



MICROFLEX



MicroFlex is a fully automatic standard system in design for flexible feeding. The system is designed for handling different types of components. The MicroFlex replaces manual handling by operators, bowl feeders and conventional handling units such as pick & place and palletising systems.

The system is equipped with continuous feeding from a conveyor that tracks components enabling very short cycle times. MicroFlex is designed to supply assembly machines, sorting equipment and other machinery that require low to medium cycle times.

The MicroFlex system benefits are as follows:

- Compact standard design. It is very easy to install and have a short commissioning time.
- SVIA's in house developed vision system "PickVision[®]", makes it possible for the system to handle multiple component families.
- Switching between products and batch runs are software controlled and very fast. There are no mechanical adjustments.
- To teach a new component to the system takes just a few minutes. The teach-in, is menu guided from windows pc software and requires no pre-requisites.
- MicroFlex can be equipped with 6 or 4-axis robots
- The MicroFlex has a low noise-level and is equipped with a bunkerunit, to provide a long stand-alone time



MicroFlex equipment with Epson 4-axle Scara robot



MicroFlex equipment with ABB 140T robot



Top mounted robot, ABB IRB 340



DATA SHEET MICROFLEX

1. Physical dimensione

Length	1 900	mm	excl. robot
Width	980	mm	
Height	2 246	mm	
Wheight	1 300	kg	

2. Media

Supply voltage	400/50	V/Hz	
Fuse	16	A	
Air	6	bar	

3. Performance

	ABB IRB 140	ABB IRB 140T	ABB IRB 340	EPSON E2L6535		
Max. handling weight	5	5	1	5	kg	(incl. gripper)
Nunber for axis	6	6	4	4		
Reach	810	810	590	660	mm	
Placed	R/F	R/F	R	F		F: Frame – R: Roof
Robot control system	IRC5	IRC5	IRC5	EPSON		
Shortest cycle time ^{1, 2}	2,7	2,4	0,45	0,75	Sec.	components-dependent

4. Ambient environment

Temperature	5-40	°C	
Interface to parent machine	Yes		Digital signals Option: Profibus
Windows interface	Yes		PickVision

5. Components

Type of belts	White, green or black		Choose based on components to be handled
Size of parts ²	< 55	mm	components-dependent

6. Other

Colour code, frame	RAL 7015	Slate grey
Colour code, ABB robot	ABB-orange	Orange
Colour code, Epson robot	Epson-white	White
Changeover time	Apx. 5 min	Incl gripper

¹ Definition of cycle time: Average time for 200 parts with a transport distance of 1000 mm and with the robot picking up and putting down the components. The maximum time for picking up or putting down is 0.2 seconds.

² Subject to the geometry of the components. The parts will not stick together and leaves excess material.