

Gear units EMGA/EMGC

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Key features

EMGA-...-P-...

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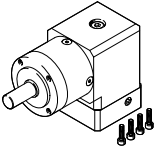


- Planetary gear, straight
- Gear ratio $i = 3; 5; 8; 12; 20$
- Life-time lubrication
- Degree of protection: IP54

For servo motor EMME-AS, EMMS-AS, EMMT-AS
For stepper motor EMMS-ST

EMGA-...-A-...

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- Right-angle gear unit
- Gear ratio $i = 3; 5; 8; 12; 20$
- Life-time lubrication
- Degree of protection: IP54

For servo motor EMME-AS, EMMT-AS

EMGC-...-P-...-SEC

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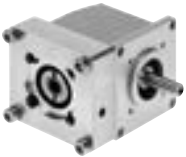


- Planetary gear, straight
- Single-stage or two-stage
- Gear ratio $i = 3; 4; 5; 7; 12; 16; 20; 25; 35; 40$
- Life-time lubrication
- Degree of protection: IP54

For integrated drive EMCA


EMGC-...-A-...-SEC

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- Right-angle gear unit
- Gear ratio $i = 1$
- Life-time lubrication
- Degree of protection: IP54

For integrated drive EMCA

 **Note**

Other ratios and versions on request

Type codes

001	Series	
EMGA	Gear unit	

002	Gear unit flange size	
40	40	
60	60	
80	80	
120	120	
160	160	

003	Gear unit type	
P	Planetary gear unit	
A	Right-angle gear unit	

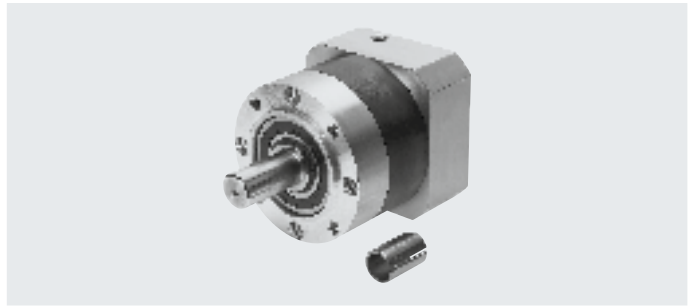
004	Gear ratio	
G3	3:1	
G5	5:1	
G8	8:1	
G12	12:1	
G20	20:1	

005	Interface	
	Without	
EAS	Eco AC synchronous	
SAS	AC synchronous	
SST	Stepper motor	

006	Flange size, motors [mm]	
40	40	
42	42	
57	57	
60	60	
80	80	
87	87	
100	100	
140	140	

Data sheet

- For servo motor:
EMME-AS, EMMT-AS, EMMS-AS
- For stepper motor:
EMMS-ST



Technical data						
Gear unit size	[mm]	ø 40				
Gear ratio	[i]	3	5	8	12	20
Output interface		40G				
Motor interface		EAS-40, SST-42		EAS-40, SST-42		EAS-40
Gear unit type		Planetary gear				
		Single-stage			Two-stage	
Continuous output torque ¹⁾	[Nm]	11	14	6	20	
Max. output torque ²⁾	[Nm]	17.6	22	10	32	
Max. drive speed	[rpm]	18000				
Torsional rigidity	[Nm/arcmin]	1		0.85	1	
Torsional backlash	[deg]	0.25		0.25	0.31	
Mass moment of inertia ³⁾	[kgcm ²]	0.031	0.019	0.015	0.025	0.018
Max. efficiency	[%]	98			96	
Operating temperature ⁴⁾	[°C]	-25 ... +90				
Degree of protection		IP54				
Product weight	[g]	350		350	450	
Note on materials		RoHS-compliant				

Technical data											
Gear unit size	[mm]	ø 60					ø 60				
Gear ratio	[i]	3	5	8	12	20	3	5	8	12	
Output interface		60H					60G				
Motor interface		EAS-60					SAS-55, SAS-70, SST-57		SST-57		
Gear unit type		Planetary gear									
		Single-stage			Two-stage		Single-stage		Two-stage		
Continuous output torque ¹⁾	[Nm]	28	40	18	44		22	18	44		
Max. output torque ²⁾	[Nm]	45	64	29	70		35.2	29	70		
Max. drive speed	[rpm]	13000					13000				
Torsional rigidity	[Nm/arcmin]	2.3		2.4	2.8		2.3	2.4	2.8		
Torsional backlash	[deg]	0.17		0.17	0.2		0.17				
Mass moment of inertia ³⁾	[kgcm ²]	0.135	0.078	0.088	0.138	0.096	0.135	0.078	0.067	0.118	
Max. efficiency	[%]	98			97	96	98		97	96	
Operating temperature ⁴⁾	[°C]	-25 ... +90									
Degree of protection		IP54									
Product weight	[g]	900		900	1100		900	900	1100		
Note on materials		RoHS-compliant									

- 1) At the output shaft
- 2) The specifications refer to an output shaft speed of 100 rpm as well as operating mode S1 and a temperature of 30°C
- 3) In relation to the drive shaft
- 4) Note the temperature range of the motor

Data sheet

Gear unit size	[mm]	ø 80							
Gear ratio	[i]	3	5	8	12	20			
Output interface		80G							
Motor interface		EAS-80, SAS-100, SST-87		EAS-80	SAS-100, SST-87	EAS-80	SAS-100, SST-87	EAS-80	SAS-100
Gear unit type		Planetary gear							
		Single-stage				Two-stage			
Continuous output torque ¹⁾	[Nm]	85	110	50	120				
Max. output torque ²⁾	[Nm]	136	176	190	80	240	192	240	192
Max. drive speed	[rpm]	7000							
Torsional rigidity	[Nm/arcmin]	6		8.4		10.2		10.4	
Torsional backlash	[deg]	0.12		0.12		0.15			
Mass moment of inertia ³⁾	[kgcm ²]	0.77	0.45	0.37		0.589		0.406	
Max. efficiency	[%]	98		97		97		96	
Operating temperature ⁴⁾	[°C]	-25 ... +90							
Degree of protection		IP54							
Product weight	[g]	2000		2000		2500	2800	2500	2800
Note on materials		RoHS-compliant							

Gear unit size	[mm]	ø 120							
Gear ratio	[i]	3	5	8	12	20			
Output interface		120G							
Motor interface		SAS-100, SAS-140							
Gear unit type		Planetary gear							
		Single-stage				Two-stage			
Continuous output torque ¹⁾	[Nm]	115		195	120	260			
Max. output torque ²⁾	[Nm]	184		312	192	416			
Max. drive speed	[rpm]	6500							
Torsional rigidity	[Nm/arcmin]	12				18		22	
Torsional backlash	[deg]	0.12				0.12		0.15	
Mass moment of inertia ³⁾	[kgcm ²]	2.63		1.53	1.43	2.22		1.57	
Max. efficiency	[%]	98				97		96	
Operating temperature ⁴⁾	[°C]	-25 ... +90							
Degree of protection		IP54							
Product weight	[g]	6000				6000		8000	
Note on materials		RoHS-compliant							

- 1) At the output shaft
- 2) The specifications refer to an output shaft speed of 100 rpm as well as operating mode S1 and a temperature of 30°C
- 3) In relation to the drive shaft
- 4) Note the temperature range of the motor

Data sheet

Gear unit size	[mm]	ø 160	
Gear ratio	[i]	3	5
Output interface		160G	
Motor interface		SAS-140	
Gear unit type		Planetary gear	
		Single-stage	
Continuous output torque ¹⁾	[Nm]	400	450
Max. output torque ²⁾	[Nm]	640	720
Max. drive speed	[rpm]	6500	
Torsional rigidity	[Nm/arcmin]	38	
Torsional backlash	[deg]	0.1	
Mass moment of inertia ³⁾	[kgcm ²]	12.14	6.07
Max. efficiency	[%]	98	
Operating temperature ⁴⁾	[°C]	-25 ... +90	
Degree of protection		IP54	
Product weight	[g]	18000	
Note on materials		RoHS-compliant	

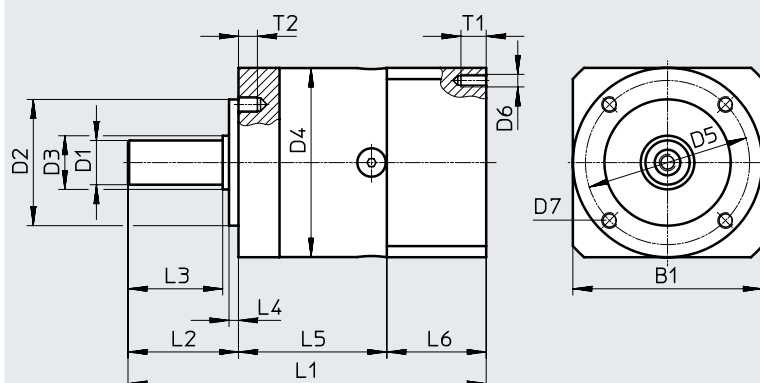
- 1) At the output shaft
- 2) The specifications refer to an output shaft speed of 100 rpm as well as operating mode S1 and a temperature of 30°C
- 3) In relation to the drive shaft
- 4) Note the temperature range of the motor

Data sheet

Dimensions

Download CAD data → www.festo.com

EMGA-... for servo motors EMME-AS, EMMT-AS



Size	Gear ratio	Interface		B1	D1 ø h7	D2 ø h7	D3 ø	D4 ø	D5 ø	D6
		Output	Motor							
40	3, 5, 8	40G	EAS-40	40	10	26	12	40	34	M3
	12, 20									
60	3, 5, 8	60H	EAS-60	60	14	40	17	60	52	M4
	12, 20									
80	3, 5, 8	80G	EAS-80	80	20	60	25	80	70	M5
	12, 20									
	3, 5, 8	80G	SAS-100	100	20	60	25	80	70	M8
	12, 20									
120	3, 5, 8	120G	SAS-100	115	25	80	35	115	100	M8
	12, 20									

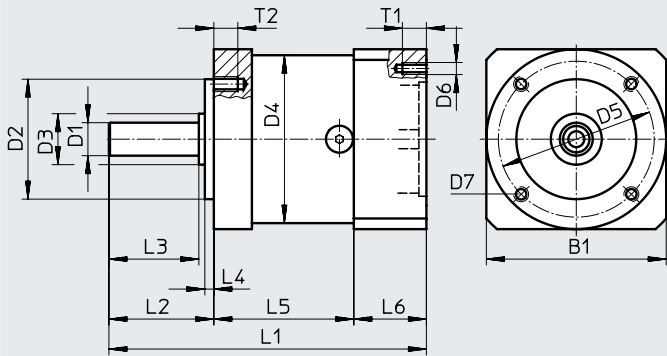
Size	Gear ratio	D7	L1	L2	L3 ±0.2	L4 ±0.2	L5	L6	T1 +2	T2 +2
	12, 20	106.5	52							
60	3, 5, 8	M5	113	35	30	3	47	31	10	8
			12, 20				125.5			
80	3, 5, 8	M6	138.5	40	36	3	60	38.5	12	10
			12, 20				156			
	3, 5, 8	M6	143.5	40	36	3	60	43.5	16	10
			12, 20				161			
120	3, 5, 8	M10	176.5	55	50	4	74	47.5	20	16
			12, 20				204			

Data sheet

Dimensions

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EMGA-... for servo motors EMMS-AS



Size	Gear ratio	Interface		B1	D1 ø h7	D2 ø h7	D3 ø	D4 ø	D5 ø	D6
		Output	Motor							
60	3, 5	60G	SAS-55	60	11	40	17	60	52	M5
	3, 5	60G	SAS-70	70	11	40	17	60	52	M5
80	3, 5	80G	SAS-100	100	20	60	25	80	70	M8
120	3, 5, 8	120G	SAS-100	115	25	80	35	115	100	M8
	12, 20									
	3, 5, 8	120G	SAS-140	140	25	80	35	115	100	M10
	12, 20									
160	3, 5	160G	SAS-140	140	40	130	55	160	145	M10

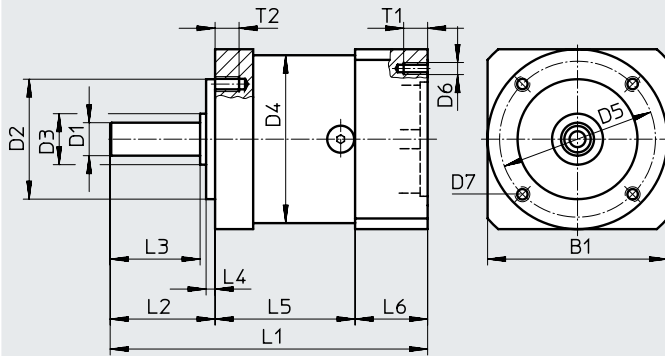
Size	Gear ratio	D7	L1	L2	L3 ±0.2	L4 ±0.2	L5	L6	T1	T2
	3, 5	M5	106	35	30	3	47	24	12	8
80	3, 5	M6	143.5	40	36	3	60	43.5	16	10
120	3, 5, 8	M10	176.5	55	50	4	74	47.5	20	16
	12, 20		204				101.5			
	3, 5, 8	M10	186.5	55	50	4	74	57.5	25	16
	12, 20		214				101.5			
160	3, 5	M12	255.5	87	80	5	104	64.5	25	20

Data sheet

Dimensions

Download CAD data → www.festo.com

EMGA-... for stepper motors EMMS-ST



Size	Gear ratio	Interface		B1	D1 ∅ h7	D2 ∅ h7	D3 ∅	D4 ∅	D5 ∅	D6
		Output	Motor							
40	3, 5, 8	40G	SST-42	40	10	26	12	40	34	∅3.4
	12									
60	3, 5, 8	60G	SST-57	60	11	40	17	60	52	M4
	12									
80	3, 5, 8	80G	SST-87	90	20	60	25	80	70	M5
	12									

Size	Gear ratio	D7	L1 ±1.5	L2	L3	L4	L5	L6	T1	T2
12	105.5	52								
60	3, 5, 8	M5	106	35	30	3	47	24	8	8
	12		118.5				59.5			
80	3, 5, 8	M6	135.5	40	36	3	60	35.5	12	10
	12		153				77.5			

Data sheet

Ordering data	Gear ratio	Interface		Part no.	Type
		Output	Motor		
For servo motor					
EMME-AS-40	3	40G	EAS-40	★ 2297684	EMGA-40-P-G3-EAS-40
	5	40G	EAS-40	★ 2297685	EMGA-40-P-G5-EAS-40
	8	40G	EAS-40	8141729	EMGA-40-P-G8-EAS-40
	12	40G	EAS-40	8141730	EMGA-40-P-G12-EAS-40
	20	40G	EAS-40	8141731	EMGA-40-P-G20-EAS-40
EMME-AS-60, EMMT-AS-60	3	60H	EAS-60	★ 2297686	EMGA-60-P-G3-EAS-60
	5	60H	EAS-60	★ 2297687	EMGA-60-P-G5-EAS-60
	8	60H	EAS-60	8141735	EMGA-60-P-G8-EAS-60
	12	60H	EAS-60	8141736	EMGA-60-P-G12-EAS-60
	20	60H	EAS-60	8141737	EMGA-60-P-G20-EAS-60
EMME-AS-80, EMMT-AS-80	3	80G	EAS-80	★ 2297690	EMGA-80-P-G3-EAS-80
	5	80G	EAS-80	★ 2297691	EMGA-80-P-G5-EAS-80
	8	80G	EAS-80	8141741	EMGA-80-P-G8-EAS-80
	12	80G	EAS-80	8141742	EMGA-80-P-G12-EAS-80
	20	80G	EAS-80	8141743	EMGA-80-P-G20-EAS-80
For third-party motor (EMMS-AS-55)	3	60G	SAS-55	552188	EMGA-60-P-G3-SAS-55
	5	60G	SAS-55	552189	EMGA-60-P-G5-SAS-55
For third-party motor (EMMS-AS-70)	3	60G	SAS-70	552190	EMGA-60-P-G3-SAS-70
	5	60G	SAS-70	552191	EMGA-60-P-G5-SAS-70
EMME-AS-100, EMMT-AS-100	3	80G	SAS-100	★ 552194	EMGA-80-P-G3-SAS-100
	5	80G	SAS-100	★ 552195	EMGA-80-P-G5-SAS-100
	8	80G	SAS-100	8141750	EMGA-80-P-G8-SAS-100
	12	80G	SAS-100	8141751	EMGA-80-P-G12-SAS-100
	20	80G	SAS-100	8141752	EMGA-80-P-G20-SAS-100
	3	120G	SAS-100	★ 552196	EMGA-120-P-G3-SAS-100
	5	120G	SAS-100	★ 552197	EMGA-120-P-G5-SAS-100
	8	120G	SAS-100	8141753	EMGA-120-P-G8-SAS-100
	12	120G	SAS-100	8141754	EMGA-120-P-G12-SAS-100
	20	120G	SAS-100	8141755	EMGA-120-P-G20-SAS-100
EMMS-AS-140	3	120G	SAS-140	552198	EMGA-120-P-G3-SAS-140
	5	120G	SAS-140	552199	EMGA-120-P-G5-SAS-140
	8	120G	SAS-140	8141759	EMGA-120-P-G8-SAS-140
	12	120G	SAS-140	8141760	EMGA-120-P-G12-SAS-140
	20	120G	SAS-140	8141761	EMGA-120-P-G20-SAS-140
	3	160G	SAS-140	552200	EMGA-160-P-G3-SAS-140
5	160G	SAS-140	552201	EMGA-160-P-G5-SAS-140	
For stepper motor					
EMMS-ST-42	3	40G	SST-42	★ 549428	EMGA-40-P-G3-SST-42
	5	40G	SST-42	★ 549429	EMGA-40-P-G5-SST-42
	8	40G	SST-42	8141762	EMGA-40-P-G8-SST-42
	12	40G	SST-42	8141763	EMGA-40-P-G12-SST-42
EMMS-ST-57	3	60G	SST-57	★ 549430	EMGA-60-P-G3-SST-57
	5	60G	SST-57	★ 549431	EMGA-60-P-G5-SST-57
	8	60G	SST-57	8141764	EMGA-60-P-G8-SST-57
	12	60G	SST-57	8141765	EMGA-60-P-G12-SST-57
EMMS-ST-87	3	80G	SST-87	★ 549432	EMGA-80-P-G3-SST-87
	5	80G	SST-87	★ 549433	EMGA-80-P-G5-SST-87
	8	80G	SST-87	8141766	EMGA-80-P-G8-SST-87
	12	80G	SST-87	8141767	EMGA-80-P-G12-SST-87

Festo Core Range

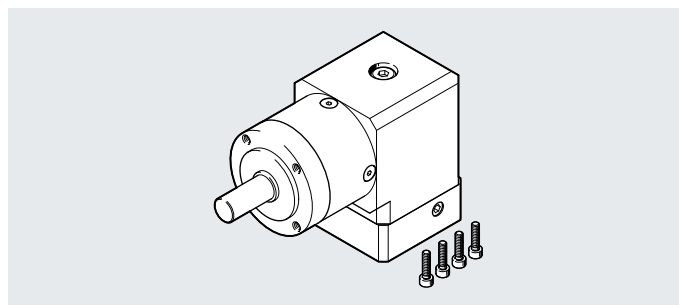


Generally ready for shipping ex works in 24 hours

Generally ready for shipping ex works in 5 days

Data sheet

- For servo motor:
EMME-AS, EMMT-AS



Technical data											
Gear unit size	[mm]	∅ 40					∅ 60				
Gear ratio	[i]	3	5	8	12	20	3	5	8	12	20
Output interface		40G					60H				
Motor interface		40P					60P				
Gear unit type		Right-angle gear unit									
		Single-stage			Two-stage		Single-stage			Two-stage	
Continuous output torque ¹⁾	[Nm]	4.5	7.5	6	20		14	24	18	44	
Max. output torque ²⁾	[Nm]	7	12	10	32		22	38	29	70	
Max. drive speed	[rpm]	18000					13000				
Torsional rigidity	[Nm/arcmin]	0.8		0.7	0.8		2	1.9	1.6	2	
Torsional backlash	[deg]	0.35			0.41		0.27			0.3	
Mass moment of inertia ³⁾	[kgcm ²]	0.049	0.035	0.032	0.048	0.035	0.394	0.257	0.243	0.391	0.256
Max. efficiency	[%]	95		92	94	92	95		93	94	92
Operating temperature ⁴⁾	[°C]	-25 ... +90									
Degree of protection		IP54									
Product weight	[g]	500			600		1700			1900	
Note on materials		RoHS-compliant									

Gear unit size	[mm]	∅ 80							
Gear ratio	[i]	3		5	8		12	20	
Output interface		80G							
Motor interface		80P, 100A							
Gear unit type		Right-angle gear unit							
		Single-stage				Two-stage			
Continuous output torque ¹⁾	[Nm]	40		67	50		120		
Max. output torque ²⁾	[Nm]	64		107	80		192		
Max. drive speed	[rpm]	3500		3600	3800		2650		3550
Torsional rigidity	[Nm/arcmin]	5		4.8	4.2		5		5.1
Torsional backlash	[deg]	0.22			0.22	0.25			
Mass moment of inertia ³⁾	[kgcm ²]	1.409		1.017	0.934		1.379		1.013
Max. efficiency	[%]	95		94	94		94		93
Operating temperature ⁴⁾	[°C]	-25 ... +90							
Degree of protection		IP54							
Product weight	[g]	4300			4400		5000		
Note on materials		RoHS-compliant							

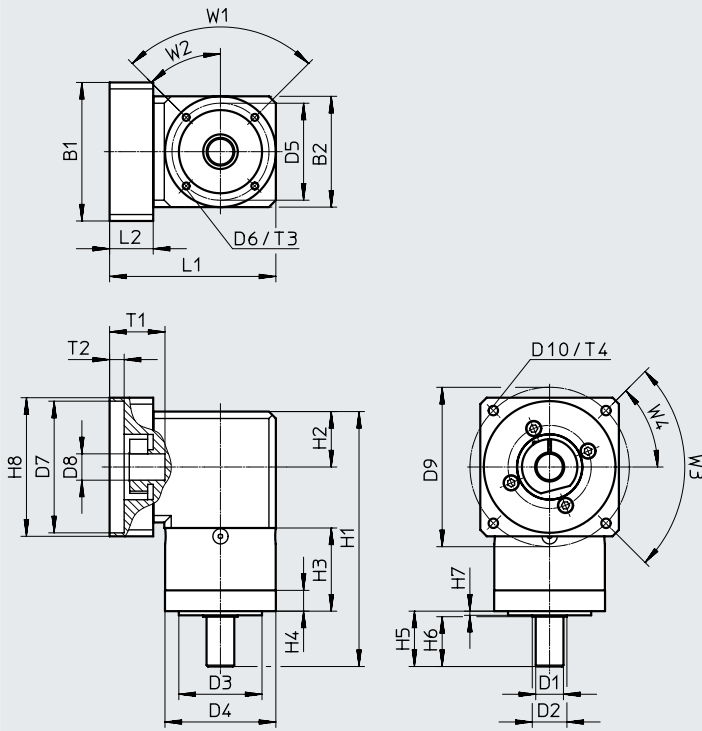
- At the output shaft
- The specifications refer to an output shaft speed of 100 rpm as well as operating mode S1 and a temperature of 30°C
- In relation to the drive shaft
- Note the temperature range of the motor

Data sheet

Dimensions

Download CAD data → www.festo.com

EMGA-... for servo motors EMME-AS, EMMT-AS



Size	Gear ratio	Interface		B1	B2	D1 ∅ h7	D2 ∅	D3 ∅ h7	D4 ∅
		Output	Motor						
40	3, 5	40G	40P	40	40	10	12	26	40 -0.3
	8								40
	12, 20								
60	3, 5	60H	60P	60	60	14	17	40	60 -0.3
	8								60
	12, 20								
80	3, 5	80G	80P	80	80	20	25	60	80 -0.4
	8								80
	12, 20								
80	3, 5	80G	100A	100	100	20	25	60	80 -0.4
	8								80
	12, 20								

Size	Gear ratio	D5 ∅	D6	D7 +0.05/+0.02	D8	D9	D10	H1	H2	
										40
	8	110								
	12, 20	123								
60	3, 5	52	M5	50	14	70	M4	146.8 ±1.5	30	
								8		147
								12, 20		159.5
80	3, 5	70	M6	70	19	90	M5	183.9 ±1.5	40	
								8		184
								12, 20		201.5
80	3, 5	70	M6	95	19	115	M6	183.9 ±1.5	40	
								8		184
								12, 20		201.5

Data sheet

Size	Gear ratio	H3 ±0.2	H4	H5	H6	H7	H8	L1	L2
40	3, 5	39	10.2	26±0.6	23 ±0.2	2 ±0.2	40	67	19
	8	39		26	23	2			
	12, 20	52							
60	3, 5	46.8	12.7	35±0.8	30 ±0.2	3 ±0.2	60	92.5	23
	8	47		35	30	3			
	12, 20	59.5							
80	3, 5	59.9	15	40±0.8	36 ±0.2	3 ±0.2	80	115	26.5
	8	60		40	36	3			
	12, 20	77.5							
80	3, 5	59.9	15	40±0.8	36 ±0.2	3 ±0.2	100	120	31.5
	8	60		40	36	3			
	12, 20	77.5							

Size	Gear ratio	T1	T2	T3	T4	W1	W2	W3	W4		
40	3, 5	25+2/+0.5	3.5	6	8	90°	45°	90°	45°		
	8		3.4		7						
	12, 20										
60	3, 5	30+2.5/+0.5	4	8	10	90°	45°	90°	45°		
	8										
	12, 20										
80	3, 5	30+2.5/+0.5	4.4	10	12	90°	45°	90°	45°		
	8									35+2.5/+0.5	
	12, 20										
80	3, 5	40+2.5/+0.5	10.4	10	20	90°	45°	90°	45°		
	8		10.5								
	12, 20										

Data sheet

Ordering data	Gear ratio	Interface		Part no.	Type
		Output	Motor		
For servo motor					
EMME-AS-40	3	40G	40P	8085342	EMGA-40-A-G3-40P
	5	40G	40P	8085343	EMGA-40-A-G5-40P
	8	40G	40P	8141732	EMGA-40-A-G8-40P
	12	40G	40P	8141733	EMGA-40-A-G12-40P
	20	40G	40P	8141734	EMGA-40-A-G20-40P
EMME-AS-60, EMMT-AS-60	3	60H	60P	8085344	EMGA-60-A-G3-60P
	5	60H	60P	8085345	EMGA-60-A-G5-60P
	8	60H	60P	8141738	EMGA-60-A-G8-60P
	12	60H	60P	8141739	EMGA-60-A-G12-60P
EMME-AS-80, EMMT-AS-80	20	60H	60P	8141740	EMGA-60-A-G20-60P
	3	80G	80P	8085346	EMGA-80-A-G3-80P
	5	80G	80P	8085347	EMGA-80-A-G5-80P
	8	80G	80P	8141744	EMGA-80-A-G8-80P
EMME-AS-100, EMMT-AS-100, EMMS-AS-100	12	80G	80P	8141745	EMGA-80-A-G12-80P
	20	80G	80P	8141746	EMGA-80-A-G20-80P
	3	80G	100A	8085348	EMGA-80-A-G3-100A
	5	80G	100A	8085349	EMGA-80-A-G5-100A
	8	80G	100A	8141747	EMGA-80-A-G8-100A
	12	80G	100A	8141748	EMGA-80-A-G12-100A
	20	80G	100A	8141749	EMGA-80-A-G20-100A

Type codes

001	Series
EMGC	Gear unit

002	Gear unit flange size
40	40
60	60
67	67

003	Gear unit characteristic
	Standard

004	Gear unit type
A	Right-angle gear unit
P	Planetary gear unit

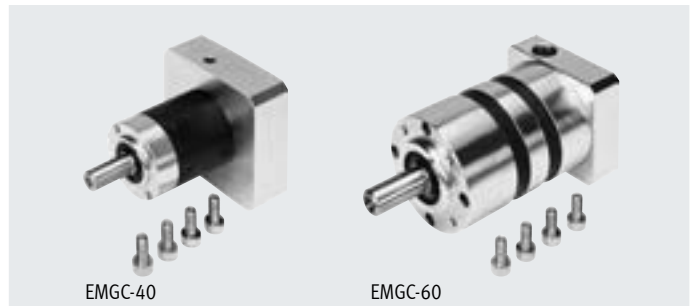
005	Gear ratio
G1	1:1
G3	3:1
G4	4:1
G5	5:1
G7	7:1
G10	10:1
G12	12:1
G16	16:1
G20	20:1
G25	25:1
G35	35:1
G40	40:1

006	Interface
SEC	EC motor

007	Flange size, motors
67	67

Data sheet

- For integrated drive:
EMCA-EC-67



Technical data											
Gear unit size	[mm]	ø 40									
Gear ratio	[i]	3	4	5	7	12	16	20	25	35	
Output interface		40G									
Motor interface		SEC-67									
Gear unit type		Planetary gear									
		Single-stage					Two-stage				
Continuous output torque ¹⁾	[Nm]	5	6.5	6.5	6.5	10	14	14	14	14	
Max. output torque ²⁾	[Nm]	10	13	13	13	12.5	17.5	17.5	17.5	17.5	
Max. drive speed ³⁾	[rpm]	6000									
Torsional rigidity	[Nm/arcmin]	0.85	0.85	0.85	0.65	0.85					
Max. torsional backlash	[deg]	0.5					0.67				
Mass moment of inertia ⁴⁾	[kgcm ²]	0.06	0.04	0.04	0.04	0.04					
Max. efficiency	[%]	94					92				
Operating temperature ⁵⁾	[°C]	-20 ... +90									
Degree of protection		IP54									
Product weight	[g]	450					550				
Note on materials		RoHS-compliant									
		Contains paint-wetting impairment substances									

- 1) At the output shaft
- 2) In relation to a rotational speed of 3000 rpm and operating mode S1
- 3) The permissible operating temperature may not be exceeded
- 4) In relation to the drive shaft
- 5) Note the temperature range of the motor

Technical data													
Gear unit size	[mm]	ø 60											
Gear ratio	[i]	3	4	5	7	10	12	16	20	25	35	40	
Output interface		60H											
Motor interface		SEC-67											
Gear unit type		Planetary gear											
		Single-stage						Two-stage					
Continuous output torque ¹⁾	[Nm]	20	26	26	26	16	36	42	42	44	44	42	
Max. output torque ²⁾	[Nm]	36	44	44	44	24	45	52	52	55	55	52	
Max. drive speed ³⁾	[rpm]	6000											
Torsional rigidity	[Nm/arcmin]	2.4	2.4	2.4	1.7	1.3	2.4						
Max. torsional backlash	[deg]	0.5						0.67					
Mass moment of inertia ⁴⁾	[kgcm ²]	0.4	0.34	0.32	0.3	0.29	0.34	0.34	0.32	0.32	0.3	0.29	
Max. efficiency	[%]	94						92					
Operating temperature ⁵⁾	[°C]	-20 ... +90											
Degree of protection		IP54											
Product weight	[g]	900						1200					
Note on materials		RoHS-compliant											
		Contains paint-wetting impairment substances											

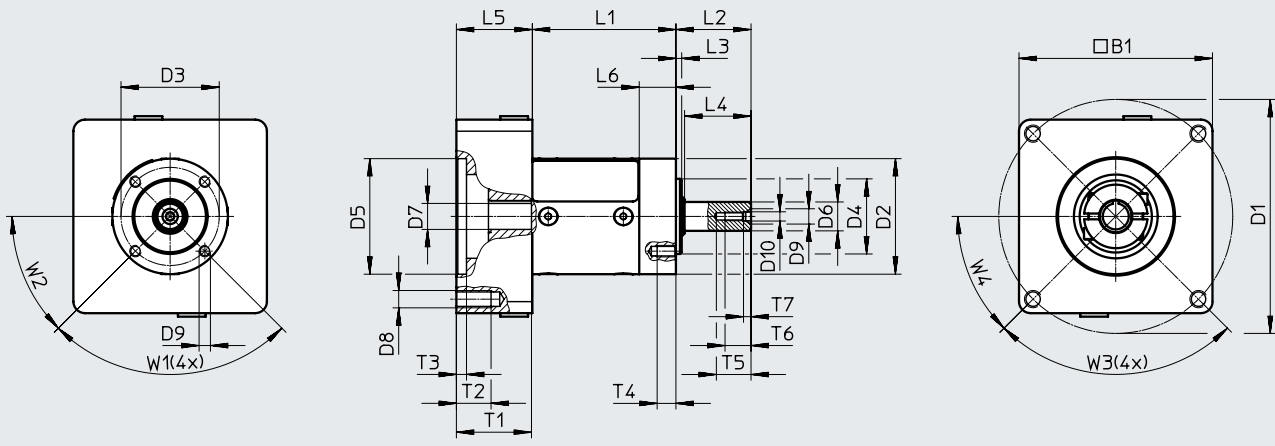
- 1) At the output shaft
- 2) In relation to a rotational speed of 3000 rpm and operating mode S1
- 3) The permissible operating temperature may not be exceeded
- 4) In relation to the drive shaft
- 5) Note the temperature range of the motor

Data sheet

Dimensions

EMGC-40-P-... for integrated drives EMCA-EC-67

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Type	Interface		B1	D1 ∅	D2 ∅ -0.1	D3 ∅ ±0.1	D4 ∅ h6	D5 ∅ G7	D6 ∅ h7	D7 ∅ G6
	Output	Motor								
EMGC-40-P-...-SEC-67	40G	SEC-67	67	81	40	34	26	40	10	9

Type	D8	D9	D10 ∅	D11 ∅	L2 -0.3	L3	L4 -0.1	L5	L6	T1 min.
EMGC-40-P-...-SEC-67	M6	M4	5.3	3.2	26	2	23	26.3	12.7	26

Type	T2 min.	T3 +0.5	T4 min.	T5 min.	T6 min.	T7	W1	W2	W3	W4
EMGC-40-P-...-SEC-67	13	3.5	6.5	12	9	2.6	90°	45°	90°	45°

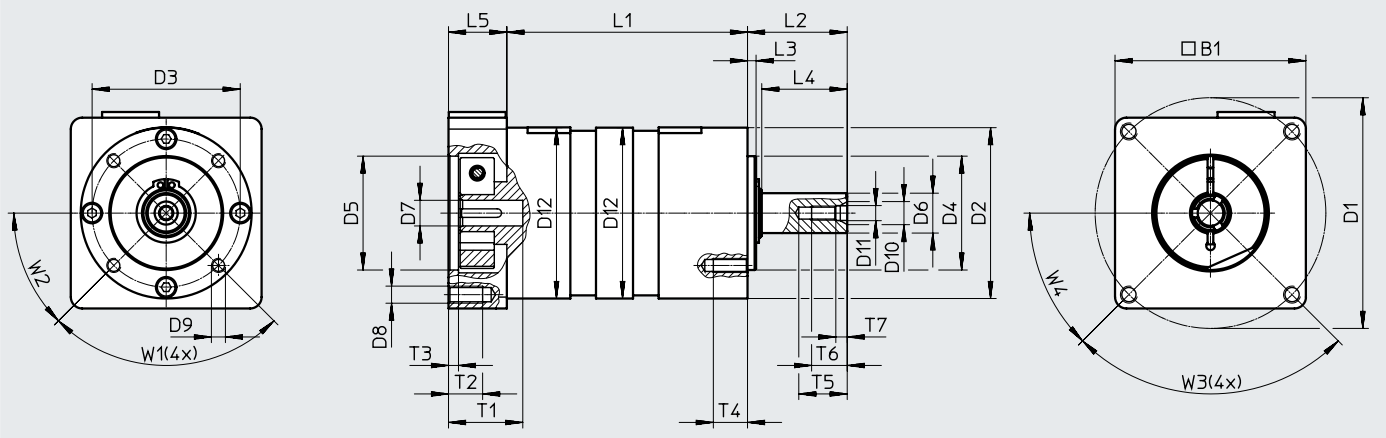
Type	L1 ±0.5
EMGC-40-P-G3-SEC-67	49.7
EMGC-40-P-G4-SEC-67	
EMGC-40-P-G5-SEC-67	
EMGC-40-P-G7-SEC-67	
EMGC-40-P-G12-SEC-67	65.3
EMGC-40-P-G16-SEC-67	
EMGC-40-P-G20-SEC-67	
EMGC-40-P-G25-SEC-67	
EMGC-40-P-G35-SEC-67	

Data sheet

Dimensions

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EMGC-60-P-... for integrated drives EMCA-EC-67



Type	Interface		B1	D1 ∅	D2 ∅ -0.1	D3	D4 ∅ h6	D5 ∅ G7	D6 ∅ h6
	Output	Motor							
EMGC-60-P-...-SEC-67	60H	SEC-67	67	81	60	52	40	40	14

Type	D7 ∅ G6	D8	D9	D10 ∅	D11 ∅	D12 ∅ +0.1	L2 -0.3	L3	L4 -0.1	L5
EMGC-60-P-...-SEC-67	9	M6	M5	8.1	5.3	60	35	3	30	20.5

Type	T1 min.	T2 min.	T3 +0.5	T4 min.	T5 min.	T6 min.	T7 +1	W1	W2	W3	W4
EMGC-60-P-...-SEC-67	26	13	3.5	12	17	12.5	4	90°	45°	90°	45°

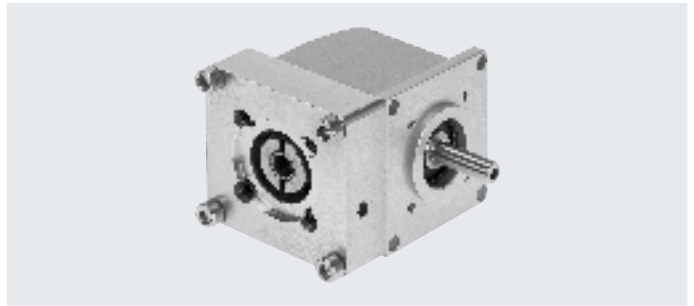
Type	L1 ±0.5
EMGC-60-P-G3-SEC-67	62.5
EMGC-60-P-G4-SEC-67	
EMGC-60-P-G5-SEC-67	
EMGC-60-P-G7-SEC-67	
EMGC-60-P-G10-SEC-67	84.5
EMGC-60-P-G12-SEC-67	
EMGC-60-P-G16-SEC-67	
EMGC-60-P-G20-SEC-67	
EMGC-60-P-G25-SEC-67	
EMGC-60-P-G35-SEC-67	
EMGC-60-P-G40-SEC-67	

Data sheet

Ordering data For integrated drive	Gear ratio		Interface		Part no.	Type
			Output	Motor		
EMCA-EC-67	3	Single-stage	40G	SEC-67	8000594	EMGC-40-P-G3-SEC-67
	4				8000595	EMGC-40-P-G4-SEC-67
	5				8000596	EMGC-40-P-G5-SEC-67
	7				8000597	EMGC-40-P-G7-SEC-67
	12	Two-stage	40G	SEC-67	8000598	EMGC-40-P-G12-SEC-67
	16				8000599	EMGC-40-P-G16-SEC-67
	20				8000600	EMGC-40-P-G20-SEC-67
	25				8000601	EMGC-40-P-G25-SEC-67
	35				8000602	EMGC-40-P-G35-SEC-67
	EMCA-EC-67	3	Single-stage	60H	SEC-67	8000612
4		8000613				EMGC-60-P-G4-SEC-67
5		8000614				EMGC-60-P-G5-SEC-67
7		8000615				EMGC-60-P-G7-SEC-67
10		8000616				EMGC-60-P-G10-SEC-67
12		Two-stage	60H	SEC-67	8000617	EMGC-60-P-G12-SEC-67
16					8000618	EMGC-60-P-G16-SEC-67
20					8000619	EMGC-60-P-G20-SEC-67
25					8000620	EMGC-60-P-G25-SEC-67
35					8000621	EMGC-60-P-G35-SEC-67
40				8000622	EMGC-60-P-G40-SEC-67	

Data sheet

- For integrated drive:
EMCA-EC-67



Technical data		
Gear unit size	[mm]	67
Gear ratio	[i]	1
Output interface		67A
Motor interface		SEC-67
Gear unit type		Right-angle gear unit Single-stage
Continuous output torque ¹⁾	[Nm]	2
Max. output torque ²⁾	[Nm]	2.1
Max. drive speed ³⁾	[rpm]	4500
Torsional rigidity	[Nm/arcmin]	0.105
Max. torsional backlash	[deg]	0.67
Mass moment of inertia ⁴⁾	[kgcm ²]	0.09
Max. efficiency	[%]	90
Operating temperature ⁵⁾	[°C]	-20 ... +90
Degree of protection		IP54
Product weight	[g]	930
Note on materials		RoHS-compliant Contains paint-wetting impairment substances

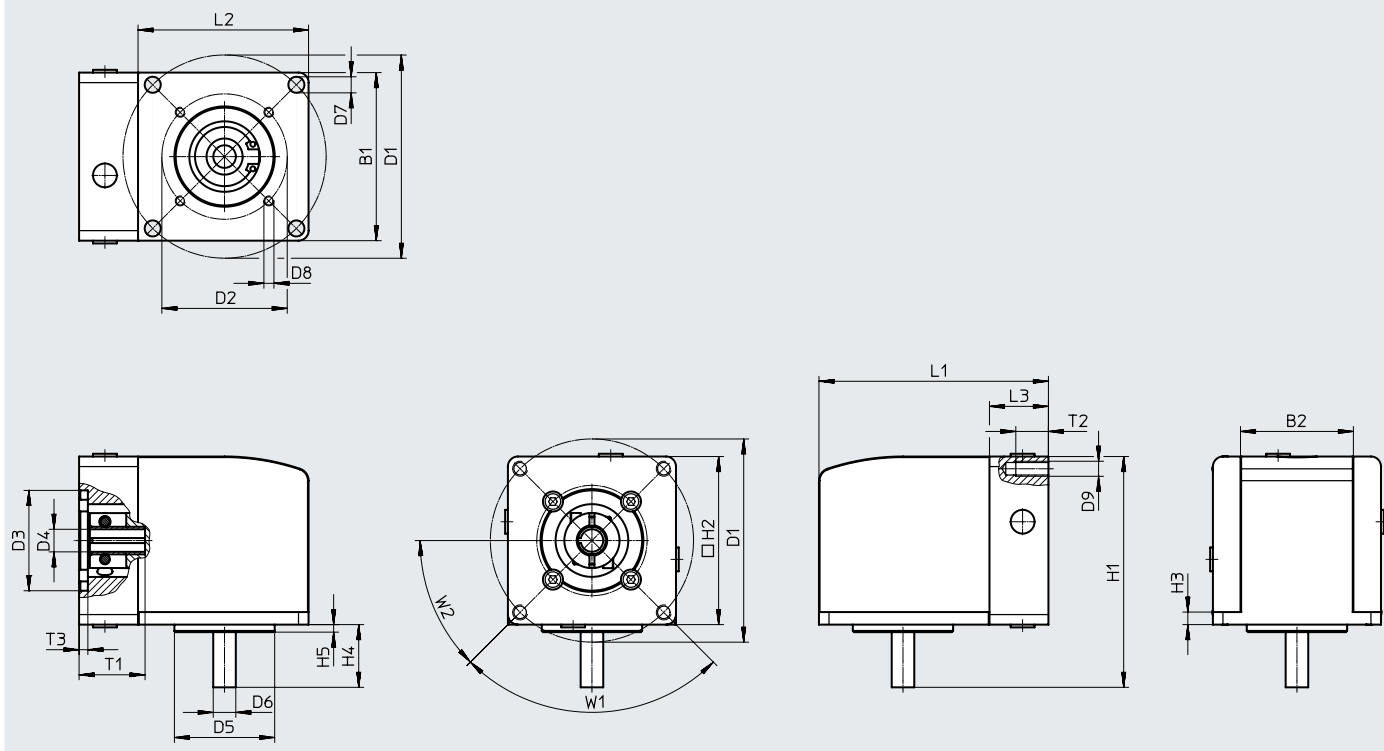
- 1) At the output shaft
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- 5) Note the temperature range of the motor

Data sheet

Dimensions

Download CAD data → www.festo.com

EMGC-67... for integrated drives EMCA-EC-67



Type	Interface		B1	B2	D1 ∅	D2 ∅	D3 ∅	D4 ∅
	Output	Motor						
EMGC-67-A-G1-SEC-67	67A	SEC-67	67	45	±0.1	±0.1	G7	G6

Type	D5	D6	D7	D8	D9	H1	H2	H3	H4
EMGC-67-A-G1-SEC-67	∅ h7	∅ h7	∅ H12					±0.1	-0.1
	40	9	6.4	M4	M6	92	67	5	25

Type	H5	L1	L2	L3	T1	T2	T3	W1	W2
EMGC-67-A-G1-SEC-67							+0.2		
	3	91.5	68	23.5	26.3	13	3.5	90°	45°

Ordering data

For integrated drive	Gear ratio	Interface		Part no.	Type
		Output	Motor		
EMCA-EC-67	1	67A	SEC-67	2321480	EMGC-67-A-G1-SEC-67