Extreme Condition Solutions



IMPROVE PERFORMANCE IN HARSH ENVIRONMENTS



Introduction



The global leader in nitrogen gas spring technology

DADCO produces top quality products at competitive prices and provides a superior level of customer service. Founded in 1958, DADCO is the highest volume producer of gas springs for press tools. DADCO's products are widely approved and used in global operations for many industries including metal stamping, automotive and plastic injection molding.

Customer Satisfaction

DADCO's motto is "Whatever It Takes To Satisfy Our Customers." DADCO will assist in any way possible to ensure that customers are completely satisfied. DADCO's salespeople and distributors are solution-oriented, product-knowledgeable, and eager to assist customers. DADCO's engineers are available to help customers with specific applications.

Rapid Delivery

DADCO's modern 13,150 m² main production facility as well as satellite facilities permit the fastest deliveries in the industry. Products are available both directly and through a network of trained distributors providing worldwide support.

Warranty

DADCO warrants its products to be free from defects in workmanship or materials for a period of one year from date of manufacture.

CAD Templates On-line



DADCO's entire product line is available on-line in solid models and 2D CAD formats. For more information, visit our website, www.dadco.net, or contact DADCO.

Extreme Condition Solutions

DADCO offers a variety of nitrogen gas spring solutions for extreme condition applications where draw die compounds and other contaminants are used. These options are designed to wipe away or shield the cylinder from caustic fluid to ensure proper operation and extend gas spring life. This catalog details the standard options that DADCO provides. Contact DADCO for more information about rod covers or to get additional assistance with your specific application.









Extreme Conditions Solutions

Secondary Wiper

DADCO offers secondary urethane wipers designed to wipe away contaminants from the gas spring rod. The wipers are available in various styles depending on the gas spring construction. Refer to the drawings below and reference the series product catalog for more information. Reference the charts for the appropriate ordering code based on the gas spring model.

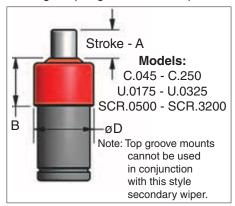
Advantages:

- · Extra protection from ingestion of fluid
- · Long-lasting urethane material resistant to lubricant damage
- · Minimal stroke loss after installation

Cylinders with Secondary Wipers

C, U.0175-U.0325 and SCR Series

For the Micro, **Ultra Force**® (U.0175 and U.0325 only) and the SCR Series, DADCO provides an external urethane wiper cap (UC) that slides over the rod and snaps into the top ring groove at any time. When a secondary wiper is installed on these gas spring models the top mount groove cannot be used.



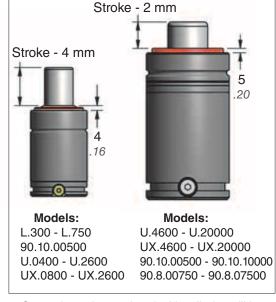
| Model | Α | В | øD | Secondary Wiper | Model | Α | В | øD | Secondary Wiper |
|-------|-----|------|------|-------------------|----------|----|----|------|-------------------|
| model | mm | mm | mm | Part No. | Wodel | mm | mm | mm | Part No. |
| C.045 | .6 | 22 | 15 | 90.346.4.UC.00045 | U.0175 | 2 | 19 | 23 | 90.346.4.UC.00175 |
| C.070 | .6 | 22 | 19 | 90.346.4.UC.00070 | U.0325 | 2 | 19 | 28.5 | 90.346.4.UC.00325 |
| C.090 | 1.4 | 23 | 23 | 90.346.4.UC.00090 | SCR.0500 | 4 | 18 | 36 | 90.346.6.UC.00500 |
| C.180 | 1.4 | 23 | 28.5 | 90.346.4.UC.00180 | SCR.0800 | 4 | 18 | 42 | 90.346.6.UC.00800 |
| C.250 | 4 | 25.4 | 36 | 90.346.4.UC.00250 | SCR.1900 | 4 | 24 | 54 | 90.346.6.UC.01900 |
| | | | | | SCR.3200 | 4 | 26 | 67 | 90.346.6.UC.03200 |

Ordering Example (C.180 Model): 90.346.4.UC.00180

Secondary wiper ordered with cylinder will be attached at the factory.

L, U.0400-U.20000, UX, 90.10 and 90.8 Series

For gas spring series that have a removable dust cap, DADCO offers either a combined urethane dust cap and wiper (UW) or, where additional scraping capability is required, the spring-loaded PTFE (TW) wiper (available for many models) can easily replace the original dust cap when installed at the factory.



Secondary wiper ordered with cylinder will be attached at the factory.

Ordering Example (U.4600 Model): 90.346.3.UW.04600



| Мо | del | Secondary Wiper Part No. | | | | |
|-------------|------------|--------------------------|---------------------------------|--|--|--|
| | | UW Wiper Option | TW Wiper Option | | | |
| | L.300 | 90.346.2.UW.00300 | 90.346.2.TW.00300 | | | |
| 90.10.00500 | L.500 | 90.346.2.UW.00500 | 90.346.2.TW.00500 | | | |
| | L.750 | 90.346.2.UW.00750 | 90.346.2.TW.00750 | | | |
| U.0400 | | 90.346.3.UW.00400 | 90.346.3.TW.00400 | | | |
| U.0600 | | 90.346.3.UW.00600 | 90.346.3.TW.00600 | | | |
| U.0800 | UX.0800 | 90.346.3.UW.00800 | 90.346.3.TW.00800 | | | |
| U.1000 | UX.1000 | 90.346.3.UW.01000 | 90.346.3.TW.01000 | | | |
| U.1200 | | 90.346.3.UW.01200 | 90.346.3.TW.01200 | | | |
| U.1600 | UX.1600 | 90.346.3.UW.01600 | 90.346.3.TW.01600 | | | |
| U.2600 | UX.2600 | 90.346.3.UW.02600 | 90.346.3.TW.02600 | | | |
| U.4600 | UX.4600 | 90.346.3.UW.04600 | | | | |
| U.6600 | UX.6600 | 90.346.3.UW.06600 | | | | |
| U.9600 | UX.9600 | 90.346.3.UW.09600 | | | | |
| U.20000 | UX.20000 | 90.346.3.UW.20000 | | | | |
| 90.10.00750 | 90.8.00750 | 90.346.1.UW.00750 | Contact DADCO for availability. | | | |
| 90.10.01500 | 90.8.01500 | 90.346.1.UW.01500 | | | | |
| 90.10.03000 | 90.8.03000 | 90.346.1.UW.03000 | | | | |
| 90.10.05000 | 90.8.05000 | 90.346.1.UW.05000 | | | | |
| 90.10.07500 | 90.8.07500 | 90.346.1.UW.07500 | | | | |

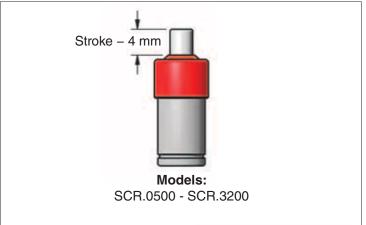
Extreme Conditions Solutions

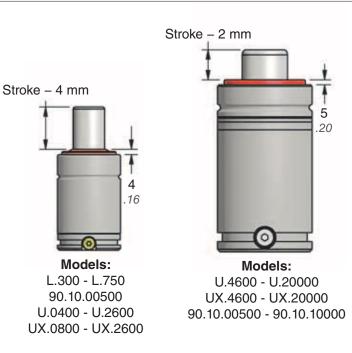
Plated Cylinder with Secondary Wiper

For the ultimate solution, DADCO offers cylinders with both a special plated finish and a secondary wiper installed. See below for details on the wiper caps and ordering information. For more information on a particular DADCO gas spring series, refer to the relevant product catalog. For high temperature applications, contact DADCO.

Advantages:

- Plated rod and can for extreme condition performance
- Secondary wiper for protection against external contamination
- Extra corrosion resistance in harsh environments
- · Easy to order: Add "Q" to the DADCO part number





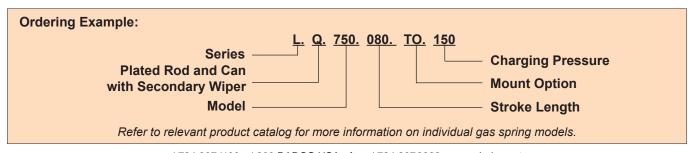


Plated Cylinders with Secondary Wipers

| Series | Plated Cylinder + Secondary Wiper Part No. | | | |
|---|--|--|--|--|
| L Series (L.300 - L.750) | L.Q.300.(stroke) | | | |
| U Series (U.0400 - U.20000) | U.Q.0400 | | | |
| UX Series (UX.1000 - UX.20000) | UX.Q.1000 | | | |
| 90.10 Series (90.10.00500 - 90.10.10000) | 90.10.Q.00500 | | | |

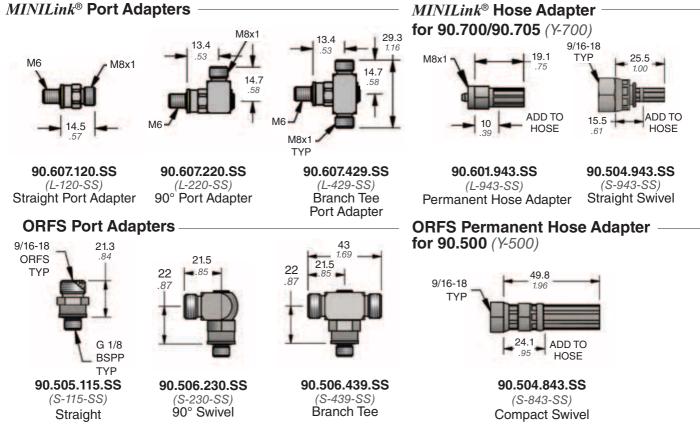
Recommended Stroke Lengths: L & U Series: 013, 025, 038, 050, 080 UX & 90.10 Series: 025, 038, 050, 080 100, 125 and 160

NOTE: To calculate usable stroke length, subtract the value provided in the appropriate drawing.



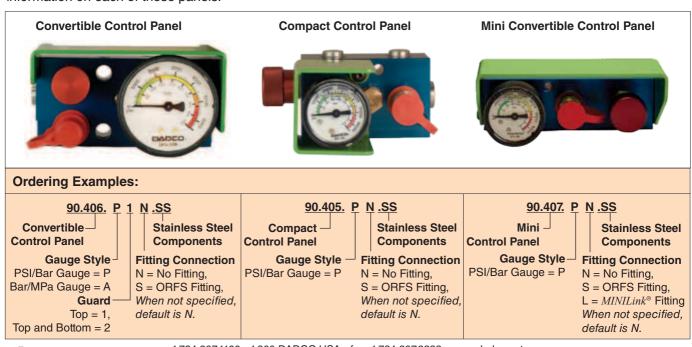
Fittings and Control Panels

DADCO offers a variety of stainless steel fittings to be paired with Y-700 or Y-500 hose when linked operation in extreme condition environments is necessary. Refer to the Linked System Components Catalog (C09118G) for more information on all of DADCO's piping options.



Control Panels

DADCO Control Panels are used to fill, drain and monitor the pressure of linked DADCO nitrogen gas springs from outside the die. Each panel consists of a high pressure gauge, rupture disk, a quick disconnect fill valve and a bleed valve. For maximum versatility, the panel is available with a variety of fitting connections. For extreme condition applications the panel may be ordered with stainless steel components: quick disconnect valve (90.310.110.SS) and fitting connection (90.607.120.SS or 90.505.115.SS). Refer to the Linked System Components Catalog for more information on each of these panels.



Other DADCO Products



Micro - C Series

- Five Models: Micro 45°, Micro 70°, Micro 90°, Micro 180° and Micro 250°
- Color-coded forces from 50 daN to 313 daN
- Full range of stroke lengths up to 200 mm
- Ideal for coil spring replacement



Ultra Force® – U Series

- 19 mm to 195 mm in diameter
- Forces up to 199 kN
- Full range of standard stroke lengths up to 125 mm
- UltraPak® cartridge for long life



ISO / 90.10 Series

- From 32 mm to 195 mm in diameter
- Forces up to 100 kN
- Full range of standard stroke lengths up to 300 mm
- · Bolt-on or welded mounts available
- ISO Standards



Mini - L / LJ Series

- 38 mm. 45 mm and 50 mm diameters
- Force models: 3 kN, 5 kN, 7.5 kN
- Full range of standard strokes up to 125 mm
- Common M6 port for linked operation



UH Series

- 32 mm to 120 mm in diameter
- Forces up to 66 kN
- Full range of standard stroke lengths up to 125 mm
- Common G1/8 port for linked operation



Ultra Force Extended® – UX Series

- 25-55% more force on-contact than ISO Standard Nitrogen Gas Springs
- From 50 mm to 195 mm in diameter
- Forces up to 199 kN
- Full range of standard stroke lengths up to 200 mm
- · Bolt-on or welded mounts available



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