

## Function control - fc

The function control increases the processing reliability of manual screwdriving assembly. It enables monitoring of every single screw assembly and guarantees the success of the screw connection on the component.



fc11

### Screwdriver controller fc11

The screwdriving function controller fc11 and the handheld screwdriver MICROMAT-F/MINIMAT-F provide the intelligent solution for your processing reliability. The screw system counts your assemblies, monitors their times, shuts-off only upon reaching torque, recognises work piece exchange and is 100 % self-checking.



fc20

### Screwdriver controller fc20

The functions control fc20 also enables the monitoring of complex assembly processes through programmable sequences. This screwdriver controller can control up to three screwdrivers of differing types. The use of the fc20 allows you high flexibility for various screwdriving requirements on one component.

## FEEDING SYSTEMS

### Vibratory Bowl Feeders

11011-0.15  
11011-0.75  
11011-1.2



11011-2.5



### Sword Feeders



1811-1.5-x



ERGOMAT-Z



DEPRAG FEED MODULE



### Vibratory Bowl Feeders and Sword Feeders for handheld Drivers and Press-In Tools

| Type           | Number of screw-drivers | Filling capacity l | max. Head dia. mm | max. Shaft length mm | Shaft dia. from - to mm | Power source AC |
|----------------|-------------------------|--------------------|-------------------|----------------------|-------------------------|-----------------|
| 11011-0.15     | 1                       | 0.15               | 5                 | 8                    | 1.2 - 2.5               | 24 Volt DC      |
| 11022-0.15     | 2                       | 0.15               | 4                 | 8                    | 1.2 - 2.5               |                 |
| 11011-0.75     | 1                       | 0.75               | 12                | 35                   | 1.5 - 6.3               |                 |
| 11022-0.75     | 2                       | 0.75               | 8                 | 25                   | 2 - 6.3                 |                 |
| 11011-1.2      | 1                       | 1.2                | 12                | 50                   | 3 - 7                   |                 |
| 11011-2.5      | 1                       | 2.5                | 16                | 60                   | 4 - 10                  |                 |
| 11022-2.5      | 2                       | 2.5                | 14                | 60                   | 4 - 10                  | 230 V/115 V     |
| 1811-ES/0.15-x | 1                       | 0.15               | 5                 | 8                    | 1 - 2.5                 |                 |
| 1811-1.5-x     | 1                       | 1.5                | 12                | 25                   | 2 - 6.3                 |                 |

### ERGOMAT-Z the stroke screwdriver for feeding machines

| Type     | Part no. | Torque  |         | Speed, idling rpm | Drive | Screws | Weight kilos |
|----------|----------|---------|---------|-------------------|-------|--------|--------------|
|          |          | min. Nm | max. Nm |                   |       |        |              |
| 347V-218 | 406859A  | 0.3     | 1       | 1900              | 1/4"  | M 3    | 0.8          |
| 347V-318 | 406859B  | 0.3     | 1.4     | 1300              |       | M 3    | 0.8          |
| 347V-518 | 406859C  | 0.2     | 2       | 900               |       | M 3    | 0.8          |
| 347V-718 | 406859G  | 0.2     | 2.5     | 640               |       | M 4    | 0.8          |

Performance data relate to an air pressure of 6.3 bar (90 psi)

### DEPRAG FEED MODULE - DFM

**DEPRAG FEED MODULE (DFM) version 1** 1 stroke, screw assembly via nosepiece, stroke 60mm, max. vertical pressure 120N

**DEPRAG FEED MODULE (DFM) version 2** 2 strokes, vacuum-supported screw/nut assembly, stroke 60mm, max. vertical pressure 120N

Please find more informations about the DEPRAG FEED MODULE in our brochure D3820E.

## Press-In Tools for feeding systems

| Type      | Parts to be transported              | Remark   |
|-----------|--------------------------------------|--|
| EDG-..    | Rivets, Dowel Pins<br>Pins, Bushings | with one press-in stroke                                   |
| EDGZ-...- |                                      | with one press-in stroke and one additional locking stroke |



Press-In Tools

## Screwfeeding Machines for stationary use

| Type  | Number of screw-drivers | Filling capacity l | max. Head dia mm | max. Shaft length mm | Shaft dia. from - to mm | Power source AC |
|-------|-------------------------|--------------------|------------------|----------------------|-------------------------|-----------------|
| 06..  | 1                       | 0.05               | 3                | 8                    | 0.6 - 2.0               | 230 V/115 V     |
| 010.. | 1 - 6                   | 0.15               | 5                | 8                    | 1.2 - 2.5               |                 |
| 010.. | 1 - 6                   | 0.75               | 8 / 12           | 35                   | 1.6 - 6.3               | 24 Volt DC      |
| 010.. | 1 - 6                   | 1.2                | 16               | 50                   | 3 - 7                   |                 |
| 010.. | 1 - 6                   | 2.5                | 14 / 16          | 50                   | 4 - 8                   | 230 V/115 V     |
| 05..  | 1 - 6                   | 6                  | 30               | 100                  | 8 - 16                  |                 |
| 05..  | 1 - 4                   | 12                 | 30/40            | 120/130              | 12 - 18                 | 230 V/115 V     |
| 08..  | 1                       | 0.15               | 5                | 8                    | 1 - 2.5                 |                 |
| 08..  | 1 - 6                   | 1.5                | 12               | 25                   | 2 - 6.3                 |                 |



Vibratory Bowl Feeders

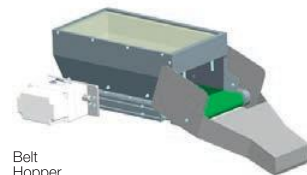
## Nut Feeders for stationary use

| Type  | Number of screw-drivers | Filling capacity l | Across Flats mm | Female Thread mm | max. Nut height mm | Power source AC |
|-------|-------------------------|--------------------|-----------------|------------------|--------------------|-----------------|
| 010.. | 1 / 2 / 4               | 0.75               | 4 - 8           | 3 - 5            | 5                  | 24 Volt DC      |
| 010.. | 1 / 2 / 4               | 2.5                | 5.5 - 13/17     | 3 - 8            | 8                  |                 |

## Feeders for small components for stationary use

| Type | Number of Outlets | Filling capacity l | Parts to be transported     | Power source AC |
|------|-------------------|--------------------|-----------------------------|-----------------|
| 06.. | 1                 | 0.75               | Rivets, Bolts, Pin, Washers | 230 V/115 V     |
| 05.. | 1                 | 2.5                | Sleeve etc.                 |                 |
| 08.. | 1                 | 1.5                | Tooling Parts, Balls        |                 |

Screwfeeding Machines for automated Assembly Units can be supplied with or without magnetic valves, as well as with electronic sequence control integrated.



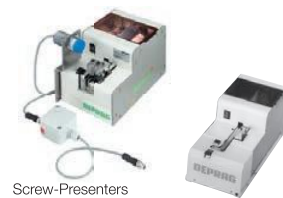
Belt Hopper

## Supply systems - Linear hoppers for feeding systems

| Type | Part no. | Filling capacity l | Operating Voltage DC |
|------|----------|--------------------|----------------------|
| B10  | 415050A  | 10                 | 24 V                 |
| B20  | 418247A  | 20                 | 24 V                 |

## Screw-Presenters

| Type      | Number of screw-drivers | Filling capacity l | Shaft dia. from - to mm | Shaft length from - to mm | Operating Voltage DC | Remark                      |
|-----------|-------------------------|--------------------|-------------------------|---------------------------|----------------------|-----------------------------|
| SG1211-.. | 1                       | 0.1                | 1.4 - 5                 | 2 - 25                    | 12                   | for handheld Screwdrivers   |
| SG0211-.. | 1                       | 0.1                | 1.4 - 5                 | 2 - 18                    | 12                   | for stationary Screwdrivers |



Screw-Presenters

## Tape-on-reel

| Type    | Suitable components                          | Operating Voltage |
|---------|--|-------------------|
| 0111-.. | single- and double-sided adhesive components | 24 V              |



Tape-on-reel