如有问题请联系
application.cn@maxongroup.com

MAH DC Actuator

delivery within 7 days if order quantity is less than 25pcs
如单笔订单量少于25台，七天内交付

Precision Drive Systems

maxon

MAH series

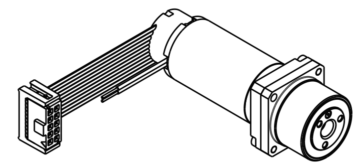
MAH actuator is an optimized combination of maxon RE motor, DCX motor and Harmonic Drive. The mechanical and electronic parts inside of MAH ensure the best fit between motors and gears. The versatile product range of rotary actuators integrating high-performance motors, brakes and feedback systems with ultra-high resolution and high precision positioning. It offers the high precision motion control of your machines and equipment based on these key features:

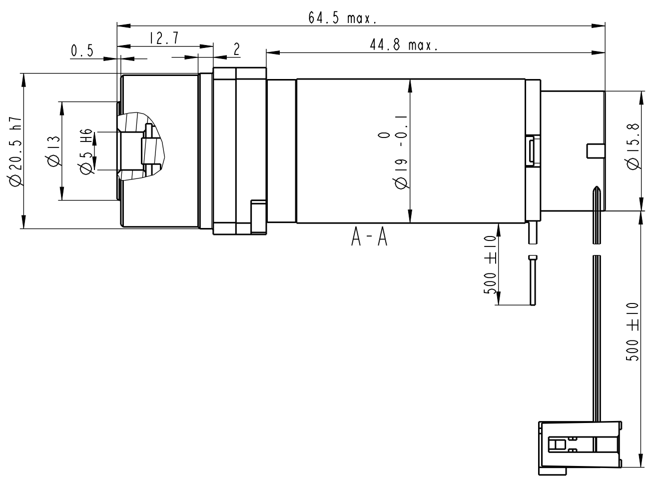
- Compact
- High torque
- Zero backlash
- Low noise

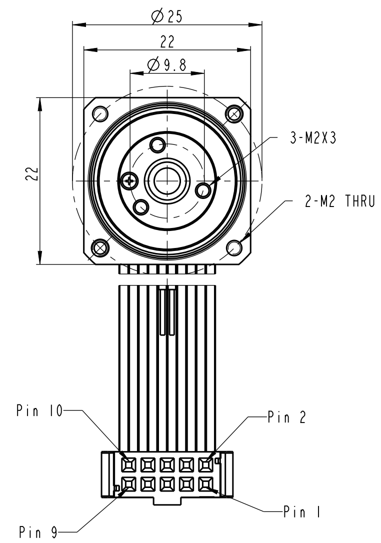
Part number	System description	Part number	System descriptionv
668181	MAH19-5B-50-1024-01	697408*	MAH30-11B-100-500-01
667872*	MAH19-5B-100-1024-01	667505*	MAH35-11B-50-500-00
707552	MAH19-5B-100-1024-01	667466*	MAH35-11B-50-500-01
668289	MAH22-5B-50-1024-01	667509*	MAH35-11B-100-500-00
668290*	MAH22-5B-100-1024-01	667502*	MAH35-11B-100-500-01
666918*	MAH25-8B-50-500-01	667723*	MAH40-11B-50-500-00
666892*	MAH25-8B-100-500-01	667717*	MAH40-11B-50-500-01
667082*	MAH25-8B-50-500-00	667739*	MAH40-11B-100-500-00
667095*	MAH25-8B-100-500-00	667721*	MAH40-11B-100-500-01
667102*	MAH30-8B-50-500-01	667863	MAH40-14B-50-500-01
667310*	MAH30-8B-100-500-01	667865	MAH40-14B-100-500-01
667317*	MAH30-8B-50-500-00	667866	MAH40-14B-50-500-00
667321*	MAH30-8B-100-500-00	667867	MAH40-14B-100-500-00

* Delivery within 7 days if the order quantity is less than 25pcs

MAH19



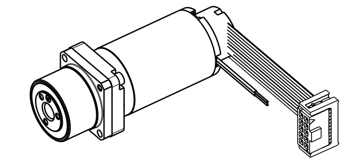


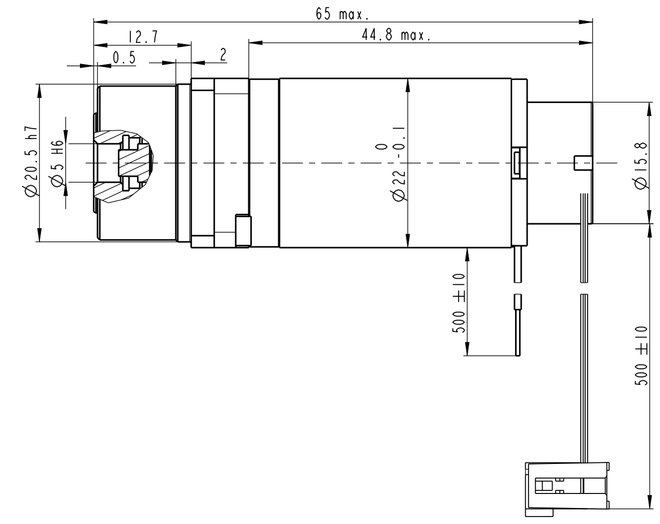


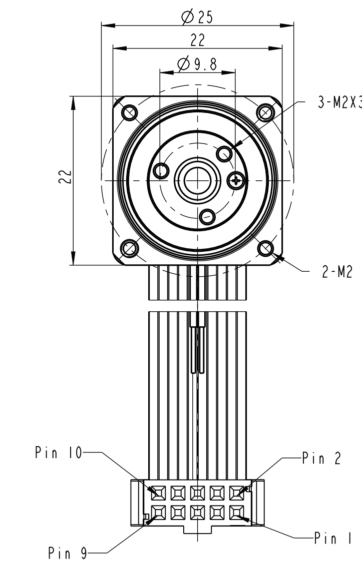
Drive data	Unit	668181	667872*	707552
Ratio	X:1	50	100	100
Maximum output torque	Nm	0.6	1.2	1.2
Maximum output speed	rpm	200	100	100
Continuous torque	Nm	0.4	0.8	0.8
Maximum current	A	2	2	1
Continuous current	A	1.35	1.35	0.67
Voltage constant (motor)	V/krpm	0.93	0.93	1.87
Motor terminal voltage	VDC	12	12	24
Mechanical time constant (motor)	ms	4.90	4.90	5.07
Electrical time constant	ms	0.06	0.06	0.06
Moment of inertia	kg*cm²	3.68	3.68	3.68
Maximum radial load [1)]	N	59	59	59
Maximum axial load	N	29	29	29
Nominal motor speed	rpm	10800	10800	10600
Motor maximum speed	rpm	12000	12000	12000
Motor resistance	Ω	1.45	1.45	5.84
Motor inductance	mH	0.082	0.082	0.329
Weight	kg	approx. 0.08	approx. 0.08	approx. 0.08
Encoder power supply	VDC	5	5	5
Encoder resolution	lines	1024	1024	1024
Output signal		EIA-RS422	EIA-RS422	EIA-RS422

[1)] The radial load is based on a force applied at the center of the output shaft.

MAH22



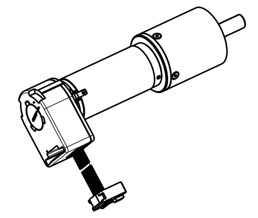


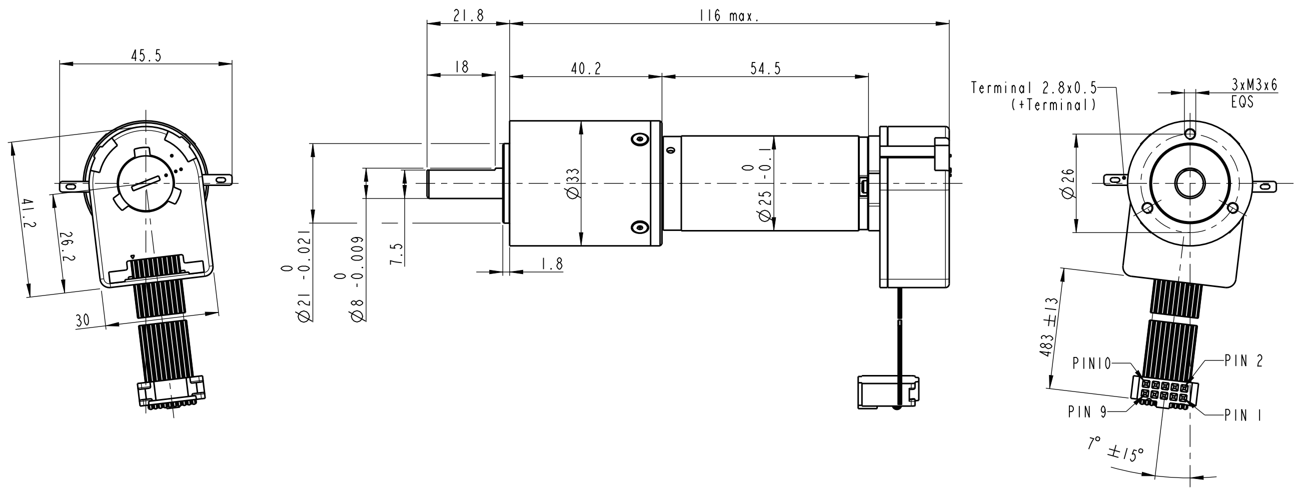


Drive data	Unit	668289	668290*	
Ratio	X:1	50	100	
Maximum output torque	Nm	0.6	1.2	
Maximum output speed	rpm	93	46	
Continuous torque	Nm	0.4	0.8	
Maximum current	A	1.3	1.3	
Continuous current	A	0.82	0.82	
Voltage constant (motor)	V/krpm	1.92	1.92	
Motor terminal voltage	VDC	12	12	
Mechanical time constant (motor)	ms	6.07	6.07	
Electrical time constant	ms	0.06	0.06	
Moment of inertia	kg*cm²	3.68	3.68	
Maximum radial load [1)]	N	59	59	
Maximum axial load	N	29	29	
Nominal motor speed	rpm	4670	4670	
Motor maximum speed	rpm	6000	6000	
Motor resistance	Ω	3.69	3.69	
Motor inductance	mH	0.231	0.231	
Weight	kg	approx. 0.11	approx. 0.11	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	1024	1024	
Output signal		EIA-RS422	EIA-RS422	

[1)] The radial load is based on a force applied at the center of the output shaft.

MAH25

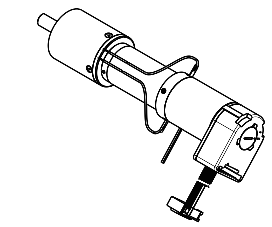


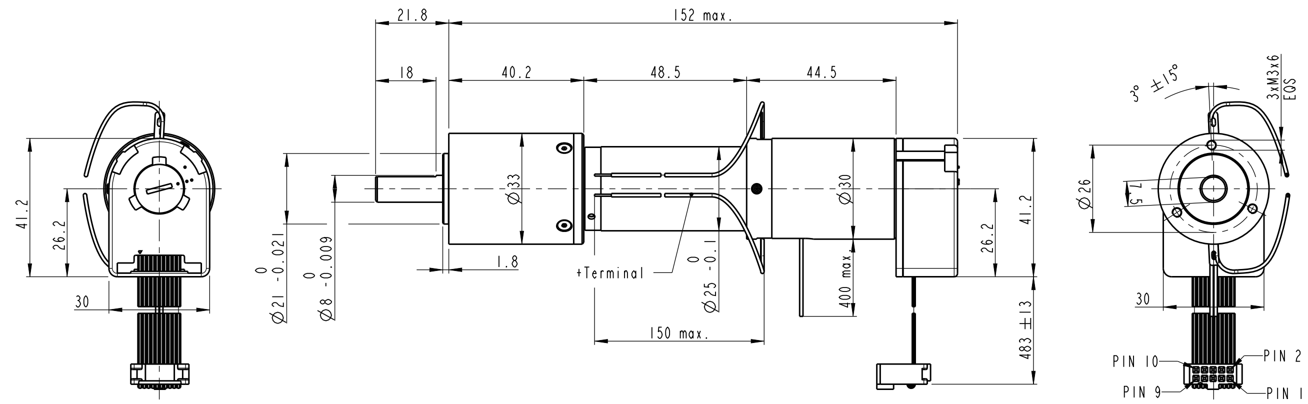


Drive data	Unit	666918*	666892*	
Ratio	X:1	50	100	
Maximum output torque	Nm	3	4.8	
Maximum output speed	rpm	166	83	
Continuous torque	Nm	1.05	2.1	
Maximum current	A	2.50	2.50	
Continuous current	A	1.16	1.16	
Voltage constant (motor)	V/krpm	2.45	2.45	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	4.55	4.55	
Electrical time constant	ms	0.1	0.1	
Moment of inertia	$kg*cm^2$	32.8	131	
Maximum radial load [1]	N	196	196	
Maximum axial load	N	98	98	
Nominal motor speed	rpm	8300	8300	
Motor maximum speed	rpm	9500	9500	
Motor resistance	Ω	2.32	2.32	
Motor inductance	mH	0.24	0.24	
Weight	kg	approx. 0.3	approx. 0.3	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

[1] The radial load is based on a force applied at the center of the output shaft.

MAH25 with holding brake

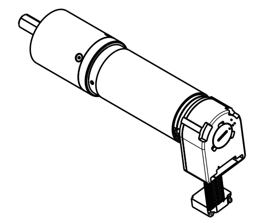


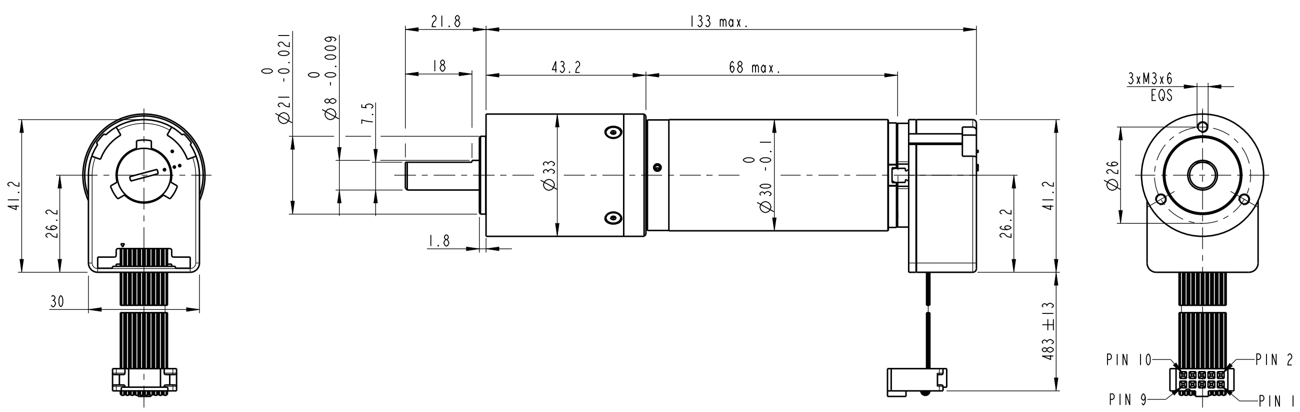


Drive data	Unit	667082	667095	
Ratio	X:1	50	100	
Maximum output torque	Nm	3	4.8	
Maximum output speed	rpm	166	83	
Continuous torque	Nm	1.05	2.1	
Maximum current	A	2.50	2.50	
Continuous current	A	1.16	1.16	
Voltage constant (motor)	V/krpm	2.45	2.45	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	4.55	4.55	
Electrical time constant	ms	0.1	0.1	
Moment of inertia	$kg*cm^2$	65.3	261	
Maximum radial load [1]	N	196	196	
Maximum axial load	N	98	98	
Nominal motor speed	rpm	8300	8300	
Motor maximum speed	rpm	9500	9500	
Motor resistance	Ω	2.32	2.32	
Motor inductance	mH	0.24	0.24	
Brake voltage	VDC	24	24	
Brake holding torque	Nm	0.1	0.1	
Brake rated power	W	2.5	2.5	
Weight	kg	approx. 0.36	approx. 0.36	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

[1] The radial load is based on a force applied at the center of the output shaft.

MAH30

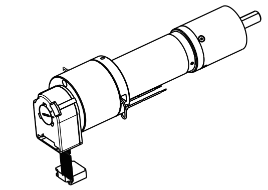


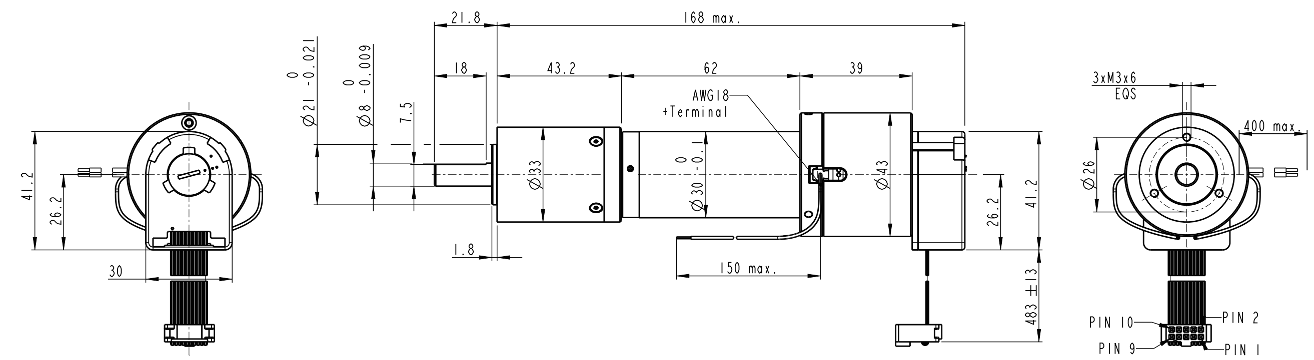


Drive data	Unit	667102	667310	
Ratio	X:1	50	100	
Maximum output torque	Nm	3.3	4.8	
Maximum output speed	rpm	160	80	
Continuous torque	Nm	1.80	2.4	
Maximum current	A	5.2	5.2	
Continuous current	A	3.47	3.47	
Voltage constant (motor)	V/krpm	2.7	2.7	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	3.05	3.05	
Electrical time constant	ms	0.17	0.17	
Moment of inertia	kg*cm²	32.8	131	
Maximum radial load 1)	N	196	196	
Maximum axial load	N	98	98	
Nominal motor speed	rpm	8000	8000	
Motor maximum speed	rpm	8800	8800	
Motor resistance	Ω	0.6	0.6	
Motor inductance	mH	0.1	0.1	
Weight	kg	approx. 0.42	approx. 0.42	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

1) The radial load is based on a force applied at the center of the output shaft.

MAH30 with holding brake



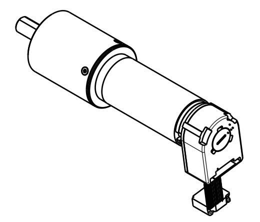


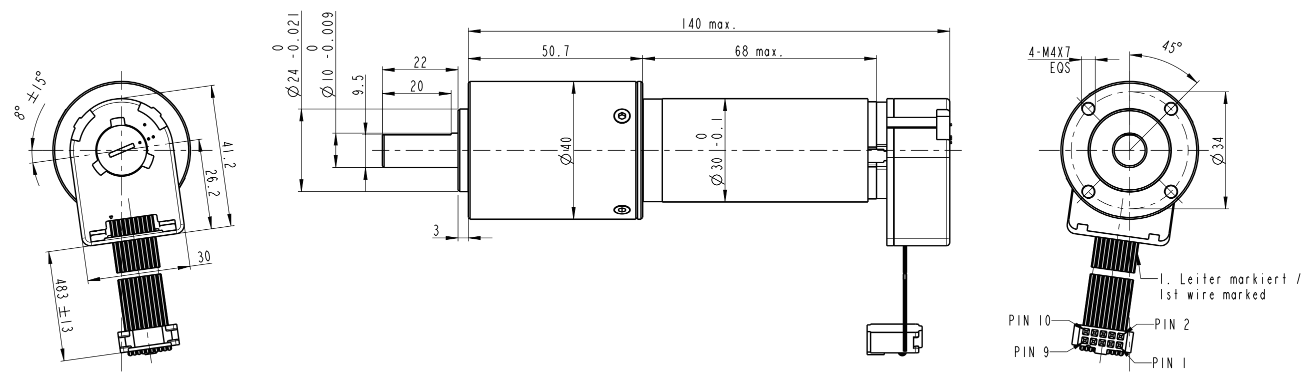
Drive data	Unit	667317	667321	
Ratio	X:1	50	100	
Maximum output torque	Nm	3.3	4.8	
Maximum output speed	rpm	160	80	
Continuous torque	Nm	1.80	2.4	
Maximum current	A	5.2	5.2	
Continuous current	A	3.47	3.47	
Voltage constant (motor)	V/krpm	2.7	2.7	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	3.05	3.05	
Electrical time constant	ms	0.17	0.17	
Moment of inertia	kg*cm²	65.3	261	
Maximum radial load 1)	N	196	196	
Maximum axial load	N	98	98	
Nominal motor speed	rpm	8000	8000	
Motor maximum speed	rpm	8800	8800	
Motor resistance	Ω	0.6	0.6	
Motor inductance	mH	0.1	0.1	
Brake voltage	VDC	24	24	
Brake holding torque	Nm	0.1	0.1	
Brake rated power	W	2.5	2.5	
Weight	kg	approx. 0.6	approx. 0.6	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

1) The radial load is based on a force applied at the center of the output shaft.

MAH30

High Torque

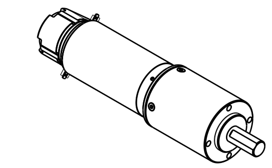


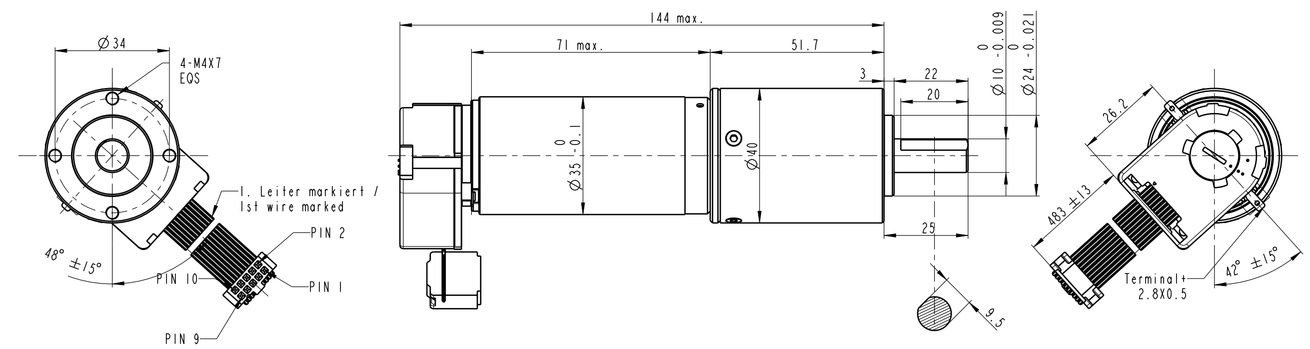


Drive data	Unit	697408		
Ratio	X:1	100		
Maximum output torque	Nm	11.0		
Maximum output speed	rpm	80		
Continuous torque	Nm	5.0		
Maximum current	A	7.5		
Continuous current	A	3.47		
Voltage constant (motor)	V/krpm	2.7		
Motor terminal voltage	VDC	24		
Mechanical time constant (motor)	ms	3.05		
Electrical time constant	ms	0.17		
Moment of inertia	kg*cm²	437		
Maximum radial load [1]	N	196		
Maximum axial load	N	98		
Nominal motor speed	rpm	8000		
Motor maximum speed	rpm	8800		
Motor resistance	Ω	0.6		
Motor inductance	mH	0.1		
Weight	kg	approx. 0.42		
Encoder power supply	VDC	5		
Encoder resolution	lines	500		
Output signal		EIA-RS422		

[1] The radial load is based on a force applied at the center of the output shaft.

MAH35

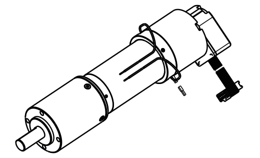


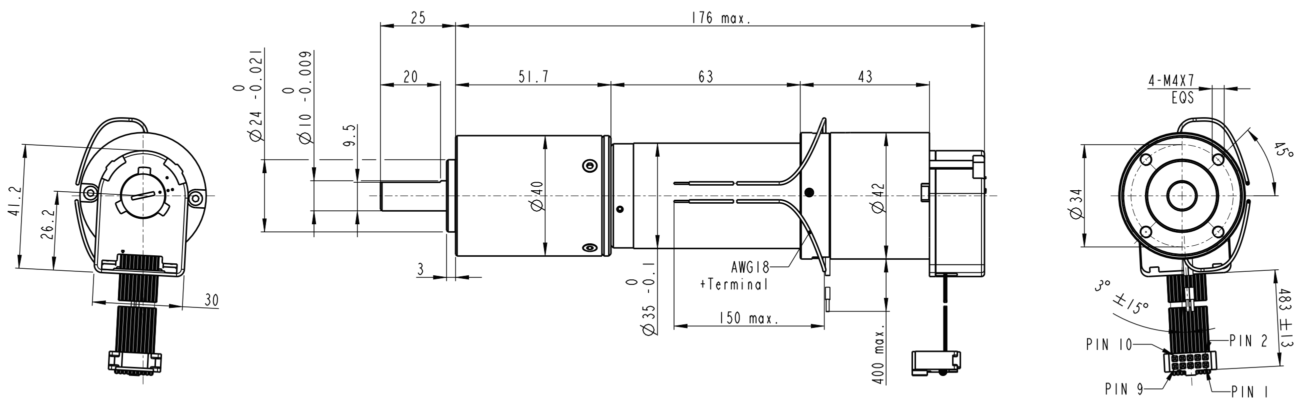


Drive data	Unit	667466	667502	
Ratio	X:1	50	100	
Maximum output torque	Nm	7.0	11.0	
Maximum output speed	rpm	138	69	
Continuous torque	Nm	3.0	5.0	
Maximum current	A	7.70	6.50	
Continuous current	A	3.72	3.72	
Voltage constant (motor)	V/krpm	3.05	3.05	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	5.41	5.41	
Electrical time constant	ms	0.33	0.17	
Moment of inertia	kg*cm²	109.3	437	
Maximum radial load [1]	N	245	245	
Maximum axial load	N	196	196	
Nominal motor speed	rpm	6900	6900	
Motor maximum speed	rpm	7700	7700	
Motor resistance	Ω	0.582	0.582	
Motor inductance	mH	0.191	0.191	
Weight	kg	approx. 0.65	approx. 0.65	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

[1] The radial load is based on a force applied at the center of the output shaft.

MAH35 with holding brake

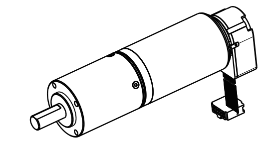


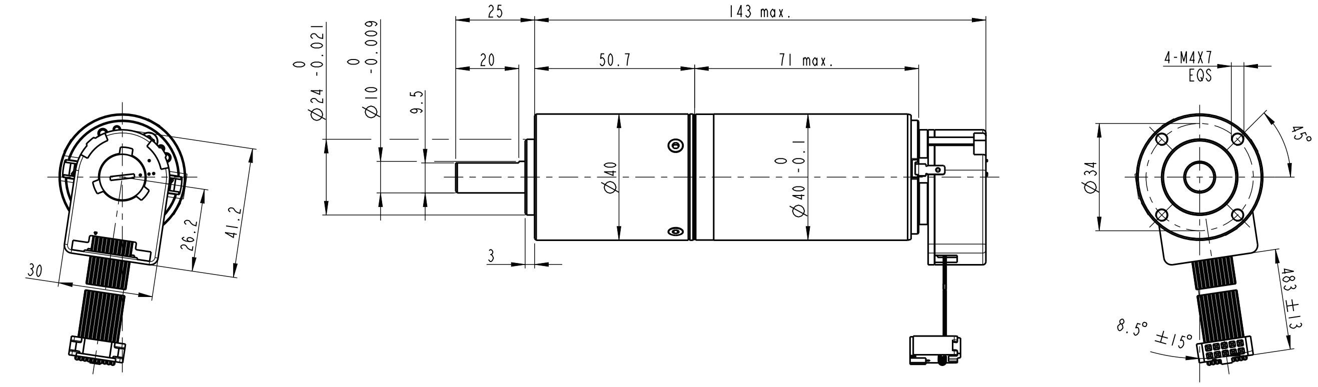


Drive data	Unit	667505	667509	
Ratio	X:1	50	100	
Maximum output torque	Nm	7.0	11.0	
Maximum output speed	rpm	138	69	
Continuous torque	Nm	3.0	5.0	
Maximum current	A	7.70	6.50	
Continuous current	A	3.72	3.72	
Voltage constant (motor)	V/krpm	3.05	3.05	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	5.41	5.41	
Electrical time constant	ms	0.33	0.17	
Moment of inertia	kg*cm²	141.75	567	
Maximum radial load [1)]	N	245	245	
Maximum axial load	N	196	196	
Nominal motor speed	rpm	6900	6900	
Motor maximum speed	rpm	7700	7700	
Motor resistance	Ω	0.582	0.582	
Motor inductance	mH	0.191	0.191	
Brake voltage	VDC	24	24	
Brake holding torque	Nm	0.4	0.4	
Brake rated power	W	6	6	
Weight	kg	approx. 0.8	approx. 0.8	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

[1)] The radial load is based on a force applied at the center of the output shaft.

MAH40

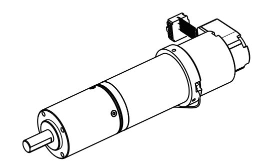


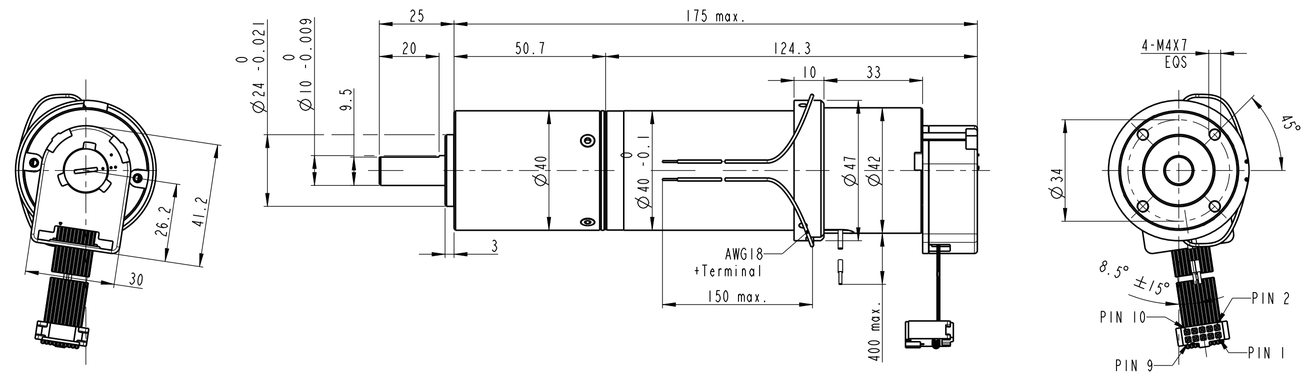


Drive data	Unit	667717	667721	
Ratio	X:1	50	100	
Maximum output torque	Nm	8.0	11.0	
Maximum output speed	rpm	138	69	
Continuous torque	Nm	3.5	5.0	
Maximum current	A	9.60	7.50	
Continuous current	A	4.2	3.2	
Voltage constant (motor)	V/krpm	3.15	3.15	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	4.67	4.67	
Electrical time constant	ms	0.27	0.27	
Moment of inertia	kg*cm²	109.3	437	
Maximum radial load [1)]	N	245	245	
Maximum axial load	N	196	196	
Nominal motor speed	rpm	6900	6900	
Motor maximum speed	rpm	7500	7500	
Motor resistance	Ω	0.299	0.299	
Motor inductance	mH	0.082	0.082	
Weight	kg	approx. 0.8	approx. 0.8	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

[1)] The radial load is based on a force applied at the center of the output shaft.

MAH40 with holding brake



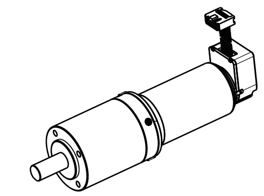


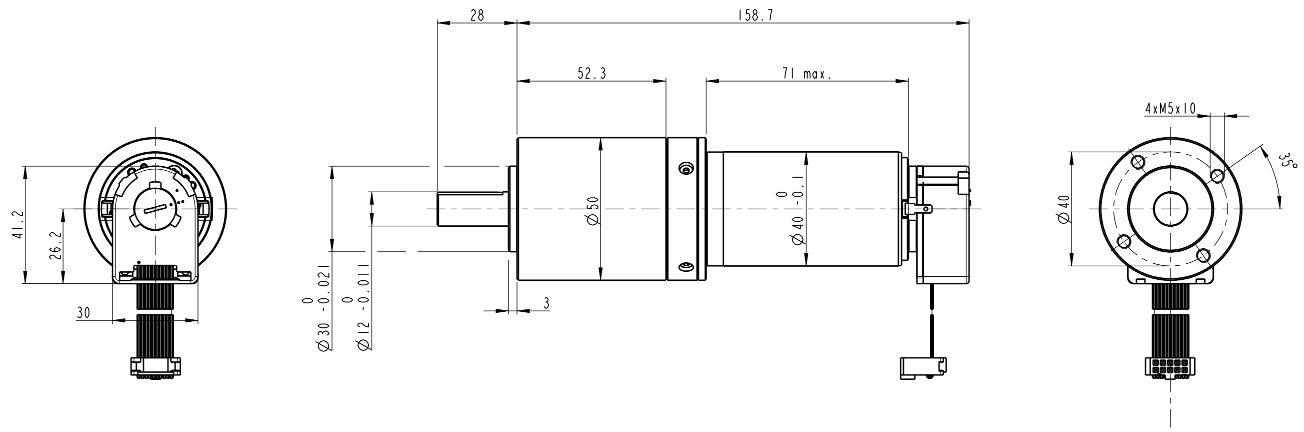
Drive data	Unit	667723	667739	
Ratio	X:1	50	100	
Maximum output torque	Nm	8.0	11.0	
Maximum output speed	rpm	138	69	
Continuous torque	Nm	3.5	5.0	
Maximum current	A	9.60	7.50	
Continuous current	A	4.2	3.2	
Voltage constant (motor)	V/krpm	3.15	3.15	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	4.67	4.67	
Electrical time constant	ms	0.27	0.27	
Moment of inertia	kg*cm²	141.75	567	
Maximum radial load 1)	N	245	245	
Maximum axial load	N	196	196	
Nominal motor speed	rpm	6900	6900	
Motor maximum speed	rpm	7500	7500	
Motor resistance	Ω	0.299	0.299	
Motor inductance	mH	0.082	0.082	
Brake voltage	VDC	24	24	
Brake holding torque	Nm	0.4	0.4	
Brake rated power	W	6.2	6.2	
Weight	kg	approx. 0.95	approx. 0.95	
Encoder power supply	VDC	5	5	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

1) The radial load is based on a force applied at the center of the output shaft.

MAH40

High Torque



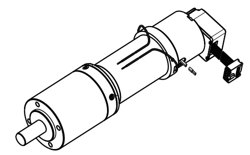


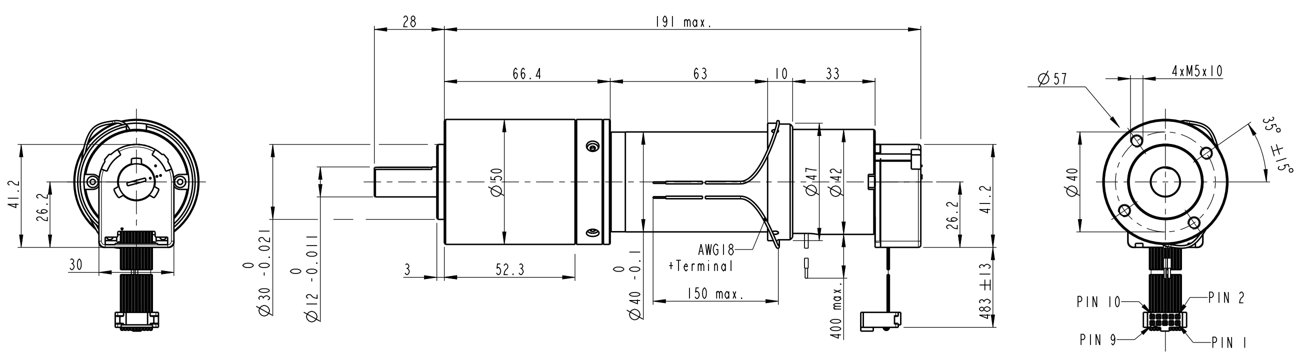
Drive data	Unit	667863	667865	
Ratio	X:1	50	100	
Maximum output torque	Nm	14	20	
Maximum output speed	rpm	138	69	
Continuous torque	Nm	5	9.3	
Maximum current	A	12	12	
Continuous current	A	6	6	
Voltage constant (motor)	V/krpm	3.15	3.15	
Motor terminal voltage	VDC	24	24	
Mechanical time constant (motor)	ms	4.67	4.67	
Electrical time constant	ms	0.27	0.27	
Moment of inertia	kg*cm²	256.5	1026	
Maximum radial load 1)	N	392	392	
Maximum axial load	N	392	392	
Nominal motor speed	rpm	6900	6900	
Motor maximum speed	rpm	7500	7500	
Motor resistance	Ω	0.299	0.299	
Motor inductance	mH	0.082	0.082	
Weight	kg	approx. 0.95	approx. 0.95	
Encoder power supply	VDC	5±10%	5±10%	
Encoder resolution	lines	500	500	
Output signal		EIA-RS422	EIA-RS422	

1) The radial load is based on a force applied at the center of the output shaft.

MAH40 with holding brake

High Torque





Drive data	Unit	667866	667867
Ratio	X:1	50	100
Maximum output torque	Nm	14	20
Maximum output speed	rpm	138	69
Continuous torque	Nm	5	9.3
Maximum current	A	12	12
Continuous current	A	6	6
Voltage constant (motor)	V/krpm	3.15	3.15
Motor terminal voltage	VDC	24	24
Mechanical time constant (motor)	ms	4.67	4.67
Electrical time constant	ms	0.27	0.27
Moment of inertia	kg*cm²	289	1156
Maximum radial load [1]	N	392	392
Maximum axial load	N	392	392
Nominal motor speed	rpm	6900	6900
Motor maximum speed	rpm	7500	7500
Motor resistance	Ω	0.299	0.299
Motor inductance	mH	0.082	0.082
Brake voltage	VDC	24	24
Brake holding torque	Nm	0.4	0.4
Brake rated power	W	6.0	6
Weight	kg	approx. 1.1	approx. 1.1
Encoder power supply	VDC	5±10%	5±10%
Encoder resolution	lines	500	500
Output signal		EIA-RS422	EIA-RS422

[1] The radial load is based on a force applied at the center of the output shaft.

A global network

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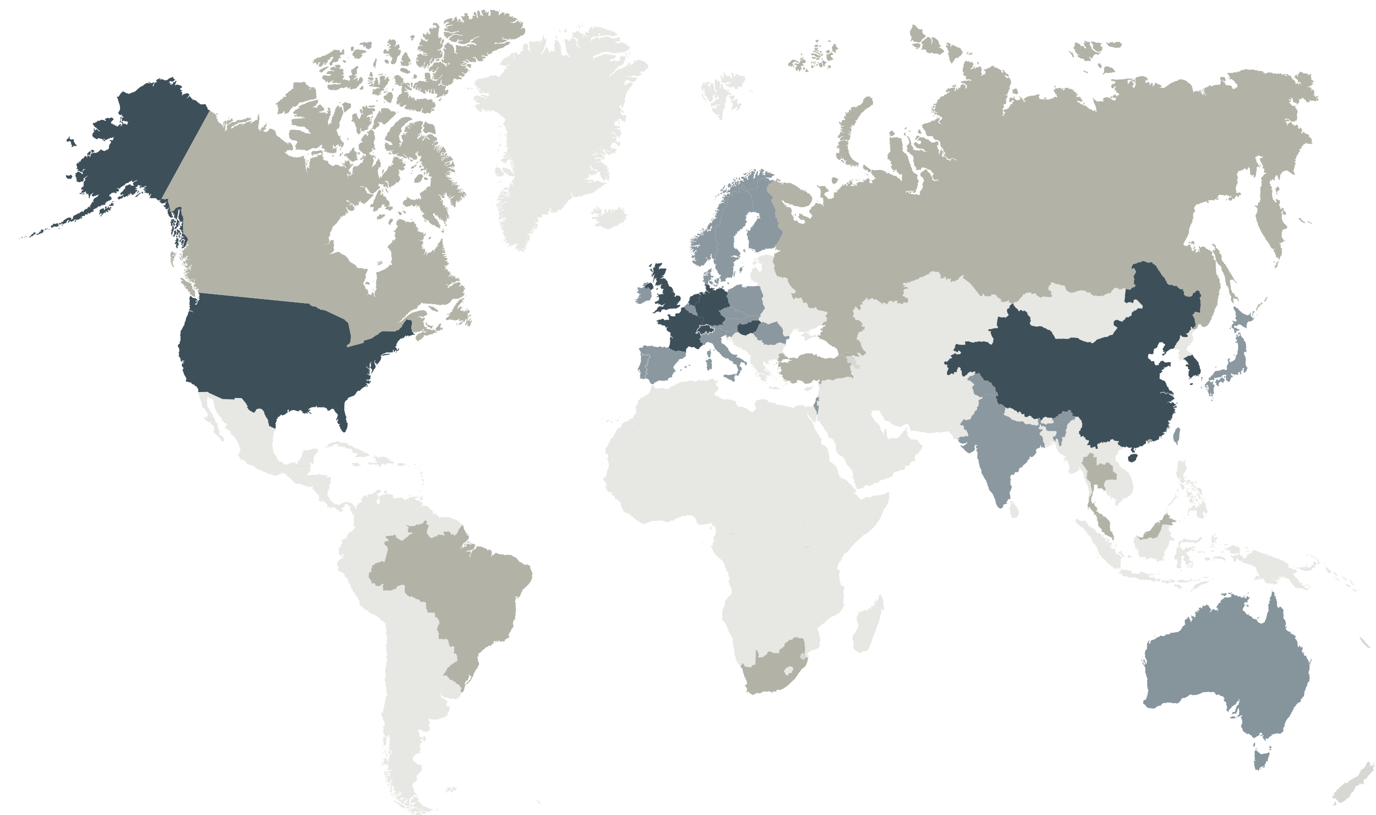

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