

Installation Instructions

Original Instructions



Allen-Bradley

by ROCKWELL AUTOMATION

Kinetix TLC Compact Servo Motors

Catalog Numbers TLC-A046010, TLC-A070020, TLC-A070040, TLC-A090075

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About the Kinetix TLC Servo Motors

Kinetix® TLC compact servo motors are tested and validated for optimal performance with Kinetix 5100 servo drives and have an optional 24V DC holding brake.

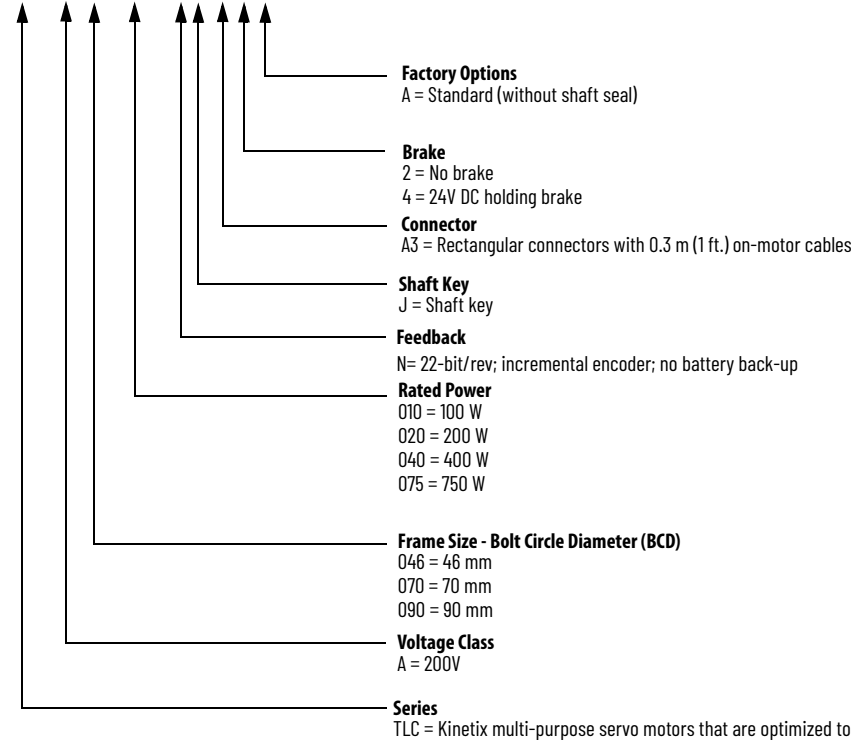
You are responsible for inspecting the equipment before accepting the shipment from the freight company. Check the items you receive against your purchase order. Notify the carrier of shipping damage or missing items immediately. Store or operate your motor in a clean and dry location within the [Environmental Specifications on page 2](#).



- ATTENTION:** To avoid personal injury and damage to the motor, do not lift or handle the motor by the motor shaft or on-motor cable (when present).
- The cap on the shaft can come loose and cause you to drop the motor.
 - Stress on the motor cable can disrupt the power and signal connectivity.

Catalog Number Explanation

TLC-A xxx xxx - x x xx x x



Kinetix TLC motors are supported by the Kinetix 5100 servo drive with firmware version 4.001 or later. For exact keying applications, use the Kinetix 5100 servo drive Add-On Profile, version 4.01.01 or later.

Environmental Specifications

Always store motors in a clean and dry location within the environmental conditions.

Table 1 - Kinetix TLC Servo Motor Features

Attribute	Value
Main characteristics	- Developed to match Kinetix 5100 servo drive for optimal system performance - Metric frame sizes - High torque to size ratio
Features	200V-class windings 22-bit high-resolution single-turn - Shaft-end threaded hole
Motor type	Brushless AC synchronous servo motors
Cables and connectors	- On-motor cables (TLC-x046...TLC-x90 frame sizes) - Kinetix TLC drive/motor system cables lengths up to 30 m (98 ft) - Build your own cable options with available connector kits
Environmental rating	- IP20 on-motor cable connectors (TLC-x046...TLC-x90 frame sizes)⁽¹⁾ - IP40 motor without shaft seal - IP65 motor with optional shaft seal and environmental seals for the cable connectors (on-motor cable connectors excluded)⁽²⁾
Certifications	Kinetix TLC rotary motors are UL Recognized components to applicable UL and CSA standards. CE marked for all applicable directives. Refer to rok.auto/certifications for the Product Certifications website.
Continuous stall torque	0.32...2.39 N•m (2.83...21.15 lb•in)
Peak stall torque	1.03...7.51 N•m (9.15...66.42 lb•in)
Rated speed	3000 rpm
Motor rated output	0.10...0.75 kW (0.13...1.00 Hp)
Continuous current	0.86...4.27 A _{rms}
Peak current	3.64...16.39 A _{rms} (5.13...23.11 A 0-k)
Compatible servo drives	Kinetix 5100 servo drive ⁽³⁾
Compatible servo cables	2090-CTxx-MAXx-xxxxx Kinetix 2090 motor cables
Typical applications	- Packaging - Converting - Material handling - Electronic assembly - Automotive - Robotics
Temperature, operating	0...40 °C (32...104 °F)
Temperature, storage	-10...+80 °C (-14 ...+176 °F)
Relative humidity	20...90% non-condensing
Shock	20g peak, 6 msec duration, 6 occurrences, (max)
Vibration	2.5 g from 30 Hz - 2 kHz

(1) IP rating descriptions are for reference only. Refer to the international standards for more complete descriptions.

(2) Total protection from dust; protected against low-pressure jets of water from all directions. IP20 without shaft seal and environmentally sealed connectors installed.

(3) Kinetix TLC motors are supported by the Kinetix 5100 servo drive with firmware version 4.001 or later. For exact keying applications, use the Kinetix 5100 servo drive Add-On Profile, version 4.01.01 or later.

Table 2 - Kinetix TLC Servo Motor (200V-class) Technical and Performance Specifications

Motor Cat. No. (1)	Voltage Range	Rated Speed rpm	Maximum Speed rpm	Continuous Stall Torque N•m (lb•in)	Peak Stall Torque N•m (lb•in)	Motor Rated Output kW (Hp)	Brake Option	Frame Size	Kinetix 5100 Drive
TLC-A046010-NJA32A	200/240V	3000	6000	0.32 (2.83)	1.03 (9.15)	0.10 (0.13)	No	46 mm	2198-E1004-ERS
TLC-A046010-NJA34A							Yes		
TLC-A070020-NJA32A				0.64 (5.66)	2.16 (19.12)	0.20 (0.27)	No	70 mm	
TLC-A070020-NJA34A							Yes		
TLC-A070040-NJA32A				1.27 (11.24)	4.28 (37.83)	0.40 (0.54)	No	2198-E1007-ERS	
TLC-A070040-NJA34A					2.78 (24.57)		Yes	2198-E1004-ERS	
TLC-A090075-NJA32A				2.39 (21.15)	7.50 (66.42)	0.75 (1.01)	No	90 mm	2198-E1015-ERS
TLC-A090075-NJA34A					7.05 (62.83)		Yes		2198-E1007-ERS

(1) All motors have a connector cable length of 0.3 m (1 ft.), a digital encoder, and a keyed shaft. Shaft seal kits are available for purchase as an accessory. See [Shaft Seals and Shaft Seal Kits](#) for available options.

Before You Install the Motor

Perform these inspection steps and review the guidelines for shaft seals, couplings and pulleys, and electrical noise prevention.

1. Remove the motor carefully from its shipping container.
2. Visually inspect the motor for any damage.
3. Examine the motor frame, front output shaft, and mounting pilot for any defects.
4. Notify the carrier of shipping damage immediately.



ATTENTION: Do not attempt to open and modify the motor. Only a qualified Rockwell Automation employee can service this motor.

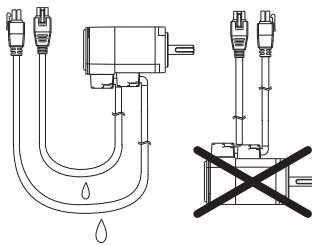
Remove the Shaft Cap

Remove the installed protective cap on the motor shaft using only hand pressure. Do not use a hammer or other tools as they can damage the motor shaft.

Prolong Motor Life

Proper design and maintenance can increase the life of a servo motor. Follow these guidelines to maximize the life of a servo motor operated within the [Environmental Specifications on page 2](#):

- Always provide a drip loop to carry liquids away from the connection to the motor.



Correct: Position the motor so that the cable enters from beneath the motor and forms a drip loop.

Incorrect: The cable lacks a drip loop.

- Whenever possible, provide shields that protect the motor housing, shaft, seals, and their junctions from contamination by foreign matter or fluids.
- Shaft seals are subject to wear and require periodic inspection and replacement. Replacement is recommended every 3 months, not to exceed 12 months, depending on use. See [Shaft Seal Kits on page 4](#) for more information.
- Inspect the motor and seals for damage or wear on a regular basis. If you detect damage or excessive wear, replace the item.
- The brake option on this servo motor is a spring-set holding brake that releases when voltage is applied to the brake coil. A separate power source is required to disengage the brake. This power source can be applied by a servo motor controller or manual operator control. If system main power fails, holding brakes can withstand occasional use as stopping brakes. However, this creates rotational mechanical backlash that can cause damage to the system, increase brake wear, and reduce brake life.

IMPORTANT

Holding brakes are not designed to stop rotation of the motor shaft, and they are not intended to be used as a safety device. They are designed to hold a motor shaft at 0 rpm for loads up to the rated brake holding torque. Follow these steps to prevent motor shaft rotation.

1. Command the servo drive to 0 rpm.
2. Verify the motor is at 0 rpm.
3. Engage the brake.
4. Disable the drive.

Disabling the drive removes the potential for brake wear caused by a badly-tuned servo system oscillating the shaft.

Kinetix TLC Servo Motor Options

Kinetix TLC servo motors are available with these options and accessories:

- 24V DC holding brake
- Shaft seal kits are available, as are replacement kits for field installation. A shaft seal provides a barrier that prevents moisture and particles from entering the motor bearings. Shaft seals are made of nitrile and require lubrication to reduce wear.

IMPORTANT

Shaft seals are subject to wear and require periodic inspection and replacement. Replacement is recommended every 3 months, not to exceed 12 months, depending on use.

24V DC Holding Brake

Holding brakes are a factory-only option for Kinetix servo motors. The holding brake is a separate mechanism located on the back of the motor and designed to hold the motor shaft stationary while the drive is disabled. The maximum torque that the holding brake can hold is called the holding torque. Holding brakes are released when 24V DC is applied to the brake coil. Voltage and polarity supplied to the brake must be as specified in the drive user manual for proper brake performance.

Table 3 - Kinetix TLC Servo Motor Brake Specifications

Motor Cat. No.	Backlash, max (brake engaged) arc minutes	Holding Torque N·m (lb·in)	Coil Current at 24V DC A (amps)	Brake Response Time	
				Release ms	Engage ⁽¹⁾ ms
TLC-A046010-NJA34A	180	0.32 (2.83)	0.25	40	80
TLC-A070020-NJA34A	96	1.27 (11.24)	0.30		
TLC-A070040-NJA34A					
TLC-A090075-NJA34A	72	2.39 (21.15)	0.33		

(1) By using diode and zener diode as arc suppression device in external control circuit.

Table 4 - Motor Rotor Inertia and Approximate Motor Weight

Motor Cat. No.	Non-brake Rotor Inertia ⁽¹⁾ kg·m ² (lb·in·s ²)	Non-brake Motor Weight, approx ⁽¹⁾ kg (lb)	Motor Cat. No.	Brake Rotor Inertia ⁽¹⁾ kg·m ² (lb·in·s ²)	Brake Motor Weight, approx ⁽¹⁾ kg (lb)
TLC-A046010-NJA32A	0.00000299 (0.0000265)	0.5 (1.10)	TLC-A046010-NJA34A	0.00000315 (0.0000279)	0.7 (1.54)
TLC-A070020-NJA32A	0.0000141 (0.000125)	1.3 (2.86)	TLC-A070020-NJA34A	0.0000151 (0.000134)	1.3 (2.87)
TLC-A070040-NJA32A	0.0000254 (0.000225)	1.2 (2.65)	TLC-A070040-NJA34A	0.0000264 (0.000234)	1.6 (3.53)
TLC-A090075-NJA32A	0.000107 (0.000947)	2.3 (5.16)	TLC-A090075-NJA34A	0.000113 (0.00100)	3.2 (6.94)

(1) Refer to [Kinetix TLC Servo Motor Brake Specifications](#) for brake rotor inertia and brake motor weight.

Shaft Seals and Shaft Seal Kits

Shaft seals are available as a replacement part from Rockwell Automation. An additional seal is required on the motor shaft near the motor front bearing if the shaft is exposed to significant amounts of fine dust or fluids, such as lubricating oil from a gearbox. An IP65 rating for the motor requires a shaft seal and environmentally sealed connectors.

The additional seal is not recommended in applications where the motor shaft area is free of liquids or fine dust, and a lower rating is sufficient:

- See [Environmental Specifications on page 2](#) for a brief description of the IP rating for these motors.
- See [Shaft Seal Kits on page 4](#) for seal kits compatible with your motor.

Shaft Seal Kits

Shaft seal kits are available as replacement kits for field installation. A shaft seal provides a barrier that prevents moisture and particles from entering the motor bearings. Shaft seals are made of nitrile and require lubrication to reduce wear.

IMPORTANT Shaft seals are subject to wear and require periodic inspection and replacement. Replacement is recommended every 3 months, not to exceed 12 months, depending on use.

Table 5 - Shaft Seal Kit Selection

Motor Cat. No.	Shaft Seal Kit Cat. No.
TLC-A046010-NJA3xA	TLC-SSN-F046
TLC-A070020-NJA3xA TLC-A070040-NJA3xA	TLC-SSN-F070
TLC-A090075-NJA3xA	TLC-SSN-F090

See Shaft Seal Kits for Kinetix TLC Installation Instructions, publication [TLC-IN002](#), for instructions on how to install a shaft seal.

Prevent Electrical Noise

Electromagnetic interference (EMI), commonly called electrical noise, can affect motor performance. Follow these guidelines to reduce the effects of EMI:

- Isolate the power transformers or install line filters on all AC input power lines.
- Use shielded cables and shield signal cables from power wiring.
- Do not route motor cables over the vent openings on servo drives.
- Ground all equipment by using a single-point parallel ground system that employs ground bus-bars or large straps.
- If necessary, use additional electrical-noise reduction techniques to reduce EMI in noisy environments.

See System Design for Control of Electrical Noise Reference Manual, publication [GMC-RM001](#), for additional information on reducing EMI.

Install Cables

Factory manufactured feedback, power, and brake cables are available in standard cable lengths. If you choose to build your own cables, connector kits available for Kinetix TLC motors are described in 2090-Series Kinetix TLP Cable Connector Kits, publication [2090-PC009](#) and the Kinetix Rotary and Linear Motion Cable Specifications Technical Data, publication [KNX-TD004](#).

Contact your nearest Rockwell Automation sales office or refer to these publications for information about available Kinetix 2090 cables.

Correct cable routing and careful cable construction improve system electromagnetic compatibility (EMC). Follow these guidelines to build and install the cables:

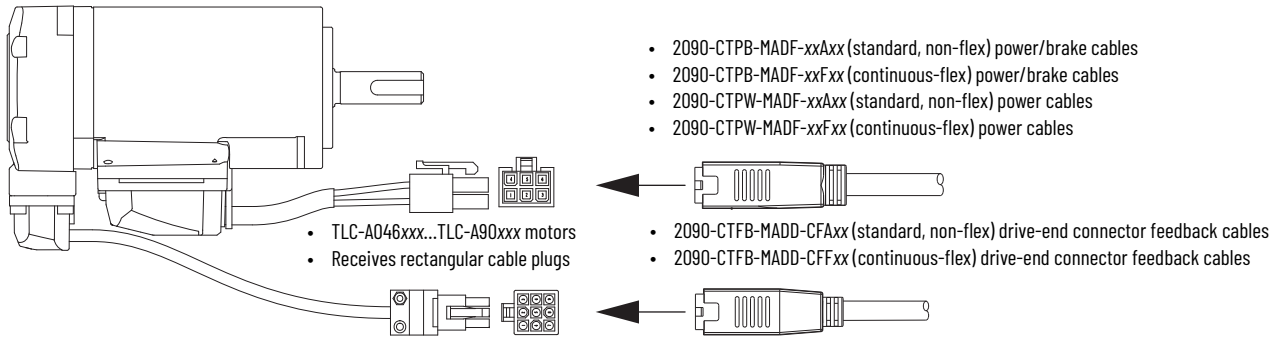
- Keep the wire lengths as short as possible.
- Route noise sensitive wiring (encoder, serial, and I/O) away from input power and motor power wiring.
- Separate cables by 0.3 m (1 ft) minimum for every 9 m (30 ft) of parallel run.
- Ground both ends of the encoder cable shield and twist the signal wire pairs to help prevent EMI from other equipment.



ATTENTION: High voltage can be present on the shield of a power cable, if the shield is not grounded. Verify that there is a connection to ground for any power cable shield.

Motor Connector/Cable Compatibility

Figure 1 - TLC-A046...TLC-A090 Servo Motor Connectors



For cable specifications, refer to Kinetix Rotary and Linear Motion Cable Specifications Technical Data, publication [KNX-TD004](#).

To build your own cables, see 2090-Series Kinetix TLP Cable Connector Kits, publication [2090-PC009](#) for guidance.

Connector Data

This section identifies the power, brake, and feedback pins on the motor connectors. For additional information see 2090-Series Kinetix TLP Power and Feedback Cables Installation Instructions, publication [2090-IN046](#).

Figure 2 - Motor Feedback Connector Pinouts

Pin	Signal	Motor Cat. No.
1	T+	TLC-A046010-NJA3xA TLC-A070020-NJA3xA TLC-A070040-NJA3xA TLC-A090075-NJA3xA
2	-	
3	-	
4	T-	
5	-	
6	-	
7	DC+5V	
8	⊕	
9	SHIELD	

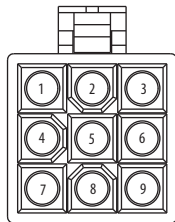
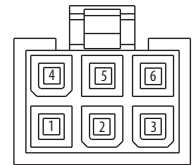


Figure 3 - Motor Power and Brake Connector Pinouts

Pin	Signal	Motor Cat. No.
1	U	TLC-A046010-NJA3xA TLC-A070020-NJA3xA TLC-A070040-NJA3xA TLC-A090075-NJA3xA
2	V	
3 ⁽¹⁾	BR+	
4	W	
5	⊕	
6 ⁽¹⁾	BR-	



(1) Only present on TLC-A0xx0xx-NJA34A

Motor Installation

Motor installation must comply with all local regulations and use of equipment and installation practices that promote safety and electromagnetic compatibility:

- All motors include a mounting pilot for aligning the motor on a machine.
- Preferred fasteners are stainless steel.



ATTENTION: Unmounted motors, disconnected mechanical couplings, loose shaft keys, and disconnected cables are dangerous if power is applied. Identify (tag-out) disassembled equipment and restrict access to (lock-out) the electrical power. Before applying power to the motor, remove the shaft key and other mechanical couplings, if present, that could be thrown from the shaft.



ATTENTION: Verify that cables are installed and restrained to prevent uneven tension or flexing at the connector. Provide support at 3 m (10 ft) intervals throughout the cable run. Excessive and uneven lateral force at the cable connector can result in shaft seal movement, which can cause motor contamination.

Install the Motor

Perform these steps to install the motor.



ATTENTION: Damage can occur to the motor bearings and the feedback device if sharp impact is applied to the shaft during installation of couplings and pulleys. Damage to the feedback device can result from applying leverage to the motor mounting face when removing devices mounted on the motor shaft. Do not strike the shaft, couplings, or pulleys with tools during installation or removal. Use a wheel puller, to apply pressure from the user end of the shaft, when attempting to remove any device from the motor shaft.

1. Leave enough space around the motor so it can dissipate heat and stay within its specified operating temperature range. See [Environmental Specifications on page 2](#) for the operating temperature range. Do not enclose the motor unless forced air is blown across the motor for cooling. A fan that blows air across the motor improves its performance. Keep other heat-producing devices away from the motor.
2. See [Motor Load Force Ratings on page 7](#) to determine the radial and axial shaft load limitations.
3. Install the motor with the connector positioned beneath the motor housing. This position can provide better environmental protection for the connector.



BURN HAZARD: Outer surfaces of the motor can reach high temperatures, during motor operation. Take precautions to prevent accidental contact with hot surfaces. Consider motor surface temperature when selecting motor mating connections and cables.

4. Mount and align the motor.
5. Attach the motor cables that transmit power, brake, and feedback signals as described:
 - a. Carefully align the cable connector with the motor connector.



ATTENTION: Keyed connectors must be properly aligned. Do not use tools, or apply excessive force, when mating the cable to the motor connector. If the connectors do not go together with light hand force, realign and try again.

- b. Press rectangular connectors together on TLC-A046, TLC-A070, and TLC-A090 motors until the contacts are inserted and a click is heard.

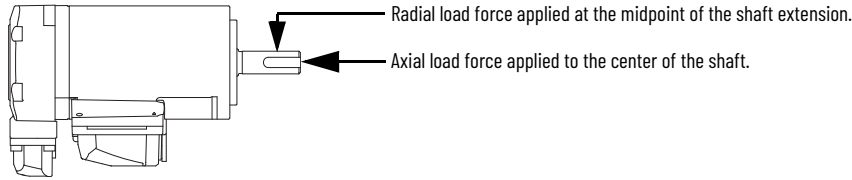


ATTENTION: The overall shield on the motor cable must be grounded to obtain an effective encoder signal. The encoder data signal is transmitted through an impedance-matched twisted-wire pair that requires effective shielding for optimum performance. Make sure there is an effective connection between the motor cable shield and the drive system ground.

Motor Load Force Ratings

Motors are capable of operating with a sustained shaft load. The location and direction of radial and axial load forces are shown in [Figure 4](#). See [Table 6](#) for maximum load rating values.

Figure 4 - Load Forces on Shaft



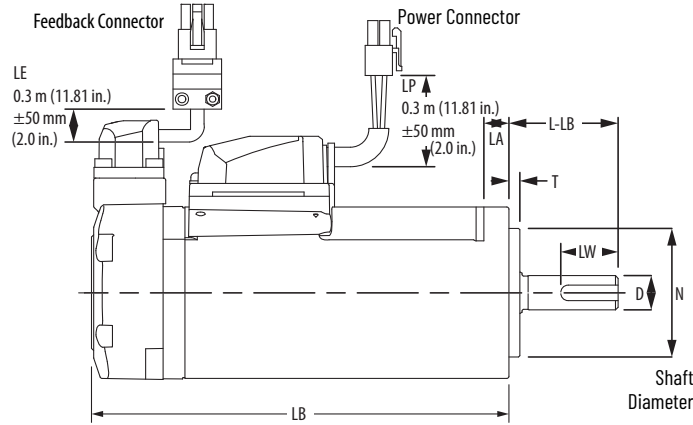
The following table represents 40,000-hour L_{10} bearing fatigue life at various loads and speeds. This 40,000-hour bearing life does not account for possible application-specific life reduction, such as bearing grease contamination from external sources.

Table 6 - Motor Load Force Rating at Maximum Speed of 6000 rpm

Motor Cat. No. ⁽¹⁾	Maximum Radial Load				Maximum Axial Load (with No Radial Load)				Axial Load (in combination with Maximum Radial Load)			
	(kgf)											
	1500 rpm	3000 rpm	4500 rpm	6000 rpm	1500 rpm	3000 rpm	4500 rpm	6000 rpm	1500 rpm	3000 rpm	4500 rpm	6000 rpm
TLC-A046010-NJA32Ax	9.2	7.3	6.4	5.8	7.6	5.6	4.7	4.2	5.6	4.1	3.5	3.1
TLC-A046010-NJA34Ax	10.6	8.4	7.4	6.7	7.6	5.6	4.7	4.2	6.3	4.6	3.9	3.4
TLC-A070020-NJA32Ax	19.4	15.4	13.4	12.2	15.4	11.4	9.5	8.4	8.7	6.4	5.4	4.8
TLC-A070020-NJA34Ax	24.8	19.6	17.2	15.6	15.4	11.4	9.5	8.4	11.1	8.2	6.9	6.1
TLC-A070040-NJA32Ax	24.8	19.7	17.2	15.6	15.4	11.4	9.5	8.4	11.1	8.2	6.9	6.1
TLC-A070040-NJA34Ax	26.2	20.8	18.1	16.5	15.4	11.4	9.5	8.4	11.8	8.7	7.3	6.5
TLC-A090075-NJA32Ax	34.1	27.1	23.7	21.5	20.4	15.1	12.6	11.1	13.0	9.6	8.0	7.1
TLC-A090075-NJA34Ax	38.8	30.8	26.9	24.5	20.4	15.1	12.6	11.1	15.1	11.2	9.4	8.3

(1) 1.0 kgf = 2.2 lbf or 9.8 N.

Motor Dimensions



Dimensions are in mm (in.)

Pilot Diameter Tolerances

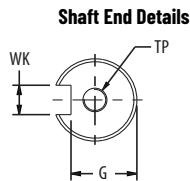
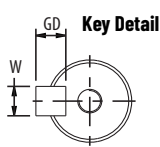
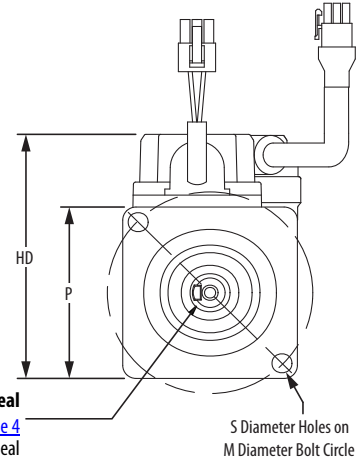
TLC-A046xxx Motors:
 $\varnothing$ 29.979...30.000 (1.180...1.181)
 TLC-A070xxx Motors:
 $\varnothing$ 49.975...50.000 (1.967...1.968)
 TLC-A090xxx Motors:
 $\varnothing$ 69.970...70.000 (2.754...2.755)

Shaft Diameter Tolerances

TLC-A046xxx Motors:
 $\varnothing$ 7.991...8.000 (0.3146...0.3149)
 TLC-A070xxx Motors:
 $\varnothing$ 13.989...14.000 (0.5507...0.5512)
 TLC-A090xxx Motors:
 $\varnothing$ 18.987...19.000 (0.7475...0.7480)

Optional Shaft Seal

Refer to [page 4](#)
 for motor shaft seal
 kit information.



Shaft and Pilot Tolerances	TLC-A046xxx	TLC-A070xxx	TLC-A090xxx
Shaft Runout (T.I.R.)	0.02 (0.0008)	0.02 (0.0008)	0.02 (0.0008)
Pilot Eccentricity (T.I.R.)	0.04 (0.0016)	0.04 (0.0016)	0.04 (0.0016)
Max Face Runout (T.I.R.)	0.04 (0.0016)	0.04 (0.0016)	0.04 (0.0016)
Shaft-end Threaded Hole (TP)	M3x0.5-6H, ∇ 6	M4x0.7-6H, ∇ 8	M6x1.0-6H, ∇ 10

Table 7 - Motor Dimensions

Motor Cat. No.	HD mm (in.)	T mm (in.)	LA mm (in.)	LB mm (in.)	L-LB ⁽¹⁾ mm (in.)	LW mm (in.)	D ⁽²⁾ mm (in.)	M mm (in.)	S mm (in.)	N ⁽²⁾ mm (in.)	P mm (in.)	G mm (in.)	GD mm (in.)	W mm (in.)	WK mm (in.)
TLC-A046010-NJA32A	60.0 (2.36)	2.5 ⁽³⁾ (0.10)	5.0 (0.20)	78.3 (3.08)	25.0 (0.98)	16.0 (0.63)	8.0 (0.31)	46.0 (1.81)	4.5 ⁽³⁾ (0.18)	30.0 (1.18)	40.0 (1.57)	6.2 (0.24)	3.0 (0.12)	3.0 ⁽⁴⁾ (0.12)	3.0 ⁽⁵⁾ (0.12)
TLC-A046010-NJA34A				112.4 (4.43)											
TLC-A070020-NJA32A	78.5 (3.09)	3.0 ⁽³⁾ (0.12)	7.5 (0.30)	73.2 (2.88)	30.0 (1.18)	20.0 (0.79)	14.0 (0.55)	70.0 (2.76)	5.5 ⁽⁶⁾ (0.22)	50.0 (1.97)	60.0 (2.36)	11.0 (0.43)	5.0 (0.20)	5.0 ⁽⁷⁾ (0.20)	5.0 ⁽⁷⁾ (0.20)
TLC-A070020-NJA34A				110.1 (4.33)											
TLC-A070040-NJA32A				91.7 (3.61)											
TLC-A070040-NJA34A				128.6 (5.06)											
TLC-A090075-NJA32A	98.5 (3.88)	3.0 ⁽⁸⁾ (0.12)	8.0 (0.31)	105.9 (4.17)	35.0 (1.38)	25.0 (0.98)	19.0 (0.75)	90.0 (3.54)	6.6 ⁽⁶⁾ (0.26)	70.0 (2.76)	80.0 (3.15)	15.5 (0.61)	6.0 (0.24)	6.0 ⁽⁷⁾ (0.24)	6.0 ⁽⁷⁾ (0.24)
TLC-A090075-NJA34A				145.5 (5.73)											

(1) Tolerance for this dimension is ± 0.50 mm (± 0.020 in.).

(2) See dimensions diagram for tolerances.

(3) Tolerance for this dimension is ± 0.10 mm (± 0.0039 in.).

(4) Tolerance for this dimension is -0, -0.025 mm (-0, -0.00098 in.).

(5) Tolerance for this dimension is -0.004, -0.029 mm (+0, -0.00142 in.).

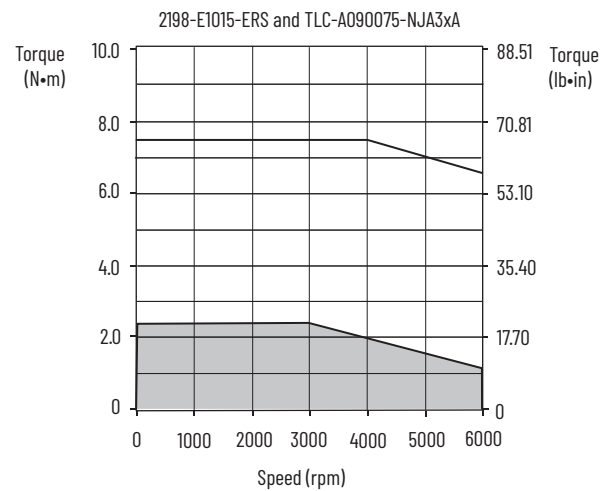
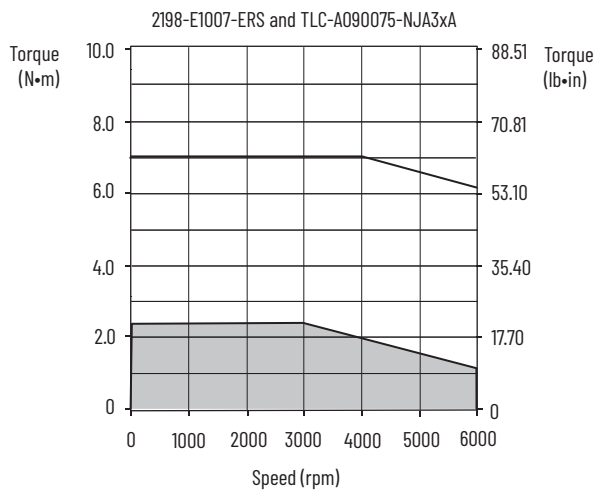
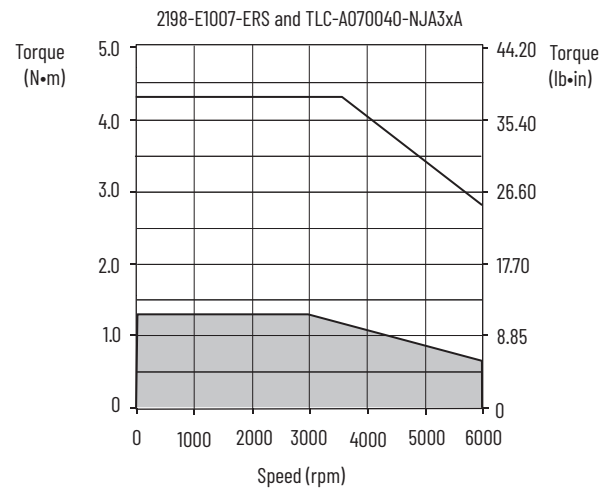
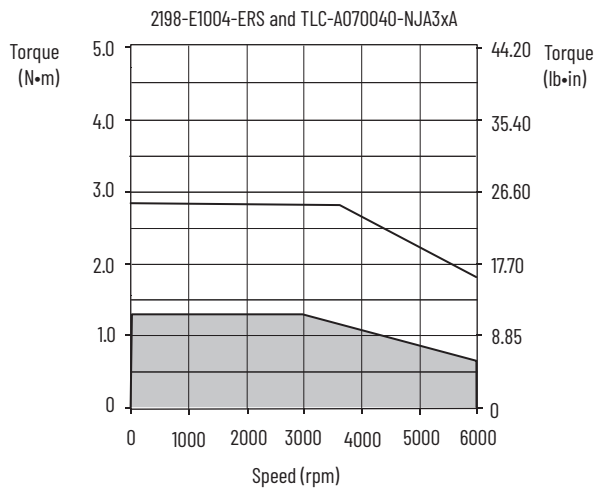
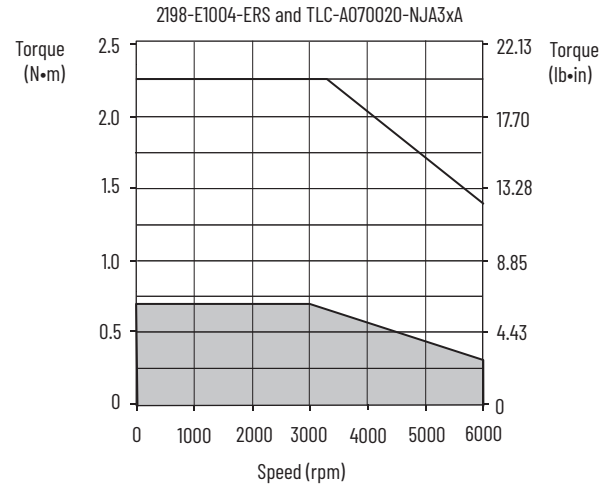
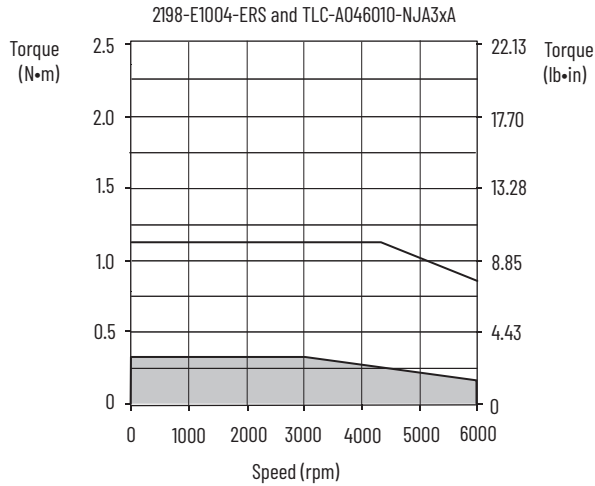
(6) Tolerance for this dimension is ± 0.20 mm (± 0.0079 in.).

(7) Tolerance for this dimension is -0, -0.030 mm (-0, -0.00118 in.).

(8) Tolerance for this dimension is ± 0.25 mm (± 0.0098 in.).

Motors are designed to metric dimensions. Inch dimensions are approximate conversions from millimeters. Dimensions without tolerances are for reference.

Torque Speed Curves



 = Intermittent operating region
 = Continuous operating region

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	rok.auto/support
Knowledgebase	Access Knowledgebase articles.	rok.auto/knowledgebase
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

Documentation Feedback

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Additional Resources

These documents contain information concerning related products from Rockwell Automation.

Resource	Description
Kinetix TLP Motors NEMA Transition Plate Kit, publication TLP-PC002	Provides instructions on how to install the NEMA transition plates for the motors.
Shaft Seal Kits for Kinetix TLC Servo Motors Installation Instructions, publication TLC-IN002	Provides shaft seal installation instructions for the Kinetix TLC servo motors.
Kinetix TLC Servo Motor, publication TLC-PC001	Provides standard warning, caution, and installation precautions.
2090-Series Kinetix TLP Cable Connector Kits, publication 2090-PC009	Lists catalog numbers and descriptions for the Kinetix 2090 connector kits.
2090-Series Kinetix TLP Power and Feedback Cables Installation Instructions, publication 2090-IN046	Provides cables, connectors, and pinout information for Kinetix 2090 cables.
Kinetix Rotary and Linear Motion Cable Specifications Technical Data, publication KNX-TD004	Product specifications and dimensions for Allen-Bradley servo drive accessories.
Kinetix 5100 Servo Drives User Manual, publication 2198-UM004	Information to install, configure, start, and troubleshoot a Kinetix 5100 servo drive system.
Kinetix 5100 Drive System Design Guide, publication KNX-RM011	Information on drive system components and accessory items for your Kinetix drive/motor combination.
System Design for Control of Electrical Noise Reference Manual, publication GMC-RM001	Information, examples, and techniques that are designed to minimize system failures that are caused by electrical noise.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.
Allen-Bradley Industrial Automation Glossary, publication AG-71	A glossary of industrial automation terms and abbreviations.

You can view or download publications at rok.auto/literature.

Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

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