

## **Control Valves for Civil Engineering**

**Solutions Focus** 

## **Eaton Control Valves**

Eaton offers control solutions specifically designed to meet the control and reliability requirements for moving large structures common in Civil Engineering installations. Our comprehensive product line forms the basis for these solutions – pressure controls, directional controls, proportional and servo valves, all in cartridge, subplate or line-mounted configurations, along with the necessary electronics. Our systems engineering expertise turns these products into system solutions which meet all performance specifications for force, motion and synchronization control. We offer complete solutions for bridges, gates, valves, turbine governors and elevators.

# **KB Proportional Flow Control Valves**

The KB range of proportional flow control valves from Eaton's Hydraulics Operations, along with the power control electronics, allows accurate, high dynamic control of the runner blades and wicket gates to be achieved.

KBFDG5V with CANBUS

## **Built to Last in Harsh Environments**

For durability, you can't beat a KB proportional valve. The amplifier is housed in a durable metal enclosure, sealed against environmental contaminates. They are reliable, rugged and provide easy access for test equipment.

You can trust Eaton's Vickers™ KB proportional valves to do the job as specified and perform consistently and reliably for years.



Eaton's Vickers™ KBHDG5V-10 valve is the choice for turbine governors.

#### **Features**

- Integrated Amplifiers Mean "Plug and Play"
- IP 65 & 67 Environmental Protection Rating (Best-In-Class) -Excellent Reliability in Harsh Environment
- Vibration & Shock Resistance
- CanOpen Bus Communication Option -Easy Diagnostics
- Complete Size Range
- Three Performance Levels - Standard, High and Servo

#### **Screw-In Cartridge Valves**

Vickers™ screw-in cartridge valves provide many advantages over traditional hydraulic valves. While offering the same control functions as traditional hydraulic valves, screw-in cartridge valves are compact, reliable and economical.

The concept of combining multiple cartridge valves in a common manifold offers both the mobile and industrial user substantial cost-saving advantages that cannot be achieved with traditional valving.



#### Slip-In Cartridge Valves

Typically associated with relatively high flows, i.e. 40 USgpm or higher, slipin cartridge valves are targeted at more efficient, faster and more compact hydraulic systems. Eaton cartridge valve system technology meets the changing needs of new generations of hydraulically operated machinery and equipment. Today's machines need controls that are exceptionally cost effective and energy efficient. Vickers cartridge valves fulfill these needs.

#### **Features and Benefits**

Here are some of the advantages of Eaton's Vickers cartridge valves:

- Response times and efficiency gains, by eliminating many of the hoses, tubes and fittings necessary in traditional installations
- Fewer potential leakage points than with conventional valves ensuring cleaner, safer application environments
- Compact and neat assemblies for economy of space and weight
- Increased ability to withstand vibration, giving optimum machine reliability and performance
- Multiple mounting configurations offers maximum design flexibility
- Greater contamination tolerance
- Faster cycle times
- · Lower noise levels
- Faster on-sight servicing and troubleshooting
- Resistance to fluid contamination
- Hardened ground steel operating parts



#### **Modular Circuit Designs**

Modular Circuit Designs (MCDs) are valve packages containing combinations of screw-in cartridge valves in a manifold block. The package is dedicated to the hydraulic control of a particular application. MCDs can be as extensive as necessary to meet the most complex applications, or as simple as two or three cartridges in a basic single manifold.

All MCD packages are designed and manufactured by Eaton to customer specifications. Manifolds can be designed to hold the requisite cartridges, pilot pistons, orifice discs, or any other components needed for individual applications and integrated with other Eaton components. Standard cavity tooling provides precision machining of standard cartridge cavities.

## Global Support

Eaton's world-wide distribution and service network is quick, reliable, and responsive to the customer's needs. Our customers can rest assured that no matter where they're located, Eaton will be there with unrivaled products and technical expertise.

#### **Technical Support**

Quality products are only part of Eaton's commitment to our customers. We also provide advisory, planning and design services specifically geared to your application and backed by on-time delivery.

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