At the heart of the Diving Technology

Our history

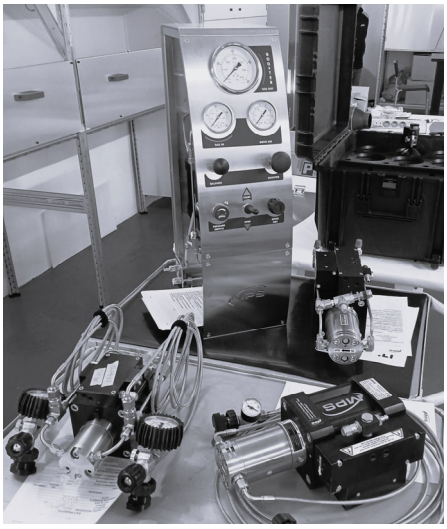
Company

MPS was born in 2000, from the mind and from the hands of Manlio Pagotto, with the aim of making more safe and simple the operations of mixing and filling with technical gas cylinders.

In 2001 he made the first mixing system (patent number ITUD20020057A1), which is followed by several model lines increasingly evolved up to the present.
Since 2004 MPS starts producing booster, with innovative solutions that make it unique and cutting-edge products, enclosed in a flawless design.

MPS is able to produce customized products to meet the needs of customers: we evolve to satisfy even the most demanding requests, simply ask!
"We create technology which is right for you"

We create technology which is right for *you*



Customer Support

With our distribution and sales network, we are able to respond in an efficient way to all requests. Support service and fast and effective maintenance.

Custom Development

We are able to develop customized projects according to the specific needs of the customer.

High Pressure

We organize workshops for all our distributors to have an efficient and professional network, able to replay to the most different requests

Your Strong Partner For your pressure needs

In addition to its proprietary range of **Air Driven Liquid Pump and Gas Booster equipments**, MPS creates custom-designed and engineered solutions to cover a wide range pressure systems. Therefore, we look to ourselves not as suppliers of components that measures technology, but rather as a competent partner, offering comprehensive solutions in close cooperation with our customers. Individually fitted and accurately aligned to each requirement.

No matter how demanding or complex your requirements may be, we design cost effective solutions. Our yardstick is zero defects.
As specialists in machining and high-precision turning we can produce your products according to specific drawings and take care of the entire life cycle of the product.
Thanks to our flexible production options we are able to supply prototypes of any dimensions.

We guide you with respect and fairness in the choice and customization of the best performing products for your needs and we grant you quick and reliable deliveries.

Content

PRODUCTS

- **Manual and pneumatic Gas Boosters**
- **Nitrox/Trimix Mixer for Ternary Breathing Gases**

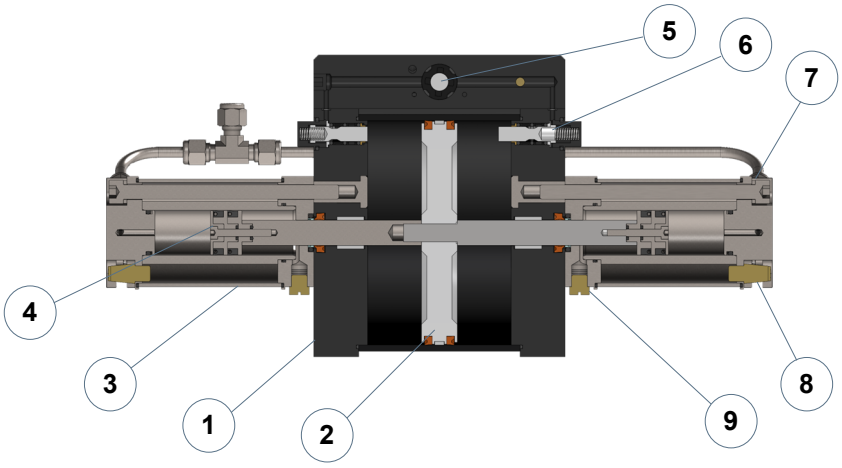
APPLICATIONS

- **CCR Divers**
- **Technical Divers**
- **Small Groups of Divers**

MPS products are designed for professional use, for military, technical diving and for the industrial sector.
The users of MPS products must be trained and certified on the use of equipment dedicated to oxygen.

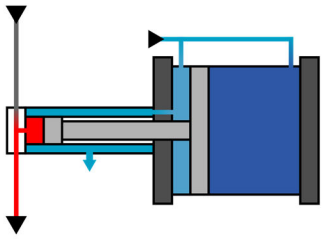
Gas Boosters Technology

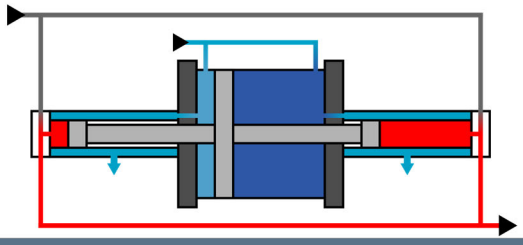
ID	DESCRIPTIONS
1	LOW PRESSURE CYLINDER
2	LOW PRESSURE PISTON
3	HIGH PRESSURE CYLINDER
4	HIGH PRESSURE PISTON
5	CONTROL VALVE
6	PILOT VALVE
7	COOLING SYSTEMS
8	SILENCER
9	SAFETY DRAIN

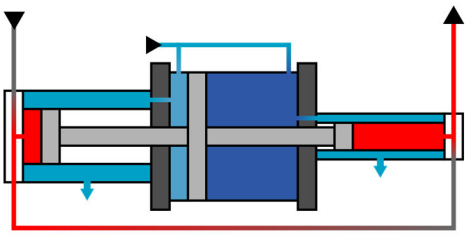


BENEFITS AND RECOMENDATIONS

MPS gas boosters offer the right solution for every application. As a result of the wide range of models it is possible to select the optimum booster for each application. Single Stage/Single Acting (SS), Single Stage/Double Acting (SD) or Double Stage/Double Acting (DD) can be used to achieve different operating pressures and flow capacities, they are suitable for different or stepped flow rates as well as for different maximum allowable operating pressures.
Thanks to wider drive size we can develop high volume flows.
The Gas Boosters can always be operated in any posistion.

SS1	
SINGLE STAGE	
SINGLE ACTING	
SINGLE DRIVE	
RATIO FROM 1:25 TO 1:100	
PRESSURE DESIGN UP TO 1000 bar (15,000 psi)	

SD1	
SINGLE STAGE	
DOUBLE ACTING	
SINGLE DRIVE	
RATIO FROM 1:25 TO 1:156	
PRESSURE DESIGN UP TO 1700 bar (25,000 psi)	

DD1	
DOUBLE STAGE	
DOUBLE ACTING	
SINGLE DRIVE	
RATIO FROM 1:2 TO 1:100	
PRESSURE DESIGN UP TO 1700 bar (25,000 psi)	

Coding system

MG	06	0025	SS	1	1	1	F	1	.0230

Ver-

MB Gas Booster
MG Gas Booster System
MM Mixer
MS Spider

Rating

03 3,000 psi (207 bar)
04 4,500 psi (310 bar)
05 5,000 psi (345 bar)
06 6,000 psi (414 bar)
10 10,000 psi (689 bar)

Ratio

0025 Ratio 1:25
0039 Ratio 1:39
0078 Ratio 1:78
2176 Ratio 1:21 / 1/76

Compression Type

SS Single Stage - Single Acting
SD Single Stage - Double Acting
DD Double Stage - Double Acting
DS Double Stage - Single Acting

Power Supply

1 Single Drive
2 Double Drive
3 Triple Drive
M Manual Lever
D Single Drive + Manual Lever
A 12 V DC
B 24 V DC

Drive Size

1 80 mm (Alluminium)
2 100 mm (Alluminium)
3 125 mm (Alluminium)
4 140 mm (Alluminium)
1 80 mm (Technopolymer)
2 100 mm (Technopolymer)
3 125 mm (Technopolymer)
4 140 mm (Technopolyper)

Stroke

1 40 mm
2 60 mm
3 120 mm
4 100 mm

High Pressure Size

D 12 mm
E 14 mm
F 16 mm
G 18 mm
H 20 mm
I 25 mm
J 30 mm
K 40 mm

System Solution

1 ABS Case 366x300x148 mm
2 ABS Case 464x366x176 mm
3 ABS Case 555x428x211 mm
4 ABS Case TROLLEY 555x445x258 mm
5 ABS Case 574x361x225 mm
6 ABS Case TROLLEY 585x361x238 mm
7 ABS Case 687x528x366 mm
8 ABS Case 816x540x426 mm
F SST Vertical Frame
T SST trolley Frame
O SST Horizontal Frame

Additional info

.0230 230 bar (3336 psi) Out Pressure
.0310 310 bar (4500 spi) Out Pressure

Product overview

Diving - Sport Line — C1 Light Pag. 10

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:25
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	8 cm^3 (0.49 inc^3)
FLOW	40 Nl/min ((1.41 scfm)
WEIGHT	6.0 Kg (13.23 lb) approx

Diving - Sport Line — C1 Pag. 11

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:25
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	8 cm^3 (0.49 in^3)
FLOW	40 Nl/min ((1.41 scfm)
WEIGHT	8.5 Kg (18.74 lb) approx

Diving - Sport Line — C1X Pag. 12

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:39
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 8 cm^3 (2 x 0,49 in^3)
FLOW	80 Nl/min ((2.82 scfm)
WEIGHT	8.0 Kg (17.64 lb) approx

Military - Sport Line — C1XM Pag. 13

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:39
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 8 cm^3 (2 x 0,49 in^3)
FLOW	80 Nl/min ((2.82 scfm)
WEIGHT	13.0 Kg (28.66 lb) approx

Diving - Sport Line — C2 Pag. 14

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:25
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	19 cm^3 (1.16 in^3)
FLOW	94 Nl/min ((3.32 scfm)
WEIGHT	9.7 Kg (18.74 lb) approx

Product overview

Diving - Sport Line — C2X Pag. 15

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:25
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 19 cm^3 (2 x 1.16 inc^3)
FLOW	188 Nl/min (6.64 scfm)
WEIGHT	14.2 Kg (31.31 lb) approx

Diving - Sport Line — C2XPLUS Pag. 16

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:39
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 19 cm^3 (2 x 1.16 in^3)
FLOW	188 Nl/min (6.64 scfm)
WEIGHT	14.2 Kg (31.31 lb) approx

Diving - Sport Line — C3X Pag. 17

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:25
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 29.4 cm^3 (2 x 1.74 in^3)
FLOW	294 Nl/min (10.38 scfm)
WEIGHT	18.5 Kg (40.79 lb) approx

Diving - Sport Line — Double Stage Sport Pag. 18

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:25:62
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	29.4 cm^3 (1.79 inc^3) / 12 cm^3 (0,732 inc^3)
FLOW	150 Nl/min (5,1 scfm)
WEIGHT	18.5 Kg (40.79 lb) approx

Diving — Frame Pag. 19

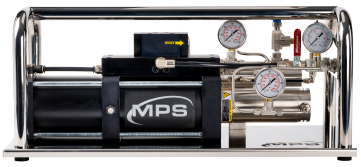
RATING	414 bar (6,000 psi)
TRASMISSION RATIO	It depends on the type of setup
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	can be equipped with all versions of Booster
FLOW	can be equipped with all versions of Booster
WEIGHT	13.8 Kg (31.31 lb) approx

Product overview

Diving — Trolley Pag. 22

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:39
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 38 cm^3 (2 x 2.3 in^3)
FLOW	377 Nl/min (13.31 scfm)
WEIGHT	13.8 Kg (31.31 lb) approx

Industry - Nitrogen — TANDEM Pag. 24



NITROGEN

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:78
MAX OUT PRESSURE	414 bar (6,000 psi)
DISPLACEMENT	37.7 cm^3 (2.30 in^3)
FLOW	188 Nl/min (6.64 scfm)
WEIGHT	29 Kg (63.90 lb) approx

Military & Professional- Box Manifolds — SPIDER Pag. 26

MAX PRESSURE	310 bar (4500 psi)
INLET CONNECTION	DIN 200/300 Female
OUTLET CONNECTION	DIN 200/300 Male
HOSE QUANTITY	4 Pieces
HOSE LENGHT	1 mt (39.37 in)
DIMENSIONS	W466 x H176 x L366 mm

Military & Professional - Low Magnetic — C4 Pag. 27

Low Magnetic

RATING	414 bar (6,000 psi)
TRASMISSION RATIO	1:39
MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
DISPLACEMENT	2 x 38 cm^3 (2 x 2.3 in^3)
FLOW	377 Nl/min (13.31 scfm)
WEIGHT	13.8 Kg (31.31 lb) approx

Multi Charging Systems - Military & Professional Mod.F — DOUBLE STAGE Pag. 28

RATING	345 bar (5,000 psi)
TRASMISSION RATIO	1:21 / 1:76
MAX OUT PRESSURE	230 bar (3336 psi)
DISPLACEMENT	70.7 cm^3 (4.31 inc^3) / 20.1 cm^3 (1.23 in^3)
FLOW	353 Nl/min ((12.46 scfm)
WEIGHT	43.0 Kg (94.8 lb) approx

Product overview

Multi Charging System - Military & Professional Mod.D		C2X PLUS MIL CASE Pag. 30
	**RATING**	414 bar (6,000 psi)
	TRASMISSION RATIO	1:39
	MAX OUT PRESSURE	230 bar (3336 psi) / 310 bar (4500 psi)
	DISPLACEMENT	2 x 19 cm^3 (2 x 1.16 in^3)
	FLOW	188 Nl/min (6.64 scfm)

Diving - T-MIX 1000		Pag. 34
	**POWER SUPPLY**	12 V DC
	MAX FLOW	1000 Lt/min (35.32 scfm)
	GAS SUPPLY	O2 - He - AIR - Ar
	POSSIBLE MIXING FLOW	- NITROX - TRIMIX - ARGON - SYNTETIC MIXTURE WITH PNEUMATIC LUNGE

Military - T-MIX MIL		Pag. 36
	**POWER SUPPLY**	12.6 V DC / Battery 4200 mAh
	MAX FLOW	350 Lt/min (35.32 scfm)
	GAS SUPPLY	O2 - He - AIR - Ar
	POSSIBLE MIXING FLOW	- NITROX - TRIMIX - ARGON - SYNTETIC MIXTURE WITH PNEUMATIC LUNGE

C1 LIGHT

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
SINGLE ACTING - SINGLE STAGE
The new Sport Line is designed to become the most portable, light-weight and complete filling system ever created.
Incredibly small, thanks its portability the C1 Light is the ideal travel companion.

APPLICATIONS

- CCR Divers
- Technical Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:25
DISPLACEMENT	8 cm^3 (0.4882 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4”
AIR DRIVE HOSE LENGHT	3 MT
GAS INLET CONNECTION	2 MT SST Braid Hose, Filter, 40 mm 0-400 Gauge, DIN 300 conn.
GAS OUTLET CONNECTION	2 MT SST Braid Hose, Filter, Purge , 40 mm 0-400 Gauge, DIN 300 .or M26x2
WEIGHT	6.0 Kg (13.23 lb)
DIMENSIONS (LxWxH)	366 x 300 x H148 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060025SS111F1.0230	10 bar (145 psi)	230 bar (3336 psi)
MG060025SS111F1.0310	13 bar (190 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C1

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
SINGLE ACTING - SINGLE STAGE
The new Sport Line is designed to become the most portable, light-weight and complete filling system ever created.
The C1 is a small all-in-one system, all you need is inside its case.

APPLICATIONS

- CCR Divers
- Technical Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:25
DISPLACEMENT	8 cm^3 (0.4882 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	230 bar (3336 psi)
AIR DRIVE PRESS. REGULATOR	HP and LP gauges, Speed Adj. Valve, 3 m Tube with Micro Quick Conn. 1/4", DIN 300
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4"
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, 40 mm 0-400 Bar Gauge, DIN 300 conn.
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve with Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	8.5 Kg (18.74 lb)
DIMENSIONS (LxWxH)	464 x 366 x H176 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060025SS111F2.0230	10 bar (145 psi)	230 bar (3336 psi)
MG060025SS111F2.0310	13 bar (190 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C1X

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
DOUBLE ACTING - SINGLE STAGE
The new Sport line is designed to be the most portable, lightest and most complete filling system ever created.
The C1X is built with an innovative system that significantly reduces air consumption during the filling operation.

APPLICATIONS

- CCR Divers
- Technical Divers
- Small groups of Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:39
DISPLACEMENT	2x8 cm^3 (0.4882 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4”
AIR DRIVE HOSE LENGHT	3 MT
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, Valve with Purge, 63 mm 0-400 Bar Gauge, DIN 300,
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve with Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	8.0 Kg (17.64 lb)
DIMENSIONS (LxWxH)	555 x 428 x H211 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060039SD111F3.0230	6 bar (85 psi)	230 bar (3336 psi)
MG060039SD111F3.0310	8 bar (115 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C1XM

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
DOUBLE ACTING - SINGLE STAGE
The SPECIAL OP. Line is made for military sector and special operators. These units needs a special training to be used. The training must be done by a MPS authorized trainer.

APPLICATIONS

- CCR Divers
- Technical Divers
- Small groups of Dovers
- Military Sector

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:39
DISPLACEMENT	2x8 cm^3 (0.4882 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4”
AIR DRIVE HOSE LENGHT	3 MT
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, Valve with Purge, 63 mm 0-400 Bar Gauge, DIN 300,
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve with Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	13.0 Kg (28.66 lb)
DIMENSIONS (LxWxH)	585 x 361 x H238 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060039SD111F6.0230	6 bar (85 psi)	230 bar (3336 psi)
MG060039SD111F6.0310	8 bar (115 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C2

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
SINGLE ACTING - SINGLE STAGE
The new Sport Line is designed to become the most portable, lightweight and complete filling system ever created.
The C2 is a powerfull all-in-one system, all you need is inside its case.

APPLICATIONS

- CCR Divers
- Technical Divers
- Small groups of Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:25
DISPLACEMENT	19 cm^3(1.20 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE PRESS. REGULATOR	HP and LP gauges, Speed Adj. Valve, 3 m Tube with Micro Quick Conn. 1/4", DIN 300
AIR DRIVE INLET CONNECTION	3 m hose Micro Quick Connection 1/4"
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, 40 mm 0-400 Bar Gauge, DIN 300 conn.
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve with Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	9.7 Kg (21.38 lb)
DIMENSIONS (LxWxH)	464 x 366 x H176 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060025SS131I2.0230	10 bar (145 psi)	230 bar (3336 psi)
MG060025SS131I2.0310	13 bar (190 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C2X

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
DOUBLEACTING - SINGLE STAGE
The new Sport Line is designed to become the most portable, lightweight and complete filling system ever created.
The C2X is built with an innovative system that significantly reduces air consumption during the filling operation.

APPLICATIONS

- CCR Divers
- Technical Divers
- Large groups of Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:25
DISPLACEMENT	2 x 19 cm^3 (2 x 1.16 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE PRESS. REGULATOR	HP and LP gauges, Speed Adj. Valve, 3 m Tube with Mi.Quick Conn. 1/4”, DIN 300
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4”
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, Valve, Purge, 63 mm 0-400 Bar Gauge, DIN 300 con.
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve , Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	14.2 Kg (31.31 lb)
DIMENSIONS (LxWxH)	555 x 428 x H211 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060025SD131I3.0230	8 bar (115psi)	230 bar (3336 psi)
MG060025SD131I3.0310	10 bar (145 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C2XPLUS

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
SINGLE ACTING - SINGLE STAGE
The new Sport Line is designed to become the most portable, lightweight and complete filling system ever created.
The C2XPLUS is a powerfull all-in-one system, all you need is inside its case.

APPLICATIONS

- CCR Divers
- Technical Divers
- Small groups of Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:39
DISPLACEMENT	2 x 19 cm^3 (2 x 1.16 inc^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE PRESS. REGULATOR	HP and LP gauges, Speed Adj. Valve, 3 m Tube with M. Quick Conn. 1/4", DIN 300
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4"
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, Valve, Purge, 63 mm 0-400 Bar Gauge, DIN 300 con.
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve, Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	14.2 Kg (31.31 lb)
DIMENSIONS (LxWxH)	555 x 366 x H176 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060039SD132H3.0230	10 bar (145 psi)	230 bar (3336 psi)
MG060039SD132H3.0310	13 bar (190 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

C3X

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
DOUBLEACTING - SINGLE STAGE
The new Sport Line is designed to become the most portable, lightweight and complete filling system ever created.
The C3X is built with an innovative system that significantly reduces air consumption during the filling operation.

APPLICATIONS

- CCR Divers
- Technical Divers
- Large groups of Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:25
DISPLACEMENT	2 x 29.4 cm^3 (2 x 1.79 inc^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE PRESS. REGULATOR	HP and LP gauges, Speed Adj. Valve, 3 m Tube with M. Quick Conn. 1/4”, DIN 300
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4”
GAS INLET CONNECTION	3 m SST Braid Hose, Filter, Valve Purge, 63 mm 0-400 Bar Gauge, DIN 300 con.
GAS OUTLET CONNECTION	3 m SST Braid Hose, Valve Purge, 63 mm 0-400 Bar Gauge, DIN 300 or M26x2
WEIGHT	18.5 Kg (40.79 lb)
DIMENSIONS (LxWxH)	555 x 428 x H211 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060025SD131I3.0230	8 bar (115psi)	230 bar (3336 psi)
MG060025SD131I3.0310	10 bar (145 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

DOUBLE STAGE

DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
DOUBLE STAGE
The new Sport Line is designed to become the most portable, lightweight and complete filling system ever created.
The Double Stage Sport is built with an innovative system that significantly reduces air consumption during the filling operation.

APPLICATIONS

- CCR Divers
- Technical Divers
- Large groups of Divers

BENEFITS

- Annual HP maintenance, BP maintenance every 5 years
- Robustness and reliability
- Protection of the operator
- Double steel braided hoses with Teflon coating to ensure oxygen compatibility and no deposit on the hose
- Delivered complete and ready to use

MAIN FEATURES	
TRASMISSION RATIO	1:25:61
DISPLACEMENT	1 x 29.4 cm^3 (1 x 1.79 inc^3) / 1 x 12 cm^3 (1 x 0,732 inc^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
AIR DRIVE PRESS. REGULATOR	HP and LP gauges, Speed Adj. Valve, 3 m Tube with Micro Q Conn. 1/4", DIN 300
AIR DRIVE INLET CONNECTION	Micro Quick Connection 1/4"
GAS INLET CONNECTION	3 m SST B.Hose, Filter, Valve Slow Purge, 63 mm 0-400 Bar Gauge, DIN 300
GAS OUTLET CONNECTION	3 m SST B. Hose, Valve Slow Purge, 63 mm 0-400 BarGauge, DIN 300 .or M26x2
WEIGHT	18.5 Kg (40.79 lb)
DIMENSIONS (LxWxH)	555 x 428 x H211 mm
SERVICE	OXYGEN SERVICE

MODELS	DRIVE AIR PRESSURE	MAX OUTLET PRESSURE
MG060025SD131I3.0230	8 bar (115psi)	230 bar (3336 psi)
MG060025SD131I3.0310	10 bar (145 psi)	310 bar (4500 psi)

BENEFITS AND RECOMENDATIONS

Protective measures are integrated in the MPS Technology boosters. In case of non respect of the rules of use, and triggering of a protection measure, a maintenance of your booster will be necessary.
The Double Stage Sport version allows you to multiply the inlet pressure 10 times and therefore thanks to the fact that the compression is carried out in two phases you can go from 20 bar to 200 directly with the Booster.
Furthermore, the quick connections (DESO Double End Shut Off) to the Booster allow us to use the whips as decanting before connecting them to the Booster, thus avoiding decanting through the Booster

The operator must be trained in the use of the booster and the compression of oxygen, you can contact us for training with our instructors,

FRAME

DESCRIPTION

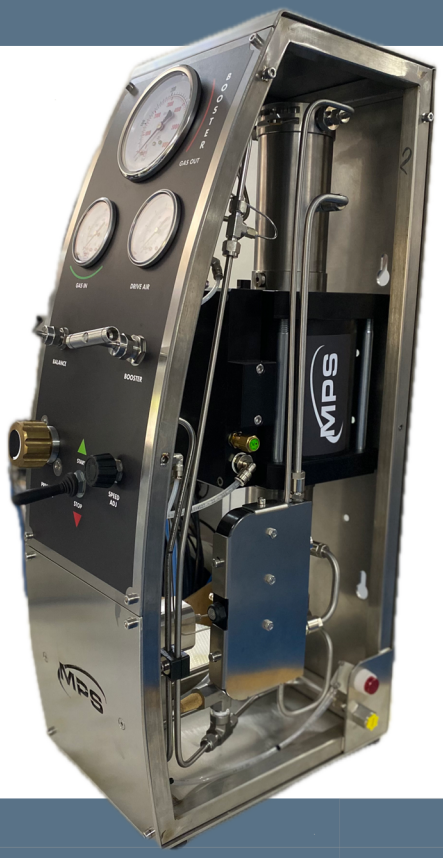
AIR DRIVEN GAS BOOSTER
The frame is designed for professional use,
commercial diving, industrial uses and military.
The full pneumatic system do not require electrical connection.

APPLICATIONS

- CCR Divers
- Technical Divers
- Small groups of Divers
- Military

MODEL	C2X PLUS	C3X	C4X	D. Stage Sport
FEATURES	**MG060039SD132HF**	**MG060025SD132IF**	**MG060039SD133HF**	**MG042561DS132F1**
TYPE	Single Stage - Double Acting	Single Stage - Double Acting	Single Stage - Double Acting	Double Stage
DRIVE	Single Drive	Single Drive	Single Drive	Single Drive
RATING	414 bar (6000 psi)	414 bar (6000 psi)	414 bar (6000 psi)	414 bar (6000 psi)
MAX OUT PRESSURE (Pb)	310 bar (4500 psi)	310 bar (4500 psi)	310 bar (4500 psi)	310 bar (4500 psi)
TRASMISSION RATIO (I)	1:39	1:25	1:39	1:25:61
TECHNICAL				
DISPLACEMENT CYCLE	37.7 cm^3 (2.3 $inch^3$)	58.9 cm^3 (3.6 $inch^3$)	75.4 cm^3 (4.6 $inch^{3h}$)	29.5 cm^3 (1.8 $inch^3$)
MAX OP. TEMPERATURE	100 °C (212 °F)	100 °C (212 °F)	100 °C (212 °F)	100 °C (212 °F)
PERFORMANCES				
MAX DIRVE PRESSURE (pL)	10 bar /145 psi)	10 bar /145 psi)	10 bar /145 psi)	10 bar /145 psi)
AIR CONSUPTION	736 Nl/min (26.00 scfm)	736 Nl/min (26.00 scfm)	1472 Nl/min (52.00 scfm)	736 Nl/min (26.00 scfm)
OUTLET FLOW	188 Nl/min (6.64 scfm)	294 Nl/min (10.38 scfm)	377 Nl/min (13.31 scfm)	147 Nl/min (5,2 scfm)
MAX INLET PRESSURE (pA)	414 bar (6000 psi)	414 bar (6000 psi)	414 bar (6000 psi)	414 bar (6000 psi)
STALL PRESSURE	i*pL+pA	i*pL+pA	i*pL+pA	
CONNECTIONS				
DRIVE INLET CONNECTION	3/8" F BSPP	3/8" F BSPP	1/2" F BSPP	1/4" F BSPP
GAS INLET CONNECTION	1/4" F BSPP	1/4" F BSPP	1/4" F BSPP	1/4" F BSPP
GAS OUTLET CONNECTION	1/4" F BSPP	1/4" F BSPP	1/4" F BSPP	1/4" F BSPP
INFORMATIONS				
LENGHT	220 mm (8.66 in)	220 mm (8.66 in)	220 mm (8.66 in)	220 mm (8.66 in)
WIDTH	330 mm (13.00 in)	220 mm (8.66 in)	330 mm (13.00 in)	220 mm (8.66 in)
HEIGHT	700 mm (27.56 in)	700 mm (27.56 in)	700 mm (27.56 in)	700 mm (27.56 in)
NET WEIGHT	36 Kg (79.37 lb)	36 Kg (79.37 lb)	44 Kg (97.00 lb)	37 Kg (81,57 lb)

FRAME



DESCRIPTION

DOUBLE STAGE MG052176DS144F7

increased intercooler system for more efficient inter-stage cooling.
high transfer volume per cycle
High compression Ratio 1/14
For example from 20 bar to 280 thanks to two stage compression

- CCR Divers
- Technical Divers
- Professional filling centers and commercial diving
- Military

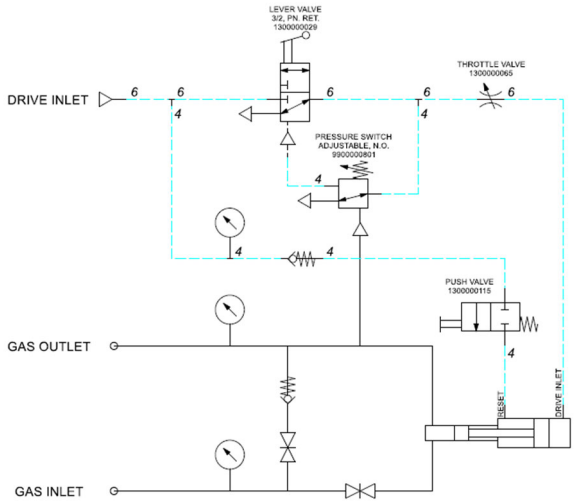
Easy access through the front panel to the minimum PRESSURE SWITCH, FILTER, PROPORTIONAL RELIEV VALVE

MODEL	Double Stage
FEATURES	**MG052176DS144F7**
TYPE	Double Stage
DRIVE	Single Drive
RATING	414 bar (6000 psi)
MAX OUT PRESSURE (Pb)	310 bar (4500 psi)
TRASMISSION RATIO (I)	1:25:76
TECHNICAL	
DISPLACEMENT CYCLE	70,6 cm^3 (4,27 $inch^3$)
MAX OP. TEMPERATURE	100 °C (212 °F)
PERFORMANCES	
MAX DIRVE PRESSURE (pL)	10 bar /145 psi)
AIR CONSUPTION	1472 Nl/min (52.00 scfm)
OUTLET FLOW	377 Nl/min (13.31 scfm)
MAX INLET PRESSURE (pA)	414 bar (6000 psi)
CONNECTIONS	
DRIVE INLET CONNECTION	1/4" F BSPP
GAS INLET CONNECTION	1/4" F BSPP
GAS OUTLET CONNECTION	1/4" F BSPP
INFORMATIONS	
LENGHT	220 mm (8.66 in)
WIDTH	220 mm (8.66 in)
HEIGHT	700 mm (27.56 in)
NET WEIGHT	40 Kg (88 lb)

FRAME

PNEUMATIC DIAGRAM

- No electrical connection needed
- Fully automatic
- Robust stainless steel construction
- Proportional relief valve included
- Oxygen filter

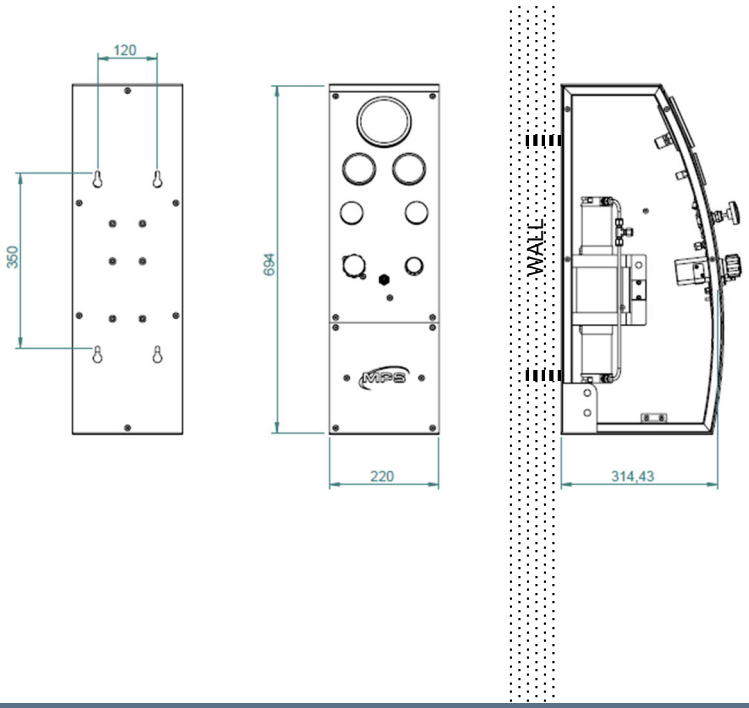


SERVICES

This booster has been designed as a pressure multiplier for the following gases:
- Helium
- Argon
- Nitrogen
- Oxygen

INSTALLATION AREA

The installation area must meet the following requirements:
- The chosen installation area must consent a sufficient safety distance for the operator.
- The connection tubes must not be placed on the floor and they must be fixed so to be easily checkable.
- The booster must be placed so to guarantee an escape route in case of accident.
- The entire high pressure pneumatic system must gruonded and this operation must be carried out by certified and qualified personnel.
- It is recommended to keep a suitable distance between the storage tanks and the tanks to be filled.
- Consult an expert or a specialized office to place the booster according to local regulations.



CUSTOMIZED PRODUCTS

Upon request, many other gas boosters model can be placed in this Stainless Steel vertical frame

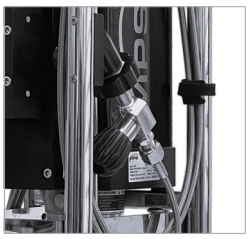
TROLLEY

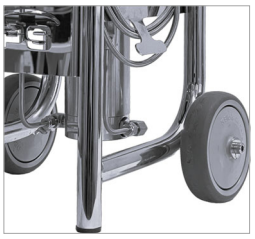
DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
The Trolley Frame is designed for professional use, commercial diving, industrial uses and military.
The full pneumatic system does not require electrical connection.

APPLICATIONS

- CCR Divers
- Technical Divers
- Small groups of Divers
- Military



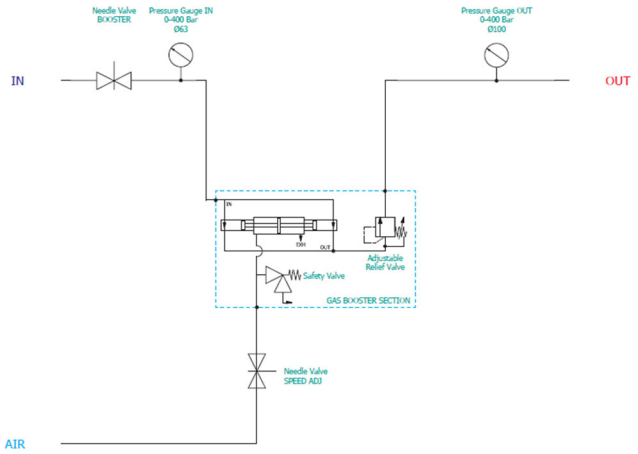


MODEL	C4X TROLLEY	C6X TROLLEY
FEATURES	**MG060039SD133HT**	**MG060025SD133IT**
TYPE	Single Stage - Double Acting	Single Stage - Double Acting
DRIVE	Single Drive	Single Drive
RATING	414 bar (6000 psi)	414 bar (6000 psi)
MAX OUT PRESSURE (Pb)	210 bar (3336 psi)	350 bar (5000 psi)
TRASMISSION RATIO (I)	1:39	1:25
TECHNICAL		
DISPLACEMENT CYCLE	75.4 cm^3 (4.6 $inch^{3h}$)	118 cm^3 (7.2 $inch^3$)
MAX OP. TEMPERATURE	100 °C (212 °F)	100 °C (212 °F)
PERFORMANCES		
MAX DIRVE PRESSURE (pL)	10 bar /145 psi)	10 bar /145 psi)
AIR CONSUPTION	1472 Nl/min (52.00 scfm)	1472 Nl/min (52.00 scfm)
OUTLET FLOW	377 Nl/min (13.31 scfm)	589 Nl/min (20.80 scfm)
MAX INLET PRESSURE (pA)	414 bar (6000 psi)	414 bar (6000 psi)
STALL PRESSURE	i*pL+pA	i*pL+pA
CONNECTIONS		
DRIVE INLET CONNECTION	Micro Quick Conn. 1/4”	1/4” F BSPP
GAS INLET CONNECTION	DIN 300 or Diff.	DIN 300 or Diff.
GAS OUTLET CONNECTION	DIN 300 or Diff.	DIN 300 or Diff.
INFORMATIONS		
LENGHT	330 mm (13.00 in)	330 mm (13.00 in)
WIDTH	280 mm (11.00 in)	280 mm (11.00 in)
HEIGHT	885 mm (38.84 in)	885 mm (38.84 in)
NET WEIGHT	30.5 Kg (67.24 lb)	30.5 Kg (67.24 lb)

TROLLEY

PNEUMATIC DIAGRAM

- Inlet 0-400 bar Gauge
- Outlet 0-400 bar Gauge
- Inlet - Needle Valve
- Speed Adjust Valve
- 2x5 mt double coated SST Hoses
- 5 mt Drive Air whip

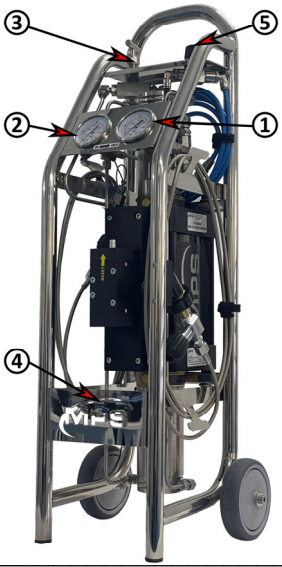


SERVICES

This booster has been designed as a pressure multiplier for the following gases:
- Helium
- Argon
- Nitrogen
- Oxygen

INSTALLATION AREA

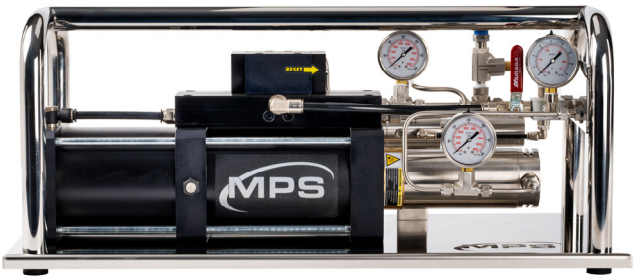
The installation area must meet the following requirements:
- The chosen installation area must consent a sufficient safety distance for the operator.
- The connection tubes must not be placed on the floor and they must be fixed so to be easily checkable.
- The booster must be placed so to guarantee an escape route in case of accident.
- The entire high pressure pneumatic system must grounded and this operation must be carried out by certified and qualified personnel.
- It is recommended to keep a suitable distance between the storage tanks and the tanks to be filled.
- Consult an expert or a specialized office to place the booster according to local regulations.



CUSTOMIZED PRODUCTS

Upon request, many other gas boosters model can be placed in this Stainless Steel vertical frame

TANDEM

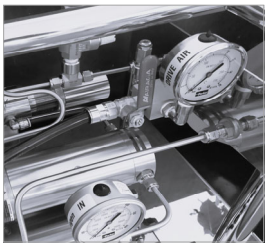


DESCRIPTION

AIR DRIVEN PORTABLE GAS BOOSTER
Flexible and efficient air-driven gas boosters for delivering high-pressure gases. MPS gas booster systems operating principle is similar to a pressure intensifier. A large air piston is charged with a low pressure air piston and works on a small area with high pressure piston.

APPLICATIONS

- Accumulator N2 Charging
- High Pressure Gas testing



MODEL	TANDEM
FEATURES	**MG060078SS233HO**
TYPE	Single Stage - Single Acting
DRIVE	Double Drive
RATING	414 bar (6000 psi)
MAX OUT PRESSURE (Pb)	414 bar (6000 psi)
TRASMISSION RATIO (I)	1:78
TECHNICAL	
DISPLACEMENT CYCLE	37.70 cm^3 (2.30 $inch^{3h}$)
MAX OP. TEMPERATURE	100 °C (212 °F)
PERFORMANCES	
MAX DIRVE PRESSURE (pL)	10 bar /145 psi)
AIR CONSUPTION	1473 Nl/min (52.00 scfm)
OUTLET FLOW	188 Nl/min (6.60 scfm)
MAX INLET PRESSURE (pA)	414 bar (6000 psi)
STALL PRESSURE	i*pL
CONNECTIONS	
DRIVE INLET CONNECTION	1/2" BSPP (F)
GAS INLET CONNECTION	1/4" BSPP (F)
GAS OUTLET CONNECTION	1/4" BSPP (F)
INFORMATIONS	
LENGHT	750 mm (29.50 in)
WIDTH	300 mm (11.80 in)
HEIGHT	320 mm (12.60 in)
NET WEIGHT	29 Kg (63.90 lb)

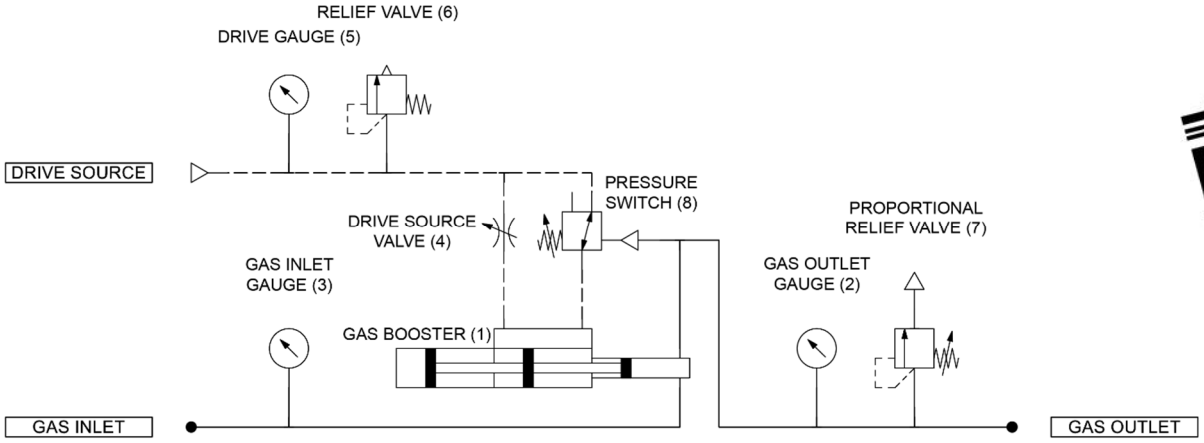
GENERAL DESCRIPTIONS

Nitrogen Gas System
The unit is built to receive nitrogen in inlet pressure from standard industrial cylinders starting from a minimum pressure of 30 Bar / 435 Psi up to 414 Bar / 6000 Psi to bring it under pressure to 414 Bar / 6000 Psi passing through a pressure switch that gives the possibility to regulate the switching off of the Booster at even lower pressures. Exceeding the maximum pressure is prevented by a proportional relief valve positioned on the gas outlet connection.

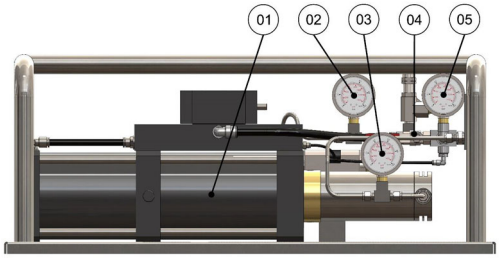
Air Piloting System
The 1/2 BSP inlet fitting is provided for air piloting. The inlet air pressure should be up to 10 Bar. The inlet pressure should be approximately 1/60 of the desired maximum nitrogen outlet pressure.

Outlet Pressure Control
The system, component 01, will automatically start working when the ball valve, component 04, is open. With the ball valve, component 04, it is also possible to manage the working speed. The system, component 01, will transfer nitrogen under pressure to the accumulator connected to the gas outlet of the system up to a maximum of 414 Bar.
The pneumatic pressure switch, component 08, allows to control the maximum outlet pressure regardless of the inlet pilot pressure. The maximum pressure preset in production is 414 Bar, but it can be modify, if necessary, between 100 Bar and 414 Bar, by unlocking the ring nut (08B) that blocks the knob (08A) and screwing it to increase or unscrewing to decrease the shutdown value of the Booster.

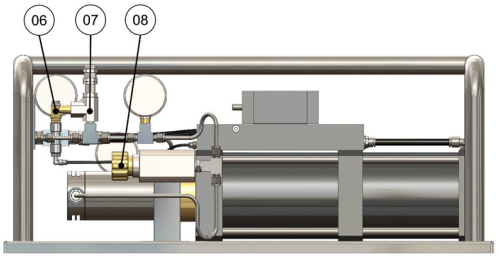
PNEUMATIC DIAGRAM



ID	DESCRIPTIONS	ID	DESCRIPTIONS
1	DRIVE PISTON	5	OPERATING PRESSURE GAUGE 0-16 bar (0-230 psi)
2	OUTLET 0-600 bar (0-9000 psi) pressure gauge	6	RELIEF VALVES
3	INLET 0-600 bar (0-9000 psi) pressure gauge	7	PROPORTIONAL RELIEF VALVES
4	DRIVE SOURCE VALVES	8	PNEUMATIC PRESSURE SWITCH



FRONT



REAR

CUSTOMIZED PRODUCTS

Upon request, many other gas boosters model pressure levels can be placed in this Stainless Steel frame

Spider Case

DESCRIPTION

SPIDER
is mainly designed to fulfill the requirements of people who works in professional and military sectors to decrease the generated heat by increasing the global volume and have better safety.

APPLICATIONS

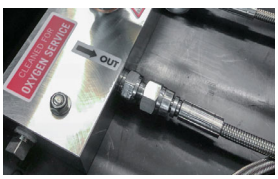
Military
Professional Divings
Groups of Divers

MODEL	SPIDER
FEATURES	**MS04000000000002**
MAX PRESSURE	310 bar (4500 psi)
INLET CONNECTION	DIN 200/300 Female or diff. on request
OUTLET CONNECTION	DIN 200/300 Male or diff. on request
HOSE QUANTITY	4 Pieces
HOSE LENGHT	1 mt (39.37 in)
DIMENSIONS	
LENGHT	464 mm (18.27 in)
WIDTH	366 mm (14.41 in)
HEIGHT	176 mm (6.93 in)
NET WEIGHT	5 Kg (11.02 lb)

INFORMATIONS

Ready to fill up to 4 cilynders simultaneously.

The needle valve allows to carry out the transfer operation in a controlled manner. There is also a sintered filter to prevent the contamination from external particles.



Every hose is equiped with a non-return valve to increase the safety of the operator.

The small and light system is mounted inside a IP68 technopolymer.

case, which protects the unit in all transport and storage conditions.

Low Magnetic Gas Boosters

Low Magnetic

DESCRIPTION

AIR DRIVEN GAS BOOSTER
DOUBLE ACTING - SINGLE STAGE

This particular Gas Booster is made of specific materials with very low magnetic residue for military applications, it has the the same performances as the standard gas booster but also provides for the following advantages:

-Low magnetic design
- Weight reduced by about 40%
- Compactness
- High resistance to corrosion thanks to the use of special steels and technopolymers

Possible installations:

- SST Frames
- Technopolymer Waterproof Cases
- Stand alone"

APPLICATIONS

- Military Sector

MAIN FEATURES	MB060039SD133H0
TRASMISSION RATIO	1:39
DISPLACEMENT	2x38 cm^3 (2.30 in^3)
MIN SUCTION PRESSURE	5 bar (70 psi)
MAX OUTLET PRESSURE	310 bar (4500 psi)
OUTLET FLOW	377 Nl/min (13.30 scfm)
AIR DRIVE INLET CONNECTION	3/8” F-BSPP
GAS INLET CONNECTION	1/4” F-BSPP
GAS OUTLET CONNECTION	1/4” F-BSPP
WEIGHT	.0 Kg (28.66 lb)
DIMENSIONS (LxWxH)	582 x 138 x H178 mm
SERVICE	OXYGEN SERVICE

CERTIFICATES

TEST CERTIFICATE
No. 23/TS/01/824

Inspection and test carried out:
- Documentation review and visual inspection
- Review of Manufacturer’s certificates
- Review of Manufacturer’s test report
- Review of material’s certificates
- Functional test
- Pressure test

Multi charging system for
Military & Professional Mod. F

DESCRIPTION

AIR DRIVEN GAS BOOSTER SYSTEM
DOUBLE STAGE - SINGLE ACTING - SINGLE DRIVE
Multiple charging system we specifically designed for the Military, professional users and Fire Fighters Corp

System polymery case that offer superior protection from the elements, water, dust and impacts when transporting fragile and valuable objects.

APPLICATIONS

- Fire Fighters Corp
- Military special force

SERVICES

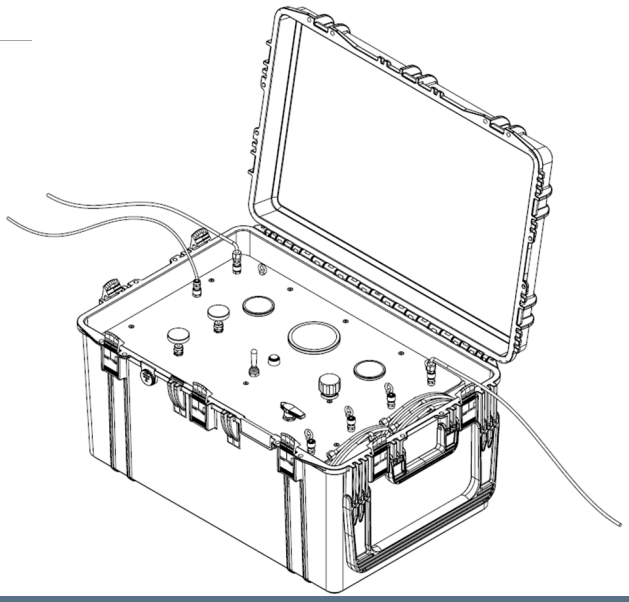
This booster has been designed as a pressure multiplier for the following gases:

- Oxygen
- Helium
- Air

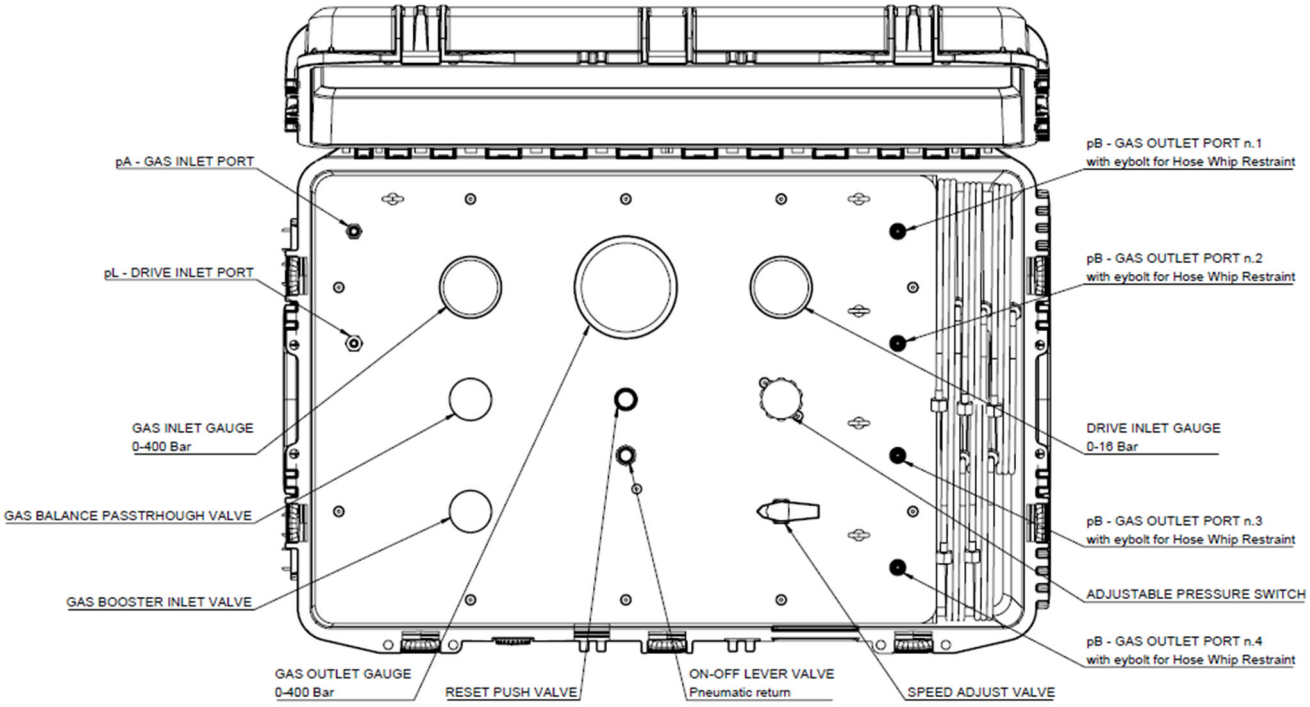
Model:	MG052176DS144F8	
RATING	345 bar (5,000 psi)	
TRASMISSION RATIO	1st Stage: 1:21	2nd Stage: 1:76
DISPLACEMENT	1st Stage: 70.7 cm^3 (4.31 inc^3)	2nd Stage: 20.1 cm^3 (1.23 inc^3)
FLOW	353 Nl/min ((12.46 scfm)	
MAX DRIVE AIR PRESSURE (pL)	10 bar (145 psi)	
MAX INLET PRESSURE (pA)	230 bar (3336 psi)	
MAX OUTLET PRESSURE	230 bar (3336 psi)	
DIMENSIONS (LxWxH)	62 x 46 x 34 cm (24.41 x 18.11 x 13.39 inc^3)	
STALL PRESSURE	76*pL + 76/21*pA	
WEIGHT	43.0 Kg (94.8 lb) approx	

Multi charging system for Military & Professional Mod. F

CONNECTIONS	
pA - Gas Inlet Port	(1x) Male Quick Connector SESO 1/8”
pL - Drive Inlet Port	(1x) Male Quick Connector 1/4”
pB - Gas Outlet port	(4x) Male Quick Connector SESO 1/8”



EASY TO USE



HIGH QUALITY MATERIALS

The high quality materials give the CASE System strenght and reliability, improving the safety for the operator.
The system is integrated into a waterproof case which protects the unit in all storage condition and the transport is simplified by wheels and handle.
The use of polymeric materials and additive manufacturing makes the unit more light and portable than ever.

Military & Professional Multi Charging Systems Mod.D

DESCRIPTION

AIR DRIVEN PORTABLE MIL CASE
The MIL CASE is designed to meet the various needs of specific sectors, it is buildt with stainless austenitics steel which gives the unit a low residual magnetism capacity and the possibility to be being used in the most extreme environments.

APPLICATIONS

- Military
- Professional and Commercial Diving

SERVICES

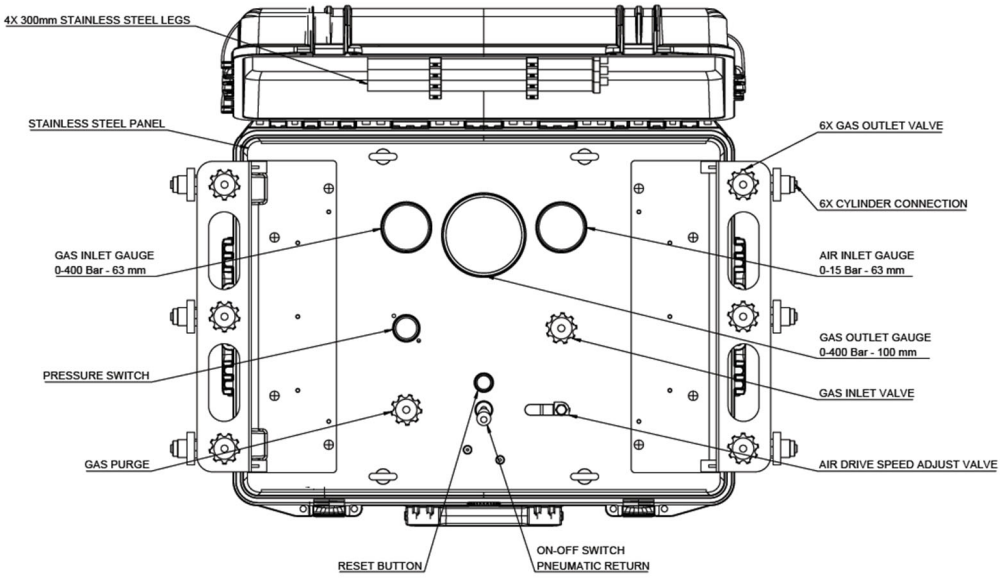
This booster has been designed as a pressure multiplier for the following gases:
- Oxygen, Helium ,Air, Argon and Others...

MODEL	C3X MIL CASE 230 BAR	C3X MIL CASE 310 BAR	DOUBLE STAGE SPORT
FEATURES	**MG060039SD133H7**	**MG060039SD133H7**	**MG062561DS133F6**
TYPE	Single Stage - Double Acting	Single Stage - Double Acting	Double Stage
DRIVE	Single Drive	Single Drive	Single Drive
RATING	414 bar (6000 psi)	414 bar (6000 psi)	414 bar (6000 psi)
MAX OUT PRESS. (Pb)	210 bar (3336 psi)	310 bar (4500 psi)	310 bar (4500 psi)
TRASMISSION RATIO (I)	1:25	1:25	1/25/61
TECHNICAL			
DISPLACEMENT CYCLE	58.9 cm^3 (3.6 $inch^3$)	58.9 cm^3 (3.6 $inch^3$)	29,4 cm^3 (1,8 $inch^3$)
MAX PUMPING SPEED	50 cpm	50 cpm	50 cpm
MAX OP. TEMPERATURE	100 °C (212 °F)	100 °C (212 °F)	100 °C (212 °F)
PERFORMANCES			
MAX DRiVE PRESS. (pL)	10 bar /145 psi)	10 bar /145 psi)	10 bar /145 psi)
AIR CONSUPTION	736 Nl/min (26.00 scfm)	736 Nl/min (26.00 scfm)	736 Nl/min (26.00 scfm)
OUTLET FLOW	294 Nl/min (10.38 scfm)	294 Nl/min (10.38 scfm)	147 Nl/min (5.2 scfm)
MAX INLET PRESS.(pA)	414 bar (6000 psi)	414 bar (6000 psi)	414 bar (6000 psi)
STALL PRESSURE	i*pL+pA	i*pL+pA	
CONNECTIONS			
DRIVE INLET CONNEC-TION	M. Quick Connection 1/4”	M. Quick Connection 1/4”	M. Quick Connection 1/4”
GAS INLET CONNECTION	Standard 1/4” F-BSPP	Standard 1/4” F-BSPP	Standard 1/4” F-BSPP
GAS OUT CONNECTION	Standard 1/4” F-BSPP	Standard 1/4” F-BSPP	Standard 1/4” F-BSPP
INFORMATIONS			
LENGHT	687 mm (27.05 in)	687 mm (27.05 in)	687 mm (27.05 in)
WIDTH	528 mm (20.79 in)	528 mm (20.79 in)	528 mm (20.79 in)
HEIGHT	366 mm (14.41 in)	366 mm (14.41 in)	366 mm (14.41 in)
NET WEIGHT	40 Kg (88.18 lb)	40 Kg (88.18 lb)	40 Kg (88.18 lb)

Military & Professional
Multi Charging Systems mod.D

INFORMATIONS

With this all-in-one system you no longer have to think about what you need to refill safely, because all the controls are integrated, such as a pressure reducer for the inlet gas or the pressure switch that automatically stops the filling phase when the desired pressure is reached.
The booster is built with an innovative system that significantly reduces air consumption during operation.
Thanks to the double coating in stainless steel and the 5-meter-long hose, the operators can operate always in safety condition.

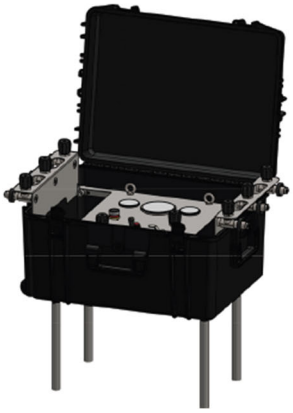


EASY TO USE

1. Place the case

2. Open the cover

3.Open the manifolds and you are ready to refill up to 6 small cylinders



4. Eventually, mount the legs to increase the height

HIGH QUALITY MATERIALS

The high quality materials give the MIL CASE strenght and reliability, improving the safety for the operator.
The system is integrated into a waterproof case which protects the unit in all storage condition and the transport is simplified by wheels and handle.
The use of polimeric materials and additive manufacturing makes the unit more light and portable than ever.

Gas Mixer

GAS MIXER TECHNOLOGY

The right Mixer for any applications

patent number:

ITUD20020057A1

In these years of great development of diving activities there has been a growing demand of Nitrox and Trimix mixtures. For simplicity of use, the refilling center use to meet the demand almost exclusively through “partial pressure” preparations. However, this way requires specific oxygen-cleaned cylinders and the utmost care in the transfer of the correct quantities of gas, before topping up with air. Moreover, unless you are equipped with 3 or 4 gas cylinder (pure gasses) and refill tanks when they are completely or almost completely empty, it is difficult to exploit the cylinders with the expensive gases used (oxygen and helium) to the best.

In order to overcome these difficulties, MPS has developed the system with static mixers with Patent n° ITUD20020057A1. In fact, they enable you to prepare the diving mixture in the percentages required and at “low pressure” in other words before the intake of the compressor. A further advantage is that the obtained mixture has been already homogenized, and so it can be used immediately after a suitable final analysis, which is not possible with other techniques. The only limitation is that the percentage of oxygen cannot exceed 40% if the compressor is oil lubricated.

MPS offers high-quality gas mixers and gas dosing systems for two or more gases, especially for high and strongly fluctuating gas mixture flow rates

Depending on customer requirements, gas mixers are available in different versions for different output ranges and almost all technical gases like:

- **carbon dioxide (CO2)**
- **oxygen (O2)**
- **nitrogen (N2)**
- **helium (He)**
- **carbon monoxide (CO)**
- **line Air**

Flexibility and precision

Mix the gases you need, when and where you need. Gas mixers offer the highest flexibility for required mixing ratios, gas volumes and application location. Are you operating a system with variable gas compositions? That is not a problem with MPS gas mixers you can change the gas mixture setting at any time to gain just the right gas mixture in seconds.

Profitability

Generate your own gas mixtures cost-effectively. At the same time, above all, there is no storage costs of the many gases required in case of frequent gas mixture changes. You can forget even the handling of gas cylinders thanks to the use of gas mixers.

Quality Mixture

MPS Mixer offer the highest gas mixture quality. As a user you always receive absolutely homogeneous mixtures. This uniformity provides optimum process reliability

INDUSTRY AND APPLICATIONS

Technical & Commercial Diving

In the technical & commercial diving sector it is often necessary to dive to extreme depths. Special gas mixtures are used to supply breathing air for this purpose. Here oxygen and helium (Heliox) or oxygen, nitrogen and helium (Trimix) are used. Depending on the depth, the gases are combined on site using MPS GAS MIXER.

Food Industry

When packaging food under protective gas (Modified Atmosphere Packaging), the aim is to ensure the longest possible shelf life and the freshest appearance. The optimal gas composition of CO_2, oxygen, nitrogen or argon is of decisive importance here. MPS supplies gas mixing and gas dosing systems for every type of packaging machine in the food industry.

Military

Regardless of their industrial or military purpose, underwater raids involve the use of binary or ternary breathing gas mixtures, such as helium-oxygen (HELIOX), nitrogen-oxygen (NITROX) or helium-nitrogen-oxygen (TRIMIX), made in different ratios of their components, imposed by the underwater technology used. MPS has developed a specific MIXER for military applications with a rechargeable battery system capable of operating without electrical connections for 16 continuous hours.

Customized Mixer

Based on customer specifications, MPS manufactures customized gas mixing systems. Special applications are designed by MPS together with the customer, thereby ensuring optimum Value Engineering to individual requirements.

Maintenance and Service

MPS gas mixers are extremely robust and durable in design. The renowned MPS quality begins with the use of high-quality materials and components and continues in careful and precise assembly. A comprehensive Quality Management System accompanies the complete value-added process and ensures the highest quality of each individual gas mixer made by MPS. Depending on the mixing technology used, the devices are subject to different requirements for maintenance and service. The service life of the devices can usually be extended further with additional components such as gas filters. On request, MPS provides maintenance and service packages for your gas mixing systems – worldwide through our network of partners.

T-MIX 1000

DESCRIPTION

The systems with MPS static mixers enable you to prepare ternary (Trimix, Heliair) as well as binary (Heliox, Nitrox) mixtures. They are easy to install and have enormous advantages to their convenience of use. Their shape, patented all over the world, guarantees mathematically predictable mixtures (by specific computer software) with a minimum pressure loss.

APPLICATIONS

CCR Divers
Technical Divers

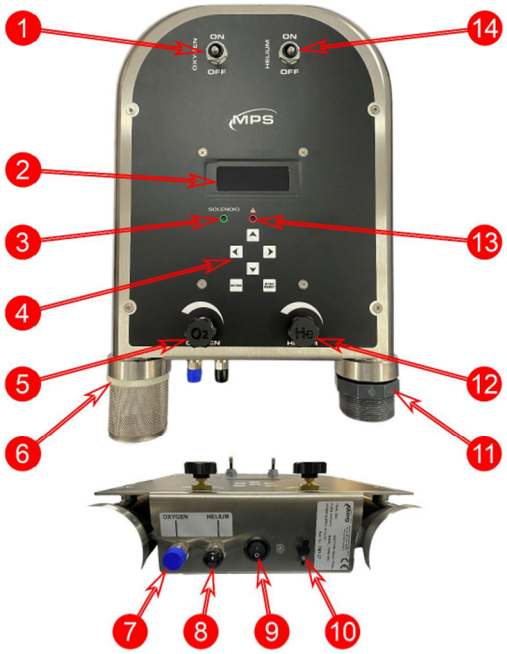
PATENTED

	MM-T-MIX1000
POWER SUPPLY	12 V DC
MAX FLOW	1000 Lt/min (35.31 m^3/h
GAS SUPPLY	O_2 - He - Air - Ar
POSSIBLE MIXING FLOW	- NITROX - TRIMIX - ARGON - SYNTETIC MIXTURE WITH PNEUMATIC LUNGE LUNGE
MAX. O_2 LEVEL UP TO 100%	PRESET 45%
O_2 CONNECTION	Rapid Fitting 8 mm Tube - Max 10 bar (145 psi)
He CONNECTION	Rapid Fitting 8 mm Tube - Max 10 bar (145 psi)
MIXER CONNECTIONS	2” (IN-OUT)
PRESSURE REDUCER O_2 - He	Included
O2-He ELECTRIC SWITCH	Optional
PNEUMATIC STOP	Included
SOFT-WARE	NITROX - TRIMIX RELOAD SOFTWARE
DIMENSIONS	395 x 260 x 115 mm (approx)

PATENT

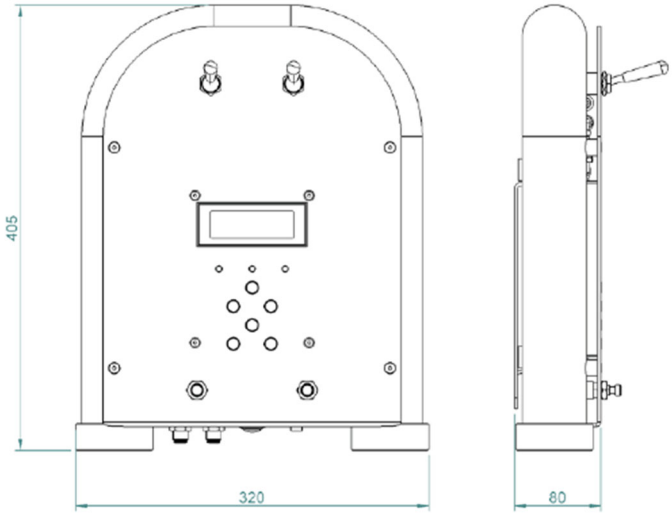
Patent number ITUD20020057A1 - mixing system

ID	DESCRIPTIONS
1	OXYGEN PNEUMATIC VALVE
2	DISPLAY
3	SOLENOID GREEN LED
4	KEYPAD
5	OXYGEN FLOW REGULATOR
6	AIR INLET
7	OXYGEN INLET
8	HELIUM INLET
9	POWER SWITCH
10	POWER CONNECTOR
11	MIXTURE OUTLET
12	HELIUM FLOW REGULATOR
13	RED ALARM LED
14	HELIUM PNEUMATIC VALVE



SOLENOID BOX

The mixer is supplied with a solenoid box which must be connected to the compressor.
Before reaching the mixer, the oxygen and helium tubes must pass through the solenoid box. This box contains two solenoid valves normally closed which, once connected to the compressor, open only if the compressor is on. It prevents accidental access of gas in the tube and stops the gas supply at the end of the refill and the compressor stops. Even in the event of an emergency stop or in the event of a power cut, the gas supply is stopped and this contributes to the safety of the system. In the box there is a switch that deactivates the operation of the solenoid valves, thus preventing the supply of gas because the valves remain closed. Always keep the switch in the off position if we do not have to produce gas mixtures. The processor is also programmed to stop the Oxygen flow when the percentage of Oxygen rise more than 45% to prevent damage to the compressor due to a work with a too high level of Oxygen.



T-MIX MIL

DESCRIPTION

The systems with MPS static mixers enable you to prepare ternary (Trimix, Heliair) as well as binary (Heliox, Nitrox) mixtures. They are easy to install and have enormous advantages to their convenience of use. Their shape, patented all over the world, guarantees mathematically predictable mixtures (by specific computer software) with a minimum pressure loss.

APPLICATIONS

Military

EASY TO USE	SAFE	RECHARGEABLE	PATENTED

	MM-T-MIXMILL
POWER SUPPLY	12.6 V DC / Battery 4200 mAh
MAX FLOW	350 Lt/min (35.32 scfm)
GAS SUPPLY	O2 - He - AIR - Ar
POSSIBLE MIXING FLOW	- NITROX - TRIMIX - ARGON - SYNTETIC MIXTURE WITH PNEUMATIC LUNGE LUNGE
MAX. O_2 LEVEL UP TO 100%	PRESET 45%
O_2 CONNECTION	Rapid Fitting 8 mm Tube - Max 10 bar (145 psi)
He CONNECTION	Rapid Fitting 8 mm Tube - Max 10 bar (145 psi)
MIXER CONNECTIONS	1” (IN-OUT)
PRESSURE REDUCER O_2 - He	Not Included
PNEUMATIC STOP AND ALARM	Included
SOFT-WARE	NITROX - TRIMIX RELOAD SOFTWARE
DIMENSIONS	395 x 260 x 115 mm (approx)

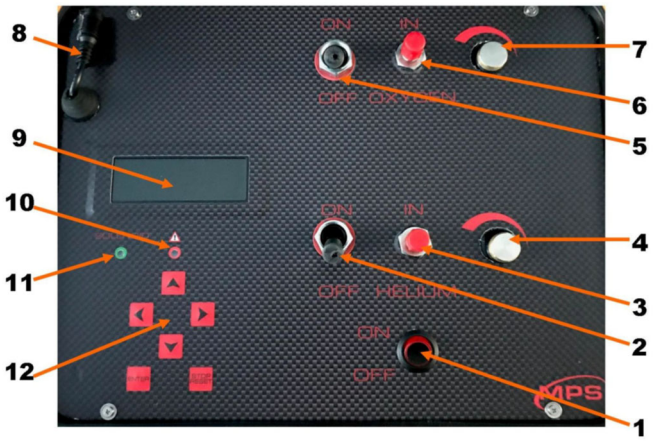
OPTIONS

Analysis system
The system integrates an analyzer. Upon request, an oxygen sensor is added inside the case and a Rilsan quick connector is prepared for a one meter long 4mm tube with a male BCD connector at the end. By connecting it to the cylinder regulator connector, you can see on the display the value of the gas coming out of your compressor or even analyze the contents of the cylinder and also obtain the MOD data, very useful for diving

PATENT

Patent number ITUD20020057A1 - mixing system

ID	DESCRIPTIONS
1	MIXER MAIN SWITCH
2	HELIUM PNEUMATIC VALVE
3	HELIUM CONNECTION
4	HELIUM FLOW REGULATOR
5	OXYGEN PNEUMATIC VALVE
6	OXYGEN CONNECTION
7	OXYGEN FLOE REGULATOR
8	CHARGING CONNECTOR
9	MIXER DISPLAY
10	RED ALARM LED
11	SOLENOID GREEN LED
12	KEYPAD

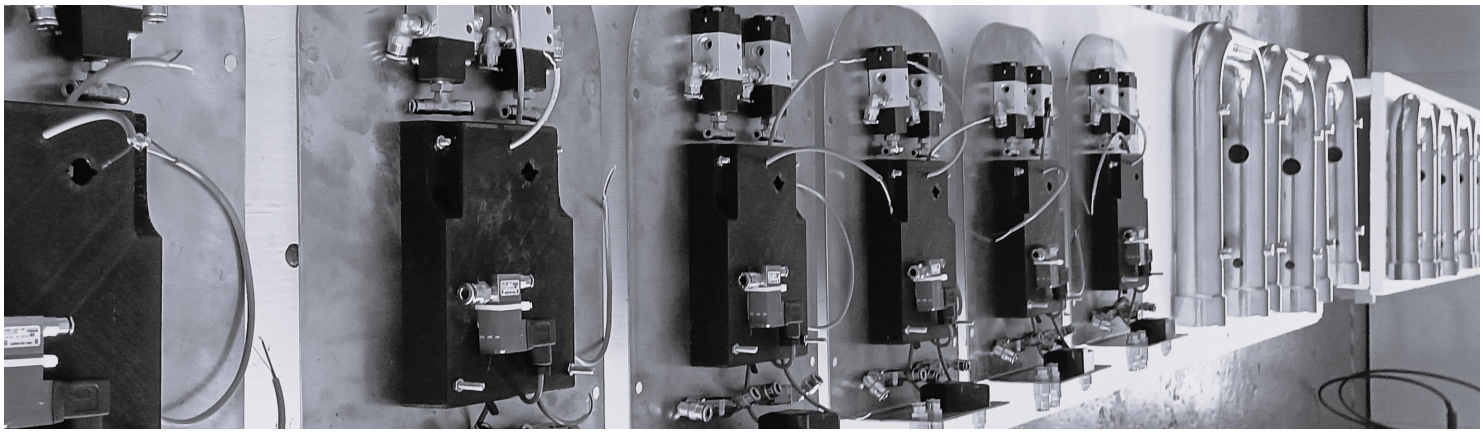


SAFETY SYSTEM

A very efficient safety system is available on the Mixer. It is provided with one electro-valves which are usually closed. This valve ensures that, if the maximum oxygen percentage is exceeded, the gas flow opening levers close pneumatically.

RECHARGEABLE BATTERY

The battery inside the super polymer lithium-ion allows us to work with the mixer for 36 hours non-stop. Remember to start mixing with the batteries always fully charged.



Spare Parts & Service

Spare Parts

Irrespective of which product you have purchased from us, we know which spare parts you need and we will deliver these directly to you by sea freight, air freight and express courier service worldwide.

Repair Return

The overhul of your machine or plant in our works is always orientated to the best cost-benefit ratio. A binding quotation will be given for careful diagnosis of the fault.

We create transparent costs and give tangible facts to make economic decisios in this way.

The repairs and maintenance are done with great care and according to the quality guidelines for new equipment. The many years of experince gained by our qualified employees and the original MPS spare parts guarantee the optimum repair.

Technical Support

Do you have a malfunction in your machine and need our support urgently ? Or do you want a specialist in high-pressure engineering to give you advice about a project ?

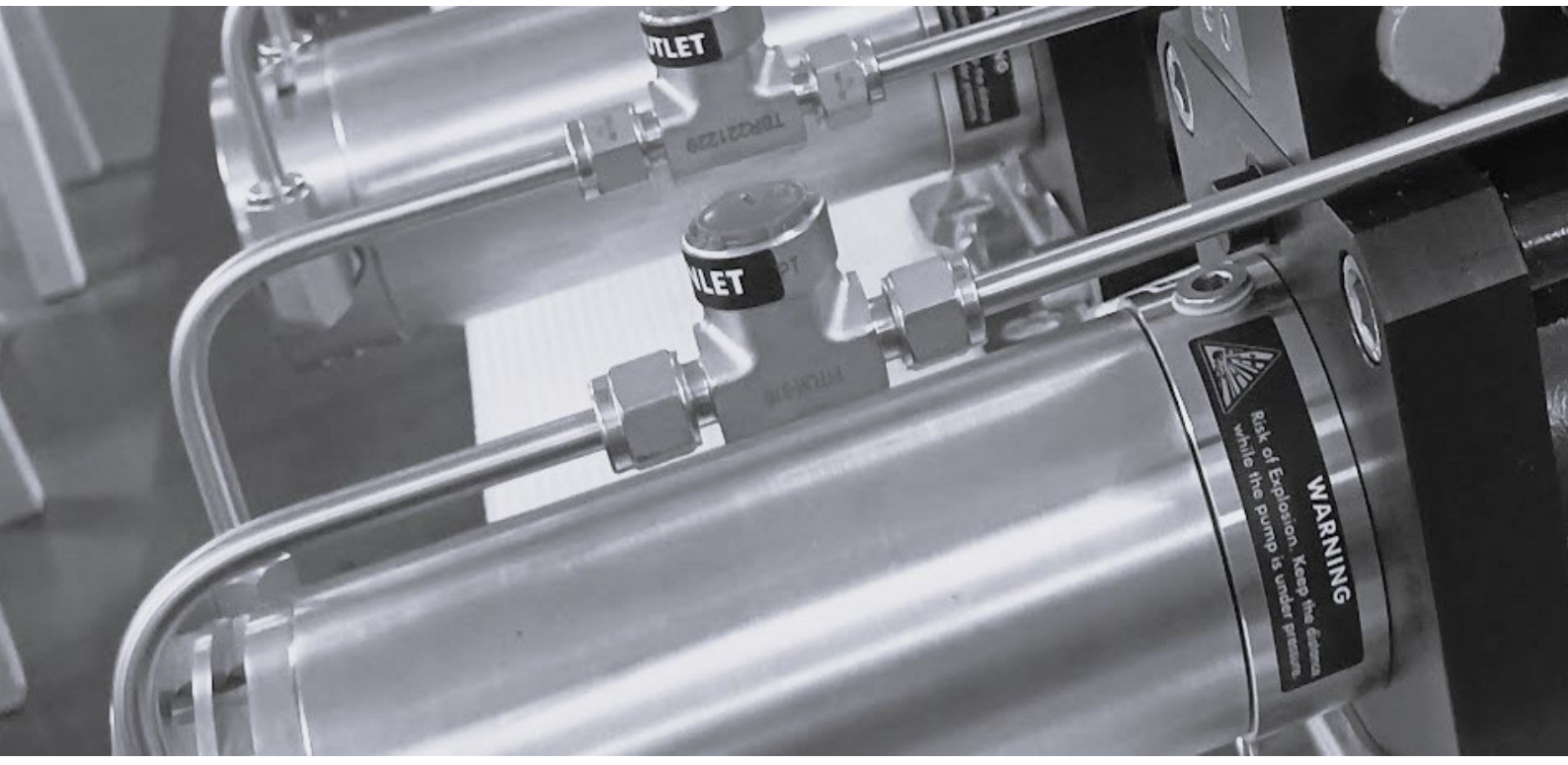
Do not hestitate to contact our engineers and technicians, who will be delighted to help you further with their practical knowledge. We will glady draw up tailor-made concepts in order to find a solution for you.

Training Courses

The operator's knowledge about the plant's construction and functionality is one of the most important prerequisites for the plant's safety and long service life.

Spare Parts

	**Speed Control**	Drive Air Valve, 1/4" Male Quick Connection, 3000mm Rilsan tube 6mm Diam, 1/4" Female Quick Connection
	**Pressure Regulator with Speed Control**	Pressure Regulator with HP and LP gauges, Drive Air Valve, 3000mm Rilsan Hose 6mm Diam, 1/4" Female Quick Connection
	**Hose 1/8", 2m**	Teflon PTFE thick heavy smooth wall, stainless steel braid, working pressure 321 Bar, G1/4"F - G1/4"F
	**Hose 1/8", 3m, 90°**	Teflon PTFE thick heavy smooth wall, stainless steel braid, working pressure 321 Bar, G1/4"F - G1/4"F 90°
	**Hose 1/8", 3m**	Teflon PTFE thick heavy smooth wall, stainless steel braid, working pressure 321 Bar, G1/4"F - G1/4"F



THE ESSENCE OF
“MADE IN ITALY”

Design, efficiency and reliability

www.mpstechnology.it

MPS TECHNOLOGY
Brand of:
LAVORAZIONI TECNOLOGICHE SRL
Via Po', 1 - 33054 - Lignano Sabbiadoro (UD)
ITALY

Tel. (+39) 0431 721482
Email. info@mpstechnology.it

Mod. 032COMEN Rev.00