

phd

Designer's Resource[®]

E-TOOLS



CAD CONFIGURATOR



SIZING



MOBILE APPS



ANIMATIONS



GRAPHICS



PRODUCT CATALOGS



DISTRIBUTION



QUOTES ONLINE



UNIQUE SOLUTIONS[®]

From initial design to delivery, We have the tools you need.

ETOOLS13



PHD is a member of the
MAC Distributor Network



SOLUTIONS FOR INDUSTRIAL AUTOMATION

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The right tool for the job.

Shorten your design process with
PHD's Designer's Resource®.



Our engineering tools take you from start to finish. One step at a time, you'll go from initial design and specifications, engineering requirements, concept design, quotes, purchase, all the way to delivery. And that means more FREE time for you to do other things.

<http://www.phdinc.com/ETools/DesignProcess/>

DESIGN STAGES

e-tool pages



Initial Design and Specification

4-7

- Review animations, graphics, ipod/ipad apps, learn.phdinc.com

PHD has many resources available to assist you in finding the right solution for your application requirements. From catalogs, documents, application examples, animations, engineering specifications, and videos are all at your fingertips online to provide the product information you need. Many of these are also available as an IPod, IPad or portable device app. Additionally, PHD Applications assistance department and your local PHD distributor can provide you with the exact solutions.



Engineering Requirements

4, 9

- Review products at phdinc.com and sizing software

Using PHD Sizing application, select either pneumatic/hydraulic or electrically-powered products. Next, select a product group. PHD Sizing provides a choice of actuators for selection. You are now ready to enter the information that your application requires. The Sizing application will create a list of units that will meet your entered application requirements. From this list you can choose the actuator that offers any additional options or benefits. Examples of this can be; compact in size, lightweight, optional adjustments, etc.



Concept Design

8, 9

- Configure accurate part numbers, options, and accessories
- Generate CAD models to create preliminary design

Once you have sized and selected a unit it is easy to configure a complete part number including options and accessories with PHD's Configurator application. From this configured number CAD models can be generated in the format of your choosing that can be used in your concept design.



Quote

8, 10

- Use configurator to accurately generate ordering data
- Contact your local MDN Distributor to determine price

Now, thanks to the PHD Configurator app., you have an accurate part number and a matching CAD model of the unit you need. At the bottom of the Configurator page you will see the "Get Quote" button. This provides you the opportunity to have an email sent directly to your local PHD distributor. They will provide you a quote for your configured unit. PHD distributors have the tools to provide you with immediate pricing.



Detail Design

8, 9, 10

- Refine design and verify correct size with sizing software
- Configure accurate part numbers
- Generate final CAD models

You have sized, configured, and requested a quote. A good practice is to verify your product requirements through the Sizing and Configurator applications again. Typically designers choose to add options or even change the size of actuator. If you decide to change the unit part number it can be easily re-quoted by your distributor.



Purchase

10

- MDN Distributor communication

PHD, Inc. is a proud member of the MAC Distributor Network (MDN). MDN is a customer-focused network of global manufacturers and distributors providing worldwide sales and exceptional service. MDN is dedicated to working closely together with common goals and philosophies to support customers' needs. With partners located worldwide, MDN provides you a wide variety of value-added support and ongoing assistance.



Delivery

4, 5, 10, 12

- Streamlined processes to process order

PHD has streamlined its order processing with its distributors to receive orders via EDI, automatically schedule orders to the factory and keep distributors updated on the status of your order to provide the quickest delivery of your product. PHD's resources continue to work for you after delivery with additional documentation on using the product you ordered as well as any repair documentation. PHD's products are supported by a worldwide distribution network.

Website Navigation

Your complete design toolbox

phdinc.com

PHDinc.com is packed full of easy design tools to help you in your design process. At phdinc.com you'll find our most current product information available whenever you need it.

- request native and neutral CAD drawings from the most popular formats available
- request information
- size online
- search the knowledgebase
- request a Unique Solutions® quote
- download software updates
- learn about products and new developments from PHD
- view product literature, graphics, and animations online
- communicate with PHD
- view continually updated information
- view application examples
- find local distributor by zip code search
- request application assistance

A benefits



B sizing



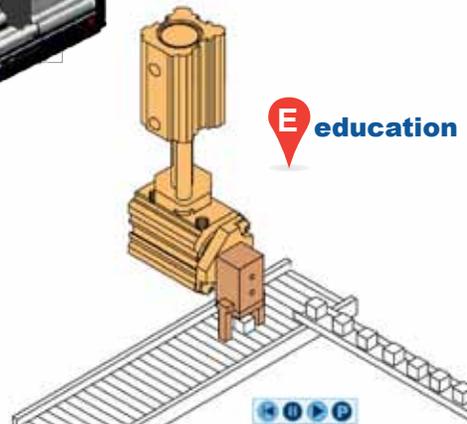
C CAD



D documents



E education center



By joining our mailing list, you will receive the latest information as it becomes available. See back page on how to register.



Our website offers the most current information at your fingertips



Advantages

The Series GRR Guardian® Gripper provides high grip force and is available in long jaw travels (150, 200, 250, & 350 mm). The unit's rugged design and jaw construction can withstand high impact and shock loads. This new heavy duty gripper is designed for robust part gripping and performs with precision in even the most demanding industrial applications, including centering and registration of heavy parts, small engine block manufacturing, automotive wheel rim manufacturing, foundry applications, and many more!

Advantages:
Narrow width, long jaw travels, high grip force, large moment capacity, rugged design, true parallel jaw motion, long unit life.



I parts/ordering data



F delivery info



G graphics



H catalog



Sizing

Engineering requirements, concept and detail design



phdinc.com/sizing



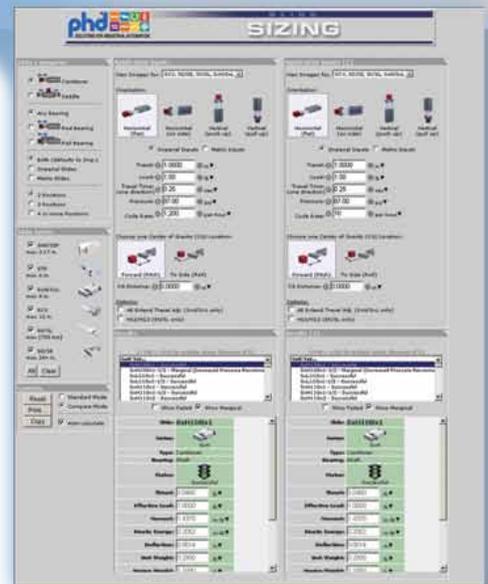
This software provides accurate sizing of most PHD products. Users can input the application data and the software will aid in finding a product that will meet their requirements. Save time by calculating properly sized units.

make your automation job easier ...

Access online or download for offline use

Designed with great features to make sizing a product easier than ever.

- Automatic unit conversion - imperial or metric
- On-the-fly calculations
- Run from web or local version available
- Easy filter method based on application preferences
- Combined product series to find best fit
- Cv and SCFM calculations included
- Side-by-side comparison
- Dynamic graphics to assist in entry
- Compare mode feature allows for different inputs to compare application possibilities
- Copy information to clipboard to use with user documentation



Compare Mode!

CAD Configurator

Concept and detail design



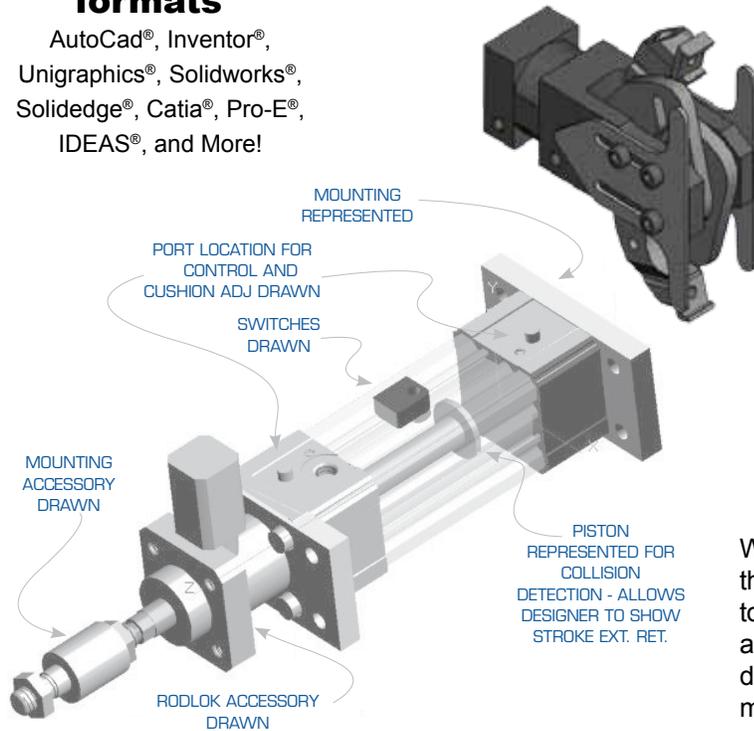
phdinc.com/cad



most popular formats

AutoCad®, Inventor®,
Unigraphics®, Solidworks®,
Solidedge®, Catia®, Pro-E®,
IDEAS®, and More!

This popular design tool enables the designer to configure an actuator and request CAD models via PHD's website. PHD's CAD Configurator lets the designer configure only accurate part numbers. Features and options such as stroke, shocks, switches and mountings are represented in the geometry. PHD's CAD models are available in most popular CAD formats. It's PHD's commitment to be able to speak your native language, whether it's AutoCad®, Inventor®, Unigraphics®, Solidworks®, Solidedge®, Catia®, Pro-E®, and IDEAS® as well as many others.



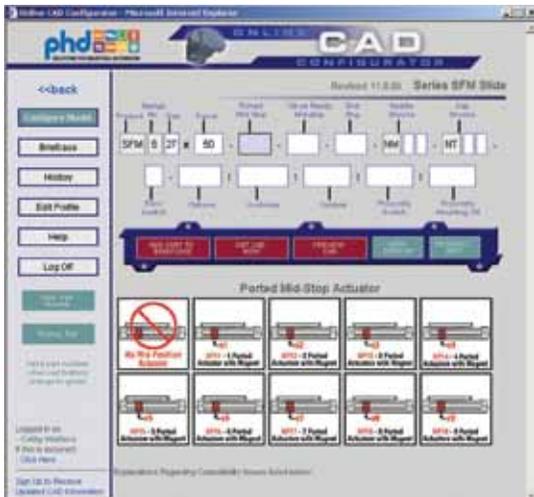
3-D PDF lets user rotate unit view



Web application that enables users to quickly configure accurate ordering data on over 450 million combinations and request a detailed CAD model in a variety of CAD formats.

- Select from all the Native and Neutral most popular CAD Formats
- Download CAD models directly from your browser or have them emailed
- Graphical Configurator ensures that a proper PHD part number is generated and handles compatibility in real-time

Graphical configurator will not let the user specify a wrong part number!



Preview Model



- Briefcase and history option allows you to select multiple CAD models of PHD products at one time
- Geometry includes options and accessories like switches, shocks and other mountings
- Edit capabilities from briefcase and history

Mobile Device Apps

Idea generation and initial design concepts



Android
iPod
iPad

PHD Education Center is an educational resource that utilizes animations to depict the advantage of product features, how the technology works, comparisons of products and application examples through an interactive application.

PHD Product Specs is a resource catalog that allows users to browse product information.

These applications can be downloaded for use with Android, iPod, or iPad use. Go to the App Store or Android Market online today for your free app.



Education Center (Limited Version)

Available at:



App Store



Google play

App Features:

- Runs on most IOS and Android devices
- View actuator internals (Take a look inside!)
- Disassemble units
- Run product comparisons
- View features and advantages
- Check out application examples

This is a limited version. Contact a PHD distributor to view additional animations.



Product Specifications

Available at:



App Store



Google play

App Features:

- Product overviews
- Product catalog
- Actuator benefits
- Unit specifications
- Delivery information
- Photos



Animations/Graphics

Idea generation and initial design concepts



learn.phdinc.com



**View online or
download to your PC.**

PHD's Learn site is dedicated to assisting visitors in learning about product features, application design ideas, and guided tours of our e-tools.

PHD's Learn site not only allows users to view videos, but offers interactive animations to take deeper dives into PHD products. View cut a ways to see inside the actuator, learn about specific features and performance characteristics. Change the application parameters to see how typical actuators compare to PHD. These interactive animations also allow the user to control the pace of their learning.

Learn what makes PHD's actuator technology a leader in the industry.

At the Learn site, you will find product videos, animated application design examples, and guided tours of our e-tools design software. All of the latest animations are updated to the home page.



View Comparisons



View Internals

Product Catalogs/Information

Idea generation, specifications and support

 litstore.phdinc.com



You will find PHD's complete product catalogs and other documents in multiple languages for reference. With Acrobat PDF documents, users can download and print pages to their printer.



Full product catalogs can be viewed and downloaded for instant access.



Information on PHD new products can be downloaded.

Search by language

Literature titles and descriptions can be searched for quick access.



Unique Solutions® Database

Find your unique industry solution



phdinc.com/unlimited

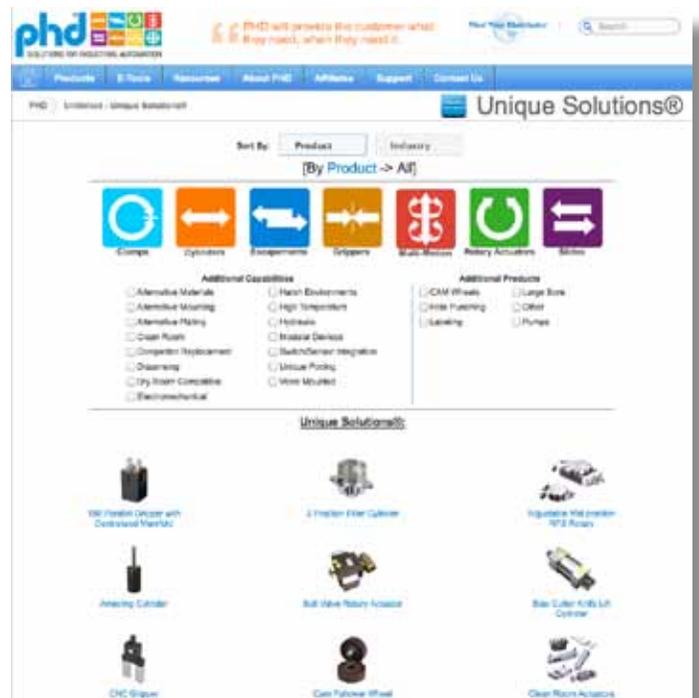


Creating Unique Solutions is simple for PHD. We can make solutions simple for you!

We have dedicated assembly cells, machining centers, and many engineers to design and build unique solutions for our customers. With over 34,000 unique designs and over 100,000 quotes already in our database, we can provide most quotes within eight working hours. We have the systems in place to provide the best delivery in the industry.

Unique Solutions® Are Our Specialty

Nearly every standard unit PHD makes is manufactured to order. That's because PHD has such a wide variety of actuators, options and accessories available. PHD has the capabilities built into our factory systems to modify products within our everyday processes. Because of our flexibility, creating Unique Solutions® is simple for PHD.



Quotes Online

Accurate part numbers and quotes



phdinc.com/unlimited/quote

Unique Solutions® Quotes Online

Our site allows you to enter information about your quote before submitting it to PHD. It also allows the addition of more quotes without filling out general contact information.

You will be asked a series of questions about your application requirements and after submitting them, an MDN representative will contact you with a quote.

Quoting request available 24 hours a day, seven days a week.

- No minimum quantities are required
- CAD files available prior to ordering
- Geared towards short-run requests
- All units receive an "ML" number when ordered. This number, along with all specifications, is kept on permanent record at PHD for future reference and reorders.



Local Distributor

Find your local distributor



phdinc.com/apps/distributors



A globally linked network of partners in over 45 countries ensures local response to multi-national customers. This network ensures seamless service and support at all locations.

Contact your local MDN distributor today for the full story on PHD's automation solutions.

PHD is a proud member of the MAC Distributor Network, a global organization of independent distributors and manufacturers with the common focus of customer service and support anywhere in the world. MDN is dedicated to working closely together with common goals, philosophies, and mutual responsibility to support customers' needs. With partners located worldwide, we are equipped to help keep you or your customers' equipment running, profitable, and competitive.

MDN provides you or your customers the highest quality customer service, local response, and delivery worldwide...wherever your machines are located. MDN "as one," takes care of the customer.



Register Online

Product support



phdinc.com/support/news

For free product updates.

Register today to receive free updates of the industry's most informative catalog on cost effective industrial automation.



Subscribe to our Newsletters and keep up to date about new PHD products and new information regarding Designer's Resource Tools including CAD, sizing, and other design aids.

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