



HYDRALIC DIAPHRAGM METERING PUMPS

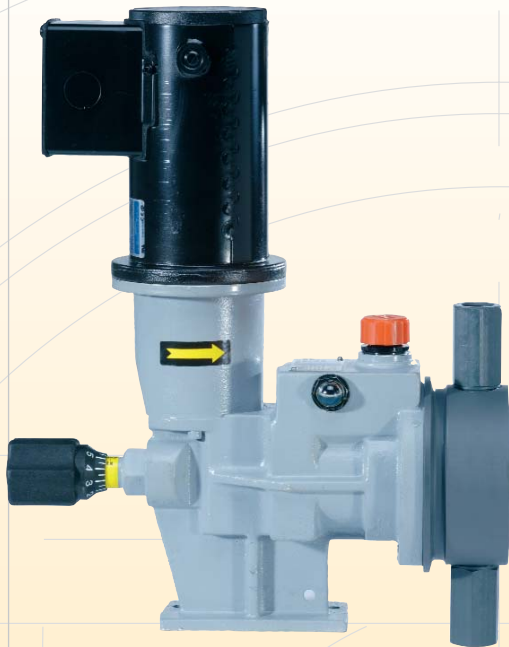
General features

OBL "UXR" series metering pumps are controlled-volume reciprocating pumps.

The anodized aluminium monobloc construction offers the advantage of a hydraulic system in a compact and economical design with very few components.

The hydraulic system with its mechanically actuated oil replenishing (smart diaphragm) system overcomes many common suction and discharge problems.

Install the pump and forget it



Adjustment via micrometer stroke length knob; electrical or pneumatic actuators are available also.

Advantages

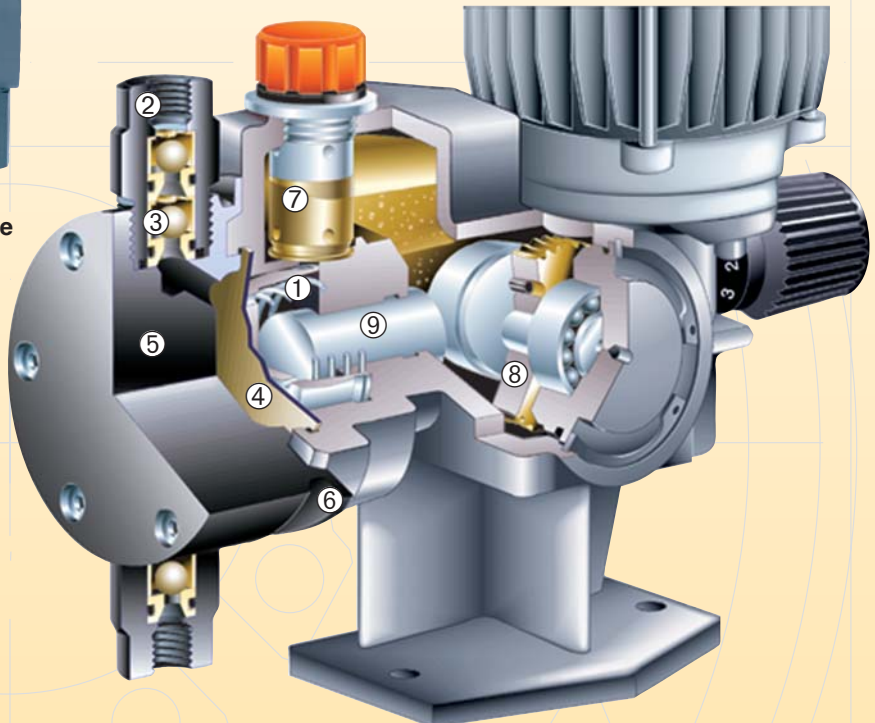
Maintenance is reduced to a minimum. The seamless oil-bathed plunger maintains, like new, volumetric efficiency even after 40,000 working hours. The diaphragm protected by the built-in relief valve and mechanically actuated oil-replenishing system, has a working life in excess of 40,000 hours.

The diaphragm is held independently of the pump head, so that when the head is dismantled, the diaphragm is retained in the body and no oil is lost. This significantly improves the ease of maintenance.

Excellent investment value is achieved thanks to very few components. The system's direct plunger stroke adjustment and the cam mechanism make this possible.

Construction characteristics

- 1 **HYDRAULIC SYSTEM**
Consists of a "smart diaphragm" which allows continuous oil replenishing. The restored oil quantity is set by diaphragm position only, with self-controlled maximum travel. In the event of critical NPSHa or closed suction piping, the "smart diaphragm" avoids oil overfeeding which would result in over expansion.
- 2 **CONNECTIONS**
Threaded NPT.
Flanged ANSI
- 3 **VALVE BALLS**
A wide range of materials (316L stainless steel, Pyrex, Ceramic, Hastelloy ® C-276) are available to handle various liquids.
- 4 **DIAPHRAGM**
Pure PTFE with independent leak-free retention system allowing pump head maintenance without leakages.
- 5 **LIQUID END**
Machined from solid barstock in either 316L (SS), PVC, PVDF or PTFE.
- 6 **PUMP HEAD**
Drip groove to prevent corrosion of the pump casing.
- 7 **BUILT-IN RELIEF VALVE**
Protects Diaphragm and Pump Internals
- 8 **INTERNAL MECHANISM**
Oil-bath lubricated and supported by ball-bearings.
- 9 **PLUNGER**
No wearing parts; seamless oil-bathed plunger.
No maintenance required.



Totally enclosed monobloc construction without external moving parts, Smart diaphragm and built-in pressure relief valve.

TECHNICAL DATA

Model	SPM	GPH	PSI		Connections		Maximum Suction Lift In Feet W.C.	Weight without motor	Motor Hp Required	Nema Motor Frame
			SS	PVC	Threaded	Flanged				
60 Hz										
LXR2.30	33	.5	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR2.30	43	.8	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR2.30	51	.92	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR2.30	67	1.19	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR2.30	87	1.58	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR2.30	103	1.85	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR2.30	133	2.64	290	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.30	51	2.64	232	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.30	67	3.7	232	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.30	87	5.3	232	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.30	103	6.34	232	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.30	133	7.92	232	145	1/4" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.38	67	6.3	145	145	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.38	87	8.7	145	145	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.38	103	10.5	145	145	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.38	133	13.2	145	145	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.38	174	18	145	145	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.48	67	10	101	101	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.48	87	13.2	101	101	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.48	103	16.4	73	73	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.48	133	21	73	73	1/2" NPT	1/2" 150#	↕	↕	1/8	42C
LXR6.48	174	27.7	73	73	1/2" NPT	1/2" 150#	↕	↕	1/8	42C

Flow rates:

- 27.7 GPH max

Pressure:

- Max Pressure 246 PSI

Motors:

- 1/8 HP, 1750 RPM, 42C Frame

Adjustment:

- Manual Via Micrometer Knob
- Electric Actuator

Materials of Construction:

- Anodized Aluminium Housing

UXR 6.48 P 174



- PVC Pump Head
- 1/8 HP motor, 42C Frame
- 1/2" NPT Connections
- Flow Rate - 27.7 GPH
- Pressure - 58 psi

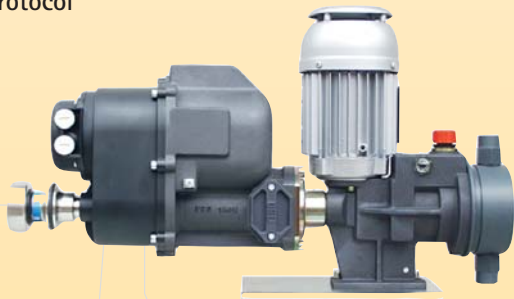
Electric actuator

UXR pumps, as all OBL pumps, can be equipped with Z type electrical actuator, with following characteristics:

- Manual emergency override
- Anticondensation heater (on demand)
- Non standard voltages and frequencies (on demand)

Flow rate is adjusted according to following input signals:

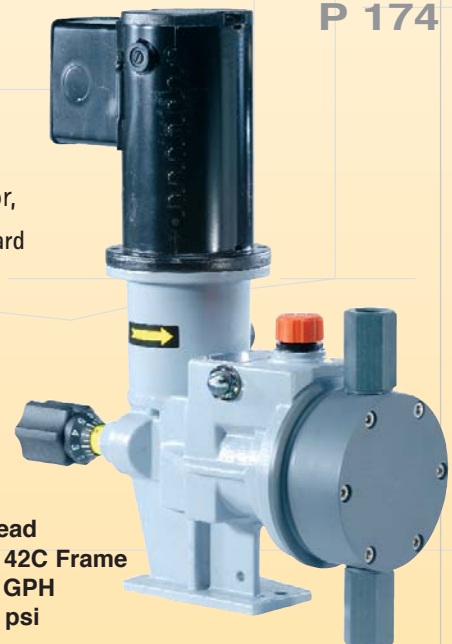
- 4-20 mA, 0-20 mA, 20-4 mA e 0-10 V
- Pulses (0-2 Hz, 0-30 Hz)
- RS 485 protocol



MATERIALS OF CONSTRUCTIONS

PARTS	A	P	P11	A32
LIQUID END	316L (SS)	PVC	PVC	316L (SS)
VALVE GUIDE	PE	PE	PE	PVC
VALVE SEAT	316L (SS)	PVC	316L (SS)	INCOLOY 825
VALVE BALL	316L (SS)	PIREX	316L (SS)	HASTELLOY C-276
VALVE SEAL	FPM	FPM	FPM	FPM
VALVE HOUSING	316L (SS)	PVC	PVC	AISI 316L
DIAPHRAGM	TEFLON (PTFE)	TEFLON (PTFE)	TEFLON (PTFE)	TEFLON (PTFE)

UXR 6.38 P 174



- PVC Pump Head
- 1/8 HP motor 42C Frame
- Flow Rate 18 GPH
- Pressure 200 psi