

Energy Efficient Geared Motors

Electric overhead conveyors series BM

 BAUER		73734 Esslingen Made in Germany	
3-Mot.-No. e 11873612-1		A/ 188W573	40/2022
Type BM30-61UO/D08MA4-TF-ST-S/ED08B6HN/ TM			
0,55 kW		cosφ	0,75
S1		IsoCl. F	
50 Hz		400 V	1,6 A
n _s 1400	n _e 28,5 min	i 49,66	143 Nm
20-50-60 Hz	186-400-400 V	0,21-0,47-0,57 kW	
B34001123803	FU	100 %	
M H1	IP 65		1,2 L PGLP 460
T _{amb} -20...40 °C		49,4 kg	
 180 V DC	0,15 A	6,5 Nm	 380...420 V AC 0,11 A
		SCH01 EN60034	

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Type Designations

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Example: Monorail geared motor with brake and series options

Significance of type designation

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

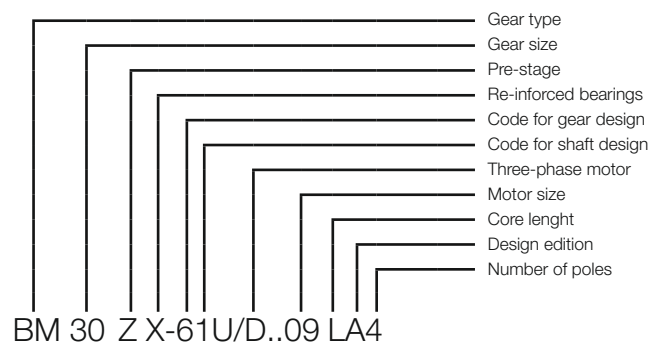
The type designation of a BAUER geared motor is a code designating of all the features in the drive configuration. The build-up of the type designation is explained with the help of the following example of a monorail geared motor with brake and series options.

	Gear										/	Motor										/	Brake					
	BM	40	Z	-	1	1	U	W	/	D..	09L	A	4	-	TF	-	S	/	ES	010	A	9	HN	/	C2			
Bauer-Monorail																												
Gear size 40																												
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

Electric overhead conveyors series BM

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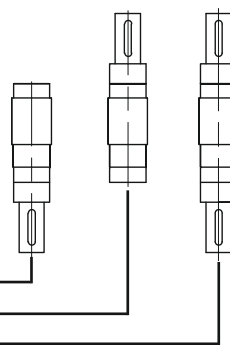
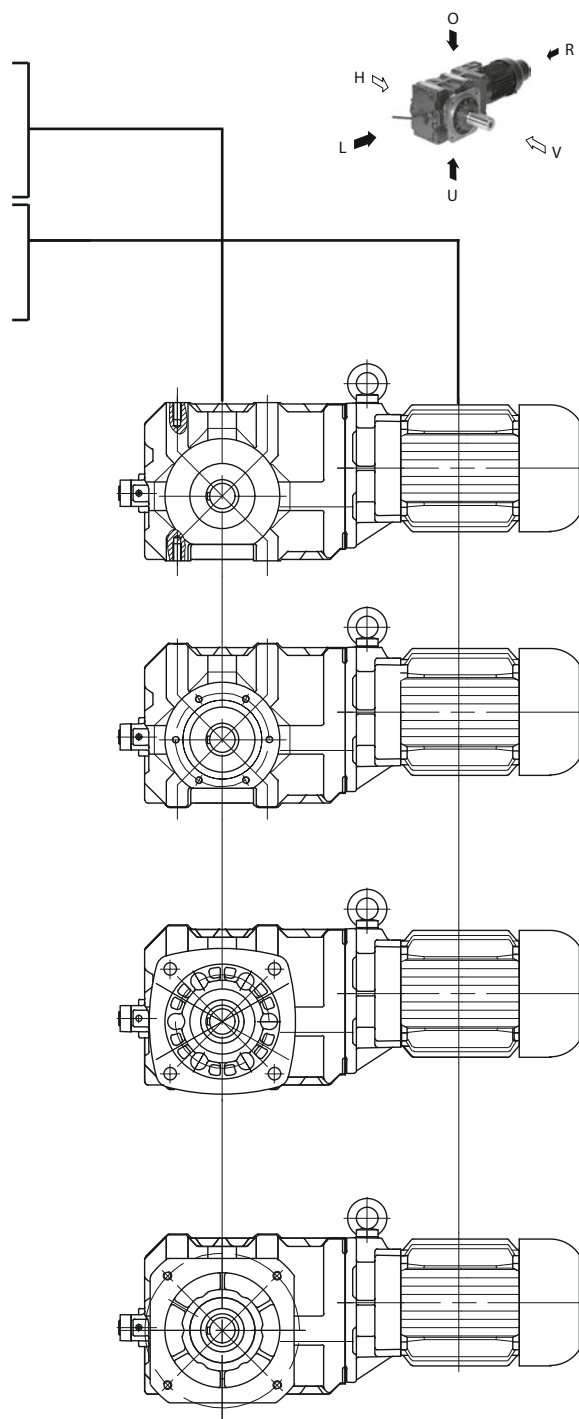
- 6 . 0 — Foot with threaded holes, top
- 6 . U — Foot with threaded holes, bottom
- 6 . UO — Foot with threaded holes, bottom and top

- 7 . V — C-flange with threaded holes, front
- 7 . H — C-flange with threaded holes, rear

- 8 . — completely machined
- 07 . V /.../ S02 — wide protruding front flange

- 07 . V /.../ S01 — Front advanced flange

- . 1 — Solid shaft on gear side V
- . 2 — Solid shaft on gear side H
- . 3 — Solid shaft on gear side V and H

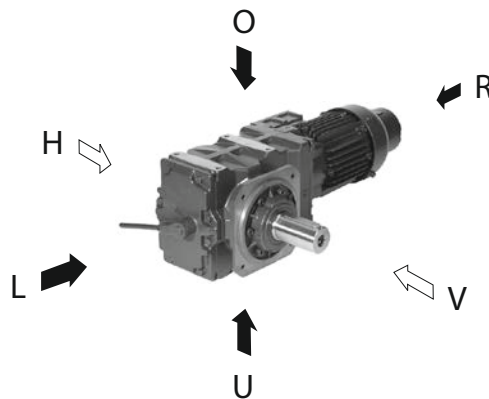


Gear unit designs

Gear unit	1st stage	2nd stage	Flange on rear	"U" and "O" foot threads	Output shaft on both sides	Output shaft on rear	Preferred flange
BM09(X)	Worm-gear	Helical-gear	-	-	-	-	-
BM10(X)	Worm-gear	Helical-gear	Option	Option	Option	-	-
BM20(X)	Helical-gear	Bevel-gear	Option	Option	Option	-	-
BM30Z(X)	Helical-gear	Bevel-gear	Option	Option	Option	-	Option
BM40Z(X)	Helical-gear	Bevel-gear	Option	Option	Option	Option	Option

Type designation and components of the BM-series geared motors

BM..-	Bauer Monorail geared motor Gear unit size (BM09, 10, 20, 30, 40)
BM..Z-..	Gear unit with additional primary stage for very high reduction ratios
BM..G-..	Gear unit with double gearing for very high reduction ratios
BM..X-..	Reinforced gear unit for high wheel loads
BM..-7.V	C-flange with threaded holes on the "V" side of the gear unit
BM..-7.H	C-flange with threaded holes on the "H" side of the gear unit (available on request)
BM..-6.UO/	Foot thread on the "U" and "O" sides of the gear unit (not with BM09)
BM..-.1/	Solid shaft on the "V" side of the gear unit
BM..-.2/	Solid shaft on the "H" side of the gear unit (available on request)
BM..-.3/	Solid shaft on the "V" and "H" sides of the motor (available on request)
BM..-07V/..S01	A-flange and solid shaft extended on the V side of the gear unit (BM30; BM40)
BM..-07V/..S02	A-flange and solid shaft "greatly" extended on the V side of the gear unit (BM30; BM40)



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

Type Designations

Motor

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	Gear	/	Motor	/	Brake	
	BM	40	Z	-	1	1
Bauer-Monorail						
Gear size 40						
With pre-stage						
Separates gear type from gear design						
Gear housing: foot with clearance holes						
Output shaft at front						
Foot with clearance holes at bottom						
Double shaft seal						
End of gear part, start of motor part						
Three-phase motor						
Motor size						
State of construction of motor						
Number of winding poles						
Separates motor type from motor supplements						
Motor protection: thermistors for thermal class F						
Separation between motor supplements						
Standard rectifier for brake, in motor terminal box						
End of motor, start of brake						
Single-disc brake						
Brake size						
State of construction of brake						
Configured braking torque						
Manual release, non-lockable						
End of supplement, start of total design						
Unit with CORO2 corrosion protection						

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

Type Designations

Motor Mounted Components

	Gear										/	Motor										/	Brake					
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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 counterclockwise

Encoders

G

Second shaft end

ZW	= With parallel 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
C5M	= Coro5 corrosion protection
IM2	= Protection against sea or brackish water
SP	= Non-catalogue version

