





# ELECTRIC PARALLEL GRIPPERS

## Electric Parallel Grippers | Product Overview

Model		Stroke mm [in]	Grip Force N [lbs]	Operating Environment	Special Features	Page GR-CRP-#
eRDH		4-16 [0.16-0.63]	220-1800 [50-405]	Clean Room General Industrial	Configurable ID/OD, force and speed. Integrated sensing. Onboard controls. <b>DIRECTCONNECT</b>	3
DPE 400		10-20 [0.39-0.78]	445-1334 [100-300]	IP 50 Clean Room Class 100, ISO 5, General Industrial	Adjustable force, discrete on/off open and close control. Onboard controls. <b>DIRECTCONNECT</b>	13
DPE 200		25 [0.98]	111 [25]	IP54 Clean Room Class 1000, ISO 6 General Industrial	Discrete on/off open and close control. Sealed design. Multiple sensor positions. Onboard controls. <b>DIRECTCONNECT</b>	15
RPE		4 [0.16]	5 [1.1]	IP54 Clean Room Class 10, ISO 4 using Scavenge Port, General Industrial	Discrete on/off 50ms pulse open and close control. Small parts handling. High speed.	17

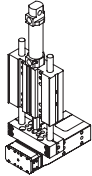
# ELECTRIC PARALLEL GRIPPERS

## Electric Parallel Grippers | DIRECTCONNECT™ Modular Connectivity Chart

### Modular DIRECTCONNECT Mounting Style Examples:

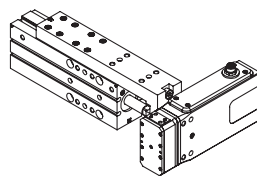
Products can be mounted in multiple positions. Refer to datasheet for complete info.

#### Slide to Gripper



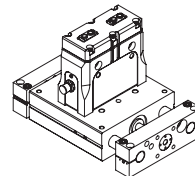
DLT Thruster Slide to  
DPE-200 Electric Gripper

#### Slide to Gripper



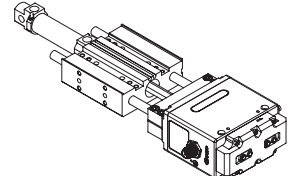
DLM Thruster Slide to  
DPE-200 Electric Gripper

#### Slide to Gripper



DLB Base Slide to  
DPE-400 Electric Gripper

#### Slide to Gripper



DLT Thruster Slide to  
eRDH Electric Gripper

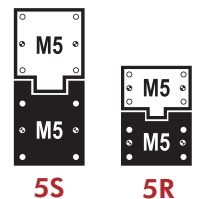
# DIRECTCONNECT™

## Mounting Compatibility Chart

DESTACO's DIRECTCONNECT™ technology, allows all components of the system—grippers and slides—to be mounted together directly. Look for matching icons on product datasheets for mounting compatibility.

**Note:** The numbers in the cell represent the metric screw size and basic mounting pattern.

S=Square, R=Rectangle. ie; 5S = M5 Screw with square mounting pattern.



Catalog Models		2 Jaw Electric Parallel Grippers			
		eRDH-1	eRDH-2,3	DPE-200	DPE-400
Base Slides	DLB-06,08	3R			
	DLB-10,12,16		5R	5R	
	DLB-20,25				10R
Thruster Slides	DLT-06,08	3R			
	DLT-10,12,16	3R	5R	5R	
	DLT-20,25		5R	5R	10R
	DLM-07	3R			
	DLM-9,12	3R	5R	5R	

# eRDH SERIES

## Configurable Electric Parallel Grippers | Features and Benefits | How To Order

### Features:

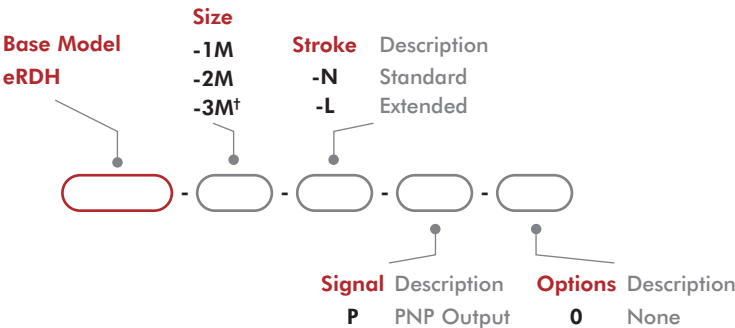
- Strokes up to 16mm
- Grip force up to 1250 N
- Finger lengths up to 120mm
- Intuitive interface for fast parameter adjustment
- Integrated smart electronics
- No software or programming required
- Integrated keypad functions include:
  - 4 levels of grip force adjustment
  - 4 integrated teachable grip sensing locations
  - 2 levels of speed adjustment
  - ID/OD configurable
  - Operator keypad lockout
  - LED indicators for configuration and fault detection
- Self-locking: grip force maintained upon power loss
- Enhanced built-in auto recovery fault detection
- Fault detection output status signals to PLC
- Accepts standard PLC/Robot discrete I/O signal commands
- Ultra-low power consumption for battery powered applications
- Single cable, M12, 8-pin standard connector
- Quiet operation



### Applications:

- Mobile Robotic Platforms
- Warehousing and Packaging
- Assembly manufacturing

## How To Order



†Contact DESTACO for availability.

## Accessories

eRDH Accessories	Models	Part Number	Qty
Keypad Cover Kit	All Models	ELEC-01-PC-CLR	1
Cable, M12, 8 PIN Connector, 5m, Shielded (Straight)	All Models	CABL-064	1
Cable, M12, 8 PIN Connector, 5m, Shielded (Right Angle)	All Models	CABL-065	1

\*Sensor and cable sold separately.

## Configurable Electric Parallel Grippers | Technical Specifications

Specifications	Units	-1-N	-1-L	-2-N	-2-L	-3-N†	-3-L†
Total Stroke	mm [in]	4 [0.16]	8 [0.32]	6 [0.24]	12 [0.47]	8 [0.32]	16 [0.63]
Total Rated Grip Force (Min)**	N [lbf]	500 [112]	220 [50]	960 [215]	420 [95]	1250 [281]	920 [207]
Power Down Grip Force (continuous)		100% via Self-locking					
Max. Permissible Finger Length L**	mm [in]	75 [3.0]		80 [3.25]		120 [4.75]	
Accuracy	mm [in]	±0.04 [±0.002]					
Repeatability	mm [in]	±0.02 [±0.001]					
Min. Actuation Time @ 2mm from Home Position***	s	0.35	0.35	0.45	0.35	0.75	0.75
Max. Actuation Time to Longest Usable Stroke***	s	0.45	0.45	0.6	0.6	0.75	0.75
Jaw Velocity (Fast Speed Setting)	mm/s [in/s]	4 [0.16]	8 [0.31]	5 [0.20]	10 [0.39]	3.6 [0.14]	7.2 [0.28]
Jaw Velocity (Slow Speed Setting)	mm/s [in/s]	2.5 [0.1]	5.5 [0.22]	3 [0.12]	6 [0.24]	6 [0.94]	12 [0.47]
Max. Cycle Rate (at Min./Max. Stroke)							
@20° C	cycles/min	85	120	66	100		
@30° C	cycles/min	55	90/75	55/45	100/50		
@40° C	cycles/min	25/25	50/30	25/20	45/30		
@45° C	cycles/min	12/12	20/12	12/5	20/15		
Weight	kg [lb]	0.7 [1.54]		1.1 [2.44]		2.3 [5.1]	
Environmental							
Noise Emission	dB(A)	<60 normal operation					
IP Protection Class, Standard		IP54 (Pending)					
Cleanroom Class, Standard		Consult DESTACO					
Operating Environment		Sealed Gripper Design					
Operating Temperature	°C [°F]	0° to 50°C [32° to 122°F] Derated*					
Electrical							
Connector		M12, 8-Pin, A-Code, Pin Receptacle					
Gripper Actuator Electronics		Onboard Integrated Controls					
Nominal Voltage	V DC	24 +/- 10%					
Power Management		See Page 14					
Open and Close Inputs	V DC	2 Discrete Inputs, 24V@5mA Active High >16.8V, Low <7.2V					
4 Point Sensor Feedback Outputs	V DC	4 Discrete Outputs, 24V@80mA Max. Per Output					
CE Testing Standard		EN/IEC 61000-6-4, EN/IEC 61000-6-2					
Certifications		CE, REACH, RoHS					

\*Duty cycle derated at higher ambient temperatures.

\*\*See grip force charts, Total Rated Grip Force occurs at each sensor teach location. Grip force remains minimal outside of sensor position locations.

\*\*\*See Teaching Sensor Positions Diagram

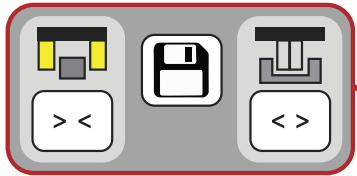
†Contact DESTACO for availability.

# eRDH SERIES

## Configurable Electric Parallel Grippers | Functions and Controls

### Grip Mode and Local Control

External Grip      Internal Grip



Select between two grip modes or use local control actuation for easy commissioning.

### Speed Control

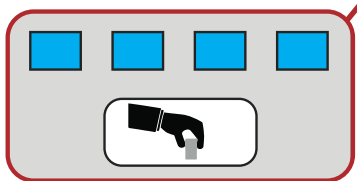
Slow      Fast



Quickly change the jaw open/close actuation speed.

### Grip Force Control

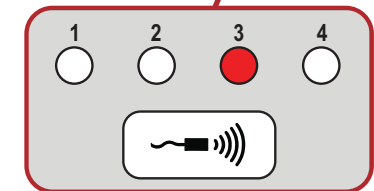
Four levels



Easily select 1 of 4 force settings via keypad interface.

### Save and Lockout

Save configuration changes or engage keypad lockout to prevent tampering.



### Integrated Position Sensing

Four teachable grip positions.



### Electrical Connector

M12, 8-Pin, A-Code, Pin Receptacle

Pin #	Color Code	Signal Description
1	WHITE	IN 1 OPEN: 24VDC**
2	BROWN	+24 VDC SUPPLY
3	GREEN	IN 2 CLOSE: 24VDC**
4*	YELLOW	SENSOR OUT 1
5*	GRAY	SENSOR OUT 2
6*	PINK	SENSOR OUT 3
7	BLUE	0 VDC
8*	RED	SENSOR OUT 4
SHELL	SHIELD	SHIELDED GROUND

\*Applying power to pins 4,5,6 & 8 can damage gripper.  
\*\* 24VDC PLC Open & Close Control Signals

### Application Notes:

- For highest cycle rate, design fingers to grip part at the minimum sensor teach distance from the home position
- Part tolerance must be within  $\pm 0.4\text{mm}$
- Grip force is independent of the speed setting
- Full grip force is only applied at taught sensor locations for optimized power management
- Extremely low power consumption for mobile applications
- Gripper not intended for applications that require precision force adjustment

### Power Management

Electrical	Units	1M-N	1M-L	2M-N	2M-L	3M-N	3M-L
Idle Current at Grip	mA	25	25	25	25	25	25
Nominal Current During Stroke	mA	500	300	350	300	625	525
Max. Current Developing Grip Force	mA	1300	800	1100	950	1650	1850
Average Power @ Max. Stroke	W	15	11	11	12	15	12

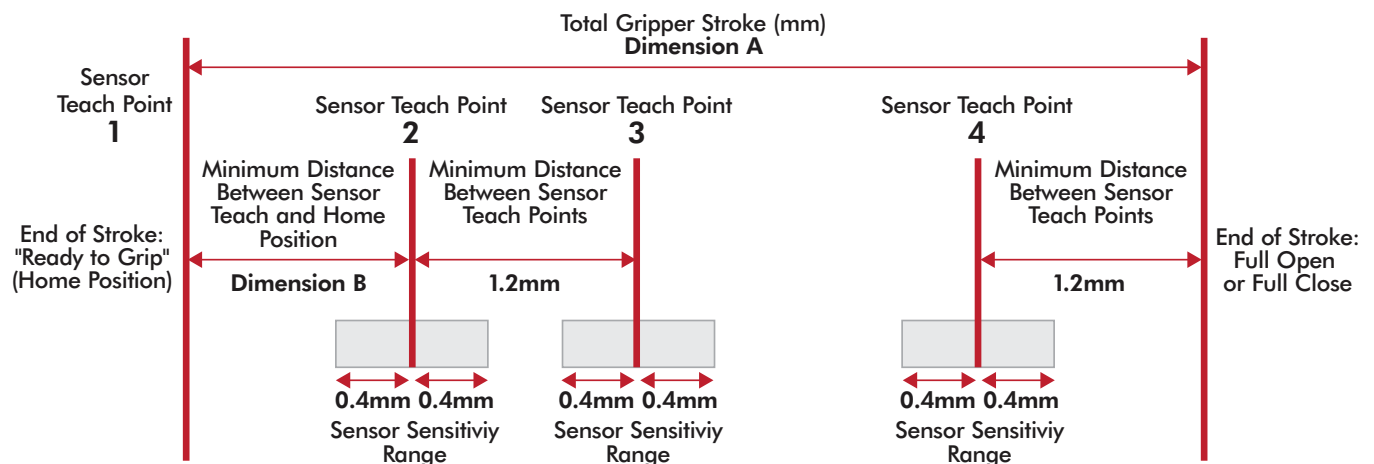
### Gripper Power Management Operation:

- Gripper remains at idle current when jaws are not in motion
- Nominal current is used during stroke travel to a sensor position (grip a part)
- If a part is detected at a sensor position, max. current is applied very briefly to generate full grip force
- eRDH returns to idle current once grip force is generated due to self-lock grip feature
- Reverse order above to release a gripped part

### Sensor Compliance

Sensing Information	Units	1M-N	1M-L	2M-N	2M-L	3M-N	3M-L
Total Gripper Stroke (Dimension A)	mm	4	8	6	12	8	16
Minimum Distance Between Home and a Sensor Teach Position (Dimension B)*	mm	0.7	1.5	0.7	1.5	0.7	1.5

\*External Gripping: Home is at gripper full open. Internal Gripping: Home is at gripper full closed.

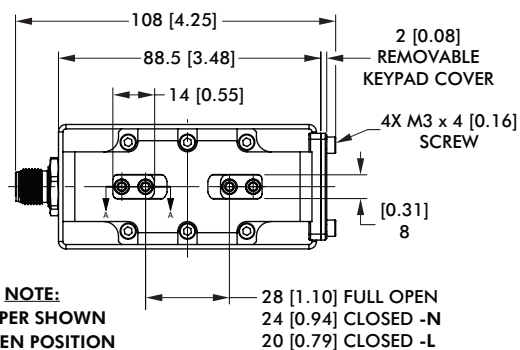
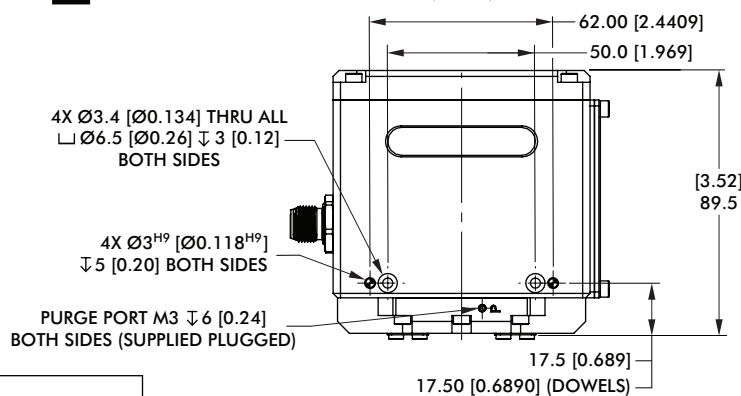
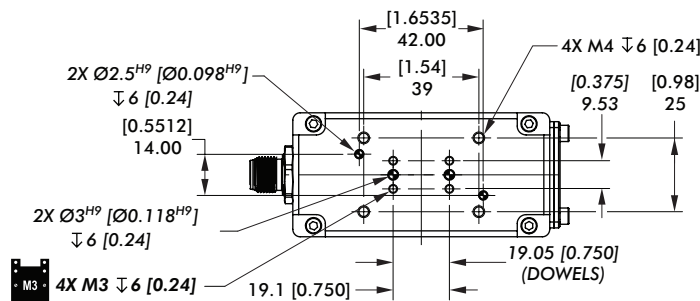
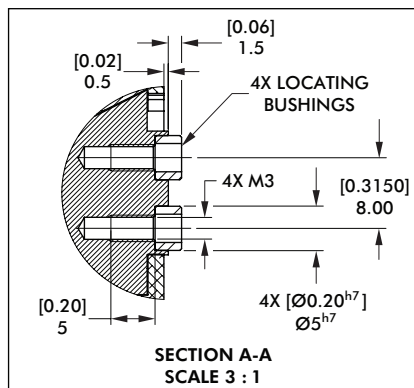
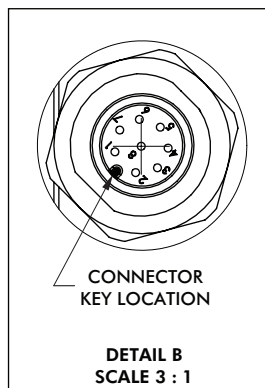
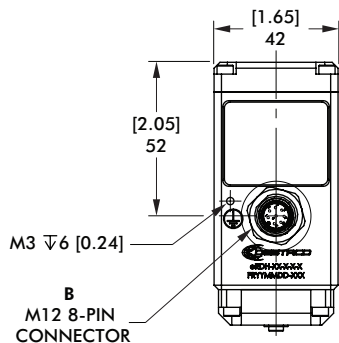


### Sensor Settings:

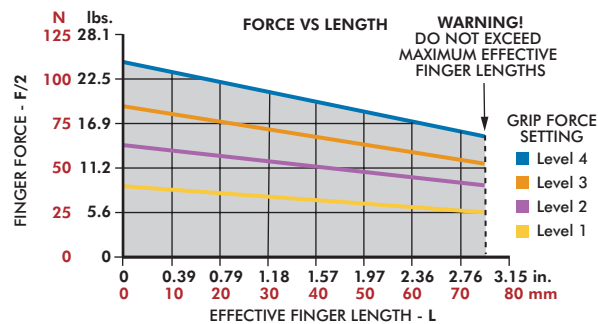
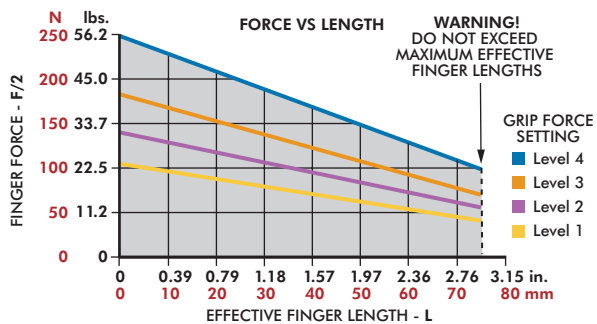
- Sensor output signal is HIGH when gripper jaws grip within +/- 0.4mm of a sensor teach point
- Distance required between sensor settings is 1.2mm except for the home position (Dimension B)
- All four sensor positions can be set anywhere along the gripper stroke if the required distance separation is maintained—eRDH-1M-N has three sensor positions possible due to stroke limitation
- Sensor settings are performed using the integrated keypad which can include both the full open and full closed positions
- See manual for complete sensor setting capabilities

**DIRECT<sup>+</sup>CONNECT<sup>TM</sup>**

## Configurable Electric Parallel Grippers | Dimensions and Technical Specifications



## Loading Information



eRDH-1M-N	Static†
Maximum Tensile T	594 N [134 lbs]
Maximum Compressive C	779 N [175 lbs]
Maximum Moment $M_x$	18 Nm [159 in-lbs]
Maximum Moment $M_y$	23 Nm [204 in-lbs]
Maximum Moment $M_z$	14 Nm [124 in-lbs]

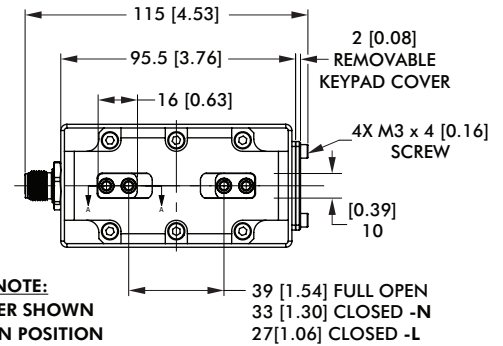
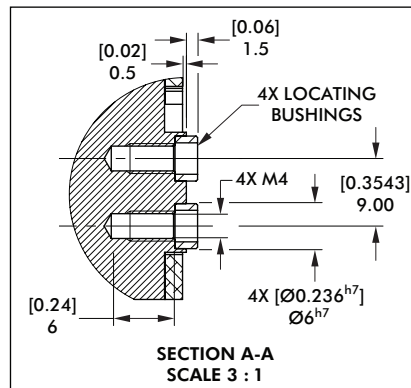
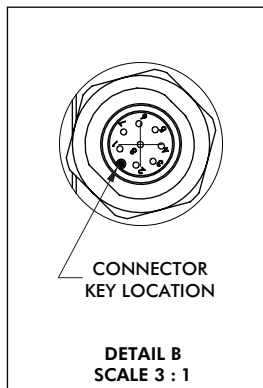
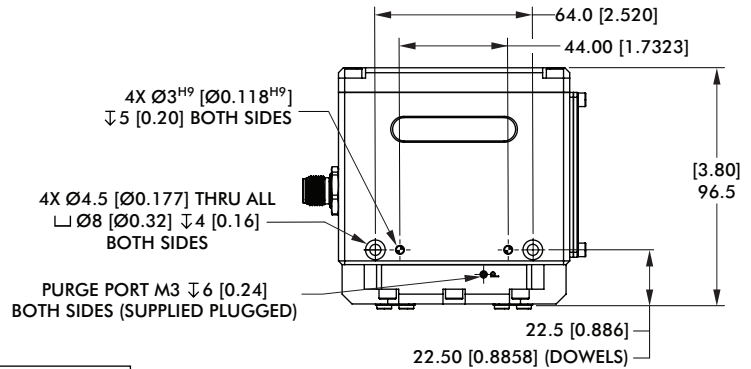
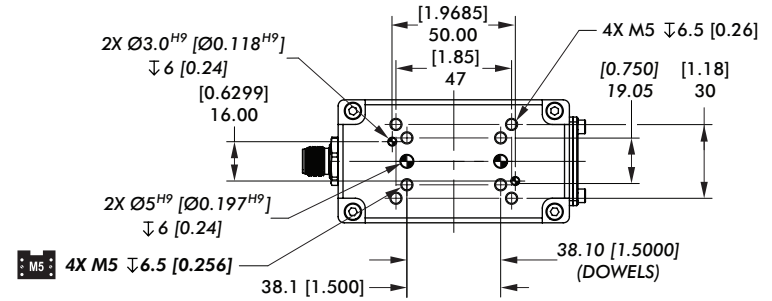
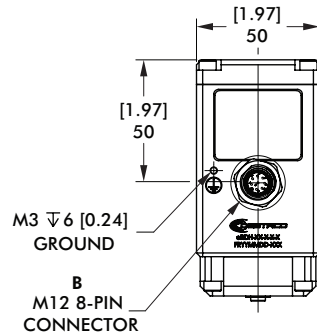
<sup>†</sup>Capacities are per set of jaws and are not simultaneous

eRDH-1M-L	Static <sup>†</sup>
Maximum Tensile T	540 N [121 lbs]
Maximum Compressive C	708 N [159 lbs]
Maximum Moment $M_x$	16 Nm [142 in-lbs]
Maximum Moment $M_y$	19 Nm [168 in-lbs]
Maximum Moment $M_z$	12 Nm [106 in-lbs]

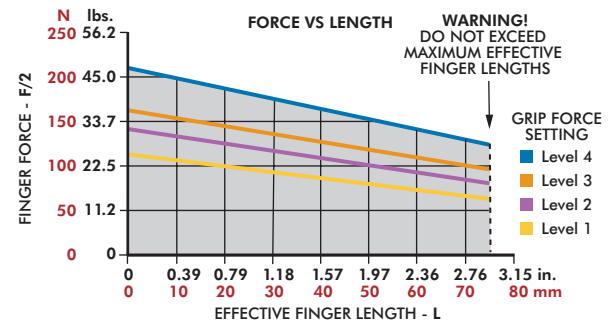
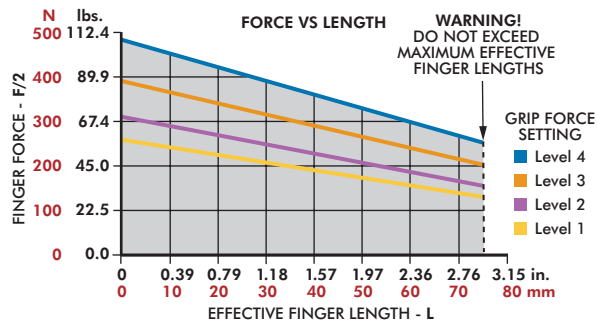
<sup>†</sup>Capacities are per set of jaws and are not simultaneous



## Configurable Electric Parallel Grippers | Dimensions and Technical Specifications



## Loading Information



eRDH-2M-N	Static <sup>†</sup>
Maximum Tensile T	849 N [191 lbs]
Maximum Compressive C	1103 N [248 lbs]
Maximum Moment $M_x$	36 Nm [319 in-lbs]
Maximum Moment $M_y$	51 Nm [451 in-lbs]
Maximum Moment $M_z$	32 Nm [283 in-lbs]

<sup>†</sup>Capacities are per set of jaws and are not simultaneous

eRDH-2M-L	Static <sup>†</sup>
Maximum Tensile T	764 N [172 lbs]
Maximum Compressive C	993 N [223 lbs]
Maximum Moment $M_x$	32 Nm [283 in-lbs]
Maximum Moment $M_y$	41 Nm [363 in-lbs]
Maximum Moment $M_z$	26 Nm [230 in-lbs]

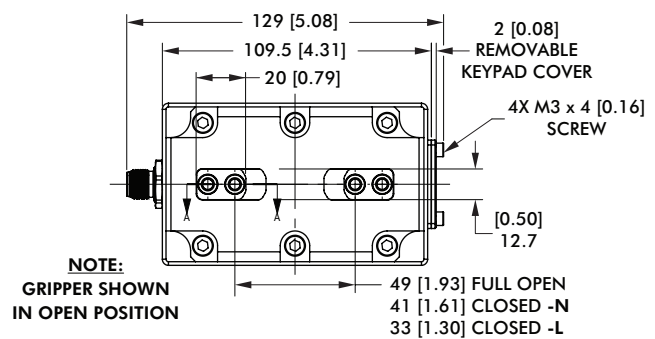
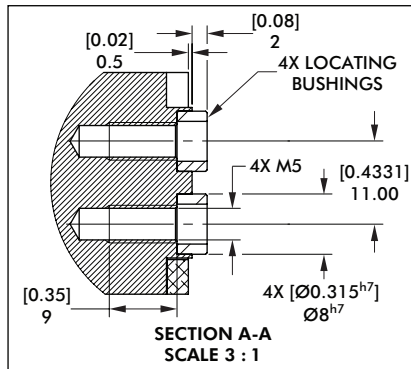
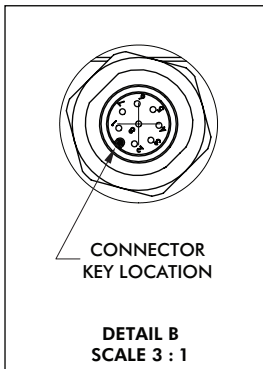
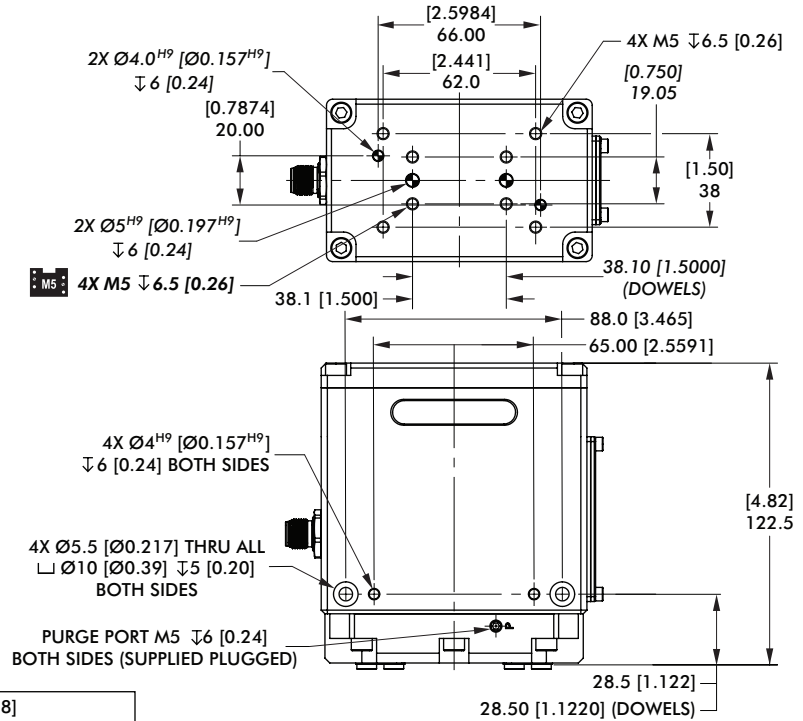
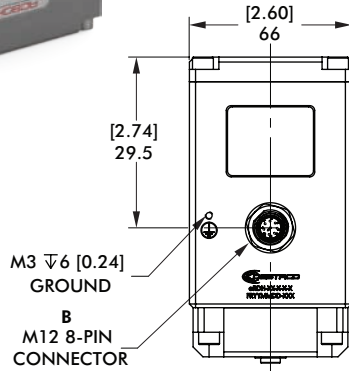
<sup>†</sup>Capacities are per set of jaws and are not simultaneous



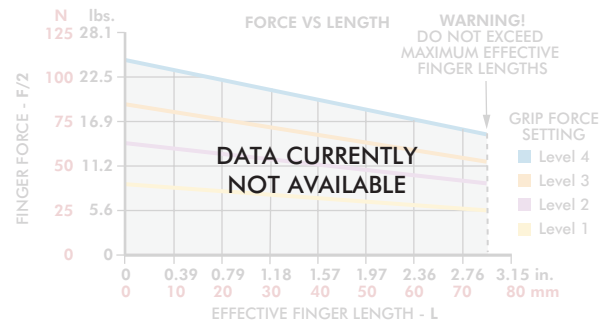
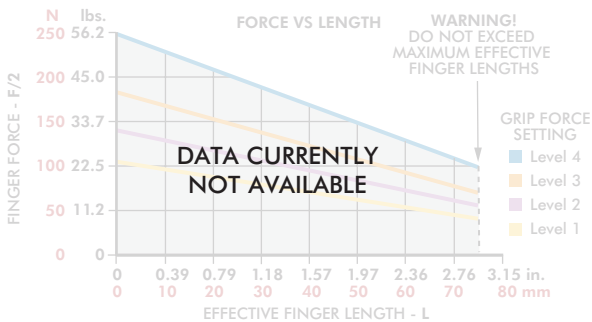
# eRDH-3M-N, -3M-L



## Configurable Electric Parallel Grippers | Dimensions and Technical Specifications



## Loading Information



eRDH-3M-N	Static <sup>†</sup>
Maximum Tensile T	1284 N [289 lbs]
Maximum Compressive C	1665 N [374 lbs]
Maximum Moment $M_x$	58 Nm [513 in-lbs]
Maximum Moment $M_y$	83 Nm [735 in-lbs]
Maximum Moment $M_z$	54 Nm [478 in-lbs]

<sup>†</sup>Capacities are per set of jaws and are not simultaneous

eRDH-3M-L	Static <sup>†</sup>
Maximum Tensile T	1146 N [258 lbs]
Maximum Compressive C	1485 N [334 lbs]
Maximum Moment $M_x$	52 Nm [460 in-lbs]
Maximum Moment $M_y$	66 Nm [584 in-lbs]
Maximum Moment $M_z$	43 Nm [381 in-lbs]

<sup>†</sup>Capacities are per set of jaws and are not simultaneous

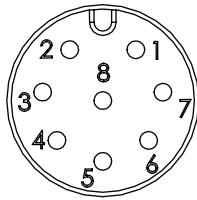
### Keypad Protection Kit



Part #	Item	Description	Quantity
ELEC-01-PC-CLR	1	Keypad Cover; Polycarbonate	1
	2	O-Ring Buna-N	1
	3	FHSCS M2 X 6mm	4
	4	Wrench, Allen 2.5mm Hex	1

Note: Keypad Cover Kit is included with gripper. Compatible with all gripper sizes.

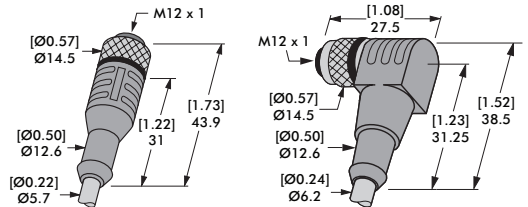
### Sensor Accessories - 5M Cordset



Pin #	Color Code	Signal Description
1	WHITE	IN 1 OPEN: 24VDC**
2	BROWN	+24 VDC SUPPLY
3	GREEN	IN 2 CLOSE: 24VDC**
4*	YELLOW	SENSOR OUT 1
5*	GRAY	SENSOR OUT 2
6*	PINK	SENSOR OUT 3
7	BLUE	0 VDC
8*	RED	SENSOR OUT 4
SHELL	SHIELD	SHIELDED GROUND

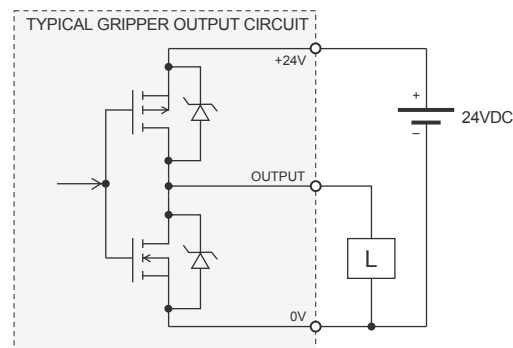
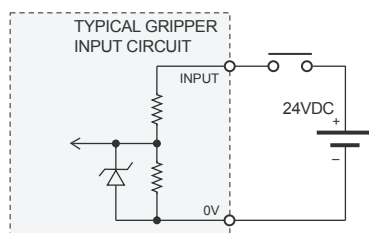
\*Applying power to pins 4,5,6 & 8 can damage gripper.

\*\* 24VDC PLC Open & Close Control Signals



Specifications	CABL-064	CABL-065
Connector Style	M12, 8-Pin, A-Code, Socket Plug	
Connector Socket	Straight	90°
Termination	Wire Leads	
Cable Diameter	6 mm	
Cable Length	5 m	
Connector Locking System	Threaded, Coupling Nut	
Housing Material	Polyurethane (PUR)	
Ingress Protection	Dust Tight, Waterproof	
Current Rating	2.0 Amps	
Voltage Rating	30V	
Operating Temperature	-25°C ~ 90°C	
EMC Compliance	Shielded	

### Electrical Connection Circuit



# DPE/RPE SERIES

Electric Parallel Grippers | Features and Benefits

## Plug-and-Play e-Grippers

### Quick Installation

Unit installs quickly using one cable for both power and operation. DIRECTCONNECT™ feature on DPE units allows mounting to rotaries and slides without adapter plates.

### Light Switch Operation

No tuning or programming required. Grippers use discrete PLC outputs to control open and close operation. Grippers are powered by 24VDC.

### Zero Maintenance

Zero maintenance required for standard environments. Units are internally lubricated and sealed. No air lines, valves, tubing, filters or compressor to interfere with high reliable operations.

### 100% Duty Cycle Operation for Durability

DPE Series supports continuous open/close command signal operation. Tight mechanical tolerances minimize wear leading to high life cycle operations.



RPE 100  
5N [1 lbf]

DPE 200  
111N [25 lbf]

DPE 400  
1334 N [300 lbf]

## DESTACO vs. Others

Features	DESTACO Light Switch Operation	Competing Units
Direct Mechanical Drive <sup>1</sup>	✓	
Integrated Motor Controls <sup>2</sup>	✓	
Zero Maintenance <sup>3</sup>	✓	
DIRECTCONNECT™ <sup>4</sup>	✓	
Programming Software <sup>5</sup>		✓
Clean Room Certified	✓	✓
Zero Backlash/Side Play	✓	

- 1 DESTACO uses a direct mechanical linkage to drive the jaws and eliminate finger play, as opposed to a belt drive design.
- 2 Integrated electronics decreases cabling and space requirements, while increasing overall system integrity.
- 3 Competing units recommend lubrication maintenance intervals.
- 4 DIRECTCONNECT™ allows units to be mounted to rotaries or slides without adapter plates .
- 5 Light Switch operation products require no software.

# DPE/RPE SERIES

## Electric Parallel Grippers | Compare the eGripper Series

Features	DPE-400	DPE-200	RPE-100
Grip Force Range	445-1334N [100-300 lbf]	111N [25 lbf]	5N [1.1 lbf]
Stroke Range	10mm [0.39 in] or 20mm [0.78 in]	25mm [0.98 in]	4mm [0.16 in]
Actuation (open/close)	800 ms	250 ms	100 ms
Accuracy	±0.05mm [0.002 in]	±0.05mm [0.002 in]	±0.05mm [0.002 in]
Jaw Drive Mechanism	Lead Screw/Wedge	Rack-and-Pinion	Solenoid Plunger
Adjustable Grip Force	☑		
100% Duty Cycle	☑	☑	
DIRECTCONNECT™ Feature	☑	☑	
FailSafe Operation			☑
Internal Sensing	☑		
IP Rating	IP50	IP54	IP54

### Clean Room Rated:

DESTACO's electric products are ideal for food, medical and clean room applications. Electric products are internally lubricated and sealed, per the chart below:

Clean Room Rating	DPE-400	DPE-200	RPE-100
	100	1000	100
Lubricant	Magnalube	Krytox	Krytox

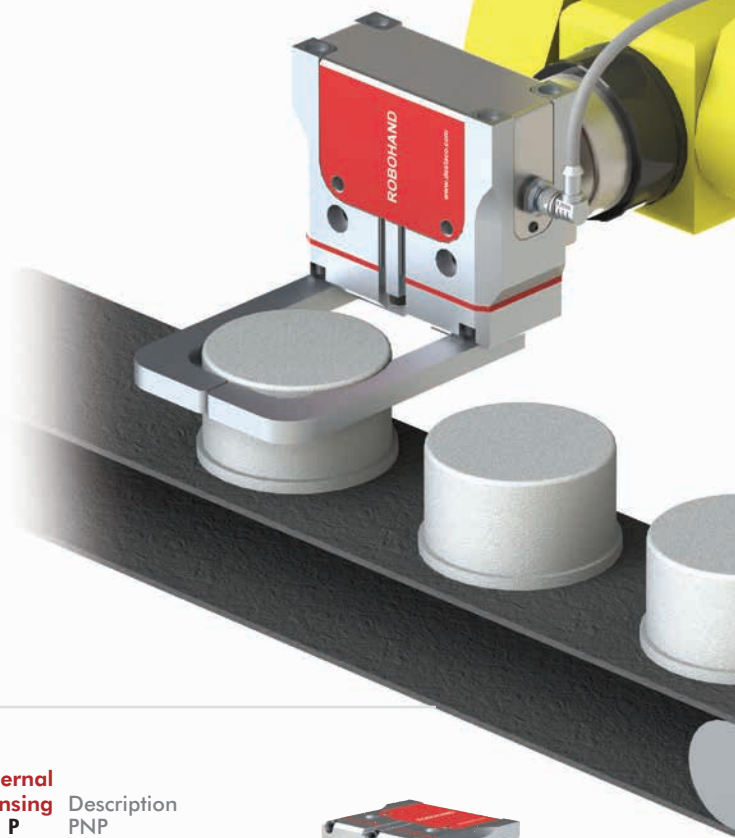
Contact DESTACO for a full range of clean room certified products at [solutions@destaco.com](mailto:solutions@destaco.com)

# DPE-400 HEAVY-DUTY

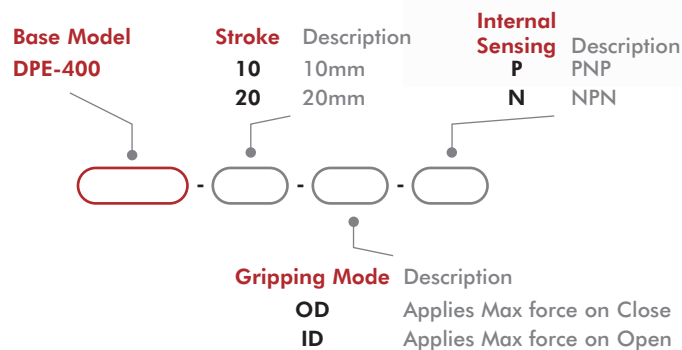
## Electric Parallel Grippers | Features and Benefits | Technical Specifications

### Features:

- Two stroke ranges from 0 to 10mm and 0 to 20mm
- Grip Force adjust-ability from 100% to 50% controlled from the 0 to 5VDC analog input
- Fully integrated electronics, no programming or software  
Operates from PLC discrete open/close commands
- Reverse polarity protection to protect from application mis-wiring
- DIRECTCONNECT™ mounting to rotaries and slides without requiring adapter plates
- Open and close sensing via built-in motor feedback signal
- Clean room 100 rated



### How To Order



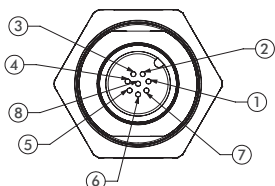
### Accessories

Power and Sensor Accessories	Part Number
PNP Magneto-Resistive Position Sensor	OHSP-017
NPN Magneto-Resistive Position Sensor	OHSN-017
Quick Disconnect Sensor Cable, 5m long	CABL-013
8-wire Power and Signal Cable, 5m long with Straight M12 Connector	CABL-052
8-wire Power and Signal Cable, 5m long with 90° M12 Connector	CABL-053

\*Sensor and cable sold separately.

### Electrical Interface: Pin Out

(Looking into the head of the connector on gripper)

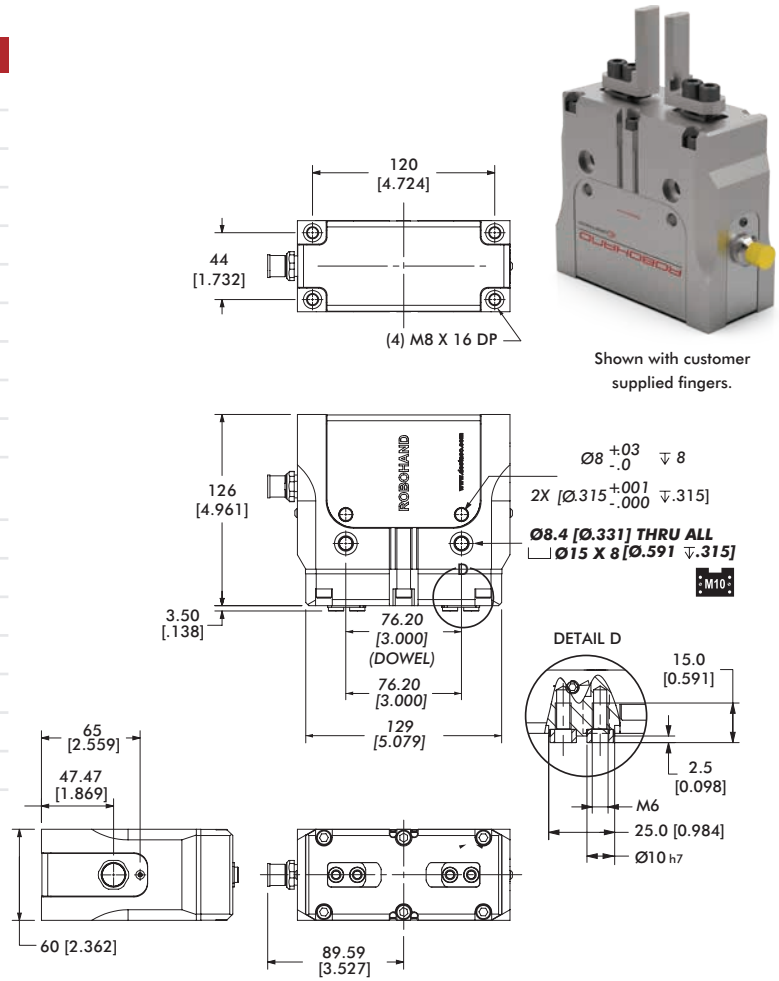
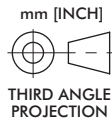


Voltage shown is applied to the FORCE pin, which accepts a 0-5V analog signal.

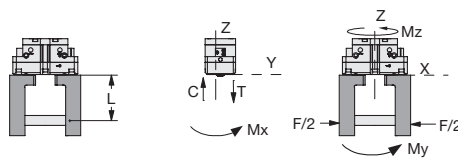
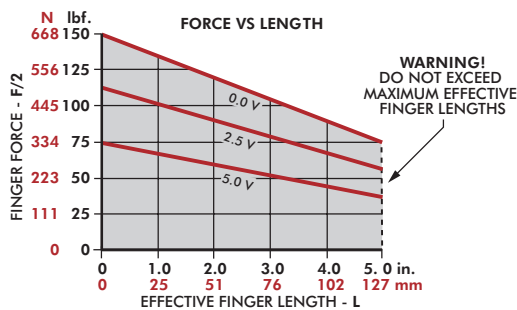
Pin #	Color	Signal	Description	Current
1	White	Force	0-5 VDC (Analog)	5mA
2	Brown	+24V	Motor Power	2A (max), 0.4 A (avg)
3	Green	Open	24 VDC Active (Inputs)	10mA
4	Yellow	Open Sense	NPN/PNP (Outputs)	300mA (max)
5	Gray	Close	24 VDC Active (Inputs)	10mA
6	Pink	Close Sense	NPN/PNP (Outputs)	300mA (max)
7	Blue	Ground	Motor Ground	2A (max),
8	Red	I/O Power	24 VDC (PNP Outputs Only)	300mA (max)

## Electric Parallel Grippers | Dimensions and Technical Specifications

Specifications	Units	DPE-400
Total Rated Grip Force:		
DPE-400-10	N [lbf]	667-1334 [150-300]
DPE-400-20	N [lbf]	445-890 [100-200]
Total Stroke:		
DPE-400-10	mm [in]	10 [0.39]
DPE-400-20	mm [in]	20 [0.78]
Repeatability	mm [in]	±0.025 [0.001]
Accuracy	mm [in]	±0.05 [0.002]
Actuation Time	ms	800
Temperature Range	°C [°F]	0~55° [32°~131°]
Power Requirements @ 100% Duty Cycle	watts	10
Voltage	VDC	24
DC Current (Peak)	amps	2 (max)
DC Current: (Continuous)	amps	0.4
Ingress Protection Class (IP)		IP50
Clean Room		100 (MagnaLube)
Weight	kg [lbs]	2.52 [5.56]
Maximum Finger Length	mm [in]	125 [4.92]
Durability	cycles	3 Million

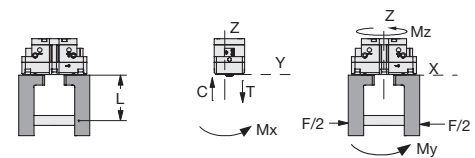
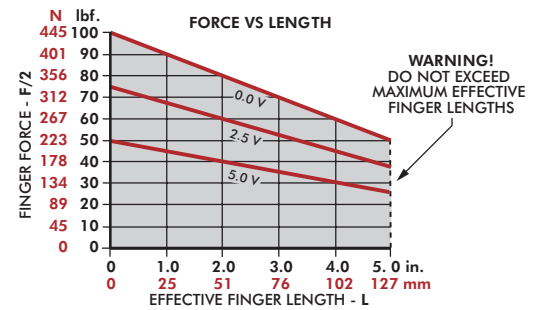


## Loading Information



DPE-400-10	Static	Dynamic
Maximum Tensile T	1564 N [352 lbs]	259 N [58 lbs]
Maximum Compressive C	2070 N [465 lbs]	259 N [58 lbs]
Maximum Moment $M_x$	76 Nm [673 in-lbs]	10 Nm [89 in-lbs]
Maximum Moment $M_y$	106 Nm [938 in-lbs]	14 Nm [124 in-lbs]
Maximum Moment $M_z$	70 Nm [620 in-lbs]	14 Nm [124 in-lbs]

\*Capacities are per set of jaws and are not simultaneous



DPE-400-20	Static	Dynamic
Maximum Tensile T	1394 N [313 lbs]	168 N [38 lbs]
Maximum Compressive C	1845 N [415 lbs]	168 N [38 lbs]
Maximum Moment $M_x$	68 Nm [602 in-lbs]	6 Nm [53 in-lbs]
Maximum Moment $M_y$	84 Nm [743 in-lbs]	8 Nm [71 in-lbs]
Maximum Moment $M_z$	56 Nm [496 in-lbs]	8 Nm [71 in-lbs]

\*Capacities are per set of jaws and are not simultaneous

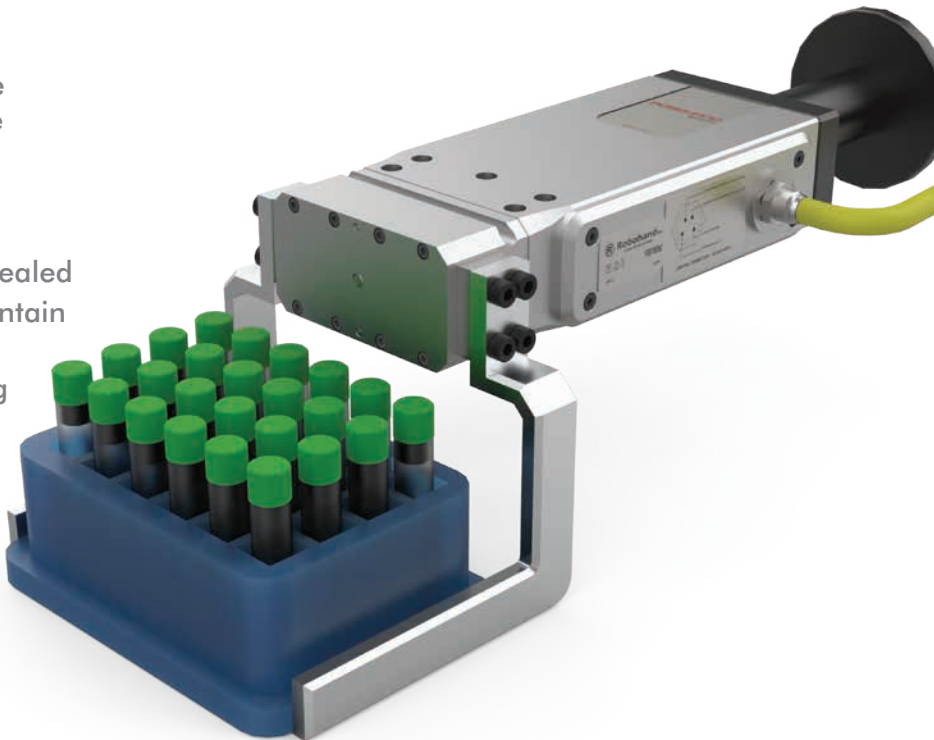


# DPE-200 MEDIUM-DUTY

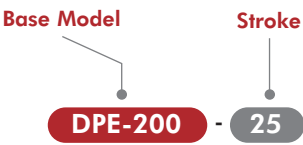
Electric Parallel Grippers | Features and Benefits | How To Order

## Features:

- Ideal for semiconductor and life sciences laboratory applications
- Fast parts handling with grip speeds capable of 120 parts per minute with a 25mm stroke and 250ms actuation time
- High reliability up to four times longer than pneumatic equivalents
- Maintenance free internally lubricated and sealed
- Precision rack-and-pinion drive helps to maintain grip accuracy of +/- 0.05mm (0.002in)
- Fully integrated electronics, no programming or software. Operates from PLC discrete open/close commands
- Reverse polarity protection to protect from application mis-wiring
- DIRECTCONNECT™ mounting to rotaries and slides without requiring adapter plates
- Clean room 1000 rated



## How To Order



## Accessories

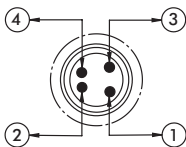
Power and Sensor Accessories	Part Number
PNP Magneto-Resistive Position Sensor	OHSP-017
NPN Magneto-Resistive Position Sensor	OHSN-017
Quick Disconnect Sensor Cable, 5m Long	CABL-013
4-wire Power and Signal Cable, 5m Long	CABL-046

\*Sensor and cable sold separately.

## Electrical Interface: Pin Out

(Looking into the head of the connector on gripper)

ELECTRICAL INTERFACE



PIN OUT (LOOKING INTO HEADER CONNECTOR ON GRIPPER)

- 1 ..... BROWN (+ 24 VDC)
- 2 ..... WHITE (OPEN GRIPPER) +24 VDC = ACTIVE
- 3 ..... BLUE (GROUND)
- 4 ..... BLACK (CLOSE GRIPPER) +24 VDC = ACTIVE

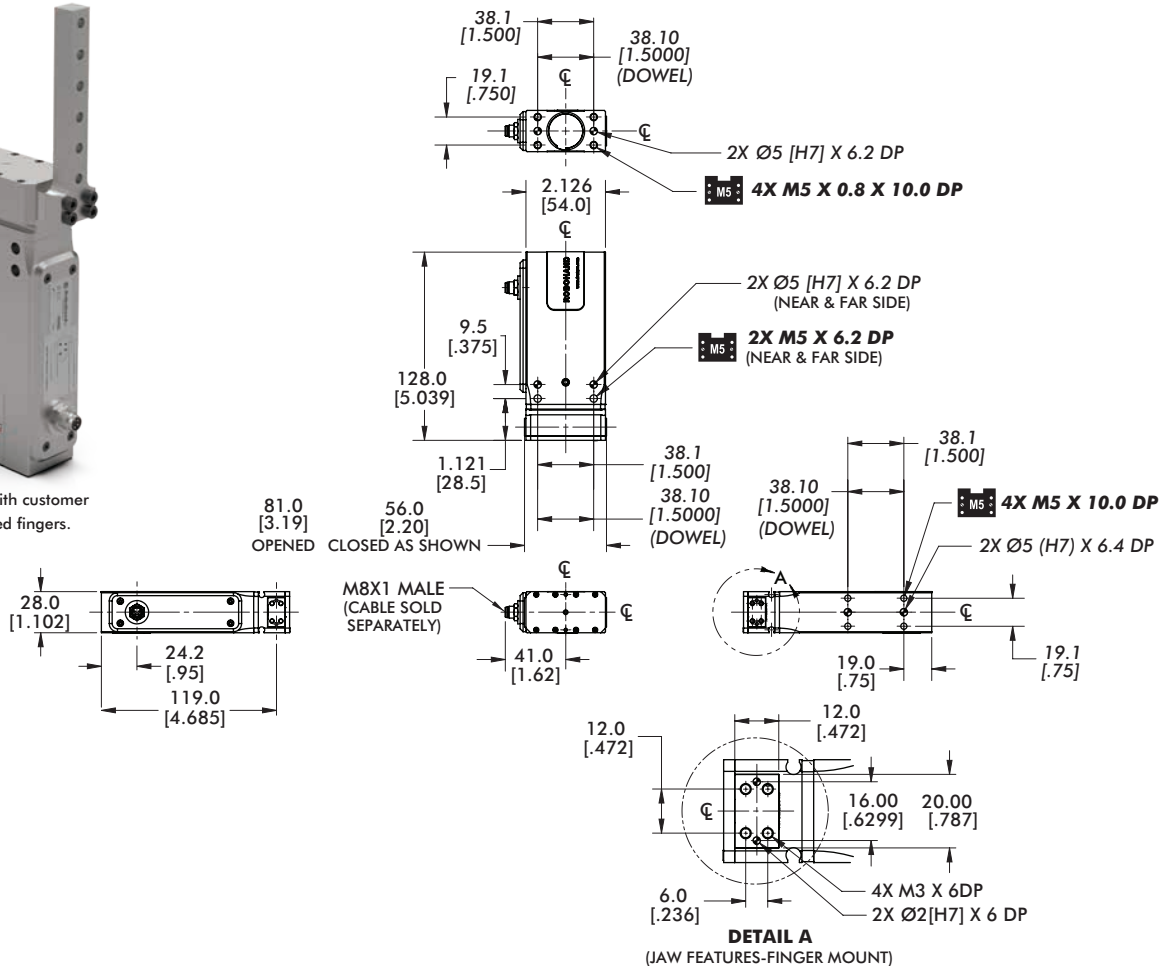
CABLE # CABL-046



## Electric Parallel Grippers | Dimensions and Technical Specifications



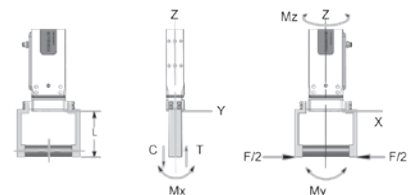
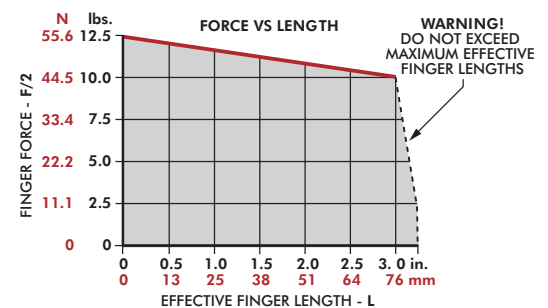
Shown with customer supplied fingers.



## Specifications

Specifications	Units	DPE-200-25
Total Grip Force	N [lbf]	111 [25]
Stroke	mm [in]	25 [0.98]
Repeatability	mm [in]	±0.025 [0.001]
Accuracy	mm [in]	±0.051 [0.002]
Actuation Time	ms	250
Temperature Range	°C [°F]	5°~60° [41°~140°]
Power Requirement @ 100% duty cycle	W	4.2
Voltage	VDC	24
Current - Peak	amps	1.5 (max)
Current - Continuous	amps	0.175
Ingress Protection Class (IP)		IP54
Clean Room		1000 (Krytox)
Weight	kg [lbs]	0.53 [1.16]
Max Finger Length	mm [in]	76.2 [3.00]
Durability	cycles	20 Million

## Loading Information



DPE-200-25	Static
Maximum Tensile T	10 N [75 lbs]
Maximum Compressive C	10 N [75 lbs]
Maximum Moment $M_x$	14 Nm [120 in-lbs]
Maximum Moment $M_y$	17 Nm [150 in-lbs]
Maximum Moment $M_z$	14 Nm [120 in-lbs]

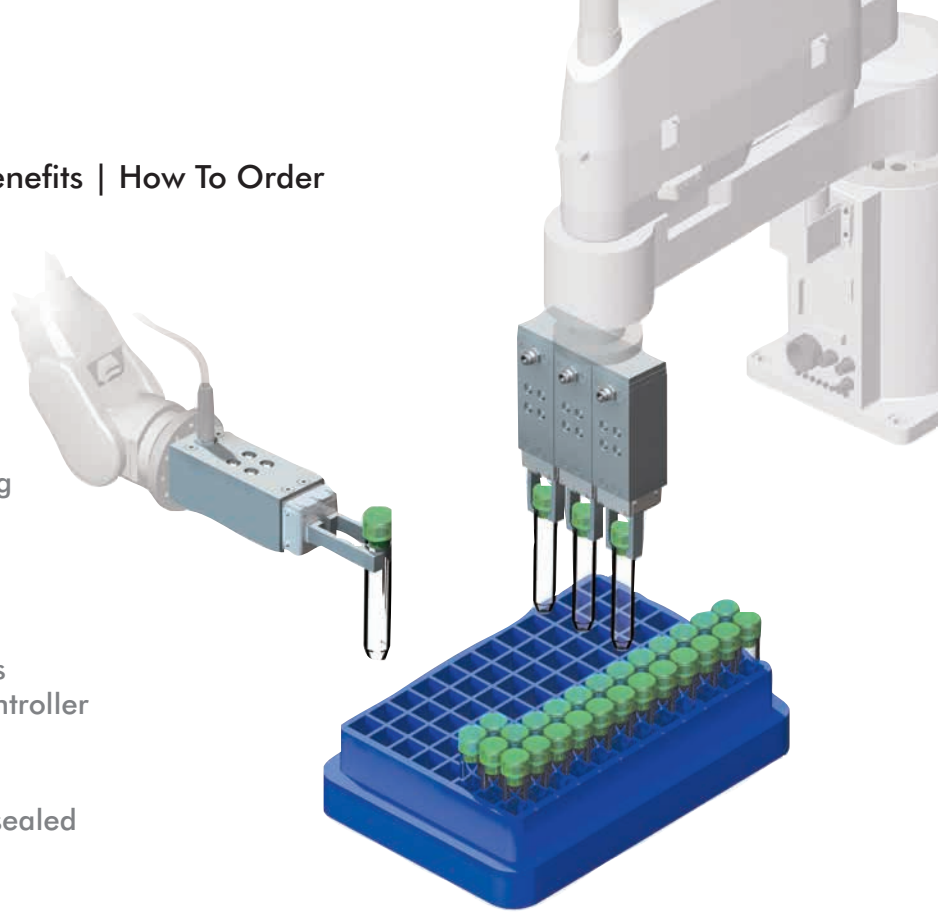
\*Capacities are per set of jaws and are not simultaneous

# RPE-100 LIGHT-DUTY

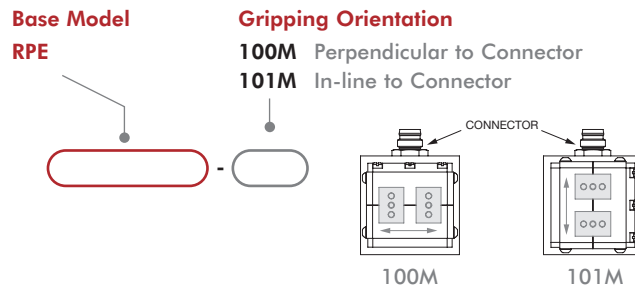
## Electric Parallel Grippers | Features and Benefits | How To Order

### Features:

- Ideal for semiconductor and life sciences laboratory applications
- Compact design allows several units mounted closely together to grip multiple parts simultaneously
- Fully integrated electronics, no programming or software. Operates from PLC discrete open/close commands
- Fail-safe operation with spring closed maintains full grip force upon power loss
- No programming required. Gripper actuates using a 50ms discrete pulse from PLC or controller
- Minimized finger backlash and side play with low friction Dual-V bearing system
- Maintenance free internally lubricated and sealed
- Clean room 100 rated IP54



### How To Order



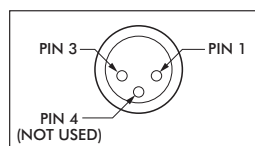
### Accessories

Sensor Accessories	Part Number
Inductive Sensor Mounting Kit (Mounts 1 sensor)	OSMK-130
PNP Inductive Sensor with Quick Connect	OISP-019
NPN Inductive Sensor with Quick Connect	OISN-019
Quick Disconnect Sensor Cable, 2m long	CABL-010
Quick Disconnect Sensor Cable, 5m long	CABL-013

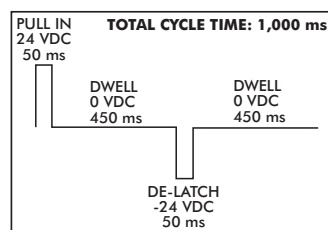
\* Sensor and cable sold separately.

### Electrical Interface: Pin Out

(Looking into the head of the connector on gripper)



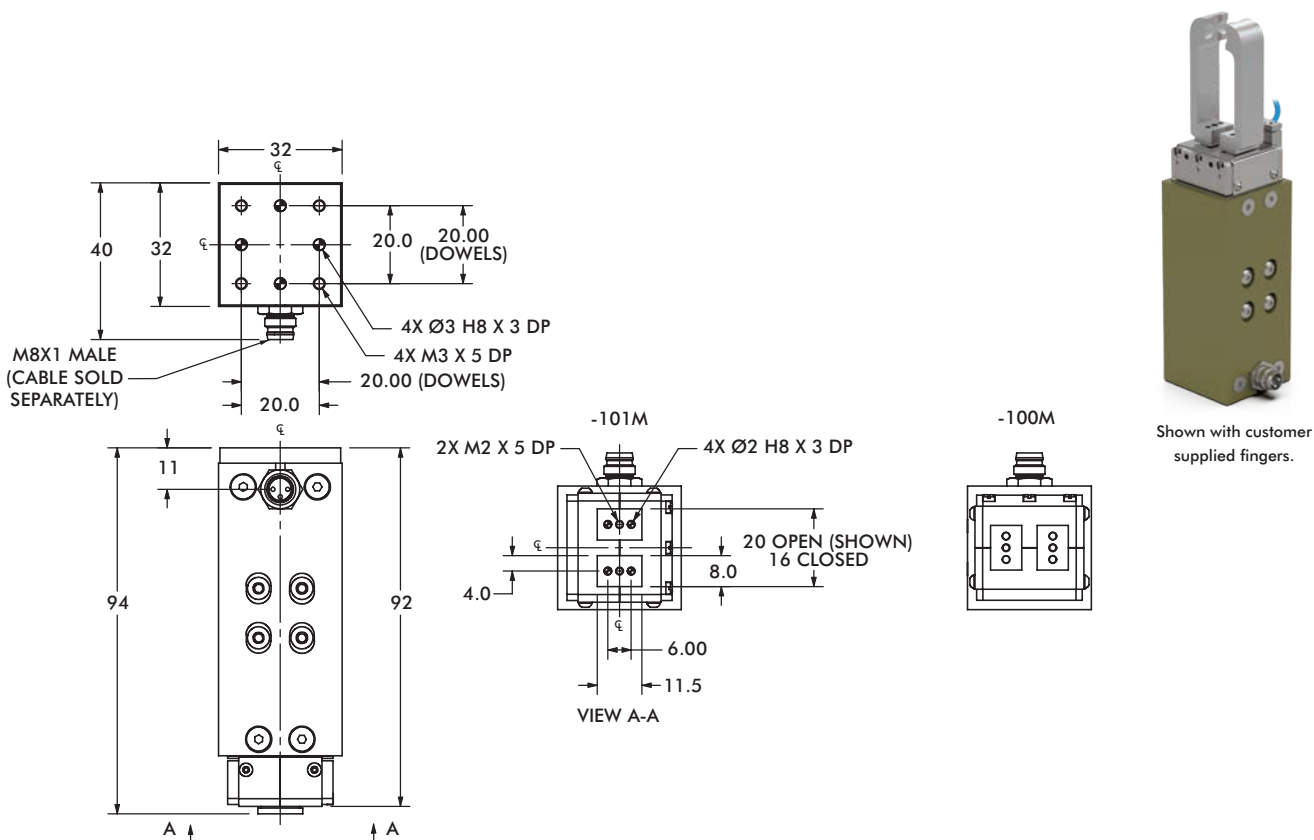
PIN ORIENTATION



TIMING DIAGRAM

# RPE-100 LIGHT-DUTY

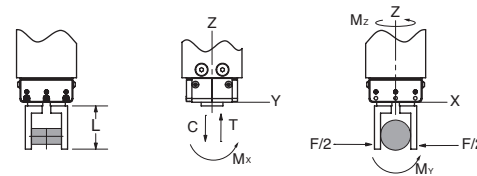
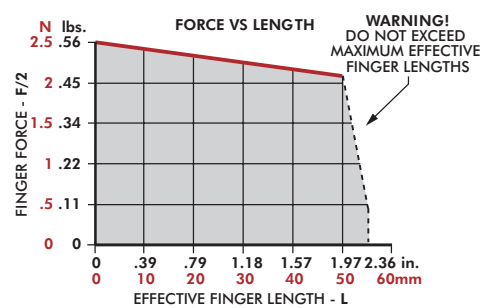
## Electric Parallel Grippers | Dimensions and Technical Specifications



### Specifications

Specifications	Units	RPE-100M/101M
Total Grip Force	N [lbf]	5 [1.1]
Stroke	mm [in]	4 [0.16]
Repeatability	mm [in]	±0.025 [0.001]
Accuracy	mm [in]	±0.051 [0.002]
Actuation Time	ms	100
Temperature Range	°C [°F]	5°~50° [40°~120°]
Power Requirement @ 100% duty cycle	W	40 (Peak)
Voltage	VDC	24
Current - Peak	amps	1.5 (max)
Current - Continuous	amps	0.175
Ingress Protection Class (IP)		IP54
Clean Room		100 (Krytox)
Weight	kg [lbs]	0.23 [0.50]
Max Finger Length	mm [in]	50 [1.90]
Durability	cycles	5 Million

### Loading Information



RPE-100, RPE-101	Static	Dynamic
Maximum Tensile T	59 N [13 lbs]	20 N [4.5 lbs]
Maximum Compressive C	59 N [13 lbs]	20 N [4.5 lbs]
Maximum Moment $M_x$	0.75 Nm [2.7 lbf-in]	0.3 Nm [6.6 lbf-in]
Maximum Moment $M_y$	1.2 Nm [10.6 lbf-in]	0.4 Nm [3.5 lbf-in]
Maximum Moment $M_z$	0.75 Nm [6.6 lbf-in]	1.1 Nm [9.7 lbf-in]

\*Capacities are per set of jaws and are not simultaneous