



**CAN** – Controller Area Network

**CAND** – Controller Area Network Deterministic

**Terminator** – This is a 120 ohm resistor that should be used on each end of a CAN network

**Nodes** – distinct device on a CAN network

**VSM** – Valve System Module – This is the interface module for the valve – it acts as a CAN gateway, a DC to DC power supply, and a supervisory controller for the system.

**VSE** – Valve System Extender – This is used on systems where the distance between two sets of blocks is greater than 6 meters

**PV** – Pilot Valve – this is the ‘top half’ of CMA and contains the embedded electronics, sensors, and pilot spools. The valve is actually two 3 position 4 way proportional valves.

**CV** – Conditioning Valve – This is the ‘top half’ of the inlet section on the CMA valve. It also contains embedded electronics, sensors, and the inlet pilot spool (one 3 position 4 way proportional valve).

**Daisy Chain** – This is the process that CMA uses during start up to ‘node’ each section with respect to physical location. The inlet controller is always node 0 and the VSM is always node 31. The section that is closest to the VSM will be node 1.

**CRC** – Cyclic redundancy check – On power up, CMA checks to make sure all of the Non-volatile memory has not been corrupted. The process for doing that is called a CRC check.

**System Layout** – This is the physical setup of the CMA system. Examples include a single block system with 1 to 8 sections. If the system configuration changes (ie. a section is removed or added), the system layout has changed.

**Block ID** – The user defines the physical location of each block in a single system with this tag.

**Upstream Port** – The port providing oil to the cylinder

**Downstream Port** – The port receiving oil from the cylinder

**Single Spool Control** – Using only one of the metering elements in CMA

**Axis Control/ Twin Spool Control** – Coordination of both metering elements in CMA to manage a double acting service (linear or rotary)

**Passive Load** – When the direction of desired velocity is opposing the external force on the service

**Overrunning Load** – When the direction of the desired velocity is in the same direction as the external forces (gravity assisted)

**IFC** – Intelligent flow control – This is a Twin Spool Controller which utilizes Flow control on one metering element and Pressure control on the other. Flow control is used to meter flow in when the load is passive and pressure control is used on the meter out side. When the load is overrunning, flow control is used on the meter out side and pressure control is used on the meter in side.

**UFC** – Universal flow control – This is a twin spool mode where both spools operate in a pressure compensated flow control mode.

**Intellifloat** – When the float position(s) are requested, the control algorithm will meter the load to tank prior to entering float mode