



Photo courtesy of AF Theriault & Portland Fire Dept. / City of Portland

## Digital Helm (DH 36)

The Digital Helm is a powerful steering device. The patented<sup>1</sup> hybrid hydraulic-electronic design provides full follow up digital control and emergency manual hydraulic control. The clean manufacturing design results in a reliable and durable unit.

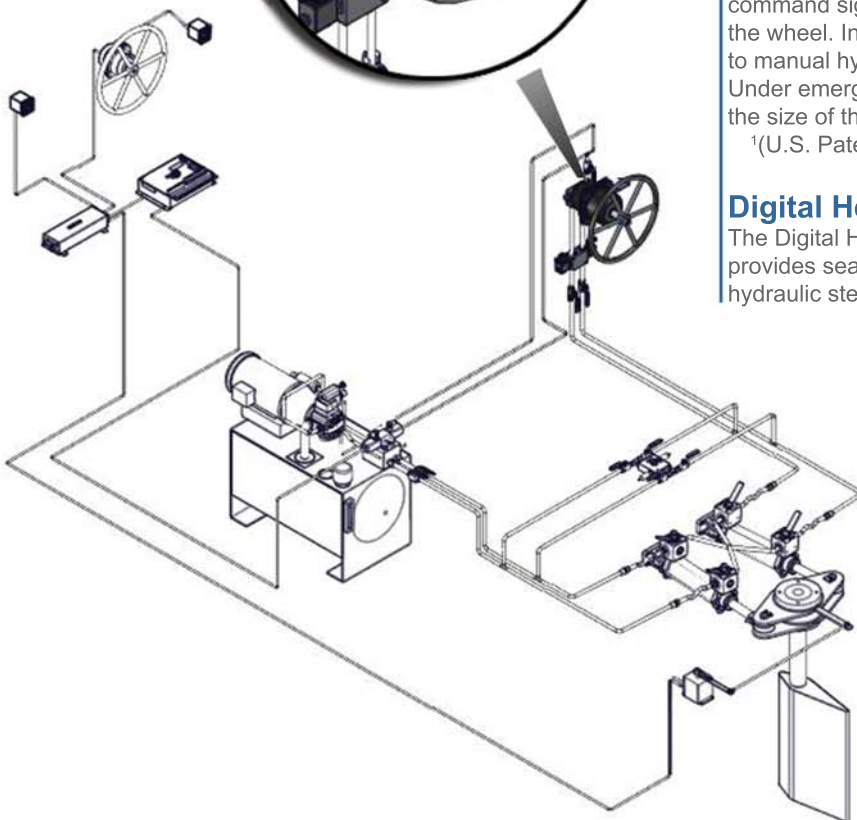
During normal power steering, the steering wheel is turned producing a rudder command signal where the rudder then follows up to the position requested by the wheel. In the event of a power failure the digital helm seamlessly transfers to manual hydraulic steering.

Under emergency manual hydraulic steering the number of turns depends on the size of the actuators.

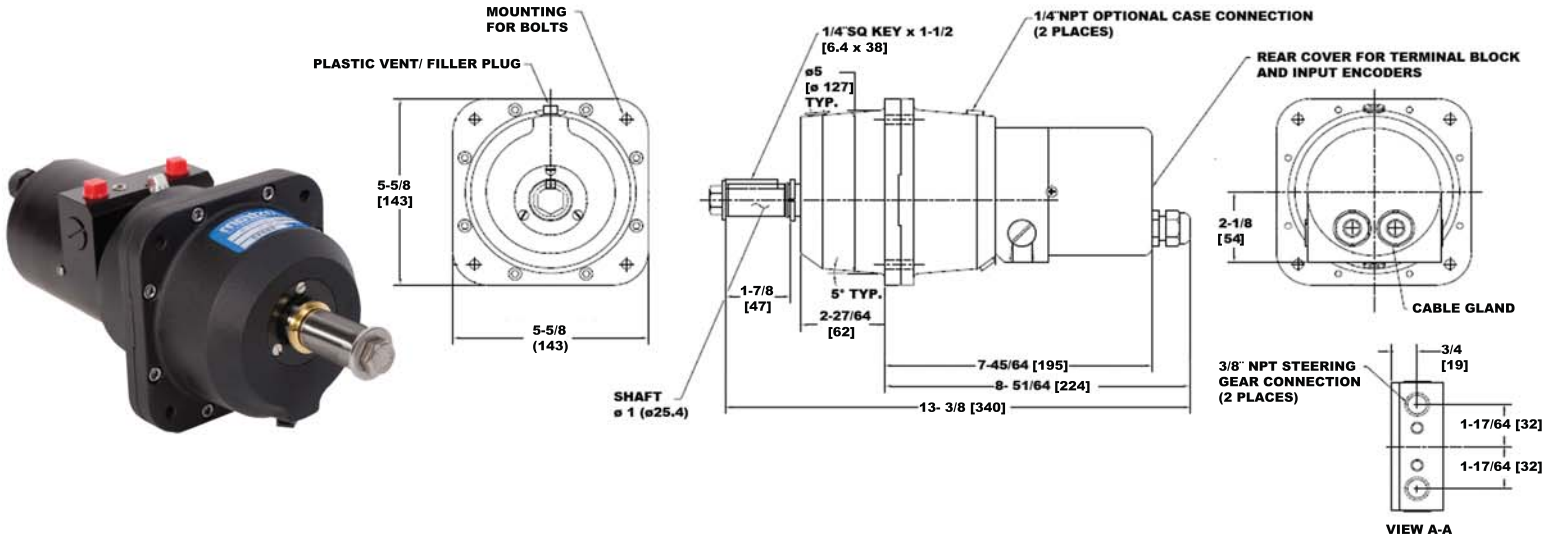
<sup>1</sup>(U.S. Patent 6,564,739 / Cdn. Patent 2,353,053)

## Digital Helm Manifold (DHM)

The Digital Helm Manifold (DHM) is a small, compact manifold which provides seamless transfer from fly-by-wire steering to emergency manual hydraulic steering in the event of a power failure.



## Digital Helm (DH36)



### Functions and Characteristics:

- Compatible with the Jastram Digital steering system
- To be used in conjunction with a Digital Helm Manifold (DHM)
- Under power steering mode:
  - \* Adjustable number of wheel turns, programmable from 1/4 turn to 10 turns lock to lock
  - \* Effort to turn the wheel does not change regardless of operating conditions
- When taking over control of the steering system the Digital Wheel takes over at the present position of the rudder. Other systems usually move the rudder back to center before acquiring control of the steering.
- Capable of Manual steering
- ROIs are recommended so the helmsman knows where the rudder will follow-up to

### Two versions available:

- DH36 - 1 is the standard unit and produces one output signal
- DH36 - 2 produces two output signals - the second signal for control redundancy, or for operation of a second steering system where independent twin steering gears are installed

### Notes:

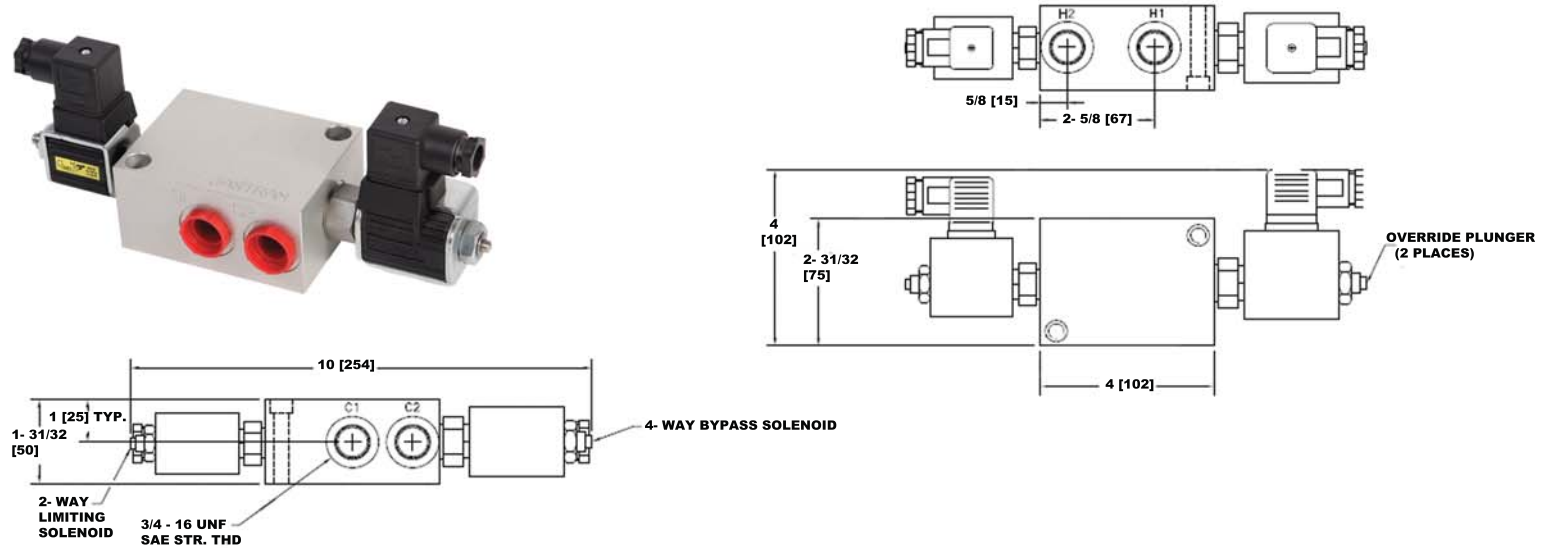
#### Warning: Do not use brake fluid or transmission oil

- Requires Hydraulic Oil ISO Grade 32
- The DH36 has a displacement of 3.6 cubic inches per revolution
- SAE O-ring fittings are used for hydraulic connections
- Waterproof and corrosion resistant housing, IP 66

### Specifications:

Input Voltage: 5 VDC  
Connector: Screw Terminals

## Digital Helm Manifold (DHM)



- To be used in conjunction with the Jastram Digital Helm
- Within certain parameters, a single DHM can service multiple DH-36 helms

### Specifications:

Input Voltage: 12 or 24 VDC  
Connector: DIN Connectors  
Recommended Cable: 16 AWG 2 wire, not shielded