmm)	S (mm.)	Air consumption ⁽⁴⁾ (m3 / hour)	Power supply	Motor drive
SW-10	0.30 – 1.60	approx. 0.20	0,028	25 - 80	9	230V/50 Hz	M10
EW-10 / 15	0.30 – 1.60	approx. 0.20	0,028	25 - 80	9	230V/50 Hz	M10 / M15

Table 2 : technical data HSDH handlers

Remarks at table 2:

- (1) Depending on the type of grippers and the mass of the products to be handled.
- (2) Depending on the type of grippers and the mass of the products to be handled.
- (3) Given inertia applies to non-product specific parts of the HSDH handler. (see picture 3).
- (4) approximate air consumption at max. use.



Picture 3: parts for determining the inertia (see table 2).