Energy Saving Solutions for Injection Moulding Machines



Forming Tomorrow. Today!



Whether it is a new machine or a retrofit on an existing power guzzling machine, the Smart Servo Pump can offer you benefits that will reduce your operating cost. They are suitable for hydraulic metal forming presses, plastic injection and blow moulding machines and any equipment that uses hydraulic power.

High dynamic changes of energy flow to individual hydraulic loads are typical for injection moulding machines during the production cycle. Conventional hydraulic systems using fixed displacement pumps provide constant energy since the pump is running at full rpm at all times. This system is energy inefficient since power is wasted even when the machine is idle or in no-load condition. This does not comply with the requirements of modern machines which demand high energy efficiencies and savings.

The solution is a "Smart Servo Pump" system. The existing hydraulic pump-motor assembly and proportional valves are replaced with a high dynamic performance servo pump and servo drive system. It is a synergy of advanced hydraulics and intelligent drive systems. The smart servo pump supplies energy only on demand and consumes zero energy during idle states. The performances are comparable to all-electric machines providing high dynamic response, yet energy efficient with smoother machine operation.

Benefits

- Energy savings up to 70%, depending on the type of application
- Built-in closed loop PQ control in the servo drive replacing proportional valves. No additional PLC required.
- Considerable reduction in oil heating, up to 70% depending on the application
- Reduced noise levels and smoother machine operation
- Reduced maintenance due to reduction in hydraulic elements
- Detailed diagnosis using online monitoring software on PC/laptop or optional HMI
- Cleaner working environment



Quick Selection Chart

Flow	Pressure	Drive Model	Motor (2000 rpm, max 2400)		Coupling	Bell Housing	Internal Gear Pump	
lpm	bar		Model	kW (cal)	Model	Model	Model	СС
With ref. to fig. below		1	2		3	4	5	
40	160	EPSD-15A	U1004F20.3	8	RT-38-1A	BH-U10-IPC4	IPCAP 4-16	16
50	160	EPSD-25A	U1004F20.3	8	RT-38-1A	BH-U10-IPC4	IPCAP 4-20	20
62.5	160	EPSD-25A	U1005F20.3	12.1	RT-38-1A	BH-U10-IPC4	IPCAP 4-25	25
80	160	EPSD-25A	U1005F20.3	12.1	RT-38-1A	BH-U10-IPC4	IPCAP 4-32	32
100	160	EPSD-25A	U1007F20.3	18.7	RT-38-1A	BH-U10-IPC5	IPCAP 5-40	40
125	160	EPSD-35A	U1010F20.3	29.1	RT-42-1A	BH-U10-IPC5	IPCAP 5-50	50
150	160	EPSD-50A	U1010F20.3	29.1	RT-42-1A	BH-U10-IPC5	IPCAP 5-64	64
175	160	EPSD-50A	U1013F20.3	37.7	RT-42-1A	BH-U10-IPC6	IPCAP 6-80	80
200	160	EPSD-50A	U1013F20.3	37.7	RT-42-1A	BH-U10-IPC6	IPCAP 6-80	80
220	160	EPSD-75A	U1320F20.3	56.3	RT-55-1A	BH-U13-IPC6	IPCAP 6-100	100
250	160	EPSD-75A	U1320F20.3	56.3	RT-55-1A	BH-U13-IPC6	IPCAP 6-100	100
300	160	EPSD-100A	U1320F20.3	56.3	RT-55-1A	BH-U13-IPC6	IPCAP 6-125	125



Electropneumatics & Hydraulics (India) Pvt. Ltd.

Gat No. 254/255, Kharabe Wadi, Chakan-Talegaon Road, Chakan, Pune 410501, India.

Tel. : +91 2135 667500 Fax. : +91 2135 667502

www.electropneumatics.com