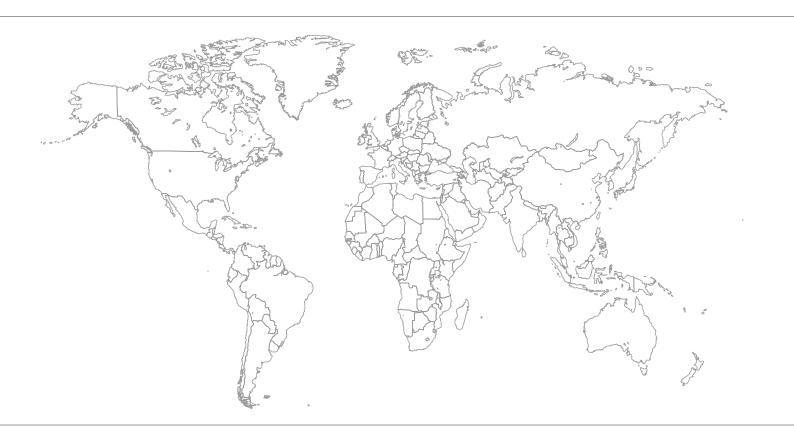


## MOVIGEAR®-SNI With Extended Control Range

Edition 01/2009 16768019 / EN Addendum to the System Manual





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#### 1 Important Information

#### 1.1 Structure of the safety notes

The safety notes in this system manual are designed as follows:

#### **Pictogram**

#### SIGNAL WORD

Type and source of danger.



Possible consequence(s) if the safety notes are disregarded.

· Measure(s) to prevent the danger.

| Pictogram                               | Signal word      | Meaning   | Consequences if disregarded                   |  |  |  |
|---|------------------|---|---|--|--|--|
| Example:                                | <u>↑</u> DANGER  | Imminent danger   | Severe or fatal injuries                      |  |  |  |
| General danger                          | WARNING          | Possible dangerous situation  | Severe or fatal injuries                      |  |  |  |
| Specific danger,<br>e.g. electric shock | <b>A</b> CAUTION | Possible dangerous situation  | Minor injuries                                |  |  |  |
| STOP                                    | STOP             | Possible damage to property   | Damage to the drive system or its environment |  |  |  |
| i                                       | TIP              | Useful information or tip. Simplifies the handling of the drive system. |   |  |  |  |

#### 1.2 Rights to claim under limited warranty

A requirement of fault-free operation and fulfillment of any rights to claim under limited warranty is that you adhere to the information in the system manual. Therefore, read the system manual before you start operating the unit.

Make sure that the system manual is available to persons responsible for the plant and its operation, as well as to person who work independently on the unit. You must also ensure that the documentation is legible.



#### 1.3 Exclusion of liability

You must comply with the information contained in the system manual to ensure safe operation of MOVIFIT® SNI and MOVIGEAR® SNI and to achieve the specified product characteristics and performance requirements. SEW-EURODRIVE assumes no liability for injury to persons or damage to equipment or property resulting from non-observance of the system manual. In such cases, any liability for defects is excluded.

#### 1.4 Other applicable documentation

- This supplementary information does not replace the detailed system manual.
- Installation and startup only by trained personnel observing the relevant accident prevention regulations and the following publication:
  - "MOVIGEAR® SNI" system manual

#### 1.5 Copyright

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## **MOVIGEAR® SNI with Extended Control Range** Description and order information

## 2 MOVIGEAR® SNI with Extended Control Range

#### 2.1 Description and order information

This design allows for operating MOVIGEAR® SNI drive units with an extended control range (speed range from 1 rpm to 2000 rpm).

For additional information, refer to section "Selecting MOVIGEAR® SNI with extended control range" (see page 7).

Take into account that with "extended control range", the contour dimensions of the MOVIGEAR $^{\otimes}$  SNI drive units change. For additional information, refer to section "Dimension drawings for MOVIGEAR $^{\otimes}$  SNI with extended control range" (see page 8).

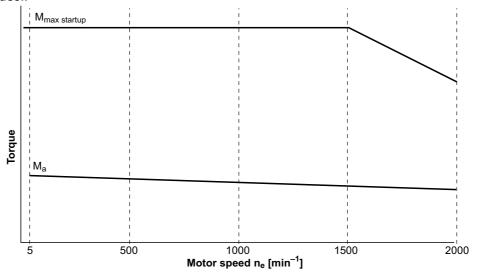
Required order information: Extended control range





### 2.2 Selection of MOVIGEAR® SNI with extended control range

The following figure shows schematic characteristic curves for the maximum torque  $(M_{max\ startup})$  and the output torque  $(M_a)$  in S1 operation. The tables below list the exact values..



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| MGF2  |                       |                          |                              |                         |                          |                          |                          |                  |                   |                  |        |
|-------|-----------------------|--------------------------|------------------------------|-------------------------|--------------------------|--------------------------|--------------------------|------------------|-------------------|------------------|--------|
|       | n <sub>a</sub>        |                          | M <sub>a</sub> <sup>1)</sup> |                         |                          |                          |                          | M <sub>gdf</sub> | M <sub>max</sub>  | i <sub>tot</sub> | Weight |
|       | with                  | with                     | with                         | with                    | with                     | with                     | with                     |                  | startup:          |                  |        |
|       | n <sub>e</sub> =<br>1 | n <sub>e</sub> =<br>2000 | n <sub>e</sub> =<br>5        | n <sub>e</sub> =<br>500 | n <sub>e</sub> =<br>1000 | n <sub>e</sub> =<br>1500 | n <sub>e</sub> =<br>2000 |                  |                   |                  |        |
|       | rpm                   | rpm                      | rpm                          | rpm                     | rpm                      | rpm                      | rpm                      |                  |                   |                  |        |
|       | [rpm]                 | [rpm]                    | [Nm]                         | [Nm]                    | [Nm]                     | [Nm]                     | [Nm]                     | [Nm]             | [Nm]              |                  | [kg]   |
| 3-    | 0.02                  | 36.2                     | 200                          | 200                     | 200                      | 197                      | 197                      | 200              | 500 <sup>2)</sup> | 55.25            | 16.0   |
| stage | 0.03                  | 53.7                     | 147                          | 147                     | 140                      | 133                      | 133                      | 200              | 500 <sup>2)</sup> | 37.24            |        |
| 2-    | 0.05                  | 108.0                    | 74                           | 74                      | 71                       | 67                       | 67                       | 192              | 281 <sup>2)</sup> | 18.52            | 15.7   |
| stage | 0.10                  | 206.0                    | 39                           | 39                      | 37                       | 35                       | 35                       | 152              | 147               | 9.71             |        |
|       | 0.20                  | 400.0                    | 20                           | 20                      | 19                       | 18                       | 18                       | 94               | 76                | 5.00             |        |

- 1) For motor speeds  $\rm n_{\rm e}$  < 5 rpm, you have to reduce the output torque  $\rm M_{\rm a}$  by factor 0.9.
- 2) Permitted frequency of occurrence on request.

| MGF4  |                  |                          |                              |                         |                          |                          |                          |                  |                    |                  |        |
|-------|------------------|--------------------------|------------------------------|-------------------------|--------------------------|--------------------------|--------------------------|------------------|--------------------|------------------|--------|
|       | n <sub>a</sub>   |                          | M <sub>a</sub> <sup>1)</sup> |                         |                          |                          |                          | M <sub>gdf</sub> | M <sub>max</sub>   | i <sub>tot</sub> | Weight |
|       | with             | with                     | with                         | with                    | with                     | with                     | with                     |                  | startup:           |                  |        |
|       | n <sub>e</sub> = | n <sub>e</sub> =<br>2000 | n <sub>e</sub> =<br>5        | n <sub>e</sub> =<br>500 | n <sub>e</sub> =<br>1000 | n <sub>e</sub> =<br>1500 | n <sub>e</sub> =<br>2000 |                  |                    |                  |        |
|       | rpm              | rpm                      | rpm                          | rpm                     | rpm                      | rpm                      | rpm                      |                  |                    |                  |        |
|       | [rpm]            | [rpm]                    | [Nm]                         | [Nm]                    | [Nm]                     | [Nm]                     | [Nm]                     | [Nm]             | [Nm]               |                  | [kg]   |
| 3-    | 0.02             | 41.7                     | 309                          | 309                     | 309                      | 309                      | 309                      | 388              | 1000 <sup>2)</sup> | 48.00            | 24.0   |
| stage |                  |                          |                              |                         |                          |                          |                          |                  |                    |                  |        |
| 2-    | 0.04             | 77.8                     | 169                          | 169                     | 169                      | 169                      | 169                      | 400              | 616 <sup>2)</sup>  | 25.72            | 23.6   |
| stage | 0.08             | 158.0                    | 83                           | 83                      | 83                       | 83                       | 83                       | 323              | 303                | 12.66            |        |
|       | 0.16             | 315.5                    | 42                           | 42                      | 42                       | 42                       | 42                       | 212              | 152                | 6.34             |        |

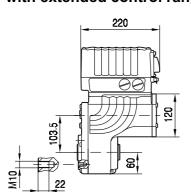
- 1) For motor speeds  $n_e$  < 5 rpm, you have to reduce the output torque  $M_a$  by factor 0.9.
- 2) Permitted frequency of occurrence on request.

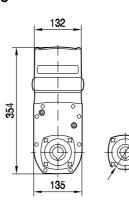


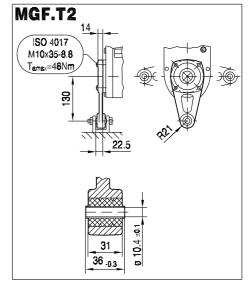


## 2.3 Dimension drawings of MOVIGEAR® SNI with extended control range

# MGFAS2 - DSM - SNI with extended control range

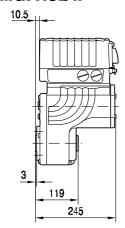




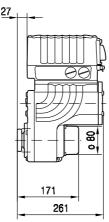


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MGFAS2..







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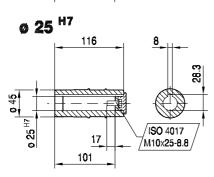
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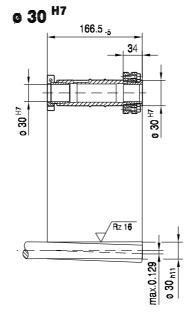
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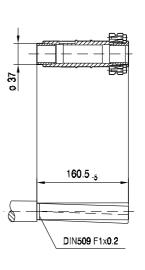
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101

M10x25-8.8







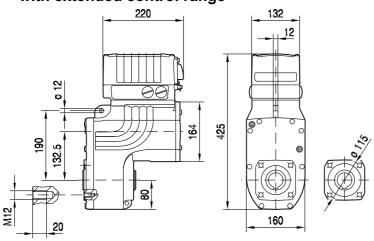
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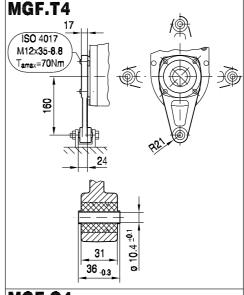


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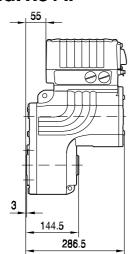


with extended control range

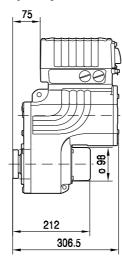




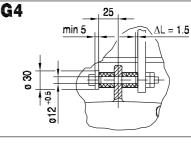
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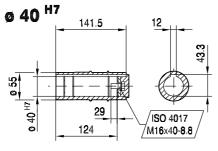


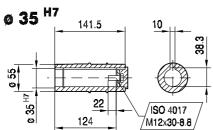
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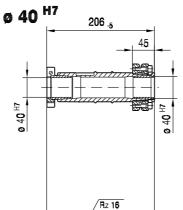


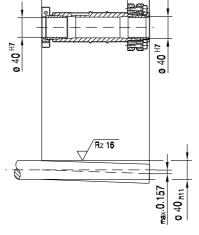
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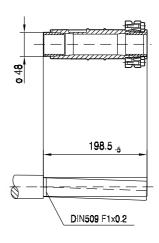






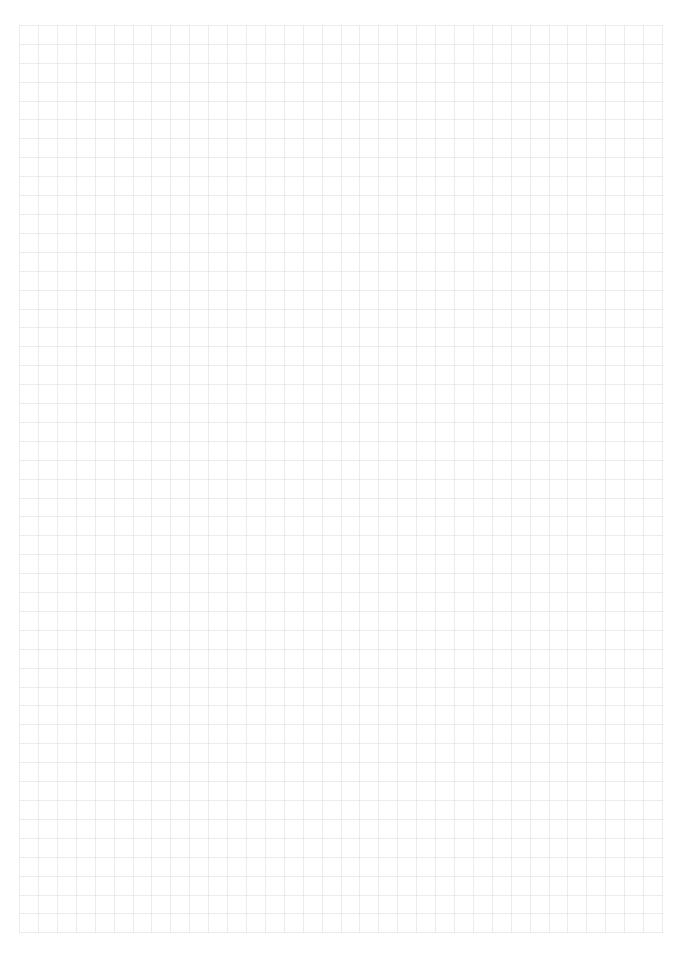




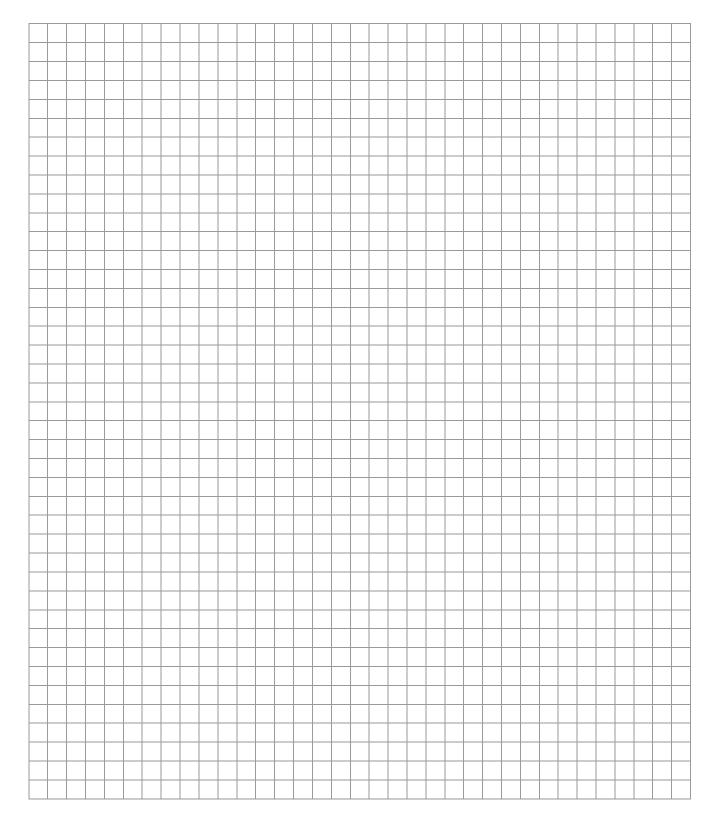


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