



AIR CONDITIONING AND REFRIGERATION
SYSTEMS AND INSTRUMENTS

2024
2025



AIR CONDITIONING AND REFRIGERATION
SYSTEMS AND INSTRUMENTS

2024
2025

Since 1976 environmentally friendly technics and equipments



A long history since 1976

Castel San Niccolò (Italia)



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Cert. Nr. 50 100 3770



Milano (Italia)

 Wigam S.p.a.

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ENVIRONMENTALLY FRIENDLY TECHNICS AND EQUIPMENTS

Since 1976, year of its establishment, Wigam has been a structure specialized in the equipment for refrigeration and air-conditioning for the civil and automotive sector.

Wigam has always paid a very particular attention to issues related to environmental protection. The continuous innovation brought to the solutions for the handling of the various refrigerants, with a particular attention to to the new low environmental impact mixtures and natural refrigerants, goes hand in hand with the training activities provided for the professionals of the sector.

Following this ideal, Wigam encourages the professionals to operate with the utmost respect to the ecosystem thanks to quality and avant-garde solutions.

In 2021 Wigam undertook the expansion of its Italian production site in Castel San Niccolò with an additional 6000 square metres of covered space.

INTRODUCTION





Design vocation and search for quality

The design and creative vocation of the firm, and its continuous search for quality have made Wigam a reference Company, where highly qualified personnel develop, manufacture and control instruments and equipment of high technology.

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WIGAM

NEW
WITH THE
BEST
QUALITY

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RECOVERY
UNITS
page 12



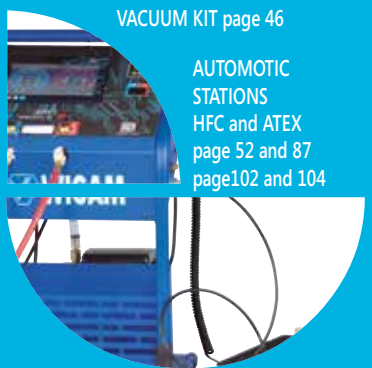
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AUTOMATIC
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VACUUM
PUMPS FOR
R32, ATEX
and NH₃
page 44



CO₂, HC and
NH₃ DIGITAL
MANIFOLDS
page 96, 110 and 118



CALIBRATION

Issue of calibration report or renewal for equipment already purchased

The company that carries out installation, maintenance or repair of fixed systems of refrigeration, air-conditioning and heat pumps containing some fluorinated greenhouse gases (EC Regulation N° 303/2008) must obligatorily own a minimum list of instruments and equipment, in order to be certified by an organization.

Furthermore, each organization demands the calibration of some of the products from the list. Warning: not all certification organizations require the same minimum equipment, nor the same products with calibration report. We kindly request you to ask for detailed information to your certification organization regarding the minimum list of instruments and equipment you must own and the products for which the calibration certificate is requested.

Calibration is an additional service against payment and is necessary even if the product is new.

Wigam SpA does not provide full or partial copies of the calibration certificates of the primary tools used to write its calibration reports, but it provides, the univocal numerical reference of the document and of the laboratory that issued it.



Wigam offers a service of calibration/check for the instruments that are necessary to the operators who are part of the CE 303/2008 regulations, by means of a metrology laboratory equipped with certified primary samples, controlled environmental conditions and following procedures pertaining to the quality system of the company.

The skilled workers, who are highly qualified and constantly updated, operate with the most modern data processing systems, with digital storage of all the metrological documents.

Categories subjected to calibration

Leak detectors	page 125-132
Manifolds and gauges	page 62-74
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RECYCLING AND RECOVERY SYSTEMS

F-GAS REGULATION - PHASE DOWN

From 2018 onwards, the EU F-Gas Regulation (EU 517/2014) creates massive cuts in the available quantities of HFCs in the EU.

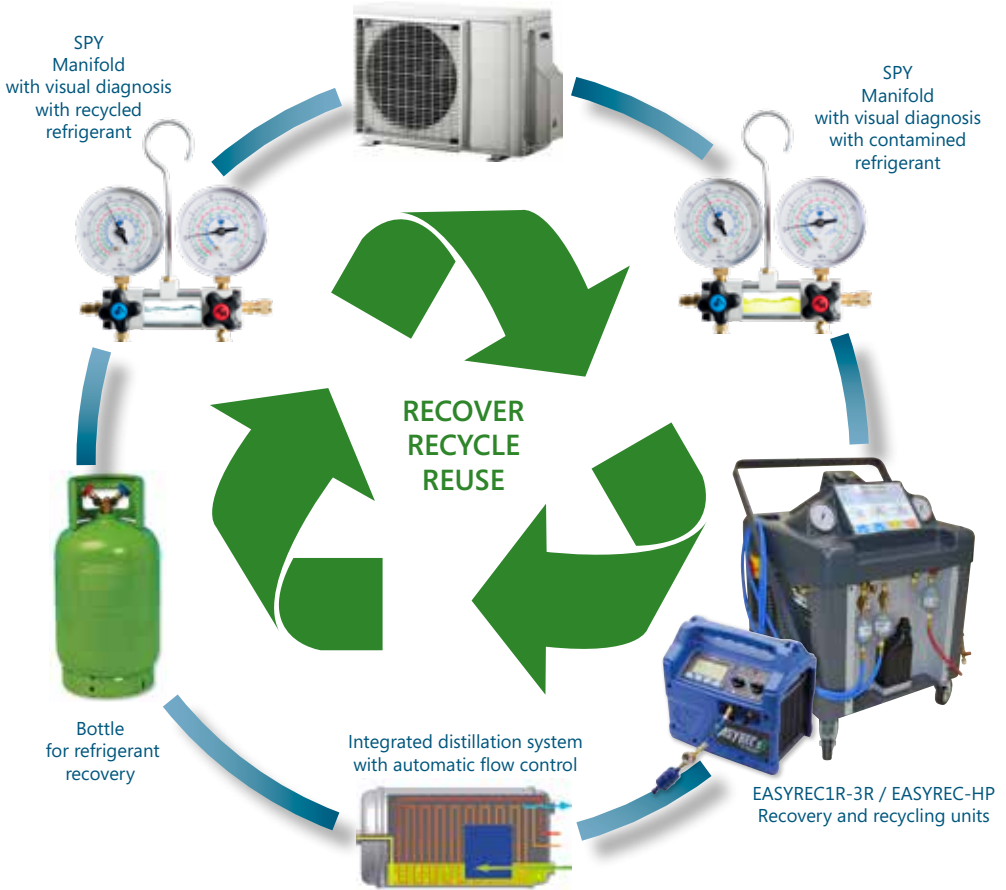
For the three-year period 2021-23 quantity reduced to 45% compared to 2015.



SAVE
THE PLANET



SAVE
MONEY



The higher the GWP of the refrigerant, the more it will come under pressure by the HFC phase-down, leading to likely **price increases and potential shortages.**

Pure HFOs, CO₂, hydrocarbons, ammonia, reclaimed or recycled HFCs etc. do not fall under the phase-down.

Recycled and reclaimed HFCs – even with a GWP > 2500 - can still be used for service until 2030.

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RECOVERY AND
RECYCLING UNITS

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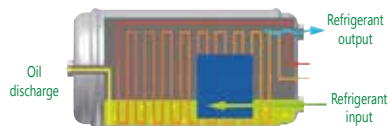
RECOVERY-RECYCLING UNIT

NEW

COMPACT AND
LIGHT DESIGN

Integrated distillation system

High-efficiency heat exchanger



Automatic flow control



Technical features

Refrigerant	CFC, HCFC, HFC e HFO (included R32 and R1234ze)
Power supply	220 - 240V AC 50 - 60 Hz
Motor power	750W
Maximal current draw	6A
Compressor	Double piston, dry
Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
Operating temperature	0 - 40 °C

EASYREC-3R

High performance recovery and recycling unit for CFC, HCFC, HFC and HFO (included R32 and R1234ze)

- High performances thanks to the powerful 1 HP compressor and to the higher capacity condenser.
- Very compact and light design with integrated distiller.
- Exclusive distillation device with liquid refrigerant flow check which:
 - allows to separate oil/impurities/dyes very efficiently.
 - optimizes the compressor's operating conditions.
- Ceramic cylinders with carbon fibre seal for superior reliability.
- Large, intuitive heavy-duty digital display that supports the user in the recovery and recycling phases guiding him as well with the discharge procedure of oil/impurities/dye.
- Multiple selectable recovery and recycling modes.
- Automatic stop of the unit at the end of recovery with visual and acoustic indication.
- Shut-off valves that prevent refrigerant spills.
- Self-evacuation (PURGE) device, which allows to change type of refrigerant easily.
- Safety device for maximum pressure.
- Sight-glass and filters included.

Code	Model	Dimensions with pack	Weight with pack
13001029	EASYREC-3R	380 x 360 x 250 mm	13,90 kg



REGULATION UE-517/2014 AND 2024 UPDATE

ARTICLE 13 – CONTROL OF USE

From 1st January 2020, the use of fluorinated greenhouse gases, with a global warming potential of 2500 or more, to service or maintain refrigeration equipment with a charge size of 40 tonnes of CO2 equivalent or more, is prohibited. From 1st January 2025, it is planned to extend this ban to all refrigeration systems regardless of the refrigerant charge.

In accordance with Article 13 Paragraph 3 Subparagraph b), until 1st January 2030 recycled fluorinated greenhouse gases with a global warming potential of 2500 or more contained in refrigeration equipment with a load size equal to or greater than 40 tonnes of CO2 equivalent may be used for the maintenance or repair of existing refrigeration equipment, provided they have been recovered from such equipment.

Such recycled gases may only be used by the undertaking which carried out their recovery as part of maintenance or servicing or the undertaking for which the recovery was carried out as part of maintenance or servicing. Regulation (EU) No. 517/2014 Article 2 point 15 and the new Regulation Article 3 point 12 define 'recycling' as the re-use of a recovered fluorinated greenhouse gas after a basic cleaning process.



NEW DIGITAL DISPLAY

Large, intuitive heavy-duty digital display that supports the user in the recovery and recycling phases guiding him as well with the discharge procedure of oil/impurities/dye. The recycling unit automatically stops the operation and signals by means of the "oil" indicator light that it is necessary to discharge oil/impurities/dyes separately from the refrigerant; it then re-start the operation and completes the recovery and recycling.



BUILT-IN DISTILLATION DEVICE

The Recovery and Recycling unit EASYREC-3R becomes unique and unrivalled if you consider that there is a built-in DISTILLATION DEVICE WITH FLOW CHECK which:

- allows RECYCLING with the efficient separation of oil/impurities/dyes.
- OPTIMIZES the compressor's OPERATING conditions by providing it with saturated steam in suction and freeing the operator from the burden of reducing the flow.



SIMPLICITY AND FLEXIBILITY

With EASYREC-3R, everything is at hand, simple and intuitive. Thanks to the "Working mode" knobs situated on the rear panel, it is possible to decide whether to operate ONLY the RECOVERY, in case the refrigerant must be disused, or to operate RECOVERY and RECYCLING aimed at purifying and then reusing the refrigerant. In this case pollutants will be separated and discharged simply through the dedicated valve.



Spare parts and accessories



Ref	Code	Model	Description	Dimensions	Weight
A	14015008	MG-111	Filter drier (1/4" SAE M-M)	100 x 40 x 40 mm	0,28 kg
A	14015041	MG-111-A	Filter drier (1/4" SAE M-M) with alumina	100 x 40 x 40 mm	0,28 kg
B	14015013	XH412	"High capacity" filter drier (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
B	14015042	XH412-A	"High capacity" filter drier (1/4" SAE M-M) with alumina	250 x 80 x 80 mm	1,10 kg
C	14020014001	G19020-WIG	Kit 10 gaskets for 1/4" SAE flexible hoses	160 x 90 x 10 mm	0,02 kg
D	06071013003	GYSS/4-4/6/Y	Connection hose for filter 1/4" SAE 150 mm	250 x 50 x 50 mm	0,16 kg
E	13008026	REC026	Sight glass	90 x 40 x 50 mm	0,17 kg

RECOVERY UNIT

NEW



NEW DIGITAL DISPLAY

Recovery rate	R1234ze-R134a	R502-R407C	R404A-R410A-R507-R32
Vapour	29 kg/h	32 kg/h	33 kg/h
Liquid (recovery)	214 kg/h	340 kg/h	380 kg/h
Push-pull	372 kg/h	474 kg/h	502 kg/h

EASYREC-3

High performance recovery unit for CFC, HCFC, HFC and HFO (included R32 and R1234ze)

- High performances thanks to the powerful 1 HP compressor and to the higher capacity condenser.
- Very compact and light design.
- Ceramic cylinders with carbon fibre seal for superior reliability.
- Large, intuitive heavy-duty digital display that supports the user in the recovery phase with multiple information.
- Multiple selectable recovery modes.
- Automatic stop of the unit at the end of recovery with visual and acoustic indication.
- Shut-off valves that prevent refrigerant spills.
- Self-evacuation (PURGE) device, which allows to change type of refrigerant easily.
- Safety device for maximum pressure.
- Sight-glass and filters included.

Code	Model	Dimensions with pack	Weight with pack
13001028	EASYREC-3	380 x 360 x 250 mm	10,90 kg



Technical features

Refrigerant	CFC, HCFC, HFC e HFO (included R32 e R1234ze)
Power supply	220 - 240V AC 50 - 60 Hz
Motor power	750W
Maximal current draw	6A
Compressor	Double piston, dry
Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
Operating temperature	0 - 40 °C



Spare parts and accessories



Ref	Code	Model	Description	Dimensions	Weight
A	14015008	MG-111	Filter drier (1/4" SAE M-M)	100 x 40 x 40 mm	0,28 kg
A	14015041	MG-111-A	Filter drier (1/4" SAE M-M) with alumina	100 x 40 x 40 mm	0,28 kg
B	14015013	XH412	"High capacity" filter drier (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
B	14015042	XH412-A	"High capacity" filter drier (1/4" SAE M-M) with alumina	250 x 80 x 80 mm	1,10 kg
C	14020014001	G19020-WIG	Kit 10 gaskets for 1/4" SAE flexible hoses	160 x 90 x 10 mm	0,02 kg
D	06071013003	GYSS/4-4/6/Y	Connection hose for filter 1/4" SAE 150 mm	250 x 50 x 50 mm	0,16 kg
E	13008026	REC026	Sight glass	90 x 40 x 50 mm	0,17 kg

EASYREC-3EX

High performance recovery unit for flammable refrigerants (included R600a and R290)

Unit EASYREC-3EX, specially DESIGNED according to the ATEX directive (CE Atex II 3G), is suitable to RECOVER FLAMMABLE REFRIGERANTS belonging to the A3 family as well, such as R600a and R290.

- High performances thanks to the powerful 1 HP compressor and to the higher capacity condenser.
- Very compact and light design.
- Ceramic cylinders with carbon fibre seal for superior reliability.
- Large, intuitive heavy-duty digital display that supports the user in the recovery phase with multiple information.
- Multiple selectable recovery modes.
- Automatic stop of the unit at the end of recovery with visual and acoustic indication.
- Shut-off valves that prevent refrigerant spills.
- Self-evacuation (PURGE) device, which allows to change type of refrigerant easily.
- Safety device for maximum pressure.
- Sight-glass and filters included.



CE Atex II 3G

NEW



NEW DIGITAL DISPLAY

Code	Model	Dimensions with pack	Weight with pack
13001030	EASYREC-3EX	380 x 360 x 250 mm	11,90 kg

Technical features

Refrigerant	HC (R600a-R290) CFC-HCFC-HFC-HFO
Power supply	220 - 240V AC 50 - 60 Hz
Motor power	750W
Compressor	Double piston, dry
Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
Operating temperature	0 - 40 °C

Recovery rate	R600a- R1234yf-R134a	R290- R502-R407	R404A-R410A R507-R32
Vapour	29 kg/h	32 kg/h	33 kg/h
Liquid (recovery)	214 kg/h	340 kg/h	380 kg/h
Push-pull	372 kg/h	474 kg/h	502 kg/h

Spare parts and accessories



Ref	Code	Model	Description	Dimensions	Weight
A	14015008	MG-111	Filter drier (1/4" SAE M-M)	100 x 40 x 40 mm	0,28 kg
A	14015041	MG-111-A	Filter drier (1/4" SAE M-M) with alumina	100 x 40 x 40 mm	0,28 kg
B	14015013	XH412	"High capacity" filter drier (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
B	14015042	XH412-A	"High capacity" filter drier (1/4" SAE M-M) with alumina	250 x 80 x 80 mm	1,10 kg
C	14020014001	G19020-WIG	Kit 10 gaskets for 1/4" SAE flexible hoses	160 x 90 x 10 mm	0,02 kg
D	06071013003	GYSS/4-4/6/Y	Connection hose for filter 1/4" SAE 150 mm	250 x 50 x 50 mm	0,16 kg
E	13008026	REC026	Sight glass	90 x 40 x 50 mm	0,17 kg

RECOVERY-RECYCLING UNIT



EASYREC-1R

Recovery and recycling unit suitable for CFC, HCFC, HFC and HFO (included R32 and R1234ze)

- Compact design with integrated distiller.
- Distillation device with liquid refrigerant flow check, which allows to separate oil/impurities/dyes very efficiently.
- Self-evacuation system (PURGE) which allows to change the type of refrigerant easily.
- Automatic stop of the unit when there is no refrigerant available in the system.
- Signal LED (green/cycle performed successfully - red/alarm).
- Safety device for maximum pressure.
- Two cut-off valves to prevent refrigerant discharge.
- "Pulse free" gauges with regulation screw.
- Ceramic cylinder with carbon fiber seal.
- Sight glass and filter included.
- Wide graphics with quick functioning instructions.

Code	Model	Dimensions with pack	Weight with pack
13001020	EASYREC-1R	545 x 300 x 395 mm	18,9 kg



Technical features

Refrigerant	CFC, HCFC, HFC and HFO (included R32 and R1234ze)
Power supply	220 - 240V AC 50 - 60 Hz
Motor power	550W
Maximal current draw	4A
Compressor	Piston-type and oil less
Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
Operating temperature	0 - 40 °C



REGULATION UE-517/2014 AND 2024 UPDATE

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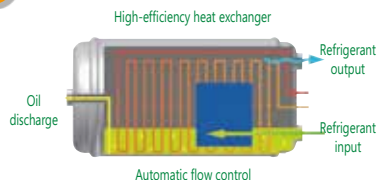
In accordance with Article 13 Paragraph 3 Subparagraph b), until 1st January 2030 recycled fluorinated greenhouse gases with a global warming potential of 2500 or more contained in refrigeration equipment with a load size equal to or greater than 40 tonnes of CO₂ equivalent may be used for the maintenance or repair of existing refrigeration equipment, provided they have been recovered from such equipment.

Such recycled gases may only be used by the undertaking which carried out their recovery as part of maintenance or servicing or the undertaking for which the recovery was carried out as part of maintenance or servicing. Regulation (EU) No. 517/2014 Article 2 point 15 and the new Regulation Article 3 point 12 define "recycling" as the re-use of a recovered fluorinated greenhouse gas after a basic cleaning process.

Recovery rate	R1234ze- R134a	R502- R407C	R404A-R410A- R507-R32
Vapour	14 kg/h	15 kg/h	16 kg/h
Liquid (recovery)	96 kg/h	108 kg/h	132 kg/h
Liquid (recovery-recycling)	16 kg/h	17 kg/h	18 kg/h
Push-pull	276 kg/h	336 kg/h	378 kg/h



Integrated distillation system



- HIGH heat exchange between "warm" refrigerant and "cold" refrigerant, that allows to optimize the distillation procedure
- Automatic flow control system
- Max filling up control
- Distillation device which allows to separate oil/impurities/dyes very efficiently

EASYREC-1

Recovery unit suitable for CFC, HCFC, HFC and HFO (included R32 and R1234ze)

- Self-evacuation system (PURGE) which allows to change the type of refrigerant easily.
- Automatic stop of the unit when there is no refrigerant available in the system.
- Signal LED (green/cycle performed successfully - red/alarm).
- Safety device for maximum pressure.
- Two cut-off valves to prevent refrigerant discharge.
- "Pulse free" gauges with regulation screw.
- Ceramic cylinder with carbon fiber seal.
- Sight glass and filter included.
- Wide graphics with quick functioning instructions.



Code	Model	Dimensions	Weight
13001019	EASYREC-1	545 x 300 x 395 mm	15,5 kg

Technical features

Refrigerant	CFC, HCFC, HFC and HFO (included R32 and R1234ze)
Power supply	220 - 240V AC 50 - 60 Hz
Motor power	550W
Maximal current draw	4A
Compressor	Piston-type and oil less
Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
Operating temperature	0 - 40 °C

Recovery rate	R1234ze- R134a	R502- R407C	R404A-R410A- R507-R32
Vapour	14 kg/h	15 kg/h	16 kg/h
Liquid (recovery)	96 kg/h	108 kg/h	132 kg/h
Push-pull	276 kg/h	336 kg/h	378 kg/h

Spare parts and accessories



Ref	Code	Model	Description	Dimensions	Weight
A	14015008	MG-111	Filter drier (1/4" SAE M-M)	100 x 40 x 40 mm	0,28 kg
A	14015041	MG-111-A	Filter drier (1/4" SAE M-M) with alumina	100 x 40 x 40 mm	0,28 kg
B	14015013	XH412	"High capacity" filter drier (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
B	14015042	XH412-A	"High capacity" filter drier (1/4" SAE M-M) with alumina	250 x 80 x 80 mm	1,10 kg
C	14020014001	G19020-WIG	Kit 10 gaskets for 1/4" SAE flexible hoses	160 x 90 x 10 mm	0,02 kg
D	06071013003	GYSS/4-4/6/Y	Connection hose for filter 1/4" SAE 150 mm	250 x 50 x 50 mm	0,16 kg
E	13008026	REC026	Sight glass	90 x 40 x 50 mm	0,17 kg

"HIGH PERFORMANCE" RECOVERY - RECYCLING UNIT



HIGH PERFORMANCE



EASYREC-HP

The ideal recovery-recycling unit for large refrigeration systems with high quantities of refrigerant

- Suitable for CFC-HCFC, HFC and HFO (included R32 and R1234ze).
- Distillation device with automatic refrigerant flow check, which allows to separate oil/impurity/dyes very efficiently.
- Self evacuation system (PURGE) which allows to change the type of refrigerant easily.
- Automatic stop system at the end of the recovery-recycling cycle (green light on).
- Safety pressure switch (red light on – alarm).
- Cut-off valves to prevent refrigerant discharge.
- Ø80 pulse free gauges with adjustment screw.
- Flexible hoses 1500mm with valves.
- Two filters in suction side and one filter in pressure side.
- Sight glasses in suction side.
- Large panel with quick functioning instructions.

Code	Model	Dimensions	Weight
13001025	EASYREC-HP	605 x 570 x 800 mm	65 kg



Technical features

Refrigerant	CFC, HCFC, HFC and HFO (included R32 and R1234ze)
Power supply	230/1/50
Motor power	1800W
Maximal current draw	8A
Compressor	With oil
Automatic safety shut-off	37 bar
Operating temperature	10 ÷ 50 °C

Recovery rate

Recovery-recycling	60 kg/h
Push-pull	660 kg/h



Spare parts and accessories

Code	Model	Description	Min. Qty
14015008	MG-111	Filter drier (1/4" SAE M-M)	-
14015041	MG-111-A	Filter drier (1/4" SAE M-M) with alumina	-
14015013	XH412	"High capacity" drier filter (1/4" SAE M-M)	-
14015042	XH412-A	"High capacity" drier filter (1/4" SAE M-M) with alumina	-
13008026	REC026	Sight glass	-
06077002001	V/GYSS/4-4/60B	Blue flexible hose 1500 mm with valve	-
06077002002	V/GYSS/4-4/60R	Red flexible hose 1500 mm with valve	-
06077002003	V/GYSS/4-4/60Y	Yellow flexible hose 1500 mm with valve	-
06071013003	GYSS/4-4/6/Y	Filter connection tube 1/4" SAE 150 mm	-
12002017	W68	Ester oil 1000 cc	9 pz

MF4/KK

Rotary vane type high flow pump

Usable with all refrigerants in liquid phase.

Positive displacement, volumetric gear pump.

New gear in KK material (can work dry for a few time).

Ref	Code	Model	Description
A	02041015	MF-4/KK	High vane pump
B	15014001	71/4F-M	Motor for MF4/KK

Ref	Code	Dimensions	Weight
A	02041015	100 x 140 x 175 mm	1,6 kg
B	15014001	240 x 140 x 180 mm	7 kg



Technical features

	MF4/KK	71/4F-M
Flow rate with 20 cPs fluid	3 ÷ 4 l/min.	-
Flow reate with lubricant	4 ÷ 5 l/min.	-
Max. Δ pressure	15 bar	-
Viscosity cPs	1 ÷ 60	-
Connections	3/8" GAS	-
Power supply		230/1/50
Motor power		350W

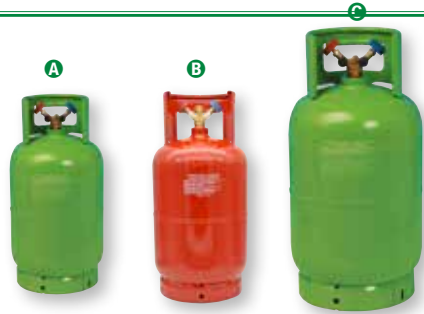
RECOVERY BOTTLES W2 SERIES

12.5 and 40 liters refillable bottles with double valve (liquid/vapour).

Ideal for storing refrigerants recovered/recycled from refrigeration systems.

Ref	Code	Model	Capacity	Min. Qty
A	11001062	W2-WR10K/44	12,5 lt	2
B	11001124	W2-WR9K/48/5	12,5 lt	2
C	11001059	W2-WR40K/49	40 lt	-

Ref	Code	Weight	Connections
A	11001062	5,9 kg	1/4" SAE
B	11001124	5,9 kg	5/16" SAE
C	11001059	21 kg	1/4" SAE



Spare parts

Code	Model	Suitable for bottle
05002016	RF2-1/4"	W2-WR10K/44
05002032	RF2-5/16"	W2-WR9K/48/5
05002022	RF2-40K-1/4"	W2-WR40K/49



Hydrocarbons recovery R600a-R290-R1270

R-ECOPUMP is the system specifically designed for the recovery/transfer/charge of flammable Refrigerants, such as R600a-R290-R1270 (HC).

Unit EASYREC-3EX, specially DESIGNED according to the ATEX (CE Atex II 3G) directive, is suitable to RECOVER FLAMMABLE REFRIGERANTS belonging to the A3 family as well, such as R600a and R290.



SEE PAG.108

REFRIGERANT VISUAL DIAGNOSIS

NEW

WIGAM

SPY-CHECK HVAC

Diagnosis instrument to check the quality of the refrigerant

Equipped with an integrally transparent cylindrical body, it allows the important visual diagnosis of the refrigerant instantly. It clearly shows the condition of the refrigerant, the presence of any contaminants and the appropriate mixing with oils and additives.

It has two 1/4"SAE connections on both sides, one male with valve and the other one swivel female.



ANALYSIS OF THE RECOVERED AND RECYCLED REFRIGERANT

Thanks to its 1/4" sae swivel female connection, SPY-CHECK-HVAC can be connected to one's recovery unit, thus allowing to check the recovered or rather recycled refrigerant.

It is possible to connect SPY-CHECK-HVAC to the only outlet of the recovery unit to check what is coming into the bottle.

By using a second SPY-CHECK-HVAC connected on the suction, we can have a complete vision: on one side, we can check the status of the refrigerant entering the recovery unit (refrigerant that comes from the system) and on the other side we can check it after recycling by means of an EASYREC-R.

PREVENTIVE CHECK ON REFRIGERANT BOTTLES

SPY-CHECK-HVAC can also be connected simply to the refrigerant bottle, thanks to the bottle adapter, supplied with it and thus allows a visual diagnosis of the refrigerant coming out of the bottle.

The device is also particularly suitable for checking the refrigerant mixtures containing R1234yf through a small sampling. Due to the presence of polluted R1234yf, these mixtures can sometimes react with air and create polymerization phenomena once out of the bottle; this can cause serious damage to the HVAC system and the equipment used.

CHECK OF THE HEALTH OF THE HVAC SYSTEM (WITH "TOTAL VERSION")

SPY-TOTAL-CHECK is the complete version, with two hoses and an extra element that turns the female swivel connection into a second male connection, when needed.

Through these additional elements, SPY-TOTAL-CHECK can also be connected to the high pressure and low pressure connections of the HVAC system and check its state of "health" directly.

The oil/refrigerant miscibility, the oil quality and the possible presence of contaminated water and particles can be visually checked so that appropriate action can be taken subsequently.



Technical features:

	SPY-CHECK-HVAC A	SPY-TOTAL-CHECK-HVAC B
Flexible hoses	No	1x blue 900mm 1/4" SAE, 1x red 900mm 1/4" SAE
Input connection	1/4" SAE swivel female	1/4" SAE swivel female - 1/4" SAE male with valve
Output connection	1/4" SAE male with valve	1/4" SAE male with valve
Maximum working pressure	42bar (4.2MPa)	42bar (4.2MPa)
Refrigerants	CFC, HCFC, HFC, HFO, HC	CFC, HCFC, HFC, HFO, HC

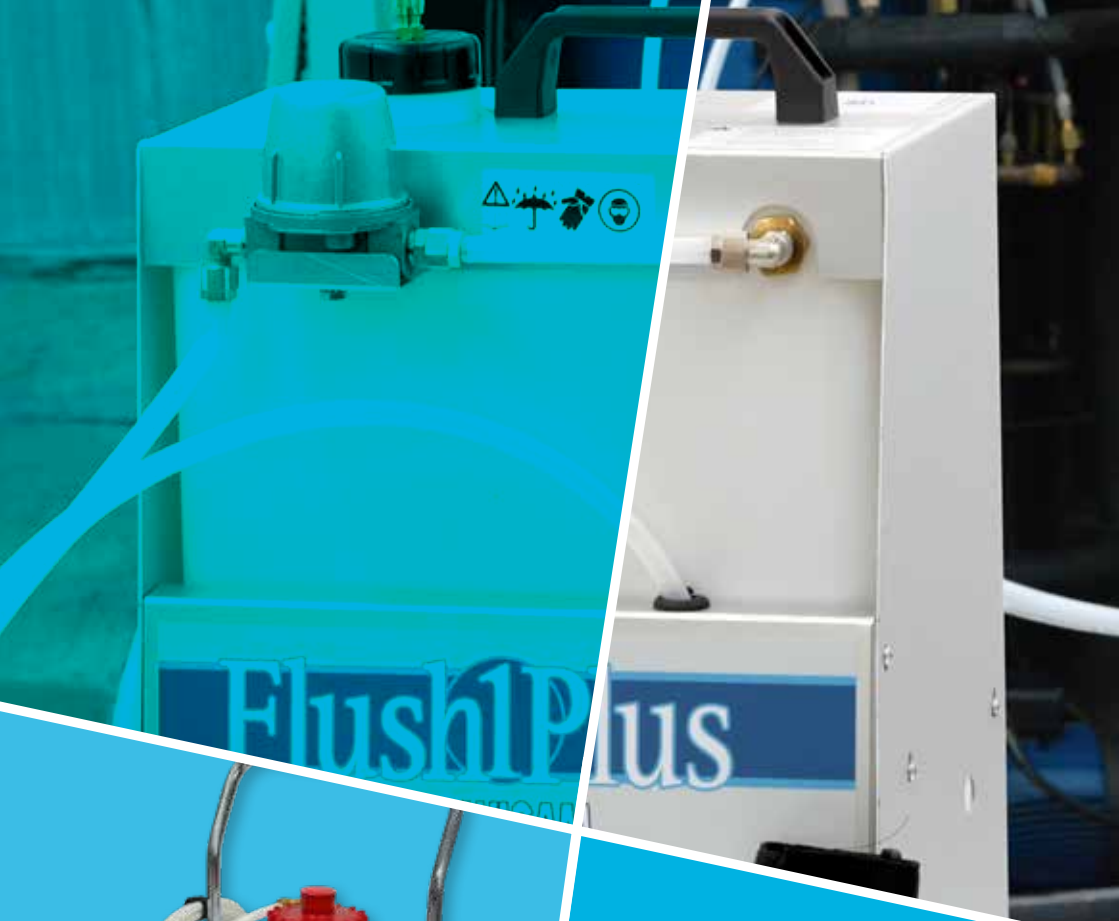
A



B



Ref.	Code	Description	Dimensions with pack	Weight with pack
A	13006081	SPY-CHECK-HVAC	220x240x45mm	0.6Kg
B	13006080	SPY-TOTAL-CHECK-HVAC	220x240x45mm	1.0Kg



Flush1Plus



FLUSHING
 WIGAM

FLUSHING UNITS



HIGHER FLOW RATE AND PUMP HEAD FOR BETTER WASHING EFFECTIVENESS



FLUSH&DRY - FLUSH1-PLUS

Flushing and fluxing station

FLUSH1-PLUS and FLUSH&DRY allow the flushing of any refrigeration circuit, even of large dimensions (10 l integrated container with possible extra tank connection).

- Indispensable for repairs and retrofit of refrigeration circuits in complete safety.
- Removal of all solid residues caused by compressor or filter breakage.
- Complete removal of oil residues from HVAC systems.

To be used with non-flammable SUPER-FLUSH flushing fluid.

Units equipped with:

- Pump, specially designed for flushing, with PTFE mechanical seal and gaskets.
- 10 l integrated tank and connection for extra container
- Mechanical suction filter.
- Flexible hoses with interchangeable connections from 1/4"SAE, 3/8"SAE and 1/2"SAE.
- Connection for external nitrogen bottle.

FLUSH&DRY allows the fluxing of the system thanks to the nitrogen regulator and the 950cc cartridge included in the kit (only FLUSH & DRY version).

Ref	Code	Model
A	13005037001	FLUSH1-PLUS-HVAC
B	13005037002	FLUSH&DRY-HVAC

Ref	Code	Dimensions	Weight
A	13005037001	300 x 220 x 550 mm	13 kg
B	13005037002	300 x 220 x 550 mm	14 kg



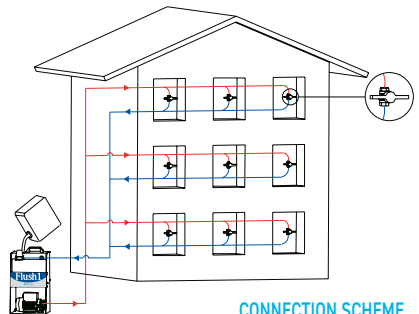
Technical features

	FLUSH&DRY	FLUSH1-PLUS
Pump flow rate	26 l/min	26 l/min
Pump max. pressure	0,45 MPa	0,45 MPa
Nitrogen regulator output pressure	0,50 MPa	-
Pump motor power	0,6 kW	0,6 kW
Power supply	230-240/1/50-60 Hz	230-240/1/50-60 Hz



Spare parts and accessories

Code	Model	Description	Min. Qty
11001060	BN2/1-TPED	Nitrogen bottle 950 cc	12
14015027	F1-CART	Mechanical filter	-
14015026	F1-FILT	Complete filter for FLUSH1	-



CONNECTION SCHEME

FLUSH-HP

Flushing station for large volume circuits

- Ideal for large-capacity HVAC systems and refrigeration units (30 l integrated tank)
- Indispensable for repairs and retrofit of refrigeration circuits in complete safety.
- Removal of all solid residues caused by compressor or filter breakage and oil residues.

To be used with non-flammable SUPER-FLUSH flushing fluid.

Unit equipped with:

- Specially designed pump with PTFE mechanical seal and fittings.
- 30 liters capacity tank.
- Inspectionable mechanical filter.
- 2 flexible hoses 5m with connections 1/2" G F.
- Connection for external nitrogen bottle.
- Valves with PTFE seals.

Code	Model	Dimensions	Weight
13005044	FLUSH-HP	580 x 450 x 1060 mm	22 kg



Spare parts and accessories

Code	Model	Description
02041006	B1-PUMP	Pump for FLUSH-HP
14015034	B1-FILT	Mechanical filter

SUPER-FLUSH

Flushing fluid

Non-flammable flushing fluid in 20kg or 6kg cans.

Compatible with metals usually used HVAC systems and with most plastic material. Does not leave any residue.

For flushing stations (FLUSH&DRY, FLUSH1-PLUS and FLUSH-HP), for pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP) and pressurized flushing sets (A/CF-P-H).

Ref	Code	Model	Description	Min. Qty
A	13005048	SUPER-FLUSH/20	Flushing fluid 20 kg	-
B	13005030	SUPER-FLUSH/6	Flushing fluid 6 kg	4

HIGH CAPACITY
30 L TANK



Technical features

Pump flow rate	51 l/min
Pump max. pressure	0,83 MPa
Pump motor power	1,20 kW
Tank	30 l
Power supply	230-240/1/50-60 Hz



A

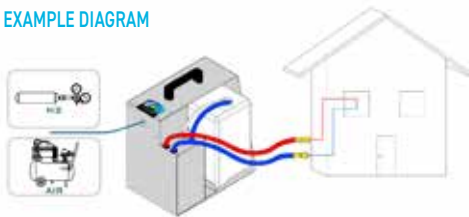
B

FLUSHING REFRIGERATION CIRCUITS

NEW



EXAMPLE DIAGRAM



FF1 CLIMA-FLUSH

Pneumatic flushing station

FF1-CLIMA-FLUSH-HVAC is the new pneumatic **FLUSHING** and **FLUXING** station for HVAC systems, that can operate with **FF1 flammable fluid** and with **SUPER-FLUSH**.

The **efficiency** given by the circulation of the fluid in the system is enhanced by the **pulsing** action, while the **dry** mode allows to perform the final flushing of the circuit.

The station allows a clean work in a **simple** way by switching from **flushing** to fluxing via a single diverter valve.

The pneumatic station can be supplied in a **flexible** way, either via the compressed air line or via a nitrogen kit.

The flushing fluid can be introduced into the removable tank or sucked directly from the fluid container, thanks to the self-priming pump.

Main functions:

- Compatible with FF1 flammable fluid.
- Pulsating flow rate which, combined with the degreasing/detergent action of the washing fluid, offers a **higher working efficiency**.
- Very easy to use thanks to a single diverter valve: flushing or fluxing can be selected with a single action.
- Built-in removable tank (5 l).
- Easy to maintain filter included.
- Possibility to suck the fluid directly from the container.
- The fluid is not overheated by the pump, thus maintains its characteristics.
- Can be used without power supply.
- Can be used either with nitrogen kit or compressed air.
- Flexible hoses of 1500mm.
- **Compact, light and easily transportable**



Technical features

Rate	7 l/min
Supply	Nitrogen kit * or compressed air (max 8 bar)
Suggested flushing fluids	FF1, SUPER-FLUSH and FORMULA
Hoses	2 x 1,5 mt
Pneumatic connection	Quick coupler - Italy (for compressed air) / 1/4"SAE M (for nitrogen kit)
HVAC connections kit included	1/4"SAE, 3/8"SAE e 1/2"SAE

* With the BN2/1-TPED 1 lt nitrogen cartridge several single-split can be flushed

Code	Model	Description
13005077001	FF1-CLIMA-FLUSH-HVAC	HVAC pneumatic station

Code	Dimensions	Weight
13005077001	310 x 295 x 300 mm	3,5 kg



Spare parts and accessories

Code	Modello	Descrizione
14015040	FF1-FILT	Replacement filter for FF1-CLIMA



FF1

Flushing fluid

Easy evaporation flushing fluids, for HVAC-R systems, in 1 liter cans. Does not leave any residue.

Usable only with pressure systems (A/CF-P-H) and pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP).

Code	Model	Min. Qty	Pack dimensions	Pack weight
13005006	FF1	12	350 x 270 x 250 mm	10,5 kg

CLIMA-FLUSH-HP

Pneumatic flushing station for large-volume refrigeration systems

CLIMA-FLUSH-HP is a pneumatic flushing unit for large-volume refrigeration systems, thanks to its built-in 30 l tank and to the important performances of the pump.

Using only the pneumatic propulsion provided by the compressed air line, it is possible to easily manage the flushing and subsequent fluxing (which can also be managed via the nitrogen port).

The efficiency given by the circulation of the fluid in the system is enhanced by the pulsing action. CLIMA-FLUSH-HP is equipped with a pneumatic ATEX pump, compatible with FF1 flammable fluid and with SUPER-FLUSH.

Using the same self-priming pump, it is possible to conveniently manage both the charge and discharge of the flushing fluid directly from the respective tank.

Main functions:

- Compatible also with flammable fluids (such as FF1).
- Easy to maintain filter included.
- Possibility to suck the fluid directly from the container.
- The fluid is not overheated by the pump.
- 2 x flexible hoses of 5 m with ½ G F connection.
- Compact and handy frame.

Code	Model	Description
13005079	CLIMA-FLUSH-HP	HP pneumatic flushing station



Technical features

Rate	5 l/min
Max. pressure	8 bar (0,8 MPa)
Built-in tank	30 l
Supply	pneumatic

FF1

Flushing fluid

Easy evaporation flushing fluids, for HVAC-R systems, in 1 liter cans.

Does not leave any residue.

Usable only with pressure systems (A/CF-P-H) and pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP).

Code	Model	Min. Qty	Pack dimensions	Pack weight
13005006	FF1	12	350 x 270 x 250 mm	10,5 kg



SUPER-FLUSH

Flushing fluid

Non-flammable flushing fluid in 20kg or 6kg cans.

Compatible with metals usually used HVAC systems and with most plastic material. Does not leave any residue.

For flushing stations (FLUSH&DRY, FLUSH1-PLUS and FLUSH-HP), for pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP) and pressurized flushing sets (A/CF-P-H).

Ref	Code	Model	Description	Min. Qty
A	13005048	SUPER-FLUSH/20	Flushing fluid 20 kg	-
B	13005030	SUPER-FLUSH/6	Flushing fluid 6 kg	4



NEW



FLUSHING SET

A/CF-P-H

Flushing set

It allows to remove totally impurities and oils by injecting the flushing fluid inside the system in both directions alternatively. It must be used combined with a cylinder and a nitrogen professional regulator with pressure between 0,5 - 0,7 MPa.

Properties:

- Total removal of metal fragments, impurities and oils.
- Does not leave any residue.
- Very easy to use.
- Economic.
- Practical and fast to use.

To be used with FF1 or SUPER-FLUSH flushing fluids.

Complete set in solid box containing:

- Fluid injection system (1 liter), with pressure gauge, hook and valve for nitrogen connection.
- 5 litres tank for collection of used fluid.
- Flexible hose for connecting the injection system to the HVAC system.
- Flexible hose for connecting the HVAC system to the waste fluid collection tank.
- Kit of fittings for connection 1/4 "SAE, 3/8" SAE, 1/2 "SAE.



Code	Model	Dimensions	Weight
13005007001	A/CF-P-H	550 x 330 x 360 mm	4,3 kg

FF1

Flushing fluid

Easy evaporation flushing fluids, for HVAC-R systems, in 1 liter cans. Does not leave any residue.

Usable only with pressure systems (A/CF-P-H) and pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP).



Code	Model	Min. Qty	Pack dimensions	Pack weight
13005006	FF1	12	350 x 270 x 250 mm	10,5 kg

F1-PASS

Kit of adapters for flushing systems

The kit is meant for the bridge connection of two refrigerant hoses, allowing to perform the cooling system flushing.

The kit includes:

- 1 flexible hose 300 mm 1/4" SAE M x 1/4" SAE M.
- 4 adapters 1/4" SAE F x 3/8" SAE M.
- 4 adapters 1/4" SAE F x 1/2" SAE M.
- 4 adapters 1/4" SAE F x 5/8" SAE M.
- 100 copper gaskets 1/4" SAE mod. B2-4.
- 100 copper gaskets 1/2" SAE mod. B2-8.



Code	Model	Dimensions	Weight
05108042	F1-PASS	440 x 170 x 50 mm	1,5 kg

FLASH-FLUSH-FORMULA

Pressurized flushing fluid

Ready for use flushing fluid pressurized with nitrogen at 40bar. FLASH-FLUSH/FORMULA enables to perform circuit flushing and fluxing in 4 easy operations.

FLASH-FLUSH/FORMULA must be completed with a connecting kit, KIT-FLASH-HVAC.

KIT-FLASH-HVAC

The kit, allowing the simple connection of FLASH-FLUSH-FORMULA to the circuit, includes:

- 1 flexible hose 900 mm mod. V/GYSS/4-4/36.
- 1 adapter 1/4" SAE x 1/4" SAE.
- 1 adapter 1/4" SAE x 3/8" SAE.
- 1 adapter 1/4" SAE x 1/2" SAE.

Ref	Code	Model	Description	Min. Qty
A	13005050	FLASH-FLUSH-FORMULA	Pressurized flushing fluid	6
B	13005043002	KIT-FLASH-HVAC	Connecting kit for HVAC system	-

Ref	Code	Dimensions	Weight
A	13005050	280 x 200 x 300 mm	9,6 kg
B	13005043002	240 x 145 x 40 mm	0,4 kg


A

B

**DOES NOT CONTAIN FLAMMABLE PRODUCTS!
DOES NOT CONTAIN TOXIC SUBSTANCES!
DOES NOT CONTAIN HARMFUL PRODUCTS!
POSSIBLE RESIDUES ARE COMPATIBLE WITH
THE FLUIDS INSIDE THE SYSTEM**

SAFE CONNECTION? CHOOSE THE WIGAM SOLUTION



Connecting



Fastening



Turning upside down



Flushing and fluxing

FLUSHING UNITS



ETO-4

Electric oil transfer and flushing pump

- Suitable for all the common refrigeration oils.
- Suitable for the charge of the oil in HVAC systems.
- Suitable for the removal of the oils from the HVAC systems.
- Complete with suction hose and a pressure hose with adapters.
- Suitable for the flushing of the systems using FORMULA fluid and the connecting kit KIT-ETO-HVAC.

KIT-ETO-HVAC

The KIT-ETO-HVAC is the completion and connection kit that transforms the ETO unit into a flushing system in combination with the FORMULA fluid.

The kit includes:

- 1 piping of 4 m with filter.
- 1 RG180/6-4 swivel 3/8 SAE F x 1/4 SAE M.
- Tank capacity 5 l.
- Adapters kit for HVAC system.

Ref	Code	Model	Description
A	02041028	ETO-4	Electric pump
B	13006067	KIT-ETO-HVAC	Connection kit
C	13005054	FORMULA/5	Flushing fluid 5 l
D	14029016	BP	Plastic case

Ref	Description	Dimensions	Weight
A	02041028	290 x 200 x 275 mm	7 kg
B	13006067	267 x 150 x 250 mm	2 kg
C	13005054	260 x 165 x 145 mm	5,5 kg
D	14029016	520 x 290 x 340 mm	1,85 kg



Technical features

Rate	4 l/min
Power	180W with thermal-protector
Max pressure	20 bar
Voltage	230 V-50/60 Hz
Self priming	Yes
Connection	1/4 SAE



**DOES NOT CONTAIN FLAMMABLE PRODUCTS!
DOES NOT CONTAIN TOXIC SUBSTANCES!
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POSSIBLE RESIDUES ARE COMPATIBLE WITH
THE FLUIDS INSIDE THE SYSTEM**



WASHING AND
SANIFICATION
OF INDOOR AND
OUTDOOR UNITS



INDOOR UNITS SANIFICATION

SIMPLE AND CLEAN SOLUTION



FLEXIBLE: SELF-PRIMING OR FROM ELECTRICITY MAIN



STRONG COVERS FOR MULTIPLE INTERVENTIONS



LANCE AND HOSES ALL IN THE EVA-PUMP COMPARTMENT



EVA-WASH-KIT

Kit for washing of indoor air-conditioning units

In Europe there is a huge park of indoor units (split, fancoil), from the cleaning and sanitizing service of which the quality of the air we breathe in our homes and in many businesses such as offices, hospitality and health facilities depends significantly.

In the guidelines against legionellosis it is highlighted how we must:

- Clean and disinfect the condensate collection tanks.
- Clean and disinfect the finned surfaces with the removal of organic and inorganic dirt.
- Clean and periodically replace the filters in compliance with the manufacturer's specifications.

A professional service of cleaning and sanitizing of the internal units (split / fancoil) allows the customer to breathe healthy air, save money and give longevity to the system.

EVA-WASH-KIT is the "simple and clean" solution for washing and sanitizing internal units (split and fancoil) which allows to:

- Cover the evaporator of the unit to be treated with the EVA-SPLIT protection cover (2pcs included).
- Treat the evaporator, the filters and the condensate collection tank with the handy spray pump (2l) and the specific detergent (included).
- Finally, wash the evaporator and plastic parts using the professional cleaning pump.

Standard equipment:

- EVA-PUMP Professional cleaning pump.
- EVA-SPLIT cleaning cover for split units (2 pcs).
- PSP2 Sprinkling pump.
- EVA-CLEANER Detergent 5 kg.

Code	Model	Dimensions	Weight
13005065	EVA-WASH-KIT	520 x 290 x 340 mm	12 kg



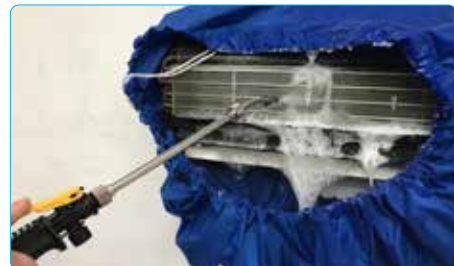
Technical features of EVA-PUMP

Flow rate	4 l/min
Power	80W
Working pressure	0.7÷1MPa
Power supply	220V-50/60Hz
Weight	5 kg



Spare parts and accessories

Code	Description
13006069	Kit 2 hoses (suction and delivery)
13006070	Replacement gun



EVA-PUMP

Cleaning pump for indoor air conditioning units

Code	Model	Dimensions	Weight
13005062	EVA-PUMP	278 x 180 x 280 mm	5 kg



Technical features

Flow rate	4 l/min
Power	80W
Working pressure	0.7÷1MPa
Power supply	220V-50/60Hz
Suction hose length	1,5 m
Delivery pipe length	5 m

EVA-CASSETTE - EVA-SPLIT

Cleaning covers for indoor units

Ref	Code	Model	Description
A	13005064	EVA-CASSETTE	Cleaning cover for ceiling cassette units
B	13005063	EVA-SPLIT	Cleaning cover for wall split up to 115 cm



EVA-CLEANER

Concentrated liquid detergent for indoor units

EVA-CLEANER is suitable for the cleaning and the sanification of the finned batteries and filters of the indoor units of the HVAC systems. In addition to its detergent action, it has also a disinfectant and deodorant action. To be diluted in water (from 25 to 30%).

Code	Model	Capacity	Dimensions	Weight
13005057	EVA-CLEANER	5 kg	370 x 170 x 150 mm	5,5 kg



PSP2

Professional sprinkling pump

2 litre high-density polyethylene tank.

Recommended detergent EVA-CLEANER.

Code	Model	Dimensions	Weight
13005061	PSP2	310 x 220 x 130 mm	0,8 kg



DETERGENTS - SANITIZERS



EFC

Detergent for evaporators and unit heaters
 Spray packaging.
 Crumbles dirt.
 Sticks even to vertical surfaces.
 Remove bad smells.

Code	Model	Min. Qty	Capacity	Dimensions	Weight Pack
13005018	EFC	12	650 ml	270 x 210 x 250 mm	7,4 kg



CLEAN-AIR

Sanitizer for air conditioning systems
 Spray packaging.
 Remove bad smells.
 Rapidly and safely sanitizes.

Code	Model	Min. Qty	Capacity	Dimensions	Weight Pack
13005014	CLEAN-AIR	12	400 ml	270 x 210 x 210 mm	5,1 kg



GREEN TABS

Conditioner cleaning treatment
 Helps eliminate odors.
 Prevents water damage.
 Non corrosive and non toxic.
 Easy to install.
 Contents 200 tablets.

Code	Model	Min. Qty	Dimensions	Weight Pack
12099005	GREEN TABS	12	230 x 310 x 160 mm	5,9 kg



SANICARE

Multi-surface sanitiser - 80% alcohol
 Ready-to-use ethyl alcohol-based aerosol
 Sanitises surfaces and equipment that are frequent touched.

Code	Model	Min. Qty	Capacity	Dimensions	Weight Pack
13005071	SANICARE	12	500 ml	270x210x250	7,4 kg

LOVAIR-PRO

Ozone (O₃) generator

LOVAIR-PRO has been designed to support the treatment of passenger compartments and environments thanks to the reactivity of ozone (O₃) in oxidizing the vast majority of organic and inorganic particles, and the consequent odors, even in difficult places to reach.

LOVAIR-PRO advantages:

- Take advantage of a natural principle without the need for chemicals
- Effective in critical points that would otherwise be unreachable
- Widespread action thanks to the ability of ozone to penetrate tissues, ...
- Automatic operation.
- Intervention times selectable according to areas and treatment
- Timer up to 180 min .
- Double power supply connection 220V-50/60Hz and 12DVC.
- More than 10, 000 half-hour treatments without using consumables.

HOW DOES OZONE WORKS?

Ozone is a molecule of three oxygen atoms bound together (O₃), with negative electric. In nature, ozone is produced by some physical reactions. The most well-known example is of course the ozone layer, where ozone is produced from the sun's UV rays. But ozone is also produced at thunderstorms and waterfalls. The special "fresh and clean spring rain" smell is a result of nature-produced ozone. Ozone derives from the Greek word "ozein" which means "to smell".

After fluorine, ozone is the strongest oxidant found in nature. The ozone operates according to the principle of oxidation. When the static ozone molecule (O₃) contacts with something "able to oxidize", the charge of the ozone molecule will directly flow over. This is because ozone is very unstable and tends to turn back to its original form (O₂).

Code	Model	Dimensions	Weight
09019008	LOVAIR PRO	200 x 150 x 150 mm	2,5 kg



Technical features

Ozone production	4.000 mg/h
Power input	40W
Power supply	220V-50/60Hz e 12DVC
Dimensions	20 x 15 x 15 cm
Weight	2,5 kg



Spare parts and accessories

Code	Description
09019004	Power supply 230V-50Hz
09019005	Adapter for lighter socket



Suggested time in min* for rooms** based on sstare meters

Up to 15 m ²	15 - 30 min.
Up to 30 m ²	30 - 60 min.
Up to 50 m ²	60 - 90 min.
Up to 65 m ²	90 - 120 min.
Up to 80 m ²	120 - 180 min.

* Read the manual carefully before using the equipment.

** Based on height 3 m.

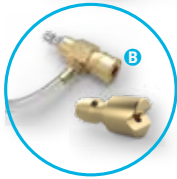
Suggested time in min* for vehicle

Small / Medium cars	15 - 30 min.
Sedan / SW / SUV	30 - 45 min.
Camper / Roulotte / Minivan	45 - 60 min.
Minibus	60 - 90 min.
Autobus / Train	90 - 180 min.

* Read the manual carefully before using the equipment.

WASHING AND PROTECTION OF OUTDOOR UNITS

NEW



COIL-PUMP-FLEX

Compact high-pressure cleaner with adjustable pressure 10-40 bar
The COIL-PUMP-FLEX high-pressure cleaner, especially designed for refrigeration specialists and installers who want to offer a professional maintenance on exchangers and units, features:

- **EXTREME FLEXIBILITY**, thanks to its regulator that can adapt the pressure to any need between 10 and 40 bar, and the possibility of direct supply from the water mains or from a tank (as it is self-priming).
- **Great COMPACTNESS**, thanks to its small size, low weight, ergonomics and the possibility of storing all accessories in their respective compartments and in the handy elastic side pockets.
- **EASE OF USE** thanks to the accessories that can be easily connected via high-performance quick couplers. In just a few seconds, the gun can be connected to the extensions and to the adjustable nozzle and get ready for the best cleaning of the units, and therefore of the exchangers, from the inside of the condenser to the outside.

Main accessories supplied:

- High-pressure delivery hose (7 mt) with quick couplers
- Gun with quick coupler for nozzles and lances.
- 2 extension lances (40 cm).
- Suction hose (2 mt) with adapters
- Regulator with pressure gauge to check the working pressure
- Cleaner Kit (optional) for the suction of the cleaning liquid (1:3) and specific tip.

Ref	Code	Model	Dimensions	Weight
A	13005073	COIL-PUMP-FLEX	400 x 300 x 320 mm	8 kg
B	13006076	CLEANER-KIT	120 x 60 x 60 mm	0,5 kg



Technical features

Power supply	220V~/50-60Hz
Working pressure	1-4MPa / 10-40bar
Flow rate	6 l/min
Power	750W

COIL-CLEANER

Concentrated liquid detergent for outdoor units

Concentrated degreasing detergent for the cleaning of different components of the outdoor units (finned exchangers, air condensers, convectors, etc...) To be diluted in water (from 10% to 20%).



Code	Model	Capacity
13005015	COIL-CLEANER	5 kg

Code	Dimensions	Weight.
13005015	370 x 170 x 150 mm	5,5 kg

PSP6

Professional sprinkling pump

5 liter high density polyethylene tank with UV protection and safety valve.

Pump with handle and lance support.

1,20 m PVC hose and fibre-filled polypropylene lance with swivel nozzle.

Recommended detergent: COIL-CLEANER.

Code	Model	Capacity	Dimensions	Weight
13005013	PSP6	5 l	610 x 200 x 200 mm	2 kg



Technical features

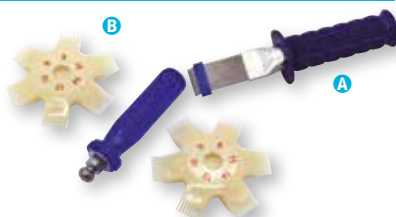
Max pressure	3 bar (0,3 MPa)
Safety valve	3,5 bar (0,35 MPa)

PA11-PA6

Fin comb

Tool suitable for the cleaning and aligning of fins of any type of finned exchanger.

Ref	Code	Model	Dimensions	Weight
A	08008051	PA11	280 x 100 x 40 mm	0,14 kg
B	08008007	PA6	130 x 160 x 40 mm	0,10 kg



HOT-BLOWER

Hot blower

Suitable to dry finned batteries (condensers-evaporators).

Ideal to warm up the refrigerant during the transfer operations (from bottle to bottle and during recovery).

Code	Model	Dimensions	Weight
14019019	HOT-BLOWER	195 x 170 x 190 mm	1,6 kg



Technical features

Power supply	230V-50/60Hz
Power	550 W
Wind rate	2,7 m ³ /min
Max. temperature	45 °C
Thermal cut-out	Yes
Power switch	On/Off with lock button
Power cable length	1,8 m

CLIMA-CAP

Protective covers for external units

Optimized dimensions for the main R32 units.

Code	Model	Dimensions	Suitable for
16010010	CLIMA-CAP-M/D	550 x 860 x 340 mm	Mono 20-35 / Multi 2-R32
16010011	CLIMA-CAP-MUL	735 x 980 x 400 mm	Mono 42-60 / Multi 3-4-5-R32

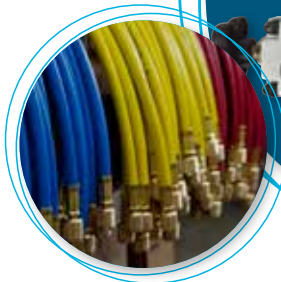
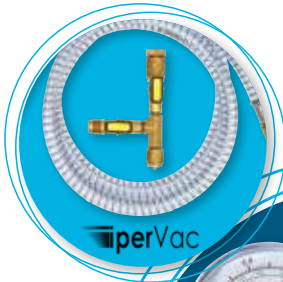




TRUST YOUR EYES!

NEW SPY 4WAYS MANIFOLD

SPY turns the manifold into an instrument of visual diagnosis of the refrigerant fluid, thanks to the completely transparent cylinder body





PRESSURIZATION
TESTING SYSTEMS

 **WIGAM**

PRESSURIZATION - NITROGEN TESTING



DUAL INTEGRATED CONNECTION

NEW DIAL WITH R32*



SPARE PARTS AND ACCESSORIES PAGE 41

K-AZ200-50/BN2

Nitrogen kit

Suitable for:

- Testing for leaks in pressure of HVAC systems.
- Flushing of HVAC systems.
- Fluxing during soldering in HVAC systems.
- Pressure switches and gauges calibration.

Kit includes:

- Nitrogen regulator serie AZ200-50 with dual integrated connection for cartridges and bottles.
- Ø80 gauge, class 1.0 with defined sectors, positioning indicator and calibration screw.
- Flexible hose 1/4" SAE, 900 mm + 200 mm.
- Nitrogen bottle 950 cc- 110 bar - TPED.
- 1 adapter RG180/5-4 (5/16" SAE F x 1/4" SAE M).
- Sturdy plastic carrying case.

Code	Model	Country	Cylinder connection	Standard reference	Cartridge connection
13005017001	K-AZ200-50/BN2	IT	W 21.7 x 1/14" M	UN 11144-5	M10x1
13005017005	K-AZ200-50/BN2-D	F-B-P-E	Ø 21.7 x 1.814 F	NF E 29-650/C	M10x1
13005017008	K-AZ200-50/BN2-E	GB	G 5/8" M	BS 341 nr.3	-
13005017009	K-AZ200-50/BN2-C	D	W 24.32 x 1/14" F	DIN 477 nr.10	M10x1



Technical features

Regulator inlet pressure	20 MPa
Max output pressure	4,8 MPa
Connections	1/4" SAE
Dimensions	360 x 320 x 120 mm
Weight	4,5 kg
Comply to	CE n. 1516 2007



COMMISSION REGULATION (EC) NO. 1516/2007

ARTICLE 8 - Repair of leakage

1. The operator shall ensure that the repair is carried out by personnel certified to undertake that specific activity. Prior to repair, a pump-down or recovery shall be carried out, where necessary.

2. The operator shall ensure that a leakage test with Oxygen Free Nitrogen (OFN) or another suitable pressure testing and drying gas is carried out where necessary, followed by evacuation, recharge and leakage test. Prior to pressure testing with Oxygen Free Nitrogen (OFN) or another suitable pressure testing gas, fluorinated greenhouse gases shall be recovered from the whole application where necessary.



Calibration

Code	Model	Description
09053011		Calibration report ref. Accredia for checking gauge
13005017016	K-AZ200-50/BN2/RT	Nitrogen kit with calibration report

NITROGEN CARTRIDGES AND CYLINDERS

Ref	Code	Model		Capacity
A	11001060	BN2/1-TPED	Disposable	950 cc
B	11003011	BAZ50/1	Rechargeable	5 l

Rif	Code	Min. Qty	Dimensions	Weight
A	11001060	12	320 x 250 x 330 mm	15,50 kg
B	11003011	-	550 x 150 x 150 mm	8,80 kg



SPRAY LEAK DETECTOR

Code	Model	Capacity	Min. Qty
09001080	GAS CONTROL	400 ml	10

Code	Dimensions	Weight
09001080	340 x 140 x 220 mm	4,8 Kg



TOTAL-TEST-HVAC

Leak detection kit with AZOIDRO (N₂-H₂)

It enables to detect and locate leaks in HVAC system in compliance with Regulation (EC) n.1516/2007.

The pressure reducer and the control pressure gauge in class 1 enable to pressurize the system to the necessary value with the AZOIDRO mixture; the system can then be checked by means of the leak detector VOYAGER.

The new VOYAGER leak detector with heated diode makes this kit the total leak detection solution. In fact, VOYAGER detects AZOIDRO mixture (N₂-H₂) and also all halogenated HFC, CFC, HCFC refrigerants and their mixtures and HC hydrocarbons (such as R290-R600a).

Kit includes:

- Pressure regulator serie AZ200-50 with dual integrated connection for cartridges and bottles.
- Control gauge Ø80, class 1 with positioning indicator and calibration screw.
- Flexible hose 1/4" SAE, 1500 mm + 200 mm.
- Swivel adapter RG180/5-4 (5/16" SAE F x 1/4" SAE M).
- AZOIDRO cartridge 1 l - 110 bar.
- VOYAGER leak detector.
- Sturdy plastic carrying case.

Code	Model	Country	Cylinder connection	Standard reference	Cartridge connection
13005072005	TOTAL-TEST-HVAC	IT	W 21.7 x 1/14" M	UN 11144-5	M10x1
13005072006	TOTAL-TEST-HVAC-D	F-B-P-E	Ø21.7 x 1.814F	NF E 29-650/C	M10x1
13005072007	TOTAL-TEST-HVAC-C	D	W 24.32 x 1/14" F	DIN 477 nr.10	M10x1
13005072008	TOTAL-TEST-HVAC-E	GB	G 5/8" M	BS 341 nr.3	



Technical features

Regulator inlet pressure	20 MPa
Max output pressure	4,8 MPa
Connections	1/4" SAE
Dimensions	360 x 320 x 120 mm
Weight	5,0 kg

REGOLAMENTO (CE) N.1516/2007

ARTICLE 8 - Repair of leakage

1. The operator shall ensure that the repair is carried out by personnel certified to undertake that specific activity. Prior to repair, a pump-down or recovery shall be carried out, where necessary.
2. The operator shall ensure that a leakage test with Oxygen Free Nitrogen (OFN) or another suitable pressure testing and drying gas is carried out where necessary, followed by evacuation, recharge and leakage test. Prior to pressure testing with Oxygen Free Nitrogen (OFN) or another suitable pressure testing gas, fluorinated greenhouse gases shall be recovered from the whole application where necessary.

AZOIDRO (N₂-H₂) CARTRIDGES AND CYLINDERS

Bottle containing 95% Nitrogen and 5% Hydrogen which allows to pressurize the system and then to find the leak source by means of VOYAGER leak detectors.

Rif	Code	Model	Capacity	Min. Qty	Dimensions pack	Weight pack
A	11001112	AZOIDRO disposable	1 l	12	320 x 250 x 330 mm	15,5 kg
B	11003020	AZOIDRO/5 rechargeable	5 l	-	550 x 150 x 150 mm	8,80 kg



PRESSURIZATION - NITROGEN AND AZOIDRO TESTING



K-AZ200-50/BAZ50

Nitrogen kit 5 liters

Suitable for:

- Testing for leaks in pressure of HVAC systems.
- Flushing of HVAC systems.
- Fluxing during soldering in HVAC systems.
- Pressure switches and gauges calibration.

Kit includes:

- Nitrogen regulator serie AZ200-50 with dual integrated connection for cartridges and bottles.
- Ø80 gauge, class 1.0 with defined sectors, positioning indicator and calibration screw.
- Flexible hose 1/4" SAE , 2500 mm + 220 mm.
- Nitrogen bottle 5 l - TPED - full (20 MPa).
- Adapter Rg180/5-4 (5/16" SAE Fx 1/4" SAE M).

Code	Model	Country	Cylinder connection	Standard reference	Cartridge connection
13005022001	K-AZ200-50/BAZ50	IT	W 21.7 x 1/14" M	UN 11144-5	M10x1

Technical features

Regulator inlet pressure	20 MPa	Dimensions	700 x 430 x 280 mm
Max output pressure	4,8 MPa	Weight	14,6 kg
Connections	1/4" SAE		



K-AZ200-50/AZOIDROS

Azoidro kit 5 liters

It enables to detect and locate leaks in HVAC system in compliance with Regulation (EC) n.1516/2007. The pressure reducer and the control pressure gauge in class 1 enable to pressurize the system to the necessary value with the AZOIDRO mixture; the system can then be checked by means of VOYAGER leak detectors (not included in the kit).

Kit includes:

- Pressure regulator serie AZ200-50 with dual integrated connection for cartridges and bottles.
- Ø80 gauge, class 1.0 with defined sectors, positioning indicator and calibration screw.
- Flexible hose 1/4" SAE , 2500 mm + 220 mm.
- Azoidro bottle 5 l - TPED - full (20 MPa).
- Adapter RG180/5-4 (5/16" SAE Fx 1/4" SAE M).

Code	Model	Country	Cylinder connection	Standard reference	Cartridge connection
13005068	K-AZ200-50/AZOIDROS	IT	W 21.7 x 1/14" M	UN 11144-5	M10x1

Technical features

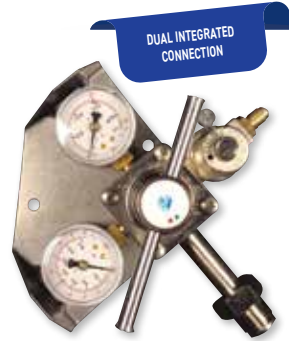
Regulator inlet pressure	20 MPa	Dimensions	700 x 430 x 280 mm
Max output pressure	4,8 MPa	Weight	14,6 kg
Connections	1/4" SAE		

AZ200

"Heavy duty" nitrogen regulator for cartridges and cylinders

Heavy duty professional nitrogen regulator with dual integrated connection for cartridges and cylinders (no external adapter required) and "High Performance" safety valve.

Code	Model	Country	Cylinder connection	Standard reference	Cartridge connection
10002017	AZ200-50	IT	W 21.7 x 1/14" M	UN 11144-5	M10x1
10002019	AZ200-50/D	F-B-P-E	Ø21.7 x 1.814F	NF E 29-650/C	M10x1
10002018	AZ200-50/E	GB	G 5/8" M	BS 341 nr.3	-
10002020	AZ200-50/C	D	W 24.32 x 1/14" F	DIN 477 nr.10	M10x1



Technical features

Regulator inlet pressure	20 MPa	Dimensions	380 x 200 x 130 mm
Max output pressure	4,8 MPa	Weight	1,8 kg
Connections	1/4" SAE		

WN2-60

Nitrogen regulator

Regulator with connection for refillable Nitrogen or AZOIDRO cylinders.

Code	Model	Country	Connections bottle	Standard reference
10002035	WN2-60	IT	W 21.7 x 1/14" M	UN 11144-5
10002037	WN2-60/D	F-B-P-E	Ø21.7 x 1.814F	NF E 29-650/C
10002036	WN2-60/E	GB	G 5/8" M	BS 341 nr.3
10002038	WN2-60/C	D	W 24.32 x 1/14" F	DIN 477 nr.10



Technical features

Regulator inlet pressure	20 MPa	Dimensions	220 x 180 x 110 mm
Max output pressure	6,0 MPa	Weight	1,4 kg
Connections	1/4" SAE		



Spare parts and accessories



Ref	Code	Model	Description
A	07121016	PF80/53R1/TEST	ø 80 test gauge, class 1,0 with defined sectors, positioning indicator and calibration screw
B	05015003	V/GYSA/1M-4/6Y/PF80/N2-K1	Flexible hose 1/4" SAE with ø80 test gauge, class 1.0 with connection 1/4" SAE 45°
B	05015010	V/GYSA/1M-5/6Y/PF80/N2-K1	Flexible hose 1/4" SAE with ø80 test gauge, class 1.0 with connection 5/16" SAE 45°
C	05015016	V/GYSS/1M-4/8Y/PF80/N2-K1	Flexible hose 1/4" SAE with ø80 test gauge, class 1.0 with connection 1/4" SAE straight
C	05015017	V/GYSA/1M-5/8Y/PF80/N2-K1	Flexible hose 1/4" SAE with ø80 test gauge, class 1.0 with connection 5/16" SAE straight
D	05015011	V/GYSS/4M-VE/Y/PF80/10/K1	Terminal for checking expansion vessel of boilers
	05059023001	RG180/5-4-WIG	Adapter 5/16" F x 1/4" M
	06071001003	GYSS/4-4/36/Y	Flexible hose 900 mm for nitrogen kit 1 l. - 1/4" SAE
	06071025003	GYSS/4-4/98Y	Flexible hose 2500 mm for nitrogen kit 5 l. - 1/4" SAE
	14020084001	95514K-WIG	Kit 10 gaskets for nitrogen regulator AZ200-50 and WN2-60 (cylinders connection side)
	14020083001	OR-AZ/K-WIG	Kit 10 o-ring for nitrogen regulator for AZ200-50 (cartridge connection side 950 cc)
	10010037		Replacement HP gauge-315 bar for AZ200-50 - 1/4" G
	10010038		Replacement LP gauge-100 bar for AZ200-50 - 1/4" G
	14029064	VP/B16	Plastic carrying case for 1 liter nitrogen/azoidro kits



Designed and manufactured according to the most advanced criteria

46 lt/min
110 lt/min
180 lt/min
250 lt/min



A2L - R32
Atex - A3 R290
NH3 - R717

**DOUBLE STAGE
HIGH VACUUM PUMPS**

MADE IN ITALY



VACUUM - CHARGE
 **WIGAM**

DOUBLE STAGE HIGH VACUUM PUMPS



- Designed and produced according to the most advanced criteria.
- High reliability.
- High performance.
- Lightweight.
- Protection index IP54.
- Incombustibility (R32-R1234yf).

Their incombustibility, in order to be able to use them with R32 and R1234yf, is guaranteed by the particular manufacturing of the stator/rotor components, which prevent reaching ignition temperatures, even in the worst working conditions or in case of failure.

- With carrying handle and gas ballast valve to evacuate condensable gases (gas ballast).
- Single packaging with one bottle of mineral oil.
- E/V models are equipped with Ø80 vacuum gauge, solenoid valve to prevent air/oil from flushing back when the pump is turned off, connection 1/4" SAE M and 2 adapters 1/4"SAE F x 3/8"SAE M e 1/4"SAE F x 5/16"SAE M.
- RS3D-EX and RS3DE/V-EX are ATEX certified and are specifically designed to work with hydrocarbons (HC) such as R290 and R600a.

SPARE PARTS AND ACCESSORIES PAG. 49

SUGGESTED R32



267 x 150 x 250 mm - 6,4 kg

SUGGESTED R32



267 x 150 x 250 mm - 6,9 kg

DISCOVER THE ATEX RANGE FROM PAG. 102



HC R600a - R290 R12/0



390 x 230 x 350 mm - 10,5 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002044	RS3D	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4" NPT-F	-
B	02099024	RS3DE/V	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4"-5/16"-3/8"	EV
C	02002052	RS3D-EX	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4" NPT-F - 1/4" SAE	-
C	02099036	RS3DE/V-EX	46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.

SPARE PARTS AND ACCESSORIES PAG. 49

SUGGESTED R32



350x150x280 mm - 11,5 kg

SUGGESTED R32



350x150x280 mm - 12 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002065	RS7D	110 lt/min	1x10 ⁻² mbar	220-240/1/50-60	250 W	IP54	450 cc	1/4" NPT-F	-
B	02099040	RS7DE/V	110 lt/min	1x10 ⁻² mbar	220-240/1/50-60	250 W	IP54	450 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.



- Designed and produced according to the most advanced criteria
- High reliability.
- High performance.
- Lightweight.
- Protection index IP54.
- Incombustibility (R32-R1234yf).
- Their incombustibility, in order to be able to use them with R32 and R1234yf, is guaranteed by the particular manufacturing of the stator/rotor components, which prevent reaching ignition temperatures, even in the worst working conditions or in case of failure.
- With carrying handle and gas ballast valve to evacuate condensable gases (gas ballast).

- Single packaging with one bottle of mineral oil.
- Model RS9DE/V is equipped with a $\varnothing 80$ vacuum gauge, a solenoid valve on the suction to prevent oil/air from flowing back when the pump is turned off, a connection $\frac{1}{4}$ " SAE M and 2 adapters $\frac{1}{4}$ "SAE F x $\frac{3}{8}$ "SAE M and $\frac{1}{4}$ "SAE F x $\frac{5}{16}$ "SAE M.
- Model RS9DE/V-EX is specifically designed for R290 and R600a, is equipped with a vacuum gauge and a solenoid valve and complies with the ATEX directive.
- Model RS9DE-NH3 is specifically designed for ammonia systems and is equipped with dual connection with shut-off valve.
- Model RS15DE is equipped with a solenoid valve on the suction to prevent oil/air from flowing back when the pump is turned off, a dual connection $\frac{3}{8}$ " SAE m and $\frac{1}{4}$ "SAE M with caps and 2 adapters $\frac{1}{4}$ "SAE F $\frac{3}{8}$ "SAE M and $\frac{1}{4}$ "SAE F x $\frac{5}{16}$ "SAE M.

SPARE PARTS AND ACCESSORIES. PAG. 49

SUGGESTED R32



DISCOVER THE ATEX RANGE FROM PAG. 102

HC R600a-R290 R1270

DISCOVER THE NH₃ RANGE FROM PAG. 118

NH₃ R717



350 x 150 x 280 mm - 12 kg



350 x 150 x 280 mm - 12,5 kg



350 x 150 x 280 mm - 12,5 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
	02002029	RS9D	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4" NPT-F	-
A	02099020	RS9DE/V	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4"-5/16"-3/8"	EV
B	02099038	RS9DE/V-EX	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4"-5/16"-3/8"	EV
C	02099039	RS9DE-NH3	180 lt/min	1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	2x1/4"	E

**Other voltages and frequencies, on demand.

SPARE PARTS AND ACCESSORIES. PAG. 49

SUGGESTED R32



SUGGESTED R32



Packaging: 350 x 180 x 280 mm - 16 kg



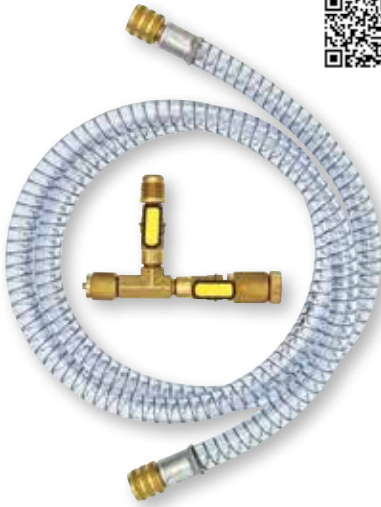
Packaging: 350 x 180 x 280 mm - 17 kg

Ref	Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
A	02002036	RS15D	250 lt/min	1x10 ⁻² mbar	220-240/1/50-60	550 W	IP54	400 cc	3/8" NPT F	-
B	02002037	RS15DE*	250 lt/min	1x10 ⁻² mbar	220-240/1/50-60	550 W	IP54	400 cc	1/4"-5/16"-3/8"	E

* Pump with dual connections $\frac{3}{8}$ " and $\frac{1}{4}$ ".

**Other voltages and frequencies, on demand.

IPERVAC KIT



IPERVAC KIT - HIGH-SPEED VACUUM KIT

The IPERVAC kit reduces the time you need for evacuation by over 50%

The IperVAC kits, for 1/4" or 5/16" service ports, optimize the connection of the vacuum pump to the air conditioning / refrigeration unit, and consists of:

- The new EW4900 core removal access solution with double connections and valves for IperVac hose and Vacuum gauge.

EW4900 enables to remove the valve core, and then open the way to its two integrated SAE M 3/8" and 1/4"(or 5/16") connections equipped with valves. 3/8" port designed for coupling with the IperVAC hose and 1/4" port for vacuum gauge, charging hose or manifold.

- The 1500mm new IperVAC hose, with internal diameter 10mm and 3/8" connections.

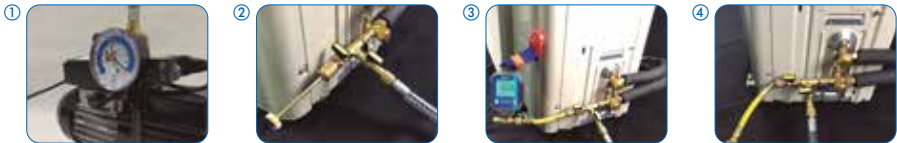
The IperVAC hose, specifically designed for vacuum, pulls a vacuum much faster compared to standard 1/4" hoses. The IperVAC hose is optimal in directly connecting the vacuum pump with the EW4900 or the vacuum pump with the VAC port of the 4-way manifold.

Code	Model	Description
02090009	IPERVAC-4	Vacuum kit for 1/4" service port
02090010	IPERVAC-5	Vacuum kit for 5/16" service port

Female connection	Male connections	Hose Length	Dimensions (mm)	Weight (kg)
1/4" SAE	3/8" SAE + 1/4" SAE	1500 mm	240 x 220 x 70	0,6
5/16" SAE	3/8" SAE + 1/4"SAE	1500 mm	240 x 220 x 70	0,6



Application examples



1 Connection with vacuum pump

2 Mechanism extraction

3 Vacuum with VG64-LX digital gauge

4 Charge



Spare parts and accessories

Code	Model	Description	Female connection	Male connections	Dimensions (mm)	Weight (kg)
08008060002	EW 4900	1/4" core removal solution with doble connections	1/4" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30	0,25
08008060003	EW 4900/5	5/16" core removal solution with doble connections	5/16" SAE	3/8" SAE + 1/4"SAE	100 x 17 5 x30	0,25
06140002	IVSS/6-6/60	IperVAC hose 1500 mm	2 x 3/8" SAE	-	240 x 220 x 70	0,30
06140001	IVSS/6-6/36	IperVAC hose 900 mm	2 x 3/8" SAE	-	240 x 220 x 70	0,25
05053012001	MG4-4/WIG	Swivel coupling for vacuum connection	2 x 1/4" SAE	-	-	-
06071013003	GYSS/4-4/6/Y	Flexible tube 150 mm for gauge connection	2 x 1/4" SAE	-	-	-
14020097	G-LV/T-WIG	Gaskets kit 5pcs for EW4900	-	-	-	-
08008059	LOCK-VALVE-CARE	Gaskets replacement tool for Lock valve, EW and hoses	-	-	-	-
14020015001	G19030	Gaskets kit(10pcs) for 3/8"SAE hoses	-	-	-	-
05108043001	M1/4"-R134A/V-RK	Kit 10 pcs Internal core for HFC (R134a-R410A, R32...)	-	-	-	-
05108152001	EV-KIT/K	Vacuum pump adapter kit	1/4" SAE	3/8" SAE + 5/16"SAE	-	-

WHV20/M

High performance vacuum pump

- High reliability
- Excellent performance
- Up to 4 ways connections thanks to CLT4/6-4 accessory.

Professional dual stage high vacuum pumps with solenoid valve to prevent air from flushing back when the pump is turned off.

Equipped with a forced oil circulation system.

It is recommended to use the pump with the oil filter **A** and the 4 ways suction collector **B** equipped with up to IPERVAC tubes **C** and connection devices such as EW4900 **D** or 121RG **E**.



Code	Model	Dimensions	Weight
02002058	WHV20/M	750 x 250 x 420 mm	41 kg



Application examples

Connection of the CLT4/6-4 collector, W-VAC-SMART vacuum gauge and IPERVAC hose.



Technical features

Swept volume	330 lt/min
Ultimate vacuum	1x10 ⁻³ mbar
Power supply	230V/1/50-60Hz
Nominal power	750 W
Protection degree	IP44
Oil charge	900 - 1500 cc
Connections	KF25



Spare parts and accessories



Ref	Code	Model	Description	Female connection	Male connections	Dimensions (mm)	Weight (kg)
A	14015035	WVF-20	Oil separator for WHV20/M and RV-25B	-	-	150 x 140 x 160	0,8
B	04003004	CLT4/6-4	4-ways 3/8"SAE collector with and 1/4" SAE revolving attachment for vacuum gauge	1/4" SAE	4x3/8" SAE	-	-
C	06140002	IVSS/6-6/60	IperVAC hose 1500 mm	2 x 3/8" SAE	-	-	-
C	06140001	IVSS/6-6/36	IperVAC hose 900 mm	2 x 3/8" SAE	-	-	-
D	08008060002	EW 4900	1/4" core removal solution with double connections	1/4" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30	0,25
D	08008060003	EW 4900/5	1/4" core removal solution with double connections	5/16" SAE	3/8" SAE + 1/4"SAE	100 x 175 x 30	0,25
E	05001007001	121RG4-6	121RG valve with depressor	1/4" SAE	3/8" SAE	140 x 100 x 20	0,1
E	05001041001	121RG5-6	121RG valve with depressor	5/16" SAE	3/8" SAE	140 x 100 x 20	0,1
	05108152001	EV-KIT/K	Vacuum pump adapter kit	1/4" SAE	3/8" SAE + 5/16"SAE	-	-
	53001032	WRK-20	WHV20/M repair kit	-	-	-	-

DOUBLE STAGE HIGH VACUUM PUMPS

Double stage high vacuum pumps

- High performance.
- Lightweight.
- Single packaging with one bottle of mineral oil.

- WP3DE/V e WP8DE/V models are equipped with Ø80 vacuum gauge, solenoid valve to prevent air/oil from flushing back when the pump is turned off, connection 1/4" SAE M and 2 adapters 1/4"SAE F x 3/8"SAE M and 1/4"SAE F x 5/16"SAE M.
- WP14DE model is equipped with solenoid valve to prevent air/oil from flushing back when the pump is turned off, double connections 3/8"SAE M and 1/4" SAE M with caps and 2 adapters for 1/4"SAE F x 3/8"SAE M and 1/4"SAE F x 5/16"SAE M.



Packaging: 255 x 105 x 202 mm - 6,3 kg

Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
02099033	WP3DE/V	42 lt/min	2x10 ⁻² mbar	220-240/1/50-60	150 W	150 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.



Packaging: 338 x 138 x 244 mm - 12,4 kg

Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
02099034	WP8DE/V	128 lt/min	2x10 ⁻² mbar	220-240/1/50-60	368 W	325 cc	1/4"-5/16"-3/8"	EV

**Other voltages and frequencies, on demand.



Packaging: 470 x 240 x 390 mm - 18 kg

Code	Model	Swept volume	Ultimate vacuum	Power supply**	Nominal power	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
02099035	WP14DE*	230 lt/min	2x10 ⁻² mbar	230V 50/60Hz	750 W	560 cc	1/4"-5/16"-3/8"	E

* Pump with dual connections 3/8" and 1/4".

**Other voltages and frequencies, on demand.



Spare parts and accessories



VACUUM PUMP OIL

Code	Model	Viscosity	Capacity	Type	Min. Qty	Dimensions	Weight
12002003	K1L	46	1000 cc	Mineral	12	110 x 160 x 250 mm	1 kg
12002017	W68	68	1000 cc	Ester	9	50 x 50 x 70 mm	1 kg

To keep the pump performances unaltered, we suggest to replace the oil every 3 months.

COMPRESSOR OIL

Code	Model	Viscosity	Capacity	Type	Min. Qty	Dimensions	Weight
12002006	SW32	32	1000 cc	Ester	-	80 x 80 x 230 mm	1 kg
12002017	W68	68	1000 cc	Ester	9	50 x 50 x 70 mm	1 kg

RACCORDI PER POMPE PER VUOTO PER DIP-RS

Rif	Code	Model	Description	
	05108152001	EV-KIT/K	Kit of adapters for vacuum pumps with solenid valve	E + F
	05108153001	RDR-KIT/K	Kit of fittings for DIP-RS3-RS9	A + E + F
	05108154001	RRS15-KIT/K	Kit of fittings for RS15D	G + E + F
A	05052011	48 F4	1/4"SAE x 1/4"NPT	100
B	05052012	48 F6	3/8"SAE x 1/4"NPT	50
D	05060001	PG 1/4"NPT	Hose adapter Ø 10 x 1/4"NPT	-
E	05055100	W404/6	1/4" SAE F x 3/8" SAE M	100
E	05108069001	404/6K	1/4" SAE F x 3/8" SAE M	2
F	05055099	W404/5	1/4" SAE F x 5/16" SAE M	100
F	05108022001	404/5K	1/4" SAE F x 5/16" SAE M	2
G	05055008	46F	1/4" SAE M x 1/8" NPT F	100
G	0510814001	46F/K	1/4" SAE M x 1/8" NPT F	10
	14020124001	G/W404	Kit 10 gaskets for W404/6 and W404/5	10



VACUUM PUMPS PLASTIC CASE

Plastic case with internal space for vacuum pump, manifold, electronic scale and flexible hoses.

Code	Model	Description	Dimensions	Weight
14029019	BP/PD	DIP and RS3 plastic case	520 x 290 x 340 mm	1,85 kg
14029020	BP/MV	RS9 plastic case	520 x 290 x 340 mm	1,85 kg



VACUUM GAUGES

VACUUM GAUGES

- Different type of gauges are available, such as vacuum gauge, 1-way or 3-way manifold vacuum gauges.
- With calibration screw, red pointer and are "Pulse-Free".
- Scale 0 ÷ 1.000 mbar (0 ÷ 1.00 kPa).
- Dial size Ø 80 mm.



Ref	Code	Model	Description	Connections	Dimensions	Weight
A	07041003	PF80/VR1	Radial connection vacuum gauge	1/8"NPT	110 x 90 x 40 mm	0,20 kg
B	04001003	W1VPF80/4	1-way manifold vacuum gauge, with safety valve and hook	1/4"SAE M	240 x 150 x 55 mm	0,40 kg
C	04003001	W3VPF80	3-way manifold vacuum gauge, with ball valve	1/4"SAE M x 3/8"SAE F x 3/8"SAE M	240 x 150 x 55 mm	0,40 kg
D	07041005	PF80/VC1	Rear connection vacuum gauge	1/8"NPT	90 x 90 x 60 mm	0,20 kg
E	07131011	BL80/VR1/K1	"Blondelle" vacuum gauge, oil filled, radial connection	1/8"NPT	125 x 95 x 40 mm	030 kg



Calibration

Code	Description
09053032	Calibration report ref. Accredia for analogical vacuum gauge

COMPLETE KIT WITH SOLENOID VALVE, VACUUM GAUGE AND WIRING



Code	Model	Connections	Description	Suitable for	Dimensions	Weight
02090001	K-EVC	1/4"-3/8"-5/16"SAE M	Complete kit with vacuum gauge	RS3-RS7-RS9-WP3-WP8	130 x 240 x 70 mm	0,35 kg
02090004	K-EC15	1/4"-3/8"-5/16"SAE M	Kit with 1 solenoid valve without vacuum gauge	RS15	230 x 140 x 80 mm	1,10 kg
07041005	PF80/VC1	1/8"NPT	Vacuum gauge	RS3-RS7-RS9-WP3-WP8	90 x 90 x 60 mm	0,20 kg

VG64-LX

Digital vacuum gauge

Code	Model	Dimensions	Weight
09003020	VG64-LX	240 x 120 x 50 mm	0,26 kg



Technical features

Displayed units	Microns, Pascal, millibar, Torr, milliTorr
Vacuum range	0 – 19.000 microns (2530 Pa, 25,30 mBar, 19 mmHg)
Accuracy vacuum	±10% (50-2000 Microns)
Vacuum resolution	0,5 Micron (0-140 microns)
Maximum overpressure	800 PSI, 5,5 MPa (55 bar)
Power supply	3x Alkaline batteries AA
Operating temperature	-17°C ÷ 65°C
Connections	2 x 1/4"SAE M



Calibration

Code	Model	Description
09053027	-	Calibration report ref. Accredia
09003020001	VG64-LX/RT	Vacuum gauge complete with calibration reports



W-VAC-SMART

Digital vacuum gauge

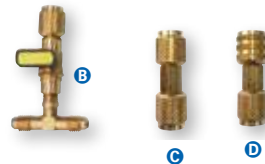
Ref	Code	Model	Description
A	09003018	W-VAC-SMART	Digital vacuum gauge
B	05001047	121RG4-T4	In-line connection / exclusion system
C	05053012001	MG4-4/WIG	Swivel coupling
D	05053013001	MG4-6/WIG	Swivel coupling

Ref	Code	Male connection	Female connection	Dimensions	Weight
A	09003018	1/4" SAE	-	110 x 33 x 25 mm	0,10 kg
B	05001047	2 x 1/4" SAE	1/4" SAE	-	-
C	05053012001	-	2 x 1/4" SAE	-	-
D	05053013001	-	3/8" SAE x 1/4" SAE	-	-



Technical features

Displayed units	Microns (milliTorr), Pascal, millibar, mmHG
Vacuum range	0 – 25.000 Microns (3330 Pa, 33.3 mBar, 25 mmHg)
Accuracy vacuum	±5% of Reading ± 5 Microns
Vacuum resolution	1 Micron and less than 1000 Microns-10 Microns between 1,000 and 10,000 Microns-100 Microns between 10,000 and 25,000 Microns
Maximum overpressure	500 PSI, 3,5 MPa (35 bar)
Warm-Up time	instant
Response time	instant
Power supply	2 x Alkaline batteries AAA
Battery life	Up to 100 hours
Operating temperature	-12°C ÷ 50°C
Connection	1/4"SAE M



Calibration

Code	Model
09053027	Calibration report ref. Accredia
09003018001	W-VAC-SMART/RT

IDO - THE 4.0 DIGITAL AUTOMATIC UNIT

EXCLUSIVE INNOVATION

IDO

4.0 digital automatic portable unit

The digital manifold turns into your compact 4.0 digital automatic unit. Thanks to its electronics and its large LCD Touchscreen, **IDO** not only displays information and measurements, but also **manages the various integrated** or connected equipment in order to carry out autonomous operations, such as recovery, pressing, vacuum and charge, or cycles of operations, verifying the results with appropriate **test phases and reports**.

With multiple advantages ranging from time saving to certified quality of the work performed, it is possible to assign tasks or cycles of tasks to the **IDO** portable unit, with the certainty that they will be carried out, checked and certified through reports. The large touchscreen makes the unit extremely easy to use, while the **interconnection** on the Service Portal, accessible via PC and Smartphone, allows remote management and exchange of information in real time.

IDO meets the requirements for Impresa 4.0 benefits



Wi-Fi 4.0 Ready Interconnection



Transparent integrated diagnosis manifold



Large digital control touchscreen display



AUTOMATIC CYCLES

Management of PRESSURIZATION and TEST

Management of VACUUM and Test

Management of CHARGE

IDO

4.0 digital automatic portable unit

The IDO range is available in the following versions:

- **IDO HFC:** in several solutions for HFC (A2L included) with or without integrated vacuum pump.
- **IDO ATEX** (Pag. 102-103): suitable also for HC (R290, R600).

Unit iDO features:

- Large digital control touchscreen display.
- 2 pressure sensors (Low and High).
- Built-in electronic precision vacuum gauge (mTorr, Pa, mbar,...).
- 3 temperature sensors (Low, High, Ambient), Subcooling and Superheating.
- Compatibility with all K-type temperature probes (2 x TK109 included).
- Built-in and backlit visual diagnosis SPY manifold.
- 35kg removable scale with fittings and adapters for different cylinders.
- Housing for 950cc Nitrogen/Azoidro cylinders and connection for external cylinder.
- Controlled power supply port for activation of the recovery system.
- USB port for data transfer and report.
- Integrated Wi-Fi kit for 4.0 ready Interconnection.
- Wigam Service Portal, accessible via PC and Smartphone for management information exchange and report.
- Refrigerant database that can be updated from the portal.
- Database that can be updated with the charging data of the manufacturers.
- Versions with dual stage 46, 110 or 180 l/min pump, or version without pump if the user already has one.



Code	Model	Vacuum pump	Packaging dimensions	Weight
01090035004	IDO	Prepared	650 x 400 x 380 mm	12,80kg
01090035001	IDO-46	RS3-46l/min	650 x 400 x 380 mm	19,80 kg
01090035006	IDO-110	RS7-110l/min	650 x 400 x 380 mm	21,50 kg
01090053003	IDO-180	RS9-180l/min	650 x 400 x 380 mm	23,00kg



Technical features

Refrigerant	CFC,HCFC,HFC,HFO -A2L included
Dual stage vacuum pump	46, 110, 180l/min
Scale	35 kg
Empty range	1-350 Pa
Charge accuracy	±10g <10kg (detachment mode)
Power supply	230V 50/60Hz
High/Low hoses	2,5m 1/4" SAE with LockValve 1/4"e 5/16" SAE
Bearings for cylinders	1/4" SAE, 5/16"SAE, 1/2" 16 ACME Sx

Automatic functions:



- PRESSURIZATION and TEST to check for leaks
- AUTOMATIC REFRIGERANT RECOVERY MANAGEMENT (recovery system not included)
- VACUUM and VACUUM TEST with rising charge
- REFRIGERANT CHARGE internal vehicles database
- USER-ADJUSTABLE AUTOMATIC CYCLES



Calibration

Codice	Modello
09053054	Calibration report for IDO

INTERCONNECTION: IDO meets the technical requirements for Impresa 4.0 benefits



FOX - DIGITAL MANIFOLD



FOX

DIAGNOSIS ✓

N2 TEST ✓

FOX and FOX-ONE

The range of professional 4-ways digital solutions for installation, maintenance and diagnosis that meets the needs of today and tomorrow.

Diagnosis of the system. Measurement of the pressure and temperature parameters, with indication of the vacuum level reached.

Test with nitrogen (N₂), with simultaneous evaluation of the pressure variation on the HIGH and LOW side.

Vacuum measurement thanks to the INTEGRATED electronic vacuum gauge.
Possibility to display all the possible units of measurement for the vacuum (mTorr, micron, Pa, etc...)

Recording on integrated memory of all measured data from internal probes and connected wireless devices.

Quantification and registration of the charged and/or recovered refrigerant with wireless SCALE-ONE.

Analysis and registration of the electrical parameters of the system with wireless clamp meter CLAMP-ONE.

APP for diagnosis, reports and new refrigerants.



FOX-ONE

DIAGNOSIS ✓

N2 TEST ✓

VACUUM MEASUREMENT ✓

INTEGRATED MEMORY ✓

REFRIGERANT QUANTIFICATION ✓

ANALYSIS OF ELECTRICAL PARAMETERS ✓

MANAGEMENT APP ✓

ALL IN FOX-ONE

EXCLUSIVE INNOVATION

Pressures, temperature, vacuum, electrical current and refrigerant charge... all in Fox-One.

FOX-ONE manages all the informations of its built-in probes (...Vacuum meter included!) and of the connected wireless instruments, clamp and scale included.

With the **Wigam APP** it is possible to analyze, customize and share reports and records, as well as **manage new refrigerants**. And if your mobile is out of batteries, no problem...it is all in FoxOne (*Integrated memory!*)



High Accuracy built-in electronic vacuum gauge



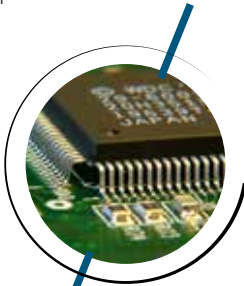
Wireless connected Dial



Wireless connected clamp meter



FOX-ONE APP
APP of control, diagnosis and report



Integrated memory



FOX-ONE - DIGITAL MANIFOLD



FOX-ONE

4 ways digital manifold

- 4-way piston manifold with 3 x 1/4" SAE connections (LOW-HIGH-REF) and 1 x 3/8" SAE connection (VAC).
- Database with more than 50 refrigerants.
- Possibility to manage new refrigerants simply through Wigam FOXApp.
- 1 ambient temperature probe.
- Integrated data logger.
- High precision built-in electronic vacuum gauge (0-600 Pa).
- 2 temperature probes Type K (Range -99.9 - 200°C), 3 m cable.
- 2 pressure transducers (Range -0.99 - +49.90 bar).
- Max operating pressure 56 bar.
- Class of precision better than 1% FS.
- "ZERO PLUS" recalibration function.
- Temperature range: -99.9 - 400 °C.
- Digital display (with back-lighting).
- Extractable hook to help fixing the manifold in every condition.
- Soft-Touch covering.
- Test with nitrogen (N2), with simultaneous evaluation of the pressure.
- Wireless scale, capacity 0-100 kg, resolution 5g (only SC version).
- Wireless Clamp Meter (only SC version).
- 230V-50/60HZ feeder included



Calibration

Code	Model
09053049	Calibration report ref. Accredia for Fox-One
09053050	Calibration report ref. Accredia for Fox-One/SC



Readings displayed

- Low pressure side (LOW)
- High pressure side (HIGH)
- Vacuum measure (milliTorr, micron, Pa,...)
- Temperature T1
- Temperature T2
- Ambient temperature
- Refrigerant saturation temperature (LOW)
- Refrigerant saturation temperature (HIGH)
- Calculating the temperature difference T2 -T1
- Subcooling
- Superheating
- Refrigerants type



- A** Built-in electronic vacuum gauge
- B** Wireless clamp meter (only SC version)
- C** Scale up to 100 Kg, resolution 5 g (only SC version)
- D** Possibility to use all K probes
- E** App for control, diagnosis and report



Spare parts and accessories

Ref	Code	Model	Description	Dimensions	Weight
A	09013027	SCALE-ONE	Wireless scale 100 kg	290 x 290 x 80 mm	3,5 kg
B	09006008	CLAMP-ONE	Wireless clamp meter	260 x 130 x 160 mm	0,6 kg
C	14029048	VP/B8	Suitcase for Fox	360 x 320 x 120 mm	0,75 kg

See the CLAMP-ONE features on page 143.





FOX-ONE-100

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109.

NEW CONNECTION
"VAC" 3/8" SAE

Code	Model	Dimensions	Weight
04080009001	FOX-ONE-100	310 x 370 x 130 mm	2,10 kg



FOX-ONE-300

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109.
- 2 flexible hoses 1500 mm with intermediate valve - blue and red.
- 1 flexible hose 1500 mm with final valve - yellow.
- 1 flexible hose for vacuum IPERVAC 900 mm 3/8" SAE.
- 2 swivel adapter RG180/5-4 - 5/16" SAE F x 1/4" SAE M.

NEW CONNECTION
"VAC" 3/8" SAE

Code	Model	Dimensions	Weight
04080009003	FOX-ONE-300	310 x 370 x 130 mm	3,3 kg



FOX-ONE-100/SC

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109
- 1 wireless electronic scale 100 kg.
- 1 wireless clamp meter.

NEW CONNECTION
"VAC" 3/8" SAE

Code	Model	Dimensions	Weight
0408010001	FOX-ONE-100/SC	480 x 400 x 130 mm	6,6 kg



FOX-ONE-300/SC

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109.
- 1 wireless electronic scale 100 kg.
- 1 wireless clamp meter.
- 2 flexible hoses 1500 mm with intermediate valve - blue and red.
- 1 flexible hose 1500 mm with final valve - yellow.
- 1 flexible hose for vacuum IPERVAC 900 mm 3/8" SAE.
- 2 swivel adapter RG180/5-4 - 5/16" F x 1/4" SAE M.

NEW CONNECTION
"VAC" 3/8" SAE

Code	Model	Dimensions	Weight
0408010003	FOX-ONE-300/SC	480 x 400 x 130 mm	7,8 kg



IPerVac

FOX - DIGITAL MANIFOLD

FOX



INCLUDED
R32

INCLUDED
R1234ZE

FOX

4 ways digital manifold

The FOX range is renewed with a new control logic that optimises its ease of use. The quality and sturdiness guaranteed by the Made in Italy is combined with the possibility of simply recalibrating the pressure transducers using the convenient "ZERO PLUS" function.

- 4-way piston manifold with 3 x 1/4" SAE connections (LOW-HIGH-REF) and 1 x 3/8" SAE connection (VAC).
- Database with more than 50 refrigerants (CFC, HCFC, HFC, Hydrocarbons and HFO).
- 1 ambient temperature probe.
- 2 temperature probes Type K (Range -99.9 ÷ 200°C), 3 m cable.
- 2 pressure transducers (Range -0.99 ÷ +49.90 bar).
- Max operating pressure 56 bar.
- Class of precision better than 1% FS.
- "ZERO PLUS" recalibration function.
- Temperature range: -99.9 ÷ 400 °C.
- Digital display (with back-lighting).
- Extractable hook to help fixing the manifold in every condition.
- Soft-Touch covering.



Calibration

Code	Model
09053049	Calibration report ref. Accredia for Fox
09053050	Calibration report ref. Accredia for Fox-One/SC



Reading displayed

Low pressure side (LOW)

High pressure side (HIGH)

Temperature T1

Temperature T2

Ambient temperature

Refrigerant saturation temperature (LOW)

Refrigerant saturation temperature (HIGH)

Calculating the temperature difference T2 -T1

Subcooling

Superheating

Refrigerants type



FOX and FOX-ONE refrigerant list

R134a
R407C
R410A
R404A
R507
R152a
R290 (Propano)
R600a (isobutano)
R22

R502
R1234ze
R1234yf
R407A
R407D
R407F
R407H
R32
R236fa

R245fa
R417A
R422A
R422B
R422D
R424A
R426A
R427A
R428A

R434A
R437A
R438A
R442A
R448A
R449A
R450A
R452A
R452B

R453A
R454B
R454C
R455A
R466A
R508A
R513A
R1270

The programmed refrigerants can undergo changes based on the new market requirements.

FOX
FOX-100

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109.

Code	Model	Dimensions	Weight
04080001001	FOX-100	310 x 370 x 130 mm	2,00 kg

 NEW CONNECTION
"VAC" 3/8" SAE

FOX
FOX-300

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109.
- 2 flexible hoses 1500 mm with intermediate valve - blue and red.
- 1 flexible hose 1500 mm with final valve.
- 1 flexible hose for vacuum IPERVAC 900 mm 3/8" SAE.
- 2 swivel adapter RG180/5-4 - 5/16" F x 1/4" SAE M.

Code	Model	Dimensions	Weight
04080001003	FOX-300	310 x 370 x 130 mm	3,00 kg

 NEW CONNECTION
"VAC" 3/8" SAE

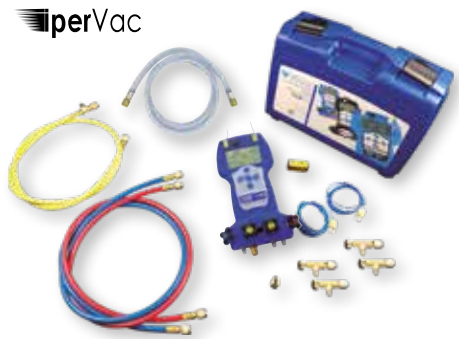
FOX
FOX-400

Digital manifold in suitcase.

Equipped with:

- 2 probes TK109.
- 1 flexible hose 1500 mm with final yellow valve.
- 2 flexible hoses 1500 mm - blue and red.
- 1 flexible hose for vacuum IPERVAC 900 mm 3/8" SAE.
- 1 adapter RG180/5-4 5/16" SAE F x 1/4" SAE M
- 2 LOCK VALVE 1/4" SAE F x 1/4" SAE M.
- 2 LOCK VALVE 5/16" SAE F x 1/4" SAE M.

Code	Model	Dimensions	Weight
04080001007	FOX-400	310 x 370 x 130 mm	3,20 kg

 NEW CONNECTION
"VAC" 3/8" SAE

Spare parts and accessories

Ref	Code	Model	Description	Dimensions (mm)	Weight
A	09012013	TK109	Universal probe	100 x 80 x 10	0,02 kg
B	09012037	TK109-STRIP	Universal probe with strip	100 x 80 x 10	0,03 kg
C	09012019	TK104	Ambient probe	380 x 100 x 10	0,12 kg
D	09012020	TK105	Surface probe	380 x 100 x 10	0,14 kg
E	09012016	TK106	Insertion probe	380 x 100 x 10	0,09 kg
F	09012017	TK107	Clamp-on probe	230 x 100 x 10	0,16 kg
G	04111011	PWR	Complete piston	-	-
H	14021013001	PWKG-L	LOW knob kit	-	-
H	14021014001	PWKG-H	HIGH knob kit	-	-
H	14021015001	PWKG-R	REF knob kit	-	-
H	14021016001	PWKG-V	VAC knob kit	-	-
	14029048	VP/B8	Suitcase for Fox	360 x 320 x 120	0,75 kg





SPY SERIES - VISUAL DIAGNOSIS MANIFOLD

The new STANDARD!



Why?



The information provided to date by the existing manifold on the market is based on pressures and temperatures. Important but incomplete information, since the standard sightglass does not allow us or only partially, to guess the passage of the refrigerant, its phase (liquid or vapour) and its quality.

How many times, after having a problem on a unit, have we questioned?

... what if I could have observed the presence of water or moisture before?

... what if I could have observed the state of the oil and its mixture with the refrigerant?

... what if I could have seen the presence of contaminants in the refrigerant?

The standard sightglass, incorporated in traditional manifolds, does not help us to obtain useful indications in this sense, and consequently do not help us in making a more complete diagnosis about the "health" of the system.



standard sightglass



How can SPY help us?

The ever-increasing importance of indications on the state of refrigerant and oils has led to design the new SPY WIGAM manifolds.

The innovative SPY diagnostic manifolds, in order to help technicians in daily working, are equipped with a fully transparent central body representing the new frontier of these service equipment.

Here are some of the indications that can be obtained quickly and easily using SPY:

- Clearly show if we are working with refrigerant in the liquid or steam phase.
- Clearly show the presence of contaminants in the refrigerant.
- Show the miscibility state of the refrigerant with oil.



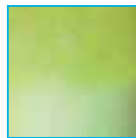
Cleaned refrigerant



Oil and refrigerant with good miscibility



Oil, additives and refrigerant with good miscibility



Bad refrigerant oil miscibility



Refrigerant and additive contaminated by water



Compressor burned

- Combine visual diagnosis with chemical analysis by taking oil samples.

SPY is now available also in the 4-ways version
See pag. 62



Look at SPY VIDEO!



TRUST YOUR EYES!



PISTON MANIFOLD



DIAPHRAGM MANIFOLD



"PULSE FREE" GAUGES



OIL FILLED GAUGES



DRY GAUGES



Read the WIGAM model

DIAPHRAGM	PISTON	GAUGE	REFRIGERANT	CONNECTIONS	PRECISION CLASS
W1L - 1 way LP	PF2 - 2 ways	PF80 - PULSE FREE	A4 - R410A-R32	4 - 1/4"SAE	K1 - Class 1
W1H - 1 way HP	PW4 - 4 ways	MS80 - Dry	A6 - R22-R134a-R404A-R407C	5 - 5/16"SAE	
F2 - 2 ways		ML80 - Liquid	A2 - R507-R404A-R134a-R407liq	6 - 3/8"SAE	
W4 - 4 ways		BL60 - Blondelle liquid	A3 - R600a		
W5 - 5 ways			D6 - R600a-R290-R1270		
			D5 - R744		
			D9 - R448A-R449A-R452A-R513A		
			E1 - R404A-R448A-R449A-R134a-R452A		

PW4 /
 ML80 /
 A4 /
 5 /
 K1

Piston manifold 4-ways "pulse free", liquid diam gauges. 80, for R410a/R32, connections 5/16"SAE, class 1

SPY 4-WAYS PISTON KIT



REFRIGERANTS DIALS

A4

R410A-R32

A6

R22-R134a-R404A-R407C



K-SPY4PFA6-4-GYSS60-LV

K-SPY4PFA4-5-GYSS60-LV

4 ways manifold kit SPY series with hoses

Sturdy plastic suitcase containing:

- 1 manifold SPY 4 ways with gauges Ø80mm "Pulse free", Class 1.
- 2 flexible hoses, GY series 1500mm, red and blue.
- 1 flexible hose, GY series 1500mm, yellow, with final valve.
- 1 IPERVAC flexible hose 900mm 3/8" SAE.
- 2 access valves LOCK-VALVE.



Code	Model	Dial	Connection
04101135	K-SPY4PFA6-4-GYSS60-LV	A6	3x 1/4"SAE + 1x 3/8"SAE
04101136	K-SPY4PFA4-5-GYSS60-LV	A4	3x 5/16"SAE + 1x 3/8"SAE

Code	Dimensions	Weight
04101135	360 x 320 x 120 mm	2,5 kg
04101136	360 x 320 x 120 mm	2,5 kg

K-SPY4PFA6-4 / K-SPY4PFA4-5

4 ways manifold kit SPY series without hoses

Sturdy plastic suitcase containing:

- 1 manifold SPY 4 ways with gauges Ø80mm "Pulse free", Class 1.



Code	Model	Dial	Connection
04101137	K-SPY4PFA6-4	A6	3x 1/4"SAE + 1x 3/8"SAE
04101138	K-SPY4PFA4-5	A4	3x 5/16"SAE + 1x 3/8"SAE

Code	Dimensions	Weight
04101137	360 x 320 x 120 mm	1,5 kg
04101138	360 x 320 x 120 mm	1,5 kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4 ways manifold kit



REFRIGERANTS DIALS	
A4	R410A-R32
A6	R22-R134a-R404A-R407C

K-SPY2PFA6-4-GYSS60-LV K-SPY2PFA4-5-GYSS60-LV

2 ways manifold kit SPY series with hoses

Sturdy plastic suitcase containing:

- 1 manifold SPY (2 ways), with gauges Ø80mm "Pulse free", Class 1.
- 2 flexible hoses, GY series 1500mm, red and blue.
- 2 flexible hoses, GY series 1500mm, yellow, with final valve.
- 2 access valves LOCK-VALVE.

Code	Model	Dial	Connection
04101124	K-SPY2PFA6-4-GYSS60-LV	A6	1/4" SAE
04101125	K-SPY2PFA4-5-GYSS60-LV	A4	5/16" SAE

Code	Dimensions	Weight
04101124	360 x 320 x 120 mm	2,5 kg
04101125	360 x 320 x 120 mm	2,5 kg



K-SPY2PFA6-4 / K-SPY2PFA4-5

2 ways analysis "transparent" manifold kit SPY series without hoses

Sturdy plastic suitcase containing:

- 1 "transparent" manifold SPY (2 ways), with gauges Ø80mm "Pulse free", Class 1.

Code	Model	Dial	Connection
04101133	K-SPY2PFA6-4	A6	1/4" SAE
04101134	K-SPY2PFA4-5	A4	5/16" SAE

Code	Dimensions	Weight
04101133	360 x 320 x 120 mm	1,5 kg
04101134	360 x 320 x 120 mm	1,5 kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4 ways manifold kit

SPY 4-WAYS

REFRIGERANTS DIALS

A4 R410A-R32 **A6** R22-R134a-R404A-R407C

4-WAYS MANIFOLD KIT IN CARRYING CASE WITH FLEXIBLE HOSES

Sturdy plastic case containing:

1 pc. 4-ways manifold

3 pcs. flexible hoses 1500 mm with or without ball valve

1 pc. flexible hose 900 mm

On request, the kit may be supplied with any combination



4-WAYS WITH DRY GAUGE Ø80 CLASS 1

3 flexible hoses 1500 mm with valve

1 flexible hose 900 mm 3/8"SAE

Code	Model	Dial	Connections
04101109	K-W4MSA6-4-CSA60	A6	3x1/4" + 1x3/8" SAE
04101110	K-W4MSA4-5-CSA60	A4	3x5/16" + 1x3/8" SAE
Code	Dimensions	Weight	
04101109	360 x 320 x 120 mm	2,5 kg	
04101110	360 x 320 x 120 mm	2,5 kg	

 IperVac



4-WAYS WITH "PULSE FREE" GAUGE Ø80 CLASS 1

3 flexible hoses 1500 mm with ball valve.

1 IperVac flexible hose 900 mm 3/8" SAE.

Code	Model	Dial	Connections
04101112	K-W4PFA6-4-GYSA56V4	A6	3x1/4" + 1x3/8" SAE
04101114	K-W4PFA4-5-GYSA56V4	A4	3x5/16" + 1x3/8" SAE
Code	Dimensions	Weight	
04101112	360 x 320 x 120 mm	2,5 kg	
04101114	360 x 320 x 120 mm	2,5 kg	

 IperVac



4-WAYS PISTON WITH "PULSE FREE" GAUGE Ø80 CLASS 1 WITH 2 LOCK-VALVE

3 flexible hoses, 1500 mm with 2 supplied LOCK-VALVE.

1 IperVac flexible hose 900 mm 3/8" SAE.

Code	Model	Dial	Connections
04101122	K-PW4PFA6-4-GYSS60-LV	A6	3x1/4" + 1x3/8" SAE
04101123	K-PW4PFA4-5-GYSS60-LV	A4	3x5/16" + 1x3/8" SAE
Code	Dimensions	Weight	
04101122	360 x 320 x 120 mm	2,5 kg	
04101123	360 x 320 x 120 mm	2,5 kg	



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4 ways manifold kit

PLASTIC CASE FOR MANIFOLDS

Code	Model	Dimensions	Weight
14029060	VP/B13	360 x 320 x 120 mm	0,75 kg

REFRIGERANTS DIALS
A4 R410A-R32 **A6** R22-R134a-R404A-R407C

2-WAYS MANIFOLD KIT IN CARRYING CASE WITH FLEXIBLE HOSES

Sturdy plastic case containing:
 1 pc. 2-ways manifold
 3 pcs. flexible hoses 1500 mm with or without ball valve
 On request, the kit may be supplied with any combination

2-WAYS WITH DRY GAUGE Ø80 CLASS 1

Flexible hoses 1500 mm without ball valve.

Code	Model	Dial	Connections
04101101	K-F2MSA6-4-CSA60	A6	3x1/4"
04101106	K-F2MSA4-5-CSA60	A4	3x5/16"

Code	Dimensions	Weight
04101101	360 x 320 x 120 mm	2,5 kg
04101106	360 x 320 x 120 mm	2,5 kg


2-WAYS WITH "PULSE FREE" GAUGE Ø80 CLASS 1

Flexible hoses 1500 mm with ball valve.

Code	Model	Dial	Connections
04101107	K-F2PFA6-4-GYSA56V4	A6	3x1/4"
04101108	K-F2PFA4-5-GYSA56V4	A4	3x5/16"

Code	Dimensions	Weight
04101107	360 x 320 x 120 mm	2,5 kg
04101108	360 x 320 x 120 mm	2,5 kg


2-WAYS PISTON WITH "PULSE FREE" GAUGE Ø80 CLASS 1 WITH 2 LOCK VALVE

Blu and red flexible hoses, 1500 mm with 2 supplied LOCK-VALVE.
 Yellow flexible hose with ball valve.

Code	Model	Dial	Connections
04101120	K-PF2PFA6-4-GYSS60-LV	A6	3x1/4"
04101121	K-PF2PFA4-5-GYSS60-LV	A4	3x5/16"

Code	Dimensions	Weight
04101120	360 x 320 x 120 mm	2,5 kg
04101121	360 x 320 x 120 mm	2,5 kg


PLASTIC CASE FOR MANIFOLDS

Code	Model	Dimensions	Weight
14029060	VP/B13	360 x 320 x 120 mm	0,75 kg


Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4-ways manifold kit

4 WAYS PISTON

REFRIGERANTS DIALS

A3 R600a **A4** R410A-R32 **A6** R22-R134a-R404A-R407C **D6** R600a-R290-R1270 **D9** R448A-R449A-R452A-R513A

On request with different refrigerants scales and diameters



WITH PRESSURE GAUGES Ø80 CLASS 1 "PULSE-FREE" WITH REGULATION SCREW

Code	Model	Dial	Connections	Dimensions	Weight
04024040	PW4PF80/A3/4/K1	A3	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024024	PW4PF80/A4/5/K1	A4	3x5/16" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024025	PW4PF80/A6/4/K1	A6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024051	PW4PF80/D6/4/K1	D6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024053	PW4PF80/D9/4/K1	D9	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg



WITH PRESSURE GAUGES Ø80 CLASS 1 DRY WITH REGULATION SCREW

Code	Model	Dial	Connections	Dimensions	Weight
04004064	PW4MS80/A4/5/K1	A4	3x5/16" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04004058	PW4MS80/A6/4/K1	A6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg



WITH PRESSURE GAUGES Ø80 CLASS 1 OIL-FILLED WITH REGULATION SCREW

Code	Model	Dial	Connections	Dimensions	Weight
04024038	PW4ML80/A4/5/K1	A4	3x5/16" SAE + 1x3/8" SAE	240 x 220 x 70 mm	1,1 kg
04024043	PW4ML80/A6/4/K1	A6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	1,1kg
04024039	PW4ML80/D6/4/K1	D6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	1,1kg



WITH PRESSURE GAUGES Ø60 CLASS 1 OIL-FILLED WITH REGULATION SCREW - BLONDELLE

Code	Model	Dial	Connections	Dimensions	Weight
04024037	PW4BL60/A4/5/K1	A4	3x5/16" SAE + 1x3/8" SAE	240 x 220 x 70 mm	1,1 kg
04024032	PW4BL60/A6/4/K1	A6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	1,1kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4-ways manifold kit

WITHOUT PRESSURE GAUGES

Code	Model	Connections
04044014	PW4SM/4	3X1/4" SAE + 1X3/8" SAE
04044017	PW4SM/5	3X5/16" SAE + 1X3/8" SAE

REFRIGERANTS DIALS
A3 R600a **A4** R410A-R32 **A6** R22-R134a-R404A-R407C **D5** R744 **D6** R600a-R290-R1270 **D9** R448A-R449A-R452A-R513A

On request with different refrigerants scales and diameters

WITH PRESSURE GAUGES Ø80 CLASS 1 "PULSE-FREE"
WITH REGULATION SCREW

Code	Model	Dial	Connections	Dimensions	Weight
04002070	PF2PF80/A3/4/K1	A3	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg
04022031	PF2PF80/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04022032	PF2PF80/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg
04022074	PF2PF80/D6/4/K1	D6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg
04022076	PF2PF80/D9/4/K1	D9	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg


WITH PRESSURE GAUGES Ø80 CLASS 1 DRY
WITH REGULATION SCREW

Code	Model	Dial	Connections	Dimensions	Weight
04002063	PF2MS80/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04002050	PF2MS80/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg


WITH PRESSURE GAUGES Ø80 CLASS 1 OIL-FILLED
WITH REGULATION SCREW

Code	Model	Dial	Connections	Dimensions	Weight
04022061	PF2ML80/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,99 kg
04022063	PF2ML80/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,99 kg
04022062	PF2ML80/D6/4/K1	D6	3x1/4" SAE	240 x 220 x 70 mm	0,99 kg
04022060	PF2ML80/D5/4/K1	D5	3x1/4" SAE	240 x 220 x 70 mm	0,99 kg


WITH PRESSURE GAUGES Ø60 CLASS 1 OIL-FILLED
WITH REGULATION SCREW - BLONDELLE

Code	Model	Dial	Connections	Dimensions	Weight
04022054	PF2BL60/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04022039	PF2BL60/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg


WITHOUT PRESSURE GAUGES

Code	Model	Connections
04042013	PF2SM/4	3x1/4" SAE
04042016	PF2SM/5	3x5/16" SAE


Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4-ways manifold kit

4 WAYS

REFRIGERANTS DIALS

A3 R600a **A4** R410A-R32 **A6** R22-R134a-R404A-R407C **D6** R600a-R290-R1270 **D9** R448A-R449A-R452A-R513A

On request with different refrigerants scales and diameters

**WITH PRESSURE GAUGES Ø80 CLASS 1 "PULSE-FREE"
WITH REGULATION SCREW**



Code	Model	Dial	Connections	Dimensions	Weight
04024042	W4PF80/A3/4/K1	A3	3x1/4" SAE + 1x3/8"SAE	240 x 220 x 70 mm	0,9 kg
04024007	W4PF80/A4/5/K1	A4	3x5/16" SAE + 1x3/8"SAE	240 x 220 x 70 mm	0,9 kg
04024008	W4PF80/A6/4/K1	A6	3x1/4"SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024052	W4PF80/D6/4/K1	D6	3x1/4"SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024054	W4PF80/D9/4/K1	D9	3x1/4"SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg

**WITH PRESSURE GAUGES Ø80 CLASS 1 DRY
WITH REGULATION SCREW**



Code	Model	Dial	Connections	Dimensions	Weight
04004059	W4MS80/A4/5/K1	A4	3x5/16" SAE + 1x3/8"SAE	240 x 220 x 70 mm	0,9 kg
04004039	W4MS80/A6/4/K1	A6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg

**WITH PRESSURE GAUGES Ø60 CLASS 1 OIL-FILLED
WITH REGULATION SCREW - BLONDELLE**



Code	Model	Dial	Connections	Dimensions	Weight
04024036	W4BL60/A4/5/K1	A4	3x5/16" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg
04024020	W4BL60/A6/4/K1	A6	3x1/4" SAE + 1x3/8" SAE	240 x 220 x 70 mm	0,9 kg



Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4-ways manifold kit

WITHOUT PRESSURE GAUGES

Code	Model	Connections
04044003	W4SM/4	3x1/4" SAE + 1x3/8" SAE
04044010	W4SM/5	3x5/16" SAE + 1x3/8" SAE

REFRIGERANTS DIALS
A3 R600a **A4** R410A-R32 **A6** R22-R134a-R404A-R407C **D6** R600a-R290-R1270 **D9** R448A-R449A-R452A-R513A

On request with different refrigerants scales and diameters

**WITH PRESSURE GAUGES Ø80 CLASS 1 "PULSE-FREE"
WITH REGULATION SCREW**

Code	Model	Dial	Connections	Dimensions	Weight
04002071	F2PF80/A3/4/K1	A3	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg
04022006	F2PF80/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04022007	F2PF80/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg
04022075	F2PF80/D6/4/K1	D6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg
04022077	F2PF80/D9/4/K1	D9	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg


**WITH PRESSURE GAUGES Ø80 CLASS 1 DRY
WITH REGULATION SCREW**

Code	Model	Dial	Connections	Dimensions	Weight
04002033	F2MS80/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04002032	F2MS80/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg


**WITH PRESSURE GAUGES Ø60 CLASS 1 OIL-FILLED
WITH REGULATION SCREW - BLONDELLE**

Code	Model	Dial	Connections	Dimensions	Weight
04022053	F2BL60/A4/5/K1	A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04022025	F2BL60/A6/4/K1	A6	3x1/4" SAE	240 x 220 x 70 mm	0,85 kg


WITHOUT PRESSURE GAUGES

Code	Model	Connections
04042001	F2SM/4	3x1/4" SAE
04042005	F2SM/5	3x5/16" SAE


Calibration

Code	Model
09053010	Calibration report ref. Accredia for 2-4-ways manifold kit

REFRIGERANTS DIALS

A4	R410A-R32	A6	R22-R134a-R404A-R407C	D6	R600a-R290-R1270	D9	R448A-R449A-R452A-R513A
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WITH PRESSURE GAUGE Ø80 CLASS 1 "PULSE-FREE" WITH REGULATION SCREW

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
04021005	W1LPF80/A4/5/K1	A4	2x5/16" SAE	-0,1 ÷ 3,8	240 x 150 x 55 mm	0,4 kg
04021006	W1LPF80/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 1,5	240 x 150 x 55 mm	0,4 kg
04021012	W1HPF80/A4/5/K1	A4	2x5/16" SAE	-0,1 ÷ 5,3	240 x 150 x 55 mm	0,4 kg
04021013	W1HPF80/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 3,5	240 x 150 x 55 mm	0,4 kg
04021074	W1LPF80/D6/4/K1	D6	2x1/4" SAE	-0,1 ÷ 1,8	240 x 150 x 55 mm	0,4 kg
04021075	W1HPF80/D6/4/K1	D6	2x1/4" SAE	-0,1 ÷ 3,8	240 x 150 x 55 mm	0,4 kg
04021076	W1LPF80/D9/4/K1	D9	2x1/4" SAE	-0,1 ÷ 1,8	240 x 150 x 55 mm	0,4 kg
04021077	W1HPF80/D9/4/K1	D9	2x1/4" SAE	-0,1 ÷ 3,8	240 x 150 x 55 mm	0,4 kg



WITH PRESSURE GAUGE Ø80 CLASS 1 DRY WITH REGULATION SCREW

Codice	Modello	Scala	Attacchi	Pressioni MPa	Dimensioni	Peso
04001076	W1LMS80/A4/5/K1	A4	2x5/16" SAE	-0,1 ÷ 3,8	240 x 150 x 55 mm	0,4 kg
04001047	W1LMS80/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 1,5	240 x 150 x 55 mm	0,4 kg
04001077	W1HMS80/A4/5/K1	A4	2x5/16" SAE	-0,1 ÷ 5,3	240 x 150 x 55 mm	0,4 kg
04001048	W1HMS80/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 3,5	240 x 150 x 55 mm	0,4 kg



WITH PRESSURE GAUGE Ø80 CLASS 1 OIL FILLED WITH REGULATION SCREW

Codice	Modello	Scala	Attacchi	Pressioni MPa	Dimensioni	Peso
04001078	W1LML80/A4/5/K1	A4	2x5/16" SAE	-0,1 ÷ 3,8	240 x 150 x 55 mm	0,5 kg
04001079	W1LML80/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 1,5	240 x 150 x 55 mm	0,5 kg
04001080	W1HML80/A4/5/K1	A4	2x5/16" SAE	-0,1 ÷ 5,3	240 x 150 x 55 mm	0,5 kg
04001081	W1HML80/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 3,5	240 x 150 x 55 mm	0,5 kg



WITH PRESSURE GAUGE Ø60 CLASS 1 OIL FILLED WITH REGULATION SCREW - BLONDELLE

Codice	Modello	Scala	Attacchi	Pressioni MPa	Dimensioni	Peso
04021036	W1LBL60/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 1,5	240 x 150 x 55 mm	0,4 kg
04021035	W1HBL60/A6/4/K1	A6	2x1/4" SAE	-0,1 ÷ 1,5	240 x 150 x 55 mm	0,4 kg

Available on request with A4 scale (R410A-R32).



Calibration

Code	Model
09053033	Rapporto Calibration Ref Accredia per gruppi manometrici 1 way

1 MPa=10 bar

WITHOUT PRESSURE GAUGES

Code	Model	Connections	Color
04041001	W1LSM/4	2X1/4" SAE	Blue
04041011	W1LSM/5	2X5/16" SAE	Blue
04041002	W1HSM/4	2X1/4" SAE	Red
04041012	W1HSM/5	2X5/16" SAE	Red

REFRIGERANTS DIALS

A4 R410A-R32 **A6** R22-R134a-R404A-R407C

**WITH PRESSURE GAUGES Ø80 CLASS 1 "PULSE-FREE"
WITH REGULATION SCREW**

Code	Model	Dial	Connections	Dimensions	Weight
04025006	W5PF80/A4/5/K1	A4	3x5/16"SAE + 1x3/8" SAE	340 x 230 x 130 mm	1,3 kg
04025007	W5PF80/A6/4/K1	A6	3x1/4"SAE + 1x3/8" SAE	340 x 230 x 130 mm	1,3 kg


Calibration

Code	Model
09053039	Calibration report ref. Accredia for 5-ways manifold kit


WITHOUT PRESSURE GAUGES

Code	Model	Connections
04045002	W5SM/4	3x1/4" SAE + 1x3/8" SAE
04045003	W5SM/6	4x3/8" SAE
04045004	W5SM/A	3x1/2" - 16 ACME + 1x3/8" SAE
04045008	W5SM/5	4x5/16" SAE

PLASTIC CASE FOR MANIFOLDS

Suitable for 1, 2, 4 ways manifolds.

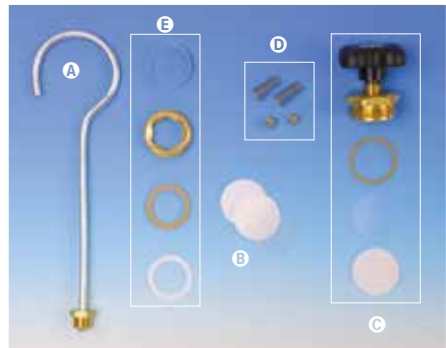
Code	Model	Dimensions	Weight
14029060	VP/B13	360 x 320 x 120 mm	0,75 kg


Spare parts for piston manifolds

Ref	Code	Model	Description
A	04111011	PWP	Complete piston
B	14021013001	PWKG-L	LOW snob kit
B	14021014001	PWKG-H	HIGH snob kit
B	14021015001	PWKG-R	REF snob kit
B	14021016001	PWKG-V	VAC snob kit


Spare parts for diaphragm manifolds

Ref	Code	Model	Description
A	04110011	W004	Hook for manifolds
B	14020011001	WKG 04	Kit of gaskets for knobs
C	14021001001	WKG07 H	HIGH snob kit
C	14021002001	WKG07 L	LOW snob kit
C	14021003001	WKG07 V	VAC snob kit
C	14021004001	WKG07 R	REF snob kit
D	14020118001	WKG 05	Spring and brass kit
E	14020119001	WKG 06	Complete sightglass kit



PRESSURE GAUGES

REFRIGERANTS DIALS

A3 R600a A4 R410A-R32 A6 R22-R134a-R404A-R407C D5 R744 D6 R600a-R290-R1270 D9 R448A-R449A-R452A-R513A

On request with different refrigerants scales and diameters

"PULSE-FREE" PRESSURE GAUGES Ø80 CLASS 1 RADIAL CONNECTION WITH REGULATION SCREW



Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07121008	PF80/3R1/A3/K1	A3	1/8" NPT	-0,1 ÷ 0,3	100 x 90 x 40 mm	0,2 kg
07121018	PF80/9R1/A3/K1	A3	1/8" NPT	-0,1 ÷ 1,0	100 x 90 x 40 mm	0,2 kg
07121001	PF80/3R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,2 kg
07121002	PF80/53R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 5,3	100 x 90 x 40 mm	0,2 kg
07121012	PF80/15R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 1,5	100 x 90 x 40 mm	0,2 kg
07121013	PF80/35R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 3,5	100 x 90 x 40 mm	0,2 kg
07121024	PF80/18R1/D6/K1	D6	1/8" NPT	-0,1 ÷ 1,8	100 x 90 x 40 mm	0,2 kg
07121025	PF80/38R1/D6/K1	D6	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,2 kg
07121026	PF80/18R1/D9/K1	D9	1/8" NPT	-0,1 ÷ 1,8	100 x 90 x 40 mm	0,2 kg
07121027	PF80/38R1/D9/K1	D9	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,2 kg

DRY PRESSURE GAUGES Ø80 CLASS 1



Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07101005	MS80/38R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,2 kg
07101006	MS80/53R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 5,3	100 x 90 x 40 mm	0,2 kg
07101001	MS80/15R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 1,5	100 x 90 x 40 mm	0,2 kg
07101002	MS80/35R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 3,5	100 x 90 x 40 mm	0,2 kg

PRESSURE GAUGES Ø80 CLASS 1 OIL-FILLED



Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07113005	ML80/38R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,3 kg
07113006	ML80/53R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 5,3	100 x 90 x 40 mm	0,3 kg
07113003	ML80/15R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 1,5	100 x 90 x 40 mm	0,3 kg
07113004	ML80/35R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 3,5	100 x 90 x 40 mm	0,3 kg
07113007	ML80/18R1/D6/K1	D6	1/8" NPT	-0,1 ÷ 1,8	100 x 90 x 40 mm	0,3 kg
07113008	ML80/38R1/D6/K1	D6	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,3 kg
07113001	ML80/100R1/D5/K1	D5	1/8" NPT	-0,1 ÷ 10	100 x 90 x 40 mm	0,3 kg
07113002	ML80/160R1/D5/K1	D5	1/8" NPT	-0,1 ÷ 16	100 x 90 x 40 mm	0,3 kg

PRESSURE GAUGES Ø60 CLASS 1 OIL-FILLED



Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07131032	BL60/20R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 2,0	125 x 95 x 40 mm	0,3 kg
07131033	BL60/45R1/A4/K1	A4	1/8" NPT	-0,1 ÷ 4,5	125 x 95 x 40 mm	0,3 kg
07131012	BL60/10R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 1,0	125 x 95 x 40 mm	0,3 kg
07131013	BL60/30R1/A6/K1	A6	1/8" NPT	-0,1 ÷ 3,0	125 x 95 x 40 mm	0,3 kg

PRESSURE GAUGES Ø60 CLASS 1 OIL-FILLED



Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07131016	BL60/10C4/A6/K1	A6	1/4" SAE	-0,1 ÷ 1,0	125 x 95 x 40 mm	0,3 kg
07131017	BL60/30C4/A6/K1	A6	1/4" SAE	-0,1 ÷ 3,0	125 x 95 x 40 mm	0,3 kg

REFRIGERANTS DIALS

A2	R507-R404A-R134a-R407C	A4	R410A-R32	A8	R22-R404A-R134a-R407C	D5	R744	E1	R404A-R448A-R449A-R134A-R452A
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On request with different refrigerants scales and diameters

PRESSURE GAUGES Ø80 CLASS 1 OIL-FILLED

Rear connection mounting bracket and stainless steel case

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07113009	ML80/18C4S/A2/K1	A2	1/4" SAE	-0,1 ÷ 1,8	90 x 90 x 70 mm	0,3 kg
07113010	ML80/38C4S/A2/K1	A2	1/4" SAE	-0,1 ÷ 3,8	90 x 90 x 70 mm	0,3 kg
07113012	ML80/38C4S/A4/K1	A4	1/4" SAE	-0,1 ÷ 3,8	90 x 90 x 70 mm	0,3 kg
07113013	ML80/53C4S/A4/K1	A4	1/4" SAE	-0,1 ÷ 5,3	90 x 90 x 70 mm	0,3 kg
07113014	ML80/100C4S/D5/K1	D5	1/4" SAE	-0,1 ÷ 10	90 x 90 x 70 mm	0,3 kg
07113015	ML80/160C4S/D5/K1	D5	1/4" SAE	0,1 ÷ 16	90 x 90 x 70 mm	0,3 kg
07113011	ML80/18C4S/U/K1		1/4" SAE	-0,1 ÷ 1,8	90 x 90 x 70 mm	0,3 kg


PRESSURE GAUGES Ø60 CLASS 1.6 OIL-FILLED

Rear connection mounting bracket and stainless steel case

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07111015	ML60/18C4S/A8	A8	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111016	ML60/38C4S/A8	A8	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111040	ML60/38C4S/A4	A4	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111041	ML60/53C4S/A4	A4	1/4" SAE	-0,1 ÷ 5,3	80 x 80 x 65 mm	0,3 kg
07111056	ML60/18C4S/E1	E1	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111057	ML60/38C4S/E1	E1	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111017	ML60/18C4S/U		1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111052	ML60/38C4S/U		1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg


PRESSURE GAUGES Ø60 CLASS 1.6 OIL-FILLED

Rear connection mounting flange and stainless steel case

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07111018	ML60/18C4FA/A8	A8	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111019	ML60/38C4FA/A8	A8	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111046	ML60/38C4FA/A4	A4	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111047	ML60/53C4FA/A4	A4	1/4" SAE	-0,1 ÷ 5,3	80 x 80 x 65 mm	0,3 kg
07111054	ML60/18C4FA/E1	E1	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111055	ML60/38C4FA/E1	E1	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111020	ML60/18C4FA/U		1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111053	ML60/38C4FA/U		1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg


PRESSURE GAUGES Ø60 CLASS 1.6 OIL-FILLED

Radial connection mounting flange and stainless steel case

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07111021	ML60/18R4FP/A8	A8	1/4" SAE	-0,1 ÷ 1,8	90 x 95 x 65 mm	0,3 kg
07111022	ML60/38R4FP/A8	A8	1/4" SAE	-0,1 ÷ 3,8	90 x 95 x 65 mm	0,3 kg
07111048	ML60/38R4FP/A4	A4	1/4" SAE	-0,1 ÷ 3,8	90 x 95 x 65 mm	0,3 kg
07111049	ML60/53R4FP/A4	A4	1/4" SAE	-0,1 ÷ 5,3	90 x 95 x 65 mm	0,3 kg
07111058	ML60/18R4FP/E1	E1	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07111059	ML60/38R4FP/E1	E1	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07111023	ML60/18R4FP/U		1/4" SAE	-0,1 ÷ 1,8	90 x 95 x 65 mm	0,3 kg



1 MPa=10 bar



DV-2 COOL/80

Certifiable sample pressure gauge for coolant examination

The DV-2 COOL was designed for monitoring tasks at coolant filling stations.

Vapour pressure/temperature values for 5 coolant liquids are saved in the unit and can be selected by pressing a button.

The LCD switches from temperature to pressure at the touch of a button, with the display offering a choice of bar/°C or PSI/°F.

The high resolution display means that DV-2 COOL can also be used for measuring leaks in vacuums.

Coolant: the following coolants are stored in the gauge:

R134a - R404a - R507 - R407C liq. and vap. - R410A.

The battery symbol illuminates when battery power is low.

Pressure gauge DV-2 COOL can be supplied with Accredia report to be used as sample pressure gauge.

Code	Model	Description
07151004	DV-2 COOL/80	Certifiable sample pressure gauge
Code	Dimensions	Weight
07151004	125 x 95 x 40 mm	0,2 kg



Technical features

Pressure ranges abs	0..80 bar
Accuracy	0,1 %FS
Compensated range	10..40 °C
Storage/Operating Temperature	-10..60 °C / 0..50 °C
Protection	IP 64
Connection	1/4" SAE
Battery	3V CR2032
Battery life	2 months in continuous operation
Dimensions	68 x 70 x 35 mm



Calibration

Code	Description
09053008	Calibration report ref. Accredia for DV-2 COOL/80

X012/A

“Spiralato” thermoplastic capillary tube 2x5,9

Practical and effective system for performing precision readings in pressure gauges, connecting sensors and valves.

Made of thermoplastic material perfectly compatible with physical characteristics of CFC, HCF, HFC refrigerants.

The braid in polyester fibre (PET) placed between the antiabrasion polyurethane (TPU) and the polyamide (PA) at the core give the tube an excellent mechanical resistance. The antiabrasion polyurethane (TPU) protects it from wear and tear.



Technical features

Outside diameter	5,9 mm
Inner diameter	2,1 mm
Core material	Poliamide (PA) compatible with refrigerant fluids
Outer covering	Antiabrasions polyurethane (TPU)
Stiffening	Polyester fiber (PET)
Refrigerants	CFC-HCFC-HFC-HC-HFO
Max.operating pressure	120 bar
Working temperature	-45 ÷ +130°C
Min. radius of curvature	15 mm
Packaging (coil)	50 m
Weight	28 g/m



Thermoplastic capillary tube assembled - 180°x180°

Code	Model	Connections	Length	Min. Qty
06050010	X012SS/4-4/300	1/4" SAE	300 mm	20
06050066	X012SS/4-4/450	1/4" SAE	450 mm	20
06050012	X012SS/4-4/600	1/4" SAE	600 mm	20
06050026	X012SS/4-4/750	1/4" SAE	750 mm	20
06050013	X012SS/4-4/1000	1/4" SAE	1000 mm	20
06050014	X012SS/4-4/1500	1/4" SAE	1500 mm	10
06050015	X012SS/4-4/2000	1/4" SAE	2000 mm	10



For quantity, hoses of any length and/or different types of fittings can be supplied on request.

Thermoplastic capillary tube assembled - 180°x90°

Code	Model	Connections	Length	Min. Qty
06050067	X012SL/4-4/300	1/4" SAE	300 mm	20
06050068	X012SL/4-4/450	1/4" SAE	450 mm	20
06050069	X012SL/4-4/600	1/4" SAE	600 mm	20
06050070	X012SL/4-4/750	1/4" SAE	750 mm	20
06050071	X012SL/4-4/1000	1/4" SAE	1000 mm	20
06050072	X012SL/4-4/1500	1/4" SAE	1500 mm	10
06050073	X012SL/4-4/2000	1/4" SAE	2000 mm	10



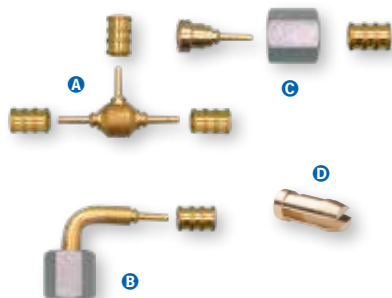
For quantity, hoses of any length and/or different types of fittings can be supplied on request.

CAPILLARY TUBE







Coil of capillary tube

Code	Model	Length	Dimensions	Weight
06050006	X012/A	50 m	250 x 250 x 50 mm	1,4 kg



Fittings to be pressed for capillary tube 2x5,9

Ref	Code	Model	Description	
A	05060022010	WCG210T-TO	Kit of "T" fittings with 3 nuts	
B	05060021001	WCG210/90	Kit of 90° fittings with 1 nut	
C	06101005	WCG250	Kit of straights fittings with 1 nut	
D	14023017001	DM 245K	Valve openers for WCG250-WCG210/90 kit	

Ref	Code	Connections	Dimensions	Weight
A	05060022010	-	140 x 100 x 20 mm	0,15 kg
B	05060021001	1/4"SAE	140 x 100 x 20 mm	0,20 kg
C	06101005	1/4"SAE	160 x 150 x 10 mm	0,80 kg
D	14023017001	-	160 x 90 x 10 mm	0,01 kg



Tools for capillary hose

The crimping manual tools allow to fasten WCG250 fittings easily to the thermoplastic capillary tube and ensures a perfect seal.

Ref	Code	Model	Description	Dimensions	Weight
A	08006010	RXA003	Crimping manual tool	340 x 120 x 30 mm	0,70 kg
B	08002012	1751	Plastic tube cutter	80 x 20 x 20 mm	0,03 kg



Complete kit

Supplied: 50 fittings 1/4"SAE, 10 valve openers, 1 crimping tool and 1 tube cutter.

Code	Model	Dimensions	Weight
06101007	KV-X012	465 x 375 x 110 mm	5kg



Spare parts and accessoires

Code	Description
14029005	Empty plastic case

WNT246P

Crimping system with hydraulic pump

Crimping modular system especially designed and made to answer the needs of professional technicians for crimping HVAC hoses of conditioning and refrigeration system.

Dies for tubes:

internal Ø 2 mm x external Ø 5,9 mm.

internal Ø 4 mm x external Ø 8,2 mm.

internal Ø 6 mm x external Ø 10,9 mm.

Durable, precise and controlled pump.

The crimper will crimp all aluminium and steel fittings reliably, uniformly and on top of it all, we now offer a way to check the accuracy. The diameter of the resulting crimp can be checked, using the special caliper provided with the crimper.

The basic set includes: hydraulic pump, manual crimper, set of 3 dies, lubricant and caliper.

Ref. Code	Model	Description
A 08008046	WNT246P	Crimping systm with hydraulic pump
B 08008046001	WNT246	Crimping manual system without hydraulic pump
08008029	WPT150	Hydraulic pump


Caratteristiche tecniche

Capacity	6,7 t at 700 bar
Corsa del pistone	22 mm
Altezza	255 mm
Weight	1,5 kg



PTFE HOSES



PTFE HOSES

High Pressure PTFE hoses with stainless braid

The stainless steel metallic braid guarantees high performances at high pressures. The stainless steel allows to work in acid environments.

These features make these hoses suitable for use with R744 (CO₂).



Technical features

Outside diameter	7,5 mm - 8,6 mm
Inner diameter	5 mm - 3.16"
Core material	PTFE compatible with refrigerant fluids
Outer covering	AISI 304
Refrigerants	R744-CFC-HCFC-HFC-HC-HFO
Max.operating pressure	200 bar
Working temperature	-60 - +260°C
Min. radius of curvature	64 mm
Weight	94 g/m



Innox hoses assembled - 180°x180°

Code	Model	Connections	Length	Min. Qty
06103006	COSS/4-4/300	1/4" SAE	300 mm	20
06103003	COSS/4-4/450	1/4" SAE	450 mm	20
06103007	COSS/4-4/600	1/4" SAE	600 mm	20
06103008	COSS/4-4/750	1/4" SAE	750 mm	10
06103009	COSS/4-4/1000	1/4" SAE	1000 mm	10
06103001	COSS/4-4 /1500	1/4" SAE	1500 mm	10

For quantity, hoses of any length and/or different types of fittings can be supplied on request.



Innox hose assembled - 180°x90°

Code	Model	Connections	Length	Min. Qty
06104001	COSL/4-4/300	1/4" SAE	300 mm	20
06104002	COSL/4-4/450	1/4" SAE	450 mm	20
06104003	COSL/4-4/600	1/4" SAE	600 mm	20
06104004	COSL/4-4/750	1/4" SAE	750 mm	10
06104005	COSL/4-4/1000	1/4" SAE	1000 mm	10
06104006	COSL/4-4 /1500	1/4" SAE	1500 mm	10

For quantity, hoses of any length and/or different types of fittings can be supplied on request.





HD HOSE

Reinforced HEAVY DUTY hose with low permeability barrier and wear-resistant coating



GY HOSE

Reinforced hose with low permeability barrier and coloured rubber coating



Read the WIGAM model

BALL VALVE	HOSE TYPE	CONNECTION	CONNECTION	CONNECTION	CONNECTION	LENGTH	COLOUR
V - with valve	GY	S - 180°	S - 180°	4 - 1/4" SAE	4 - 1/4" SAE	36 - 900 mm	B - blue
	HD	L - 90°	L - 90°	4M - 1/4" SAE male	4M - 1/4" SAE male	60 - 1500 mm	R - red
	CSA	A - 45°	A - 45°	5 - 5/16"SAE	5 - 5/16"SAE	72 - 1800 mm	Y - yellow
				6 - 3/8"SAE	6 - 3/8"SAE		



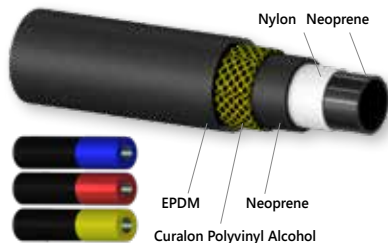
Series GY flexible hose with valve, connections straight-straight, 1/4" x 1/4", 1500 mm, red

"HD" HOSES

"HD" HOSES

Reinforced HEAVY DUTY hose with low permeability barrier and wear-resistant coating SAE J2196 - SAE J2888 - SAE J2064

In addition to the models mentioned below, hoses of any length and with any type of connection can be delivered.



Technical features

In accordance with	SAE J2196/R134a - SAE J2888/R1234yf - SAE J2064/R134a
Working pressure	5,2 MPa
Bursting pressure	27,6 MPa
Internal Ø	1/4"
Working temperature	-30 +125°C



Connections on demand

1/2"-16ACME x 1/2"-16ACME
1/2"-16ACME x M14 x 1.5
M12x1.5 x M12x1.5



Kit of 3 flexible hoses with intermediate valve, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06010016	3HDSA/5-5/32V4/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06010010	3HDSA/5-5/56V4/BRY	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg



Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06010017	3HDSA/5-5/36/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06010018	3HDSA/5-5/60/BRY	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg



Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06010015	3HDSA/4-4/32V4/BRY	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06010011	3HDSA/4-4/56V4/BRY	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg



Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06010005	3HDSA/4-4/36/BRY	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06010003	3HDSA/4-4/48/BRY	1200 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06010004	3HDSA/4-4/60/BRY	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06010002	3HDSA/4-4/72/BRY	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg

Flexible hose with intermediate valve, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06002084	HDSA/5-5/32V4	900 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
06002022	HDSA/5-5/56V4	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
06002083	HDSA/5-5/68V4	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
06002070	HDSA/4-4/32V4	900 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg
06002023	HDSA/4-4/56V4	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg
06002057	HDSA/4-4/68V4	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg

For colour choice, add to the end of the code:



Flexible hose, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06002085	HDSA/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
06002086	HDSA/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
06002097	HDSA/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
06002008	HDSA/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg
06002004	HDSA/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg
06002001	HDSA/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg

For colour choice, add to the end of the code:



Flexible hose with final valve, connections straight x straight with depressor

Code	Model	Length	Connections	Dimensions	Weight
06007089	V/HDSS/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06007078	V/HDSS/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06007098	V/HDSS/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06007012	V/HDSS/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06007013	V/HDSS/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06007014	V/HDSS/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06007022	V/HDSS/6-6/36	900 mm	3/8" SAE	250 x 250 x 50 mm	0,4 kg
06007023	V/HDSS/6-6/60	1500 mm	3/8" SAE	250 x 250 x 50 mm	0,4 kg
06007024	V/HDSS/6-6/72	1800 mm	3/8" SAE	250 x 250 x 50 mm	0,4 kg

For colour choice, add to the end of the code:



3/8 hoses without depressor.

Flexible hoses, Connections straight x straight

Code	Model	Length	Connections	Dimensions	Weight
06001184	HDSS/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06001182	HDSS/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06001185	HDSS/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06001017	HDSS/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06001011	HDSS/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06001014	HDSS/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06001024	HDSS/6-6/36	900 mm	3/8" SAE	250 x 250 x 50 mm	0,8 kg
06001026	HDSS/6-6/60	1500 mm	3/8" SAE	250 x 250 x 50 mm	0,8 kg
06001027	HDSS/6-6/72	1800 mm	3/8" SAE	250 x 250 x 50 mm	0,8 kg

For colour choice, add to the end of the code:



3/8 hoses without depressor.

"HD" HOSES



For colour choice, add to the end of the code:



Flexible hoses, Connections straight x 90° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06003130	HDSL/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06003131	HDSL/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06003132	HDSL/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06003011	HDSL/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06003005	HDSL/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06003003	HDSL/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg

For colour choice, add to the end of the code:



Flexible hoses with male valve, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06008006	V/HDSA/4M-4/6	150 mm	1/4" SAE	250 x 250 x 50 mm	0,2 kg

For colour choice, add to the end of the code:



Flexible hoses, connections 1/4"SAE F 90° x 1/4"SAE M with depressor

Code	Model	Length	Connections	Dimensions	Weight
06003020	HDSL/4M-4/6	150 mm	1/4" SAE	250 x 250 x 50 mm	0,2 kg
06003022	HDSL/4M-4/12	300 mm	1/4" SAE	250 x 250 x 50 mm	0,2 kg
06003076	HDSL/4M-4/24	600 mm	1/4" SAE	250 x 250 x 50 mm	0,2 kg



Spare parts and accessories for HD and GY



Ref	Code	Model	Description	
A	14020014001	G19020	Kit (10 pcs) gaskets for 1/4"SAE, 1/2"-16ACME in NBR	10
	14020048001	G19516	Kit (10 pcs) gaskets for 5/16"SAE	10
B	14023001001	D19302	Kit (10pcs) valve openers for 1/4" SAE and 5/16" SAE hoses	10
C	14020015001	G19030	Kit (10 pcs) gaskets for 3/8" SAE hoses	10
D	14020071001	G19020/T	kit (10pcs) PTFE gaskets for 1/4" SAE, 1/2"-16ACME hoses	10
E	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
F	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pcs of LOCK-VALVE-CARE	10

"GY" HOSES

Reinforced hose with low permeability barrier and coloured rubber coating SAE J2196 - SAEJ2888

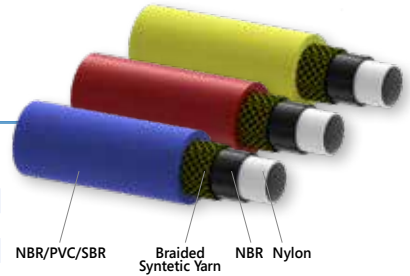
In addition to the models mentioned below, hoses of any length and with any type of connection can be delivered.

Technical features

In accordance with	SAE J2196/R134a SAE J2888/R1234yf
Working pressure	5,6 MPa
Bursting pressure	28 MPa
Working temperature	-40 +120°C

Connections on demand

1/2"-16ACME x 1/2"-16ACME
1/2"-16ACME x M14x1.5
M12x1.5 x M12x1.5



Kit of 3 flexible hoses with intermediate valve, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06080013	3GYS/5-5/32V4/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06080010	3GYS/5-5/56V4/BRY	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg


5/16"

Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06080005	3GYS/5-5/36/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06080006	3GYS/5-5/48/BRY	1200 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06080007	3GYS/5-5/60/BRY	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg


5/16"

Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06080014	3GYS/4-4/32V4/BRY	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080009	3GYS/4-4/56V4/BRY	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg


1/4"

Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

Code	Model	Length	Connections	Dimensions	Weight
06080001	3GYS/4-4/36/BRY	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080002	3GYS/4-4/48/BRY	1200 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080003	3GYS/4-4/60/BRY	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080004	3GYS/4-4/72/BRY	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg


1/4"

"GY" HOSES

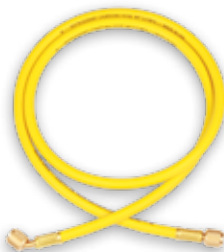


For colour choice, add to the end of the code:

- 001**
- 002**
- 003**

Flexible hoses with intermediate valve, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06072036	GYS/5-5/32V4	900 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06072013	GYS/5-5/56V4	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06072037	GYS/5-5/68V4	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06072038	GYS/4-4/32V4	900 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06072012	GYS/4-4/56V4	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06072039	GYS/4-4/68V4	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg

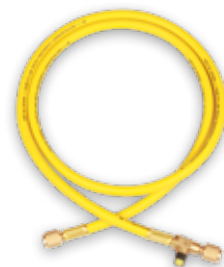


For colour choice, add to the end of the code:

- 001**
- 002**
- 003**

Flexible hose, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06072004	GYS/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06072005	GYS/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06072006	GYS/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06072001	GYS/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06072002	GYS/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06072003	GYS/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg



For colour choice, add to the end of the code:

- 001**
- 002**
- 003**

Flexible hose with final valve, connections straight x straight with depressor

Code	Model	Length	Connections	Dimensions	Weight
06077004	V/GYSS/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06077005	V/GYSS/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06077006	V/GYSS/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06077001	V/GYSS/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06077002	V/GYSS/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06077003	V/GYSS/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg



For colour choice, add to the end of the code:

- 001**
- 002**
- 003**

Flexible hoses, connections "straight - straight"

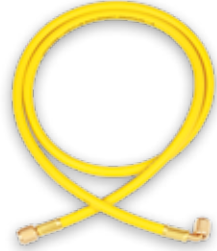
Code	Model	Length	Connections	Dimensions	Weight
06071007	GYSS/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06071008	GYSS/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06071009	GYSS/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06071001	GYSS/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06071002	GYSS/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06071003	GYSS/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06071036	GYSS/6-6/36	900 mm	3/8" SAE	250 x 250 x 50 mm	0,4 kg
06071055	GYSS/6-6/60	1500 mm	3/8" SAE	250 x 250 x 50 mm	0,4 kg
06071076	GYSS/6-6/72	1800 mm	3/8" SAE	250 x 250 x 50 mm	0,4 kg

3/8 hoses without depressor.

Flexible hoses, connections straight x 90° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06073004	GYSL/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06073005	GYSL/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06073006	GYSL/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06073001	GYSL/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06073002	GYSL/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06073003	GYSL/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg

For colour choice, add to the end of the code:



Flexible hose with male valve, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
06078002	V/GYSA/5M-5/6	150 mm	5/16" SAE	250 x 250 x 50 mm	0,4 kg
06078001	V/GYSA/4M-4/6	150 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg

For colour choice, add to the end of the code:



Flexible hose, connections 1/4" SAE F 90° x 1/4" SAE M with depressor

Code	Model	Length	Connections	Dimensions	Weight
06073013	GYSL/4M-4/6	150 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06073014	GYSL/4M-4/12	300 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg
06073015	GYSL/4M-4/24	600 mm	1/4" SAE	250 x 250 x 50 mm	0,4 kg

For colour choice, add to the end of the code:


Spare parts for HD and GY


Ref	Code	Model	Description	
A	14020014001	G19020	Kit (10 pcs) gaskets for 1/4" SAE, 1/2"-16ACME in NBR	10
	14020048001	G19516	Kit (10 pcs) gaskets for 5/16" SAE	10
B	14023001001	D19302	Kit (10 pcs) valve openers for 1/4" SAE and 5/16" SAE hoses	10
C	14020015001	G19030	Kit (10 pcs) gaskets for 3/8" SAE hoses	10
D	14020071001	G19020/T	kit (10 pcs) PTFE gaskets for 1/4" SAE, 1/2"-16ACME hoses	10
E	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
F	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pcs of LOCK-VALVE-CARE	10

“CSA” HOSES



“CSA” HOSES

Kit of three “CSA” hoses with depressor:

Each hose has a different colour, respectively blue, red and yellow.

Connections: straight x 45°.

Blister packaged.

Code	Model	Length	Connections
06040005	3CSA/4-4/60/BRY	1500 mm	1/4" SAE
06040007	3CSA/5-5/60/BRY	1500 mm	5/16" SAE
06040009	3CSA/4-5/60/BRY	1500 mm	1/4" X 5/16" SAE

Code	Pressure operating	Pressure bursting	Dimensions	Weight
06040005	4.2 MPa	20.7 MPa	250 x 250 x 50 mm	0,8 kg
06040007	5.5 MPa	27.6 MPa	250 x 250 x 50 mm	0,8 kg
06040009	5.5 MPa	27.6 MPa	250 x 250 x 50 mm	0,8 kg



Spare parts for CSA



Ref	Code	Model	Description	
A	14020113001	G-CSA4-17	Kit (10pcs) of PTFE gaskets for 1/4" SAE hoses	10
A	14020114001	G-CSA5-17	Kit (10pcs) of NBR gaskets for 1/4" SAE, 1/2"-16ACME hoses	10
B	14020115001	D-CSA-17	Kit (10pcs) valve openers for CSA hoses	10
C	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
D	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pcs of LOCK-VALVE-CARE	10

KOMPACT-HFC-100-TOUCH

Automatic test, vacuum and charging station for service operations or small productions

The KOMPACT range is available in 2 versions:

KOMPACT HFC: for HFC (A2L included) with a scale of 100 kg.

KOMPACT ATEX (see pag. 104): suitable for HC (R290, R600) and precision charges.

The KOMPACT-HFC unit features:

- Touchscreen digital display
- Database with more than 50 refrigerants.
- Suitable for CFC, HCFC, HFC (R32 e R1234yf included) refrigerants.
- Built-in independent ventilation system.
- High precision injectin system.
- 180lt high vacuum two-stage pump.
- Integrated precision vacuum gauge.
- 100Kg scale with extractable pan.
- Integrated compartments to accommodate and transport cylinders or cartridges of Refrigerant and Nitrogen.
- Handle and wheels for easy handling.
- Supports for bottles 1/4 "SAE, 5/16" SAE, 1/2" 16 ACME Sx.
- Built-in Wi-Fi kit for 4.0 ready interconnection.



DISCOVER THE ATEX VERSION FOR HC ON PAGE 104

Code	Model	Description	Weight
01090038	KOMPACT-HFC-100-TOUCH	400 x 450 x 815 mm	37,50 kg



Calibration

Code	Description
09053052	Calib. report ref. Accredia for kompact-hfc and kompact-atex



Technical features

Refrigerants	CFC, HCFC, HFC, HFO
Two-stage pump	RS9D (180l/min)
Scale	100 kg
Vacuum range	1÷600Pa
Charging accuracy	±5g <5kg / ±0,1% >5kg
Power supply	230V 50/60Hz
Connections	1/4" SAE with valve + Supports for bottles 1/4" SAE, 5/16"SAE, 1/2" 16 ACME Sx



Accessories

Code	Model	Description	Female connection	Male connection	Min. Qty
05059049001	LOCK-VALVE1/4-WIG	Access valve	1/4" SAE	1/4" SAE	-
05059053001	LOCK-VALVE/5-4-WIG	Access valve	5/16" SAE	1/4" SAE	-
06077002001	V/GYSS/4-4/60/B	Flexible hose 1500mm with valve	2 x 1/4" SAE	-	-
10002017	AZ200-50	Heavy duty nitrogen regulator 200-50 bar	-	-	-
11001060	BN2/1-TPED	Nitrogen cartridge 950cc. - 110bar	-	-	12
11003011	BAZ50/1	Nitrogen 5 l cylinder	-	-	-
11001112	AZOIDRO	Azoidro cartridge 1 l - 110bar	-	-	12
11003020	AZOIDRO/5	Azoidro 5 l cylinder	-	-	-

Bottles not included



AUTOMATIC FUNCTIONS:

- Nitrogen test for leak test.
- Test with azoidro mixture for leak test.
- Nitrogen discharge.
- Recovery management (recovery unit not INCLUDED).
- Vacuum.
- Vacuum test and pressure rising test.
- Refrigerant charge.

• 2 automatic cycles:

CYCLE 1	CYCLE 2
Nitrogen test	Recovery
Vacuum and test vacuum	Nitrogen test
Refrigerant charge	Vacuum and test vacuum
	Refrigerant charge



VACUUM AND CHARGING KIT



CADDY FOX 5/100

Universal kit for vacuum and charge with digital manifold and scale (5 or 100 kg)

Possibility to work with over 50 refrigerants

Small dimensions and very easy to carry

Standard equipment:

- 46 l/min or 110 l/min dual stage vacuum pump with solenoid valve and vacuum gauge.
- Digital manifold FOX300 complete with 2 probes TK109, 2 flexible hoses 1500 mm with intermediate valve, 1 flexible hose 1500 mm with final valve 1 flexible hose for vacuum IPERVAC 900 mm 3/8" SAE and 2 adapters RG180/5-4-5/16" SAE F x 1/4" SAE M.
- Mineral oil bottle.

CADDY FOX 5 version

- 5 kg electronic scale with 1g resolution.
- 3 supports for bottles (1/4" x 1/4" - 5/16" x 1/4" - 1/2"-16 ACME SX x 1/4" SAE).

CADDY FOX 100 version

- 100 kg electronic scale with 5g resolution.



BASIC KIT CADDY FOX



CADDY FOX 100 SCALE



Code	Model
01010006004	CADDY46D/5/FOX300
01010015003	CADDY110D/5-FOX300
01010006005	CADDY46D/100/FOX300
01010015004	CADDY110D/100-FOX300

Code	Dimensions	Weight
01010006004	630 x 400 x 450 mm	19 kg
01010015003	630 x 400 x 450 mm	22 kg
01010006005	630 x 400 x 450 mm	22 kg
01010015004	630 x 400 x 450 mm	25 kg



CADDY FOX 5 SCALE



Technical features

	CADDY 46D/5/FOX300	CADDY 110D/5/FOX300	CADDY 46D/100/FOX300	CADDY 110D/100/FOX300
Scale capacity	5 kg	5 kg	100 kg	100 kg
Pump volume	46 lt/min	110 lt/min	46 lt/min	110 lt/min
Ultimate vacuum	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar

CADDY 5/100

Universal kit for vacuum and charge with scale (5 or 100 kg)

Possibility to work with R32-R410A and R22-R134a-R404A-R407C.

Small dimensions and very easy to carry.

Quick coupling system for vacuum pump-solenoid valve-vacuum gauge - manifold assembly.

Standard equipment:

- 46 l/min or 110 l/min dual stage vacuum pump with solenoid valve and vacuum gauge.
- 2 manifolds with scales A4 and A6, class 1.
- Bottle of mineral oil.
- 4 flexible hoses 1500 mm with intermediate valve (1/4" and 5/16").

CADDY 5 version

- 5 kg electronic scale with 1g resolution.
- 3 supports for bottles (1/4" x 1/4" - 5/16" x 5/16" - 1/2" - 16 ACME SX x 5/16" SAE).

CADDY 100 version

- 100 kg electronic scale with 5g resolution.



BASIC KIT CADDY



Code	Model
01010006001	CADDY46D/5
01010015001	CADDY110D/5
01010006002	CADDY46D/100
01010015002	CADDY110D/100

Code	Dimensions	Weight
01010006001	630 x 400 x 450 mm	19 kg
01010015001	630 x 400 x 450 mm	22 kg
01010006002	630 x 400 x 450 mm	22 kg
01010015002	630 x 400 x 450 mm	25 kg



CADDY 5 SCALE



CADDY 100 SCALE



Technical features

	CADDY 46D/5	CADDY 110D/5	CADDY 46D/100	CADDY 110D/100
Scale capacity	5 kg	5 kg	100 kg	100 kg
Pump volume	46 lt/min	110 lt/min	46 lt/min	110 lt/min
Ultimate vacuum	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar

VACUUM AND CHARGING KIT

Refrigerants dials			
A3	R600a	A4	R410A-R32
A6	R22-R134a-R404A-R407C	D6	R600a-R290-R1270



K-PGTB

Vacuum and charging system with electronic scale 5kg

The quick coupling system, patented by Wigam, for vacuum pump - solenoid valve - vacuum gauge - manifold assembly, allows to replace the manifold very quickly each time you need to operate with a different refrigerant and to have a very compact and easy to carry vacuum and charging station.

Standard equipment:

- 46 l double stage vacuum pump with female rigid swivel connection 3/8" SAE .
- 4-way manifold with Ø80 gauges, class 1.
- electronic scale up to 5 kg, resolution 1 gr
- 2 flexible hoses 1500 mm with intermediate valve.
- 1 vapour discharge hose (only versions A3 and D6)
- plastic case

Code	Model
01010001	K-PGTB-A4
01010002	K-PGTB-A6
01010013	K-PGTB-A3
01010014	K-PGTB-D6

Code	Dimensions	Weight
01010001	520 x 290 x 340 mm	19 kg
01010002	520 x 290 x 340 mm	22 kg
01010013	520 x 290 x 340 mm	22 kg
01010014	520 x 290 x 340 mm	25 kg



Bottles not included in the kit



Technical features

	K-PGTB-A4	K-PGTB-A6	K-PGTB-A3	K-PGTB-D6
Refrigerants	R410A-R32	R22-R134a-R404C-R407C	R600a	R600a-R290-R1270
Scale capacity	5 kg	5 kg	5 kg	5 kg
Pump volume	46 lt/min	46 lt/min	46 lt/min	46 lt/min
Ultimate vacuum	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar
Connections	5/16" SAE	1/4" SAE	1/4" SAE	1/4" SAE
Supports	2 pcs	1 pc	1 pc	2 pcs

Bottle marked (European directive 2010/35/UE)
 Valve marked CE (European directive 2010/35/UE)
 Container made of steel (EN13322-1)
 Valve connections 17E (EN ISO11116-1) 25E (EN629-1)

WR1K/32

1 lt refillable bottles with refrigerant R32

Code	Model	Refrigerant	Connections	Refrigerant quantity	Min. Qty	Weight
11001127	WR1K/32	R32	1/2"-16ACME SX	800 gr	12	2,1 kg

Recharge service available

Valves and supports for WR1K/R32

Ref	Code	Model	Description	Connections
A	05002034001	121 RGAS-5-WIG	Valves	1/2-16ACME SX x 5/16"SAE M
B	05104049		Support + hose 90°	1/2-16ACME SX x 5/16"SAE F
C	05059077001	LOCK-VALVE/AS-5	Access valve	1/2-16ACME SX F x 5/16"SAE M



821/121RGAS-5/K

Connection kit for bottle R32 with connection W 21.7-1/14" Sx

Including:

- Adapter for bottle 12,5 l.
- Valve 5/16" SAE mod.121RGAS-5.
- Nylon gasket.

Code	Model
05108103001	821/121RGAS-5/K



WR1K/134

1 l refillable bottles with refrigerant R134a

Code	Model	Refrigerant	Connections	Refrigerant quantity	Min. Qty	Weight
11001090	WR1K/134	R134a	1/4" SAE	900 gr	12	1,90 kg

Recharge service available

Valves and supports for refillable bottles WR1K/134

Ref	Code	Model	Description	Connections
A	05001003001	121 RG4	Valves	1/4"SAE F x 1/4"SAE M
B	05104045		Support + hose 90°	1/4" SAE F x 1/4" SAE F
C	05059049001	LOCK-VALVE 1/4"	Access valve	1/4" SAE F x 1/4" SAE M



REFRIGERANT REFILLABLE BOTTLES - FULL

Bottle marked (European directive 2010/35/UE)

Valve and safety valve marked CE (European directive 2010/35/UE)

Container made of steel (EN13322-1)

Valve and safety valve are protected by collar (European directive 2010/35/UE)

Valve connections 17E (EN ISO11116-1) 25E (EN629-1)



WR1K/410

1 l refillable bottles with refrigerant R410A

Code	Model	Refrigerant	Connections	Refrigerant quantity	Min. Qty	Weight
11001088	WR1K/410	R410A	5/16" SAE	800 gr	12	1,80 kg

Recharge service available

Valves and supports for refillable bottles

Ref	Code	Model	Description	Connections
A	05001038001	121-RG5	Valves	5/16" SAE F x 5/16" SAE M
B	05104039		Support + hose 90°	5/16" SAE F x 5/16" SAE F
C	05059050001	LOCK-VALVES/16	Access valve	5/16" SAE F x 5/16" SAE M



WR2.5K/410

2,5 ltr refillable bottles with refrigerant R410A and tube

Code	Model	Refrigerant	Connections	Refrigerant quantity	Min. Qty	Weight
11001079001	WR2.5K/410	R410A	21,8 W - 1/14" DX	2 kg	6	4,2 kg

2,5 l bottles recharge

Code	Model	Refrigerant	Refrigerant quantity	Min. Qty	Weight
11011007	RICAR410/2K	R410A	2 kg	6	4 kg



WR10K-TPED/44/410

12,5 l refillable bottles with refrigerant R410A

Code	Model	Refrigerant	Connections	Refrigerant quantity	Min. Qty	Weight
11001052	WR10K-TPED/44/410	R410A	21,8 W - 1/14" DX	10 kg	2	16,5 kg

12,5 l bottles recharge

Code	Model	Refrigerant	Refrigerant quantity	Min. Qty	Weight
11011003	RICAR410/10K	R410A	10 kg	2	16,5 kg

WR2.5K/48

2.5 l refillable bottles without refrigerant, with tube

Code	Model	Refrigerant	Min. Qty
11001077	WR2.5K/48	R134a - R407C - R427 - R404A - R507 - R410A	6

Code	Connections	Capacity	Weight
11001077	21,8 W - 1/14" DX	2,50 lt	2,2 kg


W2-WR10K/44 - W2-WR9K/48/5

12,5 l refillable bottles without refrigerant with tube, with liquid and vapour valve

Code	Model	Refrigerant	Min. Qty
11001062	W2-WR10K/44	R134a - R407C - R427 - R404A - R507 - R410A	2
11001124	W2-WR9K/48/5	R32	2

Code	Connections	Capacity	Weight
11001062	1/4"SAE	12,5 lt	5,9 kg
11001124	5/16"SAE	12,5 lt	5,9 kg


W2-WR40K/49

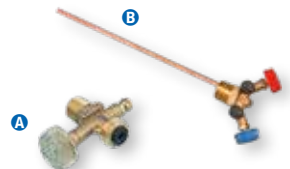
40 l refillable bottles without refrigerant with tube, liquid and vapour valve

Code	Model	Refrigerant	Min. Qty
11001059	W2-WR40K/49	R134a - R407C - R427 - R404A - R507 - R410A	1

Code	Connections	Capacity	Weight
11001059	1/4"SAE	40 lt	21 kg


Spare parts and accessories

Ref	Code	Model	Description
	05002024	WRF2-P	WR2.5K/48 with tube
A	05002025	WRF10	WR10K/44
B	05002016	RF2-1/4"	W2-WR10K/44 with tube
B	05002032	RF2-5/16"	W2-WR9K/48/5 with tube
B	05002022	RF2-40K-1/4"	W2WR40K/49 with tube



HEATERS AND ADAPTERS FOR BOTTLES



HOT-BLOWER

Hot blower

- Suitable to dry finned batteries (condensers-evaporators).
- Ideal to warm up the refrigerant during the transfer operations (from bottle to bottle and during recovery).

Code	Model	Dimensions	Weight
14019019	HOT-BLOWER	195 x 170 x 190 mm	1,6 kg



Technical features

Power supply	230V-50/60Hz
Power	550 W
Wind rate	2.7 m ³ /min
Max. temperature	45 °C
Thermal cut-out	Yes
Power switch	On/Off with lock button
Power cable length	1.8 mt

RSF400

Heater with thermostat

The heater is supplied with two springs.



Code	Model	Dimensions	Weight
14019007	RSF 400/2T/CLASSE2	150 x 150 x 190 mm	0,35 kg
14023015	Spring for heater	-	-



Technical features

Power	400 W
Temperature	60 °C max
Heater length	700 mm
Spring length	80 mm



Adapters for bottles



Ref	Code	Model	Description	Connections	
A	05055009	816/2	Adapter	21.8W-1/14" DX F x 1/4 SAE M	
A	05108020001	816/2K	kit 2 adapters with gasket	21.8W-1/14" DX F x 1/4 SAE M	2
B	05055011	816/6	Adapter	21.8W-1/14" DX F x 3/8 SAE M	
B	05108067001	816/6K	kit 2 adapters with gasket	21.8W-1/14" DX F x 3/8 SAE M	2
C	05055022	816/5	Adapter	21.8W-1/14" DX F x 5/16 SAE M	
C	05108068001	816/5K	kit 2 adapters with gasket	21.8W-1/14" DX F x 5/16 SAE M	2
D	05055100	W404/6	Adapter with gasket	1/4 SAE F x 3/8 SAE M	100
D	05108069001	404/6K	kit 2 adapters with gasket	1/4 SAE F x 3/8 SAE M	2
E	05055099	W404/5	Adapter with gasket	1/4 SAE F x 5/16 SAE M	100
E	05108022001	404/5K	kit 2 adapters with gasket	1/4 SAE F x 5/16 SAE M	2
F	05055088	821/5	Adapter	21.8W-1/14" SX F x 5/16 SAE M	
	14020124001	G/W404	Kit 10 gaskets for W404/6 e W404/5	-	10



CO₂ (R744)
 **WIGAM**



FOX-R744

2 ways digital manifold for CO₂ (R744)

FOX-R744 is realized on purpose to work with CO₂ (R744).

FOX-R744 has the same performances as the other Fox series (see page 58).

Functions:

- Maximum operating pressure 160 bar.
- 200 bar overpressure.
- 2 pressure transducers (0-160 bar).
- Precision class better than 1% FS.
- Type K temperature probes.
- Room temperature probe.
- 2-way piston manifold with 3 connections 1/4" SAE.
- Pressure test with nitrogen.

Standard equipment:

- 2 probes TK109.

Code	Model	Dimensions	Weight
04080001006	FOX-R744	360 x 320 x 120 mm	3 Kg



Calibration

Code	Model
09053012	Calibration report ref. Accredia for Fox




Accessories and spare parts for FOX-R744 and manifolds for R744

Ref	Code	Model	Description
A	04111016	PWP-CO2	Complete piston
B	14021027001	PWKG-CO2 L	LOW knob kit
B	14021028001	PWKG-CO2 H	HIGH knob kit
C	09012013	TK 109	Universal temperature probe
D	09012037	TK 109/STRIP	Universal temperature probe with strip
E	09012019	TK 104	Ambient probe
F	09012020	TK 105	Surface probe
G	09012016	TK 106	Insertion probe
H	09012017	TK 107	Clamp-on probe



CO₂ (R744) MANIFOLD KIT

2 ways piston manifold kit with Ø80 oil filled gauges for R744, class 1 with regulation screw and stainless steel case, 3 flexible hoses in plastic case.

Code	Model	Connections	Bar pressures
04101119	K-PF2ML/D5-4-COS	1/4"SAE	-1 +100 / 0 +160

Code	Dimensions	Weight
04101119	360 x 320 x 120 mm	2,5 kg



CO₂ (R744) MANIFOLD

2 ways piston manifold with Ø80 oil filled gauges for R744, class 1 with regulation screw and stainless steel case.

Code	Model	Connections	Bar pressures
04022060	PF2ML/D5-4/K1	1/4"SAE	-1 +100 / 0 +160

Code	Dimensions	Weight
04022060	240 x 220 x 70 mm	0,9 kg



CO₂ (R744) GAUGES - RADIAL CONNECTION

Pressure gauge, Ø 80, oil filled, class 1, radial connection 1/8NPT, with regulation screw and stainless steel case.

Code	Model	Bar pressures
07113001	ML80/100R1/D5/K1	-1 +100
07113002	ML80/160R1/D5/K1	0 +160

Code	Dimensions	Weight
07113001	100 x 90 x 40 mm	0,3 kg
07113002	100 x 90 x 40 mm	0,3 kg



CO₂ (R744) GAUGES - REAR CONNECTION

Pressure gauges, Ø 80, oil filled, class 1, rear connection 1/4 SAE, mounting bracket and stainless steel case.

Code	Model	Bar pressures
07113014	ML80/100C4S/D5/K1	-1 +100
07113015	ML80/160C4S/D5/K1	0 +160

Code	Dimensions	Weight
07113014	90 x 90 x 70 mm	0,3 kg
07113015	90 x 90 x 70 mm	0,3 kg





LOCK-VALVE-R744

CO₂ (R744) ACCESS VALVE

- Max operating pressure 160bar.
- Very efficient tightness that guarantees no gas leaks.
- Extremely reduced volumes that prevent gas leaks during the valve connecting or disconnecting phase.
- Very easy to handle.
- Prevent the risk of finger burns when disconnecting the valve.
- Superior construction accuracy.
- PTFE seals. .

Code	Model	Connections
05059064001	LOCK-VALVE1/4-744	1/4" SAE F x 1/4" SAE M
Code	Dimensions	Weight
05059064001	140 x 100 x 20 mm	0,10 Kg



CO₂ (R744) KIT OF 3 FLEXIBLE HOSES 1500 MM

PTFE hose with stainless steel coating.

Code	Model	Connections
06103002	3COSS/4-4/60	1/4" SAE
Code	Dimensions	Weight
06103002	430 x 230 x 20 mm	0,5 kg



Technical features

Working max. pressure	200 bar (20 MPa)
Busting pressure	800 bar (80 MPa)
Operating temperature	-60 °C ÷ +200 °C



Spare parts and accessories



A



B



C

Ref	Code	Model	Description	
A	14020097	G-LV/T-WIG	Kit 5 pcs LOCK-VALVE gaskets	5
B	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
C	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pcs of LOCK-VALVE-CARE	10

NITROGEN REGULATOR (0-200 BAR) FOR CO₂ (R744) SYSTEMS

200 bar
Special
for R744

Code	Model	Countries	Connections
10002039	WN2-200	IT	W 27.1 x 1/14" M
10002041	WN2-200/D	F-B-P-E	Ø21.7 x 1.814F
10002040	WN2-200/E	GB	G 5/8" M
10002042	WN2-200/C	D	W 24.32 x 1/14" F

Code	Dimensions	Weight
10002039	220 x 150 x 150 mm	2,3 kg
10002041	220 x 150 x 150 mm	2,3 kg
10002040	220 x 150 x 150 mm	2,3 kg
10002042	220 x 150 x 150 mm	2,3 kg



Technical features

Inlet pressure	300 bar (30 MPa)
Outlet pressure	0-200 bar (0 - 20 MPa)
Connections	1/4" SAE M
Regulation system	Piston
Inlet gauge	0-400 bar FS
Outlet gauge	0-400 bar



CO₂ (R744) TEST SYSTEM KIT

Complete with gauge 0-200 bar (3080 psi) with reference indicator.
Hose total length 1750 mm (1500 mm + 250 mm).

Code	Model
05015014	COSS/4-4/6OV8/PF80/N2-K1

Code	Dimensions	Weight
05015014	220 x 240 x 70 mm	1 kg



ADAPTER FOR CO₂ (R744) BOTTLE

Code	Model	Connections
05055009	816/2	21.8W-1/4"D x F x 1/4" SAE M





EXACTA-MAXI-CO₂

CO₂ (R744) electronic programmable scale
Very accurate charges, programmable by microprocessor.
Professional scale pan: 300 x 300 mm.

Code	Model	Dimensions	Weight
09013022	EXACTA-MAXI-CO2	460 x 350 x 170 mm	8,5 kg



Technical features

Capacity	100 kg
Resolution	± 2 gr up to 9.999 gr (capacity 30 kg) ± 10 gr (capacity 10 kg)
Accuracy	± 5 gr up to 30 kg ± 10 gr > 30 kg
Scale pan dimensions	300 x 300 mm
Operating temperature	0 - 50 °C
Power supply	230/1/50-60Hz

VOYAGER



INFRARED

VOYAGER-R744

Infrared leak detector for CO₂ (R744)

VOYAGER-R744 is equipped with an infrared sensor specifically for CO₂ (R744) that offers superior accuracy, insensitivity to false alarms and extended service life.

The robust construction with unique ergonomic design, the innovative large LCD display and the rechargeable lithium-ion batteries make the infrared leak detector not only extremely reliable, but also very intuitive and easy to use.

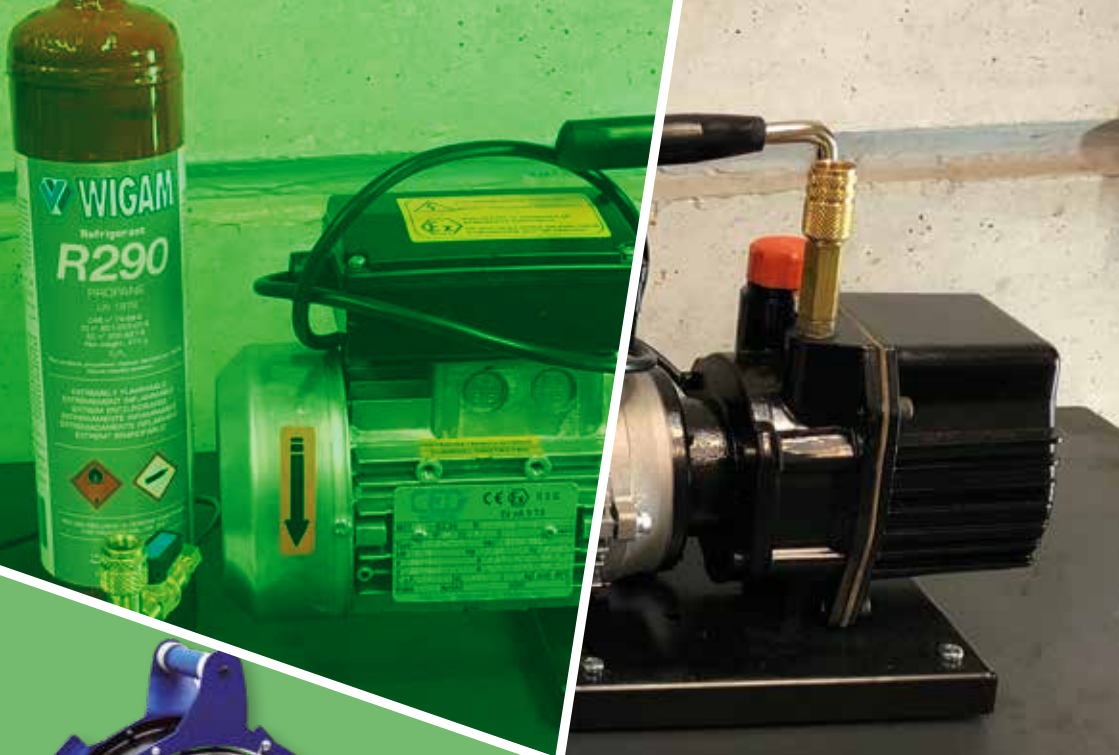
- 3 sensitivity levels (L/M/H).
- Audible alarm and optimised graphics on large LCD screen.
- High-quality, durable double-barrier probe.
- "Mute" button and connection for headphones.
- Peak storage function.
- Automatic calibration.
- Ergonomic grip.
- Sturdy case with battery charger and 5 spare tips with filters.

Code	Model	Dimensions	Weight
09001119	VOYAGER-R744	330 x 240 x 70 mm	1,2 kg



Technical features

Tecnology	Infrared
Maximum sensitivity	<6 g/year
Calibration	Automatic
Warm-up time	<30 seconds
Response time	<3 seconds
Probe length	40 cm
Power supply	Rechargeable lithium-ion battery
Batteries life	8 consecutive hours
Compliance	CE, SAE J1627, EN14624



HC (R290 - R600A
- R1270)



IDO ATEX - THE 4.0 DIGITAL AUTOMATIC UNIT



CE ATEX 3G IIB T3 Gc

EXCLUSIVE INNOVATION



Wi-Fi 4.0 Ready Interconnection



IDO ATEX

4.0 digital automatic portable unit suitable for R290 and R600a

The digital manifold turns into your compact ATEX 4.0 digital automatic unit. IDO ATEX is suitable to work with flammable refrigerants such as R290 and R600a and thanks to its electronics and its large LCD Touchscreen, it does not only display information and measurements, but also manages the various integrated or connected equipment in order to carry out autonomous operations, such as discharge and recovery, pressing, vacuum and charge, or cycles of operations, verifying the results with appropriate test phases and reports.

With multiple advantages ranging from time saving to certified quality of the work performed, it is possible to assign tasks or cycles of tasks to the IDO ATEX portable unit, with the certainty that they will be carried out, checked and certified through reports. The large touchscreen makes the unit extremely easy to use, while the interconnection on the Service Portal, accessible via PC and Smartphone, allows remote management and exchange of information in real time.

IDO ATEX meets the requirements for Impresa 4.0 benefits.

BOTTLES NOT INCLUDED IN THE KIT



Large touchscreen digital control display

AUTOMATIC CYCLES



Management of PRESSURIZATION and TEST



Management of VACUUM and Test



Management of CHARGE



IDO ATEX

4.0 digital automatic portable unit suitable for R290 and R600a

The IDO range is available in the following versions:

- IDO HFC (see page 52-53): for HFC (A2L included).
- IDO ATEX: suitable also for A3 refrigerants such as HC (R290, R600a).

Unit IDO ATEX features:

- ATEX Zone 2 Certification (CE Atex 3G IIB T3 Gc).
- Suitability to be used with A3 flammable refrigerants such as R600a-R290-R1270.
- Double automatic discharge system assisted by evacuation through integrated Atex vacuum pump or through flushing with nitrogen.
- Compatibility with refrigerants HC, CFC, HCFC, HFC and HFO (included R32 and R1234yf).
- Large digital TouchScreen display.
- 2 pressure sensors (Low and High).
- Built-in electronic precision vacuum gauge (mTorr, Pa, mbar,...).
- 3 temperature sensors (Low, High, Ambient), Subcooling and Superheating.
- Compatibility with all K-type temperature probes (2 x TK109 included).
- 35kg removable scale with fittings and adapters for different cylinders.
- Connection for external cylinder of Nitrogen or Azoido.
- USB port for data transfer and report.
- Integrated wifi kit for 4.0 ready Interconnection.
- Wigam Service Portal, accessible via PC and Smartphone for management, information exchange and report.
- Refrigerant database that can be updated from the portal.
- Database that can be updated with the charging data of the manufacturers.
- Dual stage 46 l/min integrated vacuum pump.



CE ATEX 3G IIB T3 Gc



Code	Model	Empty pump	Packaging dimensions	Weight
01090036	IDO-ATEX	RS3D-EX	650 x 400 x 380 mm	22,00 kg

Automatic functions:



- PRESSURIZATION and TEST to check for leaks
- AUTOMATIC HC DISCHARGE
- VACUUM and VACUUM TEST with rising check
- REFRIGERANT CHARGE internal vehicles database
- USER-ADJUSTABLE AUTOMATIC CYCLES



Calibration

Code	Model
09053054	Calibration report for IDO



Technical features



Refrigerant	CFC, HCFC, HFO, HC-A3 (R290,R600a...)
Dual stage vacuum pump	46 l/min
Scale	35 kg
Empty range	1-600 Pa
Charge accuracy	±5g <5kg (detachment mode)
Power supply	230V 50/60Hz
High/Low hoses	1,5m 1/4" SAE with LockValve 1/4"
Bearings for cyclinders	1/4"SAE, 5/16"SAE + Bearings 7/16"SAE, 1/2"-16ACME Sx

INTERCONNECTION: IDO meets the technical requirements for Impresa 4.0 benefits





AUTOMATIC VACUUM AND CHARGING UNIT



CE ATEX 3G IIB T3 Gc



Bottles not included



KOMPACT-ATEX-TOUCH

Automatic vacuum, test and charging ATEX station for service operations or small productions

The KOMPACT range is available in 2 variation:

- KOMPACT ATEX : suitable for HC (R290, R600) and precision charges.
- KOMPACT HFC (pag 87): for HFC (A2L included) with 100Kg scale.
- Touchscreen digital display.
- Designed for use with hydrocarbon (R600a-R290-R1270).
- ATEX Zone 2 certification (CE Atex II 3G IIB T3 Gc).
- Hi-Accuracy Injection system (injection gun).
- Discharge procedure supported by integrated ATEX vacuum pump.
- Suitable for HC, CFC, HCFC, HFC and HFO (R32 e R1234yf included).
- Database with more than 50 refrigerants.
- Fast access keys.
- Integrated precision vacuum gauge.
- 35 scale for bottles/cylinders of different volumes.
- Integrated compartments to accommodate and transport cylinders or cartridges of refrigerant and Nitrogen.
- Handle and wheels for easy handling.
- Supports for bottles 7/16", 1/2" 16 ACME Sx, 5/16"SAE

Ref	Code	Model	Vacuum pump
A	01090037	KOMPACT-ATEX-TOUCH	RS3D-EX (46l/min)
B	01090039	KOMPACT-ATEX-TOUCH/180	RS9D-EX (180l/min)

Ref	Code	Dimensions	Weight
A	01090037	550 x 330 x 360 mm	12,8 kg
B	01090039	550 x 330 x 360 mm	14,8 kg



Calibration

Code	Model
09053052	Calibration report ref. Accredia for KOMPACT-HFC and KOMPACT-ATEX



Technical features

Refrigerants	HC, CFC, HCFC, HFC, HFO
Two-stage pump	RS3D-EX (46 l/m) or RS9D-EX (180l/m) ATEX
Scale	35 Kg
Vacuum range	1÷600Pa
Charging accuracy	± 2g <5 kg / ±0.1% >5 kg
Power supply	230V 50/60HZ
Connections	1/4" SAE Female + Cylinder supports 7/16", 1/2" 16 ACME Sx, 5/16" SAE"

AUTOMATIC FUNCTIONS:

- Nitrogen test for leak test.
- Test with azidoro mixture for leak test.
- Nitrogen discharge.
- HC (R290, R600a) optimized discharge.
- Recovery management (recovery unit not included).
- Vacuum.
- Vacuum test and pressure rising test.
- Refrigerant charge.
- 2 automatic cycles:



CYCLE 1	CYCLE 2
Nitrogen test	HC discharge
Vacuum and test vacuum	Nitrogen test
Refrigerant charge	Vacuum and test vacuum
	Refrigerant charge

Application examples



Spare parts and accessories



Ref	Code	Model	Description	Mn. Qty
A	05059049001	LOCK-VALVE1/4	Access valve 1/4" SAE F x 1/4" SAE M	-
B	05059053001	LOCK-VALVE/5-4	Access valve 5/16" SAE F x 1/4" SAE M	-
C	05105008001	GF6-1/4"NPT	Quick connector for tube 6 mm	-
D	05105009001	GF8-1/4"NPT	Quick connector for tube 8 mm	-
E	05108045001	WM 16-WIG	Male quick coupling 1/4"NPT	-
F	05108046001	WF 16-WIG	Female quick coupling 1/4"NPT	-
G	05004002	BPV 21	Piercing valve Ø 12,7-15,8	8
G	05004003	BPV 31	Piercing valve Ø 6,3-7,9-9,5	12
H	05004004	W341	Piercing valve Ø 4,8÷9,6	-
I	05004005	WPV 31	Piercing valve Ø 6,3-7,9-9,5-10	10
J	08006007	PT-109	Piercing plier	-
K	08006011	PP-343	Piercing plier	-
L	10002017	AZ200-50	Nitrogen regulator 200-50 bar with bracket	-
M	11001060	BN2/1-TPED	Nitrogen cartridge 950 cc	12
	11001112	AZOIDRO	Azoidro cartridge 1 l.	12
N	11003011	BAZ 50/1	Nitrogen bottle 5 l.	-
	11003020	AZOIDRO/5	Azoidro bottle 5 l.	-



Cartridge not included



Detail of the kit with solenoid valve and vacuum meter

KIT K-EX-46D/D6

Vacuum and charging kit for R600a-R290-R1270

In compliance with the work safety recommendations when using hydrocarbons and flammable refrigerants, the kit is equipped with an ATEX-certified vacuum pump in the two versions without **A** and with solenoid valve and vacuum meter **B**.

The kit is equipped with the quick assembly kit of the manifold on the vacuum pump patented by Wigam.

All components are provided in comfortable trunk for simple handling.

Standard equipment:

- ATEX (Zone 2) vacuum pump RS3D-EX.
- 4 ways piston manifold, d. 80 oil filled pressure gauges, for R600a-R290-R1270.
- 2 flexible hoses 1500 mm, 1/4"SAE.
- 2 access valve LOCK-VALVE 1/4"- SAE F x 1/4" SAE M.
- 1 discharge vapour hose 5 m.
- Electronic scale 5kg, resolution 1g.
- 2 supports for cartridge (R290 and R600a).
- 1 mineral oil bottle.

Ref	Code	Model
A	01010008001	K-EX46D/D6
B	01010008003	K-EX-EV-46D/D6

Ref	Code	Dimensions	Weight
A	01010008001	550 x 330 x 360 mm	12,8 kg
B	01010008003	550 x 330 x 360 mm	12,8 kg

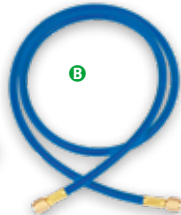


Technical features

Scale capacity	5 kg
Pump volume	46 l/min
Ultimate vacuum	1x10 ⁻² mbar



Spare parts



Ref	Code	Model	Description	Mn. Qty
A	06053010		Vapour exhaust pipe 5 m	-
B	06071002001	GYSS/4-4/60 B	Hose 1500 mm 1/4 x 1/4 - Blue	-
C	06071002002	GYSS/4-4/60 R	Hose 1500 mm 1/4 x 1/4 - Red	-
D	12002003	K1L	Mineral oil 1 l	12 pz

RS LINE ATEX

ATEX high vacuum pumps

Designed specifically to operate, according to the ATEX directive with systems using A3 refrigerants such as HC (such as R290 and R600a).

Model RS3D (46l/min) is available both in version without (A) and with solenoid valve and vacuum gauge (B).

Model RS9D (180l/min) is available only in version with solenoid valve and vacuum gauge (C).

Equipped with 5m vapour discharge hose.

A



CE ATEX II 3G c T3

B



C



Ref	Code	Model	Dimensions	Weight
A	02002052	RS3D-EX	267 x 150 x 250 mm	6,4 kg
B	02099036	RS3DE/V-EX	267 x 150 x 250 mm	6,4 kg
C	02099038	RS9DE/V-EX	350 x 150 x 280 mm	12,5 kg



Technical features

	RS3	RS9
Swept volume	46 lt/min	180 lt/min
Ultimate vacuum	1x10 ⁻² mbar	1x10 ⁻² mbar
Power supply	220-240/1/50-60	220-240/1/50-60
Nominal power	120 W	370 W
Protection degree	IP54	IP54
Oil charge	300 cc	450 cc
Connections	1/4"NPT F-1/4"SAE (RS3D) 1/4",5/16",3/8"SAE (RS3DEV)	1/4", 5/16", 3/8" SAE



Spare parts

Code	Description
06053010	Vapour discharge hose 5m x 5mm for RS3D
06053012	Vapour discharge hose 5m x 8mm for RS9D

4-WAYS PISTON MANIFOLD WITH PRESSURE GAUGES Ø80 CLASS 1 OIL-FILLED

With regulation screw.

Code	Model	Refrigerants	Dial
04024039	PW4ML80/D6/4/K1	R600a-R290-R1270	D6

Code	Connections	Dimensions	Weight
04024039	3x1/4"SAE + 1x3/8" SAE	220 x 220 x 70 mm	0,9 kg



ACCESS VALVES

Code	Model	Connections
05059049001	LOCK-VALVE 1/4"	1/4" SAE F x 1/4" SAE M

Code	Dimensions	Weight
05059049001	140 x 100 x 20 mm	0,1 kg



ATEX RECOVERY UNITS



NEW



CE ATEX II 3G



NEW DIGITAL DISPLAY

EASYREC-3EX

High performance recovery unit for flammable refrigerants (included R600a and R290)

Unit EASYREC-3EX, specially DESIGNED according to the ATEX directive (CE ATEX II 3G), is suitable to RECOVER FLAMMABLE REFRIGERANTS belonging to the A3 family as well, such as R600a and R290.

- High performances thanks to the powerful 1 HP compressor and to the higher capacity condenser.
- Very compact and light design.
- Ceramic cylinders with carbon fibre seal for superior reliability.
- Large, intuitive heavy-duty digital display that supports the user in the recovery phase with multiple information.
- Multiple selectable recovery modes.
- Automatic stop of the unit at the end of recovery with visual and acoustic indication.
- Shut-off valves that prevent refrigerant spills.
- Self-evacuation (PURGE) device, which allows to change type of refrigerant easily.
- Safety device for maximum pressure.
- Sight-glass and filters included.

Code	Model	Dimensions with pack	Weight with pack
13001030	EASYREC-3EX	380 x 360 x 250 mm	11,90 kg



Technical features

Refrigerant	HC (R600a-R290) CFC-HCFC-HFC-HFO
Power supply	220 - 240V AC 50 - 60 Hz
Motor power	750W
Compressor	Double piston, dry
Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
Operating temperature	0 - 40 °C



Spare parts and accessories



Ref	Code	Model	Description	Dimensions	Weight
A	14015008	MG-111	Filter drier (1/4" SAE M-M)	100 x 40 x 40 mm	0,28 kg
A	14015041	MG-111-A	Filter drier (1/4" SAE M-M) with alumina	100 x 40 x 40 mm	0,28 kg
B	14015013	XH412	"High capacity" filter drier (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
B	14015042	XH412-A	"High capacity" filter drier (1/4" SAE M-M) with alumina	250 x 80 x 80 mm	1,10 kg
C	14020014001	G19020-WIG	Kit 10 gaskets for 1/4" SAE flexible hoses	160 x 90 x 10 mm	0,02 kg
D	06071013003	GYSS/A-4/6/Y	Connection hose for filter 1/4" SAE 150 mm	250 x 50 x 50 mm	0,16 kg
E	13008026	REC026	Sight glass	90 x 40 x 50 mm	0,17 kg

FAN-ATEX

Atex Fan

Essential service accessory to be used with flammable refrigerants.

- Heavy Duty unit certified ATEX ZONE 2 (CE ATEX II 3G Ex ec IIC Gc).
- 5 mt power cable.
- Optimum capacity in compact dimensions.
- Capacity: 25 m³/min.
- Diameter: 254 mm.
- Power: AC 230V-50/60 Hz.



CE ATEX II 3G Ex ec IIC Gc



Code	Model	Dimensions	Weight
14006059	FAN-ATEX	350 x 200 x 350 mm	5 kg

R-ECOPUMP

Manual system for refrigerant and oil transfer

Safe system, not have ignition sources, especially designed for recovery/transfer/charge of flammable refrigerants (A3, A2L).

The system enables to recover the refrigerant minimizing the residual quantities.

Can be used with followings refrigerants and lubricants:

R290 - R600a - R134a - R1234ze - R1234yf - R12 - R22.

Equipped with:

- 2 flexible hoses with valve 1/4" SAE 1500 m, blue and red.

Ref	Code	Model	Description
A	13001026	R-ECOPUMP	Manual system
B	11001124	W2-WR9K/48/5	12.5 lt refillable bottle without refrigerant with liquid and vapour valve

Ref	Code	Dimensions	Weight
A	13001026	580 x 255 x 140 mm	3 kg
B	11001124		5,9 kg



Technical features

Max operating pressure	12 bar
Liquid flow rate (for R134-R1234)	800 g/min*
Vapour flow rate (for R134-R1234)	180 g/min*
Liquid flow rate (for R290-R600)	320 g/min*
Vapour flow rate (for R290-R600)	72 g/min*
Reachable vacuum	- 0,8 bar
Max temperature	40 °C

*The calculation of the flow rate has been made considering an average of 40/45 pumpings per minute.



ATEX II 3G Ex nA IIA T3 Gc



FOX-EX/100

4-way digital manifold (ATEX Zone 2)

The FOX-EX 4-way digital manifold (ATEX Zone 2) is designed specifically to support refrigerators in service operations on systems that use A3 refrigerants such as R290 and R600a.

FOX-EX/100 (ATEX Zone 2), responding to the needs of an evolving market that will see in refrigeration the increasing spread of refrigerants with reduced environmental impact, is extremely flexible thanks to 50 other refrigerants in memory (see list at page 58).

FOX-EX/100 offers all the features of the FOX series.

Features and equipment:

- 4-way piston manifold 3x1/4" (LOW-HIGH-REF) and 1x3/8" (VAC).
- Database with more than 50 refrigerants (CFCs, HCFCs, HFCs, Hydrocarbons and HFOs).
- Maximum operating pressure 56 bar.
- 2 Pressure Transducers (Range -0.99)
- Precision class better than 1% FS.
- 2 K-type temperature probes.
- Ambient temperature probe.
- Pressure test with nitrogen.
- Standard equipment:
- 2 TK109 (3 m) probes.
- Robust and practical case.

Code	Model	Dimensions	Weight
04080014001	FOX-EX/100	310 x 370 x 130 mm	2 Kg



Displayed readings

- Low pressure side (LOW)
- High pressure side (HIGH)
- Temperature T1
- Temperature T2
- Ambient temperature
- Refrigerant saturation temperature (LOW)
- Refrigerant saturation temperature (HIGH)
- Calculating the temperature difference T2 - T1
- Subcooling
- Superheating
- Type of refrigerants



Calibration

Code	Model
09053012	Calibration report ref. Accredia for FOX
14025158	Refrigerating database upgrade



Accessories for FOX-EX/100

Ref	Code	Model	Description
A	05059049001	LOCK-VALVE1/4	Access valve 1/4" SAE F x 1/4" SAE M
A	05059053001	LOCK-VALVE/5-4	Access valve 5/16" SAE F x 1/4" SAE M
B	14020097	G-LV/T-WIG	Kit 5pz seals for LOCK VALVE
C	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool in LOCK-VALVE, EW and hoses
D	06140001	IVSS/6-6/36	Hose IperVAC 900 mm 3/8" SAE



CHARGING OPTIMIZATION DEVICE AND CONTROL OF WORKING PRESSURES

Thanks to its small inner volumes and to its easy regulation, the device allows to optimize the HVAC systems charging process, maximizing the accuracy and reducing at the lowest the quantity of dissipated refrigerant.

Code	Model	Dimensions	Weight
04001082	W1VRML80/D6/4/K1	220 x 240 x 70 mm	0,7 kg



CARTRIDGES, VALVES AND SUPPORTS FOR R600A

Disposable cartridges with refrigerant R600a

Ref	Code	Model	Refrigerant	Refrig. Qty	Connections	Mn. Qty	Weight
A	11001026	BF420/R600	R600a	420 gr	7/16"	12	0,60 kg

Valves and supports for disposable cartridges R600a

Ref	Code	Model	Description	Connections
B	05002003001	BVR-4	Valve	7/16" F x 1/4" SAE M
C	05104038		Support + 90° hose	7/16" F x 1/4" SAE F



CARTRIDGES, VALVES AND SUPPORTS FOR R290

Disposable cartridges with refrigerant R290

Ref	Code	Model	Refrig.	Refrig. Qty	Connections	Mn. Qty	Weight
A	11001085	BF370/R290	R290	370 gr	1/2" 16 ACME SX	12	1,15 kg

Valves and supports for disposable cartridges R290

Ref	Code	Model	Description	Connections
B	05002035001	121 RGAS-4-WIG	Valve	1/2" - 16 ACME SX F x 1/4" SAE M
C	05104052		Support + 90° hose	1/2" - 16 ACME SX F x 1/4" SAE F
D	05059076	LOCK-VALVE/AS-4	Access valve	1/2"-16 ACME SX F x 1/4" SAE M





PIERCING PLIERS AND VALVES



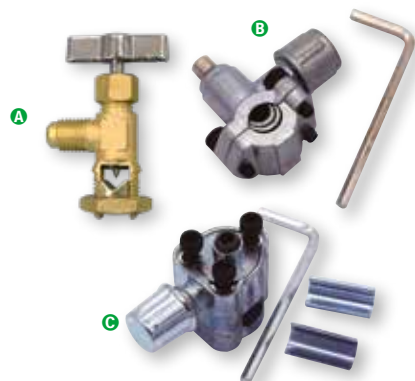
PIERCING PLIERS

Sturdy piercing pliers that allows to have an immediate piercing of the refrigeration system charging hose.

Indispensable for performing vacuum and charging operations especially on HVAC systems with flammable refrigerants (HC - hydrocarbons).

Ref	Code	Model	Connections	Ø tubes mm
A	08006007	PT-109	1/4"SAE	1/4"-1/2" (6-12 mm)
B	08006011	PP-343	1/4"SAE	1/4" (6 mm)

Ref	Code	Dimensions	Weight
A	08006007	300 x 130 x 25 mm	0,26 kg
B	08006011	240 x 75 x 25 mm	0,43 kg



TUBE PIERCING VALVES

Ref	Code	Model	Connections	Ø tubes mm	Mn. Qty
A	05004004	W341	1/4" SAE	4,8 ÷ 9,6	-
B	05004005	WPV31	1/4"SAE	6,3-7,9-9,5-10	10
C	05004002	BPV 21	1/4" SAE	12,7-15,8	8
C	05004003	BPV 31	1/4"SAE	6,3-7,9-9,5	12

Ref	Code	Dimensions	Weight
A	05004004	70 x 30 x 30 mm	0,1 kg
B	05004005	150 x 100 x 65 mm	0,7 kg
C	05004002	135 x 85 x 80 mm	1,0 kg
C	05004003	150 x 100 x 65 mm	1,2 kg



PINCH-OFF PLIERS

Sturdy pinch-off pliers. Allows to deform and close copper pipes, thanks to its particular jaws.

Ref	Code	Model	Ø tubes mm
A	08006001	RR	1/8" - 3/8"
B	08006012	POP-201	1/8" - 3/8"

Ref	Code	Dimensions	Weight
A	08006001	250 x 80 x 20 mm	0,36 kg
B	08006012	190 x 60 x 20 mm	0,35 kg



RATCHET TUBE CUTTER

Code	Model	Sizes
08002020	WR-TC12	from 1/8" to 1/2" (from 3 mm to 12 mm)

Code	Dimensions	Weight
08002020	190 x 100 x 30 mm	0,2 kg

ELD-C EX

Combustible gas leak detector

Ideal for locating leaks in industrial, commercial and residential refrigeration and heating systems, ELD-C EX detects fuel gas concentrations of up to 5 ppm.

- ATEX Zone 2 Certificate (ATEX II 3G Ex nA IIA T3 Gc)
- Self-calibrating and with low maintenance.
- Sensitivity less than 50 ppm. (Propane, Iso-butane, Methane).
- Light and ergonomic.
- Visual and sound loss detection signal.

Gases detected: propane, methane, iso-butane, natural gas, acetone, hesean, acetylene, benzene, butane, ethanol, etylene oxide, gasoline, hydrogen, industrial solvents, methanol, paint thinners, naphtha, GPL, etc.

Code	Model	Dimensions	Weight
09001117	ELD-C EX	310 x 210 x 80 mm	0,90 kg



Technical features

Technology	semi-conductor
Maximum sensitivity	<50 ppm
Calibration	automatic
Warm-up time	from 25 to 90 seconds
Response time	5 seconds
Probe Length	30 cm
Power supply	2x 1,5V AA alkaline batteries
Batteries life	11 hours



ATEX II 3G Ex nA IIA T3 Gc



Spare parts

Code	Model	Description
09050074	ELS-C	Sensing tip for HC
09050109	ELS-A	Sensing tip for AZOIDRO

SURE CHECK

"Sure Check" leak detector

- Gases detected: propane, methane, iso-butane, natural gas, acetone, acetylene.
- Formula for all temperatures: from -48°C to 93°C (from -55°F to 200°F).
- Ultra sensitive; long-lasting bubbles.
- Fluorescent bubbles for better visibility.
- Not corrosive, non-toxic.
- Can be used with refrigerants, natural gas, propane and oxygen.

Code	Model	Quantity	Dimensions	Weight
09001024	32850	473 ml	260 x 70 x 70 mm	0,6 kg



SELF-LOCKING COUPLINGS

NEW

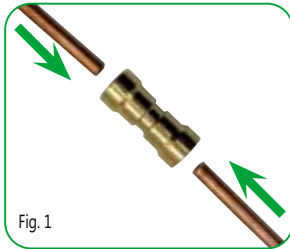


Fig. 1



Fig. 2

IPER-LINK

Self-locking couplings

Wigam's IPER-LINK is the family of SELF-BLOCKING BRASS HERMETIC COUPLINGS for an easy and quick connection of refrigeration hoses that make the operation EASY, QUICK and LOW COST.

Thanks to the IPER-LINK **A** couplings, refrigerant hoses can be hermetically connected WITHOUT BRAZING and WITHOUT SPECIAL TOOLS or SEALANTS (Fig. 1).

Thanks to the IPER-LINK **B** fittings especially threaded on one side, it is also possible to make the connection to the condensing and evaporating units WITHOUT FLANGING (Fig. 2)

Suitable for refrigerants with a working pressure up to 52bar, they have passed the leakage test, the vacuum test and the high pressure test according to the limit values of the EN14903.

The accurate Italian manufacture of IPER-LINK couplings, with especially engineered mechanical seals and gaskets, is synonymous with superior quality (MADE IN ITALY).



BENEFITS

- ✓ HERMETIC CONNECTIONS WITHOUT BRAZING OR SPECIAL TOOLS
- ✓ CONNECTIONS TO THE UNITS WITHOUT FLANGING
- ✓ FOR ALL REFRIGERANTS UP TO 52BAR
- ✓ SIMPLE, QUICK AND LOW-COST
- ✓ SMALL DIMENSIONS
- ✓ QUALITY MADE IN ITALY



Technical features

Refrigerants	CFC-HCFC-HFC-HFO-HC
Max.working pressure	5,2 MPa (52 bar)
Min. pressure	0.01mbar (7.5mTorr)
Operating temperature	-45 ÷ +130°C
Tightness system	Double-tight



Illustrative indications of the coupling installation



Cutting the hose



Inner and outer cleaning of the hose with an inner/outer reamer



Insertion of the hose on the IPER-LINK

For complete instructions, see the user's manual

IPER-LINK - LINEAR HOSE TO HOSE COUPLINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068001	IPER-LINK/S/4-4	Kit 2 linear couplings 1/4"x1/4"	1/4"	1/4"	39		20 x
05068002	IPER-LINK/S/6-6	Kit 2 linear couplings 3/8"x3/8"	3/8"	3/8"	48		10 x
05068003	IPER-LINK/S/8-8	Kit 2 linear couplings 1/2"x1/2"	1/2"	1/2"	50		10 x


IPER-LINK - LINEAR HOSE TO HOSE REDUCED COUPLINGS

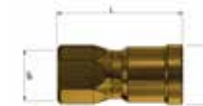
Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068004	IPER-LINK/S/4-6	Kit 2 reduced linear couplings 1/4"x3/8"	1/4"	3/8"	xx		20 x
05068005	IPER-LINK/S/6-8	Kit 2 reduced linear couplings 3/8"x1/2"	3/8"	1/2"	xx		10 x


IPER-LINK - HOSE TO HOSE 90° COUPLINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068006	IPER-LINK/L/4-4	Kit 2 90° couplings 1/4"x1/4"	1/4"	1/4"	22x22		10 x
05068007	IPER-LINK/L/6-6	Kit 2 90° couplings 3/8"x3/8"	3/8"	3/8"	29x29		10 x
05068008	IPER-LINK/L/8-8	Kit 2 90° couplings 1/2"x1/2"	1/2"	1/2"	32x32		10 x


IPER-LINK - HOSE TO UNIT FITTINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068009	IPER-LINK/S/4-4F	Kit 2 fittings 1/4"x1/4"SAE	1/4"	1/4"SAE	34		10 x
05068010	IPER-LINK/S/6-6F	Kit 2 fittings 3/8"x3/8"SAE	3/8"	3/8"SAE	41		10 x
05068011	IPER-LINK/S/8-8F	Kit 2 fittings 1/2"x1/2"SAE	1/2"	1/2"SAE	44		10 x


Spare parts

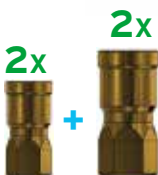
Code	Model	Description	Mn. Qty
14020035	B2-4	Conical copper gasket 1/4"	100 pz.
14020036	B2-6	Conical copper gasket 3/8"	100 pz.
14020044	B2-8	Conical copper gasket 1/2"	100 pz.


IPER-LINK - LINEAR EXTENSION KIT

Code	Model	Description	Kit	
05068022	K-IPER-LINK-JOINT/4-6	Linear extension kit 2 pcs. 1/4"x1/4" + 1 pz. 3/8"x3/8"		10 x
05068023	K-IPER-LINK-JOINT/4-8	Linear extension kit 1 pcs. 1/4"x1/4" + 1 pz. 1/2"x1/2"		10 x


IPER-LINK - SPLIT INSTALLATION KIT

Code	Model	Description	Kit	
05068020	K-IPER-LINK-SPLIT/4-6	Split installation kit 2 pcs. 1/4"x1/4" + 2 pz. 3/8"x3/8"SAE		5 x
05068021	K-IPER-LINK-SPLIT/4-8	Split installation kit 2 pcs. 1/4"x1/4"SAE + 2 pz. 1/2"x1/2"SAE		5 x



Conical brass gaskets included.



EASY-CAP

Self-flaring caps for hermetic closure of the end of the service pipes

EASY CAP is a simple and fast system that allows hermetic sealing of service pipes, without carrying out welding operations.

EASY-CAP is easily applicable only with the use of two simple hexagonal keys.

The result obtained is of the same hermetic level as a weld, but without the disadvantages it entails.

Code	Model	Description	Mn. Qty
05108109	EASY-CAP-1/4-6	Self-flaring caps	500
05108109001	EASY-CAP-1/4-6-10K	Kit 10 pz self-flaring caps	10

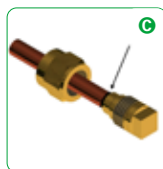
Code	Ø tube	Weight
05108109	1/4" 6mm	40 gr
05108109001	1/4" 6mm	400 gr



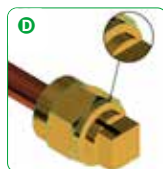
A Insert the tube into the EASY CAP system.



B Tighten the nut until the signal.



C Loosen to check the quality of the work obtained.



D Tighten again with 1/4 of a turn at the end of the work.



INTERNAL CORE FOR HC (R290, R600a)

Code	Model	Description	Mn. Qty
14023023	M1/4"-R290/V	Internal core for HC R290 R600 1/4"	500
05108110001	M1/4"-R290/VK	Kit 10 pz internal core for HC R290 R600 1/4"	10



CAP WITH GASKET FOR HC (R290, R600a)

Code	Model	Description	Mn. Qty
05063055	CP1/4"-R290	Cap for HC service ports R290-R600a equipped with internal core	500
05108111001	CP1/4"-R290K	Kit of 10 pcs of cap for R290-R600a	10



NH₃-AMMONIA
(R717)

 **WIGAM**

FOX



FOX-R717 (NH₃)

4 ways digital manifold for R717 (ammonia)

FOX-R717 is realized on purpose with steel fittings suitable to work with R717 (ammonia).

- 4-way piston manifold with 3 x 1/4" SAE connections (LOW-HIGH-REF) and 1 x 1/4" SAE connection (VAC).
- 4 flexible hoses 1500mm for R717.
- Database with more than 50 refrigerants (CFC, HCFC, HFC, Hydrocarbons and HFO).
- 1 ambient temperature probe.
- 2 temperature probes Type K (Range -99.9 ÷ 200°C), 3 m cable.
- 2 pressure transducers (Range -0.99 ÷ +49.90 bar).
- Max operating pressure 56 bar.
- Class of precision better than 1% FS.
- "ZERO PLUS" recalibration function.
- Temperature range: -99.9 ÷ 400 °C.
- Digital display (with back-lighting).
- Extractable hook to help fixing the manifold in every condition.
- Soft-Touch covering.

Code	Model	Dimensions	Weight
04080001004	FOX-R717	360 x 320 x 120 mm	3 kg

Available also in FOX-ONE version.



Readings displayed

- Low pressure side (LOW)
- High pressure side (HIGH)
- Temperature T1
- Temperature T2
- Ambient temperature
- Refrigerant saturation temperature (LOW)
- Refrigerant saturation temperature (HIGH)
- Calculating the temperature difference (T2-T1)
- Subcooling
- Superheating
- Refrigerants type



Calibration

Code	Model
09053012	Calibration report ref. Accredia for FOX
14025158	Refrigerant database update



Spare parts

Rif	Code	Model	Description
A	04111015	PWP-A	Complete steel piston
B	14021023001	PWKG-A L	LOW steel knob kit
B	14021024001	PWKG-A H	HIGH steel knob kit
B	14021025001	PWKG-A R	REF steel knob kit
B	14021026001	PWKG-A V	VAC steel knob kit
	06001183	HDSS/4-4/60-R717	Flexible hoses 1500mm for R717
	09012013	TK 109	Universal probe
	09012037	TK 109/STRIP	Universal probe with strip
	09012019	TK 104	Ambient probe
	09012020	TK 105	Surface probe
	09012016	TK 106	Insertion probe
	09012017	TK 107	Camp-on probe



RS9DE-NH₃

High vacuum pump for NH₃
Especially designed to work with NH3 Ammonia (R717).

- Solenoid valve on the suction.
- Dual fitting on the suction side.
- Equipped with 5m hose for vapour discharge.

Code	Model	Dimensions	Weight
02099039	RS9DE-NH3	350 x 150 x 280 mm	12,5 kg


Technical features

Swept volume	180 lt/min
Ultimate vacuum	1x10 ⁻² mbar
Power supply	230
Nominal power	370 W
Protection degree	IP54
Oil charge	450 cc
Connections	2x1/4"SAE


Spare parts

Code	Descrizione
06053012	Vapour discharge hose 5m x 8mm

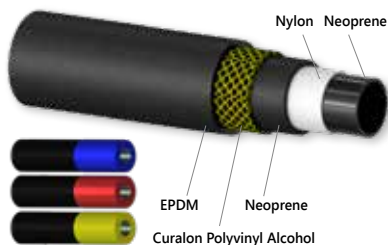

Spare parts and accessories

VACUUM PUMP OIL

Code	Model	Viscosity	Capacity	Type	Mn. Qty	Dimensions	Weight
12002003	K1L	46	1000 cc	Mineral	12	110 x 160 x 250 mm	1 kg
12002017	W68	68	1000 cc	Ester	9	50 x 50 x 70 mm	1 kg

To maintain the performances of the vacuum pump, we recommend changing the oil after each use.





"HD" SERVICE HOSE

Reinforced HEAVY DUTY hose with low permeability barrier and wear-resistant coating SAE J2196 - SAE J2888 - SAE J2064

In addition to the model mentioned below, hoses of any length can be delivered.



Technical features

In accordance with	SAE J2196 - SAE J2888 - SAE J2064
Working pressure	5,2 MPa
Bursting pressure	27,6 MPa
Internal d.	1/4"
Working temperature	-30÷+125°C



Kit of 3 HD service hoses for NH₃ (R717) with straight x straight connections, in a plastic bag

Code	Model	Length	Connections	Dimensions	Weight
06010023	3HDSS/4-4/60//R717	1500 mm	1/4"SAE	250 x 250 x 50 mm	0,8 kg

PTFE SERVICE HOSES

High pressure PTFE hoses with stainless braid

The stainless steel metallic braid guarantees high performances at high pressures. The stainless steel allow to work in acid environments.

These features make these hoses suitable for R717 (NH₃-Ammonia) applications.

In addition to she model mentioned below, hoses of any length can be delivered.



Technical features

Outside diameter	7,5 mm - 8,6 mm
Inner diameter	5 mm - 3.16"
Core material	PTFE compatible with refrigerants
Outer covering	AISI 304 steel braid
Max operating pressure	200 bar
Working temperature	-60 ÷ +260°C
Min. radius of curvature	64 mm
Weight	94 g/m



Kit of 3 PTFE service hoses for NH₃ (R717) with straight x straight connections, in a plastic bag

Code	Model	Length	Connections	Dimensions	Weight
06102005	3NHSS/4-4/60	1500 mm	1/4"SAE	430 x 230 x 20 mm	0,5 kg



INSTRUMENTS



ELECTRONIC SCALES COMPARATIVE TABLE

	EXACTA MAXI	PRATIKA WL 100-05	PRATIKA-PLUS 100-05	PRATIKA 100-05	W8025
					
Max capacity	100 kg	100 kg	100 kg	100 kg	5 kg
Resolution	± 2 g up to 9999 g (capacity 30 kg) ± 10 g (capacity 100 kg)	5 g	5 g	5 g	1 g
Accuracy	± 5 g up to 30 kg ± 10 g/f > 30 kg	0,5% value	0,5% value	0,5% value	1 g
Programmable charge and recovery	✓	-	✓	-	-
Scale pan dimensions	300 x 300 mm	270 x 270 mm	230 x 230 mm	230 x 230 mm	Ø 140 mm
Measuring units	kg	kg, lbs	kg, lbs/oz	kg, lbs/oz	kg, lbs
Operating temperature	0-50 °C	0-45°C	0-45°C	0-45°C	0-45°C
Auto power off	-	30 min	1,5 min	1,5 min	3 min
Power supply	230/1/50-60 Hz	8 x 1,5V AA alkaline batteries	4 x 1,5V AA alkaline batteries	1 x 9V alkaline batteries	2 x 1,5V AA alkaline batteries
Dimensions	460 x 350 x 170 mm	430 x 300 x 85 mm	380 x 300 x 80 mm	380 x 300 x 80 mm	235 x 130 x 40 mm
Weight	8,5 kg	2,5 kg	3,70 kg	3,10 kg	0,5 kg



W8025

Electronic scale up to 5 kg

Code	Model	Dimensions	Weight
09013018	W8025	235 x 130 x 40 mm	0,5 kg



Technical features

Max capacity	5 kg
Resolution	1 g
Accuracy	1 g
Scale pan dimensions	Ø 140 mm
Measuring units	kg, lbs
Power supply	2x1,5 AA alkaline batteries

PRATIKA 100-05

Electronic scale up to 100 kg

Code	Model	Dimensions	Weight
09013019	PRATIKA 100-05	380 x 300 x 80 mm	3,10 kg


Technical features

Max capacity	100 kg
Resolution	5 g
Accuracy	0,5 % value
Scale pan dimensions	230 x 230 mm
Measuring units	kg, lbs/oz
Operating temperature	0° - 45° C
Auto power off	1.5 min
Power supply	9V alkaline batteries


Calibration

Code	Model	Description
09053013		Calibration report ref. Accredia for scale
09013019001	PRATIKA 100-05/RT	Scale with calibration report

PRATIKA-PLUS 100-05

Programmable electronic scale up to 100 kg

Code	Model	Dimensions	Weight
09013020	PRATIKA-PLUS 100-05	380 x 300 x 80 mm	3,70 kg


Technical features

Max capacity	100 kg
Resolution	5 g
Accuracy	0,5 % value
Scale pan dimensions	230 x 230 mm
Measuring units	kg, lbs/oz
Operating temperature	0° - 45° C
Auto power off	1.5 min
Power supply	4x1,5 AA


Calibration

Code	Model	Description
09053013		Calibration report ref. Accredia for scale
09013020001	PRATIKA-PLUS 100-05/RT	Scale with calibration report

ELECTRONIC SCALES

PLATFORM
300 X 300 MM



EXACTA-MAXI

Programmable electronic scale up to 100 kg

- Display reading.
- Very accurate charges and recoveries, programmable by microprocessor.
- Pre-set data storage in case of power supply interruption.
- Charge and discharge repeatability function.
- Suitable to work with all refrigerants (R410A INCLUDED).
- Strong manufacture for small and medium productions.
- Compact and handy.

Code	Model	Dimensions	Weight
09013021	EXACTA-MAXI	460 x 350 x 170 mm	8,5 kg
09013022	EXACTA-MAXI-CO2	460 x 350 x 170 mm	8,5 kg



Technical features

Max capacity	100 kg
Resolution	± 2 g up to 9.999 gr (capacity 30 kg)
Accuracy	± 5 g up to 30 kg ± 10 g/f > di 30 kg
Scale pan dimensions	300 x 300 mm
Measuring units	kg
Operating temperature	0 - 50 °C
Power supply	230/1/50-60Hz



PRATIKA-WL 100-05

Wireless electronic scale up to 100 kg

- WIRELESS technology.
- Oversized scale pan 270x270mm.
- Memory function for bottle replacement.
- Acoustic signal on reaching the desired value.

Code	Model	Dimensions	Weight
09013026	PRATIKA-WL 100-05	430 x 300 x 85 mm	2,5 kg



Technical features

Max capacity	100 kg
Resolution	5 g
Accuracy	0,5 % value
Scale pan dimensions	270 x 270 mm
Measuring units	kg, lbs
Operating temperature	0 - 45 °C
Auto power off	30 min
Power supply	8 x1,5 AAA
Batteries life	50 hours in continuous



Calibration

Code	Model	Description
09053013		Calibration report ref. Accredia for scale
09013026001	PRATIKA-WL100-05/RT	Scale with calibration report

	VOYAGER-IR	VOYAGER	ELD-H	VOYAGER-R744	ELD-C EX
					
HFC, CFC, HCFC (INCLUDED R32)	✓	✓	✓	-	-
HFO (es. R1234yf, R1234ze)	✓	✓	✓	-	-
HC (CH4, R290, R600)	-	✓	-	-	✓
R744 (CO2)	-	-	-	✓	-
Azidiro (N2-H2)	-	✓	-	-	-
Technology	Infrared	Semi-conductor	Negative crown	Infrared	Semi-conductor
Maximum sensitivity	4 g/year	3 g/year	3 g/year	6 g/year	<50 ppm
Automatic calibration	✓	✓	✓	✓	✓
Audible	✓	✓	✓	✓	✓
Visual display	LCD display	LCD display	LED tricolor	LCD display	LED tricolor
Sensor life	10 years	1 year	30 hours	10 years	1 year
Warm-up time	<30 sec	<60 sec	<2 sec	<30 sec	from 25 to 90 sec
Response time	<3 sec	<3 sec	instant	<3 sec	5 sec
Compliance CE EN14624	✓	✓	✓	✓	-
Probe Length	40 cm	40 cm	30 cm	40 cm	30 cm
Power supply	Rechargeable lithium	Rechargeable lithium	2x 1.5V AA alkaline batteries	Rechargeable lithium	2x1.5V AA Alkaline batteries
Batteries life	6 hours	6 hours	40 hours	6 hours	11 hours

INFRARED LEAK DETECTORS



VOYAGER



VOYAGER-IR

Infrared leak detector for HVAC and A/C

VOYAGER-IR offers you maximum reliability and accuracy in leak detection.

leak detection. With its infrared sensor, it offers the best insensitivity to false alarms and also incomparable longevity.

VOYAGER-IR detects all halogenated refrigerants HFC, CFC, HCFC, HFOs and their mixtures including A2L refrigerants such as R32 or R1234yf.

The sturdy construction with unique ergonomic design, the innovative large LCD display and the rechargeable lithium-ion batteries make the infrared leak detector not only extremely reliable, but also very intuitive and easy to use.

- Sealed sensor: the sensor doesn't "touch" refrigerant as it passes through the instrument.
 - Doesn't trigger on high concentrations, liquid or moisture like other types of detectors.
 - Senses change in refrigerant levels, working even in contaminated environments.
- VOYAGER-IR designed for HVAC e A/C:
- 3 Sensitivity Levels (4gr/yr).
 - Audible alarm and optimized graphics on large LCD screen.
 - High quality sturdy probe.
 - Peak / Mute buttons and connection for earphone.
 - Ergonomic design.
 - Sturdy case.
 - Complies with EN14624:2012, SAE J1627, SAE J2791, SAE J2913.

Code	Model	Dimensions	Weight
09001116	VOYAGER-IR	330 x 240 x 70 mm	1,2 kg



Detects all halogenated refrigerants, including:

CFC	R12-R11-R500-R503
HCFC	R22-R123-R124-R502
HFC	R134a-R404A-R125-R407C-R507-R410A-R32
HFO	R1234yf and R1234ze



Technical features

Tecnology	infrared
Maximum sensitivity	4 g/year
Calibration	automatic
Warm-up time	<30 seconds
Response time	< 3 seconds
Operating temperature	-20°C +60°C
Probe Length	40 cm
Power supply	rechargeable lithium-ion battery
Batteries life	6 hours continue
Compliance	CE n. 1516 2007



CE N 1516/2007: METHODS OF DIRECT MEASUREMENT

ARTICLE 6

Gas detection devices referred to in paragraph 1(a) shall be checked every 12 months to ensure their proper functioning. The sensitivity of portable gas detection devices shall be at least five grams per year.



Calibration

Code	Model	Description
09053009005		Calibration report for leak detector
09001116001	VOYAGER IR/RT	Leak detector with calibration report

VOYAGER

Semi-conductor electronic leak detector

With its new heated diode sensor, VOYAGER combines multiple instruments in a single ally ready to support you in the different needs and detection strategies you decide to apply.

It detects efficiently all HFC, CFC, HCFC, HFO halogenated refrigerants and their mixtures (including A2 such as R32 or R1234yf).

It also extends its versatility by detecting HC hydrocarbons (such as R290 and R600a) and the AZOIDRO mixture (95% Nitrogen-5% Hydrogen) designed specifically for pressurisation for leak detection, without the need to purchase an additional sensing element.

The sensing element protection chamber, the lithium-ion battery and the new robust ergonomic design with large colour LCD screen further enhance this ideal leak detection instrument for maintenance and repair with the readiness and versatility of the new heated diode sensor.

- Multiple sensitivity levels (3gr/year).
- Sound alarm and optimized graphics on LCD screen.
- "Mute" button and headphone connection.
- Peak button.
- Ergonomic handle.
- High quality sturdy probe.
- Complies with EN14624: 2012, SAE J1627.

Code	Model	Dimensions	Weight
09001115	VOYAGER	330 x 240 x 70 mm	1,0 kg

Detects all halogenated refrigerants, including:

CFC	R12 - R11 - R500 - R503
HCFC	R22 - R123 - R124 - R502
HFC	R134a - R404A - R125 - R407C - R507 - R410A - R32
HFO	R1234yf - R1234ze
HC	R600a - R290
N2-H2	Azoidro

CE N 1516/2007: METHODS OF DIRECT MEASUREMENT

ARTICLE 6

Gas detection devices referred to in paragraph 1(a) shall be checked every 12 months to ensure their proper functioning. The sensitivity of portable gas detection devices shall be at least five grams per year.

Calibration

Code	Model	Description
09053009005		Calibration report for leak detector
09001115001	VOYAGER/RT	Leak detector with calibration report

Spare parts

Code	Model	Description
09050111	V-EL1	Sensing tip for VOYAGER
09050117	V-B1	Lithium battery for VOYAGER- VOYAGER-IR
09050121	V-F3	Kit of filters for VOYAGER-VOYAGER-IR (3 pcs)



VOYAGER



Technical features

Technology	Semi-conductor
Maximum sensitivity	3 g/year
Calibration	automatic
Warm-up time	<60 seconds
Response time	<3 seconds
Probe Length	40 cm
Power supply	rechargeable lithium-ion battery
Batteries life	6 hours continue
Compliance	CE n. 1516 2007

ELECTRONIC LEAK DETECTOR



ELD-H

Electronic leak detector

- Lightweight and ergonomic design.
- Both visual and audible leak detection signal.
- Simple, one button operation.
- Two sensitivity modes.
- Low battery indicator.
- Automatic power-off to conserve battery life.



Code	Model	Dimensions	Weight
09001081	ELD-H	310 x 210 x 80 mm	0,9 kg



Detects ALL halogenated refrigerants, including:

CFC	R12-R11-R500-R503
HCFC	R22-R123-R124-R502
HFC	R134A-R404A-R125-R407C-R507-R410A-R32
HFO	R1234yf and R1234ze



CE N 1516/2007: METHODS OF DIRECT MEASUREMENT

ARTICLE 6

Gas detection devices referred to in paragraph 1(a) shall be checked every 12 months to ensure their proper functioning. The sensitivity of portable gas detection devices shall be at least five grams per year.



Technical features

Technology	Negative crown
Maximum sensitivity	3 g/year
Calibration	automatic
Warm-up time	<2 seconds
Response time	instant
Probe Length	30 cm
Power supply	2x 1,5V alkaline batteries AA
Batteries life	40 hours
Compliance	CE n. 1516 2007



Calibration

Code	Model	Description
09053009005		Calibration report for leak detector
09001081001	ELD-H/RT	Leak detector with calibration report



Spare parts

Code	Model	Description
09050073	ELS-H	Sensing tip for ELD-H

ELD-C EX

Combustible gas leak detector

Ideal for locating leaks in industrial, commercial and residential refrigeration and heating systems, ELD-C EX detects fuel gas concentrations of up to 5 ppm.

- ATEX Zone 2 Certificate (ATEX II 3G Ex nA IIA T3 Gc).
- Self-calibrating and with low maintenance.
- Sensitivity less than 50 ppm. (Propane, Iso-butane, Methane).
- Light and ergonomic.
- Visual and sound loss detection signal.

Gases detected: propane, methane, iso-butane, natural gas, acetone, hesean, acetylene, benzene, butane, ethanol, ethylene oxide, gasoline, hydrogen, industrial solvents, methanol, paint thinners, naphtha, etc.

Code	Model	Dimensions	Weight
09001117	ELD-C EX	310 x 210 x 80 mm	0,90 kg



Technical features

Technology	semi-conductor
Maximum sensitivity	<50 ppm
Calibration	automatic
Warm-up time	from 25 to 90 seconds
Response time	5 seconds
Probe Length	30 cm
Power supply	2x 1,5V AA alkaline batteries
Batteries life	11 hours



Spare parts

Code	Model	Description
09050074	ELS-C	Sensing tip for HC
09050109	ELS-A	Sensing tip for AZOIDRO



ATEX II 3G Ex nA IIA T3 Gc






R744

VOYAGER-R744

Infrared leak detector for CO₂ (R744)

VOYAGER-R744 is equipped with an infrared sensor specifically for CO₂ (R744) that offers superior accuracy, insensitivity to false alarms and extended service life.

The robust construction with unique ergonomic design, the innovative large LCD display and the rechargeable lithium-ion batteries make the infrared leak detector not only extremely reliable, but also very intuitive and easy to use.

- 3 sensitivity levels (L/M/H).
- Audible alarm and optimised graphics on large LCD screen.
- High-quality, durable double-barrier probe.
- "Mute" button and connection for headphones.
- Peak storage function.
- Automatic calibration.
- Ergonomic grip.
- Sturdy case with battery charger and 5 spare tips with filters.

Code	Model	Dimensions	Weight
09001119	VOYAGER-R744	330 x 240 x 70 mm	1,2 kg



Technical features

Technology	Infrared
Maximum sensitivity	<6 g/year
Calibration	Automatic
Warm-up time	<30 seconds
Response time	<3 seconds
Probe length	40 cm
Power supply	Rechargeable lithium-ion battery
Batteries life	8 consecutive hours
Compliance	CE, SAE J1627, EN14624



RL-134/H2N2 • RL410/32 • RL-290
Reference leak

- It checks the efficiency of your electronic leak detector.
- Calibrated at 5g/year for R134a or R410A.
- Suitable for standard refrigerant cylinders (1/4"SAE connection).
- No expiry date.

The RL serie reference leak allows to check the efficiency of your leak detector at regular intervals even during a leak detection operation.

This helps to identify quickly any problems to the sensor or the batteries that could affect the performances of the instrument.

When the refrigerant leak is connected to a R134a or R410A refrigerant cylinder, it produces a 5g/year leakage. If the leak detector "sniffs" the leakage, then it is considered suitable for use.

The RL serie reference leak does not allow to issue calibration reports and/or certificates and is not certifiable itself.

Is my leak detector "working"?
The RL serie reference leak answers your question!
Easy checking and immediate answer


Ref	Code	Model	Description
A	09050099	RL-134/H2N2	Reference leak for R134a and Azoidro- 5g/year
A	09050100	RL-410/32	Reference leak for R410A/R32 - 5g/year
A	09050113	RL-290	Reference leak for R290 - 5g/year
B	11001090	WR1K/134	Cartridge R134a - 900g
B	11001088	WR1K/410	Cartridge R410A - 800g
C	05001003001	121-RG-4	Valve for WR1/134 1/4"F swivel x 1/4"M
C	05001033001	121-RG5-4	Valve for WR1/410 5/16"F swivel x 1/4"M

Ref	Code	Dimensions	Weight
A	09050099	55 x 25 x 25 mm	0,03 kg
A	09050100	55 x 25 x 25 mm	0,03 kg
A	09050113	55 x 25 x 25 mm	0,03 kg
B	11001090	240 x 80 x 80 mm	2 kg
B	11001088	240 x 80 x 80 mm	2 kg
C	05001003001	140 x 100 x 20 mm	0,1 kg
C	05001033001	140 x 100 x 20 mm	0,1 kg

For use with R134a, R410A and R32


A Connect the reference leak to the cylinder valve (closed). Bring the leak detector sensor near to the white positioner.



B Open the cylinder valve.



C If the performances of the leak detector are OK (5g/year), the instrument will answer within a few seconds.

For use with AZOIDRO

Connect to an Azoidro cartridge through a pressure regulator calibrated at 9 bar.

SPRAY LEAK DETECTOR



GAS-CONTROL

Spray leak detector

It is designed to test the hermetic sealing of systems using any type of gas. The liquid has a special formula against corrosion if used on copper, brass and steel. In conformity with DIN EN 14291.

It reveals any leak forming bubbles of foam.

Code	Model	Capacity	Min. Qty	Dimensions	Weight
09001080	GAS CONTROL	400 ml	10	340 x 140 x 200 mm	4,8 kg

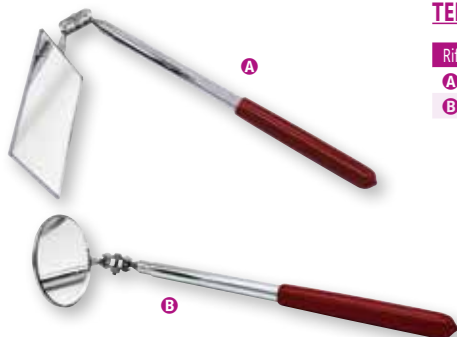


32850 SURE CHECK

"Sure Check" leak detector

- Gases detected: propane, methane, iso-butane, natural gas, acetone, acetylene.
- Formula for all temperatures: from -48°C to 93°C (from -55°F to 200°F).
- Ultra sensitive; long-lasting bubbles.
- Fluorescent bubbles for better visibility.
- Not corrosive, non-toxic.
- Can be used with refrigerants, natural gas, propane and oxygen.

Code	Model	Capacity	Dimensions	Weight
09001024	32850	473 ml	260 x 70 x 70 mm	0,6 kg



TELESCOPIC MIRRORS

Rif	Code	Model	Description	Dimensions	Weight
A	08008052	WSR-2149	5 x 9 cm	410 x 80 x 30 mm	0,15 kg
B	08008024	WSR-2146	Ø5 da 21,5 a 45 mm	410 x 80 x 30 mm	0,15 kg

LEAK-STOP

Stop leak system for HVAC systems

The easy and fast solution to seal with just one application all the leaks that are difficult to detect and reach with conventional tools.

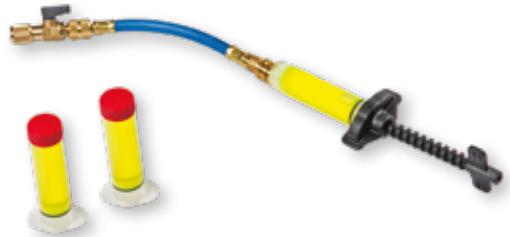
- Usable with all refrigerants.
- Compatible with 100% of the systems on the market.
- Complete compatibility with gaskets and seals of the HVAC system.

Dotazione standard:

- 1 injection system.
- 2 LEAK-STOP cartridges (30 ml).
- 1 flexible hose with ballvalve.

Code	Model
12001047	LEAK-STOP-HVAC

Code	Dimensions	Weight
12001047	240 x 145 x 40 mm	0,4 kg



2 pcs of 30 ml cartridges INCLUDED in the kit



Suggested quantities

HVAC system refrigerating capacity	Suggested fluid quantity
< 18000 BTUH 300ml oil	30 ml
18000 to 60000 BTU/H 900ml oil	60 ml
60000 to 120000 BTU/H >900ml oil	30ml every 600 ml of oil
>120000 BTU/H	30ml every 1200 ml of oil



Spare parts and accessories



Rif	Code	Model	Description	Capacity	Connections
A	12001048	K-LS	Kit of 2 cartridges	30 ml	-
B	05059023001	RG180/5-4	Straight adapter	-	5/16" SAE F swivel x 1/4" SAE M
C	13005067	UV-CLEAN250	Additive cleaning spray	250 ml	

UV LEAK DETECTION



TORCH-PRO-60-KIT

Leak detection kit with UV lamp

Standard equipment:

- 1 Lamp TORCH-PRO high performance 365nm with glasses.
- 1 Plastic injector.
- 1 Flexible hose 1/4" SAE with no return valve.
- 1 RG180/5-4 Adapter 5/16" SAE F swivel x 1/4" SAE M.
- 1 Dye bellow cartridge 60ml (10 doses).
- 1 Detergent 250 ml.
- 1 Battery charger.
- 1 Rechargeable battery.

Code	Model	Description
09001110	TORCH-PRO-60-KIT/HVAC	Complete kit

Code	Dimensions	Weight
09001110	380 x 300 x 100 mm	1,5 kg



Spare parts and accessories



Rif	Code	Model	Description	Min. Pack	Dimensions	Weight
A	09001108	TORCH-PRO	Lamp PRO-UV high performance 365nm – with glasses		80 x 190 x 70 mm	0,5 kg
B	14028028	BELLOW-IN36	Plastic injector for bellow cartridges		190 x 87 Ø mm	0,3 kg
C	12001058	UV-BELLOW-60	Dye bellow cartridge 60ml (10 doses)		110 x 36 Ø mm	0,07 kg
D	12099008	BELLOW-HOSE-HRV	1/4 adapter hose with no return valve	6pcs.	-	-
	05059023001	RG180/5-4	Adapter 5/16" SAE F swivel x 1/4" SAE M		-	-
E	13005067	UV-CLEAN250	Detergent 250 ml		190 x 87 Ø mm	0,27 kg
F	14029066	VP/TORCH	Plastic case for TORCH-PRO		380 x 300 x 100 mm	-

OJ

Aluminium injectors

Code	Model	Description
14028005	OJ/4	1/4"SAE aluminium injectors
14028006	OJ/6	3/8"SAE aluminium injectors
14028007	OJ/A	1/2"16ACME aluminium injectors


UV-CAN50

Universal dye

Code	Model	Capacity	Dimensions	Weight
12001057	UV-CAN250	250 ml	90 x 180 x 40 mm	0,27 kg


UV-CLEAN250

Dye cleaner

The citrus based biodegradable cleaner which has been specially formulated to remove spillage and residues of additives, it is also very effective on greases, adhesives, dirt, tar and gummy deposits. UV-CLEAN250 is harmless to most surfaces, and is safe to use on all metals.

Code	Model	Quantity	Dimensions	Weight
13005067	UV-CLEAN250	250 ml	190 x 87 Ø mm	0,27 kg



THERMOMETERS COMPARATIVE TABLE

	TIR-50C	SA 880 SSX	TFC-502	TFC-201	THA-261
					
Thermometer	✓	✓	✓	✓	✓
Hygrometer	no	no	no	no	yes
Measurement technology	infrared	contact	contact (2 probes)	contact (2 probes)	contact
Measured distance ratio	16:1	-	-	-	-
Emissivity	Adjustable (0,1 - 1,0)	-	-	-	-
Supported probes	-	-	K, J	K	-
Measuring units	°C, °F	°C, °F	°C, °F	°C, °F	°C, °F
Measurement range	-50 a 800 °C	-50 a 300 °C	-200 a 1375 °C (K)	-200 a 1375 °C (K)	-20 a 60 °C
Resolution	1 °C	0,1°C (19,9 a 199,9°C) 1°C (altro)	0,1 °C	0,1°C (-100 a 1370°C) 1°C (-100 a -200°C)	0,1°C
Accuracy	±2,5% reading	±1°C (-20 a 80°C) ±5°C (altro)	±0,05% reading (K)	±0,05% reading (K)	±0,5% °C (0 to 45 °C)
Range measurement Rh%	-	-	-	-	0 - 100
Resolution Rh%	-	-	-	-	0,1%
Accuracy Rh%	-	-	-	-	±2,5% °C to 25 °C (10% to 90% Rh)
Power supply	1x9V alkaline batteries	1xDC1,5V alkaline batteries	1x9V alkaline batteries	2x1,5V alkaline batteries	2x1,5V alkaline batteries
Dimensions	190 x 90 x 60 mm	107 x 60 x 20 mm	200 x 120 x 60 mm	190 x 60 x 50 mm	190 x 60 x 50 mm
Weight	0,16 kg	0,11 kg	0,5 kg	0,2 kg	0,2 kg

TIR-50C

Infrared thermometers

- Non-contact measurement with laser pointer.
- Wide range of applications: checking foodstuffs on stands, pallets or inside warehouses and means of transport, checking of temperature in inaccessible or dangerous places.
- Auto Power off after 4 seconds non-operation.
- Adjustable emissivity (0.1 - 1.0).
- Backlit digital display for use in dark areas.
- Hold data.
- Laser class II.
- °C/F switchable.
- Battery indicator.

Code	Model	Dimensions	Weight
09011060	TIR-50C	190 x 90 x 60 mm	0,16 kg



Technical features

Measuring range	-50 to 800°C
Distance	spot Ratio 16:1
Accuracy	±2,5% reading
Repeatability	1% reading or 1°C
Response time	500 msec
Operating environment	0°C to 60°C
Storage temperature	-20°C to +60°C (battery-free)
Resolution	1 °C
Batteries	9 Volt x 1
Batteries life	12 hours
laser sight	yes



SA 880 SSX

Digital thermometer

Code	Model	Dimensions	Weight
09011031	SA 880 SSX	107 x 60 x 20 mm	0,11 kg



Technical features

Measuring range	-50 to +300°C
Probe	100 mm. stainless steel
Resolution	0,1°C (-19,9°C to 199,9°C)
Measuring units	°C/°F
High or low temperature programmable	yes



DIGITAL DUAL INPUT THERMOMETER



TFC-502

Digital dual input thermometer

Code	Model	Dimensions	Weight
09011021	TFC-502	200 x 120 x 60 mm	0,5 kg



Technical features

Measuring range (Probe K)	-200 °C; 1375°C
Measuring range (Probe J)	-200°C to 1050°C
Supported probes	K - J
Resolution	0,1°C
Accuracy	+/-0,05% rdg+0,3°C
Measuring units	°C / °F



Calibration

Code	Model	Description
09053006		Calibration report ref. Accredia for thermometers with 2 calibrated probes
09011021001	TFC-502/RT	Thermometer with calibration report



TFC-201

Digital dual input thermometer

Code	Model	Dimensions	Weight
09011053	TFC-201	190 x 60 x 50 mm	0,2 kg



Technical features

Measuring range (Probe K)	-200 °C to 1375°C
Supported probes	K
Resolution	0,1°C (-100°C to 1375°C)
Accuracy	+/-0,05% rdg+0,3°C
Measuring units	°C / °F



Calibration

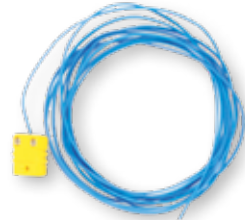
Code	Model	Description
09053006		Calibration report ref. Accredia for thermometers with 2 calibrated probes

TK109 Fiber glass insulated thermocouple

Code	Model	Measuring range	Cable length	Dimensions	Weight
09012013	TK109	-50 to +200°C	3 m	100 x 80 x 10 mm	0,02 kg


Calibration

Code	Description
09053005	Calibration report ref. Accredia for TK109

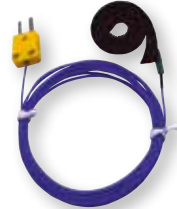

TK109-STRIP Fiber glass insulated thermocouple with strip

Code	Model	Measuring range	Cable length	Dimensions	Weight
09012037	TK109-STRIP	-50 to +200°C	3 m	100 x 80 x 10 mm	0,02 kg


Calibration

Code	Description
09053005	Calibration report ref. Accredia for TK109-STRIP

Strip suitable for hoses max. diameter 80 mm


TK104 Fast reacting probe for air and gases

Code	Model	Measuring range	Cable length	Dimensions	Weight
09012019	TK104	-50 to +800°C	27 cm	380 x 100 x 10 mm	0,12 kg


Calibration

Code	Description
09053001	Calibration report ref. Accredia for TK104


TK106 Insertion probe for food-stuff, plastic, rubber etc.

Code	Model	Measuring range	Cable length	Dimensions	Weight
09012016	TK106	-50 to +700°C	27 cm	380 x 100 x 10 mm	0,09 kg


Calibration

Code	Description
09053003	Calibration report ref. Accredia for TK106


TK105 Surface probe

Code	Model	Measuring range	Cable length	Dimensions	Weight
09012020	TK105	-50 to +400°C	27 cm	380 x 100 x 10 mm	0,14 kg


Calibration

Code	Description
09053002	Calibration report ref. Accredia for TK105


TK107 Clamp on probe for measurements on pipes

Code	Model	Measuring range	Cable length	Dimensions	Weight
09012017	TK107	-50 to +120°C	54 cm	230 x 100 x 40 mm	0,16 kg


Calibration

Code	Description
09053004	Calibration report ref. Accredia for TK107



Max opening 36 mm

THERMOMETERS

ST09 /ST10

Digital thermometer



A



B

Rif	Code	Model	Dimensions	Weight
A	09011023	ST09	210 x 80 x 20 mm	0,04 kg
B	09011050	ST10	240 x 70 x 20 mm	0,04 kg



Technical features

	ST09	ST10
Temperature range	-40 to 200°C	-50 to 300°C
Temperature resolution	0,1°C	1°C (>205°C) 0,1°C (others)
Power supply	DC 1,5V LR44	DC 1,5V LR44
Dimensions	20 x 150 mm	20 x 207 mm



EWT300

Digital LCD thermometer

Code	Model	Dimensions	Weight
09011033	EWT300	60 x 70 x 20 mm	0,04 kg



Technical features

Temperature range	-50 to 70°C
Temperature resolution	0.1°C
Probe	1 m
Power supply	DC 1,5V LR44
Dimensions	48 x 48 x 16 mm



F87 R100

Thermometer with reversible flange

Code	Model	Flange diameter	Measuring range
09011019	F87 R100	100 mm	-40 to +40°C

Code	Dimensions	Weight
09011019	100 x 100 x 50 mm	0,08 kg



ROF 88

Telethermometer

Code	Model	Measuring range	Dimensions	Weight
09011008	ROF 88	-40 to +40°C	100 x 100 x 30 mm	0,06 kg

MINIDISQUES

JRI remote temperature recorders

- Small size makes recorder suitable for panel mounting.
- Continuous 7 days' recording on Ø 125 mm chart.
- Stainless steel sensor with 3 mt long capillary tube.
- Complete with wall - mounting bracket, door panel and key lock and 100 recording charts.
- Quartz chart movement, power supply 1 x 1.5V battery; average battery life is 6 months (at 20°C).



DESIGNED IN CONFORMITY WITH EUROPEAN DIRECTIVES 92/1, 93/43, NF E 18-150 AND EN 12830 STANDARD



Single probe temperature recorders

Code	Model	Measuring range	Recording period	Recording chart	Fiber pen	Dimensions	Weight
09008005	13052.11	-35 to +15 °C	7 days*	D3169	97601	230 x 200 x 170 mm	1,5 kg
09008011	13023.11	-10 to +40 °C	7 days*	D3174	97601	230 x 200 x 170 mm	1,5 kg
09008008	13019.11	-100 to +50 °C	7 days	D3230	97601	230 x 200 x 170 mm	1,5 kg

* The recording period can be changed in 24h just by moving the lever on the movement and placing a 24h chart.
Other models with different measuring ranges are available on request.



Spare parts

Code	Model	Description	Measuring range	Recording period	Min. Qty
09009001	D3169	Recording chart	-35 to +15 °C	7 days	100
09009003	D3174	Recording chart	-10 to +40 °C	7 days	100
09009002	D3230	Recording chart	-100 to +50 °C	7 days	100
09010001	97601	Fiber pen	-	-	-
09052001	1T/7	Quartz movement motor	-	-	-

THERMO-HYGROANEMOMETER



THA-261

Digital thermo-hygroanemometer

Code	Model	Dimensions	Weight
09011057	THA-261	190 x 60 x 50 mm	0,2 kg



Temperature

Measuring range	-20°C to 60°C
Resolution	0,1°C
Accuracy	±0.5° from 0°C to 45°C
Measuring units	°C - °F



Humidity

Measuring range	0% to 100% RH
Resolution	0.1%
Accuracy	±2.5% at 25°C (77°F) 10%to90%RH



Wind velocity

Measuring range	0.4 to 20 m/s
Resolution	0,1 m/s
Accuracy	±0.2 m/s + 2% of reading

CLAMP-ONE

Wireless digital clamp-on meter

- Maximum reading of 3999.
- Heavy duty test leads.
- ACA Measurement up to 1000A.
- Ohm, Diode, Continuity, Capacitance, Frequency and Duty input Protection to 750V DA/AC rms.
- Diode test and Audible continuity check function.
- Auto power off to preserve battery life.
- Display back-light feature.
- Provides DATA-HOLD, RELATIVE.
- Complete of external temperature probe.

Code	Model	Dimensions	Weight
09006008	CLAMP-ONE	225 x 97 x 40 mm	0,45 kg



Electrical specifications

Range

DC voltage	400mV, 4V, 40V, 400V, 1000V
AC voltage	4V, 40V, 400V, 750V
DC current	200A, 1000A
AC current	400A, 1000A
Resistance	400Ω, 40KΩ, 400KΩ, 4MΩ, 40mΩ
Quantity	5124F, 5, 124F, 51.24F, 100 4F
Temperature	-20 to 1000 °C
Frequency	5.12Hz, 51.2Hz, 512Hz, 5.12kHz, 512kHz, 5.12MHz
Duty current	0.1% to 99.9%



Calibration

Code	Model	Description
09053017		Calibration report ref. Accredia for clamp-on meter
09006008001	CLAMP-ONE/CT	Clamp-on meter with calibration report

INDISPENSABLE FOR INVERTER UNITS CHECK



COMPATIBLE APPS WITH FOX-ONE



PHONE APP



RELAYS

**ICG**

Relays and hard starts for refrigeration systems without run capacitors.

Code	Model	Dimensions	Weight
09016002	ICG-220	140 x 120 x 20 mm	0,05 kg

**RO**

Relays and hard starts for refrigeration systems without run capacitors.

Code	Model	Dimensions	Weight
09016001	RO-82	140 x 120 x 40 mm	0,07 kg
09016004	RO-62	140 x 120 x 40 mm	0,07 kg
09016003	RO-42	140 x 120 x 40 mm	0,07 kg

**PO**

Relays with overload combination.

Code	Model	Dimensions	Weight
09016017	PO-230	120 x 100 x 20 mm	0,03 kg

**RCO**

3 n° 1 Start Relay.

Code	Model	Dimensions	Weight
09016033	RCO-820	190 x 180 x 40 mm	0,20 kg
09016009	RCO-620	190 x 180 x 40 mm	0,20 kg
09016011	RCO-420	190 x 180 x 40 mm	0,20 kg

**Comparative table**

	ICG-220	PO-230	RO-82	RO-62	RO-42	RCO-820	RCO-620	RCO-420
Relay	x	x	x	x	x	x	x	x
Overload	-	-	x	x	x	x	x	x
Start capacitor	-	-	-	-	-	x	x	x
Mounting	Quick connect	Quick connect	Quick connect	Quick connect	Quick connect	Quick connect	Quick connect	Quick connect
HP rating	1/12 to 1/2	1/12 to 1/2	1/1 2to 1/8	1/6 to 1/5	1/4 to 1/3	1/12 to 1/8	1/6 to 1/5	1/4 to 1/3
Voltage	230	230	230	230	230	230	230	230

SPP

Starter

Increases starting torque up 250% TO 600%.

Code	Model	Dimensions	Weight
09016015	SPP	120 x 100 x 20 mm	0,03 kg
09016012	SPP5	190 x 150 x 40 mm	0,15 kg
09016022	SPP6	200 x 60 x 60 mm	0,30 kg
09016034	SPP7S	300 x 140 x 40 mm	0,28 kg



Comparative table

	SPP	SPP5	SPP6	SPP7S
Voltage	90 - 277	90 - 277	90 - 277	90 - 277
Recommended range HP	1/2 to 10	1/2 to 10	1/2 to 10	1/2 to 10
Increase in torque	250%	300%	500%	600%
Capacitor	-	X	X	X

EDT

Electronic adjustable defrost timer

Replaces most timers being used in today's domestic refrigerators and freezers!

The new energy efficient "Edt" electronic adjustable defrost timers were designed and developed by Supco engineers. They offer numerous advantages over conventional electro-mechanical defrost timers presently being used. The "Edt" has a two dial adjustment configuration that allows for the setting of any defrost frequency from 4 to 12 hours and any defrost time from 10 to 35 minutes. Quiet operation and repeat reliability is unmatched.

Features:

- Standard size and mounting to fit most applications.
- Standard terminal configuration to accommodate most connections.
- No ground wire.
- Dustproof case.
- State of the art extra long life electronic circuitry.



Code	Model	Voltage	Max compressor rating	Max resistive load	Dimensions	Weight
09016013	EDT20	208/240 VAC	1/3 HP	5 Amp	240 x 110 x 40 mm	0,10 kg
09016035	EDT21	208/240 VAC	3/4 HP	20 Amp	240 x 110 x 40 mm	0,12 kg

TD69

TD series delay on make timers (Dom)

For protection of Hvac/r equipment, the Td series of time delays provide the solution, choose the delay on make, delay on break or by-pass timer that solves the problem.

Applications:

- Multi Purpose "Delay on Make" timing.
- Protects air-conditioning, refrigeration and heat pumps from damage which may be caused by short cycling of compressor.
- For compressor staging and stagger starting multiple units.
- Helps to reduce power surges in multiple compressor applications.

Technical features:

- Delay range (adj.): 6 sec. to 8 min.
- Delay range (fixed): 3/5 min.
- Initiate timer: 70 millisecc.
- Input voltage: 19 to 250 VAC/VDC, 56/60 Hz.
- Max load: 1 amp - 10 amp in rush.
- Temperature: -18°C +71°C.
- Dimensions: 50,8 x 50,8 x 19 mm.
- Mount: 1 hole only for mounting.
- Connections: 1/4" M.



Code	Model	Delay period	Dimensions	Weight
09016016	TD69	6 sec to 8 min	130 x 90 x 40 mm	0,05 kg



AIR CONDITIONING AND REFRIGERATION
SYSTEMS AND INSTRUMENTS



*Solutions for Natural
and LOW GWP refrigerants*

HC (R600a - R290)



HFC (R32...) **HFO (R1234...)**

CO₂ (R744)



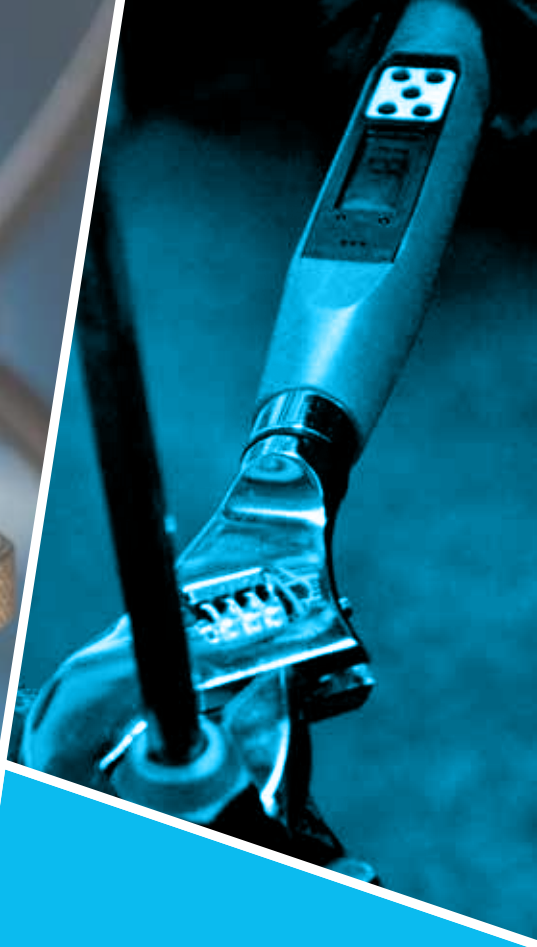
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TOOLS - VALVES
FITTINGS

 **WIGAM**

RATCHET FLARING TOOL



W850-AVIO

Ratchet flaring tool with clutch and ratchet

- Body and bar in lighter aluminium.
- Possibility to operate with the manual ratchet or with an electric screwdriver.
- Standstill device for copper tube.
- Bar fast disconnecting system.

Code	Model	For OD tubing
08001028	W850-AVIO	1/4" - 5/16" - 3/8" - 1/2" - 5/8" - 3/4"
08001029	W850M-AVIO	6-8-10-12-16-18 mm

Code	Dimensions	Weight
08001028	250 x 220 x 50 mm	1,4 kg
08001029	250 x 220 x 50 mm	1,4 kg



Possibility to operate by manual ratchet and electric drill.



Standstill device for copper tube.



Bar fast disconnecting system.



Supplied in a plastic case



W810A

Eccentric flaring tool with clutch and ratchet

- Robust and reliable.
- Case included



Code	Model	For OD tubing
08001024	W810A	1/4" - 3/16" - 5/16" - 3/8" - 1/2" - 5/8" - 3/4"

Code	Dimensions	Weight
08001024	250 x 220 x 50 mm	1,9 kg



Spare parts and accessories

Code	Model	Description	For OD tubing
08050043	808MMB	Bar in mm for W810A	6-8-10-12-14-16-19 mm

UNIVERSAL FLARING TOOL


Code	Model	For OD tubing	Dimensions	Weight	
08001020	W525	3/16" ÷ 5/8"	4,7 ÷ 16 mm	160 x 120 x 30 mm	0,85 kg


FLARING TOOL IN INCHES


Code	Model	For OD tubing	Dimensions	Weight
08001027	W195	3/16"-1/4"-5/16" 3/8"-7/16"-1/2"-5/8"	200 x 130 x 30 mm	1 kg


FLARING TOOL IN INCHES


Code	Model	For OD tubing	Dimensions	Weight
08001023	W500	3/16"-1/4"-5/16"-3/8"-1/2"-5/8"	200 x 130 x 30 mm	0,9 kg


FLARING AND SWAGING TOOL


Code	Model	For OD tubing	Dimensions	Weight
08001019	W275L	1/8" - 7/16" - 1/4" - 5/16" 3/8" - 1/2" - 5/8" - 3/4"	330 x 150 x 40 mm	2,1 kg


UNIVERSAL OIL FOR FLARE


Universal oil essential for the flare lubrication, during flaring operation and before clamping with torque wrenches.

Code	Model	Min. Qty	Capacity	Dimensions	Weight
12002015	FO-200	12	200 ml	170 x 50 x 50 mm	0,2 kg



RATCHET FLARING TOOL

NEW



TUBE
CUTTERS
BW432
PAG. 153

BLUE LINE
WIGAM

BW-830

Ratchet flaring tool with clutch and ratchet

- Body and bar in aluminium.
- Possibility to operate by manual ratchet and electric screwdriver.
- Tube standstill device.
- Carrying case with compartment for BW432 tube cutter.

Code	Model	For OD tubing
08001030	BW-830	1/4" - 5/16" - 3/8" - 1/2" - 5/8" - 3/4"



Standstill device for copper tube



Carrying case with compartment for BW432 tube cutter



Possibility to operate by manual ratchet and electric screwdriver



UNIVERSAL OIL FOR FLARE

Universal oil essential for the flare lubrication, during flaring operation and before clamping with torque wrenches.

Code	Model	Min. Qty	Capacity	Dimensions	Weight
12002015	FO-200	12	200 ml	170 x 50 x 50 mm	0,2 kg

UNIVERSAL FLARING TOOL


Code	Model	For OD tubing	Dimensions	Weight
08001001	525F	5 ÷ 16 mm 3/16" ÷ 5/8"	200 x 120 x 30 mm	0,86 kg


FLARING TOOL


Code	Model	For OD tubing	Dimensions	Weight
08001005	500FC	3/16"-1/4"-5/16" -3/8"-1/2"-5/8"	250 x 220 x 50 mm	2 kg

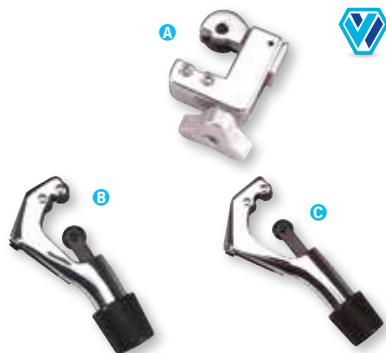

UNIVERSAL OIL FOR FLARE


Universal oil essential for the flare lubrication, during flaring operation and before clamping with torque wrenches.

Code	Model	Min. Qty	Capacity	Dimensions	Weight
12002015	FO-200	12	200 ml	170 x 50 x 50 mm	0,2 kg



TUBE CUTTERS



TUBE CUTTERS

Ref	Code	Model	For OD tubing	Dimensions	Weight
A	08002019	W127	1/8" ÷ 5/8" 4 ÷ 16 mm	60 x 40 x 30 mm	0,10 kg
B	08002017	W274	1/8" ÷ 1-1/8" 4 ÷ 28 mm	130 x 60 x 40 mm	0,30 kg
C	08002018	W312	1/4" ÷ 1-5/8" 7 ÷ 41 mm	150 x 70 x 40 mm	0,30 kg



Spare parts

Code	Model	Description	Min. Qty
08052012	W127B	Wheel for W127	10
08052013	W274B	Wheel for W274 - W312	10

IDEAL FOR
SMALL PLACES



RATCHET TUBE CUTTERS

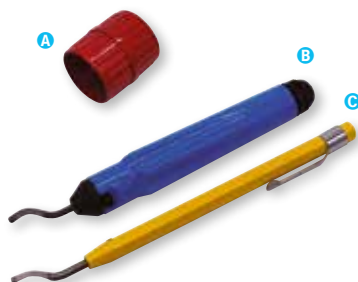
Code	Model	Sizes
08002020	WR-TC12	from 1/8" to 1/2" (from 3 mm to 12 mm)
08002022	WR-TC22	from 1/4" to 7/8" (from 6 mm to 22 mm)
08002021	WR-TC29	from 5/16" to 1-1/8" (from 8 mm a 29 mm)

Code	Dimensions	Weight
08002020	190 x 100 x 30 mm	0,20 kg
08002022	130 x 260 x 50 mm	0,35 kg
08002021	125 x 270 x 50 mm	0,38 kg



Spare parts

Code	Model	Description
08052015	WR-TC12B	Wheel for WR-TC12
08052017	WR-TC22B	Wheel for WR-TC22
08052016	WR-TC29B	Wheel for WR-TC29



REAMERS

Ref	Code	Model	Description
A	08008034	W209	Inner/outer reamer
B	08008049	W210	Pen reamer with blade container and spare blade
C	08008050	W211	Pen reamer

Ref	Code	Dimensions	Weight
A	08008034	60 x 60 x 60 mm	0,22 kg
B	08008049	240 x 80 x 20 mm	0,05 kg
C	08008050	220 x 80 x 20 mm	0,05 kg



Spare parts

Code	Model	Description
08008055	W210B	Blade for W210
08008056	W211B	Blade for W211

BLUE LINE
BW TUBE CUTTERS

Tube cutters with anti-ovalization technology

- Spare blade included.
- Heavy-duty blade.

Ref	Code	Model	For OD tubing
A	08002026	BW316	1/8" ÷ 5/8" 3 ÷ 16mm
B	08002027	BW432	3/16" ÷ 1 - 1/4" 4 ÷ 32mm
C	08002028	BW654	1/4" ÷ 2-1/8" 6 ÷ 54mm


NEW


Spare blade included



Anti-ovalization technology



Heavy-duty blade

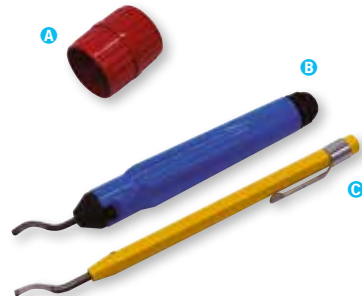

Spare parts

Code	Model	Description
08052021	BLADE-316/432	Kit 5 pcs blades for BW316/432
08052022	BLADE-654	Kit 5 pcs blades for BW654

REAMERS

Ref	Code	Model	Description
A	08008034	W209	Inner/outer reamer
B	08008049	W210	Pen reamer with blade container and spare blade
C	08008050	W211	Pen reamer

Ref	Code	Dimensions	Weight
A	08008034	60 x 60 x 60 mm	0,22 kg
B	08008049	240 x 80 x 20 mm	0,05 kg
C	08008050	220 x 80 x 20 mm	0,05 kg


Spare parts

Code	Model	Description
08008055	W210B	Blade for W210
08008056	W211B	Blade for W211

TUBE CUTTERS



TUBE CUTTERS

Ref	Code	Model	For OD tubing	Dimensions	Weight
A	08002008	TC1050	4 ÷ 16 mm	76 x 51 x 38 mm	0,08 kg
B	08002006	TC1000	4 ÷ 28 mm	127 x 57 x 38 mm	0,27 kg
C	08002005	174 FC	10 ÷ 28 mm	76 x 56 x 31 mm	0,07 kg
D	08002007	312 FC	17 ÷ 41 mm	159 x 66 x 35 mm	0,32 kg
E	08002009	206 FB	10 ÷ 66 mm	213 x 96 x 41 mm	0,88 kg



Accessories

Code	Model	Description	Per Model	Dimensions	Weight
08052014	TC1051	Ratchet	TC1050	130 x 30 x 230 mm	0,05 Kg



Spare parts

Code	Model	Description	Per Model	Min. Qty
08052002	75015	Wheels	TC1000-312 FC - 174 FC	10
08052003	323633	Wheels	TC1050	5
08052004	74761	Wheels	206 FB	5
08052006	74762	Screws	TC1000-312 FC - 174 FC	5
08052007	77511	Screws	206 FB	-
08052009	26883	Screws	TC1050	-
08052010	77507	Nuts	206 FB	-



REAMERS

Code	Model	Dimensions	Weight
08008006	208F	76 x 54 x 54 mm	0,20 kg

METALLIC CASE


Code	Model	Dimensions	Weight
14029003	WE 02	420 x 200 x 50 mm	2,2 kg

TUBE EXPANDER TOOL WITHOUT HEAD

Code	Model	Dimensions	Weight
08004001	WE 01	400 x 110 x 80 mm	1,45 kg

HEAD FOR WE01 TUBE EXPANDER

Code	Model	For OD tubing	Dimensions	Weight
08005001	WE 08	8 mm*	50 x 50 x 40 mm	0,12 kg
08005002	WE 10	10 mm	50 x 50 x 40 mm	0,12 kg
08005003	WE 12	12 mm	50 x 50 x 40 mm	0,12 kg
08005004	WE 14	14 mm	50 x 50 x 40 mm	0,12 kg
08005012	WE 15	15 mm	50 x 50 x 40 mm	0,12 kg
08005005	WE 16	16 mm	50 x 50 x 40 mm	0,12 kg
08005006	WE 18	18 mm	50 x 50 x 40 mm	0,13 kg
08005007	WE 20	20 mm	50 x 50 x 40 mm	0,14 kg
08005008	WE 22	22 mm	50 x 50 x 40 mm	0,15 kg
08005009	WE 24	24 mm	50 x 50 x 40 mm	0,15 kg
08005010	WE 26	26 mm	50 x 50 x 40 mm	0,18 kg
08005011	WE 28	28 mm	50 x 50 x 40 mm	0,19 kg
08005014	WE 30	30 mm	50 x 50 x 40 mm	0,20 kg
08005013	WE 32	32 mm -1,1/4"	50 x 50 x 40 mm	0,22 kg
08005015	WE 35	35 mm	50 x 50 x 40 mm	0,25 kg
08005016	WE 36	36 mm	50 x 50 x 40 mm	0,28 kg
08005017	WE 40	40 mm	50 x 50 x 40 mm	0,28 kg
08005018	WE 42	42 mm	50 x 50 x 40 mm	0,30 kg
08005021	WE 1/2	1/2"	50 x 50 x 40 mm	0,12 kg
08005020	WE 3/8	3/8"	50 x 50 x 40 mm	0,12 kg
08005022	WE 5/8	5/8"	50 x 50 x 40 mm	0,12 kg
08005023	WE 3/4	3/4"	50 x 50 x 40 mm	0,12 kg
08005024	WE 7/8	7/8"	50 x 50 x 40 mm	0,15 kg
08005025	WE 1	1"	50 x 50 x 40 mm	0,20 kg
08005026	WE 1,1/8	1,1/8"	50 x 50 x 40 mm	0,22 kg
08005027	WE 1,3/8	1,3/8"	50 x 50 x 40 mm	0,24 kg
08005028	WE 1,5/8	1,5/8"	50 x 50 x 40 mm	0,26 kg

* To be used only with annealed hose



Example picture

SWAGING PUNCHES


Code	Model	Description	For OD tubing
08004002	193 S	Swaging punches serie	1/4"-3/8"-1/2"-5/8" inches

Code	Dimensions	Weight
08004002	160 x 90 x 30 mm	0,4 kg



TUBE BENDERS



RATCHET TUBE BENDERS

Ref	Code	Model	For OD tubing
A	08003013	230	6-8-10-12-14-16 mm
B	08003014	250	10-12-14-16-18-22 mm
B	08003030	260	3/8" - 1/2" - 5/8" - 3/4" - 7/8"

Ref	Code	Dimensions	Weight
A	08003013	360 x 320 x 100 mm	3 kg
B	08003014	400 x 340 x 100 mm	3,7 kg
B	08003030	400 x 350 x 100 mm	3,4 kg



7 IN 1 RATCHET TUBE BENDERS

Code	Model	For OD tubing
08003082	W280	8-10-12-14-16-19-22 mm
08003081	W270	1/4"-5/16"-3/8"-1/2"-5/8"-3/4"-7/8"

Code	Dimensions	Weight
08003082	370 x 300 x 80 mm	3,5 kg
08003081	370 x 300 x 80 mm	3,4 kg



DOUBLE HANDLER TUBE BENDERS

Ref	Code	Model	Bend radius	For OD tubing
A	08003042	TB-364-04	14,2 mm - 9/16"	6 mm - 1/4"
A	08003037	TB-364-8 MM	17,5 mm - 11/16"	8 mm
A	08003038	TB-364-10 MM	24 mm - 15/16"	10 mm - 3/8"
A	08003044	TB-364-08	38,1 mm - 1-1/2"	12 mm - 1/2"
B	08003041	TB-364-15 MM	57 mm - 2-1/4"	15 mm
B	08003040	TB-364-16 MM	57 mm - 2-1/4"	16 mm - 5/8"
B	08003046	TB-364-12	76 mm - 3"	19 mm - 3/4"
B	08003056	TB-364-14	76 mm - 3"	22 mm - 7/8"

Ref	Code	Dimensions	Weight
A	08003042	260 x 75 x 50 mm	0,6kg
A	08003037	260 x 75 x 50 mm	0,6kg
A	08003038	400 x 130 x 90 mm	2 kg
A	08003044	400 x 130 x 90 mm	2 kg
B	08003041	730 x 130 x 80 mm	2,5 kg
B	08003040	730 x 130 x 80 mm	2,5 kg
B	08003046	820 x 130 x 90 mm	3,2 kg
B	08003056	820 x 140 x 90 mm	3,5 kg



MULTIPLE TUBE BENDERS

Code	Model	For OD tubing	Dimensions	Weight
08003048	TB-368	1/4"-5/16"-3/8"	250 x 70 x 50 mm	0,44 kg
08003059	TB-368M	6-8-10 mm	250 x 70 x 50 mm	0,45 kg

PRE-CALIBRATED TORQUE WRENCHES

New kit of 6 pre-calibrated torque wrenches in plastic case:

Code	Model	Description	Dimensions	Weight
08007041	PRE-TW/KIT-06	Kit of 6 pre-calibrated wrenches	380 x 290 x 60 mm	1,75 kg
08007028	PRE-TW17	Single wrench 17 mm	210 x 30 x 50 mm	0,40 kg
08007029	PRE-TW22	Single wrench 22 mm	220 x 30 x 50 mm	0,40 kg
08007030	PRE-TW26	Single wrench 26 mm	250 x 30 x 50 mm	0,45 kg
08007031	PRE-TW29	Single wrench 29 mm	280 x 30 x 50 mm	0,52 kg
08007032	PRE-TW24	Single wrench 24 mm	240 x 30 x 50 mm	0,42 kg
08007033	PRE-TW27	Single wrench 27 mm	280 x 30 x 50 mm	0,53 kg



SMALL DIMENSIONS
THAT ENABLE
AN EASY USE


Technical features

Wrench	Dimensions	Tightening torque Nm	Length	Refrigerant
17	1/4"	18	220 mm	R22-R407C-R410A-R32
22	3/8"	42	265 mm	R22-R407C-R410A-R32
26	1/2"	55	270 mm	R410A-R32
29	5/8"	65	335 mm	R410A-R32
24	1/2"	55	250 mm	R22-R407C
27	5/8"	65	280 mm	R22-R407C

TORQUE WRENCHES KIT

orque wrenches complete kit with regulating torque wrench setting complete with carrying plastic case.

It is possible to modify the torque value with spaces of 1 Nm. Working range 0÷75 Nm.

Code	Model	Description
08007025	TW/KIT-04	Complete wrenches kit 17 - 22 - 24 - 26 - 27 - 29

Code	Dimensions	Weight
08007025	380 x 290 x 60 mm	1,75 kg


UNIVERSAL OIL FOR FLARE

Universal oil essential for the flare lubrication, during flaring operation and before clamping with torque wrenches.

Code	Model	Min. Qty	Capacity	Dimensions	Weight
12002015	FO-200	12	200 ml	170 x 50 x 50 mm	0,2 kg





DTW-32/85

Digital adjustable torque wrenches

Large back-light display shows the target torque and real time reading.

- 2-colour led light, buzzer and vibration provide visual and audible indicator when target torque is reached.
- High accuracy in 2%.
- Available measurement units: Nm - lbf.in - lbf.ft - kgf.m.
- Memory storage up to 5 sets of target torque setting.
- Easily calibration.

Code	Model	Dimensions	Weight
08007040	DTW32/85	460 x 90 x 70 mm	1,4 kg



Technical features

Working range	8 ÷ 85 Nm
	71 ÷ 1195 lbf.in
	6 ÷ 63 lbf.ft
Accuracy	1 ÷ 8 kgf.m
	± 2% (C.W./C.C.W. of reading, from 10% to 100% of full scale)
Resolution	0.1 Nm / 1 lbf.in / 0.1 lbf.ft / 0.1 kgf.m
Open end size	10 ÷ 32 mm
Power supply	3V (2 x AAA batteries)
Operating temperature	0 ÷ 40°C
Storage temperature	-20 ÷ 45°C
Wrench length	390 mm



Calibration

Code	Description
09053035	Calibration report for wrench



PTC1

Capillary tube cutter

Handy tube cutter for the exact cut of capillary tubes of all dimensions, without altering the tube internal diameter.

Code	Model	Dimensions	Weight
08006003	PTC1	150 x 70 x 20 mm	0,08 kg



RR - POP-201

Pinch-off plier

Sturdy pinch-off plier which, thanks to its particular jaws, allows to deform and close copper tubes.

Ref	Code	Model	For Od tubing
A	08006001	RR	1/8" - 3/8"
B	08006012	POP-201	1/8" - 3/8"

Ref	Code	Dimensions	Weight
A	08006001	250 x 80 x 20 mm	0,36 kg
B	08006012	190 x 60 x 20 mm	0,35 kg



PA11-PA6

Fin comb

Tool suitable for the cleaning and aligning of fins of any type of radiators.

Ref	Code	Model	Dimensions	Weight
A	08008051	PA11	280 x 100 x 40 mm	0,14 kg
B	08008007	PA6	130 x 160 x 40 mm	0,10 kg



CAPILLARY TOOLS

Small gauge tools for the measurement of capillary tubes inside diameter.

Ref	Code	Model	Dimensions	Weight	
A	08008008	C4751/015	0,45 ÷ 1,5 mm	120 x 75 x 30 mm	0,03 kg
B	08008009	C4751/0130	1,5 mm ÷ 3 mm	120 x 75 x 30 mm	0,03 kg



WRENCHES



RATCHET WRENCHES

Ref	Code	Model	Description	Dimensions	Weight
A	08007005	R6725MK	Complete set	240 x 130 x 50 mm	1,3 kg



Spare parts

Ref	Code	Model	Description	Square opening	Dimensions	Weight
B	08007042	R6950	Ratchet wrench	1/4"-5/16" 8,5-9,5-13 mm	170 x 60 x 30 mm	0,75 kg



Ratchet measures
1/4"-5/16"



Fixed key measures
8,5-9,5-13 mm



RATCHET WRENCHES

Ref	Code	Model	Square opening	Hexagonal opening	Dimensions	Weight
A	08007001	127 C	1/4"-3/8"-3/16"- 5/16"		267 x 133 x 9 mm	0,11 kg
B	08007003	124 C	1/4"-3/16"	9/16"-1/2"	267 x 133 x 15 mm	0,20 kg
C	08007006	127 CO	1/4"-3/8"-3/16"- 5/16"		267 x 133 x 23 mm	0,11 kg



RATCHET WRENCHES

Ref	Code	Model	Square opening	Dimensions	Weight
A	08007024	W122	1/4"-3/8"-3/16"-5/16"	190 x 70 x 20 mm	0,13 kg
B	08007039	W124	1/4"-3/8"-3/16"-5/16"	190 x 70 x 20 mm	0,12 kg



PROFESSIONAL 1/2" SQUARE RATCHET WRENCH

Code	Model	Square opening	Dimensions	Weight
08007043	W12-S	1/2"	280 x 50 x 45 mm	0,6 kg



CTV-DIGIT

Digital torque screwdriver

CTV-DIGIT torque screwdriver has been created for the tightening of the charging valves with controlled torque and digital reading on the display.

- Possibility to set the tightening torque according to the specifications supplied by the valves manufacturer.
- Suitable for standard valves and magnum valves.
- Prevents the excessive tightening and thus the valve damage.
- Small, light and handy.
- Backlight display to make operations in dark areas easier.
- Visual alarm when the pre-set tightening torque is reached.
- Complete of two heads.



Code	Model	Dimensions	Weight
08008057	CTV-DIGIT	175 x 50 x 50 mm	0,6 kg



Technical features

Torque range	0-2 Nm
Torque resolution	0.01 Nm
Torque accuracy	±1% CW/CCW of reading, 10% ÷ 100 % FS
Power supply	1,5 V, 1xAA alkaline

CORE SCREWERS TOOLS

Complete range of plastic and metal core screwer tools.

Ref	Code	Model	Dimensions	Weight
A	08008002	W32000	190 x 70 x 30 mm	0,09 kg
B	08008003	CTV 1	100 x 40 x 20 mm	0,03 kg



MAS20

Open-release magnet for solenoid valve

- The magnet allows to open and release non-energized solenoid valves, turning them into manual valves.
- Can be used valves with diameters ≤15,8 mm.
- Ideal for any operation of maintenance, such as refrigerant recovery, transfer of fluids.

Ref	Code	Model	Description
A	08007037	MAS20	Open-release magnet for solenoid valve
B	08007038	MAS20-WIG	Kit of 8 open-release magnet for solenoid valve

Ref	Dimensions	Weight
A	50 x 50 x 40 mm	0,12 kg
B	130 x 230 x 80 mm	1 kg



LOCK-VALVE - ACCESS VALVE



LOCK-VALVE

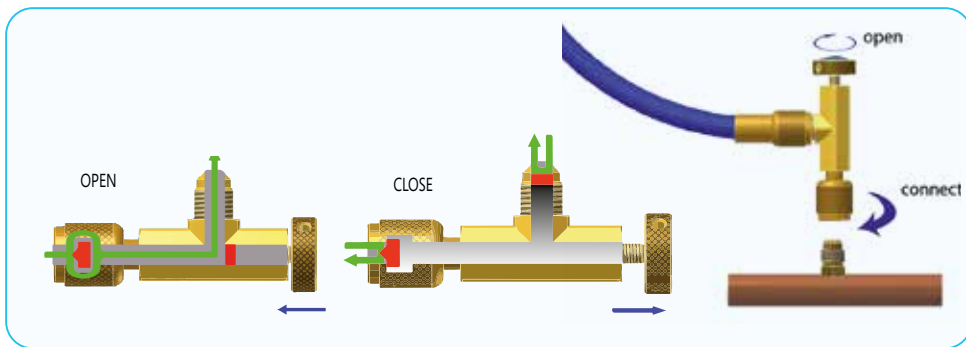
Access valves

- Very efficient tightness that guarantees no gas leaks.
- Extremely reduced volumes that prevent gas leaks during the valve connecting or disconnecting phase.
- Very easy to handle.
- Allow to regulate the refrigerant flow.
- Prevent the burning risks to fingers when disconnecting.
- Constructive precision that guarantees 100% compatibility with the systems on the market.
- PTFE seal compatible with CFC, HCFC, HFC and HFO.
- Maximum operating pressure 52 bar.
- Dimensions: 140x100x20 mm.
- Weight: 0,10 kg

Ref	Code	Model	Description
A	05059049001	LOCK-VALVE 1/4"	1/4" SAE F x 1/4" SAE M
B	05059050001	LOCK-VALVE 5/16"	5/16" SAE F x 5/16" SAE M
	05059053001	LOCK-VALVE/5-4	5/16" SAE F x 1/4" SAE M
	05059063001	LOCK-VALVE/4-5	1/4" SAE F x 5/16" SAE M
	05059076001	LOCK-VALVE/AS-4	1/2 16"AS F x 1/4"M
	05059077001	LOCK-VALVE/AS-5	1/2 16"AS F x 5/16"M



Connecting scheme



Accessories and Spare parts



Ref	Code	Model	Description	
A	14020097	G-LV/T-WIG	Kit 5pcs gaskets for LOCK-VALVE and EW3900/EW4900	5
	14020122	OR-LV-WIG	Kit 10 OR for LOCK-VALVE	10
B	08008059	LOCK-VALVE-CARE	Gasket easy replacement tool	
C	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pcs LOCK-VALVE-CARE	10

LOCK-VALVE-CARE

Simple gaskets replacement tool

LOCK-VALVE-CARE allows easy removal of worn gaskets and replacement with new one in Lock Valve, EW3900/4900 and HD/GY tubes.

The hooked tip allows the easy removal of the worn gasket while the cap on the back is specifically sized to facilitate the insertion of the new gasket.

The cap is also equipped with a specific groove to position the depressor inside HD/GY hoses.

LOCK-VALVE-CARE is equipped with an internal compartment to store the tip and any spare gaskets.

The solution is available in a single blister or in counter display containing 10 pcs.

Ref	Code	Model	Description	
A	08008059	LOCK VALVE CARE	Gasket replacement tool for Lock valves, EW and hoses	-
B	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pcs of LOCK-VALVE-CARE	10

Ref	Code	Dimensions	Weight
A	08008059	220 x 60 x 18 mm	0,04 kg
B	08008065	235 x 145 x 65 mm	0,51 kg



Removal of gasket



Inserting new gasket



Accessories and Spare parts



Ref	Code	Model	Description	
A	14020097	G-LV/T-WIG	Kit 5pcs gaskets for LOCK-VALVE and EW3900/EW4900	5
B	14020014001	G19020	Kit 10 pcs gaskets for hoses 1/4" SAE, 1/2"-16ACME-NBR	10
C	14020071001	G19020/T	Kit 10 pcs gaskets for hoses 1/4" SAE, 1/2"-16ACME - PTFE	10
	14020048001	G19516	Kit 10 pcs gaskets for hoses 5/16"SAE	10
D	14020015001	G19030	Kit of 10 pcs gaskets for hoses 3/8"SAE	10
E	14023001001	D19302	Kit of 10 pcs valve openers for hoses	10

CORE SCREWER TOOL

EW3900

Core screwer tool

Easy and efficient system that enables to remove and replace valve cores without dispersing one gramme of refrigerant. It also enables to recharge the A/C system faster by removing the valve core and reinserting it again once charging is over.

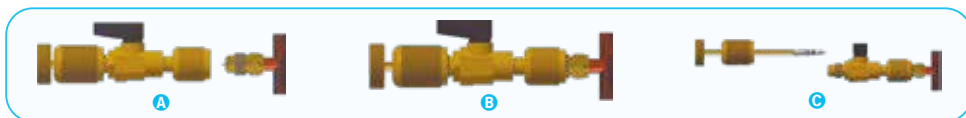


Code	Model
08008023002	EW 3900
08008023003	EW 3900/5

Swivel female connections	Male connections	Dimensions	Weight
1/4" SAE	1/4" SAE	100 x 175 x 30 mm	0,10 kg
5/16" SAE	1/4" SAE	100 x 175 x 30 mm	0,10 kg



Functioning diagrams: how to remove and replace valve cores without dispersing one gramme of refrigerant.



EW4900

Core removal access solution with dual connections

EW4900 enables to remove the valve core, and then open the way to its two integrated SAE M 3/8" and 1/4" connections equipped with valves.

3/8" port designed for coupling with the IperVAC hose (see pag 32) and 1/4" port for vacuum digital gauge, charging hose or manifold.

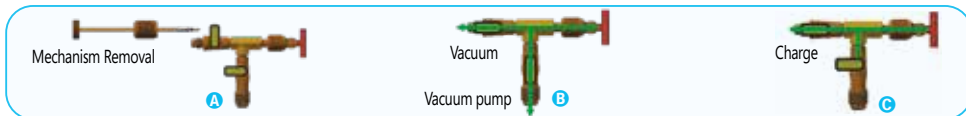


Code	Model	Description
08008060002	EW 4900	1/4" core removal solution with double connections
08008060003	EW 4900/5	5/16" core removal solution with double connections

Swivel female connections	Male connections	Dimensions	Weight
1/4" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30 mm	0,25 kg
5/16" SAE	3/8" SAE + 1/4" SAE	100 x 175 x 30 mm	0,25 kg



Application:



Accessories and Spare parts

Code	Model	Description
06140002	IVSS/6-6/60	IPERVAC 1500 mm hose 3/8" connection
06140001	IVSS/6-6/36	IPERVAC 900 mm hose 3/8" connection
14020097	G-LV/T-WIG	Kit 5 pcs gaskets for LOCK-VALVE - EW3900/EW4900
08008059	LOCK VALVE CARE	Gasket replacement tool for LOCK-VALVE, EW and hoses
05108043001	M1/4"-R134A/V-RK	Kit 10 pcs internal cores for HFC (R134a-R410A, R32,...)
05055099	W404/5	1/4" SAE F x 5/16" SAE M adapter

QUICK COUPLERS

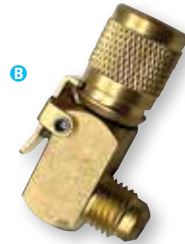
- Allow to open or close automatically the system without loss of refrigerant.
- Eliminate hazardous discharge of refrigerant and oil from the system when disconnecting the hose.
- Prevent finger burn when disconnecting.

Ref	Code	Model	Description
A	05059071	W-16 C	1/4" SAE M x 1/4" SAE F
A	05059072	W-26 C	5/16" SAE M x 5/16" SAE F
B	05059073	W-17 C	1/4" SAE M 1/4" SAE F
B	05059074	W-27 C	5/16" SAE M 5/16" SAE F

Ref	Code	Dimensions	Weight
A	05059005	165 x 135 x 20 mm	0,07 kg
A	05059038	165 x 135 x 20 mm	0,07 kg
B	05059007	165 x 135 x 20 mm	0,07 kg
A	05059039	165 x 135 x 20 mm	0,07 kg


Spare parts

Code	Model	Description	For	
14020126	OR-WC-WIG	Kit 10 O-rings	W16C-W17C-W26C-W27C	10
14020127	G-WC-WIG	Kit 10 gaskets	W16C-W17C-W26C-W27C	10


NEW

CLICK-LOCK

Universal system of identification and protection

Protect your craftsmanship.

Reduce questionable warranty returns.

Defend your reputation and provide your customer with a permanent system protection. Safeguard your equipment from being contaminated by impure refrigerants.

Code	Model	Description	Pack	Dimensions	Weight
05049025	CLSR100	For 1/4"-3/8"-1/2"	25 pcs	240 x 200 x 60 mm	0,30 kg
05049034	CLSC100	For 5/16"	25 pcs	240 x 200 x 60 mm	0,30 kg

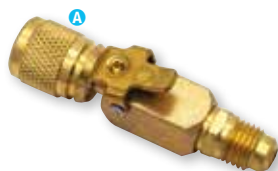

How to fit the CLICK-LOCK? As easy as 1-2-3!


QUICK COUPLERS



QUICK COUPLERS

- Allow to open or close automatically the system without loss of refrigerant.
- Eliminate hazardous discharge of refrigerant and oil from system when disconnecting hose.
- Prevent finger burn when disconnecting.



Ref	Code	Model	Description
A	05059005	16 C	1/4" SAE male x 1/4" SAE female
A	05059038	26 C	5/16" SAE male x 5/16" SAE female
B	05059007	17 C	1/4" SAE male 1/4" SAE female
B	05059039	27 C	5/16" SAE male 5/16" SAE female

Ref	Code	Dimensions	Weight
A	05059005	165 x 135 x 20 mm	0,07 kg
A	05059038	165 x 135 x 20 mm	0,07 kg
B	05059007	165 x 135 x 20 mm	0,07 kg
A	05059039	165 x 135 x 20 mm	0,07 kg



Spare parts

Code	Model	Description	For	
14020087	S8920071	Female coupler-sleeve	16C	
14020088	S8920072	Female coupler-retaine	16C	
14020047	S8920073	Female coupler-gasket kit	16C-17C	
14020022	S8920077	Female coupler-o-ring	16C-17C-26C-27C	
14020023	S8920263	Female coupler-3/16"	19C	
14020081	S10000996	Female coupler-gasket kit	26C-27C	

EASY-JOINT

Self-flaring connections for split systems

EASY-JOINT replaces flares very quickly, safely and cheaply.

No further connection or soldering is necessary.

The operator must only prepare the copper tube (cut and deburred) and place the nose at its end after having inserted the nut.

- No calibrator is required for copper tube thickness from 0,8 to 1 mm.
- For all types of refrigerants (included R410A).
- Easy and quick installation.
- Perfect for small spaces.
- Low cost.
- Safe.

Code	Model	Description	
05108075001	EASY-JOINT1/4"	Self-flaring connections kit 1/4"	4
05108076001	EASY-JOINT 3/8"	Self-flaring connections kit 3/8"	4
05108077001	EASY-JOINT 1/2"	elf-flaring connections kit 1/2"	4

Code	Dimensions	Weight
05108075001	140 x 100 x 30 mm	0,15 kg
05108076001	140 x 100 x 30 mm	0,15 kg
05108077001	140 x 100 x 30 mm	0,15 kg



INLINE-JOINT

Self-flaring straight connections

- Replaces flares very quickly, safely and cheaply.
- For all types of refrigerants (included R410A).
- Easy and quick installation.
- Perfect for small spaces.

Code	Model	Description
05108083001	INLINE-JOINT-1/4"	1/4"- 1/4" complete with 2 nuts
05108084001	INLINE-JOINT-3/8"	3/8"- 3/8" complete with 2 nuts
05108085001	INLINE-JOINT-1/2"	1/2" - 1/2" complete with 2 nuts

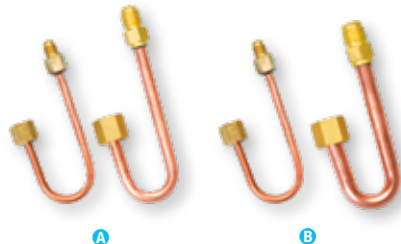
Code	Dimensions	Weight
05108083001	140 x 100 x 30 mm	0,10 kg
05108084001	140 x 100 x 30 mm	0,10 kg
05108085001	140 x 100 x 30 mm	0,10 kg



INVERSING FITTINGS

Ref	Code	Model	Description	
A	05108080	INV-4/6	1 pc. 1/4" x 1/4" + 1 pc. 3/8" x 3/8"	-
B	05108081	INV-4/8	1 pc. 1/4" x 1/4" + 1 pc. 1/2" x 1/2"	-

Ref	Code	Dimensions	Weight
A	05108080	200 x 150 x 30 mm	0,20 kg
B	05108081	200 x 150 x 30 mm	0,20 kg



SELF-LOCKING COUPLINGS

NEW



IPER-LINK

Self-locking couplings

Wigam's IPER-LINK is the family of SELF-BLOCKING BRASS HERMETIC COUPLINGS for an easy and quick connection of refrigeration hoses that make the operation EASY, QUICK and LOW COST.

Thanks to the IPER-LINK **A** couplings, refrigerant hoses can be hermetically connected WITHOUT BRAZING and WITHOUT SPECIAL TOOLS or SEALANTS (Fig. 1).

Thanks to the IPER-LINK **B** fittings especially threaded on one side, it is also possible to make the connection to the condensing and evaporating units WITHOUT FLANGING (Fig. 2)

Suitable for refrigerants with a working pressure up to 52bar, they have passed the leakage test, the vacuum test and the high pressure test according to the limit values of the EN14903.

The accurate Italian manufacture of IPER-LINK couplings, with especially engineered mechanical seals and gaskets, is synonymous with superior quality (MADE IN ITALY).

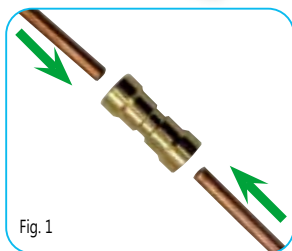


Fig. 1



Fig. 2

BENEFITS

- ✓ HERMETIC CONNECTIONS WITHOUT BRAZING OR SPECIAL TOOLS
- ✓ CONNECTIONS TO THE UNITS WITHOUT FLANGING
- ✓ FOR ALL REFRIGERANTS UP TO 52BAR
- ✓ SIMPLE, QUICK AND LOW-COST
- ✓ SMALL DIMENSIONS
- ✓ QUALITY MADE IN ITALY



Technical features

Refrigerants	CFC-HCFC-HFC-HFO-HC
Max.working pressure	5,2 MPa (52 bar)
Min. pressure	0.01mbar (7.5mTorr)
Operating temperature	-45 ÷ +130°C
Tightness system	Double-tight



Illustrative indications of the coupling installation



Cutting the hose



Inner and outer cleaning of the hose with an inner/outer reamer



Insertion of the hose on the IPER-LINK

Per le istruzioni complete fare riferimento al manuale

IPER-LINK - LINEAR HOSE TO HOSE COUPLINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068001	IPER-LINK/S/4-4	Kit 2 linear couplings 1/4"x1/4"	1/4"	1/4"	39		20 x
05068002	IPER-LINK/S/6-6	Kit 2 linear couplings 3/8"x3/8"	3/8"	3/8"	48		10 x
05068003	IPER-LINK/S/8-8	Kit 2 linear couplings 1/2"x1/2"	1/2"	1/2"	50		10 x


IPER-LINK - LINEAR HOSE TO HOSE REDUCED COUPLINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068004	IPER-LINK/S/4-6	Kit 2 reduced linear couplings 1/4"x3/8"	1/4"	3/8"	xx		20 x
05068005	IPER-LINK/S/6-8	Kit 2 reduced linear couplings 3/8"x1/2"	3/8"	1/2"	xx		10 x


IPER-LINK - HOSE TO HOSE 90° COUPLINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068006	IPER-LINK/L/4-4	Kit 2 90° couplings 1/4"x1/4"	1/4"	1/4"	22x22		10 x
05068007	IPER-LINK/L/6-6	Kit 2 90° couplings 3/8"x3/8"	3/8"	3/8"	29x29		10 x
05068008	IPER-LINK/L/8-8	Kit 2 90° couplings 1/2"x1/2"	1/2"	1/2"	32x32		10 x


IPER-LINK - HOSE TO UNIT FITTINGS

Code	Model	Description	ØA	ØB	L (mm)	Kit	
05068009	IPER-LINK/S/4-4F	Kit 2 fittings 1/4"x1/4"SAE	1/4"	1/4"SAE	34		10 x
05068010	IPER-LINK/S/6-6F	Kit 2 fittings 3/8"x3/8"SAE	3/8"	3/8"SAE	41		10 x
05068011	IPER-LINK/S/8-8F	Kit 2 fittings 1/2"x1/2"SAE	1/2"	1/2"SAE	44		10 x


Spare parts

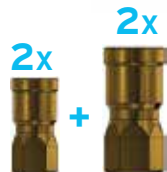
Code	Model	Description	Mn. Qty
14020035	B2-4	Conical copper gasket 1/4"	100 pcs.
14020036	B2-6	Conical copper gasket 3/8"	100 pcs.
14020044	B2-8	Conical copper gasket 1/2"	100 pcs.


IPER-LINK - LINEAR EXTENSION KIT

Code	Model	Description	Kit	
05068022	K-IPER-LINK-JOINT/4-6	Linear extension kit 2 pcs. 1/4"x1/4" + 1 pcs. 3/8"x3/8"		10 x
05068023	K-IPER-LINK-JOINT/4-8	Linear extension kit 1 pcs. 1/4"x1/4" + 1 pcs. 1/2"x1/2"		10 x


IPER-LINK - SPLIT INSTALLATION KIT

Code	Model	Description	Kit	
05068020	K-IPER-LINK-SPLIT/4-6	Split installation kit 2 pcs. 1/4"x1/4" + 2 pcs. 3/8"x3/8"SAE		5 x
05068021	K-IPER-LINK-SPLIT/4-8	Split installation kit 2 pcs. 1/4"x1/4"SAE + 2 pcs. 1/2"x1/2"SAE		5 x



Conical brass gaskets included.

QUICK CONNECTOR, COUPLINGS, PIERCING PLIER



QUICK CONNECTORS

Ref	Code	Model	Description	Connection	Dimensions	Weight
A	05105008001	GF6-1/4"NPT	Quick connector	1/4"NPT 6 mm	140 x 100 x 20 mm	0,20 kg
B	05105009001	GF8-1/4"NPT	Quick connector	1/4"NPT 8 mm	140 x 100 x 20 mm	0,20 kg
	14020017	G6	Gasket Ø 6		140 x 100 x 20 mm	0,20 kg
	14020018	G8	Gasket Ø 8		140 x 100 x 20 mm	0,20 kg



1/4" NPT QUICK COUPLINGS

Realized in stainless steel.

Ref	Code	Model	Connection	Dimensions	Weight
A	05108046001	WF 16	1/4"NPT	140 x 100 x 20 mm	0,15 kg
B	05108045001	WM 16	1/4"NPT	140 x 100 x 20 mm	0,15 kg



3/8" NPT QUICK COUPLINGS

Ref	Code	Model	Connection	Dimensions	Weight
A	05108056001	WF 21	3/8"NPT	140 x 100 x 30 mm	0,15 kg
B	05108055001	WM 21	3/8"NPT	140 x 100 x 30 mm	0,15 kg



TUBE PIERCING VALVES

Ref	Code	Model	Connection	Ø tubing mm	Min. Qty	Dimensions	Weight
A	05004003	BPV 31	1/4"SAE	6,3-7,9-9,5	12	150 x 100 x 65 mm	1,2 kg
A	05004002	BPV 21	1/4"SAE	12,7-15,8	8	135 x 85 x 80 mm	1,0 kg
B	05004005	WPV 31	1/4"SAE	6,3 - 7,9 - 9,5 - 10	10	150 x 100 x 65 mm	0,7 kg
C	05004004	W341	1/4"SAE	4,8 ÷ 9,6		70 x 30 x 30 mm	0,10 kg

PIERCING PLIER

The piercing plier allows to have an immediate piercing of the refrigeration system charging hose. As soon as the hose has been perforated, it is possible to perform the vacuum and the refrigerant recharge in the system.

Necessary for HC systems (hydrocarbons) and flammables.

Ref	Code	Model	Connection	Ø tubing mm	Dimensions	Weight
A	08006007	PT-109	1/4"SAE	1/4"-1/2" (6-12 mm)	340 x 120 x 30 mm	0,70kg
B	08006011	PP-343	1/4"SAE	6 mm	240 x 75 x 25 mm	0,43 kg



121RG SERIES WITH DEPRESSOR

Code	Model	A Female swivel connections	B Male connect	Dimensions	Weight
05001003001	121RG4	1/4" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg *
05002003001	BVR-4	7/16" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg
05001033001	121RG5-4	5/16" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg
05001011001	121RG6-4	3/8" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg
05001010001	121RGA-4	1/2" -16 ACME	1/4" SAE	140 x 100 x 20 mm	0,10 kg
05001038001	121RG5 (BVR-5)	5/16" SAE	5/16" SAE	140 x 100 x 20 mm	0,10 kg
05001031001	121RG4-5	1/4" SAE	5/16" SAE	140 x 100 x 20 mm	0,10 kg
05002034001	121RGA-5	1/2" -16 ACME	5/16" SAE	140 x 100 x 20 mm	0,10 kg
05001004001	121RG6	3/8" SAE	3/8" SAE	140 x 100 x 20 mm	0,10 kg
05001007001	121RG4-6	1/4" SAE	3/8" SAE	140 x 100 x 20 mm	0,10 kg
05001041001	121RG5-6	5/16" SAE	3/8" SAE	140 x 100 x 20 mm	0,10 kg
05001009001	121RGA-6	1/2" -16 ACME	3/8" SAE	140 x 100 x 20 mm	0,10 kg
05001008001	121RGA	1/2" -16 ACME	1/2" -16 ACME	140 x 100 x 20 mm	0,10 kg
05001020001	121RG4-A	1/4" SAE	1/2" -16 ACME	140 x 100 x 20 mm	0,10 kg
05001005001	121RG6-A	3/8" SAE	1/2" -16 ACME	140 x 100 x 30 mm	0,10 kg



Available in following colors



(*) With 2 plates.

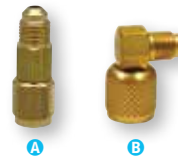


Spare parts

Ref	Code	Model	Description	
A	14022191001	K-PLATE/B	Kit 10 pcs blue colored plates	
B	14022191002	K-PLATE/R	Kit 10 pcs red colored plates	
C	14022191003	K-PLATE/Y	Kit 10 pcs yellow colored plates	

RG SERIES WITH DEPRESSOR

Code	Model	A Female swivel connections	B Male connect	Dimensions	Weight
05059002001	RG180	1/4" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg
05059022001	RG180/4-5	1/4" SAE	5/16" SAE	140 x 100 x 20 mm	0,10 kg
05059023001	RG180/5-4	5/16" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg
05059009001	RG183	3/16" SAE	1/4" SAE	140 x 100 x 20 mm	0,10 kg



Code	Model	A Female swivel connections	B Female connect	Dimensions	Weight
05059001001	RG180F	1/4" SAE	1/4" SAE	140 x 100 x 20 mm	0,04 kg



Code	Model	Description	Dimensions	Weight
05059003001	RG090	Adapter 90°, 1/4" SAE M x 1/4" SAEW swivel connection F	140 x 100 x 20 mm	0,04 kg
05059024001	RG090/5-4	Adapter 90°, 1/4" SAE M x 5/16" SAEW swivel connection F	140 x 100 x 20 mm	0,10 kg
05059010001	RG093	Adapter 90°, 1/4" SAE M x 3/16" SAEW swivel connection F	140 x 100 x 20 mm	0,10 kg

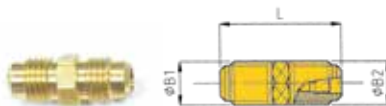


SAE FLARE

The "C" after 1/4" indicates that the connection is suitable to fit the access valve.

SAE FLARE UNIONS

Code	Model	Description	exag.	L mm	ØB1	ØB2	Weight	Min. Qty
05102003	3BA	Valve body	11	35	1/4"	1/4"C	22 g	500
05102030	512 3BA	Valve complete with core and cap	11	35	1/4"	1/4"C	22 g	500
05108026001	512 3BAK	Kit of 10 pcs. Valve complete with core and cap	11	35	1/4"	1/4"C	220 g	10



SAE FLARE X NPT UNIONS

Code	Model	Description	exag.	L mm	ØB	ØC	Weight	Min. Qty
05102004	2BA	Valve body	11	27	1/4"C	1/8"	20 g	500
05102029	512 2BA	Valve complete with core and cap	11	27	1/4"C	1/8"	20 g	500
05108025001	512 2BAK	Kit of 10 pcs. Valve complete with core and cap	11	27	1/4"C	1/8"	200 g	10
05102075	24F5BA	Valve body	14	27	5/16"C	1/8"	20 g	500
05108108001	512 24F5BAK	Kit of 10 pcs. Valve complete with core and cap	14	27	5/16"C	1/8"	200 g	10



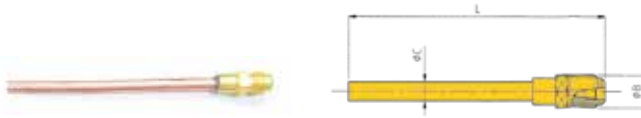
SAE FLARE X O.D.S. UNIONS

Ref	Code	Model	Description	exag.	L mm	ØB	ØC-ØD-ØE mm	Weight	Min. Qty
A	05102001	1BA/6,2	Valve body	11	26	1/4"C	6,2	12 g	500
A	05102002	1BA/6,4	Valve body	11	26	1/4"C	6,4 1/4"	12 g	500
B	05102005	4BA	Valve body	11	29	1/4"C	6,2-8-10	12 g	500
B	05102070	5BA	Valve body	11	29	5/16"C	6,2-8-10	13 g	500
A	05102028	512 1BA/6,2	Valve complete with core and cap	11	30,5	1/4"C	6,2	12 g	500
A	05108023001	512 1BA/6,2K	Kit of 10 pcs. Valve complete with core and cap	11	26	1/4"C	6,2	120 g	10
A	05102033	512 1BA/6,4	Valve complete with core and cap	11	26	1/4"C	6,4 1/4"	12 g	500
A	05108024001	512 1BA/6,4K	Kit of 10 pcs. Valve complete with core and cap	11	26	1/4"C	6,4 1/4"	120 g	10
B	05102031	512 4BA	Valve complete with core and cap	11	29	1/4"C	6,2-8-10	13 g	500
B	05108027001	512 4BAK	Kit of 10 pcs. Valve complete with core and cap	11	29	1/4"C	6,2-8-10	130 g	10
B	05102071	512 5BA	Valve complete with core and cap	14	30,5	5/16"C	6,2-8-10	13 g	500
B	05108089001	512 5BAK	Kit of 10 pcs. Valve complete with core and cap	14	30,5	5/16"C	6,2-8-10	130 g	10



SAE FLARE UNIONS WITH COPPER TUBE

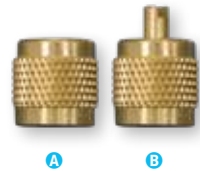
Code	Model	Description	exag.	L mm	ØB	ØC	Weight	Min. Qty
05102006	50BA	Valve body	11	77	1/4"C	6	29 g	500
05102007	100BA	Valve body	11	126	1/4"C	6	29 g	500
05102025	512/50	Valve complete with core and cap	11	77	1/4"C	6	29 g	500
05108028001	512/50K	Kit of 10 pcs. Valve complete with core and cap	11	77	1/4"C	6	290 g	10
05102023	512/100	Valve complete with core and cap	11	126	1/4"C	6	29 g	500
05108029001	512/100K	Kit of 10 pcs. Valve complete with core and cap	11	126	1/4"C	6	290 g	10


INTERNAL CORE

Code	Model	Description	Min. Qty
14023003	M1/4"-R22/B	Internal core for R22	500
05108040001	M1/4"-R22/BK	Kit 10 pcs. Internal core for R22	10
14023002	M1/4"-R134A/V-R	Internal core for HFC (R134a-R410A, R32...)	500
05108043001	M1/4"-R134A/V-RK	Kit 10 pcs. Internal core for HFC (R134a-R410A, R32...)	10
14023023	M1/4"-R290/V	Internal core for HC R290 R600 1/4"	500
05108110001	M1/4"-R290/VK-WIG	Kit 10 pcs. Internal core for HC R290 R600 1/4"	10


CAP

Ref	Code	Model	Description	Min. Qty
A	05063001	CP1/4"	1/4" flare cap with gasket	500
	05108044001	CP1/4"K	Kit 10 pcs. Caps with gasket	10
A	05063042	CP5/16"	5/16" flare cap with gasket	100
	05108105001	CP5/16"K	Kit 10 pcs caps with gasket	10
B	05063053	CP1/4"-CTV	1/4" flare cap with gasket with wrench	50


COPPER BONNETS FOR SAE FLARE CONNECTIONS

Code	Model	Flare	Weight gr x 100 pc	Min. Qty
05063024	B1-4	1/4"	41	100
05063025	B1-5	5/16"	56	100
05063026	B1-6	3/8"	91	100
05063027	B1-8	1/2"	140	100
05063028	B1-10	5/8"	186	100
05063029	B1-12	3/4"	443	100



TEES

The "C" after 1/4" indicates that the connection is suitable to fit the access valve.
The "N" after 1/4" indicates the presence of the nut.

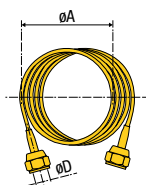
CONICAL COPPER GASKETS FOR SAE FLARE CONNECTIONS

Code	Model	Flare	Weight g x 100 pc	Min. Qty
14020035	B2-4	1/4"	27	100
14020043	B2-5	5/16"	30	100
14020036	B2-6	3/8"	50	100
14020044	B2-8	1/2"	66	100
14020045	B2-10	5/8"	85	100
14020046	B2-12	3/4"	182	100



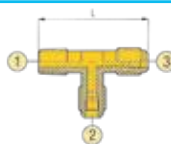
SAE FLARE CAPILLARY ADAPTORS WITHOUT DEPRESSOR

Code	Model	ØA mm	ØD mm	L mm	Weight
06052001	87A	60	1/4"	1000	85 g
06052002	87B	60	1/4"	500	65 g

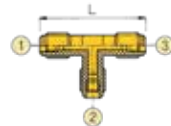


TEES

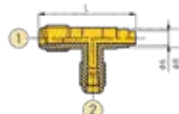
Code	Model	L mm	1 NTP	2 flare	3 flare	Weight	Min. Qty
05059008	889/02	45	1/8"	1/4"C	1/4"C	25 g	100
05108112001	889/02K	45	1/8"	1/4"C	1/4"C	250 g	



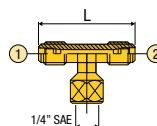
Code	Model	L mm	1 flare	2 flare	3 flare	Weight	Min. Qty
05057061	890/02	45	1/4"C	1/4"C	1/4"	25 g	100
05108113001	890/02K	45	1/4"C	1/4"C	1/4"	250 g	



Code	Model	L mm	1 flare	2 flare	Weight	Min. Qty
05057001	892/02	40	1/4"C	1/4"C	20 g	100

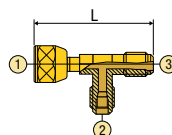


Code	Model	L mm	1 flare	2 flare	Weight	Min. Qty
05057034	T6-4C/01	46	1/4"C	1/4"C	37 g	100
05108114001	T6-4C/01K	46	1/4"C	1/4"C	370 g	



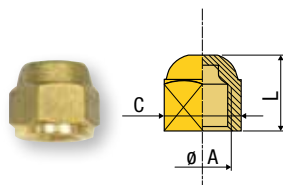
TEES WITH SWIVEL NUT

Code	Model	L mm	1 flare	2 flare	3 flare	Weight	Min. Qty
05057029	891/02	52	1/4"N	1/4"C	1/4"C	47 g	100
05108115001	891/02K	52	1/4"N	1/4"C	1/4"C	470 g	

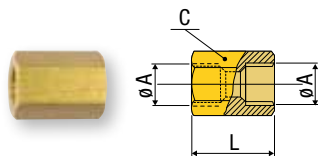


SAE FLARE CAPS

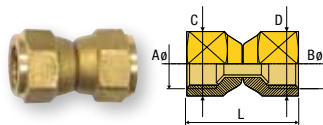
Code	Model	ØA flare	C esag.	L mm	Weight	Min. Qty
05062031	N5-4	1/4"	14	14	10 g	100
05108116001	N5-4K	1/4"	14	14	100 g	10
05062060	N5-5	5/16"	19	18	22 g	100
05108117001	N5-5K	5/16"	19	18	220 g	10
05062032	N5-6	3/8"	22	18	33 g	100


SAE FLARE COUPLING UNIONS

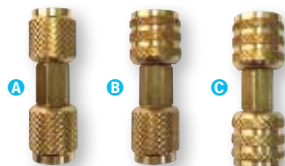
Code	Model	ØA flare	C esag.	L mm	Weight	Min. Qty
05053003	U4-4	1/4"	17	26	38 g	100
05108118001	U4-4K	1/4"	17	26	380 g	10
05053004	U4-5	5/16"	19	28	47 g	100
05108119001	U4-5K	5/16"	19	28	470 g	10
05053005	U4-6	3/8"	22	30	64 g	100
05108120001	U4-6K	3/8"	22	30	320 g	5
05053007	U4-10	5/8"	28	40	124 g	100
05108122001	U4-10K	5/8"	28	40	645 g	5


SAE FLARE SWIVEL NUTS UNIONS

Code	Model	ØA flare	C esag.	L mm	Weight	Min. Qty
05062007	US4-4	1/4"	17	30	38 g	100
05108123001	US4-4K	1/4"	17	30	380 g	10
05062036	US4-6	3/8"	22	37	65 g	50
05108124001	US4-6K	3/8"	22	37	650 g	10
05062037	US4-8	1/2"	24	41	78 g	50
05108125001	US4-8K	1/2"	24	41	780 g	10
05062038	US4-10	5/8"	27	42	91 g	25
05108126001	US4-10K	5/8"	27	42	910 g	10

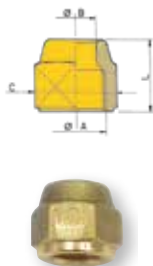

SWIVEL COUPLING

Ref	Code	Model	Connection
A	05053012001	MG4-4	1/4" SAE x 1/4" SAE
B	05053013001	MG4-6	1/4" SAE x 3/8" SAE
C	05053014001	MG6-6	3/8" SAE x 3/8" SAE

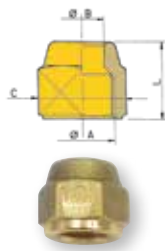


UNIONS

SAE FLARE NUTS FOR INCH TUBES

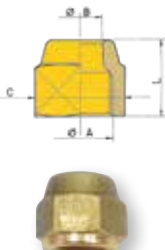


Code	Model	Description	ØA	ØB	C esag.	L mm	Weight	Min. Qty
05062008	NS4-4	Nuts for inch tubes	1/4"	1/4"	17	15	18 g	100
05108002001	NS4-4K	Kit 10 pcs. nuts for inch tubes	1/4"	1/4"	17	15	180 g	10
05062009	NS4-6	Nuts for inch tubes	3/8"	3/8"	22	18	31 g	100
05108003001	NS4-6K	Kit 10 pcs. nuts for inch tubes	3/8"	3/8"	22	18	310 g	10
05062010	NS4-8	Nuts for inch tubes	1/2"	1/2"	24	20	36 g	100
05108004001	NS4-8K	Kit 10 pcs. nuts for inch tubes	1/2"	1/2"	24	20	360 g	10
05062011	NS4-10	Nuts for inch tubes	5/8"	5/8"	28	23	43 g	100
05108005001	NS4-10K	Kit 10 pcs. nuts for inch tubes	5/8"	5/8"	28	23	430 g	10
05062013	NS4-12	Nuts for inch tubes	3/4"	3/4"	33	30	87 g	100
05108006001	NS4-12K	Kit 5 pcs. nuts for inch tubes	3/4"	3/4"	33	30	435 g	5
05062014	NS4-14	Nuts for inch tubes	7/8"	7/8"	41	36	179 g	10
05062015	NS4-16	Nuts for inch tubes	1"	1"	41	36	149 g	10



SAE FLARE REDUCED NUTS FOR INCH TUBES

Code	Model	Description	ØA	ØB	C esag.	L mm	Weight	Min. Qty
05062018	NRS4-64	Reduced nuts for inch tubes	3/8"	1/4"	22	18	31 g	100
05108127001	NRS4-64K	Reduced nuts for inch tubes	3/8"	1/4"	22	18	310 g	10
05062020	NRS4-86	Reduced nuts for inch tubes	1/2"	3/8"	24	20	37 g	100
05108128001	NRS4-86K	Reduced nuts for inch tubes	1/2"	3/8"	24	20	370 g	10
05062021	NRS4-108	Reduced nuts for inch tubes	5/8"	1/2"	27	25	47 g	100
05108129001	NRS4-108K	Reduced nuts for inch tubes	5/8"	1/2"	27	25	470 g	10

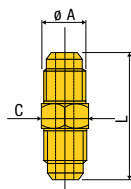


SAE FLARE NUTS FOR METRIC TUBES

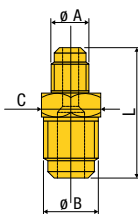
Code	Model	Description	ØA	ØB	C esag.	L mm	Weight	Min. Qty
05062002	NS4-4/6	Nuts for inch tubes	1/4"	6	17	15	19 g	100
05108007001	NS4-4/6K	Kit 10 pcs. nuts for inch tubes	1/4"	6	17	15	190 g	10
05062006	NS4-6/8	Nuts for inch tubes	3/8"	8	22	18	33 g	100
05108058001	NS4-6/8K	Kit 10 pcs. nuts for inch tubes	3/8"	8	22	18	330 g	10
05062005	NS4-6/10	Nuts for inch tubes	3/8"	10	22	8	31 g	100
05108059001	NS4-6/10K	Kit 10 pcs. nuts for inch tubes	3/8"	10	22	18	310 g	10
05062001	NS4-8/10	Nuts for inch tubes	1/2"	10	24	20	38 g	100
05108008001	NS4-8/10K	Kit 10 pcs. nuts for inch tubes	1/2"	10	24	20	380 g	10
05062003	NS4-8/12	Nuts for inch tubes	1/2"	12	24	20	37 g	100
05108060001	NS4-8/12K	Kit 10 pcs. nuts for inch tubes	1/2"	12	24	20	370 g	10
05062024	NS4-10/12	Nuts for inch tubes	5/8"	12	27	23	47 g	100
05108062001	NS4-10/12K	Kit 10 pcs. nuts for inch tubes	5/8"	12	27	23	470 g	10

SAE FLARE UNIONS

Code	Model	Description	ØA	C esag.	L mm	Weight	Min. Qty
05051014	U2-4	Unions	1/4"	11	33	17 g	100
05108010001	U2-4K	Kit 10 pcs. unions	1/4"	11	33	170 g	10
05051011	U2-5	Unions	5/16"	14	36	27 g	100
05108014001	U2-5K	Kit 10 pcs. unions	5/16"	14	36	270 g	10
05051016	U2-6	Unions	3/8"	17	36	40 g	100
05108009001	U2-6K	Kit 10 pcs. unions	3/8"	17	39	400 g	10
05108011001	U2-8K	Kit 10 pcs. unions	1/2"	20	45	34 g	5
05108012001	U2-10K	Kit 10 pcs. unions	5/8"	23	50	47 g	5
05108013001	U2-12K	Kit 10 pcs. unions	3/4"	27	57	292 g	2


SAE FLARE REDUCED UNIONS

Code	Model	Description	ØA	ØB	C esag.	L mm	Weight	Min. Qty
05052020	UR2-64	Reduced unions	1/4"	3/8"	17	39	36 g	100
05108015001	UR2-64K	Kit 10 pcs. Reduced unions	1/4"	3/8"	17	39	360 g	10
05052022	UR2-84	Reduced unions	1/4"	1/2"	20	42	52 g	100
05108016001	UR2-84K	Kit 10 pcs. Reduced unions	1/4"	1/2"	20	42	260 g	5
05052021	UR2-86	Reduced unions	3/8"	1/2"	20	44	75 g	100
05108017001	UR2-86K	Kit 10 pcs. Reduced unions	3/8"	1/2"	20	44	375 g	5
05052027	UR2-104	Reduced unions	1/4"	5/8"	23	43	66 g	100
05108018001	UR2-104K	Kit 10 pcs. Reduced unions	1/4"	5/8"	23	43	330 kg	5
05052028	UR2-106	Reduced unions	3/8"	5/8"	23	45	74 g	100
05108065001	UR2-106K	Kit 5 pcs. Reduced unions	3/8"	5/8"	23	45	370 g	5
05052029	UR2-108	Reduced unions	1/2"	5/8"	23	48	80 g	100
05108019001	UR2-108K	Kit 5 pcs. Reduced unions	1/2"	5/8"	23	48	400 g	5
05052030	UR2-128	Reduced unions	1/2"	3/4"	27	52	114 g	50
05052031	UR2-1210	Reduced unions	5/8"	3/4"	27	54	132 g	50


UNIVERSAL OIL FOR FLARE

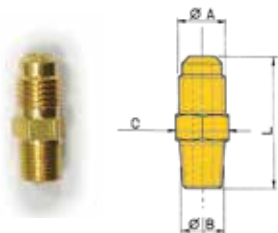
Universal oil essential for the flare lubrication, during flaring operation and before clamping with torque wrenches.

Code	Model	Min. Qty	Capacity	Dimensions	Weight
12002015	FO-200	12	200 ml	170 x 50 x 50 mm	0,2 kg



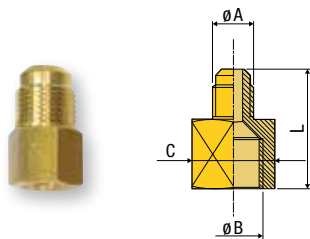
UNIONS

SAE FLARE M X NPT M UNIONS



Code	Model	ØA	ØB NPT	C esag.	L mm	Weight	Min. Qty
05052001	U1-4A (24F4)	1/4"	1/8"	11	31	16 g	100
05052011	U1-4B (48F4)	1/4"	1/4"	14	36	29 g	100
05052026	U1-4C	1/4"	3/8"	17	38	41 g	100
05108130001	U1-4CK	1/4"	3/8"	22	42	410 g	10
05052013	U1-6A (24F6)	3/8"	1/8"	17	36	33 g	50
05052012	U1-6B (48F6)	3/8"	1/4"	17	39	36 g	50
05052033	U1-6C	3/8"	3/8"	17	39	46 g	50
05108131001	U1-6CK	3/8"	3/8"	17	39	460 g	10
05052025	U1-6D	3/8"	1/2"	22	45	76 g	50
05052034	U1-8B	1/2"	1/4"	20	43	54 g	50
05052016	U1-8C	1/2"	3/8"	20	43	60 g	50
05052035	U1-8D	1/2"	1/2"	22	45	83 g	50
05052038	U1-10D	5/8"	1/2"	23	49	88 g	50
05052039	U1-10E	5/8"	3/4"	27	54	132 g	50
05052041	U1-12E	3/4"	3/4"	27	53	138 g	50

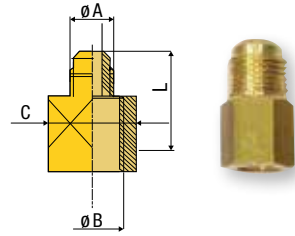
SAE FLARE M X SAE FLARE F REDUCED UNIONS



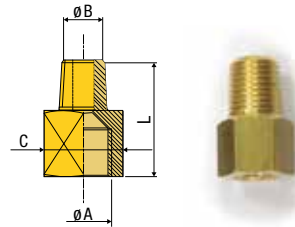
Code	Model	ØA	ØB	C esag.	L mm	Weight	Min. Qty
05055018	UR3-46	1/4"	3/8"	22	33	50 g	50
05108133001	UR3-46	1/4"	3/8"	22	33	500 g	10
05055024	UR3-48	1/4"	1/2"	25	37	73 g	50
05108134001	UR3-48K	1/4"	1/2"	25	37	730 g	10
05055017	UR3-64	3/8"	1/4"	17	33	40 g	50
05108132001	UR3-64K	3/8"	1/4"	17	33	400 g	10
05055025	UR3-68	3/8"	1/2"	25	38	73 g	50
05108135001	UR3-68K	3/8"	1/2"	25	38	365 g	5
05055026	UR3-84	1/2"	1/4"	20	35	58 g	50
05108136001	UR3-84K	1/2"	1/4"	20	35	290 g	5
05055027	UR3-86	1/2"	3/8"	22	35	60 g	50
05108137001	UR3-86K	1/2"	3/8"	22	35	300 g	5
05055028	UR3-810	1/2"	5/8"	27	43	97 g	50
05108138001	UR3-810K	1/2"	5/8"	27	43	485 g	5
05055029	UR3-108	5/8"	1/2"	25	43	83 g	50
05108139001	UR3-108K	5/8"	1/2"	25	43	415 g	5
05055030	UR3-1012	5/8"	3/4"	32	45	129 g	40
05055031	UR3-1210	3/4"	5/8"	27	41	102 g	40

REDUCED UNIONS SAE FLARE M X NPT F

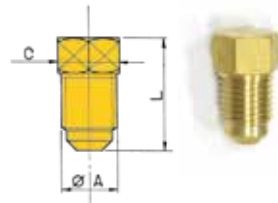
Code	Model	ØA	ØB NPT	C esag.	L mm	Weight	Min. Qty
05055008	46F	1/4"	1/8"	14	28	20 g	100
05108140001	46F/K	1/4"	1/8"	14	28	200 g	10
05055019	U3-4B	1/4"	1/4"	19	33	41 g	100
05108141001	U3-4BK	1/4"	1/4"	19	33	410 g	10
05055033	U3-4C	1/4"	3/8"	22	36	55 g	100
05108142001	U3-4CK	1/4"	3/8"	22	36	550 g	10
05055035	U3-6B	3/8"	1/4"	19	33	49 g	100
05055036	U3-6C	3/8"	3/8"	22	35	54 g	100
05055046	U3-6D	3/8"	1/2"	27	40	85 g	50
05055038	U3-8C	1/2"	3/8"	22	38	63 g	50
05055039	U3-8D	1/2"	1/2"	27	44	100 g	50


REDUCED UNIONS SAE FLARE F X NPT M

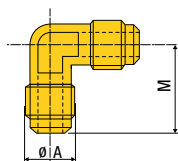
Code	Model	ØA	ØB NPT	C esag.	L mm	Weight	Min. Qty
05055040	U5-4A	1/4"	1/8"	17	28	21 g	100
05108143001	U5-4AK	1/4"	1/8"	17	28	210 g	10
05055041	U5-4B	1/4"	1/4"	17	30	39 g	100
05108144001	U5-4BK	1/4"	1/4"	17	30	390 g	10
05055042	U5-6B	3/8"	1/4"	22	34	51 g	100
05108145001	U5-6BK	3/8"	1/4"	22	34	255 g	5
05055043	U5-6C	3/8"	3/8"	22	34	65 g	100
05108146001	U5-6CK	3/8"	3/8"	22	34	325 g	5


SAE FLARE PLUGS

Code	Model	ØA flare	C esag.	L mm	Weight	Min. Qty
05063030	P2-4	1/4"	12	20	13 g	200
05063032	P2-6	3/8"	17	23	36 g	200
05063033	P2-8	1/2"	20	26	55 g	200

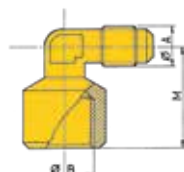


ELBOWS AND TEES



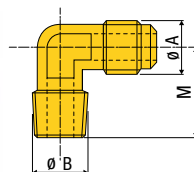
SAE FLARE ELBOWS

Code	Model	ØA flare	M mm	Weight	Min. Qty
05056009	E2-4	1/4"	23	20 g	100
05056022	E2-6	3/8"	30	52 g	50
05056023	E2-8	1/2"	34	86 g	50
05056024	E2-10	5/8"	34	92 g	50



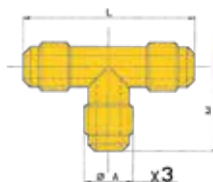
SAE FLARE M X SAE F ELBOWS

Code	Model	ØA flare	ØB flare	M mm	Weight	Min. Qty
05056030	ER3-44	1/4"	1/4"	27	59 g	50



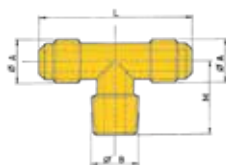
SAE FLARE M X NPT M ELBOWS

Code	Model	ØA flare	ØB NPT	M mm	Weight	Min. Qty
05056011	E1-4A	1/4"	1/8"	23	20 g	100
05056012	E1-4B	1/4"	1/4"	25	31 g	100
05108147001	E1-4BK	1/4"	1/4"	25	310 g	10
05056010	E1-6B	3/8"	1/4"	27	44 g	50
05056039	E1-6C	3/8"	3/8"	27	55 g	50



SAE FLARE TEES

Code	Model	ØA flare	L mm	M mm	Weight	Min. Qty
05057017	T2-4	1/4"	46	22	30 g	100
05108148001	T2-4K	1/4"	46	22	300 g	10
05057018	T2-6	3/8"	52	26	59 g	100
05108149001	T2-6K	3/8"	52	26	590 g	5
05057019	T2-8	1/2"	60	31	95 g	50
05108164001	T2-8K	1/2"	60	31	190 g	5
05057020	T2-10	5/8"	70	35	145 g	50
05057041	T2-12	3/4"	80	41	225 g	50



SAE FLARE X NPT BRANCH TEES

Code	Model	ØA flare	ØB NPT	L mm	M mm	Weight	Min. Qty
05057025	T1-4A	1/4"	1/8"	46	22	29 g	100
05108151001	T1-4AK	1/4"	1/8"	46	22	290 g	10



CONDENSATION
WATER PUMPS

 **WIGAM**



WATER DISSIPATER



WE SUGGEST THE INSTALLER TO MEASURE THE HOURLY VOLUME OF WATER PRODUCED BY THE SYSTEM



HYPPO

Water dissipater

It eliminates the water produced by air-conditioning systems.

Usable with all air-conditioning equipments, with or without heat pump.

Outer container is fireproof and resistant to UV rays.

Single or in series assembly.

The unit must always be connected to the power supply.

Power consumption only when there's water condensate and in proportion to quantity of it.

Water dissipater must be installed exclusively outside the house (outside walls, balconies, etc...) by a qualified installer.

Practical and easy installation.

Economical.

Evaporation capacity: 1,5 l/h (25 cc/min).

Designed and approved in compliance with the CE rules of the European community and IEC 60335.

Code	Model	Dimensions	Weight
02042019	HYPPO	170 x 110 x 55 mm	0,56 kg



Spare parts and accessories

Code	Description
02042034	Completion fitting kit for HYPPO



LITTLE-NOISELESS

Condensation water pump

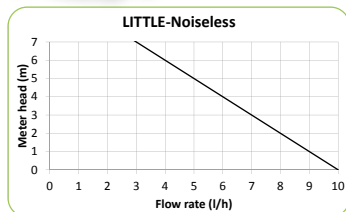
Little is a small condensation water pump that can be incorporated in air conditioners including ceiling and wall-mounted mini-split units. The pump consists of two parts: the pump unit and the detection unit.

Code	Model	Dimensions	Weight
02042003	LITTLE-NOISELESS	130 x 100 x 100 mm	0,3 kg



Technical features

For split units up to	10 kW
Maximum flow rate	10 l/h
Maximum discharge head	8 m
Maximum suction	2,5 m
Voltage	230V - 50/60Hz
Alarm contact	NO / NC 230 [V] / 8 [A]
Dimensions pump body	78 x 35,5 x 65 mm
Dimensions detection unit	72 x 38,5 x 39 mm



Spare parts and accessories

Rif	Code	Description
A	02042010	Detection unit with 1,5 m cable
B	02042011	Non return valve 30 x Ø8



SMART-12

Mini condensation water pump

SMART-12, with its SLIM conformation, can be easily installed inside the air conditioners indoor unit or trunking. Its elongated body has a height of only 3 cm and a width of 3.4 cm.

Easy installation thanks to the complete set of electrical / hydraulic connections.

Extremely quiet operation.

Integrated alarm contact.

Code	Model	Dimensions	Weight
02042033	SMART-12	154 x 30 x 34 mm	0,5 kg



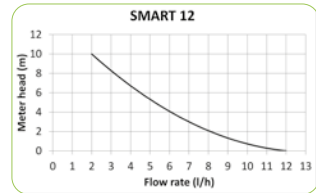
Technical features

For split units up to	10 kW
Maximum flow rate	12 l/h
Maximum discharge head	7 m
Maximum suction	2 m
Voltage	100-230V/50-60Hz
Alarm contact	NC 2A-230V
Dimensions pump body	154 x 30 x 34 mm
Dimensions detection unit	86 x 40 x 45 mm



Spare parts and accessories

Code	Description
02042022	Detection unit with 1.5 cable



CUB-18

Condensation water pump

Cub is a small condensation water pump that can be incorporated in air conditioners including ceiling and wall-mounted mini-split units.

Very low noise.

Easy installation thanks to the complete set of electrical and hydraulic connections.

Code	Model	Dimensions	Weight
02042028	CUB-18	260 x 170 x 60 mm	0,7 kg



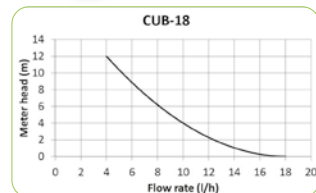
Technical features

For split units up to	12 kW
Maximum flow rate	18 l/h
Maximum discharge head	10 m
Maximum suction	2 m
Voltage	100-230V/50-60Hz
Alarm contact	NC 3A-250V
Dimensions pump body	104 x 49 x 46 mm
Dimensions detection unit	86 x 40 x 45 mm



Spare parts and accessories

Code	Description
02042022	Detection unit with 1.5 cable



CONDENSATION WATER PUMP



SMILE-EVO

Wall mounted condensation pump

Designed for installation below the air conditioners.

Effective even in the presence of water with impurities.

Minimum sound level.

Safety connection to interrupt the supply in case of overflow.

Code	Model	Dimensions	Weight
02042027	SMILE-EVO	160 x 100 x 130 mm	0,6 kg



Technical features

Maximum flow rate	40 l/h
Maximum discharge head	10 m
Voltage	230V - 50/60Hz
Tank capacity	200 ml
Power consumption	3W



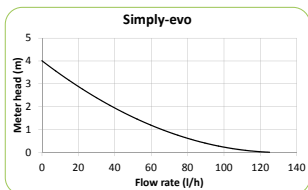
SIMPLY-EVO

Water tank condensation pump

With a flow rate of 125l/h and Havy duty construction, SIMPLY-EVO is suitable for both air conditioning and refrigeration solutions.

Equipped with forced air cooling, it guarantees great reliability and stable operation.

Code	Model	Dimensions	Weight
02042004	SIMPLY-EVO	286 x 136 x 163 mm	2,4 kg



Technical features

Maximum flow rate	125 l/h
Maximum discharge head	4 m
Voltage	230V - 50/60Hz
Tank capacity	1,8 l
Power consumption	NO/NC 230-5A

SILENT

Condensate water pump without neutralization system

Usable for air-conditioning air dehumidification systems.

Usabel for gas boilers up to 400kW.

Made of resistant ABS plastic material.

Can be used with condensing boilers, after installation of a condensate treatment/neutralisation system.

Extremely quiet.

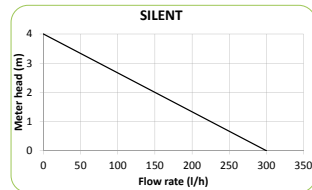


Code	Model	Dimensions	Weight
02042002	SILENT	185 x 85 x 100 mm	1,6 kg



Technical features

For gas boilers up to	400 kW
Maximum flow rate	350 l/h
Max delivery height	4 m
Tank capacity	0,5 l
Fluid temperature	70°C
Voltage	230V - 50/60Hz
Alarm contact	Máx 24V. 6VA(NA) Ohm load



CLIMA-CAP

Protective covers for external units

Optimized dimensions for the main R32 units.



Code	Model	Dimensions	Suitable for
16010010	CLIMA-CAP-M/D	550 x 860 x 340 mm	Mono 20-35 / Multi 2-R32
16010011	CLIMA-CAP-MUL	735 x 980 x 400 mm	Mono 42-60 / Multi 3-4-5-R32





AIR CONDITIONING AND REFRIGERATION SYSTEMS AND INSTRUMENTS



HIGH VACUUM PUMPS



PRESSURIZATION SYSTEMS



RECOVERY AND RECYCLING UNITS



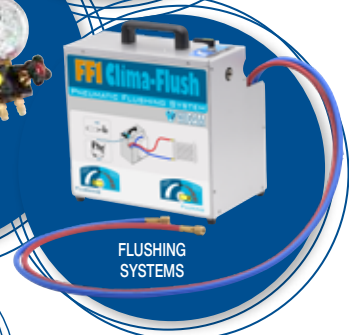
TOOLS



CONDENSATION WATER PUMPS



MANIFOLD, HOSES AND ACCESS VALVES



FLUSHING SYSTEMS



LEAK DETECTORS





WELDING
CONSUMABLES



WELDING



SPITFIRE/PRO

Complete kit with 1 torch SPITFIRE and 2 MAP-HP cartridges

Features:

- Large and high intensity flame.
- Up to 2200°C high temperature powerful swirl flame.
- For use with MAP-HP and Propane gas.
- Piezo igniter for instant flame.
- Safety lock feature to prevent accidental ignition.
- Ignition button lock for continuous use.
- Replaceable brass tip.
- Ergonomic handle design.

Code	Model	Dimensions	Weight
10001037	SPITFIRE/PRO	310 x 270 x 120 mm	2,8 kg



SPITFIRE

Torch welders

Features:

- Large and high intensity flame.
- Up to 2200°C high temperature powerful swirl flame.
- For use with MAP-HP and Propane gas.
- Piezo igniter for instant flame.
- Safety lock feature to prevent accidental ignition.
- Ignition button lock for continuous use.
- Replaceable brass tip.
- Ergonomic handle design.

Code	Model	Dimensions	Weight
10001036	SPITFIRE	320 x 160 x 40 mm	0,46 kg



MAP-HP

New-generation cartridges MAP-HP

Ref	Code	Model	Description	Capacit	Min. Qty
A	11003022	MAP-HP	Cartridge	400 g	12
B	05055071	-	Adapter for use with TURBO SET 90	-	-

Ref	Code	Temperature	Dimensions	Weight
A	11003022	1982°C	470 x 160 x 280 mm	11,1kg
B	05055071		140 x 100 x 20 mm	0,10 kg

SPITFIRE FLEX/PRO

Complete kit with 1 SPITFIRE-FLEX torch and 2 MAP-HP cartridges

SPITFIRE-FLEX torch with integrated hose to work even in hard-to-reach areas.

Piezo igniter for instant flame

Flame adjustment.

Powerful swirl flame up to a temperature of 2200 °C.

For use with **MAP-HP** and **Propane gas**.

Codice	Modello	Dimensioni	Peso
10001041	SPITFIRE FLEX/PRO	310 x 270 x 120 mm	2,8 kg



SPITFIRE-FLEX

Torch welder with flexible nozzle

Thanks to its flexible nozzle, the new **SPITFIRE-FLEX** torch welder allows you to work comfortably even in hard-to-reach areas of installations.

Integrated hose of 200 mm (total length of 440mm).

Piezo igniter for instant flame.

Flame adjustment.

Powerful swirl flame up to a temperature of 2200°C.

For use with **MAP-HP** and **Propane gas**.

Codice	Modello	Dimensioni	Peso
10001040	SPITFIRE FLEX	75 x 35 x 457 mm	0,6 kg



BELT HOSE KIT

Extension and belt hook for SPITFIRE and SPITFIRE-FLEX

The **BELT HOSE KIT** extension allows you to operate more comfortably by freeing yourself from the load and size of the cartridge.

The **MAP-HP** cartridge is attached to the belt by means of the belt holder and the SPITFIRE or **SPITFIRE-FLEX** torch is connected to the cartridge by means of a handy 1300mm hose with valve.

The kit includes:

- 1300mm connecting hose with valve.
- Hook for hanging the **MAP-HP** cartridge on the belt.

Codice	Modello	Dimensioni	Peso
10001039	BELT-HOSE-KIT	135 x 60 x 135 mm	0,5 kg



PROPANE AND OXYGEN WELDING KIT



TURBO SET 90

Autogen welding rack

The smallest autogenous welding system with disposable cylinder and cartridge in metal frame.

Compact, it allows professional welding. The system is particularly suitable for hydraulics, conditioning and refrigeration.

Standard equipment

- mignon OXYGEN pressure regulator and gas valve with double protection check valves.
- 2000 mm hoses with double protection valves.
- handle with regulating valves and lance. 80 l.
- Kit of 4 lances for head (63, 100, 160, 225 l).
- Protection goggles.
- Multipurpose wrench.
- Brazing alloy.

Code	Model	Description	Temp. °C	Min. Qty
10001013	TURBO SET 90	Complete rack	3000	2 pz
10001030	TURBO SET 90/SB	Rack without cartridges	3000	2 pz

Code	Dimensions	Weight
10001013	400 x 245 x 370 mm	11 kg
10001030	400 x 245 x 370 mm	7,4 kg



Spare parts and accessories

Code	Model	Description	Min. Qty	Dimensions	Weight
11002001	OXIGEN110	Oxygen cartridge	12	310 x 240 x 330 mm	16,3 kg
11003003	MAXIGAS	Maxigas cartridge	12	300 x 240 x 290 mm	5,9 kg
10002014	220500	Oxygen regulator	-	60 x 30 x 30 mm	0,15 kg
10002015	201500	Propylene regulator	-	60 x 30 x 30 mm	0,15 kg
10005013	110005	Handgrip with head, lance 80 l, check valves and hoses	-	240 x 230 x 50 mm	0,65 kg
10004021	110600	Head and lance 80 l	-	130 x 100 x 10 mm	0,05 kg
10004033		Kit 4 spare lances for head	-	-	-

HEAT DISSIPATING

Helps prevent heat damage to components and surrounding materials during soldering.

Helps protect rubber, plastic, painted and finished surfaces during soldering.

Sticks to surfaces without dripping or running off.

Safe, non-toxic.

Reduces danger of fire to surrounding surfaces.

Available in:

- Gel in convenient spray solution (A).
- Reusable paste (B).



Ref	Code	Model	Min. Qty	Capacity	Dimensions	Weight
A	12003007	11509	12	0,947 lt	320 x 80 x 80 mm	1,06 kg
B	12003009	HOT-BUSTER	4	500 g	90 x d.105 mm	0,5 kg

80P/B

Propane and oxygen bottles kit on metal frame

Rif	Code	Model	Empty oxygen bottle	Empty propane bottle
A	10001022	80P/B	5 l	2 kg

Rif	Code	Dimensions	Weight
A	10001022	690 x 430 x 280 mm	14,6 kg



80P/R

Propane and oxygen pressure regulator kit

Propane pressure regulator and oxygen pressure regulator kit complete with gauges, check valve, handle with one 160 lt LP lance and hoses.

Rif	Code	Model	Dimensions	Weight
B	10001023	80P/R	360 x 360 x 210 mm	4,7 kg

80A/B

Acetylene and oxygen bottles kit on metal frame

Rif	Code	Model	Empty oxygen bottle	Full acetylene bottle
A	10001026	80A/B	5 l	5 l

Rif	Code	Dimensions	Weight
A	10001026	690 x 430 x 280 mm	14,6 kg



80A/R

Acetylene and oxygen pressure regulator kit

Acetylene pressure regulator and oxygen pressure regulator kit complete with gauges, check valve, handle with 3 LP lances of 160, 225 and 315 l and hoses.

Rif	Codice	Modello	Dimensioni	Peso
B	10001027	80A/R	360 x 360 x 210 mm	5,2 kg



Spare parts and accessories

Rif	Code	Model	Description	Capacity	Dimensions	Weight
A	11002002	BOS 50	Empty oxygen bottle	5 l	550 x 150 x 150 mm	7,6 kg
B	05002026	VO 5	Oxygen valve for BOS 50	-	-	-
C	11003017	BAC 50/C	Full acetylene bottle	5 l	550 x 150 x 150 mm	11,6 kg
D	11003004	BOP 5	Empty propane bottle	2 kg	270 x 200 x 200 mm	3,3 kg

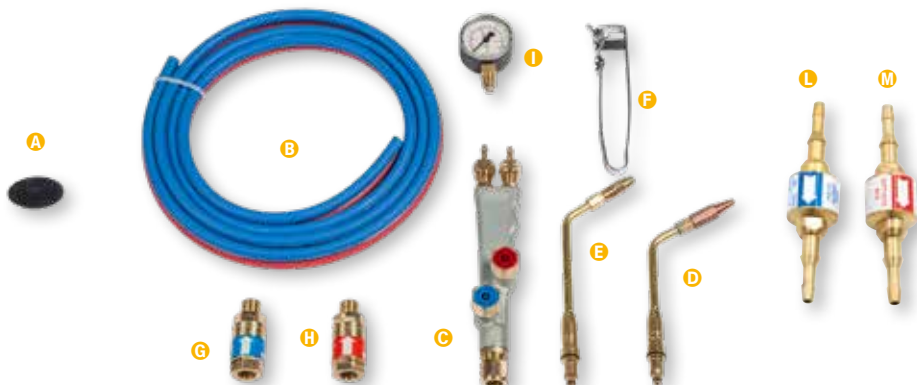


SPARE PARTS AND ACCESSORIES FOR PRESSURE REDUCERS



Pressure regulators

Rif	Code	Model	Description	High pressure bar	Low pressure bar	Working pressure bar
A	10002001	RPM	Miniature propane regulator	-	-	-
B	10002005	PR 04	Propane regulator	-	0÷6	4
C	10002003	AC 14	Acetylene regulator	0÷315	0÷16	10
D	10002009	AC 14/P	Acetylene regulator for 80A	0÷40	0÷2,5	1,5
E	10002002	OS15	Oxygen regulator	0÷315	0÷16	10
F	10002008	OS 15/P	Oxygen regulator for 80A	0÷315	0÷16	4
G	10002004	AZ 11	Nitrogen regulator	0÷315	0÷16	10



Spare parts and accessories for pressure regulators

Rif	Code	Model	Description
A	10010023	95513	Diaphragm for regulator
B	10010015	TB	Twin hose
C	10005001	IM	Handle
D	10004XXX	LA	Acetylene welding head 25÷315 l
E	10004XXX	LP	Propane welding head 25÷500 l
F	10010002		Lighter
G	10010012	VO	Straight oxygen check valve
H	10010013	VSP	Traight propane- acetylen check valve
I	10010XXX		Replacement gauge for regulator
L	10005008		Intermedia oxygen valve
M	10005009		Intermedia gas valve

734

Brazing alloy for copper-brass welding

Code	Model	Diameter	Alloys compositions%			Fusion temp.	Conf.
			Ag	Cu	Zn		
10003013	734	1,5 m	34	36,2	27,1	630-730 °C	500 g


DP250

Flux powder

Code	Model	Conf.
10003004	DP250	250 g


734R

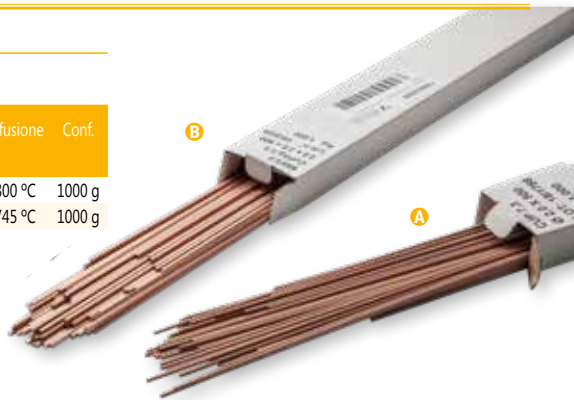
Brazing alloy for copper-brass welding covered with flux

Code	Model	Diameter	Alloys compositions%			Temp. fusione	Conf.
			Ag	Cu	Zn		
10003014	734R	1,5 m	34	36	27	630-730 °C	500 g


615/654

Brazing alloy for copper-copper welding

Rif	Code	Model	Diameter	Alloys compositions%			Temp. fusione	Conf.
				Ag	Cu	Zn		
A	10003001	615	2,0	-	92,4	7,6	705-800 °C	1000 g
B	10003006	654	2,0	0,4	92,6	7	680-745 °C	1000 g



SEALERS

**10001**

Thread locker

Code	Model	Capacity	Dimensions	Weight	Min. Qty
12003002	10001	40 cc	145 x 100 x 100 mm	0,6 kg	12

**HST**

Epoxy Sealer

Stops leaks fast.

Makes tough, cured, epoxy repairs in as little as 90 seconds.

Melts and cures in one operation.

Restores service immediately.

Effective for all refrigeration systems.

Withstands pressure to 600 psi.

Resists temperatures to 350°F (177°C).

Works on all metals, ceramics, even glass.

Seals all refrigeration systems.

Code	Model	Capacity	Dimensions	Weight	Min. Qty
12003004	HST	11,7 g	140 x 120 x 150 mm	0,35 kg	12

A**B****L542/LX53-14**

Threaded sealers

Rif	Code	Model	Capacity	Dimensions	Weight	Min. Qty
A	12003005	L542	50 cc	180 x 110 x 60 mm	1 kg	12
B	12003008	LX53-14	50 cc	150 x 55 x 30 mm	0,8 kg	10

**NAC10**

Anti-condensation flexible and reinforced ribbon for heat insulation

Anti-condensation ribbon in synthetic rubber.

Rolls dimensions: 0,03 x 50 mm x 10 m.

Code	Model	Operating temp.	Dimensions Pack	Weight Pack	Min. Qty
12004001	NAC10	-25°C +120°C	450 x 450 x 320 mm	4,5kg	24

**NAL50**

Alluminium adhesive ribbon

Alluminium adhesive ribbon with silicon paper support.

Rolls dimensions: 0,03 x 50 mm x 50 m

Code	Model	Dimensions	Weight	Min. Qty
12004002	NAL50	270 x 270 x 320 mm	11 kg	24

ATK-4

Acid kit test

Acid test for oil samples taken from refrigeration and air conditioning systems.

The kit consists of 4 vials useful to perform 4 tests.

The test can be carried out on both mineral and polyester oils.

Code	Model	Dimensions	Weight
12001033	ATK-4	95 x 55 x 55 mm	0,09 kg



QWIK-CHECK

QwikCheck rapid acidity test

Quick and simple to use, QwikCheck supports the refrigeration technicians in identifying acidity problems promptly. It is ideal both in the preventive maintenance phase and to check the status of the plant following the replacement of a compressor.

QwikCheck detects the presence of inorganic acids in a few seconds thanks to a simple test performed on the refrigerating unit in operation.

QwikCheck operates with all refrigerants and oils and is not subject to the false positives typical of POE oils.

The color change from Yellow to Red selects underlines the presence of inorganic acids in the system. system: (test for inorganic acids to the ARI-700 limit of 1ppm).

Code	Model	Description	Dimensions	Weight	Min. Qty
12001069	QWIK-CHECK	Rapid acidity test	40 x 40 x 20 mm	0,03 kg	25



Acids are typically formed by chemical reactions with components and / or materials present in the circuit, lubricating oils and / or impurities. Performing preventive acidity tests is a recommended practice as acidity conditions that are not managed promptly can lead to malfunctions and premature rupture of the compressor.

The esterification process used for the production of POE oils (a synthetic aesthetic base) and the possibility of residual presence of organic acids can lead, with traditional acidity kits, to false positives.

Systems equipped with hermetic compressors, typically more prone to breakage, are rarely subject to control as they are normally without oil withdrawal points.



CHEMICALS AND CONSUMABLES



18004

Acid neutralizer liquid

Completely eliminates and prevents acid in HVAC system.

Code	Model	Capacity	Dimensions pack	Weight pack	Min. Qty
12001036	18004	118 cc	195 x 145 x 135 mm	1,7 kg	24



THAWZONE

Dehydrating fluid

Neutralizes water and acid inside the cooling system forming neutral compounds

Easy to use, available in bottles of different capacity

Rif	Code	Model	Capacity	Dimensions pack	Weight pack	Min. Qty
A	12001013	17001	29 cc	195 x 140 x 110 mm	1 kg	24
B	12001014	17004	118 cc	195 x 145 x 135 mm	1,5 kg	12



21004

Tracer fluid

Added to the refrigerant, it pinpoints the leakage.

Suitable for halogenated refrigerants, ammonia, amethyl chloride, sulfur dioxide.

With additive for any type of UV lamp.

Code	Model	Capacity	Dimensions pack	Weight pack	Min. Qty
12001032	21004	118 cc	195 x 145 x 135 mm	1,6 kg	12



OIL CHECKER

Identifies:

Polyol Ester (POE).

Alkibenzene (ABZ).

Mineral oil.

Code	Model	Dimensions	Weight	Min. Qty
12001054	OIL-CHECKER	95 x 55 x 55 mm	0,09 kg	12

ETO-4

Electric oil transfer and flushing pump

Suitable for all the common refrigeration oils.

Suitable for changing.

Suitable for the removal of the oils from the HVAC systems.

Complete with aspiration hose and a pressure hose with adapters.

Suitable for flushing the systems using FORMULA fluid and the connecting kit KIT-ETO-HVAC (see pag. 24).

Code	Model	Dimensions	Weight
02041028	ETO-4	290 x 200 x 275 mm	7 kg



W52013

Oil charging pump

The W52013, for all oil containers, allows to charge oil inside the compressor of refrigeration systems, thus avoiding the danger of introducing air and humidity.

Code	Model	Capacity for stroke	Dimensions	Weight
02041025	W52013	52 ml	500 x 160 x 90 mm	1,44 kg



R-ECOPUMP

Oils and refrigerants charging and recovery pump

R-ECOPUMP has such design features as to allow the recovery/ transfer/charge not only of oils but also of flammable refrigerants such as A3, or A2L reaching an excellent vacuum. (See at R290/R600 section also).

The unit is extremely flexible as it has a convenient pedestal, hoses with valves and non-return valve.

Code	Model	Cap. for each run	Dimensions	Weight
13001026	R-ECOPUMP	125 ml	580 x 255 x 140 mm	3 kg



GENERAL SALES CONDITIONS



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Prices are per unit, list prices and do not include VAT.

Packaging is invoiced at cost.

The Min. Qty column indicates the minimum orderable quantity.



Symbol indicates the pieces included in the kit.

In this case, price refers to the kit.

Prices are considered Ex-Works and can be changed by us without notice.

The goods are shipped at the consignee's risk, even if sold franco domicile. If there is no precise indication, goods will be shipped with one of our forwarders, without our being responsible.

No complaint will be considered valid and accepted after five days from the receipt of goods.

Any comment on the price invoiced must be done immediately.

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