

## Pick- and place units

AAE manufactures a high tech pick- and place unit utilizing 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. This leads to lower stress loads and therefore improved durability and reliability.
- Both vertical strokes can be controlled separately.
- Available in two standard widths. Depending on the size of the products that need to be handled, the width of the handler frame can vary within the two standard ranges.
- Total height specified based on customer's request.
- Two types of motor drives for the rotational movement, depending on the shape and size of the products that need to be handled.
- Hoses and wiring can be fed through the centre of the main axis.
- The vertical side plates are placed in an angle of 10° to the centre line. As a result, the HSDH units can easily be placed in circular configuration.
- Suitable for fitting various types of grippers.
- The AAE pick- and 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. Based on specific customer requirements the most suitable configuration can be built.

#### 1 Motor drive

AAE offers two types of motor drives (M10 and 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 the best possible choice!

#### 2 Bottom- and top plate

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

#### 3 Vertical side plates

#### 4 Product gripper

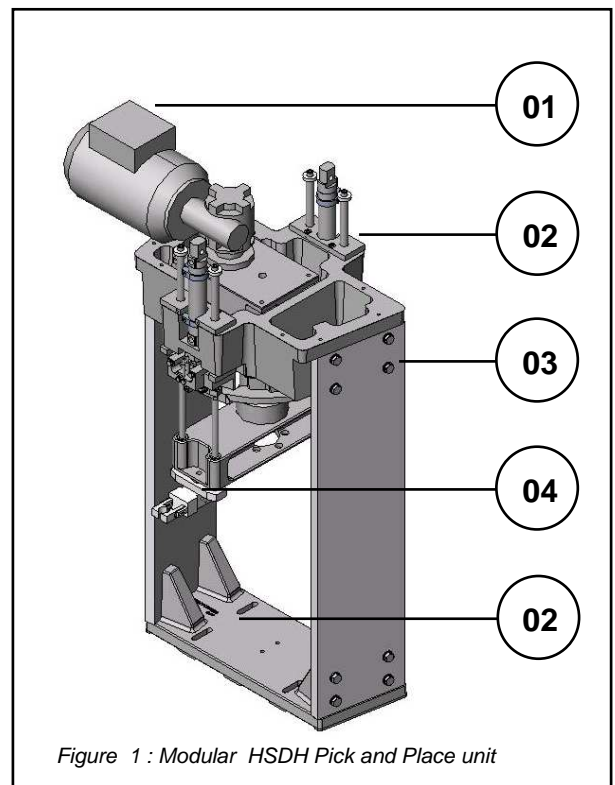
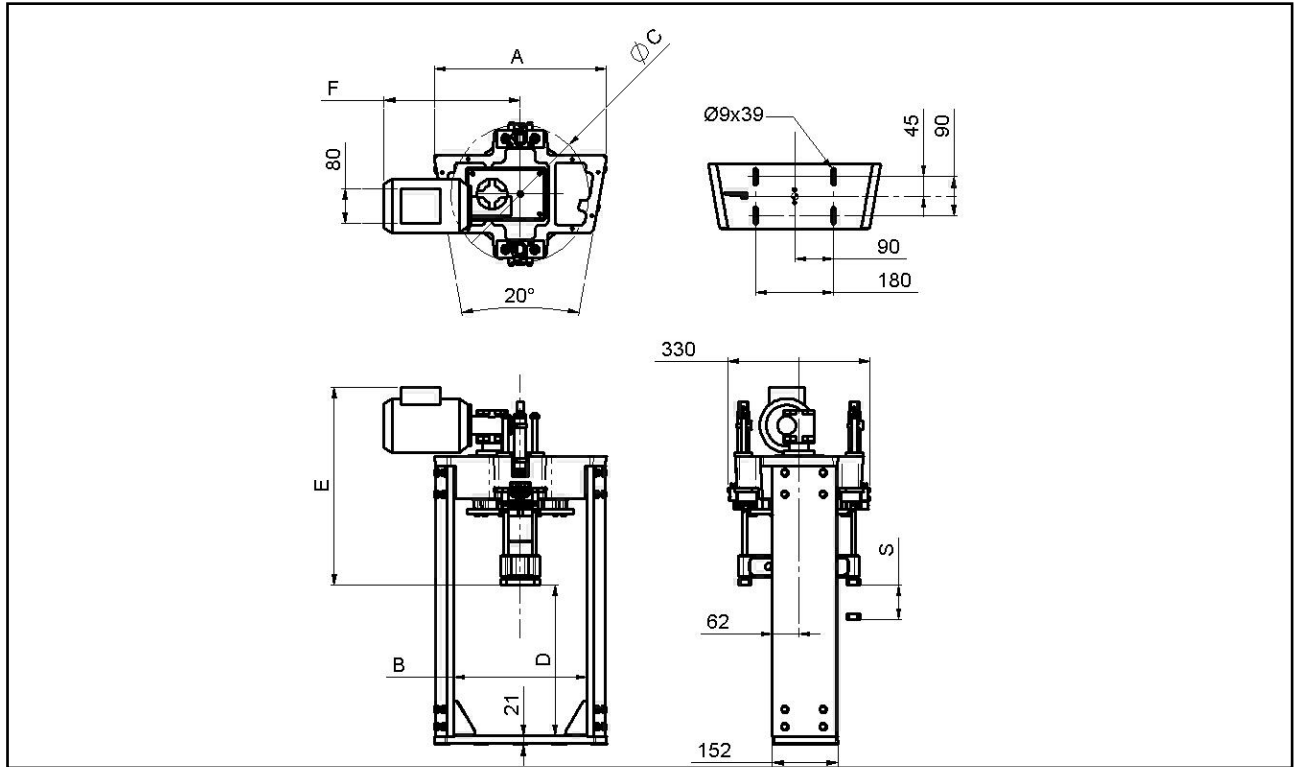


Figure 1 : Modular HSDH Pick and Place unit

## Technical data



Picture 2 : main dimensions HSDH handler

Model	A (mm.)	B (mm.)	ØC (mm.)	D (mm.)	E (mm.)	F (mm.)	Weight <sup>(1)</sup> (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

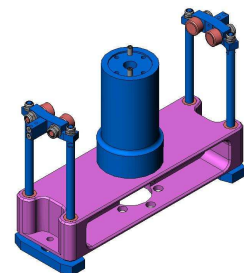
(1) Given weight is excluding the side plates and product depending parts.

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

Table 2 : technical data HSDH handlers

Remarks for 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 to determine inertia (table 2).