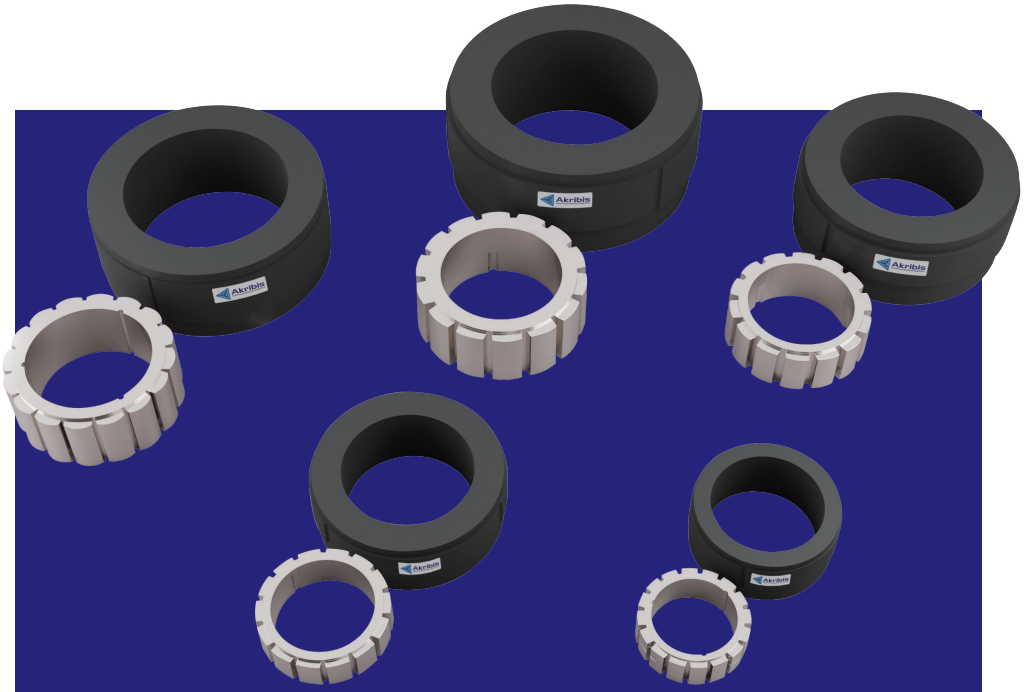


ADR-F SERIES

- High torque density
- Low cogging torque
- Small volume and compact design
- Optional for low speed and high speed windings
- Suitable for robotic application

EN-26.3.1

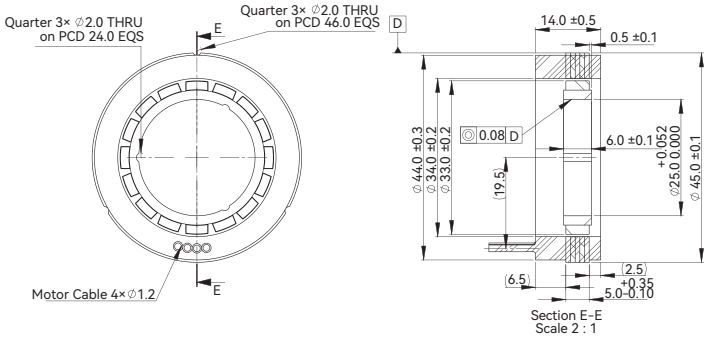
Akribis systems

ADR045-F-005

ADR045-F-005					
Performance Parameters		**Symbol**	**Unit**	**L**	**H**
Continuous Torque (NC) @100°C ❶		T_{cn}	Nm	0.05	0.05
Peak Torque		T_{pk}	Nm	0.13	0.13
Torque Constant ±10%		K_t	Nm/Arms	0.08	0.04
Back EMF Constant ±10%		K_e	Vpeak/rpm	6.50E-03	3.25E-03
Motor Constant @25°C		K_m	Nm/Sqrt(W)	0.03	0.03
Resistance (L-L) 25°C ±10% ❷		R_{25}	Ω	3.65	0.91
Inductance (L-L) ±20% ❸		L	mH	0.79	0.20
Electrical Time Constant		τ_e	ms	0.22	0.22
Continuous Current (NC) @100°C ❶		I_{cn}	Arms	0.6	1.2
Peak Current		I_{pk}	Arms	2.0	4.0
Continuous Power Dissipation (NC) @100°C ❶		P_{cn}	W	2.6	2.6
Max. Coil Temperature		t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶		K_{thn}	W/℃	0.03	0.03
Max. Bus Voltage		U_{bus}	Vdc	48	48
Pole Number		2_P	-	16	16
Max. Speed @continuous torque ❹		Ω_{max}	rpm	3000	3000
Max. Speed @peak torque ❹		Ω_{max}	rpm	3000	3000
Mechanical Parameters					
Overall Mass (NC)		m_n	kg	0.08	0.08
Rotor Inertia		J_r	kg·m²	2.60E-06	2.60E-06
Other Information					
Insulation Class			Class B (130°C)		
Protection Grade			IP00		
Compliance with Global Standards			RoHS		
Ambient Temperature	Operation		0°C to 40°C (non-freezing)		
	Storage		-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation		10%RH to 80%RH (non-condensing)		
	Storage		10%RH to 90%RH (non-condensing)		
Recommended Ambience			Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

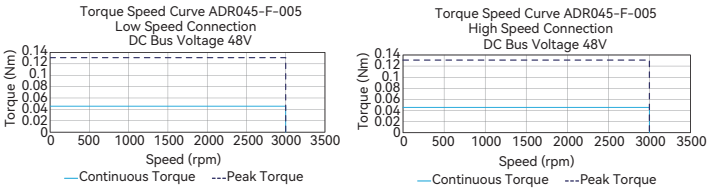
❶ Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling
❷ Resistance is measured by DC current with standard 0.5 m cable.
❸ Inductance is measured by current frequency of 1 kHz.
❹ The value is based on max. bus voltage.
The contents of datasheet are subject to change without prior notice.

Dimension



Note:
❶ The concentricity of stator and rotor to be within 0.1mm when mounted;
❷ User to ensure flatness of mounting surface within 0.01/300mm;
❸ Comes without temperature sensor;
❹ Motor must be used with a Variable Frequency Driver;
❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;
❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve

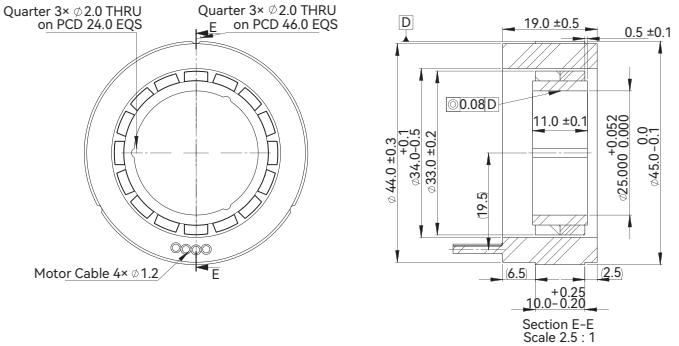


ADR045-F-010

ADR045-F-010					
Performance Parameters		**Symbol**	**Unit**	**L**	**H**
Continuous Torque (NC) @100°C ❶		T_{cn}	Nm	0.09	0.09
Peak Torque		T_{pk}	Nm	0.26	0.26
Torque Constant ±10%		K_t	Nm/Arms	0.15	0.08
Back EMF Constant ±10%		K_e	Vpeak/rpm	1.30E-02	6.50E-03
Motor Constant @25°C		K_m	Nm/Sqrt(W)	0.05	0.05
Resistance (L-L) 25°C ±10% ❷		R_{25}	Ω	5.40	1.35
Inductance (L-L) ±20% ❸		L	mH	1.30	0.33
Electrical Time Constant		τ_e	ms	0.24	0.24
Continuous Current (NC) @100°C ❶		I_{cn}	Arms	0.6	1.2
Peak Current		I_{pk}	Arms	2.0	4.0
Continuous Power Dissipation (NC) @100°C ❶		P_{cn}	W	3.8	3.8
Max. Coil Temperature		t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶		K_{thn}	W/℃	0.05	0.05
Max. Bus Voltage		U_{bus}	Vdc	48	48
Pole Number		2_P	-	16	16
Max. Speed @continuous torque ❹		Ω_{max}	rpm	3000	3000
Max. Speed @peak torque ❹		Ω_{max}	rpm	2400	3000
Mechanical Parameters					
Overall Mass (NC)		m_n	kg	0.11	0.11
Rotor Inertia		J_r	kg·m²	5.20E-06	5.20E-06
Other Information					
Insulation Class			Class B (130°C)		
Protection Grade			IP00		
Compliance with Global Standards			RoHS		
Ambient Temperature	Operation		0°C to 40°C (non-freezing)		
	Storage		-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation		10%RH to 80%RH (non-condensing)		
	Storage		10%RH to 90%RH (non-condensing)		
Recommended Ambience			Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

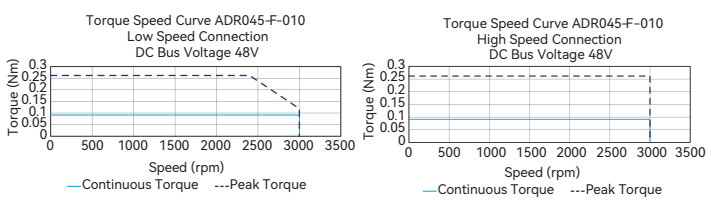
❶ Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling
❷ Resistance is measured by DC current with standard 0.5 m cable.
❸ Inductance is measured by current frequency of 1 kHz.
❹ The value is based on max. bus voltage.
The contents of datasheet are subject to change without prior notice.

Dimension



Note:
❶ The concentricity of stator and rotor to be within 0.1mm when mounted;
❷ User to ensure flatness of mounting surface within 0.01/300mm;
❸ Comes without temperature sensor;
❹ Motor must be used with a Variable Frequency Driver;
❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;
❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve



ADR060-F-010

ADR060-F-010				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	0.30	0.30
Peak Torque	T_{pk}	Nm	0.86	0.86
Torque Constant ±10%	K_t	Nm/Arms	0.10	0.05
Back EMF Constant ±10%	K_e	Vpeak/rpm	8.20E-03	4.10E-03
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.10	0.09
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	0.65	0.20
Inductance (L-L) ±20% ❸	L	mH	0.47	0.12
Electrical Time Constant	τ_e	ms	0.72	0.59
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	3.1	6.2
Peak Current	I_{pk}	Arms	10.9	21.7
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	12.1	14.9
Max. Coil Temperature	t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.16	0.20
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_P	-	14	14
Max. Speed @continuous torque ❹	Ω_{max}	rpm	3000	3000
Max. Speed @peak torque ❹	Ω_{max}	rpm	3000	3000
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	0.22	0.22
Rotor Inertia	J_r	kg·m²	1.02E-05	1.02E-05
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

❶Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling

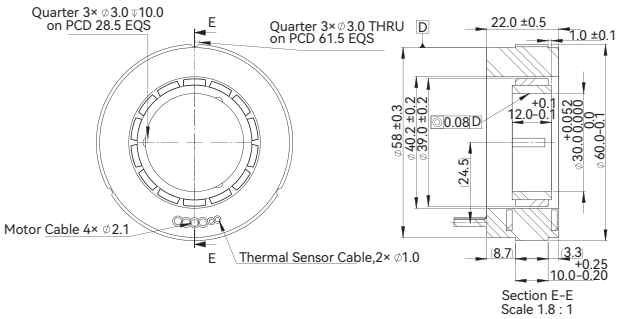
❷Resistance is measured by DC current with standard 0.5 m cable.

❸Inductance is measured by current frequency of 1 kHz.

❹The value is based on max. bus voltage.

The contents of datasheet are subject to change without prior notice.

Dimension



Note:

❶ The concentricity of stator and rotor to be within 0.1mm when mounted;

❷ User to ensure flatness of mounting surface within 0.01/300mm;

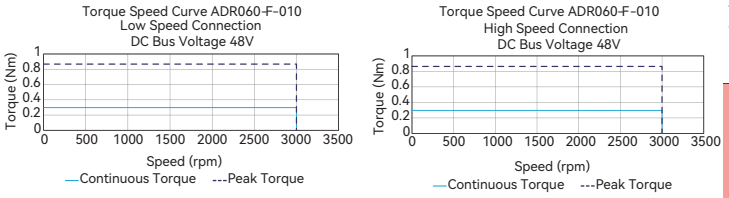
❸ With temperature sensor;

❹ Motor must be used with a Variable Frequency Driver;

❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;

❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve



ADR060-F-020

ADR060-F-020				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	0.59	0.59
Peak Torque	T_{pk}	Nm	1.73	1.73
Torque Constant ±10%	K_t	Nm/Arms	0.19	0.10
Back EMF Constant ±10%	K_e	Vpeak/rpm	1.64E-02	8.20E-03
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.15	0.14
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	1.10	0.30
Inductance (L-L) ±20% ❸	L	mH	0.81	0.20
Electrical Time Constant	τ_e	ms	0.74	0.68
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	3.1	6.2
Peak Current	I_{pk}	Arms	10.9	21.8
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	20.5	22.4
Max. Coil Temperature	t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.27	0.30
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_P	-	14	14
Max. Speed @continuous torque ❹	Ω_{max}	rpm	2200	3000
Max. Speed @peak torque ❹	Ω_{max}	rpm	1500	3000
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	0.35	0.35
Rotor Inertia	J_r	kg·m²	2.03E-05	2.03E-05
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

❶Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling

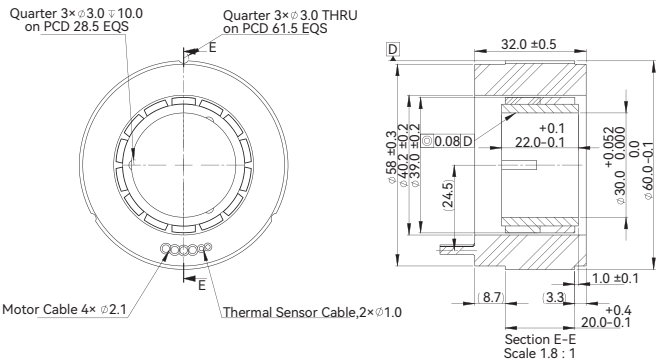
❷Resistance is measured by DC current with standard 0.5 m cable.

❸Inductance is measured by current frequency of 1 kHz.

❹The value is based on max. bus voltage.

The contents of datasheet are subject to change without prior notice.

Dimension



Note:

❶ The concentricity of stator and rotor to be within 0.1mm when mounted;

❷ User to ensure flatness of mounting surface within 0.01/300mm;

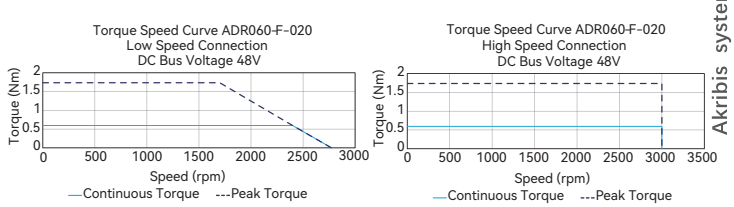
❸ With temperature sensor;

❹ Motor must be used with a Variable Frequency Driver;

❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;

❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve

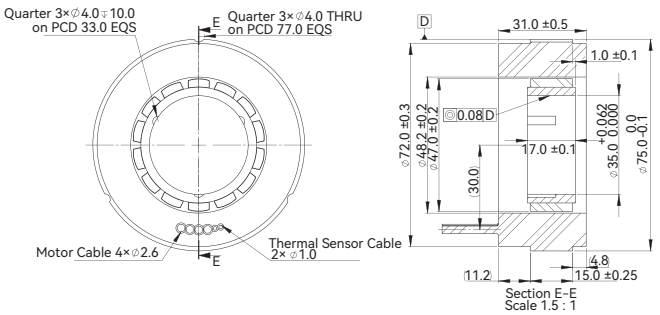


ADR075-F-015

ADR075-F-015				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	0.80	0.80
Peak Torque	T_{pk}	Nm	2.41	2.41
Torque Constant ±10%	K_t	Nm/Arms	0.12	0.06
Back EMF Constant ±10%	K_e	Vpeak/rpm	1.03E-02	5.13E-03
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.20	0.20
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	0.25	0.06
Inductance (L-L) ±20% ❸	L	mH	0.40	0.10
Electrical Time Constant	τ_e	ms	1.60	1.60
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	6.7	13.4
Peak Current	I_{pk}	Arms	20.1	40.2
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	21.8	21.8
Max. Coil Temperature	t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.29	0.29
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_p	-	14	14
Max. Speed @continuous torque ❹	Ω_{max}	rpm	3000	3000
Max. Speed @peak torque ❹	Ω_{max}	rpm	3000	3000
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	0.46	0.46
Rotor Inertia	J_r	kg·m²	3.25E-05	3.25E-05
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

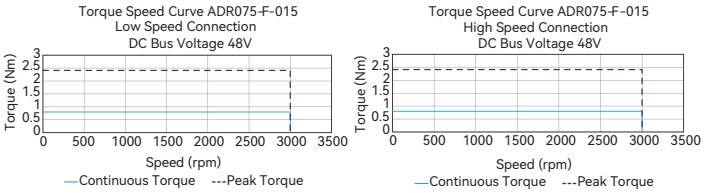
❶Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling
❷Resistance is measured by DC current with standard 0.5 m cable.
❸Inductance is measured by current frequency of 1 kHz.
❹The value is based on max. bus voltage.
The contents of datasheet are subject to change without prior notice.

Dimension



Note:
❶ The concentricity of stator and rotor to be within 0.1mm when mounted;
❷ User to ensure flatness of mounting surface within 0.01/300mm;
❸ With temperature sensor;
❹ Motor must be used with a Variable Frequency Driver;
❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;
❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve

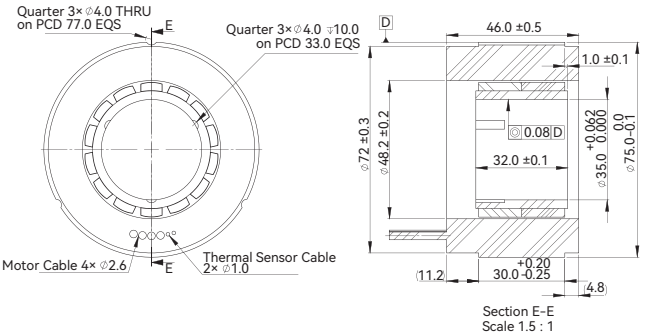


ADR075-F-030

ADR075-F-030				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	1.61	1.61
Peak Torque	T_{pk}	Nm	4.82	4.82
Torque Constant ±10%	K_t	Nm/Arms	0.24	0.12
Back EMF Constant ±10%	K_e	Vpeak/rpm	2.05E-02	1.03E-02
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.32	0.32
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	0.38	0.10
Inductance (L-L) ±20% ❸	L	mH	0.70	0.18
Electrical Time Constant	τ_e	ms	1.84	1.84
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	6.7	13.4
Peak Current	I_{pk}	Arms	20.1	40.2
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	33.1	33.1
Max. Coil Temperature	t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.44	0.44
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_p	-	14	14
Max. Speed @continuous torque ❹	Ω_{max}	rpm	1900	3000
Max. Speed @peak torque ❹	Ω_{max}	rpm	1500	3000
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	0.80	0.80
Rotor Inertia	J_r	kg·m²	6.47E-05	6.47E-05
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

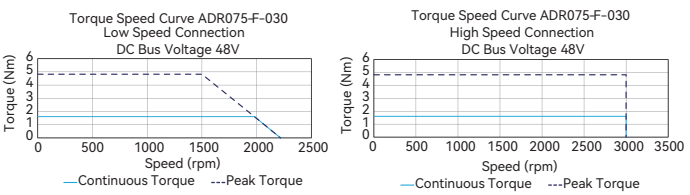
❶Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling
❷Resistance is measured by DC current with standard 0.5 m cable.
❸Inductance is measured by current frequency of 1 kHz.
❹The value is based on max. bus voltage.
The contents of datasheet are subject to change without prior notice.

Dimension



Note:
❶ The concentricity of stator and rotor to be within 0.1mm when mounted;
❷ User to ensure flatness of mounting surface within 0.01/300mm;
❸ With temperature sensor;
❹ Motor must be used with a Variable Frequency Driver;
❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;
❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve



ADR080-F-020

ADR080-F-020				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	1.41	1.41
Peak Torque	T_{pk}	Nm	4.22	4.22
Torque Constant ±10%	K_t	Nm/Arms	0.32	0.16
Back EMF Constant ±10%	K_e	Vpeak/rpm	2.74E-02	1.37E-02
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.27	0.26
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	0.95	0.25
Inductance (L-L) ±20% ❸	L	mH	1.15	0.29
Electrical Time Constant	τ_e	ms	1.21	1.16
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	4.4	8.8
Peak Current	I_{pk}	Arms	15.2	30.4
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	39	41
Max. Coil Temperature	t_{max}	℃	130	130
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.37	0.39
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_P	-	16	16
Max. Speed @continuous torque ❹	Ω_{max}	rpm	1350	3000
Max. Speed @peak torque ❹	Ω_{max}	rpm	850	2285
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	0.58	0.58
Rotor Inertia	J_r	kg m²	8.27E-05	8.27E-05
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

❶Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling

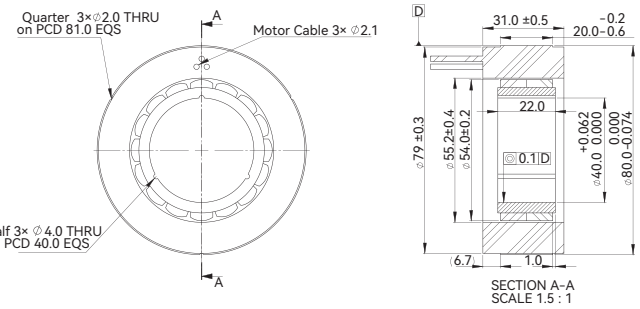
❷Resistance is measured by DC current with standard 0.5 m cable.

❸Inductance is measured by current frequency of 1 kHz.

❹The value is based on max. bus voltage.

The contents of datasheet are subject to change without prior notice.

Dimension



Note:

❶ The concentricity of stator and rotor to be within 0.08mm when mounted;

❷ User to ensure flatness of mounting surface within 0.01/300mm;

❸ Comes without temperature sensor;

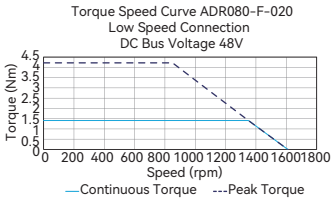
❹ Motor must be used with a Variable Frequency Driver;

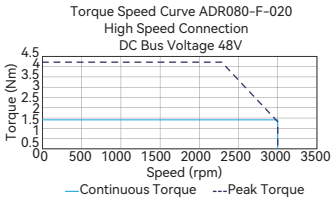
❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;

❻ Certain specifications in the drawing are subject to change;

❼ Customers need to connect ground wire by themselves.

Torque-Speed Curve





ADR090-F-020

ADR090-F-020				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	1.88	1.88
Peak Torque	T_{pk}	Nm	5.61	5.61
Torque Constant ±10%	K_t	Nm/Arms	0.28	0.14
Back EMF Constant ±10%	K_e	Vpeak/rpm	2.39E-02	1.20E-02
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.38	0.38
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	0.37	0.09
Inductance (L-L) ±20% ❸	L	mH	0.80	0.20
Electrical Time Constant	τ_e	ms	2.16	2.16
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	6.7	13.4
Peak Current	I_{pk}	Arms	22.5	45.0
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	32.2	32.2
Max. Coil Temperature	t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.43	0.43
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_P	-	14	14
Max. Speed @continuous torque ❹	Ω_{max}	rpm	1500	3000
Max. Speed @peak torque ❹	Ω_{max}	rpm	1200	2800
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	0.85	0.85
Rotor Inertia	J_r	kg m²	1.03E-04	1.03E-04
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

❶Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling

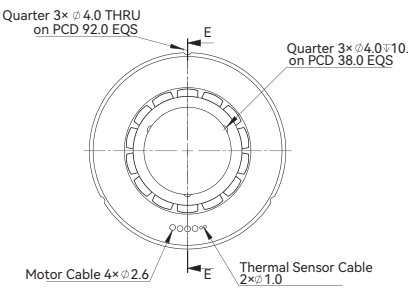
❷Resistance is measured by DC current with standard 0.5 m cable.

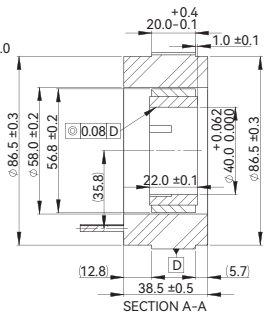
❸Inductance is measured by current frequency of 1 kHz.

❹The value is based on max. bus voltage.

The contents of datasheet are subject to change without prior notice.

Dimension





Note:

❶ The concentricity of stator and rotor to be within 0.1mm when mounted;

❷ User to ensure flatness of mounting surface within 0.01/300mm;

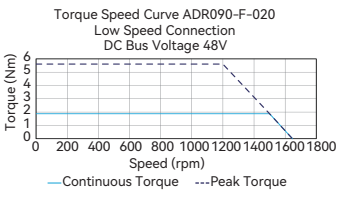
❸ With temperature sensor;

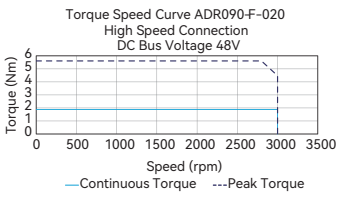
❹ Motor must be used with a Variable Frequency Driver;

❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;

❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve



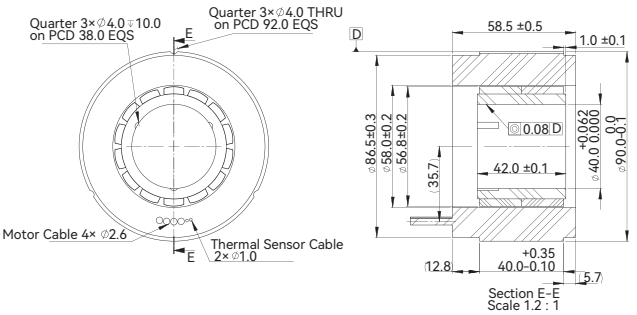


ADR090-F-040

ADR090-F-040				
Performance Parameters	Symbol	Unit	L	H
Continuous Torque (NC) @100°C ❶	T_{cn}	Nm	3.75	3.75
Peak Torque	T_{pk}	Nm	11.22	11.22
Torque Constant ±10%	K_t	Nm/Arms	0.56	0.28
Back EMF Constant ±10%	K_e	Vpeak/rpm	4.79E-02	2.39E-02
Motor Constant @25°C	K_m	Nm/Sqrt(W)	0.61	0.61
Resistance (L-L) 25°C ±10% ❷	R_{25}	Ω	0.57	0.14
Inductance (L-L) ±20% ❸	L	mH	1.45	0.36
Electrical Time Constant	τ_e	ms	2.54	2.54
Continuous Current (NC) @100°C ❶	I_{cn}	Arms	6.7	13.4
Peak Current	I_{pk}	Arms	22.5	45.0
Continuous Power Dissipation (NC) @100°C ❶	P_{cn}	W	49.7	49.7
Max. Coil Temperature	t_{max}	℃	100	100
Thermal Dissipation Constant (NC) ❶	K_{thn}	W/℃	0.66	0.66
Max. Bus Voltage	U_{bus}	Vdc	48	48
Pole Number	2_p	-	14	14
Max. Speed @continuous torque ❹	Ω_{max}	rpm	800	1500
Max. Speed @peak torque ❹	Ω_{max}	rpm	550	1350
Mechanical Parameters				
Overall Mass (NC)	m_n	kg	1.49	1.49
Rotor Inertia	J_r	kg·m²	2.04E-04	2.04E-04
Other Information				
Insulation Class		Class B (130°C)		
Protection Grade		IP00		
Compliance with Global Standards		RoHS		
Ambient Temperature	Operation	0°C to 40°C (non-freezing)		
	Storage	-15°C to 70°C (non-freezing)		
Ambient Humidity	Operation	10%RH to 80%RH (non-condensing)		
	Storage	10%RH to 90%RH (non-condensing)		
Recommended Ambience		Indoor (no direct sunlight); No corrosive gas, inflammable gas, oil mist or dust.		

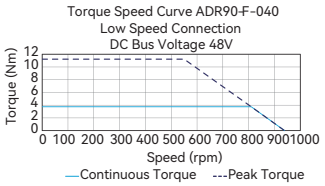
❶ Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment. NC-Natural cooling
❷ Resistance is measured by DC current with standard 0.5 m cable.
❸ Inductance is measured by current frequency of 1 kHz.
❹ The value is based on max. bus voltage.
The contents of datasheet are subject to change without prior notice.

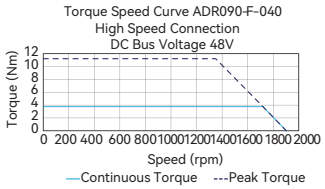
Dimension



Note:
❶ The concentricity of stator and rotor to be within 0.1mm when mounted;
❷ User to ensure flatness of mounting surface within 0.01/300mm;
❸ With temperature sensor;
❹ Motor must be used with a Variable Frequency Driver;
❺ Cable diameter within +/-0.3mm tolerance, cable length within +/-30.0mm tolerance;
❻ Certain specifications in the drawing are subject to change.

Torque-Speed Curve

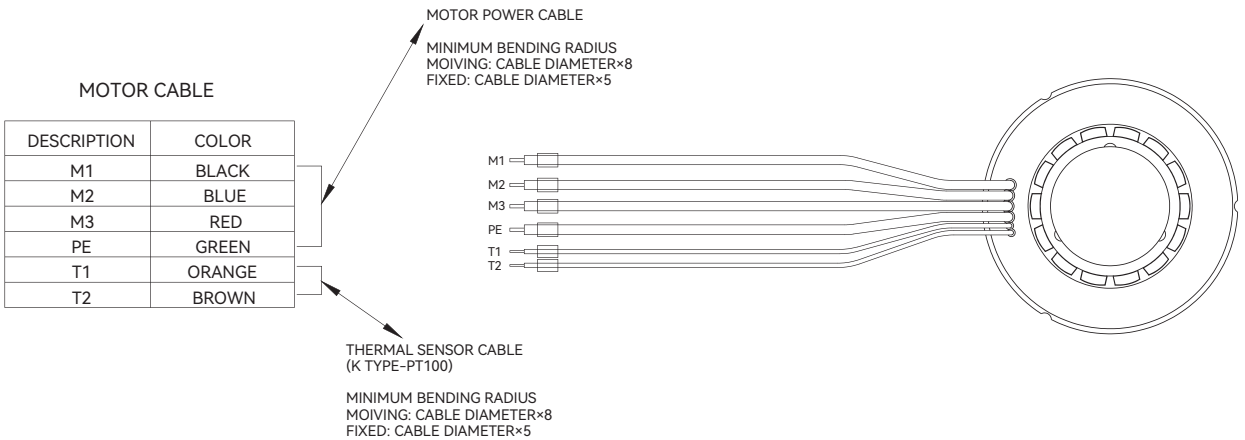




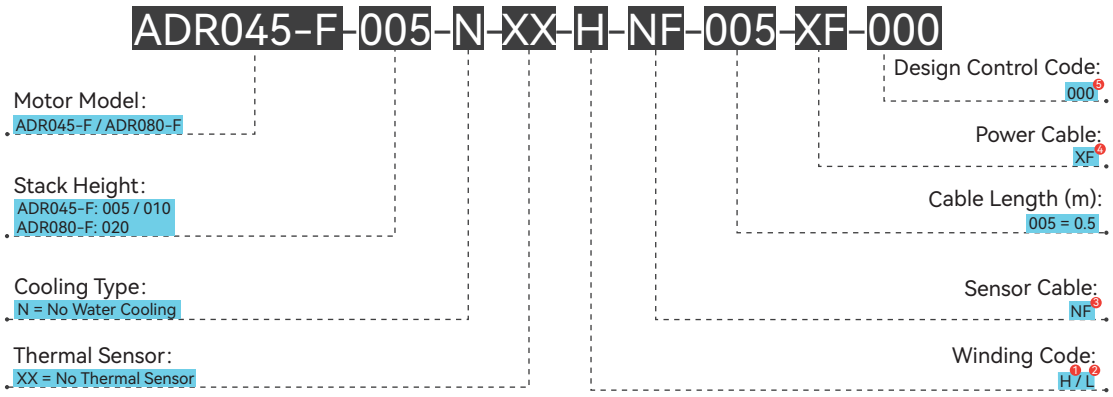
Motor Cable Connection

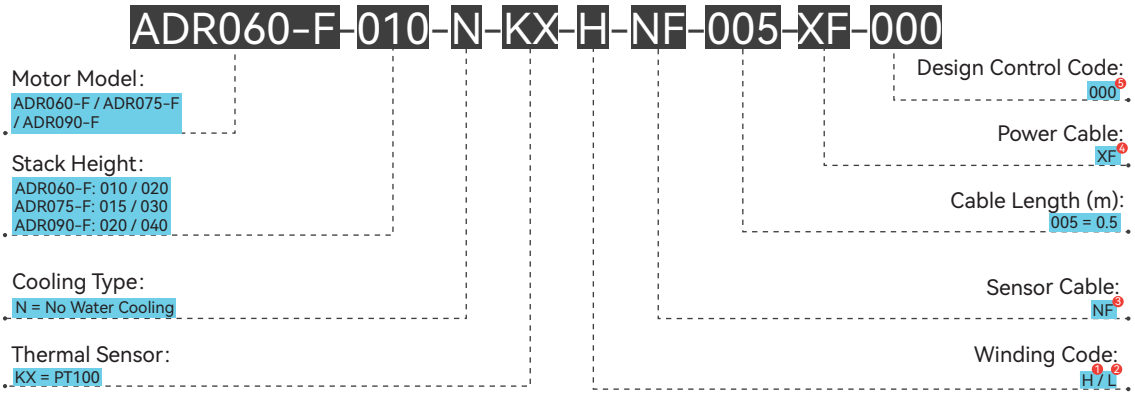
MOTOR CABLE

DESCRIPTION	COLOR
M1	BLACK
M2	BLUE
M3	RED
PE	GREEN
T1	ORANGE
T2	BROWN



Part Numbering





1 H = High Speed Winding
2 L = Low Speed Winding
3 NF = Without Built-in Hall Sensor C/W Flying Leads
4 XF = Without Ferrite Bead C/W Flying Leads
5 000 = Standard Model (for more options, please consult cust-service@akribis-sys.com)