

### 3.2 Designs and options for the DRN.. motor series

#### 3.2.1 Designation of the motors

Design	Description
DRN..	Energy efficient motors of energy efficiency class IE3
80 – 315	Sizes: 80 / 90 / 100 / 112 / 132 / 160 / 180 / 200 / 225 / 250 / 280 / 315
S, M, ME, LS, L, H	Lengths: S = Short; M = Medium; L = Long; H = Extra-long design ME = longer variant of length M LS = Length S with shorter package
4	Number of poles 4

#### 3.2.2 Output variants

Designation	Option	Size DRN..
/FI	IEC foot-mounted motor	80M – 315H
/F.A, /F.B	Universal foot version	80M – 132S, 225S – 315H
/FG	7-series integral motor, as stand-alone motor	80M – 315H
/FF	IEC flange-mounted motor with bore	80M – 315H
/FT	IEC flange-mounted motor with threads	80M – 100L
/FL	Flange mounted motor (deviating from IEC)	80M – 315H
/FM	7-series integral motor with IEC feet	80M – 315H
/FE	IEC flange-mounted motor with bore and IEC feet	80M – 315H
/FY	IEC flange-mounted motor with threads and IEC feet	80M – 100L
/FK	Flange-mounted motor (deviating from IEC) with feet	80M – 280M <sup>1)</sup>
/FC	C-face flange-mounted motor, dimensions in inch	80M – 160L <sup>1)</sup>

1) In preparation

#### 3.2.3 Mechanical attachments

Designation	Option	Size
/BE..	Spring-loaded brake with specification of size	80M – 315H
HR	Manual brake release of the brake, automatic disengaging function	80M – 315H
HF	Manual brake release, lockable	80M – 315H
/RS	Backstop	80M – 315H
/MSW	MOVI-SWITCH®	80M – 100L
/MI	Motor identification module for MOVIMOT®	80M – 112M
/MM03 – MM40	MOVIMOT®	80M – 112M

Designation	Option	Size
/MO	MOVIMOT® option(s)	80M – 112M

### 3.2.4 Connection alternatives

Designation	Option	Size
/IS	Integrated plug connector	80M – 132S
/ASE.	HAN 10ES plug connector on terminal box with single locking latch (cage clamp contacts on the motor side)	80M – 132S
/ASB.	HAN 10ES plug connector on terminal box with double locking latch (cage clamp contacts on the motor side)	80M – 132S
/ACE.	HAN 10E plug connector on terminal box with single locking latch (crimp contacts on the motor side)	80M – 132S
/ACB.	HAN 10E plug connector on terminal box with double locking latch (crimp contacts on the motor side)	80M – 132S
/AME.	HAN Modular 10B plug connector on terminal box with single locking latch (crimp contacts on the motor side)	80M – 132S
/ABE.		80M – 225M
/ADE.		80M – 225M
/AKE.		132M – 225M
/AMB.	HAN Modular 10B plug connector on terminal box with double locking latch (crimp contacts on the motor side)	80M – 132S
/ABB.		80M – 225M
/ADB.		80M – 225M
/AKB.		132M – 225M
/AND.	Harting Han® Q8/0, single locking latch	80M – 132S
/AFQ.	Round plug connector Molex/ Amphenol, 4-pole power 1 3/8" (AFQ8 housing AI), 3-pole brake connection 7/8", 3 fixed ends, max. 25 A, BG/BGE/BSR/BUR brake	80M – 132S
/AFL.	Round plug connector Molex/ Amphenol, 4-pole power 7/8" (AFL8 housing AI), 3-pole brake connection 7/8", 3 ends, max. 25 A, BG/BGE/BSR/BUR brake	80M – 100L
/KCC	6 or 10-pole terminal strip with cage clamp contacts	80M – 132S
/KC1	C1-profile-compliant connection of the electric monorail system drive (VDI guideline 3643) (for DR71, 80). Alternatively for DR.90 – 132 for a more compact connection range	80M – 132S
/IV	Other industrial plug connectors according to customer specifications	80M – 225M

### 3.2.5 Temperature sensor / temperature detection

Designation	Option	Size
/TF	Temperature sensor (PTC thermistor or PTC resistor)	80M – 315H
/TH	Thermostat (bimetallic switch)	80M – 315H
/KY	1 KTY84 – 130 sensor	80M – 315H

# 3 Overview of types and type designations

Designs and options for the DRN.. motor series

Designation	Option	Size
/PT	1 / 3 PT100 sensor(s)	80M – 315H

## 3.2.6 Encoders

Designation	Option	Size
/ES7S <sup>1)</sup>	Mounted speed sensor with sin/cos interface	80M – 132S
/EG7S <sup>1)</sup>		132M – 280M
/EV7S		80M – 280M
/EH7S		315S – 315H
/ES7R	Mounted speed sensor with TTL (RS-422) interface, V = 9 – 26 V	80M – 132S
/EG7R		132M – 280M
/EV7R		80M – 280M
/EH7R		315S – 315H
/EI7C <sup>1)</sup>	Built-in incremental encoder with HTL interface, 24 periods	80M – 132S
/EI76	Built-in incremental encoder with HTL interface and 6 / 2 / 1 period(s)	80M – 132S
/EI72		80M – 132S
/EI71		80M – 132S
/AS7W <sup>1)</sup>	Mount-on absolute encoder, RS-485 interface (multi-turn)	80M – 132S
/AG7W <sup>1)</sup>		132M – 280M
/AV7W		80M – 280M
/AS7Y <sup>1)</sup>	Mount-on absolute encoder, SSI interface (multi-turn)	80M – 132S
/AG7Y <sup>1)</sup>		132M – 280M
/AV7Y		80M – 280M
/AH7Y		315S – 315H
/ES7A	Mounting adapter for speed sensors from the SEW-EURODRIVE portfolio	80M – 132S
/EG7A		132M – 280M
/EV7A		80M – 280M
/EH7A		315S – 315H
/ES7C	Mount-on speed sensor with HTL interface	80M – 132S
/EG7C		132M – 280M
/EV7C		80M – 280M
/EH7C		315S – 315H
/EH7T	Mount-on speed sensor TTL (RS-422) interface	315S – 315H
/XV.A	Mounting adapter for non-SEW speed sensors	80M – 280M
/XH1.	Mounted non-SEW speed sensor	80M – 132S <sup>2)</sup>
/XV..		80M – 280M

1) Also available in a safety-rated design

2) In preparation

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**3.2.7 Ventilation**

Designation	Option	Size
/V	Forced cooling fan	80M – 315H
/Z	Additional inertia (flywheel fan)	80M – 132L
/AL	Metal fan	80M – 315H
/U	Non-ventilated (without fan)	80M – 315H
/OL	Non-ventilated (closed B-side)	80M – 132S <sup>1)</sup>
/C	Protection canopy for fan guard	80M – 315H

1) In preparation

**3.2.8 Bearings**

Designation	Option	Size
/NS	Lubrication device	250M – 315H
/ERF	Reinforced bearings on A-side with roller bearing	250M – 315H
/NIB	Insulated bearing B-side	250M – 315H

**3.2.9 Condition monitoring**

Designation	Option	Size
/DUE	Diagnostic Unit Eddy Current = function/wear monitoring for brakes BE1 – BE122	80M – 315H <sup>1)</sup>

1) In preparation

**3.2.10 Other additional features**

Designation	Option	Size
/DH	Condensation drain hole	80M – 315H
/RI	Reinforced winding insulation	80M – 315H
/RI2	Reinforced winding insulation with increased resistance against partial discharge	80M – 315H <sup>1)</sup>
/2W	Second shaft end on the motor/brakemotor	80M – 315H

1) In preparation

# 3 Overview of types and type designations

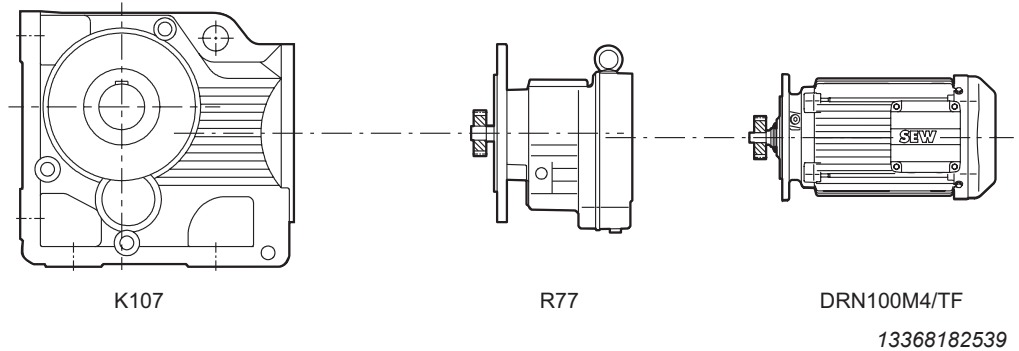
Example type designation of a DRN.. gearmotor

## 3.3 Example type designation of a DRN.. gearmotor

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

Example: K107R77DRN100M4 /TF		
Gear unit type	K	1. Gear unit
Gear unit size	107	
Gear unit series	R	2. Gear unit
Gear unit size	77	
Motor series	DRN..	Motor
Motor size	100	
Length	M	
Number of poles	4	
Motor option temperature sensor	/TF	Option

Example: DRN.. gearmotor



## 3.4 DRN.. gearmotor nameplate

The following figure shows an example of the nameplate of a DRN.. gearmotor.

<b>SEW-EURODRIVE</b>		CE	
76646 Bruchsal/Germany			
R67 DRN90L4BE2			
01.1207730226.0001.14		Inverter duty VPWM	3~IEC60034
Hz 50 r/min 1461/21	v 230/400 Δ/Y		
kW 1.5 S1	A 5.9/3.4	eff% 85.6 IE3	
Cosφ 0.74	IP65		
Th.K1.155 (F)			
i 69.75	Nm 685	IM M1	V <sub>br</sub> 230 AC
CLP 220 Miner.Öl/1.11			Nm 20
kg 54.000	188 578 2		BG1.5
			Made in Germany

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