

## ThermoFisher A255



**Manufacturer:** ThermoFisher  
**Model Number:** A255  
**Web Address:** [www.thermofisher.com](http://www.thermofisher.com)

The A255 five axis articulated arm is ideally suited for laboratory automation, educational and industrial users. Typical industrial applications include machine tending, adhesive dispensing and light material handling as well as general pick and place operations.

### Robotic Arm: Commands

- ▶ **Home( )** - Home the robotic arm.
- ▶ **Ready( )** - Moves the robotic arm to the ready position.
- ▶ **GripperClose( servoForce )** - Closes the gripper fingers.

servoForce	Integer	The percentage of the force applied when using a servo gripper. Range of values: <b>1</b> to <b>100</b> .
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- ▶ **GripperOpen( servoForce )** - Opens the gripper fingers.

servoForce	Integer	The percentage of the force applied when using a servo gripper. Range of values: <b>1</b> to <b>100</b> .
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- ▶ **Joint( joint, distance )** - Moves the specified joint by the specified number of units.

joint	Integer	Specifies the joint for the move. Range of values: <b>1</b> to <b>5</b> .
distance	Float	Extent of motion along the joint (in linear units) or around the joint (in degrees).

- ▶ **Jog( x, y, z )** - Moves the tool center point (TCP) by a cartesian (X,Y,Z) increment using joint-interpolated motion.

x	Float	Specifies the X axis for the move.
y	Float	Specifies the Y axis for the move.
z	Float	Specifies the Z axis for the move.

- ▶ **JogStraight( x, y, z )** - Moves the tool center point (TCP) by a cartesian (X,Y,Z) increment using straight-line motion.

x	Float	Specifies the X axis distance for the move.
y	Float	Specifies the Y axis distance for the move.
z	Float	Specifies the Z axis distance for the move.

▶ **Move( location )** - Moves the tool center point (TCP) to the specified location using joint-interpolated motion.

location	String	Target location for the move.
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▶ **MoveStraight( location )** - Moves the tool center point (TCP) to the specified location using straight-line motion.

location	String	Target location for the move.
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▶ **Appro( location, distance )** - Moves the robot to a position a specified distance away from the location using joint-interpolated motion.

location	String	Target location for the move.
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distance	Float	Specifies the distance for the move.
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▶ **ApproStraight( location, distance )** - Moves the robot to a position a specified distance away from the location using straight-line motion.

location	String	Target location for the move.
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distance	Float	Specifies the distance for the move.
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▶ **Depart( distance )** - Moves the robot away from its current location using joint-interpolated motion.

distance	Float	Specifies the distance for the move.
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▶ **DepartStraight( distance )** - Moves the robot away from its current location using straight-line motion.

distance	Float	Specifies the distance for the move.
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▶ **X( x )** - Moves the tool center point (TCP) by an increment in X direction using joint-interpolated motion.

x	Float	Specifies the X axis distance for the move.
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▶ **XStraigth( x )** - Moves the tool center point (TCP) by an increment in X direction using straight-line motion.

x	Float	Specifies the X axis distance for the move.
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▶ **Y( y )** - Moves the tool center point (TCP) by an increment in Y direction using joint-interpolated motion.

y	Float	Specifies the Y axis distance for the move.
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▶ **YStraight( y )** - Moves the tool center point (TCP) by an increment in Y direction using straight-line motion.

y	Float	Specifies the Y axis distance for the move.
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▶ **Z( z )** - Moves the tool center point (TCP) by an increment in Z direction using joint-interpolated motion.

z	Float	Specifies the Z axis distance for the move.
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▶ **ZStraight( z )** - Moves the tool center point (TCP) by an increment in Z direction using straight-line motion.

z	Float	Specifies the Z axis distance for the move.
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▶ **SetSpeed( speed )** - Set speed of robot motion.

speed	Integer	Percentage value for the arm speed. Range of values: <b>1</b> to <b>150</b> .
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▶ **Finish( )** - Waits for the arm to finish moving.

▶ **Here( locationName )** - Define a location as the current robot position.

locationName	String	Location name for the current position.
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▶ **ListLocations( )** - List all locations stored in memory.

▶ **DeleteLocation( locationName )** - Delete a specified location stored in memory.

locationName	String	Name of the location to delete.
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## Robotic Arm: Errors

🔥 **Error( )** - Fatal or non-fatal robotic arm error.

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