

S Serie - Stirnrad-Getriebe

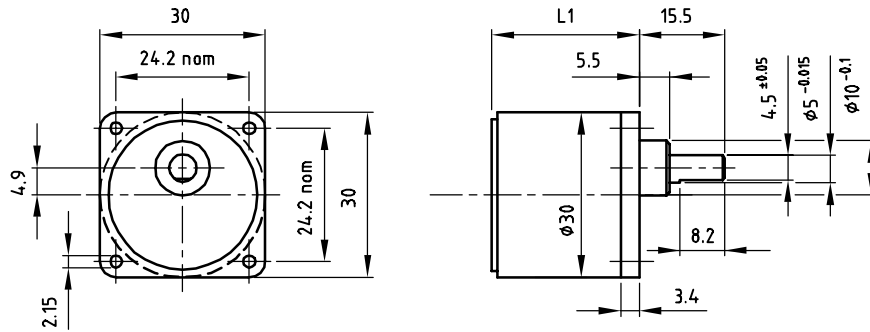


- Stirnradgetriebe
- 10 Baugrößen mit jeweils mehreren Getriebestufen
- Betriebsmoment von 0,07 bis 9Nm
- Eingangsdrehzahl bis 6.000rpm
- Sonderausführungen möglich (Sonderflansch, Wellenkonfiguration)

Getriebe - Daten								
Getriebe- typ	Untersetzung	Stufen	Wirkungs- grad	max. Dauer- moment	max. Eingangs- drehzahl	Spiel	Gewicht	Baugröße
	1:		%	Nm		°	g	d (b x h) x l mm
	S30A	15 / 30	3	73	0,07	5.000	3	40
60 / 100		4	65	0,1	5.000	3	45	30 x 30 x 21,0
200		5	59	0,2	5.000	3	50	30 x 30 x 26,0
500		6	52	0,2	5.000	3	50	30 x 30 x 26,0
S37A	10	2	81	0,1	6.000	3	76	37 x 23,5
	18 / 30	3	73	0,1 / 0,2	6.000	3	81	37 x 26,0
	60 / 75 / 100	4	66	0,3 / 0,4 / 0,6	6.000	3	86	37 x 28,5
	150 / 200	5	59	0,6	6.000	3	89	37 x 31,0
	500 / 900	6	53	0,6	6.000	3	94 / 97	37 x 33,5
S38A	5,85 / 9,69	2	82	0,15	5.000	3	55	38 x 38 x 16
	17,55 / 29,07	3	74	0,25	5.000	3	60	38 x 38 x 18,5
	59,67 / 98,85	4	67	0,4 / 0,7	5.000	3	65	38 x 38 x 21
	202,88	5	61	0,7	5.000	3	70	38 x 38 x 23,5
	501,17 / 889,62	6	55	0,7	5.000	3	75	38 x 38 x 26
S52A	4,17 / 8,33 / 12,5 / 16,67	2	80	0,1 - 0,5	500			52 x 52 x 27
	6,25 / 10 / 20 / 25 / 33,33 / 41,67 / 50 / 62,5 / 83,33	3	73	0,2 - 0,7	500			52 x 52 x 27
	100 / 125 / 166,67 / 250	4	65	0,7	500			52 x 52 x 27
	375 / 500 / 750 / 1.000 / 1.250	5	59	0,7	500			52 x 52 x 27
	5.000	6	53	0,7	500			52 x 52 x 27
	15.000	7	48	0,7	500			52 x 52 x 27

Getriebe - Daten								
Getriebe- typ	Untersetzung	Stufen	Wirkungs- grad	max. Dauer- moment	max. Eingangs- drehzahl	Spiel	Gewicht	Baugröße
	1:		%	Nm		°	g	d (b x h) x l mm
S52B	17	3	73	1,5	4.500	<2		52 x 52 x 27
	30 / 50	4	65	1,5	4.500	<2		52 x 52 x 27
	75 / 100 / 125 / 150	5	59	1,5	4.500	<2		52 x 52 x 27
S64A	5	2	81	0,5	5.000	0,4		64 x 64 x 30
	12,5	3	73	1	5.000	0,6		64 x 64 x 30
	25 / 50	4	66	3	5.000	0,8		64 x 64 x 30
	100 / 125 / 250	5	59	3	5.000	1,0		64 x 64 x 30
S66A	5 / 12,5	3	70	1,4 - 1,5	3.000	3	460	66 x 66 x 41
	25 / 50	4	65	2,0 - 2,8	3.000	3	480	66 x 66 x 41
	100 / 125	5	60	3,5 - 3,8	3.000	3	500	66 x 66 x 41
	250 / 500	6	55	4,4 - 4,7	3.000	3	520	66 x 66 x 41
S69A	13,75 / 27,4	2	81	5	5.000	1,6	290	60,8 x 69,3 x 40,5
	54,4 / 94,8 / 145,7	3	73	7	5.000	1,6	305	60,8 x 69,3 x 40,5
	276 / 537	4	66	9	5.000	1,6	315	60,8 x 69,3 x 40,5
S70B	25 / 50	3	73	1,3 - 2,6	500			70 x 70 x 27,5
	100 / 125 / 250	4	65	4,6 - 7,0	500			70 x 70 x 27,5
	500 / 325	5	59	7	500			70 x 70 x 27,5
	5.000	6	53	7	500			70 x 70 x 27,5
S70A	4,17 / 6,25 / 8,33 / 10 / 12,5 / 16,67	2	80	0,2 - 0,8	500			70 x 70 x 27,5
	20 / 25 / 33,33 / 41,67 / 50 / 62,5 / 83,33	3	73	0,9 - 3,0	500			70 x 70 x 27,5
	125 / 250	4	65	3	500			70 x 70 x 27,5
	500 / 750 / 1.000 / 1.250	5	59	3	500			70 x 70 x 27,5
	5.000	6	53	3	500			70 x 70 x 27,5
	15.000	7	48	3	500			70 x 70 x 27,5

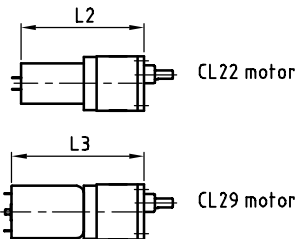
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor	Weight [g]	L1 [mm]	L2 [mm]	L3 [mm]
S30A0015AA	15:1	3	73	0.07	0.2	≠	40	18.5	58.7	64.0
S30A0030AA	30:1	3	73	0.07	0.2	≠	40	18.5	58.7	64.0
S30A0060AA	60:1	4	65	0.10	0.3	=	45	21.0	61.2	66.5
S30A0100AA	100:1	4	65	0.10	0.3	=	45	21.0	61.2	66.5
S30A0200AA	200:1	5	59	0.20	0.6	≠	50	26.0	66.2	71.5
S30A0500AA	500:1	6	52	0.20	0.6	=	50	26.0	66.2	71.5

Product combinations



Order number of motor/gearbox

Last 6 digits of motor number + gearbox number

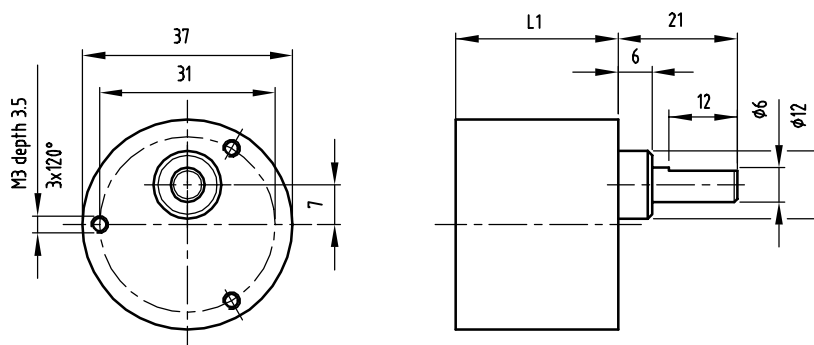
General data

* Bearing on output shaft	sleeve	
* Maximum radial load 5 mm from bearing	30	N
* Maximum axial load	15	N
* Maximum press on force	350	N
* Radial play, 5 mm from bearing	<0.1	mm
* Axial play	max 0.2	mm
* Max. recommended input speed	5000	rpm
* Backlash at no load	2	°
* Backlash at nominal load	3	°
* Temperature range	-10/+90	°C

Options

- * Custom ratios
- * Custom shafts

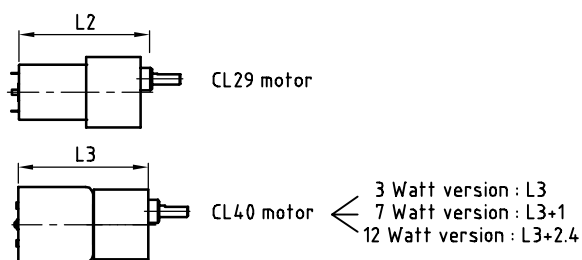
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor	Weight [g]	L1 [mm] without adapter	L2 [mm]	L3 [mm]
S37A0010AA	10:1	2	81	0.1	0.3	=			59.3	63.7
S37A0018AA	18:1	3	73	0.1	0.3	≠			61.8	66.2
S37A0030AA	30:1	3	73	0.2	0.6	≠			61.8	66.2
S37A0060AA	60:1	4	66	0.3	0.9	=			64.3	68.7
S37A0075AA	75:1	4	66	0.4	1.2	=			64.3	68.7
S37A0100AA	100:1	4	66	0.6	1.8	=			64.3	68.7
S37A0150AA	150:1	5	59	0.6	1.8	≠			66.8	71.2
S37A0200AA	200:1	5	59	0.6	1.8	≠			66.8	71.2
S37A0500AA	500:1	6	53	0.6	1.8	=			69.3	73.7
S37A0900AA	900:1	6	53	0.6	1.8	=			69.3	73.7

Product combinations



Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	sleeve	
* Maximum radial load	1.1	N
* Maximum axial load	4.5	N
* Maximum press on force	450	N
* Radial play of shaft	<=0.1	mm
* Axial play of shaft	0.1 - 0.6	mm
* Max. recommended input speed	6000	rpm
* Backlash at no load		°
* Backlash at nominal load		°
* Temperature range	-10/+60	°C

Options

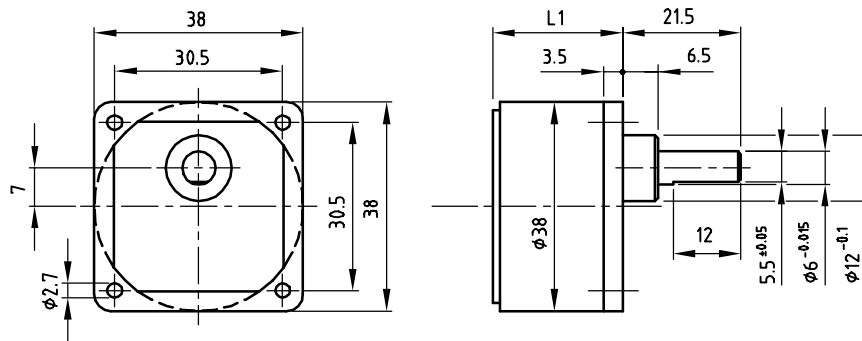
- * Other standard ratios
- * Custom shafts

S38A

Spur gearbox

0.7 Nm

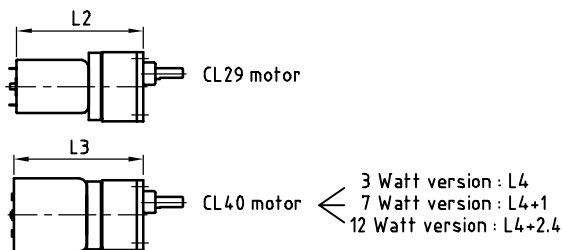
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Exact ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor	Weight [g]	L1 [mm]	L2 [mm]	L3 [mm]
S38A0006AA	6:1	5.85:1	2	82	0.15	0.3	=	55	16	61.4	62.8
S38A0010AA	10:1	9.69:1	2	82	0.15	0.4	=	55	16	61.4	62.8
S38A0018AA	18:1	17.55:1	3	74	0.25	0.6	≠	60	18.5	63.9	65.3
S38A0030AA	30:1	29.07:1	3	74	0.25	0.7	≠	60	18.5	63.9	65.3
S38A0060AA	60:1	59.67:1	4	67	0.4	1.8	=	65	21	66.4	67.8
S38A0100AA	100:1	98.85:1	4	67	0.7	1.8	=	65	21	66.4	67.8
S38A0200AA	200:1	202.88:1	5	61	0.7	1.8	≠	70	23.5	68.9	70.3
S38A0500AA	500:1	501.17:1	6	55	0.7	2.0	=	75	26	71.4	72.8
S38A0900AA	900:1	889.62:1	6	55	0.7	2.0	=	75	26	71.4	72.8

Product combinations



Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	sleeve	
* Maximum radial load 5 mm from bearing	45	N
* Maximum axial load	30	N
* Maximum press on force	450	N
* Radial play, 5 mm from bearing	<0.1	mm
* Axial play	max. 0.2	mm
* Max. recommended input speed	5000	rpm
* Backlash at no load	1	°
* Backlash at nominal load	3	°
* Temperature range	-10/+90	°C

Options

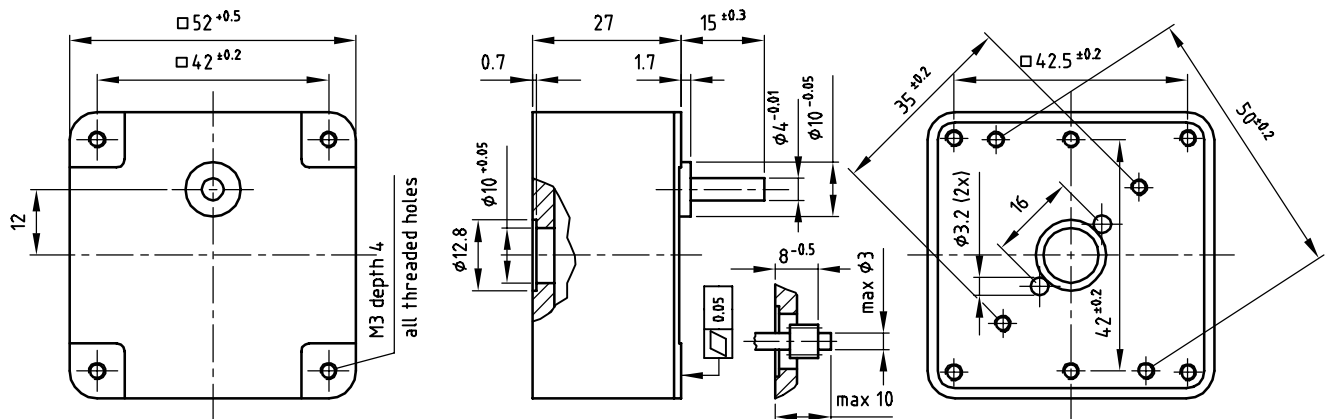
- * Custom ratios
- * Custom shafts

S52A

Spur gearbox

1 Nm

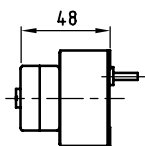
Dimensional drawing



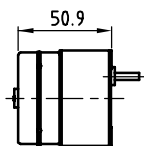
Gearbox data

Gearbox Order number	Ratio	Exact ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor
S52A0004AA	4:1	4.17:1	2	80	0.1	0.2	=
S52A0006AA	6:1	6.25:1	3	73	0.2	0.3	≠
S52A0008AA	8:1	8.33:1	2	80	0.3	0.4	=
S52A0010AA	10:1	10:1	3	73	0.3	0.5	≠
S52A0012AA	12:1	12.5:1	2	80	0.4	0.6	=
S52A0017AA	17:1	16.67:1	2	80	0.5	0.8	=
S52A0020AA	20:1	20:1	3	73	0.6	0.8	≠
S52A0025AA	25:1	25:1	3	73	0.7	1.0	≠
S52A0033AA	33:1	33.33:1	3	73	0.7	1.0	≠
S52A0042AA	42:1	41.67:1	3	73	0.7	1.0	≠
S52A0050AA	50:1	50:1	3	73	0.7	1.0	≠
S52A0062AA	62:1	62.5:1	3	73	0.7	1.0	≠
S52A0083AA	83:1	83.33:1	3	73	0.7	1.0	≠
S52A0100AA	100:1	100:1	4	65	0.7	1.0	=
S52A0125AA	125:1	125:1	4	65	0.7	1.0	=
S52A0166AA	166:1	166.67:1	4	65	0.7	1.0	=
S52A0250AA	250:1	250:1	4	65	0.7	1.0	=
S52A0375AA	375:1	375:1	5	59	0.7	1.0	≠
S52A0500AA	500:1	500:1	5	59	0.7	1.0	≠
S52A0750AA	750:1	750:1	5	59	0.7	1.0	≠
S52A1000AA	1000:1	1000:1	5	59	0.7	1.0	≠
S52A1250AA	1250:1	1250:1	5	59	0.7	1.0	≠
S52A5000AA	5000:1	5000:1	6	53	0.7	1.0	=
S52A15XKAA	15000:1	15000:1	7	48	0.7	1.0	≠

Product combinations



SY32/ST32 motor



SY31/ST31 motor

Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	sleeve	
* Maximum radial load	50	N
* Maximum axial load	20	N
* Backlash at nominal load		°
* Max. recommended input speed	500	rpm
* Temperature range	-5/+60	°C

Options

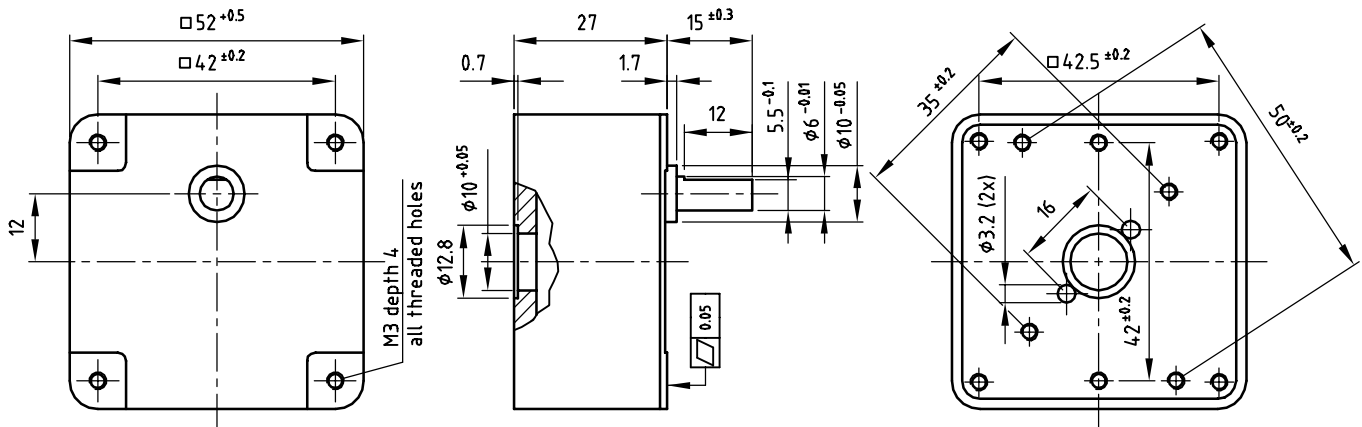
- * Custom ratios
- * Custom shafts
- * Ball bearings on output shaft

S52B

Spur gearbox

1.5 Nm

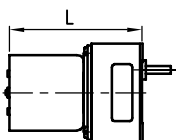
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor
S52B0017AA	17:1	3	73	1.5	4.7	≠
S52B0030AA	30:1	4	65	1.5	4.7	=
S52B0050AA	50:1	4	65	1.5	4.7	=
S52B0075AA	75:1	5	59	1.5	4.7	≠
S52B0100AA	100:1	5	59	1.5	4.7	≠
S52B0125AA	125:1	5	59	1.5	4.7	≠
S52B0150AA	150:1	5	59	1.5	4.7	≠

Product combinations



CL40 motor

- 3 Watt version : L=70.6
- 7 Watt version : L=71.6
- 12 Watt version : L=73.0

Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	sleeve	
* Maximum radial load	80	N
* Maximum axial load	20	N
* Backlash at nominal load		°
* Max. recommended input speed	4500	rpm
* Temperature range	-5/+60	°C

Options

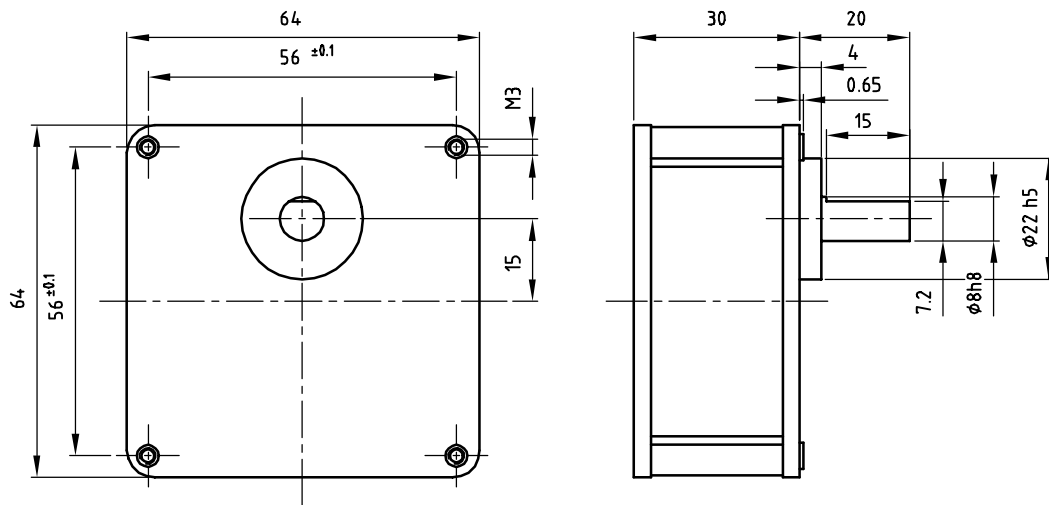
- * Custom ratios
- * Custom shafts
- * Ball bearings on output shaft

S64A

Spur gearbox

3 Nm

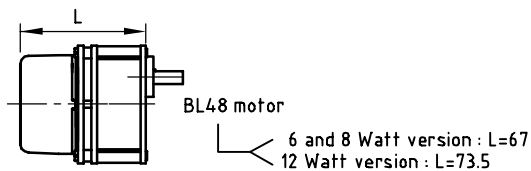
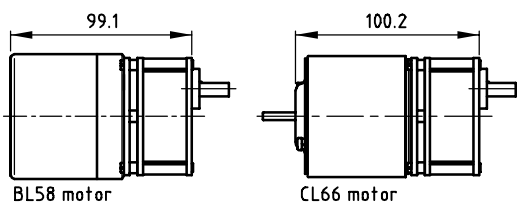
Dimensional drawing



Gearbox data

Gearbox Order number	Exact ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor
S64A0005AA	5:1	2	81	0.5	0.75	=
S64A0012AA	12.5:1	3	73	1	1.5	≠
S64A0025AA	25:1	4	66	3	4.5	=
S64A0050AA	50:1	4	66	3	4.5	=
S64A0100AA	100:1	5	59	3	4.5	≠
S64A0125AA	125:1	5	59	3	4.5	≠
S64A0250AA	250:1	5	59	3	4.5	≠

Product combinations



Order number of gearmotor :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	ball	
* Maximum radial load	50	N
* Maximum axial load	20	N
* Max. recommended input speed	5000	rpm
* Backlash per stage	0.2	°
* Temperature range	-20/+65	°C
* Weight	ca. 200	g

Options

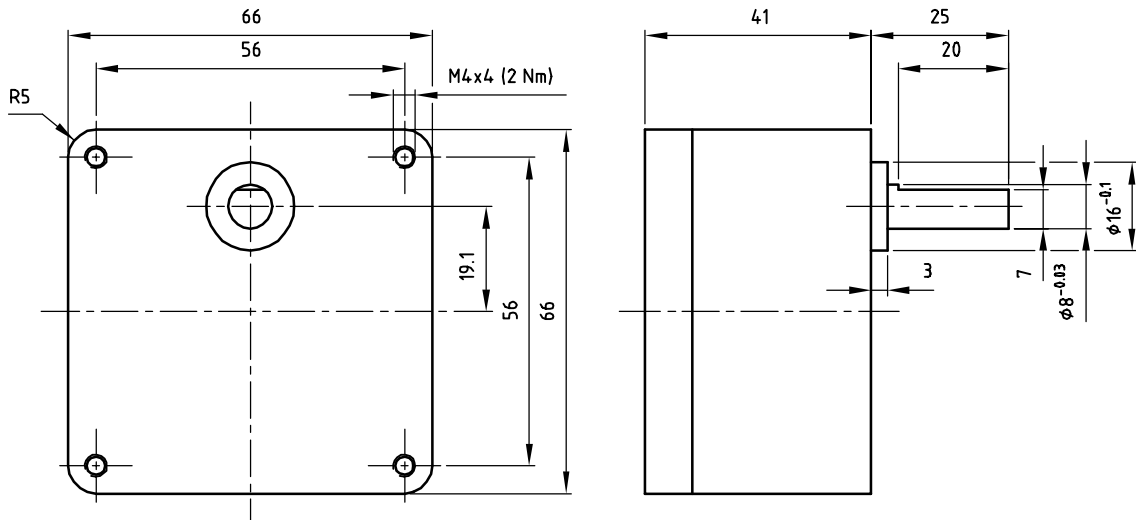
- * Additional standard ratios
- * Custom ratios
- * Special shafts

S66A

Spur gearbox

5 Nm

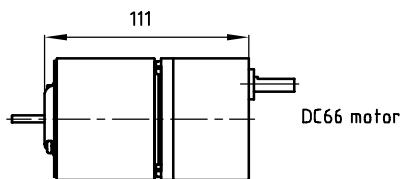
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor	Weight [g]
S66A0005AA	5:1	3	70	1.4	1.6	≠	460
S66A0012AA	12.5:1	3	70	1.5	2.0	≠	460
S66A0025AA	25:1	4	65	2.0	2.4	=	480
S66A0050AA	50:1	4	65	2.8	3.4	=	480
S66A0100AA	100:1	5	60	3.5	4.4	≠	500
S66A0125AA	125:1	5	60	3.8	4.7	≠	500
S66A0250AA	250:1	6	55	4.4	5.2	=	520
S66A0500AA	500:1	6	55	4.7	5.6	=	520

Product combinations



Order number of gearmotor :
Motor number + gearbox number

General data

* Bearing on output shaft	sleeve	
* Maximum radial load 5 mm from mounting face	25	N
* Maximum axial load	20	N
* Maximum press on force	200	N
* Radial play	<0.05	mm
* Axial play	0.05-0.250	mm
* Maximum static torque	6	Nm
* Max. recommended input speed	3000	rpm
* Backlash at no load	2	°
* Backlash at nominal load	3	°
* Temperature range	-30/+65	°C

Options

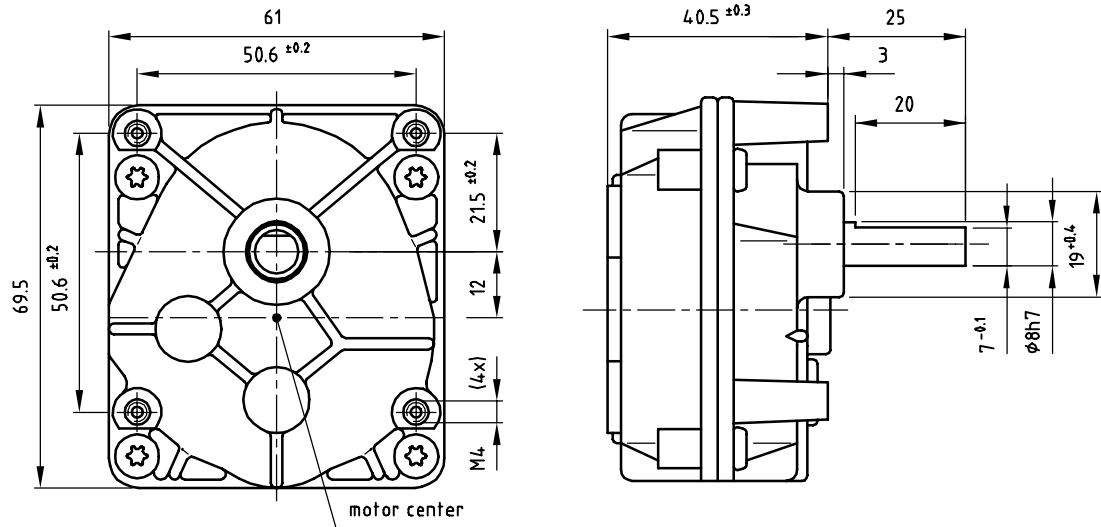
- * Ball bearings
- * Custom shafts
- * Custom ratios
- * Lower backlash version

S69A

Spur gearbox

9 Nm

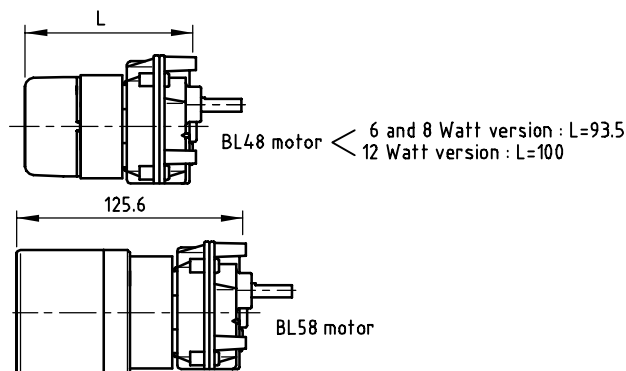
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Exact ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Direction of rotation w.r.t. motor	Weight [g]
S69A0014AA	14:1	13.75:1	2	81	5	=	290
S69A0027AA	27:1	27.4:1	2	81	5	=	290
S69A0054AA	54:1	54.4:1	3	73	7	≠	305
S69A0095AA	95:1	94.8:1	3	73	7	≠	305
S69A0146AA	146:1	145.7:1	3	73	7	≠	305
S69A0276AA	276:1	276:1	4	66	9	=	315
S69A0537AA	537:1	537:1	4	66	9	=	315

Product combinations



Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	needle / sleeve	
* Maximum radial load 17 mm from mounting face	120	N
* Maximum axial load	40	N
* Max. recommended input speed	5000	rpm
* Max. backlash at nominal load	1.6	°
* Temperature range	-30/+80	°C

Options

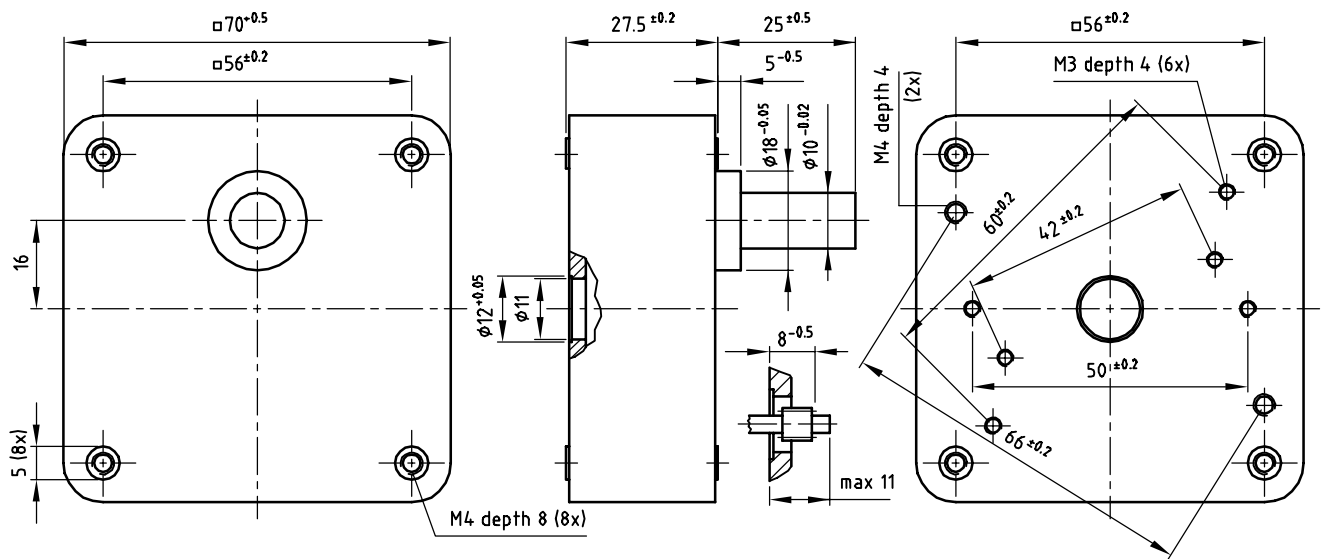
- * Other standard ratios
- * Special shafts
- * Double sleeve bearing or double needle bearing
- * Pivot bearing for higher axial loads
- * Lower backlash version

S70B

Spur gearbox

10 Nm

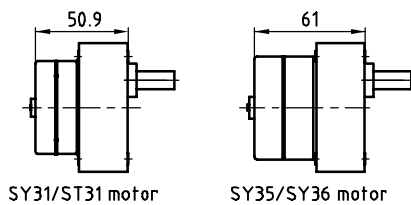
Dimensional drawing



Gearbox data

Gearbox Order number	Exact ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation w.r.t. motor
S70B0025AA	25:1	3	73	1.3	1.8	≠
S70B0050AA	50:1	3	73	2.6	3.7	≠
S70B0100AA	100:1	4	65	4.6	6.5	=
S70B0125AA	125:1	4	65	5.7	8.1	=
S70B0250AA	250:1	4	65	7.0	10.0	=
S70B0500AA	500:1	5	59	7.0	10.0	≠
S70B0625AA	625:1	5	59	7.0	10.0	≠
S70B5000AA	5000:1	6	53	7.0	10.0	=

Product combinations



Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

* Bearing on output shaft	sleeve	
* Maximum radial load	100	N
* Maximum axial load	20	N
* Backlash at nominal load		°
* Max. recommended input speed	500	rpm
* Temperature range	-5/+60	°C

Options

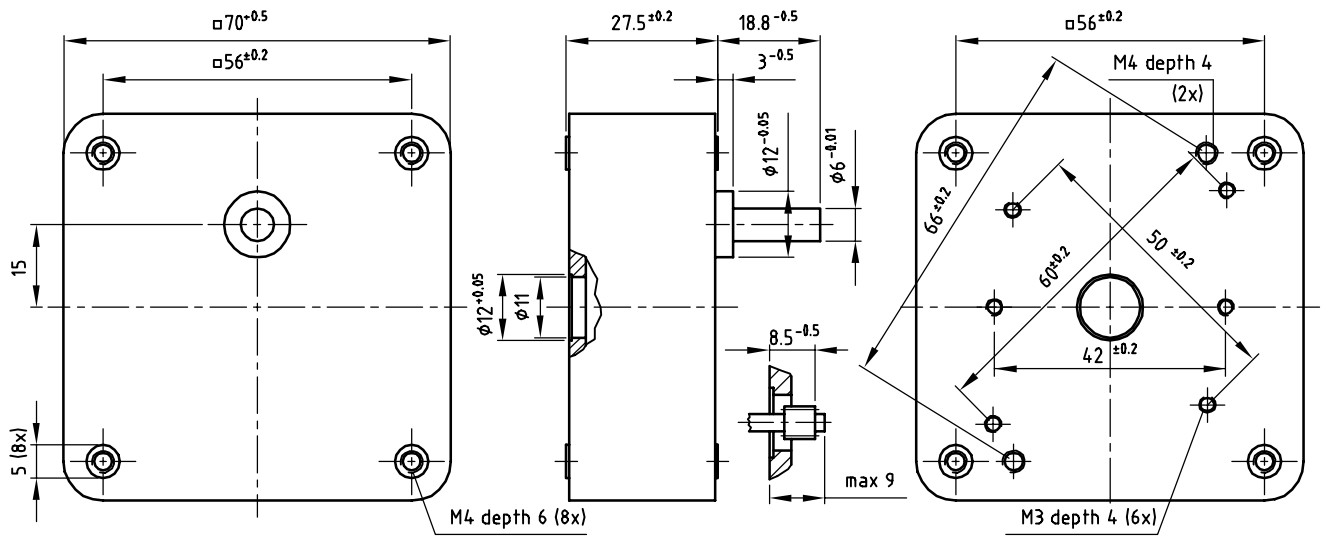
- * Custom ratios
- * Custom shafts
- * Ball bearings on output shaft

S70A

Spur gearbox

3 Nm

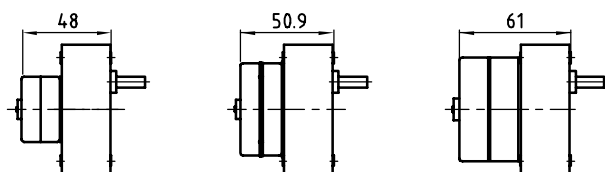
Dimensional drawing



Gearbox data

Gearbox Order number	Ratio	Exact ratio	Number of stages	Efficiency [%]	Maximum torque continuous [Nm]	Maximum torque intermittent [Nm]	Direction of rotation v.r.t. motor
S70A0004AA	4:1	4.17:1	2	80	0.2	0.3	=
S70A0006AA	6:1	6.25:1	2	80	0.3	0.4	=
S70A0008AA	8:1	8.33:1	2	80	0.4	0.6	=
S70A0010AA	10:1	10:1	2	80	0.5	0.7	=
S70A0012AA	12:1	12.5:1	2	80	0.6	0.9	=
S70A0017AA	17:1	16.67:1	2	80	0.8	1.1	=
S70A0020AA	20:1	20:1	3	73	0.9	1.3	≠
S70A0025AA	25:1	25:1	3	73	1.1	1.6	≠
S70A0033AA	33:1	33.33:1	3	73	1.5	2.1	≠
S70A0042AA	42:1	41.67:1	3	73	1.8	2.6	≠
S70A0050AA	50:1	50:1	3	73	2.2	3.1	≠
S70A0062AA	62:1	62.5:1	3	73	2.7	3.9	≠
S70A0083AA	83:1	83.33:1	3	73	3.0	5.0	≠
S70A0125AA	125:1	125:1	4	65	3.0	5.0	=
S70A0250AA	250:1	250:1	4	65	3.0	5.0	=
S70A0500AA	500:1	500:1	5	59	3.0	5.0	≠
S70A0750AA	750:1	750:1	5	59	3.0	5.0	≠
S70A1000AA	1000:1	1000:1	5	59	3.0	5.0	≠
S70A1250AA	1250:1	1250:1	5	59	3.0	5.0	≠
S70A5000AA	5000:1	5000:1	6	53	3.0	5.0	=
S70A15XKAA	15000:1	15000:1	7	48	3.0	5.0	≠

Product combinations



SY32/ST32 motor

SY31/ST31 motor

SY35/SY36 motor

Order number of motor/gearbox :

Last 6 digits of motor number + gearbox number

General data

*	Bearing on output shaft	sleeve	
*	Maximum radial load	80	N
*	Maximum axial load	20	N
*	Backlash at nominal load		°
*	Max. recommended input speed	500	rpm
*	Temperature range	-5/+60	°C

Options

- * Custom ratios
- * Custom shafts
- * Ball bearings on output shaft