



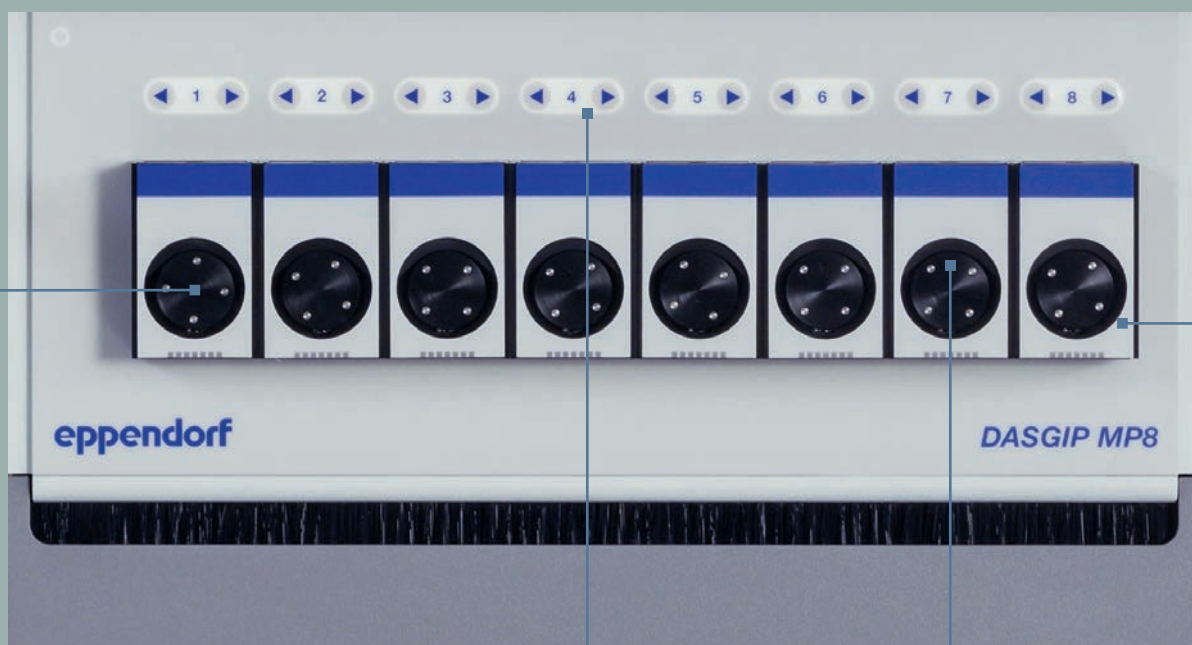
Variable Speed

DASGIP® MP8 and MP4: Precision multi pumps for bench-scale bioprocesses

Continuous-Flow Feeding

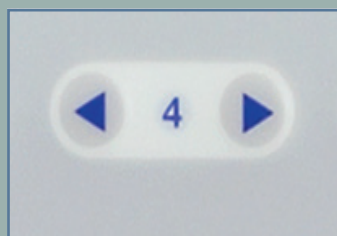
Eppendorf DASGIP MP8 and MP4 multi pump modules individually supply multiple bioreactors with medium, acid, base or other liquids. They meet the demands of bench-scale applications in both cell culture and microbiology.

DASGIP MP8 and MP4: Individual feeding with variable speed pumps



Digitally encoded variable speed pumps

Continuous flow rates enable most accurate feeding and avoid concentration peaks of liquid additions



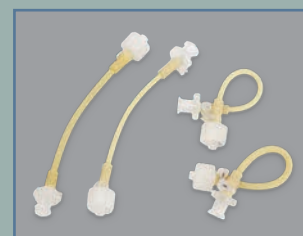
Selectable direction:

Users can choose between clockwise and counterclockwise rotation.



Individual performance

Each pump head can be operated individually.



Wide choice of tubings

Pump head tubings with different inner diameter enable a broad feed range. Can be extended by PTFE or C-Flex® feed lines.

DASGIP MP8 and MP4 feature eight or four variable speed pumps for continuous flow rates. Each of the peristaltic pump heads can be operated individually. Tubings with different inner diameters allow continuous flow rates from 0.3 – 420 mL/h with MP8 and 0.01 – 5 L/h with MP4. With setpoints below the minimum continuous flow rate, pumps switch to duty cycling mode automatically.

- > Individual feed of media, substrate and or acid/base (user-defined)
- > Miniature peristaltic digital pumps using variable speed drives
- > Up to eight feeds per vessel (depending on available head plate port configuration)



Stand-alone solutions for monitoring

Seamless integration using the DASGIP EasyAccess software package

DASGIP MP8 and **MP4** multi pump modules can not only be used as part of DASGIP Parallel Bioreactor Systems, but also stand-alone or integrated with New Brunswick™ and third-party software. OPC communication allows seamless integration with existing process control systems.

You will find the ordering numbers of our stand-alone modules on the back cover.



»As easy as stacking blocks.«

The flexible Eppendorf DASGIP modules for monitoring and control meet the highest demands in research and process development labs or as a part of quality assurance. The parallel nature of the DASGIP modules and their compact, stackable design enable individual operation of up to 16 bioreactors while making optimal use of lab space.



For more information please also refer to our brochures on DASGIP solutions for monitoring, temperature/agitation control, and gassing.

Technical data* and ordering information

	DASGIP® MP8	DASGIP® MP4
		
Power supply	110 – 240 V, 50/60 Hz	110 – 240 V, 50/60 Hz
Dimensions (W x D x H)	300 x 320 x 190 mm (11.8 x 15.6 x 7.5 in)	300 x 320 x 190 mm (11.8 x 15.6 x 7.5 in)
Weight	8.1 kg	10.3 kg
Digital interface	RS-232	RS-232
Pumps		
Quantity	8	4
Variant	Pump head with 4 rollers	Spring mounted 2 roller rotor
Drive	Speed-controlled planetary drive	Speed-controlled planetary drive
Operational modes	Continuous and dispensing	Continuous and dispensing
Tubes		
Standard material pump head tubing	Bioprene® (0.8 – 1.05 mm wall thickness)	Marprene® (1.6 mm wall thickness)
Inner diameter (flow rates)	0.25 mm (0.3 – 9.5 mL/h) 0.5 mm (1.3 – 42 mL/h) 1.0 mm (4.0 – 122 mL/h) 2.0 mm (13 – 420 mL/h)	0.5 mm (0.01 – 0.07 L/h) 0.8 mm (0.02 – 0.22 L/h) 1.6 mm (0.06 – 0.74 L/h) 2.4 mm (0.13 – 1.57 L/h) 3.2 mm (0.23 – 2.72 L/h) 4.8 mm (0.43 – 5.04 L/h)
Standard material feed lines	PTFE	PTFE or C-Flex
System integration		
Analog interface (0 – 10 V)	o	o
Communication protocol**	DTP (OPC)	DTP (OPC)
Order number	76DGMP8	76DGMP4
Order number stand-alone**	76DMMP8	76DMMP4

* Technical specifications are subject to change without notice. ** Stand-alone modules incl. OPC server software (requires separate PC)
o = optional, module order no.: 76DGMP8X, 76DGMP4X

Accessories

Description	Order no.
Package to Support MP4/MP8 Calibration, incl. balance	
for 4 vessels	76DGMPAC4
for 8 vessels	76DGMPAC8
DASGIP® Option Gravimetric Dosing, of one feed	
for 4 vessels	76DGBAL4
for 8 vessels	76DGBAL8
DASware® control Option External I/O, 4x analog input and output per vessel, for 1 vessel	76DGSWEI0

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