

IC Serie - eisenbehaftete DC-Motoren im Kunststoffgehäuse



- DC – Kleinmotoren, eisenbehaftet
- Kunststoffgehäuse
- Beständig gegenüber Chemikalien
- unempfindlich in feuchten Umgebungen (keine Rostbildung)
- hohe Lebensdauer
- 3 Getriebeversionen (Kunststoff, optional Metall) mit jeweils mehreren Untersetzungen
- Dauermomente von 6 bis 600mNm
- Wicklungen für 6 – 24Vdc
- Interne Funkenunterdrückung
- Sonderausführungen möglich

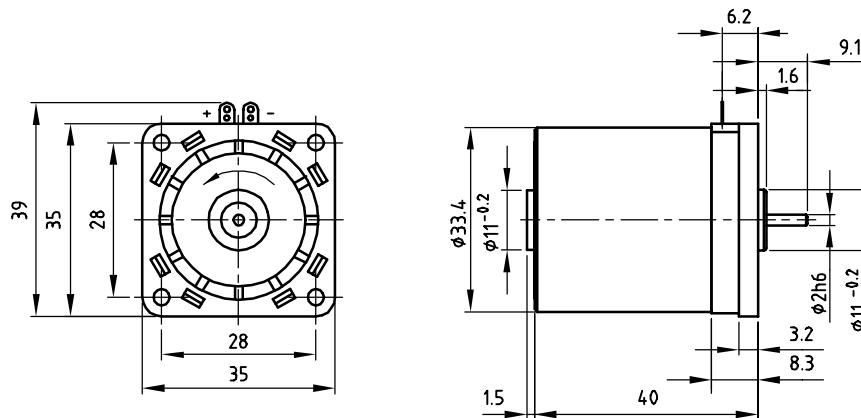
Motortyp	Motor Performance						Getriebe- unter- setzung	Dreh- richtung
	Leistung	Spannung	Dreh- moment	Dreh- moment	Drehzahl	Baugröße		
	W	Vdc	Spitze mNm	Dauer mNm	rpm	b x h x l mm		
IC34 3,0W	3	6/9/12/18/24	36	6	0-4.900	35x35x40	-	CW/CCW
IC34 0,15Nm	1	6/12/24	30	15	0-590	39x39x64	5,57	CW
			50	25	0-365		9,1	CW
			100	50	0-194		16,7	CCW
			160	80	0-120		27,1	CCW
			300	150	0-64		50	CW
			300	150	0-43		81	CW
			300	150	0-24		150,4	CCW
			300	150	0-15,5		243	CCW
			300	150	0-8,3		451,25	CW
			300	150	0-5,3		729	CW
IC34 0,3Nm	2	6/12/24	800	300	0-65	39x54x64	81	CW
IC34 0,6Nm	1	6/12/24	480	240	0-40	39x39x64	81	CW
			800	450	0-20,9		150,4	CCW
			800	600	0-13,5		243	CCW
			800	600	0-7,8		451,25	CW
			800	600	0-5,0		729	CW

IC34

Iron Core DC motor

3 Watt

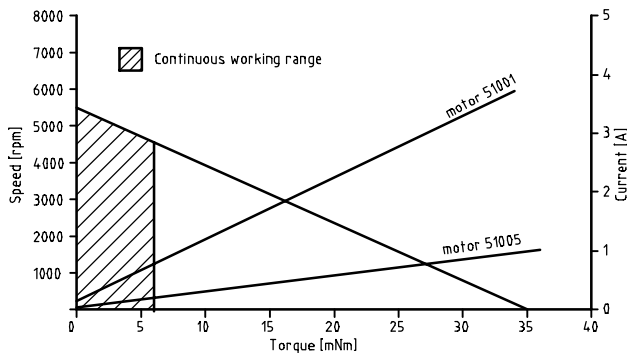
Dimensional drawing



Motor data

Motor order number	9904 120 +	51001	51002	51003	51004	51005
Nominal Voltage	[V]	6	9	12	18	24
Nominal Torque	[mNm]	6	6	6	6	6
Nominal Speed	[rpm]	4750	4570	4890	4580	4660
Nominal Current	[mA]	775	490	395	250	190
No load Speed	[rpm]	5770	5510	5790	5520	5530
No load Current	[mA]	155	98	84	49	39
EMF at 3000 rpm	[V]	3.0	4.7	6.0	9.4	12.5
Torque constant	[mNm/A]	9.5	15	19	30	4.0
Terminal Resistance	[Ohm]	1.7	3.8	5.8	15	25
Starting Torque at nominal Voltage	[mNm]	34	39	38	38	36
Starting Current at nominal Voltage	[A]	3.7	2.4	2.1	1.2	1.0
Thermal resistance winding-housing	[K/W]	21	21	21	21	21
Thermal resistance housing-ambient	[K/W]	12	12	12	12	12

Performance curve



General data

*	Type of bearings	sleeve	
*	Commutation system	graphite / copper	
*	Maximum radial load 10 mm from mounting front	2.5	N
*	Maximum axial load	2	N
*	Ambient temp. range operating	-10/+60	°C
*	Ambient temp. range storage	-40/+70	°C
*	Mass of motor	100	g

Options

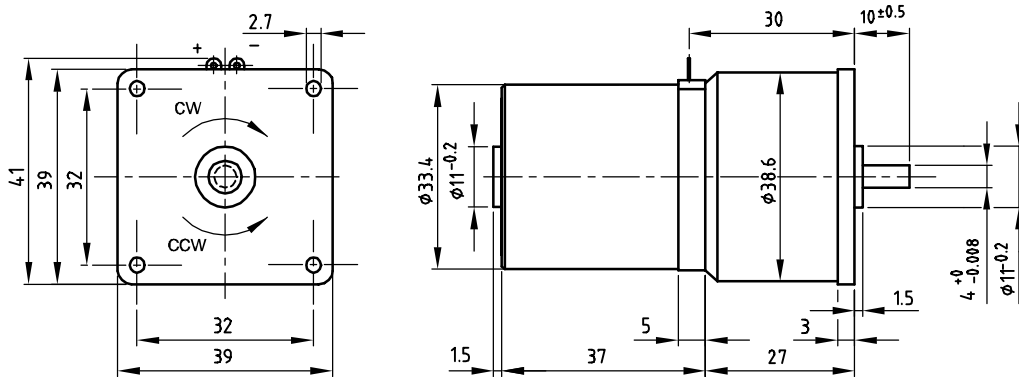
- * Special shafts
- * Other supply voltages
- * Geared version

IC34

Iron Core DC gear motor

0.15 Nm

Dimensional drawing



Gear Motor data

Gear motor Order number	Gear ratio	Direction of rotation	Nominal voltage [V]		Maximum torque continuous [Nm] (nominal load)	Maximum torque intermittent [Nm]	Speed at no load [rpm]	Speed at nominal load [rpm]	Current at no load [mA]	Current at nominal load [mA]	Maximal radial force [N]	Maximal axial force [N]					
			6	12									14.4	28.8			
9904 120 52 +	5.57:1	cw	401	6	7.2	0.015	0.03	686	590	118	341	2	2				
			601	12	14.4									643	554	60	165
			701	24	28.8									644	557	29	82
	9:1	cw	402	6	7.2	0.025	0.05	427	364	110	344	2	2				
			602	12	14.4									400	342	57	166
			702	24	28.8									400	345	28	83
	16.7:1	ccw	403	6	7.2	0.05	0.1	231	194	101	363	4	4				
			603	12	14.4									216	182	52	175
			703	24	28.8									217	183	26	87
	27:1	ccw	404	6	7.2	0.08	0.16	143	120	98	358	4	4				
			604	12	14.4									134	113	51	173
			704	24	28.8									134	114	25	86
	50:1	cw	405	6	7.2	0.15	0.3	77	64	95	369	6	6				
			605	12	14.4									73	60	50	178
			705	24	28.8									73	61	24	88
	81:1	cw	406	6	7.2	0.15	0.3	48	43	94	263	6	6				
			606	12	14.4									45	40	50	129
			706	24	28.8									45	40	24	64
	150.4:1	ccw	407	6	7.2	0.15	0.3	25.8	24.2	92	195	8	8				
			607	12	14.4									24.2	22.6	49	97
			707	24	28.8									24.2	22.7	24	48
	243:1	ccw	408	6	7.2	0.15	0.3	16.0	15.5	92	156	8	8				
			608	12	14.4									15.0	14.4	49	79
			708	24	28.8									15.0	14.4	24	39
	451.25:1	cw	409	6	7.2	0.15	0.3	8.6	8.3	92	129	10	10				
			609	12	14.4									8.1	7.9	49	66
			709	24	28.8									8.1	7.9	24	32
	729:1	cw	411	6	7.2	0.15	0.3	5.3	5.3	92	115	10	10				
			611	12	14.4									5.0	4.9	49	59
			711	24	28.8									5.0	4.9	24	29

Motor data

	Nominal Voltage [V]	Rotor resist. [Ohm]	Speed at no load [rpm]	Stall torque [mNm]	Torque const. [mNm/A]
9904 120 524..	6	3.6	3800	23	14
9904 120 526..	12	15	3550	23	30
9904 120 527..	24	58	3550	23	61

General data

*	Type of bearings	sleeve	
*	Commutation system	graphite / copper	
*	Gear material	plastic	
*	Axial play	0.5	mm
*	Ambient temp. range operating	-20/+60	°C
*	Ambient temp. range storage	-40/+70	°C
*	Thermal resistance winding-ambient	30	K/W
*	Mass of gear motor	125	g

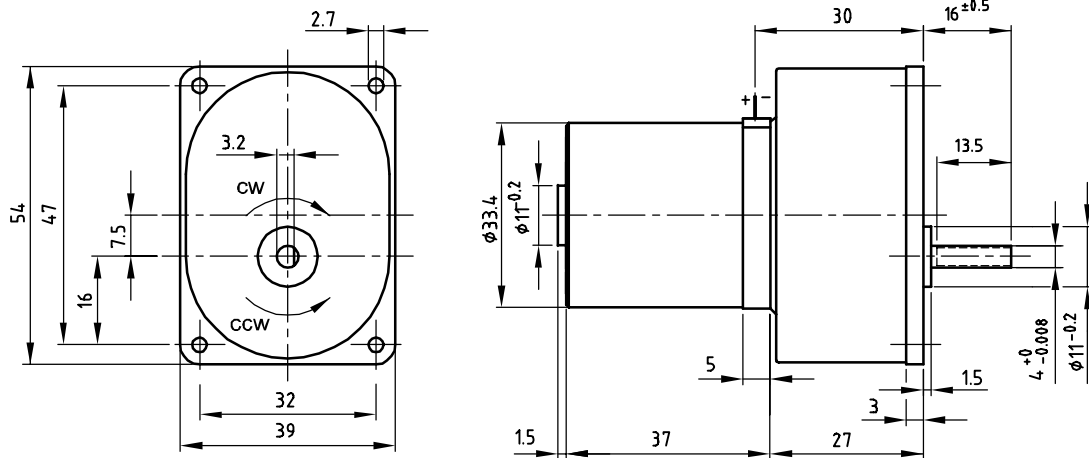
Options : Special shafts /Other supply voltages

IC34

Iron Core DC gear motor

0.3 Nm

Dimensional drawing



Gear Motor data

Gear motor		Gear ratio	Direction of rotation	Nominal voltage [V]	Maximal voltage [V]	Maximum torque continuous [Nm] (nominal load)	Maximum torque intermittent [Nm]	Speed at no load [rpm]	Speed at nominal load [rpm]	Current at no load [mA]	Current at nominal load [mA]	Maximal radial force [N]	Maximal axial force [N]
Order number													
9904 120 55 +	406	81:1	CW	6	7.2	0.30	0.80	75	65	190	760	10	10
	606			12	14.4			70	60	85	350		
	706			24	28.8			70	60	43	175		

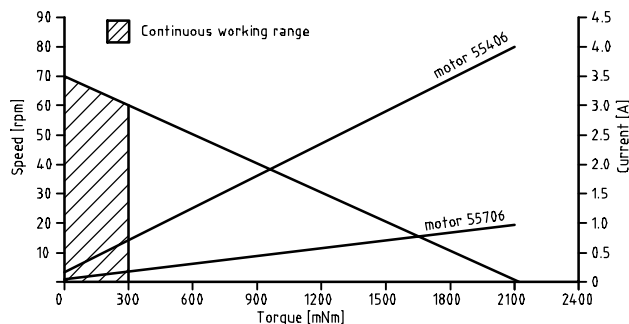
Motor data

	Nominal Voltage [V]	Terminal resistance [Ohm]	Speed at no load [rpm]	Stall torque [mNm]	Torque const. [mNm/A]
9904 120 55406	6	1.5	6200	34	9
9904 120 55606	12	5.7	5800	35	19
9904 120 55706	24	24.4	5800	36	38

General data

*	Type of bearings	sleeve	
*	Commutation system	graphite / copper	
*	Gear material	plastic	
*	Axial play	0.5	mm
*	Ambient temp. range operating	-20/+60	°C
*	Ambient temp. range storage	-40/+70	°C
*	Thermal resistance winding-ambient	30	K/W
*	Mass of gear motor	125	g

Performance curve



Options

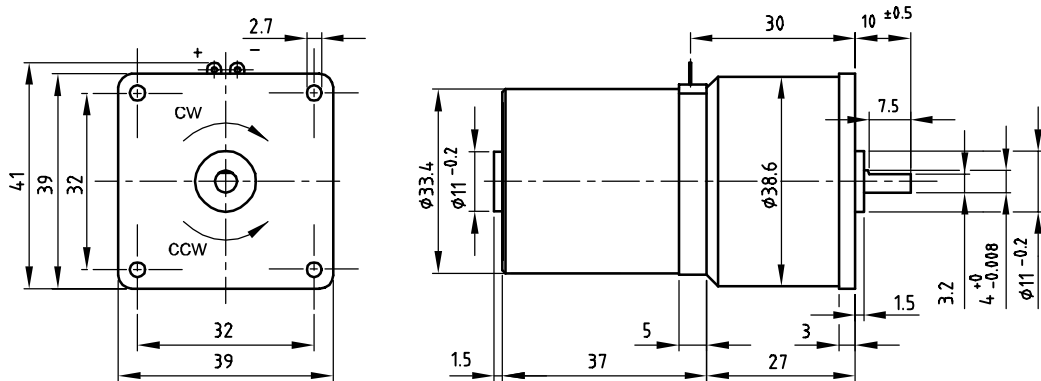
- * Special shafts
- * Other supply voltage

IC34

Iron Core DC gear motor

0.6 Nm

Dimensional drawing



Gear Motor data

Gear motor Order number	Gear ratio	Direction of rotation	Nominal voltage [V]		Maximum torque continuous [Nm] (nominal load)	Maximum torque intermittent [Nm]	Speed at no load [rpm]	Speed at nominal load [rpm]	Current at no load [mA]	Current at nominal load [mA]	Maximal radial force [N]	Maximal axial force [N]
			6	12								
9904 120 53 +	81:1	CW	406	7.2	0.24	0.48	47.3	32.9	103	460	6	6
			606	14.4								
			706	28.8								
407	150.4:1	CCW	607	7.2	0.45	0.8	25.5	16.8	103	502	8	8
			707	14.4								
			408	28.8								
608	243:1	CCW	708	7.2	0.6	0.8	15.8	11.3	103	434	8	8
			609	14.4								
			709	28.8								
411	451.25:1	CW	611	7.2	0.6	0.8	8.5	7.1	103	300	10	10
			711	14.4								
			711	28.8								

Motor data

	Nominal Voltage [V]	Rotor resist. [Ohm]	Speed at no load [rpm]	Stall torque [mNm]	Torque const. [mNm/A]
9904 120 534..	6	3.6	3800	23	14
9904 120 536..	12	15	3550	23	30
9904 120 537..	24	58	3550	23	61

General data

*	Type of bearings	sleeve	
*	Commutation system	graphite / copper	
*	Gear material	plastic / metal	
*	Axial play	0.5	mm
*	Ambient temp. range operating	-20/+60	°C
*	Ambient temp. range storage	-40/+70	°C
*	Thermal resistance winding-ambient	30	K/W
*	Mass of gear motor	125	g

Options

- * Special shafts
- * Other supply voltage