



DC-MOTORS

SERIE M169



M169

This direct current motors series, whose power range goes from 45 Watt to 1500Watt, was created after a careful market analysis and represents the right balance among performance-price-quality. Thanks to components such as copper-silver commutator, long-life brushes and ferrite permanent magnets, which are magnetized and calibrated in place, M169 series assures a high performance competitiveness.



Motor Type	Power Watt		Rated Speed Torque (Nm)	Voltage (Vdc)	Mounting				Ventilation		Dimensions (mm)	
	3000 Rpm	2000 Rpm			B3	B5	B14	Natural	Fan Cooled	Diameter	Length	
M169 1S	45		0.14	24÷48						57.8	109.5	
M169 1M	70		0.22								136	
M169 1L	95		0.30								183.5	
M169 4S	300	200	0.95	12÷180						116	197.5	
M169 4M	600	400	1.9	24÷180							227.5	
M169 4L	900	600	2.86								257.5	
M169 5X	100	70	0.32	12÷180						83.5	144.5	
M169 5XS	150	100	0.48								177.5	
M169 5S	200	135	0.64								212.5	
M169 5SL	300	200	0.96	24÷180							229	
M169 5M	360	240	1.15	36÷180							267.5	
M169 5L	500	335	1.6	48÷180							322.5	
M169 5XA	150	100	0.48	12÷180						107	189.5	
M169 5XSA	235	155	0.75								222.5	
M169 5SA	300	200	0.96	24÷180							257.5	
M169 5SLA	440	290	1.4								274	
M169 5MA	565	375	1.8								312.5	
M169 7SA	750	500	2.4	90÷180						116	318	
M169 7MA	1100	750	3.5								390	
M169 7LA	1500	1100	4.8	110÷180							462	

IP 54 protection

Class F insulation

Low noise

High coercive ferrite permanent magnets field

Skewed armature for higher linearity

D.C. MOTORS

Series

M169

1S



W	RPM
45	3000
	2000

Performance characteristics

Motor type		1S 30		
Rated power	[W]	45		
Rated speed	[rpm]	3000	2000	
Rated torque	[Nm]	0.143		
Rated voltage	[V]	48	36	24
Rated current	[A]	1.3	1.7	2.6
Peak torque	[Nm]	0.715	0.715	0.715
Peak current	[A]	6.5	8.5	13
Armature resistance	[Ohm]	6.3	3.33	1.33
Armature inductance	[mH]	9	4.95	2
Voltage constant	[V/Krpm]	13	10	6.4
Elect.time constant	[ms]	1.5	1.5	1.5
Mech.time constant	[ms]	6	5	5

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgcm ²]	0.15
Max theor. Acc.	[Rad/sec ²]	47000
Max radial load	[N]	196
Max axial load	[N]	58
Motor weight	[Kg]	0.95
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	20
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

1M



W	RPM
70	3000
	2000

Performance characteristics

Motor type		1M30																	
Rated power	[W]			70															
Rated speed	[rpm]			3000															2000
Rated torque	[Nm]			0.22															
Rated voltage	[V]			48	36	24													
Rated current	[A]			1.95	2.6	3.65													
Peak torque	[Nm]			1.1	1.1	1.1													
Peak current	[A]			9.75	13	18.25													
Armature resistance	[Ohm]			2.33	1.85	0.85													
Armature inductance	[mH]			4	3	1.34													
Voltage constant	[V/Krpm]			13.2	10.4	7.3													
Elect.time constant	[ms]			1.7	1.62	1.58													
Mech.time constant	[ms]			6.5	6	6													

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgcm ²]	0.324
Max theor. Acc.	[Rad/sec ²]	33950
Max radial load	[N]	196
Max axial load	[N]	58
Motor weight	[Kg]	1.3
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	25
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

1L



W	RPM
95	3000
	2000

Performance characteristics

Motor type		1L 30		
Rated power	[W]	95		
Rated speed	[rpm]	3000		
Rated torque	[Nm]	0.3		
Rated voltage	[V]	48	36	24
Rated current	[A]	2.5	3.4	4.9
Peak torque	[Nm]	1.5	1.5	1.5
Peak current	[A]	12.5	17	24.5
Armature resistance INDUTTANZA ARMATURA	[Ohm] La	2.43	1.19	0.48
Armature inductance	[mH]	3	1.65	0.7
Voltage constant	[V/Krpm]	13.3	10.7	7.5
Elect.time constant	[ms]	1.24	1.4	1.46
Mech.time constant	[ms]	9	7	6

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgcm ²]	0.607
Max theor. Acc.	[Rad/sec ²]	24711
Max radial load	[N]	196
Max axial load	[N]	58
Motor weight	[Kg]	1,85
Ventilation		T.E.N.V.
Class protection	IP	54

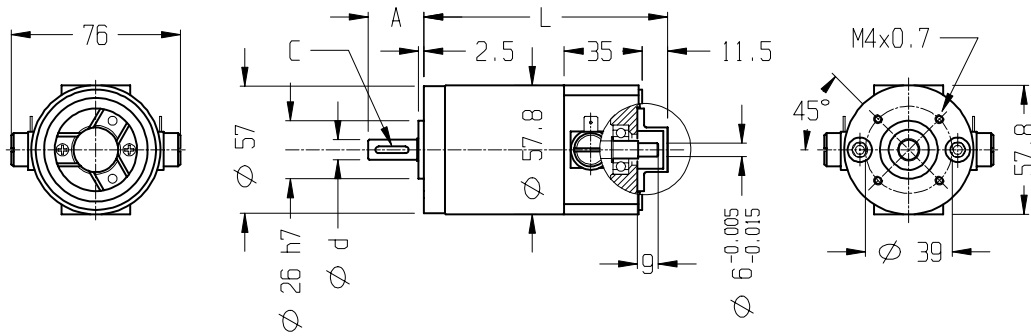
Winding data

Thermal time constant	[min]	30
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

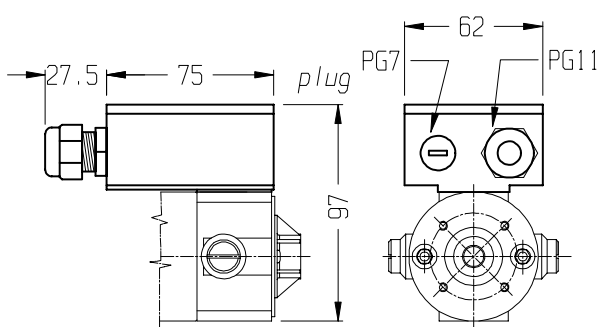
M169 1...

DIMENSIONS (mm)

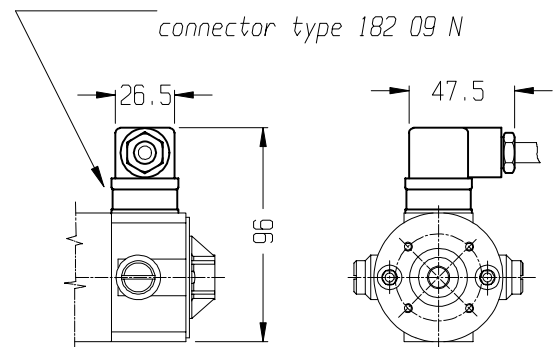


Type	S	M	L
A	20		25
L	109.5	136	183.5
d (j6)	7		9
C	-		3x3x15

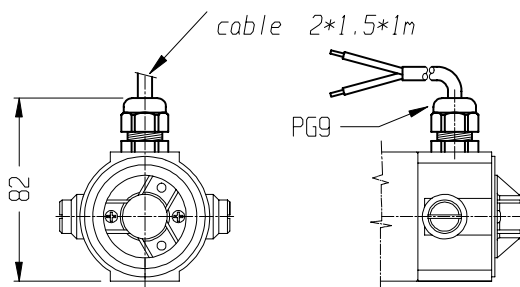
TERMINAL BOX



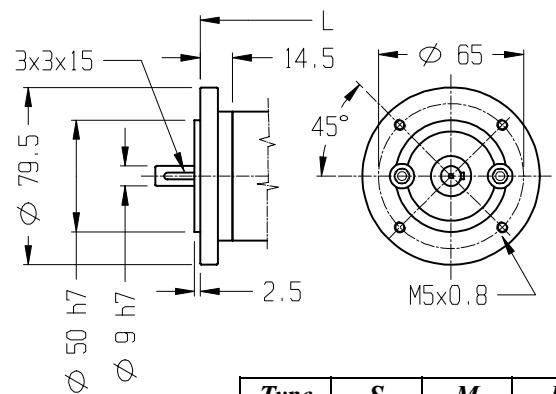
CONNECTOR



FLYING LEADS



B14/56 FLANGE



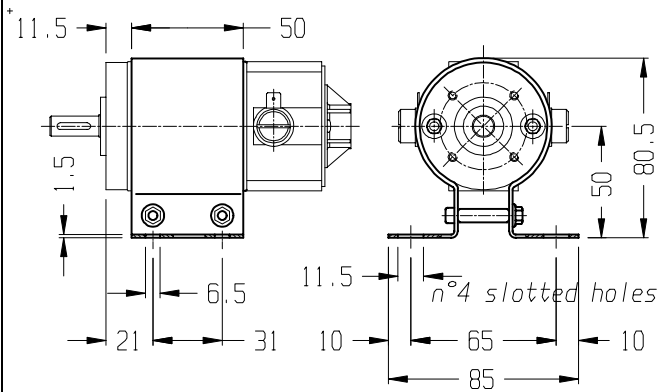
Type	S	M	L
L	114.5	141	188.5



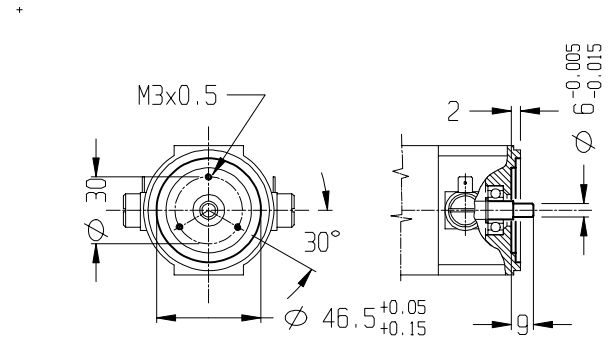
M169 1...

OPTIONALS

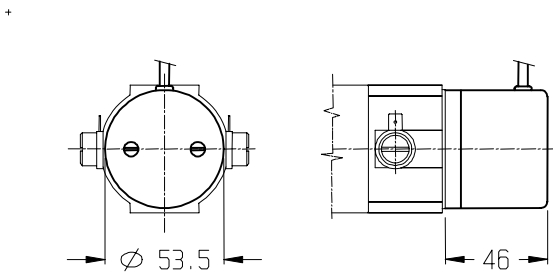
FOOT BAND TYPE



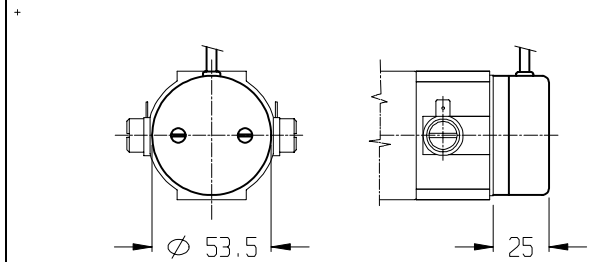
ENC. PREARRANGEMENT



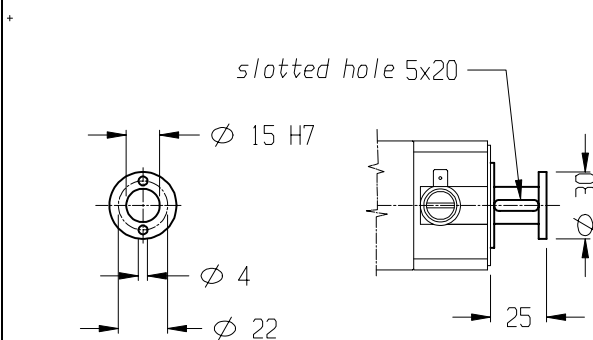
EH53 ENCODER



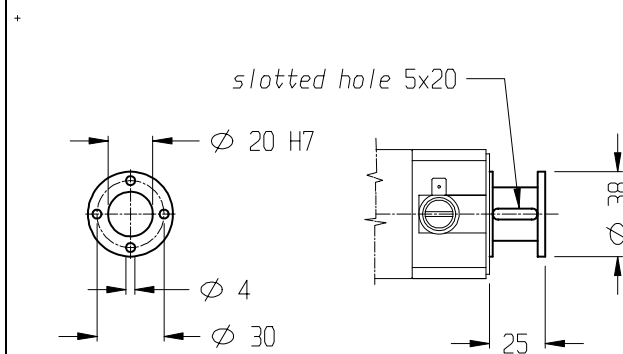
EH38 ENCODER



ENCODER SPACER N°1



ENCODER SPACER N°2



M169 1...

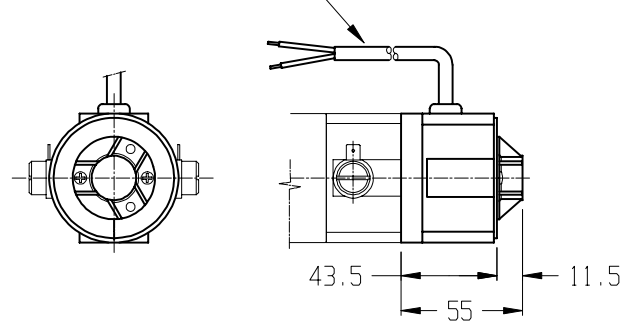
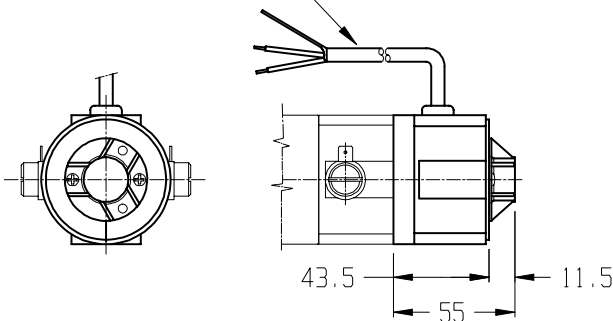
OPTIONALS

TACHO GENERATOR

BRAKE 0.5 Nm

shielded cable L=1m

n°2 cables 0.5*1m



ENCODER PREARRANGEMENT

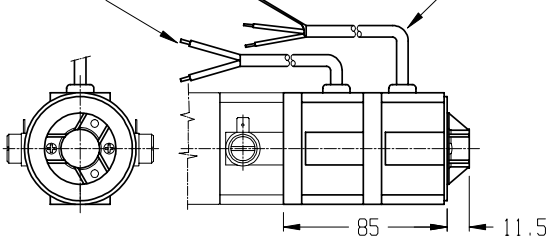
ENCODER PREARRANGEMENT

VOLTAGE CONSTANT	10±5% V/KRPM	RATED CURRENT	2 mA
MAX SPEED	9000 RPM	MAX CURRENT	8 mA

STATIC TORQUE	0.5 Nm	CURRENT	0.42 A
POWER SUPPLY VOLTAGE	24 V.c.c.	INPUT POWER	10 W

TACHO GENERATOR + BRAKE 0.5 Nm

n°2 cables 0.5*1m shielded cable L=1m



BRAKE

TACHO G.

STATIC TORQUE	0.5 Nm	VOLTAGE CONSTANT	10±5% V/KRPM
POWER SUPPLY VOLTAGE	24 V.c.c.	MAX SPEED	9000 RPM
CURRENT	0.42 A	RATED CURRENT	2 mA
INPUT POWER	10 W	MAX CURRENT	8 mA

D.C. MOTORS

Series

M169

4S



W	RPM
300	3000
200	2000

Performance characteristics

Motor type		4S 30								4S20							
Rated power	[W]	300								200							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	0.95								0.95							
Rated voltage	[V]	180	90	60	48	36	24	12	180	90	60	48	36	24	12		
Rated current	[A]	2.22	4.44	6.67	8.33	11.11	16.67	33.33	1.48	2.96	4.44	5.56	7.41	11.11	22.22		
Peak torque	[Nm]	4.76								4.76							
Peak current	[A]	11.1	22.2	33.3	41.7	55.6	83.3	166.7	7.4	14.8	22.2	27.8	37.0	55.6	111.1		
Armature resistance	[Ohm]	7.36	1.91	1.19	0.91	0.62	0.23	0.09	16.99	3.66	1.94	1.92	1.20	0.47	0.16		
Armature inductance	[mH]	30.00	7.50	3.59	0.90	0.51	0.23	0.06	80.00	19.50	8.67	2.05	1.12	0.51	0.14		
Voltage constant	[V/Krpm]	54.5	27.3	18.2	14.5	10.6	7.1	3.5	81.8	40.9	27.3	21.8	15.9	10.6	5.2		
Elect.time constant	[ms]	4.08	3.93	3.02	0.99	0.81	0.98	0.59	4.71	5.32	4.47	1.07	0.93	1.09	0.88		
Mech.time constant	[ms]	31.2	32.3	45.4	54.4	69.8	58.1	98.9	32.0	27.6	32.9	50.8	60.1	53.0	74.3		

* Intermittent duty only

Mechanical data

Rotor inertia	[Kgm ²]	0.00115
Max theor. Acc.	[Rad/sec ²]	4141
Max radial load	[N]	360
Max axial load	[N]	108
Motor weight	[Kg]	5.3
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	30
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

4M



W	RPM
600	3000
400	2000

Performance characteristics

Motor type		4M 30								4M20							
Rated power	[W]	600								400							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	1.90								1.90							
Rated voltage	[V]	180	90	60	48	36	24	12*	180	90	60	48	36	24	12*		
Rated current	[A]	4.44	8.89	13.33	16.67	22.22	33.33	66.67	2.96	5.93	8.89	11.11	14.81	22.22	44.44		
Peak torque	[Nm]	9.52								9.52							
Peak current	[A]	22.2	44.4	66.7	83.3	111.1	166.7	333.3	14.8	29.6	44.4	55.6	74.1	111.1	222.2		
Armature resistance	[Ohm]	2.84	0.96	0.59	0.52	0.40	0.13	0.08	4.79	1.62	0.81	0.95	0.54	0.23	0.11		
Armature inductance	[mH]	12.80	2.98	1.23	0.45	0.28	0.11	0.02	27.00	6.75	3.00	1.05	0.54	0.24	0.06		
Voltage constant	[V/Krpm]	56.3	27.3	18.2	14.5	10.6	7.1	3.5	81.8	40.9	27.3	21.8	15.9	10.6	5.2		
Elect.time constant	[ms]	4.50	3.12	2.09	0.87	0.70	0.87	0.25	5.64	4.16	3.72	1.10	0.99	1.04	0.56		
Mech.time constant	[ms]	20.2	28.9	40.2	55.3	79.4	58.6	156.6	16.1	21.8	24.4	44.9	48.4	45.8	88.5		

* Intermittent duty only

Mechanical data

Rotor inertia	[Kgm ²]	0.00205
Max theor. Acc.	[Rad/sec ²]	4646
Max radial load	[N]	360
Max axial load	[N]	108
Motor weight	[Kg]	6,8
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	40
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

4L



W	RPM
900	3000
600	2000

Performance characteristics

Motor type		4L 30								4L20							
Rated power	[W]	900								600							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	2.86								2.86							
Rated voltage	[V]	180	90	60	48	36	24*	12*	180	90	60	48	36	24	12*		
Rated current	[A]	6.67	13.33	20.00	25.00	33.33	50.00	100.00	4.44	8.89	13.33	16.67	22.22	33.33	66.67		
Peak torque	[Nm]	14.29								14.29							
Peak current	[A]	33.3	66.7	100.00	125.0	166.7	250.0	500.0	22.2	44.4	66.7	83.3	111.1	166.7	333.3		
Armature resistance	[Ohm]	1.73	0.69	0.45	0.36	0.28	0.11	0.07	2.50	0.85	0.49	0.53	0.36	0.13	0.09		
Armature inductance	[mH]	7.50	1.88	0.35	0.25	0.12	0.06	0.01	12.70	3.18	1.52	0.48	0.24	0.12	0.02		
Voltage constant	[V/Krpm]	57.1	27.3	18.2	14.5	10.6	7.1	3.5	81.8	40.9	27.3	21.8	15.9	10.6	5.2		
Elect.time constant	[ms]	4.34	2.70	0.78	0.67	0.42	0.56	0.13	5.08	3.75	3.08	0.90	0.67	0.90	0.26		
Mech.time constant	[ms]	16.8	29.7	43.5	54.7	80.2	69.6	193.6	11.9	16.1	21.1	35.5	45.8	37.7	99.9		

* Intermittent duty only

Mechanical data

Rotor inertia	[Kgm ²]	0.0029
Max theor. Acc.	[Rad/sec ²]	4946
Max radial load	[N]	360
Max axial load	[N]	108
Motor weight	[Kg]	8,3
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	60
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

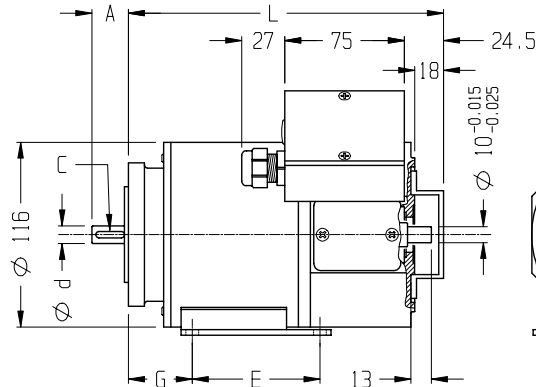
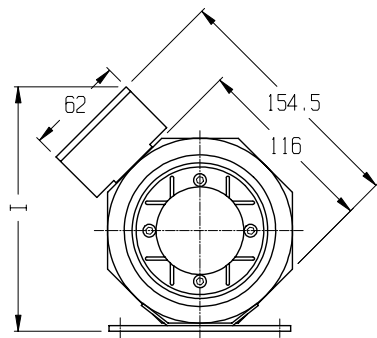
Data tolerance +/-5%

M169 4...

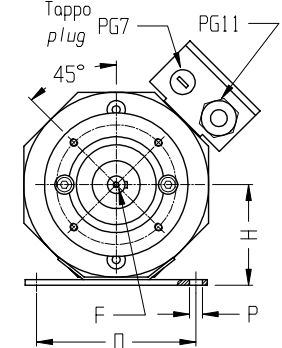
D.C. MOTORS

DIMENSIONS (mm)

FOOT

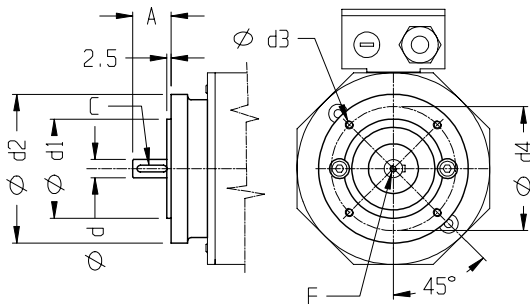


Type	S	M	L
L	197.5	227.5	257.5



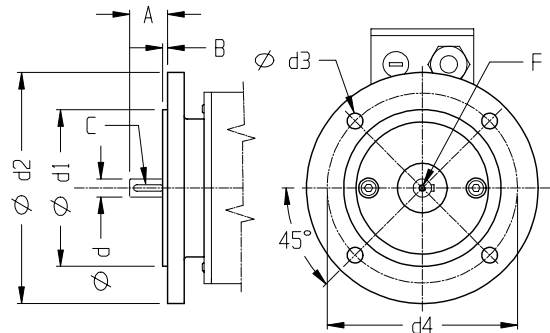
Size	A	C	d(h7)	E	F	G	H	I	O	P
63	23	4x4x18	11	80	M4	40	63	153	100	8
71	30	5x5x25	14	90	M5	45	71	161	112	9

B14 FLANGE



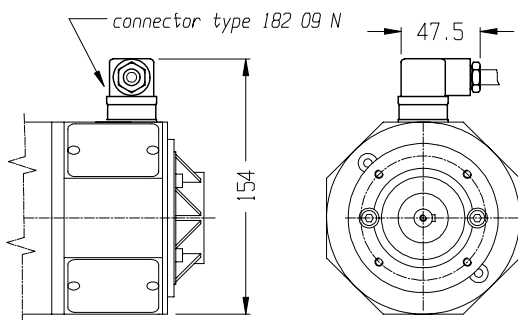
Size	A	C	d(h7)	d1(h7)	d2	d3	d4	F
56	20	3x3x15	9	50	80	M5	65	-
63	23	4x4x18	11	60	90	M5	75	M4
71	30	5x5x25	14	70	105	M6	85	M5

B5 FLANGE

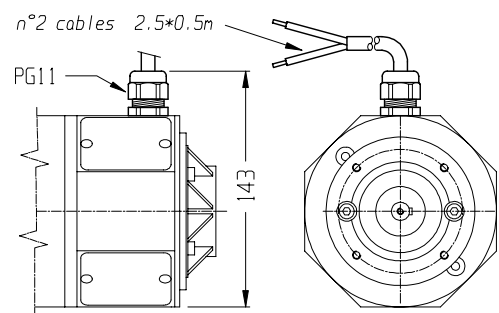


Size	A	B	C	d(h7)	d1(h7)	d2	d3	d4	F
56	20	3	3x3x15	9	80	120	8.5	100	-
63	23	3	4x4x18	11	95	140	9.5	115	M4
71	30	3.5	5x5x25	14	110	160	9.5	130	M5

CONNECTOR



FLYING LEADS

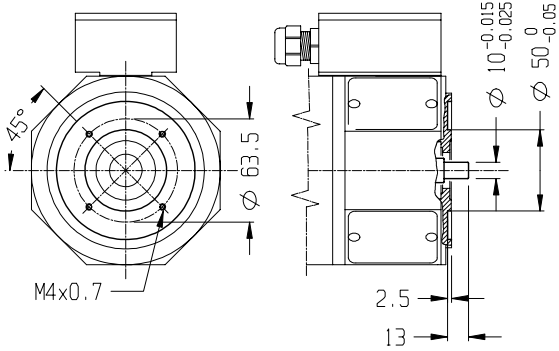


M169 4...

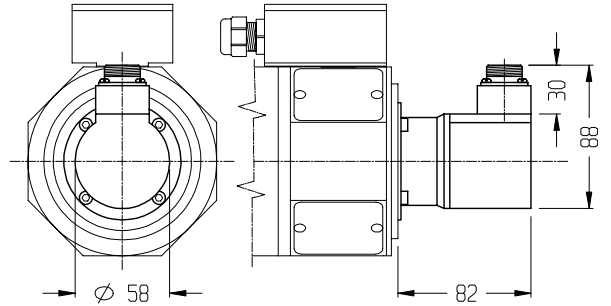
D.C. MOTORS

OPTIONALS

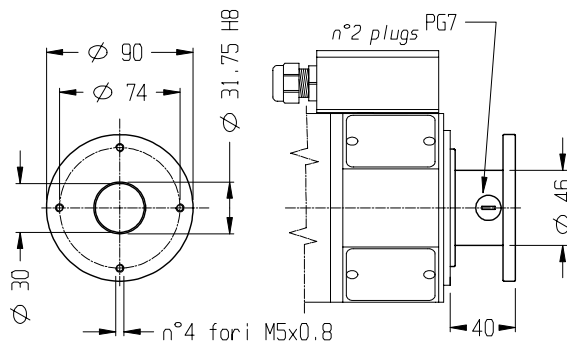
ENC. PREARRANGEMENT



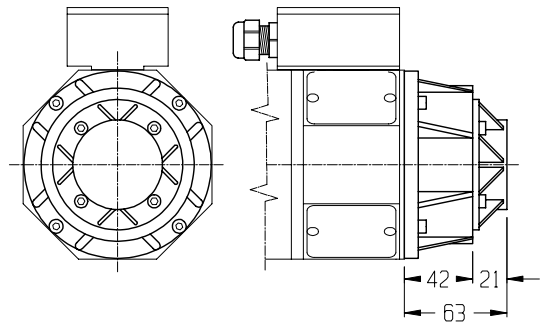
EL72 ENCODER



ENC. SPACER N°1

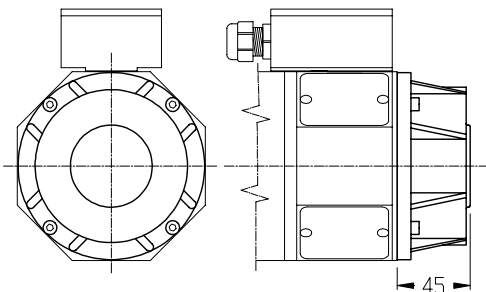


TACHO GENERATOR



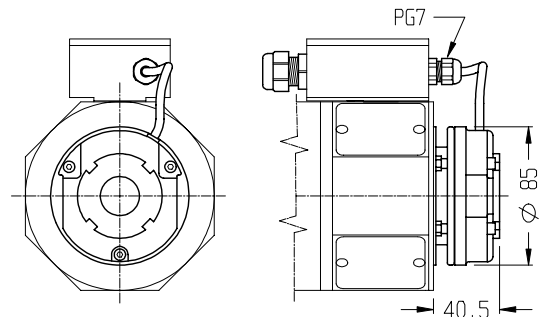
VOLTAGE CONSTANT	10±5% V/KRPM	RATED CURRENT	2 mA
MAX SPEED	9000 RPM	MAX CURRENT	8 mA

BRAKE N°1: 1,7 Nm



STATIC TORQUE	1,7 Nm	CURRENT	0.46-0.058 A
POWER SUPPLY VOLTAGE	24-190 V.c.c.	INPUT POWER	11 W

BRAKE N°2: 4 Nm



STATIC TORQUE	4 Nm	CURRENT	0.83-0.109 A
POWER SUPPLY VOLTAGE	24-190 V.c.c.	INPUT POWER	20 W

D.C. MOTORS

Series

M169

5X



W	RPM
100	3000
70	2000

Performance characteristics

Motor type		5X 30								5X20							
Rated power	[W]	100								70							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	0.32								0.32							
Rated voltage	[V]	180	90	60	48	36	24	12	180	90	60	48	33	24	12		
Rated current	[A]	0.74	1.5	2.2	2.8		5.54	11	0.55	1.1	1.6	2	2.8	4	8		
Peak torque	[Nm]	1.6	1.6	1.6	1.6		1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6		
Peak current	[A]	3.7	7.5	11	14		27.7	55	2.75		8	10	14	20	40		
Armature resistance	[Ohm]	16.7	4.1	1.8	1.28		0.4	0.12	41.1		4.1	2.4	1.28	0.86	0.25		
Armature inductance	[mH]	46.5	10.25	4.15	2.95		0.8	0.19	135	35.4	10.25	5.75	2.95	1.75	0.5		
Voltage constant	[V/Krpm]	54	27	17	15		7	3.4	82	40	26	20	15	9.6	5		
Elect.time constant	[ms]	2.8	2.5	2.3	2.3		2	1.6	3.3		2.5	2.4	2.3	2.1	1.6		
Mech.time constant	[ms]	11	11	12	11		16	20	12		11	12	11	15	19		

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.00018
Max theor. Acc.	[Rad/sec ²]	8800
Max radial load	[N]	294
Max axial load	[N]	88
Motor weight	[Kg]	2.9
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	20
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

5XS



W	RPM
150	3000
100	2000

Performance characteristics

Motor type		5XS 30								5XS 20							
Rated power	[W]	150								100							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	0.48								0.48							
Rated voltage	[V]	180	90	60	48	36	24	12	180	90	60	48	36	24	12		
Rated current	[A]	1.1	2.2	3.3	4.2	5.55	8.33	16	0.74	1.5	2.2	2.8	3.7	5.54	11		
Peak torque	[Nm]	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4		
Peak current	[A]	5.5		16.7	21		41.7	80	3.7		11	14		27.7	55		
Armature resistance	[Ohm]	13.9	4.04	1.64	1.1		0.29	0.12	26.9		3.5	2.6		0.54	0.184		
Armature inductance	[mH]	47	11	5.4	3.5	1.92	0.73	0.165	100	29	10.9	7.5	4.7	1.3	2.2		
Voltage constant	[V/Krpm]	54		18	15		7	3.4	82		26	20		9.6	5		
Elect.time constant	[ms]	3.4	3.2	3.29	3.2	3.5	2.5	1.4	3.7	3.5	3.2	2.9	3.4	2.4	2.2		
Mech.time constant	[ms]	15		17	16		19	34	13		17	21		19	24		

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0003
Max theor. Acc.	[Rad/sec ²]	8000
Max radial load	[N]	294
Max axial load	[N]	88
Motor weight	[Kg]	3.5
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	25
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

5S



W	RPM
200	3000
135	2000

Performance characteristics

Motor type		5S 30								5S 20					
Rated power	[W]	200								135					
Rated speed	[rpm]	3000								2000					
Rated torque	[Nm]	0.64								0.64					
Rated voltage	[V]	180	90	60	48	36	24	12*	180	88	60	46	36	24	12
Rated current	[A]	1.4	2.85	4.3	5.3	7	10.7		0.97	2.1	2.9	3.8	4.8	7.25	14.5
Peak torque	[Nm]	3.2	3.2	3.2	3.2	3.2	3.2		3.2	3.2	3.2	3.2	3.2	3.2	3.2
Peak current	[A]	7		21.5	26.5		53.5		4.85	10.5	14.5	19		36	72.5
Armature resistance	[Ohm]	6.15		0.92	0.6		0.17		15.5	3	1.36	0.96	1.08	0.33	0.12
Armature inductance	[mH]	20	5.79	2.5	1.5	0.76	0.32		49	11	3.9	2.67	1.77	0.73	0.16
Voltage constant	[V/Krpm]	54	28.5	18	15		7		82	40	26	20	16.6	9.6	5
Elect.time constant	[ms]	3.3	3.33	2.7	2.5		1.9		3.2	3.7	2.9	2.8		2.2	1.7
Mech.time constant	[ms]	14		19	17		23		15	12	13	16		21	31

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0006
Max theor. Acc.	[Rad/sec ²]	5330
Max radial load	[N]	294
Max axial load	[N]	88
Motor weight	[Kg]	4.6
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	30
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

5SL



W	RPM
300	3000
200	2000

Performance characteristics

Motor type		5SL 30								5SL 20							
Rated power	[W]	300								200							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	0.96								0.96							
Rated voltage	[V]	180	90	60	48	36	24	12*	180	90	60	48	36	24	12*		
Rated current	[A]	2.1	4.2	6.3	7.8	10.4	15.6		1.4	2.8	4.2	5.2	7	10.4			
Peak torque	[Nm]	4.8	4.8	4.8	4.8	4.8	4.8		4.8	4.8	4.8	4.8	4.8	4.8			
Peak current	[A]	10.5	21	31.5	39	52	78		7	14	21			52			
Armature resistance	[Ohm]	5.3	1.41	0.67	0.4	0.29	0.16		12.5	2.5	1.41			0.29			
Armature inductance	[mH]	18.5	4.1	2	1.2	0.7	0.32		42	9.46	4.1	2.74	1.45	0.7			
Voltage constant	[V/Krpm]	55.5	27	19	15	11.4	7.5		84.5	40	27	21		11.4			
Elect.time constant	[ms]	3.5	3.13	3	3	2.4	2		3.4	3.8	3.13			2.4			
Mech.time constant	[ms]	13	19	14	14	17	22		13	12	19			17			

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0007
Max theor. Acc.	[Rad/sec ²]	6850
Max radial load	[N]	343
Max axial load	[N]	103
Motor weight	[Kg]	5.3
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	35
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

5M



W	RPM
360	3000
240	2000

Performance characteristics

Motor type		5M 30								5M 20							
Rated power	[W]	360								240							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	1.15								1.15							
Rated voltage	[V]	180	90	60	48	36	24*	12*	180	90	60	48	36	24	12*		
Rated current	[A]	2.6	5	7.5	9.4	12.5			1.7	3.4	5	6.25	8.3	12.5			
Peak torque	[Nm]	5.75	5.75	5.75	5.75	5.75			5.75	5.75	5.75	5.75	5.75	5.75			
Peak current	[A]	12.6	25	37.5	47	62.5			8.5	17	25			62.5			
Armature resistance	[Ohm]	4.05	0.9	0.52	0.35	0.25			7.2	1.84	0.9			0.25			
Armature inductance	[mH]	14.3	3	1.43	1	0.56			27	6.8	3	2	1.2	0.56			
Voltage constant	[V/Krpm]		27	19.5	15.5	11.5			87	40	27			11.5			
Elect.time constant	[ms]		3.4	2.75	2.9	2.5			3.75	3.7	3.4			2.5			
Mech.time constant	[ms]		10	12	13	14			8	10	10			14			

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0008
Max theor. Acc.	[Rad/sec ²]	7187
Max radial load	[N]	343
Max axial load	[N]	103
Motor weight	[Kg]	6.4
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	45
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

5L



W	RPM
500	3000
335	2000

Performance characteristics

Motor type		5L 30								5L 20							
Rated power	[W]	500								335							
VELOCITA' NOMINALE	Nnom																
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	1.6								1.6							
Rated voltage	[V]	180	90	60	48	36*	24*	12*	180	90	60	48	36	24*	12*		
Rated current	[A]	3.3	6.6	10.5	13				2.2	4.4	6.6	10					
Peak torque	[Nm]	8	8	8	8				8	8	8	8					
Peak current	[A]	16.5	33	51.5	65				11	22	33						
Armature resistance	[Ohm]	2.62	0.86	1.42	0.16				5.4	1.1	0.86						
Armature inductance	[mH]	8.8	2.2	0.95	0.35				18.5	4.3	2.2	1.39					
Voltage constant	[V/Krpm]	57	27.7	17.8	11.5				84	40	27.7	21.5					
Elect.time constant	[ms]	3.4	2.6		2.2				3.43	3.9	2.6						
Mech.time constant	[ms]	9	12		14				8	7	12						

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.001
Max theor. Acc.	[Rad/sec ²]	8000
Max radial load	[N]	343
Max axial load	[N]	103
Motor weight	[Kg]	8
Ventilation		T.E.N.V.
Class protection	IP	54

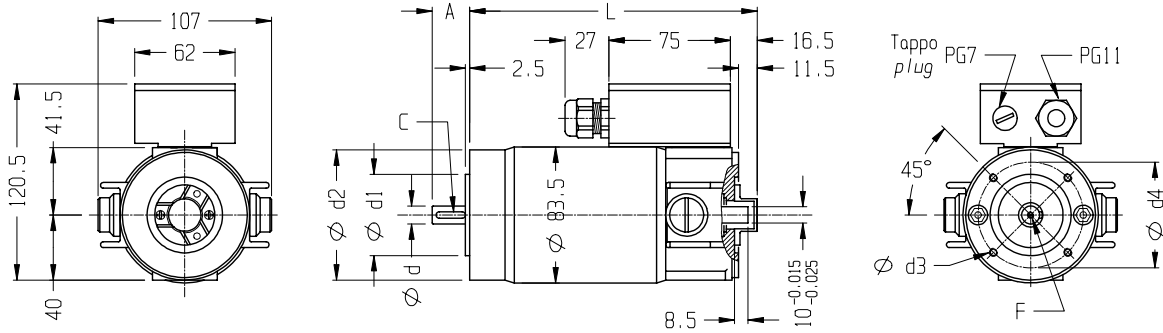
Winding data

Thermal time constant	[min]	55
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

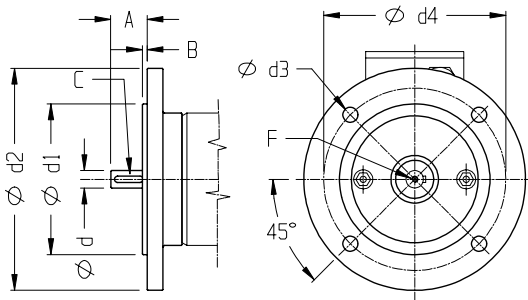
M169 5...

DIMENSIONS (mm)



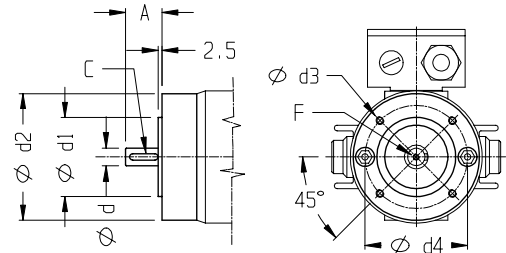
Type	X	XS		S		SL		M		L	
Size	B14/56	B14/56	B14/63	B14/56	B14/63	B14/63	B14/71	B14/63	B14/71	B14/63	B14/71
A	20	20	23	20	23	23	30	23	30	23	30
L	144.5	177.5		212.5		229		267.5		322.5	
d(h7)	9	9	11	9	11	11	14	11	14	11	14
F	-	-	M4	-	M4	M4	M5	M4	M5	M4	M5
C	3x3x15	3x3x15	4x4x18	3x3x15	4x4x18	4x4x18	5x5x25	4x4x18	5x5x25	4x4x18	5x5x25
d1(h7)	50	50	60	50	60	60	70	60	70	60	70
d2	80	80	90	80	90	90	105	90	105	90	105
d3	M5	M5	M5	M5	M5	M5	M6	M5	M6	M5	M6
d4	65	65	75	65	75	75	85	75	85	75	85

B5 FLANGE



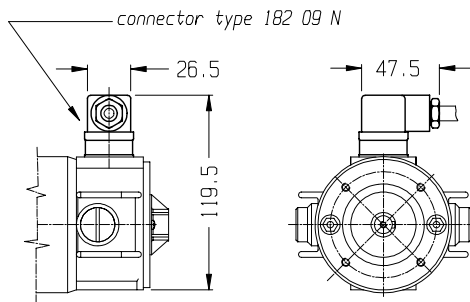
Size	A	B	C	d(h7)	d1(h7)	d2	d3	d4	F
56	20	3	3x3x15	9	80	120	8.5	100	-
63	23	3	4x4x18	11	95	140	9.5	115	M4
71	30	3.5	5x5x25	14	110	160	9.5	130	M5

B14 FLANGE

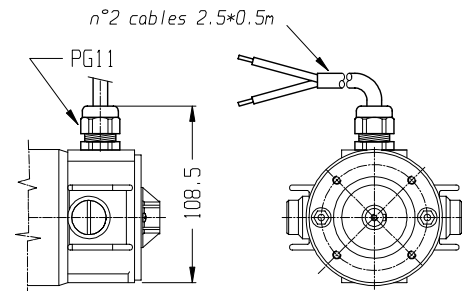


Size	A	C	d(h7)	d1(h7)	d2	d3	d4	F
56	20	3x3x15	9	50	80	M5	65	-
63	23	4x4x18	11	60	90	M5	75	M4
71	30	5x5x25	14	70	105	M6	85	M5

CONNECTOR

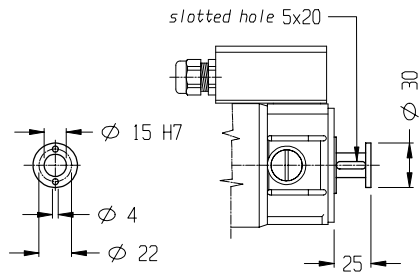


FLYING LEADS

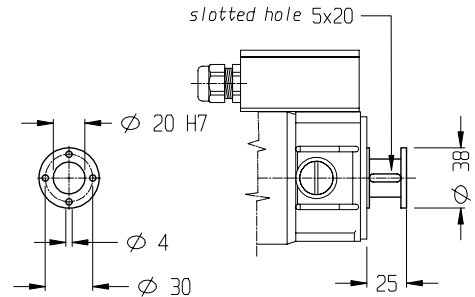


OPTIONALS

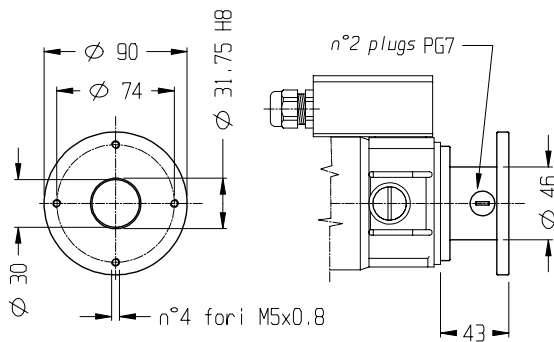
ENCODER SPACER N°1



ENCODER SPACER N°2

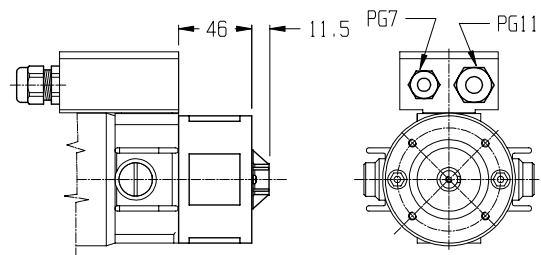


ENCODER SPACER N°3



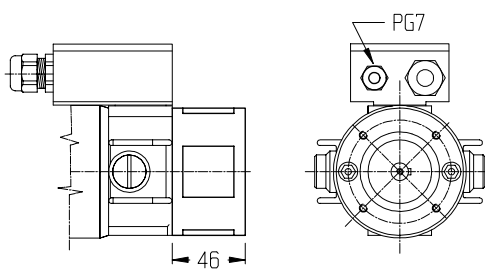
TACHO GENERATOR

ENCODER PREARRANGEMENT



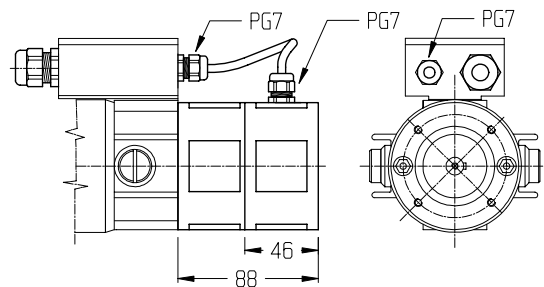
VOLTAGE CONSTANT	10±5% V/KRPM	RATED CURRENT	2 mA
MAX SPEED	9000 RPM	MAX CURRENT	8 mA

BRAKE 1,7 Nm



STATIC TORQUE	1,7 Nm	CURRENT	0.46-0.058 A
POWER SUPPLY VOLTAGE	24-190 V.c.c.	INPUT POWER	11 W

TACHO GENERATOR +
BRAKE 1,7 Nm

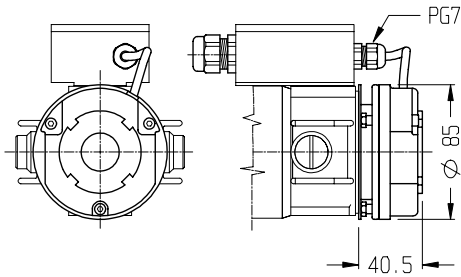


BRAKE		TACHO G.	
STATIC TORQUE	1,7 Nm	VOLTAGE CONSTANT	10±5% V/KRPM
POWER SUPPLY VOLTAGE	24-190 V.c.c.	MAX SPEED	9000 RPM
CURRENT	0.46-0.058 A	RATED CURRENT	2 mA
INPUT POWER	11 W	MAX CURRENT	8 mA

M169 5...

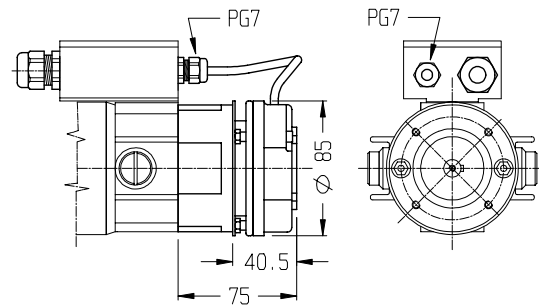
OPTIONALS

BRAKE 4 Nm



STATIC TORQUE	4 Nm	CURRENT	0.83-0.109 A
POWER SUPPLY VOLTAGE	24-190 V.c.c.	INPUT POWER	20 W

*TACHO GENERATOR +
BRAKE 4 Nm*



BRAKE		TACHO G.	
STATIC TORQUE	4 Nm	VOLTAGE CONSTANT	10±5% V/KRPM
POWER SUPPLY VOLTAGE	24-190 V.c.c.	MAX SPEED	9000 RPM
CURRENT	0.83-0.109 A	RATED CURRENT	2 mA
POTENZA ASSORBITA INPUT POWER	20 W	MAX CURRENT	8 mA

D.C. MOTORS

Series

M169

5XA



W	RPM
150	3000
100	2000

Performance characteristics

Motor type		5XA 30								5XA 20							
Rated power	[W]	150								100							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	0.48								0.48							
Rated voltage	[V]	180	90	60	48	36	24	12	180	90	60	48	36	24	12		
Rated current	[A]	1.1	3.3	4	5.54	8.33	16	0.74	1.54	2.2	2.8	5.5	11				
Peak torque	[Nm]	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4			
Peak current	[A]	5.5	16.7	20	27.7	41.7	80	3.7	7.7	11	14	27.5	55				
Armature resistance	[Ohm]	16.1	1.8	1.1	0.74	0.45	0.1	44.1	10.9	4	2.7	0.53	0.17				
Armature inductance	[mH]	51.5	5.4	3	1.8	0.9	0.18	145.5	35.4	12.6	8	1.32	0.34				
Voltage constant	[V/Krpm]	50	16.5	13.5	10	6.5	3.5	70	35.5	24	19	8	4.8				
Elect.time constant	[ms]	3.2	3	2.7	2.4	2.2	1.8	3.3	3.25	3.15	3	2.5	2				
Mech.time constant	[ms]	13	13	12	14	19	16	18	17	14	15	13	12				

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.00018
Max theor. Acc.	[Rad/sec ²]	13300
Max radial load	[N]	294
Max axial load	[N]	88
PESO MOTORE	G	
Motor weight	[Kg]	3.6
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	30
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169 5XSA



W	RPM
235	3000
155	2000

Performance characteristics

Motor type		5XSA 30							5XSA 20						
Rated power	[W]	235							155						
Rated speed	[rpm]	3000							2000						
Rated torque	[Nm]	0.75							0.75						
Rated voltage	[V]	180	90	60	48	36	24	12*	180	90	60	48	36	24	12*
Rated current	[A]	1.7	3.4	5	6.25	8.3	12.5		1.14	2.28	3.4	4.3	5.7	8.54	
Peak torque	[Nm]	3.75	3.75	3.75	3.75	3.75	3.75		3.75	3.75	3.75	3.75	3.75	3.75	
Peak current	[A]	8.5		25	31	41.5	62.5		5.7	11.4	17	21.5		42.7	
Armature resistance	[Ohm]	13.65		1.5	0.9	0.58	0.38		30.6	7.6	3.3	2.25		0.41	
Armature inductance	[mH]	47	11.5	4.5	2.5	1.6	0.825		107	26	10.4	6.45	4	1.45	
Voltage constant	[V/Krpm]	50		16.5	13.5	10	6.5		70	35.5	24	19		8	
Elect.time constant	[ms]	3.45		3	2.8	2.75	2.17		3.5	3.4	3.12	2.9		2.3	
Mech.time constant	[ms]	18		18	16	21	28		20	20	19	20		21	

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0003
Max theor. Acc.	[Rad/sec ²]	12500
Max radial load	[N]	294
Max axial load	[N]	88
Motor weight	[Kg]	4.2
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	35
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169 5SA



W	RPM
300	3000
200	2000

Performance characteristics

Motor type		5SA 30								5SA 20							
Rated power	[W]	300								200							
Rated speed	[rpm]	3000								2000							
Rated torque	[Nm]	0.96								0.96							
Rated voltage	[V]	180	90	60	48	36	24	12*	180	90	60	48	36	24	12*		
Rated current	[A]	2.1	4.2	6.3	7.8	10.4	15.6		1.4	2.8	4.2	5.2	7	10.4			
Peak torque	[Nm]	4.8	4.8	4.8	4.8	4.8	4.8		4.8	4.8	4.8	4.8	4.8	4.8			
Peak current	[A]	10.5		31.5	39	52	78		7	14	21	26		52			
Armature resistance	[Ohm]	5.9		0.76	0.49	0.32	0.18		11.7	2.9	1.6	1.1		0.235			
Armature inductance	[mH]	19		2.2	1.32	0.8	0.38		36	9	4.9	3		0.52			
Voltage constant	[V/Krpm]	50		16.5	13.5	10	7		74	37	24	19		8.5			
Elect.time constant	[ms]	3.3		2.9	2.7	2.5	2.1		3.1	3.1	3.1	2.7		2.2			
Mech.time constant	[ms]	15		18	17	21	24		14	14	15	20		21			

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0006
Max theor. Acc.	[Rad/sec ²]	8000
Max radial load	[N]	294
Max axial load	[N]	88
Motor weight	[Kg]	5.5
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	40
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169 5SLA

W	RPM
440	3000
290	2000

Performance characteristics

Motor type		5SLA 30							5SLA 20						
Rated power	[W]	440							290						
Rated speed	[rpm]	3000							2000						
Rated torque	[Nm]	1.4							1.4						
Rated voltage	[V]	180	90	60	48	36	24*	12*	180	90	60	48	36	24	12*
Rated current	[A]	3	6	9	11.3	15			2	4	6	7.5	10	15	
Peak torque	[Nm]	7	7	7	7	7			7	7	7	7	7	7	
Peak current	[A]	15	30	45	56.5	75			10	20	30	37.5	50	75	
Armature resistance	[Ohm]	4.86	1.37	0.54	0.45	0.27			11	3.05	1.37	0.88	0.45	0.25	
Armature inductance	[mH]	17	4.45	1.84	1.4	0.62			37.8	10.3	4.45	2.5	1.4	0.57	
Voltage constant	[V/Krpm]	53	26	17	14.5	10.5			78	39	26	20.5	14.5	9	
Elect.time constant	[ms]	3.5	3.3	3.4	3.1	2.3			3.45	3.4	3.3	2.84	3.1	2.3	
Mech.time constant	[ms]	13	14	14	16	18			14	15	14	15	16	25	

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0007
Max theor. Acc.	[Rad/sec ²]	10000
Max radial load	[N]	343
Max axial load	[N]	103
Motor weight	[Kg]	6.25
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	40
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

5MA



W	RPM
565	3000
375	2000

Performance characteristics

Motor type		5MA 30						5MA 20							
		180	90	60	48	36*	24*	12*	180	90	60	48	36	24*	12*
Rated power	[W]	565						375							
Rated speed	[rpm]	3000						2000							
Rated torque	[Nm]	1.8						1.8							
Rated voltage	[V]	180	90	60	48	36*	24*	12*	180	90	60	48	36	24*	12*
Rated current	[A]	3.7	7.4	11	13.8				2.5	5	7.4	9.3	13.8		
Peak torque	[Nm]	9	9	9	9				9	9	9	9	9		
Peak current	[A]	18.5	37	55	69				12.5	25	37	46.5			
Armature resistance	[Ohm]	3.65	0.93	0.49	0.33				6.8	2.2	0.93	0.55			
Armature inductance	[mH]	12	2.8	1.6	0.85				23	7	2.8	1.5	1.08		
Voltage constant	[V/Krpm]	54.5	26	18	14.5				82	41.5	26	22	16		
Elect.time constant	[ms]	3.3	3	3.2	2.6				3.4	3.2	3	2.7			
Mech.time constant	[ms]	11	12	13	13				9	11	12	10			

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0008
Max theor. Acc.	[Rad/sec ²]	11250
Max radial load	[N]	343
Max axial load	[N]	103
Motor weight	[Kg]	7.5
Ventilation		T.E.N.V.
Class protection	IP	54

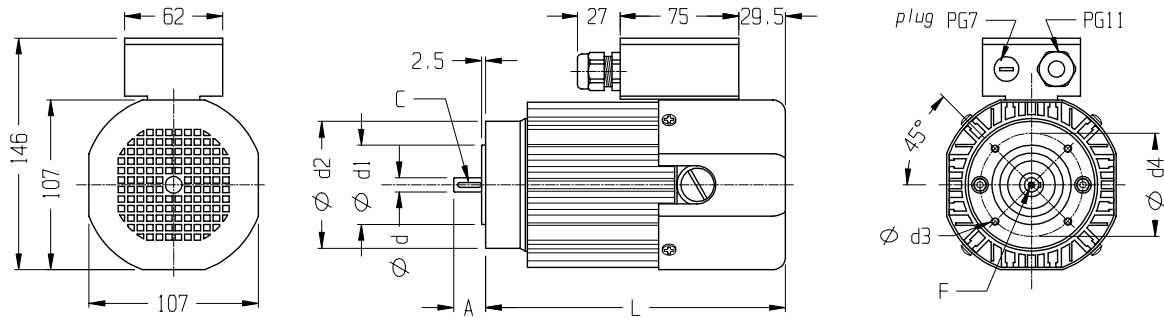
Winding data

Thermal time constant	[min]	40
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

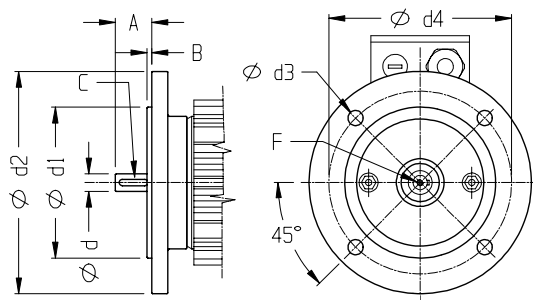
M169 5...A

DIMENSIONS (mm)



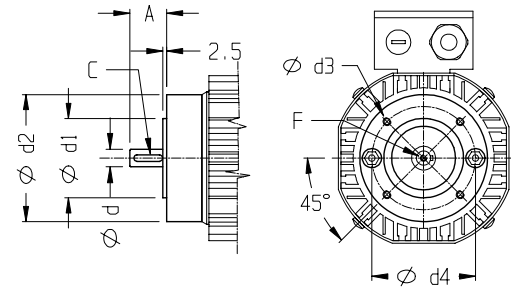
Type	X	XS		S		SL		M	
Size	B14/56	B14/56	B14/63	B14/56	B14/63	B14/63	B14/71	B14/63	B14/71
A	20	20	23	20	23	23	30	23	30
L	156.5	189.5		224.5		241		279.5	
d(h7)	9	9	11	9	11	11	14	11	14
F	-	-	M4	-	M4	M4	M5	M4	M5
C	3x3x15	3x3x15	4x4x18	3x3x15	4x4x18	4x4x18	5x5x25	4x4x18	5x5x25
d1(h7)	50	50	60	50	60	60	70	60	70
d2	80	80	90	80	90	90	105	90	105
d3	M5	M5	M5	M5	M5	M5	M6	M5	M6
d4	65	65	75	65	75	75	85	75	85

B5 FLANGE



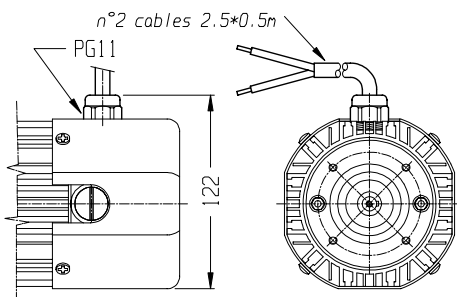
Size	A	B	C	d(h7)	d1(h7)	d2	d3	d4	F
56	20	3	3x3x15	9	80	120	8.5	100	-
63	23	3	4x4x18	11	95	140	9.5	115	M4
71	30	3.5	5x5x25	14	110	160	9.5	130	M5

B14 FLANGE

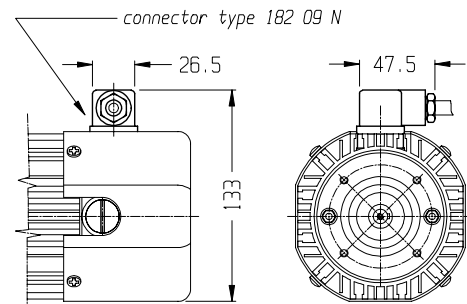


Size	A	C	d(h7)	d1(h7)	d2	d3	d4	F
56	20	3x3x15	9	50	80	M5	65	-
63	23	4x4x18	11	60	90	M5	75	M4
71	30	5x5x25	14	70	105	M6	85	M5

FLYING LEADS



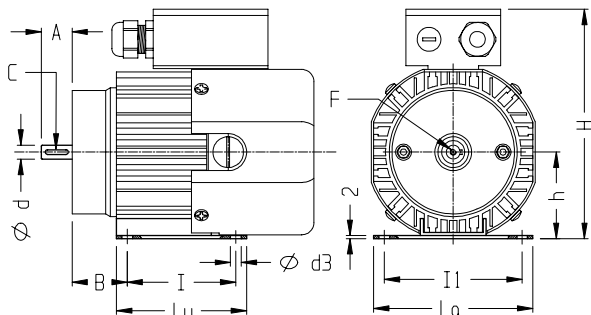
CONNECTOR



M169 5...A

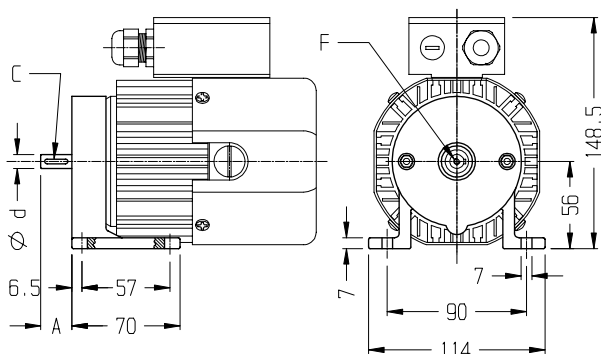
OPTIONALS

B3 FOOT



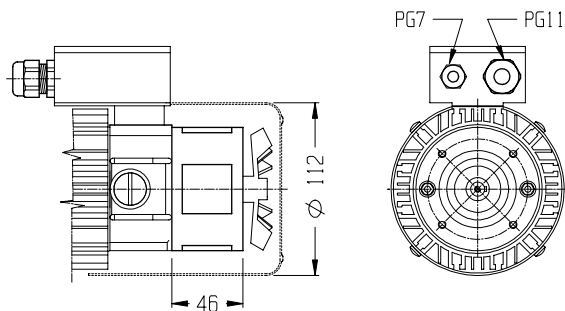
Type	XS			S		SL		M	
Size	B3/56	B3/56	B3/63	B3/56	B3/63	B3/63	B3/71	B3/63	B3/71
A	20	20	23	20	23	23	30	23	30
d(h7)	9	9	11	9	11	11	14	11	14
Lu	85	85	95	85	95	95	104	95	104
La	104	104	114	104	114	114	126	114	126
F	-	-	M4	-	M4	M4	M5	M4	M5
C	3x3x1	3x3x1	4x4x1	3x3x1	4x4x1	4x4x1	5x5x2	4x4x1	5x5x2
B	36	36	40	36	40	40	45	40	45
I	71	71	80	71	80	80	90	80	90
Il	90	90	100	90	100	100	112	100	112
H	148.5	148.5	155.5	148.5	155.5	155.5	163.5	155.5	163.5
h	56	56	63	56	63	63	71	63	71
d3	7	7	9	7	9	9	9	9	9

B3 FLANGE



Type	X	XS		S		SL		M	
A	20	20	23	20	23	23	30	23	30
d(h7)	9	9	11	9	11	11	14	11	14
F	-	-	M4	-	M4	M4	M5	M4	M5
C	3x3x1	3x3x1	4x4x1	3x3x1	4x4x1	4x4x1	5x5x2	4x4x1	5x5x2

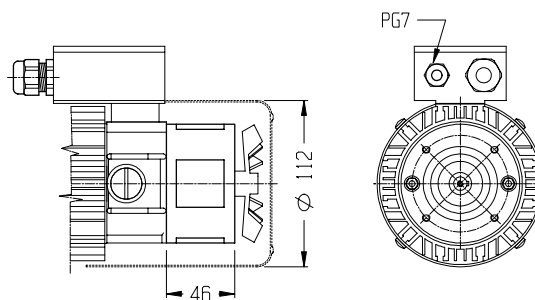
TACHO GENERATOR



THE TOTAL LENGTH OF THE MOTOR INCREASES OF 42 mm

VOLTAGE CONSTANT	10±5% V/KRPM	RATED CURRENT	2 mA
MAX SPEED	9000 RPM	MAX CURRENT	8 mA

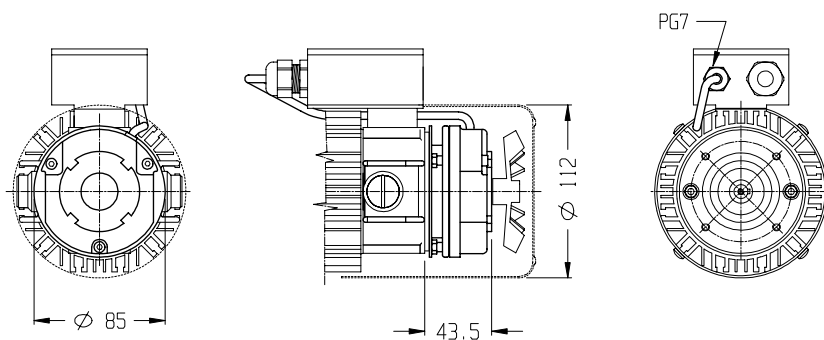
BRAKE 1,7 Nm



THE TOTAL LENGTH OF THE MOTOR INCREASES OF 42 mm

STATIC TORQUE	1,7 Nm	CURRENT	0.46-0.058 A
POWER SUPPLY VOLTAGE	24-190 V.c.c.	INPUT POWER	11 W

BRAKE 4 Nm



THE TOTAL LENGTH OF THE MOTOR INCREASES OF 42 mm

STATIC TORQUE	4 Nm
POWER SUPPLY VOLTAGE	24-190 V.c.c.
CURRENT	0.83-0.109 A
INPUT POWER	20 W

D.C. MOTORS

Series

M169

7SA



W	RPM
750	3000
500	2000

Performance characteristics

Motor type		7SA 30						7SA 20						
Rated power	[W]	750						500						
Rated speed	[rpm]	3000						2000						
Rated torque	[Nm]	2.4						2.4						
Rated voltage	[V]	180	90	60*	48*	36*	24*	180	90	60	48	36*	24*	12*
Rated current	[A]	5.7	10.6					3.55	7	14	14			
Peak torque	[Nm]	12	12					12	12	12	13.25			
Peak current	[A]	28.5	53					17.75	35	10.7				
Armature resistance	[Ohm]	2.35	0.71					5.55	1.44					
Armature inductance	[mH]	13.9	4.6					35.4	9	2.77	1.61			
Voltage constant	[V/Krpm]	58	29.5					87	44	26.1	20.3			
Elect.time constant	[ms]	5.9	6.5					6.4	6.3					
Mech.time constant	[ms]	14	16					14	14					

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0018
Max theor. Acc.	[Rad/sec ²]	6600
Max radial load	[N]	588
Max axial load	[N]	176
Motor weight	[Kg]	9.4
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	45
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

7MA



W	RPM
1100	3000
750	2000

Performance characteristics

Motor type		7MA 30						7MA 20					
Rated power	[W]	1100						750					
Rated speed	[rpm]	3000						2000					
Rated torque	[Nm]	3.5						3.5					
Rated voltage	[V]	180	90	60	48*	36*		180	90	60	48	36*	24*
Rated current	[A]	7.3	14.6	22.9				5.5	11	16.5	23		
Peak torque	[Nm]	17.5	17.5	17.5				17.5	17.5	17.5	17.5		
Peak current	[A]	36.5	73	114.5				27.5	55		114		
Armature resistance	[Ohm]	0.85	0.26	0.30				1.51	0.45	0.5	0.22		
Armature inductance	[mH]	3.15	0.95	0.28				6.8	1.65	1.6	0.22		
Voltage constant	[V/Krpm]	57.7	30	19.2				84	40	44	19.5		
Elect.time constant	[ms]	3.7	4.3					4.6	3.7				
Mech.time constant	[ms]	8	7					6	9				

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0028
Max theor. Acc.	[Rad/sec ²]	6250
Max radial load	[N]	588
Max axial load	[N]	176
Motor weight	[Kg]	13.6
Ventilation		T.E.N.V.
Class protection	IP	54

Winding data

Thermal time constant	[min]	55
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

D.C. MOTORS

Series

M169

7LA



W	RPM
1500	3000
1100	2000

Performance characteristics

Motor type		7LA 30							7LA 20						
Rated power	[W]	1500							1100						
Rated speed	[rpm]	3000							2000						
Rated torque	[Nm]	4.8							4.8						
Rated voltage	[V]	180	110	90	60*	48*	36*		180	110	90*	60*	48*	36*	24*
Rated current	[A]	9.8	15.5	19.6					6.8	11					
Peak torque	[Nm]	24	24	24					24	24					
Peak current	[A]	49	77.5	98.1					34	55					
Armature resistance	[Ohm]	0.42	0.22	0.3					1.05	0.45					
Armature inductance	[mH]	1.72	0.73	0.47					4.2	1.65					
Voltage constant	[V/Krpm]	57	35	28.5					84	53.5					
Elect.time constant	[ms]	4.1	4.1						4.15	4.1					
Mech.time constant	[ms]	7	8						8	7					

* Only intermittent duty

Mechanical data

Rotor inertia	[Kgm ²]	0.0051
Max theor. Acc.	[Rad/sec ²]	4705
Max radial load	[N]	588
Max axial load	[N]	176
Motor weight	[Kg]	17
Ventilation		T.E.N.V.
Class protection	IP	54

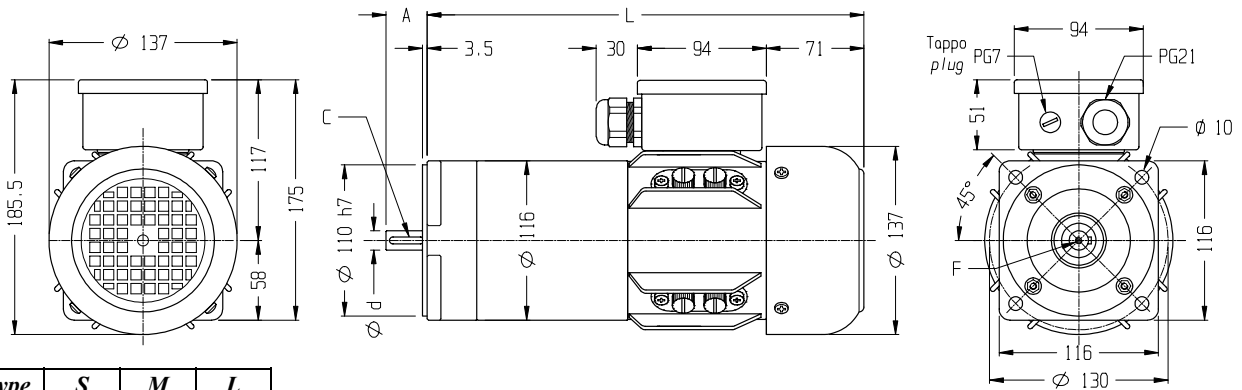
Winding data

Thermal time constant	[min]	65
Max no load speed	[rpm]	4000
Max load speed	[rpm]	3000
Insulation class		F
Duty cycle		S1
Form factor	FF	1
Room temp.data refer.	[°C]	40°

Data tolerance +/-5%

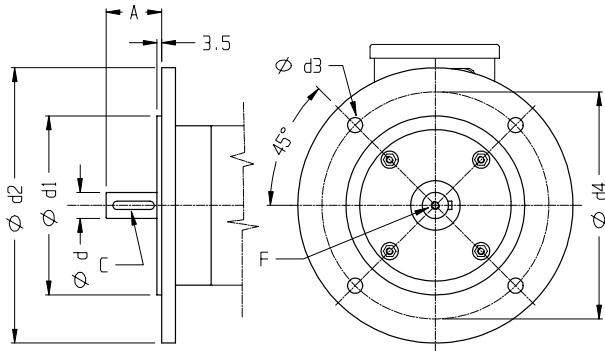
M169 7...A

DIMENSIONS (mm)



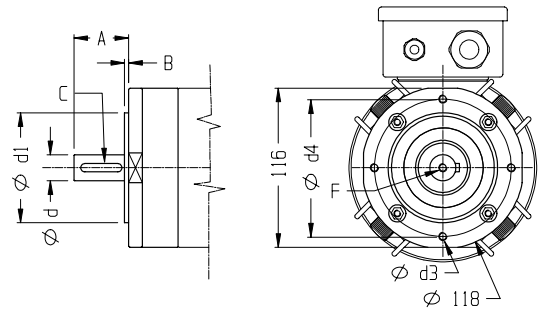
Type	S	M	L
A		40	
L	318	390	462
d(h7)	19		
F	M6		
C	6x6x30		

B5 FLANGE



Size	A	C	d(h7)	d1(h7)	d2	d3	d4	F
71	30	5x5x25	14	110	160	9.5	130	M5
80	40	6x6x30	19	130	200	11	165	M6

B14 FLANGE

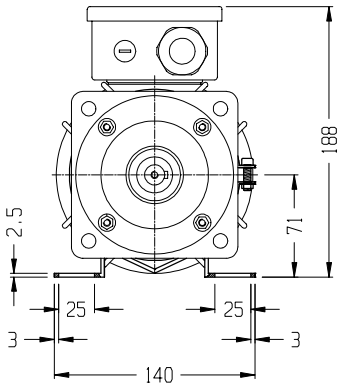
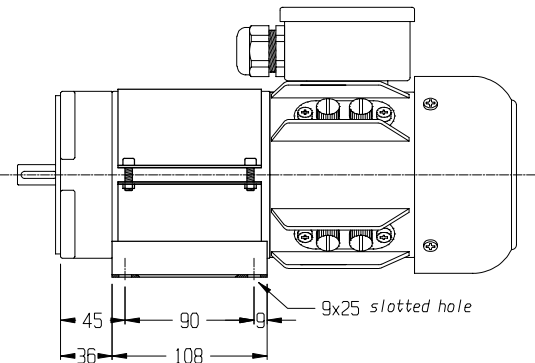


Size	A	B	C	d(h7)	d1(h7)	d3	d4	F
71	30	2.5	5x5x25	14	70	M6	85	M5
80	40	3	6x6x30	19	80	M6	100	M6

M169 7...A

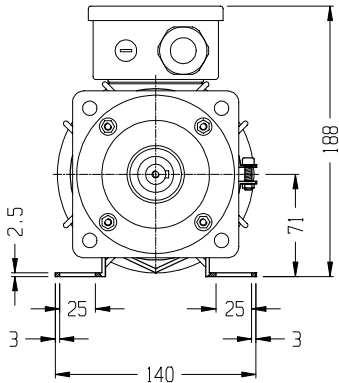
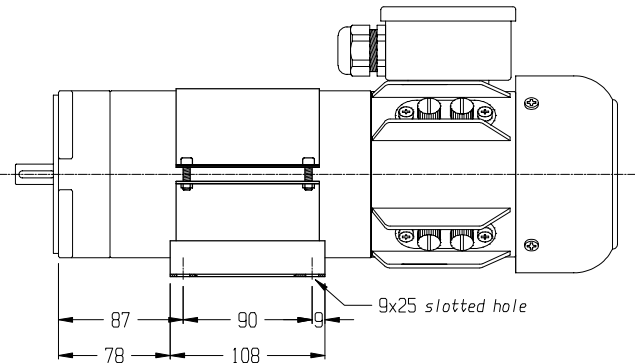
OPTIONALS

FOOT BAND TYPE



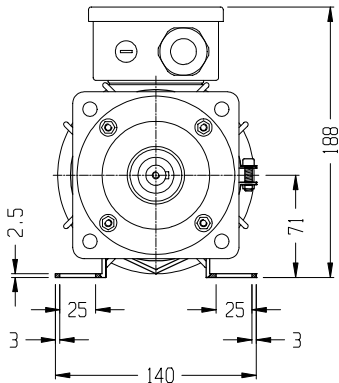
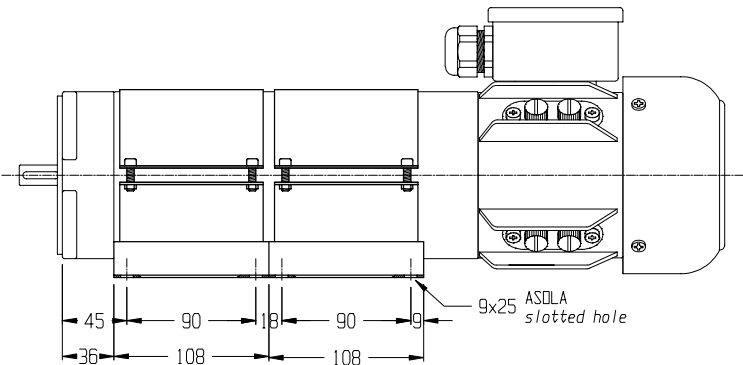
ONLY TYPE S

FOOT BAND TYPE



ONLY TYPE M

FOOT BAND TYPE

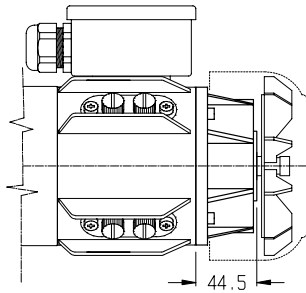


ONLY TYPE L

M169 7...A

OPTIONALS

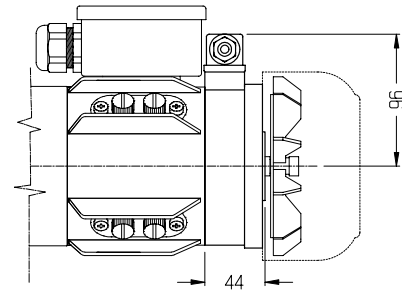
TACHO GENERATOR



THE TOTAL LENGTH OF THE MOTOR INCREASES ± 10 mm

VOLTAGE CONSTANT	10±5% V/KRPM	RATED CURRENT	2 mA
MAX SPEED	9000 RPM	MAX CURRENT	8 mA

BRAKE 8 Nm



THE TOTAL LENGTH OF THE MOTOR INCREASES ± 42 mm

STATIC TORQUE	8 Nm	CURRENT	1-0.13 A
POWER SUPPLY VOLTAGE	24-190 V.c.c.	INPUT POWER	24 W

