

MEDAP-Flowmeters LS FLOW and S FLOW

MEDAP 



Modern specialists for
oxygen and compressed air



Modern flowmeters for even more **precision, flexibility and efficiency**

A sign of the times: Above and beyond the pure technical innovations, however, MEDAP's therapy program meets the expectations of the users in terms of economics. This is particularly pertinent when it comes to the LS FLOW and S FLOW flowmeters from MEDAP.

With their precisely dosable flow rate of 0-1 l/min, 0-5 l/min and 0-15 l/min, as well as being MR Conditional, the MEDAP click-stop flowmeters and tube flowmeters fulfil all standard requirements in the area of inhalation and insufflation as well as the aerosol therapy of adults, children and neonates. In this way, various models, with a variety of wall and rail connection options, guarantee needs-based deployment in every central gas supply unit.

Because of their unique combination of solid quality, their highest level of safety and their ease of use, LS FLOW flowmeters and pressure-compensated S FLOW flowmeters present themselves as an extremely modern and flexible solution for hospitals, specialized medical practices and nursing homes.





LS DFLOW O 15 twin flowmeter

Convincing performance for OR, ward and intra-clinical transport

LS FLOW and LS DFLOW for oxygen and compressed air

Compact all-rounder: They fit in the palm of the hand, are incredibly light, compact and robust and can be adjusted extremely quickly – the practical MEDAP click-stop flowmeters are available as single and twin flowmeter models.

For adults, children and neonates: In accordance with the differing requirements, ATMOS offers a wide range of suitable LS FLOW flowmeters:

- LS FLOW O 15, LS DFLOW O 15, LS FLOW A 15 and LS DFLOW A 15 with a flow rate of 0-15 l/min for adults
- LS FLOW O 05 with a flow rate of 0-5 l/min for children
- LS FLOW O 01 with a flow rate of von 0-1 l/min for infants

All LS FLOW flowmeters with their total of 13 setting levels can be regulated extremely individually. A simple rotation of the handwheel enables extremely precise settings to be made with no further monitoring required.

MR Conditional: Thanks to the special technology, the modern LS FLOW flowmeters also meet the requirements made for use in MR environment. All LS FLOW flowmeters are MR Conditional up to 4.7 Tesla.

Position-independent: Thanks to the robust technology used, click-stop flowmeters are ideally suited for intra-clinical patient transport, guaranteeing an uninterrupted supply of oxygen for the patient.



SDFLOW O 15 twin flowmeter



S FLOW A 15 flowmeter for compressed air

Providing an extremely **secure workflow**

S FLOW and S DFLOW for oxygen and compressed air

Innovative technology: They have a wide adjustment range, can be easily read from a distance and are also exceptionally light – the pressure-compensated MEDAP tube flowmeters for oxygen and compressed air combine tried-and-tested performance features with innovative technology. This makes them particularly suitable for continuous operation.

Precisely adjustable: S FLOW O 15, S DFLOW O 15 and S FLOW A 15 have a 0-15 l/min flow rate that can be very accurately adjusted. Their extremely high accuracy with a deviation of just $\pm 5\%$ is well above the prescribed standard. The good readability of the scaling, even from a distance, supports a seamless and secure workflow.

MR Conditional : Thanks to the special technology, the modern S FLOW flowmeters also meet the requirements made for use in MR environment. All S FLOW flowmeters are MR Conditional up to 4.7 Tesla.

Extremely flexible: S FLOW flowmeters can be installed very quickly and easily to equipment rails as well as at awkwardly located gas outlets. In order to provide optimum aerosol therapy, combination with MEDAP bubble humidifiers is possible at all times.

Unbeatably versatile

LS FLOW connection forms

In use around the world: With an input pressure from the central gas supply system (CSS) that can vary between 300 kPa and 550 kPa \pm 10% and different connection forms, all LS FLOW product versions are perfectly suited for deployment in just about any country.

Definitely economical: The extremely long servicing interval of five years ensures reduced operating costs, which meets the cost demands of hospitals, specialized medical practices and nursing homes.

LS FLOW flowmeters – wall:

- Direct extraction from the terminal unit of the central gas supply system (CSS)
- According to version: MEDAP, DIN, BOC, ALI, AGA

LS FLOW flowmeters – rail:

- Ideal for mounting on a 25 – 35 x 10 mm equipment rail, in accordance with DIN EN ISO 19054 (German Standard)
- Direct extraction from the terminal unit of the central gas supply system (CSS) with universal NIST connection



LS FLOW O 15 click-stop flowmeter for oxygen

LS FLOW A 15 click-stop flowmeter for compressed air



LS DFLOW O 15 click-stop flowmeter for oxygen

Technical specifications

	LS FLOW O 15, LS FLOW A 15		LS DFLOW O 15, LS DFLOW A 15	
	Wall	Rail	Wall	Rail
Weight	180 g	320 g	540 g	690 g
Dimensions (W x H x D) in mm	35 x 65 x 95	40 x 100 x 120	125 x 65 x 100	125 x 100 x 140
Measurement range	0-15 l/min			
Adjustable flow rates (l/min)	0; 0.2; 0.4; 0.7; 1; 1.5; 2; 3; 4; 6; 8; 10; 12; 15			
Display precision	\pm 10 %			
Connection thread	UNF 9/16"			
Nominal pressure, gas supply	300 kPa – 550 kPa \pm 10 %			
MR Conditional	up to 4.7 Tesla			
Conditions for use	temperature -20°C – +60°C, rel. humidity 30 – 75 %			

	LS FLOW O 05		LS FLOW O 01	
	Wall	Rail	Wall	Rail
Weight	180 g	320 g	180 g	320 g
Dimensions (W x H x D) in mm	35 x 65 x 95	40 x 100 x 120	35 x 65 x 95	40 x 100 x 120
Measurement range	0-5 l/min		0-1 l/min	
Adjustable flow rates (l/min)	0; 0.1; 0.2; 0.3; 0.4; 0.6; 0.8; 1; 1.5; 2; 2.5; 3; 4; 5		0; 0.1; 0.15; 0.2; 0.25; 0.3; 0.35; 0.4; 0.5; 0.6; 0.7; 0.8; 0.9; 1	
Display precision	\pm 10 %			
Connection thread	UNF 9/16"			
Nominal pressure, gas supply	300 kPa – 550 kPa \pm 10 %			
MR Conditional	up to 4.7 Tesla			
Conditions for use	temperature -20°C – +60°C, rel. humidity 30 – 75 %			



LS FLOW O 15 wall outlet for MEDAP



LS FLOW O 15 wall outlet for DIN



LS FLOW O 15 wall outlet for AGA (SS 87 524 30) Sweden



LS FLOW O 15 wall outlet for BOC (BS 5682) Great Britain



LS FLOW O 15 wall outlet for Air Liquide (NF S 90-116) France



LS FLOW O 15 equipment rail 25 - 35 x 10 mm (DIN) with NIST connection



LS DFLOW O 15 equipment rail 25 - 35 x 10 mm (DIN) with NIST connection



LS DFLOW A 15 wall outlet for DIN

Type / terminal unit	LS FLOW O 15 Art.-No.	LS FLOW O 05 Art.-No.	LS FLOW O 01 Art.-No.	LS DFLOW O 15 Art.-No.	LS FLOW A 15 Art.-No.	LS DFLOW A 15 Art.-No.
Wall outlet for MEDAP	5752 4917				5752 5450	
Wall outlet for DIN	5752 4916	5752 5304	5752 5306	5752 4919	5752 5235	5752 5607
Wall outlet for AGA (SS 87 524 30) Sweden	5752 5162			5752 5183		
Wall outlet for BOC (BS 5682) Great Britain	5752 4921					
Wall outlet for Air Liquide (NF S 90-116) France	5752 5161					
Equipment rail 25 - 35 x 10 mm (DIN) with NIST connection	5752 5301	5752 5305	5752 5307	5752 5302	5752 5303	5752 5608

Universally deployable S FLOW connection forms

Ideal for use with any gas supply system: All pressure-compensated S FLOW flowmeters have a wide range of international connection forms, enabling global deployment in hospitals, specialized medical practises and nursing homes. Calibrated for country-specific implementation, each ensures a seamless workflow.

S FLOW flowmeters – wall:

- Direct extraction from the terminal unit of the central gas supply system (CSS)
- According to version: MEDAP, DIN, BOC, ALI, AGA

S FLOW flowmeters – rail:

- Ideal for mounting on a 25 – 35 x 10 mm equipment rail, in accordance with DIN EN ISO 19054 (German Standard)
- Direct extraction from the terminal unit of the central gas supply system (CSS) with universal NIST connection



Technical specifications

	S FLOW O 15, S FLOW A 15			S DFLOW O 15	
	Wall DIN, MEDAP	Wall BOC, ALI, AGA	Rail	Wall	Rail
Weight	230 g	230 g	360 g	580 g	730 g
Dimensions (W x H x D) in mm	25 x 150 x 130	25 x 150 x 105	40 x 170 x 125	145 x 150 x 130	145 x 150 x 130
Measurement range	0-15 l/min				
Display precision	± 10 %				
Connection thread	UNF 9/16"				
Nominal pressure, gas supply	500 kPa ± 10%	414 kPa ± 10%	500 kPa ± 10%	500 kPa ± 10%	500 kPa ± 10%
MR Conditional	up to 4.7 Tesla				
Conditions for use	temperature -20° C – +60° C, rel. humidity 30 – 75 %				



S FLOW O 15 wall outlet for MEDAP



S FLOW O 15 wall outlet for DIN



S FLOW O 15 wall outlet for AGA (SS 87 524 30) Sweden



S FLOW O 15 wall outlet for BOC (BS 5682) Great Britain



S FLOW O 15 wall outlet for Air Liquide (NF S 90-116) France



S FLOW O 15 equipment rail 25 - 35 x 10 mm (DIN) with NIST connection



S DFLOW O 15 wall outlet for DIN



S DFLOW O 15 equipment rail 25 - 35 x 10 mm (DIN) with NIST connection

Type / terminal unit	S FLOW O 15 Art.-No.	S DFLOW O 15 Art.-No.	S FLOW A 15 Art.-No.
Wall outlet for MEDAP	5752 4907	5752 5532	5752 5269
Wall outlet for DIN	5752 4906	5752 4910	5752 4912
Wall outlet for AGA (SS 87 524 30) Sweden	5752 4915		
Wall outlet for BOC (BS 5682) Great Britain	5752 4913		5752 5579
Wall outlet for Air Liquide (NF S 90-116) France	5752 4914		
Equipment rail 25 - 35 x 10 mm (DIN) with NIST connection	5752 5298	5752 5299	5752 5300

Comprehensive product portfolio for modern gas supply:

LS FLOW and S FLOW accessories

Variety with system: Offering appropriate, carefully selected accessories, ATMOS supports the application-suitable use of MEDAP LS FLOW and S FLOW flowmeters as part of a modern gas supply.

Practical all-rounder: Disposable sterile water systems and the MEDAP bubble humidifier (REF 5752 5315) can be connected directly to the LS FLOW and S FLOW flowmeters. A special adapter is available for connecting the MEDAP bubble humidifiers (REF 5750 7525).



Adapter for MEDAP bubble humidifier (REF 5750 7525)



Tube adapter (UNF 9/16") for tubes with internal diameter 4, 6, 8 mm



Plastic tube adapter for tubes with internal diameter 4, 6, 8 mm

Necessary accessories for LS FLOW and S FLOW

Connection of	LS FLOW O 15, LS DFLOW O 15, S FLOW O 15, S DFLOW O 15	Art.-No	LS FLOW A 15, LS DFLOW A 15, S FLOW A 15	Art.-No.
MEDAP bubble humidifier (REF 5750 7525)	adapter for humidifier (UNF 9/16" – G 3/8")	5752 2745		
MEDAP bubble humidifier (REF 5752 5315)	direct connection		direct connection	
Disposable sterile water systems	direct connection		direct connection	
Tube 4, 6, 8 mm	tube adapter (UNF 9/16") or plastic tube adapter (UNF 9/16")	5752 2746 5752 5316	tube adapter (UNF 9/16") or plastic tube adapter (UNF 9/16")	5752 2746 5752 5316

Experts in efficient inhalation and aerosol therapy:

Bubble humidifier

More humidity in the respiratory passages: As a prolonged supply with oxygen results in severe desiccation of the patient, MEDAP offers reusable bubble humidifying systems.

MEDAP bubble humidifiers: They operate according to the bubble principle. With approx. 60 % relative humidity they provide a steady physiological humidity in the respiratory passages.



Bubble humidifier (G 3/8")



Bubble humidifier (UNF 9/16")

Recommended accessories for LS FLOW and S FLOW

Bubble humidifying systems	Art.-No.
MEDAP bubble humidifier (G 3/8")	5750 7525
MEDAP bubble humidifier (UNF 9/16")	5752 5315



■Manufacturer:

ATMOS MedizinTechnik GmbH & Co. KG
Ludwig-Kegel-Str. 16
79853 Lenzkirch
GERMANY
Phone: +49 7653 689-0
www.atmosmed.com
www.atmos-medap.com