

# **Technical Bulletin** TB0055

## Subject: Optimized Valve Plate Now Standard on P400 Pumps

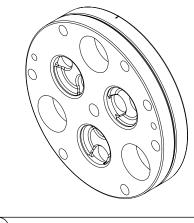
To further improve the Wanner product line, we are releasing the "Optimized Valve Plate" for Hydra-Cell P400 Series metering pumps.

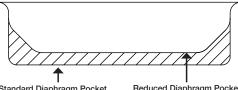
#### **New Design**

The design improvements involve geometry changes to the diaphragm pocket of the Valve Plate. The shaded area in the figure below/right represents the difference between the reduced and the standard diaphragm pockets. The reduced pocket has approximately 30% less volume than the standard pocket. In addition, the Valve Port through holes have been reduced by 6% to increase fluid velocity through the plate.

### **Advantages**

Efficiency is improved by minimizing dead space in the diaphragm pocket and increasing fluid velocity through the plate. This reduces the risk of pump pack-out and vapor lock, results in faster, easier priming in low-speed metering applications, and provides superior performance in gaseous fluid applications.





Reduced Diaphragm Pocket Standard Diaphragm Pocket

#### **How to Order**

The P400 configuration will remain the same with the Optimized Valve Plate included as standard.

It will continue to include Kel-Cell technology, and it will be available with all existing Valve Plate materials.

There is no price adder for the new design.

Note: This will take effect for all P400 pumps beginning with Serial Number 356817.

### How to Order

A complete pump order number contains 13 digits based on the specified pump materials listed below.



#### Pump Model Size (Digits 1-4)

For all P400 Pumps (Kel-Cell) with Optimized Valve Plate



1204 Chestnut Avenue Minneapolis, MN 55403 USA Phone: 612-332-5681 Fax: 612-332-6937 Toll-Free Fax (USA): 800-332-6812 Email: sales@wannereng.com www.Hydra-Cell.com



#### Wanner International Ltd.

8 & 9, Fleet Business Park Sandy Lane, Church Crookham Hampshire GU52 8BF, England Phone: +(44) 01252 816847 Fax: +(44) 01252 629242 Email: sales@wannerint.com www.hydra-cell.eu



Flat A, 21/F, Chatham Commercial Building 399 Chatham Road North Hunghom, Kowloon, Hong Kong Phone: +(852) 3428-6534 Fax: +(852) 3188-9145 Email: sales@wannerpumps.com www.WannerPumps.com