ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Eaton / MTL Instruments MTL4046P* at our website: *Click HERE*

MTL4046P HIGH POWER ISOLATING DRIVER

4–20mA with line fault detection for HART® valve positioners

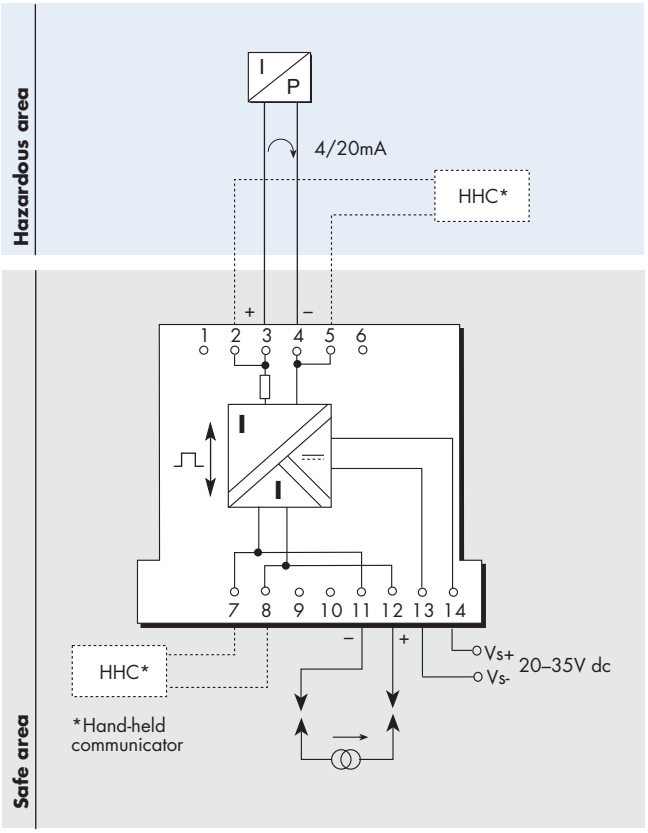
CE

The MTL4046P accepts a 4/20mA floating signal from a safe-area controller to drive a current/pressure converter (or any other floating load up to 870Ω) in a hazardous area. For HART valve positioners, the module also permits bi-directional transmission of digital communication signals so that the device can be interrogated either from the operator station or by a hand-held communicator (HHC). Process controllers with a readback facility can detect open or short circuits in the field wiring: if these occur, the current taken into the terminals drops to a preset level.

SPECIFICATION

See also common specification, cable parameters and approvals

Number of channels
One
Location of I/P converter
Zone 0, IIC, T4–6 hazardous area if suitably certified
Div. 1, Group A, hazardous location
Working range
4 to 20mA
Digital signal bandwidth
500Hz to 10kHz
Maximum load resistance
870Ω (17.4V at 20mA)
Minimum load resistance
90Ω (short circuit detection at <50Ω)
Output resistance
>1MΩ
Under/over range capability
Under range = 1.0mA
Over range = 26.0mA (load ≤600Ω)
Input and output circuit ripple
<40µA peak-to-peak
Transfer accuracy at 20°C
Better than 20µA
Input characteristics
<4.0V with the field wiring intact
<0.9mA with the field wiring open- or short-circuit
Response time
Settles within 200µA of final value within 100ms
Temperature drift
<1.0µA/°C
LED indicator
Green: one provided for power indication
Power requirement, Vs
58mA at 24V dc
70mA at 20V dc
40mA at 35V dc
Power dissipation within unit
1.2W typical at 24V with 20mA loop current
1.4W worst case
Isolation
250V ac between safe- and hazardous-area circuits
Input circuit is floating



Terminal	Function
2	Optional HHC connection +ve
3	Output +ve
4	Output –ve
5	Optional HHC connection –ve
7	Optional HHC connection –ve
8	Optional HHC connection +ve
11	Input –ve
12	Input +ve
13	Supply –ve
14	Supply +ve

Safety description
28V, 240Ω, 116mA, U_m = 250V rms or dc
FM entity parameters
V_t = 28V dc, I_{sc} = 117mA, C_a = 0.14µF, L_a = 2.6mH

HART® is a registered trademark of HART Communication Foundation

EUROPE (EMEA) Tel: +44 (0)1582 723633 Fax: +44 (0)1582 422283
AMERICAS Tel: +1 603 926 0090 Fax: +1 603 926 1899
ASIA PACIFIC Tel: +65 6 487 7887 Fax: +65 6 487 7997
E-mail: enquiry@mtl-inst.com **Web site: www.mtl-inst.com**

June 2004

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP