

# P3010 Vacuum switch, mini, pre-set, push-in



## P3010 Vacuum switch, mini, pre-set, push-in

- Patented multistage COAX® cartridge - MINI - with Pi, Xi cartridge.
- Electromechanical vacuum switch with digital output.
- Built-in red LED that indicates status.
- Includes a flow-through silencer and a built-in vacuum filter for harsh environments.
- High system reliability in case of fluctuating or low feed pressure.
- Suitable for fast and reliable evacuation in sealed systems.

### Technical data

| Description                                  | Unit  | Value                                |
|--|-------|--------------------------------------|
| Feed pressure, max. (pump)                   | psi   | 101.5                                |
| Noise level                                  | dba   | 66-68                                |
| Pressure, max (switch)                       | psi   | 29                                   |
| Material                                     |       | PP, PA, Al, , NBR, TPU, SS, CuZn(Au) |
| Temperature range                            | °F    | 14-122                               |
| Weight                                       | oz    | 6.10-15.0                            |
| Signal range                                 | -inHg | 9.0, 15.0 or 21.0 +1.5/-0.30         |
| Function                                     |       | PNP NO/NC, NPN NO/NC                 |
| Hysteresis                                   | -inHg | 1.78 ± 0.30                          |
| Voltage                                      | VDC   | 24 (12-30)                           |
| Safety classification                        |       | IP40                                 |
| Current max                                  | mA    | 100 inductive/400 resistive          |
| Voltage drop, max (100mA/24V inductive load) | VDC   | 0.055                                |
| Response time                                | ms    | 4                                    |
| Display                                      |       | Red LED                              |
| Electric connection                          |       | M8 3-pin male                        |

### Vacuum flow

| COAX® Cartridge | Feed pressure*<br>psi | Air consumption<br>scfm | Vacuum flow (scfm) at different vacuum levels (-inHg) |      |      |      |      |      |      |      |      |      | Max vacuum<br>-kPa |
|-----------------|-----------------------|-------------------------|---|------|------|------|------|------|------|------|------|------|--------------------|
|                 |                       |                         | 0   | 3    | 6    | 9    | 12   | 15   | 18   | 21   | 24   | 27   |                    |
| Pi12-3          | 45                    | 0.93                    | 2.97  | 1.27 | 0.93 | 0.57 | 0.40 | 0.30 | 0.21 | 0.13 | 0.06 | —    | 27.0               |
| Si08-3          | 87                    | 0.93                    | 2.84  | 1.55 | 1.17 | 0.74 | 0.49 | 0.36 | 0.28 | 0.17 | —    | —    | 22.2               |
| Xi10-3          | 72.5                  | 0.97                    | 3.03  | 1.48 | 1.06 | 0.70 | 0.40 | 0.32 | 0.23 | 0.15 | 0.10 | 0.02 | 27.8               |

For vacuum flows at other feed pressures, see COAX® Cartridge data sheets. \*Feed pressure tolerance, +/- 1.45 psi

### Evacuation time

| COAX® Cartridge | Feed pressure*<br>psi | Air consumption<br>scfm | Evacuation time (s/cf) to reach different vacuum levels (-inHg) |      |      |      |      |      |      |     |     |      | Max vacuum<br>-inHg |
|-----------------|-----------------------|-------------------------|---|------|------|------|------|------|------|-----|-----|------|---------------------|
|                 |                       |                         | 3   | 6    | 9    | 12   | 15   | 18   | 21   | 24  | 27  |      |                     |
| Pi12-3          | 45                    | 0.93                    | 2.27  | 6.52 | 13.9 | 28.3 | 48.2 | 73.7 | 110  | 178 | —   | 27.0 |                     |
| Si08-3          | 87                    | 0.93                    | 2.83  | 7.08 | 13.6 | 22.7 | 36.8 | 56.7 | 82.2 | —   | —   | 22.2 |                     |
| Xi10-3          | 72.5                  | 0.97                    | 2.55  | 7.37 | 14.2 | 25.5 | 42.5 | 62.3 | 96.3 | 147 | 249 | 27.8 |                     |

For evacuation times at other feed pressures, see COAX® Cartridge data sheets. \*Feed pressure tolerance, +/- 1.45 psi

| Blow flow       |                      |                         |   |      |      |      |      |      |      |      |      |      |      |      |                     |
|-----------------|----------------------|-------------------------|---|------|------|------|------|------|------|------|------|------|------|------|---------------------|
| COAX® cartridge | Feed pressure<br>psi | Air consumption<br>scfm | Blow flow (scfm) at different pressure levels (psi) |      |      |      |      |      |      |      |      |      |      |      | Max pressure<br>psi |
|                 |                      |                         | 0   | 3    | 6    | 9    | 10   | 12   | 13   | 15   | 16   | 17   | 19   | 20   |                     |
| Pi12-3          | 87                   | 1.59                    | 3.96  | 2.97 | 2.82 | 2.37 | 2.18 | 2.18 | 2.18 | 2.18 | 2.12 | 2.01 | 1.82 | 1.67 | 20                  |
| Si08-3          | 87                   | 0.93                    | 3.77  | 2.46 | 2.18 | 1.82 | 1.70 | 1.59 | 1.40 | 1.12 | —    | —    | —    | —    | 10                  |
| Xi10-3          | 87                   | 1.14                    | 3.81  | 2.75 | 2.33 | 2.08 | 1.80 | 1.78 | 1.67 | 1.50 | 1.29 | —    | —    | —    | 13                  |

## Ordering information

### 1. Select housing P3010 Code

|                               |    |
|-------------------------------|----|
| Housing, connection Ø=6 mm    | 00 |
| Housing, connection 1/8" NPSF | 01 |

### 2. COAX® cartridge modules P3010 Code

|   |    |
|---|----|
| COAX® cartridge module Pi12-3FSx1                   | AE |
| COAX® cartridge module Pi12-3FSx1, non-return valve | AF |
| COAX® cartridge module Pi12-3FSx2                   | AG |
| COAX® cartridge module Pi12-3FSx2, non-return valve | AH |
| COAX® cartridge module Si08-3FSx1                   | AA |
| COAX® cartridge module Si08-3FSx1, non-return valve | AB |
| COAX® cartridge module Si08-3FSx2                   | AC |
| COAX® cartridge module Si08-3FSx2, non-return valve | AD |
| COAX® cartridge module Xi10-3FSx1                   | AI |
| COAX® cartridge module Xi10-3FSx1, non-return valve | AJ |
| COAX® cartridge module Xi10-3FSx2                   | AK |
| COAX® cartridge module Xi10-3FSx2, non-return valve | AL |

### 3. Select connection and function module P3010 Code

|   |    |
|---|----|
| Function Quick-release connection, 10 and 6 mm, 3 cm <sup>3</sup>         | 04 |
| Function Quick-release connection, 8 and 6 mm, 30 cm <sup>3</sup>         | 05 |
| Function Quick-release connection, 8 and 6 mm, 60 cm <sup>3</sup>         | 06 |
| Function Quick-release connection, 10 and 6 mm, 30 cm <sup>3</sup>        | 07 |
| Function Quick-release connection, 10 and 6 mm, 60 cm <sup>3</sup>        | 08 |
| Function Quick-release connection, 1/4" NPSF and 6 mm, 3 cm <sup>3</sup>  | 09 |
| Function Quick-release connection, 1/4" NPSF and 6 mm, 30 cm <sup>3</sup> | 10 |
| Function Quick-release connection, 1/4" NPSF and 6 mm, 60 cm <sup>3</sup> | 11 |
| Function Quick-release connection, 8 and 6 mm, 3 cm <sup>3</sup>          | 12 |

For detailed information on Quick-release, see separate datasheet.

### 4. Select ES P3010 Code

|                  |    |
|------------------|----|
| No energy saving | AA |
| Valve DS23       | AB |

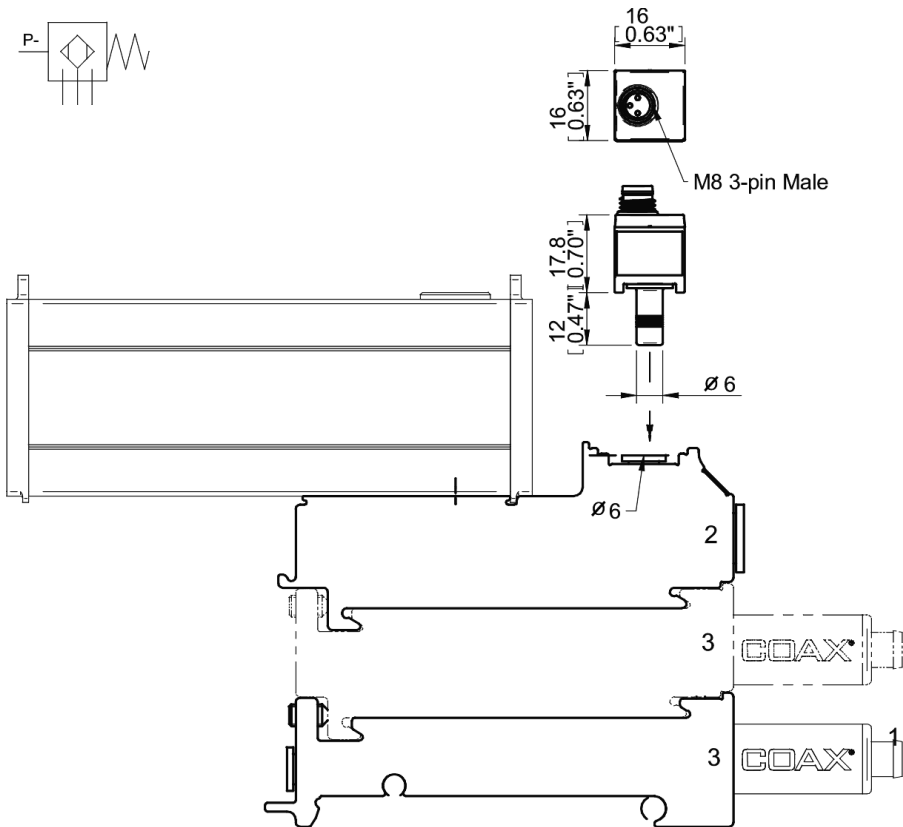
For detailed information on Valve DS 23, see separate datasheet.

### 5. Select vacuum sensing P3010 Code

|                                   |    |
|-----------------------------------|----|
| Vacuum switch VS4015 Ø6, 9 -inHg  | 18 |
| Vacuum switch VS4015 Ø6, 15 -inHg | 19 |
| Vacuum switch VS4015 Ø6, 21 -inHg | 20 |

### Example Ordering number

|   |                      |
|---|----------------------|
| Housing, connection Ø 6 mm Pi12-3FSx1, Function Quick-release module 10/6 3cm <sup>3</sup> , no energy saving, Vacuum switch VS4015 9.0 -inHg | P3010.00.AE.04.AA.18 |
|---|----------------------|



Ordering information,  
accessories

Description

Part No.

Sealing kit P3010, NBR

01.04.201

The sealing kit includes flap valves, compressed air filter and vacuum filter.