VAC D400 Digital Positioner

The VAC D400 is a microprocessor based, “intelligent” instrument that can be mounted to rotary or linear pneumatic actuators for accurate positioner control. This unit, while sophisticated in its accuracy and performance, is simple to mount, calibrate, and with good filtered air and proper maintenance, can provide very accurate and trouble-free service for many years. Available with HART, FOUNDATION Fieldbus, or Profibus communication, the D400 range of applications and communications meets the latest industry standards. The “efficiencies” of the D400 are not only in its microprocessor based technology and accuracy, but also in the pneumatic air handling where air consumption is kept to a very minimum.

Features and Benefits:
- Microprocessor based valve positioner
- User friendly, menu driven programming with LCD Display—multilingual
- Local push button configuration—no handheld device or PC necessary
- Low air consumption and proven dependable mechanical design
- Modular design—available with position feedback, micro switches and “Fail Freeze” options—rotary or linear mounting.
- Unique adaptive control feature offers the ability to update valve/actuator package for maximum control without upsetting the process.
- ATEX-FM-CSA-IEC-Ex approvals available

Ordering codes:

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<td>D400</td>
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<td>N-NPT</td>
<td>D1-Namur</td>
<td>NO-No Communication</td>
<td>GB-Gauge block w gauges</td>
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<td>D400 IS</td>
<td>D-Double</td>
<td>G-Metric</td>
<td>D2-1/2” square</td>
<td>H-Hart</td>
<td>S2-Micro Switches*</td>
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<td>D3-3/8” square</td>
<td>FB-Foundation Fieldbus</td>
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<td>Dx-linear standard</td>
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Example: D400-S-N-D1-H-4/20

*4/20 transmitter and switches are not available on FB and PA Bus units.

When requesting a quote the items that can change pricing are: Positioner version, Action, Communication, Options-please have that information available for quick and accurate quotation.
VAC D400 Approvals

The D400 digital positioner has approvals for the below agencies. The details and exact listings associated with these approvals are quite extensive. We have a supplemental document, entitled D400 Approval Details on our website under the D400 downloads or we can email or fax you a copy. They can also be found in the VAC Manuals on our website under the D400 Product Tab and the far right drop down menu. Even the listing between no communication and Hart units vs. Fieldbus and Profibus can be slightly different.

All D400 unit’s enclosure are Nema 4X IP 65, Electrostatically dipped varnish with stove-hardened epoxy resin.

### D400 IS
- Intrinsically safe
- FM: J1 30005029 (3610, 3611)
- CSA: Certificate 1052414
- Non-incendive: Enclosure 4X, max 65°C
- ATEX/
- GOST Russia
- GOST Ukraine: II 2G Ex lb IIC T6
- ATEX: II 2G Ex lb IIC T6
- GOST Russia
- GOST Ukraine: II 2G Ex lb IIC T6
- ATEX: II 2G Ex lb IIC T6
- IECEx: Ex lb IIC T6

### D400 EX
- Explosion Proof
- FM: HLC 8/02 3010829
- Intrinsically safe
- Non-incendive: 4X, T5 max 82°C
- Dust Ignition proof: 4X, T5, max 82°C
- CSA: Certificate 1393820
- ATEX/
- GOST Russia
- GOST Ukraine: II 2G Ex d II C T4/T5/T6
- ATEX: II 2G Ex lb IIC T6
- IECEx: EXIB IIC T6

Rotation: 25-120 degrees
Max Air supply: 90 PSI
Air delivery: 6.0 SCFM @ 90 PSI
Ambient temperature: -40 to 185°F
Characteristic curves – linear, equal %, 1:25, 1:50, 25:1, 50:1 or user configurable with 20 reference points
Characteristic deviation: ≤ 0.5%
Deadband: 0.1%, adjustable to 10%
Resolution (A/D conversion): 16,000 steps
Sample rate: 20 msec
Seismic vibration: Meets requirements to DIN IEC 68-3-3 Class III for strong and strongest earthquakes
Mechanical vibration: ≤ 1% up to 10 g and 10...80 Hz
Mounting orientation: ≤ 0.5% at 90° change
EMI: comply with EMC directive 89/336/EEC as of May 1989 (increased EMI shielding to EN 50082-2 PR as of 11/93)

Air Supply-Must be free of oil, water, and dust to DIN/ISO 8573-1 pollution and oil contents according to Class 3 dew point 10 K below operating temperatures.