# Nitrogen Gas Spring Compact Pressure Indicator

The Compact Pressure Indicator is designed specifically for use with new selfcontained DADCO Nitrogen Gas Springs, providing an at a glance indication of whether or not the self-contained spring has experienced a pressure loss. The small indicator fits into an additional G 1/8 port, typically 180 degrees from the standard charging port. The additional port will be included in the gas spring if the pressure indicator is ordered with the spring, or a spring may be reworked to incorporate the additional port necessary to install a Compact Pressure Indicator. The preset indicator will display green when the set minimum pressure is met in the gas spring, switching to red if the internal pressure of the gas spring drops below the preset minimum.

Refer to the tables below for the availability of the Compact Pressure Indicator; contact DADCO for more information.

| UT / UH / UX Series |       |       |                     |       |      |       |       |       |      |
|---------------------|-------|-------|---------------------|-------|------|-------|-------|-------|------|
| Models              | 400   | 600   | 800                 | 1000  | 1600 | 2600  | 4600  | 6600  | 9600 |
| Available           | N/A   | N/A   | N/A                 | ✓     | ✓    | ✓     | ✓     | ✓     | ✓    |
| 90.8 / 90.10 Series |       |       |                     |       |      |       |       |       |      |
| Models              | 00500 | 00750 | 015                 | 00 03 | 3000 | 05000 | 07500 | 10000 | )    |
| Available           | N/A   | ✓     | <ul><li>✓</li></ul> |       | ✓    | ✓     | ✓     | ✓     |      |



## Operation

The Pressure Indicator provides a visual signal of the pressure status of a DADCO Nitrogen Gas Spring. It ships installed in the gas spring and is marked with a predetermined monitored pressure. When green is visible it confirms that the nitrogen pressure is above the desired monitored value. When red is visible it indicates that the pressure has dropped below the desired monitored value.



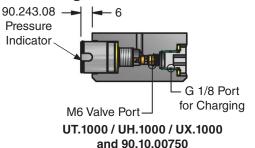
Green indicates pressure is greater than preset pressure (80 bar/8 MPa).

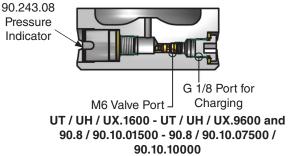


Red indicates pressure is less than preset pressure (80 bar/8 MPa).

| Pressure Monitor Preset<br>Values: |         |          |  |  |  |  |
|------------------------------------|---------|----------|--|--|--|--|
| 8 MPa                              | 80 bar  | 1160 psi |  |  |  |  |
| 10 MPa                             | 100 bar | 1450 psi |  |  |  |  |

#### **Typical Port Arrangement**





## **Ordering Example**

Cylinder with Indicator Installed:

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|--|---|--------|---|--|---------------------|------|--|----------------------------|
| Model  |   | Stroke |   | Mount  | Operating<br>System |      |  | Charging Pressure<br>(bar) |
| UT.1000  | • | 025    | • | RM   | •                   | C108 | •  | 100<br>100 MIN<br>150 MAX  |
| Part Number<br>Includes Series, Stroke Length and<br>Mount Option (refer to product<br>catalogs for more information). |   |        |   | Self-contained with<br>Compact Pressure<br>Indicator.<br>CI08 = 8 MPa<br>CI10 = 10 MPa |                     |      | Must be charged at a<br>minimum of 20 bar/2 MPa<br>above the preset Compact<br>Pressure Indicator value. |                            |

The use of Compact Pressure Indicator requires an additional port to be added to gas spring for installation. Please contact DADCO for information about adding a Compact Pressure Indicator to an existing DADCO Nitrogen Gas Spring.

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CAUTION: Always wear safety goggles when performing any maintenance work.

## **Resetting the Compact Pressure Indicator** -



 When the nitrogen pressure in the gas spring is below the preset value the Compact Pressure Indicator displays red. The indicator cannot be reset until the gas spring is charged.



2. Charge the gas spring with nitrogen gas to the preset value plus at least 20 bar/2 MPa, refer to Page 1 for more information. Once charged, the Compact Pressure Indicator can be reset by sliding the indicator until it displays green. The indicator will click into place.

#### **Removing the Compact Pressure Indicator**

**CAUTION:** Discharge all nitrogen gas before removing the Compact Pressure Indicator, refer to the gas spring maintenance instructions for more information.



1. To remove the Compact Pressure Indicator from the gas spring you will need a Pressure Indicator Removal Tool, 90.243.RT, and a 5 mm allen wrench.



2. Place the removal tool over the Compact Pressure Indicator and align the teeth of the removal tool with the grooves of the indicator. Use the allen wrench to turn the removal tool, loosening the indicator from the gas spring.



3. Remove the Compact Pressure Indicator with the tool from the gas spring. You can now install a new indicator into the gas spring. Note: The Compact Pressure Indicator cannot be adjusted manually; they are preset at the factory.

Compact Pressure Indicator - Factory Preset 90.243.08 (8 MPa) 90.243.10 (10 MPa)

For replacement purposes. Other factory presets may be available, contact DADCO for more information.



#### Compact Pressure Indicator Removal Tool 90.243.RT

Use the Pressure Indicator Removal Tool to remove and install the Compact Pressure Indicator.



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