

**MEDAP CONNECTION TUBES
MEDAP GAS PROBES
MEDAP GAS DISTRIBUTORS**



**COMPREHENSIVE ACCESSORIES PROGRAMME
GUARANTEES PERFECT GAS SUPPLY
MEDAP – GAS PROBES AND CONNECTION TUBES**



Full range of top quality technology: Optimum workflow and perfectly harmonised details are required to save lives and provide optimum patient care. For this purpose, ATMOS offers a complete MEDAP therapy accessories programme made of high-quality connection tubes in neutral colour or ISO-colour coding, gas probes, adapter

couplings and gas distributors suitable for innovative medical gas extraction. For many years, ATMOS therapy accessories have been used successfully in gas extraction worldwide. Top-quality finish and durability as well as the very good price-performance ratio are points in ATMOS's favour.

INTELLIGENT COMPLETE SYSTEM FOR WORLDWIDE APPLICATION MEDAP THERAPY ACCESSORIES PROGRAMME

Comprehensive component system: ATMOS provides a practice-oriented component system for reliable gas extraction from the central gas supply system (CGS) – as desired and required – for the media compressed air, vacuum and oxygen. This provides hospitals and specialised medical practices with innovative tapping units and a complete accessories portfolio which meets international requirements:

- MEDAP connection tubes – as desired in neutral colour or ISO colour coding
- Gas probes – MEDAP, DIN, BS, NF, SS
- NIST screw connectors
- Adapter couplings
- Gas distributors

Perfect partner for the transition of gas identification colours: From 31 December 2009 at the latest, when the transition period for the previous national gas identification colours expired, all DIN colour coding on devices and tube connections must be changed to neutral colour or ISO colour coding. As a competent partner, ATMOS supports hospitals and clinics with a large number of connection tubes and thus ensures prompt, economical and, above all, simple retrofitting.

ALLOCATION OF COLOUR TO GAS TYPE

Colour	Gas type in case of neutral colour	Gas type in case of ISO colour coding
White		oxygen
Black/white		compressed air
Blue		nitrous oxide
Yellow		vacuum
Grey		carbon dioxide
Black	all gases and vac	

ALLOCATION OF GAS TYPE TO COLOUR

Gas type	Neutral colour	ISO colour coding
Compressed air	black	black/white
Vacuum	black	yellow
Oxygen	black	white
Nitrous oxide	black	blue
Carbon dioxide	black	grey

MEDAP connection tubes: It is their task to supply pressure or vacuum-controlled equipment (e.g. anaesthesia or respiratory equipment) with medical gases. For this purpose, ATMOS offers a broad range of highest quality connection tubes which are especially designed for the supply of compressed air, vacuum and oxygen. MEDAP connection tubes are available in many lengths – as desired in neutral colour or ISO colour coding.

Quality made by ATMOS: Especially great demands are made on tubes for medical applications. MEDAP connection tubes convince by excellent flexural strength, construction flexibility and long service life. They are anti-static, possess all required classifications and are thus suited for use in operating rooms and on wards.

TECHNICAL SPECIFICATION

MEDAP connection tubes	
Connection tubes	suited for the conduction of compressed air, vacuum, oxygen
Connection tubes	antistatic
Internal tube diameter	6.7 mm (compressed medical gases) 8 mm (vacuum) (ISO colour coding)
Tube wall thickness	3 mm
Tube material	PVC with integrated mesh (physiologically approved and FDA listed)
External tube texture	high gloss
Nominal pressure	500 kPa
Burst pressure at 23°C	> 5600 kPa
Deformation under pressure, resistance to blocking and flexibility	according to DIN EN ISO 5359



Gas probe MEDAP for compressed air – ISO colour coding



Gas probe DIN for compressed air – ISO colour coding



Gas probe SS for compressed air (SS 87 524 30) Sweden – ISO colour coding



Gas probe BS for compressed air (BS 5682) Great Britain – ISO colour coding



Gas probe NF for compressed air (NF S 90-116) France – ISO colour coding

Gas probes for worldwide application: Due to a broad range of gas probes with standardised connection forms (MEDAP, DIN, BS, NF, SS), MEDAP connection tubes can be used worldwide for direct extraction from the central gas supply system. In addition to high safety technology, the gas probes distinguish themselves by comfortable handling. So the DIN, BS, NF, and SS gas probes are equipped with rotating gas pins. This means that the connection tube moves freely on the gas probe and may thus be positioned individually.

Universal NIST screw connectors: They all represent optimised development fulfilling today's and future requirements on medical technology. Modern calculation methods were used to provide high performance and mounting safety. NIST screw connectors meet the standards of the US American National Institute of Standards and Technology.

Optimised workflow: Adapter couplings and gas distributors for DIN and MEDAP have one thing in common – they increase flexibility when dealing with gas extraction and guarantee uncomplicated workflow.

PARTICULARLY SAFE DUE TO CODED GAS PROBES AND NIST SCREW CONNECTORS CONNECTION TUBES FOR COMPRESSED AIR AND VACUUM

For safe patient care: All connection tubes compressed air and vacuum possess a media-coded gas probe with the requested connection form (MEDAP, DIN, BS, NF, SS) for direct extraction from the CGS. A universal NIST screw connector provides leakage-free mounting to the receiving terminal unit.

High-quality material: The connection nipples and axles at the gas probe are made of chrome-plated brass. They guarantee many years of safe coupling and uncoupling in the direct extraction point of the CGS. All connection tubes are antistatic and meet the high quality demands of operating room requirements.

Connection tubes compressed air:

- As desired in neutral colour or ISO colour coding
- Recommended for the use with MEDAP controllers for equipment rail
- Ideal also for pressure-controlled equipment



Connection tube compressed air with MEDAP gas probe and NIST screw connector – neutral colour



Connection tube vacuum with DIN gas probe and NIST screw connector – ISO colour coding

Connection tubes vacuum:

- As desired in neutral colour or ISO colour coding
- Recommended for the use with MEDAP controllers for equipment rail
- Ideal also for vacuum-controlled equipment

COMPRESSED AIR

Gas probe	Tube colour	Connection tube compressed air	Tube length / metre – Art.-No.		
			1.5 m	3 m	5 m
MEDAP	black (neutral colour)	MED-NIST-FN	5752 5172	5752 5173	
	black/white (ISO colour coding)	MED-NIST-EN	5752 5016	5752 5017	
DIN 13260	black (neutral colour)	DIN-NIST-FN	5752 5019	5752 5020	5752 5350
	black/white (ISO colour coding)	DIN-NIST-EN	5752 5021	5752 5022	5752 5023
SS 87 524 30 (Sweden)	black/white (ISO colour coding)	SS-NIST-EN	5752 5024	5752 5025	
BS 5682 (Great Britain)	black/white (ISO colour coding)	BS-NIST-EN	5752 5026	5752 5027	
NF S 90-116 (France)	black/white (ISO colour coding)	NF-NIST-FN	5752 5028	5752 5029	

VACUUM

Gas probe	Tube colour	Connection tube vacuum	Tube length / metre – Art.-No.		
			1.5 m	3 m	5 m
MEDAP	black (neutral colour)	MED-NIST-FN	5752 5174		
	yellow (ISO colour coding)	MED-NIST-EN	5752 5270	5752 5271	
DIN 13260	black (neutral colour)	DIN-NIST-FN	5752 5037	5752 5038	5752 5039
	yellow (ISO colour coding)	DIN-NIST-EN	5752 5273	5752 5274	5752 5275
SS 87 524 30 (Sweden)	yellow (ISO colour coding)	SS-NIST-EN	5752 5276	5752 5277	
BS 5682 (Great Britain)	yellow (ISO colour coding)	BS-NIST-EN	5752 5278	5752 5279	
NF S 90-116 (France)	yellow (ISO colour coding)	NF-NIST-FN	5752 5280	5752 5281	

PERFECT DUE TO HIGH-QUALITY GAS PROBE AND NIST SCREW CONNECTOR CONNECTION TUBES OXYGEN

Knowing what is needed: All connection tubes oxygen and nitrous oxide possess a media-coded gas probe with the requested connection form (MEDAP, DIN, BS, NF, SS) for direct extraction from the CGS. A universal NIST screw connector provides leakage-free mounting to the receiving terminal unit.

High-quality materials: The connection nipples and axles at the gas probe are made of chrome-plated brass. They guarantee many years of safe coupling and uncoupling in the direct extraction point of the CGS. All connection tubes are antistatic and meet the high quality demands of operating room requirements.

Connection tubes oxygen:

- As desired in neutral colour or ISO colour coding
- Recommended for the use with MEDAP controllers for equipment rail
- Ideal for anaesthesia and inhalation equipment



Connection tube oxygen with NF gas probe and NIST screw connector – ISO colour coding

OXYGEN

Gas probe	Tube colour	Connection tube oxygen	Tube length / metre – Art.-No.	
			1.5 m	3 m
MEDAP	black (neutral colour)	MED-NIST-FN	5752 5175	5752 5176
	white (ISO colour coding)	MED-NIST-EN	5752 5051	5752 5052
DIN 13260	black (neutral colour)	DIN-NIST-FN	5752 5054	5752 5055
	white (ISO colour coding)	DIN-NIST-EN	5752 5056	5752 5057
SS 87 524 30 (Sweden)	white (ISO colour coding)	SS-NIST-EN	5752 5059	5752 5060
BS 5682 (Great Britain)	white (ISO colour coding)	BS-NIST-EN	5752 5061	5752 5062
NF S 90-116 (France)	white (ISO colour coding)	NF-NIST-FN	5752 5063	5752 5064

SPECIALISTS FOR EFFICIENT ANAESTHETIC GAS SCAVENGING SYSTEMS GAS PROBES AND CONNECTION TUBES

Always the perfect solution: For efficient anaesthetic gas scavenging in the field of anaesthetic gas scavenging systems (AGFS), ATMOS offers a perfectly matched portfolio of connection tubes for all commercial anaesthesia systems as well as high-quality gas probes for the connection to

- Terminal units in accordance with MEDAP works standard (Gas probe AGSS-C)
- Terminal units in accordance with Dräger works standard (Gas probe AGSS-E)
- Terminal units in accordance with EN standard (Gas probe AGSS-EN, type 1)

To suit all requirements: ATMOS offers connection tubes for anaesthetic gas scavenging systems pursuant to DIN 13252 which are equipped with a shunt air opening at the patient-side connection, as well as connection tubes for anaesthetic gas scavenging systems without shunt air opening at the patient-side connection suitable for anaesthetic equipment pursuant to EN 740. Both connection tubes are available in various lengths.

Top quality finish: For the safety of patient and hospital staff, MEDAP gas probes and connection tubes for anaesthetic gas scavenging systems are made of material which more than meets the highest OR quality requirements.



Connection tube for anaesthetic gas scavenging system without shunt air opening



Connection tube for anaesthetic gas scavenging systems with shunt air opening



Gas probe for anaesthetic gas scavenging systems AGSS-C



Gas probe for anaesthetic gas scavenging systems AGSS-E



Gas probe for anaesthetic gas scavenging systems AGSS-EN, type 1

GAS PROBES FOR ANAESTHETIC GAS SCAVENGING SYSTEMS

Terminal unit	Gas probe	Art.-No.
MEDAP works standard	AGSS-C	5750 8097
Dräger works standard	AGSS-E	5750 8098
EN standard	AGSS-EN, type 1	5752 5084

CONNECTION TUBES FOR ANAESTHETIC GAS SCAVENGING SYSTEMS

Connection tube for anaesthetic gas scavenging systems	Shunt air opening at the patient-side connection	Tube length / metre – Art.-No.		
		3 m	5 m	7 m
For anaesthesia systems pursuant to DIN 13252	yes	5750 8095	5750 8096	5752 4448
For anaesthesia systems pursuant to EN 740	no	5752 1281	5752 1282	

IDEAL FOR QUICK APPLICATION ADAPTER COUPLINGS

Adapter couplings: Whenever the gas probe does not fit into the terminal unit of the CGS, adapter couplings help. As transition pieces between the different construction types DIN and MEDAP, they ensure flexible application and quickly enable easy oxygen or compressed air extraction.

Practice-oriented technology: Adapter couplings consist of a media-specific plug-in coupling, a connection tube and a media-specific gas probe. The adapter coupling is labelled with the appropriate type of gas – oxygen or compressed air. Adapter couplings can be removed from the device and re-used at any time.

ATMOS offers the following type of adapter couplings:

- DIN-MEDAP adapter coupling for the transfer from a DIN gas probe to a MEDAP coupling



Oxygen adapter coupling with MEDAP gas probe and DIN coupling - ISO colour coding

ADAPTER COUPLINGS

Medium	Gas probe	Coupling	Tube colour	Art.-No.
Compressed air	MEDAP	DIN 13260	black/white (ISO colour coding)	5752 5093
Oxygen	MEDAP	DIN 13260	white (ISO colour coding)	5752 5095

FOR MAXIMUM FLEXIBILITY GAS DISTRIBUTORS FOR DIN AND

Distribution of gas flow: Gas distributors have the task to homogeneously distribute the gas flow from the terminal unit at the CGS to the required number of terminal units while keeping the developing loss of pressure as low as possible. Gas distributors for DIN are perfectly suited for applications with a maximum flow of 30 l/min.

Gas distributor for DIN 13260: They are suitable for compressed air and oxygen gas types and are equipped with 2 or 4 terminal units. An integrated pressure tube in 1.5 m length in ISO colour coding with DIN gas probe is included in the scope of delivery. An equipment holder with fixing screw for fastening to the 25 x 10 mm equipment rail (DIN) (art. no. 5752 4532) must be ordered separately.



Distributor for compressed gases DIN 13260 with four terminal units for oxygen

GAS DISTRIBUTORS

Terminal unit	Medium	Number of gas outlets	Art.-No.
DIN 13260	compressed air	2	5752 5088
		4	5752 5086
	oxygen	2	5752 5087
		4	5752 5085

SAFE AND COMFORTABLE EXTRACTION OF FIVE TYPES OF GAS GAS PROBES MEDAP AND DIN

Safety and comfort: Gas probes for tapping units with MEDAP system or in compliance with DIN 13260 convince by particularly high safety technology and comfortable handling. Standard plug-in nipples ensure a distinctive connection. The DIN gas probes are fitted with rotating gas pins. This means that the connection tube moves freely on the gas probe and may thus be positioned individually. In addition, all tube connectors have a 45° outlet.

Flexible use: MEDAP and DIN gas probes are made of chromed brass and thus fulfil the high quality standards of both operating rooms and wards. A special flexibility feature is the delivery of matching standard factory gas type plates in neutral colour coding upon request.



Gas probes oxygen with tube connecting piece for terminal units according to DIN 13260



Gas probes oxygen with tube connecting piece for MEDAP terminal units

GAS PROBES

Gas probe	Medium	Tube connecting piece	Art.-No.
MEDAP	compressed air	8.4 mm	5752 5072
	vacuum	8.4 mm	5752 5073
	oxygen	8.4 mm	5752 5074
	laughing gas	8.4 mm	5752 5075
	carbon dioxide	8.4 mm	5752 5076
DIN 13260	compressed air	8.4 mm	5752 5079
	vacuum	8.4 mm	5752 5080
	oxygen	8.4 mm	5752 5081



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