Electronic Pressure Regulator
EPDN4
EPDN4-MP
EPDN8-MP series

Catalogue PDE2529TCUK-ab
Electronic Pressure Regulator EPDN

Function
The electronic pressure regulator is designed to quickly and accurately adjust and maintain the output pressure from the unit, regardless of flow, in relation to an electronic control signal. The medium can be compressed air or an inert gas.

Construction
The electronic pressure regulator comprises:
- an electronically controlled 3/3-way, poppet valve with spring return to the mid position,
- a semiconductor pressure sensor,
- control electronics
- integrated volume booster.

Operation
The electronic pressure regulator features a closed control loop design, which means that the outlet pressure is constantly measured by a pressure sensor and compared with the required outlet pressure value (setpoint value).

- Whenever the outlet pressure is lower than the required pressure, the electronically controlled 3/3-way valve is shifted out of the spring loaded and closed mid position to feed air until the two pressure values are equal.

- Whenever the outlet pressure is higher than the required pressure, the electronically controlled 3/3-way valve is shifted to exhaust air until the two pressure values are equal again.

- To give higher flow capability, the pressure regulator operates an air operated volume booster.

- The pressure sensor measures the outlet pressure of the volume booster.

Applications
- spot welding: control of clamping force spot welding electrodes,
- ships winches: control of the brake power on the cable drums,
- marine engines: control of the number of revolutions,
- air conditioning in buildings etc.: control of heating, cooling, ventilation etc.
- glass and plastic industry: control of expending pressures,
- medical techniques: monitoring and adjusting for varying pressures resulting from human movements in relation to breathing, etc.
- mechanical engineering: the balancing of loads.
- General purposes

WARNING
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High Reliability

Valves easily comply with the requirements for component reliability in accordance with the EU Machinery Directive standards EN292-2 and N983. In the EPD range high molecular weight plastics with self-lubricating properties make it suitable for use with, or without supplementary lubrication. The design principles also guarantee many years of lifetime lubrication reliable operation.

Simple maintenance

Since the EPD proportional valves have such reliable function, long service life and low price, there is in general no preventive maintenance required but in case of failure we can offer a very interesting exchange system.

Low noise level

The exhaust air from the pilot valves is exhausted through a silencer (optional) located in the bottom, to give the lowest possible noise level. This is particularly important for industries where low noise levels are required. The silencers make it possible for the valves to comply with the EU Machinery Directive, Noise 1.5.8.

High protection class

The solenoid valves are protection class IP 65 with the standard cable plug.

Several types of cable plugs

For connection to your own cables or with moulded cable. A large selection allows you to choose cables to meet your requirements.

Insensitive to dirt air

Thanks to large flow passage areas and the large flow diameter the EPD range can be used in normal industrial or mobile environments without any problems of blocking. However the service life of the valve depends on the cleanliness of the air. Please refer to ISO 8573.

Flexible multiple installation

There is a (building) system modular available were you can put in the EPD, this system is called frame block.

If more information, concering this frame-block, required, please contact your local Parker Sales Office.
Electronic Pressure Regulator EPDN

Pneumatics

Working medium
Compressed air or inert gasses, filtered to min. 50µ, lubricated
or non-lubricated, dried or un-dried, above dewpoint.

Supply pressure
Primary (input pressure): 16 bar: 0 - 12 B output range
12 bar: 0 - 7 B output range
7 bar: 0 - 2 B output range
(others on request)

Pressure control range
Available in three pressure ranges, 0-2 bar, 0-7 bar or 0-12
bar. (See “how to order” on page 4)
Other ranges on request.

Burst pressure of sensor
2 x F.S.*

Air consumption
No consumption in stably regulated situation.

Display
The regulator is provided with an display, indicating the
output pressure (except the digital version).

Electronics

Supply voltage
24 VDC +/- 10%

Current consumption
Max. 200 mA with unloaded signal outputs

Control signals
The electronic pressure regulator can be externally controlled
through an analogue control signal of either 0-10V or 4-20mA,
or a digital control (See “how to order” on page 4).

Output signals
As soon as the output pressure is within the signal band a
signal is given of 24V DC, PNP Ri = 1 K ohm
Outside the signal band this connection is 0V.

Optional
Proces value outlet signal order separately proces value
board. (Except EPDN4-MP series)

Connections
Central M12 connector 4-pole or others
(See *how to order).

Schematic

24 VDC

control signal

*F.s. = Full scale = chosen max. output pressure = 100% pressure control range.
Electronic Pressure Regulator EPDN

Technical Data

**Dead band**
The dead band is preset at 1.1% F.S.

**Accuracy**
Hysteresis is equal to the dead band setting (1.1% F.S.)
Linearity: \( \leq 0.3\% \) F.S.

**Signal band**
The signal band is preset at 5% F.S.

**Proportional band**
The proportional band is preset at 10% F.S.

**Fail safe operation**
After interrupting the power supply the present output pressure is maintained at approximately the same level.
After switching on the power supply again the pressure can be adjusted immediately by giving a new control signal.
(Not available on the M12-version)

**Full exhaust**
Complete exhaust of the regulator is obtained at 1% of F.S.

**Temperature range:** -10°C up to +50°C

**Degree of protection:** IP 65

**CE/EMC:** according to directive 89/336/EEC

**Mounting position**
Preferably vertically, with the cable gland on top.

**Materials**
Parts in contact with the working medium:
- magnet core: steel
- solenoid valve poppet: FPM
- core housing: brass
- solenoid valve housing: plastic
- regulator housing: anodised aluminium / plastic
- valve: Polyurethane
- seats and auxiliary piston: Delrin, Brass
- remaining seals: NBR

Parts in contact with the atmosphere: aluminium anodised.

Regulation characteristics
Advanced functionality

Air consumption
Under normal conditions and in steady state there is no air consumption.

Enable (only on EPDN with DIN connector)
The enable function provides the possibility to accept or not accept a change in control signal and resets the fail-safe mode.
A high enable signal 10 - 30V DC will accept a new control signal
A low enable signal 0 - 6V DC will block a new control signal
An enable signal between 6 - 10V DC is neglected.

In this version of the proportional valve, the enable function is continuously held high through an internal resistor and jumper.

Connect the enable line (pin 4) to GND for a low enable signal.
Enable input Ri = 5K.
With closed “held high” jumper, current to GND = 6mA.
On EPDN-MP range a auto enable functionality is installed.

Fail safe (in respect of the enable input, not valid on EPDN-MP)
When the supply voltage drops below 19VDC, the electronic control is knocked out of function and locked in the fail-safe mode. The latest known output pressure is maintained at approximately the same level (this depends on air consumption).

After return of the supply voltage the digital display in the hood of the valve blinks and indicates a non-realistic value. The manual override buttons are in effect. Input control signals are not accepted and output pressure is maintained as above. As long as the enable signal is low, the valve will stay in this fail-safe mode.

When the enable signal is high (= default) then, upon return of the supply voltage, the valve will get out of fail-safe mode and the output pressure will immediately follow the control signal from that moment. The display stops blinking and shows the actual output pressure. The manual override buttons are set out of function.

When the required output pressure can not be achieved because of a lack of input pressure the unit will open continuously after 5 seconds. The output pressure will then approximately be equal to the inlet pressure. As soon as the input pressure is back on the required level the normal control function follows.

Response times
For a volume of 330 cm³ directly on the outlet of the regulator:
Pressure increase from 2 to 4 bar » 32 msecs
Pressure increase from 2 to 8 bar » 137 msecs
Pressure decrease from 4 to 2 bar » 64 msecs
Pressure decrease from 8 to 2 bar » 159 msecs

For a volume of 330 cm³ on a distance of 20 meters from the regulator (connected with tubing - inner Ø10 mm)
Pressure increase from 2 to 4 bar » 56 msecs
Pressure increase from 2 to 8 bar » 200 msecs
Pressure decrease from 4 to 2 bar » 69 msecs
Pressure decrease from 8 to 2 bar » 196 msecs

Settings
The regulator is pre-set at the factory. If required, adjustments can be made.

Process output value
As option we can supply the complete regulators range of valve’s with a process output value board, which gives the possibility to get a feedback signal in volts (0-10V) of the actual pressure. In this cases the enable or alarm functionality will be replaced by this function. Standard available on EPDN-MP range
### Electronic Pressure Regulator EPDN

**Directional standard EPDN 1/2”**

<table>
<thead>
<tr>
<th>With M12 connector</th>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN4-0-12B-0U10-11-1</td>
<td>3087000</td>
</tr>
<tr>
<td>EPDN4-0-12B-4I20-11-1</td>
<td>3087100</td>
</tr>
<tr>
<td>EPDN4-0-7B-0U10-11-1</td>
<td>3087200</td>
</tr>
<tr>
<td>EPDN4-0-7B-1I20-11-1</td>
<td>3087300</td>
</tr>
<tr>
<td>EPDN4-0-2B-0U10-11-1</td>
<td>3087400</td>
</tr>
<tr>
<td>EPDN4-0-2B-1I20-11-1</td>
<td>3087500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>With DIN 43651 connector</th>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN4-0-12B-4I20-10-1-4</td>
<td>3069100</td>
</tr>
<tr>
<td>EPDN4-0-10B-0U10-10-1-4</td>
<td>3073700</td>
</tr>
<tr>
<td>EPDN4-1.2B-0U10-11-0</td>
<td>3079100</td>
</tr>
<tr>
<td>EPDN4-0-12B-4I20-11-1</td>
<td>3081800</td>
</tr>
<tr>
<td>EPDN4-1.2-12B-0U10-11-0</td>
<td>3091000</td>
</tr>
<tr>
<td>EPDN4-0-12B-4I20-11-1</td>
<td>3091100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>With Harting connector; HAN3+PE*</th>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN4-0-0-2B-0U10-11-1-D</td>
<td>3085700</td>
</tr>
<tr>
<td>EPDN4-0-12B-0U10-11-1-D</td>
<td>3092000</td>
</tr>
</tbody>
</table>

* suitable for oxygen gas

**Digital**

<table>
<thead>
<tr>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN4-0-0-12B-0U10-11-1-D</td>
</tr>
<tr>
<td>EPDN4-0-12B-0U10-11-1-D</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable with plug DIN43651</td>
</tr>
<tr>
<td>Flangeset 1/2”</td>
</tr>
<tr>
<td>Procesvalue print</td>
</tr>
</tbody>
</table>
Control signal:

- DIGITAL

8BIT 8 bits (preferred)
value '0' = 0 ± 6 VDC, Ri = 3.7 kohm
value '1' = 10 ± 30 VDC, Ri = 3.7 kohm

10 fixed dead band range:
+/- 1% F.S.*

Expressed in % of the chosen maximum output pressure (= F.S.*)
(Show to one tenth of a percent!)

Special models

- no special models: standard
- other options required
- suitable for oxygen

For example:
Proces value output (0 - 10 V)

Order key Specials

<table>
<thead>
<tr>
<th>Type</th>
<th>Passage</th>
<th>Flow rate</th>
<th>Flow factor</th>
<th>Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN</td>
<td>12 mm</td>
<td>1800</td>
<td>30</td>
<td>1/2&quot; BSP</td>
</tr>
<tr>
<td>*4</td>
<td></td>
<td></td>
<td></td>
<td>acc. VDI 2173 acc. VDI 3290</td>
</tr>
</tbody>
</table>

Pressure control

- required minimum pressure, expressed in B bar of M mbar (preset pressure)
- required maximum pressure (=F.S.*), expressed in B bar of M mbar (min. 2m bar, max. 12 bar)

Complete exhaust of unit:

10 fixed dead band range:
+/- 1% F.S.*

* For other models, range or special demands, please contact your local Parker sales office.
Electronic Pressure Regulator EPDN -MP

**General information**

Description: Proportional valve (Electronic pressure regulator)
Type example: EPDN4-MP-1,2-12B-0U10
Code example: 3505100 (see page 12)

**Description**

EPDN4 = Proportional valve 1/2”
MP = Micro processor
1,2-12B = Output pressure range: 1,2 to 12 bar
0U10 = Control signal: 0-10 Volt
(0 - 1V will be ignored)
.... = Customer identification if necessary
• Connector DIN 43651 (Plug and cable are not supplied)
• Alarm output signal 24VDC when required pressure is reached
• Fits in the Parker Pneumatic Frame-block (air service unit)

**Working medium**

Compressed air or inert gases, filtered to min. 50µ, lubricated or non-lubricated, dried or non dried, above dewpoint.

**Pressure range**

Primary (Input pressure) max. 16 bar
Secondary (Output pressure) 0-12 bar
The output pressure is indicated on a built-in digital display.
Pressure drop input/output min. 0,5 bar

**Supply voltage**

24V DC ± 10% (-20% / +25% with decrease of specs).
Reverse protected
Max. 200 mA.

**Temperature range**

-10°C - +50°C

**Class of protection**

IP 65

**Flow capacity**

1/2” 1800 Nl/min (acc. VDI 2173)
1” 4000 Nl/min

**Settings**

Dead band: ± 1% of FS (= ± 0,12 bar) = Hysteresis
Proportional band: ±10% of FS (= ± 1,2 bar)
Signal band: ±10% of FS (= ± 1,2 bar)

**Accuracy**

Linearity : < 0,3% of F.S

**Control signal**

0 - 10V or 0 (4)-20mA, Ri = 100K
(0 - 1V will be ignored)
The control signal can be changed (see page 11).

**Alarm output signal**

Within the signal band an output signal is available: 24VDC, PNP open collector, max 50mA, prevented against short-circuit, accepts inductive loads.

**Air consumption**

Under normal conditions and in steady state there is no air consumption.

**Parameters.**

Functionality of EPD can be manipulated by means of parameterset. This set can be changed by means of 3 buttons at the front side of the EPD.
For details look at page 13 ‘How to change parameters’, etc.

**Behaviour control.**

In this version we introduced a five steps behaviour control functionality. This gives the user the capability of changing the regulation speed and accuracy by means of one parameter. (P20). For details see page 13.

**Auto_enable functie.**

The enable function can be activated automatically, and is activated when the enable input is made ‘high’ (24V), the first time after power on. For details see page 14.

**Hidden functions.**

There are several additional functions to perform different tasks, for instance resetting the default settings, storing actual parameters as the default set.
For details see page 14.

**Available options.**

Analog output.
External analog input.
Infrared communication.

For additional information, consult referred section or please contact factory.
Pilot valve protection

When the required output pressure can not be achieved because of a lack of input pressure the unit will display "No.P". The output pressure will then approximately be equal to the inlet pressure. As soon as the input pressure is back on the required level the normal control function follows.

Safety exhaust

This function is not used.

Response times

For a volume of 330 cm$^3$ directly on the outlet of the regulator:
Pressure increase from 2 to 4 bar $\approx$ 32 msecs
Pressure increase from 2 to 8 bar $\approx$ 137 msecs
Pressure decrease from 4 to 2 bar $\approx$ 64 msecs
Pressure decrease from 8 to 2 bar $\approx$ 159 msecs

For a volume of 330 cm$^3$ on a distance of 20 meters from the regulator (connected with tubing - inner $\varnothing$ 10 mm)
Pressure increase from 2 to 4 bar $\approx$ 56 msecs
Pressure increase from 2 to 8 bar $\approx$ 200 msecs
Pressure decrease from 4 to 2 bar $\approx$ 69 msecs
Pressure decrease from 8 to 2 bar $\approx$ 196 msecs

Settings

The regulator is pre-set at the factory as indicated on label. If required, adjustments can be made, see page 13.

Drawing

Attached is a drawing showing the dimensions and the pneumatic scheme.

Mounting

The unit preferably is to be mounted vertically with the electrical connection to the top.

Materials used

Body : Anodised aluminium
Seals : NBR
Valve : Polyurethane
Inner parts : Delrin, brass, aluminium

Electrical connections

Use plug DIN 43651 female 6+PE

The electrical connections are as follows:

<table>
<thead>
<tr>
<th>Pin no.</th>
<th>Function</th>
<th>assembled cable color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0 volt supply</td>
<td>Blue</td>
</tr>
<tr>
<td>2</td>
<td>24V alarm signal output</td>
<td>Grey</td>
</tr>
<tr>
<td>3</td>
<td>+24V supply</td>
<td>Brown</td>
</tr>
<tr>
<td>4</td>
<td>Enable default not connected</td>
<td>Green</td>
</tr>
<tr>
<td>5</td>
<td>GDN control signal</td>
<td>Pink</td>
</tr>
<tr>
<td>6</td>
<td>0 - 10 V control signal Ri = 100K</td>
<td>White</td>
</tr>
<tr>
<td>7</td>
<td>PE cable sleeve</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

Change the control signal

From 0 - 10 V to 0 - 20mA (Ri = 500$\Omega$): (Parameter 4)
From 0 - 10 V to 4 - 20mA (Ri = 500$\Omega$): (Parameter 4 + 29)

Warning

Do not adjust any of the other parameters. These are factory settings. Any other change can have a big influence on the performance of the regulator.

Parker Pneumatic does not warranty units which have not been properly used and/or adjusted.
Electronic Pressure Regulator EPDN-MP

Directional standard EPDN/MP

<table>
<thead>
<tr>
<th>With M12 connector - size 1/2&quot;</th>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN4-MP-0-12B-OU10</td>
<td>3505500</td>
</tr>
<tr>
<td>EPDN4-MP-0-12B-4I20</td>
<td>3505600</td>
</tr>
<tr>
<td>EPDN4-MP-0-7B-OU10</td>
<td>3505700</td>
</tr>
<tr>
<td>EPDN4-MP-0-7B-4I20</td>
<td>3505800</td>
</tr>
<tr>
<td>EPDN4-MP-0-2B-OU10</td>
<td>3505900</td>
</tr>
<tr>
<td>EPDN4-MP-0-2B-4I20</td>
<td>3506000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>With M12 connector - size 1&quot;</th>
<th>Order code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPDN8-MP-0-12B-OU10</td>
<td>3508550</td>
</tr>
<tr>
<td>EPDN8-MP-0-12B-4I20</td>
<td>3508560</td>
</tr>
<tr>
<td>EPDN8-MP-0-7B-OU10</td>
<td>3508570</td>
</tr>
<tr>
<td>EPDN8-MP-0-7B-4I20</td>
<td>3508580</td>
</tr>
<tr>
<td>EPDN8-MP-0-2B-OU10</td>
<td>3508590</td>
</tr>
<tr>
<td>EPDN8-MP-0-2B-4I20</td>
<td>3508600</td>
</tr>
</tbody>
</table>

Ordering-key Specials

- **Micro processor**

<table>
<thead>
<tr>
<th>EPDN</th>
<th>4</th>
<th>MP</th>
<th>750 M</th>
<th>5,5</th>
<th>B</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
</table>

- **Type**
  - **Passage**
    - 4: 12 mm
    - 8: 25 mm
  - **Flow rate**
    - 1800 Nl/min
  - **Flow factor**
    - 30 Kv (l/min)
  - **Connections**
    - 1/2" BSP
  - **Internal thread**
    - acc. VDI 2173
  - **Pressure control**
    - required minimum pressure, expressed in B bar of M mbar (preset pressure)
    - required maximum pressure (=F.S.*) expressed in B bar of M mbar (min. 2m bar, max. 12 bar)

- **Control signal**: *
  - **ANALOGUE**
    - 0U10: 0 ± 10 VDC, Ri = 90 kohm
    - 4I20: 4 ± 20 mA, Ri = 250 ohm
  - **DIGITAL**
    - 8BIT: 8 bits (preferred)
    - value '0': 0 ± 6 VDC, Ri = 3.7 kohm
    - value '1': 10 ± 30 VDC, Ri = 3.7 kohm

- **Special models**
  - O: no special models: standard
  - S: other options required
  - D: suitable for oxygen
## Parameter setting

<table>
<thead>
<tr>
<th>Changeable user parameters*</th>
<th>Setting</th>
<th>Standard value</th>
<th>Description</th>
<th>Unit</th>
<th>Action</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n.u. n.u. n.u green key</td>
<td></td>
<td>Back to factory settings</td>
<td>Back to normal settings</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>mA V</td>
<td></td>
<td>Set setpoint input to mA</td>
<td>0(4)-20mA, (P29) 0-10V</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
<td>mA V</td>
<td></td>
<td>Set external input to mA</td>
<td>0(4)-20mA, (P29) 0-10V</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
<td>Alarm output</td>
<td></td>
<td>Set output to digital alarm output</td>
<td>24V= in band 0-10V–P_out</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>0</td>
<td>Analog output</td>
<td></td>
<td>Set output to analog output</td>
<td>0-10V–P_out</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>0</td>
<td>% F.S.</td>
<td></td>
<td>Set analog output offset</td>
<td>offset = 0-2V</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>0</td>
<td>% F.S.</td>
<td></td>
<td>Set analog output span</td>
<td>span = 0-11V</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>0 to 20</td>
<td>% F.S.</td>
<td></td>
<td>Set proportional area</td>
<td>0,5 to 2,5 Bar</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>50 to 250</td>
<td>% F.S.</td>
<td></td>
<td>Set deadband area</td>
<td>20 to 400 mBar</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>1 to 250</td>
<td>% F.S.</td>
<td></td>
<td>Set slow area</td>
<td>0 to 2,5 Bar</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>1</td>
<td>% F.S.</td>
<td></td>
<td>Set slow steps</td>
<td>highest speed lowest speed</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>0 to 200</td>
<td>% F.S.</td>
<td></td>
<td>Set preset pressure (x10 mBar)</td>
<td>0 to 2 bar</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>0 to 100</td>
<td>% F.S.</td>
<td></td>
<td>Pressure correction</td>
<td>0 to P-max</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>0</td>
<td>Custom set</td>
<td></td>
<td>Fastest Fast Normal Slow Slowest</td>
<td>P 12, 13, 21</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>0</td>
<td>Custom set</td>
<td></td>
<td>Fastest Fast Normal Slow Slowest</td>
<td>P 12, 13, 21</td>
</tr>
<tr>
<td>15</td>
<td>15</td>
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<td>P 12, 13, 21</td>
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<td>16</td>
<td>16</td>
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<td></td>
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<td>P 12, 13, 21</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
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<td>18</td>
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<td>19</td>
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</tr>
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<td>P 12, 13, 21</td>
</tr>
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<td></td>
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<td>P 12, 13, 21</td>
</tr>
<tr>
<td>29</td>
<td>29</td>
<td>0</td>
<td>Custom set</td>
<td></td>
<td>Fastest Fast Normal Slow Slowest</td>
<td>P 12, 13, 21</td>
</tr>
</tbody>
</table>

*Other parameter settings are available. Consult factory.
Electronic Pressure Regulator EPDN-MP

How to change parameters:

Pressing Accept key for more than 3 sec, will activate parameter change mode. User can select parameter by pressing up or down key on EPD.(display shows Pxx). When parameter number is correct, pressing accept again will enter parameter number.(display shows parameter value now). Pressing the up or down key will change the parameter itself now. (blinking display point shows parameter editing mode). Pressing the accept key will accept the new parameter value. (all digits will blink during acceptance). After releasing all keys , the next parameter number will be presented on the display. (you may evt. step to the next parameter). When no key is pressed, after ca. 3 sec the display will show the actual output pressure.

Hidden functions EPDN4-MP

During startup unit. (Power goes on)

When keys DOWN and UP are pressed during startup, (connecting to the 24V power supply) manual modus is activated. This means that the user is able to in/decrease the output pressure of the EPD, by pressing the UP or DOWN key. During this action the display will blink, indicating that the manual mode is activated.

Pressing the UP and DOWN key again simultaneously will cause the EPD to terminate manual modus.

After startup. (Power is on)

Parameter 0 = 3 (green key function)
Entering this value in parameter 0 will store the calibrated factory data into the working parameters. (Default calibration data is used)

Auto enable function.

Default the auto enable function is deactivated. The unit will now respond to any new applied setpoint.

If the enable input is made high (24Vdc) for the first time, the auto enable function is activated. The unit will now only respond to the new setpoint when the enable input is high.

If auto enable function is activated and the enable input is low. Pressing UP or DOWN will cause the unit to go in manual modus. The user is able to in/decrease the output pressure of the EPD, by pressing the UP or DOWN key. During this action the display will blink, indicating that the manual mode is activated.

When the enable input becomes high, the new setpoint will overrule the manual setting, and will exit the manual mode directly. Also pressing the UP and DOWN key again simultaneously will cause the EPD to terminate manual modus.

Behaviour control.

The regulation speed off the pressure regulator can be modified by means of one parameter. (P 20)
The value in this parameter has a range from 0-5, an higher value means slower regulation speed. (but more accurate). When the value 0 is entered, you are able to create your own custom settings true parameters 12,13 and 21.
Electronic Pressure Regulator EPDN

Dimensions

EPDN with DIN-connector

View AA
Dimensions

EPDN with M12 connector
Dimensions

EPDN8-MP with M12 connector
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We reserve the right to make alterations without prior notification.
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