NORTHLAND
Precision Air Chuck Guarantee - Accuracy within Millionths

NORTHLAND… THE WORLD
LEADER IN PRECISION
DIAPHRAGM AIR CHUCKS

GUARANTEED ACCURACY
• Radial - .000020 inch T.I.R
• Axial - .000010 inch T.I.R.

Advantages of a diaphragm chuck:
• Completely sealed from harsh environments
• Jaw motion provides pullback feature
• No metal-to-metal moving parts
• Counterbalanced for higher operating speeds
• No lubrication required, maintenance free
• Uniform, adjustable clamping pressures

Applications:
• Grinding, turning, boring, milling, measuring, inspection, material handling, robotics, CNC, EDM
• All Machines: Rotating, stationary, vertical, horizontal
• Universal workholding: external, thin-wall, rigid

Productivity
• Simple loading and unloading. No indicating or adjusting.
• Automatic self centering
• Uniform, adjustable holding pressure
• Automatic or manual operation

Reliability
• No metal-to-metal moving parts for extremely long life.
• Counterbalanced to operate at high speeds
• Built-in, self contained air cylinder
• Built-in safety features.

The Precision Workholding source
• Workholding leader in accuracy, reliability, repeatability, concentricity and productivity.
• Standard chuck sizes from 3-inch to 10-inch
• Specials up to 18-inch
• Coolant thru or air thru models available
• Custom designed top tooling. Special jaws and back stops, engineered and manufactured to adhere to your work piece tolerance.
• One competitive price for a complete workholding solution.

AIR FILTER / LUBRICATOR (OPTIONAL)

AIR INLET

ROTARY UNION

FLEXIBLE HOSES

‘UNCLAMP’ PRESSURE REGULATOR WITH GAUGE & QUICK-DUMP VALVE (OPTIONAL)

‘CLAMP’ PRESSURE REGULATOR WITH GAUGE & QUICK-DUMP VALVE (OPTIONAL)

DIAPHRAGM CHUCK

TOP TOOLING

MANUAL CLAMP / UNCLAMP VALVE

AIR TUBE
CUSTOM DESIGNED WORKHOLDING JAWS

Top jaws are a critical part of a precision workholding system. The same attention must be paid to jaw design and manufacture as to chuck machine performance if maximum accuracy is to be achieved at the workpiece. Northfield’s experienced workholding engineers and specialized manufacturing facilities provide a unique capability for the design and manufacture of custom jaws.

Based on customer drawings or workpieces, we design jaws to hold the most intricate or fragile parts. The appropriate material is used — from hardened and ground tool steel through aluminum to Delrin plastic and serrated diamond points. Jaws are created for external, thin-wall/rigid, over-the-shoulder, and hundreds of other unique solutions to exactly meet each workholding requirement to bring gauge block accuracy to your production pieces.

SPECIAL DEVICES FOR INCREASED PRODUCTIVITY

Quality and productivity are improved by specialized tooling produced by Northfield. Among the workholding products we design and manufacture are devices for parts ejection, coolant direction, chip blow-off, robotic loading/unloading, locating tooling, stand-offs and chuck redesign for special applications.

In most cases, quotations for these engineering services are free.

U.S. and METRIC

All dimensions and weights listed in this catalog are in U.S. (Imperial) and metric equivalents.

ORDERING INFORMATION

To fit the custom-made air tube to your machine, we need:
(1) I.D. of the spindle’s rear. Within .002” (.051mm).
(2) Overall length of the spindle.
(3) I.D. of the spindle’s bore at midpoint for spindles over 25 inches (635mm) in length.

TERMS: Net 30 days, F.O.B. Island Park, NY

Accessories Available

- Air Tube Assemblies
- Manual Operating Valve
- Adapter plate — machined to your spindle nose configuration.
- Stationary fixture plates.
- Air pressure regulator, filter, lubricator.
- Side-mounted air ports for lower stationary chuck profile.
- Replacement top jaws.
- Quick disconnects.
MODEL DPH-300
3 INCH DIAPHRAGM CHUCK

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020" TIR
- Axial Accuracy – 0.000010" TIR
- Jaw Stroke – 0.020" with Pull-Down Action (1" Top Jaws) @ 100 PSI
- Speed – 15,000 RPM Max. with Proper Top Jaws
- Weight – 3.4 lbs.
- Standard Chucking Range – 0" to 2.5"
- Totally Sealed with No Metal-to-Metal Moving Parts

DIMENSIONS

Material – Special Multi-Treated High Alloy Steel
Air Cylinder Components – Heat Treated Stainless Steel

MODEL DPH-300W
3 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020" TIR
- Axial Accuracy – 0.000010" TIR
- Jaw Stroke – 0.020" with Pull-Down Action (1" Top Jaws) @ 100 PSI
- Speed – 15,000 RPM Max. with Proper Top Jaws
- Weight – 3.4 lbs.
- Standard Chucking Range – 0" to 2.5"
- Totally Sealed with No Metal-to-Metal Moving Parts
- Coolant-Through or Air Blast-Through (DPH 300W)

DIMENSIONS

Material – Special Multi-Treated High Alloy Steel
Air Cylinder Components – Heat Treated Stainless Steel
MODEL DPH-300I
3 INCH NON-ROTATING AIR TUBE DIAPHRAGM CHUCK

MODEL DPH-400CB
4 INCH - 5/8" COUNTER BORE DIAPHRAGM CHUCK

SPECIFICATIONS
SPECIFICATIONS SUBJECT TO CHANGE

- Actuation — Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy — 0.000020" TIR
- Axial Accuracy — 0.000010" TIR
- Jaw Stroke — 0.020" with Pull-Down Action (1" top Jaws) @ 100 PSI
- Speed — 15,000 RPM Max. with Proper Top Jaws
- Weight — 3.5 lbs.
- Standard Chucking Range — 0" to 2.5"
- Totally Sealed with No Metal-to-Metal Moving Parts

- Actuation — Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy — 0.000020" TIR
- Axial Accuracy — 0.000010" TIR
- Jaw Stroke — 0.048" with Pull-Down Action (1" Top Jaws) @ 100 PSI
- Speed — 12,000 RPM Max. with Proper Top Jaws
- Weight — 5.6 lbs.
- Standard Chucking Range — 0" to 3.0"
- Totally Sealed with No Metal-to-Metal Moving Parts

MATERIALS

- Diaphragm — Special Multi-Treated High Alloy Steel
- Air Cylinder Components — Heat Treated Stainless Steel

DIMENSIONS

NORTHFIELD
PRECISION INSTRUMENT CORPORATION
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Call Toll Free 1 (800) 810-2482
**SPECIFICATIONS**

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020" TIR
- **Axial Accuracy** – 0.000010" TIR
- **Jaw Stroke** – 0.048" with Pull-Down Action
- **(1) 10-32 CAP SCREW**
- **PER JAW FOR MOUNTING**
- **(6) HOLES EQ. SPC'D ON 1.850 B.C.**
- **FOR TOOLING.**
- **Ø2.3000**
- **1.850 B.C.**
- **Ø3.0500**
- **.6250**
- **Ø1.1748**
- **.0500**
- **.3125**
- **1.9950**
- **TOP JAW Ø4.000**
- **(6) 10-32 TAPPED HOLES EQ. SPC'D ON 3.500 B.C. FOR TOOLING.**
- **(6) HOLES EQ. SPC'D ON 3.500 B.C. TO MOUNT CHUCK W/10-32 S.H.C.S.**

**MATERIALS**

- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

**DIMENSIONS**

- **Diaphragm – Special Multi-Treated High Alloy Steel**
- **Air Cylinder Components – Heat Treated Stainless Steel**

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Call Toll Free 1 (800) 810-2482
MODEL DPH-400W
4 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

SPECIFICATIONS

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020" TIR
- Axial Accuracy – 0.000010" TIR
- Jaw Stroke – 0.048" with Pull-Down Action (1" Top Jaws) @ 100 PSI
- Speed – 12,000 RPM Max. with Proper Top Jaws
- Weight – 5.6 lbs.
- Standard Chucking Range – 0" to 3.0"
- Totally Sealed with No Metal-to-Metal Moving Parts
- Coolant through or Air Blast-Through

MATERIALS

- Diaphragm – Special Multi-Treated High Alloy Steel
- Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS

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Call Toll Free 1 (800) 810-2482
MODEL DPH-500
5 INCH DIAPHRAGM CHUCK

SPECIFICATIONS
SPECIFICATIONS SUBJECT TO CHANGE

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020° TIR
- Axial Accuracy – 0.000010° TIR
- Jaw Stroke – 0.050" with Pull-Down Action (1.5" Top Jaws) @ 100 PSI
- Speed – 12,000 RPM Max. with Proper Top Jaws
- Weight – 9.8 lbs.
- Standard Chucking Range – 0" to 4.1"
- Totally Sealed with No Metal-to-Metal Moving Parts

MATERIALS

- Diaphragm – Special Multi-Treated High Alloy Steel
- Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS

MODEL DPH-500W
5 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020° TIR
- Axial Accuracy – 0.000010° TIR
- Jaw Stroke – 0.050" with Pull-Down Action (1.5" Top Jaws) @ 100 PSI
- Speed – 12,000 RPM Max. with Proper Top Jaws
- Weight – 9.8 lbs.
- Standard Chucking Range – 0" to 4.1"
- Totally Sealed with No Metal-to-Metal Moving Parts
- Coolant through or Air Blast-Through

- Diaphragm – Special Multi-Treated High Alloy Steel
- Air Cylinder Components – Heat Treated Stainless Steel

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Call Toll Free 1 (800) 810-2482
MODEL DPH-500I
5 INCH NON-ROTATING AIR FEED TUBE DIAPHRAGM CHUCK

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000020" TIR
• Axial Accuracy – 0.000010" TIR
• Jaw Stroke – 0.050" with Pull-Down Action (1.5" Top Jaws) @ 100 PSI
• Speed – 12,000 RPM Max. with Proper Top Jaws
• Weight – 9.8 lbs.
• Standard Chucking Range – 0" to 4.1"
• Totally Sealed with No Metal-to-Metal Moving Parts

MODEL DPH-600
6 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000020" TIR
• Axial Accuracy – 0.000010" TIR
• Jaw Stroke – 0.060" with Pull-Down Action (1.5" Top Jaws)
• Speed – 10,000 RPM Max. with Proper Top Jaws
• Weight – 16.1 lbs.
• Standard Chucking Range – 0" to 4.8"
• Totally Sealed with No Metal-to-Metal Moving Parts

SPECIFICATIONS
SPECIFICATIONS SUBJECT TO CHANGE

S P E C I F I C A T I O N S

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

M A T E R I A L S

D I M E N S I O N S

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

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Call Toll Free 1 (800) 810-2482
MODEL DPH-600W  
6 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

MODEL DPH-600I  
6 INCH NON-ROTATING AIR FEED TUBE DIAPHRAGM CHUCK

SPECIFICATIONS

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020" TIR
- Axial Accuracy – 0.000010" TIR
- Jaw Stroke – 0.060" with Pull-Down Action (1.5" Top Jaws)
- Speed – 10,000 RPM Max. with Proper Top Jaws
- Weight – 16.1 lbs.
- Standard Chucking Range – 0" to 4.8"
- Totally Sealed with No Metal-to-Metal Moving Parts
- Coolant through or Air Blast-Through

- Actuation – Air Open/Close, with or without Diaphragm Clamping
- Radial Accuracy – 0.000020" TIR
- Axial Accuracy – 0.000010" TIR
- Jaw Stroke – 0.060" with Pull-Down Action (1.5" Top Jaws)
- Speed – 10,000 RPM Max. with Proper Top Jaws
- Weight – 16.3 lbs.
- Standard Chucking Range – 0" to 4.8"
- Totally Sealed with No Metal-to-Metal Moving Parts

MATERIALS

- Diaphragm – Special Multi-Treated High Alloy Steel
- Air Cylinder Components – Heat Treated Stainless Steel

- Diaphragm – Special Multi-Treated High Alloy Steel
- Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS

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Call Toll Free 1 (800) 810-2482
**MODEL DPH-600L**

**6 INCH LOW PROFILE DIAPHRAGM CHUCK**

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020" TIR
- **Axial Accuracy** – 0.000010" TIR
- **Jaw Stroke** – 0.060" with Pull-Down Action (1.5" Top Jaws)
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 13.0 lbs.
- **Standard Chucking Range** – 0" to 4.8"
- **Totally Sealed with No Metal-to-Metal Moving Parts**

**SPECIFICATIONS**

**SPECIFICATIONS SUBJECT TO CHANGE**

**MATERIALS**

- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

**DIMENSIONS**

- (1) 1/4-28 CAP SCREW PER JAW FOR MOUNTING
- (6) HOLES EQ. SPC'D ON 2.900 B.C. FOR CHUCK MOUNTING WITH 1/4-20 S.H.C.S.
- CENTER SLUG CAN BE MACHINED FOR TOOLING

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**MODEL DPH-600LW**

**6 INCH LOW PROFILE COOLANT-THROUGH DIAPHRAGM CHUCK**

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020" TIR
- **Axial Accuracy** – 0.000010" TIR
- **Jaw Stroke** – 0.060" with Pull-Down Action (1.5" Top Jaws)
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 13.0 lbs.
- **Standard Chucking Range** – 0" to 4.8"
- **Totally Sealed with No Metal-to-Metal Moving Parts**
- **Coolant through or Air Blast-Through**

**SPECIFICATIONS**

**SPECIFICATIONS SUBJECT TO CHANGE**

**MATERIALS**

- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

**DIMENSIONS**

- (1) 1/4-28 CAP SCREW PER JAW FOR MOUNTING
- (6) HOLES EQ. SPC'D ON 3.343 B.C. FOR CHUCK MOUNTING WITH 1/4-20 S.H.C.S.
- CENTER SLUG CAN BE MACHINED FOR TOOLING

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Call Toll Free 1 (800) 810-2482
**MODEL DPH-600LI**
6 INCH LOW PROFILE NON-ROTATING AIR FEED TUBE DIAPHRAGM CHUCK

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020" TIR
- **Axial Accuracy** – 0.000010" TIR
- **Jaw Stroke** – 0.060" with Pull-Down Action (1.5" Top Jaws)
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 13.0 lbs.
- **Standard Chucking Range** – 0" to 4.8"
- **Totally Sealed with No Metal-to-Metal Moving Parts**

**MATERIALS**
- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

**DIMENSIONS**

### MODEL DPH-700
7 INCH DIAPHRAGM CHUCK

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020" TIR
- **Axial Accuracy** – 0.000010" TIR
- **Jaw Stroke** – 0.065" with Pull-Down Action (1.5" Top Jaws) @ 100 PSI
- **Speed** – 10,000 RPM Max. with Proper Top Jaws
- **Weight** – 31.3 lbs.
- **Standard Chucking Range** – 0" to 5.5"
- **Totally Sealed with No Metal-to-Metal Moving Parts**

**MATERIALS**
- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

**DIMENSIONS**

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Call Toll Free 1 (800) 810-2482
**MODEL DPH-700W**
7 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020° TIR
- **Axial Accuracy** – 0.000010° TIR
- **Jaw Stroke** – 0.065" with Pull-Down Action (1.5" Top Jaws) @ 100 PSI
- **Speed** – 10,000 RPM Max. with Proper Top Jaws
- **Weight** – 31.3 lbs.
- **Standard Chucking Range** – 0” to 5.5”
- **Machinable Area** – 5.7500 Ø
- **Pilot** – 2.0000 Ø
- **Top Jaw** – 0.2000 Ø
- **3/8-24 Cap Screw** per jaw for mounting (6) places eq. spc’d on 2.6250 B.C.
- **Center Slug** can be machined for tooling

**MODEL DPH-700L**
7 INCH LOW PROFILE DIAPHRAGM CHUCK

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000020° TIR
- **Axial Accuracy** – 0.000010° TIR
- **Jaw Stroke** – 0.065" with Pull-Down Action (1.5" Top Jaws) @ 100 PSI
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 23.2 lbs.
- **Standard Chucking Range** – 0” to 5.5”
- **Machinable Area** – 5.7500 Ø
- **Pilot** – 1.0000 Ø
- **Top Jaw** – 1.2500 Ø
- **5/16-18 Cap Screw** per jaw for mounting (12) places eq. spc’d on 2.6250 B.C.
- **Center Slug** can be machined for tooling

**SPECIFICATIONS**
SPECIFICATIONS SUBJECT TO CHANGE

**DIAMETERS**
• Diameter – 7.000

**MATERIALS**
- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

**DIMENSIONS**

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MODEL DPH-700LIW
7 INCH LOW PROFILE COOLANT-THROUGH DIAPHRAGM CHUCK

SPECIFICATIONS

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000020" TIR
• Axial Accuracy – 0.000010" TIR
• Jaw Stroke – 0.065" with Pull-Down Action
  (1.5" Top Jaws) @ 100 PSI
• Speed – 3,000 RPM Max. with Proper Top Jaws
• Weight – 23.2 lbs.
• Standard Chucking Range – 0" to 5.5"
• Totally Sealed with No Metal-to-Metal Moving Parts
• Coolant through or Air Blast-Through

MATERIALS

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS

MODEL DPH-700LIW
7 INCH LOW PROFILE COOLANT-THROUGH NON-ROTATING AIR FEED TUBE DIAPHRAGM CHUCK

SPECIFICATIONS

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000020" TIR
• Axial Accuracy – 0.000010" TIR
• Jaw Stroke – 0.065" with Pull-Down Action
  (1.5" Top Jaws) @ 100 PSI
• Speed – 3,000 RPM Max. with Proper Top Jaws
• Weight – 23.2 lbs.
• Standard Chucking Range – 0" to 5.5"
• Totally Sealed with No Metal-to-Metal Moving Parts
• Coolant through or Air Blast-Through

MATERIALS

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS
MODEL DPH-800
8 INCH COOLANT-THROUGH
DIAPHRAGM CHUCK

SPECIFICATIONS
SPECIFICATIONS SUBJECT TO CHANGE

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000050° TIR
• Axial Accuracy – 0.000050° TIR
• Jaw Stroke – 0.060" with Pull-Down Action
  (2" Top Jaws) @ 100 PSI
• Speed – 8,000 RPM Max. with Proper Top Jaws
• Weight – 40.8 lbs.
• Standard Chucking Range – 0" to 6.5"
• Totally Sealed with No Metal-to-Metal Moving Parts

MATERIALS

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS

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Call Toll Free 1 (800) 810-2482
## SPECIFICATIONS

### Model DPH-800L

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000050" TIR
- **Axial Accuracy** – 0.000050" TIR
- **Jaw Stroke** – 0.060" with Pull-Down Action (2" Top Jaws) @ 100 PSI
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 30.1 lbs.
- **Standard Chucking Range** – 0" to 6.5"
- **Totally Sealed with No Metal-to-Metal Moving Parts**

### Model DPH-800LW

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000050" TIR
- **Axial Accuracy** – 0.000050" TIR
- **Jaw Stroke** – 0.060" with Pull-Down Action (2" Top Jaws) @ 100 PSI
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 30.1 lbs.
- **Standard Chucking Range** – 0" to 6.5"
- **Totally Sealed with No Metal-to-Metal Moving Parts**
- **Coolant through or Air Blast-Through**

## MATERIALS

- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat Treated Stainless Steel

## DIMENSIONS

### Model DPH-800L

- [Diagram with dimensions and notes]

### Model DPH-800LW

- [Diagram with dimensions and notes]

- Also Available: **DPH-800L LOW PROFILE DIAPHRAGM CHUCK**

SPECIFICATIONS SUBJECT TO CHANGE
MODEL DPH-800LIW  
8 INCH LOW PROFILE COOLANT-THROUGH  
NON-ROTATING AIR FEED TUBE  
DIAPHRAGM CHUCK

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000050" TIR
- **Axial Accuracy** – 0.000050" TIR
- **Jaw Stroke** – 0.060" with Pull-Down Action  
  (2" Top Jaws) @ 100 PSI
- **Speed** – 3,000 RPM Max. with Proper Top Jaws
- **Weight** – 30.1 lbs.
- **Standard Chucking Range** – 0" to 6.5"
- Totally Sealed with No Metal-to-Metal Moving Parts
- Coolant through or Air Blast-Through

**SPECIFICATIONS**
SPECIFICATIONS SUBJECT TO CHANGE

**MATERIALS**

- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat-Treated Stainless Steel

**DIMENSIONS**

MODEL DPH-1000  
10 INCH DIAPHRAGM CHUCK

- **Actuation** – Air Open/Close, with or without Diaphragm Clamping
- **Radial Accuracy** – 0.000050" TIR
- **Axial Accuracy** – 0.000050" TIR
- **Jaw Stroke** – 0.120" with Pull-Down Action  
  (2.5" Top Jaws) @ 100 PSI
- **Speed** – 8,000 RPM Max. with Proper Top Jaws
- **Weight** – 92.9 lbs.
- **Standard Chucking Range** – 0" to 8.3"
- Totally Sealed with No Metal-to-Metal Moving Parts

- **Diaphragm** – Special Multi-Treated High Alloy Steel
- **Air Cylinder Components** – Heat-Treated Stainless Steel

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Call Toll Free 1 (800) 810-2482
MODEL DPH-1000W
10 INCH COOLANT-THROUGH DIAPHRAGM CHUCK

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000050" TIR
• Axial Accuracy – 0.000050" TIR
• Jaw Stroke – 0.120" with Pull-Down Action (2.5" Top Jaws) @ 100 PSI
• Speed – 8,000 RPM Max. with Proper Top Jaws
• Weight – 92.9 lbs.
• Standard Chucking Range – 0" to 8.3"
• Totally Sealed with No Metal-to-Metal Moving Parts
• Coolant through or Air Blast-Through

MODEL DPH-1000L
10 INCH LOW PROFILE DIAPHRAGM CHUCK

• Actuation – Air Open/Close, with or without Diaphragm Clamping
• Radial Accuracy – 0.000050" TIR
• Axial Accuracy – 0.000050" TIR
• Jaw Stroke – 0.120" with Pull-Down Action (2.5" Top Jaws) @ 100 PSI
• Speed – 3,000 RPM Max. with Proper Top Jaws
• Weight – 68.7 lbs.
• Standard Chucking Range – 0" to 8.3"
• Totally Sealed with No Metal-to-Metal Moving Parts

SPECIFICATIONS

SPECIFICATIONS SUBJECT TO CHANGE

MATERIALS

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

DIMENSIONS

• Diaphragm – Special Multi-Treated High Alloy Steel
• Air Cylinder Components – Heat Treated Stainless Steel

NORTHFIELD
PRECISION INSTRUMENT CORPORATION

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DIAPHRAGM CHUCK

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12 IN. SLIDING JAW CHUCK WITH QUICK CHANGE SUB JAW

7 IN. COMPENSATING DIAPHRAGM CHUCK

HOT DOG CHUCK
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Special 5 IN. DIAPHRAGM CHUCK WITH COUNTER BORE

7 IN. DIAPHRAGM CHUCK WITH FACE CLAMPS

3 IN. STATIONARY DIAPHRAGM CHUCK

4 IN. DIA. DIAPHRAGM CHUCK TO GRIP CIRCULATOR PUMP BEARING HOUSE
Precision Air Chucks

Northfield Precision works closely with a world-wide network of representatives and distributors to provide sales and service for the most accurate line of air chucks in the world. This network is supported by factory engineers, full documentation and a national advertising program.

In addition, Northfield is continually developing new products, custom designed to solve the most difficult workholding problems. Northfield supplies precision products to the international automotive, aerospace, electrical/electronic, medical/optical, machine tool, plastics/ceramics and appliance industries.

Northfield provides special accessories such as: automatic lubrication; air or spring ejectors; parts locators; coolant redirection; rubber covers; multiple chuck pallets; all metric chucks; quick-change top jaws. Northfield engineers provide custom workholding solutions for any part that may seem to be impossible to hold.