



MEDICAL GAS SYSTEMS  
[www.aymmedikal.com](http://www.aymmedikal.com)

MEDICAL GAS SYSTEMS PRODUCT CATALOGUE





AYM Medical Factory has been established in 1995 to take place in medical gas sector to give services consultancy , manufacturing, maintenance, aftersales service, making projects and installation of the pipe lines of the hospitals, clinics, laboratories . The company is growing its business with dynamic and young team.

AYM MEDICAL follows the technology in medical gas systems to improve the service and products. To be able to give quick service to our customers we have establish 2012 years a branch office in **İSTANBUL** in addition to the factory in **MERSİN**.

Our mission is to give services on cosultancy, production, installation, aftersales, maintenance, project to our customers and solve problems in medical gas field.

AYM MEDICAL is registered in National Data Bank and has quality assurance system ISO9001:2008 and ISO13485, TSE Service Qualification Certificate. All our products are CE marked.

We are proud of giving quality, fast and reliable servicing to our customer.

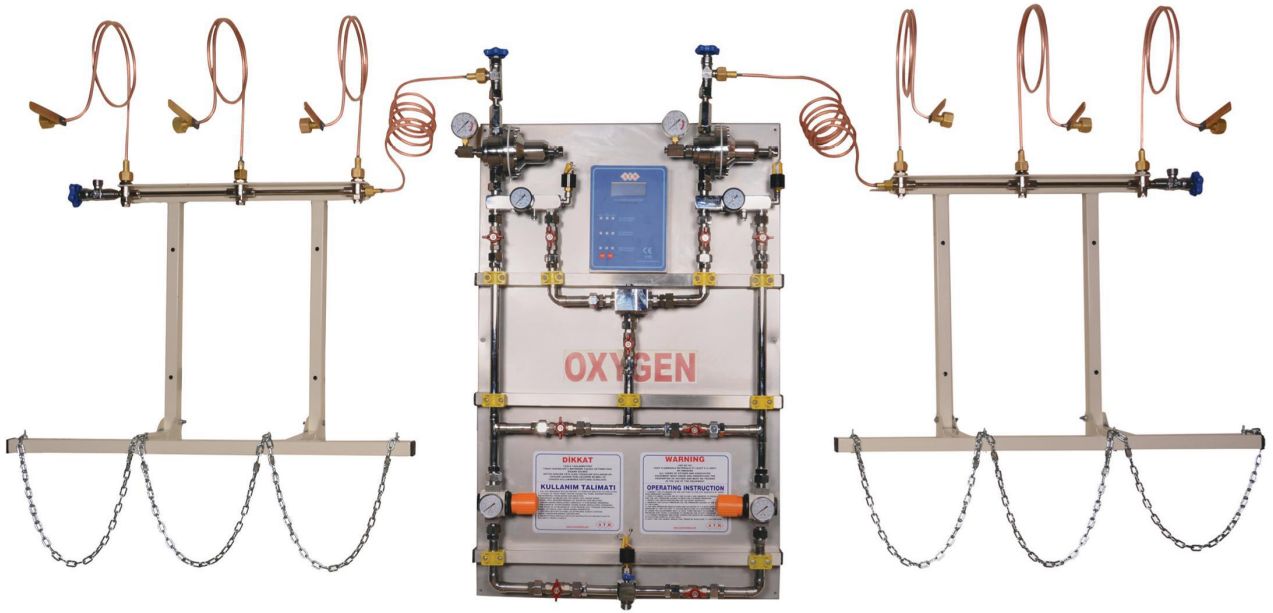
SOME OF OUR REFERENCES  
NO CUSTOMER NAME OF PROJECT

1	"BATMAN İLİ HASANKEFİ İLÇESİ 25 YATAKLI ENTEGRE HAST."	70	Private	MERSİN ÖZEL DİŞ DÜNYASI AĞIZ VE DİŞ SAĞLIĞI MERKEZİ	
2	MoH	DİYARBAKIR DİŞ HASTANESİ	71	MoH	ADİYAMAN KADIN DOĞUM VE ÇOCUK HASTANESİ
3	MoH	BURDUR BUCAK 150 YATAKLI DEVLET HAST.	72	MoH	ANKARA DR. SAMİ ULUS ÇOCUK HASTANESİ
4	MoH	İSTANBUL SULTANGAZİ DİŞ HST.	73	MoH	ÇANAKKALE ÇAN HASTANESİ
5	MoH	GİRESUN 150 YATAKLI KADIN DOĞUM VE ÇOCUK HST.	74	MoH	KASTAMONU DEVLET HASTANESİ
6	MoH	GİRESUN ESPIYE 50 YATAKLI DEV. HST.	75	MoH	ADANA NİZİP KADIN DOĞUM HASTANESİ
7	MoH	UŞAK İLİ EŞME İLÇESİ 30 YATAKLI DEV. HST. EK BİNA	76	CYPRUS	MAGOSA DEVLET HASTANESİ
8	Private	ÖZEL KONYA GÖZ HASTANESİ	77	IRAK	DUHOK ÖZEL HASTANESİ
9	QATAR	KATAR 15 YATAKLI HASTANE	78	Private	ATA SAĞLIK HASTANESİ
10	MoH	ANTALYA MANAVGAT 100 YATAKLI DEV. HST. EK BİNA	79	MoH	AŞİN DEVLET HASTANESİ
11	MoH	SULTANGAZİ AĞIZ DİŞ SAĞLIĞI MERKEZİ	80	Private	ÖZEL BATMAN DÜNYA HASTANESİ
12	MoH	ADANA SAİMBEYLİ 10 YATAKLI DEVLET HASTANESİ	81	MoH	İZMİR KÖRFEZ HASTANESİ
13	MoH	KARS DİGOR DEVLET HASTANESİ	82	MoH	SİLOPİ DEVLET HASTANESİ
14	MoH	ADANA İLİ FEKE İLÇESİ 20 YATAKLI ENTEGRE HST.	83	Private	YAŞAM HASTANESİ
15	MoH	AKSARAY DEV. HST. EK BİNA	84	MoH	MARMARİS DEVLET HASTANESİ
16	MoH	KARS İLİ SARIKAMIŞ İLÇESİ 50 YATAKLI DEV. HST.	85	Private	ÖZEL KENT HASTANESİ
17	MoH	AĞRI DİYADİN 50 YATAKLI DEV. HST.	86	MoH	DİYARBAKIR HAZRO DEVLET HASTANESİ
18	Private	ÖZEL GÜNEY PARK HASTANESİ HATAY	87	MoH	BOZOVA DEVLET HASTANESİ-URFA
19	Private	DOĞU AKDENİZ HASTANESİ HATAY	88	MoH	CEYLANPINAR DEVLET HASTANESİ- URFA
20	Private	ÖZEL HATAY HASTANESİ	89	MoH	BAYRAMPAŞA DEVLET HASTANESİ-İSTANBUL
21	Private	ÖZEL PALMİYE HASTANESİ	90	MoH	GÖZTEPE DİŞ HASTANESİ- İSTANBUL
22	MoH	KAHRAMANMARAŞ DEVLET HASTANESİ	91	University	TRAKYA ÜNİVERSİTESİ HASTANESİ-
23	MoH	ELAZIĞ ARAŞTIRMA VE UYGULAMA HASTANESİ	92	Private	ÖZEL BATMAN YAŞAM HASTANESİ- BATMAN
24	MoH	URFA ÇOCUK HASTANESİ	93	Private	ÖZEL ŞİİRT GÜVEN HASTANESİ- ŞİİRT
25	MoH	URFA BALIKLIGÖL DEVLET HASTANESİ	94	EGYPT	MISIR
26	MoH	BALCALI EĞİTİM VE ARAŞTIRMA HASTANESİ	95	AZERBEIJAN	ÖZEL NEWHED HOSPİTAL BAKU
27	MoH	URFA EĞİTİM VE ARAŞTIRMA HASTANESİ	96	AZERBEIJAN	AKCİĞER HASTALIKLARI ENSTİTÜSÜ BAKU
28	MoH	BALIKESİR ASKERİ HASTANE ACİL BÖLÜMÜ	97	IRAQ	NASİRİYE DEVLET HASTANESİ
29	Private	ÖZEL ELBİSTAN HASTANESİ	98	MoH	TARSUS 70. YIL DEVLET HASTANESİ EK BİNA -TARSUS
30	MoH	ANKARA EĞİTİM VE ARAŞTIRMA HASTANESİ	99	MoH	ADİYAMAN DEVLET HASTANESİ- ADİYAMAN
31	MoH	MUŞ DİŞ DEVLET HASTANESİ	100	MoH	G.ANTEP 25 ARALIK DİŞ HAS.
32	Private	MALTEPE ÜNİVERSİTESİ DRAGOS HST.	101	MoH	MUŞ DİŞ HASTANESİ
33	Private	MERSİN ÖZEL FORUM YAŞAM HST.	102	MoH	DENİZLİ TAVAS 100 YATAKLI DEVLET HAST.
34	Private	ÖZEL ÜSKÜDAR HOSPİTAL TÜRK 50 YATAKLI HST.	103	MoH	ANTALYA İLİ SERİK İLÇESİ 100 YATAKLI DEVLET HST.
35	Private	VAN LOKMAN HEKİM SAĞLIK HİZMETLERİ 100 YATAKLI HASTANE	104	MoH	ERZİNCAN TERCAN 50 YATAKLI HST.
36	Private	ÖZEL DELTA HOSPİTAL	105	MoH	AĞRI İLİ TUTAK İLÇESİ 30 YATAKLI ENTEGRE İLÇE HST.
37	Private	VAN İSTANBUL HASTANESİ	106	MoH	GAZİ ÜNİV.TIP FAKÜLTESİ VE ARAŞ.VE UYG. HASTANESİ
38	Private	DENİZYILDIZI HASTANESİ	107	MoH	FATİH SULTAN MEHMET EĞİTİM VE ARAŞTIRMA HASTANESİ
39	Private	İBNİ-SİNA HASTANESİ	108	MoH	KARTAL EĞİTİM VE ARAŞTIRMA HASTANESİ
40	Private	KAĞITHANE YENİ HUZUR TIP MERKEZİ	109	MoH	ÜMRANİYE EĞİTİM VE ARAŞTIRMA HASTANESİ
41	University	DICLE ÜNİVERSİTESİ HASTANESİ	110	MoH	SULTANBEYLİ DEVLET HASTANESİ
42	Private	ÖZEL ŞİŞLİ KOLAN HOSPİTAL	111	Ship	"YALOVA SESİNE KURTARMA GEMİSİMEDİKAL GAZ YAPIM İŞİ "
43	MoH	DİYARBAKIR KADIN DOĞUM VE ÇOCUK HST.	112	Private	İSTANBUL PENDİK CİHAN TIP MERKEZİ
44	MoH	YEŞİL YURT DEVLET HASTANESİ	113	Romania	ROMANYA
45	Private	ÖZEL BÜYÜKÇEKMECE KOLAN HOSPİTAL-İSTANBUL	114	MoH	K.MARAŞ ELBİSTAN KADIN DOĞUM VE ÇOCUK HASTANESİ
46	Private	KÜÇÜKYALI ÖZEL DELTA HASTANESİ	115	UGANDA	UGANDA
47	MoH	NUSAYBİN DEVLET HASTANESİ	116	Private	ALİ AĞA ÖZEL TIP MERKEZİ
48	MoH	OSMANİYE KADIN DOĞUM VE ÇOCUK HASTANESİ	117	Private	ENTA KULAK BURUN BOĞAZ HASTANESİ
49	MoH	ADİYAMAN KAHTA DEVLET HASTANESİ	118	Private	ÖZEL GAZİ HASTANESİ
50	Private	VENİ VİDİ HASTANESİ	119	Private	ÇANKIRI ADSM
51	Private	AKADEMİ HASTANESİ	120	MoH	DENİZLİ DEVLET HASTANESİ - 40 YATAKLI YOĞUNBAKIM ÜNİTESİ
52	Private	ÖZEL SEVGİ HASTANESİ	121	MoH	BALIKESİR HAVRAN 25 YATAKLI DEVLET HASTANESİ
53	MoH	TUT DEVLET HASTANESİ	122	MoH	GRESUN ADSM
54	Private	MAREMAR HASTANESİ			
55	Private	DİYARBAKIR ÖZEL HASTANESİ			
56	Private	ÜSKÜDAR ÖZEL ANADOLU HASTANESİ			
57	Private	MERSİN DUYGU TIP MERKEZİ			
58	MoH	GAZİANTEP 25 ARALIK DİŞ HASTANESİ			
59	MoH	MERSİN DEVLET HASTANESİ			
60	MoH	NİĞDE DEVLET HASTANESİ			
61	MoH	MALATYA DARENDE HULUSİ EFENDİ DEVLET HASTANESİ			
62	MoH	ÜSKÜDAR ZEYNEP KAMİL KADIN DOĞUM VE ÇOCUK HASTANESİ			
63	MoH	ADİYAMAN GÖLBAŞI DEVLET HASTANESİ			
64	Private	ÖZEL BATMAN HASTANESİ			
65	MoH	ADİYAMAN BESNİ DEVLET HASTANESİ			
66	MoH	MANİSA SOMA HASTANESİ			
67	MoH	MERSİN KADIN DOĞUM VE ÇOCUK HASTANESİ			
68	MoH	ALİ OSMAN SÖNMEZ ONKOLOJİ DEVLET HASTANESİ			
69	MoH	SİVEREK DEVLET HASTANESİ			
70	Private	MERSİN ÖZEL DİŞ DÜNYASI AĞIZ VE DİŞ SAĞLIĞI MERKEZİ			

## Full Automatic Oxygen Plant

Product Code : AYM -OS -X

Product Name : Full Automatic Oxygen Plant

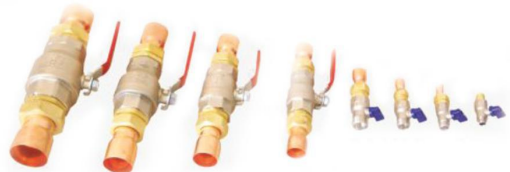


Technical Specifications:

- \*Automatic Collector Changeover
- \*150m<sup>3</sup>/h Regulators
- \*High and Low Pressure Manometers
- \*Second Stage Low Pressure Regulators
- \*Collector Groups (2X1 , 2X2, 2X3, 2X4, 2X5, 4X4, 4X5, 5X6, 5X8 )
- \*Flexible Connection Pipes
- \*Digital Alarm Panel
- \*Stainless Steel Main Body



Product Code : AYM-TIJO KOLTU  
Product Name : Manifold Valve

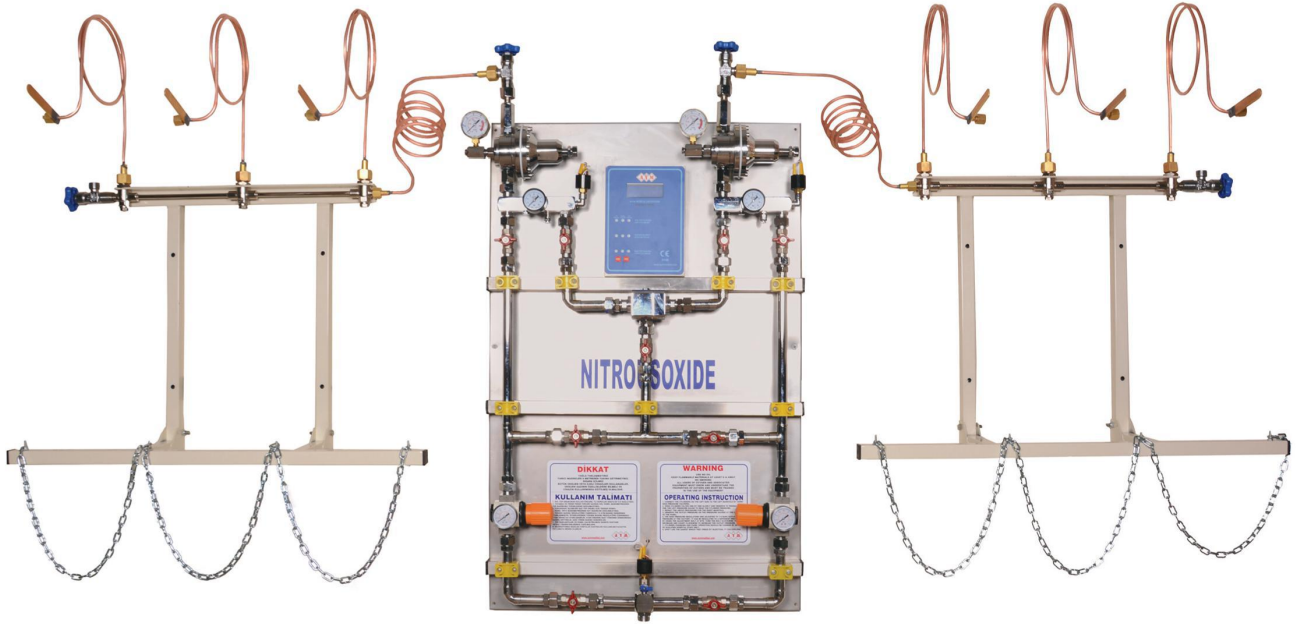


Product Code : AYM-VN  
Product Name : Valves

## Full Automatic Nitrous Oxide Plant

Product Code : AYM -AS- X

Product Name : Full Automatic Nitrous Oxide Plant



Technical Specifications:

- \*Automatic Collector Changeover
- \*150m<sup>3</sup>/h Regulators
- \*High and Low Pressure Manometers
- \*Second Stage Low Pressure Regulators
- \*Digital Alarm Panel
- \*Stainless Steel Main Body
- \*Collector Groups (2X1 , 2X2, 2X3, 2X4, 2X5, 4X4, 4X5, 5X6, 5X8 )
- \*Flexible Connection Pipes



Product Code : AYM-KNV  
Product Name : Gas Ball Valves

## Automatic Control and High Pressure Reducer Unit Oxygen



Product Code: AYM-YBD -O2

Product Name :Automatic Control and High Pressure Reducer Unit Oxygen

### Technical Specifications:

- \*Automatic Collector Changeover
- \*150m<sup>3</sup>/h Regulators
- \*High and Low Pressure Manometers
- \*Second Stage Low Pressure Regulators
- \*Digital Alarm Panel
- \*Stainless Steel Main Body

## Automatic Control and High Pressure Reducer Unit Nitrous Oxide



Product Code : AYM - YBD-N2O  
Product Name : Automatic Control and High Pressure Reducer Unit Nitrous Oxide

### Technical Specifications:

- \*Automatic Collector Changeover
- \*150m<sup>3</sup>/h Regulators
- \*High and Low Pressure Manometers
- \*Second Stage Low Pressure Regulators
- \*Digital Alarm Panel
- \*Stainless Steel Main Body

## Medical Air Plant Vertical



Product Code: AYM-HS-X  
Product Name: MEDICAL AIR PLANT VERTICAL

Product Code : AYM-HS-K-X  
Product Name : Compressor

### Technical Specifications:

- \*Capacity: According to the Project specifications
- \*Air Compressors ( Optional 2,3,4 Compressor)
- \*500-1000-1500 LT TANKS
- \*Dryer
- \*Filter Group
- S\*tage Pressure Reducers
- \*Compact Design
- \*Capacity 40 , 220 .... m<sup>3</sup>/h: 40 , 220 .... m<sup>3</sup>/h



## Vacuum Plant Horizontal

Product Code : AYM-VAK-YAYM-VS-B-F-2

Product Name : Vacuum Plant- Horizontal



Technical Specifications:

- \*Capacity: According to the Project specifications
- \*Vacuum Pumps Optional 2-3-4 pumps
- \*500 LT TANKS
- \*Automatic Control Panel
- \*Filter Group
- \*Pumps Capacity: 40, 100 ....m<sup>3</sup>/h

Product Code : AYM-VS-B-F-1

Product Name : Filter Group

Product Code : AYM-VS-B-F-2

Product Name : Filter Group



## Medical Vacuum Plant - Vertical



Product Code : AYM -VAK-D  
Product Name : Vacuum Plant- Vertical

### Technical Specifications:

- \*Capacity: According to the Project specifications
- \*Vacuum Pumps Optional 2-3-4 pumps)
- \*500-1000-1500 LT TANKS
- \*Automatic Control Panel
- \*Filter Group
- \*Pumps Capacity: 40, 305 ....m3/h

Vacuum Plant- Vertical

Ürün Kodu :AYM-VS-B-F-1

Ürün Adı : Vacuum Plant- Vertical

Vacuum Plant- Vertical

Ürün Kodu :AYM-VS-B-F-2

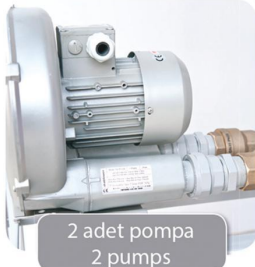
Ürün Adı : Vacuum Plant- Vertical



## Anesthetic Gas Scavenging System Plant



Kontrol panosu  
Control panel



2 adet pompa  
2 pumps



Filtreli Egzos  
Filtered Exhaust



Product Code : AYM-AGSS -X

Product Name : Anesthetic Gas Scavenging Plant

Technical Specifications:

\*2 Pcs Pumps

\*Control Panel

\*One-way Valve

\*Pump Capacity: 30 , 130 ...m<sup>3</sup>/h

AGSS Outlet Pump Type

Product Code: AYM-AG-P

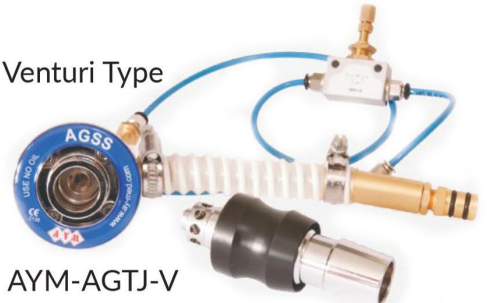
Product Name : AGSS Outlet -Pump Type



AGSS Outlet Venturi Type

Product Code: AYM-AGTJ-V

Product Name : AGSS Outlet - Venturi Type



AGSS PROBE DIN

Product Code: AYM-AGTJ-V

Product Name : AGSS Probe DIN



AGSS PROBE BS

Product Code: AYM-AGTJ-P

Product Name : AGSS Probe BS



## Liquid Oxygen Changeover System



Product Code: AYM-LKT-O-ÇP

Product Name: Liquid Oxygen Changeover Panel

Technical Specifications:

\*Input Pressure: Max12 Bar

\*Output Pressure : 4-7 Bar

\*Capacity: 150 m<sup>3</sup>/h

\*System Input: 2 Set Of System  
( Main and Emergency)

\*Working Temperature: (+10) - (+45) C°

\*Power Supply: 220 V 50 Hz 100 Watt

\*Alarm System: Visual and Audible

\*Digital Pressure Screen

Emergency Backup Manifold

Product Code: AYM-ADM-X

Product Name: Emergency Backup Manifold

Technical Specifications:

\*O<sub>2</sub>( Oxygen), N<sub>2</sub>O Nitrous Oxide), AR( Argon), KG(Mixed Gas),  
CO<sub>2</sub>( Carbon dioxide), HD(Hydrogen), H(Dry Air)

\*Input Pressure: Max. 220 Bar

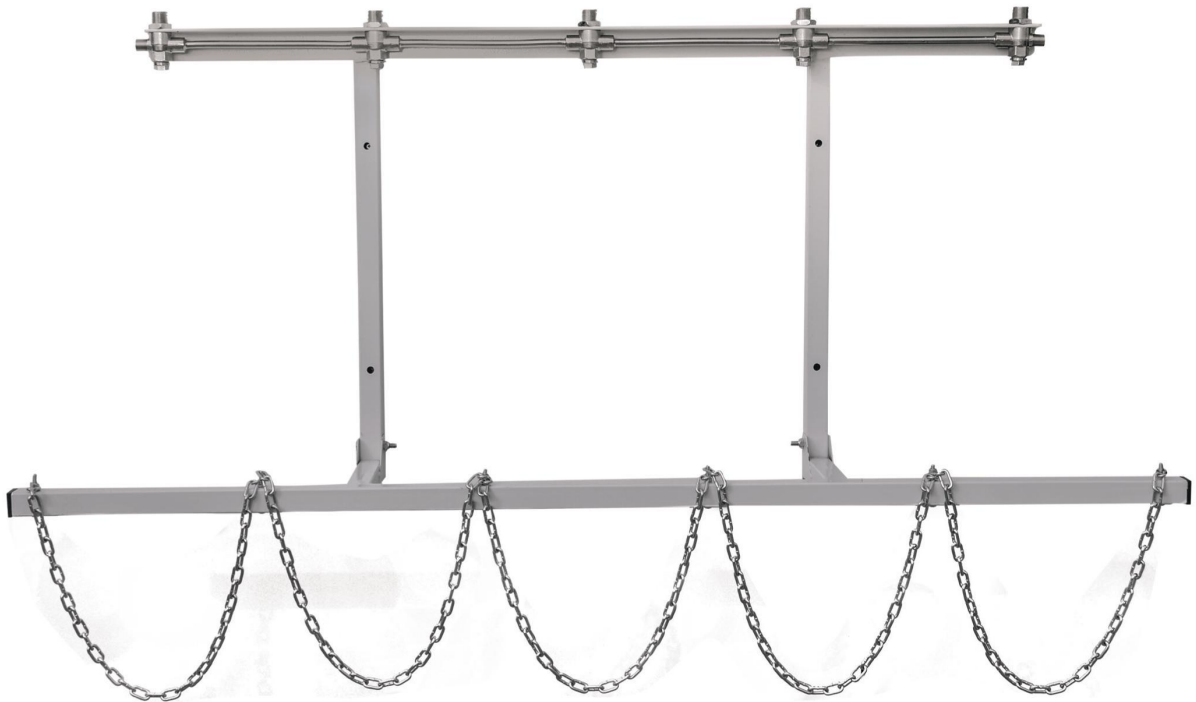
\*Output Pressure: 4 - 7 Bar

\*Capacity: 150 m<sup>3</sup>/h

\*Single Input



## Supply Collectors For Cylinder Systems



Product Code : AYM-KOL-X  
Product Name : COLLECTOR

### Technical Specifications:

- \*AYM- KOL -2 2 COLLECTOR
- \*AYM-KOL - 3 3 COLLECTOR
- \*AYM- KOL- 4 4 COLLECTOR
- \*AYM-KOL - 5 5 COLLECTOR

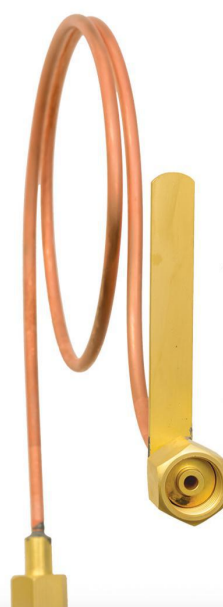
### Flexible Pipe Connection



Product Code :AYM-TIJA  
Product Name: Flexible Pipe  
Connection (O2)

### Technical Specifications:

- \*Pipe Diameter:  $\text{Ø } 8 \times 2 \text{ mm}$
- Copper Pipe
- \*Pipe Length: 128cm
- \*Pressure Range: Max 220Bar

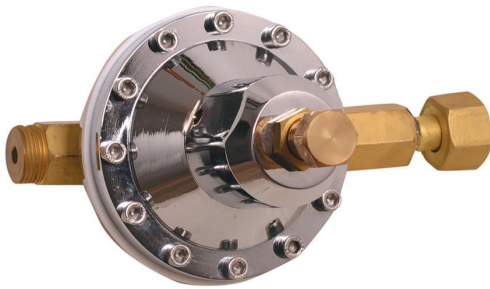


Product Code :AYM-TIJO  
Product Name : Flexible Pipe  
Connection (N2O)

### Technical Specifications:

- \*Pipe Diameter:  $\text{Ø } 8 \times 2 \text{ mm}$
- Copper Pipe
- \*Pipe Length: 128cm
- \*Pressure Range: Max 220Bar

## Automatic Plant Spare Parts



High Pressure Regulator

Product Code : AYM-Y-B-R

Product Name: High Pressure Regulator

ALARM PANEL

Product Code: AYM-A-P

Product Name: Alarm Panel





## Gas Module Horizontal

Gas Module – 1 Gas

Product Name: Gas Module – 1 Gas

Product Code: AYM-GMY-1



Product Code: AYM-GMY-2

Product Name: Gas Module – 2 Gases

Product Code: AYM-GMY-2



Product Code: AYM-GMY-3

Product Name: Gas Module – 3 Gases

Product Code: AYM-GMY-3



Gas Module – 4 Gases

Product Name: Gas Module – 4 Gases

Product Code: AYM-GMY-4



Gas Module – 5 Gases

Product Name: Gas Module – 5 Gases

Product Code: AYM-GMY-5



Gas Module – 6 Gases

Product Name: Gas Module

– 6 Gases

Product Code: AYM-GMY-6

## Rail Type Horizontal Gas Modules:



Product Name:

Rail Type Gas Module – 1

Rail Type Gas Module – 2

Rail Type Gas Module – 3

Rail Type Gas Module – 4

Rail Type Gas Module – 5

Rail Type Gas Module – 6

Product Code:

Gas AYM-GMY-R1

Gases AYM-GMY-R2

Gases AYM-GMY-R3

Gases AYM-GMY-R4

Gases AYM-GMY-R5

Gases AYM-GMY-R6

## Bed Head Units



Installation Space: Flat Wall is needed.

Standard Unit Technical Specifications (1 Single)

Product Code : AYM-HB x:1,2,3 Product Code

Product Name: Bed Head Unit

Gas Equipments: 1xO2 Outlet\_, 1x Vacuum Outlet

Electrical Equipments: 2x Earthed Electric Sockets, 1x Button,  
1xPhone Socket, 1x 36 Indirect Light, 1 x18W Direct Light

Number of Channels in Unit : 3

Operating Temperature: (+10°)-(45°)

Power Supply : 220 V. 50 Hz.

Length : 150-180 cm

Product Main Raw Material: Aluminum Extrusion Profile

Body Color: Ral : \_\_\_\_\_ Front Panel Color : Ral: \_\_\_\_\_

Accessories :

Gas Outlet Adaptors, Earthed Nodes, Data Sockets - Optional

## VIP Patient Bed Head Unit



Product Code: AYM-HB-T-M

Furnished Frame

Sliding Front Cover

90 degrees rotational inner gas channels

Electrostatic Powder Coating

Aluminum Main Body

Central Gas system Outlets

Gas Equipments for Standard: 1xO<sub>2</sub> Gas Outlet, 1x Vacuum Gas Outlet

Electrical Equipments. 2x Earthed Electric Sockets, 1x Button., 1xPhone Socket., 1x Upper Light

## VIP Patient Bed Head Unit



Product Code: AYM-HB-T

Sliding Front Cover

90 degrees rotational inner gas channels

Electrostatic Powder Coating

Aluminum Main Body

Central Gas system Outlets

Gas Equipments for Standard: 1xO<sub>2</sub> Gas Outlet, 1x Vacuum Gas Outlet.

Electrical Equipments. 2x Earthed Electric Sockets, 1x Button., 1xPhone Socket, 1x Upper Light

## Zone Control And Alarm Units



### Product Code

AYM-KKA-1  
AYM-KKA-2  
AYM-KKA-3  
AYM-KKA-4  
AYM-KKA-5

### Product Name

Zone Control and alarm Units - 1 Gas  
Zone Control and alarm Units - 2 Gas  
Zone Control and alarm Units - 3 Gas  
Zone Control and alarm Units - 4 Gas  
Zone Control and alarm Units - 5 Gas

## Horizontal Intensive Care Unit



Installation Space : Flat Wall is needed.

Standard Unit Technical Specifications (1 Single )

Product Code: AYM-YO-YA-TK

Product Name: Intensive Care Unit

Rail Loading Capacity: Max:100kg

Gas Equipments: 3x O2 Gas Outlet, 3x Vacuum Gas Outlet,  
2x Med Air Gas Outlet

Electrical Equipments: 12x Earthed Electric Sockets, 4xEated Nodes

Operating Temperatures: (+10) - (+45) C °

Power Supply : 220 V 50 Hz

Length: 150-180 cm

Product Main Raw Materials Aluminum: Extrusion Profile

Body Color: RAL Front Cover Color. RAL

Accessories:

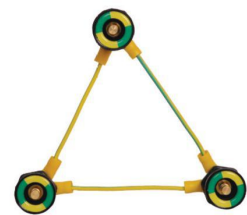
IV Poles, Monitor Stands, Tool Basket, Catheter Jar,

Vacuum Jars, Gas Outlet Adaptors

Earthed Node

Product Code : AYM-T-N

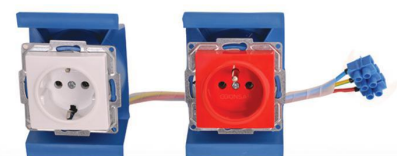
Product Name : Eaethed Node



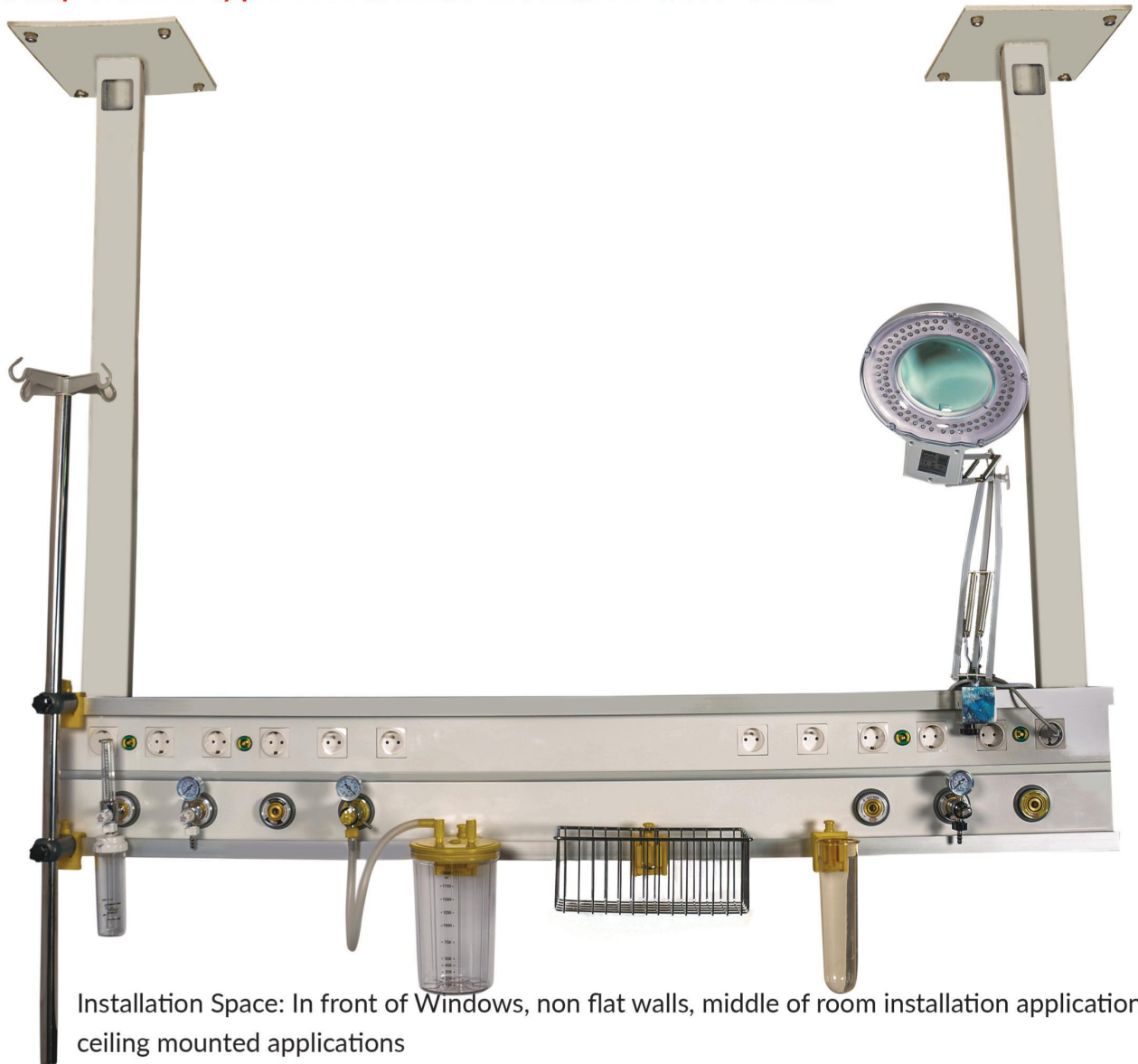
Electrical Sockets

Product Code: AYM-E-P

Product Name: Electric Socket



## Suspended Type Horizontal Intensive Care Units



Installation Space: In front of Windows, non flat walls, middle of room installation applications, ceiling mounted applications

Standard Unit Technical Specifications (1 Single)

Product Code : AYM-YO-YA-TA-T

Product Name: Suspended Type Horizontal Rail Type Intensive Care Units

Loading Capacity: Max 100kg

Gas Equipments: 3x O2 Gas Outlet, 3x Vacuum Gas Outlet, 2x Med Air Gas Outlet

Electrical Equipments: 12x Earthed Electric Sockets, 4x Eated Nodes

Operating Temperatures: (+10) - (+45) C

Power Supply: : 220 V 50 Hz

Length: 150-180 cm

Product Main Raw Materials: Aluminum Extrusion Profile & Square Profile

Body Color: RAL            Front Cover Color: RAL

Accessories:

IV Poles, Monitor Stands, Tool Basket, Catheter Jar, Vacuum Jars, Gas Outlet Adaptors

## Vertical Intensive Care Units



Installation Space: In front of Windows, non flat walls, middle of room installation applications, ceiling mounted applications

Standard Unit Technical Specifications (1 Single):

Product Code: AYM-YO-D

Product Name : Vertical Intensive Care Units)

Arm Loading Capacity: Max: 100kg

Gas Equipments: 3x O2 Gas Outlet, 3x Vacuum

Gas Outlet, 2x Med Air Gas Outlet

Electrical Equipments: 12x Earthed Electric Sockets, 4xEated Nodes

Operating Temperatures: (+10) - (+45) C

Power Supply: : 220 V 50 Hz

Length: 220cm + Suspended Ceiling

Distance and Connection Pats

Product Main Raw Materials: Aluminum Extrusion Profile

Safety Panel: Emergency Control Box, ( Fuse and Valve box)

Body Color: RAL

Front Cover Color. RAL

Accessories:IV Poles, Monitor

Stands, ToolBasket, Catheter Jar,

Vacuum Jars, Gas Outlet Adaptors



## Suspended Single Arm Intensive Care Pendant



### Installation Space:

In front of Windows, non flat walls, middle of room installation applications, ceiling mounted applications

Standard Unit Technical Specifications (1 Single):

Product Code : AYM-YB-TA-T

Product Name : Vertical Intensive Care Unit- Single Arm Suspended

Accessories Loading Capacity: Max.100kg

Gas Equipments: 3x O2 Gas Outlet, 3x Vacuum Gas Outlet,  
2x Med Air Gas Outlet -

Electrical Equipments: 12x Earthed Electric Sockets, 4xEated Nodes

Operating Temperatures: (+10) - (+45) C

Power Supply: 220 V 50 Hz

Length: 80 cm - 100cm + Suspended Ceiling Distance and Connection Pats

Product Main Raw Materials: Aluminum Extrusion Profile

Safety Panel: Emergency Control Box,( Fuse and Valve box)

Body Color: RAL Front Cover Color. RAL

Monitor Stands : 1 Pcs

Accessories:

IV Poles, Monitor Stands, Tool Basket, Catheter Jar,

Vacuum Jars, Gas Outlet Adaptors

## Pendant Type Intensive Care Unit Double Arm Double Console



### Unit Technical Specifications (1 Single):

Product Name: AYM-YB-ÇK-ÇK

Product Name: Pendant Type Intensive Care Unit- Double Arm Double Console

Accessories Loading Capacity: Max.100kg

Gas Equipments: 3x O2 Gas Outlet, 3x Vacuum Gas Outlet, 2x Med Air Gas Outlet

Electrical Equipments: 12x Earthed Electric Sockets, 4xEated Nodes

Operating Temperatures: (+10) - (+45) C

Power Supply: 220 V 50 Hz

Horizontal Length: 220 -250 cm

Product Main Raw Materials: Aluminum Extrusion Profile & Stainless Steel Profile

Safety Panel: Emergency Control Box,( Fuse and Valve box) Optional

Body Color: RAL Front Cover Color. RAL

Monitor Shelf: 3 Pcs

Drawer : 1 Pcs

Accessories:

IV Poles, Tool Basket, Catheter Jar, Vacuum Jars, Gas Outlet Adaptors

## Vertical Rigid Intensive Care and Operation Theatre Pendant

Suspended and Rotatable around its axis 340 °

Standard Unit Technical Specifications (1 Single)

Product Code : AYM-DRP-X X: A( Anesthesia), C ( Surgical), G( General)

Product Name: Rigid Pendant

Number of Joint: Single

Loading Capacity: Max 150kg

Gas Equipments: According to the projects

Electrical Equipments: 8x Earthed Electric Sockets, 4xEated Nodes

Operating Temperatures: (+10) - (+45)

Power Supply: 220 V 50 Hz

Product Main Raw Materials: Aluminum Extrusion Profile & Stainless Steel Profile

Body Color: RAL Front Cover Color. RAL

Monitor Shelf: 1 Pcs

Accessories:

IV Poles, Tool Baskets, Vacuum Trolley, Gas Outlet Adaptor SI



## Double Arm Intensive Care and Operation Theatre Pendant



Standard Unit Technical Specifications (1 Single):

Product Code : AYM-PEN-Ç -x X: A( Anesthesia), C ( Surgical), G( General)

Product Name : Double Arm Pendant - Standard

Number of Joint: 3

Loading Capacity: Max 120kg

Length : 2x 60-80 cm

Gas Equipments: According to the projects.

Electrical Equipments: 8x Earthed Electric Sockets, 4xEated Nodes,  
According to the Project specifications

Operating Temperatures: (+10) - (+45) C °

Power Supply : 220 V 50 Hz

Product Main Raw Materials: Aluminum Extrusion Profile

Body Color: RAL Front Cover Color. RAL

Monitor Shelf: 1 Pcs

Accessories:

IV Pole , Tool Basket, Vacuum Trolley, Gas Outlet Adaptors

## Single Arm Engine Driven Pendant



Standard Unit Technical Specifications (1 Single ):

Product Code: AYM-PEN-T-X-M- X: A( Anesthesia), C ( Surgical), G( General)

Product Name: Single Arm Pendant – Engine Driven

Number of Joint: 3

Loading Capacity: Max 100kg

Length : 80-100 cm

Vertical Movement: 65cm

Gas Equipments: According to the project

Electrical Equipments: 8x Earthed Electric Sockets, 4xEated Nodes

Operating Temperatures: (+10) - (+45) C °

Power Supply: 220 V 50 Hz

Product Main Raw Materials: Aluminum Extrusion Profile

Body Color: RAL Front Cover Color. RAL

Monitor Shelf: 1 Pcs

Accessories:

IV Pole, Tool Basket, Vacuum Trolley, Gas Outlet Adaptors, Monitor Shelf

## Double Arm Engine Driven Pendant



Standard Unit Technical Specifications (1 Single ):

Product Code: AYM-PEN-Ç-X-M - X: A( Anesthesia), C ( Surgical), G( General)

Product Name: Double Arm Pendant- Engine Driven Standard

Number of Joint: 3

Loading Capacity: Max 100kg

Length : 2x80-100 cm

Vertical Movement: 65cm

Gas Equipments: According to the projects

Electrical Equipments: 8x Earthed Electric Sockets, 4xEarthed Nodes

Operating Temperatures: (+10) - (+45) C °

Power Supply: 220 V 50 Hz

Product Main Raw Materials: Aluminum Extrusion Profile

Body Color: RAL Front Cover Color. RAL

Monitor Shelf: 1 Pcs

Accessories:

IV Pole, Tool Basket, Vacuum Trolley, Gas Outlet Adaptors ,Monitor Shelf

## O<sub>2</sub>TUBE EQUIPMENT CONNECTION

Product Code: AYM-TER-C

Product Name: Therapy Device



Product Code: AYM-TB-X-R x ; (N<sub>2</sub>O, O<sub>2</sub>)

Product Name: Cylinder Connection Regulators

## INTENSIVE CARE EQUIPMENT



Product Name: Vacuum Jars  
Product Code: AYM-VK-2LT.x:D (Wall Type)  
Capacity:2lt.

Double Hose Connector



Product Name: Double Hose Connector  
Product Code: AYM-ÇD



Product Name : Catheter Jars  
Product Code :AYM-S-K



Product Name : Vacuum Hose  
Product Code : AYM-VH



Product Name: Vacuum and Catheter Jar Rail Connector  
Product Code: AYM-VK-R

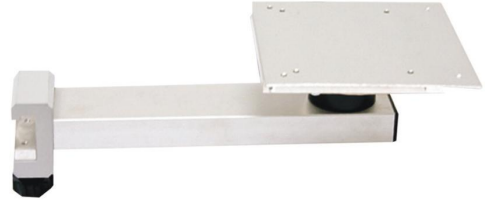
## INTENSIVE CARE EQUIPMENT



Monitor Stand ( Vertical Type)

Technical Specifications:  
Product Code: AYM-MS  
Product Name: Monitor Stand Wall Type  
Installation Type: Wall Mounted  
Movement Type: Vertical Movement  
Loading Capacity: 100kg

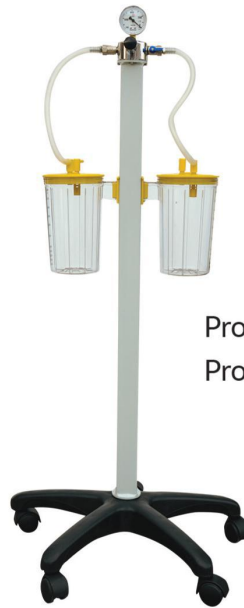
Monitor Stand Horizontal Type



Technical Specifications:  
Product Code: AYM-MS  
Product Name: Monitor Stand Rail Type  
Height Adjustable( for ICU)  
Installation Type: Rail Mounted  
Movement Type: horizontal Movement  
Loading Capacity: 100kg



Product Code: AYM-SA-ÇR  
Product Name: IV Pole



Product Code: AYM-AV-2LT  
Product Name: Vacuum Trolleys

Product Code: AYM-A-L  
Product Name: Articulated Arm Light



Product Code: AYM-AS  
Product Name: Tool Basket



## O<sub>2</sub> Flowmeter For Gas



BS Norm:  
Product Code: AYM-FLV-BS  
Product Name: Flowmeter  
FlowRate: 0-15 lt/min



AFNOR Norm:  
Product Code: AYM-FLV-NF  
Product Code: Flowmetre  
FlowRate: 0-15 lt/min



DIN Norm  
Product Code: AYM-FLV-DIN  
Product Code: Flowmeter  
FlowRate: 0-15 lt/min

## O<sub>2</sub> Double Flowmeter



Product Code: AYM-FLV-Ç-X x: B(BS), D(DIN), F(Afnor)

Product Name: Double Flowmeter

FlowRate: 2x 0-15 lt/min



## Flowmeter with Regulator

Product Code: AYM-FLV-REG-X "x: B(BS), D(DIN), F(Afnor)

Product Name: Regulator & Flowmeter

FlowRate: 2x 0-15 lt/min

## Central System Gas Probes



Probe DIN norm:

Product Code: AYM-PRB-X-DIN "x: O (Oxygen),A (N2O), H4(Medical Air 4 Bar ),  
H7 (Medical Air 7 Bar)D(DIN)

Product Name: Central System Gas Probe



Probe - BS Norm:

Product Code : AYM-PRB-X-BS "x: O (Oxygen),A (N2O), H4(Medical Air 4 Bar ),  
H7 (Medical Air 7 Bar)" B(BS)

Product Name : Central System Gas Probe



Probe AFNOR Norm:

Product Code: AYM-PRB-X-AFNOR "x: O (Oxygen),A (N2O), H4(Medical Air 4 Bar ),  
H7 (Medical Air 7 Bar)"

Product Name: Central System Gas Probe

## Central System Low Pressure Regulators



Regulators BS- DIN -AFNOR

Product Code : AYM-X-VNA -y x: O (Oxygen),A (N2O), H4(Medical Air 4 Bar ),  
H7 (Medical Air 7 Bar) : y: BS ,DIN, NF

Product Name: Central System Low Pressure Regulators

Operating Range: 0-16 Bar



Regulators BS- DIN- AFNOR Norms:

Product Code: AYM-X-R-H-y x: O (Oxygen),A (N2O), H4(Medical Air 4 Bar ),  
H7 (Medical Air 7 Bar) D(DIN) , y: BS ,DIN, NF

Product Name: Central System Low Pressure Regulator

Operating Range: 0-16 Bar

## Turbo Vacuum Regulator:



Product Code: AYM-V-R-TRB "x: B(BS), D(DIN), F(Afnor)  
Product Name: Turbo Vacuum Regulator  
Operating Range: 0-760 mm Hg



Turbo Vacuum Regulator with Jar:

Product Code: AYM-V-R-TRB-ş "x: B(BS), D(DIN), F(Afnor)  
Product Name: Turbo Vacuum Regulator with Jar  
Operating Range: 0-760 mm Hg



Vacuum Regulator:

Product Code: AYM-V-R-H "x: B(BS),D(DIN), F(Afnor)  
Product Name: Vacuum Regulator  
Operating Range: 0-760 mm Hg



Vacuum Regulator with Jar:

Product Code : AYM-V-R-ş "x: B(BS),D(DIN), F(Afnor)  
Product Name: Vacuum Regulator with Jar  
Operating Range: 0-760 mm Hg

# Gas Outlets

## BS Norm



Product Code  
 AYM-OP-BS  
 AYM-VP-BS  
 AYM-H4P-BS  
 AYM-H7P-BS  
 AYM-AP-BS

Product  
 Oxygen Outlet  
 Vacuum Outlet  
 Medical Air 4 Bar Outlet  
 Medical Air 7 Bar Outlet  
 N2O Outlet



## DIN Norm



Product Code  
 AYM-OP-DIN  
 AYM-VP-DIN  
 AYM-H4P-DIN  
 AYM-H7P-DIN  
 AYM-AP-DIN

Product Name  
 Oxygen Outlet  
 Vacuum Outlet  
 Medical Air 4 Bar Outlet  
 Medical Air 7 Bar Outlet  
 N2O Outlet



AFNOR Norm  
 Product Code  
 AYM-OP-NF  
 AYM-VP-NF  
 AYM-H4P-NF  
 AYM-H7P-NF  
 AYM-AP-NF

Product Name  
 Oxygen Outlet  
 Vacuum Outlet  
 Medical Air 4 Bar Outlet  
 Medical Air 7 Bar Outlet  
 N2O Outlet

# Certificates

**CERTIFICATE**  
Full Quality Assurance System  
Medical Devices Directive 93/42/EEC Annex II

Company Name : Mersin AYM Medical Gıda Ürn. Mob. İnş. San. ve Tic. Ltd. Şti.

Company Address : Hal Mah. Turgut Özal Bw. Mertçöç St. Diğ. Kapı No:20 C Blok İç Kapı No:67 Akdeniz MERSİN / TÜRKİYE

Related Directives and Annex : MDD 93/42/EEC Medical Devices Directive - Annex II (Excluding Section 4)

Product : Central Gas Systems - Class II & Class III  
Central Medical Gas Supply Systems (O2, N2O, Vacuum, Air, AGES) - Class III  
Patient Bedside Unit, Intensive Care Unit, Perfusion - Class III  
Terminal Unit (Gas Outlets, Probe) - Class III  
Flowmeter and Oxygen Therapy - Class III  
Pressure Regulator & Turbo - Class II & Class III  
Vacuum Regulator - Class III  
Zone Valves - Class III  
Alarm Panels - Class III

Certificate Number : M.2014.106.6340  
Report Number : MD.3056.B  
Initial Assessment Date : 30.12.2015  
Registration Date : 08.03.2016  
Release Date/No : 07.03.2021

Address: Mersin Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çarşıya - Akdeniz - İZMİR  
Phone: +90 312 443 03 90 Fax: +90 312 443 03 76  
E-mail: info@aymmed.com.tr www.aymmed.com.tr

**MARKA TESCİL BELGESİ**  
Marka No : 2011 38630 - Ticaret

**MARKA SAHİBİ : AYM MEDICAL GIDA MOBİLYA İNŞAAT SANAYİ VE TİCARET LİMİTED ŞİRKETİ**  
TÜRKİYE CUMHURİYETİ  
MERSİN

**EMTİAŞ : 10**  
Cerrahi, tıbbi, dişi, laboratuvar ve veteriner için alet, cihaz ve mobilyalar.  
Yanıp yanmayan ve paslanmaz.  
Tıbbi ortopedik malzemeler.  
Ameliyathane aletleri ve aletleri aletleri.  
Cisim amaçlı aletler ve malzemeler.  
Protez aletleri cinsinden kapalı.  
Bilgisayar, laboratuvar emektörleri, emektörler, hebesler için dış kapayıcılar.

**Markalarının Korunması Hakkında 556 Sayılı Kanun Hükmünde Kararnameye göre 06/05/2011 tarihinden itibaren ON YIL müddetle 19/09/2012 tarihinde tescil edilmiştir.**

**E.F.F.B. AKIN**  
Ticaret Başkani  
Markalar Dairesi Başkanı

TÜRK PATENT ENSTİTÜSÜ

**SERTİFİKA**  
Tam Kalfite Güvence Sistemi  
93/42/AT Tıbbi Cihazlar Direktifi Ek II

Firma Adı : Mersin AYM Medical Gıda Ürn. Mob. İnş. San. ve Tic. Ltd. Şti.

Firma Adresi : Hal Mah. Turgut Özal Bw. Mertçöç St. Diğ. Kapı No:20 C Blok İç Kapı No:67 Akdeniz MERSİN / TÜRKİYE

İlgili Yönetmelikler ve Bölümler : MDD 93/42/AT Tıbbi Cihazlar Yönetmeliği - Ek II (Madde 4 Harici)

Dönemler : Medical Gaz Sistemleri - Sınıf II ve Sınıf III  
Medical Medical Gaz Tıbbi Cihazları (O2, N2O, Hava, Vakuum, AGES) - Sınıf III  
Yanıp Yanmayan Ürünler, Yoğun Bakım Ünitesi, Pendol - Sınıf III  
Ürünler (O2) Ürünler - Sınıf III  
Hücreler ve Oksijen Terapi Cihazları - Sınıf II ve Sınıf III  
Sensör ve Regülatörler ve Turbo - Sınıf II ve Sınıf III  
Vakuum Regülatörleri - Sınıf III  
İç Gereci Ürünleri - Sınıf III  
Alarm Paneli - Sınıf III

Sertifika Numarası : M.2014.106.6340  
Rapor Numarası : MD.3056.B  
İz Belgelendirme Denetimi : 30.12.2015  
Tescil Tarihi : 08.03.2016  
Yeniden Belgelendirme Tarihi/No : -  
Geçerlilik Tarihi : 07.03.2021

Address: Mersin Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çarşıya - Akdeniz - İZMİR  
Tel: +90 312 443 03 90 Fax: +90 312 443 03 76  
E-posta: info@aymmed.com.tr www.aymmed.com.tr

**TÜRK STANDARLARI ENSTİTÜSÜ**  
TSE-HYB

**HİZMET YETERLİLİK BELGESİ**

Değer No : 35-HYB-020  
Başlangıç Tarihi : 10.09.2012  
Son Geçerlilik Tarihi : 10.09.2016

Firmamız Adı : **MERSİN AYM MEDICAL GIDA ÜRÜNLERİ MOBİLYA İNŞAAT SANAYİ VE TİCARET LİMİTED ŞİRKETİ**  
Firmamız Adres : **İZMİR ÜLK MAHALLESİ MERTÇÖÇ CADDESİ ÇIKIŞI ÇIKIŞI ÇIKIŞI ÇIKIŞI ÇIKIŞI / AKDENİZ MERSİN/TİCARET**  
Firmamız Yurt Adresi : **İZMİR ÜLK MAHALLESİ MERTÇÖÇ CADDESİ ÇIKIŞI ÇIKIŞI ÇIKIŞI ÇIKIŞI ÇIKIŞI / AKDENİZ MERSİN/TÜRKİYE**

1. TS 22405 (18.02.2002) YETKİLİ SERİFİLER, TIBBİ CIHAZLAR (CEN-KURALLAR) STANDARLARINA UYGUN HİZMET VEREN MEDICAL CİHAZLARA HİZMET VEREN SERİFİLER, ÇALIŞAN TIBBİ CİHAZLARA VE DİĞER MEDICAL CİHAZLARA  
2. MERSİN AYM MEDICAL GIDA ÜRÜNLERİ MOBİLYA İNŞAAT SANAYİ VE TİCARET LİMİTED ŞİRKETİ YETKİLİ SERİFİLER (14/11/2012)  
(08.09.2012) Mersin Aym Medical Gıda Ürünleri İnşaat San. ve Tic. Şti. No: 97/3 MARKALI

MERSİN TİCARET VE SANAYİ ODASI

**SERTİFİKA**  
85135

Bu sertifika aşağıda adı geçen kuruluşu UDEM Uluslararası Belgelendirme Denetim Eğitim Merkezi San. ve Tic. Ltd. Şti. tarafından verildiği, Referans alınan standartlar TS EN ISO 13485:2003 ve EN 13485:2012'dir

**Mersin Aym Medikal Gıda Ürünleri Mobilya İnşaat San. ve Tic. Ltd. Şti.**  
Hal Mahallesi Turgut Özal Bulvarı Mertçöç St. Diğ. Kapı No:20 C Blok İç Kapı No:67 Akdeniz MERSİN / TÜRKİYE

**ISO 13485:2003**

Kapsam: Medikal gaz dağıtım sistemleri, basıncı medikal gazlar ve anestezik gaz tahliye sistemi iç birimleri, debimetreler, hasta yatakları birimleri, yoğun bakım ünitesi, pendol, basınç regülatörleri, vakum regülatörleri, bölge vana kutusu, alarm paneli tasarım, geliştirme, üretim, kurulum ve servis

Belgelendirme Denetim Tarihi : 10.09.2014  
Tescil Tarihi : 10.10.2014  
Yeniden Başım Tarihi : 25.11.2015  
Geçerlilik Tarihi : 09.10.2017

UDEM Uluslararası Belgelendirme Denetim Eğitim Merkezi San. ve Tic. Ltd. Şti. Çarşı

Address: Mersin Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çarşıya - Akdeniz - İZMİR  
Tel: +90 312 443 03 90 Fax: +90 312 443 03 76  
E-posta: info@aymmed.com.tr www.aymmed.com.tr

**SERTİFİKA**  
58130

Bu sertifika aşağıda adı geçen kuruluşu UDEM Uluslararası Belgelendirme Denetim Eğitim Merkezi San. ve Tic. Ltd. Şti. tarafından verildiği,

**Mersin Aym Medikal Gıda Ürünleri Mobilya İnşaat San. ve Tic. Ltd. Şti.**  
Hal Mahallesi Turgut Özal Bulvarı Mertçöç St. Diğ. Kapı No:20 C Blok İç Kapı No:67 Akdeniz MERSİN / TÜRKİYE

**ISO 9001:2008**

Kapsam: Medikal gaz dağıtım sistemleri, basıncı medikal gazlar ve anestezik gaz tahliye sistemi iç birimleri, debimetreler, hasta yatakları birimleri, yoğun bakım ünitesi, pendol, basınç regülatörleri, vakum regülatörleri, bölge vana kutusu, alarm paneli tasarım, geliştirme, üretim, kurulum ve servis

EA Kodu: Z3

Belgelendirme Denetim Tarihi : 05.09.2015  
Tescil Tarihi : 25.11.2015  
Yeniden Başım Tarihi : -  
Geçerlilik Tarihi : 24.11.2016

UDEM Uluslararası Belgelendirme Denetim Eğitim Merkezi San. ve Tic. Ltd. Şti. Çarşı

Address: Mersin Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çarşıya - Akdeniz - İZMİR  
Tel: +90 312 443 03 90 Fax: +90 312 443 03 76  
E-posta: info@aymmed.com.tr www.aymmed.com.tr

**BİLM. SANAYİ VE TEKNOLOJİ BAKANLIĞI**  
Sanayi Genel Müdürlüğü

**SANAYİ SİCİL BELGESİ**

Belge Tarihi : 01/04/2013 Belge No : 008693 Veriliş Sebebi : İlk Kayıt Vergi No : 618039825

İşyeri İşletme Ünvani : MERSİN AYM MEDICAL GIDA ÜRÜNLERİ MOBİLYA İNŞAAT SAN. TIC. LTD.ŞTİ. MERSİN MERTÇÖÇ SÜBESİ

İşyeri Adresi : HAL MAHALLESİ TURGUT ÖZAL BULVARI MERTÇÖÇ GIDA TOP. SİTESİ C BLOK NO: 67 AKDENİZ / MERSİN

Kayıtlı Bulunduğu Meslek Odası : MERSİN TİCARET VE SANAYİ ODASI Kuruluş Tarihi ve Ticaret Sicil No : 14/09/2012 37548

Kapasite Raporu Birlik Onay Tarihi ve No : 07/11/2012 23263 Ticaret Sicil Gazetesi Tarihi ve Sayısı : 21/06/2012 6095

Üretim Konusu : OKSİJEN SANTRALLERİ, AZOT FİZYOKEMİK SANTRALLER, MEDİKAL HAVA SANTRALLERİ, MEDİKAL VAKUUM SANTRALLERİ, ATIK GAZ TAHLİYE SANTRALLERİ, KAYI KONTROL ÜNİTELERİ VE ALARMLAR, BİYOMEDİKAL GAZ ÇIKIŞI MODÜLLERİ, YOĞUN BAKIM ÜNİTELERİ, İNTEGRA YATAK ÜNİTELERİ, ANESTEZİYE POMPALARI, MEDİKAL GAZ PRİZLERİ, GAZ (PROB) OKSİJEN FLOWMETRELERİ, REGÜLATÖR, SERUM AŞIRI, MANİTÖR SPİRALI, SEPTET

2013 YILI VİZESİ YILI VİZESİ YILI VİZESİ YILI VİZESİ

Yükseköğretim Kurulu Başkanlığı 24.04.1997 tarih ve 9848 Sayılı Kararı ile Milli Eğitim Bakanlığına devredilmiştir. Bu belge düzenlenirken bu kararın bu yönde etkisi göz önünde tutulmuştur.



**MEDİKAL GIDA MOBİLYA  
İNŞAAT SAN. ve TİC.LTD. ŞTİ.**

FACTORY:

HAL MAH. TURGUT ÖZAL BULV. MERTOÇ SİTESİ  
KAPI NO:20 C BLOK NO:67  
AKDENİZ MERSİN/TÜRKİYE

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ay-med33@yandex.com

BRANCH/OFFICE:

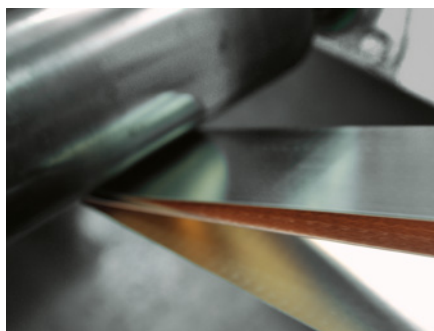
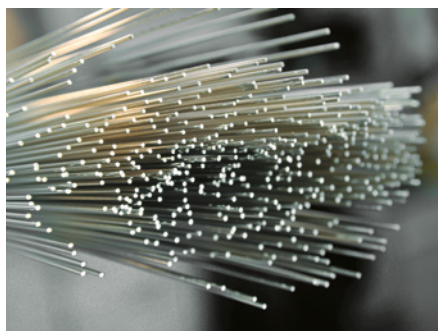
GÜLLÜBAĞLAR MAH. GÜMÜŞDAMLA SOKAK  
NO:24 / A PENDİK-İSTANBUL/TÜRKİYE

TEL: +90 216 550 69 90 - FAX: +90 216 418 3145  
WEB: www.ay-medistanbul.com - E-MAİL: info@ay-medistanbul.com



# BRAZETEC OVERVIEW OF STANDARDS

Name	ISO 17672	ISO 3677	DIN EN 1044	AWS A5.8	DIN 8513	JIS	GB/T
<b>BrazeTec Brazing Alloys, Cadmium Free</b>							<b>GB/T 10046</b>
BrazeTec 5662	-	B-Ag56CuZnSnGa-610/630	-	-	-	-	-
BrazeTec 5600	Ag 156	B-Ag56CuZnSn-620/655	AG 102	BAG-7	L-Ag55Sn	BAG-7	BAG56CuZnSn
BrazeTec 5507	Ag 155	B-Ag55ZnCuSn-630/660	AG 103	-	L-Ag55Sn	-	BAG55CuZnSn
BrazeTec 4576	Ag 145	B-Ag45CuZnSn-640/680	AG 104	BAG-36	L-Ag45Sn	BAG-7A	BAG45CuZnSn
BrazeTec 4076	Ag 140	B-Ag40CuZnSn-650/710	AG 105	BAG-28	L-Ag40Sn	BAG-28	BAG40CuZnSn
BrazeTec 3476	Ag 134	B-Cu36AgZnSn-630/730	AG 106	-	L-Ag34Sn	BAG-7B	BAG34CuZnSn
BrazeTec 3076	Ag 130	B-Cu36ZnAgSn-665/755	AG 107	-	L-Ag30Sn	-	BAG30CuZnSn
BrazeTec 2576	Ag 125	B-Cu40ZnAgSn-680/760	AG 108	-	L-Ag25Sn	-	BAG25CuZnSn
BlueBraze 3510	-	B-Ag35CuZnMnSn(Si)-680/700	-	-	-	-	-
BlueBraze 3010	-	B-Cu38AgZnMnSn(Si)-690/730	-	-	-	-	-
BlueBraze 2410	-	B-Cu44AgZnMnSn(Si)-690/750	-	-	-	-	-
BlueBraze 2010	-	B-Cu43ZnAgMnIn(Si)-710/765	-	-	-	-	-
BrazeTec 4404	Ag 244	B-Ag44CuZn-675/735	AG 203	-	-	-	BAG44CuZn
BrazeTec 3075	Ag 230	B-Cu38ZnAg-680/765	AG 204	BAG-20	-	BAG-20	BAG30CuZn
BrazeTec 2500	Ag 225	B-Cu40ZnAg-700/790	AG 205	-	-	BAG-20A	BAG25CuZn
BrazeTec 2009	Ag 220	B-Cu44ZnAg(Si)-690/810	AG 206	-	L-Ag20	-	BAG20CuZn (Si)
<b>BrazeTec Brazing Alloys for Copper and Copper Based Materials</b>							<b>GB/T 6418</b>
BrazeTec Silfos 18	CuP286	B-Cu75AgP-645	CP 101	-	-	BCuP-8	BCu75AgP
BrazeTec Silfos 15	CuP 284	B-Cu80AgP-645/800	CP 102	BCuP-5	L-Ag15P	BCuP-5	BCu80AgP
BrazeTec Silfos 5	CuP 281a	B-Cu89PAg-645/815	CP 104	BCuP-3*	L-Ag5P	-	BCu89AgP*
BrazeTec Silfos 2*	CuP 279	B-Cu92PAg-645/825	CP 105	-	L-Ag2P	-	BCu92AgP
BrazeTec Silfos 94*	CuP 179	B-Cu94P-710/890	CP 203	-	L-CuP6	-	BCu94P
BrazeTec Silfos 93	CuP 180	B-Cu93P-710/820	CP 202	-	L-CuP7	BCuP-2	BCu93P-B
BrazeTec Silfos 92*	CuP 182	B-Cu92P-710/770	CP 201	-	L-CuP8	-	BCu92P
BrazeTec Silfos 90	-	-	-	-	-	-	-
BrazeTec Silfos 86	CuP 386	B-Cu86SnP-650/700	CP 302	-	-	-	BCu86SnP



Name	ISO 17672	ISO 3677	DIN EN 1044	AWS A5.8	DIN 8513	JIS	GB/T
<b>BrazeTec Silver Brazing Alloys for Special Applications</b>							<b>GB/T 10046</b>
BrazeTec 7200	Ag 272	B-Ag72Cu-780	AG 401	BAG-8	L-Ag72	BAG-8	BAG72Cu
BrazeTec 6009	Ag 160	B-Ag60CuSn-600/700	AG 402	BAG-18	-	BAG-18	BAG60CuSn
<b>BrazeTec Brass Brazing Alloys for Special Applications</b>							<b>GB/T 6418</b>
BrazeTec 60/40	Cu 670	B-Cu60Zn(Si)(Mn)-870/900	CU 303	-	L-CuZn40	-	BCu60Zn(Si)(Mn)
BrazeTec 48/10	Cu 773	B-Cu48ZnNi(Si)-890/920	CU 305	RBCuZn-D	L-CuNi10Zn42	BCu-8	BCu48ZnNi(Si)
<b>BrazeTec Brazing Alloys for the Brazing of Tungsten Carbides</b>							<b>GB/T 10046 or GB/T 6418</b>
BrazeTec 6488	-	B-Ag64CuInNiMn-730/780	-	-	-	-	-
BrazeTec 5081	Ag 450	B-Ag50CuZnNi-660/705	-	BAG-24	-	BAG-24	BAG49ZnCuNi
BrazeTec 4900	Ag 449	B-Ag49ZnCuMnNi-680/705	AG 502	BAG-22	L-Ag49	BAG-22	BAG49ZnCuMnNi
BrazeTec 4900 A	-	B-Ag49ZnCuMnNi-670/690	-	-	-	-	-
BrazeTec 2700	Ag 427	B-Cu38AgZnMnNi-680/830	AG 503	-	L-Ag27	-	BAG27CuZnMnNi
BrazeTec 21/80	-	B-Cu84MnNi-965/1000	-	-	-	-	BCu84MnNi
BrazeTec 21/68	-	B-Cu87MnCo 980/1030	-	-	-	-	-
<b>BrazeTec Copper Based Pastes</b>							<b>GB/T 6418</b>
BrazeTec D 801	Cu 110	B-Cu100-1085	CU 101	BCu-1b	L-Cu	BCu-1	BCu100-B
BrazeTec D 807	CuP 284	B-Cu80AgP-645/800	CP 102	BCuP-5	L-Ag15P	BCuP-5	BCu80AgP
BrazeTec D 810	CuP 182	B-Cu92P-710/770	CP 201	-	L-CuP8	-	BCu92P
<b>BrazeTec Nickel Based Pastes</b>							
BrazeTec 897	Ni 710	B-Ni76CrP-890	NI 107	BNI-7	L-Ni7	BNI-7	-
BrazeTec 1002	Ni 620	B-Ni82CrSiBFe-970/1000	NI 102	BNI-2	L-Ni2	BNI-2	-
BrazeTec 1135	Ni 650	B-Ni71CrSi-1080/1135	NI 105	BNI-5	L-Ni5	BNI-5	-

CEGA FORANO  
BY GREGGERSEN



PRODUCT CATALOG  
FORANO

## Forano Terminal Unit

ACCORDING TO DIN EN ISO 9170-1

### GENERAL

According to national and international standards, terminal units are the points that connect medical appliances to the gas supply system. The prize-winning FORANO terminal units can be flexibly integrated into every conceivable installation. Ease of handling guarantees smooth running in routine hospital practice.

Our Anaesthetic Gas Scavenging System controls the safe use of anaesthetic gases. Our Air-Motor system supplies the energy to drive your compressed air-operated tools.

### USAGE

The unit is used to withdraw compressed gases and vacuum from a central medical gas supply system in line with DIN EN ISO 7396-1; Anaesthetic Gas Scavenging System in line with DIN EN ISO 7396-2; integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2.

### STRUCTURE AND FUNCTIONS

The terminal unit comprises a gas-specific basic block (rear part) and a connector mounting (front part) which are joined together. The front part can be adjusted (rotated). All movable parts are made of metal materials. The terminal unit thus in general has a very low-wear construction.



All three O-ring seals are combined in a maintenance-friendly way in an assembly – the cartridge – which can easily be replaced by removing the front part. The cartridge is marked with a LOT number so that the age of the sealing elements can be immediately identified. The plug in the connector mounting is kept either in the parking or the operating position.



**Labelling:** Type of gas written out in German and English plus chemical symbol (laser-inscribed in a wipe-resistant and tamper-proof way).

**Colour coding:** neutral or in line with DIN EN ISO 5359.

### TECHNICAL DATA

**Design:** pearl gloss, chrome-plated all-metal construction with parking and operating position; unlocking by means of the actuator; single-handed operation when connecting/disconnecting; manually lockable servicing valve.

**Types of installation:** concealed and hollow wall installation, surface mounting, installation into bed-head units or into ceiling-mounted supply units.

**Operating pressure:**

400 kPa to 500 kPa (overpressure) – compressed gases  
700 kPa to 1000 kPa (overpressure) – Airmotor  
<60 kPa (absolute pressure) – vacuum

The terminal unit FORANO has won three of the world's most prestigious design awards and has been nominated for the 2010 Design Prize of the Federal Republic of Germany.



## Terminal Unit Forano

INTELLIGENT CLOSING SYSTEM

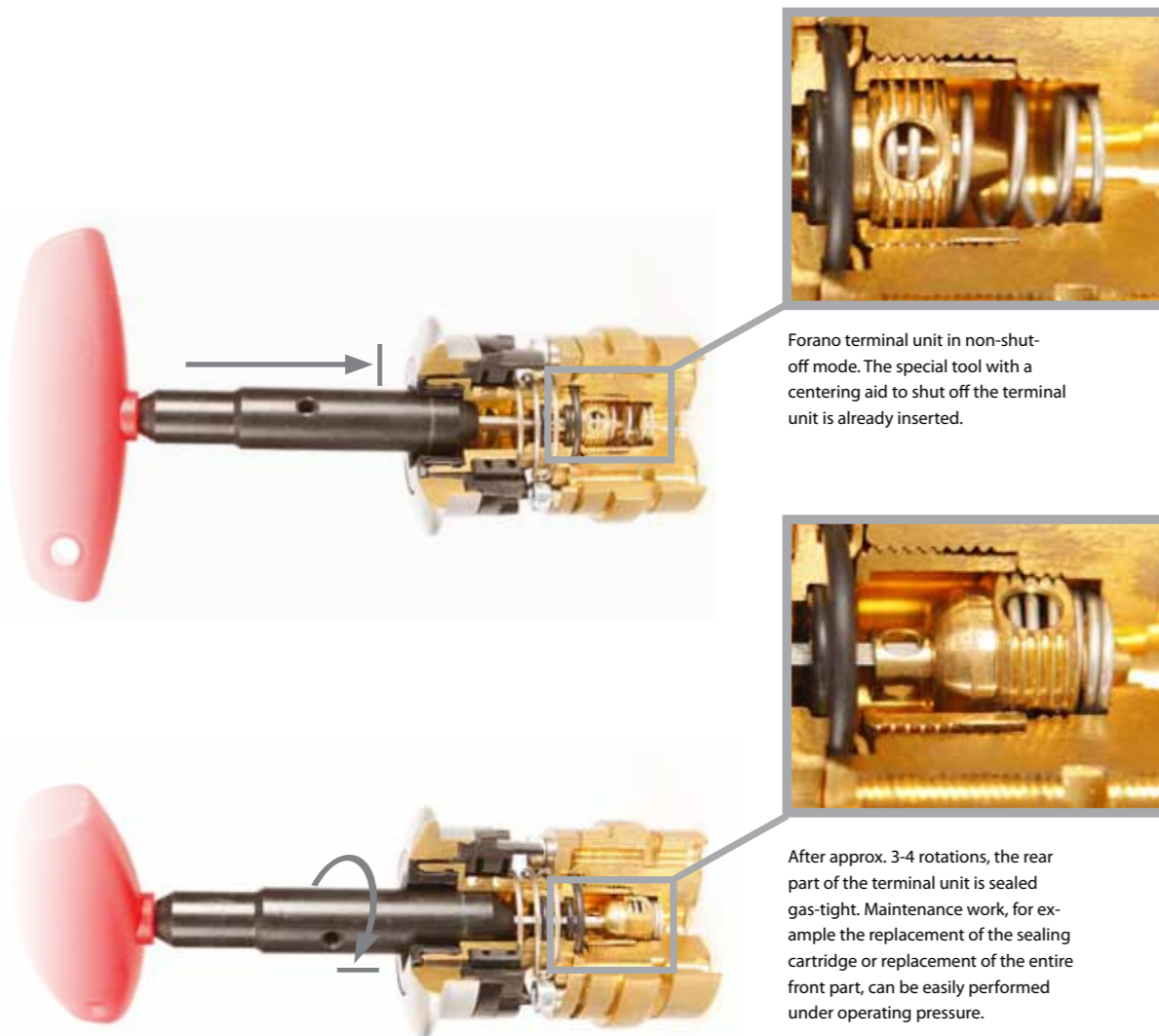
### INTELLIGENT, SIMPLE, SECURE

The Forano terminal unit is the only medical gas outlet on the market with an intelligent closing system offering three closing functions:

1. It seals the terminal unit when the plug connector is disconnected.
2. The front part of the terminal unit can be dismantled without interrupting the gas supply and the wear parts can be replaced.

3. The terminal unit can be shut off using a special key without dismantling the front part. The front part is then sealed with a warning sticker (art. no. 903.309) (see p. 5).

Thus each terminal unit can be shut off individually, eliminating the need to shut off individual areas or entire wards of the hospital if servicing or repairs need to be performed.



### STICKER "OUT OF ORDER!"

When shutting off a terminal unit or entire sections of the mains supply, the corresponding terminal units must be clearly marked. For this purpose, we offer you a sticker especially for the terminal unit Forano to paste over the connector mounting.

Please see page 18 / TOOLS AND ACCESSORIES



### TEST KIT FOR TERMINAL UNIT SYSTEM FORANO

in accordance with DIN EN ISO 7396-1/2

#### Consisting of:

- Test block with flow pipe for compressed gases
- Test block with flow pipe for vacuum/ NGA/AGSS
- Air motor test device
- Leak tightness measurement device
- Particle test device
- Filter box
- Gas-specific plug connector in accordance with DIN 13260:
  - Connector for oxygen (O<sub>2</sub>)
  - Connector for compressed air (AIR)
  - Connector for vacuum (VAC)
  - Connector for carbon dioxide (CO<sub>2</sub>)
  - Connector for nitrous oxide (N<sub>2</sub>O)
- AGSS testing device with panel for 50 L/min



- AGSS testing device with panel for 25 L/min
- AGSS connection test kit according to DIN EN ISO 7396-2
- Testing device kit with insert
- Optional accessories:
  - O<sub>2</sub> meter for testing gas type
  - Pressure gauge for leakage testing of the pipe line

Test kit terminal unit in line with 7396-1/2 DIN

902.114

## Terminal Unit Forano DIN

CONCEALED / HOLLOW WALL INSTALLATION



### USAGE

The unit is used to withdraw compressed gases and vacuum from a central medical gas supply system in line with DIN EN ISO 7396-1; integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2. The Forano terminal unit complies with the requirements of DIN EN ISO 9170-1.

### ADVANTAGES

- Two-part construction: gas-specific basic block and connector mounting
- Sophisticated design: all-metal actuator with laser labelling, front panel with wavy lines and diaphragm ring
- Easy installation and servicing: cartridge with sealing elements, replacement possible without blocking the station
- Unique marking: gas-type labelling – laser labelling: chemical symbol + German + English, colour coding: neutral or in line with DIN EN ISO 5359.

### TECHNICAL DATA

Inlet: 8 mm copper pipe  
 Operating pressure: 400 kPa to 500 kPa (overpressure) – compressed gases  
 < 60 kPa (absolute pressure) – vacuum

#### FORANO CONCEALED / HOLLOW-WALL – REAR PART (front part has to be ordered separately)

Forano, O2, concealed / hollow wall installation, type DIN / AGA / NF	903.250
Forano, AIR, concealed / hollow wall installation, type DIN / AGA / NF	903.251
Forano, VAC, concealed / hollow wall installation, type DIN / AGA / NF	903.252
Forano, N2O, concealed / hollow wall installation, type DIN / AGA / NF	903.253
Forano, CO2, concealed / hollow wall installation, type DIN / AGA / NF	903.255
Forano, special gas, concealed / hollow wall installation, type DIN / AGA / NF	903.256

#### ACCESSORIES REQUIRED

Front / wave screen to cover the built-in variant UP/HW	903.258
Front / wave screen to cover the built-in variant UP/HW (sales unit = 6 pcs.) UP/HW (sales unit = 6 pcs.)	903.259

All front parts for terminal unit Forano DIN, neutral or DIN EN ISO 5359 colour coding, can be found on page 11 of this product information.

## Terminal Unit Forano DIN

CONCEALED / HOLLOW WALL INSTALLATION

### USAGE

The unit is used to withdraw compressed gases and vacuum from a central medical gas supply system in accordance with DIN EN ISO 7396-1; integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2. The Forano terminal unit complies with the requirements of DIN EN ISO 9170-1.

### ADVANTAGES

- Two-part construction: gas-specific basic block and connector mounting
- Sophisticated design: all-metal actuator with laser labelling, front panel with wavy lines and diaphragm ring
- Easy installation and servicing: cartridge with sealing elements, replacement possible without blocking the station
- Unique marking: gas-type labelling – laser labelling: chemical symbol + German + English, colour coding: neutral or in line with DIN EN ISO 5359.

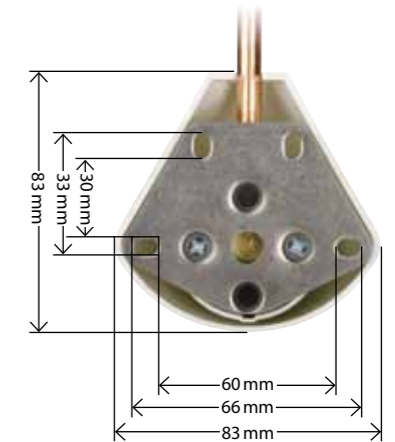
### TECHNICAL DATA

Inlet: 8 mm copper pipe  
 Operating pressure: 400 kPa to 500 kPa (overpressure) – compressed gases  
 < 60 kPa (absolute pressure) – vacuum  
 Depth: 72 mm

#### FORANO SURFACE MOUNTING – REAR PART (front part has to be ordered separately)

Forano, O2, surface mounting, type DIN	903.240
Forano, AIR, surface mounting, type DIN	903.241
Forano, VAC, surface mounting, type DIN	903.242
Forano, N2O, surface mounting, type DIN	903.243
Forano, CO2, surface mounting, type DIN	903.245
Forano, special gas, surface mounting, type DIN	903.246

All front parts for terminal unit Forano DIN, neutral or DIN EN ISO 5359 colour coding, can be found on page 11 of this product information.



## Terminal Unit Forano DIN

INSTALLATION INTO BED HEAD UNIT



### USAGE

The unit is used to withdraw compressed gases and vacuum from a central medical gas supply system in line with DIN EN ISO 7396-1; integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2. The Forano terminal unit complies with the requirements of DIN EN ISO 9170-1.

### ADVANTAGES

- Two-part construction: gas-specific basic block and connector mounting
- Sophisticated design: all-metal actuator with laser labelling, front panel with wavy lines and diaphragm ring
- Easy installation and servicing: cartridge with sealing elements, replacement possible without blocking the station
- Unique marking: gas-type labelling – laser labelling: chemical symbol + German + English, colour coding: neutral or in line with DIN EN ISO 5359.

### TECHNICAL DATA

Inlet: 8 mm copper pipe  
 Operating pressure: 400 kPa to 500 kPa (overpressure) – compressed gases  
 < 60 kPa (absolute pressure) – vacuum

FORANO, PIPE STRAIGHT UP (front part has to be ordered separately)

Forano, O2, bed-head unit pipe straight up, type DIN / AGA / NF	903.200
Forano, AIR, bed-head unit pipe straight up, type DIN / AGA / NF	903.201
Forano, VAC, bed-head unit pipe straight up, type DIN / AGA / NF	903.202
Forano, N2O, bed-head unit pipe straight up, type DIN / AGA / NF	903.203
Forano, CO2, bed-head unit pipe straight up, type DIN / AGA / NF	903.205
Forano, special gas, bed-head unit pipe straight up, type DIN / AGA / NF	903.206

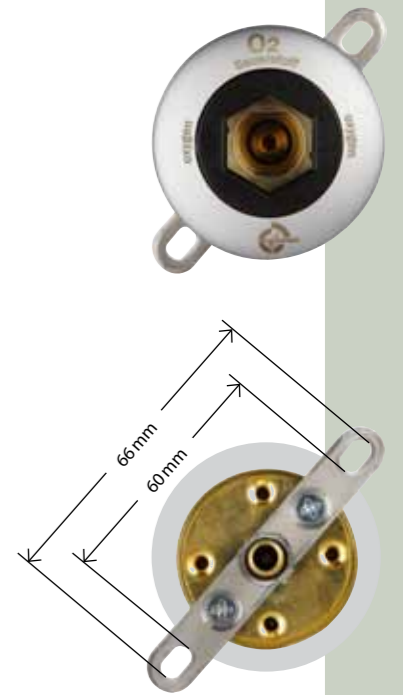
FORANO, PIPE STRAIGHT BACK (front part has to be ordered separately)

Forano, O2, bed-head unit pipe straight up, type DIN / AGA / NF	903.260
Forano, AIR, bed-head unit pipe straight up, type DIN / AGA / NF	903.261
Forano, VAC, bed-head unit pipe straight up, type DIN / AGA / NF	903.262
Forano, N2O, bed-head unit pipe straight up, type DIN / AGA / NF	903.263
Forano, CO2, bed-head unit pipe straight up, type DIN / AGA / NF	903.265
Forano, special gas, bed-head unit pipe straight up, type DIN / AGA / NF	903.266

All front parts for terminal unit Forano DIN, neutral or DIN EN ISO 5359 colour coding, can be found on page 11 of this product information.

## Terminal Unit Forano DIN

INSTALLATION IN CEILING PENDANTS



### USAGE

The unit is used to withdraw compressed gases and vacuum from a central medical gas supply system in line with DIN EN ISO 7396-1; integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2. The Forano terminal unit complies with the requirements of DIN EN ISO 9170-1.

### ADVANTAGES

- Two-part construction: gas-specific basic block and connector mounting
- Sophisticated design: all-metal actuator with laser labelling
- Easy installation and servicing: cartridge with sealing elements, replacement possible without blocking the station
- Unique marking: gas-type labelling – laser labelling: chemical symbol + German + English, colour coding: neutral or in line with DIN EN ISO 5359.

### TECHNICAL DATA

Inlet: 6/8 mm barbed hose connector  
 Operating pressure: 400 kPa to 500 kPa (overpressure) – compressed gases  
 < 60 kPa (absolute pressure) – vacuum

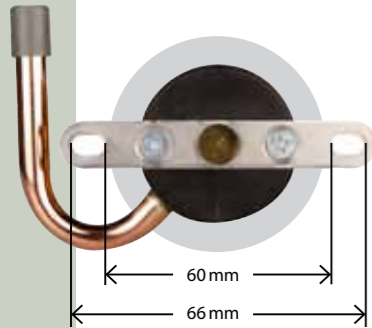
FORANO DIN FOR CEILING PENDANTS DVE (front part has to be ordered separately)

Forano, O2, DVE, type DIN / AGA / NF	903.230
Forano, AIR, DVE, type DIN / AGA / NF	903.231
Forano, VAC, DVE, type DIN / AGA / NF	903.232
Forano, N2O, DVE, type DIN / AGA / NF	903.233
Forano, CO2, DVE, type DIN / AGA / NF	903.235
Forano, special gas, DVE, type DIN	903.236

All front parts for terminal unit Forano DIN, neutral or DIN EN ISO 5359 colour coding, can be found on page 11 of this product information.

## Terminal Unit Forano DIN

INSTALLATION INTO BED HEAD UNIT



VS 100 M (B)



VS 100 M (A)

### USAGE

The unit is used to withdraw compressed gases and vacuum from a central medical gas supply system in line with DIN EN ISO 7396-1; integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2. The Forano terminal unit complies with the requirements of DIN EN ISO 9170-1.

### ADVANTAGES

- Two-part construction: gas-specific basic block and connector mounting
- Sophisticated design: all-metal actuator with laser labelling
- Easy installation and servicing: cartridge with sealing elements, replacement possible without blocking the station
- Unique marking: gas-type labelling – laser labelling: chemical symbol + German + English, colour coding: neutral or in line with DIN EN ISO 5359.

### TECHNICAL DATA

Inlet: 8 mm copper pipe  
Operating pressure: 400 kPa to 500 kPa (overpressure) – compressed gases  
< 60 kPa (absolute pressure) – vacuum

### FORANO DIN BED-HEAD UNIT CONSTRUCTION TRILUX VS 100M (A) RIGHT (front part has to be ordered separately)

Forano, O2, Trilux VS100M (A) type DIN / AGA / NF	903.210
Forano, AIR, Trilux VS100M (A) type DIN / AGA / NF	903.211
Forano, VAC, Trilux VS100M (A) type DIN / AGA / NF	903.212
Forano, N2O, Trilux VS100M (A) type DIN / AGA / NF	903.213
Forano, CO2, Trilux VS100M (A) type DIN / AGA / NF	903.215
Forano, special gas, Trilux VS100M (A) type DIN	903.216

### FORANO, DIN BED-HEAD UNIT CONSTRUCTION TRILUX VS 100M (B) LEFT (front part has to be ordered separately)

Forano, O2, Trilux VS100M (B) type DIN / AGA / NF	903.220
Forano, AIR, Trilux VS100M (B) type DIN / AGA / NF	903.221
Forano, VAC, Trilux VS100M (B) type DIN / AGA / NF	903.222
Forano, N2O, Trilux VS100M (B) type DIN / AGA / NF	903.223
Forano, CO2, Trilux VS100M (B) type DIN / AGA / NF	903.225
Forano, special gas, Trilux VS100M (B) type DIN	903.226

All front parts for terminal unit Forano DIN, neutral or DIN EN ISO 5359 colour coding, can be found on page 11 of this product information.

## Front Parts Terminal Unit Forano DIN

FOR ALL INSTALLATION TYPES

### FORANO FRONT PART – SCOPE OF DELIVERY

Each gas-specific front part contains the following components:

- Actuator
- Cartridge
- Gas-specific connector mounting
- Warning label (not ready for operation)



### FRONT PART FORANO DIN, NEUTRAL COLOUR CODING (front part has to be ordered separately)

Forano, O2, front part, type DIN – German + English	903.150
Forano, AIR, front part, type DIN – German + English	903.151
Forano, VAC, front part, type DIN – German + English	903.152
Forano, NO2, front part, type DIN – German + English	903.153
Forano, CO2, front part, type DIN – German + English	903.155
Forano, special gas, front part, type DIN – German + English	903.156



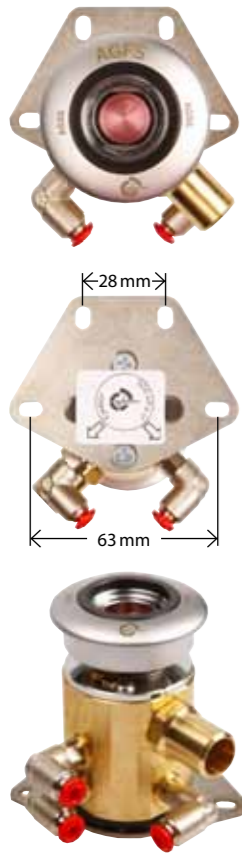
### FRONT PART FORANO DIN, ISO32 COLOUR CODING (front part has to be ordered separately)

Forano, O2, front part, type DIN – German + English	903.160
Forano, AIR, front part, type DIN – German + English	903.161
Forano, VAC, front part, type DIN – German + English	903.162
Forano, NO2, front part, type DIN – German + English	903.163
Forano, CO2, front part, type DIN – German + English	903.165



## Terminal Unit Forano AGSS

ANAESTHESIA GAS SCAVENGING SYSTEM



### USAGE

System for safe disposal of excess anaesthetic gases and anaesthetic vapours from the clinical environment within a central medical gas supply system in line with DIN EN ISO 7396-2.

All-metal construction, symbols for monitoring operation, with external ejector for vacuum generation. Suction adjustable; single-handed operation when connecting and disconnecting, unlocking via the connector receptacle. Fully mounted in a stainless steel casing, with stainless steel front panel (for concealed or hollow wall installation). Design complies with DIN EN ISO 9170-2.

### TECHNICAL DATA

Dimensions: 145 x 120 x 65 mm (WxHxD)  
 Material: Brass; casing and front panel stainless steel  
 Throughput: Min. 50 L/min at 500 kPa  
 Inlet: Copper pipe 8x1 mm / flexible tube PA 6 mm  
 Outlet: Copper pipe 15x1 mm / wave tube 15 mm  
 Marking: Colour coding in line with DIN EN ISO 9170-2  
 standard magenta

### FORANO AGFS

Forano AGSS, concealed/hollow wall	902.073
Forano AGSS, ceiling pendants, with external ejector	902.074
Forano AGSS, bed-head units	902.075
Forano AGSS, surface mounting	902.076



Surface version 130 x 174\* x 80 mm (\*plus approx. 200 mm Cu pipe)



Concealed version 175 x 175 mm



Concealed version 175 x 175 mm



Surface version 130 x 174\* x 80 mm (\*plus approx. 200 mm Cu pipe)

## Terminal Unit Forano Air-motor

FOR DRIVING COMPRESSED AIR-OPERATED TOOLS IN ENCLOSED SPACES

### USAGE

Terminal unit for supplying and disposing of air used to operate surgical tools. A combination of an outlet assembly (for supply) and an inlet assembly (for disposal), which is connected to a supply and disposal system in line with DIN EN ISO 7396-1. A non-return valve in the disposal system prevents return flow of consumed air. Design complies with DIN EN ISO 9170-1. Integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2.

### TECHNICAL DATA

Dimensions: 145 x 120 x 65 mm (WxHxD)  
 Material: Brass, chrome-plated;  
 Housing and front plate: stainless steel  
 Throughput: Min. 350 L/min at 800 kPa  
 Inlet: Copper pipe 8x1 mm / flexible tube PA 6 mm  
 Outlet: Copper pipe 15x1 mm / wave tube 15 mm  
 Marking: Colour coding in line with DIN EN ISO 9170-1  
 Operating pressure: 700-1000 kPa



### FORANO AIR-MOTOR

Forano Air-Motor for concealed / hollow wall installation	902.090
Forano Air-Motor for ceiling pendants	902.091
Forano Air-Motor for bed-head units	902.092
Forano Air-Motor for surface mounting	902.093

## Terminal Unit Forano DIN

WALL SUPPLY UNIT

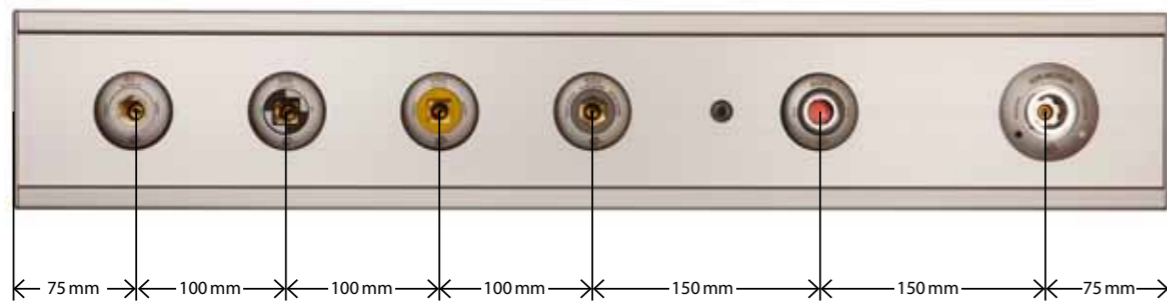
### USAGE

Duct for surface mounting, fully fitted with various terminal units in line with DIN EN ISO 9170-1, Air-Motor and/ or Anaesthetic Gas Scavenging System (AGSS in line with DIN EN ISO 9170-2 with integrated ejector, Air-Motor in line with DIN EN ISO 9170-1) in the aluminium duct.

The length of the duct can be customised to suit requirements. The terminal units are already installed with piping laid. The feed pipe can come from the left, right, above, below or behind.

### TECHNICAL DATA

Inlet:	8x1 mm (1 terminal unit per gas) 12x1 mm (2-3 terminal units per gas)
Outlet:	Forano terminal unit for integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2.
Colour coding:	Neutral or in line with DIN EN ISO 5359



WALL DUCT (Please indicate gas type for each outlet!)

Wall duct Forano, 2 outlets	903.400
Wall duct Forano, 3 outlets	903.401
Wall duct Forano, 4 outlets	903.402
Wall duct Forano, 5 outlets	903.403
Wall duct Forano, each additional outlet	903.404
Wall duct Forano, add-on 1 x AGSS	903.405
Wall duct Forano, add-on 1 x air-motor	903.406
Wall supply unit, meterage	902.040

### TERMINAL UNIT BLOCK

Block of 2 or 3 terminal units in line with DIN EN ISO 9170-1. Integration of plugs and medical appliances with plug-in connections in line with DIN 13260-2. A rail clamp with knurled nut is used to secure the block to a standard equipment rail as per DIN EN ISO 19054 (25 x 10 mm).



The terminal unit blocks can be found in the "Medical Accessories" catalog.

More information can also be found at [www.greggersen.com](http://www.greggersen.com).



## Terminal Unit Forano DIN

INTERNATIONAL STANDARDS AND ADDITIONAL VARIANTS



BRITISH STANDARD, SCANDINAVIAN STANDARD (AGA), NORME FRANÇAISE, etc.

The Forano terminal unit system is available in several other international standards beside the DIN variant.

For the British Standard, Norme Francaise and AGA/Scandinavian Standard variants, catalogs are available on our website for download.

For other standards or custom-made designs, please contact us directly about the version you require.

More information can also be found at [www.greggersen.com](http://www.greggersen.com).



Front part of terminal unit  
Forano British Standard



Front part of terminal unit  
Forano Norme Francaise



Front part of terminal unit  
Forano AGA Scandinavian Standard

## Terminal Unit Forano DIN

TOOLS AND ACCESSORIES



### FORANO HEIGHT ADJUSTMENT

In the variant for concealed / hollow wall installation, the basic block is seated in a ring follower. After installation of the housing, the mounting tool can subsequently be used to adjust the mounting depth of the basic block.

Mounting tool for concealed / hollow wall installation – height adjustment 903.300



### FORANO LEAK TEST

For performing the leak test in line with DIN EN ISO 7396-1. The blind flange is screwed to the basic block and closes up the terminal unit. The test pressure can then be used to check the pipe system for leaks.

Blind flange, brass, for Forano pressure test 903.301



### FORANO DISMOUNTING TOOL

Special tool used to remove the actuator without damaging the connector mounting.

Forano actuator dismounting tool 903.302



### FORANO MOUNTING AID

Mounting aid used to place a maximum of 3 or 4 concealed FORANO units next to each other. The mounting aid can be expanded, as required, by being combined with additional mounting aids. The Forano units can be quickly, easily and accurately aligned with each other using this tool. Spacing from Forano centre to Forano centre: 100 mm and 150 mm

Forano mounting aid 903.303

Forano mounting aid add-on for AGSS + Air-Motor 903.306



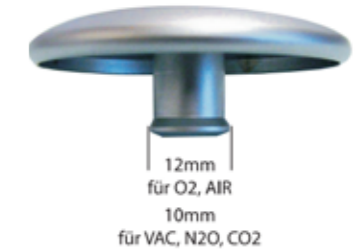
### "OUT OF ORDER" STICKER FOR FORANO DIN

Sticker to paste over the connector mounting when shutting off the terminal unit or sections of the mains supply.

"Out of order" sticker for Forano DIN 903.309

### FORANO CHILD SAFETY LOCK

To secure the FORANO gas terminal units against unauthorised use or for temporary shut-down of a terminal unit, we developed a "child safety lock". This is intended to prevent inadvertent or unauthorized use of the terminal unit.



Forano spanner for child safety lock O<sub>2</sub>, AIR 903.308

Forano child safety lock VAC, N<sub>2</sub>O, CO<sub>2</sub> 903.381

### FORANO SPANNER FOR CHILD SAFETY LOCK

The child safety lock can be removed from the terminal unit using the key.



Forano spanner for child safety lock 903.308

### FORANO DIAPHRAGM RING

The diaphragm ring made of POM is clicked into a 44 mm hole. It is delivered as standard with the Forano wave screen. However, the diaphragm ring can also be obtained as a separate component (e.g. for installation into media supply units).



Forano diaphragm ring 802.842

### FORANO ALLEN KEY

Allen key SW 3 with an additional, removable plastic sleeve. This sleeve guides the key in the front part of the terminal unit, virtually ruling out any "tilting" of the closing cone.



Forano closing cone Allen key 903.305

### FORANO SPANNER FOR SEALING CONE RETAINING SCREW



Forano spanner for sealing cone retaining screw 903.304

greggersen gasetechnik gmbh | bodestraße 27-29 | 21031 hamburg | germany  
tel: +49 (0)40 – 73 93 57 – 0 | fax: +49 (0)40 – 73 93 57 – 27 | info@greggersen.com | www.greggersen.com



there is no substitute

COPPER TUBES  
**TALOS**<sup>®</sup>

BUILDING PLUMBING INSTALLATIONS



**HALCOR**



# **HALCOR**

HALCOR is a large-scale modern industrial company with over sixty years of experience in metal processing. It holds a significant position in European and global markets and has five modern plants; four in Greece and one in Bulgaria.

The company is dedicated to achieving high quality. It has ISO 9001:2000 certification, uses state-of-the-art technology and employs highly skilled personnel. Substantial, continual investment in research and know-how allows the company to create innovative new products, which support its aim of being a market leader.

At the same time, HALCOR is committed to sustained development and environmental protection. As such, its production processes are regulated by an ISO 14001:2004 certified Environmental Management System.

Aiming at the total satisfaction of all of its customers' needs, the company focuses on responding reliably and rapidly to demand. It provides exceptional support for its products, which are distributed to more than fifty countries worldwide. HALCOR combines size, strength and technology to achieve its overall vision of putting metals at man's disposal.



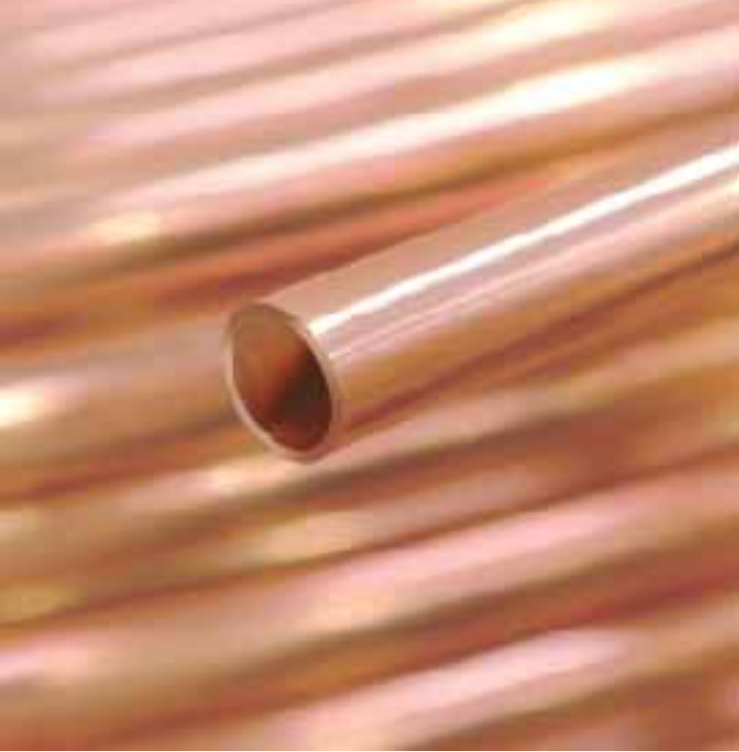


### Versatility with the dependability of copper

TALOS® copper tubes, with their high quality of manufacture provide:

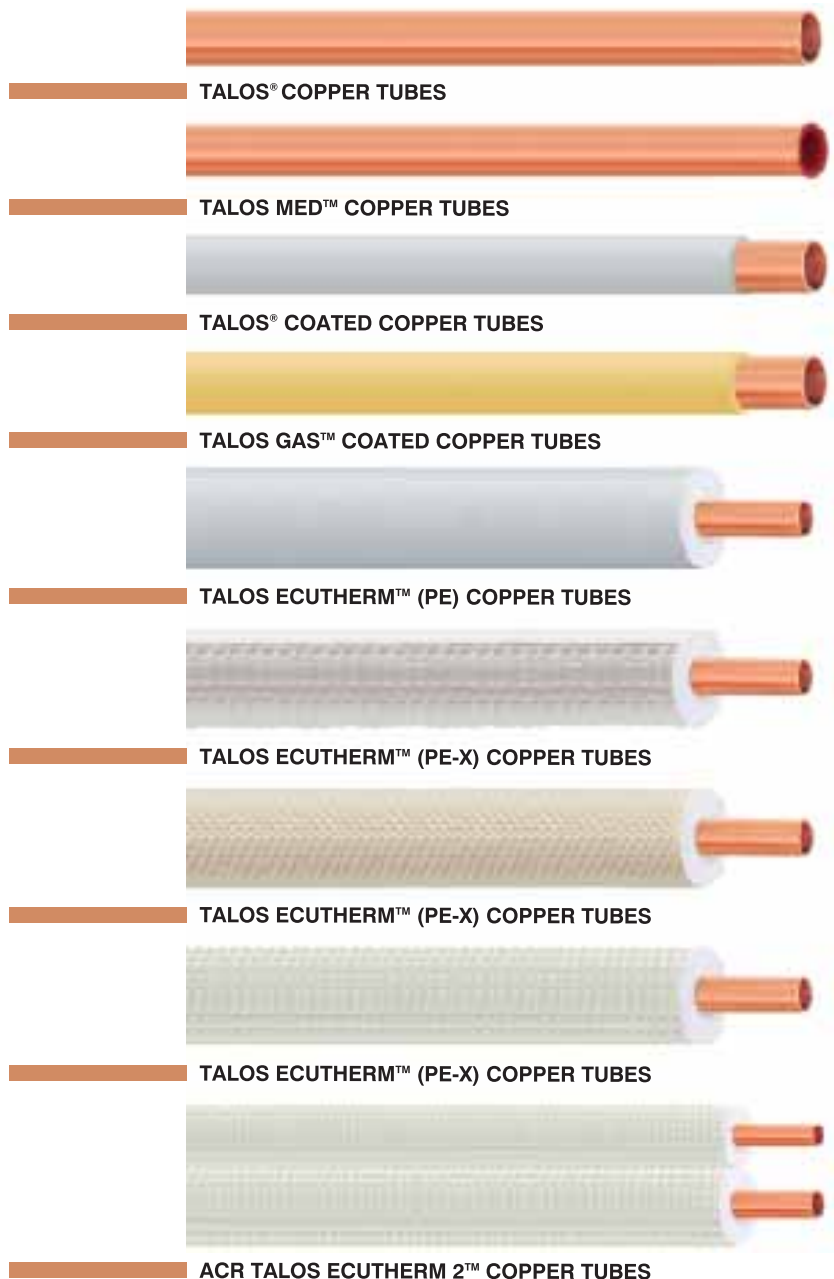
- **Unlimited lifetime.**
- **Resistance to pressure, temperature and fire.**
- **Low thermal expansion and enhanced shape stability.**
- **Complete impermeability.**
- **Potable water hygiene.**
- **Style and space saving.**
- **Cost-effectiveness.**





TALOS® copper tubes are widely used in a variety type of construction plumbing installations, such as potable water and hot water supply, central heating, natural gas, air conditioning, fire extinguishing networks, medical gas networks, etc.

They are manufactured according to harmonised European standards such as EN 1057:2006 and EN 13349 for coated pipes for sanitary applications, EN 12735 for air conditioning systems, EN 13348 for medical applications, etc.



**WATER SUPPLY**  
**HEATING**  
**NATURAL GAS**  
**COOLING**

### TALOS® PLAIN COPPER TUBES ADVANTAGES

- TALOS® copper tubes are easy and cost-effective to install, and provide safe and secure operation.
- TALOS® copper tubes are resistant to high working pressures and temperatures.
- TALOS® copper tubes are completely air- and water- tight and retain their natural and mechanical properties unchanged over time.
- They are stable and self-supporting.

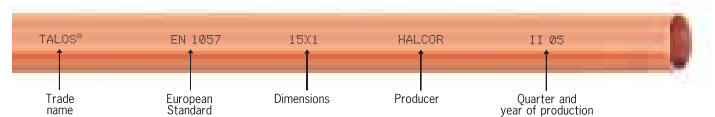
### TALOS HALF HARD COPPER TUBES SPECIAL ADVANTAGES

- Easy cold bending.
- Reduction of necessary fittings.
- Easier shaping of networks.
- Faster installation and working performance.
- Overall lower installation costs.

### MATERIAL

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P=0.015% - 0.040%.

### MARKINGS



### MECHANICAL PROPERTIES

Temper	EN 1057 Classification	Tensile strength N/mm <sup>2</sup> (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Half hard	R-250	250	30
Hard	R-290	290	3

### SPECIFICATIONS

EN 1057: 2006

### QUALITY MARKS

RAL/DVGW, BSI, AFNOR, AENOR, NSF, NSAI.

## I. STRAIGHT HALF HARD

Diameter x thickness d x s  (mm)	Internal diameter d internal  (mm)	Nominal copper weight  (kg/m)	External surface area  (m <sup>2</sup> /m)	Full volume  (l/m)	Packing		Maximum allowed working pressure (bar)
					Straight lengths	Pieces per bundle	
10x0,70	8,6	0,182	0,031	0,058	3m	900	90
10x1,00	8,0	0,252	0,031	0,050	4m	250	133
12x0,70	10,6	0,221	0,038	0,088	3m	800	74
12x1,00	10,0	0,308	0,038	0,079	4m	400	109
15x0,70	13,6	0,280	0,047	0,145	3m	600	59
15x0,80	13,4	0,318	0,047	0,141	3m	600	68
15x1,00	13,0	0,391	0,048	0,133	4m	600	86
15x1,20	12,6	0,463	0,047	0,127	4m	125	104
18x0,80	16,4	0,384	0,056	0,211	3m	450	56
18x1,00	16,0	0,475	0,056	0,201	4m	450	71
18x1,20	15,6	0,563	0,056	0,191	4m	100	86
22x0,80	20,4	0,474	0,069	0,327	3m	300	45
22x0,90	20,2	0,531	0,069	0,320	3m	300	51
22x1,00	22,0	0,587	0,069	0,314	4m	300	57
22x1,50	19,0	0,860	0,069	0,284	4m	80	88

## II. STRAIGHT HARD

28x0,80	26,4	0,609	0,087	0,547	3m	200	43
28x0,90	26,2	0,682	0,087	0,539	3m	200	48
28x1,00	26,0	0,087	0,087	0,531	4m	200	54
28x1,50	25,0	0,087	0,087	0,491	4m	60	82
35x1,00	33,0	0,950	0,110	0,856	3m	100	43
35x1,50	32,0	1,410	0,110	0,804	4m	50	65
35x2,00	31,0	1,844	0,110	0,754	4m	50	88
42x1,00	40,0	1,148	0,131	1,256	3m	90	35
42x1,20	39,6	1,368	0,131	1,231	3m & 4m	90	43
42x1,50	39,0	1,700	0,131	1,193	4m	40	54
54x1,00	52,0	1,484	0,170	2,123	3m	60	27
54x1,20	51,6	1,771	0,170	2,090	3m & 4m	60	33
54x1,50	51,0	2,202	0,170	2,042	4m	60	41
54x2,00	50,0	2,906	0,170	1,962	4m	30	56
64x2,00	60,0	3,467	0,201	2,827	3m	25	47
76,1x2,00	72,1	4,144	0,239	4,083	3m	20	39
88,9x2,00	84,9	4,859	0,279	5,661	4m	15	33
108x2,50	103,0	7,375	0,339	8,332	4m	10	34

## III. SOFT COILS

11x0,75	9,5	0,287	0,034	0,071	Plain in coils (m) long	50	Plain coils per pallet	96	67
15x1,00	13,0	0,391	0,047	0,133		50		30	66
18x1,00	16,0	0,475	0,056	0,201		25		40	54
22x1,00	20,0	0,587	0,069	0,314		25		40	44
18x1,50	17,0	0,692	0,057	0,177		25		40	84
22x1,50	19,0	0,860	0,069	0,284		25		30	67

Non-standard dimensions are manufactured upon request.



COPPER TUBES

**TALOS®**

## FIRE EXTINGUISHING NETWORKS

### Maximum fire protection and safety

TALOS® copper tubes are the fastest and most cost-effective choice, for the construction of permanent fire extinguishing water supply networks and automatic sprinkler systems.

TALOS® copper tubes for fire extinguishing networks, provide substantial advantages:

- Smooth surface with minimal pressure loss due to friction, resulting in the need for smaller cross-sections, for specific water supply requirements.
- Various options in coupling methods.
- Easy to transport, install and support, even in limited spaces.
- High thermal conductivity that ensures prevention of extreme temperature peaks.
- Completely air- and water-tight and practically maintenance-free.
- Excellent corrosion resistance, compared to other metals.
- Extreme temperature resistance (copper melting point 1083 °C).
- Fully recyclable.
- Tested and reliable for all types of plumbing applications.

TALOS® copper tubes are the ideal material for the construction of fire extinguishing installations in different areas, such as: Hospitals, Factories, Warehouses, Schools, Museums, Restaurants, Hotels, Sports facilities, Offices, Shops, Car Parks, Houses.

TALOS® copper tubes are covered by a 30-year manufacturer's guarantee for good performance.



## MATERIAL

Copper phosphorus deoxidised (minimum copper content 99.9%, phosphorus concentration P=0.015% - 0.04%, classified as CW024A, or Cu-DHP, according to the European alloy coding system).

## MECHANICAL PROPERTIES

Temper	EN 1057 Classification	Tensile strength N/mm <sup>2</sup> (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Half hard	R-250	250	30
Hard	R-290	290	3

## SPECIFICATIONS

EN 1057:2006

TALOS® copper tubes comply fully with the EN 1057:2006 standard for water supply and permanent fire extinguishing networks.

## QUALITY MARKS

RAL/DVGW, BSI, AFNOR, AENOR, NSAI.

## STANDARD DIMENSIONS

Diameter x thickness d x s (mm)	Internal diameter d internal (mm)	Nominal copper weight (kg/m)	External surface area (m <sup>2</sup> /m)	Full volume (l/m)	Packing	
					Type	Pieces per bundle
15x1,00	13,0	0,391	0,047	0,133	Straight lengths of 4m	600
18x1,00	16,0	0,475	0,057	0,211		450
22x1,00	22,0	0,587	0,069	0,314		300
28x1,00	26,0	0,755	0,088	0,531		200
35x1,50	32,0	1,405	0,110	0,804		50
42x1,50	39,0	1,699	0,132	1,195		40
54x1,50	51,0	2,202	0,170	2,043		60
54x2,00	50,0	2,908	0,170	1,963		30
64x2,00	60,0	3,467	0,201	2,827		25
76,1x2,00	72,1	4,144	0,239	4,083		20
88,9x2,00	84,9	4,859	0,279	5,661		15
108x2,50	103,0	7,375	0,339	8,332		10

## MEDICAL GAS DISTRIBUTION NETWORKS

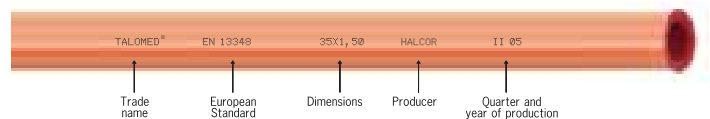
### Cleanliness and resistance

In the sensitive healthcare areas and installations, it is imperative to use materials that safeguard cleanliness, neat appearance and durability. TALOS MED™ copper tubes, thanks to the natural strength of copper they can withstand high working pressures with unlimited durability, hence they are the ideal choice for the construction of the distribution networks of the medical gases. TALOS MED™ copper tubes are manufactured according to the requirements of standard EN 13348:2001. They are supplied with end caps to prevent contamination by foreign matter intrusion during storage or transportation.

### MATERIAL

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P= 0.015% - 0.040%.

### MARKINGS



### MECHANICAL PROPERTIES

Temper	EN 13348 Classification	Tensile strength N/mm <sup>2</sup> (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Hard	R-290	290	3

### SPECIFICATIONS

EN 13348: 2001



### STANDARD DIMENSIONS

Diameter x thickness d x s (mm)	Internal diameter d internal (mm)	Nominal copper weight (kg/m)	External surface area (m <sup>2</sup> /m)	Full volume (l/m)	Packing
6x1,00	4,0	0,140	0,019	0,013	Straight lengths of 5m
8x1,00	6,0	0,196	0,025	0,028	
10x1,00	8,0	0,252	0,031	0,050	
12x1,00	10,0	0,308	0,038	0,079	
15x1,00	13,0	0,391	0,048	0,133	
18x1,00	16,0	0,475	0,056	0,201	
22x1,00	22,0	0,587	0,069	0,314	
28x1,00	26,0	0,758	0,087	0,531	
35x1,50	32,0	1,410	0,110	0,804	
42x1,50	39,0	1,700	0,131	1,193	
54x2,00	50,0	2,906	0,170	1,962	
64x2,00	60,0	3,467	0,201	2,827	
76,1x2,00	72,1	4,144	0,239	4,083	
88,9x2,00	84,9	4,857	0,279	5,658	
108x2,50	103,0	7,370	0,339	8,328	

Different sizes and lengths are available upon request.

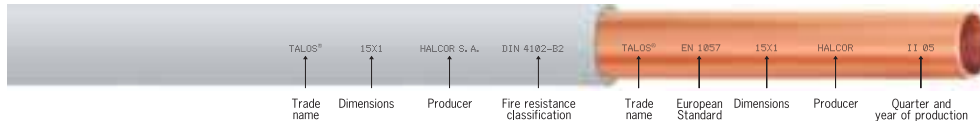


**WATER SUPPLY  
HEATING  
COOLING**

**MATERIAL**

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P=0.015% - 0.040%.

**MARKINGS**



**MECHANICAL PROPERTIES**

Temper	EN 1057 Classification	Tensile strength N/mm <sup>2</sup> (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Hard	R-290	290	3

**SPECIFICATIONS**

EN 13349:2002, EN 1057:2006.

They are classified as B2 according to DIN 4102 fire resistance classification system.

**QUALITY MARKS FOR COPPER TUBES**

AFNOR.

Copper tube: RAL, BSI, AENOR, AFNOR, NSF, NSAI.

**STANDARD DIMENSIONS**

**I. SOFT COILS**

Copper tube ext. diam. x thickness d x s (mm)	Overall ext. diameter D (mm)	Tube full volume (l/m)	Nominal copper weight (kg/m)	Thermal* capacity (Kcal/h)	Min. bending radius manually (mm)	Min. bending radius with bending tool (mm)	Packing in coils (m) long
12 x 1,00	16	0,079	0,308	6.700	100	—	25 or 50
15 x 1,00	19	0,133	0,391	11.000	120	—	
16 x 1,00	20	0,154	0,420	13.300	130	—	
18 x 1,00	22	0,200	0,475	17.200	145	—	25
22 x 1,00	26	0,315	0,537	27.200	175	—	25 or 50
15 x 0,80	19	0,141	0,318	12.100	125	—	
16 x 0,80	20	0,163	0,340	14.000	135	—	
18 x 0,80	22	0,211	0,385	18.200	150	—	25

**II. STRAIGHT HARD**

15 x 1,00	19	0,133	0,391	11.000	—	55	Straight lengths of 4m
16 x 1,00	20	0,154	0,420	13.300	—	60	
18 x 1,00	22	0,191	0,563	17.200	—	70	
22 x 1,00	26	0,314	0,587	27.200	—	80	

\* For a temperature drop of 20 °C and a flow rate of 1.2 m/sec.

## SPECIFICATIONS

	Tubes
EN	12449
ASTM	B135 B587 B251

## ALLOYS FOR BRASS PRODUCTS

ALLOY	EUROPE EN	USA USN	Cu	Pb	Zn	Sn	As	Ni	Al	Other Named Elements
CuZn39Sn1	CW719R	C46400	59-61	0,2	REM	0,5-1	-	0,2	1,8-2,3	
CuZn36Pb2Sn1	CW711R	C48500	59,5-61,5	1,3-2,2	REM	0,5-1	-	0,3	0,05-0,5	
CuZn40Pb2	CW617N	C37710	57-59	1,6-2,5	REM	0,3	-	-	0,05	
CuZn39Pb3	CW614N	C38500	57-59	2,5-3,5	REM	0,3	-	0,3	0,05	
CuZn39Pb2	CW612N	C37700	59-60	1,6-2,5	REM	0,3	-	0,3	0,05	
CuZn38Pb2	CW608N	-	60-61	1,6-2,5	REM	0,2	-	0,3	0,05	
CuZn38Pb1	CW607N	-	60-61	0,8-1,6	REM	0,2	-	0,3	0,05	
CuZn36Pb3	CW603N	C36000	60-62	2,5-3,5	REM	0,2	-	0,3	0,05	
CuZn36Pb2As	CW602N	C35330	61-63	1,7-2,8	REM	0,1	0,02-0,15	0,3	0,05	
CuZn35Pb2	CW601N	C34200	62-63,5	1,6-2,5	REM	0,1	-	0,3	0,02	
CuZn37	CW508L	C27200	62-64	0,1	REM	0,1	-	0,3	0,02	
CuZn40Si	CF724R	-	58,5-61,5	0,02	REM	0,2	-	-	0,01	Si: 0,2-0,4
CuZn40Mn1Pb1AlFeSn	CW721R	-	57-59	0,8-1,6	REM	0,2-1	-	0,3	0,3-1,3	
CuZn40Mn1Pb1	CW720R	-	57-59	1,0-2,0	REM	0,3	-	0,6	0-0,2	
CuZn37Mn3Al2PbSi	CW713R	-	57-59	0,2-0,8	REM	0,4	-	1	1,3-2,3	
CuZn36Sn1Pb	CW712R	-	61-63	0,6	REM	1,0-1,5	-	0,2	-	
CuZn35Ni3Mn2AlPb	CW710R	-	58-60	0,2-0,8	REM	0,5	-	2,0-	0,3-1,3	
CuZn38As	CW511L	-	61-63,5	0,2	REM	0,1	-	3,0	0,1	
CuZn40	CW509L	-	59-61,5	0,2	REM	0,2	-	0,3	0,05	
CuZn42	CW510L	-	57-59	0,2	REM	0,3	-	0,3	0,05	



### SPECIFICATIONS

EN 13348

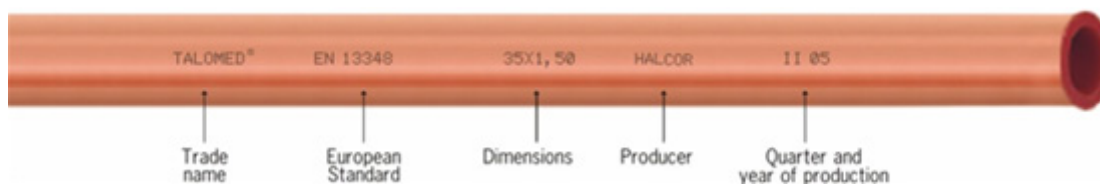
### APPLICATIONS

MEDICAL GAS, DISTRIBUTION, NETWORKS

### MATERIAL

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P= 0.015% - 0.040%.

### MARKINGS



### MECHANICAL PROPERTIES

Temper	EN 1057 Classification	Minimum Tensile strength N/mm2	Minimum elongation A%
Soft	R-220	220	40
Hard	R-290	290	3

STANDARD DIMENSIONS  
STANDARD DIMENSIONS

Diameter x thickness d x s (mm)	Internal diameter d internal(mm)	Nomin al copper weight (kg/m)	Extern al surface area (m2/m)	Ful l volume (l/m)	Packing
6x1.00	4.0	0.140	0.019	0.013	Straight lengths of 5m
8x1.00	6.0	0.196	0.025	0.028	
10x1.00	8.0	0.252	0.031	0.050	
12x1.00	10.0	0.308	0.038	0.079	
15x1.00	13.0	0.391	0.047	0.133	
18x1.00	16.0	0.475	0.057	0.201	
22x1.00	20.0	0.587	0.069	0.314	
28x1.00	26.0	0.755	0.088	0.531	
35x1.50	32.0	1.405	0.110	0.804	
42x1.50	39.0	1.700	0.132	1.195	
54x2.00	50.0	2.908	0.170	1.963	
64x2.00	60.0	3.467	0.201	2.827	
76,1x2.00	72.1	4.144	0.239	4.083	
88,9x2.00	84.9	4.857	0.279	5.661	
108x2.50	103.0	7.375	0.339	8.332	

RTM 3

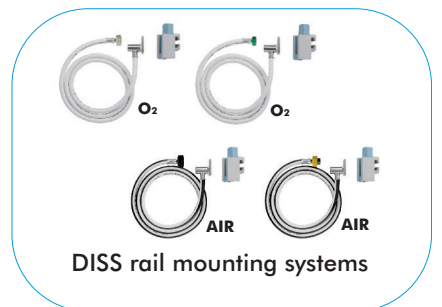
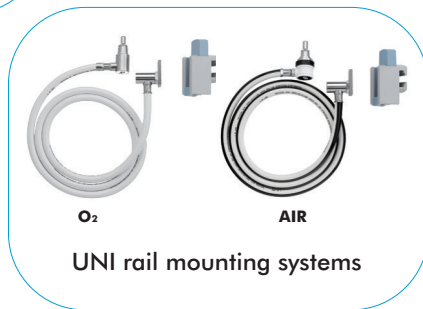
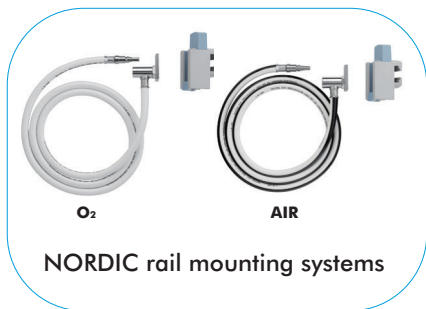
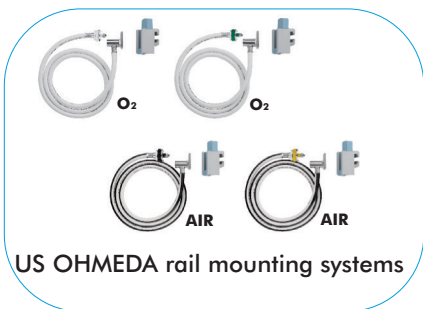
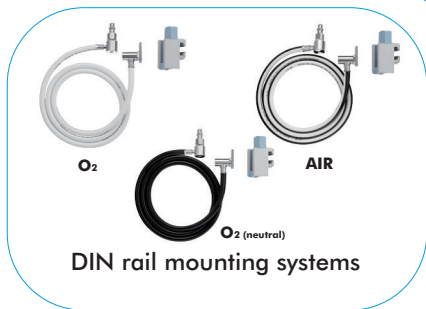
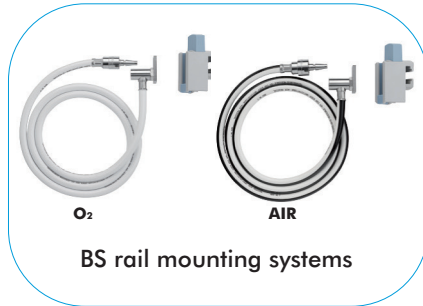
OXYGEN-THERAPY  
FLOWMETERS WITH  
FLOATING BALL



TECHNOLOGIE  
MEDICALE

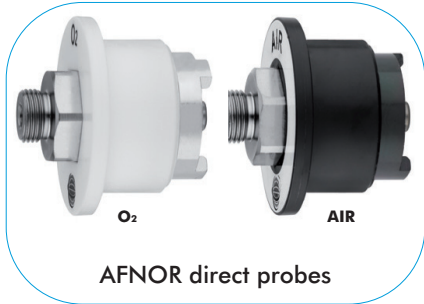


# RAIL MOUNTING SYSTEMS

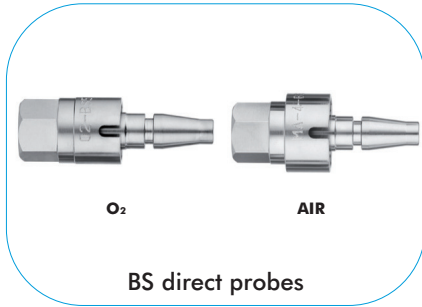


Others standards available upon request.

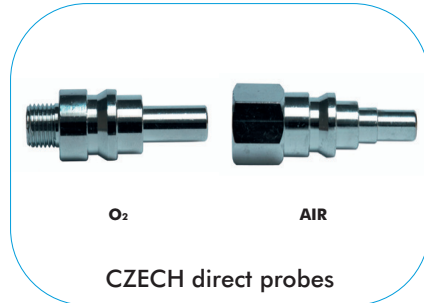
# DIRECT PROBES



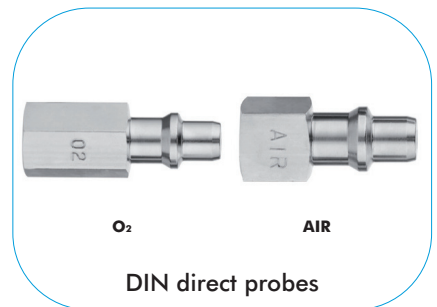
AFNOR direct probes



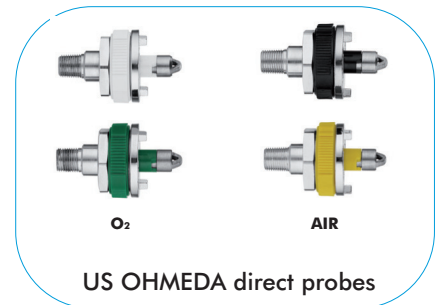
BS direct probes



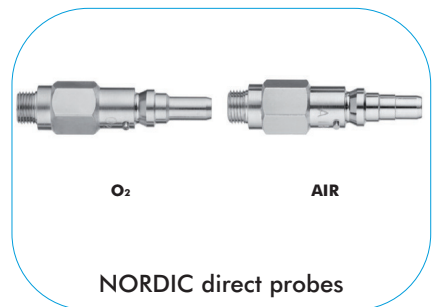
CZECH direct probes



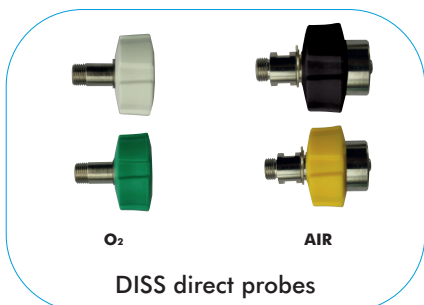
DIN direct probes



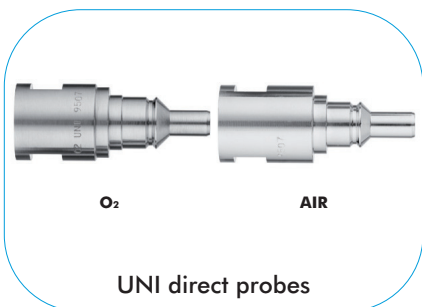
US OHMEDA direct probes



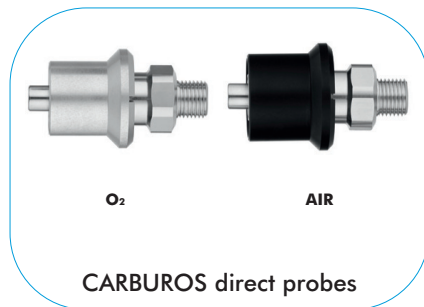
NORDIC direct probes



DISS direct probes



UNI direct probes



CARBUROS direct probes

Others standards available upon request.

# RTM3

The RTM3 flowmeter with floating ball is used to adjust and measure the flow of a gas that is to be delivered to patients through the respiratory tract. The RTM3 should be connected to a source of pressured gas on the wall either using a direct probe or a rail mounting system. It must be fitted at its outlet either with a humidifier/nebulizer or with an outlet tubing nipple.

## Main technical features:

Medical device of glass Ila.

In compliance with the EN ISO 15002: 2008 standard.

Inlet pressure : 4.5 bar +/- 0.5 bar (O<sub>2</sub>)  
4.5 bar +/- 0.5 bar (Air)

- **Flowmeter with compensated pressure** ensuring perfect flowrate stability and accuracy. The scale working pressure is the same as the pressure of the network so that the scale is not affected by any counter-pressure.
- **New type of "cartridge" knob**, extremely reliable, easy-to-clean and ensuring an optimized adjustment. Perfect tightness of the knob thanks to its polyamide seat.

*The knob was tested under pressurized working conditions during more than 10,000 cycles (which corresponds to 5 openings / closings every day during more than 5 years) without showing any leakage after closing. This allows us to guarantee the closing of the knob during 5 years without any leakage.*

- **Monoblock scale cover made of polyamide** for a higher sturdiness and a greater safety. The inopportune unscrewing of the monoblock scale cover is not possible. Patients have no access to the scale.
- **Expanded scale** providing higher reading accuracy for low flowrates (only for 05 l/min and 15 l/min RTM3 flowmeters).
- **Filter at the scale inlet** protecting the device against any gas network impurities and thus ensuring the protection of both the patient and the flowmeter.
- Body made of nickel-plated brass, very strong.
- Flowmeter MRI compatible.
- Normative information (gas name, CE marking, signs related to the use of the device) are mentioned on a self-adhesive ring for a better reading and immediate identification of a TM device. The identification ring is protected against tarnishing and wear & tear thanks to the monoblock cover.
- **A unit serial number is engraved on the body of each flowmeter** ensuring its identification and traceability. 8 digits number indicating the manufacturing year and month as well as the unit serial number of the device.

## Many versions available:

Available gases & flowrates:

- OXYGEN & MEDICAL AIR: 1.5l/min, 5l/min, 15l/min, 30l/min
- CO<sub>2</sub>: 12l/min
- CARBOGEN: 15l/min

- Inlets: 12x100F - 1/4G M - 1/8NPT F - 3/8"BSP F.
- Outlets: 12x125 M - 9/16" M - 1/2" BS F - 1/4G M.
- Available configurations: Single, Twin and DUO.
- Available connections to the wall outlet: Direct probe or Rail mounting system.
- Standards: AFNOR (French Standard) - BS (British Standard) DIN (German Standard) - US OHMEDA DIAMOND (American standard) - NORDIC (Scandinavian Standard) UNI (Italian Standard) - DISS (American Standard).
- Weight (without direct probe): 275 g.
- Dimensions (without direct probe):  
Height 145 mm x width 35 mm x depth 70 mm.

## Use, cleaning and maintenance:

The RTM3 flowmeter must be connected vertically. Then just open the knob and adjust the position of the floating ball according to the required flowrate (reading in the middle of the ball).

Clean the outside of the device with water and soap. Rinse and dry. If using disinfecting products please check their compatibility with plastics. Do not lay under water.

Device to be serviced every 1 to 3 years according to intensive use, if any.

## Accessories:

- Tubing nipple (1 part) or tubing nipple (2 parts) ❶
- Switch or Flow-Switch ❷
- Humidifier: CCO model (250 ml) or TMS model (500ml) ❸





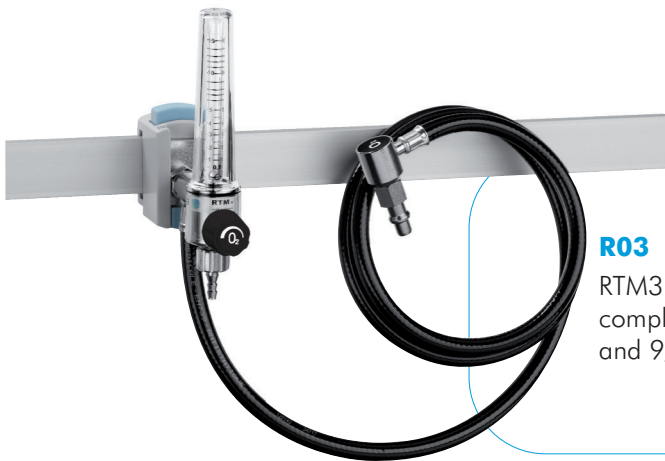
**R01**

RTM3 O<sub>2</sub> 15 l/min mounted with BS direct probe and 9/16" outlet tubing nipple



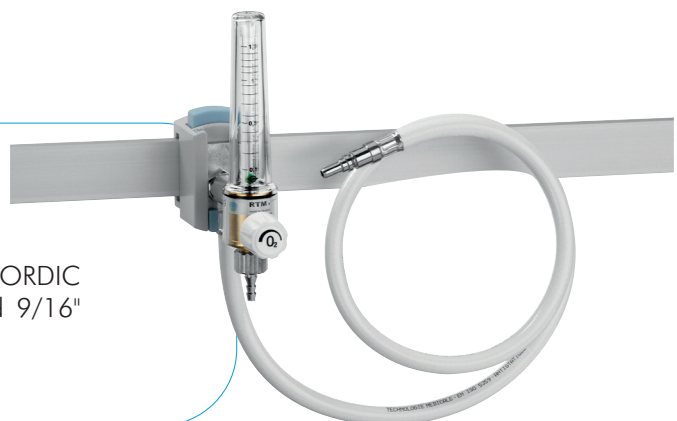
**R02**

RTM3 O<sub>2</sub> 05 l/min mounted with DIN direct probe and 250 ml CCO humidifier



**R03**

RTM3 O<sub>2</sub> 15 l/min mounted with DIN complete rail mounting system (neutral) and 9/16" outlet tubing nipple



**R04**

RTM3 O<sub>2</sub> 1.5 l/min mounted with NORDIC complete rail mounting system and 9/16" outlet tubing nipple



**R05**

RTM3 O<sub>2</sub> 15 l/min mounted with UNI direct probe and 500 ml TMS humidifier

**R06**

Twin RTM3 O<sub>2</sub> 15-30 l/min mounted with AFNOR direct probe and 12 x 125 outlet tubing nipples



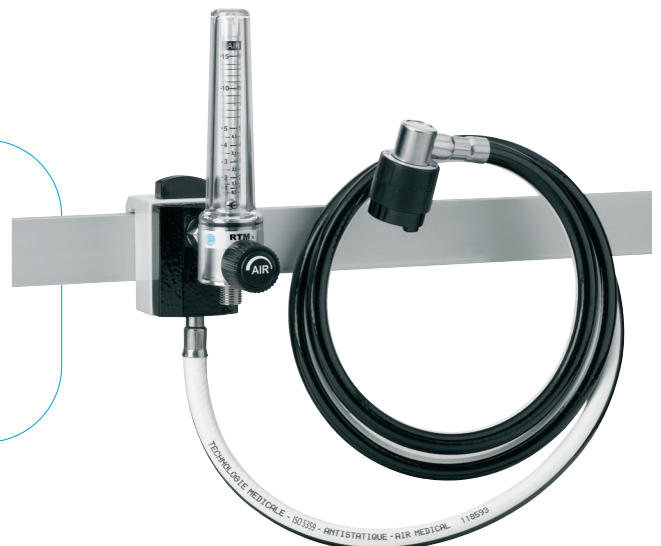
**R07**

RTM3 AIR 05 l/min mounted with BS direct probe and 1/2" BS outlet tubing nipple



**R08**

RTM3 AIR 15 l/min mounted with AFNOR complete rail mounting system (with metal clamp)



## RTM3 DUO FLOWMETER

### Patented model

Double outlet integrated in the body of the flowmeter:

- ▶ One horizontal outlet tubing nipple;
- ▶ One vertical central threaded outlet to connect a humidifier (outlet thread 12x125 M and 9/16" M available).

Thanks to this DUO system there is no need to screw and unscrew the outlet tubing nipple or the humidifier.

The saving of time is really appreciated compared to a standard flowmeter and the risk of losing the nipple is avoided.

The user can choose between 3 positions and can switch from one position to another without removing the nipple or the humidifier.

- ▶ **1<sup>st</sup> position:** the gas flow is delivered through the nipple.
- ▶ **2<sup>nd</sup> position:** the gas flow is cut off. Parking position.
- ▶ **3<sup>rd</sup> position:** the gas flow goes through the vertical central outlet to which you can connect either a CCO humidifier (250 ml) or a TMS humidifier (500 ml) or any other model (single-use humidifier, nebulizer).

Also available with a complete rail mounting system.



### R09

RTM3 DUO O<sub>2</sub> 15 l/min with AFNOR direct probe

To convert the standard RTM3 flowmeters into DUO flowmeters the solution is :

## TM FLOW-SWITCH OR SWITCH

- ▶ **Flow-Switch: model with ring** (R10)
- ▶ **Switch: model with knob** (R11)

Both Flow-Switch and Switch can be screwed onto any standard flowmeter. They enable you to deliver a gas flow either through the outlet tubing nipple or through a humidifier.

Available with 12x125 or 9/16" threaded inlet and outlet.







### R10

### R11





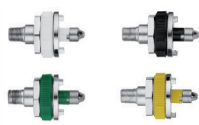



AFNOR French Standard		RTM3 FLOWMETERS WITH FLOATING BALL					
OXYGEN (O <sub>2</sub> )	Flowrates l/min	Single	Single	Single	Single	Twin	DUO
MEDICAL AIR		1.5	05	15	30	15-15	15
Inlet thread: 12 x 100 F	Outlet thread: 12x125M	<b>17579</b> X	<b>14801</b> 14696	<b>14803</b> 14683	<b>14805</b> 14685	<b>14811</b> 14691	<b>14815</b> 14693
	Outlet thread: 9/16" M	<b>17587</b> X	<b>14851</b> 14709	<b>14855</b> 14713	<b>14859</b> 14717	<b>14866</b> 14724	<b>14873</b> -
Inlet thread: 1/4G M	Outlet thread: 12x125M	<b>17610</b> X	<b>14800</b> 14680	<b>14802</b> 14682	<b>14804</b> 14684	<b>14810</b> 14690	<b>14814</b> -
	Outlet thread: 9/16" M	<b>17591</b> X	<b>14849</b> 14707	<b>14853</b> 14711	<b>14857</b> 14715	<b>14865</b> 14723	<b>14871</b> -
Mounted with AFNOR direct probe 	Outlet thread: 12x125M	<b>17581</b> X	<b>14030</b> 13883	<b>14038</b> 13891	<b>14046</b> 13899	<b>14071</b> 13924	<b>14078</b> 13928
	With nipple*: 12 x 125	<b>17583</b> X	<b>14032</b> 13885	<b>14040</b> 13893	<b>14048</b> 13901	<b>14073</b> 13926	<b>X</b> X
	Outlet thread: 9/16" M	<b>17588</b> X	<b>14130</b> 13968	<b>14134</b> 13972	<b>14138</b> 13976	<b>14150</b> 13988	<b>14155</b> -
	With nipple*: 9/16" M	<b>17589</b> X	<b>14131</b> 13969	<b>14135</b> 13973	<b>14139</b> 13977	<b>14151</b> 13989	<b>X</b> X
Mounted with AFNOR complete rail mounting system (polycarbonate clamp) 	Outlet thread: 12x125M	<b>17612</b> X	<b>14026</b> 13879	<b>14034</b> 13887	<b>14042</b> 13895	<b>14068</b> 13921	<b>-</b> -
	With nipple*: 12 x 125	<b>17614</b> X	<b>14028</b> 13881	<b>14036</b> 13889	<b>14044</b> 13897	<b>14070</b> 13923	<b>X</b> X
	Outlet thread: 9/16" M	<b>17592</b> X	<b>14128</b> 13966	<b>14132</b> 13970	<b>14136</b> 13974	<b>14148</b> 13986	<b>-</b> -
	With nipple*: 9/16" M	<b>17593</b> X	<b>14129</b> 13967	<b>14133</b> 13971	<b>14137</b> 13975	<b>14149</b> 13987	<b>X</b> X

BS British Standard		RTM3 FLOWMETERS WITH FLOATING BALL					
OXYGEN (O <sub>2</sub> )	Flowrates l/min	Single	Single	Single	Single	Twin	DUO
MEDICAL AIR		1.5	05	15	30	15-15	15
Inlet thread: 1/4G M	Outlet thread: 9/16" M	<b>17591</b> X	<b>14849</b> 14707	<b>14853</b> 14711	<b>14857</b> 14715	<b>14865</b> 14723	<b>14871</b> -
	Outlet thread: 1/2" BS F	<b>17574</b> X	<b>14752</b> 14659	<b>14754</b> 14661	<b>14756</b> 14663	<b>14760</b> 14667	<b>X</b> X
Mounted with BS direct probe 	Outlet thread: 9/16" M	<b>17594</b> X	<b>14398</b> 14278	<b>14404</b> 14284	<b>14410</b> 14290	<b>14424</b> 14304	<b>14430</b> -
	With nipple*: 9/16" M	<b>17595</b> X	<b>14399</b> 14279	<b>14405</b> 14285	<b>14411</b> 14291	<b>14425</b> 14305	<b>X</b> X
Mounted with BS complete rail mounting system (polycarbonate clamp) 	Outlet thread: 9/16" M	<b>17596</b> X	<b>14400</b> 14280	<b>14406</b> 14286	<b>14412</b> 14292	<b>14426</b> 14306	<b>14431</b> -
	With nipple*: 9/16" M	<b>17597</b> X	<b>14401</b> 14281	<b>14407</b> 14287	<b>14413</b> 14293	<b>14427</b> 14307	<b>X</b> X

\* Outlet tubing nipple in 2 parts, metal  
 - Available upon request only.  
 X Not available.  
 Please contact us for other flowmeter configurations.



DIN German Standard		RTM3 FLOWMETERS WITH FLOATING BALL						
OXYGEN (O <sub>2</sub> )		Flowrates l/min	Single	Single	Single	Single	Twin	DUO
MEDICAL AIR			1.5	05	15	30	15-15	15
Inlet thread: 1/4G M	DIN ISO	Outlet thread: 9/16" M	17591	14849	14853	14857	14865	14871
			X	14707	14711	14715	14723	-
	DIN NEUTRAL	-	-	17156	-	-	-	
Mounted with DIN direct probe 	DIN ISO	Outlet thread: 9/16" M	17598	14566	14570	14574	14586	14592
			X	14494	14498	14502	14514	-
		With nipple*: 9/16"	17599	14567	14571	14575	14587	-
	X	14495	14499	14503	14515	X		
	DIN NEUTRAL	Outlet thread: 9/16" M	-	18014	17154	-	17330	-
Mounted with DIN complete rail mounting system (polycarbonate clamp) 	DIN ISO	Outlet thread: 9/16" M	17600	14568	14572	14576	14588	14593
			X	14496	14500	14504	14516	-
		With nipple*: 9/16"	17601	14569	14573	14577	14589	X
	X	14497	14501	14505	14517	X		
	DIN NEUTRAL	Outlet thread: 9/16" M	-	18013	18012	-	-	-
	X	-	-	-	-	-		



US OHMEDA American Standard		RTM3 FLOWMETERS WITH FLOATING BALL						
OXYGEN (O <sub>2</sub> )		Flowrates l/min	Single	Single	Single	Single	Twin	DUO
MEDICAL AIR / ISO			1.5	05	15	30	15-15	15
Inlet thread: 1/4G M	Outlet thread: 9/16" M	17591	14849	14853	14857	14865	14871	
		X	14707	14711	14715	14723	-	
Inlet thread: 1/8NPT F	Outlet thread: 9/16" M	17706	14850	14854	14858	17080	14872	
		X	14726	14730	14734	-	-	
Mounted with US OHMEDA direct probe 	Outlet thread: 9/16" M	-	14917	14921	14925	-	-	
		-	17997	17999	-	-	-	
		X	14893	14897	14901	-	-	
	X	18001	18003	-	-	-		
	With nipple*: 9/16" M	-	14918	14922	14926	-	X	
	X	14894	14898	14902	-	X		
Mounted with US OHMEDA complete rail mounting system (polycarbonate clamp) 	Outlet thread: 9/16" M	-	14915	14919	14923	-	-	
		-	17996	17998	-	-	-	
		X	14891	14895	14899	-	-	
	X	18000	18002	-	-	-		
	With nipple*: 9/16" M	-	14916	14920	14924	-	X	
	X	14892	14896	14900	-	X		



\* Outlet tubing nipple in 2 parts, metal  
 - Available upon request only.  
 X Not available.  
 Please contact us for other flowmeter configurations.

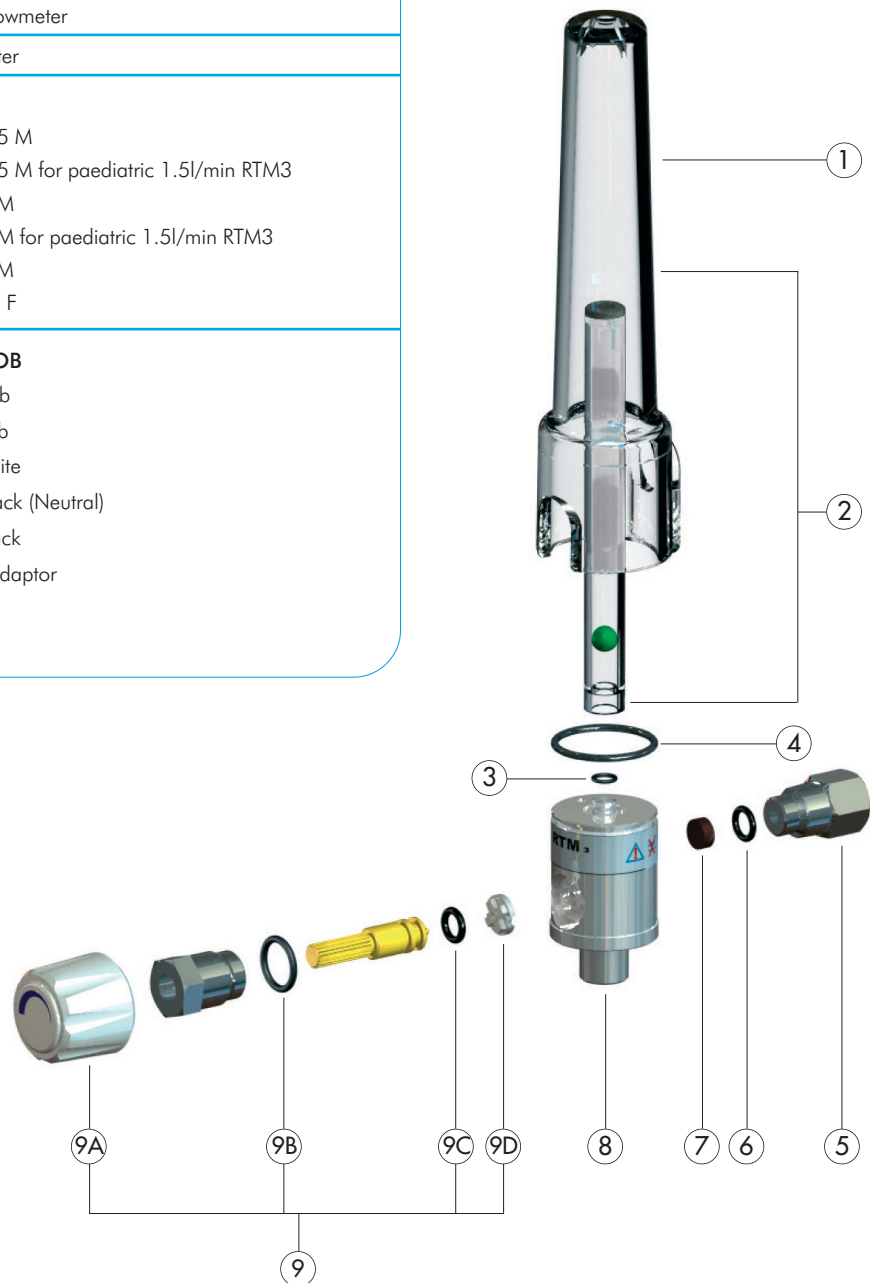


NORDIC Scandinavian Standard		RTM3 FLOWMETERS WITH FLOATING BALL					
OXYGEN (O <sub>2</sub> )	Flowrates l/min	Single	Single	Single	Single	Twin	DUO
MEDICAL AIR		1.5	05	15	30	15-15	15
Inlet thread: 1/4G M	Outlet thread: 9/16" M	17591	14849	14853	14857	14865	14871
		X	14707	14711	14715	14723	-
Inlet thread: 1/8NPT F	Outlet thread: 9/16" M	17607	14850	14854	14858	17080	14872
		X	14726	14730	14734	-	-
Mounted with NORDIC direct probe  	Outlet thread: 9/16" M	X	14638	14643	14648	-	-
		X	14611	14616	14621	-	-
	With nipple*: 9/16" M	17609	14639	14644	14649	-	X
		X	14612	14617	14622	-	X
Mounted with NORDIC complete rail mounting system (polycarbonate clamp)  	Outlet thread: 9/16" M	17602	14635	14640	14645	-	-
		X	14608	14613	14618	-	-
	With nipple*: 9/16" M	17603	14637	14642	14647	-	X
		X	14610	14615	14620	-	X

UNI Italian Standard		RTM3 FLOWMETERS WITH FLOATING BALL					
OXYGEN (O <sub>2</sub> )	Flowrates l/min	Single	Single	Single	Single	Twin	DUO
MEDICAL AIR		1.5	05	15	30	15-15	15
Inlet thread: 1/4G M	Outlet thread: 1/4G M	X	14770	14772	14774	14778	-
		X	14668	14670	14672	-	-
	Outlet thread: 9/16" M	17591	14849	14853	14857	14865	14871
		X	14707	14711	14715	14723	-
Mounted with UNI direct probe  	Outlet thread: 1/4G M	X	14945	14949	14953	17428	17431
		X	14933	14937	14941	-	17432
	With nipple*: 1/4G M	X	14946	14950	14954	-	-
		X	14934	14938	14942	-	-
	Outlet thread: 9/16" M	18005	18004	18006	18007	18008	18009
		X	-	-	-	-	-
Mounted with UNI complete rail mounting system (polycarbonate clamp)  	Outlet thread: 1/4G M	X	14947	14951	14955	-	-
		X	14935	14939	14943	-	-
	With nipple*: 1/4G M	X	14948	14952	14956	-	-
		X	14936	14940	14944	-	-
	Outlet thread: 9/16" M	X	-	18010	-	-	-
		X	-	-	-	-	-

\* Outlet tubing nipple in 2 parts, metal  
 - Available upon request only.  
 X Not available.  
 Please contact us for other flowmeter configurations.

Reference		Description
1	18783	Monobloc scale cover in polyamide
2	O <sub>2</sub>	<b>COMPLETE SCALE</b>
		17570 Complete scale 1.5 l/min (paediatric)
		16968 Complete scale 05 l/min 4.5 bar
		16969 Complete scale 15 l/min 4.5 bar
	AIR	16970 Complete scale 30 l/min 4.5 bar
		16965 Complete scale 05 l/min 4.5 bar
		16966 Complete scale 15 l/min 4.5 bar
	16967 Complete scale 30 l/min 4.5 bar	
3	11131	Gasket for scale bottom
4	11408	Gasket for scale cover
5	11174	Inlet adaptor 12 x 100F
	11178	Inlet adaptor 1/4G M
	11176	Inlet adaptor 1/8NPT F
	16922	Inlet adaptor 3/8G BSP F
6	11578	Inlet gasket for flowmeter
7	11029	Inlet flowmeter filter
8	<b>BODY ONLY</b>	
	11201	Body only 12x125 M
	17569	Body only 12x125 M for paediatric 1.5l/min RTM3
	11205	Body only 9/16" M
	17568	Body only 9/16" M for paediatric 1.5l/min RTM3
	11211	Body only 1/4G M
11216	Body only 1/2"BS F	
9	<b>COMPLETE KNOB</b>	
	16954	O <sub>2</sub> complete knob
9A	16955	Air complete knob
	11198	O <sub>2</sub> knob only, white
	17086	O <sub>2</sub> knob only, black (Neutral)
9B	11189	Air knob only, black
	11684	Gasket for inlet adaptor
9C	11234	Knob axis gasket
9D	11184	Knob seat





**Also available**



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