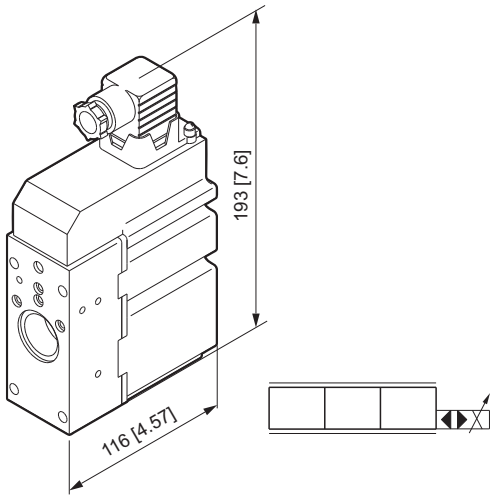
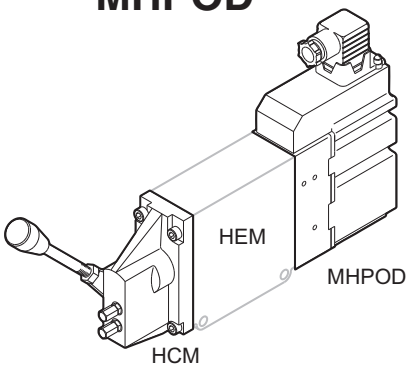
MHPOD voltage controls for HEM working sections



MHPOD



Example with module MHPOD and manual control HCM

MHPOD electrohydraulic PROPORTIONAL module

MHPOD is a open loop electrohydraulic activation unit, whose design is based on digital technology.
MHPOD has been specially developed to meet the harsh operating requirements of today's mobile machine market.
MHPOD electrical open loop proportional actuation operates the main spool's shift according to an electrical signal coming from a remote control unit, and is recommended where a simple proportional control is required, and where hysteresis and reaction time are not critical.
MHPOD does not have the inductive position transceiver (LVDT) and any electronic circuit for faults monitoring. This means that any forces that override the pilot pressure spool forces may change the spool position with no error signal, and the safety of the whole system is left to the operator's visual control, only.

MHPOD is defined by:

- Capacity to handle three different kinds of input signal control (see chart below).
- The required signal control is to be stated in the order phase
- Integrated PWM (Pulse Width Modulator)
- Good flow regulation
- Simple built-up.

Voltage	Input signal control		
	0.5 x UDC (A) joystick	**0 ÷ 10 VDC** (B) PLC	**0 ÷ 20 mA** (C) PLC
12 Vdc	**MHPOD04108077**	**MHPOD04108082**	**MHPOD04108086**
24 Vdc	**MHPOD04108075**	**MHPOD04108084**	**MHPOD04108088**

Aluminum body

Rated voltage			12 Vdc	24 Vdc
Power supply voltage range			11 ÷ 15 V	20 ÷ 28 V
Max. ripple			5 %	
Current supply			520 mA	260 mA
Current consumption (neutral position, constant voltage)			36 mA	46 mA
Power consumption			6 W	
Heat insulation			Class H 180 °C [256 °F]	
Reaction time (constant voltage)		From neutral position to max. spool travel	110 ÷ 140 ms	
		From max. spool travel to neutral position	70 ÷ 90 ms	
Reaction time (neutral switch)		From neutral position to max. spool travel	130 ÷ 170 ms	
		From max. spool travel to neutral position	70 ÷ 90 ms	
Connector			Standard (IP 65) according to DIN 43650 / ISO 4400	
Enclosure to IEC 529			IP 65	
(A) joystick	Input signal control	Neutral position	0.5 x UDC	
		Control range	0.25 x UDC to 0.75 x UDC	
	Max. current signal control		0.5 mA	1 mA
	Input impedance in relation to 0.5 x UDC		12 kΩ	
(B) PLC	Input signal control	Voltage	0 ÷ 10 VDC	
		Neutral position	5 VDC	
		Control range	0.25 x 10 VDC to 0.75 x 10 VDC	
	Current signal control		0.5 mA	
	Input impedance in relation to 0 ÷ 10 VDC		20 kΩ	
(C) PLC	Input signal control	Current	0 ÷ 20 mA	
		Neutral position	10 mA	
		Control range	0.25 x 20 mA to 0.75 x 20 mA	
	Input impedance in relation to 0 ÷ 20 mA		0.5 kΩ	

Electrical connections for MHPOD controls, see page: E-4