Parallel Grippers - DPW DIRECTCONNECT™

Wide Body Series

**DirectConnect™ Connectivity:**
- Tapped and Dowel mounting on body.

**Large or Wide Parts:**
- Wide body design provides secure gripping of large & wide parts.

**Multiple air port positions:**
- Tapped air ports on top and front are standard.

**Manifold Air Porting:**
- Top air ports can be manifold o-ring sealed.

**Inductive Sensor Flexibility:**
- Mount either 3mm or 4mm inductive sensors with the same bracket (3mm only on DPW-250).

**Magnetoresistive Sensing:**
- Full range adjustable Magnetoresistive Sensors. Magnet supplied standard.

**Long Finger Applications:**
- Jaw support thru the length of the body allows for long fingers to be attached to jaws.

**Thru Jaw Mounting:**
- Offers a wider variety of mounting applications for jaws.

**Shaft Wiper Option:**
- Rugged urethane shaft wipers seal the unit against harsh environments. Designed to be used in machine coolant and metal chip environment applications.

**Multiple Strokes:**
- All gripper sizes are available in 2 different strokes.

**Non-synchronous motion:**
- The unit can be made non-synchronous providing independent jaw motion allowing the gripper to pick or place at a point other than its center.

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**Technical Specifications:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Imperial</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Operating Range</td>
<td>40-100 psi</td>
<td>3-7 bar</td>
</tr>
<tr>
<td>Cylinder Type</td>
<td>Double Acting</td>
<td></td>
</tr>
<tr>
<td>Dynamic Seals</td>
<td>Internally Lubricated Buna-N</td>
<td></td>
</tr>
<tr>
<td>Valve Required to Operate</td>
<td>4-way, 2-position</td>
<td></td>
</tr>
<tr>
<td>Air Quality Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Filtration</td>
<td>40 Micron or Better</td>
<td></td>
</tr>
<tr>
<td>Air Lubrication</td>
<td>Not Necessary*</td>
<td></td>
</tr>
<tr>
<td>Air Humidity</td>
<td>Low Moisture Content (dry)</td>
<td></td>
</tr>
<tr>
<td>Temperature Operating Range</td>
<td>-30°~180° F</td>
<td>-35°~80° C</td>
</tr>
<tr>
<td>Buna-N Seals (standard)</td>
<td>-20°~300° F</td>
<td>-30°~150° C</td>
</tr>
<tr>
<td>Viton® Seals (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Specifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Life</td>
<td>5 million cycles</td>
<td></td>
</tr>
<tr>
<td>w/ Preventative Maintenance</td>
<td>10+ million cycles*</td>
<td></td>
</tr>
<tr>
<td>Field Repairable</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Seal Repair Kits Available</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**-W Option Shaft Wiper Specifications:**

| Wiper Material                     | 90 Durometer Urethane |
| Temperature Rating (Wiper Only)    | -65°~275° F           |
| Compatible Chemicals              | -54°~135° C           |
|                               | water, coolant, petroleum oils, silicone, lubricants, dilute acids & alkalis, hydraulic fluid, transmission fluid, ozone, ketones, strong acids, brake fluid |
| Non- Compatible Chemicals         | Grind dust, machine chips & coolant, paper dust, washdown |

**Applications Restrictions:**

<table>
<thead>
<tr>
<th>Applications where mechanism lubricant could cause contamination (use -W Shaft Wiper Option in this case)</th>
</tr>
</thead>
</table>

*Addition of lubrication will greatly increase service life

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**Mounting Information:**

- Grippers can be mounted & operated in any direction.

- Fingers attach with screws and locate on jaws with dowel pins.

- Thru mounting on inside of jaws to allow for alternate finger mounting.

- Jaw design allows for simplified mounting of fingers.

- Body mounts on top with screws and locates with slip fit dowel pin holes for accuracy.

- Symmetrical mounting pattern on jaws allows for multiple finger orientation.
**Product Features**

- **Thru-Jaw Mounting**
  C-frames on inside of jaws for thru mounting to increase range of applications.
- **Sealed Design (-W option)**
  Urethane shaft wipers prevent against dirty environments (machining chips & coolant, grinding dust, paper mill environments, etc.)
- **End of Stroke Cushions**
  Reduce shock of fully open and close strokes.
- **Square-Faced Jaws**
  Allow for a symmetrical, multi-positional mounting pattern for simplified finger design and increased range of applications.
- **Magnet Resistant Sensors**
  An alternative option to inductive sensors (magnets supplied standard).
- **Combined 3mm and 4mm Inductive Sensor Mounting**
  Allows for either 3 or 4mm inductive sensors (3mm only on DPW-250).
- **Superior Jaw Support**
  Each jaw is supported by 2 shafts that extend the entire length of the body and are guided by 2 oil impregnated bronze bushings per shaft.
- **High Temperature Optional Viton® seals are available for high temperature applications**
- **Optional Non-Synchronous Operation**

**Operating Principle**

- Two shafts, one with a rack cut into it, are securely fastened to each of the jaws and supported through the length of the body.
- Two double acting opposed pistons provide power to the jaws.
- The rack shafts of each jaw slide in opposite directions of one another and are synchronized by a piston gear.
- This gripper is suitable for internal or external gripping and can be mounted in any orientation.

**U.S Patent #5,163,729 Designed, manufactured and assembled in the USA**

See back cover for DE-STA-CO Global Locations. www.destaco.com
**PARALLEL GRIPPERS DPW-250M-1 DIRECTCONNECT WIDE BODY SERIES**

**How to Order:** (Order Accessories separately from Basic Model)

<table>
<thead>
<tr>
<th>BASIC MODEL</th>
<th>STROKE</th>
<th>WIPERS</th>
<th>VITON SEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW-250M</td>
<td>-1</td>
<td>NS</td>
<td>W</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V</td>
</tr>
</tbody>
</table>

**JAW SYNCHRONIZATION**

- **NS:** Non-Synchronous Operation
- **W:** Shaft Wipers
- **V:** VITON® Seals

**SENSOR ACCESSORIES**

- PNP Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*
- NPN Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*
- PNP Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*
- NPN Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*
- Quick Disconnect Cable (2 meters long)*
- Quick Disconnect Cable (5 meters long)*
- PNP Inductive Sensor 3mm (with Qk. Disc.)*
- NPN Inductive Sensor 3mm (with Qk. Disc.)*
- Sensor Mounting Kit for 3mm Inductive Sensor

**ORDER # | QTY/UNIT**
---|---
OHSF-017 | 1 or 2
OHSN-017 | 1 or 2
OHSF-011 | 1 or 2
OHSN-011 | 1 or 2
CABL-010 | 1 or 2
CABL-013 | 1 or 2
OSIP-019 | 1 or 2
OISH-019 | 1 or 2
OSMK-116 | 1

**PNEUMATIC ACCESSORIES**

- Seal Repair Kit (Standard Buna-N)
- Seal Repair Kit (Viton®)
- Manifold Seal Kit (Viton®)
- Shaft Wiper Seal Kit
- Fail Safe Valve M5
- Adjustable Flow Control

**ORDER # | QTY/UNIT**
---|---
SLKT-337 | 1
SLKT-337V | 1
SLKT-197V | 1
SLKT-338 | 1
OFSV-004 | 1
VLVF-008 | 1 or 2

*Sensor and cable sold separately

**UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW**

<table>
<thead>
<tr>
<th>Imperial in.</th>
<th>Metric [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.005 = ±0.0123</td>
<td>±0.005 = ±0.13</td>
</tr>
</tbody>
</table>

**NOTE:** DIRECTCONNECT™ DIMENSIONS ARE SHOWN IN BLUE

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**SAMPLE ORDER:** DPW-250M-1-W-V

Ex DPW-250M Gripper; 19.1mm Stroke; Shaft Wipers; Viton Seals

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Please see back cover for DE-STA-CO Global Locations. www.destaco.com
Accessory Mounting Technical Data

Specifications | DPW-250M-1
---|---
Total Rated Grip Force $F$ @ 100 psi, 7 bar | 50 lbs. 222 N
Stroke | 0.75 in. 19.1 mm
Pressure Range | 40-100 psi 3-7 bar
Cylinder Bore Ø | 0.625 in. 15.9 mm
Displacement | 0.023 in³ 3.8 cm³
Weight | 0.662 lbs. 0.30 Kg
Temperature Range: Standard Seals | -30°~180° F -35°~80° F
Viton® Seals | -20°~300° F -30°~150° C
Actuation | 0.12 sec. 0.12 sec.
Accuracy | ±0.003 in. ±0.08 mm
Repeatability | ±0.001 in. ±0.03 mm
Valve required to actuate | 4-way, 2-position

Flow Controls

• Thumb screw adjust with locking nut for adjusting actuation time
• Available for 6mm OD tubing

Sensors

• PNP and NPN Magneto Resistive available
• Sensors are slot mounted, no mounting kits required
• Low profile underflush sensor version or 90° wire exit sensor version
• Simple adjustment with slotted screw driver
• PNP and NPN Inductive available
• Inductive sensor bracket mounts 3mm sensor
• Available with 2M or 5M Quick Disconnect mating cable (order separately)

Multiple Air Port Locations

• 2 standard air port locations (top and front surface)
• Top manifold air ports are supplied plugged
• Seals in manifold kit are Viton®
• Front air ports are tapped for MS fittings

Failsafe Valves

• Used in applications where it is critical that the part being gripped not be dropped if air pressure is lost
• Mounts directly to gripper
• MS air port

Loading Capacity

<table>
<thead>
<tr>
<th></th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Tensile $T$</td>
<td>60 lbs. [267 N]</td>
<td>12 lbs. [53 N]</td>
</tr>
<tr>
<td>Maximum Compressive $C$</td>
<td>60 lbs. [267 N]</td>
<td>12 lbs. [53 N]</td>
</tr>
<tr>
<td>Maximum Moment $M_x$</td>
<td>120 in.-lbs. [14 Nm]</td>
<td>24 in.-lbs. [3 Nm]</td>
</tr>
<tr>
<td>Maximum Moment $M_y$</td>
<td>180 in.-lbs. [20 Nm]</td>
<td>36 in.-lbs. [4 Nm]</td>
</tr>
<tr>
<td>Maximum Moment $M_z$</td>
<td>120 in.-lbs. [14 Nm]</td>
<td>24 in.-lbs. [3 Nm]</td>
</tr>
</tbody>
</table>

*Capacities are per set of jaws and are not simultaneous
PARALLEL GRIPPERS DPW-250M-2
DIRECTCONNECT WIDE BODY SERIES

How to Order:
(Order Accessories separately from Basic Model)

<table>
<thead>
<tr>
<th>BASIC MODEL</th>
<th>STROKE</th>
<th>WIPERS</th>
<th>VITON SEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW-250M</td>
<td>2</td>
<td>NS</td>
<td>W-V</td>
</tr>
</tbody>
</table>

JAW SYNCHRONIZATION
NS Non-Synchronous Operation
— Leave Blank for Synchronous (standard)
WIPERS W Shaft Wipers
VITON® SEALS V

SENSOR ACCESSORIES
PNP Magneto Resistive Sensor Short Barrel (with Ok. Disc.)*
ORDER # QTY/UNIT
OHSP-017 1 or 2
PNP Magneto Resistive Sensor Short Barrel (with Ok. Disc.)*
OHSH-017 1 or 2
PNP Magneto Resistive Sensor 90° Barrel (with Ok. Disc.)*
OHSP-011 1 or 2
PNP Magneto Resistive Sensor 90° Barrel (with Ok. Disc.)*
OHSH-011 1 or 2
Quick Disconnect Cable (2 meters long)*
CABL-010 1 or 2
Quick Disconnect Cable (5 meters long)*
CABL-013 1 or 2
PNP Inductive Sensor 3mm (with Ok. Disc.)*
OISP-019 1 or 2
PNP Inductive Sensor 3mm (with Ok. Disc.)*
OISN-019 1 or 2
Sensor Mounting Kit for 3mm Inductive Sensor
OSMK-116 1

PNEUMATIC ACCESSORIES
Seal Repair Kit (Standard Buna-N)
SLKT-337 1
Seal Repair Kit (Viton®)
SLKT-337V 1
Manifold Seal Kit (Viton®)
SLKT-197V 1
Shaft Wiper Seal Kit
SLKT-338 1
Fail Safe Valve M5
OFSV-004 1
Adjustable Flow Control
VLFP-008 1 or 2

*Sensor and cable sold separately

SAMPLE ORDER: DPW-250M-2-W-V
Ex: CPM-250M Gripper, 31.8mm Stroke, Shaft Wipers, Viton Seals

Courtesy of CM/A/Flydine/Hydradyne /Motion Control /Hydraulic /Pneumatic /Electrical /Mechanical • (800) 426-5480 • www.cmafh.com

Please see back cover for DE-STA-CO Global Locations. www.destaco.com
Flow Controls

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing

Failsafe Valves

- Used in applications where it is critical that the part being gripped not be dropped if air pressure is lost
- Mounts directly to gripper
- M5 air port

Sensors

- PNP and NPN Magneto Resistive available
- Sensors are slot mounted, no mounting kits required
- Low profile underflush sensor version or 90° wire exit sensor version
- Simple adjustment with slotted screw driver
- PNP and NPN inductive available
- Inductive sensor bracket mounts 3mm sensor
- Available with 2M or 5M Quick Disconnect mating cable (order separately)

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>DPW-250M-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Rated Grip Force F @ 100 psi, 7 bar</td>
<td>50 lbs. 222 N</td>
</tr>
<tr>
<td>Stroke</td>
<td>1.25 in. 31.8 mm</td>
</tr>
<tr>
<td>Pressure Range</td>
<td>40-100 psi 3-7 bar</td>
</tr>
<tr>
<td>Cylinder Bore Ø</td>
<td>0.625 in. 15.9 mm</td>
</tr>
<tr>
<td>Displacement</td>
<td>0.383 in³ 6.3 cm³</td>
</tr>
<tr>
<td>Weight</td>
<td>0.856 lbs. 0.39 Kg</td>
</tr>
<tr>
<td>Temperature Range: Standard Seals</td>
<td>-30°~180° F -35°~80° C</td>
</tr>
<tr>
<td></td>
<td>-20°~300° F -30°~150° C</td>
</tr>
<tr>
<td>Actuation</td>
<td>0.14 sec. 0.14 sec.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.003 in. ±0.08 mm</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.001 in. ±0.03 mm</td>
</tr>
<tr>
<td>Valve required to actuate</td>
<td>4-way, 2-position</td>
</tr>
</tbody>
</table>

Loading Capacity

<table>
<thead>
<tr>
<th>Loading Capacity</th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Tensile T</td>
<td>60 lbs. [267 N]</td>
<td>12 lbs. [53 N]</td>
</tr>
<tr>
<td>Maximum Compressive C</td>
<td>60 lbs. [267 N]</td>
<td>12 lbs. [53 N]</td>
</tr>
<tr>
<td>Maximum Moment Mx</td>
<td>120 in.-lbs. [14 Nm]</td>
<td>24 in.-lbs. [3 Nm]</td>
</tr>
<tr>
<td>Maximum Moment My</td>
<td>180 in.-lbs. [20 Nm]</td>
<td>36 in.-lbs. [4 Nm]</td>
</tr>
<tr>
<td>Maximum Moment Mz</td>
<td>120 in.-lbs. [14 Nm]</td>
<td>24 in.-lbs. [3 Nm]</td>
</tr>
</tbody>
</table>

WARNING!
DO NOT EXCEED MAXIMUM EFFECTIVE FINGER LENGTHS

Accessory Mounting Technical Data

Flow Controls

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing
PARALLEL GRIPPERS DPW-375M-1
DIRECTCONNECT WIDE BODY SERIES

How to Order: (Order Accessories separately from Basic Model)

<table>
<thead>
<tr>
<th>BASIC MODEL</th>
<th>STROKE</th>
<th>WIPERS</th>
<th>VITON SEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW-375M</td>
<td>1</td>
<td>NS</td>
<td>W</td>
</tr>
<tr>
<td></td>
<td>NS</td>
<td>W</td>
<td>V</td>
</tr>
</tbody>
</table>

NON-SYNCHRONOUS

JAW SYNCHRONIZATION NS Non-Synchronous Operation
W Non-Synchronous Operation
WIPERS W Shaft Wipers
VITON SEALS V

SENSOR ACCESSORIES
- PNP Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*
- NPN Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*
- PNP Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*
- NPN Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*
- Quick Disconnect Cable (2 meters long)*
- Quick Disconnect Cable (5 meters long)*
- PNP Inductive Sensor 3mm (with Qk. Disc.)*
- NPN Inductive Sensor 3mm (with Qk. Disc.)*
- PNP Inductive Sensor 4mm (with Qk. Disc.)*
- NPN Inductive Sensor 4mm (with Qk. Disc.)*
- Sensor Mounting Kit for 3mm or 4mm Inductive Sensor

PNEUMATIC ACCESSORIES
- Seal Repair Kit (Standard Buna-N)
- Seal Repair Kit (Viton®)
- Manifold Seal Kit (Viton®)
- Shaft Wiper Seal Kit
- Fail Safe Valve M5
- Adjustable Flow Control

ORDER #     QTY/UNIT
- OHSP-017    1,2,3 or 4
- OHSH-017    1,2,3 or 4
- OHSP-011    1,2,3 or 4
- OHSH-011    1,2,3 or 4
- CABL-010    1,2,3 or 4
- CABL-013    1,2,3 or 4
- OISP-019    1 or 2
- OISH-019    1 or 2
- OISP-014    1 or 2
- OISH-014    1 or 2
- OSMK-117    1
- SLKT-339    1
- SLKT-339V   1
- SLKT-199V   1
- SLKT-340    1
- OFSV-004    1
- VLUF-006    1 or 2

SAMPLE ORDER: DPW-375M-1-W-V
Ex: DPW-375M Gripper, 25.4mm Stroke, Shaft Wipers, Viton Seals

*Sensor and cable sold separately

NOTE: DIRECTCONNECT™ DIMENSIONS ARE SHOWN IN BLUE

Dimensions are symmetrical about centerline

Imperial in. ± .01 Metric [mm] ± .025

Metric Threads Coarse Pitch

Third Angle Projection

All Dowel Holes are SF (Slip Fit). Localized Tolerance ± .005" or ± .013mm

Metric [mm] (0.00) = ± .005 (0.00) = ± .013

(End Cap)

(Open Port)

END CAP

OPEN STROKE POSITION PICTURED ABOVE

How to Order:
(800) 426-5480, www.destaco.com
1.203

PARALLEL GRIPPERS DPW-375M-1
DIRECT CONNECT WIDE BODY SERIES

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>DPW-375M-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Rated Grip Force</td>
<td>@ 100 psi, 7 bar</td>
</tr>
<tr>
<td>Stroke</td>
<td>1.00 in.</td>
</tr>
<tr>
<td>Pressure Range</td>
<td>40-100 psi</td>
</tr>
<tr>
<td>Cylinder Bore Ø</td>
<td>0.938 in.</td>
</tr>
<tr>
<td>Displacement</td>
<td>0.690 in³</td>
</tr>
<tr>
<td>Weight</td>
<td>1.80 lbs.</td>
</tr>
<tr>
<td>Temperature Range: Standard Seals</td>
<td>-30°~180° F</td>
</tr>
<tr>
<td>Viton® Seals</td>
<td>-20°~300° F</td>
</tr>
<tr>
<td>Actuation</td>
<td>0.16 sec.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.003 in.</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.001 in.</td>
</tr>
<tr>
<td>Valve required to actuate</td>
<td>4-way, 2-position</td>
</tr>
</tbody>
</table>

Total Rated Grip Force

<table>
<thead>
<tr>
<th>psi</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>445</td>
</tr>
</tbody>
</table>

Stroke

<table>
<thead>
<tr>
<th>in</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25.4</td>
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Pressure Range

<table>
<thead>
<tr>
<th>psi</th>
<th>bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>100</td>
<td>7</td>
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Cylinder Bore Ø

<table>
<thead>
<tr>
<th>in</th>
<th>mm</th>
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<tbody>
<tr>
<td>0.938</td>
<td>23.8</td>
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Displacement

<table>
<thead>
<tr>
<th>in³</th>
<th>cm³</th>
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<tr>
<td>0.690</td>
<td>11.3</td>
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Weight

<table>
<thead>
<tr>
<th>lbs</th>
<th>Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.80</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Temperature Range

| Standard Seals | -30°~180° F | -35°~80° C |
| Viton® Seals | -20°~300° F | -30°~150° C |

Actuation

<table>
<thead>
<tr>
<th>sec</th>
<th>sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.16</td>
<td>0.16</td>
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</tbody>
</table>

Accuracy

<table>
<thead>
<tr>
<th>in</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.003</td>
<td>±0.08</td>
</tr>
</tbody>
</table>

Repeatability

<table>
<thead>
<tr>
<th>in</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.001</td>
<td>±0.03</td>
</tr>
</tbody>
</table>

Flow Controls

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing

Sensors

- PNP and NPN Magneto Resistive available
- Sensors are slot mounted, no mounting kits required
- Low profile underflush sensor version or 90° wire exit sensor version
- Simple adjustment with slotted screw driver
- PNP and NPN inductive available
- Inductive sensor bracket mounts 3mm sensor
- Available with 2M or 5M Quick Disconnect mating cable (order separately)

Loading Capacity

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Tensile</td>
<td>120 lbs. [534 N]</td>
<td>24 lbs. [107 N]</td>
</tr>
<tr>
<td>Maximum Compressive</td>
<td>120 lbs. [534 N]</td>
<td>24 lbs. [107 N]</td>
</tr>
<tr>
<td>Maximum Moment</td>
<td>210 in.-lbs. [24 Nm]</td>
<td>42 in.-lbs. [5 Nm]</td>
</tr>
<tr>
<td>Maximum Torque</td>
<td>300 in.-lbs. [34 Nm]</td>
<td>60 in.-lbs. [7 Nm]</td>
</tr>
<tr>
<td>Maximum Valves</td>
<td>210 in.-lbs. [24 Nm]</td>
<td>42 in.-lbs. [5 Nm]</td>
</tr>
</tbody>
</table>

WARNING!

DO NOT EXCEED MAXIMUM EFFECTIVE FINGER LENGTHS

Accessory Mounting Technical Data

- Used in applications where it is critical that the part being gripped not be dropped if air pressure is lost
- Mounts directly to gripper
- MS air port

Multiple Air Port Locations

- 2 standard air port locations (top and front surface)
- Top manifold air ports are supplied plugged
- Seals in manifold kit are Viton®
- Front air ports are tapped for MS fittings

Flow Controls

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing

Flow Controls

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing

Please see back cover for DE-STA-CO Global Locations. www.destaco.com
PARALLEL GRIPPERS DPW-375M-2
DIRECTCONNECT WIDE BODY SERIES

How to Order: (Order Accessories separately from Basic Model)

<table>
<thead>
<tr>
<th>BASIC MODEL</th>
<th>STROKE</th>
<th>WIPERS</th>
<th>VITON SEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW-375M</td>
<td>2</td>
<td>NS</td>
<td>W</td>
</tr>
</tbody>
</table>

**NOTE:** DIRECTCONNECT™ DIMENSIONS ARE SHOWN IN BLUE

**JAW SYNCHRONIZATION**
- **NS** Non-Synchronous Operation
- Leave Blank for Synchronous (standard)
- **W** Shaft Wipers
- **V** VITON® SEALS

**SUPPORT ACCESSORIES**
- PNP Magneto Resistive Sensor Short Barrel (with Ok. Disc.)*
- NPN Magneto Resistive Sensor Short Barrel (with Ok. Disc.)*
- PNP Magneto Resistive Sensor 90° Barrel (with Ok. Disc.)*
- NPN Magneto Resistive Sensor 90° Barrel (with Ok. Disc.)*
- Quick Disconnect Cable (2 meters long)*
- Quick Disconnect Cable (5 meters long)*
- PNP Inductive Sensor 3mm (with Ok. Disc.)*
- NPN Inductive Sensor 3mm (with Ok. Disc.)*
- PNP Inductive Sensor 4mm (with Ok. Disc.)*
- NPN Inductive Sensor 4mm (with Ok. Disc.)*
- Sensor Mounting Kit for 3mm or 4mm Inductive Sensor

**PNEUMATIC ACCESSORIES**
- Seal Repair Kit (Standard Buna-N)
- Seal Repair Kit (Viton®)
- Manifold Seal Kit (Viton®)
- Shaft Wiper Seal Kit
- Fail Safe Valve M5
- Adjustable Flow Control

**SAMPLE ORDER:** DPW-375M-2-W-V
Ex: DPW-375 M Gripper, 50.8mm Stroke, Shaft Wipers, VITON® Seals

*Sensor and cable sold separately

<table>
<thead>
<tr>
<th>ORDER #</th>
<th>QTY/UNIT</th>
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</thead>
<tbody>
<tr>
<td>OHSP-017</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>OHSN-017</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>OHSP-011</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>OHSN-011</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>CABL-010</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>CABL-013</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>OISP-019</td>
<td>1 or 2</td>
</tr>
<tr>
<td>OISK-019</td>
<td>1 or 2</td>
</tr>
<tr>
<td>OISP-014</td>
<td>1 or 2</td>
</tr>
<tr>
<td>OISK-014</td>
<td>1 or 2</td>
</tr>
<tr>
<td>OSMK-117</td>
<td>1</td>
</tr>
<tr>
<td>SLKT-339</td>
<td>1</td>
</tr>
<tr>
<td>SLKT-339V</td>
<td>1</td>
</tr>
<tr>
<td>SLKT-199V</td>
<td>1</td>
</tr>
<tr>
<td>SLKT-340</td>
<td>1</td>
</tr>
<tr>
<td>OFSV-004</td>
<td>1</td>
</tr>
<tr>
<td>VLVF-008</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>
**Specifications DPW-375M-2**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Total Rated Grip Force F @ 100 psi, 7 bar</td>
<td>100 lbs. 445 N</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.00 in. 50.8mm</td>
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<tr>
<td>Pressure Range</td>
<td>40-100 psi 3-7 bar</td>
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<tr>
<td>Cylinder Bore Ø</td>
<td>0.938 in. 23.8 mm</td>
</tr>
<tr>
<td>Displacement</td>
<td>1.382 in. 22.6 cm²</td>
</tr>
<tr>
<td>Weight</td>
<td>2.66 lbs. 1.20 Kg</td>
</tr>
<tr>
<td>Temperature Range: Standard Seals</td>
<td>-30°~180°F -35°~80°C</td>
</tr>
<tr>
<td>Viton® Seals</td>
<td>-20°~300°F -30°~150°C</td>
</tr>
<tr>
<td>Actuation</td>
<td>0.20 sec. 0.20 sec.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.003 in. ±0.08 mm</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.001 in. ±0.03 mm</td>
</tr>
<tr>
<td>Valve required to actuate</td>
<td>4-way, 2-position</td>
</tr>
</tbody>
</table>

**Failsafe Valves**
- Used in applications where it is critical that the part being gripped not be dropped if air pressure is lost
- Mounts directly to gripper
- M5 air port

**Sensors**
- PNP and NPN Magneto Resistive available
- Sensors are slotted mounted, no mounting kits required
- Low profile underflush sensor version or 90° wire exit sensor version
- Simple adjustment with slotted screw driver
- PNP and NPN inductive available
- Inductive sensor bracket mounts 5mm sensor
- Available with 2M or 5M Quick Disconnect mating cable (order separately)

**Multiple Air Port Locations**
- 2 standard air port locations (top and front surface)
- Top manifold air ports are supplied plugged
- Seals in manifold kit are Viton®
- Front air ports are tapped for M5 fittings

**Loading Capacity**

<table>
<thead>
<tr>
<th>Loading Category</th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Tensile T</td>
<td>120 lbs. [534 N]</td>
<td>24 lbs. [107 N]</td>
</tr>
<tr>
<td>Maximum Compressive C</td>
<td>120 lbs. [534 N]</td>
<td>24 lbs. [107 N]</td>
</tr>
<tr>
<td>Maximum Moment Mx</td>
<td>210 in.-lbs. [24 Nm]</td>
<td>42 in.-lbs. [5 Nm]</td>
</tr>
<tr>
<td>Maximum Moment My</td>
<td>300 in.-lbs. [34 Nm]</td>
<td>60 in.-lbs. [7 Nm]</td>
</tr>
<tr>
<td>Maximum Moment Mz</td>
<td>210 in.-lbs. [24 Nm]</td>
<td>42 in.-lbs. [5 Nm]</td>
</tr>
</tbody>
</table>

*Capacities are per set of jaws and are not simultaneous*
PARALLEL GRIPPERS DPW-500M-1
DIRECTCONNECT WIDE BODY SERIES

How to Order: (Order Accessories separately from Basic Model)

<table>
<thead>
<tr>
<th>BASIC MODEL</th>
<th>STROKE</th>
<th>WIPERS</th>
<th>VITON SEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW-500M-1</td>
<td>NS</td>
<td>W</td>
<td>V</td>
</tr>
</tbody>
</table>

JAW SYNCHRONIZATION
NS Non-Synchronous Operation
   Leave Blank for Synchronous (standard)

WIPERS W Shaft Wipers

VITON® SEALS V

SENSOR ACCESSORIES
PNP Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*
OSHP-017 1,2,3 or 4
PNP Magneto Resistive Sensor Short Barrel (with Qk. Disc.)*
OHSN-017 1,2,3 or 4
PNP Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*
OHSF-011 1,2,3 or 4
PNP Magneto Resistive Sensor 90° Barrel (with Qk. Disc.)*
OHSN-011 1,2,3 or 4
Quick Disconnect Cable (2 meters long)*
CABL-010 1,2,3 or 4
Quick Disconnect Cable (5 meters long)*
CABL-013 1,2,3 or 4
PNP Inductive Sensor 3mm (with Qk. Disc.)*
OISP-019 1 or 2
PNP Inductive Sensor 3mm (with Qk. Disc.)*
OISH-019 1 or 2
PNP Inductive Sensor 4mm (with Qk. Disc.)*
OISP-014 1 or 2
PNP Inductive Sensor 4mm (with Qk. Disc.)*
OISH-014 1 or 2
Sensor Mounting Kit for 3mm or 4mm Inductive Sensor
OSMK-118 1

PNEUMATIC ACCESSORIES
Seal Repair Kit (Standard Buna-N)
SLKT-117 1
Seal Repair Kit (Viton®)
SLKT-119V 1
Manifold Seal Kit (Viton®)
SLKT-119V 1
Shaft Wiper Seal Kit
SLKT-342 1
Fail Safe Valve M5
OFSV-004 1
Adjustable Flow Control
VLUF-008 1 or 2

*Sensor and cable sold separately

SAMPLE ORDER: DPW-500M-1-W-V
Ex: CPW-500M Gripper, 38.1mm Stroke, Shaft Wipers, Viton Seals

NOTE: DIRECTCONNECT™ DIMENSIONS ARE SHOWN IN BLUE

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

<table>
<thead>
<tr>
<th>Metric</th>
<th>Imperial</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 = ±0.01</td>
<td>0.00 = ±0.0025</td>
<td></td>
</tr>
<tr>
<td>0.000 = ±0.005</td>
<td>0.0000 = ±0.0125</td>
<td></td>
</tr>
<tr>
<td>0.0000 = ±0.0005</td>
<td>0.00000 = ±0.000125</td>
<td></td>
</tr>
</tbody>
</table>

All Dowel Holes are SF (Slip Fit).
Locational Tolerance ±0.0005” or ±0.013mm

Dimensions are symmetrical about centerline

Third Angle Projection

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

All Dowel Holes are SF (Slip Fit).
Locational Tolerance ±0.0005” or ±0.013mm

Metric Threads
Course Pitch

Metric [mm]

Imperial in.

Dimensions are symmetrical about centerline

Third Angle Projection

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW
**Specifications DPW-500M-1**

- **Total Rated Grip Force** @ 100 psi, 7 bar: 180 lbs., 800 N
- **Stroke**: 1.50 in., 38.1 mm
- **Pressure Range**: 40-100 psi, 3-7 bar
- **Cylinder Bore**: 1.250 in., 31.8 mm
- **Displacement**: 1.841 in³, 30.2 cm³
- **Weight**: 3.27 lbs., 1.48 Kg
- **Temperature Range: Standard Seals**: -30° to 180° F, -35° to 80° C
  - *Viton® Seals*: -20° to 300° F, -30° to 150° C
- **Actuation**: 0.20 sec.
- **Accuracy**: ±0.003 in., ±0.08 mm
- **Repeatability**: ±0.001 in., ±0.03 mm
- **Valve required to actuate**: 4-way, 2-position

---

**Accessory Mounting Technical Data**

- **FailSafe Valves**
  - Used in applications where it is critical that the part being gripped not be dropped if air pressure is lost
  - Mounts directly to gripper
  - MS air port

- **Multiple Air Port Locations**
  - 2 standard air port locations (top and front surface)
  - Top manifold air ports are supplied plugged
  - Seals in manifold kit are Viton®
  - Front air ports are tapped for MS fittings

- **Flow Controls**
  - Thumb screw adjust with locking nut for adjusting actuation time
  - Available for 6mm OD tubing

- **Sensors**
  - PNP and NPN Magneto Resistive available
  - Sensors are slot mounted, no mounting kits required
  - Low profile underflush sensor version or 90° wire exit sensor version
  - Simple adjustment with slotted screw driver
  - PNP and NPN inductive available
  - Inductive sensor bracket mounts 3mm sensor
  - Available with 2M or 5M Quick Disconnect mating cable (order separately)

---

**PARALLEL GRIPPERS DPW-500M-1**

**DIRECT CONNECT WIDE BODY SERIES**

**Specifications**

<table>
<thead>
<tr>
<th></th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Tensile T</strong></td>
<td>600 lbs. [2668 N]</td>
<td>60 lbs. [267 N]</td>
</tr>
<tr>
<td><strong>Maximum Compressive C</strong></td>
<td>600 lbs. [2668 N]</td>
<td>60 lbs. [267 N]</td>
</tr>
<tr>
<td><strong>Maximum Moment M_x</strong></td>
<td>600 in.-lbs. [68 Nm]</td>
<td>60 in.-lbs. [7 Nm]</td>
</tr>
<tr>
<td><strong>Maximum Moment M_y</strong></td>
<td>900 in.-lbs. [102 Nm]</td>
<td>90 in.-lbs. [10 Nm]</td>
</tr>
<tr>
<td><strong>Maximum Moment M_z</strong></td>
<td>600 in.-lbs. [68 Nm]</td>
<td>60 in.-lbs. [7 Nm]</td>
</tr>
</tbody>
</table>

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

---

**WARNING!**

Do not exceed maximum effective finger lengths:

- **Effective Finger Length**: 
  - L
  - F / 2 F / 2
  - TC
  - M_x
  - Z
  - Y
  - M_y
  - Z
  - M_z

**Loading Capacity**

- **Max. Tensile**: 600 lbs. [2668 N]
- **Max. Compressive**: 600 lbs. [2668 N]
- **Max. Moment M_x**: 600 in.-lbs. [68 Nm]
- **Max. Moment M_y**: 900 in.-lbs. [102 Nm]
- **Max. Moment M_z**: 600 in.-lbs. [68 Nm]

---

**Flow Controls**

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing

---

Please see back cover for DE-STA-CO Global Locations. www.destaco.com
PARALLEL GRIPPERS DPW-500M-2 DIRECTCONNECT WIDE BODY SERIES

How to Order: (Order Accessories separately from Basic Model)

<table>
<thead>
<tr>
<th>BASIC MODEL</th>
<th>STROKE</th>
<th>WIPERS</th>
<th>VITON SEALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPW-500M</td>
<td>-2</td>
<td>NS</td>
<td>W-V</td>
</tr>
</tbody>
</table>

NON-SYNCHRONOUS

JAW SYNCHRONIZATION NS Non-Synchronous Operation __ Leave Blank for Synchronous (standard)

WIPERS W Shaft Wipers

VITON® SEALS V

SAMPLE ORDER: DPW-500M-2-W-V

Ex CPW-500M Gripper, 63.5mm Stroke, Shaft Wipers, Viton Seals

SENSOR ACCESSORIES
- PNP Magneto Resistive Sensor Short Barrel (with Ok. Disc.)*
- OHSP-017 1,2,3 or 4
- NPN Magneto Resistive Sensor Short Barrel (with Ok. Disc.)*
- OHSN-017 1,2,3 or 4
- PNP Magneto Resistive Sensor 90° Barrel (with Ok. Disc.)*
- OHSP-011 1,2,3 or 4
- NPN Magneto Resistive Sensor 90° Barrel (with Ok. Disc.)*
- OHSN-011 1,2,3 or 4
- Quick Disconnect Cable (2 meters long)*
- CABL-010 1,2,3 or 4
- Quick Disconnect Cable (5 meters long)*
- CABL-013 1,2,3 or 4
- PNP Inductive Sensor 3mm (with Ok. Disc.)*
- OSP-019 1 or 2
- NPN Inductive Sensor 3mm (with Ok. Disc.)*
- OISH-019 1 or 2
- PNP Inductive Sensor 4mm (with Ok. Disc.)*
- OISP-014 1 or 2
- NPN Inductive Sensor 4mm (with Ok. Disc.)*
- OISH-014 1 or 2
- Sensor Mounting Kit for 3mm or 4mm Inductive Sensor
- OSMK-118 1

PNEUMATIC ACCESSORIES
- Seal Repair Kit (Standard Buna-N)
- SLKT-341 1
- Seal Repair Kit (Viton®)
- SLKT-341V 1
- Manifold Seal Kit (Viton®)
- SLKT-199V 1
- Shaft Wiper Seal Kit
- SLKT-342 1
- Fail Safe Valve M5
- OFSV-004 1
- Adjustable Flow Control
- VLVF-008 1 or 2

*Sensor and cable sold separately

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

Dimensions are symmetrical about centerline
Third Angle Projection
All Dowel Holes are SF (Slip Fit), Locational Tolerance ±.0005" or ±.013mm

Imperial in. 0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005
Metric [mm] 0.0 = ±.25 0.00 = ±.13 0.000 = ±.013

NOTE: DIRECTCONNECT® DIMENSIONS ARE SHOWN IN BLUE

How to Order:
- (Order Accessories separately from Basic Model)

SAMPLE ORDER: DPW-500M-2-W-V
- Ex CPW-500M Gripper, 63.5mm Stroke, Shaft Wipers, Viton Seals

Please see back cover for DE-STA-CO Global Locations. www.destaco.com
PARALLEL GRIPPERS DPW-500M-2
DIRECT CONNECT WIDE BODY SERIES

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>DPW-500M-Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Rated Grip Force</td>
<td>180 lbs.</td>
</tr>
<tr>
<td>@ 100 psi, 7 bar</td>
<td>800 N</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.50 in.</td>
</tr>
<tr>
<td>Pressure Range</td>
<td>40-100 psi</td>
</tr>
<tr>
<td>Cylinder Bore Ø</td>
<td>1.250 in.</td>
</tr>
<tr>
<td>Displacement</td>
<td>3.068 in²</td>
</tr>
<tr>
<td>Weight</td>
<td>4.39 lbs.</td>
</tr>
<tr>
<td>Temperature Range:</td>
<td></td>
</tr>
<tr>
<td>Standard Seals</td>
<td>-30°~180°F</td>
</tr>
<tr>
<td>Viton® Seals</td>
<td>-20°~300°F</td>
</tr>
<tr>
<td>Actuation</td>
<td>0.28 sec.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.003 in.</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.001 in.</td>
</tr>
</tbody>
</table>

Valve required to actuate 4-way, 2-position

Accessories Mounting Technical Data

Loading Capacity

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Static</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Tensile T</td>
<td>600 lbs. [2668 N]</td>
<td>60 lbs. [267 N]</td>
</tr>
<tr>
<td>Maximum Compressive C</td>
<td>600 lbs. [2668 N]</td>
<td>60 lbs. [267 N]</td>
</tr>
<tr>
<td>Maximum Moment Mx</td>
<td>600 in.-lbs. [68 Nm]</td>
<td>90 in.-lbs. [10 Nm]</td>
</tr>
<tr>
<td>Maximum Moment My</td>
<td>900 in.-lbs. [102 Nm]</td>
<td>90 in.-lbs. [10 Nm]</td>
</tr>
<tr>
<td>Maximum Moment Mz</td>
<td>600 in.-lbs. [68 Nm]</td>
<td>60 in.-lbs. [7 Nm]</td>
</tr>
</tbody>
</table>

*Capacities are per set of jaws and are not simultaneous

Flow Controls

- Thumb screw adjust with locking nut for adjusting actuation time
- Available for 6mm OD tubing

Sensors

- PNP and NPN Magneto Resistive available
- Sensors are slot mounted, no mounting kits required
- Low profile underflush sensor version or 90° wire exit sensor version
- Simple adjustment with slotted screw driver
- PNP and NPN inductive available
- Inductive sensor bracket mounts 3mm sensor
- Available with 2M or 5M Quick Disconnect mating cable (order separately)

Valve required to actuate

WARNING!
DO NOT EXCEED MAXIMUM EFFECTIVE FINGER LENGTHS

Features

- Effective Finger Length - L
- Finger force - F/2
- Grip force per finger

Specifications

- Total Rated Grip Force @ 100 psi, 7 bar: 180 lbs. 800 N
- Stroke: 2.50 in. 63.5 mm
- Pressure Range: 40-100 psi 3-7 bar
- Cylinder Bore Ø: 1.250 in. 31.6 mm
- Displacement: 3.068 in² 50.3 cm²
- Weight: 4.39 lbs. 2.0 Kg
- Temperature Range: Standard Seals -30°~180°F -35°~80°C
- Viton® Seals -20°~300°F -30°~150°C
- Actuation: 0.28 sec. 0.28 sec.
- Accuracy: ±0.003 in. ±0.08 mm
- Repeatability: ±0.001 in. ±0.03 mm

Failsafe Valves

- Used in applications where it is critical that the part being gripped not be dropped if air pressure is lost
- Mounts directly to gripper
- MS air port

Multiple Air Port Locations

- 2 standard air port locations (top and front surface)
- Top manifold air ports are supplied plugged
- Seals in manifold kit are Viton®
- Front air ports are tapped for MS fittings

Accessory Mounting

Front Surface

- Front surface
- 2 standard air port locations (top and front surface)
- Top manifold air ports are supplied plugged
- Seals in manifold kit are Viton®
- Front air ports are tapped for MS fittings

Top Surface

- Top surface
- 2 standard air port locations (top and front surface)
- Top manifold air ports are supplied plugged
- Seals in manifold kit are Viton®
- Front air ports are tapped for MS fittings

Please see back cover for DE-STA-CO Global Locations. www.destaco.com
### DPW SERIES EXPLODED VIEW

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>1</td>
<td>Body</td>
</tr>
<tr>
<td>02</td>
<td>8</td>
<td>Bushing, Oil Impregnated Bronze</td>
</tr>
<tr>
<td>03</td>
<td>2</td>
<td>End Cap</td>
</tr>
<tr>
<td>04</td>
<td>2</td>
<td>Jaw</td>
</tr>
<tr>
<td>05*</td>
<td>2</td>
<td>Guide Shaft, Rack</td>
</tr>
<tr>
<td>06*</td>
<td>2</td>
<td>Guide Shaft (Qty 4 for -NS)</td>
</tr>
<tr>
<td>07</td>
<td>2</td>
<td>Piston Rod</td>
</tr>
<tr>
<td>08</td>
<td>2</td>
<td>Piston</td>
</tr>
<tr>
<td>09</td>
<td>1</td>
<td>Cap, Gear</td>
</tr>
<tr>
<td>10*</td>
<td>1</td>
<td>Gear</td>
</tr>
<tr>
<td>11*</td>
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<td>Bearing, Radial</td>
</tr>
<tr>
<td>12*</td>
<td>2</td>
<td>Piston Rod Wiper (Shaft Wiper &quot;-W&quot; option only)</td>
</tr>
<tr>
<td>13*</td>
<td>8</td>
<td>Shaft Wiper (Shaft Wiper &quot;-W&quot; option only)</td>
</tr>
<tr>
<td>14</td>
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<td>Piston Bumper</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>Piston O-ring</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>Teflon Ring</td>
</tr>
<tr>
<td>17*</td>
<td>2</td>
<td>Body O-ring</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>U-cup</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
<td>Jaw Bumper</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>Gear Cap O-ring</td>
</tr>
<tr>
<td>21</td>
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<td>Retaining Ring</td>
</tr>
<tr>
<td>22</td>
<td>1</td>
<td>Magnet</td>
</tr>
<tr>
<td>23</td>
<td>8</td>
<td>End Cap Mntg Screw</td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>Guide Shaft Mntg Screw</td>
</tr>
<tr>
<td>25</td>
<td>4</td>
<td>Piston Shaft Mntg Screw</td>
</tr>
<tr>
<td>26*</td>
<td>2</td>
<td>Guide Shaft Alignment Dowel</td>
</tr>
<tr>
<td>27</td>
<td>2</td>
<td>Manifold Port Plug</td>
</tr>
<tr>
<td>28</td>
<td>8</td>
<td>Retainer Ring (Shaft Wiper &quot;-W&quot; Option only)</td>
</tr>
<tr>
<td>29</td>
<td>2</td>
<td>Retainer Ring (Shaft Wiper &quot;-W&quot; Option only)</td>
</tr>
<tr>
<td>30*</td>
<td>4</td>
<td>End Cap Mntg Screw</td>
</tr>
<tr>
<td>31</td>
<td>4</td>
<td>End Cap Dowel Pins</td>
</tr>
</tbody>
</table>

**Notes:**
1) Contact the Robohand Sales Department for a complete spare parts list with order numbers and prices.
2) Quantity of #6 is 4 when ordering a Non-synchronous gripper.
3) Items #5, #10, #11, and #26 are for synchronous grippers only.
4) Items #12 and #13 are for –W option only.
5) Item #17 (Body O-ring) shown in body groove.
6) Item #23 Quantity is 6 for 375-1 and 375-2 only.
7) Item #30 is only used in 375-1 and 375-2.

- **Non-Synchronous Procedure:**
  1) Take DPW synchronous gripper and remove the retaining ring and gear cap.
  2) Remove gear from gripper.
  3) Replace gear cap and retaining ring. The gripper is now non-synchronous.

- **-W Option Assembly Procedure:**
  1) Take out guide shaft and piston rod mounting screws.
  2) Remove jaws from guide shafts and piston rods.
  3) Take out end cap mounting screws and pull off end caps.
  4) Take out piston.
  5) Slide out shafts and press wipers in pockets thru front side. Install retaining rings.
  6) Replace shafts, pistons, and end caps.
  7) Be sure to apply thread locker to mounting screws. The gripper now has shaft wipers.
DPW SERIES ASSEMBLED VIEW

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>1</td>
<td>Body</td>
</tr>
<tr>
<td>02</td>
<td>8</td>
<td>Bushing, Oil Impregnated Bronze</td>
</tr>
<tr>
<td>03</td>
<td>2</td>
<td>End Cap</td>
</tr>
<tr>
<td>04</td>
<td>2</td>
<td>Jaw</td>
</tr>
<tr>
<td>05*</td>
<td>2</td>
<td>Guide Shaft, Rack</td>
</tr>
<tr>
<td>06*</td>
<td>2</td>
<td>Guide Shaft (Qty 4 for NS)</td>
</tr>
<tr>
<td>07</td>
<td>2</td>
<td>Piston Rod</td>
</tr>
<tr>
<td>08</td>
<td>2</td>
<td>Piston</td>
</tr>
<tr>
<td>09</td>
<td>1</td>
<td>Cap, Gear</td>
</tr>
<tr>
<td>10*</td>
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<td>Gear</td>
</tr>
<tr>
<td>11*</td>
<td>1</td>
<td>Bearing, Radial</td>
</tr>
<tr>
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<td>End Cap Dowel Pins</td>
</tr>
</tbody>
</table>

Accessory Installation & Adjustment Instructions

Plumbing Fittings:
1) Flow Controls #39 or #40 can be inserted and used in any open or closed airport to help control the stroke actuation.
2) Fail-Safe Valve #37 or #38 can be used in either the open or closed airport to help limit the possibility of dropping the part if air pressure is lost.

Magneto-Resistive Sensors:
1) Insert sensors #28 or #29 into the opening at the end of the profile slot and lock the sensor into position with the integrated screw.

Inductive Sensors:
1) Mount inductive sensor target (#32) to jaw using mounting screw (#36).
2) Insert sensor bracket (#33) into slot of body.
3) Insert sensor (#30 or #31) into appropriate 3mm or 4mm opening in bracket and adjust sensor depth so that sensor light indicates target (#32).
4) Tighten sensor locking screw (#34).
5) Position sensor bracket for desired stroke detection.
6) Tighten sensor bracket with set screw (#35) to lock stroke detection position.

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Other Plumbing Fittings are available for each size - Consult Factory

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<tr>
<th>Item</th>
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<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>1.2</td>
<td>Magneto Resistive Sensor (short barrel) w/Ok. Disconnect</td>
</tr>
<tr>
<td>29</td>
<td>1.2</td>
<td>Magneto Resistive Sensor (90° barrel) w/Ok. Disconnect</td>
</tr>
<tr>
<td>30</td>
<td>1.2</td>
<td>Inductive Sensor (3mm) w/Ok. Disconnect</td>
</tr>
<tr>
<td>31</td>
<td>1.2</td>
<td>Inductive Sensor (4mm) w/Ok. Disconnect (DPW-375 &amp; 500 only)</td>
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<tr>
<td>39</td>
<td>1.2</td>
<td>Adjustable Flow Control (Imperial) #10-32 elbow - 1/4&quot; OD Push-in Style</td>
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<tr>
<td>40</td>
<td>1.2</td>
<td>Adjustable Flow Control (Metric) M5 elbow - 6mm OD Push-in Style</td>
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<tr>
<td>37</td>
<td>1</td>
<td>Fail Safe Valve (Imperial) #10-32</td>
</tr>
<tr>
<td>38</td>
<td>1</td>
<td>Fail Safe Valve (Metric) M5</td>
</tr>
</tbody>
</table>
DPW SERIES SPECIALS

Smaller or Larger Bores
Metallic Rod Scrapers
Extended Strokes
Alternate Materials
and more...

Drawings are for concept only.
Contact Robohand Tech Support
with project requirements.
Please describe your application. Include a sketch or attach additional sheets if necessary.