

Application Spotlight

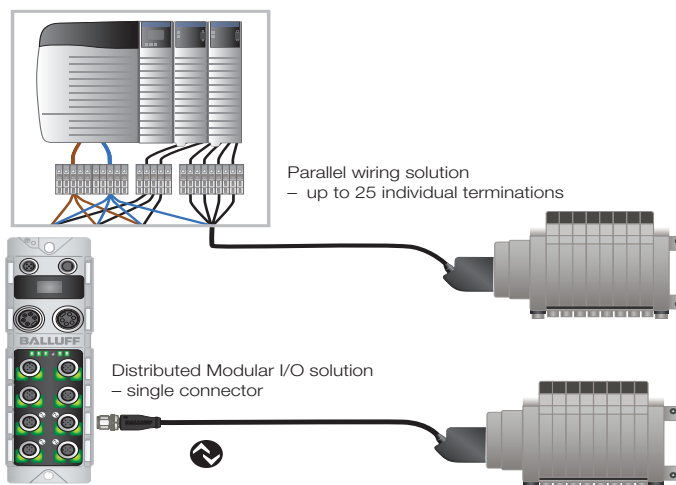
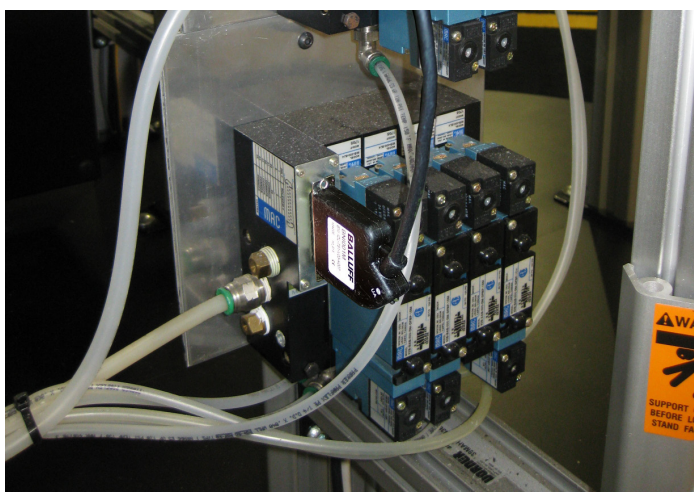
MAConnect using Balluff Distributed Modular I/O

When controls engineers get involved in specifying valve manifolds a slippery slope can develop. Where does the mechanical design end and the electrical design begin? Being able to order simple valve manifolds with 25-pin D-sub connectors removes this situation and provides multiple advantages: these valves are low cost, they are simple to wire and they are typically standard off the shelf components so they are easy to repair. But terminating the 25 wires and trying to troubleshoot these multiple connections can be time consuming and costly. By utilizing an industrial network and a Distributed Modular I/O valve manifold connector, cost and time of installation and repair can be dramatically reduced.

Features

- Max 0.7A per output and up to 1.1A total can be active at once
- Connector provides a 0V common on pin 25 and 24V signals
- Up to 16 output positions can be controlled per manifold
- Up to 4 manifolds can be controlled per master device
- Communication speeds between the master and valve control of 2ms

Industrial Networks Available



MAC Valve Mainfold Control over EtherNet/IP utilizing Distributed Modular I/O

In this conveyor application, a few cylinders are being used for gate control to help sort packages as they come through the process. The MAConnect valve manifold has a simple 25pin D-sub connector controlling 7 positions on the conveyor. Controlling the valve manifold is a 25pin D-sub valve manifold controller with IP40 protection. This connector is then plugged into an EtherNet/IP master device and the controller sees the valve manifold over the network as a simple 2 bytes of output data. An auxiliary power output, from the master, controls the device power and can turn on or off control to the outputs when necessary. Four manifolds can be controlled on one EtherNet/IP master and the manifolds can be up to 20 meters from the master device.

Ordercode	Part Number*	Description	
BNI004A	BNI EIP-502-105-Z015	EtherNet/IP Distributed Modular I/O Master (4 IO-Link ports)	1
BNI001L	BNI IOL-751-V02-K007	25pin D-sub Valve Manifold Control for MAConnect Valves	2



*For part numbers mating to other valve manufacturers, and other industrial networks please see the Industrial Networking and Connectivity Catalog.