Electronic Pressure Monitors

DADCO offers two types of Electronic Pressure Monitors to monitor nitrogen gas pressure during operation: An Electronic Pressure Monitor Sensor or a Control Panel with Pressure Monitor. For maximum versatility both types have multiple configurations to best suit your application. Pressure Monitor sensor options are detailed on pages 2-3.

Electronic Pressure Monitor Configuration

To customize your Electronic Pressure Monitor, select the base, sensor and cable accessory that best suits your application.

### Ordering Example:

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Base Option</th>
<th>Sensor Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.421.CP.S.EDS.G</td>
<td>JB = Block only (Bleed Valve, Filler Valve and Rupture Disk not included), CP = Block with Bleed Valve, Filler Valve and Rupture Disk</td>
<td>EDS, DSK, DPS, DPT</td>
</tr>
</tbody>
</table>

**Guard Option**

- G

**Cable Accessory**

- 90.454.M12.S.____
- 90.454.M12.L.____

Attachment Orientation: S = Straight, L = Elbow

Cable Length: 02 = 2 m, 05 = 5 m, 10 = 10 m

Applicable for EDS, DPS & DPT sensor options

**Example shown:**

90.421.CP.S.EDS.G

With 90.454.M12.S Cable

GM specific option available, reference bulletin B16106.

Electronic Pressure Monitor Configuration

To customize your Electronic Pressure Monitor, select the base, sensor and cable accessory that best suits your application.

### Electronic Pressure Monitor Sensor Options

- EDS
- DSK
- DPS
- DPT

### Base Options

- JB
- CP

**Cable Accessory**

- 90.454.M12.S.____
- 90.454.M12.L.____

Attachment Orientation: S = Straight, L = Elbow

Cable Length: 02 = 2 m, 05 = 5 m, 10 = 10 m

Applicable for EDS, DPS & DPT sensor options

**Guard Option**

- G

**Pressure Monitor Sensor Options**

- EDS
- DSK
- DPS
- DPT

**Base Option**

- JB
- CP

**Fitting Connection**

- N = No Fitting Supplied, S = 90.505.115 (ORFS), D = 90.508.115 (D-24), B = 90.805.115 (Zip), L = MINILink® Fitting. Default is N.

**Guard Option**

- G

**Pressure Monitor Sensor Options**

- EDS
- DSK
- DPS
- DPT

**Base Option**

- JB
- CP

**Fitting Connection**

- N = No Fitting Supplied, S = 90.505.115 (ORFS), D = 90.508.115 (D-24), B = 90.805.115 (Zip), L = MINILink® Fitting. Default is N.
**Electronic Pressure Monitors**

**Electronic Pressure Monitor Sensors**
The Electric Pressure Monitor has four sensor options available: EDS, DSK, DPS and DPT. Review the details provided below to select the correct option for your application.

**EDS – Electronic Pressure Sensor**
The EDS features a LED digital display that reads pressure value in bar, psi or MPa. The sensor display face rotates 270° while the body rotates 340°. For added versatility, the sensor also features two switching outputs that can be easily set with face mounted push buttons. **Note: EDS uses 90.454.M12 style cable accessory.**

**DSK – Piston Pressure Switch**
The DSK switch uses a pressure input to operate a SPDT switch as the pressure rises or falls across a set value. The manually adjusted switch monitors a preset pressure. This switch can be set at the factory and wired to shut down a press operation or activate an alarm once pressure is above or below the set-point. **Note: DSK includes a DIN 43650 cable adapter.**

**DPS – Dial Pressure Switch**
The DPS switch features two manually adjustable dials. The upper dial is the set pressure and the lower dial is the reset pressure. When the system pressure increases to the set value, Output 1 (pin 4) turns on, and Output 2 (pin 2) turns off. When the system pressure decreases to the Reset Pressure, Output 1 turns off and Output 2 turns on. **Note: DPS uses 90.454.M12 style cable accessory.**
Electronic Pressure Monitors

**DPT – Electronic Pressure Transducer**

DADCOC’s DPT unit is a pressure transducer, emitting an analogue signal that provides a range of voltage. The DPT converts pressure input to a 0 – 10 V output, the voltage output can then be scaled by a press controller to read the pressure value. Note: DPT uses 90.454.M12B style cable accessory.

**Features:**
- **Supply Voltage:** 12 – 32 VDC
- **Accuracy:** 0.5% Full Scale
- **Output Signal:** Analog (0-10 Volts)

**90.406.421 Control Panel with Pressure Monitor**

The 90.406.421 Control Panel with Pressure Monitor is used to fill and monitor the pressure of linked nitrogen gas springs from outside the die. The panel is adjustable to read pressure in bar, psi or MPa and includes a digital pressure sensor with programmable output to signal if pressure drops below a preset level. This panel conforms to Toyota standard number D-PACPS-B.

**Circuit Diagram**

<table>
<thead>
<tr>
<th>Pin</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brown</td>
</tr>
<tr>
<td>2</td>
<td>White</td>
</tr>
<tr>
<td>3</td>
<td>Blue</td>
</tr>
<tr>
<td>4</td>
<td>Black</td>
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**Pin Color**

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**Analog**

- **Sensor View**
- **Input/Output**
- **Pin Color**
- **12 to 32 VDC**
- **Output Signal**
- **Analog (0-10 Volts)**
- **Current Consumption**
- **< 15 mA**

**DPT – Electronic Pressure Transducer**

- **Max Pressure Rating:** 600 bar (8700 psi)
- **Electrical Connection:** 4 – Pin M12 x 1

**Ordering Example:**

- **Plate Style:** 90.406.421, B
- **Fitting Location:** B, C, D, BD

*For Japanese plate order 90.406.421.A__

**Output:**
- SPST N.O. (Normally Open)
- **Supply Voltage:** 12 – 24 VDC, 80 – 130 VAC (50 – 60 Hz)

**Max Pressure Rating:**
- 350 bar (5076 psi)

**Electrical Connection:**
- M12 (B – Code), 5 Wire, Reverse Key
Pressure Monitors

Electronic Pressure Monitors

90.416. Control Panel

The 90.416 Control Panel with Pressure Monitor is used to fill and monitor the pressure of linked nitrogen gas springs from outside the die. The panel has a protective guard option and includes an EPD digital pressure sensor which is adjustable to read pressure in bar, psi or MPa. The panel offers programmable output to signal when pressure drops below a preset level; one additional switching output is included. This panel conforms to Toyota standard number D-PACPS-C.

Note: 90.416. uses 90.454. M5P. cordset.

Features:
- Output: SPST N.O. / N.C.
  (Normally Open / Normally Closed)
- Max Pressure Rating: 400 bar (5800 psi)
- Supply Voltage: 90 – 240 VAC (45 – 65 Hz)
- Electrical Connection: 1/2” – 20UNF 2A

Control Panel with Pressure Monitor Ordering Example

To customize your Control Panel with Pressure Monitor, follow the ordering codes below. Fitting Location examples are shown on page 3.

Ordering Example:

Model Number: 90.406.421.A. B.02
Fitting Location: C
Fitting supplied is 90.805.115 (Zip), B = Side Port, C = Bottom Port, D = Side Port, BC = Side and Bottom Ports, BCD = All Ports, BD = Both side Ports, N = None

Cable Length: 02 = 2 m, 05 = 5 m, 10 = 10 m, N = None

Note: Additional fitting options available, contact DADCO.

Ordering Example:

Model Number: 90.416. A3B. N. EPD. S05
Gauge Type: EPD = Digital Pressure Sensor, N = None
Guard Type: 3 = Three Sided, N = None
Fitting Type: Fitting supplied is 90.805.115 (Zip), B = Zip Standard, N = None
Fitting Location: A = Side Port, B = Top Port, AB = Both Ports, N = None
Cable Length: S05 = 5 m, S10 = 10 m, N = None
Sensor Type: EPD = Digital Pressure Sensor, N = None

Ordering Example:

Model Number: 90.454. M12B. S. 02
Cable Accessory: M12B Cordset
Cable Length: 02 = 2 m, 05 = 5 m, 10 = 10 m, N = None
Attachment Orientation: S = Straight, L = Elbow

Note: Additional fitting options available, contact DADCO.

Ordering Example:

Model Number: 90.454. M5P. S05
Cable Accessory: M5P Cordset
Cable Length: S05 = 5 m, S10 = 10 m, N = None

Note: Additional fitting options available, contact DADCO.