



Series VS Pulsar® Pressure Control Valves

Effective: February 1, 2004
Supersedes: Cat. No. PMF 1009 dated 12/97

Features

- Low current draw
- Wide control bandwidth
- Contamination tolerant
- No quiescent flow
- Long life, fast response, cartridge design
- Low hysteresis
- Color coded jacket and leads

Specifications

Typical pilot flow: 0.2-0.3 GPM @ 400 psi
(0,8 - 1,1 LPM @ bar).

Constant pilot pressure: 100 to 400 psi range
(7 to 28 bar).

Operating temperature: -40°F to +250°F
(-40°C to +121°C).

Viscosity range: 1500 to 30 SUS (323 to 1,1 cSt).

Weight: 4.5 oz. (125 gm).

Response – on time: 5 ms.

Response – off time: 3 ms.

Quiescent leakage: 5 drops/minute @ 250 psi
(17 bar).

Filtration: SAE Class 5 (ISO 17/14).

Recovery pressure: 75% of pilot.

Control band: 80% of MR.

Standard and Marine Solenoids

Coil resistance @ 70°F (21°C): 28.5 ohms
@ 12V DC; 63.5 ohms @ 24V DC.

Operating voltage range: 12±3V DC; 24±3V DC.

Current draw @ 70°F (21°C): 420 mA @ 12V DC;
380 mA @ 24V DC.

PWM frequency: 33Hz.

Description

The Parker Series VS Single-Stage Pulsar® Valve is a high-speed, digital valve for variable pilot pressure control. It is used in the Parker Series VP/VPO and VPL products to provide the electrohydraulic interface.

Intrinsically Approved Solenoids (may require Parker Hannifin intrinsically approved drive card — consult factory).

Coil resistance @ 70°F (21°C): 28 ohms.

Rated operating voltage: 11.2V DC or 12V DC.

Current draw @ 70°F (21°C): 400 mA @ 11.2V DC;
430 mA @ 12V DC.

PWM frequency: 33Hz.

Intrinsic Safety approvals

1. **MSHA:** IA-14238-0/IA-627-0.

2. **CENELEC:** NEMKO 90.114;

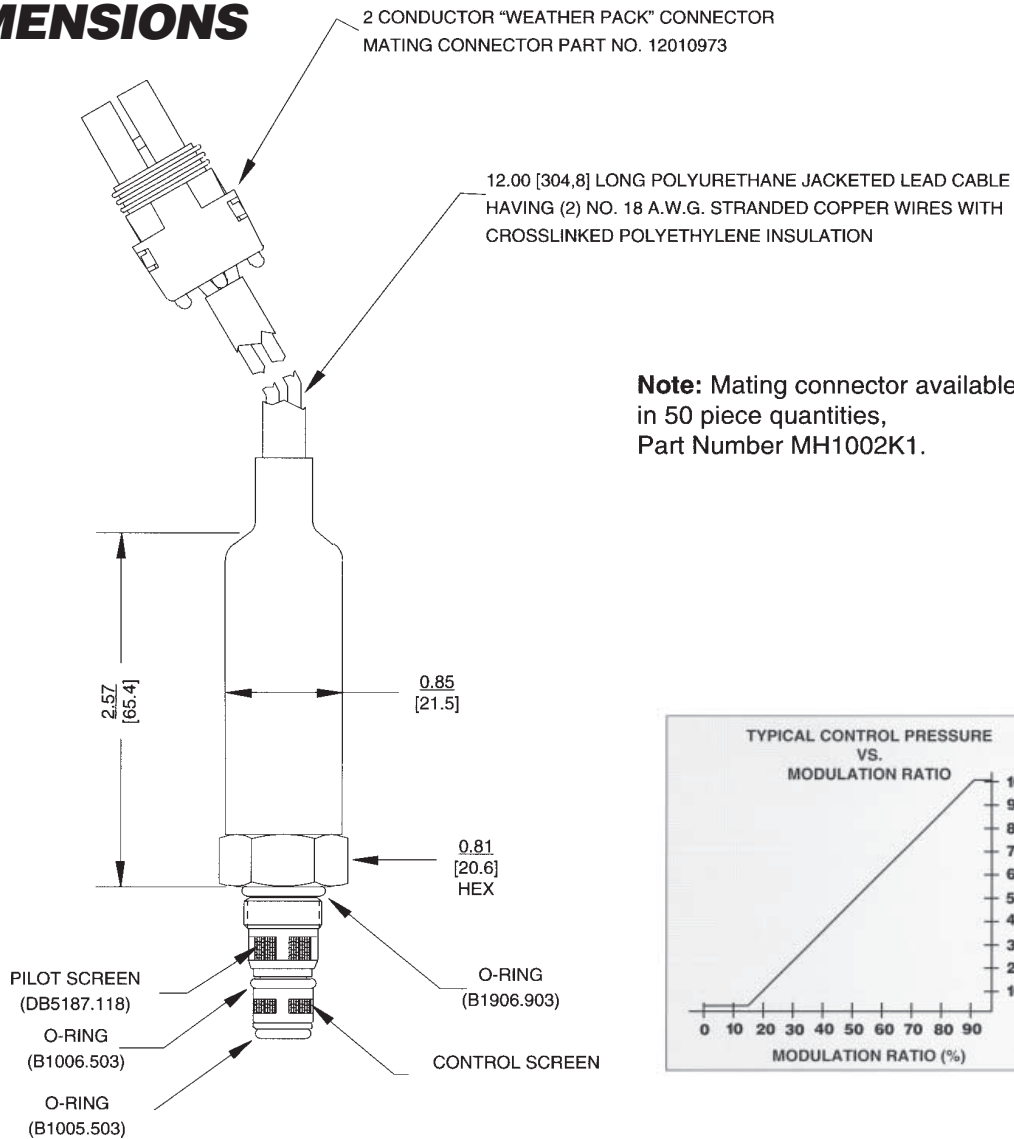
EEX Ib IIA, T4, I_{max}=300 mA, 12V DC,
L_{eq}=2.25 mH, C_{eq}=0;

EEX Ib IIA, T4, I_{max}=250 mA, 9V DC,
L_{eq}=2.25 mH, C_{eq}=0.

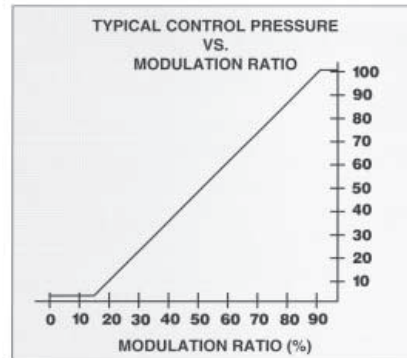
3. **NEMKO:** 90.277X; EEX m II T4.

CSA: Group 1 Division 1 Group C and D.

DIMENSIONS



Note: Mating connector available in 50 piece quantities, Part Number MH1002K1.



DIMENSIONS ARE IN INCHES (MILLIMETERS) AND ARE FOR REFERENCE ONLY.

NOTE: Consistent with our policy of continuing product improvement, we reserve the right to change this information without notice or obligation.

WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

© Copyright 2004, Parker Hannifin Corporation, All Rights Reserved



Parker Hannifin Corporation
Hydraulic Valve Division
520 Ternes Avenue
Elyria, Ohio, USA 44035
Tel: (440) 366-5200
Fax: (440) 366-5253
www.parker.com/hydraulicvalve

Bulletin HY14-2107/US,
3C, 3/04, PHD