

Yacht & Commercial Steering **Power Steering Manifold PSM 200**

The PSM 200 series represent a line of extremely versatile, stand-alone, solenoid operated, hydraulic Power Steering Manifolds. PSM 200's are designed to allow for the interface of "on/off" electric steering controls to hydraulic steering systems. They are supplied as complete stand-alone units for use with electric motor or engine driven power take-offs.



Design Features

- Anodized aluminum body . (optional steel body available)
- Input flow of up to 15 gpm.
- Adjustable output flow capacity (0 - 8 gpm), part shown JA-401052-3), allowing for adjustable, constant rate, rudder turning response.
- Built-in pressure relief valves, adjustable to 1500 psi, protecting the hydraulic system from overload.
- Two built-in pilot operated lock valves prevent hydraulic rudder feedback.
- Optional second speed adjustment for fast, constant rate, rudder response.
- Autopilot easily interfaced.
- Optional AFV valve (micro adjustable between 0 - 1.0 gpm) for autofill systems.
- Optional lock alarm module for systems requiring hydraulic lock alarm.
- Optional counterbalance valve, in replacement of pilot operated check valves, for systems where "run away" rudder conditions might occur.
- Available in 12, 24, 32 VDC and 110, 220 VAC.

For further details please consult component manual MAN 00703.

Part number	Description	Lbs (Kg)
	PSM 200-wxyz w = 1 single adjustable speed, 2 dual adj speed	
	x = 0 NO autofill valve, = 1 autofill valve	
	y = 0 lock valves, = 1 c-balance valve	
	z = 1 12VDC, = 2 24VDC, = 3	
JA-401052-1	PSM 200-1002, 1 speed, no autofill, lock valve, 24 VDC	15.0 (6.8)
JA-401052-2	PSM 200-1102, 1 speed, autofill, lock valve, 24 VDC	15.2 (6.9)
JA-401052-3	PSM 200-2002, 2 speed, no autofill, lock valve, 24 VDC	15.9 (7.2)
JA-401052-4	PSM 200-2102, 2 speed, autofill, lock valve, 24 VDC	16.1 (7.3)
JA-401052-5	PSM 200-1012, 1 speed, no autofill,c-balance valve, 24V	15.9 (7.2)

CCO

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Perfect for both yachts and commercial vessels; the CCO (Conversion & Change Over) manifold is a unique and patented modern approach to hydraulic full flow-up power steering. Instead of relying on complicated and troublesome mechanical follow-up devices the CCO simply converts the oil flow into an electrical signal. This signal is transferred to an SCA amplifier, which controls the hydraulic power units. In the event of loss of electrical power the manifolds automatically reverts back to direct manual hydraulic steering. The CCO is easy to install, safe, and simple. This makes it perfect for new construction or for retrofitting existing hydraulic FFU systems.



Design Features

- Anodized aluminum body.
- Available with up to 4 potentiometers.
- Suitable for direct auto pilot input.
- Suitable for proportional amplifiers with acceleration and deceleration of hydraulic actuators.

For further details please consult the technical manual MAN 00801.

Part number	Description	Lbs (Kg)
JA-401004-1	CCO 2300, single pot	17.6 (8.0)
JA-401004-2	CCO 2300, dual pots	17.6 (8.0)
JA-401004-3	CCO 2300, 3 pots	17.6 (8.0)
JA-401004-4	CCO 2300, 4 pots	17.6 (8.0)