



Superior Clamping and Gripping



## Product Information

Controller ECM

## Powerful. Easy. Bus capable.

### ECM controller

Electrical controllers are used to control/ regulate mechatronic modules and systems without integrated electronics. SCHUNK offers these controllers for EGN / EZN grippers and ERS rotary modules.

#### Field of application

Application in a clean environment in connection with the corresponding SCHUNK grippers or rotary modules

#### Advantages – Your benefits

##### High accuracy and flexibility

**SCHUNK MTS Motion Tool commissioning software** for positioning processes with, for example, accurate positioning or exact force/torque control

**Communication interface Profinet, Profibus-DP und CAN** to support parameterization, commissioning and function tests

**USB service interfaces** for flexible integration

**Standard connector technology and spring clamps** for easy and quick parameterization via USB stick and commissioning via PC

**Rotary encoding switch and DIP switch** for convenient and industry-suitable commissioning



#### Options and special information

**Various bus systems can be selected:** Profinet, Profibus or CAN

**Digital inputs/outputs on option:** On option, the controller can be equipped with 4 digital inputs or 4 digital outputs (HTL).

## Functional description

The ECM controller is an electronic module, which is used to control/ regulate the mechatronic modules.



- ① Status display
- ② Service interfaces
- ③ Rotary encoding switch
- ④ DIP switch
- ⑤ M12 plug technology for communication
- ⑥ Spring clamp and plug connector

### SCHUNK offers more ...

The following components make the product ECM even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



EGN 2-finger parallel gripper



EZN 3-finger centric gripper



ERS Universal rotary unit

- ① Additional information regarding the products can be found on the following product pages or at [www.schunk.com](http://www.schunk.com). Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696

## Order example ECM for ERS 135

ECM - ERS 135 - B - PB - N

### Controller type

ECM

### Module type

EGN 080, EGN 100, EGN 160  
EZN 064, EZN 100  
ERS 135, ERS 170, ERS 210

### Options (ERS only)

B = Brake  
DDF = Rotary feed-through  
B-DDF = Brake and rotary feed-through

### Communication type

PN = ProfiNet  
PB = Profibus  
CN = CAN

### I/O add-on card

N = not used  
I = 4 inputs / 4 outputs

## Order example ECM for EGN 080

ECM - EGN 080 - PN - I

### Controller type

ECM

### Module type

EGN 080, EGN 100, EGN 160  
EZN 064, EZN 100  
ERS 135, ERS 170, ERS 210

### Communication type

PN = ProfiNet  
PB = Profibus  
CN = CAN

### I/O add-on card

N = not used  
I = 4 inputs / 4 outputs

## How to find the right ECM controller

### Step 1

#### Choosing the module type to be operated, in the required size

Choose from the SCHUNK mechatronic modules

- EGN 2-finger parallel gripper, sizes 080, 100 and 160
- EZN 3-finger centric gripper, sizes 064 and 100
- ERS rotary module, sizes 135, 170 and 210

Enter the product designation with the corresponding size.

### Step 1a

#### For SCHUNK ERS only. Selection options

Choose from the following options for the SCHUNK ERS

- Brake = B
- Rotary feed-through = DDF
- Brake and rotary feed-through = B-DDF

Enter the corresponding abbreviation.

### Step 2

#### Choosing the bus system

Enter the corresponding abbreviation for the communication type

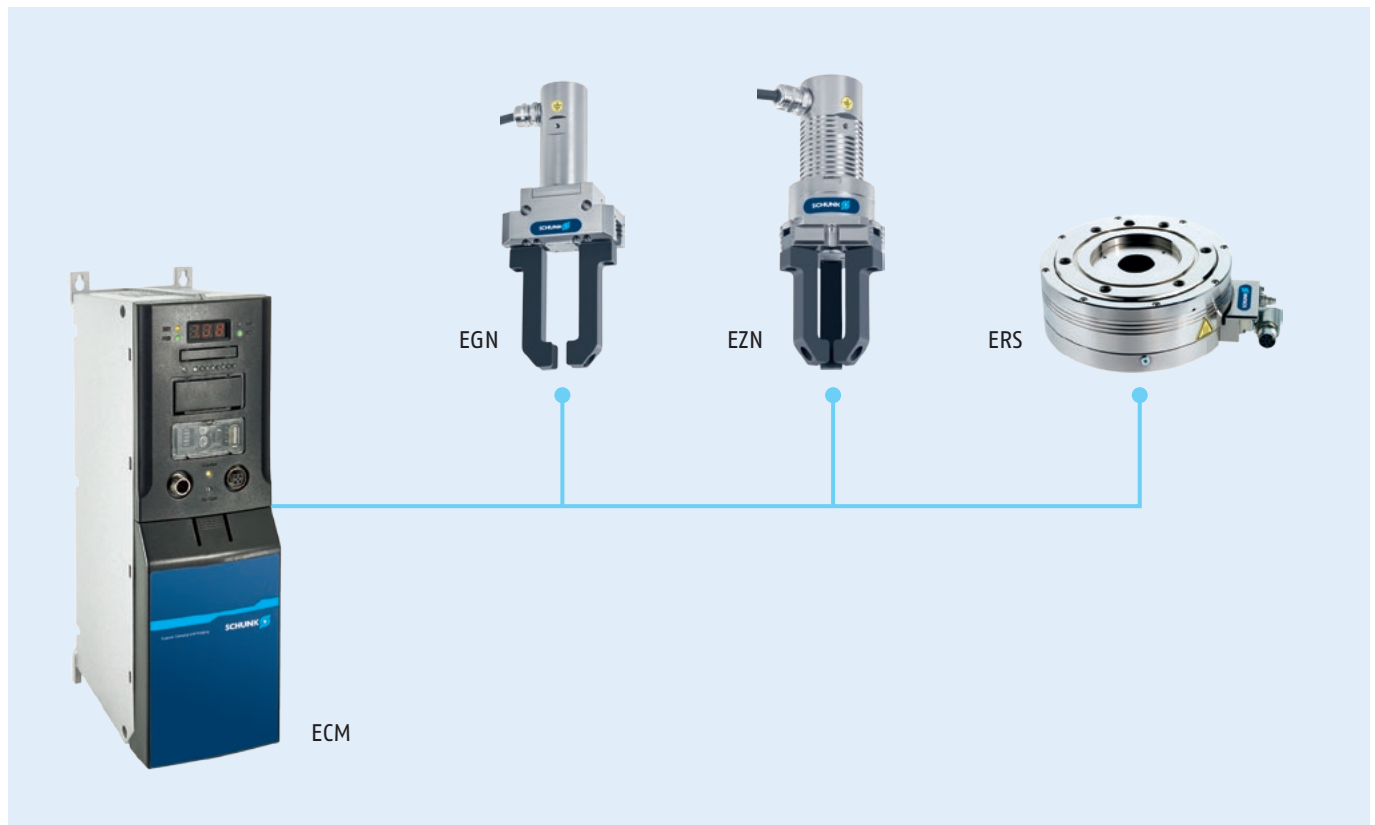
- ProfiNet = PN
- Profibus = PB
- CAN Bus = CN

### Step 3

#### Choosing the option for digital inputs/outputs

Choose from the following

- Not used = N
- 4 inputs / 4 outputs = I



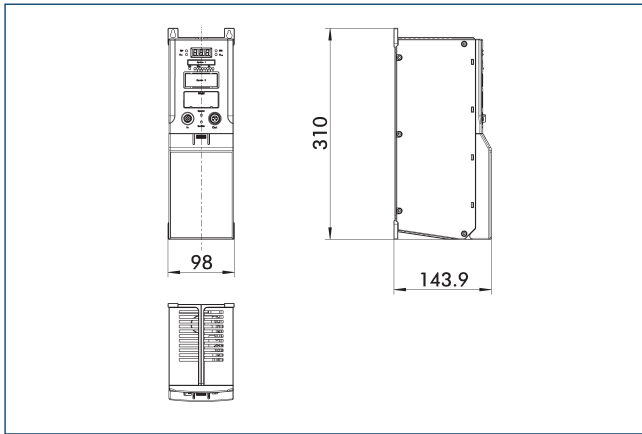


### Technical data

| Description          |      | ECM-EGN | ECM-EZN | ECM-ERS |
|----------------------|------|---------|---------|---------|
| ID                   |      |         |         |         |
| Power supply (logic) | [V]  | 24      | 24      | 24      |
| Power supply (load)  | [V]  | 24      | 24      | 48      |
| Nominal current      | [A]  | 15      | 15      | 15      |
| Length               | [mm] | 144     | 144     | 144     |
| Width                | [mm] | 98      | 98      | 98      |
| Height               | [mm] | 310     | 310     | 310     |
| Weight               | [kg] | 1       | 1       | 1       |

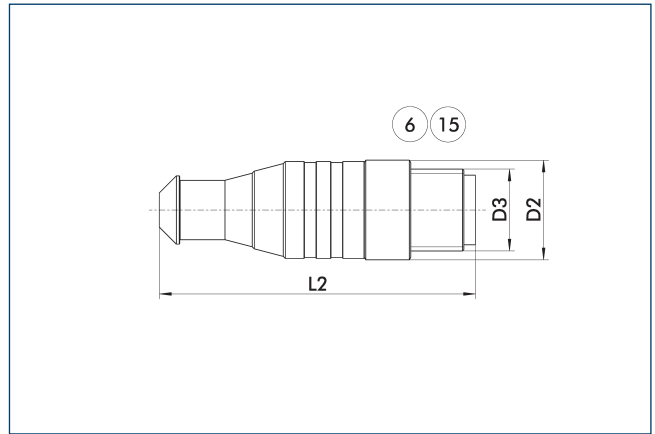
① This is the data of the basic variants. In order to determine your ordering code, please see the configuration example. If you should have any queries, please contact our technical sales department. Contact information can be found online.

**SCHUNK ECM Drive controller**



The drive controller can be used for the rotary unit ERS 48V as well as for the grippers EGN and EZN. It is available with the communication interfaces Profinet, Profibus and CAN-Bus.

**Termination resistor**



- ⑥ Connection module side
- ⑮ Socket



The terminating resistors are provided for terminating the bus string directly at the SCHUNK module.

| Description                            | ID      | L2<br>[mm] | D2<br>[mm] | D3  |
|--|---------|------------|------------|-----|
| <b>Termination resistor - CAN bus</b>  |         |            |            |     |
| ST SG1204-CN-A-A                       | 0349660 | 47         | 15         | M12 |
| <b>Termination resistor - Profibus</b> |         |            |            |     |
| ST SG1204-PB-A-A                       | 0349650 | 47         | 15         | M12 |

- ① An appropriate terminating resistor must be installed on the last module in the CAN or Profibus string.

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Jens Lehmann, German goalkeeper legend, SCHUNK brand ambassador since 2012 for precise gripping and safe holding.  
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