

DPE-400 HEAVY-DUTY

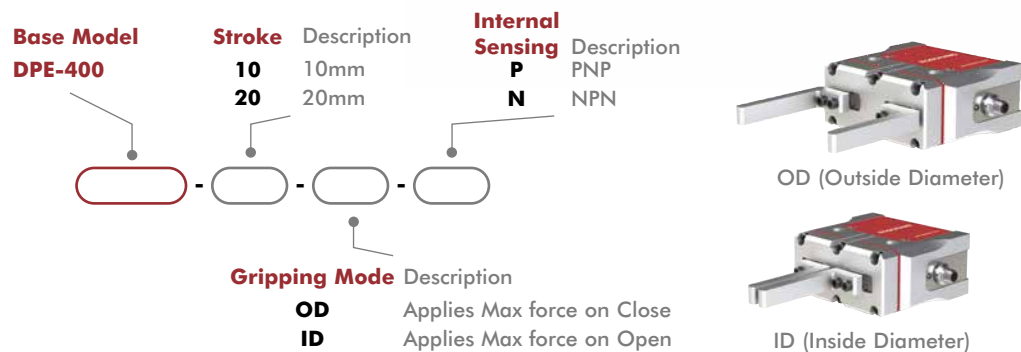
Electric Parallel Grippers | Features and Benefits | Technical Specifications

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



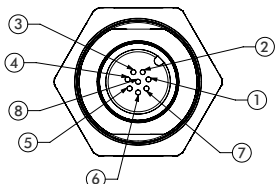
Accessories

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)

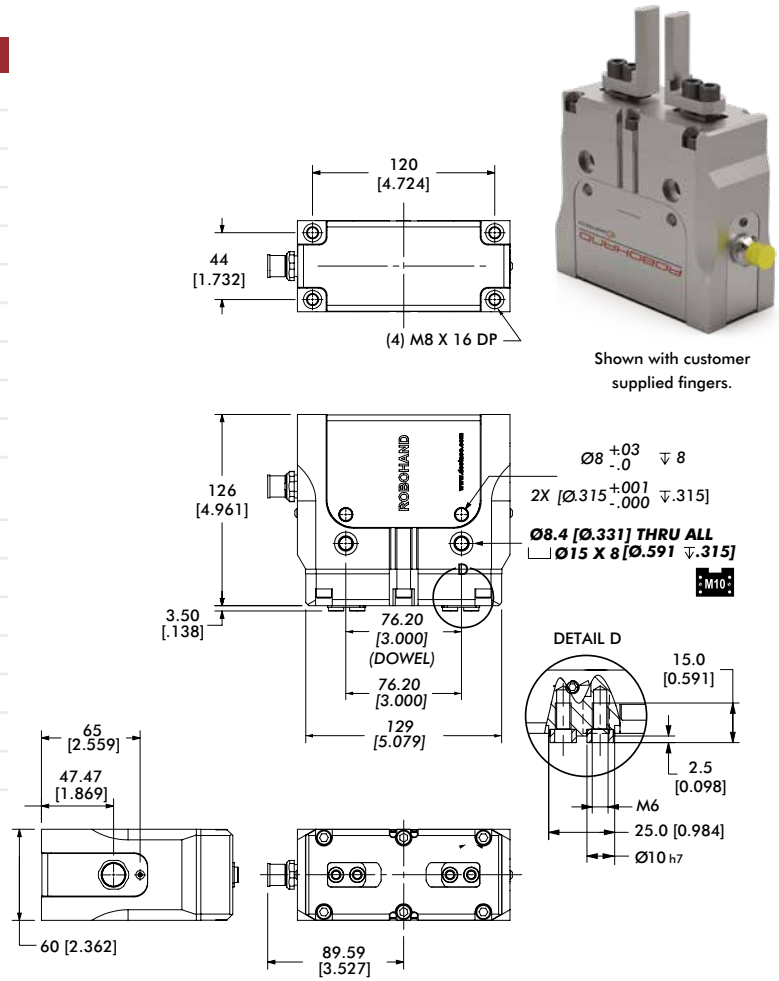
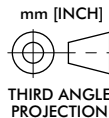


Voltage shown is applied to the FORCE pin, which accepts a 0-5V analog signal.

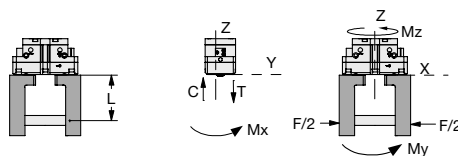
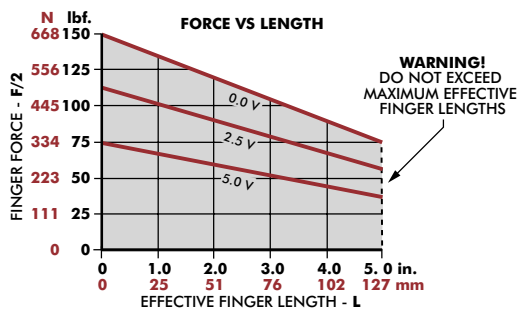
Pin #	Color	Signal	Description	Current
1	White	Force	0-5 VDC (Analog)	5mA
2	Brown	+24V	Motor Power	2A (max), 0.4 A (avg)
3	Green	Open	24 VDC Active (Inputs)	10mA
4	Yellow	Open Sense	NPN/PNP (Outputs)	300mA (max)
5	Gray	Close	24 VDC Active (Inputs)	10mA
6	Pink	Close Sense	NPN/PNP (Outputs)	300mA (max)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

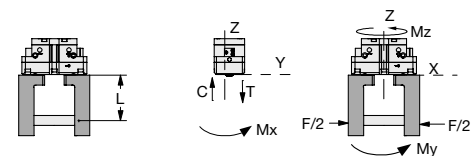
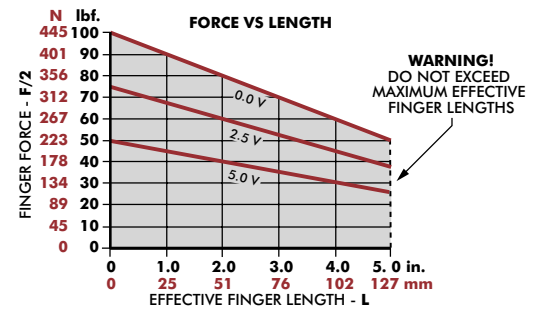


Loading Information



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]

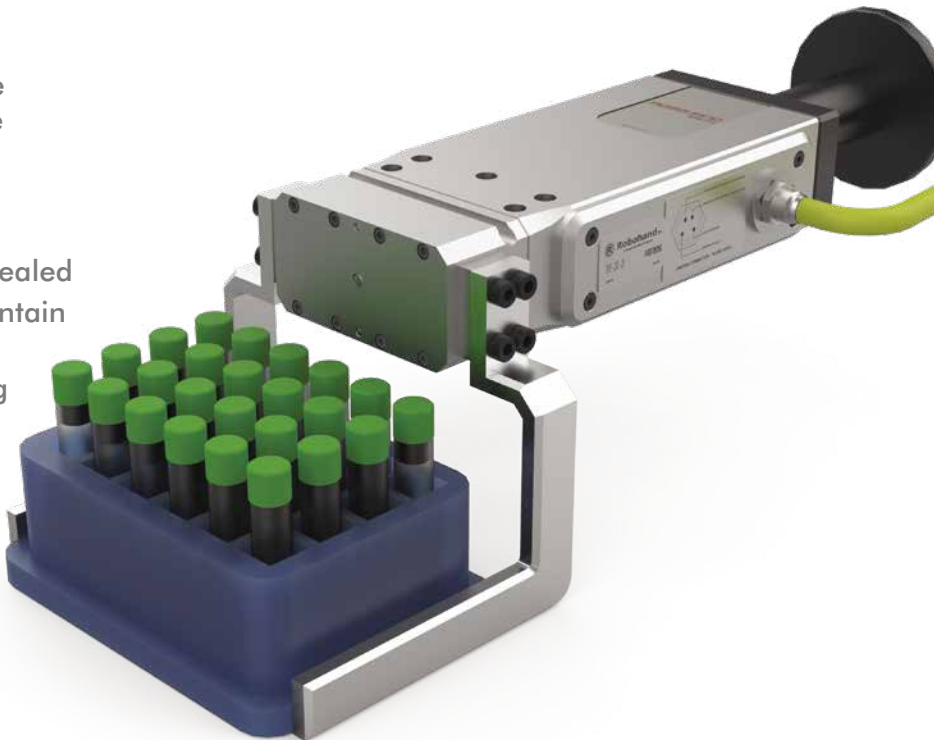
*Capacities are per set of jaws and are not simultaneous

DPE-200 MEDIUM-DUTY

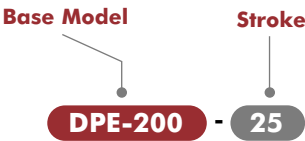
Electric Parallel Grippers | Features and Benefits | How To Order

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

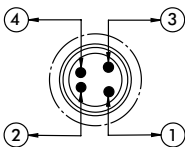
Power and Sensor Accessories	Part Number
PNP Magneto-Resistive Position Sensor	OHSP-017
NPN Magneto-Resistive Position Sensor	OHSN-017
Quick Disconnect Sensor Cable, 5m Long	CABL-013
4-wire Power and Signal Cable, 5m Long	CABL-046

* 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)

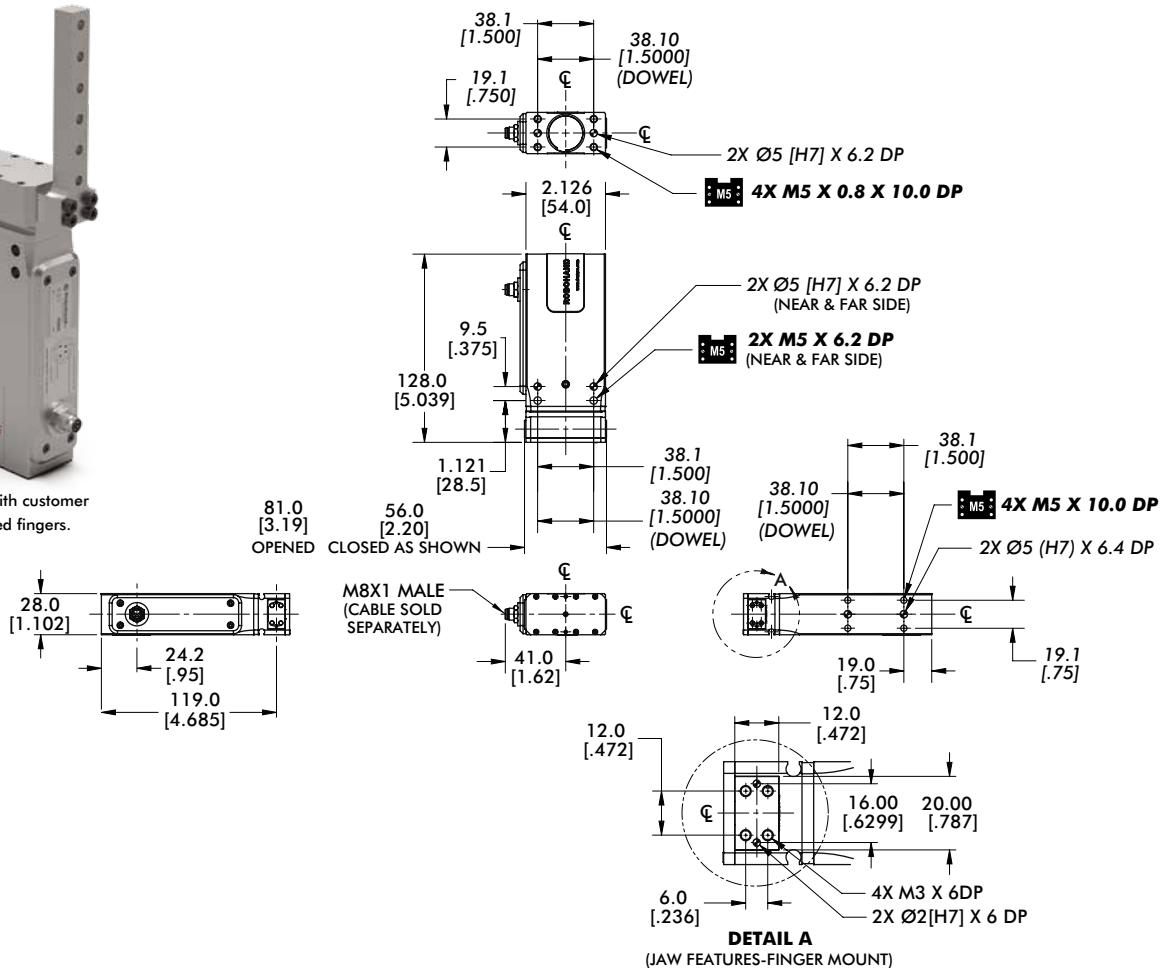
- 1 BROWN (+ 24 VDC)
- 2 WHITE (OPEN GRIPPER) +24 VDC = ACTIVE
- 3 BLUE (GROUND)
- 4 BLACK (CLOSE GRIPPER) +24 VDC = ACTIVE

CABLE # CABL-046

Electric Parallel Grippers | Dimensions and Technical Specifications



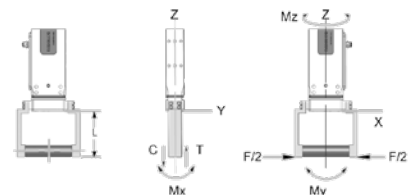
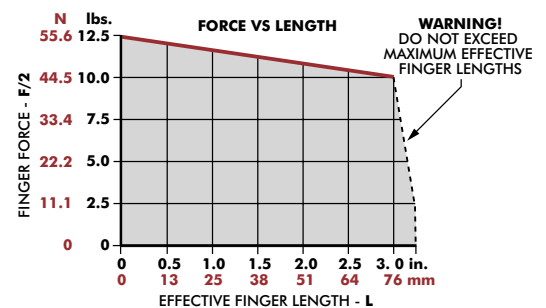
Shown with customer
supplied fingers.



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