AxisPro™ It Answers to You.

Powering Business Worldwide

Next Generation Proportional Valves

Performance

- On-board high performance, independent axis controller
- Open architecture controller for customer application program
- PQ control function

Reliability

- Best in class dirt and moisture ingression protection, IP65 & 67
- Best in class ambient temp rating 85°C
- No air bleeding
- CE electromagnetic compliance

Flexibility

- Modular design
- Configurable with Eaton's Pro-FX™ Software Suite
- Supports multiple architectures

Easy Diagnostics

- Comprehensive LED indicators
- Field bus communication
- Built-in pressure/temp sensors

Eaton's Next Generation Proportional Valve

Open Architecture - Designed to work in Centralized and Distributed control solutions.

Modular Flexibility

Built on the proven KB Servo Proportional Valve technology, Eaton's Next Generation proportional valve provides 4 levels in a modular design. Order exactly what the application demands.

Centralized Control

Distributed Control

- Higher reliability and durability
- Flexibility
- Easy diagnosis
- More robust

- Better control performance
- Wiring savings
- Machine scalability
- Comprehensive diagnostic data available via field bus

- Flexible control strategy using built-in sensors
- More diagnosis data available from sensors

- Differentiated machine performance

KBS1

- Configurable
- Higher Flow and Pressure Rating
- IP65 & 67 Rating
- Ambient Temp up to 85°C
- No Air Bleeding
- Comprehensive LED

KBS2

Bus Communication,
Hard Coded Axis Controller, PQ

KBS3

Embedded Pressure
& Temperate Sensors
on all 4 Ports

KBS4

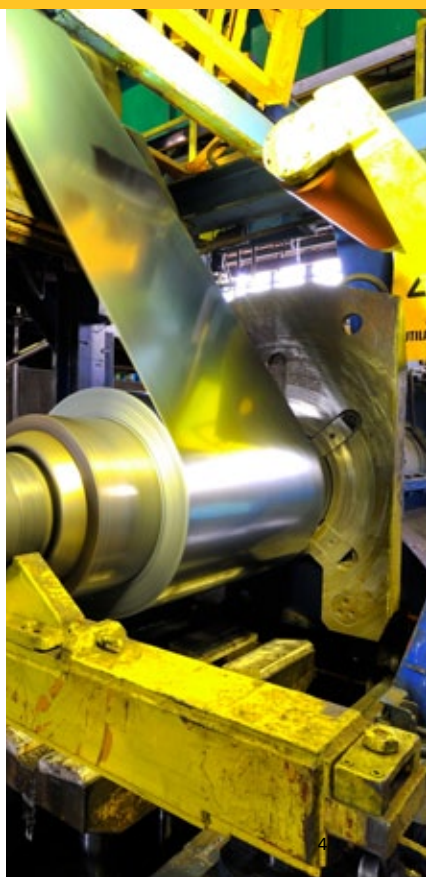
"White Space" for
Customer Applications

Eaton's Next Generation Proportional Directional Valve

D03 and D05 are smart axis control subsystem featuring:

- Servo performance level
- 4-level modular design
- On-board amplifier and axis controller
- Open architecture axis controller (customer applications)
- Embedded sensors
- Field bus communication
- Improved flow and pressure
- More robust design

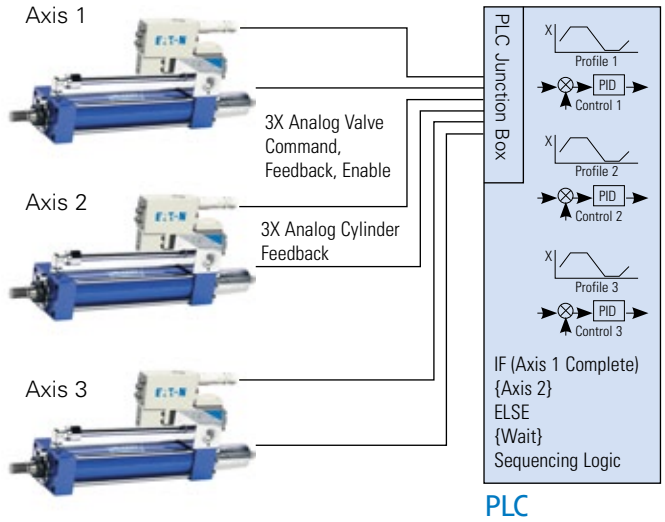
	ISO-3 Size	ISO-5 Size
Rated Flow	40 LPM @ 70 bar	100 LPM @ 70 bar
Max Flow	75 LPM	180 LPM
Dynamic Bandwidth	150 Hz	100 Hz
Step Response	8 ms	18 ms
Hysteresis	0.1%	0.1%
Linearity	1%	1%
Temperature	85°C Ambient (best in class)	85°C Ambient (best in class)
	85°C Hydraulic (best in class)	85°C Hydraulic (best in class)
Pressure	350 bar P, A and B port	350 bar P, A and B port
	250 bar T port	250 bar T port
Environmental Protection	IP65 & 67 (best in class)	IP65 & 67 (best in class)



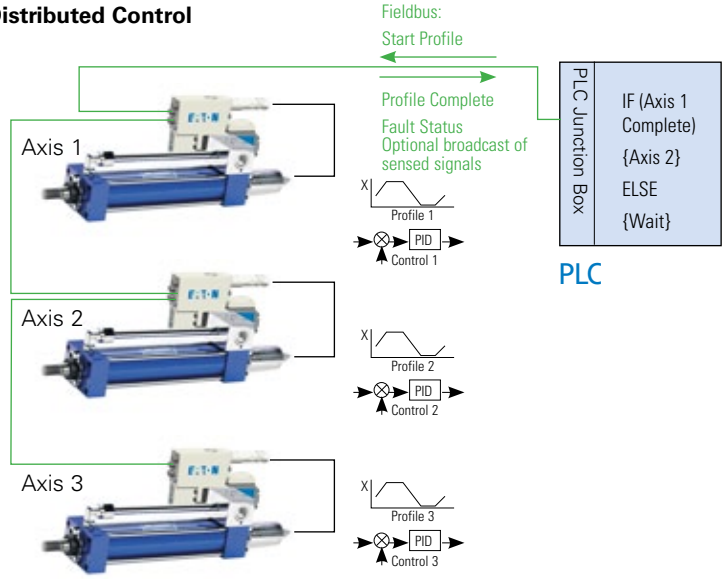
Eaton's Next Generation Proportional Valve

Open Architecture - Designed to enable custom solutions.

Centralized Control



Distributed Control



Distributed Axis Control, Eaton Two Solutions:

- Hard-coded Algorithms per industry standard
- Eaton's Pro-FX: Control + "White Space" for customers to develop proprietary control algorithms.

Eaton Pro-FX Programming Software

Power and Differentiation

Make It Yours! Create custom applications for the AxisPro proportional valves with **Eaton's Pro-FX Software Suite**, and upload your control application code to the on-board axis controller to achieve differentiated machine performance. Designed around open standards and based on the IEC-61131-3 programming standard, **Eaton's Pro-FX: Control** is a Windows-based tool that lets you design and develop high performance distributed axis control systems. Use Eaton-developed function blocks for or create your own to enable even more rapid, reliable development.

With Pro-FX: Control and Eaton's AxisPro proportional valves, your imagination and creativity are enabled to achieve differentiated solutions.

Six language editor, visualization capabilities and real-time debugging and simulation make Pro-FX an efficient, extremely effective tool.

Components

- Library management for user defined libraries
- Run time system in ANSI-C for flow control, debugging and communication
- Visualization elements
- Code Generators for multiple processors
- Complete offline simulation
- Hierarchical graphical configuration
- DDE Server, OPC Server

Editors for programming in:

- Instruction list
- Sequential function chart
- Function block diagram
- Structured text
- Ladder diagram
- Continuous function chart

Online functionality:

- Monitoring of all variables
- Writing and forcing of receipts (sets of variables)
- Debugging your complete project (breakpoints, stepping, single cycle, call stack)
- Interrupt-free online changes of POUs and data
- Power Flow
- Sampling Trace

Eaton's Next Generation Proportional Valve

Designed to meet the needs of the most demanding and sophisticated applications.

for Woodworking

Precision and Repeatability

- Distributed Axis Control
- Embedded Sensors
- Wide Bandwidth
- Algorithm Customization

for Wind Turbines

Reliable and Predictable Performance

- Distributed Axis Control
- Embedded Sensors
- IP65 And IP67
- Widest Ambient Temperature Range up to 85°C

for Pulp and Paper

Reliable Performance

- Distributed Axis Control
- Widest Ambient Temperature Range up to 85°C
- Embedded Sensors

for Metal Forming

Precision and Repeatability

- Distributed Axis Control
- High Bandwidth Capabilities

for Plastic Injection Molding

Precision and Repeatability

- Distributed Axis Control
- Algorithm Customization
- Embedded Sensors
- High Bandwidth Capabilities

for Primary Metals

Reliable Performance

- Widest Temperature Range up to 85°C
- IP65 And IP67
- LED Visual Diagnostic

Performance • Reliability • Cost Savings • Easy Diagnostics

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