Cole-Parmer® GEAR PUMP SYSTEMS

FEATURES/BENEFITS

- Complete pump system—drive and pump head—with a single catalog number

BENCHTOP ANALOG PUMPS

- Gradual on-second acceleration offers smooth control of drive speed and flow rate
- PMD drive is built to last—excellent for long-term applications
- System includes analog console drive 75211-10 (115 V) or 75211-15 (230 V); see page 64 for drive specifications

BENCHTOP DIGITAL PUMPS

- Calibrate, copy, and dispense features produce precise, pulseless batching and dispensing
- Displacements and flow values for all Micropump® A-mount pump heads are stored in memory
- IP23-rated enclosure protects the internal components
- Controller has a DB15F connection to the optional foot switch for hands-free on/off control (order foot switch separately below)
- System includes digital console drive 75211-30 (115 V) or 75211-35 (230 V); see page 63 for drive specifications

MORE INFO

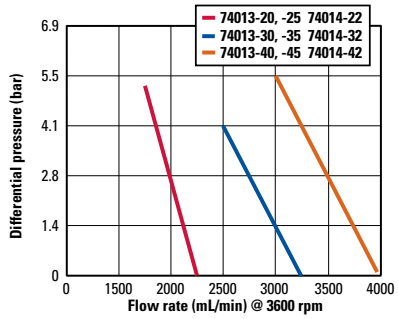
Service kits 07144-42; 74012-02, -42, and -52 include: gears, suction shoe, shaft seals, and springs.

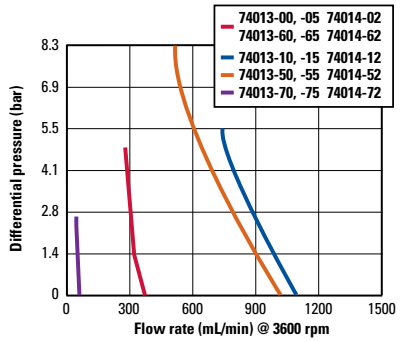
Service kits 74012-12, -22, and -32 include: gears, bushings, and seals.

Analog Gear pump system 74013-07

Digital Gear pump system 74014-72

Flow Curve





ISO 9001:2008 CERTIFIED SUPPLIER · c UL us · CE · 2 year warranty

SPECIFICATIONS & ORDERING INFORMATION

Viscosity: 0.2 to 1500 cp

Suction lift: 59.8 millibar (24" of H_2O) at 1750 rpm

Duty cycle: continuous

Remote control
74013-00 to -65: none
74014-00 to -65: (input) on/off by contact closure 0 to 10 VDC, 0 to 20 mA, 4 to 20 mA, and remote output

Max temperature: 40°C (104°F)

Speed
Analog drives: 50 to 5000 rpm
Digital drives: 60 to 3600 rpm

Dimensions (L x W x H)
Analog drives:
21.6 x 16.2 x 13.8 cm (8½" x 6⅜" x 5⁵⁄₁₂")
Digital drives:
19.7 x 29.2 x 18.4 cm (7¾" x 11½" x 7¼")

Flow rates (mL/min)†			Max pressure		Port size NPT(F)	Wetted parts			Temperature range	Power (VAC)	Benchtop analog pumps	Benchtop digital pumps	Service kits
mL/rev	at 50 rpm	at 3600 rpm	Diff (bar)	System (bar)		Body	Gears	Seals			Catalog number	Catalog number	Catalog number
0.017	0.85	85	1.37	20.68	⅛"	316 SS	Graphite	PTFE	–46 to 177°C (–50 to 350°F)	115	HL-74013-70	EW-74014-72	HL-07144-42
										220	HL-74013-75		
0.092	4.60	331.2	5.17	20.68	⅛"	316 SS	PPS	PTFE	–46 to 177°C (–50 to 350°F)	115	HL-74013-00	EW-74014-02	HL-74012-02
										220	HL-74013-05		
0.092	4.60	331.2	5.17	20.68	⅛"	316 SS	PPS	PPS	–46 to 177°C (–50 to 350°F)	115	HL-74013-60	EW-74014-62	—
										220	HL-74013-65		
0.261	13.05	939.6	8.61	20.68	⅛"	316 SS	PEEK	Viton	–46 to 177°C (–50 to 350°F)	115	HL-74013-50	EW-74014-52	HL-74012-52
										220	HL-74013-55		
0.316	15.8	1137.6	5.17	20.68	⅛"	316 SS	PPS	PTFE	–46 to 54°C (–50 to 130°F)	115	HL-74013-10	EW-74014-12	HL-74012-12
										220	HL-74013-15		
0.64	32.0	2304	5.17	20.68	⅛"	316 SS	PPS	PTFE	–46 to 54°C (–50 to 130°F)	115	HL-74013-20	EW-74014-22	HL-74012-22
										220	HL-74013-25		
0.91	45.5	3276	5.17	20.68	⅛"	316 SS	PPS	PTFE	–46 to 54°C (–50 to 130°F)	115	HL-74013-30	EW-74014-32	HL-74012-32
										220	HL-74013-35		
1.17	58.5	4212	4.13	20.68	⅛"	316 SS	PPS	Viton®	–46 to 177°C (–50 to 350°F)	115	HL-74013-40	EW-74014-42	HL-74012-42
										220	HL-74013-45		

†Flow rates in mL/min are based on water at room temperature and no back pressure.

ACCESSORIES

HL-07595-42 Foot switch, for momentary start/stop control. 6-ft cable.

HL-06385-10 Male pipe adapter (straight); PP, ¼"OD x ⅛" NPT(M). Pack of 10.

HL-30621-31 Male pipe adapter; HDPE, ⅛" NPT(M) x ¼" ID. Pack of 10.

HL-40610-36 Male pipe adapter; natural PP, ⅛" NPT(M) x ¼" ID. Pack of 10.