

# Energy Efficient Geared Motors

## AC Line Operated / European Union

<b>BAUER</b>		73734 Esslingen Made in Germany	
3-Mot.-No. E 11115465-1		A/ 189D5829	44/2020
Type BK50-34V/DPE16XB4-TF			
15 xBr	cosφ	0,82	S1
50 Γ <sub>N</sub>		380 B	30,5 A
n <sub>n</sub> 1470	n <sub>2</sub>	280 ob/min	i 5,26
5-50-60 Γ <sub>N</sub>	51-380-380 B		0,9-15-17,8 xBr
	FU	100%	IE3 - 92,1 %
IM H3	IP 65	5,8 L PGLP 220	
	t <sub>amb</sub> -20 ... 40 °C		190,3 ct
<b>CE</b>		SCH03 EN60034	

# 3

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# Type Designations

## Significance of type designation

### Example: Bauer bevel-geared motor with brake and standard add-ons

#### Significance of type designation

The type designation of a BAUER geared motor is a code designating all the features in the drive configuration.

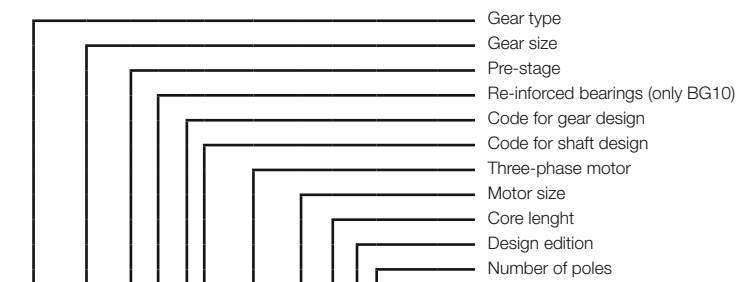
The build-up of the type designation is explained with the help of the following example of a bevel geared motor with brake and series options.

	Gear										/	Motor										/	Brake						
	BK	50	Z	-	1	1	U	W	/	D..	09L	A	4	-	TF	-	S	/	ES	010	A	9	HN	/	C2				
Bauer bevel-gears																													
Gear size 50																													
With pre-stage																													
Separates gear type from gear design																													
Gear housing, foot with clearance holes at bottom																													
Solid output shaft at front																													
Foot with clearance holes at bottom																													
Double shaft seals																													
End of gear part, start of motor part																													
Three-phase motor																													
Motor size																													
State of construction of motor																													
Poles of Winding																													
Separates motor-type from motor supplement																													
Motor protection, thermistors from thermal class F																													
Separation between motor supplements																													
Standard brake rectifier, in the motor terminal box																													
End of motor, start of brake																													
Single disc brake																													
Brake size																													
State of construction of brake																													
Code for braking torque set																													
Manual release non lockable																													
End of supplement, start total design																													
Unit in corrosion protection CORO2																													

# Type Designations

## BG-series helical-geared motor

3



BG 10 Z X-71 / D..08 LA4

Z-.. Gear with pre-stage  
 G-.. Tandem gear

1. Foot with clearance holes

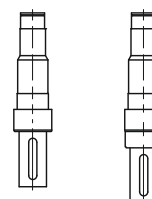
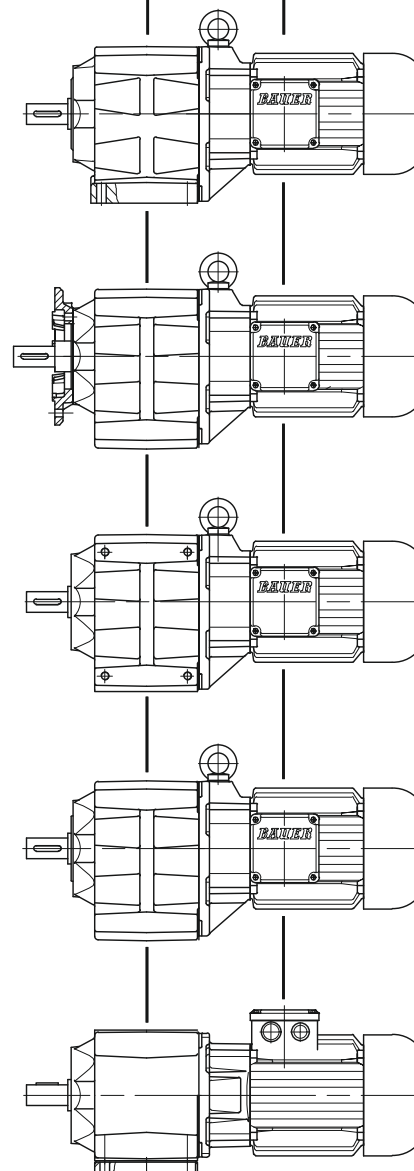
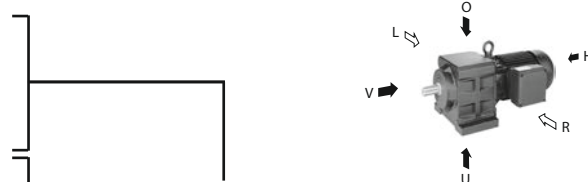
2. Small A-flange with clearance holes  
 3. Standard A-flange with clearance holes  
 4. Large A-flange with clearance holes

6. L Foot with tapped holes, left  
 6. R Foot with tapped holes, right  
 6. LR Foot with tapped holes, left and right

7. C-flange with threaded holes  
 8. Completely machined

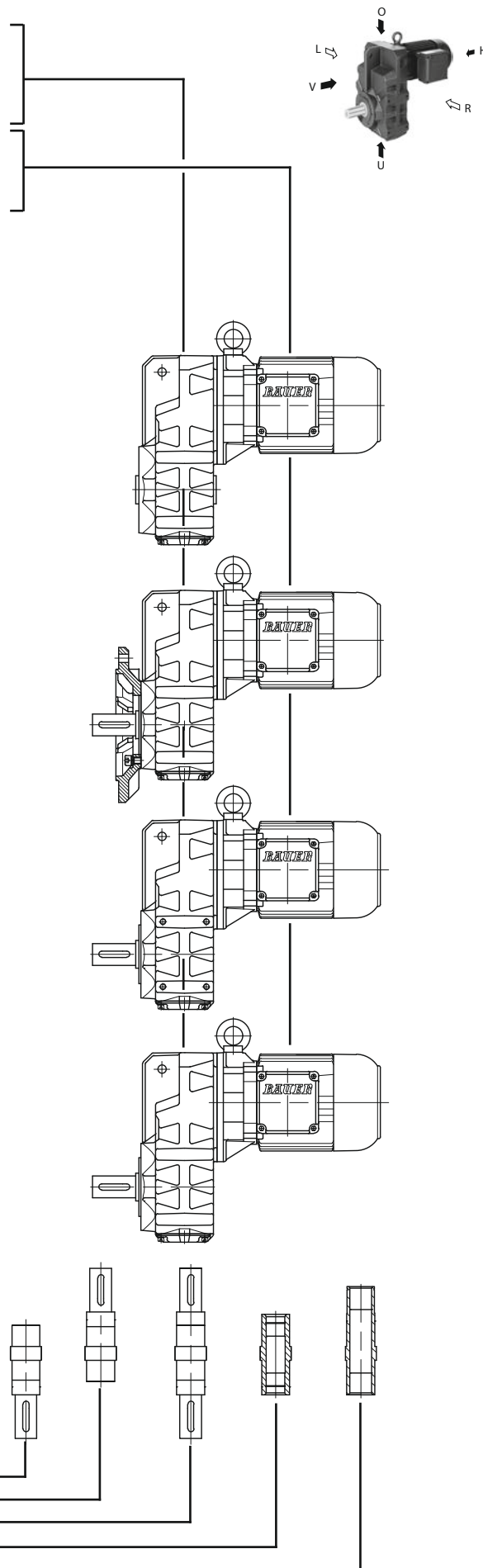
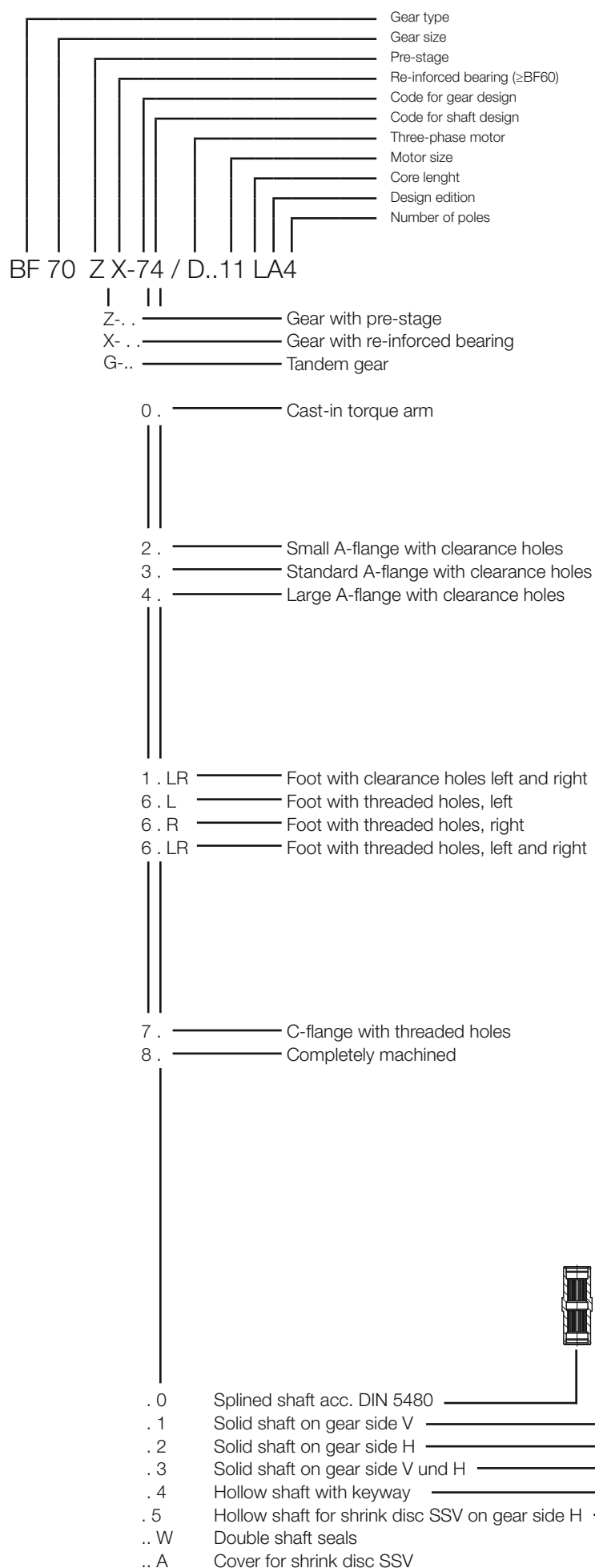
9. L Foot plate, left  
 9. R Footplate, right  
 9. LR Footplate, left and right

. 1 Solid shaft on gear side V  
 . 7 Solid shaft on gear side V for flange as from BG10  
 .. W Double shaft seals



# Type Designations

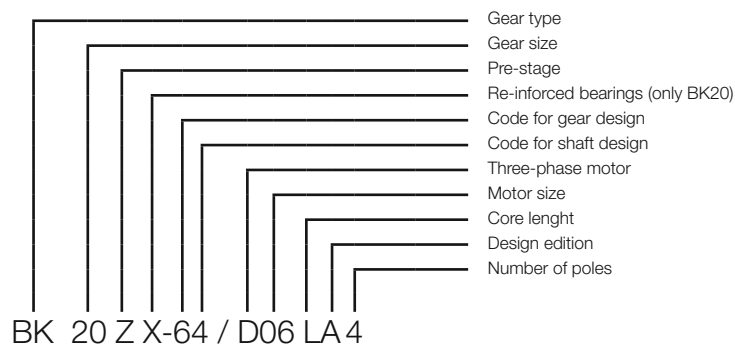
## BF-series shaft-mounted geared motor



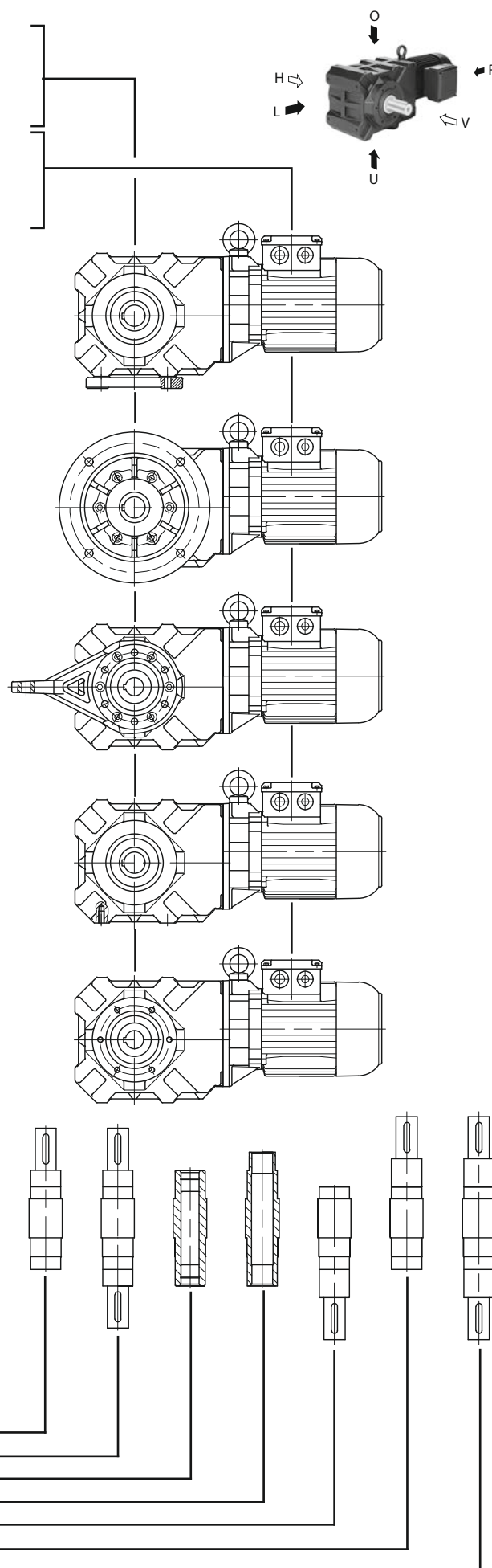
# Type Designations

## BK-series bevel-geared motor

3

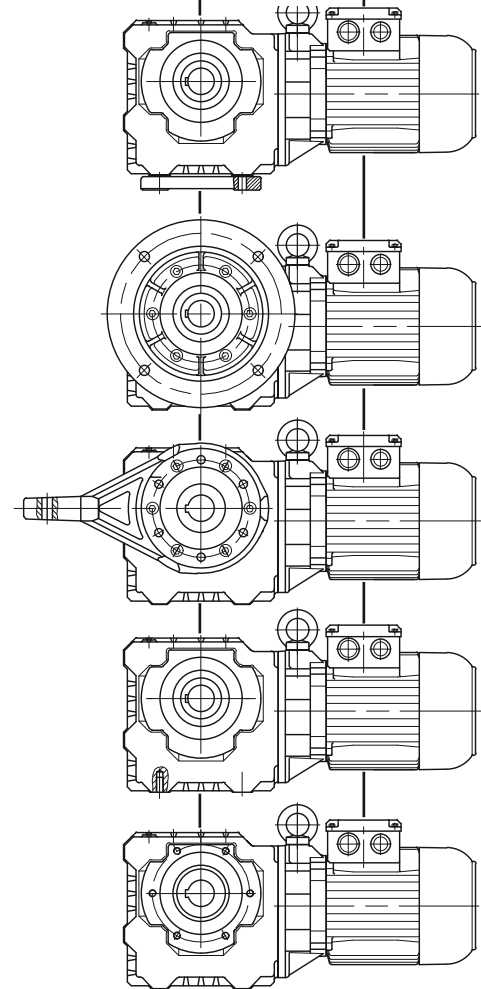
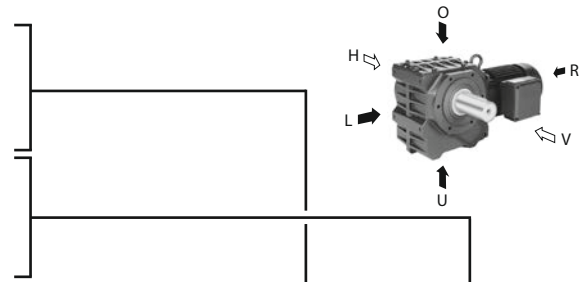
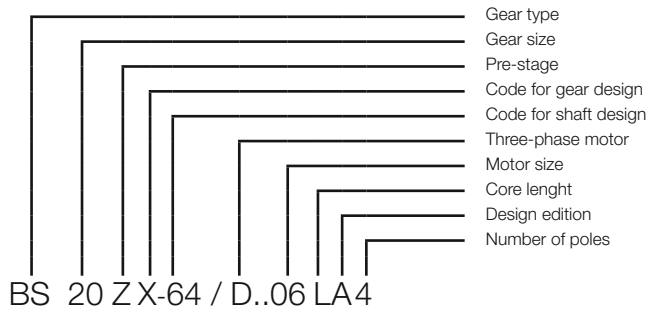


- 1 . U — Foot with clearance holes, bottom
- 1 . L — Foot with clearance holes, left
- 1 . O — Foot with clearance holes, top
- 2 . V — small A-flange with clearance holes , front
- 3 . V — Standard A-flange with clearance holes, front
- 4 . V — large A-flange with clearance holes, front
- .. H — A-flange, rear
- .. VH — A-flange, front and rear
- 5 . V — Torque arm at front
- 5 . VL — Torque arm, front to left
- 5 . VO — Torque arm, front to top
- 5 . VU — Torque arm, front to bottom
- 5 . HL — Torque arm, rear to left
- 5 . HO — Torque arm, rear to top
- 5 . HU — Torque arm, rear to bottom
- 6 . U — Foot with threaded holes, bottom
- 6 . L — Foot with threaded holes, left
- 6 . O — Foot with threaded holes, top
- 7 . V — C-flange with threaded holes, front
- 7 . H — C-flange with threaded holes, rear
- 7 . VH — C-flange with threaded holes, front and rear
- 8 . — Completely machined

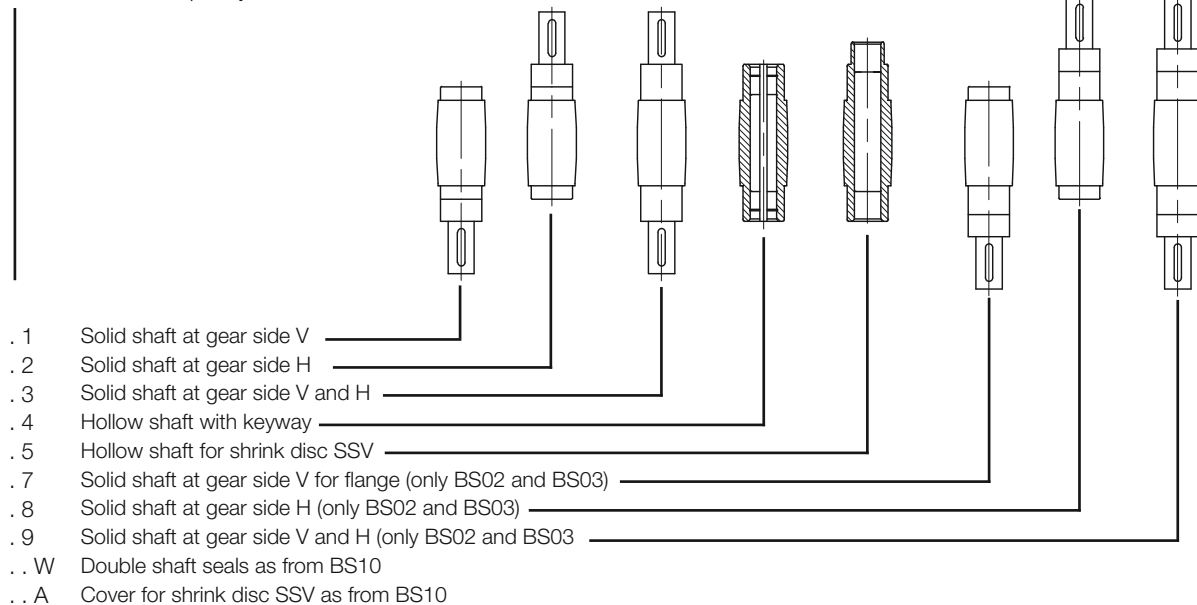


# Type Designations

## BS-series worm-geared motor



- 1 . U — Foot with clearance holes, bottom
- 1 . L — Foot with clearance holes, left
- 1 . O — Foot with clearance holes, top
- 2 . V — small A-flange with clearance holes , front
- 3 . V — Standard A-flange with clearance holes, front
- 4 . V — large A-flange with clearance holes, front
- .. H — A-flange, rear
- .. VH — A-flange, front and rear
- 5 . V — Torque arm at front
- 5 . VL — Torque arm, front to left
- 5 . VO — Torque arm, front to top
- 5 . VU — Torque arm, front to bottom
- 5 . HL — Torque arm, rear to left
- 5 . HO — Torque arm, rear to top
- 5 . HU — Torque arm, rear to bottom
- 6 . U — Foot with threaded holes, bottom
- 6 . L — Foot with threaded holes, left
- 6 . O — Foot with threaded holes, top
- 7 . V — C-flange with threaded holes, front
- 7 . H — C-flange with threaded holes, rear
- 7 . VH — C-flange with threaded holes, front and rear
- 8 . — Completely machined

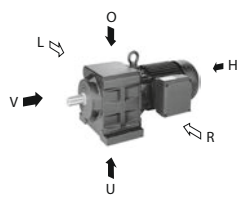


# Type Designations

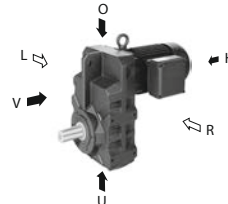
## Versions and options

### BG and BF series

BG series: type H4



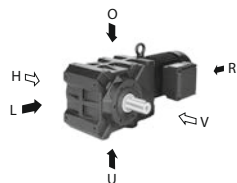
BF series: type H4



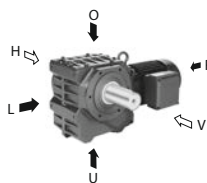
- V = Front  
The side of the gear unit facing away from the motor or the source of motive power
- H = Rear  
The side of the gear unit facing toward the motor or the source of motive power
- L = Left  
The left side of the gear unit as viewed from the output shaft side of type B3 for the BG series or type H4 for the BF series
- R = Right  
The right side of the gear unit as viewed from the output shaft side of type B3 for the BG series or type H4 for the BF series

### BK and BS series

BK series: type H1

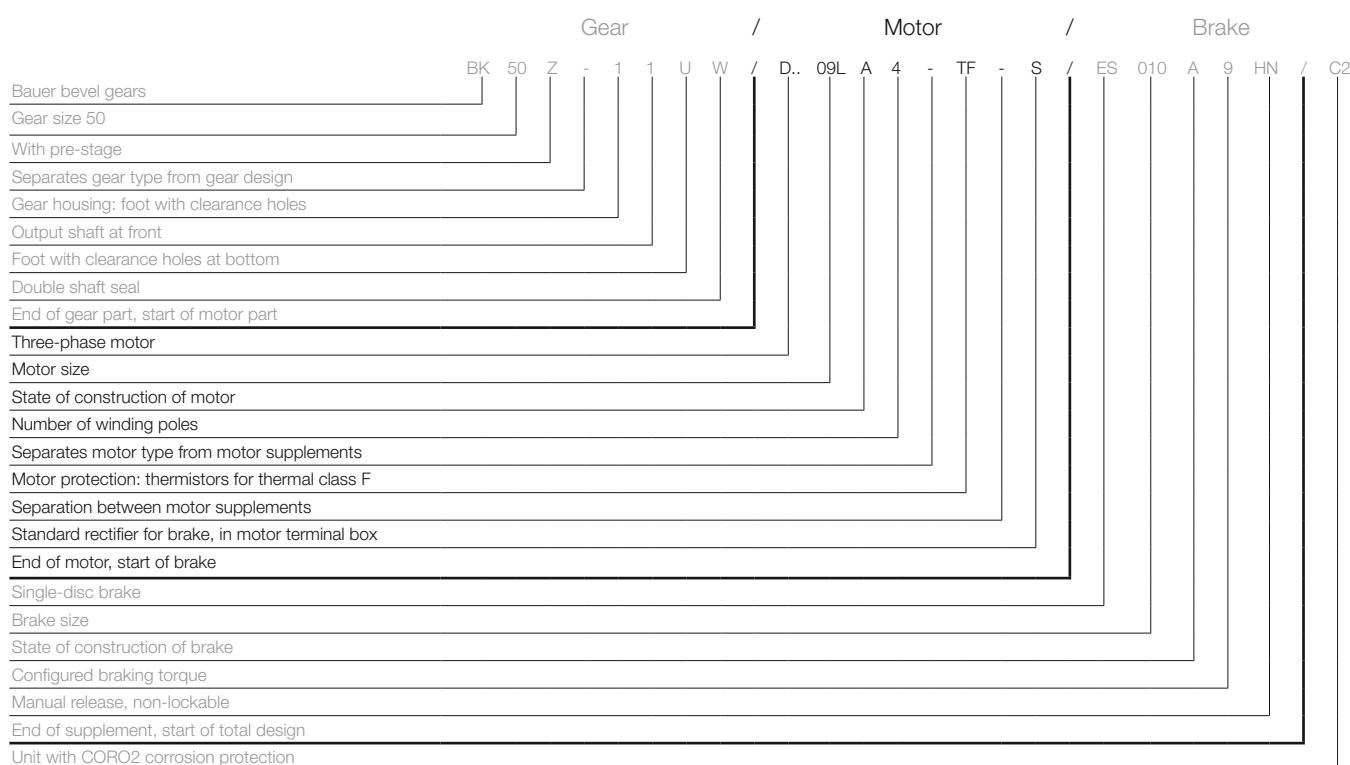


BS series: type H1



- V = Front  
The side of the gear unit facing toward the viewer looking toward the type H1 unit
- H = Rear  
The side of the gear unit facing away from the viewer looking toward the type H1 unit
- L = Left  
The left side of the gear unit as viewed from the output shaft side of type H1, or the torque brace oriented to the left
- O = Top  
The top side of the gear unit as viewed from the output shaft side of type H1, or the torque brace oriented upwards
- U = Bottom  
The bottom side of the gear unit as viewed from the output shaft side of type H1, or the torque brace oriented downwards





### Three-phase motor

D	=	Three-phase motor
E	=	Single-phase motor (Steinmetz circuit)
S	=	PM-Synchronous motor
. A	=	Aseptic motor (germ-free drive)
. SE	=	Three-phase motor with enhanced efficiency compliant with IE1
. HE	=	Three-phase motor with enhanced efficiency compliant with IE2
. PE	=	Three-phase motor with enhanced efficiency compliant with IE3
. N	=	Motor without gear unit; foot-mount version
. NF	=	Motor without gear unit; flange-mount version
. R	=	Roller table motor
. XE	=	Explosion-proof motor with increased safety
. XD	=	Explosion-proof motors
. W	=	Torque motor
. L	=	Special rotor for traction and slewing gear motors
. C	=	With main and auxiliary windings; only with single-phase motors (EC....)
. V	=	Multiple voltage ranges (wide voltage range)
. U	=	Unventilated (no forced ventilation)

### Motor protection

TB	=	Thermistor 140°
TF	=	Thermistor 160°
TH	=	Thermistor 180°
TEB	=	Thermistor warning/shutdown 120°/140°
TBF	=	Thermistor warning/shutdown 140°/160°
TFH	=	Thermistor warning/shutdown 160°/180°
TOB	=	Thermostatic switch, NC 140°
TOF	=	Thermostatic switch, NC 160°
TOH	=	Thermostatic switch, NC 180°
TSB	=	Thermostatic switch, NO 125°
TSF	=	Thermostatic switch, NO 160°
TSH	=	Thermostatic switch, NO 180°
TX	=	Other

### Brake rectifier in motor terminal box

S	=	Standard rectifier	SG
E	=	Special rectifier	ESG
M	=	Special rectifier	MSG

### Plug connector

ST	=	Harting (other)
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### Heavy-duty fan

SL

### Protective cover

D

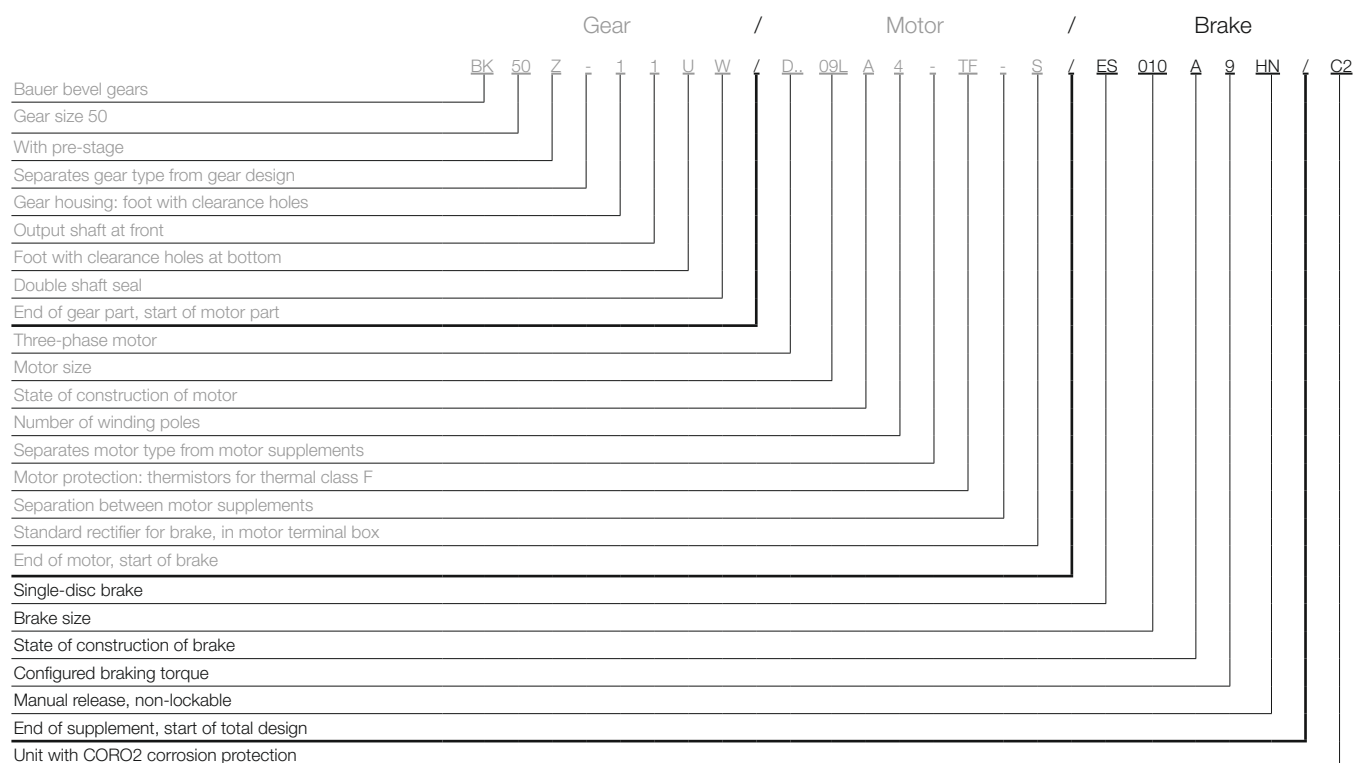
### CleanDrive

CD	=	Aseptic drive with cable
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# Type Designations

## Motor Mounted Components

3



### Brake

E	= Single-disc brake
ES	= Single-disc holding brake
EH	= Single-disc holding brake in heavy duty
ZS	= Two-disc holding brake
ESX	= Single-disc service brake
EHX	= Single-disc service brake in heavy duty version
ZSX	= Two-disc service brake
... 010	= Brake size
... ... A	= Construction state
... ... . 9	= Code for configured braking torque
... ... . . HN	= Manual release (not lockable)
... ... . . HA	= Manual release (lockable)

### Reverse rotation block

RR	= Blocking direction clockwise
RL	= Blocking direction anticlockwise

### Digital and analogue encoder

G

### Second shaft end

ZW	= With key
ZV	= With square shaft

### Forced ventilation

FV

### Overall design

AV	= USA/Canada version with shaft dimensions in inches
AM	= USA/Canada version with metric shaft dimensions
UL	= US version
CS	= Canadian version
C1	= Coro1 corrosion protection
C2	= Coro2 corrosion protection
C3	= Coro3 corrosion protection
C4	= Coro4 corrosion protection
C5I	= Coro5 corrosion protection with protection level I
C5M	= Coro5 corrosion protection with protection level M
IM2	= Protection against sea or brackish water
SP	= Non-catalogue version