



1 Drum pump Pump-it

For rapid and clean emptying from cans, drums and small barrels up to 60l.

Bürkle

- For liquids up to a viscosity of 1500 cPs at 20°C
- not suitable for HCL!
- Pump connection suitable for 64mm dia. (BSI) container threads
- Threaded adapters for most commercially-sold containers available
- Precise dosing, without dripping.

Material	Immersion depth mm	Flow rate L / min.	PK	Cat. No.
PP/FKM	1000	8	1	9.001 110



2 Adapter set for Pump-it drum pump

Consisting of:

Bürkle

- 2" Coarse thread, Mauser L ring, green
- 2" coarse thread, Leer/Tri-sure, brown
- 2" Fine thread steel drum, blue
- DIN 60, Mauser-barrel, black
- DIN 51, black (image in centre)

Type	PK	Cat. No.
Adapter set for Pump-it can pump	1	9.001 111



3 Hand pumps Otal

For jerry cans and ballons up to 60l capacity. Universal bungs for container openings of 30 to 70mm diameter.

Bürkle

PP: weak acids, caustic solutions and detergents

PVDF: chlorine bleaching, not for strongly oxidizing acids and caustic solutions

Stainless steel: solvents and liquids of VbF Hazard Class AIII (not easily flammable)

Material	Dia. mm	Flow rate L / min.	Immersion depth mm	PK	Cat. No.
PP*	10	4	450	1	9.001 210
PP	12	14	700	1	9.001 112
PP	15	20	700	1	9.001 115
PP	18	26	700	1	9.001 118
PVDF	16	20	700	1	9.001 135
Stainless steel tubing	18	26	900	1	9.001 137
PVC dispensing tube	12	12	700	1	9.001 138

*Miniature pump for container openings 20 to 36mm.



4 Foot pumps Otal

For jerry cans and ballons up to 120l capacity. Universal bungs for container openings of 30 to 70mm diameter.

Bürkle

PP: weak acids, caustic solutions and detergents

PVDF: chlorine bleaching, not for strongly oxidizing acids and caustic solutions

Stainless steel: solvents and liquids of VbF Hazard Class AIII (not easily flammable)

Material	Dia. mm	Flow rate L / min.	Immersion depth mm	PK	Cat. No.
PP	15	20	700	1	9.001 015
PP	18	26	700	1	9.001 018
PP	22	30	900	1	9.001 022
PVDF	16	20	700	1	9.001 130
Stainless steel tubing	18	26	900	1	9.001 132
PVC dispensing tube	10	12	700	1	9.001 133

1 Siphons

Bürkle-Laboplast. Transparent with stopcock. Simple to use, suitable for occasional dispensing of non-aggressive liquids from a higher drum to a lower vessel, following the siphoning principle.

Bürkle



Material	Immersion depth mm	Dia. mm	Flow rate L / min.	PK	Cat. No.
PE-LD/PVC	1000	15	9	1	9.001 355

2 3 Barrel pumps, PP

- For decanting acids, caustic solutions and aggressive detergents
- Excellent recovery of residual liquid in the barrel provided by base-sitting, non-return valve and steplessly adjustable immersion tube
- For barrels and tanks from 60 to 1000l.

Bürkle



Type A: With rigid, angled, dispensing nozzle.
Type B: With flexible, PVC dispensing hose and stopcock.

Immersion tube dia.: 32mm
Max. pump capacity: up to approx. 12 L/min.

Type	Immersion depth mm	Length mm	PK	Cat. No.
A	500	595	1	9.001 356
B	500	595	1	9.001 366
A	650	740	1	9.001 357
B	650	740	1	9.001 367
A	800	895	1	9.001 358
B	800	895	1	9.001 368
A	1000	1090	1	9.001 359
B	1000	1090	1	9.001 369
A	1250	1340	1	9.001 364
B	1250	1340	1	9.001 370
A	1500	1590	1	9.001 365
B	1500	1590	1	9.001 371



Screwthread connections for PP and PTFE drum pumps

Bürkle

Type	Material	PK	Cat. No.
R2", internal steel barrel thread	PP	1	9.001 335 4
Drum stoppers for 4 to 70 mm	PVC	1	9.001 336 5
Mauser 2", internal coarse screwthread	PP	1	9.001 337 6
Tri-Sure®, internal coarse screwthread	PP	1	9.001 338 7



9.001 335



9.001 336



9.001 337



9.001 338



1 Drum hand pump

Stainless steel V2A and PTFE. Not suitable for acetone. For safe dispensing of low flash point liquids. Electrostatic charge can be dissipated through the accessory antistatic set and drum screwthread connection.

Bürkle

Immersion depth mm	Dia. mm	Description	PK	Cat. No.
570	32	rigid angled tube	1	9.001 340
910	32	rigid angled tube	1	9.001 341
570	32	flexible tubing with stopcock	1	9.001 362
910	32	flexible tubing with stopcock	1	9.001 363

Drum pumps, accessories

Accessories for stainless steel drum pumps.

Constructed in nickel-plated brass. For containers with R2", internal steel barrel thread.

Bürkle

Description	PK	Cat. No.
Drum screwthread connection 2"	1	9.001 345
Drum screwthread connection 2", hermetic sealing	1	6.090 497



9.001 345



6.090 497



4 Solvent pump foot operated

- for barrels up to 220l (fully adjustable)
- for dispensing ultrapure solvents
- solvent-wetted materials: Stainless steel and PTFE
- rigid angled tube or flexible tubing with stainless steel/PTFE stopcock
- supplied with gas tight, R2" steel barrel internal thread connection

Bürkle

Description	Tube dia. mm	Immersion depth mm	Flow rate L / min.	PK	Cat. No.
Pump with rigid angled tube	21.0	950	30	1	9.001 134
Pump with flexible tubing	18.0	950	30	1	6.236 800



5 Solvent pump hand operated

Bürkle

- for contamination-free, dispensing of organic solvents and flavouring agents
- suitable for all commercially available, stainless steel drums up to 60l with R2" fine thread necks (immersion depth 600mm - fully adjustable).
- gas-tight pump can be completely shut-off using two ball valves
- wetted parts are stainless steel, with PTFE seals
- electrostatic charge can be dissipated through the accessory antistatic set (incl.).
- supplied with gas tight, R2" steel barrel internal thread connection

Immersion depth mm	PK	Cat. No.
600	1	9.001 349

1 Antistatic set

When dispensing combustible/explosive liquids all pumps, both dispensing and filling drums involved in the process must be sufficiently earthed, in order to prevent ignition or explosion through electrostatic discharges. Antistatic set, includes three colour-coded connecting cables with clamps, supplied complete in plastic case. Bürkle



Type	PK	Cat. No.
Antistatic set	1	9.001 346

2 Barrel pumps AccuOne and EnergyOne



Bürkle barrel pumps AccuOne and EnergyOne with the unique hybrid system ensure fast, flexible and convenient filling, whenever and wherever you want. The pumps are equipped with two different power supply systems: Bürkle
 AccuOne, driven by a high-performance rechargeable battery or EnergyOne, with a power cable for direct connection to mains electricity. Innovative new feature: The power supply units are interchangeable! The rechargeable battery or the power supply unit are fitted with a clip lock and are removable. They can be exchanged quickly and easily. Thus AccuOne can also be operated with the power supply cable unit and EnergyOne can be operated with the rechargeable battery. With a replacement rechargeable battery as an accessory, you never have to wait for charging. The drive can also be disconnected quickly and easily from the pump station with a clip lock. This makes it possible to use one drive for filling at several stationary pump stations. AccuOne and EnergyOne are designed for applications in which even very small amounts of liquid can be added to small containers with narrow openings. The TouchPanel features a foil keyboard, sealed against dust, dirt and water. The keyboard can be used to regulate the flow rate continuously and precisely from 0.4l/min to 12 l/min. In addition to the discharge tube, a flexible discharge hose with nozzle is available as an option. The light and powerful pumps are made of high-quality materials, PP and Hastelloy C, to ensure outstanding chemical resistance. This also makes them suitable for dispensing acids and bases. Please make note of detailed information related to chemical resistance!



AccuOne

Maximum pumping capacity	12l/min.
Weight	750g
Discharge connection	3/4"
Rechargeable battery capacity	up to 600l
Battery type	Li-Ion
Voltage	14.4V
Electrical charge	1.5Ah
Parts in contact with media:	
Shaft	Hastelloy C
Pump station	PP
Seals	PTFE

EnergyOne

Maximum pumping capacity	12l/min.
Weight	580g
Discharge connection	3/4"
Power supply via 230 V power supply unit, international plug adapter included with delivery.	
Parts in contact with media:	
Shaft	Hastelloy C
Pump station	PP
Seals	PTFE

Description	PK	Cat. No.
AccuOne with rechargeable battery, rigid discharge tube and charger, immersion pipe length 500mm	1	9.001 420
AccuOne with rechargeable battery, rigid discharge tube and charger, immersion pipe length 700mm	1	9.001 421
AccuOne with rechargeable battery, rigid discharge tube and charger, immersion pipe length 1000mm	1	9.001 422
EnergyOne with power supply unit and rigid discharge tube, immersion pipe length 500mm	1	9.001 423
EnergyOne with power supply unit and rigid discharge tube, immersion pipe length 700mm	1	9.001 424
EnergyOne with power supply unit and rigid discharge tube, immersion pipe length 1000mm	1	9.001 425



1 Accessories for AccuOne and EnergyOne

NEW!

Bürkle

Description	PK	Cat. No.
Rechargeable battery without charger	1	9.001 426
Charger	1	9.001 427
Power supply unit incl. connector	1	9.001 428
Drive without rechargeable battery, power supply unit and pump station	1	9.001 429
Discharge tube	1	9.001 430
Discharge hose with nozzle	1	9.001 431
Pump station with immersion pipe length 500mm	1	9.001 432
Pump station with immersion pipe length 700mm	1	9.001 433
Pump station with immersion pipe length 1000mm	1	9.001 434
Barrel screw connection, PP for R2" steel barrel internal thread	1	9.001 335
Drum screwthread connection 2", counternut	1	9.001 347
Barrel plug, PVC for openings from 40 to 70mm diameter	1	9.001 336
Barrel screw connection, PP for Mauser 2", coarse internal thread	1	9.001 337
Barrel screw connection, PP for Tri-Sure, coarse internal thread	1	9.001 338



2 Drum pumps GLP 25

Grün-Pumpen GmbH

GLP 25 is your ideal helper for clean and safe liquid transfer from small containers and drums up to 220litres. Various media such as undiluted acids and bases, dies, emulsions, dispersions and low-viscosity liquids can be measured out without any problems. Wetted materials are PP, stainless steel and Viton®. The pump is therefore additionally media resistant against aggressive liquids. Driveshaft made from stainless steel. Delivery rates from 1 to 20 l/min adjustable. Pump Set supplied with: motor, pump unit, PP, 3/4" dia. inlet tubing (length 500, 700 or 1000mm), PP discharge tubing, 250mm long and adapter for drum necks of 40 to 58mm.

Description	Length mm	PK	Cat. No.
Pump set	500	1	9.001 410
Pump set	700	1	9.001 411
Pump set	1000	1	9.001 412

3 4 Accessories for drum pumps GLP 25

Grün-Pumpen GmbH

Description	PK	Cat. No.
Motor for all pump units	1	9.001 400
Pump unit with inlet tubing length 500mm, incl. discharge tube	1	9.001 401
Pump unit with inlet tubing length 700mm, incl. discharge tube	1	9.001 402
Pump unit with inlet tubing length 1000mm, incl. discharge tube	1	9.001 403
Discharge tube PP, length 25cm	1	9.001 404
Adapter PP, diam. 65 to 70mm	1	9.001 405
Nozzle PP, reinforced PVC outlet tubing 1.5m, DN19	1	9.001 406



1 | 2 Drum pumps, mains-powered

Lightweight and powerful pump for transferring small amounts of aqueous liquids up to 300 mPas from cans and drums with infinitely variable speed controller.

Lutz Pumpen

- Motor 230V, 200W (IP 24)
- Sealless pump tube
- Polypropylene version for acids and alkalis
- Stainless steel version for low-viscosity lubricants
- Suitable accessory flow meter required
- Pump with tubing connection
- Supplied as a set with 1.5m PVC tubing, nozzle in polypropylene, wall bracket



Type	Material	Immersion depth	Flow rate	Immersion tube diam.	Delivery head	PK	Cat. No.
		mm	l / min.	mm	mWS		
Pump	PP	500	75	32	7.0	1	9.880 300
Pump	PP	700	75	32	7.0	1	9.880 301
Pump	PP	1000	75	32	7.0	1	9.880 302
Pump	stainless steel	500	68	28	6.5	1	9.880 303
Pump	stainless steel	700	68	28	6.5	1	9.880 304
Pump	stainless steel	1000	68	28	6.5	1	9.880 305
Pump set	PP	500	75	32	7.0	1	9.880 310
Pump set	PP	700	75	32	7.0	1	9.880 311
Pump set	PP	1000	75	32	7.0	1	9.880 312
Pump set	stainless steel	500	68	28	6.5	1	9.880 313
Pump set	stainless steel	700	68	28	6.5	1	9.880 314
Pump set	stainless steel	1000	68	28	6.5	1	9.880 315



3 | 4 Horizontal centrifugal pumps, magnetically coupled

These new magnetic drive pumps are designed for pumping acids, bases, mixtures of acids and bases, solvents, photochemicals into alkali stripping baths, galvanic baths, as well as radioactive, sterile, expensive or highly corrosive liquids. The pumps are sealless. The impeller is driven by the magnetic force of the outer magnets, therefore no mechanical seal is required. As the pump housing is hermetically sealed no leaks can occur. The use of high performance, permanent magnets, ensures high transmission forces even at elevated temperatures.

Lutz Pumpen

- viscosity up to 20 mPas
- pump complete with flanged-to motor

Magnetic drive pump 15 Watt:

Motor 230V, material PP (fibre-glass reinforced), stainless steel (shaft), Viton® (O-ring), tubing connection 14mm

Magnetic drive pump 29 Watt:

Motor 230V, material PP (fibre-glass reinforced), ceramics (shaft), Rulon (guide bearing), Viton® (O-ring), suction/discharge G 3/4" OT (BSP)



Description	Flow rate	Delivery head	PK	Cat. No.
	L / min.	mWS		
15 Watt, without thread	12	2.0	1	9.880 360
29 Watt, with 3/4" outer thread	24	3.0	1	9.880 361



1 Laboratory peristaltic pumps, behrotest®

Compact laboratory peristaltic pumps with stepless, adjustable flow rate, pump rotor, two compression and four guide rollers. Changing pump tubing is easy, no tools or other aids are required. For 220V 50Hz a.c. supplies.

Behr

Type	Flow rate ml/min.	PK	Cat. No.
PLP 33	7 - 33	1	9.700 420
PLP 66	17 - 66	1	9.700 421
PLP 330	66 - 400	1	9.700 422
PLP 1000	250 - 1000	1	9.700 423

Peristaltic Multichannel Pump PLP 380

Flow rates from 0.0002 to 380 ml/min. The speed can be adjusted manually or automatically through optional external control. Easy to operate.

Behr

- Accepts various pump heads
- Prime key for fast filling and emptying
- Adjust speed manually or automatically through optional external control
- Memory function, storing the running parameters automatically
- Membrane keypad, easy to operate
- Good performance and low price

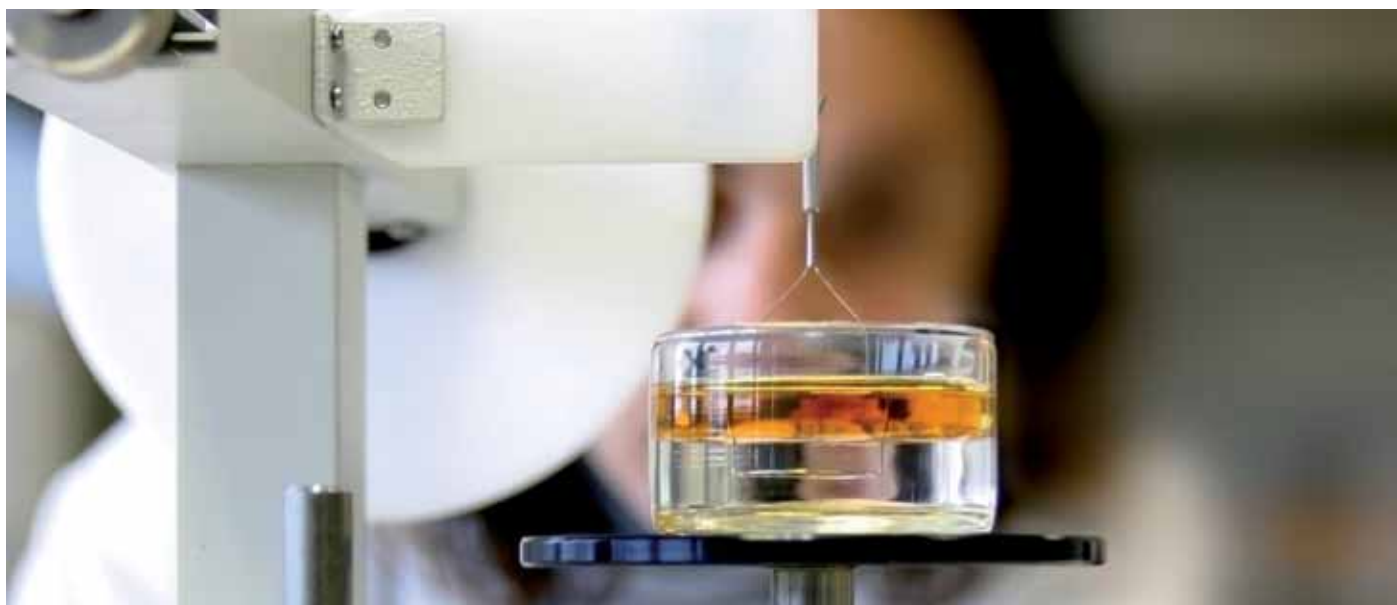
Specifications:

Speed:	0.1 to 100rpm, reversible
Speed precision:	0.1rpm
Speed control:	Membrane keypad
Display:	3-digit LED displays current rpm
Communication interface:	RS485
Power supply:	90 bis 260 V _{ac} 50/ 60 Hz
Power consumption:	< 30 W
Operating condition:	0 to 40°C
Relative humidity:	< 80%
Dimensions (L x W x H in mm):	232 x 142 x 149
Drive weight (without Pump Head):	2.3kg
IP rating:	IP 31

Type	Description	Flow rate ml/min.	PK	Cat. No.
PLP 380	Peristaltic pump	0.00025 - 380	1	9.700 430

Flow rate PLP 380

Pump Head	Channels	Flow rate per channel ml/min
PPH 103	1	0.07 - 380
PPH 303	1	1.7 - 150
PPH 5061	1	0.00025 - 48
PPH 5062	2	0.00025 - 48



1 Peristaltic Multichannel Pump PLP 380 multi

Behr



Flow rates from 0.00025 to 380 ml/min. The speed can be adjusted manually or automatically through optional external control. Easy to operate.

- High torque grants the use of double channel pump heads and multiple pump heads
- Up to 8 channels
- Rich variety of pump heads
- Adjust speed manually
- Membrane keypad and rotary encoded switch, easy to operate
- Good performance and low price

Specifications

Speed:	0.1 to 100rpm, reversible
Speed precision:	0.1rpm
Speed control:	Membrane keypad and rotary encoded switch
Display:	128 x 64 graphic LCD displays flow rate and speed (rpm)
Communication interface:	RS485
Power supply:	220 V _{ac} ±10%, 50/ 60 Hz, 110 V _{ac} ±10%, 50/ 60 Hz
Power consumption:	< 50 W
Operating condition:	0 to 40°C
Relative humidity:	< 80%
Dimensions (L x W x H in mm):	202 x 160 x 239
Drive weight (without Pump Head):	5.34kg
IP rating:	IP 31

Type	Description	Flow rate ml/min.	PK	Cat. No.
PLP 380 multi	Peristaltic multichannel pump	0.0025 - 380	1	9.700 431

Flow rate PLP 380 multi

Pump Head	Channels	Max. No. of pump heads	Flow rate per channel ml/min
PPH 103	1	4	0.07 - 380
PPH 303	1	4	1.7 - 150
PPH 5062	2	1	0.00025 - 48
PPH 5064	4	1	0.00025 - 48
PPH 5066	6	1	0.00025 - 48
PPH 5068	8	1	0.00025 - 48

Peristaltic Pump PLP 2200

Behr

Flow rates from 0.07 to 2200 ml/min. The speed can be adjusted manually or automatically through optional external control. Easy to operate.

- Accepts various pump heads
- Prime key for fast filling and emptying
- Adjust speed manually or automatically through optional external control
- Memory function, storing the running parameters automatically
- Easy to operate through start/stop switch and rotary encoded switch for speed control
- Good performance and low price

Specifications

Speed:	1 to 600rpm, reversible
Speed precision:	1rpm
Speed control:	Start/stop switch and rotary encoded switch
Display:	3-digit LED displays current rpm
Communication interface:	RS485
Power supply:	90 to 260 V _{ac} 50/ 60 Hz
Power consumption:	< 100 W
Operating condition:	0 to 40°C
Relative humidity:	< 80%
Dimensions (L x W x H in mm):	285 x 207 x 180
Drive weight (without Pump Head):	3.8kg
IP rating:	IP 31

Type	Description	Flow rate ml/min.	PK	Cat. No.
PLP 2200	Peristaltic pump	0,07 - 2200	1	9.700 432

Flow rate PLP 2200

Pump Head	Channels	Flow rate per channel ml/min
PPH 103	1	0.07 - 2200
PPH 303	1	1.6 - 1600



1 Peristaltic Pump PLP 6000

Easy to operate. DC brushless motor and close loop control integrate circuit. It features big torque, small vibration, high efficiency and non maintenance. Flow rates from 4.2 to 6000 ml/min. The speed can be adjusted manually or automatically through optional external control.

Behr

- Accepts various pump heads
- Prime key for fast filling and emptying
- Adjust speed manually or automatically through optional external control
- Memory function, storing the running parameters automatically
- High torque grants the use of double channel pump heads
- Easy to operate through start/stop switch and rotary encoded switch for speed control
- Good performance and low price

Specifications

Speed:	60 to 600rpm
Speed precision:	±1%
Resolution:	1rpm
Torque:	>=1.60 Nm
Speed control:	Start/stop switch and rotary encoded switch
Display:	3-digit LED displays current rpm
Communication interface:	RS485
Power supply:	176 to 264 V _{ac} 50/ 60 Hz
Power consumption:	< 200 W
Operating condition:	0 to 40°C
Relative humidity:	< 80%
Dimensions (L x W x H in mm):	285 x 207 x 180
Drive weight (without Pump Head):	5.2kg
IP rating:	IP 31

Type	Description	Flow rate ml/min.	PK	Cat. No.
PLP 6000	Peristaltic pump	4.2 - 6000	1	9.700 433

Flow rate PLP 6000

Pump Head	Channels	Flow rate per channel ml/min
PPH 103	1	4.2 - 2200
PPH 303	1	100 - 1600
PPH 603	1	200 - 6000
PPH 7042	2	50 - 1800
PPH 8062	1	30 - 4000

Pump Heads for PLP 380, PLP 380 multi, PLP 2000 and PLP 6000

Behr

Type	Flow rate L / min.	Max. speed rpm	Rollers	Channels	Weight kg	For Type	PK	Cat. No.
PPH 103	2200	600	3	1	0.40	PLP 380, PLP 380 multi, PLP 2200, PLP 6000	1	9.700 435
PPH 303	1600	600	3	1	0.35	PLP 380, PLP 380 multi, PLP 2200, PLP 6000	1	9.700 436
PPH 5061	48	100	6	1	0.21	PLP 380	1	9.700 437
PPH 5062	48	100	6	2	0.27	PLP 380, PLP 380 multi	1	9.700 438
PPH 5064	48	100	6	4	0.40	PLP 380 multi	1	9.700 439
PPH 5066	48	100	6	6	0.54	PLP 380 multi	1	9.700 440
PPH 5068	48	100	6	8	0.67	PLP 380 multi	1	9.700 441
PPH 603	6000	600	3	1	0.79	PLP 6000	1	9.700 442
PPH 7042	1800	600	4	2	0.82	PLP 6000	1	9.700 443
PPH 8062	4000	350	6	1	2.50	PLP 6000	1	9.700 444



1 Analog Pump drive PD 5001/5006

For standard applications - liquid transfer

Heidolph

- High precision, even for flow rates starting at 0.005ml/min
- Optional foot-pedal remote control via cable to operate pump drive outside a closed fume hood and facilitates operation
- For the use in cell biology just use a pump head which features convex rollers and does not squeeze the tubing as conventional rollers
- All models feature a smooth start operation which prevents spills and splashing of media. The speed will ramp up slowly until your set rpm has been reached
- Safety for continuous unattended operation: the motor will be switched off if a high thermal load situation occurs to preventatively avoid accidents

Pumpdrive PD 5001 - Flow rates of 0.8 to 790ml/min with single-channel pump heads

- Low speed range from 10 to 120rpm
- This pump drive is suitable for multi-channel operation
- Multi-channel flow rates from 0.005 to 320ml/min
- Upgrade your PD 5001 for multi-channel operation in just minutes with a pump head adaptor

Pumpdrive PD 5006 - Flow rates of 3.6 to 3900ml/min with single-channel pump heads

- High speed range from 50 to 600rpm
- This pump drive is not suitable for multi-channel operation



Type	PK	Cat. No.
PD 5001	1	9.829 240
PD 5006	1	9.829 241

2 Pump drive PD 5101/5106

For reproducible results - liquid transfer

Heidolph

- Control the speed (rpm) in a clockwise or counter-clockwise direction and On/Off via analog interface for 0-10V or 4-20mA
- Adjust the variable speed on the analog control knob from 5.0 to 600rpm. Your speed is held constant even under changing loads
- This model features electronic speed control at an accuracy of ±3.5%
- This model connects to an optional foot pedal remote control via cable to start and stop your pump drive outside a closed fume hood increasing your personal safety or ease of use in multiple sample fills
- At the press of a button the pump operates clockwise or counter-clockwise
- A press of the max button accelerates the filling and draining of your tubing

PD 5101 Flow rates of 0.3 to 790ml/min with single-channel pump heads

- Low speed range from 5 to 120rpm
- This pump drive is suitable for multi-channel operation
- Multi-channel flow rates from 0.005 to 320ml/min
- Upgrade your PD 5101 for multi-channel operation in just minutes with a pump head adaptor

PD 5106 Flow rates of 1.3 to 3900ml/min with single-channel pump heads

- High speed range from 24 to 600rpm
- This pump drive is not suitable for multi-channel operation



Type	Flow rate ml/min.	PK	Cat. No.
PD 5101	0.005 to 790	1	9.829 242
PD 5106	1.3 to 3900	1	9.829 243

1



1 Pump drive PD 5201/5206

Reproducibility - pumping and dosing

Heidolph

- Control the speed (rpm) in clockwise or counter-clockwise direction and On/Off via analog interface for 0-10V, 4-20mA or digital RS232 interface
- Flow characteristic of pump heads in combination with various tubing diameters is pre-programmed for accurate flow rate numbers
- Digital read-out of: Speed (rpm), Tubing diameter, Flow rate in ml/min, Dosing volume, Interval dosing, Pause function
- Easily change all process parameters via these buttons
- This model connects to an optional foot pedal remote control via cable to start and stop your pump drive outside a closed fume hood increasing your personal safety or easy use in multiple sample fills
- This model features electronic speed control and an accuracy of $\pm 0.5\%$
- A press of the max button accelerates the filling and draining of your tube
- At the press of a button the pump operates clockwise or counter-clockwise
- Calibrate your flow volume and flow rate individually

Pumpdrive PD 5201 - Flow rates of 0.3 to 790ml/min with single-channel pump heads

- Low speed range from 5 to 120rpm
- This pump drive is suitable for multi-channel operation
- Multi-channel flow rates from 0.005 to 320ml/min
- Upgrade your PD 5201 for multi-channel operation in just minutes with a pump head adaptor

Pump drive PD 5206 - Flow rates of 1.3 to 3900ml/min with single-channel pump heads

- High speed range from 24 to 600rpm
- This pump drive is not suitable for multi-channel operation

Type	PK	Cat. No.
PD 5201	1	9.829 244
PD 5206	1	9.829 245

2



2 Single-channel pump heads SP quick/SP quick d

SP quick

Heidolph

- Fast and convenient tube changes
- Low pulsation due to 5 roller system
- Pump head features ball bearings
- Rollers made of stainless steel
- For tubes with a 1.6mm or 2.5mm wall thickness (wt)
- Depending on drive and tubing, the flow rate ranges from 0.4 to 3300ml per minute

SP quick d

- Choose SP quick in combination with SP quick d to attach two pump heads to one drive
- This combination is suitable for pump drives PD 5001/5101/5201 only

Type	Tubing wall thickness	Flow rate ml/min.	PK	Cat. No.
SP quick	1.6	0.3 to 3300	1	9.829 250
SP quick	2.5	0.3 to 3300	1	9.829 251
SP quick d	1.6	0.3 to 3300	1	9.829 252
SP quick d	2.5	0.3 to 3300	1	9.829 253

We can supply this
manufacturer's
whole
product range !



Single-channel pump heads SP standard and SP vario

SP standard

- Recommended for standard applications
- Convex rollers do not squeeze or crush organic cell cultures
- Pump head features ball bearings
- Rollers made of stainless steel and polyamide
- For tubes with a 1.6mm or 2.5mm wall thickness (wt)
- Depending on drive and tubing, the flow rate ranges from 0.3 to 3900ml per minute

SP vario

- Suitable for most Heidolph tubing due to adjustable roller spacing
- Convex rollers do not squeeze or crush organic cell cultures
- Pump head features ball bearings
- Rollers made of stainless steel and aluminum
- Depending on drive and tubing, the flow rate ranges from 0.3 to 3900ml per minute

Heidolph



9.829 254



9.829 256

Type	Tubing wall thickness	Flow rate ml/min.	PK	Cat. No.
SP standard 1.6*	1.6	0.5 to 3644	1	9.829 254 1
SP standard 2.5*	2.5	0.5 to 3644	1	9.829 255
SP vario**	var.	0.5 to 3644	1	9.829 256 2

* for simple flow requirements.
** rotor with adjustable roller distance.

3 4 Multi-channel pumps C4/C8/C12

- These pump drives are able to be configured for multi-channel use: PD 5001, PD 5101 and PD 5201
- Increase your output by running up to 12 individual cassettes on one single pump drive and pump head system
- Separate metering into multiple vessels with different feed rates at the same time by using different tubing dimensions to adjust flow rates
- Save time: Tubing change is done in just seconds
- In addition to standard pump heads which feature a 4 roller system you can choose 8 roller pump heads for low pulsation
- Change your cassettes easily, even during operation - there are no restrictions
- Cassettes adjustments and changes are simple, just click in place
- No additional pump drive purchase needed: Upgrade your single channel pump drive with just an adaptor for multi-channel use and pick the head/cassette configuration that matches your application needs

Heidolph

Type	Description	PK	Cat. No.
C4	for max. 4 x small cassettes	1	9.829 285
C8	for max. 8 x medium or 4 x large cassettes	1	9.829 286
C12	for max. 12 x small cassettes	1	9.829 287
Cassette, small	Flowrate: 0.005 to 40.8 ml/min	1	9.829 288
Cassette, medium	Flowrate: 0.29 to 25.2 ml/min	1	9.829 289
Cassette, large	Flowrate: 1.0 to 336 ml/min	1	9.829 290
Multi channel adaptor		1	9.829 291



Masterflex multi channel peristaltic pumps

NEW!

Each pump head is constructed with rugged anodized aluminum frames, stainless steel rotor assemblies, and either one or two precision machined aluminum occlusion beds. These occlusion beds are designed to compress the tubing for optimum performance, no occlusion adjustment is required.

Heidolph

Type	Description	PK	Cat. No.
Masterflex	Multi channel peristaltic pumps	1	9.829 292

1



1 Peristaltic pump drives, MCP standard/MCP process

Can be combined with over 20 pumpheads for flow rates of 0.01 to 3700ml/min (depending on pump-head).

Ismatec

Combined peristaltic pump and precise dispenser. Microprocessor controlled, with precise controlled rotation speed and metering unit for 1 to 24 pump channels. The speed (1rpm to 240rpm) is adjustable to 0.1rpm, key-pad with LED-display, programmable. Different dosing modes supply very exact and reproducible results. With RS232 interface, tubing valve operation, dosing handle and foot switch. Can be used for sterile dosing up to 135°C (with adequate tubing). Dimensions (WxDxH): 155mm x 220mm x 260 mm (without pumphead).

Programmable functions:

- ml/min
- drive speed
- drop-free (roller reverse step)
- calibration ml/min in ml (volume)
- drive unit on/off

Dosing:

- volume ml
- volume/time unit
- dosing time (0.1 to 999 h)

Additional functions MCP process:

- programmable sequences
- dust-tight and water-proof

Specifications

Motor type:

Speed:

Speed setting:

Flow rate setting:

Power consumption:

Power supply:

Protection rating:

Weight:

Motor type:

Speed:

Speed setting:

Flow rate setting:

Power consumption:

Power supply:

Protection rating:

Weight:

MCP-Process

d.c. motor

1 to 240rpm

rpm, resolution 0.1rpm

µl/min, ml/min, l/min

100W

100 to 230V, 50 to 60Hz a.c.

IP65

6.9kg (without pumphead)

MCP-Standard

d.c. motor

1 to 240rpm

rpm, resolution 0.1rpm

µl/min, ml/min, l/min

100W

230V 50Hz; 115V, 60Hz a.c. selectable

IP30

6.4kg (without pumphead)

Type	PK	Cat. No.
MCP-Process	1	9.828 510
MCP-Standard	1	9.828 367



Peristaltic pump drives, BVP-Standard/BVP-Process

Can be combined with over 20 pump-heads for flow rates of 0.01 to 3700ml/min (depending on pump-head) Ismatec

For the continuous pumping of liquids and suspensions with up to 60 % solids content according to capacity or time. Analogue interface for Start/Stop, rotation direction, autostart. LED display on BVP Process. Stainless steel housing, dust-tight and water-proof. Dimensions (W X D x H): 155 x 220 x 260mm (without pump-head). Power supply: 230V/50Hz, 115V/60Hz

Specifications: BVP Standard

- speed 2.4 to 240 rpm
- speed setting: 1-99.9%, resolution 0.1%
- protection rating: IP30
- weight: 5.7kg

Specifications: BVP Process

- speed 1 to 240 rpm
- speed setting: rpm, resolution: 0.1 rpm
- protection rating: IP65
- weight: 6.9kg

Type	Flow rate ml / min.	PK	Cat. No.
BVP-Standard	0.003 - 3700	1	9.828 366 1
BVP-Process	0.001 - 3700	1	9.828 512 2



9.828 366



9.828 512

3 Single-channel-pumpheads for peristaltic pumps BVP-Standard (-Process) and MCP-Standard (-Process) drive units

Ismatec



Pumphead type	Inputs	Flow rate ml / min.	Rollers	PK	Cat. No.
7518-10 Easy-Load*	1	0.07 - 1100	3	1	9.828 391
Easy-Load removable plate	-	-	-	1	9.828 530
PTFE tubing pumphead*	1	0.07 - 45	6	1	9.828 395

* Removable plate 9.828 530 is required for operation.

4 Single-channel pumpheads for BVP-Standard (-Process) and MCP-Standard (-Process) peristaltic pump drive units

For tubing with max. wall thickness: 1.6mm Ismatec

Pumphead type	Flow rate ml / min.	Inputs	Rollers	PK	Cat. No.
360	0.072 - 530	1	3	1	9.828 371
380	0.44 - 2800	1	3	1	9.828 372
380 AD**	0.41 - 3600	1	3	1	9.828 373
Pro 280	0.49 - 3700	1	2	1	9.828 520
Pro 380	0.45 - 3400	1	3	1	9.828 521
Pro 281*	3.6 - 3100	1	2	1	9.828 394
Pro 381*	3.3 - 2900	1	3	1	9.828 396

* Tubing wall thickness 2.4 mm

**Pump head for tubing wall thickness of 1.6 to 2.4 mm





1 Multichannel pumpheads for BVP-Standard/Process and MCP-Standard/Process drive units

Ismatec

Pumphead type	Flow rate ml / min.	Inputs	Rollers	PK	Cat. No.
SB removable plate	-	-	6	1	9.828 533
SB-3V*	0.09 - 530	3	6	1	9.828 216
SB-2V*	1.1 - 1100	2	6	1	9.828 215

* Removable plate 9.828 533 is required for operation.

2 3 Multichannel pumpheads for BVP-Standard/Process and MCP-Standard/Process drive units

Ismatec

Pumphead type	Flow rate ml / min.	Inputs	Rollers	PK	Cat. No.
CA4	0.002 - 230	4	8	1	9.828 379
CA8	0.002 - 230	8	8	1	9.828 380
CA12	0.002 - 230	12	8	1	9.828 381
MS/CA8-6*	0.002 - 100	8	6	1	9.828 375
MS/CA4-12**	0.001 - 57	4	12	1	9.828 377
MS/CA8 cartridge block	0.002 - 100	8	6	1	9.828 376
MS/CA4-12 cartridge block	0.001 - 57	4	12	1	9.828 378

*extendible to 24 channels

**extendible to 16 channels



4 Pump, peristaltic, Flowmaster FMT 300

Ismatec

Offers high flow rates from 37ml/min to 13l/min for industrial applications.

Protection level IP65, sterile tube insertion without priming.

Simple detachable pumphead makes cleaning easy, no tools required. Dispensing in intervals possible.

Specifications

Pumping speed:	5 to 500rpm, accuracy 0.1rpm, waterproof keypad, LED readout
Power consumption:	500W
Power supply:	115/230V 60Hz a.c., switchable
Protection:	IP 65
Dimensions (HxWxD):	220x500x262mm
Weight:	26kg
Flowrate:	37 ml/min - 13l/min
Pumphead:	Comprises a 3-roller pumphead for tubing with a thickness of 3.2 mm

Type	PK	Cat. No.
Flowmaster FMT 300	1	9.828 541

1 Pumps, peristaltic, multichannel, precision, IPC, IPC-N-IP and IP-N

Ismatec

1



IP and IP-N series, without dispensing features

- Microprocessor controlled
- very precise pumping

IPC and IPC-N series, with dispensing features

- Microprocessor controlled
- very precise pumping
- with "standby-mode" (prevents draining the tubing line e.g. overnight)
- with dispensing and calibration functions

IPC-N and IP-N series

- 4, 8, 12, 16 or 24 channels
- 8 actively driven stainless steel rollers
- Transparent keyboard and LED-display
- Click 'n' go cassettes providing defined and repeatable occlusion conditions.
- different tube sizes can be inserted in each channel.
- 2 Stopper tubes
- Differential pressure: 1.0 bar

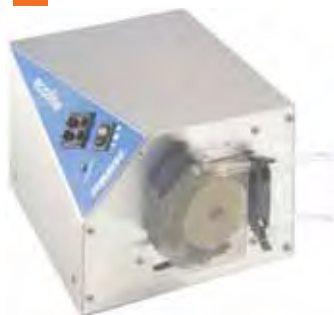
Specifications IPC and IPC-N:

Motor type:	d.c. motor
Flow rates:	IPC: 0.4 up to 44 l/min IPC-N: 0.11 up to 11.25 l/min
Speed range:	1 to 100 %, resolution 0.1 % in µl/min to ml/min
Input:	30W
Supply requirements:	230V 50Hz, 115V 60Hz (selectable)
Protection class:	IP 30

Specifications IP and IP-N:

Motor type:	d.c. motor
Flow rates:	IP: 0.4 up to 44 l/min IP-N: 0.11 up to 11.25 l/min
Speed range:	1 to 100 %, resolution 0.1 % IP; rpm, resolution 0.1 l/min IP-N: rpm, resolution 0.03 l/min
Input:	30W
Supply requirements:	230V 50Hz, 115V 60Hz a.c. (selectable)
Protection class:	IP 30

Type	Flow rate ml/min.	Inputs	Dimensions (W x D x H) mm	PK	Cat. No.
IP-4	0.002 - 44	4	175 x 180 x 130	1	9.828 346
IP-8	0.002 - 44	8	175 x 220 x 130	1	9.828 347
IP-12	0.002 - 44	12	175 x 260 x 130	1	9.828 348
IP-16	0.002 - 44	16	175 x 300 x 130	1	9.828 349
IP-24	0.002 - 44	24	175 x 380 x 130	1	9.828 350
IP-N-4	0.0004 - 11	4	175 x 180 x 130	1	9.828 356
IP-N-8	0.0004 - 11	8	175 x 220 x 130	1	9.828 357
IP-N-12	0.0004 - 11	12	175 x 260 x 130	1	9.828 358
IP-N-16	0.0004 - 11	16	175 x 300 x 130	1	9.828 360
IP-N-24	0.0004 - 11	24	175 x 380 x 130	1	9.828 370
Foot switch T-51-S	-	-	-	1	9.828 359
IPC-4	0.002 - 44	4	175 x 180 x 130	1	9.828 351
IPC-8	0.002 - 44	8	175 x 220 x 130	1	9.828 352
IPC-12	0.002 - 44	12	175 x 260 x 130	1	9.828 353
IPC-16	0.002 - 44	16	175 x 300 x 130	1	9.828 354
IPC-24	0.002 - 44	24	175 x 380 x 130	1	9.828 355
IPC-N-4	0.0004 - 11	4	175 x 180 x 130	1	9.828 361
IPC-N-8	0.0004 - 11	8	175 x 220 x 130	1	9.828 362
IPC-N-12	0.0004 - 11	12	175 x 260 x 130	1	9.828 363
IPC-N-16	0.0004 - 11	16	175 x 300 x 130	1	9.828 364
IPC-N-24	0.0004 - 11	24	175 x 380 x 130	1	9.828 365

1


9.828 514

Pumps, peristaltic, Ecoline

Flow rate 0.003 to 5400 ml/min. Robust and economical. Stainless steel housing. Easy handling. For all applications in laboratory and industry.

Ismatec
Ecoline VC-280:

Economical, basic, single-channel drive model for flow rates up to 5.4 l/min. with variable speed.

Ecoline VC-360 and VC380:

1-channel tubing pumps, microprocessor controlled. With 2-digit potentiometer, scaled 1 to 99% and analogue interface for Start/Stop, rotation direction, speed control (0 to 5 or 0 to 10V/0 to 20 or 4 to 20mA).

Ecoline VC-drive without pump heads:

- combinable with Easy-Load®, MS/CA 8-6 and MS/CA 4-12 pumpheads

2


9.828 515

Type	Channels	Rollers	Flow rate ml / min.	To fit tubing mm	PK	Cat. No.
VC-280 II	1	2	1.7 - 5400	1.6 - 11.1	1	9.828 513
VC-360 II	1	3	0.25 - 1300	0.8 - 6.4	1	9.828 514 1
VC-380 II	1	3	1.6 - 5000	1.6 - 11.1	1	9.828 515 2
Ecoline VC-drive			0.23 - 5400	-	1	9.828 516
Easy-Load®	1	3	0.23 - 1600	0.8 - 8.0	1	9.828 391
MS/CA 8-6	8	6	0.005 - 150	0.13 - 3.17	1	9.828 376
MS/CA4-12	4	12	0.003 - 83	0.13 - 3.17	1	9.828 378

3


3 Compact peristaltic pump Reglo-Quick

Flow rate 2.1 to 230ml/min. Single-channel tubing pump with user friendly pump head for fast change of tubing. The tubing bed is easily accessible, with large opening angle of the protection cover, rapid tube change-over.

Ismatec

- high reproducibility via speed-controlled drive
- with hinged, transparent protection cover
- for standard silicone or Tygon tubing
- occupies minimal space
- max. differential pressure 1.5 bar
- reduced pulsation

Specifications

Speed:	3.2 to 160 rpm
Speed setting:	1 to 99 %, resolution 1%, 2-digit potentiometer
Power supply:	230 V 50 Hz, 115 V 60 Hz a.c. selectable
Protection rating:	IP 30
Dimensions (D x W x H):	178 x 100 x 143 mm
Weight:	2.2 kg

Type	Channels	Rollers	Flow rate ml / min.	PK	Cat. No.
REGLO-Quick	1	4	2.1 - 230	1	9.828 490

4


4 Pumps, peristaltic, Reglo-Analogue

For high precision pumping in the ml-range and below (0.002 to 68ml/min). Simple Click'n'go mini tubing assembly cartridges. With remote control for on/off and speed.

Ismatec

- speed setting: 2-99%, resolution: 1%
- power consumption 20W
- overload control
- analogue interface
- for 0.13 to 3.17mm tubing i.d.
- 3-stop, colour-coded tubing

Dimensions (WxDxH)

2-channel versions:	100 x 178 x 143 mm
4-channel versions:	100 x 190 x 143 mm

Type	Rotation speed rpm	Flow rate ml/min.	Channels	Rollers	PK	Cat. No.
MS-2/6-160	3.2 - 160	0.005 - 68	2	6	1	9.828 470
MS-2/8-160	3.2 - 160	0.004 - 57	2	8	1	9.828 471
MS-2/12-160	3.2 - 160	0.003 - 38	2	12	1	9.828 474
MS-4/6-100	2,0 - 100	0.003 - 43	4	6	1	9.828 472
MS-4/8-100	2,0 - 100	0.003 - 35	4	8	1	9.828 473
MS-4/12-100	2,0 - 100	0.002 - 24	4	12	1	9.828 475

1 Pumps, peristaltic, Reglo-Digital

For high precision pumping in the ml-range and below (0.001 to 68ml/min). Simple Click'n'go mini tubing assembly cartridges.

Ismatec

Microprocessor controlled, with RS232 interface and can be calibrated. Programmable flow rates, dispensing volume and pause times. Digital LED display. For: 0.13 to 3.17mm i.d. tubing.

Programmable functions:

- ml/min
- the drive speed (rpm)
- drip-free by rolling back steps
- calibration: ml/min (flow rate); ml (volume)
- power ON/OFF

Dosing by:

- volume ml
- volume/unit time
- metering (0.1 to 999 hours)
- interval metering with preset pause
- selectable number of dispensing

Type	Rotation speed rpm	Flow rate ml/min.	Inputs	Rollers	PK	Cat. No.
MS-2/6-160	1.6 - 160	0.003 - 68	2	6	1	9.828 480
MS-2/8-160	1.6 - 160	0.002 - 57	2	8	1	9.828 481
MS-2/12-160	1.6 - 160	0.002 - 38	2	12	1	9.828 484
MS-4/6-100	1.0 - 100	0.002 - 43	4	6	1	9.828 482
MS-4/8-100	1.0 - 100	0.002 - 35	4	8	1	9.828 483
MS-4/12-100	1.0 - 100	0.001 - 24	4	12	1	9.828 485



2 Compact peristaltic pumps MS-CA

Flow rate 0.021 to 26ml/min. Simple Click'n'go mini tubing assembly cartridges.

Ismatec

- 3-stop colour-coded tubing
- fixed-speed motor
- Dimensions MS-CA2 (WxDxH): 88 x 135 x 125mm
- Dimensions MS-CA4 (W x D x H): 88 x 135 x 145mm

Type	Rotation speed rpm	Flow rate ml/min.	Channels	Rollers	PK	Cat. No.
MS-CA 2/620	20	0.028 - 8.5	2	6	1	9.828 142
MS-CA 2/660	60	0.083 - 26.0	2	6	1	9.828 146
MS-CA 2/640	40	0.6 - 17	2	6	1	9.828 144
MS-CA 2/840	40	0.043 - 14	2	8	1	9.828 154
MS-CA 2/820	20	0.021 - 7.1	2	8	1	9.828 152
MS-CA 2/860	60	0.064 - 21.0	2	8	1	9.828 156



1



1 Chemically-resistant Diaphragm Dosing Pumps SIMDOS®

NEW!

Dosing simplified.

KNF

Technical features:

- Intuitive operation
- Adaptable to fluid characteristics
- Quick and easy calibration
- Analog and impulse control (RC)
- Pause function without data loss
- Chemically-resistant versions
- Self priming
- Dry running
- Low maintenance

The chemically-resistant, microprocessor-controlled series FEM 1.10__18/S and FEM 1.10__18/RC diaphragm metering pumps meter the smallest volumes continuously and evenly. Thanks to a special drive technology, these pumps feature a remarkably wide metering range. A knob makes it easy to vary the pumping function. Supply with software and PC cable (RC-Version).

Material in contact with the pumped media

S version (manual control):

Operation is manual using over a knob.

RC version (manual or external control):

The RC version incorporates all the functions of the S version and can also be controlled externally via analog or digital signals.

- Analog control: 0 - 10V, 0- 20mA, 4- 20mA from 0 to 100%
- Start/Stop: through logic control (TTL)
- Reset/Prime: through logic control (TTL)
- Output signal (i.e. the end of cycle)

Technical data:

Flow rate:	1 - 100 ml/min.
Pressure head:	60 mWg (6 bar)
Suction head:	3 mWg
Time metering:	1 s - 99 h 59 min (manual)
Reproducibility:	±1 %
Connectors:	for tube (ID/AD) 4/6 mm
Mains:	100 - 240 V 50/60 Hz
Permissible liquid temperature:	+5 to +80°C
Permissible ambient temperature:	+5 to +40°C
Max. viscosity allowed:	bis 150 cSt (with reduced power to 500 cSt)
Weight:	0.9 kg
Housing:	IP 65 (splash proof)
Dimensions (WxDxH):	134 x 93 x 145 mm

Type	Head	Control	PK	Cat. No.
FEM 1.10 KT.18 S	PP	S-Version (manual)	1	9.880 560
FEM 1.10 TT.18 S	PVDF	S-Version (manual)	1	9.880 561
FEM 1.10 FT.18 S	PTFE	S-Version (manual)	1	9.880 562
FEM 1.10 KT.18 RC	PP	RC-Version (man./extern)	1	9.880 563
FEM 1.10 TT.18 RC	PVDF	RC-Version (man./extern)	1	9.880 564
FEM 1.10 FT.18 RC	PTFE	RC-Version (man./extern)	1	6.239 423

We can supply this
manufacturer's
whole
product range !



Diaphragm/Dosing pumps

These chemically-resistant, microprocessor-controlled, diaphragm dosing pumps supply small volumes continuously and evenly (reproducibility $\pm 1\%$). Thanks to a special drive technology, these pumps exhibit a remarkably wide dosing range of 1:1000. The pump head is fabricated of PP, PVDF, PTFE or stainless steel (selectable), valves and seals are made of FFPM, the diaphragm is PTFE coated. KNF

S-Version (manual control):

Operation is selected manually using a membrane keypad

Run mode:

- for continuous dosing

Dispense mode:

- Dosing by volume
- Dosing by time
- Repetitive dosing with preset pause interval
- Quick-aspirate function

RC-Version (manual or external control):

The RC version includes all S version functions and can also be externally controlled via analogue or digital signals which are PC compatible.

- Analogue signals: 0/4 to 20 mA, 0 to 10 V
- Digital signals: RS 232, RS 485
- Pulse transition

1 Diaphragm metering pumps STEPDOS 03 und STEPDOS 08

The microprocessor-controlled series FEM 03__18/S and FEM 03__18/RC diaphragm metering pumps meter the smallest volumes continuously and evenly. Thanks to a special drive technology, these pumps feature a remarkably wide metering range of 1:1000.

- maintenance-free
- silent
- even discharge over the entire travel range
- suitable for virtually any chemicals
- reproducibility $\pm 1\%$
- integrated solenoid valve ensures the liquid does not drip or flow back during stop

Technical data:

STEPDOS 08

Flow rate:	0.08 to 80ml/min.
Pressure:	2bar
Maximum head:	4m
Connectors:	for 4 to 6mm i.d. tubing
Supply requirement:	100-230V 50/ 60Hz
Weight:	1.4kg
Housing:	IP 65 (splash-proof)
Dimensions (L x W x H):	180 x 115 x 80mm

STEPDOS 03

Flow rate:	0.03 to 30ml/min.
Pressure:	6bar
Maximum head:	4m
Connectors:	¼"-28 UNF
Supply requirement:	100-230V 50/ 60Hz
Weight:	1.4kg
Housing:	IP 65 (splash-proof)
Dimensions (L x W x H):	180 x 115 x 80mm

Type	Head	Control	PK	Cat. No.
FEM 03 KT.18 S	PP	S-Version (manual)	1	9.880 708
FEM 03 TT.18 S	PVDF	S-Version (manual)	1	9.880 709
FEM 03 FT.18 S	PTFE	S-Version (manual)	1	6.205 091
FEM 03 FT.18 RC	PTFE	RC-Version (man./extern)	1	6.206 511
FEM 03 ST.18 S	stainless steel	S-Version (manual)	1	9.880 714
FEM 03 KT.18 RC*	PP	RC-Version (man./extern)	1	9.880 710
FEM 03 TT.18 RC*	PVDF	RC-Version (man./extern)	1	9.880 711
FEM 03 ST.18 RC*	stainless steel	RC-Version (man./extern)	1	9.880 716
FEM 08 KT.18 S	PP	S-Version (manual)	1	9.880 690
FEM 08 TT.18 S	PVDF	S-Version (manual)	1	9.880 692
FEM 08 FT.18 S	PTFE	S-Version (manual)	1	9.880 718
FEM 08 ST.18 S	stainless steel	S-Version (manual)	1	9.880 720
FEM 08 KT.18 RC*	PP	RC-Version (man./extern.)	1	9.880 695
FEM 08 TT.18 RC*	PVDF	RC-Version (man./extern)	1	9.880 697
FEM 08 FT.18 RC*	PTFE	RC-Version (man./extern)	1	9.880 717
FEM 08 ST.18 RC*	stainless steel	RC-Version (man./extern)	1	9.880 719

* Dispensing pump with man./external control incl. software for Windows and PC control cable.





1 Diaphragm liquid pumps LIQUIPORT®

The LIQUIPORT® diaphragm liquid pumps of the NF 100/1.100...18 S series reliably pump neutral and aggressive liquids. A knob with LED makes it easy to vary the pumping capacity. These pumps work quietly and with low vibrations.

KNF

- acid, alkali, solvent resistant
- self-priming
- dry running
- maintenance-free
- splashproof (IP65 level)
- flow rate manually adjustable, LED display
- standby mode
- maximum pressure limitation
- quiet pumping, low vibrations.

Pump head material:

KT = PP

TT = PVDF

Membrane: PTFE coated

Valves: FFPM

Specifications

Suction head:	3 mWS
Pressure head:	10 mWS
Ambient temp.:	+5 to +40°C
Liquid temp.:	+5 to +80°C
Supply requirements:	100-230V, 50/60Hz

Type	Flow rate l / min.	Int. dia. mm	Rating W	Weight kg	Width mm	Length mm	Height mm	PK	Cat. No.
NF 100 KT.18 S	0.2 to 1.3	8	12	1.0	99	130	177	1	9.880 597
NF 100 TT.18 S	0.2 to 1.3	8	12	1.0	99	130	177	1	9.880 598
NF 300 KT.18 S	0.5 to 3.0	12	24	1.5	104	160	190	1	9.880 599
NF 300 TT.18 S	0.5 to 3.0	12	24	1.5	104	160	190	1	9.880 600

Further designs available on request.



Gear pump drives, MCP-Z-Standard, MCP-Z-Process

2 drive units can be combined with 20 interchangeable magnetically-coupled pumpheads. Flow rates of 1 to 7241ml/min. are attainable with pulse-free flow. Up to 5.6 bar differential pressure and 21 bar system pressure.

Ismatec

MCP-Z-Standard

Microprocessor controlled. Digital display of rotation speed, flow rate, dispensing volume or dispensing time. 4 programme memory and 6 programmable pumping or dispensing functions with calibration mode. Flow rates stored for 20 pumpheads. With RS232 and analogue interfaces.

MCP-Z-Process

Industrial process-adapted drive, dust and watertight, washdown (IP 65) capability through completely sealed stainless steel housing. PC programmed processes can be stored in the pump memory and operated without PC. Other specifications are as MCP-Z-Standard.

Förderbereich 1 bis 7241 ml/min (depending on pump-head)

Specifications: MCP-Z Standard

- speed: 60-6000 min⁻¹
- speed setting: 1-99.9%, resolution 0.1%
- power supply: 230 V/50 Hz - 115 V/60 Hz
- weight: 6.4 kg (without pump head)
- protection rating: IP 30

Specifications: MCP-Z Process

- speed: 60-6000 min⁻¹
- speed setting: min⁻¹, resolution: 0.1 min⁻¹
- power supply: 100-230V/50-60Hz
- weight: 6.9 kg (without pump head)
- protection rating: IP 65



9.828 308



9.828 309

Type	PK	Cat. No.
MCP-Z-Standard	1	9.828 308
MCP-Z-Process	1	9.828 309
Spare magnet for MCP-Z-Standard	1	9.828 344
Spare magnet for MCP-Z-Process	1	9.828 345

Please order two tubing connectors separately.
Tubing connectors - see Gear pump heads.

3 Gear pump drive BVP-Z

Flow rates of 1 to 7241ml/min. Motor speed: 60 to 6000 rpm, adjustable in 0.1% steps.

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Up to 5.2 bar differential pressure and 21 bar system pressure, Rotation speed adjustable via 2 or 3-digit, mechanical push-button potentiometer, with analogue interface and double overload protection. With magnet.

- Weight 5.7kg
- 155 x 220 x 260mm
- Supply requirements: 230V 50Hz, 150W



Type	PK	Cat. No.
BVP-Z	1	9.828 307
Spare magnet for BVP-Z	1	9.828 344

Please order two tubing connectors separately.
Tubing connectors - see Gear pump heads.

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9.828 302

Gear pump drives, Reglo-Z/ZS

Drive units can be combined with 14 interchangeable magnetically-coupled pumpheads. Ismatec
 Flow rates of 1 to 3290 ml/min. are attainable with pulse-free flow.

Motor speed 50 to 5000 rpm, adjustable in 0.1% steps.

Rotation speed adjustable via 2-digit mechanical push-button potentiometer, with analogue interface.

- Weight 2.1kg (Reglo Z), 2.4kg (Reglo ZS)

- Dimensions : 178 x 100 x 143mm (Reglo Z), 175 x 65 x 80 mm (Reglo ZS)

- Supply requirements: 230V, 50Hz a.c., 50W

Reglo-ZS: Drive and pump head are separated from control unit by a 2m long cable.

Applications:

- cooling and climatic technology
- water purification
- liquid chromatography
- surface coating

2



9.828 305

Type	PK	Cat. No.
Reglo-Z	1	9.828 302 1
Reglo-ZS	1	9.828 305 2
Magnet for Reglo-Z / -ZS	1	9.828 306

Please order one magnet and two tubing connectors separately.

Tubing connectors - see Gear pump heads.

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3 Gear pump drives, Reglo-Z Digital

Pulsefree dispensing pumps with excellent repeatability! Ismatec

- Flow rates 1 to 3290ml/min (depending on mounted pump-head)

- 6-button membrane key-pad

- LED display

Operating modes:

- pumping by drive speed (rpm)
- pumping by flow rate (ml/min)
- dispensing by volume (ml)
- dispensing by time (0.1s up to 999hrs)
- dispensing by volume within a pre-set time
- interval dispensing by volume with a pause
- interval dispensing by time with a pause
- setting the number of dispensing cycles
- pause time setting (from 0.1s up to 999hrs)
- back-steps for drip-free dispensing
- reversible rotation direction (only for Cavity Style pumpheads)

Calibrating functions:

- for flow rate (ml/min)
- for dispensing volume (ml)

Motor speed	50 to 5000 rpm
Speed setting	digital speed setting (resolution 1 rpm), closed loop control
RS232 interfaces	- RS232 "in" - for operation controlling via PC - RS232 "out" - for cascading up to 8 pumps
Analogue output	Speed monitoring (0 to 12 kHz)
Digital input (TTL level)	Run/Stop, autostart
Differential pressure	max. 5.2 bar/75.4 psi (depending on pump-head)
Motor type	d.c. motor
Power consumption	75 W
Supply requirements	100 to 230 V a.c., 50 to 60 Hz
Protection rating	IP 30
Dim. D x W x H	175 x 100 x 135 mm (6.8" x 3.8" x 5.3") (without pump-head)
Weight	1.7kg (3.7 lb) (without pump-head)
Accessories	- Driver for "LabView" software (free download) - Foot switch

Type	PK	Cat. No.
Reglo-Z Digital	1	9.828 310

Please order one magnet and two tubing connectors separately.

Tubing connectors - see Gear pump heads.

Gear pumps MCP-Z, BVP-Z, Reglo-Z/ZS, accessories

Please order 2 tubing connection ferrules which are necessary for pump operation.

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Type	PK	Cat. No.
Spare magnet for MCP-Z and BVP-Z	1	9.828 344
Spare magnet for Reglo-Z / -ZS	1	9.828 306
Spare magnet MCP-Z-Process	1	9.828 345
Connector nipple (required)	1	9.828 540

1 Pumpheads for gear pumps BVP-Z, MCP-Z Standard and MCP-Z Process

User-specific pumping heads, drive magnets and two hose connectors are required for operating the magnet-coupled gear pumps. Temperatures -45 to +177°C. If you want to operate pumps with teflon fitments at more than 54°C, please specify this in your order, because operation up to 99°C requires alternative seals. Please note: The flow rate depends on the model.

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- magnets, see gear pump drives
- Service kits available on request



Further pump heads available on request.

Type	Gear material	Flow rate ml/min.	PK	Cat. No.
Z-120	PTFE	40 - 3950	1	9.828 405
Z-122	PTFE	55 - 5460	1	9.828 407
Z-130	PPS	40 - 3950	1	9.828 408
Z-140	PTFE	40 - 3950	1	9.828 409
Z-142	PTFE	55 - 5460	1	9.828 411
Z-150	PPS	33 - 3950	1	9.828 412
Z-181	Graphite	3 - 252	1	9.828 413
Z-183	Graphite	5 - 504	1	9.828 414
Z-186	Graphite	1 - 99	1	9.828 415
Z-200	PPS	35 - 3509	1	9.828 416
Z-1830	PPS	6 - 560	1	9.828 418
Z-201	PPS	70 - 7020	1	9.828 417
Tubing ferrules required			1	9.828 540

Gear material:

PPS = Polyphenylene sulphide PTFE=Polytetrafluorethylene

Case material = 316 Stainless steel



1 Pumps, liquid, ceramic piston, MCP-CPF Process

Ismatec

Flow-rate from 0.025 to 2300 ml/min (depending of the pump head).

Operate on a valveless rotating piston principle with liquid pathway materials made of sapphire-hard, chemically inert ceramic (99.7 % Al₂O₃).

Ideal for chemically aggressive and viscous or crystallizing materials.

Differential pressure up to 6.9 bar.

Industrial process-adapted drive, dust- and water-tight, with washdown (IP 65) capability due to completely sealed stainless steel housing.

PC-programmed routines can be stored in the pump memory and run without needing a PC.

Specifications

Motor:	d.c. motor
Rotation speed:	10.0 to 1800 rpm.
Speed resolution:	1rpm, 0.1 rpm selectable.
Flowrate setting:	µl/min, ml/min, l/min
Power rating:	100 W
Overall (WxDxH):	155 x 220 x 260 mm (without pumphead)
Safety protection:	IP 65
Weight:	6.9kg (without pumphead)
Supply requirements:	100 to 230V a.c. 50/ 60 Hz

Type	Flow rate ml / min.	Width mm	Depth mm	Height mm	PK	Cat. No.
MCP-CPF process	0.025 - 2300	155	220	260	1	9.828 511
Reglo-CPF*	0.08 - 180	100	175	135	1	9.828 368

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2



2 Gyro flask pumpheads for MCP-CPF-Process

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Type	Pump head	Working vol. µl	Flow rate ml / min.	To fit tubing mm	PK	Cat. No.
RH00SKY-LF	steel SS316	2.5 - 25	0.025 - 45	i.d. 1.5	1	9.828 423
RH00CKC-LF	ceramic	2.5 - 25	0.025 - 45	i.d. 1.5	1	9.828 422
RH0CKC	ceramic	5 - 50	0.050 - 90	o.d. 6.4	1	9.828 420
RH1CKC	ceramic	10 - 100	0.10 - 180	o.d. 6.4	1	9.828 421

Alternative Gyro flask pumpheads RH... and QP... available on request !

1 Gyro flask pumpheads for MCP-CPF Process pump drive

Ismatec

Type	Pump head	Working vol. μ l	Flow rate ml / min.	To fit tubing mm	PK	Cat. No.
QP.Q0.SSY	Steel SS316	3.2 - 80	0.04 - 144	6.4	1	9.828 430
QP.Q2.CSC	Ceramic	28.8 - 720	0.29 - 1300	9.5	1	9.828 432
QP.Q3.CKC	Ceramic	51.2 - 1280	0.51 - 2300	12.7	1	9.828 433
QP.Q1.CSC.W*	Ceramic	12.8 - 320	0.13 - 576	9.5	1	9.828 434
QP.Q2.CSC.W*	Ceramic	28.8 - 720	0.29 - 1300	9.5	1	9.828 435
QP.Q1.CSC-WT**	Ceramic	12.8 - 320	0.13 - 576	9.5	1	9.828 424
QP.Q2.CSC-WT**	Ceramic	28.8 - 720	0.29 - 1300	9.5	1	9.828 425

Alternative pumpheads are available - details on request !

*W - with rinsing inlet

**WT - with rinsing and thermostatic control inlet



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