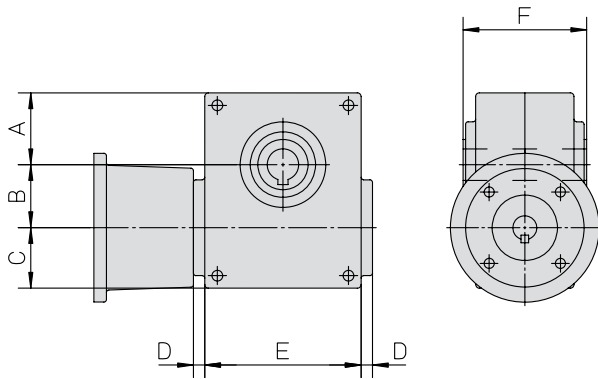




Options and Accessories

Flanges and Gears

BS40 / BS50 Worm Gears



The worm gear includes a gear, bell house and matching coupling but no adaptor flange. The worm gear is ordered using the ordering keys on the right page. The adaptor flange is ordered separately using the part numbers below as there are different adaptor flanges depending on the type of unit being used.

Dimensions

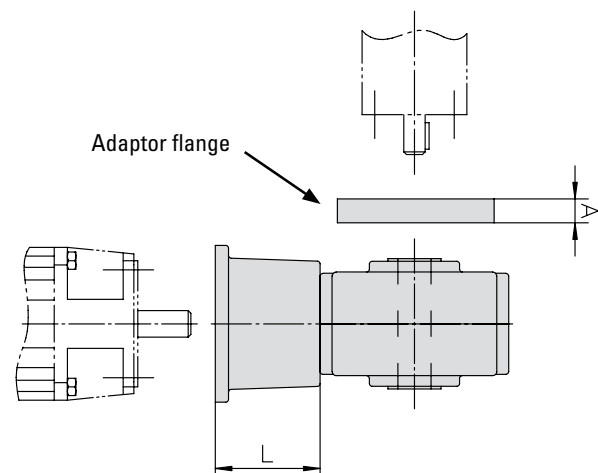
Gear	A	B	C	D	E	F
BS40	54	40	46	10	100	92
BS50	57	50	48	10	124	98

Compatibility

Unit	BS40	BS50	IEC71B14	IEC80B14	IEC90B14	A	L
T90 (T09xxxxxB32)	•		•			17	58
T90 (T09xxxxxB32)	•			•		17	68
T130		•	•			17	78
T130		•		•		17	88
T130		•			•	17	98

Adaptor Flanges

Unit	p/n
T90 (T09xxxxxB32)	D606 227
T130	D606 187



Options and Accessories

Flanges and Gears

BS40 / BS50 Worm Gears

BS40 Ordering Key

1	2	3
BS40	-10	-71
1. Type and size of worm gear BS40 = BS40 worm gear	2. Gear ratio -3 = 3:1 -5,5 = 5,5:1 -7,5 = 7,5:1 -10 = 10:1 -15 = 15:1 -20 = 20:1 -24 = 24:1 -30 = 30:1 -40 = 40:1 -48 = 48:1 -60 = 60:1	6. Motor size -71 = IEC71B14 -80 = IEC80B14

BS50 Ordering Key

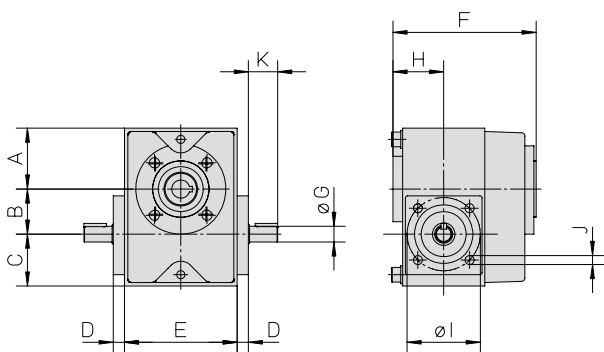
1	2	3
BS50	-37	-90
1. Type and size of worm gear BS50 = BS50 worm gear	2. Gear ratio -8 = 8:1 -10,5 = 10,5:1 -14 = 14:1 -21 = 21:1 -24 = 24:1 -32 = 32:1 -37 = 37:1 -42 = 42:1 -54 = 54:1 -64 = 64:1 -81 = 81:1	6. Motor size -71 = IEC71B14 -80 = IEC80B14 -90 = IEC90B14



Options and Accessories

Flanges and Gears

TBS40 Worm Gear



The worm gear is installed directly to the unit and requires no intermediate coupling between the two. To install the gear to the motor, a bell house flange must be used between the gear and the motor. The bell house flange, which includes a matching coupling, is ordered separately. A shaft cover can be ordered to cover the second primary shaft on the gear in case it is not being used.

Dimensions

Gear	A	B	C	D	E	F	øG	H	øI	J	K
TBS40	54	40	46	10	100	125	14j6	45	65	M8 (4x)	25

Compatibility

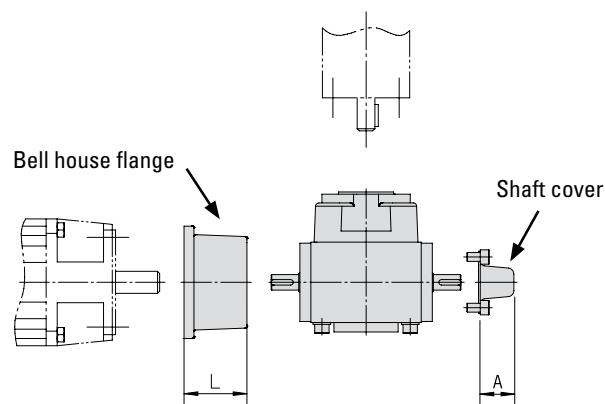
Unit	TBS40	IEC71B14	IEC80B14	A	L
T60 / T90 (T09xxxxxB25)	•	•		32	58
T60 / T90 (T09xxxxxB25)	•		•	32	68

Bell House Flange

Motor size	p/n
IEC71B14	D701 011
IEC80B14	D701 015

Shaft Cover

Gear type	p/n
TBS40	D701 020



Options and Accessories

Flanges and Gears

TBS40 Worm Gear

Ordering Key

1	2	3
TBS40	-3	-216
1. Type and size of worm gear TBS40 = TBS40 worm gear	2. Gear ratio -3 = 3:1 -5,5 = 5,5:1 -7,5 = 7,5:1 -10 = 10:1 -15 = 15:1 -20 = 20:1 -24 = 24:1 -30 = 30:1 -40 = 40:1 -48 = 48:1 -60 = 60:1	3. Fixed code -216

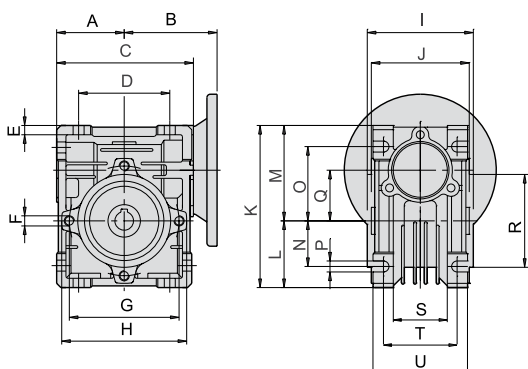


Options and Accessories

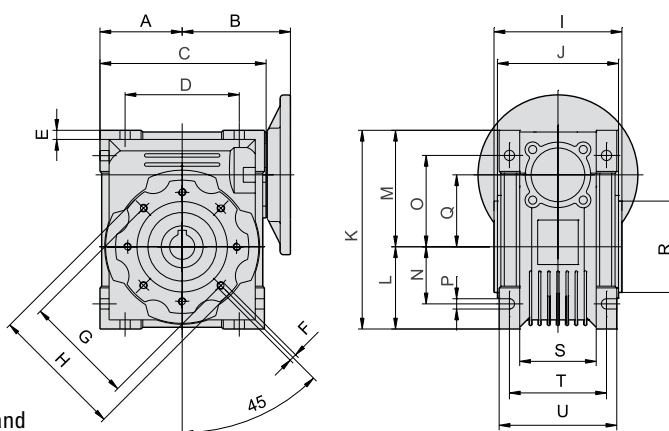
Flanges and Gears

SB Worm Gear

SB030



SB040, SB050, SB063, SB075



The worm gear is installed to the unit using a unit type and gear-size-specific adapter flange. No intermediate coupling is needed. The gear mounts directly to the motor and no coupling, bell house or adaptor flange is required. An optional rear clevis can be mounted to the gear by using a rear clevis adaptor flange. This can be ordered as a package either unmounted or mounted to the unit, or as separate items.

Dimensions

Gear size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
SB030	40	55	81	54	5.5	M6 × 11	65	75	63	58	97	40	57	27	44	6.5	30	55h8	32	44	56
SB040	50	70	101	70	6.5	M6 × 8	75	87	78	73	121.5	50	71.5	35	55	6.5	40	60h8	43	60	71
SB050	60	80	121	80	7	M8 × 10	85	100	92	87	144	60	84	40	64	8.5	50	70h8	49	70	85
SB063	72	95	146	100	8	M8 × 14	95	110	112	106	174	72	102	50	80	8.5	63	80h8	67	85	103
SB075	86	112.5	174	120	10	M8 × 14	115	140	120	114	205	86	119	60	93	11.5	75	95h8	72	90	112

Unit and Gear Compatibility

Unit type	Gear				
	SB030	SB040	SB050	SB063	SB075
T60 (T06SXXXXG25)	•				
T60 (T06SXXXXH25)		•			
T90 (T09SXXXXH25)		•			
T90 (T09SXXXXL32)			•	•	
T130 (T13SXXXXL40)				•	
T130 (T13SXXXXK50)					•

Options and Accessories

Flanges and Gears

SB Worm Gear

Gear, Gear Ratio and Motor Compatibility

Gear size	Motor size	Gear Ratio [i]											
		5	7.5	10	15	20	25	30	40	50	60	80	100
SB030	IEC56B14	•	•	•	•	•	•	•	•	•	•	•	
	IEC63B14	•	•	•	•	•	•	•	•	•			
SB040	IEC63B14	•	•	•	•	•	•	•	•	•	•	•	•
	IEC71B14	•	•	•	•	•	•	•	•				
SB050	IEC71B14	•	•	•	•	•	•	•	•	•	•	•	
	IEC80B14	•	•	•	•	•	•	•					
SB063	IEC71B14								•	•	•	•	•
	IEC80B14		•	•	•	•	•	•	•	•			
	IEC90B14		•	•	•	•	•	•					
SB075	IEC80B14					•	•	•	•	•	•	•	•
	IEC90B14		•	•	•	•	•	•	•				
	IEC100/112B14		•	•	•								

Ordering Key

1	2	3	4	5
SB030-06G	-7.5	-63	-M	-C
1. Worm gear type, size and unit compatibility SB030-06G = SB030, T06SXXXXG25 SB040-06H = SB040, T06SXXXXH25 SB040-09H = SB040, T09SXXXXH25 SB050-09L = SB050, T09SXXXXL32 SB063-09L = SB063, T09SXXXXL32 SB063-13L = SB063, T13SXXXXL40 SB075-13K = SB075, T13SXXXXK50	2. Gear ratio -5 = 5:1 -7.5 = 7.5:1 -10 = 10:1 -15 = 15:1 -20 = 20:1 -25 = 25:1 -30 = 30:1 -40 = 40:1 -50 = 50:1 -60 = 60:1 -80 = 80:1 -100 = 100:1	3. Motor size -56 = IEC56B14 -63 = IEC63B14 -71 = IEC71B14 -80 = IEC80B14 -90 = IEC90B14 -100 = IEC100/112B14	4. Mounting type -M = gear mounted to unit -N = gear not mounted to unit	5. Rear mounting option -X = no rear mounting -C = rear clevis

Options and Accessories

Flanges and Gears

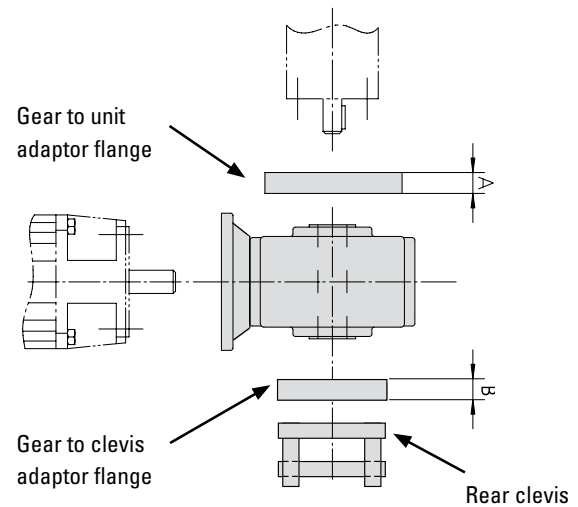
SB Worm Gear

Gear to Unit Adaptor Flanges

Unit type	Gear size	p/n	A [mm]
T60 (T06SXXXXG25)	SB030	D321823	22
T60 (T06SXXXXH25)	SB040	D321978	25
T90 (T09SXXXXH25)	SB040	D321978	25
T90 (T09SXXXXL32)	SB050	D322130	56
T90 (T09SXXXXL32)	SB063	D322050	56
T130 (T13SXXXXL40)	SB063	D322135	56
T130 (T13SXXXXK50)	SB075	D322118	56

Gear to Rear Clevis Adaptor Flanges

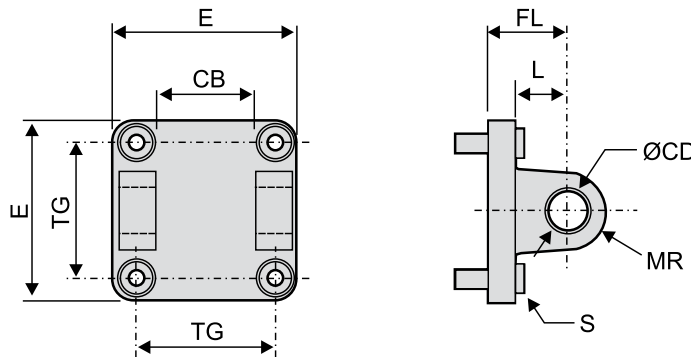
Gear size	p/n	B [mm]
SB030	D390075	14
SB040	D322132	14
SB050	D322124	15
SB063	D322125	15
SB075	D322119	25



Options and Accessories

Flanges and Gears

SB Worm Gear



Rear Clevis

Gear size	p/n	CB [mm]	ØCD [mm]	E [mm]	FL [mm]	L [mm]	MR [mm]	S	TG [mm]
SB030	D701982	40	16	75	32 ± 0.2	21	16	M8 × 20	56.5 ± 0.2
SB040	D702169	50	16	95	36 ± 0.2	22	16	M10 × 25	72 ± 0.2
SB050, SB063	D702170	70	25	140	50 ± 0.3	30	25	M12 × 25	110 ± 0.3
SB075	D606576	90	30	180	55 ± 0.2	35	25	M16 × 30	140 ± 0.2

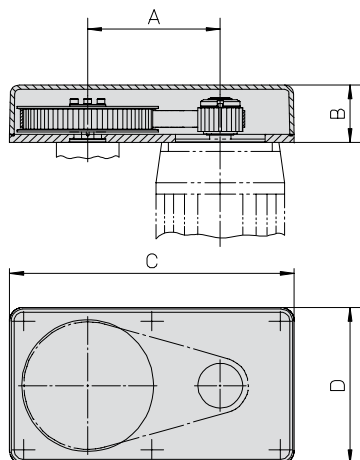
Options and Accessories

Flanges and Gears

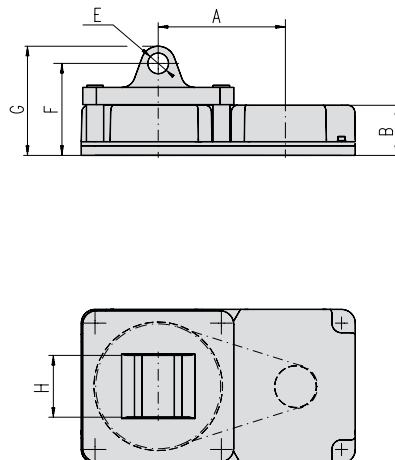
BGM Belt Gear

The belt gear comes in parts and is assembled and mounted to the unit and motor by the customer.

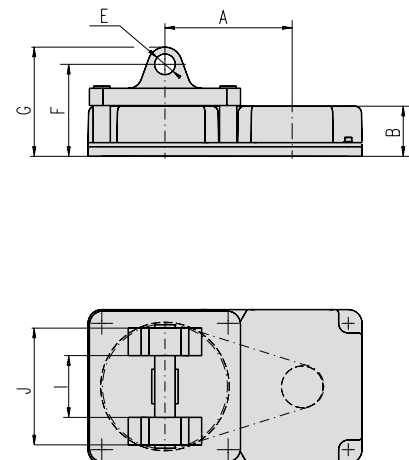
BGM06/09/41/81 - NO CLEVIS OPTION



BGM09/41/81 - CLEVIS OPTION TYPE S



BGM06/81 - CLEVIS OPTION TYPE R



Dimensions

Gear	A	B	C	D	øE	F	G	H	I	J
BGM06	72,5	50	152	95	16 H9	82	98	—	40	70
BGM09	118,7	52	255	140	20 H9	95	115	60	—	—
BGM41	155,2	70	305	165	25 H9	122	147	70	—	—
BGM81	200	73	399	224	30 H9	134	159	90	90H14	170

Technical Data

Gear	i	nmax [rpm]	Mmax [Nm]	η	J [kgm ²]	Weight [kg]
BGM06	1:1	4000	2,1	0,85	0,000076	1,6
BGM06	2:1	4000	3,4	0,85	0,000100	1,7
BGM09	1,04:1	4000	3,3	0,85	0,000102	2
BGM09	1,85:1	4000	3,3	0,85	0,000112	2,1
BGM09	2,85:1	4000	3,3	0,85	0,000213	2,5
BGM41	1:1	4000	16,6	0,85	0,000438	3,4
BGM41	2:1	4000	9,7	0,85	0,000342	3,7
BGM41	3:1	4000	9,7	0,85	0,000583	4,6
BGM81	1:1	4000	32	0,85	0,000836	12,1
BGM81	2,25:1	4000	30	0,85	0,001051	12,9
BGM81	3,13:1	4000	28	0,85	0,001439	14

i = gear ratio, nmax = max. input speed, Mmax = max. input torque, η = efficiency factor, J = inertia

Options and Accessories

Flanges and Gears

BGM Belt Gear

BGM Compatibility

Gear	T60	T90 (T09-B25)	T90 (T09-B32)	T130
BGM06	•			
BGM09	•	•		
BGM41		•	•	•
BGM81				•

BGM Ordering Key

1	2	3	4	5	6	7	8
BGM09	-2	-CC	063	P	09A	X	+XX

1. Type and size of belt gear

BGM06 = BGM belt gear size 06
 BGM09 = BGM belt gear size 09
 BGM41 = BGM belt gear size 41
 BGM81 = BGM belt gear size 81

2. Gear ratio

-1 = see table below
 -2 = see table below
 -3 = see table below

Gear ratio code	Belt gear type			
	BGM06	BGM09	BGM41	BGM81
-1	1:1	1,04:1	1:1	1:1
-2	2:1	1,85:1	2:1	2,25:1
-3	–	2,85:1	3:1	3,13:1

3. Type of couplings

-CC = conical couplings

4. Motor size compatibility ¹

063 = IEC 63 B14
 071 = IEC 71 B14
 080 = IEC 80 B14
 090 = IEC 90 B14
 100 = IEC 100/121 B14
 S80 = servo motor size 80
 S95 = servo motor size 95
 A20 = servo motor size A200
 AK3 = servo motor type AKM 3
 AK4 = servo motor type AKM 4
 AK5 = servo motor type AKM 5
 AK6 = servo motor type AKM 6

Motor code	Belt gear type			
	BGM06	BGM09	BGM41	BGM81
063		•		
071		•	•	
080			•	
090			•	•
100				•
S80		•	•	
S95				
A20			•	•
AK3	•			
AK4	•	•		
AK5			•	
AK6				•

5. Type of mounting

P = standard

6. Compatible unit

T06 = T60
 09A = T90 (T09-B25)
 09B = T90 (T09-B32)
 130 = T130

Unit code	Belt gear type			
	BGM06	BGM09	BGM41	BGM81
T06	•	•		
09A		•	•	
09B			•	
130			•	•

7. Clevis option compatibility

X = no clevis option
 S = clevis option type S
 R = clevis option type R

Clevis code	Belt gear typ			
	BGM06	BGM09	BGM41	BGM81
X	•	•	•	•
S		•	•	•
R	•			•

8. Protection

+XX = standard
 +S1 = wash down protection

(1) This is only a selection of all motors that fit the gears. Please contact customer support to see if your preferred motor fits the gear.