









SOUDAGE - COUPAGE - DÉTENTE



WELDING - CUTTING - EXPANSION







B LE LORRAIN

FOUNDED IN 1946, THE COMPANY HAMPIAUX, OWNER OF THE LE LORRAIN BRAND,

applies its technical expertise and technology to offer a complete range of expansion, flame welding equipment and safety accessories. Its products are designed for the following markets:

- Crafts,
- Precision works such as jewellery,
- Heavy industry,
- Construction & demolition,
- Pipeline,

- Shipbuilding,
- Aerospace,
- Transport & railways,
- Heating & ventilation systems,
- Water treatment...

LE LORRAIN equipment is certified ISO 9001, version 2015 (certificate FR19/81843074). The company covers the whole production process and quality control: from turning the parts on CNC machines at the assemby and from the performing unit tests on each products, to shipment.













A SERVICE OFFER AND DEDICATED EXPERTS!

Driven by an ambitious team and growth strategy.

LE LORRAIN is betting on a new dynamic with the main focus: innovation. Using its expertise and know-how to support its customers in meeting the challenges they face is essential at LE LORRAIN.

LE LORRAIN is committed to offering its distributors and users the best level of service: from the design of a tailor-made product to after-sales service, through the qualification of an installation, and training in order to ensure the best use and guarantee the safety of users.

Beyond being a French manufacturer, LE LORRAIN wants to be a partner who works daily to contribute to the creation of added value for the professional activity of its own customers via services and personalized offers:



Design office

Listen, understand and innovate to respond the specific requirements and needs of customers. The Research & Development department supports customers: from the writing of specifications to the design of a tailor-made product.



Technical assistance

Analyze a specific situation, qualify an installation, advise on the choice or maintenance of equipment by telephone or face-to-face. Need help? Contact us: contact@lelorrain.fr or + 33 (0)3 83 35 47 98



Calibration benchs

Control the performance and safety of your installations. Fromon-site calibration to laboratory calibration at our factory, we offer calibration services to suit all your needs to ensure your regulators are compliant.



Preventive visit

Carry out a full diagnosis of the company and be guided in the preventive maintenance of all the installations.

The onsite visit is carried out by a LE LORRAIN expert technician, who provides a detailed report practices to be adopted and monitors the transfer of technical skills in the use of the equipment.



Specific technical assistance for gas networks

Accompany, advise, guide, correct or write specifications for the construction or maintenance of a gas network.



An after sales service

Carry out diagnostics, preventive maintenance and/or repair within defined deadlines according to user constraints.



LE LORRAIN Academie

Transmit, train, support its customers in their development. LE LORRAIN ACADEMIE, a QUALIOPI-certified training organization, undertakes to provide to each learner a training program suited to their development objectives.

LE LORRAIN ACADEMIE

Trainings

As a French manufacturer and partner, LE LORRAIN must provide you with support and accompany you in your development. In order to respond to your frequent requests for training, LE LORRAIN has structured itself with the aim of becoming an Organization of Training.

Taking part in a LE LORRAIN training means:

- Training by one of the last European manufacturers, recognized worldwide for 75 years.
- Training programs adapted and personalized according to development objectives.
- Training in the LE LORRAIN factory, to be immersed in the heart of the workshops and benefit from the advice of our most experienced welders.
- Trainers benefiting from technical expertise acquired in the field.
- Post-training support with the possibility of contacting technical support.
- To be able to claim financial support, thanks to the Qualiopi certification.



LE LORRAIN ACADEMIE has obtained Qualiopi certification. Qualiopi certification is a state mark that certifies the quality of training providers.

The accreditation process for this Qualiopi certification is very rigorous and therefore guarantees the quality of the training provided.



Preventive visits

A LE LORRAIN expert technician carries out a complete diagnosis of your company:

• An inventory of all installations (gas networks, torches, nonreturn valves, etc.)

• A check of the general condition of the equipment and correction of minor faults after an in-depth diagnosis.

- A detailed report provided with the best practices to adopt.
- A follow-up for a transfer of technical skills on the use of the equipment..

Beyond compliance with the regulations imposed on employers, this LELORRAIN service aims to:

- Increase the life of equipment and reduce the probability of failures.
- Avoid abnormal gas consumption.
- Improve work quality and productivity.
- Improve staff working conditions and reduce the risk of serious accidents.

Find all the information about our services on our websiteite

www.lelorrain.fr





TO

REGULATORS

EQUIPMENT

SAFETY DEVICE:

ACCESSORIE

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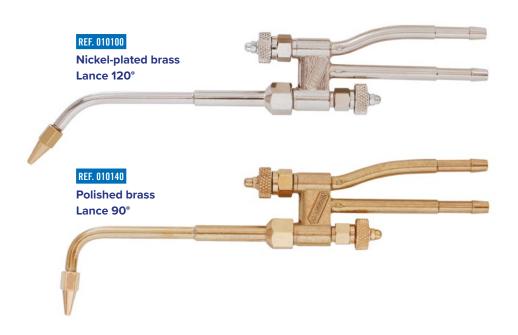
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S00 type

Torch designed for fine brazing work: for dental prostheses or jewelleries.

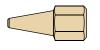
Possible to operate in OX/LPG

Ref.	Capacity in mm	Overall torch Length	Standard weight in kg	Thread	Accessory
010100	0,10 to 1	220	0.110	6 x 100	6 becs
010140	0,10 to 1	220	0.110	6 x 100	de 10 to 100 L/h



TIPS AND BURNERS

Single-flame





Round-flame OX/LPG





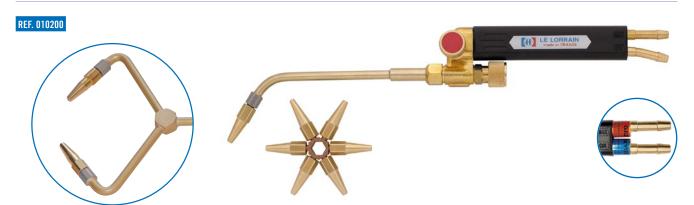


Ref.	Flow I/h	Thread
010010	10	6 x 100
010011	16	6 x 100
010012	25	6 x 100
010013	40	6 x 100
010014	63	6 x 100
010015	100	6 x 100

Ref.	Flow I/h	Thread
010013	40	6 x 100
010014	63	6 x 100
010015	100	6 x 100

Dynamic oxygen operating pressure in bar	Dynamic Acetylene operating pressure in bar	Thickness to be welded in mm	Flow rate of the acetylene tip in I/h	Filler metal diameter in mm
1,3	0,3	0,1	10	Steel 0,6
1,3	0,3	0,2	16	Steel 0,6
1,3	0,5	0,3	25	Steel 0,6
1,3	0,3	0,4	40	Steel 0,6
1,3	0,3	0,5 to 0,7	63	Steel 0,8
1,3	0,5	0,8 to 1,0	100	Steel 1,0

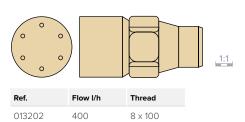
S0 type



Ref.	Capacity in mm	Overal torch length	Weight in kg	Description	Accessory	Thread
010150	0,40 to 4	330	0,32	Brass lance		8 x 100
010355	0,40 to 4	330	0,33	Hard chrome plating brass	7 tips from 40 to 400 l/h	8 x 100
010200	0,40 to 4	340	0,33	Brass lance to receive the tips		8 x 100
010300	0,40 to 4	350	0,39	With flashback arrestor		8 x 100
010270	2	Tailor-made	According to length	Twin-nose lance with tailor-made gap between the elbows	1 spout mounted at each of the two	8 x 100
010280	2	Tailor-made	According to length	Dual elbow nozzle with tailor-made gap with builtin flashback arrestor	ends, flow rate chosen by the customer.	8 x 100

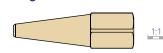
TIPS AND BURNERS

Multi-flame



REF. 015101 Complete tips holder wrench, 7 tips, 40 to 400 L/h

Single-flame



Ref.	Flow I/h	Thread
010261	25	8 x 100
010262	40	8 x 100
010263	63	8 x 100
010264	100	8 x 100
010265	160	8 x 100
010266	250	8 x 100
010267	315	8 x 100
010268	400	8 x 100
010269	500	8 x 100

Dynamic oxygen operating pressure in bar	Dynamic Acetylene operating pressure in bar	Thickness to be welded in mm	Tips flow in I/h	Filler metal diameter in mm
1,3	0,3	0,4	40	Steel 0,6
1,3	0,3	0,5 to 0,7	63	Steel 0,8
1,5	0,5	0,8 to 1,0	100	Steel 1,0
1,5	0,5	1,0 to 1,6	160	Steel 1,2
1,5	0,5	1,6 to 2,5	250	Steel 1,6
1,5	0,5	2,5 to 4,0	315	Steel 2,0
1,5	0,5	4,0 to 5,0	400	Steel 2,4

SOM type

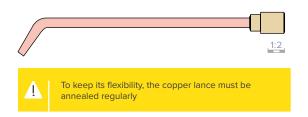
Torches particularly intended for plumbers and refrigeration technicians.



Ref.	Subtype	Capacity in mm	Overall torch length	Weight in kg	Accessory	Thread
012200	-	0,40 to 4	325	0.330	- 1 rigid brass lance, tips holder wrench, 7 tips from 50 to 400 l/h	8x100
012201	FBA	0,40 to 4	340	0.390		8x100
012205	-	0,40 to 4	325	0.370	and 2 flexible lances in copper.	8x100
012203	FBA	0,40 to 4	340	0.430		8x100

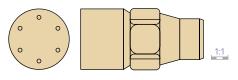
TIPS AND BURNERS

Flexible lance



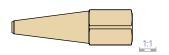
Ref.	Туре	Flow in I/h
012010	Flexible lance	100
012014	Flexible lance	160
012220	Flexible lance	200
012025	Flexible lance	250
012230	Flexible lance	315
012040	Flexible lance	400
410120	Rigid lance	400

Multi-flame



Ref.	Flow I/h	Thread
013202	400	8 x 100

Single-flame



Ref.	Flow I/h	Thread
010261	25	8 x 100
010262	40	8 x 100
010263	63	8 x 100

Ref.	Flow I/h	Thread
010264	100	8 x 100
010265	160	8 x 100
010266	250	8 x 100
010267	315	8 x 100
010268	400	8 × 100
010269	500	8 x 100

REF. 015101 Complete tips holder wrench 7 tips 40 to 400 L/h

Dynamic oxygen operating pressure in bar	Dynamic Acetylene operating pressure in bar	Thickness to be welded in mm	Tips flow in I/h	Filler metal diameter in mm
1,3	0,3	0,4	40	Steel 0,6
1,3	0,3	0,5 to 0,7	63	Steel 0,8
1,5	0,5	0,8 to 1,0	100	Steel 1,0
1,5	0,5	1,0 to 1,6	160	Steel 1,2
1,5	0,5	1,6 to 2,5	250	Steel 1,6
1,5	0,5	2,5 to 4,0	315	Steel 2,0
1,5	0,5	4,0 to 5,0	400	Steel 2,4

S1 type



Ref.	Subtype	Capacity in mm	Overall torch length	Weight in kg	Accessory	Thread
010425	=	2 to 10	430	0,700		12x150
010435	-	2 to 10	430	0,700	Either with tips holder wrench and 7 tips from 250 to 1000 I/h Either with a multi-flame burner of 1000	12x150
010422	FBA	2 to 10	460	0,700		12x150
010440	FBA	2 to 10	460	0,700		12x150

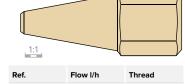


Multi-flame



Ref.	Flow I/h	Thread
014401	1000	12 x 150

Single-flame



Ref.	Flow I/h	Thread
015411	250	12 x 150
015412	315	12 x150
015413	400	12 x150
015414	500	12 x 150
015415	630	12 x 150
015416	800	12 x 150
015417	1000	12 x 150

REF. 010426 Complete tips holder wrench, 7 becs from 250 to 1000 l/h

Dynamic oxygen operating pressure in bar	Dynamic Acetylene operating pressure in bar	Thickness to be welded in mm	Tips flow in I/h	Filler metal diameter in mm
1,5	0,5	1,6 to 2,5	250	Steel 1,6
1,5	0,5	2,5 to 4,0	315	Steel 2,0
1,5	0,5	4,0 to 5,0	400	Steel 2,4
1,5	0,5	5,0 to 6,0	500	Steel 3,0
1,5	0,5	6,0 to 8,0	630	Steel 4,0
1,5	0,5	8,0 to 10	800	Steel 4,0
1,5	0,5	10	1000	Steel 4,0

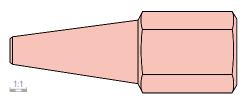
S2 type



Ref.	Subtype	Capacity in mm	Overall torch length	Weight in kg	Accessories	Thread
010500	-	10 to 45	580	1,300	Tips holder wrench and 6 tips from 1000 to 4000 l/h	14 x 150
010535	-	10 to 45	580	1,300	Burner 4000 l/h	14 × 150
010520	FBA	10 to 45	620	1,400	Tips holder wrench and 6 tips from 1000 to 4000l/h	14 × 150
010540	FBA	10 to 45	620	1,400	Burner 4000 l/h	14 x 150
010590	-	10	580	1,200	Tip 1000 I/h	14 x 150

TIPS AND BURNERS

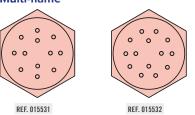
Single-flame

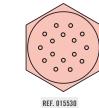


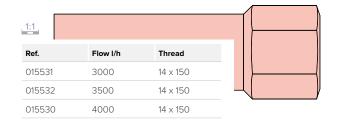
Ref.	Flow I/h	Thread
015502	1000	14 x 150
015503	1250	14 x 150
015504	1600	14 x 150
015505	2500	14 x 150
015506	3150	14 x 150
015507	4000	14 x 150

REF. 010501 Complete tips holder wrench, 6 tips 1000 to 4000 I/h

Multi-flame







Max thickness to be welded in mm	OX pressure in bar	Gas pressure in bar	Maximum flow OX in I/h	Maximum acetylene flow in I/h	Unit of power in kW (kilowatts)
45	3	0,3	4400	4000	49

S0 type



Ref.	Subtype	Overall torch length	Weight in kg	Thread
013200	-	340	0,330	8x100
013210	FBA	340	0,330	8x100

TIPS AND BURNERS

Annulaire

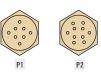




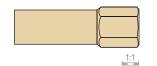


Ref.	Ø hole	Thread
013261	12/10	8 x 100
013262	16/10	8 x 100
013263	18/10	8 x 100
013264	20/10	8 x 100
013265	22/10	8 x 100

Multi-flame







Ref.	Flow in g/h	Thread
013201	120	8 x 100
013211	220	8 x 100
013221	300	8 x 100

Max heating thickness in mm	OX pressure in bar	Gas pressure in bar	Maximum OX flow in I/h	Maximum LPG flow in g/h	Unit of power in kW (kilowatts)
4	1,5	0,3	555	80	3,90

OX / LPG

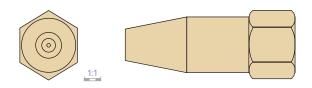
S1 type

Heating/brazing torch supplied with 3 multi-flame burner.



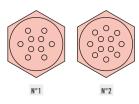
TIPS AND BURNERS

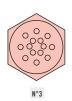
Round-flame

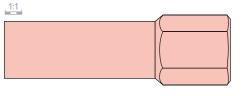


Ref.	Flow I/h	Thread
015441	600	12 x 150
015442	900	12 x 150
015443	1200	12 x 150

Multi-flame





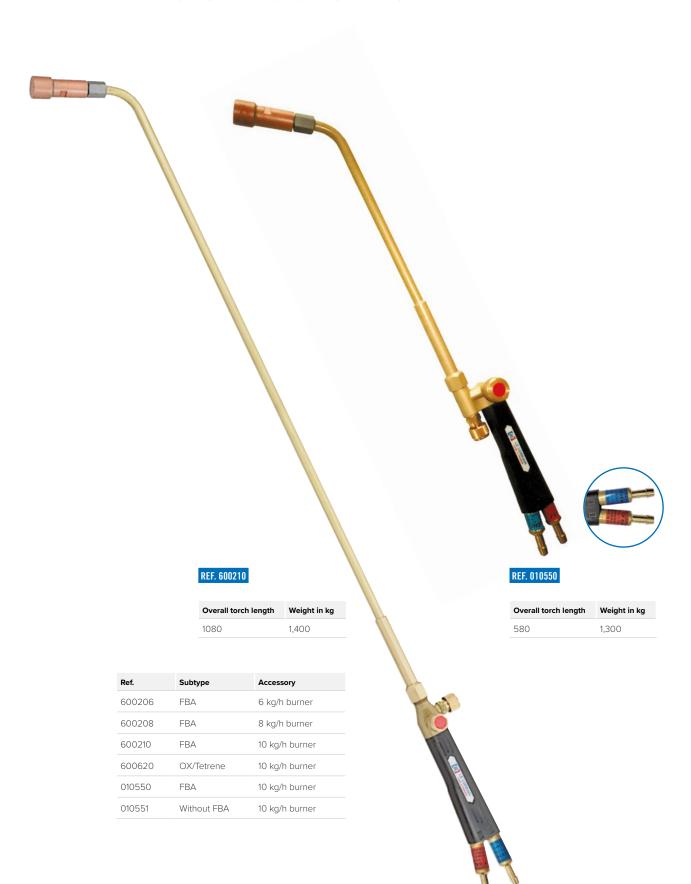


Ref.	Marking	Flow I/h	Thread
014402	LPG tips n°1	800	12 x 150
014403	LPG tips n°2	1000	12 x 150
014404	LPG tips n°3	1200	12 x 150

Max heating thickness in mm	OX pressure in bar	Gas pressure in bar	Maximum OX flow in I/h	Maximum LPG flow in g/h	Unit of power in kW (kilowatts)
10	2	0,3	220	315	8,06

High thicknesses type

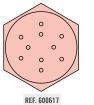
These torches have been especially designed for heavy duty heating and shaping work on all thicknesses.



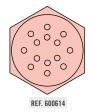
High thicknesses type

TIPS AND BURNERS

Multi-flame

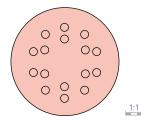


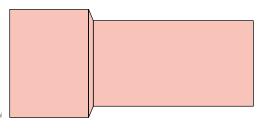




1:1		
Ref.	Flow in g/h	Thread
600617	2000	14 x 150
600618	3000	14 x 150
600614	4000	14 x 150

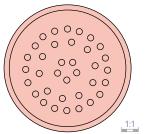
Multi-flame (also used for propylene)

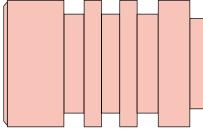




Ref.	Flow in g/h	Thread
600615	6000	14 x 150
600616	8000	14 x 150
600608	10000	14 x 150

Multi-flame OX/Ethylene

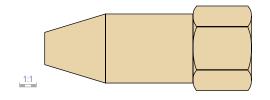




Ref.	Flow in g/h	Thread	
600609	10000	14 x 150	

Round-flame



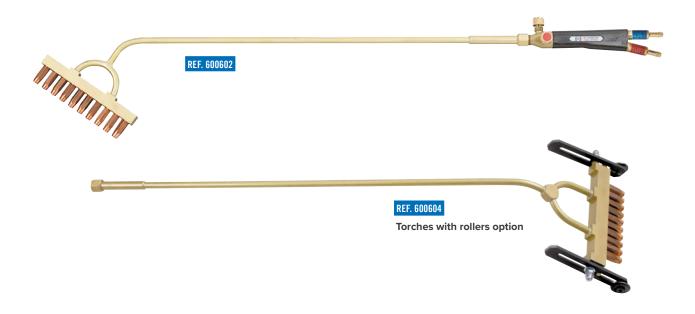


Ref.	Flow in g/h	Thread
015524	1500	14 x 150
015525	2000	14 x 150
015526	3000	14 × 150
015527	4000	14 x 150

Max heating thickness in mm	OX pressure in bar	Gas pressure in bar	Maximum OX flow in I/h	Maximum LPG flow in g/h	Unit of power in kW (kilowatts)
45	4	0,7	18375	2625	128,00

Long lengths FOR HEAVY DUTY

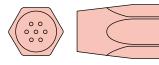
The heating rake is composed of 10 multi-flame tips (flow rate of each tips 1000 L/h), inclination of the lance on demand. There is a variant: 5 multi-flame tips. Also works with natural gas, contact us.



Ref.	Description	Width in mm	Overall torch length	Weight in kg
600601	Rake torche with 5 multi-flame tips 1	110	1080	1,400
600601	Rake torche with 10 multi-flame tips	200	1080	1,400
600601	Rake torche with 10 multi-flame tips and rollers	230	1080	1,600

TIPS AND BURNERS

Multi-flame burner





Ref.	Marking	Flow in g/h	Thread
600605	Oxygen / LPG	1000	12 x 125

Max heating thickness in mm	Туре	OX pressure in bar	Gas pressure in bar	Maximum OX flow in I/h	Maximum gas flow in g/h	Unit of power in kW (kilowatts)
25	5 tips rake	4	0,7	9187	1300	64,00
50	10 tips rake	4	0,7	18375	2625	128,00

DH3 type



REF. 017000

High pressure heating torch with mixture in the head, it is particularly intended for heating or descaling very thick parts. Delivered without burner.



WARNING

With the mixture oxygen + LPG:
For optimal operation without risk of damage, this torch must be used with an oxygen rack of at least 8 bottles + 1 or more coupled LPG cylinders.

- Good equipment consists of:

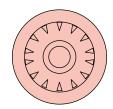
 1 high flow oxygen regulator 070150 fitted with a high flow FBA 900303
- •13S LPG regulator 035200 fitted with an FBA 063006
- 2 x 20 meters of EN 559 / ISO 3821 hoses diameter 10 mm minimum without connectors which would slow down the supply of the torch.

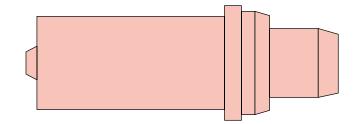
Ref.	Thread	Overall torch length	Weight in kg
017000	Inlet 20 x 150 R - OX 20 x 150 L - GAS	1200	2,4



TIPS AND BURNERS

OX/Acetylene





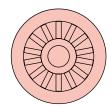


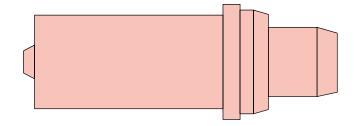


For DH3 OX/Acetylene burner, it is imperative to have a rack of 8 cylinders equiped with high flow regulators and appropriate FBA.

OX / LPG

Ref.	Flow in g/h	Weight in kg
017030	7000	0,32
017031	10000	0,32
017032	14000	0,32





Maximum heating thickness in mm	OX pressure in bar	Gas pressure in bar	Maximum OX flow in I/h	Maximum gas flow in I/h	Unit of power in kW (kilowatts)
80	6	0,7	9000	8000 acetylene	97,44
70	4	1	25725	14700 LPG	179,00

For welding: OX/Acetylene and for the cutting: OX / Acetylene or OX /LPG

SC0 G type

This torch, by simply changing the tip, makes it possible to cut or weld. On small thicknesses, it avoids strong deformations during cutting. Its small cutting nozzles make it more economical. It is light and very easy to handle, it is particularly recommended for portable welding stations.



Ref.	Subtype	Capacity in mm	Overall torch length	Weight in kg	Accessory
201531	Weight in kg Accessory		320	0,450	Complete tips holder wrench 7 tips + 2 cutting head 7 and 10/10 + intermediate
201541	Welding/cutting/FBA	• Welding from 0.4 to 4	320	0,515	Complete tips holder wrench 7 tips + 2 cutting head 7 and 10/10 + intermediate
201530	Cutting	• Cut up to 50	330	0,450	2 acetylene cutting head 7 and 10/10
201540	Cutting FBA		330	0,515	2 acetylene cutting head 7 and 10/10

CUTTING HEAD

Pour les réglages et consommations des têtes de coupe, se référer au tableau page 33.

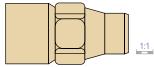


Gas	Caliber	Cutting thickness in mm
Acetylene	5 / 10	0,5 to 3
Acetylene	7 / 10	3 to 10
Acetylene	10 / 10	10 to 25
Acetylene	12 / 10	20 to 50
LPG	7 / 10	3 to 10
LPG	10 / 10	10 to 25
Welding intermediate piece		
	Acetylene Acetylene Acetylene Acetylene LPG	Acetylene 5 / 10 Acetylene 7 / 10 Acetylene 10 / 10 Acetylene 12 / 10 LPG 7 / 10 LPG 10 / 10

TIPS AND BURNER

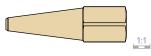
Multi-flame





Ref.	Flow I/h	Thread
013202	400	8 x 100

Single-flame



Ref.	Flow I/h	Thread
010261	25	8 x 100
010262	40	8 x 100
010263	63	8 x 100

Ref.	Flow I/h	Thread
010264	100	8 x 100
010265	160	8 x 100
010266	250	8 × 100
010267	315	8 x 100
010268	400	8 x 100
010269	500	8 x 100

REF. 015101 complete tips holder wrench 7 tips from 40 to 400 l/h

Operating pressure Dynamic oxygen in bar	Operating pressure Dynamic acetylene in bar	Maximum welding thickness in mm	Tips flow in I/h d'Acétylène	e Filler metal diameter in mm
1,3	0,3	0,4	40	0,6
1,3	0,3	0,5 to 0,7	63	0,8
1,5	0,5	0,8 to 1,0	100	1,0
1,5	0,5	1,0 to 1,6	160	1,2
1,5	0,5	1,6 to 2,5	250	1,6
1,5	0,5	2,5 to 4,0	315	2,0
1,5	0,5	4,0 to 5,0	400	2,4

DV-MP1 type

REF. 201675

Pre-mixed torch (low pressure) allowing better quality cutting and working with a low pressure setting. Opening of the cutting oxygen by a cutting trigger (lever) on the easy side to operate using the thumb of the right hand.

Acetylene or LPG operation by simply changing cutting heads.

The torches are delivered without cutting head.



REF. 204675 Titan

The TITAN DV-MP1 version can only function with a mixture of oxygen and LPG or natural gas. The long length of the mixing tube does not allow working in complete safety with an oxygen + acetylene mixture which would lack stability.



Ref.	Туре	Outlet	Description	Intlet	Length in mm	Weight in kg
201675	Cutting DV-MP1	MP1	90° bend	16 x 150 R 16 x 150 L	480	1,2
204675	Cutting DV-MP1 TITAN	MP1	120° bend	16 x 150 R 16 x 150 L	750	1,35

CUTTING HEADS

For cutting head settings and power consumption, refer to the table on page 33.





780A07 Acetylene 7 / 10 3 to 10 780A10 Acetylene 10 / 10 10 to 20 780A15 Acetylene 15 / 10 20 to 60 780A20 Acetylene 20 / 10 60 to 100 780A25 Acetylene 25 / 10 100 to 180 780A30 Acetylene 30 / 10 180 to 300 780P07 LPG 7 / 10 3 to 10 780P10 LPG 10 / 10 10 to 20 780P15 LPG 15 / 10 20 to 60	ss in mm
780A15 Acetylene 15 / 10 20 to 60 780A20 Acetylene 20 / 10 60 to 100 780A25 Acetylene 25 / 10 100 to 180 780A30 Acetylene 30 / 10 180 to 300 780P07 LPG 7 / 10 3 to 10 780P10 LPG 10 / 10 10 to 20	
780A20 Acetylene 20 / 10 60 to 100 780A25 Acetylene 25 / 10 100 to 180 780A30 Acetylene 30 / 10 180 to 300 780P07 LPG 7 / 10 3 to 10 780P10 LPG 10 / 10 10 to 20	
780A25 Acetylene 25 / 10 100 to 180 780A30 Acetylene 30 / 10 180 to 300 780P07 LPG 7 / 10 3 to 10 780P10 LPG 10 / 10 10 to 20	
780A30 Acetylene 30 / 10 180 to 300 780P07 LPG 7 / 10 3 to 10 780P10 LPG 10 / 10 10 to 20	
780P07 LPG 7/10 3 to 10 780P10 LPG 10/10 10 to 20	
780P10 LPG 10 / 10 10 to 20	
780P15 LPG 15 / 10 20 to 60	
780P20 LPG 20 / 10 60 to 100	
780P25 LPG 25 / 10 100 to 180	
780P30 LPG 30 / 10 180 to 300	

DV1 R type

A pre-mix torch (low pressure) allowing for better quality cutting and working with a low pressure setting. All-gas operation, by simply changing the cutting heads. The torches are delivered without cutting head.

The small size of the head and the thikness of the cutting head make it easy to remove previous defective welds.



Ref.	Subtype	Overall torch length	Weight in kg	Specificity	
202670	Top Naval DV1 R	480	1,060	-	
202685	Top Naval FBA DVR	520	1,100	-	
202673	Top injection DV1 R	480	1,180	Tuesday of the arighture of the board for several artists.	
202683	Top injection 180° bend DV1 R	520	1,180	Transfer of the mixture at the bend for more safety	

CUTTING HEADS

For cutting head settings and power consumption, refer to the table on page 33.



Ref.	Gas	Caliber	Cutting thickness in mm
702C07	Ethylene or LPG	7 / 10	3 to 10
702C10	Ethylene or LPG	10 / 10	10 to 20
702C15	Ethylene or LPG	15 / 10	20 to 60
702C20	Ethylene or LPG	20 / 10	60 to 100
702C25	Ethylene or LPG	25 / 10	100 to 180
702C30	Ethylene or LPG	30 / 10	180 to 300



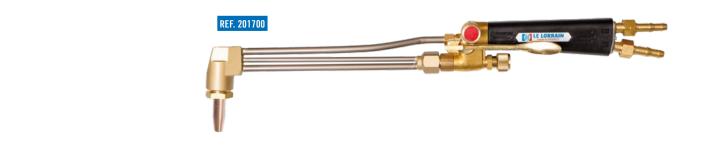
Ref.	Gas	Caliber	Cutting thickness in mm
720A10	Acetylene	10 / 10	10 to 20
720A15	Acetylene	15 / 10	20 to 60
720A20	Acetylene	20 / 10	60 to 100
720A25	Acetylene	25 / 10	100 to 180
720A30	Acetylene	30 / 10	180 to 300

DH1 type

High pressure cutting torches operating on the principle of mixing oxygen and fuel gas in the head.

This type of mixture insure minimal flashbacks for users.

Opening of the cutting oxygen by a cutting trigger (lever) on the side easy to operate using the thumb of the right hand. There is a version equipped with a valve-activated instead of the trigger. Torch delivered without cutting head.

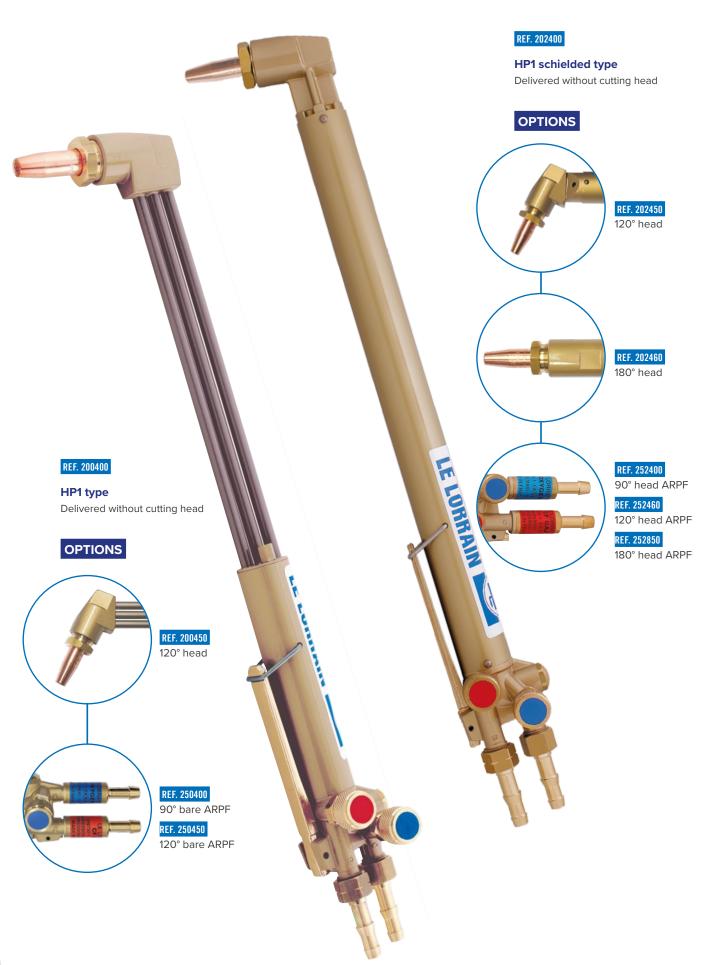




Long lengths available, ideal for reinforcement operations.

Ref.	Subtype	Overall torch length	Weight in kg	Description
201700	DH1G	470	1,200	Trigger
201720	DH1G - FBA	520	1,200	Trigger
201722	DH1R	470	1,200	Cutting oxygen valve
201721	DH1R - FBA	520	1,200	Cutting oxygen valve
201750	DH1G	770	1,200	Trigger 120° bend
201760	DH1G - FBA	820	1,200	Trigger 120° bend

HP1 type



HP1 and **HP1** schielded type

Torches are delivered without cutting head.

STANDARDS

The two major advantages of this range of products are robustness, simplicity of operation and maintenance.

All HP1 type high pressure cutting torches work on the principle of mixing oxygen and fuel gas in the head. This type of mixture assures the user of a minimization of flashbacks.

Optimization of its grip due to its round handle and the position of the cutting lever (trigger). The 120° head facilitates the oxycutting of parts on the ground by allowing the user to remain upright or at a distance.

Ref.	Description	Length in mm	Weight in kg
200400	90°	470	1,120
200450	120°	470	1,120
202450	Schielded + 120°	470	1,270
202460	Schielded + 180°	480	1,350
250400	90° + FBA	530	1,150
250450	120° + FBA	530	1,150
252400	Schielded + 90° + FBA	530	1,300
252460	Schielded + 120° + FBA	530	1,300
252850	Schielded + 180° + FBA	530	1,380

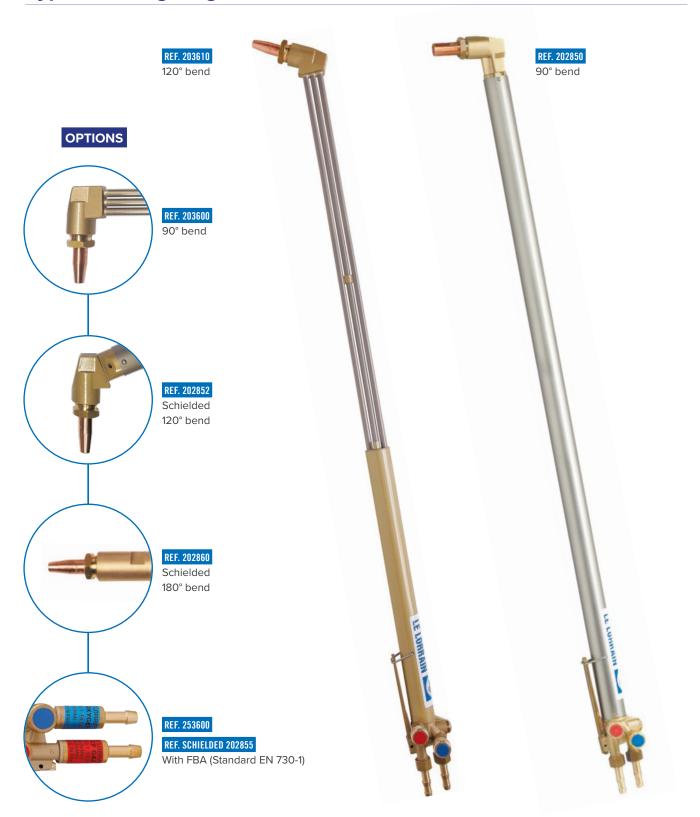
SCHIELDED

Schielded torches are designed for tough jobs.

The three major advantages of this product range are:

- 1 More robust thanks to its external shielding.
- 2 A lightness preserved despite the shielding.
- 3 Easy to use and maintain.

Type HP1 long length



For all other lengths from 60 cm to 6 m, contact us.

Ref.	Outlet cone	Length in mm	Weight in kg
203610	G1	1000	1,6

Ref.	Outlet cone	Length in mm	Weight in kg
202850	G1	1000	1,9

CUTTING HEAD

For cutting head settings and power consumption, refer to the table on page 33.

For HP1 and DH1 type torches

 $\ensuremath{\mathsf{G1}}$ cutting heads are three-cone, mixture in the head.

OX/ACETYLENE



Ref. G1	Caliber	Cutting thickness in mm
205A07	7/10	3 to 10
205A10	10/10	10 to 25
205A12	12/10	25 to 50
205A16	16/10	50 to 80
205A20	20/10	80 to 120
205A25	25/10	120 to 200
205A30	30/10	200 to 300

OX/LPG



Ref. G1	Caliber	Cutting thickness in mm
200P07	7/10	3 to 10
200P10	10/10	10 to 25
200P12	12/10	25 to 50
200P16	16/10	50 to 80
200P20	20/10	80 to 120
200P25	25/10	120 to 200
200P30	30/10	200 to 300

OXY/PROPYLENE (OR SIMILAR GAS)



Ref. G1	Caliber	Cutting thickness in mm
205T07	7/10	3 to 10
205T10	10/10	10 to 25
205T12	12/10	25 to 50
205T16	16/10	50 to 80
205T20	20/10	80 to 120
205T25	25/10	120 to 200
205T30	30/10	200 to 300

CUTTING HEAD

For cutting head settings and power consumption, refer to the table on page 33.

For DH1 and HP1 type torches

EXTRA HEATING OX/NATURAL GAS OR OX/LPG

Cutting head for HP1 torch. One-piece and high resistance, can cut thicknesses up to 360 mm. Mounting on HP1 torch with Ø17 nut ref. 200429.

Ref.	Туре	Caliber
850014	Simple heating ring	40/10
850015	Double heating ring	40/10

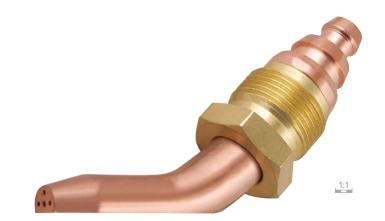




RIVET REMOVAGL OX/ACETYLENE

Allows oxycutting as close as possible to the sheet; reducing griding time.

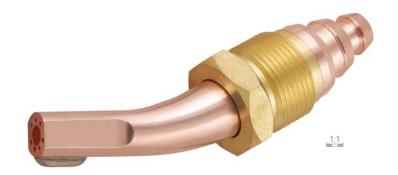
Ref.	Caliber	Rivet removal thickness in mm
205D20	20/10	Maxi 80



GOUGEAGE OX/ACETYLENE

Can remove the defective welds.

Ref.	Caliber	Gouging thicknessin mm
205G16	16 / 10	10 Max
205G20	20 / 10	15 Max
205G25	25 / 10	25 Max

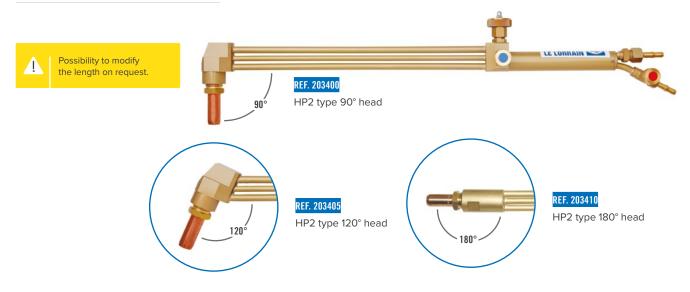


HP2 type

Manual cutting torch for cutting thicknesses from 300 to 900 mm by simply changing the cutting head. Opening of the cutting oxygen by valve activated. Works on all gases by simply changing the cutting head.

Delivered without cutting head.

Ref.	Overall torch length	Weight in kg standard en kg
203400	760	3.750
203405	800	3.750
203410	850	3.780





CUTTING HEAD

For cutting head settings and power consumption, refer to the table on page 33.

For HP2/G2 torches

OX/LPG

Removable cutting heads for machine or manual torches.



Ref.	Caliber	Cutting thickness in mm
203P35	35/10	300 to 400
203P40	40/10	400 to 500
203P45	45/10	500 to 600
203P50	50/10	600 to 750
203P55	55/10	750 to 900
203P60	60/10	900 to 1050



Ref.	Gas	Caliber	Cutting thickness in mm
230P30	LPG	30/10	200 to 300
230P35	LPG	35/10	300 to 400
230P40	LPG	40/10	400 500
230P45	LPG	45/10	500 to 600
230P50	LPG	50/10	600 to 750
230P55	LPG	55/10	750 to 900
230P60	LPG	60/10	900 to 1050

OX/Acetylene

Ref.	Gas	Caliber	Cutting thickness in mm
230A30	Acetylene	30/10	200 to 300
230A35	Acetylene	35/10	300 to 400
230A40	Acetylene	40/10	400 to 500
230A45	Acetylene	45/10	500 to 600
230A50	Acetylene	50/10	600 to 750
230A55	Acetylene	55/10	750 to 900
230A60	Acetylene	60/10	900 to 1050

OX/LPG

One-piece cutting heads HP2/G2. Designed for demolition work :

OX setting = 10 bar min.

Gas setting = 0,8 bar min.



Ref.	Gas	Caliber	Welding thickness in mm
230P70	LPG	70/10	600 to 900
230P80	LPG	80/10	800 to 1110
230P90	LPG	90/10	1000 to 1300

Special lengths type on request

Manufacture on request

MACHINE CUTTING TORCHES
OX/Acetylene or OX / LPG



Three inlets with two regulating taps and a 1/4 turn ball valve for the cutting oxygen. Inlet M16x150D for heating oxygen, M16 x150D for cutting oxygen, M16 x150G for fuel gas.

External tube diam. 32mm, length 350 mm. Delivered without rack body or cutting head. Works with all combustible gases by simply changing the cutting head. Takes HP1 type cutting heads (adaptable G1) from 7 to 40/10, allowing cuts from 3 to 360 mm thick.

Optional: rack body, other inlet thread.



The torch machine is designed for the steel industry, specifically for the cutting of billets in continuous casting.

It accommodates cutting heads with a cone type 853 and comes equipped with a built-in cooling system. The external tube has a standard diameter of 50 mm.

The cutting head, the length of the torch and the inlet threads depend on the installation to be which the torch is intended.



Three input machine torche (1/4 turn ball valve, valve and cooling in option).16 x 150 D inlets for heating oxygen, 20 x 150D for cutting oxygen, 16 x 150G for fuel gas (optional water cooling, 16 x 150D inlet and outlet). External tube diam. 50 mm. Nonstandard tube length to be specified when ordering.

Delivered without rack body or cutting head. Works with all combustible gases by simply changing the cutting head.

It can receive HP2 type cutting heads (adaptable G2 or adaptable cone 853) from 30 to 70/10, allowing cuts 300 to 900 mm thick.



CUTTING HEADS

For cutting head settings and power consumption, refer to the table on page 33.

OX/ACETYLENE





Ref.	Cutting thickness in mm	Operating pressure in bar
220A10	3/25	3,5 OX / 0,3
220A12	25/50	5,0 OX / 0,4
220A16	50/80	6,0 OX / 0,5
220A20	80/120	7,0 OX / 0,6
220A25	120/200	9,0 OX / 0,7
220A30	200/300	10,0 OX / 0,7

OX/LPG







Ref.	Cutting thickness in mm	Operating pressure in bar
220P10	3/25	3,5 OX / 0,3
220P12	25/50	5,0 OX / 0,4
220P16	50/80	6,0 OX / 0,5
220P20	80/120	7,0 OX / 0,6
220P25	120/200	9,0 OX / 0,7
220P30	200/300	10,0 OX / 0,7

Cuttir	ng settings	Set pressure in bar			Hourly consumption			
Caliber cutting head	Thickness in mm	OX cutting	OX heating*	Acetylene	LPG	OX heating + cutting in liters / h	Acetylene in liters / h	LPG in liters / h
7/10	3 to 10	3 to 5	1,5	0,3	0,5	650 / 1100	150	200
10/10	10 to 25	3 to 5	1,5	0,3	0,5	1200 / 2200	200	300
12/10	25 to 50	3 to 5	1,5	0,3	0,7	1700 / 3000	300	400
16/10	50 to 80	4 to 6	1,5	0,3	0,7	2800 / 5600	400	500
20/10	80 to 120	5 to 7	1,5	0,3	0,8	7000 / 15000	550	700
25/10	120 to 200	6 to 8	1,5	0,3	0,8	13000 / 25000	750	900
30/10	200 to 300	6 to 8	1,5	0,3	0,8	21000 / 37000	900	1100
35/10	300 to 400	8 to 10	1,5	0,3	0,9	36000 / 56000	1100	1200
40/10	400 to 550	8 to 10	1,5	0,3	0,9	54000 / 68000	1100	1200
45/10	550 to 700	8 to 10	1,5	0,3	1,0	68000 / 79000	1100	1200
50/10	700 to 800	8 to 10	1,5	0,3	1,0	78000 / 84000	1100	1200
55/10	800 to 900	8 to 10	1,5	0,3	1,0	83000 / 90000	1100	1200
60/10	850 to 950	8 to 10	1,5	0,3	1,0	88000 / 10000	1100	1200

* Only for oxycutting table



These results are obtained in the laboratory. They are an average and can fluctuate according to:

- The supply conditions for the gases used
 Any pressure losses due to the lengths of pipe
- The condition of the equipment
 The number of flashback arrestor

GENERAL GAS INFORMATION

Gas name	Chemical formula	Gas + OX melting temperature	Bottle inlet type	Nominal cylinder pressure in bar	Industrial brand names
Propylene	C3H6	2883°	E TYPE	7	Flamal 29
Ethylene	C2H4	2909°	E TYPE	170	Flamal 31
LPG	C3H8	2830°	E TYPE	7	LPG
Methane	CH4	2730°	E TYPE	196	Natural gas
Acetylene	C2H2	3160°	H TYPE	17	Acetylene
MAPP	C4H10	2640°	E TYPE	3	MAPP

Commonly uses valves inlet conncetion per country

For the other regulator inlet or outlet conncetions, please contact us/

Country	Oxygene O3	Acetylene C2H3	LPG C3H8	Butane C4H10	Carbon dioxide CO3	Argon Ar	Hydrogen H2	Nitrogen N3	Hydrogenated Nitrogen N2 + H2 > 5%
France	22,91X1,814	G5/8"	3,2	3,2	W21.7X1.814-14	W24.32X1/14"	3,2	W21.7X1.814-14	-
Germany	G3/4"		3,1	3,1	W21.8X1/14"	W21.8X1/14"	3,1	W24.32X1/14"	3,1
Sweden	W21,8X1/14"	G3/4"	-	-	W21,8X1/14"	W24.32X1/14"	6.3/3.1*	W24.32X1/4" TYPA work bring to the state of	6,3
Italy	W21,8X1/14°		-	3,5	W21,7X1/14"	W24.5X1/14"	3,5	W21.7X1/14"	
Morocco	22,91X1,814	G5/8"		3,2	W21,7X1,814-14	W21.7X1.814-14	3,2	W21.7X1/14"	-
Tunisia	22,91X1,814	G5/8"	3,2	3,2	W21,7X1,814-14	W21,7X1,814-14	3,2	W21.7X1.814-14	-
United Arab Emirates	G5/8"	G5/8"	3.3/3.4 *	3,3	0,860"X14TPI RH	G5/8"	3,3	G5/8"	-
United Kingdom	G5/8"	G5/8"	3.3/3.4 *	3,3	0,860"X14TPI RH	G5/8"	3,3	G5/8"	1
USA	W21.8X1/14"	g 332	2,14	2,14		30.1	6,4	38.1	~
Peru	W21,8X1/14" CGA540	a 3.2	-	-		G5/8"	6,4	38.1	

DDI type















Ref.	Intlet type	Weight in kg
054200	С	1,040
050200	F	1,040
051200	Н	1,040

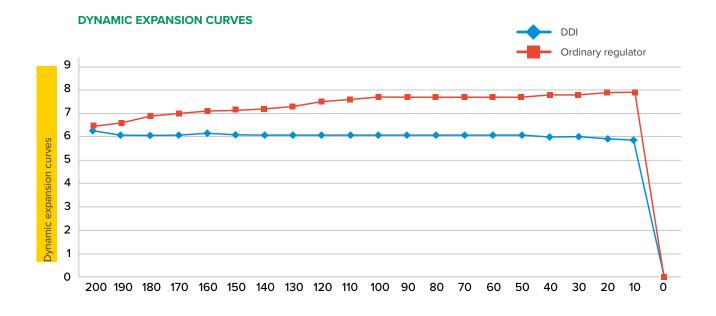
DDI type

DDI regulators are compact, extremely solid and easy to use.

- ▶ Very easy to use, the pressures recommended for welding or cutting are determined by the color zones:
 - Oxygen Regulator: two green welding and cutting zones.
 - For the Acetylene Regulator: a single green zone welding cutting.
 - For the neutral gas regulator: a yellow TIG zone + a gray MIG zone.
- MHigh pressure manometer protected by a anti-choc PA rubber casing.
- Donstant pressure: an INPI patented device makes it possible to obtain a constant outlet pressure during the use of the bottle.

Other product advantages:

- 2 patents filed.
- Very easy to adjust thanks to the positioning of the adjustable wheel (no need for a second pressure anometer anymore).
- Very resistant valve system.
- 2 ultra-resistant ABS protections.
- Ergonomics of the device to follow the curve of the gas cylinder.
- Machining in the brass bar allows a better solidity while remaining light.



TORCHE!

These regulators are single-stage regulators, whose two manometers are covered with a flexible rubber envelope. Their compact size and rear connection limit shocks. They are ideal on mobile equipment mounted on type B05 or B11 cylinders. For input and output connections, consult us.

LB21 type

Standard EN 585/ISO 2503 following minutes n° L.025.962





Ref.	Gas	Graduation	Flow / Pressure	Intlet	Outlet	Weight in kg
090200	Oxygen	315 bar/16 bar	35 Nm3/h – 10 bar	1,08	16 x 150D	1,08
091200	Acetylene	40 bar/2.5 bar	10 Nm3/h – 1.5 bar	1,08	16 x 150G	1,08
092200	Acetylene inlet export with clip holder + key	40 bar/2.5 bar	10 Nm3/h – 1.5 bar	1,08	16 x 150G	1,08
092500	Acetylene inlet export without clip holder + key		10 Nm3/h – 1.5 bar	1,08	16 x 150G	1,08
093200	Pressurized air	315 bar/ 16 bar	35 Nm3/h – 10 bar	1,08	16 x 150D	1,08
094100	Nitrogen	315 bar/20 l/mn	15 l/mn	1,08	12 x 100D	1,08
094200	Nitrogen/CO2	315 bar/38 l/mn	25 l/mn	1,08	12 x 100D	1,08
094210	Nitrogen	315 bar/16 bar	10 bar	1,08	16 x 150D	1,08
094230	hydrogenated nitrogen	315 bar/16 bar	10 bar	1,08	16 x 150G	1,08
095200	LPG	2.5 bar	1.5 bar	1,02	16 x 150G	1,02
095000	LPG	6.0 bar	4.0 bar	1,02	16 x 150G	1,02
098200	Methane	315 bar/6.0 bar	4.0 bar	1,08	16 x 150G	1,08
098210	Propylene	2.5 bar	1.5 bar	1,08	16 x 150G	1,08
098220	Ethylene	315 bar/2.5	1.5 bar	1,08	16 x 150G	1,08
094240	Nitrogen	315 bar/120 L/mn	100 l/mn	1,08	16 x 150D	1,08

L2C2 type

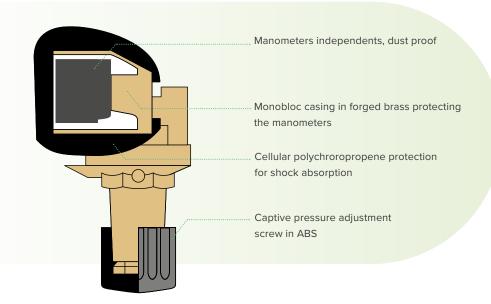


Ref.	Las	Lraduation	Flow / Pressure	Intlet	Outlet	Weight in kg
100200	Oxygen	315 bar/16 bar	35 Nm3/h - 10 bar	F	16 x 150R	1,120
101200	Acetylene	40 bar/2.5 bar	10 Nm3/h - 1.5 bar	Н	16 x 150L	1,120
102200	Acetylene inlet export with clip holder + key	40 bar/2.5 bar	10 Nm3/h - 1.5 bar	А	16 x 150L	1,320
102500	Acetylene inlet export without clip holder + key	40 bar/2.5 bar	10 Nm3/h - 1.5 bar	А	16 x 150R	1,120
104200	Nitrogen / CO2	315 bar/38 l/mn	25 l/mn	С	12 x 100R	1,120
104100	Nitrogen / CO2	315 bar/20 l/mn	15 l/mn	С	12 x 100R	1,120
104210	Nitrogene	315 bar/ 16b	10 bars	С	16 x 150R	1,120
103200	Pressurized air	315 bar/ 16 bar	35 Nm3/h - 10 bar	В	16 x 150R	1,120
102400	Ethylene	315 bar/2.5	1.5 bar	Е	16 x 150L	1,120

3S type







Gas	Max flow*
Oxygen	80 Nm ³ /h
Acetylene	35 Nm³/h

^{*} In the best configuration: max cylinder and maximum operating pressure.

Ref.	Gas	Graduation	Rébit / Pression	Intlet	Outlet	Weight in kg
030200	Oxygen	315 bar/16 bar	35 Nm3/h - 10 bar	F	16 X 150 R	1,780
031200	acetylene	40 bar/2.5 bar	10 Nm3/h - 1.5 bar	Н	16 X 150 L	1,780
032200	Acetylene inlet export with clip holder + key	40 bar/2.5 bar	10 Nm3/h - 1.5 bar	А	16 X 150 L	1,980
032500	Acetylene inlet export with clip holder + key	40 bar/2.5 bar	10 Nm3/h - 1.5 bar	А	16 X 150 L	1,780
033200	Pressurized air	315 bar/16 bar	35 Nm3/h - 10 bar	В	16 X 150 R	1,780
034200	Nirogen 16 bar	315 bar/16 bar	10 bar	С	16 X 150 R	1,780
035200	LPG	2.5 bar	1.5 bar	Е	16 X 150 L	1,740
037200	Argon / CO2	315 bar/20 l/mn	15 l/mn	С	12 X 100 R	1,780
038200	Natural gas / Methane	315 bar/6 bar	4 bar	Е	16 X 150 L	1,780
040200	Argon / CO2	315 bar/38 l/mn	25 l/mn	С	12 X 100 R	1,780
041200	Nitrogen / Hydrogen or Ethylene	315 bar/40 l/mn	25 l/mn	Е	12 x 100 R	1,780
041205	Nitrogen / Hydrogen or Ethylene	315 bar/16 bar	10 bar	Е	16 X 150 L	1,780

Nitrogen high pressure type



These regulators are mainly used with nitrogen and are used to purge refrigeration installations, inflate shock absorbers, inert large diameter pipes, etc.



BE CAREFUL to use hoses resistant to the indicated values of the regulator

Ref.	Graduation max in bar	Maximum pressure in bar	Intlet	Outlet	Weight in kg
080200	315 / 60	40	С Туре	16 x 150 R	2,48
080201	315 / 60	40	С Туре	3/8 gas	2,48
080202	315 / 60	40	С Туре	1/4 SAE	2,48
080210	315 / 100	60	С Туре	16 x 150 R	2,48
080217	315 / 100	60	С Туре	3/8 gas	2,48
080218	315 / 100	60	С Туре	1/4 SAE	2,48
080220	315 / 160	105	С Туре	16 x 150 R	2,48
080221	315 / 160	105	С Туре	3/8 gas	2,48
080222	315 / 160	105	С Туре	1/4 SAE	2,48

High flow type



At standard pressure, this regulator can deliver from 20 to 280 Nm 3 /h depending on the gases concerned.

Example of utilisation: Supply of several torches or several welding unit stations, depending on the gases used.

At + 20° C

Gas	P1 / bar	P4 / bar	P2 / bar	Flow Nm ³ /h
Oxygen	200 - 20	10 - 10	9 - 7,7	280 - 100
Acetylene	17 - 5	1,5 - 1,5	1,15 - 1,15	60 - 22

P1: Upstream pressure P4: Static expansion pressure

P2: Read expansion

Ref.	Las	Lraduation en bar	Pression maxi en bar	Intlet	Outlet	Weight in kg
070100	Oxygen	315 / 16	10	F	20 x 150 R	4,100
070150	Frame oxygen	315 / 16	10	35 x 200 R	20 x 150 R	4,150
070200	Neutral gas	315 / 16	10	С	20 x 150 R	4,100
070250	Neutral gas frame	315 / 16	10	38 x 200 R	20 x 150 R	4,150
070300	Acetylene	40 / 2,5	1,5	Н	20 x 150 L	4,100
070350	Acetylene frame	40 / 2,5	1,5	33 x 200 L	20 x 150 L	4,150

In Tig/Mig or orbital welding, a quality regulator allows better welding initiation and better management of gas consumption:

- Avoid damage to the welding solenoid valves welding stations.
- The amount of gas trapped in the pipes is divided by 4.
- Optimal gas saving for spot welding.
- Suitable for fume extraction welding torches.

DEI type

UP TO

SAVING GAS*
COMPARED TO
A STANDARD
REGULATOR

* Tests carried out on a panel of customers

Standard regulator peak flow

DEI flow peak

Flow rate adjusted according to the process

Curve standard regulator

---- Flow curve regulator DEI

Volume of gas saved

Welding torch open/close cycle

This 3 in 1 regulator is designed to be mounted on a 200 bar argon/CO2 bottle. It consists of:

- a regulator that releases the pressure of the bottle to 3.5 bar,
- a flowmeter graduated from 0 to 30 l/min allowing an accurate reading of the flow,
- a gas saver.

Flow: 30I/minute max Inlet pressure: 200 bar

This regulator has two stages, the second being specially designed to limit the pressure of gas trapped during welding interruptions. Comparative measurements show a division by 4 of the pressure trapped in the pipes.

This reduction pressure has several advantages:

- Reduction of the blowing effect when initiating the arc.
 This results in greater ease of ignition, in particular for low currents
- Less pressure on the gas circuit of the welding machine.
- Avoid wasting gas at each initiation..

LESS PRESSURE

- = LESS TRAPED GAS
- = REDUCED CONSUMPTION

A comparative test was carried out to determine the gas saving. A standard DEI and a standard regulatorwere tested for 600 flow cycles:

- Flow rate of 20 I/min
- Open flow for 1s
- Close flow for 2s

The measured saving is 42% on this type of cycle but the result may vary depending on the flow rate set, the type of welding machine and the length of the pressure pipes. Tests carried out by manufacturers on pointing processes with this new regulator show savings of up to 55%.



DEI REGULATOR TEST IN ENGLISH

Flowmeter type



REF. 054221

This product saves gas when welding is initiated.

Column graduated from 0 to 30 L/min, with integrated economizer for network mounting at a fixed 3.5 bar pressure.

3/8 inlet connection and other connections on request.

Outlet fitting 12x100 and other connections on request.

ECO/MIG - ECO/TIG type





The ECO / MIG economizer, installed at the outlet of a neutral gas flowmeter, allows gas savings of around 30% when starting welding. Optimal gas savings for pointing users.

Ref.	Туре
042200	ECO/MIG saver
043200	ECO/MIG saver

Flowmeter



The use of a ball column allows better adjustment precision: ideal for stainless steel and aluminum TIG welding.

Exists in OX version in 7 and 15 l/min.



Ref.	Gas	Туре
054201	Neutral gas	DM flowmeter regulator 30 l/mn
054202	Neutral gas	DM flowmeters regulator 30 l/mn
054261	Neutral gas	DM flowmeter regulator15 l/mn
054262	Neutral gas	DM flowmeters regulator 15 l/mn
054251	Oxygen DM	flowmeter regulator 15 l/mn
054252	Oxygen DM	flowmeters regulator 15 I/mn
054280	Neutral gas	LB21 flowmeter regulator 30 l/mn
054281	Neutral gas	LB21 flowmeter regulator 15 l/mn

REF. 054202

This regulator is used to supply two TIG/MIG stations or to ensure in parallel the inerting of the pipe to be welded.



DDI-DE type for neutral gas

Particularly used for laser and plasma tables.

Guarantees stability of the pressure upstream of the bottle when it varies and therefore ensures process reliability. Equipped with a stainless steel membrane and piston systems, these regulators prevent any contamination and thus guarantee the quality of the gases.

Available in service pressure from 0 to 40 bar for all types of gas!



Ref.	Gas	Graduation max in bar	Flow / pressure in bar	Intlet	Outlet	Weight in kg
054420	Neutral gas	315/16	10	С Туре	16 x 150 R	1,8
054422	Oxygen	315/16	10	F Type	16 x 150 R	1,8
054500	Neutral gas	315/60	35	С Туре	16 x 150 R	2,150
054510	Neutral gas	315/60	35	С Туре	L1/4	2,150
054511	Neutral gas	315/60	35	С Туре	L3/8	2,150
054550	Oxygen	315/60	35	F Type	16 x 150 R	2,160
054551	Oxygen	315/60	10	F Type	L1/4	2,160
054552	Oxygen	315/60	10	F Type	L3/8	2,160

3S schielded type with electric heater 220 V/125 W



REF. 041250

CO2 is a cold gas, it must be heated to use it for MIG welding protection.

On request can be realized with other voltages.

Ref.	Gas	Graduation	Flow / Pressure	Intlet	Outlet	Weight in kg
041250	CO2	315 bar / 40 l/mn	25 l/mn	С	12 x 100 R	2,4
041267	CO2	315 bar / 16 bar	10 bar	С	16 x 150 R	2,4



REF. 041250K

CO2 is cold gas. It must be heated to use it for mig welding protection. Led controlling the periods of the resistance.

On request can be realised with other votlages.

Ref.	Gas	Graduation	Flow / Pressure	Intlet	Outlet	Weight in kg
041250K	CO2	315 bar / 40 l/mn	25 l/mn	С	12 x 100 D	2,4

Other voltages available on request.

Led controlling the periods resistance operation

Heater

Unit station inlet



Other voltages available on request.

STAN type

LPG

2,5 bar

1,5 bar

095820

REF. 090800



16 x 1,5 L

E type

Automotive special nitrogen kitclim (10 bar)

It's made of:

- 1 carrying case with protective foam (Ref. 080105)
- ▶1 LB21 regulator for nitrogen, fitted with a ¼ SAE outlet, maximum operating pressure of 10 bar (Ref. 080155)
- 1 flexible, length 3000 mm, 1/4 SAE female inlet and outlet (Ref. 080104)
- 1 service key for mounting regulator on cylinder (Ref. 080103)
- ▶ 1 blue quick-release car connector R134E low pressure, and R134A high pressure, red. (Ref. 080151 et 080152)

Option : 1 blue quick-release car connector 1234Y Flow pressure and 1234YF high pressure, red (Réf. 080156 - 080157)



REF. 080160

Nitrogen kitclim special industrial refrigeration units (100 bar)

It's made of:

- ▶ 1 carrying case with transport foam (ref. 080171)
- ▶ 13SHP manoregulator for nitrogen, fitted with a ¼ SAE outlet, maximum operating pressure of 105 bar (Ref. 080222)
- ▶ 1 high pressure flexible 3000 mm long with stainless steel braiding ¼ SAE inlet and outlet + anti whip cable (Ref. 080173)
- 1 service key for assembly regulator on bottle.



Special building nitrogen kitclim (55 bar)

It's made of:

- 1 carrying case with transport foam (Ref. 080105).
- ▶ 1 LBHP manoregulator for nitrogen, fitted with a ¼ SAE outlet, maximum operating pressure of 55 bar
- ▶1 flexible length 1500 mm 1/4 SAE female inlet and outlet fitted with a closing valve
- ▶1 service key for assembly regulator on cylinder
- ▶1 1/4 SAE male connector 5/16 SAE female assembly at the flexible outlet (Ref. 080153)





Ref.	Intlet	Outlet	Operating pressure in bar
080100	C type	1/4 SAE	55
080108	C type	16x150 R	55
080120	E type	1/4 SAE	55





Low pressure ramps for pipe rotameters

The model presented reference 850070 is intended to be fixed on a wall or a transport vehicle. On request we can deliver it on a set of feets, for laying on the ground.



Specify the graduation when ordering as well as the type of gas.



Ref.	Gas	Inlet pressure in bar	Description	Intlet en mm	Outlet en mm	Weight in kg
850066	Oxygen	3,5	7 rotameters 7 l/mn or 15 l/mn	Staged 10 and 6,3	6,3	5,45
850067	Oxygen	3,5	6 rotameters 7 I/mn or 15 I/mn	Staged 10 and 6,3	6,3	4,70
850068	Oxygen	3,5	5 rotameters 7 l/mn or 15 l/mn	Staged 10 and 6,3	6,3	3,95
850069	Oxygen	3,5	4 rotameters 7 l/mn or 15 l/mn	Staged 10 and 6,3	6,3	3,25
850070	Oxygen	3,5	3 rotameters 7 l/mn or 15 l/mn	Staged 10 and 6,3	6,3	2,50
850071	Oxygen	3,5	2 rotameters 7 l/mn or 15 l/mn	Staged 10 and 6,3	6,3	1,76
850266	Arg./CO2	3,5	7 rotameters 15 l/mn or 30 l/mn	Staged 10 and 6,3	6,3	5,45
850267	Arg./CO2	3,5	6 rotameters 15 I/mn or 30 I/mn	Staged 10 and 6,3	6,3	4,70
850268	Arg./CO2	3,5	5 rotameters 15 l/mn or 30 l/mn	Staged 10 and 6,3	6,3	3,95
850269	Arg./CO2	3,5	4 rotameters 15 I/mn or 30 I/mn	Staged 10 and 6,3	6,3	3,25
850270	Arg./CO2	3,5	3 rotameters 15 I/mn or 30 I/mn	Staged 10 and 6,3	6,3	2,50
850271	Arg./CO2	3,5	2 rotameters 15 l/mn or 30 l/mn	Staged 10 and 6,3	6,3	1,76

Orifices calibrated for argon/CO2

This flow regulator is definitly calibrated in the workshop, as desired: 7, 10, 12, 15 or 20 l/min. The 1/4 turn ball valve leaves a full passage.

The calibrated injector, located at the front, can be removed for cleaning.



Rear entrance. 3/8 male. Supplied with nut and endpiece to be brazed.

Ref.	Туре
040335	Hole 7 I/mn with valve, end-piece to be brazed and marking
040336	Hole 10 I/mn with valve 1/4 turn, endpiece to be brazed and marking
040337	hole 12 l/mn with valve 1/4 turn, endpiece to be brazed and marking
040338	hole 15 l/mn with valve 1/4 turn, endpiece to be brazed and marking
040339	hole 20 I/mn with valve 1/4 turn, endpiece to be brazed and marking



IMPERATIVE: Stable inlet pressure of 3.5 bars to allow a precise and exact reading of the rotameter settings.

Pipe rotameters

It allows to accurately read the required flow rate for ARGON/C02. Available in 7 and 15 I/min for oxygen. Possibility of mounting on valve support Ref. 060260 (see page 51).

Ref.	Gas	Intlet	Graduation in I/mn
040280	Neutral gas	Rear entry 3/8th male gas	0 to 30
040285	Neutral gas	Rear entry 1/4 male gas	0 to 30
040297	Neutral gas	Rear entry 3/8e male gas	0 to 15
040298	Neutral gas	Rear entry 1/4 male gas	0 to 15
040397	Oxygen	Rear entry 3/8e male gas	0 to 15
040398	Oxygen	Rear entry 1/4 male gas	0 to 15
040385	Oxygen	Rear entry 3/8e male gas	0 to 7
040386	Oxygen	Rear entry 1/4 male gas	0 to 7
040300	Protection blo	ock, fixing provided on the back of	the block



FLOW REGULATORS FOR ARGON/CO2

Possibility of mounting on check stop valves.

Flow regulator with a scale of 4/6/8/10/12/15/18/22/26 litres/minute and a MAX position. Fitted with a female neutral gas quick connector to ISO 7289 standard. It can be connected to an integrated expansion cylinder with a stable outlet pressure of 3.5 bar.

Rear entrance. Thread 3/8 gas male at the right



REF. 060255

Rear entrance. Female ISO 7289 fitting

Ref.	Туре
060255	Preset flowmeter 4 to 26 l/min + maxi
060257	Preset flowmeter position 0 + 6 to 26 L/min + maxi
060258	Pre-set flowmeter 4 to 26 l/min + max Female ISO 7289 inlet





CAUTION: Never use copper pipe for acetylene. The oxygen pipes must be fitted with degreased tubing $\ensuremath{\mathsf{IMPERATIVELY}}$

Line regulator



Second expansion for all non-corrosive gases.

Inlet and outlet line regulator 1/2 female - 300 m3/h at 10 bars. Mounted at the outlet of the unit station to allow a second expansion which stabilizes the gas and the pressure regulation.

Ref neutral gas	Graduation in bar	Operating pressure / flow
080271	2,5	2 bar / 15 m³/h
080272	6	3 bar / 30 m³/h
080273	10	5 bar / 46 m³/h
080274	16	12 bar / 300 m³/h



Pipe regulator



To be mounted on a pipe:

- Oxygen and neutral gas: inlet pressure between 6 and 20 bar.
- Acetylene: inlet pressure 1.5 bar
- LPG: inlet pressure 4 bar maximum

Rear entrance. 3/8 male.

Ref.	Туре
060200	DM BP oxygen
060250	DM BP neutral gas 0-38 l/mn
060251	DM BP neutral gas 0-20 l/mn
065200	DM BP LPG
061200	DM BP acetylene

Dynaflow



To function properly, the Dynaflow must have a stable inlet pressure of 3.5 bar.

The Dynaflow mounts on a pipe and is intended for applications for which fine adjustment of a flow rate is necessary.

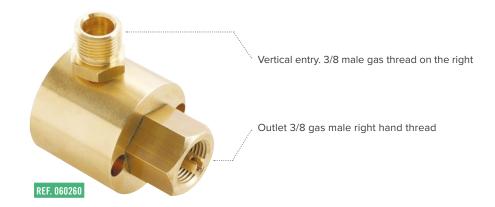
Other flow rates (up to 150 I/ min) for other gases (O2/He/H2/N2/Air/ and mixtures) can be supplied on request.

Ref.	Gas	Flow in I/min	Male inlet	Outlet in mm	Weight in kg
060300	Argon	0 – 5	3/8	6	0,34
060301	Argon	0 – 15	3/8	6	0,34
060302	Argon	0 – 30	3/8	6	0,34
060303	Argon	0 – 50	3/8	6	0,34
060304	Argon	0 – 100	3/8	6	0,34
060310	CO2	0 – 5	3/8	6	0,34
060311	CO2	0 – 50	3/8	6	0,34
060312	CO2	0 – 100	3/8	6	0,34
060322	Nitrogen	0 – 50	3/8	6	0,34

Valve support

Wall-mounted, this valve support that receives the pipe allows the assembly of a pipe regulator, a calibrated orifice, a flow regulator, a column, etc.

Maximum upstream pressure 20 bar.



Wall expansion unit station

Recommendations:

- Oxygen and neutral gas: inlet pressure between 6 and 20 bar.
- Acetylene : Inlet pressure 1,5 bar
- ▶ LPG : Inlet pressure 4 bar maximum

They are fitted at the inlet valve in 1/4 turn 3/8 right female.

Optional:

ISO 7289 quick connectors at outlet

Ref.	Туре
401107	Neutral gas unit station. Delivered with steel body, valve. Graduation 30 I/min.



Ref.	Туре
401100	Simple oxygen unit station. Delivered with steel body, valve and incorporated FBA valves. 16 bar graduation. operating pressure max 10 bar.
401101	Simple acetylene unit station. Delivered with steel body, valve and incorporated FBA valves. 2.5 bar graduation. operating pressure max 1.5 bar.
401115	Single LPG unit station. Delivered with steel body, valve and incorporated ARPF valves. 2.5 bar scale. PS max 1.5bar.
401117	Simple neutral gas unit station. Delivered with steel body, valve incorporated. Graduation 20I/min. Max flow 15 I/min.
401110	Simple neutral gas unit station. Delivered with steel body, valve. Graduation 38 I/min. Max flow 25 I/min.
401119	Nitrogen single unit station. Delivered with steel body, valve. 16 bar graduation. operating pressure max 10 bar.

Wall-mounted expansion unit station



Recommandations:

- Oxygen and neutral gas: inlet pressure between 6 and 20 bar
- Acetylene: inlet pressure 1.5 bar
- ▶ LPG: inlet pressure 4 bar maximum





REF. 402100





REF. 150346 Option: quick connectors (outlet unit station)

Ref.	Туре
402100	OX/Acetylene dual unit station. Delivered with steel body, valves, purge and incorporated FBA valves
452101	OX/LPG dual unit station. Delivered with steel body, valves, purge and incorporated FBA valves
452200	OX/Ethylene dual unit station. Delivered with steel body, valves, purge and incorporated FBA valves
452600	Double unit station (specify the nature of the gases when ordering)
402300	Triple unit station (specify the nature of the gases when ordering). Delivered with steel body, valves, purge and incorporated FBA valves
402350	Quadruple unit station (specify the nature of the gases when ordering). Delivered with steel body, valves, purge and incorporated FBA valves

Semi-automatic high pressure manifold

We are at your disposal to respond to specification or project manager.

REF. 900300



This type of manifold is originally designed for 1 to 3 bottles (or frame) on each side.

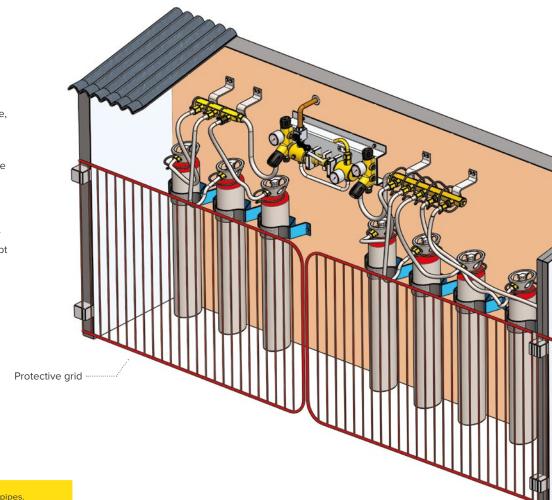
An extension via ramps is also possible.

Before pressurizing a new pipeline, it is essential to purge it with nitrogen to remove all impurities.

Similarly, for a better stability of the service pressure, we recommend creating a closed loop of the network guaranteeing a better stability of the pressures and flow.

Exists for all industrial gases except corrosive - Contact us.

Exists in high pressure version for neutral gas and oxygen - Contact us.

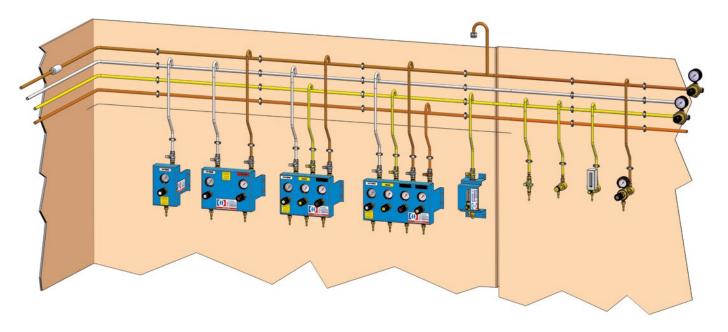




For oxygen, use degreased pipes. For acetylene, do not use copper tubing.

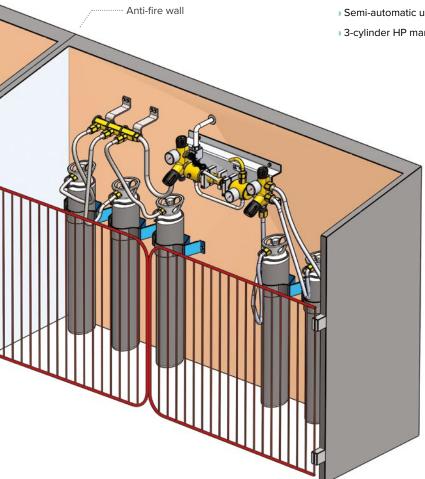
Ref.	Туре
900300	Semi-automatic manifold. ox. cen10/50-low pressure 10 bar/50 nm3/h
900310	Semi-automatic neutral gas manifold- non-corrosive - cen10/50-low pressure 10 bars/50 nm3/h
900320	Semi-automatic acetylene manifold cen10/50-low pressure 1.5 bar/6.5 nm3/h

We are at your disposal to respond to specification or project manager.



See the references for :

- Wall-mounted expansion units pages 52 and 53
- Argon/CO2 flow regulator page 50
- Pipe rotameter pages 50
- Regulators page 51
- Semi-automatic units page 54
- 3-cylinder HP manifold Ref. 900111



High flow flashback arrestor (for MANIFOLDS, high flow regulators and torches)

Ref.	Туре	Gas	Débit
900303	High flow flashback arrestor Following standard EN730-1. ISO 5175-1 Inlet turning nut 20 x 150 D. Male outlet 20 x 150 R	Oxygen, Outlet high flow regulator or unit station 20 x150R	80 nm³/h to 10 bar 330 nm³/h to 30 bar
900323	High flow flashback arrestor. Following standard EN730-1. ISO 5175-1 Inlet turning nut 20 x 150 L Male outlet 20 x 150 L	Acetylene, high flow regulator or unit station outlet in 20 x150L	20.2 nm³/h to 1,5 bar
017123	High flow flashback arrestor Following standard EN730-1. ISO 5175-1 Male inlet 20 x 150L outlet turning nut 20 x 150 L	Acetylene, Torche inlet in 20 x 150 L	20.2 nm ³ /h to 1,5 bar
017124	High flow flashback arrestor. Following standard EN730-1. ISO 5175-1 Male entry 16 x 150 L outlet turning nut 16 x 150 L	Acetylene, Torches inlet 16 x 150 L	20.2 nm³/h to 1,5 bar
017103	High flow flashback arrestor Following standard EN730-1. ISO 5175-1 Male inlet 20 x 150 R Outlet turning nut 20 x 150 R	Oxygen, Torche inlet in 20 x 150 R	80 nm³/h to 10 bar 330nm³/h to 30 bar



Delivered with nut and union \emptyset 10

Unit inversion alarm signal

Ref.	Туре	Gas	Connection
900304	HP 24 volts pressure contact (electrical connectors at the initiative of the customer)	Oxygen, Neutral gas	1/4 male
900324	Inductive signal pressure switch	Acetylene	1/4 male





Electric heater (for unit station or regulator)

Ref.	Туре	Gas	Connection
136100	Electric heater 500 watt/220v Maximum operating pressure 300 bar Painted steel body protection IP66	Neutral gas	Inlet F, C type Outlet M, C type



Safety system for low pressure acetylene manifolds

Ref.	Туре	Gas	Connection
900326	Burst diaphragm. Bursting pressure 2,75 bar	Acetylene	3/4LG male inlet / Outlet 3/4 L female
900327	Rupture disc for burst diaphragm	Acetylene	

When it breaks at 2.75 bar, the 900326 diaphragm prevents any risk of overpressure by evacuating the gas outside.





Flow limiter

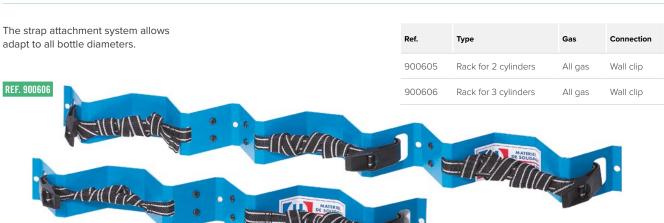
REF. 900325



Inserted horizontally on the pipe, it limits the flow to $10\,\mathrm{m}^3/\mathrm{h}$ in the event of a technical problem.

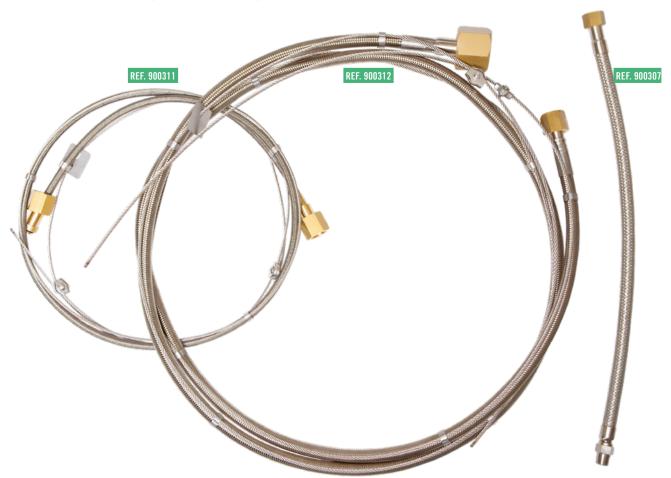
Ref.	Туре	Gas	Connection
900325	Flow limiter 10 m3 / hour	Acetylene	Inlet and outlet 3/4 L female

Cylinder rack



High pressure connecting flexible

We can manufacture to order any hose of a special length or whose inlet and/or outlet threads are different from our standards, contact us.



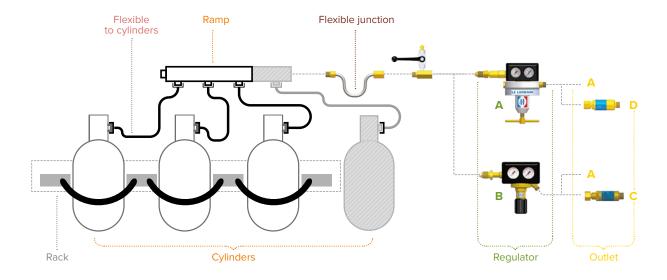
Accessory	Ref.	Туре
	900301	Oxygen cylinder flexible Length 1000 mm with anti-whiplash cableMale inlet at the right 22,91 \times 1,814 F type - female outlet at the right 21,7 \times 1,814 C type
Connecting flexible Cylinder/ramp	900311	Neutral gas cylinder flexible length 1000 mm whip anti whip cable -female inlet and outlet 21,7 x 1,814 C type
	900321	Acetylene cylinder flexible - Length 1000 mm with anti whip cable - male inlet at the left 22,91 \times 1,814 H type - female outlet a the left 21,7 \times 1,814 E typeE
	900302	OX rack body flexible Length 3000 mm with anti whip cable - Female inlet at the right 35×200 and female outlet at the right 21.7×1.814 C type
Connecting flexible Cadre/centrale	900312	Neutral gas rack flexible Length 3000 mm with anti whip cable - female inlet at the right 38×200 and female outlet at the right 21.7×1.814 C type
	900322	Acetylene rack flexible Length 3000 mm with anti whip cable - Female inlet at the left 33×200 and female outlet at the right 21.7×1.814 E type
Flexible onduleur	900307	Oxygen + neutral gas - stainless steel 3/8 LG 500 MM between 20x150R F-OUTLET 3/8M



ADVICE: On each of our flexible we write the month and year of manufacture, and for maximum safety, we advise you to change them every three years. On request, we can provide you with test certificates.

Standard simplified installation

Choice of regulator and ARPF according to the useful flow.



Ref.	Description
910000-A-3-A-D-1-A-A	Oxygen installation- 3 cylinders - high flow regulator - Outlet FBA 20x150 - with rack - 1m flexible cylinder - 1m flexible purge
910000-A-3-B-C-1-A-A	Oxygen installation- 3 cylinders - 3S regulator - Outlet FBA 16x 150 -with rack - 1m flexible cylinder - 1m flexible purge
910000-B-3-A-D-1-A-A	Acetylene installation- 3 cylinders - high flow regulator- Outlet FBA 20x150 - with rack - 1m flexible cylinder - 1m flexible purge
910000-B-3-B-C-1-A-A	Acetylene installation- 3 cylinders - 3S regulator - Outlet FBA 16x150 - with rack - 1m flexible cylinder - 1m flexible purge
910000-C-3-A-A-1-A-A	Neutral gas installation- 3 cylinders - high flow regulator - Outlet without FBA - with rack - 1m flexible cylinder - 1m flexible purge
910000-C-3-B-C-1-A-A	Neutral gas installation- 3 cylinders - 3S regulator - Outlet 16x150 - with rack - 1m flexible v - 1m flexible purge

Compose your own installation!

910000- # - # - # - # - # - # -

#	GAZ	#	NB CYLINDERS*	#	REGULATOR	#	OUTLET	#	RACK	#	LENGHT FLEX CYLINDER	#	LENGHT FLEX PURGE
A	OXYGEN	1	1 CYLINDER	A	HIGH FLOW	A	WITHOUT	1	WITH	Α	1 m	Α	1 m
В	ACETYLENE	2	2 CYLINDERS	В	3S	С	FBA 16x150	0	WITHOUT	В	1,5 m	В	2 m
С	NEUTRAL GAS	3	3 CYLINDERS			D	FBA HIGH FLOW 20x150			С	2 m		
		•••	CYLINDERS							D	2,5 m		
		6	6 CYLINDERS							E	3 m		

* Of which ramp size according to the number of bottles

Do you have a specific installation?

Compose the reference of your pack yourself by referring to the color charts!

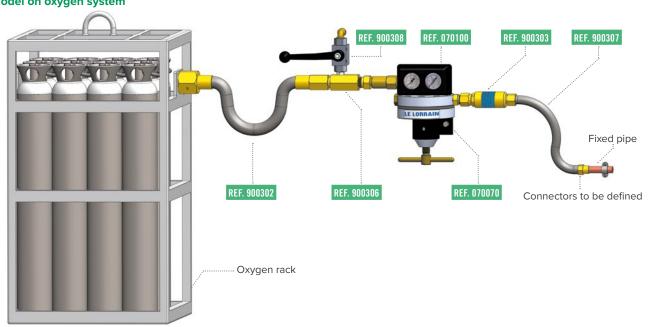
Example for an installation:

- 1. GAS: Neutral gas > C
- 2. Number of cylinders: 5 bouteilles > 5
- 3. Type of regulators: 3S > B
- 4. Outlet: Outlet without FBA > A
- 5. Rack: without rack> 0
- 6. Meter flexible to cylinders: 3 meters > E
- 7. Meter flexible to purge: 2 meters > B

Final reference: 910000-C-5-B-A-0-E-B

Simplified installation high flow rack

Model on oxygen system



Ref.	Description	

OXYGEN INSTALLATION

900302	Flexible 3 m High pressure oxygen rack	
900306	Connecting sleeve HP inlet M 21,7 D/outlet F 22,91D	
900308	Valve purge High pressure degreased	
070100	High flow regulator inlet cylinder	
900303	High flow FBA	
900307	Low pressure flexible stainless steel Length. 500 mm. Female inlet 20/150 right and outlet 3/8 male	
070070	Wall clip fixation	

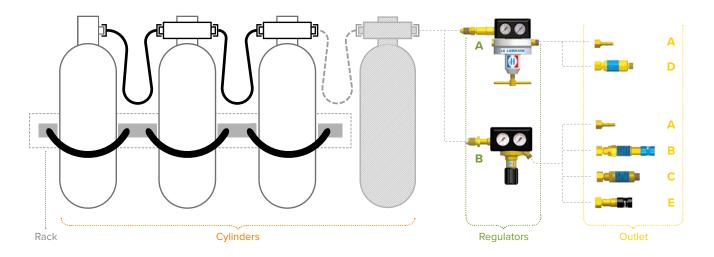
ACETYLENE INSTALLATION

900322	Flexible 3m high pressure acteylene rack	
900329	High pressure Connecting sleeve inlet M 21,7L / outlet F 22,91L	
900308	Degreased high pressure purge	
070300	Inlet cylinder high flow regulator	
900323	High flow FBA	
900333	Flexible low pressure stainless steel 500 mm female 20/150L and outlet 3/8 male	
070070	Wall clip fixation	

NEUTRAL GAS INSTALLATION

900312	Flexible 3 m high pressure rack HP	
900316	High pressure connecting sleeve inlet M 21,7 R/ outlet M 21,7 R	
900308	Degreased high pressure purge	
070200	High flow regulator neutral gas cylinder inlet	
900307	Low pressure flexible satinless steel length. 500 mm. Female inlet 20/150 right and outlet 3/8 male	
070070	Wall clip fixation	

Set of paired cylinders



Ref.	Description				
930000-A-3-B-C-1	xygen installation - 3 cylinders - 3S regulator - FBA outlet 16X150 - with rack				
930000-B-3-B-C-1	Acetylene installation - 3 cylinders - 3S regulator - FBA outlet 16X150 - with rack				
930000-C-3-B-A-1	Neutral gas installation - 3 cylinders - 3S regulator - union outlet Ø 10 - with rack				

Compose your own installation!

930000-#-#-#-#-#

#	GAS	#	NB CYLINDERS*	#	REGULATORS	#	OUTLET	#	RACK
A	OXY	1	1 CYLINDER	Α	HIGH FLOW	A	UNION Ø10	1	WITH
В	AD	2	2 CYLINDERS	В	3S	В	ISO CONNECTORS + FBA	0	WITHOUT
С	NEUTRE	3	3 CYLINDERS	С	LB21	С	FBA 16×150		
			CYLINDERS	D	L2C2	D	FBA HIGH FLOW 20x150		
		9	9 CYLINDERS			Е	CONNECTORS ISO		
			hich ramp size rding to the number						

Do you have a specific installation?

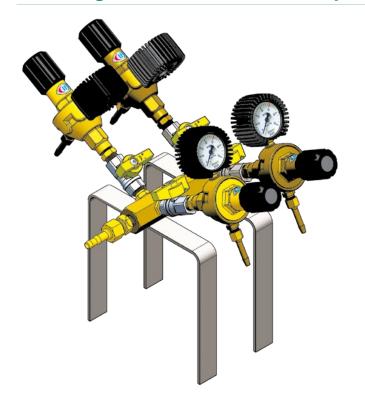
Compose the reference of your pack yourself by referring to the color charts!

Example for an installation:

- 1. GAS: Neutral gas > C
- 2. Number of cylinders: 5 cylinders > 5
- 3. Type of regulator: 3S > B
- 4. Outlet: Outlet without FBA > A
- 5. Rack: Without rack > 0

Final reference: 930000-C-5-B-A-0

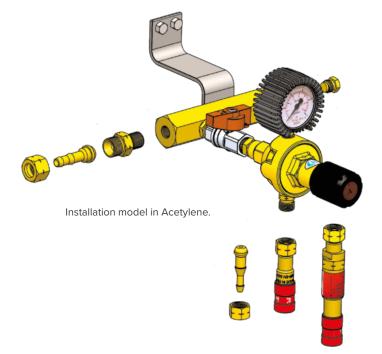
Standing distribution second expansion



Ref.	Gas	Description		
921000	Oxygen	Ramp of 4 regulators		
921001	Acetylene	Ramp of 4 regulators		
921002	Argon / CO2 38 I	Ramp of 4 regulators		
921003	Argon / CO2 20 I	Ramp of 4 regulators		
921004	LPG	Ramp of 4 regu		

6, 8, 10 or 12-valve manifolds available on request.

Second expansion wall distribution



Ref.	Gas	Description
922000	Oxygen	Ramp of 2 regulators
922001	Acetylene	Ramp of 2 regulators
922002	Argon / CO2 38 I	Ramp of 2 regulators
922003	Argon / CO2 20 I	Ramp of 2 regulators
922004	LPG	Ramp of 2 regulators

3, 4, 5 or 6-valve manifolds available on request.

SITE box

Specially designed to be able to do all welding and cutting work on construction sites and in the factory. It is possible to compose a personalized set.



Including:

- ▶1 lockable sheet metal storage box
- ▶1 shielded oxygen regulator
- ▶1 shielded acetylene regulator
- 2 x 20 m of hoses Ø 10 x 17 EN 559
- ▶1 complete SO welding torch + 7 nozzles
- ▶1 complete S1 welding torch + 7 nozzles
- ▶1 HP1 cutting torch and 3 cutting heads
- ▶1 pair of welding goggles
- ▶1 cup gas lighter + 1 pocket of 5 stones
- ▶1 box of clearing nozzle (14 reamers)
- ▶1 set of ISOCOUPLE ISO 7289 quick connectors with
- FBA (standard EN 730-1)1)

All assembled and ready to use.

CAPACITIES

Cutting in mm	Welding in mm
3 to 120	0,4 to 10

Up to 300 mm with additional cutting head.

ECO box



Including:

- ▶1 lockable sheet metal storage box
- ▶1 L2C2 oxygen manoregulator
- ▶1 L2C2 acetylene manoregulator
- 2 x 5 m of hoses diameter 10 x 17 EN 559
- ▶1 set of ISOCOUPLE ISO 7289 quick connectors with FBA (standard EN 730-1)
- ▶1 complete SO welding torch + 7 nozzles
- 1 HP1 cutting torch and 3 cutting heads
- ▶1 cup gas lighter + 1 pocket of 5 stones

All assembled and ready to use.

CAPACITIES

Cutting in mm	Welding in mm
Up to 80	0,4 to 4

Up to 300 mm with additional cutting head



SOM equipment



Including:

- 2 DDI regulators (OX and AC)
- 2 x 5 meters of hoses with FBA, EN 730-1
- ▶1 SOM welding torche (tip holder wrench and 7 tips ,from 40 to 400 l/h), with rigid lance
- ▶1 pair de welding goggles

All assembled, cardboard packaging.

Optional: flexible lances



Including:

- 2 LB 21 regulators (OX and AC)
- 2 x 5 m of hoses with FBA, EN 730-1
- ▶1 SOM welding torches (tip holder wrench and 7 tips from 40 to 400 l/h), with rigid lance
- ▶1 pair de welding goggles

All assembled, cardboard packaging.

Optional: flexible lances

SCO equipment



Including:

- 2 DDI regulators (OX and AC)
- 2 x 5 m of hoses with FBA, EN 730-11 complete welding/cutting SCO torch (tip holder wrench and 7 tips from 40 to 400 l/h)
- 1 intermediate welding piece + 2 cutting heads (7/10 and 10/10)
- ▶1 pair of welding goggles

All assembled, cardboard packaging.



Including:

- 2 LB 21 regulators (OX and AC)
- 2 x 5 m of hoses with FBA, EN 730-1
- ▶1 complete SCO welding/cutting torch (tipholder wrench and 7 tips from 40 to 400 l/h)
- 1 intermediate welding piece + 2 cutting heads (7/10 and 10/10)
- ▶1 pair of welding goggles

All assembled, cardboard packaging.

SOM welder bag



Including:

- ▶ 2 LB 21 regulators (OX and AD)
- 2 x 5 m of hoses with FBA, EN 730-1
- ▶1 SOM welding torche (tip holder wrench and 7 tips from 40 to 400 l/h), with rigid lance
- ▶1 pair of welding goggles

All mounted in a textile storage bag with semi-rigid frame.

Option: flexible lance

SOM welder/cutter bag



Including:

- 2 regulators LB 21 (OX and acetylene)
- 2 x 5 m of hoses with FBA, EN 730-1
- ■1 complete SCO welding/cutting torches (tips holder wrench and 7 tips from 40 to 400 l/h)
- ▶1 intermediate welding piece
- + 2 cutting heads (7/10 and 10/10)
- ▶1 pair of goggles

All mounted in a textile storage bag with semi-rigid frame.



Ref.	Dimensions in cm
080022	small model 53x28x60 cm sold alone
080023	large model 65x28x52 cm sold alone

Oxygen site equipment



Acetylene oxygen site equipment

- ▶ 2 3S regulators (OX and Acetylene)
- 2 x 10 m of welding hoses diameter.10
- ▶1 HP1 cutting torches FBA , 1 cutting head 205 A16
- cardboard packagingn

LPG oxygen site equipment Including:

- 2 x 10 m of welding hoses dia.10
- 2 3S regulators (oxygen and LPG)
- 1 HP1 cutting torches FBA and 1 cutting head
- 200 P16
- Cardboard packaging

These bottles are sold full. For recharging, it is necessary to contact the gas depot network LINDE or AIR LIQUIDE.



WARNING: IT IS STRICTLY FORBIDDEN TO WORK WITH ACETYLENE BOTTLES LYING DOWN. A minimum slope of 15° upwards is mandatory even for transport in vehicles.



WARNING: It is important to ask us for more information and validate the feasibility according to the country.

Welding station

MOBIFLAM type **B11** welding station

REF. 600980

- Oxygen cylinder: 2.3 m³
- Acetylene cylinder: 1.6 m³

MINI ARTIGAZ type B05 welding station

REF. 600940

- Oxygen cylinder: 1 m³
- Acetylene cylinder: 0.8 m³





600980	Trolley + B11 cylinder and welding equipment
600985	Trolley + B11 cylinder and welding/cutting equipment
600940	Trolley + B05 cylinder and welding equipment
600945	Trolley + B05 cylinder and welding/cutting equipment



ROLLERFLAM type **B11** oxyflame station

REF. 600920

- Oxygen cylinder: 2.3 m³
- Acetylene cylinder: 1.6 m³

PRODIGE type B05 oxyflame station



- Oxygen cylinder: 1 m³
- Acetylene cylinder: 0.8 m³





Ref.	Туре
600920	Trolley + B11 cylinder and welding equipment
600930	Trolley + B11 cylinder and welding/cutting equipment
600950	Trolley + B05 cylinder and welding equipment
600905	Trolley + B05 cylinder and welding/cutting equipment



Trolley with solid wheels, designed for transporting bottles in complete safety. There are other trolley models available on order only.

Trolleys

Trolley 2 cylinders B05







Ref.	Width in mm	Depth in mm	Height in mm	Weight in kg	Cylinder specificity
600910	470	270	995	7,75	2 cylinders BO5 type of 1 m^3 oxygen and 0,8 m^3 for acetylene
600922	290	270	690	3,9	1 cylinder type BO5 of 1 $\mathrm{m^3}$ or B11 of 2 $\mathrm{m^3}$ by extension of the handle
600913	550	470	1150	16	² cylinders B ²⁰ type of 3m ³

Trolley 2 cylinders B50



Ref.	Width in mm	Depth in mm	Height in mm	Weight in kg	Cylinder specificity
600911	740	303	1200	27	2 cylinders B ⁵⁰ type of 10 m ³
600919	720	510	1200	35	1 cylinder B50 type of 10 m³ and 1 cylinder 35 kg LPG
600935	735	303	1585	35	B50C OX/ Acetylene integrated lifting panel

Trolley 1 cylinder B50 + 1 cylinder 35 kg LPG



Outlet cylinder

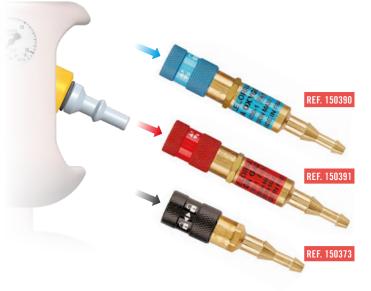


Connectors to be fitted at the outlet of regulators 16 x 150 R for oxygen and neutral gas and 16 x 150 L for combustible gas.

Equipped at the outlet with an Female + Male ISO 7289 quick connectors.



Outlet with quick-release connectors



Reverse quick-release connectors

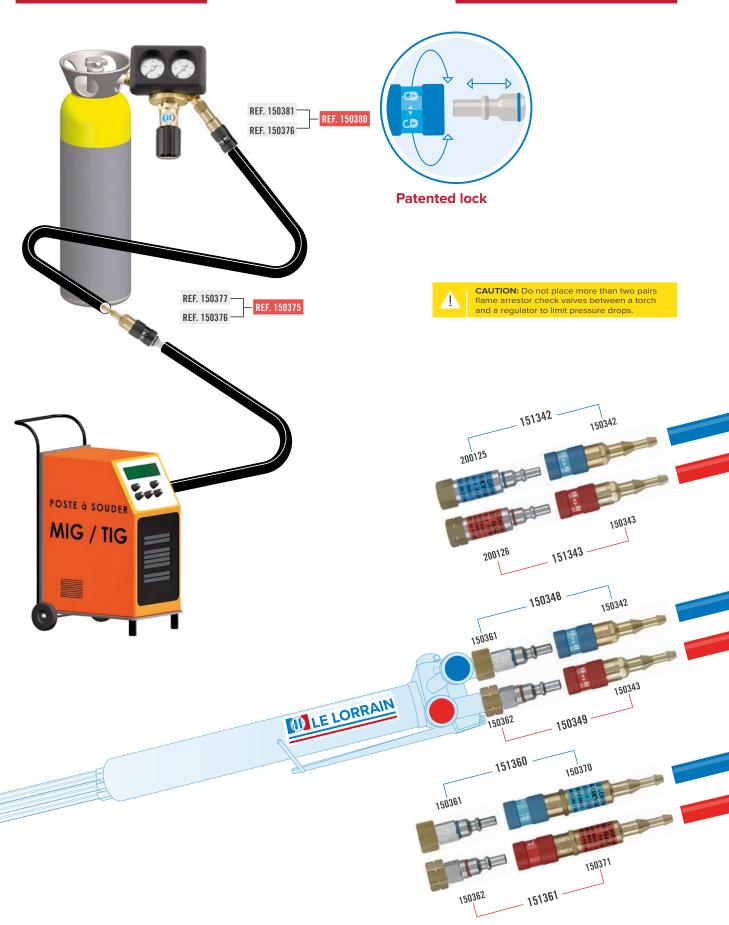
fitted with a flame arrestor non-return valve for the oxygen and fuel gas versions, designed to be fitted at the outlet of cylinders equipped with an ISO 7289 male quick connector.

Isocouple quick-release connectors

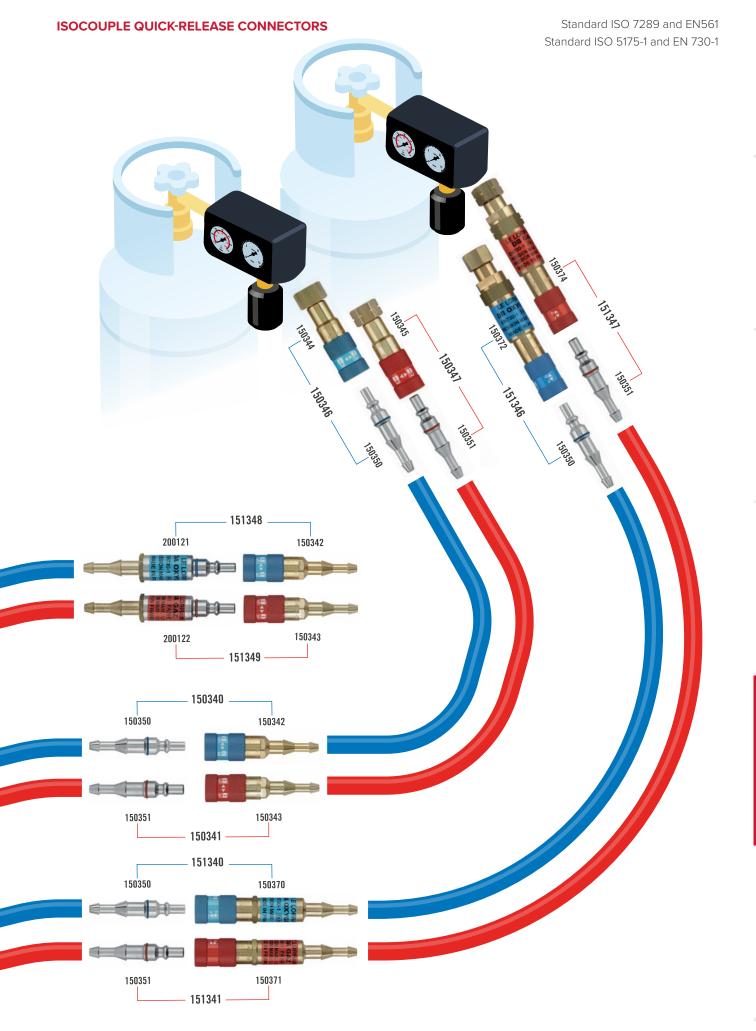
(with or without flashback arrestor)

NEUTRAL GAS INSTALLATION

OXYGEN-FUEL GAS INSTALLATION







Isocouple quick-release connectors

(with or without flashback arrestor)

Quick-release connectors allowing the connection of several torches alternately on the same installation. They are compatible with all other fittings of the same standard.

The ISO connectors fitted with built-inflashback arrestor valves provide the user with maximum safety according to the 2-in-1 formula, in particular by avoiding the multiplication of pipe/union connections which are potential sources of leaks.



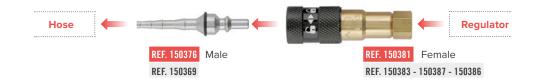
CAUTION: Do not place more than two pairs of flashback arrestor valves between a torch and a regulator in order to limit pressure drops.

NEUTRAL GAS CONNECTION FOR HOSE



Ref.	Description	Assembly
150375 = 150376 + 150377	Neutral gas male / female coupling Ø 4 and 6 mm	Inlet and outlet multi-size pipe junction for hose \varnothing 4 to 6 mm
150396 = 150369 + 150320	Neutral gas male / female coupling Ø 10 and 6 mm	Inlet and outlet multi-size pipe junction for hose \varnothing 10 and 6 mm

NEUTRAL GAS CONNECTION FOR HOSE/REGULATOR

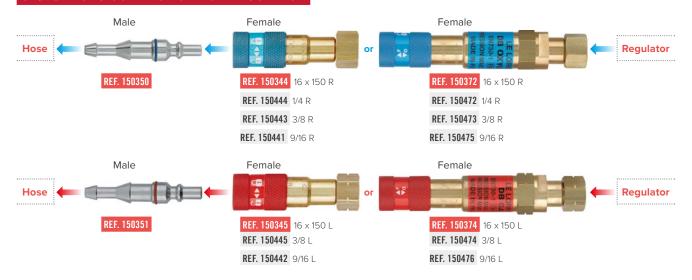


Ref.	Description	Assembly
150380 = 150376+150381	Neutral gas male/female coupling	Regulator inlet nut 12 X 100 R rotating nut Outlet staged union Ø 4 to 6 mm
150382 = 150376 + 150383	Neutral gas male/female coupling	Regulator inlet 1/4 D rotating nut Outlet staged union Ø 4 to 6 mm
150388 = 150376+150387	Neutral gas male/female coupling	Regulator inlet 3/8 D rotating nut Outlet staged union Ø 4 to 6 mm
150406 = 150369 + 150386	Neutral gas male/female coupling	Regulator inlet nut 16x150 R rotating nut Outlet staged union Ø 6 to 10 mm

Isocouple quick connectors

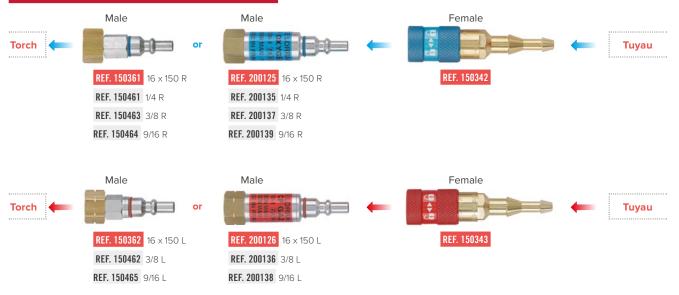
(with or without flashback arrestor)

OX/FUEL GAS CONNECTION FOR REGULATOR



Ref.	Description	Assembly
150346 = 150350 + 150344	Oxygen male / female coupling	Inlet nut 16 x 150 R regulator. Union outlet / pipe \varnothing 6 and 10 mm
150347 = 150351 + 150345	Fuel gas male / female coupling	Inlet nut 16 x 150 L regulator. Union outlet / pipe Ø 6 and 10 mm
151346 = 150350 + 150372	Oxygen FBA male / female coupling	Inlet nut 16 x 150 R regulator. Union outlet / pipe Ø 6 and 10 mm
151347 = 150351 + 150374	Fuel gas FBA male / female coupling	Inlet nut 16 x 150 L regulator. Union outlet / pipe Ø 6 and 10 mm

OX/FUEL GAS CONNECTION FOR TORCHE

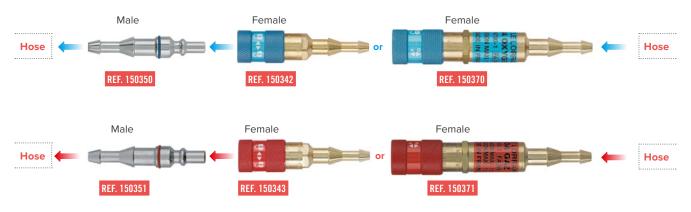


Ref.	Description	Assembly
150348 = 150361 + 150342	Oxygen male / female coupling	Pipe staged union inlet Ø 6 and 10 mm, torch nut outlet 16 \times 150 R turning
150349 = 150362 + 150343	Fuel gas Male / female coupling	Pipe staged union inlet \emptyset 6 and 10 mm, torch nut outlet 16 x 150 L turning
151342 = 200125 + 150342	Oxygen Male / female FBA coupling	Pipe staged union inlet \varnothing 6 and 10 mm, torch nut outlet 16 x 150 R
151343 = 200126 + 150343	Fuel gas male / female FBA coupling	Pipe staged union inlet Ø 6 and 10 mm, torch nut outlet 16 x 150 L
150364 = 150361 + 150362	Oxygen / fuel gas gas male set of fittings	Turning nut inlet 16 x 150 R and L torch

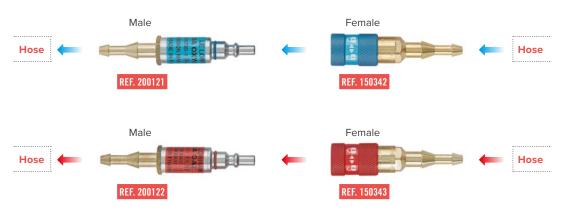
Isocouple quick connectors

(with or without flashback arrestor)

OX/FUEL GAS CONNECTION FOR HOSE



Ref.	Description	Assembly
150340 = 150350 + 150342	Oxygen male / female coupling	Inlet and outlet staged union hose / hose
150341 = 150351 + 150343	Fuel gas mal / female coupling	Inlet and outlet staged union hose / hose
151340 = 150350 + 150370	Oxygen male / female coupling FBA	Inlet and outlet staged union hose / hose
151341 = 150351 + 150371	Fuel gas male / female FBA	Inlet and outlet staged union hose / hose
150355 = 150350 + 150351	Oxygen / gas male adapter set	Inlet staged union hose
150370	Oxygen female adapter FBA	Inlet staged union hose
150371	Fuel gas female adapter FBA	Inlet staged union hose



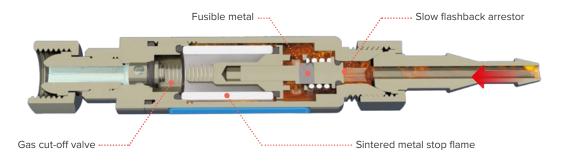
Ref.	Description	Assembly
151348 = 200121 + 150342	Oxygen male FBA/ female ARPF	Inlet and outlet staged union hose / hose
151349 = 200122 + 150343	Fuel gas male FBA/ female FBA	Inlet and outlet staged union hose / hose
200121	Oxygen male adapter FBA	Outlet staged union hose
200122	Fuel gas male adapter FBA	Outlet staged union hose

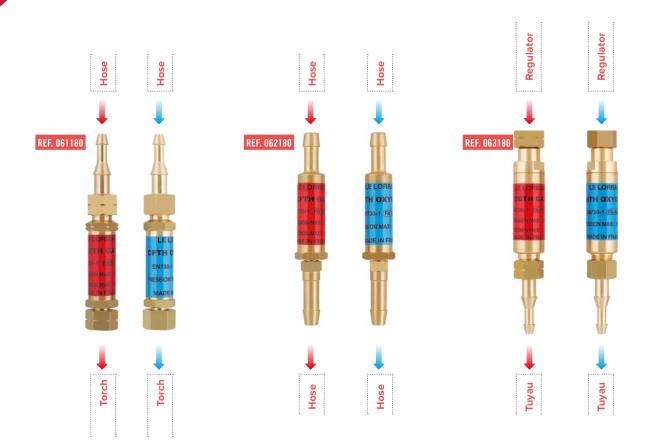
FBA THERMOSTOP

These valves provide MAXIMUM SAFETY for the user (when attached to the torch inlet) and for the installation (when attached to the regulator outlet). THERMOSTOP non-return valves are equipped with non-return valves, sintered metal filter and fusible metal part that melts at 90°C. During a flashback, the fusible metal melts, causing the gas supply to be cut off.









Ref.	Туре
061180	Pair of FBA valves with thermal stop thread 16 x 150 R and L for torch
062180	Pair of FBA valves with thermal stop inlet and outlet union for pipe Ø 10
063180	Pair of FBA valves with thermal stop thread 16 x 150 R and L for regulator

FBA

An FBA valve stops the flame upstream.

Each of the three types of flame arrester non-return valves represents a specific safety feature:

CF valve: User protection. Connects to the torch inlet.

DA valve: Hose inlet and outlet.

DB valve: Safety for the bottle and the regulator. Attaches to the outlet of the pressure regulator.

The addition of the CF valve and the DB valve provides optimal safety for the protection of the worker and for the safeguard of theequipment. Our various Flame Arrester Check Valves are delivered with the corresponding fittings. Delivered in blister packs (or in bulk, on request).

We can supply our flashback arrestors with various connections: for example: 1/4 right and 3/8 left or 9/16 right and 9/16 left.





Do not place more than two pairs of flame arrester non-return valves between a torch and the regulators in order to limit pressure drops.



CAUTION: Respect the colors when mounting (Blue: oxygen. Red: combustible gas). The direction of the arrow indicates the direction of gas flow.



VERY IMPORTANT: During frequent dismantling in a dusty environment, or after a flashback, the sintered metal ring which provides the flame arrester may become clogged. The non-return valve MUST then be changed, as it makes work impossible under normal operating pressure conditions.

MOUNTED ON TORCH - CF FBA

Threaded connection type



Ref.	Туре
061013	Pair of CF flashback arrestor valves. OX/Gas with nuts and staged union Ø 6.3 and 10 mm. Delivered with clips
061012	Pair of CF flashback arrestor valves. OX/Gas - 16 x 150 thread
061022	Pair of CF flasback arrestor valves. OX 3/8 R / Gas 3/8 L Pair of CF flashback arrestor valves.
061025	OX 5/8 UNF R / Gas 5/8 UNF L with nuts and staged union Ø 6.3 and 10 mm. Delivered with clips
061020	Pair of CF flashback arrestor valves. OX 1/4 R / Gas3/8 L
061021	Pair of cf flashback arrestor valves. OX 9/16 R / Gas 9/16 L

MOUNTED ON HOSE - DA FBA

REF. 062016

DA type

to be mounted on pipe Ø 10 and Ø 6,3



REF. 062013

DA type

to be mounted on \emptyset 10 pipe



Ref.	Туре
062013	Pair of flashback arrestor valves DA OX/Gas union inside Ø 10 mm. Comes with clips
062014	Pair of flashback arrestor valves DA OX/Gas union inside Ø 6.3 mm. Comes with clips
062015	Pair of flashback arrestor valves DA OX/Gas union inside Ø 8 mm. Comes with clips
062016	Pair of flashback arrestor valves DA OX/Gas union inside Ø 6.3 and 10 mm. Comes with clips

MOUNTED ON REGULATOR - DB FBA

REF. 063007



Ref.	Туре
063007	Pair of DB flashback arrestor valves. OX / Gas staged union Ø 6.3 and 10 mm Supplied with clips
063009	Pair of DB flashback arrestor valves. OX / Gasthread 16 x 150 R and L
063042	Pair of DB flashback arrestor Valves. OX 3/8 R / Gas 3/8 L
063055	Pair of DB flashback arrestor valves. OX 5/8 UNF R / Gas5/8 UNF L staged olives Ø 6.3 and 10 mm. Comes with clips
063040	Pair of DB flashback arrestor valves. OX 1/4 R / Gas 3/8 L
063041	Pair of DB flashback arrestor valves. OX 9/16 R / Gas 9/16 L

Y connection BP



Ref.	Gas	1 inlet	2 outlet
515103	All gas	Staged Ø 10 and 6,3	Staged Ø 10 and 6,3
515002	Oxygen and nitrogen	Turning nut 16 x 150 R	Staged Ø 10 and 6,3
515102	Acetylene LPG	Turning nut 16 x 150 L	Staged Ø 10 and 6,3

Ref.	Gas	1 inlet	2 outlet
525003	Oxygen and nitrogen	Turning nut 16 x 150 R	Staged Ø 10 and 6,3 with check valves
525004	Acetylene and LPG	Turning nut 16 x 150 L	Staged Ø 10 and 6,3 with check valves
525006	Oxygen and nitrogen	Turning nut 20 x 150 R	Union Ø 10 with check valves
525007	Acetylene and LPG	Turning nut 20 x 150 L	Union Ø 10 with check valves



T for cylinders

(allows you to put 2 regulators on a single bottle)







Ref.	Gas	1 inlet	2 outlet
517001	Neutral gas C type	21.70 x 1.814 female right	21.7 x 1.814 male right
517019	Oxygen F type	22.91 x 1.814 male right	22.91 x 1.814 female right
517020	Acetylene H type	22.91 x 1.814 male left	22.91 x 1.814 female left

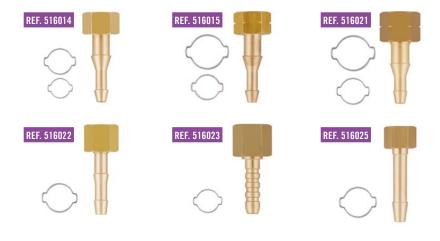
Frame connectors

Assembly at the exit of the frame which makes it possible to pass on bottle-type connectors.



Ref.	Туре
519004	Oxygen
519005	Neutral gas
519006	Acetylene
519014	Dual OX outlets
519015	Double neutral gas outlets
519016	Dual Acetylene outlets

Connection kit (union + nut + clip)



Ref.	Ø hose	Nut
516014	Ø 6,3 and 10	16 x 150 right
516015	Ø 6,3 and 10	16 x 150 left
516020	Ø 6,3 and 10	3/8 right
516021	Ø 6,3 and 10	3/8 left
516022	Ø 6,3	1/4 right
516023	Ø 6,3	9/16 right
516024	Ø 6,3	9/16 left
516025	Ø 6,3	12 x 100 right
516026	Ø 6,3	12 x 100 left

Dual union

Used to connect 2 pipes of identical or different diameter, for the same gas.



Ref.	Туре	Ø hose
516002	Dual union	Ø 6,3 / 10
516003	Dual union	Ø 6,3 / 6,3
516004	Dual union	Ø 10 / 10
516005	Dual union	Ø 12 / 12

Mirror

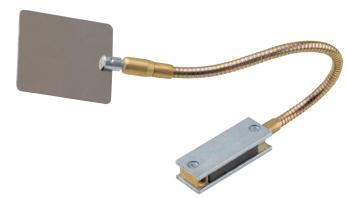
REF. 518100

Welding mirror with magnetic base.

Resist a temperature of 600°C.

REF. 518101

Recharging glasses for welding mirror.



Gas lighter supplier and clearing nozzles



Ref.	Туре
512101	Gas lighter for all types of torches with pack of 5 flints
519003	Nozzle cleaner box. These reamers of differents diameters are used to clean welding tips and cutting heads. They considerably extend the live of cleaned tips



WARNING: It is forbidden to light your torch with a lighter.

Clamps

These two-ear clamps allow the flexible to be fixed to the unions.



Ref.	Туре
514004	Ear clamp for hose Ø ext. 11 to 13
514014	Ear clamp for hose Ø ext. 13 to 15
514005	Ear clamp for hose Ø ext. 15 to 18
514006	Clamp to join 2 hoses Ø ext. 11 to 13
514007	Clamp to join 2 hoses Ø ext. 15 to 18

Wheeled guide

Mounted on the cutting head.

For rectilinear oxygen cutting (and a circle with the compass 260 002) to prevent user fatigue and keeps the correct distance between the torch flame and the welding pool to avoid any flashback.

Ref.	Туре
260001	Roller guide (specify HP1 or DV) for guiding the part to be cut, avoid contacts between the cutting head and melting point.
260002	Compasses for guide 260001 used for circular cutting.
260020	Roller guide with gear drive for regulated progression.



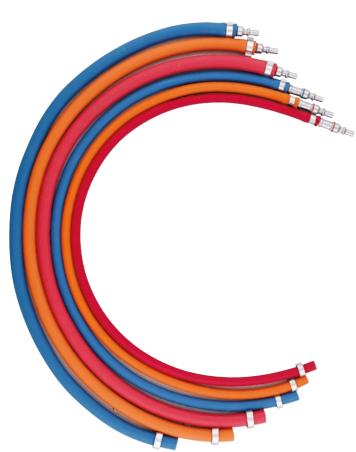
Workbench economizer

Robust and economical, its pilot light allows the instant ignition of the torch without modifying the setting.

Ref.	Туре	Ø tuyau	REF. 518005
518003	Oxygen / LPG	Union Ø 10/6,3	
518004	Oxygen / natural gas	Union Ø 10/6,3	
518005	Oxygen / acetylene	Union Ø 10/6,3	

HOSES Standard EN 559 / ISO 3281

Sleeve kit

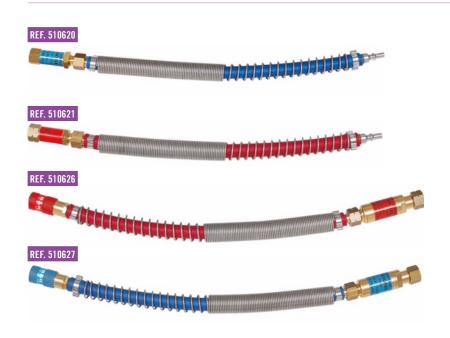


All our hoses are from EEC manufacturers.

They correspond to Standard EN559 / ISO 3821 and benefit from certification validated by a certified European control laboratory. For advice on use, see page 84.

Ref.	Color	Gas	Diameter	Length in meters	included iso male connectors + 2 clamps
510601	Blue	Oxygen	Ø 10	1	150350
510602	Red	Acetylene	Ø 10	1	150351
510603	Orange	LPG	Ø 10	1	150351
510611	Blue	Oxygen	Ø 6,3	1	150350
510612	Red	Acetylene	Ø 6,3	1	150351
510613	Orange	LPG	Ø 6,3	1	150351

Sleeve kit





Ref.	Désignation
510620	Oxygen torch inlet sleeve
510621	Acetylene torch inlet sleeve
510622	LPG torch inlet sleeve
510626	OX regulator outlet sleeve
510627	Acetylene regulator outlet sleeve
510628	LPG regulator outlet sleeve

Welding hoses

All our hoses can be delivered with exterior metal braiding, they come from European manufacturers.

They correspond to Standard EN559 / ISO 3821 and benefit from certification validated by a certified European control laboratory.

For advice on use, see page 84













Ref.	Color	Gas	Internal diameter	Length in meters
510220	Blue	Oxygen	Ø 10	20
510226	Blue	Oxygen	Ø 6,3	20
510240	Blue	Oxygen	Ø 10	40
510246	Blue	Oxygen	Ø 6,3	40
510320	Red	Acetylene	Ø 10	20
510326	Red	Acetylene	Ø 6,3	20
510340	Red	Acetylene	Ø 10	40
510346	Red	Acetylene	Ø 6,3	40
510420	Orange	LPG	Ø 10	20
510426	Orange	LPG	Ø 6,3	20
510440	Orange	LPG	Ø 10	40
510446	Orange	LPG	Ø 6,3	40
510520	Blue / Red	Oxygen / Acetylene	Twin Ø 10	20
510526	Blue / Red	Oxygen / Acetylene	Twin Ø 6,3	20
510540	Blue / Red	Oxygen / Acetylene	Twin Ø 10	40
510546	Blue / Red	Oxygen / Acetylene	Twin Ø 6,3	40
510135	Black	Neutral gas	Ø 6,3	40
510720	Blue / Orange	Oxygen / LPG	Ø 10	20

Hose reel



Ref.	Designation	Length	Dimensions in mm	Weight in kg
510140	Hose reel with protective flange and turning bracket OX/Acetylene	15 m Ø 10	560 x 550 x 203	24
510141	Hose reel with protective flange and turning bracket Oxygen / Acetylene	15 m Ø 6,3	560 x 550 x 203	22

Supplied with 15 meters of ISO 3821 twin hose, ready to use. Steel casing, epoxy paint, very robust, easy installation. For all other gases, consult us.

Directions for use

	VISUAL INSPECTIONS - CHECKS LEAK TESTS		REVISIONS OR
	EACH TIME THE BOTTLE IS CHANGED	ANNUALLY	REPLACEMENTS
Regulators		<u>~</u> ⊻= ⊻=	5 years Maximum
Quick connector with shutter		전=- 전=- 전=-	If incident
Flexible hoses	+	+ -	5 years Maximum
Flash-back arrestor valves	VERY IMPORTANT	when dismanting, be careful of the	3 years Maximum
Torches		+ ==	5 years Maximum







FIND OUT MORE INFORMATION **ABOUT THIS TECHNICAL TABLE BY FLASHING THIS QR CODE**



Terms of guarantee

Duration of the guarantee

All Le Lorrain torches and regulators are checked before sale. However, the guarantee for Le Lorrain torches and regulators, under normal conditions of use, is valid for two years. Unless otherwise stipulated, the warranty period begins to run from the date of delivery of the materials.

If the customer wishes to avail himself of the guarantee, it is his responsibility to consult the terms and conditions of application of the guarantee reproduced below.

If the guarantee is not applicable or if the guarantee period has expired, the company may send a quotation to the customer and will only carry out repairs or sell the parts after receiving the customer's agreement and the corresponding payment. However, it is reminded that the benefit of the guarantee does not prevent the application of the provisions relating to the legal guarantee for hidden defects.

Conditions

- CeThis guarantee does not apply to parts and equipment that have been worn out or deteriorated prematurely, due to negligence, maintenance or storage defects.
- The guarantee is not valid if the appliance has been used improperly or if it has been dismantled or modified in any way without our written consent by a repairer not authorised by us.
- If an appliance is returned to us as defective, and after expertise in our workshops, this appliance is not at fault and is in working order, the costs of expertise as well as the costs of return to the sender will be invoiced.
- Defects and their consequences linked to any case of force majeure
- Within the framework of this guarantee, our liability is limited to the costs of repairing or replacing the defective appliance or parts.

Installation of the hoses

- After ensuring that the hoses are perfectly clean inside, fit them to the connections of the regulators and torches: blue hoses for oxygen, red hoses for acetylene, orange hoses for propane.
- Fix the hose clamps..

It is advisable to fit oxygen and fuel gas non-return valves between the torch and regulators.

1

WARNING:

Never use a torch without wearing glasses, and never exceed a consumption of 800 l/h of acetylene per acetylene cylinder. Never use a lighter.

Putting LE LORRAIN pressure regulators into service

Bleed the cylinder by briefly opening the valve EXCEPT for combustible gases.

Caution:

- For acetylene, propane and all fuel gas pressure regulators, do not bleed.
- Make sure that no grease or oil contaminates the inlet connection.
- Place the regulator on the cylinder valve, tightening the inlet fitting nut moderately.
- See below for the start-up of Le Lorrain torches.

Starting up LE LORRAIN welding and cutting torches

- Loosen the trigger screws on the regulators.
- Is Slowly open the cylinder valves.
- Check that the needles of the low pressure gauges are on "O".
- Adjust the operating pressure by adjusting the regulator trigger screws according to the performance tables on each page of the products concerned.
- ▶ Slightly open the oxygen valve (blue) on the torch.
- Open the fuel gas valve (red) on the torch.
- Light the torch:

For welding: adjust the flame with the oxygen valve.

For cutting: adjust with both taps, then open the cutting oxygen by operating the trigger or tap, and adjust again with both taps. During operation, slag, metal impurities or other impurities may cause a flame to re-enter the mixer. Immediately close the oxygen and fuel gas taps.

In the case of malleable torches, when the torches lose their suppleness, it is necessary to anneal them.

Shut down

- Close the cylinder valves
- Close torch valves after evacuating gases from hoses
- ▶ Loosen the trigger screws on the regulators



WARNING:

For your safety and for optimal use of LE LORRAIN equipment, please res- pect the technical instructions.

General terms and conditions of sale

The present general conditions of sale define the rights and obligations of the parties in the context of the sale of equipment (hereinafter the "Equipment") by the company HAMPIAUX SAS, with a share capital of 750,000 euros, located at 12 rue Marcel Brot in Nancy 54000, registered in the Nancy (54) Trade and Companies Register under the number 769 800 830 (hereinafter "HAMPIAUX SAS") to its professional Customers, whether natural or legal persons, private or public, acting for purposes within the framework of his commercial, industrial, agricultural, craft or liberal activity, including when he acts in the name of or on behalf of another professional (hereinafter the "Customer"), and apply to any order placed on any durable medium. Any order implies the Customer's acceptance of and full and complete adherence to these general conditions of sale, which prevail over any other document, unless expressly agreed otherwise in writing by

I. ENFORCEABILITY - VALIDITY OF THE GCVS

These GTC are systematically communicated to all Customers before or at the same time as an order form is issued. These GTC may be modified at any time by HAMPIAUX SAS. However, the version applicable to the Customer is that in force on the day of the order. In the absence of proof to the contrary, the data recorded in the system of HAMPIAUX SAS constitutes proof of all transactions concluded with the Customer. The Customer may access the archived GTC by sending a request by e-mail to: contact@lelorrain.fr. Validation of the order by the Customer implies acceptance without restriction or reservation of these GTC. In the event that any of the clauses of these GTC are found or declared to be invalid or in violation of any provision of public policy, such clause shall be deemed to be unwritten and all other clauses shall remain in force, unless the remaining obligations become manifestly unbalanced for one or other of the parties. II. INFORMATION ON EQUIPMENT In general, the Materials offered for sale, their main characteristics and in particular their compatibility, specifications, illustrations and dimensions are presented on the website www.lelorrain.fr (hereinafter the "Site") and in the commercial brochure. The Customer must refer to the description sheet of each of the Materials in order to know their properties and essential characteristics. The photographs on the Website or in the brochures are as accurate as possible, but cannot guarantee a perfect similarity with the Material purchased. Variations in colour may occur, in particular due to the technical limitations of the colour rendering of computer equipment and printing. HAMPIAUX SAS cannot be held responsible for any non-substantial errors that may occur. If a technical or visual detail should change. HAMPIAUX SAS will endeavour to inform the Customer of this in its possible. For any question relating to the Materials and their use, any additional question or request for advice, the Customer may contact the team of advisors by calling Customer service on +33 (0)3.83.35.47.98 (price of a local call), in the "Contact" section of the Site or via the contact form indicated in the same section.

II. INFORMATION ON EQUIPMENT

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III. ORDER:

By telephone

Customers may request information about the Materials by telephone. However, it is important to note that no orders can be placed by telephone.

Remotely (by e-mail exchange) Order form requests can be made by correspondence with the HAMPIAUX SAS Customer service department by e-mail or via the contact form accessible in the "Contact" section of the Site. Before signing the order form, the Customer must check the accuracy of the order form and inform HAMPIAUX SAS immediately of any error. The order will only be considered final after receipt of the unmodified order form, dated and signed by the Customer, sent to HAMPIAUX SAS by e-mail and after receipt by the latter of the full deposit due, where applicable.

For the order to be validated, the order form signed by the Customer must be received by HAMPIAUX SAS which must have acknowledged receipt. If the Customer makes one or more modifications before the acceptance of the Purchase order, HAMPIAUX SAS reserves the right to refuse them or to propose a new Purchase order which will again specify its period of validity. In all cases, any deposits required by HAMPIAUX SAS from its Customers cannot be considered as a deposit. An order placed by the Customer under the above conditions shall constitute acceptance without restriction or reservation of these GTC and shall result in the formation of the Contract.

IV. ORDER CHANGE

On the Customer's initiative

Any modification of an order after its acceptance by HAMPIAUX SAS must be sent in writing to the Customer service department of HAMPIAUX SAS, accessible on the Site in the "Contact" section. No modification of an order can be taken into account less than 24 hours before the date of dispatch agreed between the Customer and HAMPIAUX SAS. In the event of a change in the above conditions, HAMPIAUX SAS and the Customer will have to define a new date for the dispatch of the order.

The modification is only effective on receipt of the amount corresponding to the administration costs and, if applicable, the price difference resulting from the modification.

For any request for modification leading to a reduction in the price of the order, HAMPIAUX SAS, after having applied any administration costs, undertakes to reimburse the price difference as soon as possible.

On the initiative of HAMPIAUX SAS

If HAMPIAUX SAS is obliged to make significant changes to the order before the date of dispatch agreed with the Customer, it must inform the Customer in writing as soon as possible. The Customer may either accept the proposed change or terminate the contract free of charge. The period within which the Customer must communicate its decision will be specified in the notification of the modified elements.

V. CANCELLATION OF ORDER

If HAMPIAUX SAS is forced to cancel the order, it will inform the Customer as soon as possible. In this case, the Customer will be reimbursed for all sums paid within a maximum period of fourteen (14) days.

VI. REFUSAL TO ORDER

HAMPIAUX SAS reserves the right to suspend or cancel any order and/or delivery, whatever its nature and level of execution, in the event of non-payment or partial payment of any sum due by the Customer, in the event of a payment incident, including on the occasion of previous orders.

VII. DELIVERY

Place of delivery

The Materials are delivered to the delivery address indicated by the Customer during the ordering process. The Customer may not change the place of delivery of the Materials once the order has been confirmed, unless he has obtained the prior written agreement of HAMPIAUX SAS. Delivery is the transfer to the Customer of physical possession or control of the ordered Material.

Delivery times

Delivery times are given for information purposes only, as they depend on the availability of carriers and the order in which orders arrive. Any delay in relation to the indicative deadlines does not justify cancellation of the order placed and recorded by HAMPIAUX SAS, and cannot give rise to any penalty or compensation.

Transfer of risk

The Materials travel at the Customer's risk, the transfer of risks on the Materials sold taking place when the Materials are handed over to the carrier.

HAMPIAUX SAS cannot be held responsible for destruction, damage, loss or theft during transport, even if it has chosen the carrier. Except for special agreements, unloading is at the Customer's expense.

Transport and delivery tracking

Deliveries are made by an independent carrier to the address given by the Customer at the time of ordering and to which the carrier has easy access. In the event of a specific request from the Customer concerning the conditions of packaging or transport of the ordered Materials, duly accepted in writing by HAMPIAUX SAS, the costs related to this will be the subject of a specific additional invoice, on the basis of an estimate previously accepted in writing by the Customer.

The Customer is required to provide a correct delivery address and telephone number for the carrier. In the event of an error and/ or changes to these details not being reported or in the event of the Customer's absence, which would result in the return of the Material, the storage costs, as well as all related costs, will be borne exclusively by the Customer, and upon presentation of an invoice and supporting documents. In cases where the Customer has arranged an appointment with a carrier for the delivery of the Material, it is specified that HAMPIAUX SAS reserves the right to invoice, on presentation of proof, the costs of the second presentation of the carrier, in cases where the Customer has not respected the terms of the first appointment made with the carrier. Similarly, if the Customer is absent at the time of delivery, a notice of delivery may be left in the letterbox attached to the delivery address.

The Customer is then invited to contact the carrier or the Customer service department directly. In cases where the actual configuration of the delivery location physically prevents the unloading of the Materials, the carrier reserves the right to cancel the delivery. In this case, the delivery costs will be borne by the Customer. It is the Customer's responsibility to contact Customer service. The Customer will be informed of the new terms and conditions and costs of delivery of the order.

Return of Materials

The Customer is required to check the apparent condition of the Materials upon delivery; It is the responsibility of the Customer, in the event of damage to the Materials delivered or shortages, to make any necessary reservations with the carrier. Any Material which has not been the subject of reservations formulated by registered letter with acknowledgement of receipt within 3 days of its reception, with the carrier, in accordance with article L 133-3 of the Commercial Code, and a copy of which will be sent simultaneously to the company HAMPIAUX SAS, will be considered accepted by the Customer. No return of Material can be made by the Customer without the prior agreement, by any means, of the company HAMPIAUX SAS, Materials must be sent back within 8 days of delivery, by any carrier of the Customer's choice. HAMPIAUX SAS will only bear the cost of returning the goods if an apparent defect is found by the company of its representative. A reduction may be applied for inspection, repackaging, storage and administrative costs.

VIII. PRICES - PAYMENT CONDITIONS

The prices of the Materials sold are those appearing in the price list of HAMPIAUX SAS on the Site or in the commercial brochures in force on the day of the order. These prices are, on this date, firm and definitive and are exclusive of tax, for goods ex works. HAMPIAUX SAS reserves the right to modify its prices at any time However, it is specified that the Materials will be invoiced on the basis of the rates in force on the day of the order. The postage is determined in the price list in relation to the amount of the order. VAT is charged in addition at the current legal rate. VAT is paid on debits.

Deposit

One or more deposits corresponding to a partial amount of the total price of the ordered Materials may be requested by HAMPIAUX SAS at the time of ordering. The determination of the amount of the deposit as well as its due date are provided for in the order form, if applicable.

Billing

When one or more down payments are required, HAMPIAUX SAS will issue a down payment invoice to the Customer for the amount of each down payment due, as stated in the order form. A balance invoice (amount provided for in the order form deducted from the deposit(s) paid by the Customer) is drawn up by HAMPIAUX SAS and given to the Customer on final acceptance of the ordered Equipment.

Invoices will be sent electronically to the e-mail address of the Customer as communicated to HAMPIAUX SAS.

On the express written request of the Customer, these invoices can only be sent to him by paper to the postal address he will communicate to HAMPIAUX SAS.

General terms and conditions of sale

Payment deadlines

Invoices are payable on the due date indicated therein, it being specified that payment terms may not exceed 45 days end of month or 60 days from the date of issue of the invoice. The handing over of a payment voucher does not constitute payment. Only the effective cashing of cheques, drafts or bills of exchange (LCR) shall be considered as full payment within the meaning of these general terms of sale. Any costs generated by the refusal of a means of payment shall be borne by the Customer. Unless expressly agreed between the parties, the agreed payment dates may not be delayed for any reason whatsoever, including in the event of a dispute. No discount is granted for early payment.

Means of payment:

1) Bank transfer

The Customer may use a bank transfer. The information on the bank transfer is given to the Customer on the invoice. The Customer must pay the full amount of the invoice within the period indicated on the invoice.

2) Bank cheque

The bank cheque must be issued by a bank domiciled in France or Monaco, made out to HAMPIAUX SAS and sent to the following address HAMPIAUX SAS, 12 rue Marcel Brot, Nancy 54000. The cheque will be cashed on receipt. The Customer has ten (10) days following the validation of his order to send the cheque to HAMPIAUX SAS. After this period of ten (10) days, the order will be automatically cancelled. In the event that, for any reason whatsoever (opposition, refusal of the issuing centre, etc.), the collection of the sums due by the Customer proves impossible, the order shall be cancelled immediately.

Failure to pay

It is expressly agreed that failure to pay a single invoice on the due date shall automatically result in all outstanding invoices becoming immediately payable, as well as the application, without prior notice, of the following provisions

- late payment interest calculated on the total amount still due at a rate equal to 3 times the legal interest rate in force on the date of invoicing,
- and a fixed indemnity of €40 per invoice not paid on the due date, in accordance with the provisions of article L441-10 of the Commercial Code.

If the actual costs of collection exceed the above fixed sum, HAMPIAUX SAS reserves the right to charge the Customer for any sum due for the collection of the invoice or part thereof which is unpaid, on presentation of the supporting documents. In the event of non-compliance with the above payment conditions, HAMPIAUX SAS also reserves the right to suspend the execution of its obligations under the present contract and/ or to reduce or cancel any discounts granted to the latter, after notification by registered letter with acknowledgement of receipt addressed to the Customer to comply has remained wholly or partly without effect within a period of eight (8) working days from the first presentation of the letter.

The company HAMPIAUX SAS also reserves the right to demand, in the event of non-payment of an invoice on the due date, the cancellation of the sale after sending a formal notice which has remained without effect for a period of eight (8) days. Similarly, HAMPIAUX SAS may unilaterally, after sending a formal notice, draw up or have drawn up an inventory of its Materials in the possession of the Customer, who undertakes, from now on, to allow free access to its warehouses, shops or others for this purpose, ensuring that identification of the company's Materials is always possible.

Transfer of ownership

HAMPIAUX SAS retains full ownership of the Materials until full payment of the price by the Customer, in principal and accessories.

The Customer undertakes not to transform, incorporate, resell or pledge the Materials until the price has been paid in full, on pain of immediate reclamation of the Materials by HAMPIAUX SAS. For the purposes of this article, the Customer undertakes to ensure that the identification of the Material is always possible until full payment of the price.

HAMPIAUX SAS may exercise its rights under the present retention of title clause, for any of its claims, on all its Materials in the Customer's possession, the latter being conventionally presumed to be those unpaid, and HAMPIAUX SAS may take them back or claim them as compensation for all its unpaid invoices, without prejudice to its right to cancel current sales.

The client formally undertakes to enter the equipment sold with a reservation of ownership clause on a separate line on the assets side of its balance sheet. In the event of resale of the equipment by the Customer, the latter undertakes to inform HAMPIAUX SAS immediately in order to enable it to exercise, if necessary, its right of claim on the price with regard to the third party purchaser. The authorisation to resell is automatically withdrawn in the event of the Customer's receivership or liquidation. In the event of the return of the Material in application of the above provisions, the advance payments received by HAMPIAUX SAS shall be retained by way of lump-sum damages, without prejudice to any other damages.

All costs incurred by the reclamation of the Material or its price shall be borne exclusively by the Client, without prejudice to the right to claim any other damages. In the event of the opening of receivership or liquidation proceedings against the Customer, current orders will be automatically cancelled, and HAMPIAUX SAS reserves the right to reclaim goods in stock from the Customer.

IX. GUARANTEES

The equipment must be checked by the client on delivery, and any claim, reservation or dispute relating to shortages and apparent defects must be made under the conditions referred to in Article 2

The Equipment supplied by HAMPIAUX SAS benefits by right and without additional payment, in accordance with the legal provisions of the legal guarantee against hidden defects (art. 1641 to 1649 of the Civil Code) resulting from a defect in Material, design or manufacture affecting the equipment delivered and making it unfit for use. HAMPIAUX SAS will reimburse, replace or have repaired (if necessary) the Materials under guarantee that are found to be defective.

Shipping costs will be reimbursed on the basis of the invoiced rate and return shipping costs will be reimbursed upon presentation of proof. Refunds for Materials found to be defective will be made as soon as possible and at the latest within fourteen (14) days of the finding of the hidden defect by HAMPIAUX SAS.

The refund will be made by bank cheque sent to the Customer, or any other means expressly accepted in writing by the Customer. Notwithstanding the above, HAMPIAUX SAS cannot be held responsible in the event of misuse, negligence on the part of the Customer, accident or force majeure.

The guarantee of HAMPIAUX SAS is, in any case, limited to the replacement or reimbursement of the Materials affected by a defect. More specifically, the guarantee is excluded:

- In the event of use of the Equipment under conditions of use or performance that do not comply with the provisions set out in the instructions accompanying the equipment.
- In case of modification or dismantling by the Customer or a third party not approved by HAMPIAUX SAS.

X. RESPONSABILITY

HAMPIAUX SAS cannot be held responsible, in whole or in part, if the Customer does not comply, in whole or in part, with these GTC or in the event of force majeure within the meaning of article 1218 of the Civil Code as interpreted by case law or due to the actions of a third party presenting the characteristics of force majeure. HAMPIAUX SAS cannot under any circumstances, even if it were to be held liable, be required to pay compensation for damage that is not an immediate and direct consequence of the contractual breach in question.

The Materials offered for sale by HAMPIAUX SAS comply with current French legislation.

XI. FORCE MAJEURE

Events beyond the control of the parties, which they could not reasonably be expected to foresee, and which they could not reasonably avoid or overcome, shall be considered as force majeure or fortuitous events, insofar as their occurrence makes the performance of the obligations totally impossible.

In particular, the following are considered to be cases of force majeure or fortuitous events which relieve the company HAMPIAUX SAS of its obligation to deliver within the time limits initially set strikes by all or part of the staff of HAMPIAUX SAS or its usual transporters, fire, flooding, war, production stoppages due to unforeseen breakdowns, the impossibility of being supplied with raw Materials, epidemics, thawing barriers, roadblocks, strike or disruption of EDF-GDF supplies, or disruption of supplies for a reason not attributable to HAMPIAUX SAS, as well as any other cause of disruption of supplies attributable to our suppliers.

In such circumstances, HAMPIAUX SAS will inform the Customer in writing, in particular by fax or e-mail, within 24 hours of the date of occurrence of the events, the order placed by the Customer being then suspended by right without compensation, as from the date of occurrence of the event.

If the event lasts more than 30 days from the date of its occurrence, the more diligent party may cancel the order without either party being entitled to claim damages.

XII. PERSONAL DATA

In application of Regulation (EU) 2016/679 of 27 April 2016, known as the "RGPD", and Law n°78-17 of 6 January 1978, amended by Law n°2018-493 of 20 June 2018, it is reminded that certain personal data of the Customer, its partners, its legal representatives and/or its staff (hereinafter referred to as the "Data Subjects") requested by HAMPIAUX SAS are necessary, in particular, for the processing payment and execution of the order, any complaints relating thereto and invoicing, as well as for the communication of newsletters from HAMPIAUX SAS relating to Materials similar to those already ordered; In accordance with the regulations in force, the personal data of the Persons concerned may be communicated to any partners of HAMPIAUX SAS responsible for the execution, processing, management and payment of the orders. In any case, the personal data of the Data Subjects are not transferred outside the European Union The processing of information provided by Persons concerned complies with the legal requirements for the protection of personal data, with the information system used by HAMPIAUX SAS ensuring optimum protection of this data.

In accordance with the regulations in force, the Persons concerned have, at any time and under certain conditions, a right to information, a right of access and rectification, opposition, deletion, limitation of processing and portability of all their personal data by writing to HAMPIAUX SAS either at the following contact e-mail address: contact@lelorrain.fr or at the following postal address HAMPIAUX SAS, 12 rue Marcel Brot in Nancy 54000

ATTENTION: Processing times will be increased if the application is made by post.

The Persons concerned also have the right to lodge a complaint about the use of their personal data with the CNIL: Commission Nationale de l'Informatique et des Libertés, 3 Place de Fontenoy - TSA 80715 - 75334 PARIS CEDEX 07 - Tel: 0153 73 22 22 - Fax: 0153 73 22 00

XIII. JURISDICTION - APPLICABLE LAW

These GTC are subject to French law.

Any dispute arising between the parties concerning the validity, execution, non-execution or termination of the present contract or which may be connected to these elements by a direct or indirect link, obliges the parties to seek an amicable settlement before taking legal action.

If a party brings such an action or claim without first attempting to reach an amicable settlement, the action or claim shall be inadmissible and the court seised shall stay the proceedings until the day when the parties prove to the court that they have sought an amicable settlement of their dispute.

In the absence of an amicable agreement within a period of one (f) year, any dispute concerning the application, interpretation or execution of these general terms of sale shall be submitted to the Commercial Court of Nancy (54), which shall have sole jurisdiction, regardless of the place of order, delivery or payment terms.

LE LORRAIN is exported to over sixty countries on five continents





ALGERIA	
GERMANY	
ENGLAND	
AUSTRALIA	
AUSTRALIA	
AZERBAIJAN	
BAHRAIN	
BELGIUM	
BENIN	
BRAZIL	
BURKINA FASO	

CHILE
CHINA
CYPRUS
COLOMBIA
CONGO DRC
CONGO
COTE D'IVOIRE
DENMARK
DJIBOUTI
U.A.E.
EGYPT
SPAIN

FINLAND
GABON
GAMBIA
GREECE
GUADELOUPE
GUINEA
GUYANA
HUNGARY
MAURITIUS
INDIA
ITALY
KENYA

KUWAIT
LA REUNION
LATVIA
LEBANON
LITHUANIA
LUXEMBOURG
MADAGASCAR
MALI
MOROCCO
MARTINIQUE
MAURITANIA
MEXICO

MONACO
NORWAY
NEW CALEDONIA
UGANDA
NETHERLANDS
PERU
POLAND
POLYNESIA
PORTUGAL
QATAR
CZECH REP.
REUNION

ROMANIA
RWANDA
SENEGAL
SERBIA
SINGAPORE
SLOVAKIA
SLOVENIA
SWITZERLAND
THAILAND
TOGO
TUNISIA
USA
VANUATU



CAMEROON