ELECTROHYDROSTATIC PUMP UNIT

Compact pump unit helps leverage the benefits of both hydraulic and electric actuation.





Electrohydrostatic Pump Units (EPU) are emerging as viable options for industrial machine builders seeking for compact alternatives to traditional hydraulic or electromechanical motion control solutions.

The Moog EPU is at the heart of electrohydrostatic actuation and combines the advantages of both actuation technologies in a self-contained product delivering a high degree of energy efficiency and environmental cleanliness.

It helps enable the deployment of a decentralized drive system which eliminates the need for a hydraulic power unit and complex piping, thereby reducing the overall machine footprint.

The compact product design also features a unique interface that enables direct mounting on to a cylinder minimizing the requirement of additional space on each axis and reducing the number of components required.

The Electrohydrostatic Pump Unit is available either as a stand-alone product or as an entire system, called the Electrohydrostatic Actuation System (EAS). The EAS combines the electrohydrostatic pump unit and any optional parts a customer might need, such as servo drives, manifolds, or cylinders. All components are Moog products that meet the highest standards of reliability and quality.

ADVANTAGES

- High energy efficiency
- Increased productivity
- Reduced machine footprint
- Reduced maintenance costs and total cost of ownership (TCO)

APPLICATIONS

- Metal forming and presses
- · Injection molding and die-casting
- Gas and steam turbines
- Wind turbine pitch control
- Marine
- Heavy industry

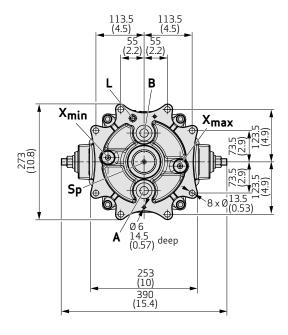




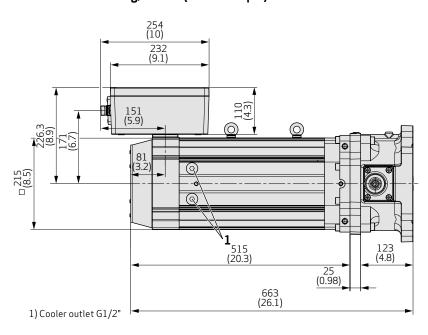
TECHNICAL DATA

EPU Series	19 ccm	32 ccm	80 ccm	250 ccm
Maximum Flow	85 l/min (22.5 gpm)	118 l/min (31.2 gpm)	216 l/min (64.8 gpm)	450 l/min (118.9 gpm)
Maximum AB pressure	350 bar (5,000 psi)			
Pump version	Radial piston pump, fixed or dual displacement			
Motor version	Brushless servo motor, natural or liquid cooled			
Temperature range				
Ambient	-15 to +60 °C (+5 to +140 °F)			
Fluid	-15 to +80 °C (+5 to +176 °F)			
Seal material	FKM			
Pilot pressure supply	External			
Operating fluid	Mineral oil according to DIN 51524 , HFD, others upon request			
Viscosity	Allowable viscosity operational range 12 to $100 \text{ mm}^2/\text{s}$ (12 to 100 cSt); Recommended hydraulic fluid viscosity class VG 46 to VG 100 according to ISO 3448; Maximum viscosity 500 mm $^2/\text{s}$ (500 cSt) during start-up with electric motor at 1,800 r/min			
System filtration	 NAS 1638, class 9 ISO 4406, class 20/18/15; obtained with filter fineness of β20 = 75 			
Installation position	Any			

Pump front view, size 32 (as an example)



Installation drawing, size 32 (as an example)



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Moog Electrohydrostatic Pump Unit Hirth/Laasner/Rev. D, February 2018, CDL51786-en For product information, visit

www.moog.com/industrial

For service information, visit

www.moogglobalsupport.com

This technical data is based on current available information and is subject to change at any time. Specifications for specific systems or applications may vary.

