

Robohandinc.

GRIPPERS PNEUMATIC PRECISION PARALLEL **MOVEMENT DPP** IRECTCONNECT™ SERIES





- Precision Gripping—Preloaded V Roller Bearing Eliminate Side Play Resulting in **Excellent Part Positioning**
- Accuracy of ±0.03 mm (0.001") and Repeatability of ±0.01 mm (0.0005")
- Highly Configurable Modular Automation— Exclusive Direct Connect[™] Technology Provides Multiple Mounting Options
- Multiple Pneumatic Port Locations—Tapped Ports on Front, Top and Both Sides are Standard
- Rigid and Low Friction Design Provides Longer Gripper Finger Lengths and the Ability to Handle Delicate Parts
- Non Synchronous Motion Option Provides Independent Jaw Motion
- Up to 5 Million Cycles in Typical Application— Up to 10 Million with Maintenance
- Temperature Operating Range -35 to 80°C (-30 to 180°F)
- System Requires 0.3 to 7 bar (5 to 100 psi) Dry Filtered (40 Micron or Better) Air Supply
- Accessory Equipment Required—4-Way, 2 Position Pneumatic Directional Control Valve

PRODUCT FEATURES

Excellent Accuracy

Excellent parallelism and accuracy between gripper mounting surface and jaw surfaces.

Superior Jaw

Support

Jaws are supported

using our patented

"Dual-V" roller bearing design. **Top Manifold Air Ports** Eliminates the

need for airlines.

Standard Purge/ **Scavenge Port** Used with a vacuum for clean room

environments or positive pressure for harsh environments and jaw surfaces.

Hard Coat Anodized

One piece, aircraft quality aluminum body, has hardcoat anodize 60 RC with PFA impregnation.

> DPP-10M-06, \$365, shown slightly smaller than actual size.

Adjustable Pre-load Screws

Allows for adjustment of preload on roller bearings.

Multiple Air Port Locations

4 standard locations; front, top and both sides

DIRECTCONNECT Mounting Patterns

DIRECTCONNECT[™] tapped and dowel mounting surfaces on top and side of body (except DPP-28).

> **Optional Spring Assist** For close stroke.

Self Lubricating **Dynamic Seals** (Buna-N only)

High Grip Force

With respect to weight due to extremely efficient drive mechanism.

Inductive sensors (sensors sold separately)

Accessory Mounting Slots

For Magneto Resistive and

Dowel Holes

H7 dowel pin holes in body and jaws. Jaws also have key slot for better finger alignment.

Hardened Plated Jaws For wear resistance and longer life.

Multiple Sensor Capabilities

Capable of sensing both jaws in the open and closed positions (up to 4 sensors can be used for multi-position sensing). Sensor magnets on pistons come standard for Magneto Resistive Sensing.



"Dual-V" Roller Bearings Provide low friction motion and are preloaded

Fkm Seals Available for high temperature applications.

for maximum support and zero side play.

DLT Linear Thruster

Series, starts at \$244.

see omegamation.com

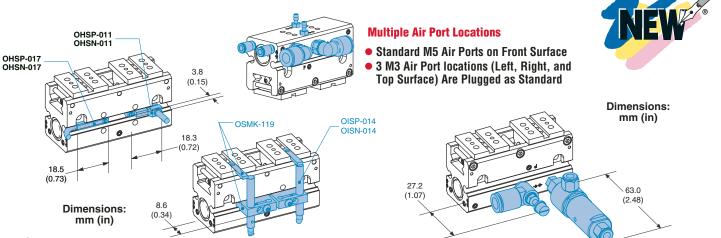
DPP-14M-25, \$525, shown smaller than actual size.

Note: gripper fingers are shown for reference purposes, this tooling is the customers responsibility.

Shielded Design

Shielded design repels contamination from

penetrating the "Dual-V" roller bearings.



Sensors

- Magneto Resistive or Inductive Proximity Available
- Capable of Sensing 4 Positions
- Open and Closed on Both Jaws
- PNP and NPN Available
- Magneto Resistive Sensors Are Slot Mounted, No Mounting Kits Required
- Threaded Quick Disconnect with Built-In LED Output
- Sensors Mount on Either Side of Gripper
- Sensors Magnets in Pistons Are Standard

Plumbing Fittings

- Adjustable Flow Controls
 - Have Thumb Screw Adjust with Locking Nut for Adjusting Actuation Time
 Available for 3 or 6 mm OD Tubing
- Failsafe Valve for Applications
 - Where it is Critical That the Part Being Gripped Not be Dropped if Air Pressure is Lost
 - Can Mount Directly to Gripper or In-Line with Plumbing to Gripper
 For M5 Air Ports

MOST POPULAR MODELS HIGHLIGHTED!

- For IVIS AIr Ports
- Consult Factory for Additional Plumbing Fittings

To Order (Specify Model Number)

MODEL NO.	PRICE	JAW LGTH CLOSED mm (in)	JAW LGTH OPEN mm (in)	BODY DEPTH mm (in)	BODY LGTH mm (in)	BODY HEIGHT mm (in)	MAX STROKE mm (in)	GRIP FORCE N (lbs)	WEIGHT Kg (lbs)
DPP-10M-06	\$365	47 (1.85)	53 (2.10)	25 (0.98)	63 (2.47)	35 (1.36)	6.4 (0.25)	111(25)	0.16 (0.35)
DPP-10M-12	415	49 (1.93)	62 (2.43)	25 (0.98)	74 (2.90)	35 (1.36)	12.7 (0.50)	111(25)	0.20 (0.45)
DPP-14M-15	450	63 (2.47)	79 (3.10)	34 (1.34)	90 (3.55)	42 (1.66)	15.9 (0.63)	200 (45)	0.48 (1.05)
DPP-14M-25	525	82 (3.23)	107 (4.23)	34 (1.34)	119 (4.67)	42 (1.66)	25.4 (1.00)	200 (45)	0.57 (1.25)
DPP-10M-06-C	390	47 (1.85)	53 (2.10)	25 (0.98)	63 (2.47)	35 (1.36)	6.4 (0.25)	120 (27)	0.16 (0.35)
DPP-10M-12-C	440	49 (1.93)	62 (2.43)	25 (0.98)	74 (2.90)	35 (1.36)	12.7 (0.50)	120 (27)	0.20 (0.45)
DPP-14M-15-C	485	63 (2.47)	79 (3.10)	34 (1.34)	90 (3.55)	42 (1.66)	15.9 (0.63)	227 (51)	0.48 (1.05)
DPP-14M-25-C	560	82 (3.23)	107 (4.23)	34 (1.34)	119 (4.67)	42 (1.66)	25.4 (1.00)	214 (48)	0.57 (1.25)

Ordering Example: DPP-14M-25, pneumatically powered precision gripper with DirectConnect easy mounting technology, 25.4 mm (1") jaw stroke and 200 N (45 lbs) of gripping force, \$525. All models have a temperature range of -35 to 80°C (-30 to 180°F). The temperature range can be modified to -30 to 120°C (-20 to 250°F) with FKM seals. Add "V" to the end of the model Number and \$36. All models come standard with snychornous jaws, if non snychornous is required consult sales. All models with the "-C" option have a spring assist closing mechanism on the jaws to provide fail safe closing and additional gripping force. Detailed specifications and CAD drawings are available at omegamation.com

/\r	CO	SSO	110	DC.
AL	LC	550		

MODEL NO.	PRICE	DESCRIPTION		
SENSOR ACCESS	SORIES			
OISN-014	\$114	NPN inductive proximity sensor		
OISP-014	114	PNP inductive proximity sensor		
OHSN-011	63	NPN magneto resistive sensor 90° barrell with quick disconnect fitting		
OHSP-011	63	PNP magneto resistive sensor 90° barrell with quick disconnect fitting		
OHSN-017	63	NPN magneto resistive sensor short barrell with quick disconnect fitting		
OHSP-017	63	PNP magneto resistive sensor short barrell with quick disconnect fitting		
CABL-010	23	2 m sensor extension cable with quick disconnect fitting		
CABL-013	26	5 m sensor extension cable with quick disconnect fitting		
OSMK-119	40	DPP-10M-14M inductive sensor mounting kit		
PNEUMATIC ACCESSORIES				
Pneumatic Tubing	Consult Sales	Polyurethane tubing in multiple diameters and colors avaialable, see omegamation.com		
Pneumatic Fittings	Consult Sales	Poly-Tube fittings in Male or Female NPT in multiple configurations, see omegamation.com		
Pneumatic Flow Controls	Consult Sales	Adjustable flow control fittings and directional control valves, see omegamation.com		

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