



### 3 Unit Designations and Variants

#### 3.1 Gear unit and options – unit designations

##### *Helical gear units*

Designation	
RX..	Single-stage foot-mounted design
RXF..	Single-stage B5 flange-mounted design
R..	Foot-mounted design
R..F	Foot and B5-flange mounted design
RF..	B5 flange-mounted design
RZ..	B14 flange-mounted design
RM..	B5 flange-mounted design with extended bearing hub

##### *Parallel-shaft helical gear units*

Designation	
F..	Foot-mounted design
FA..B	Foot-mounted, hollow shaft
FH..B	Foot-mounted, hollow shaft with shrink disk
FV..B	Foot-mounted, hollow shaft with splined hollow shaft to DIN 5480
FF..	B5 flange-mounted design
FAF..	B5 flange-mounted design and hollow shaft
FHF..	B5 flange-mounted and hollow shaft with shrink disk
FVF..	B5 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480
FA..	Hollow shaft
FH..	Hollow shaft with shrink disk
FT..	Hollow shaft with TorqLOC® hollow shaft mounting system
FV..	Hollow shaft with splining to DIN 5480
FAZ..	B14 flange-mounted design and hollow shaft
FHZ..	B14 flange-mounted and hollow shaft with shrink disk
FVZ..	B14 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480



### Helical-bevel gear units

Designation	
K..	Foot-mounted design
KA..B	Foot-mounted, hollow shaft
KH..B	Foot-mounted, hollow shaft with shrink disk
KV..B	Foot-mounted, hollow shaft with splined hollow shaft to DIN 5480
KF..	B5 flange-mounted design
KAF..	B5 flange-mounted design and hollow shaft
KHF..	B5 flange-mounted and hollow shaft with shrink disk
KVF..	B5 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480
KA..	Hollow shaft
KH..	Hollow shaft with shrink disk
KT..	Hollow shaft with TorqLOC® hollow shaft mounting system
KV..	Hollow shaft with splining to DIN 5480
KAZ..	B14 flange-mounted design and hollow shaft
KHZ..	B14 flange-mounted and hollow shaft with shrink disk
KVZ..	B14 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480

### Helical-worm gear units

Designation	
S..	Foot-mounted design
SF..	B5 flange-mounted design
SAF..	B5 flange-mounted design and hollow shaft
SHF..	B5 flange-mounted and hollow shaft with shrink disk
SA..	Hollow shaft
SH..	Hollow shaft with shrink disk
ST..	Hollow shaft with TorqLOC® hollow shaft mounting system
SAZ..	B14 flange-mounted design and hollow shaft
SHZ..	B14 flange-mounted and hollow shaft with shrink disk



## Unit Designations and Variants

### Gear unit and options – unit designations

#### **Spiroplan® gear units**

For all gear unit sizes (W..10 to W..47):

Designation	
W..	Foot-mounted design
WF..	Flange-mounted design
WAF..	Flange-mounted design and hollow shaft
WA..	Hollow shaft

Only for gear unit sizes 37 and 47 (W..37 and W 47):

Designation	
WA..B	Foot-mounted, hollow shaft
WH..B	Foot-mounted, hollow shaft with shrink disk
WHF..	Flange-mounted, hollow shaft with shrink disk
WH..	Hollow shaft with shrink disk
WT..	Hollow shaft with TorqLOC® hollow shaft mounting system

#### **Options**

R, F and K gear units:

Designation	
/R	Reduced backlash

K, S and W gear units:

Designation	
/T	With torque arm

F gear units:

Designation	
/G	With rubber buffer

#### **Condition monitoring**

Designation	Option
/DUO	Diagnostic Unit Oil = Oil aging sensor
/DUV	Diagnostic Unit Vibration = Vibration sensor



### 3.2 Unit designations for AC motors and options

#### AC motor series

Designation	
DRS..	Motor, standard efficiency, 50 Hz
DRE..	Energy efficient motor, high efficiency, 50 Hz
DRP..	Energy efficient motor, premium efficiency, 50 Hz
...71 to 315	Sizes: 71 / 80 / 90 / 100 / 112, 132 / 160 / 180 / 225 / 315
..K to L	Lengths: K= very short / S = short / M = medium / L = long MC/LC = Lengths of rotors with copper cage
Number of poles	4

#### Output types

Designation	Option
/FI	IEC foot-mounted motor with specification of shaft height
/FG	7 Series integral motor, as stand-alone motor
/FF	IEC flange-mounted motor with bore holes
/FT	IEC flange motor with threads
/FL	General flange-mounted motor (other than IEC)
/FM	7 series integral gearmotor with IEC feet, with specification of shaft height if required
/FE	IEC flange-mounted motor with bore holes and IEC feet, with specification of shaft height
/FY	IEC flange-mounted motor with thread and IEC feet, with specification of shaft height
/FK	General flange-mounted motor (other than IEC) with feet, with specification of shaft height if required
/FC	C-face flange-mounted motor, dimensions in inch



## Unit Designations and Variants

Unit designations for AC motors and options

### Mechanical attachments

Designation	Option
BE..	Spring-loaded brake with size specification
HR	Manual brake release of the brake, automatic disengaging function
HF	Manual brake release, lockable
/RS	Backstop
/MSW	MOVI-SWITCH®
/MI	Motor identification for MOVIMOT®
/MM03MM40	MOVIMOT®
/MO	MOVIMOT® option(s)

### Temperature sensors/detection

Designation	Option
/TF	Temperature sensor (positive coefficient thermistor or PTC resistor)
/TH	Thermostat (bimetallic switch)
/KY	One KTY84 - 130 sensor
/PT	One / three PT100 sensor(s)

### Encoder

Designation	Option
/ES7S /EG7S /EH7S	Mounted speed sensor with sin/cos interface
/ES7R EG7R	Mounted speed sensor with TTL (RS-422) interface, U = 9 - 26 V
/EI7C /EI7S	Mounted speed sensor with HTL or sin/cos interface
/EI76 /EI72 /EI71	Mounted speed sensor with HTL interface and few periods
/AS7W /AG7W	Mounted absolute encoder, RS-485 interface (multi-turn)
/AS7Y /AG7Y /AH7Y	Mounted absolute encoder, SSI interface (multi-turn)
/AI7W	Mounted absolute encoder with SEW interface
/ES7A /EG7A	Mounting adapter for encoders from the SEW portfolio
/XV.A	Mounting adapter for non-SEW encoders
/XV..	Mounted non-SEW encoders



#### Connection options

Designation	Option
/IS	Integrated plug connector
/ASB.	HAN 10ES plug connector on terminal box with two-clamp closure (cage clamps on motor end)
/ACB.	HAN 10E plug connector on terminal box with two-clamp closure (crimp contacts on motor end)
/AMB. /ABB.	HAN Modular 10B plug connector on terminal box with two-clamp closure (crimp contacts on motor end)
/ASE.	HAN 10ES plug connector on terminal box with single-clamp closure (cage clamps on motor end)
/ACE.	HAN 10ES plug connector on terminal box with single-clamp closure (crimp contacts on motor end)
/AME. /ABE.	HAN Modular 10B plug connector on terminal box with single-clamp closure (crimp contacts on motor end)
/ASK.	HAN 10ES ECOFAST <sup>®</sup> plug connector on terminal box with single-clamp closure (cage clamp on motor end), additionally with mounting screws for optional carrier plate
/KCC	Terminal strip with cage clamps
/KC1	C1 profile compliant connection of the DR80 overhead trolley drive (VDI guideline 3643)

#### Ventilation

Designation	Option
/V	Forced cooling fan
/Z	Additional inertia (flywheel fan)
/AL	Metal fan
/U	Non-ventilated (without fan)
/OL	Non-ventilated (closed B side)
/C	Protection canopy for the fan guard
/LF	Air filter

#### Bearing

Designation	Option
/NS	Relubrication device (for DR.315 only)
/ERF	Reinforced bearing A-side with roller bearing (for DR.315 only)
/NIB	Insulated bearing B-side (for DR.315 only)



## Unit Designations and Variants

Unit designations for AC motors and options

### Condition monitoring

Designation	Option
/DUB	Diagnostic unit brake = brake monitoring
/DUV	Diagnostic Unit Vibration = Vibration sensor

### Explosion-proof motors

Designation	Option
/2GD	Motors according to 94/9/EC, category 2 (gas/dust)
/3GD	Motors according to 94/9/EC, category 3 (gas/dust)
/3D	Motors according to 94/9/EC, category 3 (dust)
/VE	Forced-cooling fan for motors according to 94/9/EC, category 3 (gas/dust)

### Other additional features

Designation	Option
/DH	Condensation drain hole
/RI	Reinforced winding insulation
/2W	2nd shaft end on the motor/brakemotor



### 3.3 Sample unit designation for a DR gearmotor

The unit designation of the gearmotor starts from the component on the output end. For instance, a multi-staged helical-bevel gearmotor with thermistor sensor in the motor winding has the following unit designation:

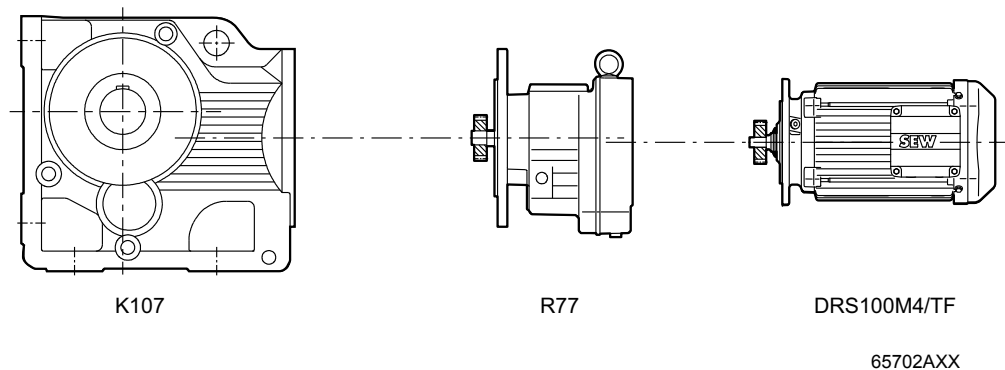
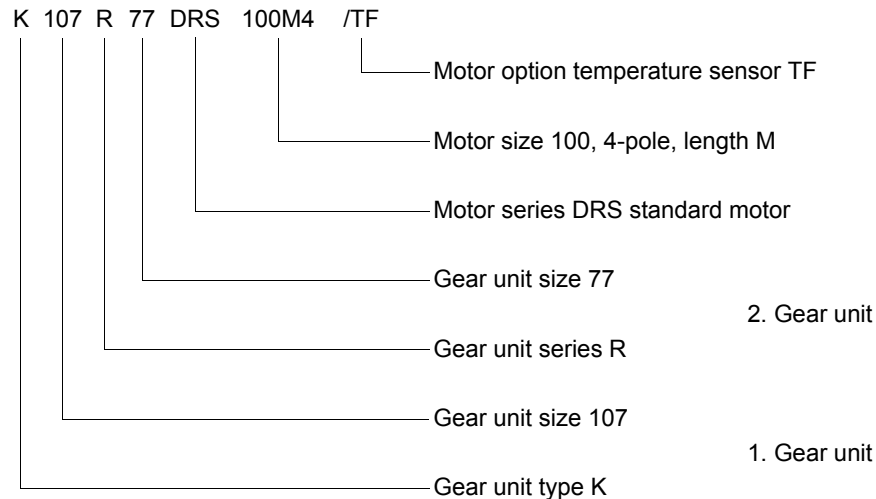


Figure 1: Sample unit designation for a DR gearmotor

Other examples:

- RF 97 /R DRS100M4 BE2 HR
  - Gear unit type: Reduced backlash (/ R) helical gear unit in flange-mounted version
  - Gear unit size: 97
  - Motor series: DRS standard motor
  - Motor size 100M, 4-pole
  - Motor options: BE2 brake with self-reengaging manual brake release (HR)
- FAF 47 /R DRS90L4 BE2 /C
  - Gear unit type: Reduced backlash (/ R) parallel-shaft helical gear unit in B5 flange-mounted version with hollow shaft
  - Gear unit size: 47
  - Motor series: DRS standard motor
  - Motor size 90L, 4-pole
  - Motor options: BE2 brake and protection canopy for the fan guard (/ C)





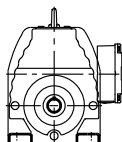
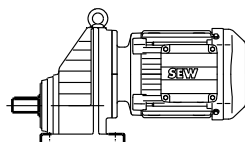
### 3.4 Gearmotor variants



The types described in this section refer to DR gearmotors from SEW-EURODRIVE. They also apply to gear units without motors (without DR).

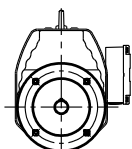
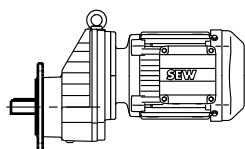
#### Helical gearmotors

The following versions of helical gearmotors can be supplied:



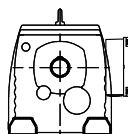
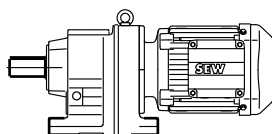
#### **RX..DR..**

Foot-mounted single stage helical gearmotor



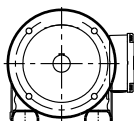
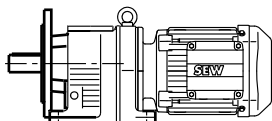
#### **RXF..DR..**

Single-stage B5 flange-mounted helical gearmotor



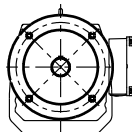
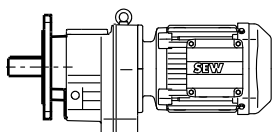
#### **R..DR..**

Foot-mounted helical gearmotor



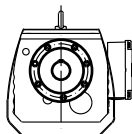
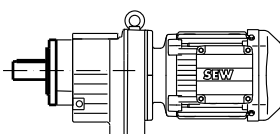
#### **R..F DR..**

Foot and B5-flange mounted helical gearmotor



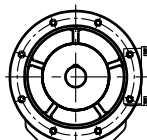
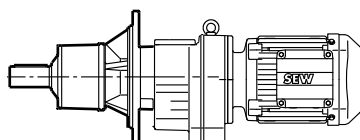
#### **RF..DR..**

Helical gearmotor in B5 flange-mounted version



#### **RZ..DR..**

Helical gearmotor in B14 flange-mounted version



#### **RM..DR..**

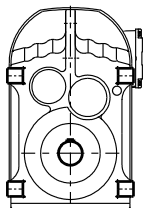
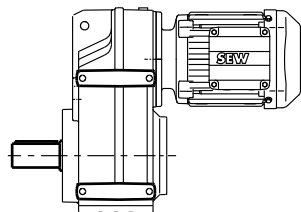
B5 flange-mounted helical gearmotor with extended bearing hub

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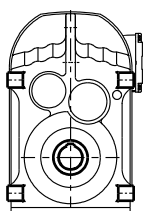
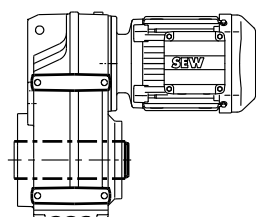
### Parallel-shaft helical gearmotors

The following variants of parallel-shaft helical gearmotors can be supplied:



#### **F..DR..**

Foot-mounted parallel-shaft helical gearmotor

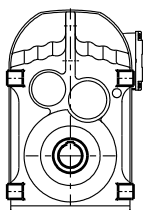
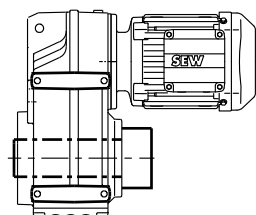


#### **FA..B DR..**

Foot-mounted parallel-shaft helical gearmotor with hollow shaft

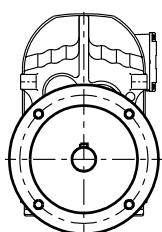
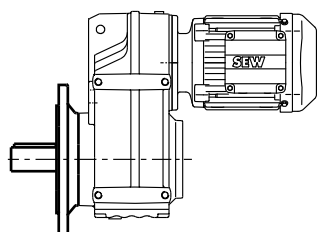
#### **FV..B DR..**

Foot-mounted parallel-shaft gearmotor with hollow shaft and splining according to DIN 5480



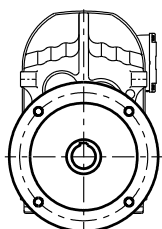
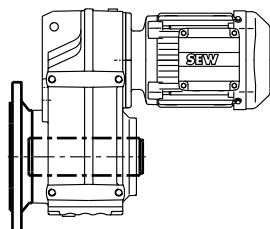
#### **FH..B DR..**

Foot-mounted parallel-shaft helical gearmotor with hollow shaft and shrink disk



#### **FF..DR..**

B5 flange-mounted parallel-shaft helical gearmotor



#### **FAF..DR..**

Parallel shaft helical gearmotor in B5 flange-mounted design with hollow shaft

#### **FVF..DR..**

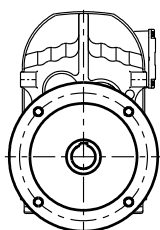
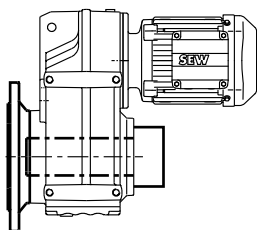
Parallel-shaft helical gearmotor in B5 flange-mounted design with hollow shaft and splining according to DIN 5480

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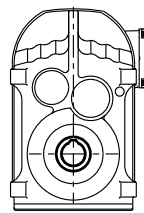
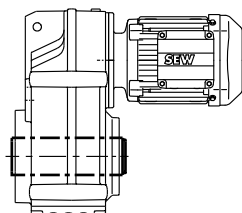
## Unit Designations and Variants

### Gearmotor variants



#### **FHF..DR..**

Parallel-shaft helical gearmotor in B5 flange-mounted version with hollow shaft and shrink disk

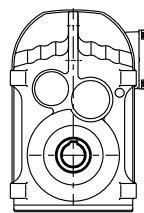
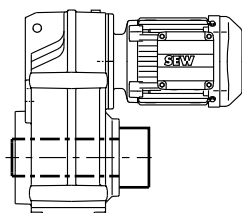


#### **FA..DR..**

Parallel-shaft helical gearmotor with hollow shaft

#### **FV..DR..**

Parallel-shaft helical gearmotor with hollow shaft and splining according to DIN 5480

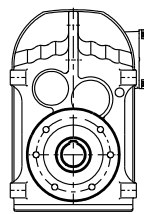
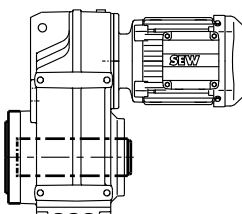


#### **FH..DR..**

Parallel-shaft helical gearmotor with hollow shaft and shrink disk

#### **FT..DR..**

Parallel-shaft helical gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system

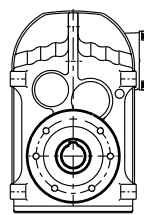
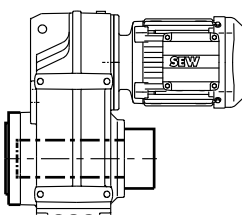


#### **FAZ..DR..**

Parallel-shaft helical gearmotor in B14 flange-mounted design with hollow shaft

#### **FVZ..DR..**

Parallel-shaft helical gearmotor in B14 flange-mounted design with hollow shaft and splining according to DIN 5480



#### **FHZ..DR..**

Parallel-shaft helical gearmotor in B14 flange-mounted version with hollow shaft and shrink disk

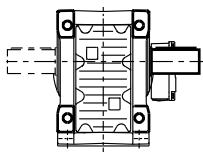
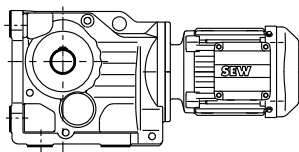
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### Helical-bevel gearmotors

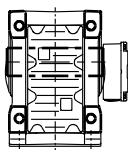
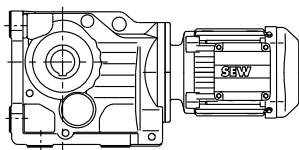
The following types of helical-bevel gearmotors can be supplied:

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#### **K..DR..**

Foot-mounted helical-bevel gearmotor

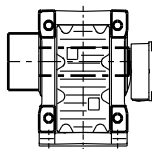
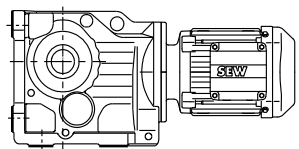


#### **KA..B DR..**

Foot-mounted helical-bevel gearmotor with hollow shaft

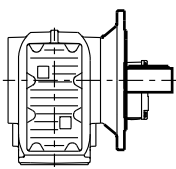
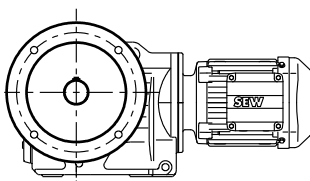
#### **KV..B DR..**

Foot-mounted helical-bevel gearmotor unit with hollow shaft and splining according to DIN 5480



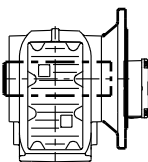
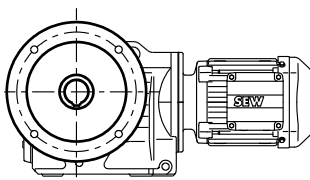
#### **KH..B DR..**

Foot-mounted helical-bevel gearmotor with hollow shaft and shrink disk



#### **KF..DR..**

Helical-bevel gearmotor in B5 flange-mounted design



#### **KAF..DR..**

Helical-bevel gearmotor in B5 flange-mounted design with hollow shaft

#### **KVF..DR..**

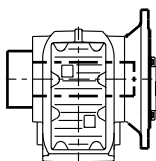
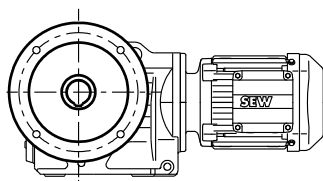
Helical-bevel gearmotor in B5 flange-mounted design with hollow shaft and splining according to DIN 5480

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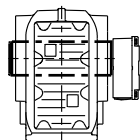
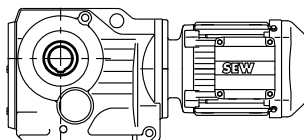
## Unit Designations and Variants

### Gearmotor variants



#### **KHF..DR..**

Helical-bevel gearmotor in B5 flange-mounted version with hollow shaft and shrink disc

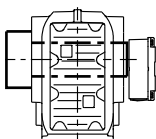
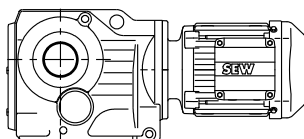


#### **KA..DR..**

Helical-bevel gearmotor with hollow shaft

#### **KV..DR..**

Helical-bevel gearmotor with hollow shaft and splining according to DIN 5480

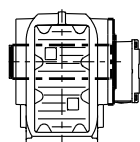
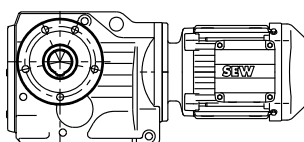


#### **KH..DR..**

Helical-bevel gearmotor with hollow shaft and shrink disc

#### **KT..DR..**

Helical-bevel gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system

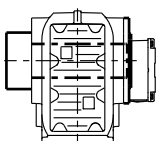
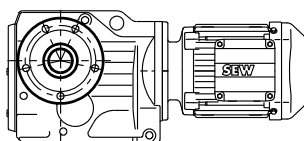


#### **KAZ..DR..**

Helical-bevel gearmotor in B14 flange-mounted design with hollow shaft

#### **KVZ..DR..**

Helical-bevel gearmotor in B14 flange-mounted design with hollow shaft and splining according to DIN 5480



#### **KHZ..DR..**

Helical-bevel gearmotor in B14 flange-mounted version with hollow shaft and shrink disc

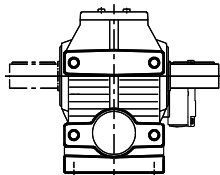
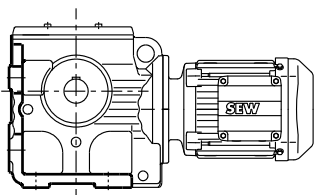
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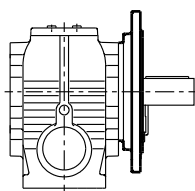
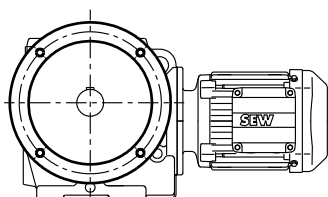
### Helical-worm gearmotors

The following types of helical-worm gearmotors are available:

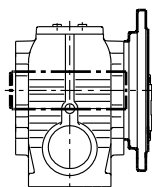
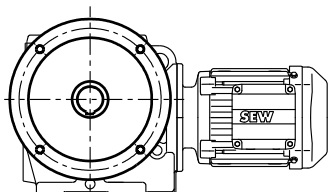
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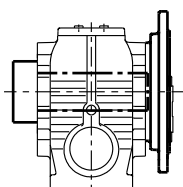
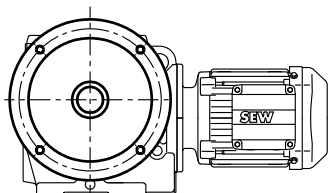
**S..DR..**  
Foot-mounted helical-worm gearmotor



**SF..DR..**  
Helical-worm gearmotor in B5 flange-mounted design



**SAF..DR..**  
Helical-worm gearmotor in B5 flange-mounted design with hollow shaft



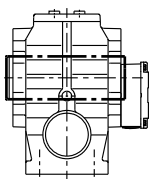
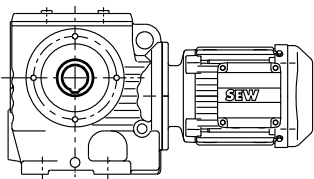
**SHF..DR..**  
Helical-worm gearmotor in B5 flange-mounted design with hollow shaft and shrink disk

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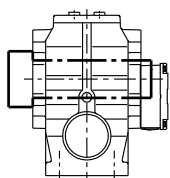
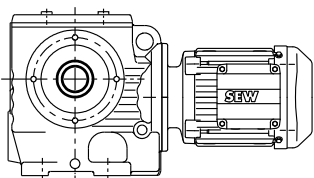
## Unit Designations and Variants

### Gearmotor variants



#### **SA..DR..**

Helical-worm gearmotor with hollow shaft

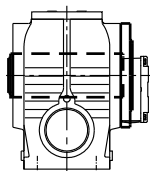
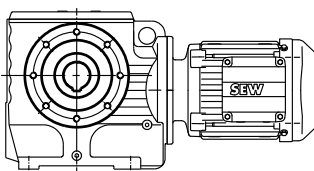


#### **SH..DR..**

Helical-worm gearmotor with hollow shaft and shrink disk

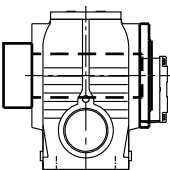
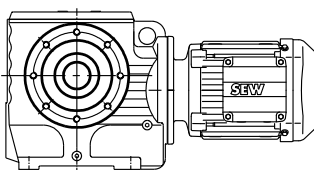
#### **ST..DR..**

Helical-worm gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system



#### **SAZ..DR..**

Helical-worm gearmotor in B14 flange-mounted design with hollow shaft



#### **SHZ..DR..**

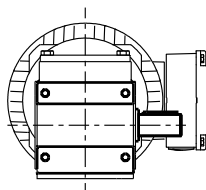
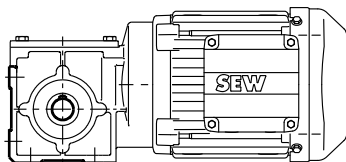
Helical-worm gearmotor in B14 flange-mounted design with hollow shaft and shrink disk

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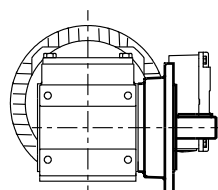
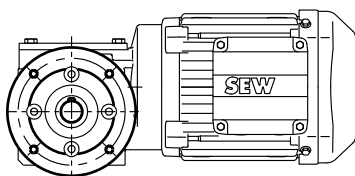
### **Spiroplan® gear-** **motors**

The following variants of Spiroplan® gearmotors size W..10 to W..47 are available:

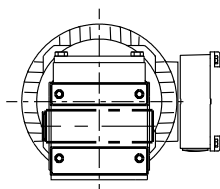
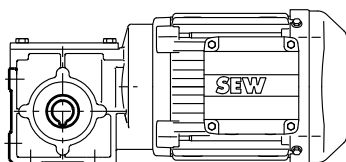


**W..DR..**  
Foot-mounted Spiroplan® gearmotors

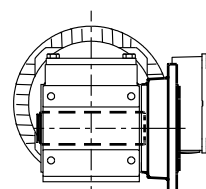
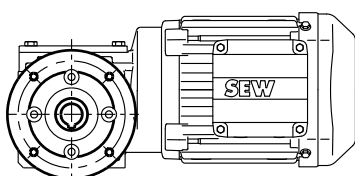
3



**WF..DR..**  
Spiroplan® gearmotor in flange-mounted design



**WA..DR..**  
Spiroplan® gearmotor with hollow shaft



**WAF..DR..**  
Spiroplan® gearmotor in flange-mounted design with hollow shaft

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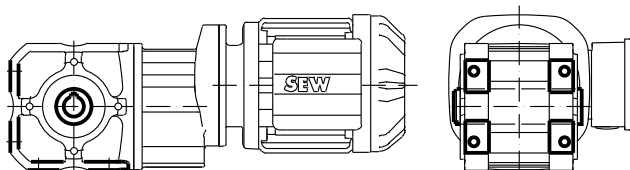




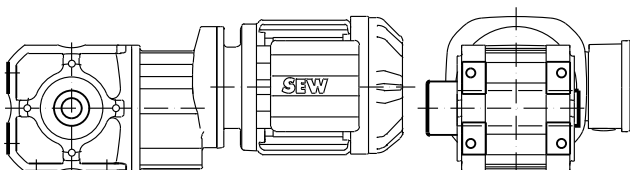
## Unit Designations and Variants

### Gearmotor variants

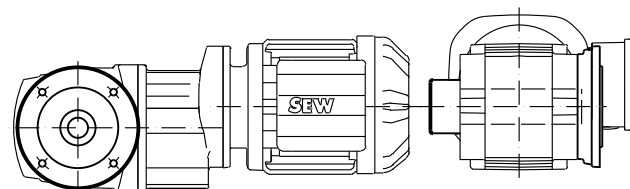
Additionally, the following variants of Spiroplan® gearmotors size W..37 and W..47 are available:



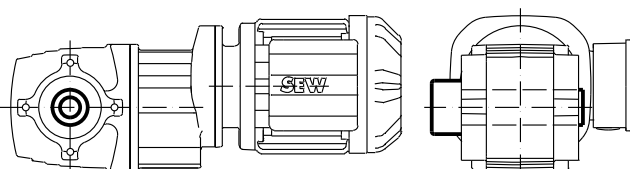
**WA..B DR..**  
Foot-mounted Spiroplan® gearmotor with hollow shaft



**WH..B DR..**  
Foot-mounted Spiroplan® gearmotor with hollow shaft and shrink disk



**WHF.. DR..**  
Spiroplan® gearmotor in flange-mounted design with hollow shaft and shrink disk



**WH.. DR..**  
Spiroplan® gearmotor with hollow shaft and shrink disk

**WT.. DR..**  
Spiroplan® gearmotor with hollow shaft and TorqLOC®

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