

P3010 AVM™2



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- Patented multistage COAX® cartridge - MINI - with Pi, Si, Xi cartridge.
- AVM™2, Automatic Vacuum Management, unit with built-in control and monitoring functions.
- Valves for vacuum on/off, blow-off, blow-off flow control and non-return valve.
- Option with Normally Closed "fail safe" on/off valve (NC). It changes to an open valve if power is lost and vacuum will be generated. A conventional normally closed on/off valve (NC 2) is also available. It stays closed if electrical power is lost or removed.
- Option with automatic blow-off (1 sec) reduces number of outputs needed from PLC or I/O box.
- Analog vacuum sensor with two digital outputs.
- Digital display with "-kPa" or "-inHg" as unit options.
- Integrated energy saving function (ES) that minimizes the air consumption in sealed systems. The ES function can be activated manually or via a signal (signal override).
- Three-color LED status indicators for valves, signal outputs

Technical data

| Description | Unit | Value |
|------------------------------|----------------|-------------------------|
| Feed pressure, max. | psi | 101.5 |
| Noise level | dBA | 66-68 |
| Material | | PA, NBR, AI, SS, PMMA |
| Temperature range | °F | 32-122 |
| Weight | oz | 8.82-11.6 |
| Signal range, adjustable | -inHg | 5.9-23.6 |
| Hysteresis | -inHg | 2.07±0.30 |
| Voltage | VDC | 24 (22-28) |
| Ripple, max. | V _p | 1V _{rms} |
| Current consumption, nominal | mA | 110 |
| Safety classification | | IP65 [NEMA 4] |
| Current, max. output load | | 100 |
| Display | | LED indicators, numeric |
| Flow. blow-off | scfm | 0-15.9 |

Vacuum flow

| COAX® Cartridge | Feed pressure* psi | Air consumption scfm | Vacuum flow (scfm) at different vacuum levels (-inHg) | | | | | | | | | | Max vacuum -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* psi | Air consumption scfm | Evacuation time (s/cf) to reach different vacuum levels (-inHg) | | | | | | | | Max vacuum -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 | |
| 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 psi | Air consumption scfm | Blow flow (scfm) at different pressure levels (psi) | | | | | | | | | | Max pressure 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 | |
| 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, non-return valve AF

COAX® cartridge module Pi12-3FSx2, non-return valve AH

COAX® cartridge module Si08-3FSx1, non-return valve AB

COAX® cartridge module Si08-3FSx2, non-return valve AD

COAX® cartridge module Xi10-3FSx1, non-return valve AJ

COAX® cartridge module Xi10-3FSx2, non-return valve AL

3. Select connection and function module P3010 Code

Function AVM™2 NO 27

Function AVM™2 NC (power off - NO) 28

Function AVM™2 NO, automatic blow-off (1 sec) 30

Function AVM™2 NC, automatic blow-off (1 sec) 31

Function AVM™2 NC 2 (power off - NC) 32

4. Select ES P3010 Code

No energy saving AA

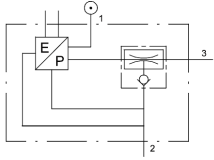
5. Select vacuum sensing P3010 Code

No vacuum sensing 00

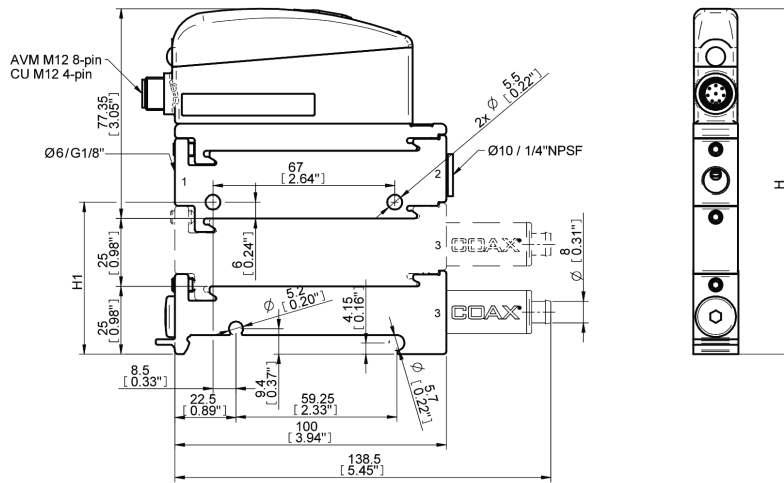
Example Ordering number

Housing, connection 1/8" NPSF Pi12-3FSx1, non-return valve, Function AVM2 NO, no energy saving function, no vacuum sensing P3010.01.AF.27.AA.00

ES and vacuum sensing functions are built-in to the Function AVM™2 .



| COAX® Cartridge | H | H1 |
|-----------------|---------------|------------|
| 1 | 102,4 [4.03"] | 31 [1.22"] |
| 2 | 127,4 [5.01"] | 56 [2.2"] |



Ordering information, accessories

Description

Part No.

Cable M12 8-pin female, PUR, L=2m

01.10.238

Cable M12 8-pin female, PUR, L=5m

01.17.746

Y-cable M12 8-pin female, 2xM12 4-pin male, PNP, PUR, L=2m

01.18.407

Y-cable M12 8-pin female, 2xM12 5-pin male, NPN, PUR, L=2m

01.20.229

Sealing kit P3010, NBR

01.04.201

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