

CERTIFICATO N° 306SGQ06

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Si certifica che il
this is to certify that - on certifie que

Sistema di Gestione per la Qualità

Quality Management System – Système de Gestion pour la Qualité

messo in atto da
implemented by – mis en acte par

MD S.r.l

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

nella Sede Operativa di
Operative Unit – Siège Opérationnel

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

è conforme alla norma
is in compliance with the standard – est conforme à la norme

UNI EN ISO 9001-2015 (ISO 9001-2015)

per i seguenti Processi
concerning the following kinds of Processes – pour les suivants Processus

Progettazione e produzione di componenti per impianti di distribuzione dei gas medicinali e per vuoto e per impianti di evacuazione dei gas anestetici.

Design and manufacture of components for pipeline systems for compressed medical gases and vacuum and for anaesthetic gas scavenging disposal systems.

Conception et fabrication de composants pour systèmes de distribution de gaz médicaux comprimés et de vide e pour Systèmes d'évacuation de gaz d'anesthésie non réutilisables

Il presente Certificato è soggetto al rispetto delle condizioni stabilite dai Regolamenti per la Certificazione in vigore applicabili

This Certificate shall satisfy the requirements established in the Rules for the certification in force applicable

Ce certificat est soumis à la conformité avec les termes et conditions du règlement de certification applicable.

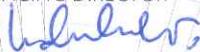
In caso di discordanza tra le lingue utilizzate nella traduzione del contenuto del presente certificato, fare riferimento alla lingua italiana

In cases of discrepancy between the languages used in the translation of the content of this certificate, please refer to the Italian language

En cas de divergence entre les langues utilisées pour la traduction du contenu de ce certificat, veuillez vous référer à la langue italienne

L'AMMINISTRATORE DELEGATO

MANAGING DIRECTOR



Dr. Ing. Roberto Cusolito

Data di Prima Emissione

Forst Issue Date

2011-10-10

Data di Rinnovo

Renewal Date

2020-11-19

Data di Scadenza

Expiration Date

2023-06-05

Settore IAF 17



SGQ N° 023A

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

CERTIFICATO N° 306DM09

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Sistema di Gestione per la Qualità

Quality Management System - Système de Gestion pour la Qualité

messo in atto da
implemented by - mis en acte par

MD S.r.l

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

nella Sede Operativa di
Operative Unit - Siège Opérationnel

Via Guido Rossa, 22/c – IT 30037 SCORZE' (VE)

è conforme alla norma
is in compliance with the standard - est conforme à la norme

UNI CEI EN ISO 13485-2016 (ISO 13485-2016)

per i seguenti Processi
concerning the following kinds of Processes - pour les suivants Processus

Progettazione e produzione di componenti per impianti di distribuzione dei gas medicinali e per vuoto e per impianti di evacuazione dei gas anestetici.

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L'AMMINISTRATORE DELEGATO

MANAGING DIRECTOR



Dr. Ing. Roberto Cusolito

Data di Prima Emissione

First Issue Date

2005-12-01

Data di Rinnovo

Renewal Date

2020-11-19

Data di Scadenza

Expiration Date

2023-06-05



SGQ N° 023A

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

Notified Body n° 0426



ITALCERT S.r.l.
viale Sarca, 336 - IT 20126 MILANO MI
tel. +39 0266104876 - fax +39 0266101479
E-mail italcert@italcert.it

CERTIFICATE N° 062-03-00-DM

(in compliance with Annex II of the Directive 93/42/EEC)

ITALCERT

certifies that

Full Quality Assurance System
applied for the design, manufacture and final inspection
of “Medical Devices” - MD -

by the manufacturer



MD S.r.l.

Via Guido Rossa, 22/c - 30037 SCORZÈ (VE) - ITALY

Digitally signed by Ciohanu Sergiu,
Date: 2021.09.06 15:32:17 EEST
Reason: MoldSign Signature
Location: Moldova

in the headquarters located in

Via Guido Rossa, 22/c
30037 SCORZÈ (VE) - ITALY

complies with the requirements stated in

Directive 93/42/EEC - Annex II (excluding point 4)

and authorizes the same manufacturer to mark

CE 0426

in compliance with the criteria defined in Annex XII of the Directive 93/42/EEC
the MD reported in Annex 1 of this Certificate

dr. ing. Roberto Cusolito

A blue ink signature of Roberto Cusolito.

MANAGING DIRECTOR

First Issue date
2006-05-24

Renewal date
2019-05-24

Expire date
2024-05-23

This certificate must be published only in integral form and accompanied by its Annex 1.
This certificate is the English translation of the certificate n°062-03-00-DM issued by ITALCERT Srl in Italian language.
In case of discrepancy you must refer to the original certificate issued in Italian language.

Annex 1 to the Certificate n° 062-03-00-DM

- page 1 of 2 -

Active medical device intended to administer and/or remove medicines, body liquids or other substances to or from the body

- Terminal units for medical gas and vacuum pipeline systems (class IIb)
 - PF-01xx-yyyy Base blocks for terminal units for medical gas pipeline systems
 - PF-02xx-yyyy Outlets for terminal units for medical gas pipeline systems
 - PF-06xx-yyyy Probes for terminal units for medical gas pipeline systems
 - PF-36xx-yyyy Doublers for terminal units for medical gas pipeline systems
 - KT-02xx-yyyy Maintenance kits for terminal units
 - PF-34xx-yyyy Pre-installed terminal units boxes
 - PF-66xx-yyyy Hose assemblies
 - KT-01xx-yyyy Maintenance kits for base blocks

- Second stage pressure regulators for medical gas pipeline systems (class IIb)
 - PF-05xx-yyyy / PF-37xx-yyyy Line pressure regulators for medical gas pipeline systems
 - KT-05xx-yyyy / KT-37xx-yyyy Maintenance kits for line pressure regulators
 - PF-55xx-yyyy High flow line pressure regulators
 - KT-55xx-yyyy Maintenance kits for high flow line pressure regulators
 - PF-44xx-yyyy Pre-assembled cabinets for second stage pressure regulation / line pressure stabilization and regulation cabinets

- Terminal units for type 1 AGSS (Anaesthetic gas scavenging systems) (class IIa)
 - PF-02Ex-yyyy Outlets for terminal units for AGSS
 - PF-01Ex-yyyy Base blocks for terminal units for AGSS
 - PF-06Ex-yyyy Probes for terminal units for AGSS
 - KT-02Ex-yyyy Replacement kits for terminal units for AGSS
 - PF-76xx-yyyy Accessories for AGSS

- Flow-meters for connection with terminal units of medical gas pipeline systems (class IIa)
 - PF-26xx-yyyy Flow meters
 - PF-27xx-yyyy Humidifiers for flow meters
 - PF-57xx-yyyy Flow selectors

- Medical suction devices
 - PF-38xx-yyyy Vacuum regulators with collection for collection jar or hose barb fitting (class IIa)
 - PF-50xx-yyyy Vacuum regulator – Probe – Flexible hose kit – Hose barb fitting/collection jar – filter (class IIb)

- Shut-off area valves and Vacuum control units (class IIb)
 - PF-03xx-yyyy Shut-off area valves for medical gases and vacuum
 - PF-35xx-yyyy Vacuum control units
 - PF-45xx-yyyy Area valves pre-assembled cabinets
 - PF-46xx-yyyy Shut off valves pre-assembled cabinets for fire control
 - PF-48xx-yyyy Shut off line valves pre-assembled cabinets
 - PF-49xx-yyyy Medical gas distribution system management cabinet
 - PF-61xx-yyyy Shut-off area valves for medical gases and vacuum
 - PF-64xx-yyyy AVSU (Area Valve Service Unit)
 - KT-61xx-yyyy Maintenance kits for shut-off area valves
 - PF-74xx-yyyy Area shut-off valves for compressed medical gases and vacuum
 - KT-74xx-yyyy Connecting kits for area shut-off valves PF-74xx-yyyy
 - KT-76xx-yyyy Maintenance kits for area shut-off valves PF-74xx-yyyy

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Annex 1 to the Certificate n° 062-03-00-DM

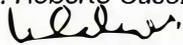
- page 2 of 2 -

- High pressure systems (class IIb)
 - PF-40xF-yyyy Pigtails for cylinders
 - PF-40xP-yyyy Pigtails for cylinder bundles
 - PF-40xT-yyyy High pressure flexible connections
 - PF-42xy-zzzz Cylinder manifolds

- First stage regulation devices (class IIb)
 - PF-43xx-yyyy First stage regulators for medical gas cylinder manifolds
 - KT-43xx-yyyy Maintenance kits for first stage pressure regulators
 - PF-51xx-yyyy Automatic change-over decompression units for medical gases
 - PF-52xx-yyyy Automatic change-over
 - PF-53xx-yyyy Emergency decompression units for medical gases
 - PF-62xx-yyyy First stage regulators for medical gas cylinder manifolds
 - KT-62xx-yyyy Maintenance kits for first stage pressure regulators
 - PF-70xx-yyyy High-flow manual change-over safety decompression station for medical gases

- Double-stage regulation devices (class IIb)
 - PF-54xx-yyyy Double-stage decompression units for medical gases
 - PF-56xx-yyyy Double-stage emergency decompression units for medical gases
 - PF-59xx-yyyy HTM 02-01 automatic manifolds for medical gases
 - PF-60xx-yyyy HTM 02-01 emergency reserve manifolds for medical gases

Milan, 2019-05-24

dr. ing. Roberto Cusolito

Managing Director



HTM 02-01 Automatic Manifold

Basic solution and amendment

IDENTIFICATION

- ▶ Two-stage-regulation, micro-processor driven, automatic manifold control panel for medical gas pipeline systems
- ▶ Fully compliant with HTM 02-01 and CE marked according to 93/42/EC directive (medical devices)
- ▶ First stage and second stage regulators specifically designed and tested for medical gases (in compliance with ISO 10524-2)
- ▶ Fail-safe normally-open (NO) solenoid valves for gas supply in case of power failure
- ▶ 24 V AC control system with RS485 interface for alarm signals reporting
- ▶ Painted stainless steel cabinet with piston-assisted opening system door

CE MARKING

Notified body: 0426
CE marking in risk class II B in accordance with Directive 93/42/EEC

REFERENCE STANDARD

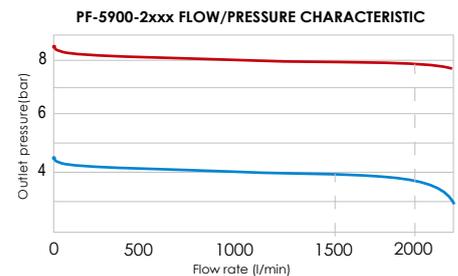
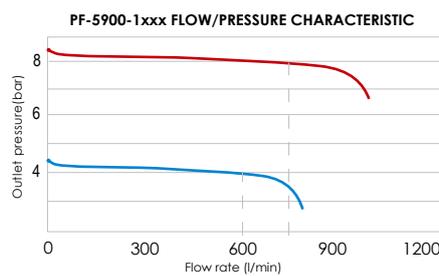
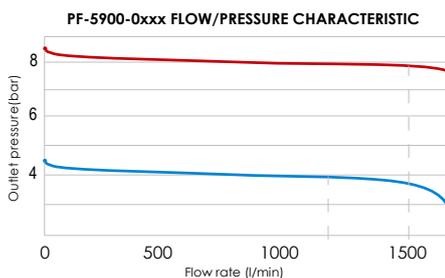
- HTM 02-01:** "Medical gas pipeline systems"
- ISO 10524-2:** "Pressure regulators for use with medical gases- Part 2: Manifold and line pressure regulators"
- ISO 7396-1:** "Medical gas pipeline systems - Part 1: Pipeline systems for compressed medical gases and vacuum"
- ISO 15001:** "Anaesthetic and respiratory equipment. Compatibility with oxygen"

* Validity of the standards is referred to the current year



KEY:

- $P_{out} = 4.3$ bar
- $P_{out} = 8.5$ bar (surgical air)
- — — Max flow rate

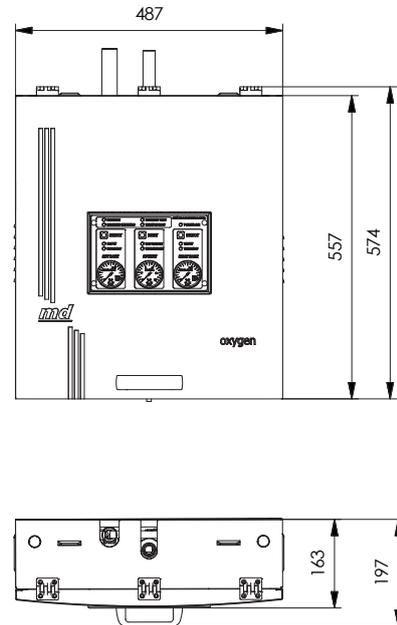
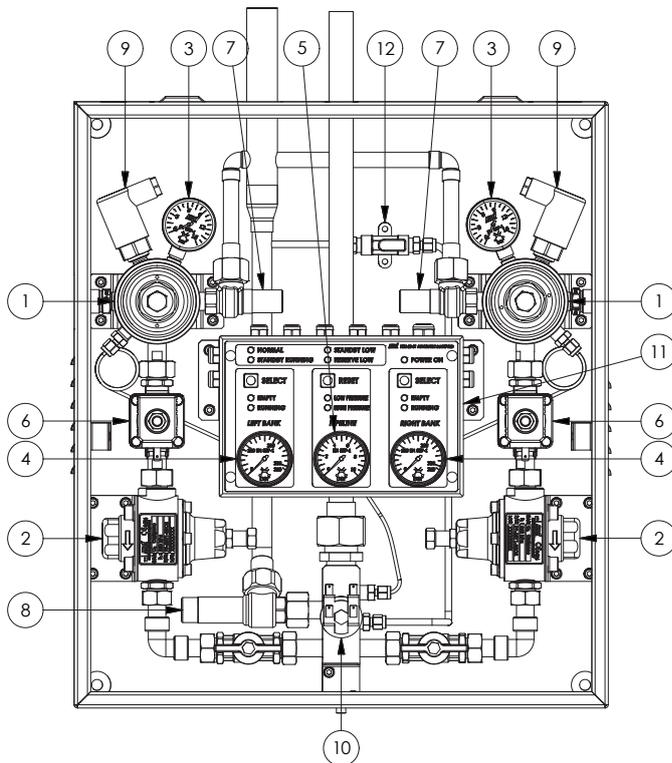




HTM 02-01 Automatic Manifold

Basic solution and amendment

DIMENSIONS



KEY:

- 1. 1st stage pressure regulator
- 2. 2nd stage pressure regulator
- 3. Intermediate pressure gauge
- 4. HP manifold pressure gauge
- 5. Pipeline pressure gauge
- 6. NO (Normally Open) solenoid ball valve
- 7. 1st stage safety valve
- 8. Pipeline safety valve
- 9. Manifold pressure switch
- 10. Pipeline low/high pressure switch
- 11. Manifold control panel 24 V AC
- 12. By-pass valve

- ▶ Available in 3 versions: 2000, 1000 and 650 l/min (2400, 1200 and 800 l/min for Air 7 bar)
- ▶ Inlet max pressure: 230 bar
- ▶ Cylinder bank pressure switch calibration: 11 bar
- ▶ Low/High pressure calibration: 3.7 bar / 5.0 bar (6.5 bar / 10.5 bar for Air 7 bar)
- ▶ Solenoid valves: NO (Normally Open); PN25; DN 11; 24 VAC
- ▶ 1st and 2nd stage regulators inlet degree of filtration: ≤ 24 µm

- ▶ 1st stage safety valve opening pressure: 14 bar
- ▶ Pipeline safety valve opening pressure: 5.3 bar (11.0 bar for Air 7 bar)
- ▶ Storage and working temperature: -20 °C ÷ +60 °C
- ▶ Inlet pressure gauges precision class and scale: 2.5; 0 ÷ 250 bar (0 ÷ 100 bar for N₂O and CO₂)
- ▶ Outlet pressure gauge precision class and scale: 2.5; 0 ÷ 10 bar (0 ÷ 16 bar for Air 7 bar)
- ▶ Cabinet in white painted AISI 430 stainless steel

| | CODE | | | GAS | PACKAGE | | |
|---------------|----------------|-----------------|------------------------------------|-----|--------------|------|----|
| | 2000 l/min | 1000 l/min | 650 l/min | | pack | cm | kg |
| PF-5900-20O2 | PF-5900-00O2 | PF-5900-10O2 | Oxygen | box | 55 x 55 x 25 | 26.5 | |
| PF-5900-20AC | PF-5900-00AC | PF-5900-10AC | Medical Air MA4 | box | 55 x 55 x 25 | 26.5 | |
| PF-5900-2N2O | PF-5900-0N2O | PF-5900-1N2O | Nitrous Oxide | box | 55 x 55 x 25 | 26.5 | |
| PF-5900-2CO2 | PF-5900-0CO2 | PF-5900-1CO2 | Carbon Dioxide | box | 55 x 55 x 25 | 26.5 | |
| PF-5900-2AC8* | PF-5900-0AC8** | PF-5900-1AC8*** | Air for Driving Surgical Tools MA7 | box | 55 x 55 x 25 | 26.5 | |

* flow rate: 2400 l/min
 ** flow rate: 1200 l/min
 *** flow rate: 800 l/min
 H590x.2018.01



Medical Gas Plants



Stainless Steel



Electrostatic Painted

Electrostatic Painted

| Explanation | Under Plaster Version Model No | On Plaster Version Model No |
|-----------------------|--------------------------------|-----------------------------|
| With 1 gas w/o alarm | GZ71.58 | GZ71.68 |
| With 1 gas with alarm | GZ71.59 | GZ71.69 |
| With 2 gas w/o alarm | GZ71.60 | GZ71.70 |
| With 2 gas with alarm | GZ71.61 | GZ71.71 |
| With 3 gas w/o alarm | GZ71.62 | GZ71.72 |
| With 3 gas with alarm | GZ71.63 | GZ71.73 |
| With 4 gas w/o alarm | GZ71.64 | GZ71.74 |
| With 4 gas with alarm | GZ71.65 | GZ71.75 |
| With 5 gas w/o alarm | GZ71.66 | GZ71.76 |
| With 5 gas with alarm | GZ71.67 | GZ71.77 |

Stainless Steel

| Explanation | Under Plaster Version Model No | On Plaster Version Model No |
|-----------------------|--------------------------------|-----------------------------|
| With 1 gas with alarm | GZ71.83 | GZ71.88 |
| With 2 gas with alarm | GZ71.84 | GZ71.89 |
| With 3 gas with alarm | GZ71.85 | GZ71.90 |
| With 4 gas with alarm | GZ71.86 | GZ71.91 |
| With 5 gas with alarm | GZ71.87 | GZ71.92 |

Area Gas Control Panels

Description

Inspital Area Gas Control Unit is manufactured to provide isolation of individual floors of medical gases in the hospital. Area Gas Control Unit includes all features required by the EN ISO 7396-1 and HTM O2-O1 standards. Isolation may be required for installation, maintenance or in the case of an emergency

Classification

- Area Gas Control Unit is manufactured HTM O2-O1, HTM 2022, EN ISO 7396-1 and BS EN 15908.

Services

- Oxygen
- Nitrous Oxide
- Medical Air 400 kPa
- Surgical Air 700 kPa
- Medical Vacuum

Features

- Controls 1 to 5 gases, including vacuum
- Lockable covers with emergency access lock system
- Window on the cover enables the user to monitor the analog manometers without opening the covers
- Under plaster and on plaster types are available

Alarm Unit

- Local Area Alarm

Pressure Switches

- Pressure switches can be fitted inside the box to enable local monitoring.

Area Gas Control Panels With Second Stage Regulator

- Second stage pressure reducing from 10 bar to 7 bar or 4 bar
- Lockable covers with emergency access lock system
- Stainless steel valve box
- Double or single regulators option
- Under plaster and on plaster types are available

| Explanation | Under Plaster Version Model No | On Plaster Version Model No |
|-------------|--------------------------------|-----------------------------|
| With 1 gas | GZ71.83F | GZ71.88F |
| With 2 gas | GZ71.84F | GZ71.89F |
| With 3 gas | GZ71.85F | GZ71.90F |
| With 4 gas | GZ71.86F | GZ71.91F |
| With 5 gas | GZ71.87F | GZ71.92F |





High pressure flexible connections

IDENTIFICATION

- ▶ Flexible pigtail pipe for connection between cylinders and cylinder manifolds
- ▶ Flexible pigtail pipe for connection between cylinder manifolds, decompression stations and HP purge valves
- ▶ Gas-specific threaded inlet fitting in compliance with national standards
- ▶ Laser-marking of gas, production lot and product code



CE MARKING

Notified body: 0426
CE marking in risk class II B in accordance with Legislative Decree 24 February 1997, no. 46 "Implementation of Directive 93/42/EEC, concerning Medical Devices" and further modifications



REFERENCE STANDARD

ISO 21969: "High-pressure flexible connections for use with medical gas systems"

ISO 7396-1: "Medical gas pipeline systems - Part 1: Pipeline systems for compressed medical gases and vacuum"

HTM 02-01: "Medical gas pipeline systems"

ISO 15001: "Anaesthetic and respiratory equipment. Compatibility with oxygen"

* Validity of the standards is referred to the current year

- ▶ Gases: Oxygen, Air, N₂O, CO₂
- ▶ Storage and working temperature: -20 °C ÷ +60 °C
- ▶ Test pressure: 220 bar
- ▶ Cylinder pigtails pipe diameter: Ø= 8 x 2 mm
- ▶ HP flexible connection pipe: Ø= 10 x 2.5 mm



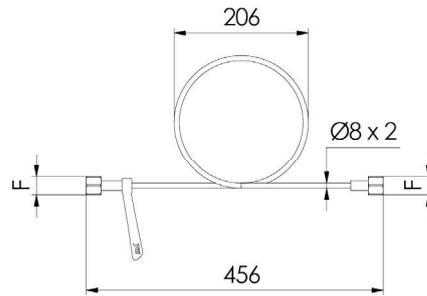


High pressure flexible connections

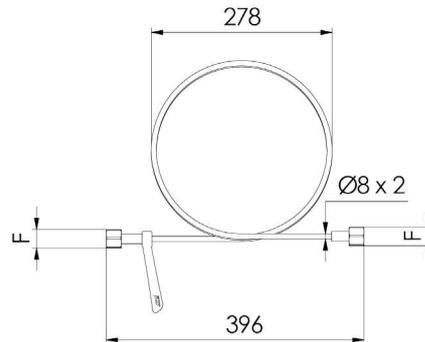


DIMENSIONS

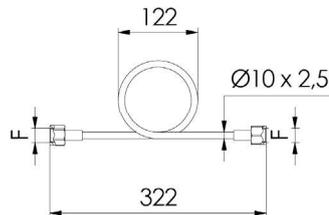
CYLINDER PIGTAILS PF-40UF-0yyy



CYLINDER PIGTAILS PF-40UF-2yyy



HP FLEXIBLE CONNECTION FOR MANIFOLD- DECOMPRESSION UNIT PF-40UT-0000



| CODE | TYPE | GAS | CONNECTIONS | | PERFORMANCE | | PACKAGING | | |
|--------------|------------------------|------------------|-----------------------------------|--------------------|----------------------|--------------------------------|-----------|-----|-----|
| | | | THREAD | REFERENCE STANDARD | WORKING PRESSURE bar | FLOW RATE/ PRESSURE DROP* | type | kg | |
| PF-40UF-0002 | Pigtail | O ₂ | W 21,7 x 1/14" F copper gasket | UNI 11144 | 200 | 5 m ³ /h 20 kPa | bag | 0.7 | |
| PF-40UF-00AC | Pigtail | Air | W 30 x 1/14" F copper gasket | UNI 11144 | 200 | 5 m ³ /h 20 kPa | | | |
| PF-40UF-0N2O | Pigtail | N ₂ O | G 3/8" F copper gasket | UNI 11144 | 60 | 5 m ³ /h 20 kPa | | | |
| PF-40UF-0CO2 | Pigtail | CO ₂ | W 27 x 2 F NBR 70 o-ring | ISO 5145 | 60 | 5 m ³ /h 20 kPa | | | |
| PF-40UF-000N | Pigtail | N | W 21,7 x 1/14" M copper gasket | UNI 11144 | 200 | 5 m ³ /h 20 kPa | | | |
| PF-40UF-2002 | Pigtail L= 2 m | O ₂ | W 21,7 x 1/14" F copper gasket | UNI 11144 | 200 | 5 m ³ /h 20 kPa | | | 1.1 |
| PF-40UF-20AC | Pigtail L= 2 m | Air | W 30 x 1/14" F copper gasket | UNI 11144 | 200 | 5 m ³ /h 40 kPa | | | |
| PF-40UF-2N2O | Pigtail L= 2 m | N ₂ O | G 3/8" F copper gasket | UNI 11144 | 60 | 5 m ³ /h 40 kPa | | | |
| PF-40UT-0000 | HP flexible connection | all gases | W 21,7 x 1/14" F copper gasket | - | 200 | 50 m ³ /h 80 kPa | | | 0.6 |

* Pressure drop measured at 1500 kPa pressure and @ specified flow rate, in compliance with reference standard ISO 21969, par. 6.2.5





DENTIFICATION

- ▶ Cylinder manifolds for connection of high pressure gas sources to the decompression station
- ▶ Modular racks from one to five cylinder seats
- ▶ Cylinders shut-off valves with non-return system (check valve)
- ▶ Galvanized and painted sheet metal frame
- ▶ Gas specific laser-marked plate indicating production lot and product code

CE MARKING

Notified body: 0426

CE marking in risk class II B in accordance with Legislative Decree 24 February 1997, no. 46 "Implementation of Directive 93/42/EEC, concerning Medical Devices" and further modifications

REFERENCE STANDARD

ISO 7396-1: "Medical gas pipeline systems - Part 1: Pipeline systems for compressed medical gases and vacuum"

HTM 02-01: "Medical gas pipeline systems"

ISO 15001: "Anaesthetic and respiratory equipment. Compatibility with oxygen"

* Validity of the standards is referred to the current year

- ▶ Gases: Oxygen, Air, N₂O, CO₂
- ▶ Storage and working temperature: -20 °C ÷ +60 °C
- ▶ Test pressure: 220 bar

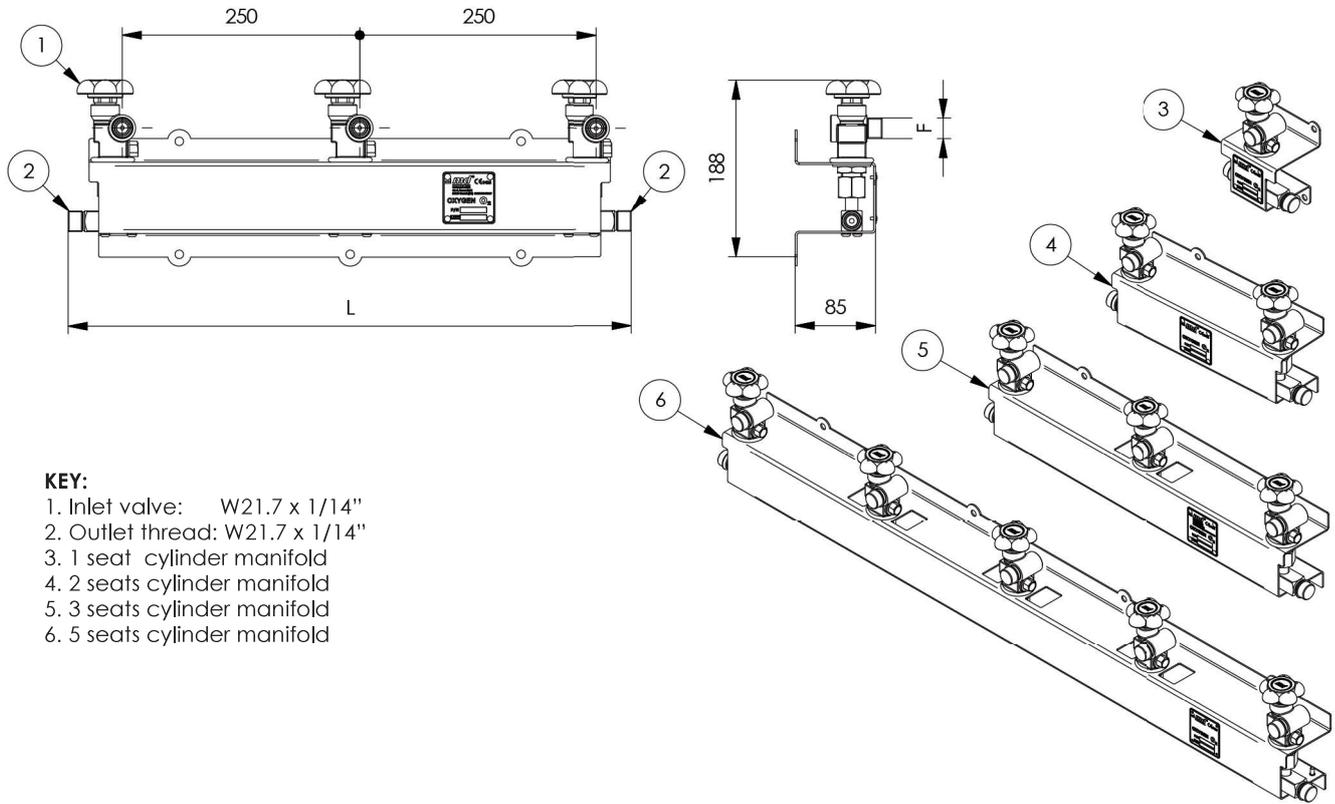
- ▶ Manifold pipe diameter: Ø=10 x 2.5 mm
- ▶ Cylinder manifolds inlet couplings: gas-specific
- ▶ Cylinder manifolds inlet/outlet fitting: W 21.7 x 1/14"





High pressure manifolds

DIMENSIONS



KEY:

- 1. Inlet valve: W21.7 x 1/14"
- 2. Outlet thread: W21.7 x 1/14"
- 3. 1 seat cylinder manifold
- 4. 2 seats cylinder manifold
- 5. 3 seats cylinder manifold
- 6. 5 seats cylinder manifold

| CODE | GAS | DIMENSIONS | | CONNECTIONS | | WORKING PRESSURE bar | PACKAGING | | |
|--------------|------------------|-----------------|------|---------------|--------------------|----------------------|---------------|--------------|-----|
| | | NUMBER OF SEATS | L mm | THREAD | REFERENCE STANDARD | | type | cm | kg |
| PF-42U1-00O2 | O ₂ | 1 | 120 | W21,7 x 1/14" | UNI 11144 | 200 | box | 11 X 22 X 16 | 2.0 |
| PF-42U1-00AC | Air | | | W30 x 1/14" | UNI 11144 | 200 | | | |
| PF-42U1-0N2O | N ₂ O | | | G 3/8" | UNI 11144 | 60 | | | |
| PF-42U1-0CO2 | CO ₂ | | | W27 x 2 | ISO 5145 | 60 | | | |
| PF-42U2-00O2 | O ₂ | 2 | 344 | W21,7 x 1/14" | UNI 11144 | 200 | | | |
| PF-42U2-00AC | Air | | | W30 x 1/14" | UNI 11144 | 200 | | | |
| PF-42U2-0N2O | N ₂ O | | | G 3/8" | UNI 11144 | 60 | | | |
| PF-42U2-0CO2 | CO ₂ | | | W27 x 2 | ISO 5145 | 60 | | | |
| PF-42U3-00O2 | O ₂ | 3 | 594 | W21,7 x 1/14" | UNI 11144 | 200 | | 11 X 22 X 65 | 6.0 |
| PF-42U3-00AC | Air | | | W30 x 1/14" | UNI 11144 | 200 | | | |
| PF-42U3-0N2O | N ₂ O | | | G 3/8" | UNI 11144 | 60 | | | |
| PF-42U3-0CO2 | CO ₂ | | | W27 x 2 | ISO 5145 | 60 | | | |
| PF-42U5-00O2 | O ₂ | 5 | 1094 | W21,7 x 1/14" | UNI 11144 | 200 | 11 X 22 X 115 | 8.0 | |
| PF-42U5-00AC | Air | | | W30 x 1/14" | UNI 11144 | 200 | | | |
| PF-42U5-0N2O | N ₂ O | | | G 3/8" | UNI 11144 | 60 | | | |
| PF-42U5-0CO2 | CO ₂ | | | W27 x 2 | ISO 5145 | 60 | | | |





High pressure accessories



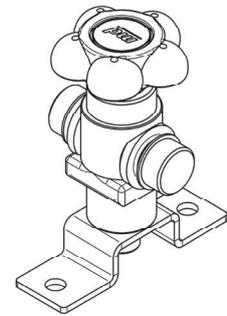
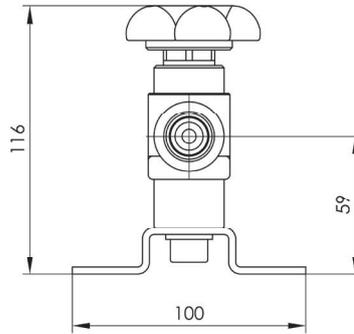
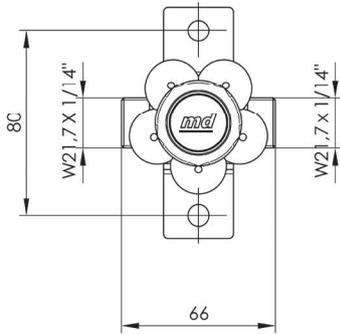
IDENTIFICATION

- ▶ Shut-off valve with spindle seal
- ▶ Inlet and outlet connection fitting: W 21.7 x 1/14" male
- ▶ Degreased for use with oxygen in compliance with ISO 15001
- ▶ Working pressure: P= 200 bar
- ▶ Available with fitting for pipe welding on inlet and outlet sides Ø 10 mm or Ø 13 mm (optional)
- ▶ Wall bracket

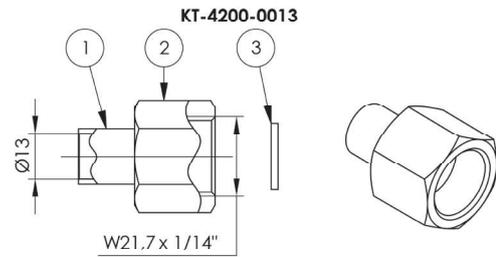
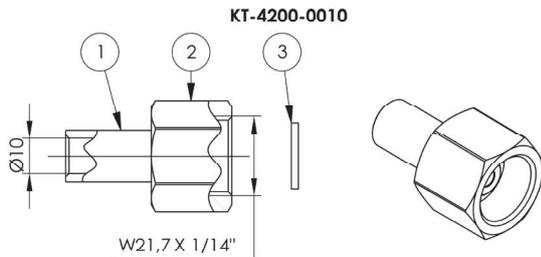


DIMENSIONS

HP SHUT-OFF VALVE



FITTINGS FOR PIPE WELDING



KEY:

1. Fitting for pipe welding
2. Nut
3. Copper gasket

HP SHUT-OFF VALVE

| CODE | DESCRIPTION | GAS | INLET/OUTLET FITTINGS | WORKING PRESSURE bar | PACKAGING | |
|--------------|-------------------|-----------|-----------------------|----------------------|-----------|-----|
| | | | | | type | kg |
| PF-4200-00EV | HP shut-off valve | All gases | W21.7 x 1/14" | 200 | bag | 0.7 |

FITTINGS FOR PIPE WELDING

| CODE | DESCRIPTION | PIPE Ø | WORKING PRESSURE bar | PACKAGING | |
|--------------|--|--------|----------------------|-----------|------|
| | | | | type | kg |
| KT-4200-0010 | Ø10 pipe welding kit (fitting, nut and gasket) | Ø10 | 200 | bag | 0.12 |
| KT-4200-0013 | Ø13 pipe welding kit (fitting, nut and gasket) | Ø13 | 200 | bag | 0.10 |





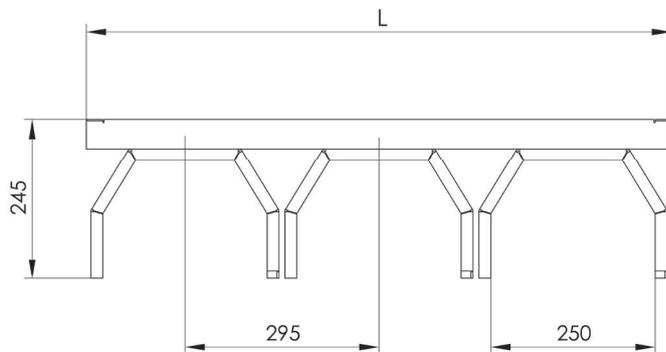
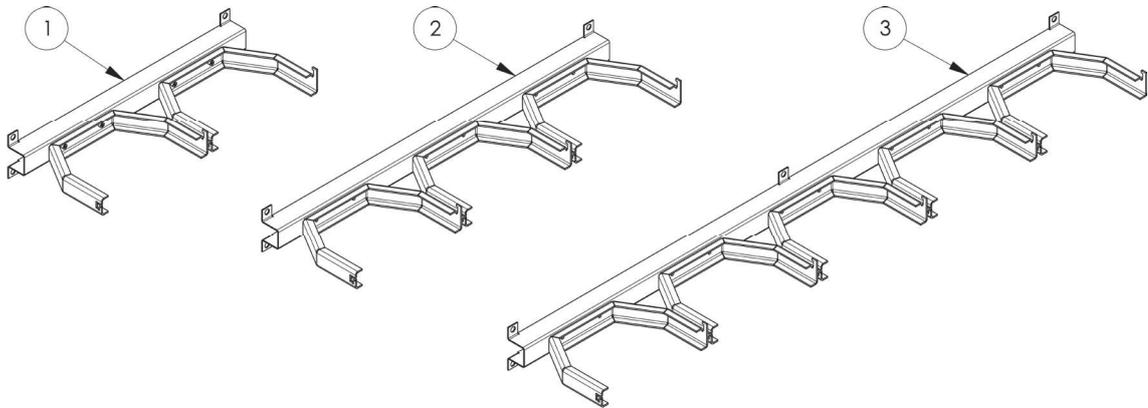
Cylinders racks



IDENTIFICATION

- ▶ Wall rack for holding gas cylinders
- ▶ Modular layout of elements; customization of number of cylinder seats (on request)
- ▶ Cold zinc coating for outdoor applications
- ▶ Chains for fastening cylinders in vertical position
- ▶ C section profile with holes for secure wall fixing

DIMENSIONS



KEY:

- 1. 2 seats wall rack
- 2. 3 seats wall rack
- 3. 5 seats wall rack

| CODE | # OF CYLINDERS | L mm | PACKAGING | |
|--------------|----------------|---------|-----------|-----|
| | | | type | kg |
| PF-3902-0000 | 2 | 570 | bag | 3.2 |
| PF-3903-0000 | 3 | 865 | bag | 4.7 |
| PF-3905-0000 | 5 | 1480 | bag | 7.7 |





High pressure manifolds application for cylinder groups



IDENTIFICATION

- ▶ Cylinder manifolds for connection of 2 high pressure gas sources
- ▶ Flag-styled brackets for wall fastening
- ▶ Cylinders shut-off valves with non-return system (check valve)
- ▶ Threaded inlets of specific gas valves according to national
- ▶ Support frame in painted steel
- ▶ Laser-marked plate indicating production lot and product code

CE MARKING

Notified body: 0426

CE marking in risk class II B in accordance with Legislative Decree 24 February 1997, no. 46 "Implementation of Directive 93/42/EEC, concerning Medical Devices" and further modifications.

REFERENCE STANDARD

ISO 7396-1: "Medical gas pipeline systems - Part 1: Pipeline systems for compressed medical gases and vacuum"

ISO 15001: "Anaesthetic and respiratory equipment. Compatibility with oxygen"

* Validity of the standards is referred to the current year

- ▶ Gases: Oxygen, Air, Medical Air
- ▶ Storage and working temperature: -20 °C ÷ +60 °C
- ▶ Test pressure: 220 bar

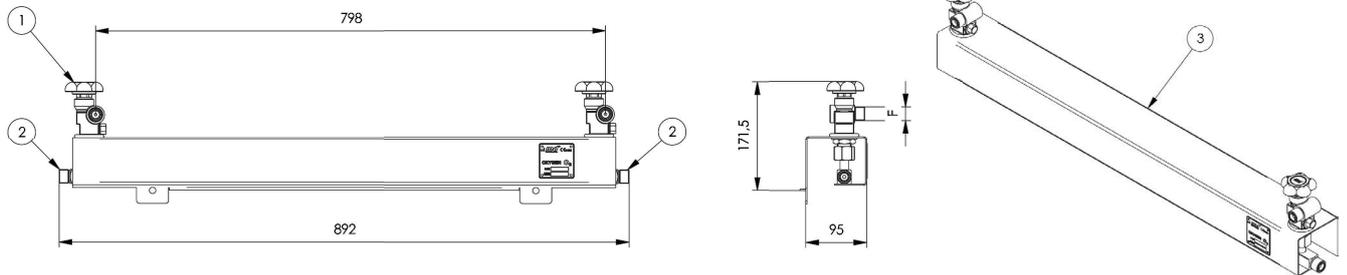
- ▶ Manifold pipe diameter: $\varnothing=10 \times 2.5$ mm
- ▶ Cylinder manifolds inlet couplings: gas-specific
- ▶ Cylinder manifolds inlet/outlet fitting : W 21.7 x 1/14"





High pressure manifolds & application for cylinder groups

DIMENSIONS

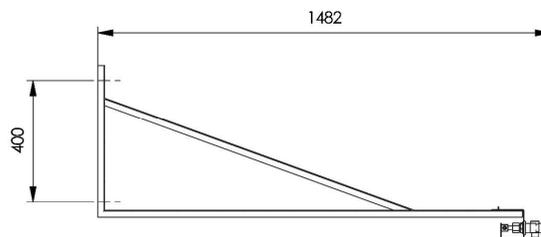
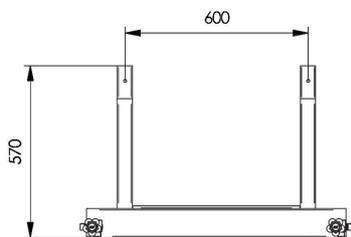


KEY:

- 1. Inlet valve with gas specific coupling
- 2. Outlet thread W21.7 x 1/14"
- 3. 2 sources manifold gas cylinders

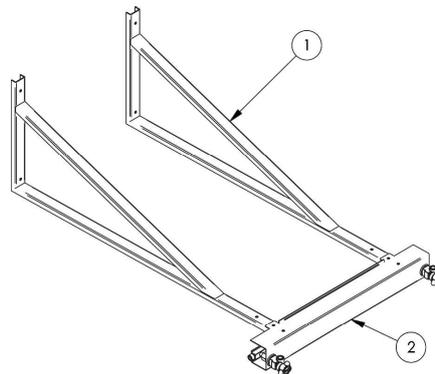
HIGH PRESSURE GAS MANIFOLDS – APPLICATION FOR CYLINDERS GROUPS

| CODE | GAS | NUMBER OF SEATS # | INLET | | WORKING PRESSURE bar | PACKAGING | | |
|--------------|----------------|-------------------|---------------------------|--------------------|----------------------|-----------|---------------|----|
| | | | INLET / OUTLET FITTINGS F | REFERENCE STANDARD | | ? type | cm | kg |
| PF-42U2-10O2 | O ₂ | 2 | W 21,7 x 1/14" | UNI 11144 | 200 | box | 11 X 22 X 115 | 6 |
| PF-42U2-10AC | Air | | W 30 x 1/14" | | | | | |



KEY:

- 1. Flag-styled brackets
- 2. 2 seats manifold for cylinders groups



KIT FLAG STYLED BRACKETS

| CODE | PACKAGING | |
|--------------|-----------|----|
| | ? type | kg |
| KT-4202-3000 | bag | 12 |

EXTENSION KIT FLAG STYLED BRACKETS

| CODE | PACKAGING | |
|--------------|-----------|----|
| | ? type | kg |
| KT-4202-3001 | bag | 4 |

