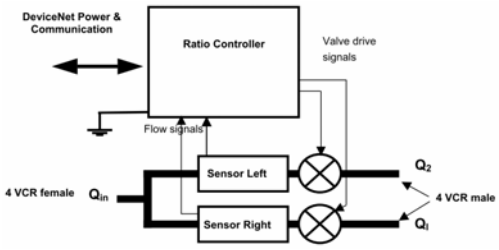
MKS FRCA Valve vs. DeviceNet Master Products

DeviceNet Master series:

DeviceNet Master series includes the USB interface(I-7565-DNM), PCI interface(PISO-DNM100U) and PAC module(I-8124W). They can represent an economic solution of DeviceNet application and be a DeviceNet master device on the DeviceNet network. They support Group 2 only Server and UCMM functions to communication with slave devices. They are popularly applied in the industrial automation, building automation, vehicle, marine, and embedded control network.

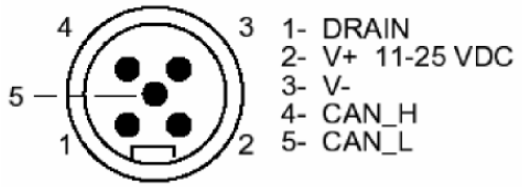
MKS FRCA Ratio Mass-Flo Controller :

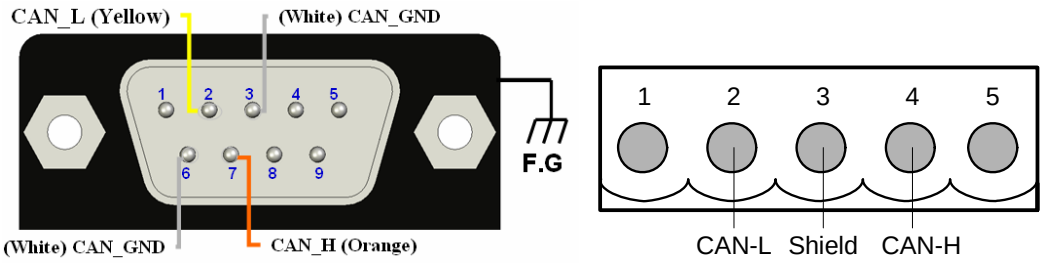
The MKS FRCA Ratio Mass-Flo® controller is a compact unit, which accurately divides the mass flow of gas or any mixture of gasses (Qin) into two proportionate flows (Q1 & Q2). The flow outputs are controlled by programming the ratio of the two outputs (α = Q2/Q1) to a value equal to or greater than 1. The MKS FRCA Ratio Mass-Flo controller uses proven thermal sensor technology to measure the flows through the unit and provides quick response to changes in ratio (α) setpoint. The ratio of the flow outputs of the MKS FRCA Ratio Mass-Flo controller remains constant through input flow perturbations.



The pictures came from the manual and are belonged to the MKS.

Wire connection with the DeviceNet Master:





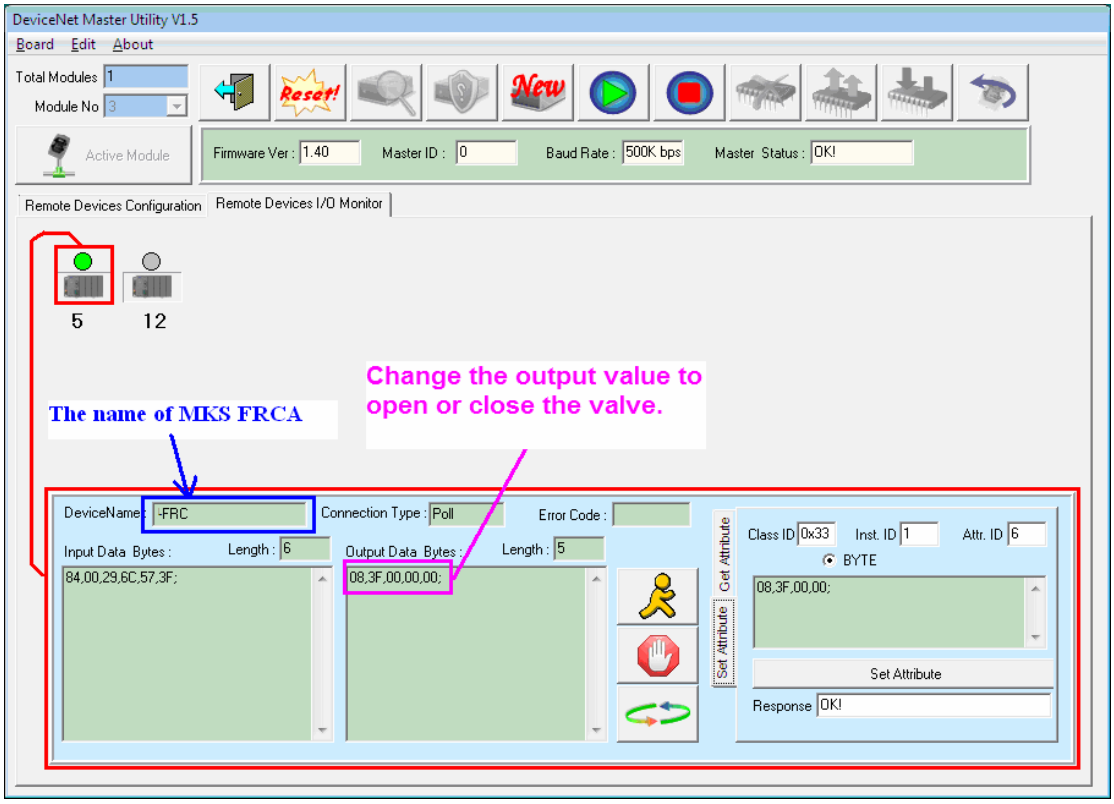
The users need to provide extra DC 24V power in M12-5PIN of the V+(pin-2) and V-(pin-3) for the DeviceNet module.

DNM Utility

The software utility includes various useful functions which help users to diagnose and access the DeviceNet devices. The users do not care about the protocol and configurations. The users could download from the website below.

ftp://ftp.icpdas.com.tw/pub/cd/fieldbus_cd/devicenet/master/dnm_utility/

The DNM Utility is communicating with the MKS FRCA valve



The node #5(MKS FRCA valve) supports Poll connection. The Poll connection is with 5-byte input data and 5-byte output data which indicates the valve information.