

CHRONOS®

DIGITAL POSITIONER

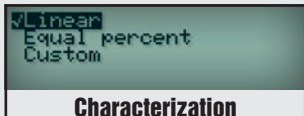


VALTEK™
SULAMERICANA

CHRONOS IDP7600 POSITIONER



LCD Interface

			
Language	Autocalibration	Characterization	Quick Setup

The Chronos IDP7600 positioners are digital-to-pneumatic instruments with microprocessed technology that use the HART® protocol to allow remote communication. The two-wire power supply, made by the control loop, contributes significantly to the reduction of wiring costs.

The advanced technology of the two-stage relay and microprocessor allows the positioner provides high response level and accurate control. The Chronos IDP7600 provides a local PID loop with ultrafast loop execution time: lower process variability means higher quality of final product and increased productivity.

The reliability, intuitive use and quick setup/calibration make the Chronos IDP7600 the more practical and advanced HART® positioner of the market.

Local Interface

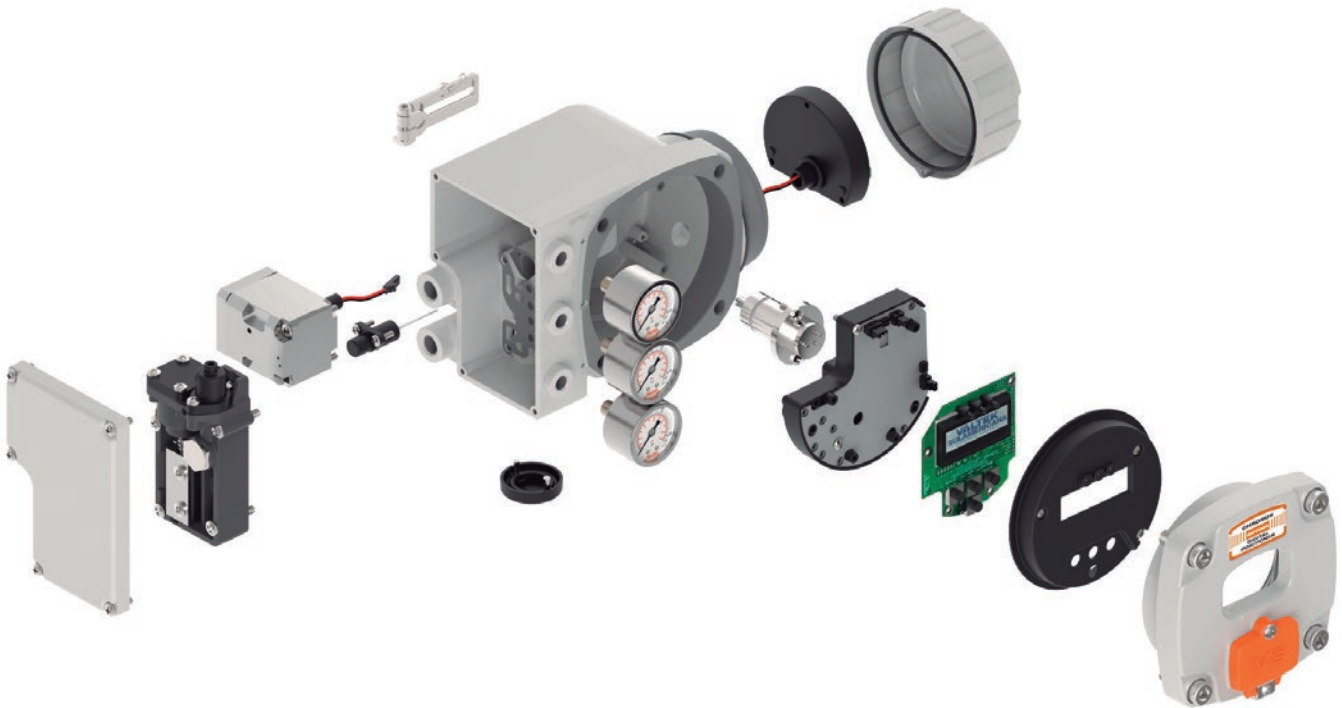
The interface of Chronos IDP7600 positioner consists of LCD display with large size, which has illuminated background to allows easy viewing of messages even in dimly lit areas of the plant.

A trio of bright LED in green, yellow and red complements the information on the display and allows the functioning alerts are seen even at a distance.

The information can be seen locally at a glance and are presented in plain language, which does not require decoding.

Virtually all menu items can be accessed through the four buttons of the interface, with the main cover of the positioner closed, and without the need for a portable calibrator or personal computer.

FEATURES AND BENEFITS



Features

- Backlit LCD display with large dimensions
- High brightness warning LEDs
- Quick setup wizard
- RFI & EMI immune
- Explosion proof housing Exd IIC T5/T6 (IECEEx/ATEX/INMETRO), IP66
- Local interface with protected setup buttons
- Autocalibration and autotune
- Automatic or manual gain adjustment
- Two-stage relay with advanced technology
- Modular design with electronic and pneumatic parts separated
- Can be mounted on single or double acting actuators

Benefits / Advantages

- Multilingual texts, messages in plain language
- Accurate control
- Allows reading in dimly lit places
- High response level
- Easy to assemble in a wide range of linear and rotary actuators
- Configuration and calibration processes are extremely fast
- Firmware upgradeable
- Cost-effective
- In most cases, PC and handhelds are not required to configure (setup).
- When necessary, the maintenance tasks are simple
- Cut-off function
- Assembly in double acting actuators does not require additional manifolds

SPECIFICATIONS

TECHNICAL SPECIFICATIONS AND CONSTRUCTION MATERIALS

Communication Protocol	HART®, version 7	Housing / Enclosure	Anodized aluminum, low-copper, polyester painting (standard)
Power Supply	Two-wire, loop powered, 4-20 mA, protected against reverse polarity		300 series stainless steel (optional)
Input Signal	4-20 mA (3.8 mA min.)	Internal Parts	Aluminum and 300 series stainless steel
Compliance Voltage	10.4 Vcc @ 20 mA (typical)	Soft Goods	Buna-N, Silicone
Effective Resistance	520 Ω @ 20 mA (typical)	Hazardous Area Certifications	Explosion proof, flameproof and non-incendive - IECEx / ATEX / INMETRO
Characterization	Linear, equal percent or customized, with characterizable curve from 21 points	Enclosing Rating	IP66
Mounting Types	Linear actuators Rotary actuators	Electrical Connections	1/2"-14 NPT (standard) M20 x 1.5 (optional)
Strokes	Linear: 0.4 to 12 inches (10.2 to 304 mm) Rotary: 0 to 90°	Pneumatic Connections	1/4" - 18 NPT 1/8" - 27 NPT (pressure gauges)
Pneumatic Supply	Instrument air according to ANSI/ISA 7.0.01 ⁽¹⁾ / Nitrogen	Weights	Aluminum version: 9.6 lbs. (4.4 kg) Stainless steel version: 20.6 lbs (9.4 kg)
Supply Pressure	30 to 120 psig (2.1 to 8.3 bar)	Dimensions	8.4 x 5.7 x 6.5 in. (22 x 15 x 17 cm)
Operating Temperature	-4 to 185°F (-20 to 85°C)		
Operating Humidity	0 to 95% U.R., noncondensing		

(1) Dew point should be at least 18°F (10°C) below the ambient temperature, the amount of oil should not exceed one part per million (1 ppm) and particle size should be less than 5 microns (less than 1 micron is recommended).

PERFORMANCE DATA

Air Delivery	14 SCFM @ 60 psig (22.5 Nm ³ /h @ 4.1 bar)	Linearity	< 0,8% F.S. (Linear actuators) < 0.5% F.S. (Rotativos actuators)
Steady State Air Consumption	Typical: 0.39 SCFM @ 60 psig (0.63 Nm ³ /h @ 4.1 Bar)	Temperature Effects	± 0.04% F.S./°F (± 0.08% F.S./°C)
Deadband	< 0.2% F.S. ⁽¹⁾	Maximum Shock	4g (5 to 15 Hz) / 2g (15 to 2000 Hz)
Repeatability	< 0.05% F.S.	Influence of Mounting Orientation	Negligible

(1) F.S. = Fundo de escala

Latin América

Central Office e Factory

Rua Goias, 345 - Diadema - SP - Brazil
+55 11 4072-8600
www.valteksulamericana.com.br

Middle East

Main office and manufacturing

Al Qusais Industrial Area 4
Dubai - United Arab Emirates
+971 4 207 3933 www.vsmena.ae

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