

AIR CONDITIONING AND **REFRIGERATION** SYSTEMS AND INSTRUMENTS

2020 2021













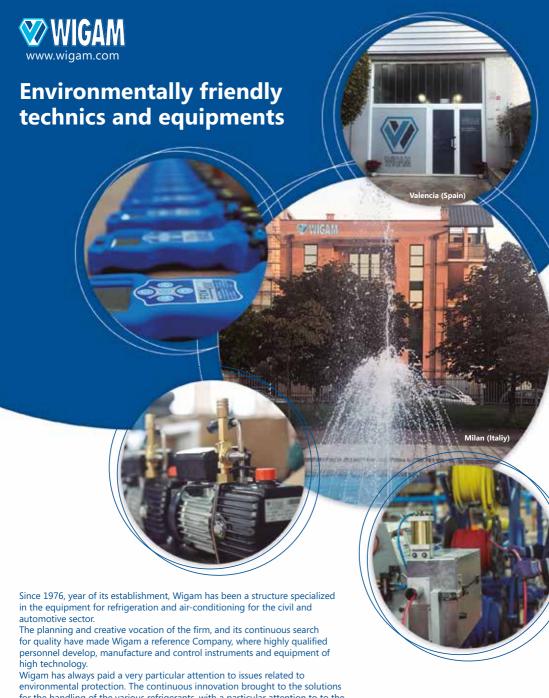
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Catalogue

Our company at your disposal

DESIGN
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TECHNICAL SUPPORT
REPAIRS SERVICE





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.

SUNDARY

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3	PRESSURIZATION TEST SYSTEMS
4	VACUUM - CHARGE
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RECOVERY BOTTLES.....REFRIGERANT VISUAL DIAGNOSIS....

RECOVERY - RECYCLING

RECYCLING AND RECOVERY UNITS....... 10 - 14 VOLUMETRIC REFRIGERANT PUMPS.....

new with the best quality



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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, airconditioning 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 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

Leaks detectors	pag. 107-112
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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.





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.







RECOVERY-RECYCLING



RECOVERY-RECYCLING UNIT

















REGULATION UE-517/2014 -USAGE CONTROL

ARTICLE 13

3. From 1 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 CO, equivalent or more, shall be prohibited.

The prohibition referred to in the first subparagraph shall not apply to the following categories of fluorinated greenhouse gases until 1 January 2030:

b) recycled fluorinated greenhouse gases with a global warming potential of 2500 or more used for the maintenance or servicing 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.

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	Weight
13001020	EASYREC-1R	545 x 300 x 395 mm	18,9 kg



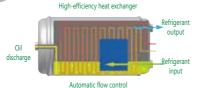
Specifications:

	Refrigerant	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	R12-R134a	R22-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



Specifications:

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)
Operatingtemperature	0 - 40 °C

Recovery rate	R12-R134a	R22-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









RECOVERY UNIT





Spare parts and accessories







Ref	Code	Model	Description	Dimensions	Weight
A	14015008	MG-111	Drier filter (1/4" SAE M-M)	100 x 40 x 40 mm	0,28 kg
A	14015041	MG-111-A	Allumina drier filter (1/4"SAE M-M)	100 x 40 x 40 mm	0,28 kg
3	14015013	XH412	"Hight capacity" drier filter (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
3	14015042	XH412-A	"Hight capacity" with allumina drier filter (1/4" SAE M-M)	250 x 80 x 80 mm	1,10 kg
	13008026	REC026	Sight glass	90 x 40 x 50 mm	0,17 kg
•	14020014001	G19020-WIG	Kit 10 gaskets for 1/4" SAE flexible hoses	160 x 90 x 10 mm	0,02 kg
0	06071013003	GYSS/4-4/6/Y	Connection hose for filter 1/4" SAE 150 mm	250 x 50 x 50 mm	0,16 kg

RECOVERY-RECYCLING UNIT

















REGULATION UE-517/2014 -USAGE CONTROL

ARTICLE 13

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EASYREC-2R

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.
- \bullet 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
13001022	EASYREC-2R	545 x 300 x 395 mm	19,6 kg



Specifications:

	Refrigerant	R1234ze)
	Power supply	220 - 240V AC 50 - 60 Hz
	Motor power	750W
	Maximal current draw	5A
	Compressor	Piston-type and oil less
	Automatic safety shut-off	38.5 bar/3850 kPa (558 psi)
	Operating temperature	0 - 40 °C

CFC, HCFC, HFC and HFO (included R32 and

Recovery rate	R12-R134a	R22-R407C	R404A-R410A- R507-R32
Vapour	28 kg/h	30 kg/h	32 kg/h
Liquid (recovery)	168 kg/h	198 kg/h	198 kg/h
Liquid (recovery-recycling)	32 kg/h	34 kg/h	36 kg/h
Push-pull	450 kg/h	510 kg/h	570 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-2

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.
- \bullet 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.
- Wide graphics with quick functioning instructions.

Code	Model	Dimensions	Weight
13001021	EASYREC-2	545 x 300 x 395 mm	16.2 ka



Specifications:

Refrigerant	CFC, HCFC, HFC and HFO (included R32 and R1234ze)	
Power supply	220 - 240V AC 50 - 60 Hz	
Motor power	750W	
Maximal current draw	5A	
Compressor	Piston-type and oil less	
Blocco automatico di sicurezza	38.5 bar/3850 kPa (558 psi)	
Operating temperature	0 - 40 °C	

Recovery rate	R12-R134a	R22-R407C	R404A-R410A- R507-R32
Vapour	28 kg/h	30 kg/h	32 kg/h
Liquid (recovery)	168 kg/h	198 kg/h	198 kg/h
Push-pull	450 kg/h	510 kg/h	570 kg/h









RECOVERY UNIT











0,28 kg
0,28 kg
1,10 kg
1,10 kg
0,17 kg
0,02 kg
0,16 kg

"HIGH PERFORMANCE" RECOVERY - RECYCLING UNIT





















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-recylcing 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



Specifications:

	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
	Blocco automatico di sicurezza	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	Drier filter (1/4" SAE M-M)	-
14015041	MG-111-A	Allumina drier filter (1/4"SAE M-M)	-
14015013	XH412	"Hight capacity" drier filter (1/4" SAE M-M)	-
14015042	XH412-A	"Hight capacity" with allumina drier filter (1/4" SAE M-M)	-
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.

3 15014001 240 x 140 x 180 mm 7 kg

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

Ref	Code	Model	Description	
A	02041015	MF-4/KK	High vane	pomp
8	15014001	71/4F-M	Motor for I	MF4/KK
Ref	Code	Dimensions	Weight	
A	02041015	100 x 140 x 175 mm	1,6 kg	



Specifications:

	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



REFRIGERANT PUMP - RECOVERY BOTTLES

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	Ability	Min. Qty
A	11001062	W2-WR10K/44	12,5 lt	2
•	11001124	W2-WR9K/48/5	12,5 lt	2
0	11001059	W2-WR40K/49	40 lt	-

Ref			
A	11001062	5,9 kg	1/4" SAE
3	11001124	5,9 kg	5/16" SAE
e	11001059	21 ka	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).

R-ECOPUMP allows you to quickly recover HCs (R290-R600) with simplicity and full safety, reaching a vacuum level of -0.8 relative bars.



REFRIGERANT VISUAL DIAGNOSIS





SERIE SPY

New SPY manifold family (in 2 or 4 ways version)

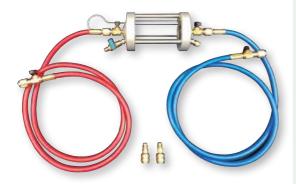
The information currently provided by the gauge manifolds on the market is limited to pressures and temperatures. Important but incomplete information, since the visor (indicator) traditionally incorporated does not allow us, or barely, to guess the passage of the refrigerant, its phase (liquid or vapor) and its quality.

The innovative SPY WIGAM manifolds, in order to support technicians in their daily work, are equipped with an integrally transparent central body and represent the new frontier of these service equipment.

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

- Show clearly if we are working with refrigerant in liquid or vapour phase.
- Show clearly the presence of contaminants in the refrigerant.
- Show the state of miscibility of the refrigerant with oil
- Assist visual diagnosis with chemical analysis thanks to the oil sample collection procedure

Through the EASYREC-R and SPY it will be possible to "view" the quality of refrigerant before recovery and after recycling.





Length	240 mm	
Diameter cylindrical glass	50 mm	
Maximum pressure	40 bar	
Maximum temperature	50 °C	
Capacity	150 ml	

INSPECTOR HVAC

Diagnosis instrument for checking the HVAC systems refrigerant and oil quality

The diagnosis instrument INSPECTOR-HVAC enables to check the "health" of your HVAC system, simply by connecting to the high and low pressure connections.

The oil and the oil/refrigerant mixture will be easily visible inside the glass cylinder. Oil miscibility with refrigerant, oil quality and possible water content or contaminating particles can be analyzed visually, so that you can take actions.

The discharge valve, thanks to its considerable internal section, enables to drain easily the possible contaminants.

Furthermore, INSPECTOR-HVAC allows to take oil samples for analysis.

By means of the recovery and recycling system EASYREC-R/HP and INSPECTOR, it will be possible to "inspect" the recovered and recycled refrigerant.

Equipped with:

- 2 flexible hoses 1500 mm (blue and red) with valve
- Sturdy plastic case

Code	Model
13006039	INSPECTOR HVAC



FLUSHING



FLUSHING UNITS







FLUSH&DRY - FLUSH1-PLUS

Flushing and fluxing station

FLUSH-1-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 washing fluid.

Units equipped with:

- Pump, specially designed for flushing, with PTFE mechanical seal and gaskets
- 10 I 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).

CONNECTION SCHEME

Model

A	13005037001	FLUSH1-PLUS-H	IVAC
(3)	13005037002	FLUSH&DRY-HVAC	
Ref	Code	Dimensions	Weight
A	13005037001	300 x 220 x 550 mm	13 kg
(3)	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

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



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 washing 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 1/2G 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



Technical features

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





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) and pressurized flushing sets (A/CF-P-H).

Ref	Code	Model	Description	Min. Qty
A	13005048	SUPER-FLUSH/20	Flushing fluid 20 kg	-
8	13005030	SUPER-FLUSH/6	Flushing fluid 6 kg	4





FLUSHING SET





A/CF-P-H

Flushing set

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

- 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).

Code	Model	Min. Qty	Dimensions	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.

	соррс.	945.1015 2,2	5,12,111041,52,01	
ode		Model	Dimensions '	١

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-FORMUL	A Pressurized flushing fluid	6
(3)	13005043002	KIT-FLASH-HVAC	Connecting kit for HVAC sys	item -
			Weight	
A	13005050	280 x 200 x 300 mm	9,6 kg	
3	13005043002	240 x 145 x 40 mm	0,4 kg	
			_	





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



Turning upside down



Fastening



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.

Kei	Code	Model	Descripti	ON
A	02041028	ETO-4	Electric p	ump
B	13006067	KIT-ETO-HVAC	Connecti	on kit
•	13005054	FORMULA/5	Flushing	fluid 5 l
0	14029016	BP	Plastic ca	se
Ref				
A	02041028	290 x 200 x	275 mm	7 kg
B	13006067	267 x 150 x	250 mm	2 kg
(13005054	260 x 165 x	1/E mm	5,5 kg
•	15005054	200 X 103 X	143 11111	J,J 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
Conection	1/4 SAE



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SANIFICATION



INDOOR UNITS SANIFICATION











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 same guidelines against legionellosis it is highlighted how they go periodically:

- Clean and disinfect the condensate collection tanks.
- Clean and disinfect the finned surfaces with the removal of organic and inorganic dirt
- Cleaned and periodically replaced 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:

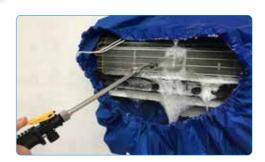
- Dress the evaporator of the unit to be treated with the EVA-SPLIT protection cover (2pcs included).
- Treat the evaporator, the filters and the condensate collection tank with the handy spray pump (2l) and the specific detergent (included).
- Finally, wash the evaporator and plastic parts using the special evaporating pressure washer. Standard equipment:
 - EVA-PUMP Professional cleaning pump.
 - EVA-SPLIT cleaning cover for split units (2 pcs).
 - · PSP2 Sprinkling pump.
 - EVA-CLEANER Detergent 5 l.

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





EVA-PUMP

Cleaning pump for indoor air conditioning units

Code	Model	Dimensions	Weight
13005062	EVA-PUMP	370 x 320 x 230 mm	5 kg



Technical features

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



EVA-CASSETTE - EVA-SPLIT

Cleaning covers indoor units

Ref	Code	Model	Description
(A)	13005064	EVA-CASSETTE	Cleaning cover fort ceiling cassette units
0	13005063	EVA-SPLIT	Cleaning cover for wall split



EVA-CLEANER

Concentrated liquid detergent for internal units

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

Code	Model	Capacity	Dimensions	Weight
13005057	EVA-CLEANER	5	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 Conf.
13005018	EFC	12	650 ml	270 x 210 x 250 mm	7,4 kg



CLEAN-AIR

Sanitizer for air conditioning systems

Remove bad smells.

Rapidally and safely sanitizes.

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



T-SORB

Odor neutralizer

Code	Model	Min. Qty	Dimensions	Weight Conf.
12099	0006 T-SORB	12	280 x 190 x 280 mm	5,6 kg





LOVAIR-CLIMA

Sanitizer (O₂)

Bacteria, moulds, mites, bad smells and smoke lurk in domestic environments, offices, public places and refrigerators, particularly inside the air-conditioning and ventilation circuit and they cause several problems to respiratory tracks such as cough, sore throat, allergic reactions ...

The solution?

LOVAIR CLIMA, professional ozone generator, thanks to its strong oxidizing power:

- destroys bacteria, moulds and mites.
- issolves bad smells, such as petrol, smoke of cigarette, musty odours, etc...
- · keeps bother animals (such as spiders and insects) away.

Advantages:

- · Quick intervention.
- · No need to dismount any component of the ventilation circuit.
- · Automatic functioning.
- The operator's presence is not necessary during the cycle.
- Selection of 5 intervention times with automatic stop.
- · Allows at least 5000 treatments of half-hour.
- · Contained investment that can generate profit.
- Treatment without process wastes.
- · Without use of chemicals.
- · No consumption products are required.
- · Supplied in exhibitor box of 4 pcs.

Code	Model	Min. Qty	Dimensions	Weight
09019002001	LOVAIR-CLIMA	4 pz	175 x 130 x 15 mm	1,2 kg



Bactericidal capacity test effected by the laboratory R.Q.A. srl - Environment Quality Research - Rodano - Milan







Technical features

Guaranteed for 5000 cycles of half hour 5 selectable programmes with automatic stop (5' - 15' - 30' - 45' - 60')

Forced ventilation that makes the saturation in the room quickly

Equipped with 230V feeder and adapter for lighter socket



Spare parts and accessories

Code	Description
09019004	Feeder 230V-50Hz
09019005	Adapter for lighter sock



The quality of the air that we breath is function of the attention given to cleaning and sanitizing the surfaces where harmful substances can proliferate. Furthermore, maintenance on ducted air conditioning / ventilation solutions, now increasingly widespread even in the residential sector, requires the necessary attention.

LOVAIR thanks to the oxidizing power of ozone supports installers in the treatment of these solutions. The unit can be placed in front of the fan of an air conditioning unit in order to spread the oxidative power in the room to be treated or close to air-intake of the canalized systems in order to convey the oxidizing power also in ducts.

HOW DOES OZONE WORK?

The ozone operates according to the principle of oxidation. When the static loaded 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). Ozone can oxidize with all kinds of materials, but also with odours and micro organisms like viruses, moulds and bacteria. The extra oxygen atom releases from the ozone molecule and binds with the other material. In the end, only the pure and stable oxygen molecule remains.



WASHING AND PROTECTION OF OUTDOOR UNITS





HP-COIL-PUMP

High-pressure cleaner for condensing outdoor units

The HP-COIL-PUMP cleaner has the ideal capacity and pressure performance for cleaning.

It can be used both by connecting from normal water network, or by a dedicated separate bucket/tank.(HP-COIL-PUMP is self-priming).

Easy to carry, it is complete with all the accessories.

Gun with adjustable nozzle to adapt the jet to your specific needs and automatic stop with pressure control.

Code	Model	Dimensions	Weight
13005069	HP-COIL-PUMP	352 x 294 x 200 mm	10 kg



Technical features

Electric motor	220V~/50-60Hz
Pressure	3.5-4MPa / 35-40bar
Range	6 l/min
Absorbed power	550W
3	. ,



PSP6

Professional sprinkling pumps

5 liter high density polyethylene tank with UV protection and safety valve. Pump with steel rod and handle with lance support.

1.20 m PVC hose and brass nozzle with adjustable jet.

Recommended detergent COIL-CLEANER.

Code	Model	Capacity	Dimensions	Weight
13005013	PSP6	5 I	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)



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	Min. Qty
13005015	COIL-CLEANER	5	4
Code	Dimensions	Weight.	
13005015	370 x 170 x 150 mm	5,5 kg	



WASHING AND PROTECTION OF OUTDOOR UNITS

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
(3)	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 m³/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









PRESSURIZATION TEST SYSTEMS



PRESSURIZATION - NITROGEN TEST





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



COMMISSION REGULATION (EC) NO. 1516/2007

ARTICAL 8 - Repair of leakage

- 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.



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



Calibration

Code	Model	Description
09053011		Calibration report ref. Accredia for checking gauge
13005017016	K-A7200-50/BN2/RT	Nitrogen kit with calibration report

NITROGEN CARTRIDGES AND CYLINDERS

	Code		Capacity	Min. Qty
A	11001060	BN2/1-TPED	950 cc	12
B	11003011	BAZ50/1	51	-
A	11001060	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		Ca	pacity	Min. Qty
09001080	GAS COI	NTROL	40	00 ml	10
Dimensi					
340 x 140 x 2	220 mm	4,8 Kg			





K-AZ200-50/BAZ50

Nitrogen kit 5 liters

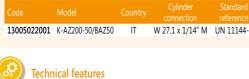
Suitable for:

- · 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 5I TPED full (20 MPa).
- Adapter Rg180/5-4 (5/16" SAE Fx 1/4" SAE M).

Code		Country	Cylinder connection		Cartridge connection
13005022001	K-AZ200-50/BAZ50	IT	W 27.1 x 1/14" M	UN 11144-5	M10x1





PRESSURIZATION - NITROGEN TEST

DUAL INTEGRATED

CONNECTION



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

AZ200

"Heavy duty" nitrogen regulator for cartridges and cylindres

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

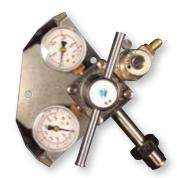
Code		Country	Cylinder connection	Standard reference	Cartridge connection
10002017	AZ200-50	IT	W 27.1 x 1/14" M	UN 11144-5	M10x1
10002019	AZ200-50/D	F-B-P-E	Ø21.7 x 1.814F	NF E 29-650/C	M10x1
10002018	AZ200-50/E	GB	G 5/8" M	BS 341 nr.3	-
10002020	AZ200-50/C	D	W 24.32 x 1/14" F	DIN 477 nr.10	M10x1



Technical features

Inlet pressure	20 MPa
Max output pressure	4,8 MPa
Connections	1/4" SAE





PRESSURIZATION - AZOIDRO TEST





TOTAL-TEST-HVAC-ELD-A

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 specific leak detector ELD-A.

Kit includes:

- Pressure regulator serie AZ200-50 with dual integrated connection for cartridges and bottles.
- Control gauge Ø80, class 1 with positioning indicator.
- 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 I 110 bar.
- · ELD-A leak detector.
- Sturdy plastic carrying case.

Code		Country	Cylinder connection		Cartridge connection
13005046014	TOTAL-TEST-HVAC-ELD-A	IT	W 27.1 x 1/14" M	UN 11144-5	M10x1
13005046015	TOTAL-TEST-HVAC-ELD-A-D	F-B-P-E	Ø21.7 x 1.814F	NF E 29-650/C	M10x1
13005046016	TOTAL-TEST-HVAC-ELD-A-C	D	W 24.32 x 1/14" F	DIN 477 nr.10	M10x1
13005046017	TOTAL-TEST-HVAC-ELD-A-E	GB	G 5/8" M	BS 341 nr.3	



COMMISSION REG. (EC) NO. 1516/2007

ARTICAL 8 - Repair of leakage

- 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.



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



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 the ELD-A leak detector.

R		Code		Capacity	Min. Qty	Dimensions pack	Weight pack
(A	11001112	AZOIDRO	11	12	320 x 250 x 330 mm	15,5 kg
0	3	11003020	AZOIDRO/5	51	-	550 x 150 x 150 mm	8,80 kg



K-AZ200-50/AZOIDRO5

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 the specific leak detector ELD-A (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 I TPED full (20 MPa).
- Adapter RG180/5-4 (5/16" SAE Fx 1/4" SAE M).

Code		Country	Cylinder connection	Standard reference	Cartridge connection
13005068	K-AZ200-50/AZOIDRO5	IT	W 27.1 x 1/14" M	UN 11144-5	M10x1





Technical features

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



ELD-A

For Azoidro gas electronic leak detector

ELD-A leak detector uses a specific sensor for the Azoidro mixture (95% Nitrogen and 5% Hydrogen). This mixture was created in accordance with Regulation (EC) n.1516/2007.

Code	Model		Weight
09001107	ELD-A	190 x 57 x 38 mm	0,5 kg



Technical features

Technology	semi-conductor
Maximum sensitivity	< 8 ppm H2 (<4,9 g/year R134a equivalent)
Calibration	automatic
Warm-up time	25 to 90 sec
Response time	5 seconds
Probe lenght	30 cm
Power supply	batteries 2x 1.5V AA
Batteries life	11 hours
Digital loss indicator	3 colours LED



Spare parts and accessories

Code		Description	
09050109	ELS-A	Sensing tip	



PARTS AND ACCESSORIES - TEST SYSTEMS





WN2-60

Nitrogen regulator

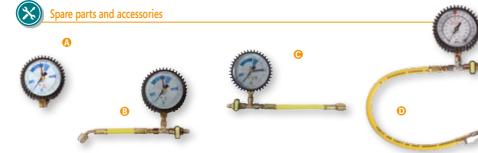
Regulator with connection for refillable Nitrogen or AZOIDRO cylinders.

Code	Model	Country	Connections bottle	Standard reference
10002035	WN2-60	IT	W 27.1 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
Max output pressure	6,0 MPa
Connections	1/4" SAE
Dimensions	220 x 150 x 150 mm
Weight	1,7 kg
Comply to	Reg. Ce n. 1516 2007



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°
•	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
•	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 lt 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
	10010038		Replacement LP gauge-100 bar for AZ200-50
	14029064	VP/B16	Plastic carrying case for 1 liter nitrogen/azoidro kits



VACUUM - CHARGE



DOUBLE STAGE HIGH VACUUM PUMPS



Double stage high vacuum pumps PROFESSIONAL LINE

- 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 even in the worst working conditions or in case of failure prevent reaching ignition temperatures.

- 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 is ATEX certified and is specifically designed to work with hydrocarbons (HC) such as R290 and R600a.



Packaging: 267 x 150 x 250 mm - 6,4 kg

Packaging: 267 x 150 x 250 mm - 6,9 kg

Packaging: 390 x 230 x 350 mm - 10,5 kg

Ref	Code Mod	lel 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
•	02002052 RS3D-	X 46 lt/min	1x10 ⁻² mbar	220-240/1/50-60	120 W	IP54	300 cc	1/4" NPT-F	-

^{**}Other voltages and frequencies, on demand.



Packaging: 285 x 150 x 260 mm - 10 kg



Packaging: 285 x 150 x 260 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	02002020 DIP 402	90 lt/min	1x10 ⁻² mbar	220-240/1/50-60	240 W	IP54	300 cc	1/4" NPT-F	-
B	02099013 DIP 402E/V	90 lt/min	1x10 ⁻² mbar	220-240/1/50-60	240 W	IP54	300 cc	1/4"-5/16"-3/8"	EV

^{**}Other voltages and frequencies, on demand.



DOUBLE STAGE HIGH VACUUM PUMPS

Double stage high vacuum pumps PROFESSIONAL LINE

- 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 even in the worst working conditions or in cae of failure prevent reaching ignition temperatures.

- With carrying handle and gas ballast valve to evacuate condensable gases (gas ballast).
- · Single packaging with one bottle of mineral oil.
- RS9DE/V models is 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.
- RS15DE model is equipped with solenoid valve to prevent air from fluhing back when the pump is turned off, double connections 3/8"SAE M and 1/4" SAE M with caps and 2 additional adapters 1/4"SAE F x 3/8"SAE M e 1/4"SAE F x 5/16"SAE M.
- The RS15-NH3 model is specially designed for ammonia systems and is complete with dual connections with a shut-off valve.



Packaging: 350 x 150 x 280 mm - 12 kg



Packaging: 350 x 150 x 280 mm - 12,5 kg

Ref	Code Mo	odel Swept volum		Power supply**	Nominal power	Protection degree	Oil charge	Connections	Solenoid valve (E) Vacuum gauge (V)
(A)	02002029 RS9D	180 lt/n	nin 1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4" NPT-F	-
0	02099020 RS9D	E/V 180 lt/m	nin 1x10 ⁻² mbar	230/1/50-60	370 W	IP54	450 cc	1/4"-5/16"-3/8"	EV

^{**}Other voltages and frequencies, on demand.



Packaging: 350 x 180 x 280 mm - 16 kg

Packaging: 350 x 180 x 280 mm - 17 kg

Packaging: 350 x 180 x 280 mm - 16 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	-
3	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
•	02002060 RS15D-NH3*	250 lt/min	1x10 ⁻² mbar	220-240/1/50-60	550 W	IP54	400 cc	1/4" SAE	-

^{*} Pump with dual connections 3/8" and 1/4" (RS15DE) and 2 x 1/4" (RDS15D-NH3).

^{**}Other voltages and frequencies, on demand.

IPERVAC KIT





TiperVac



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.

EW4009 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 EW4009 or the vacuum pump with the VAC port of the 4-way manifold.

Code	Model	Description			
02090009	IPERVAC-4	Vacuum kit fo	ce port		
02090010	IPERVAC-5	Vacuum kit fo	vice port		
Female connectio	Male co	onnections H	lose Lenght	Dimensions (mm)	Weight (kg)

1500 mm

1500 mm



Application examples



Core removal



Vacuum with W-VAC-SMART digital gauge



3/8" SAE + 1/4" SAE

3/8" SAE + 1/4"SAE

1/4" SAE

5/16" SAE

Vacuum with VG64-LX digital gauge



240 x 220 x 70 240 x 220 x 70

0,6

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)	-	-	•	-
05055048	404/5	1/4" SAE F x 5/16" SAE M adapter	-	-	-	-
05055016	404/6	1/4" SAE F x 3/8" SAE M adapter	-	-	-	-

DOUBLE STAGE HIGH VACUUM PUMP

WHV20/M

WWGM

High performance vacuum pump

- · High reliability
- Excellent performance
- Up to 4 ways connection.

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 (3) equipped with up to IPERVAC tubes (9) and connection devices such as EW4900 (10) or 121RG (3).

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





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



Application examples





Spare parts and accessories



Ref	Code	Model	Description	Female connection	Male connections	Dimensions (mm)	Weight (kg)
A	14015035	WVF-20	Oil separator	-	-	150 x 140 x 160	0,8
3	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	-	-
•	06140002	IVSS/6-6/60	IperVAC hose 1500 mm	2 x 3/8" SAE	-	-	-
•	06140001	IVSS/6-6/36	IperVAC hose 900 mm	2 x 3/8" SAE	-	-	-
0	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
O	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
(3	05001007001	121RG4-6	121RG valve with depressor	1/4" SAE	3/8" SAE	140 x 100 x 20	0,1
3	05001041001	121RG5-6	121RG valve with depressor	5/16" SAE	3/8" SAE	140 x 100 x 21	0,1
	05055048	404/5	1/4" SAE F x 5/16" SAE M adapter	-	-	-	-
	05055016 404/6 1/4" SAE F x 3/8" SAE M adapter		1/4" SAE F x 3/8" SAE M adapter	-	-	-	-
	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 fluhing 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 сс	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.







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.





WMGM

Spare parts and accessories



VACUUM PUMP OIL

Code	Model	Viscosity	Capacity	Туре	Min. Qty	Dimensions	Weight
12002003	K1L	46	1000 cc	Minerale	10	110 x 160 x 250 mm	1 kg
12002017	W68	68	1000 cc	Estere	9	50 x 50 x 70 mm	1 kg

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

COMPRESSOR OIL

Code	Model	Viscosity	Capacity	Туре	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

VACUUM PUMPS FITTINGS FOR DIP-RS

Ref	Code	Model	Description	
A	05052011	48 F4	1/4"SAE x 1/4"NPT	-
B	05052012	48 F6	3/8"SAE x 1/4"NPT	-
•	05052008	48 FA	1/2"-16ACME x 1/4"NPT	-
0	05052024	48 F5	5/16"SAE x 1/4"NPT	-
3	05060001	PG 1/4"NPT	Ruber holder connection Ø 10 x 1/4"NPT	-
()	05055016	404/6	1/4" SAE F x 3/8" SAE M	-
•	05108069001	404/6K	1/4" SAE F x 3/8" SAE M	2
0	05055048	404/5	1/4" SAE F x 5/16" SAE M	-
0	05108022001	404/5K	1/4" SAE F x 5/16" SAE M	2
0	05055008	46F	1/4" SAE M x 1/8" NPT F	-



VACUUM PUMPS PLASTIC CASE

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

Code	Model	Description
14029019	BP/PD	DIP and RS3 plastic case
14029020	BP/MV	RS9 platic case
Code	Dimensions	Weight
14020010	520 x 290 x 340 mm	1,85 kg
14029019	320 X 230 X 340 IIIIII	1,00 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
3	04001003	W1VPF80/4	1-way manifold vacuum gauge, with safety valve and hook	1/4"SAE F x 1/4"SAE F	240 x 150 x 55 mm	0,40 kg
•	04003001	W3VPF80	3-way manifold vacuum gauge, with ball valve	1/4"SAE F x 3/8"SAE M x 3/8"SAE F	240 x 150 x 55 mm	0,40 kg
0	07041005	PF80/VC1	Rear connection vacuum gauge	1/8"NPT	90 x 90 x 60 mm	0,20 kg
(3	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-RS9-DIP402-WP3-WP9	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-RS9-DIP402-WP3-WP9	90 x 90 x 60 mm	0,20 kg



VG64-LX

WWGM

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
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 ga	auge	
B	05001047	121RG4-T4	In-line connection	n / exclusion system	
•	05053012001	MG4-4/WIG	Swivel coupling		
D-f					
Ref	Code	Male connection	Female connection	Dimensions	Weight
A Ref	09003018	1/4" SAE	- remale connection	Dimensions 110 x 33 x 25 mm	0,10 kg
			- 1/4" SAE		
A	09003018	1/4" SAE	-		0,10 kg



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	35 bar (500 PSI)
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

FOX - DIGITAL MANIFOLD





FOX and FOX-ONE

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





DIAGNOSIS

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

DIAGNOSIS

INZ	IESI

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

N2 TEST

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

Vacuum measurement thanks to the INTEGRATED

VACUUM MEASUREMENT

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

INTEGRATED MEMORY

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

REFRIGERANT QUANTIFICATION

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

ANALYSIS OF ELECTRICAL PARAMETERS

APP for diagnosis, reports and new refrigerants.

MANGEMENT APP





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

FOX-ONE manage 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

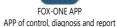






Integrated memory









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.
- 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

1

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



Spare parts and accessories

© Scale up to 100 Kg, resolution 5 g (only SC version)

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	

^{*} See the CLAMP-ONE features on page 126.

B Wireless clamp meter (only SC version)

(3) App for control, diagnosis and report

Possibility to use all K probes







FOX-ONE-100

Digital manifold in suitcase.

Equipped with:

• 2 probes TK109.

Code	Model	Dimensions	Weight
04080009001	FOX-ONE-100	310 x 370 x 130 mm	2.10 ka



FOX-ONE - DIGITAL MANIFOLD



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" F x 1/4" SAE M.

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.

Code	Model	Dimensions	Weight
040800010001	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.

Code	Model	Dimensions	Weight
040800010003	FOX-ONE-300/SC	480 x 400 x 130 mm	7,8 kg



FOX - DIGITAL MANIFOLD













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 (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
- 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



Letture visualizzate

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	R407A	R426A	R453A
R407C	R407D	R427A	R454C
R410A	R407F	R428A	R455A
R404A	R407H	R434A	R508A
R507	R32	R437A	R508b
R152a	R236fa	R438A	R513A
R290 (Propano)	R245fa	R442A	R1270
R600a (isobutano)	R417A	R448A	R744 (CO2)
R22	R422A	R449A	
R502	R422B	R450A	
R1234ze	R422D	R452A	
R1234yf	R424A	R452B	

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 ka



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



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





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
•	09012019	TK104	Ambient probe	380 x 100 x 10	0,12 kg
•	09012020	TK105	Surface probe	380 x 100 x 10	0,14 kg
(3	09012016	TK106	Insertion probe	380 x 100 x 10	0,09 kg
•	09012017	TK107	Clamp-on probe	230 x 100 x 10	0,16 kg
0	04111011	PWR	Complete piston	-	-
0	14021013001	PWKG-L	LOW knob kit	-	-
0	14021014001	PWKG-H	HIGH knob kit	-	-
0	14021015001	PWKG-R	REF knob kit	-	-
0	14021016001	PWKG-V	VAC knob kit	-	-



VACUUM-CHARGE





SPY SERIES - VISUAL DIAGNOSIS MANIFOLD The new STANDARD!



Because?

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 guickly 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

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



also in the 4-ways version See pag. 54



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 BP	PF2 - 2 ways	PF80	A4 - R410A-R32	4 - 1/4"SAE	K1 - Class 1
W1H - 1 way AP	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		



















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REFRIGERANTS DIALS

R410A-R32

6 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	Connessioni
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.

Model	Dial	Connessioni
K-SPY4PFA6-4	A6	3x 1/4"SAE + 1x 3/8"SAE
K-SPY4PFA4-5	A4	3x 5/16"SAE + 1x 3/8"SAE
Dimensions	Weight	
360 x 320 x 120 mm	1,5 kg	
360 x 320 x 120 mm	1,5 kg	
	K-SPY4PFA6-4 K-SPY4PFA4-5 Dimensions 360 x 320 x 120 mm	K-SPY4PFA6-4 A6 K-SPY4PFA4-5 A4 Dimensions Weight 360 x 320 x 120 mm 1,5 kg



Calibration

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











REFRIGERANTS DIAL

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.

04101125

Code	Model		Dial	Connessioni
04101124	K-SPY2PFA6-4-GYSS60-	LV	A6	1/4" SAE
04101125	K-SPY2PFA4-5-GYSS60-	LV	A4	5/16" SAE
Code	Dimensions	Weight		
Code	Difficusions	weigiii		
04101124	360 x 320 x 120 mm	2,5 kg		

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:

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

Code	Model	Dial	Connessioni
04101133	K-SPY2PFA6-4	A6	1/4" SAE
04101134	K-SPY2PFA4-5	A4	5/16" SAE
Codo	Dimensions	3.6	fairely a

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







KIT 4 WAYS



REFRIGERANTS DIALS 132 A6 R22-R134a-R404A-R407C R410A-R32

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

Flexible hoses 1500 mm without ball valve.

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 W	eight		

Code		Weight
04101109	360 x 320 x 120 mm	2,5 kg
04101110	360 x 320 x 120 mm	2,5 kg



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

Flexible hoses 1500 mm with ball valve.

04101114 360 x 320 x 120 mm 2,5 kg

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 ka		





4 VIE A PISTONE CON MANOMETRI Ø80 "PULSE FREE" CLASSE 1 CON 2 LOCK VALVEK VALVE

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

Code	Model		Dial	Connections
04101122	K-PW4PFA6-4-GYSS	60-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		



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		Di	al	Connection
04101101	K-F2MSA6-4-CSA6	0	Α	6	3x1/4"
04101106	K-F2MSA4-5-CSA6	0	Α	4	3x5/16"
Code	Dimensions	Wei	ght		
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-GYSA56\	/4	A6	3x1/4"
04101108	K-F2PFA4-5-GYSA56\	/4	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-GYSS6	A6	3x1/4"	
04101121	K-PF2PFA4-5-GYSS6	A4	3x5/16"	
Code	Dimensions	Weight		
04101120	360 x 320 x 120 mm	2,5 kg		



PLASTIC CASE FOR MANIFOLDS

04101121 360 x 320 x 120 mm 2,5 kg

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



4 WAYS PISTON



REFRIGERANTS DIALS									
A2	R507-R404A-R134a-R407C	A3	R600a	A4	R410A-R32	A6	R22-R134a-R404A-R407C	D6	R600a-R290-R1270

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



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
04024041	PW4ML80/A2/4/K1	A2	3x1/4"SAE + 1x3/8" SAE	240 x 220 x 70 mm	1,1 kg
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



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

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



					REFRI	GERAN	S DIALS				
A2	R507-R404A-R134a-R407C	A3	R600a	A4	R410A-R32	A6	R22-R134a-R404A-R407C	D5	R744	D6	R600a-R290-R1270
				On reque	est with differen	t refrige	rants 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



WITH PRESSURE GAUGES Ø80 CLASS 1 DRY WITH REGULATION SCREW

Code Model	Dial	Connections	Dimensions	Weight
04002063 PF2MS80/A	4/5/K1 A4	3x5/16" SAE	240 x 220 x 70 mm	0,85 kg
04002050 PF2MS80/A	6/4/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
04022064	PF2ML80/A2/4/K1	A2	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



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



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

4 WAYS



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

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



WITH PRESSURE GAUGES Ø80 CLASS 1 DRY WITH REGULATION SCREW

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



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

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



				Refr	igerants dials		
	R600a	A4	R410A-R32	A6	R22-R134a-R404A-R407C	D6	R600a-R290-R1270
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



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	P2MS80/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



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



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





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



WITH PRESSURE GAUGE Ø80 CLASS 1 DRY WITH REGULATION SCREW

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
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

Code Model	Dial	Connections	Pressure MPa	Dimensions	Weight
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

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
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).



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

1 MPa=10 bar

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



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
(3)	14021016001	PWKG-V	VAC snob kit

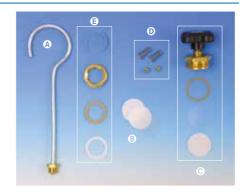






Spare parts for diaphragm manifolds

Ref	Code	Model	Description
A	04110011	W004	Hook for manifolds
B	14020011001	WKG 04	Kit of gaskets for knobs
•	14021001001	WKG07 H	HIGH snob kit
•	14021002001	WKG07 L	LOW snob kit
0	14021003001	WKG07 V	VAC snob kit
•	14021004001	WKG07 R	REF snob kit
O	14020118001	WKG 05	Spring and brass kit
3	14020119001	WKG 06	Complete sightglass kit



PRESSURE GAUGES









"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	PF80/38R1/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



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
07113016	ML80/18R1/A2/K1	A2	1/8" NPT	-0,1 ÷ 1,8	100 x 90 x 40 mm	0,3 kg
07113017	ML80/38R1/A2/K1	A2	1/8" NPT	-0,1 ÷ 3,8	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	ML80/10R1/D5/K1	D5	1/8" NPT	-0,1 ÷ 3,8	100 x 90 x 40 mm	0,3 kg
07113002	ML80/160R1/D5/K1	D5	1/8" NPT	-0,1 ÷ 3,8	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



			Refrigera	nts dials	S		
A2	R507-R404A-R134a-R407C	A4	R410A-R32	A8	R22-R404A-R134a-R407C	D5	R744

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
07113011	ML80/18C4S/U/K1		1/4" SAE	-0,1 ÷ 1,8	90 x 90 x 70 mm	0,3 kg
07113014	ML80/100C4S/D5/K1	D5	1/4" SAE	-1 +100	90 x 90 x 70 mm	0,3 kg
07113015	ML80/160C4S/D5/K1	D5	1/4" SAE	0 +160	90 x 90 x 70 mm	0,3 kg



PRESSURE GAUGES Ø60 VLASS 1.6 OIL-FILLED

Rear connection mounting bracket and stainless steel case

Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07011015	ML60/18C4S/A8	A8	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07011016	ML60/38C4S/A8	A8	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07011040	ML60/38C4S/A4	A4	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07011041	ML60/53C4S/A4	A4	1/4" SAE	-0,1 ÷ 5,3	80 x 80 x 65 mm	0,3 kg
07011017	ML60/18C4S/U		1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07011052	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
07011018	ML60/18C4FA/A8	A8	1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07011019	ML60/38C4FA/A8	A8	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07011046	ML60/38C4FA/A4	A4	1/4" SAE	-0,1 ÷ 3,8	80 x 80 x 65 mm	0,3 kg
07011047	ML60/53C4FA/A4	A4	1/4" SAE	-0,1 ÷ 5,3	80 x 80 x 65 mm	0,3 kg
07011020	ML60/18C4FA/U		1/4" SAE	-0,1 ÷ 1,8	80 x 80 x 65 mm	0,3 kg
07011053	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

	5 5					
Code	Model	Dial	Connections	Pressure MPa	Dimensions	Weight
07011021	ML60/18R4FP/A8	A8	1/4" SAE	-0,1 ÷ 1,8	90 x 95 x 65 mm	0,3 kg
07011022	ML60/38R4FP/A8	A8	1/4" SAE	-0,1 ÷ 3,8	90 x 95 x 65 mm	0,3 kg
07011048	ML60/38R4FP/A4	A4	1/4" SAE	-0,1 ÷ 3,8	90 x 95 x 65 mm	0,3 kg
07011049	ML60/53R4FP/A4	A4	1/4" SAE	-0,1 ÷ 5,3	90 x 95 x 65 mm	0,3 kg
07011023	ML60/18R4FP/U		1/4" SAE	-0,1 ÷ 1,8	90 x 95 x 65 mm	0,3 kg



1 MPa=10 bar

CERTIFIABLE SAMPLE PRESSURE GAUGE





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.

The pressure gauge will be supplied with protection rubber.

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	080 bar
Accuracy	0,1 %FS
Compensated range	1040 °C
Storage/Operating Temperature	-1060 °C / 050 °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	

"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	Poliuretano antiabrasione (TPU)
Stiffening	polyester fiber (PET)
Refrigerants	CFC-HCFC-HFC-HFO
Max.operating pressure	120 bar
Working temperature	-45 ÷ +130°C
Min. radius of curvature	15 mm
Packaging (coil)	50 m
Weight	28 a/m

Thermoplastic capillary tube assembled - $180^{\circ}\text{x}180^{\circ}$

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 delivered 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 delivered on request.



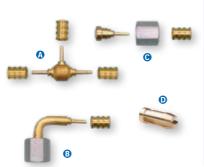
CAPILLARY TUBE





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	Desc	ription			
A	05060022010	WCG210T-TO	Kit of "T" fittings wit		10		
(3)	05060021001	WCG210/90	Kit of 90°fittings with	Kit of 90° fittings with 1 nut			
•	06101005	WCG250	Kit of straights fittings with 1 nut				
0	14023017001	DM 245K	Valve openers for WCG250-WCG210/90 kit		G210/90 kit	10	
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			
0	06101005	1/4"SAE	160 x 150 x 10 mm	0,80 kg			
0	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	480 x 400 x 120 mm	5kg



WNT246P

WWGM

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.

Code	Model	Description
08008046	WNT246P	Crimping systm with hydraulic pump
08008046001	WNT246	Crimping manual system without hydraulic pump
08008029	WPT150	Hydraulic pump
08008031	APT100	Air-hydraulic pump
08008030	UHT150	Kit with cylinder and hydraulic hose





Technical features

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



Crimping manual system



Air-hydralic pump



Kit with cylinder and hydraulic hose







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



Inox 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 delivered on request.



Inox 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 delivered on request.



SERIE HD

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



SERIE GY

Reinforced hose with low permeability barrier and coloured rubber coating

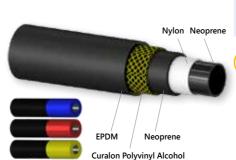






"HD" HOSES





"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
0	6010017	3HDSA/5-5/36/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
0	6010018	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



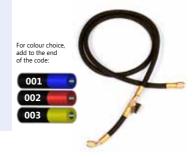
Kit of 3 flexible hoses, connections straight x 45° with depressor with blister

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



Flexible hose, connections straight x 45° with depressor

Code	Model	Length	Connections	Dimensions	Weight
0600208	85 HDSA/5-5/36	900 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
0600208	86 HDSA/5-5/60	1500 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
0600209	97 HDSA/5-5/72	1800 mm	5/16" SAE	250 x 250 x 50 mm	0,3 kg
0600200	08 HDSA/4-4/36	900 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg
0600200	04 HDSA/4-4/60	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg
0600200	01 HDSA/4-4/72	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,3 kg



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



3/8 hoses without depressor.

Flexible hoses, Connections staright x staright

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



"HD" HOSES





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

001	
002	
003 (- 0

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
3	14023001001	D19302	Kit (10pcs) valve openers for 1/4" SAE and 5/16" SAE hoses	10
•	14020015001	G19030	Kit (10 pcs) gaskets for 3/8" SAE hoses	10
0	14020071001	G19020/T	kit (10pcs) PTFE gaskets for 1/4" SAE, 1/2"-16ACME hoses	10
(3	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
•	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pz 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
Workiong 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

45° with depressor with blister



Kit of 3 flexible hoses with intermediate valve, connections straight x

Code	Model	Length	Connections	Dimensions	Weight
06080013	3GYSA/5-5/32V4/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06080010	3GYSA/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
06080005	3GYSA/5-5/36/BRY	900 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06080006	3GYSA/5-5/48/BRY	1200 mm	5/16" SAE	250 x 250 x 50 mm	0,8 kg
06080007	3GYSA/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
06080014	3GYSA/4-4/32V4/BRY	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080009	3GYSA/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
06080001	3GYSA/4-4/36/BRY	900 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080002	3GYSA/4-4/48/BRY	1200 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080003	3GYSA/4-4/60/BRY	1500 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg
06080004	3GYSA/4-4/72/BRY	1800 mm	1/4" SAE	250 x 250 x 50 mm	0,8 kg



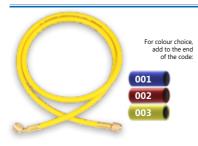
"GY" HOSES





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

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



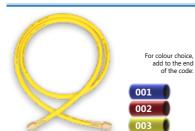
Flexible hose, connections straight x 45° with depressor

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



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



Flexible hoses, connections "staight - 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



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





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

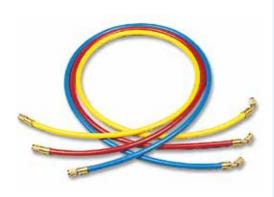




Ref	Code	Model	Description	
⚠ 14020014001 G19020		G19020	Kit (10 pcs) gaskets for 1/4"SAE, 1/2"-16ACME in NBR	10
	14020048001	G19516	Kit (10 pcs) gaskets for 5/16"SAE	10
3	14023001001	D19302	Kit (10pcs) valve openers for 1/4" SAE and 5/16" SAE hoses	10
•	14020015001	G19030	Kit (10 pcs) gaskets for 3/8" SAE hoses	10
0	14020071001	G19020/T	kit (10pcs) PTFE gaskets for 1/4" SAE, 1/2"-16ACME hoses	10
(3	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
(3	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pz 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				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 PFTE 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
•	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool for LOCK-VALVE, EW and flexible hoses	-
0	08008065	LOCK-VALVE-CARE-WIG	Counter display with 10 pz of LOCK-VALVE-CARE	10



AUTOMATIC VACUUM AND CHARGING UNIT

KOMPACT-HFC

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

The KOMPACT range is available in 2 variation:

KOMPACT HFC: for HFC (A2L included) with a balance of 35 or 100 kg KOMPACT ATEX (page 94): suitable for HC (R290, R600) and precision charges.

The KOMPACT-HFC unit features:

- Database with more than 50 refrigerants
- Suitable for CFC, HCFC, HFC (R32 e R1234yf included)
- · Multilingual digital display
- · Fast access kevs
- Micro SD included: it allows to store the data and trsfer to PC (software included)
- · 180lt high vacuum two-stage pump
- · Integrated precision vacuum gauge
- 35 or 100Kg scale
- Integrated compartments to accommodate and transport cylinders or cartridges of Refrigerant and Nitrogen
- · Handle and wheels for easy handling
- Flexible hose with valve for connection to the HVAC system
- Supports for bottles 1/4 "SAE, 5/16" SAE, 1/2 "16 ACME Sx

Code	Model	Dimensions	Weight
01090034	KOMPACT-HFC	400 x 650 x 815 mm	37,50 kg
01090034001	KOMPACT-HFC-100	400 x 650 x 815 mm	37,50 kg





Bottles not included



Technical features

	KOMPACT-HFC	KOMPACT-HFC 100	
Refrigerants	CFC, HCFC, HFC, HFO		
Two-stage pump	RS9D (180l/min)		
Scale	35 kg	100 kg	
Vacuum range	1÷350Pa		
Charging accuracy	±10g <10 kg *	±30g <10 kg *	
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		

* Detachment mode



AUTOMATIC FUNCTIONS:

- Nitrogen test for leak test.
- Test with azoidro mixture for leak test.
- Nitrogen discharge.
- Recovery management (recovey unit not INCLUDED).

- Vacuum test and pressure test.
- Refrigerant charge
- 2 automatic cycles:

CYCLE 1
Nitrogen test
Vacuum and tes
B (1)

CYCLE 2 vacuum Nitrogen test Vacuum and test vacuum Refrigerant charge



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 litres cylinder	-	-	-
11001112	AZOIDRO	Azoidro cartridge 1 liter - 110bar	-	-	12
11003020	AZOIDRO/5	Azoidro 5 litres cylinder	-	-	-

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 90 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 x1/4" SAE).

CADDY FOX 100 version

• 100 kg electronic scale with 5g resolution.

Code	Model
01010006004	CADDY46D/5/FOX300
01010007003	CADDY90D/5/FOX300
01010006005	CADDY46D/100/FOX300
01010007004	CADDY90D/100/FOX300

Code	Dimensions	Weight
01010006004	630 x 400 x 450 mm	19 kg
01010007003	630 x 400 x 450 mm	22 kg
01010006005	630 x 400 x 450 mm	22 kg
01010007004	630 x 400 x 450 mm	25 kg







CADDY FOX 5 SCALE



	CADDY 46D/5/FOX300	CADDY 90D/5/FOX300	CADDY 46D/100/FOX300	CADDY 90D/100/FOX300
Scale capacity	5 kg	5 kg	100 kg	100 kg
Pump volume	46 lt/min	90 lt/min	46 lt/min	90 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 90 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 x5/16" SAE).

CADDY 100 version

• 100 kg electronic scale with 5g resolution.

Code	Model
01010006001	CADDY46D/5
01010007001	CADDY90D/5
01010006002	CADDY46D/100
01010007002	CADDY90D/100

Code		Weight
01010006001	630 x 400 x 450 mm	19 kg
01010007001	630 x 400 x 450 mm	22 kg
01010006002	630 x 400 x 450 mm	22 kg
01010007002	630 x 400 x 450 mm	25 kg











VACUUM AND CHARGING KIT







CADDY 5 SCALE

	CADDY 46D/5	CADDY 90D/5	CADDY 46D/100	CADDY 90D/100	
Scale capacity	5 kg	5 kg	100 kg	100 kg	
Pump volume	46 lt/min	90 lt/min	46 lt/min	90 lt/min	
Ultimate vacuum	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar	1x10 ⁻² mbar	

VACUUM AND CHARGING KIT









Bottles not included in the kit

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 I 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

	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



REFRIGERANT REFILLABLE BOTTLES - FULL

Bottle marked (Direttiva Europea 2010/35/UE)
Valve marked CE (Direttiva Europea 2010/35/UE)
Container made of steel (EN13322-1)

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

WR1K/32

1 It 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 I
B	05104049		Support + hose 90°	1/2-16ACME SX x 5/16"SAE



821/121RGAS-5-5/K

Connection kit for bottle R32 $\,$ with connection W 21.7-1/14" \mbox{Sx}

Including

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

Code	Model
051081003001	821/121RGAS-5/K





WR1K/134

1 I 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



REFRIGERANT REFILLABLE BOTTLES - FULL



Marcatura del recipiente (Direttiva Europea 2010/35/UE)

Valve and safety valve marked CE (Direttiva Europea 2010/35/UE)

Container made of steel (EN13322-1)

Valve and safety valve are protected by collar (Direttiva Europea 210/35/UE)

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



WR1K/410

1 I 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 x5/16" SAE M
B	05104039		Support + hose 90°	5/16" SAE F x 5/16" SAE F





RECHARGE SERVICE

WR2.5K/410

2,5 It 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



Code	Model	Refrigerant	Refrigerant quantity	Min. Qty	Weight
11011007	RICAR410/2K	R410a	2 kg	6	4 kg





WR10K-TPED/44/410

12,5 I 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 I bottles recharge

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



REFRIGERANT REFILLABLE BOTTLES - EMPTY

WR2.5K/48

2.5 I refillable bottles without refrigerant, with tube

Code	Model		Refrigera	ant	Min. Qty
11001077	WR2.5K/48	R134a - R407C	- R427 - R4	404A - R507 - R410A	6
Code	Connections	Capacity	Weight		
11001077	21,8 W - 1/14" [OX 2,50 lt	2,2 kg		



WR10K/44

12,5 I refillable bottles without refrigerant

Code	Model		Refrigera	int	Min. Qty
11001053	WR10K/44	R134a - R407C	- R427 - R4	04A - R507 - R410A	2
Code	Connection	ns Capacity	Weight		
11001053	21,8 W - 1/14	" DX 12,5 lt	6,5 kg		
	,,-		.,,		



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

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

Model		Refri	gerant	Min. Qty
W2-WR10K/44	R134a - R40	R134a - R407C - R427 - R404A - R507 - R410A		
W2-WR9K/48/5		R	32	2
Connections	Capacity	Weight		
1/4"SAE	12,5 lt	5,9 kg		
5/16"SAE	12,5 lt	5,9 kg		
	W2-WR10K/44 W2-WR9K/48/5 Connections 1/4"SAE	W2-WR10K/44 R134a - R40 W2-WR9K/48/5 Connections Capacity 1/4"SAE 12,5 lt	W2-WR10K/44 R134a - R407C - R427 W2-WR9K/48/5 R Connections Capacity Weight 1/4"SAE 12,5 lt 5,9 kg	W2-WR10K/44 R134a - R407C - R427 - R404A - R507 - R410A W2-WR9K/48/5 R32 Connections Capacity Weight 1/4"SAE 12,5 lt 5,9 kg



W2-WR40K/49

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

Code	Model		Refri	gerant	Min. Qty
11001059	W2-WR40K/49	R134a - R4	07C - 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 m³/min
Max. temperature	45 °C
Thermal cut-out	Si
Power switch	On/Off with lock button
Power cable length	1.8 mt



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
3	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
0	05055022	816/5	Adapter	21.8W-1/14" DX F x 5/16 SAE M	
•	05108068001	816/5K	kit 2 adapters with gasket	21.8W-1/14" DX F x 5/16 SAE M	2
0	05055016	404/6	Adapter	1/4 SAE F x 3/8 SAE M	
0	05108069001	404/6K	kit 2 adapters with gasket	1/4 SAE F x 3/8 SAE M	2
(3)	05055048	404/5	Adapter	1/4 SAE F x 5/16 SAE M	
3	05108022001	404/5K	kit 2 adapters with gasket	1/4 SAE F x 5/16 SAE M	2
(3)	05055088	821/5	Adapter	21.8W-1/14" SX F x 5/16 SAE M	



CO₂ (R744) HC (R600a - R290 - R1270)



AND FITT

CONDENSATIC WATER PUMP

NSUMABLES



DIGITAL MANIFOLD





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 50)

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.

Dotazione stardard:

• 2 probes TK109.

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



Calibration

09053012 Calibration report ref. Accredia for Fox





Accessories and parts for FOX-R744 and manifolds for R744

Ref	Code	Model	Description
A	04111016	PWP-CO2	Complet piston
B	14021027001	PWKG-CO2 L	LOW knob kit
B	14021028001	PWKG-CO2 H	HIGH knob kit
0	09012013	TK 109	Universal temperature probe
0	09012037	TK 109/STRIP	Universal temperature probe with strip
3	09012019	TK 104	Ambient probe
•	09012020	TK 105	Surface probe
œ	09012016	TK 106	Inserion probe
0	09012017	TK 107	Clamp-on probe







CO, (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	Conne	ections	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		



CO, (R744) MANIFOLD

2 ways piston manifold with $\emptyset 80$ oil filled gauges for R744, class 1 with regulation screw and stainless steel case.

Code Dimensions Weight	Code	Model	Connections	Bar pressures
- 11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13-11-13	04022060	PF2ML/D5-4/K1	1/4"SAE	-1 +100 / 0 +160
04022060 240 v 220 v 70 mm 0.9 kg	Code		Weight	
0+022000 2+0 x 220 x 70 mm 0,5 kg	04022060	240 x 220 x 70 mn	n 0,9 kg	



CO, (R744) GAUGES - RADIAL CONNECTION

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

Code	Model	Ва	r 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 stell case

Code	Model	Bar pre	essures
07113014	ML80/100C4S/D5/K1	-1 +	100
07113015	ML80/160C4S/D5/K1	0 +	160
Code			
07113014	90 x 90 x 70 mm	0,3 kg	
07113015	90 x 90 x 70 mm	0,3 kg	







HOSES AND ACCESS VALVES





LOCK-VALVE-R744

CO₂ (R744) access valve

- Max operating pressure 160bar.
- Very effi cient 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 burning risks to fi ngers when disconnecting.
- Constructive superior precision.
- PTFE seal.

Code	Model		Connections
05059064001	LOCK-VALVE1/4-	744 1,	/4" SAE F x 1/4" SAE M
Code	Dimensions	Weight	
05059064001	140 v 100 v 20 mm	0.10 Kg	



R744 (CO₂) KIT OF 3 FLEXIBLE HOSES 1500 MM

PTFE hose, inox covering.

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
Busting pressure	800 bar
Operating temperature	-60 °C ÷ +200 °C



Spare parts and accessories









Ref	Code	Model	Description	
(14020097	G-LV/T-WIG	Kit 5 pz LOCK-VALVE gaskets	5
3	08008059	LOCK-VALVE-CARE	Counter disp. gaskets easy replacement tool in LOCK-VALVE, EW and hoses	-
•	08008065	LOCK-VALVE-CARE-WIG	Display with 10 pz of LOCK-VALVE-CARE	10







NITROGEN REGULATOR (0-200 BAR) FOR CO_2 (R744) SYSTEMS

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
Outlet pressure	0-200 bar
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 lenght 1750 mm.

Code	Model		
05015014	COSS/4-4/60V8/P	F80/N2-K1	
Code		Weight	
05015014	220 x 240 x 70 mm	1 kg	



ADAPTER FOR CO, (R744) BOTTLE

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





SCALE AND LEAK DETECTOR





EXACTA-MAXI-CO,

CO₂ (R744) electronic programmable scale

 $\label{thm:condition} \mbox{Very accurate charges, programmable by microprocessor.}$

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 (capcity 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



ELD-D

CO₂ (R744) infrared leak detector

- Sensibility less than 400 ppm to 350 ppm in environment.
- Light and ergonomic.
- Visual and sound loss signal.
- Simple, one button.
- Two levels of sensitivity.
- · Self-off function.

Code	Model	Dimensions	Weight
09001083	ELD-D	310 x 210 x 80 mm	1,1 kg



Technology	infrared	
Maximum sensitivity	< 400 ppm to 350 ppm environment	
Calibration	automatic	
Warm-up time	10 seconds	
Response time	1 second	
Reset time	1 second	
Probe length	30 cm	
Power supply	4x 1,5V AA alkaline batteries	
Battery life	20 hours	







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 50).

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.
- Stardard 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 Ka







i

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
•	08008059	LOCK-VALVE-CARE	Gaskets easy replacement tool in LOCK-VALVE, EW and hoses
0	06140001	IVSS/6-6/36	Tube IperVAC 900 mm 3/8" SAE





AUTOMATIC VACUUM AND CHARGING UNIT







CE ATEX 3G IIB T3 Gc









AUTOMATIC FUNCTIONS:

- · Nitrogen test for leak test.
- · Test with azoidro 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

KOMPACT ATEX

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 79): for HFC (A2L included) with a 35 or 100Kg scale.
- 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 (R32 e R1234yf included).
- · Database with more than 50 refrigerants.
- · Multilingual digital display.
- · Fast access keys.
- Micro SD included: it allows to store the data and trsfer to PC (software included).
- · 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

Code	Model	Dimensions	Weight
01090033	KOMPACT-ATEX	400 x 450 x 815 mm	36.5 ka



Calibration

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



	Refrigerants	HC, CFC, HCFC, HFC, HFO
	Two-stage pump	RS3D-EX (46 l/m) ATEX
	Scale	35 Kg
	Vacuum range	1÷350Pa
	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"





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	-
(3)	05059053001	LOCK-VALVE/5-4	Access valve 5/16" SAE F x 1/4" SAE M	-
0	05105008001	GF6-1/4"NPT	Quick connector for tube 6 mm	-
0	05105009001	GF8-1/4"NPT	Quick connector for tube 8 mm	-
(3	05108045001	WM 16-WIG	Male quick coupling 1/4"NPT	-
()	05108046001	WF 16-WIG	Female quick coupling 1/4"NPT	-
Θ	05004002	BPV 21	Piercing valve Ø 12,7-15,8	8
Θ	05004003	BPV 31	Piercing valve Ø 6,3-7,9-9,5	12
0	05004004	W341	Piercing valve Ø 4,8÷9,6	-
0	05004005	WPV 31	Piercing valve Ø 6,3-7,9-9,5-10	10
0	08006007	PT-109	Piercing plier	-
0	08006011	PP-343	Piercing plier	-
0	10002017	AZ200-50	Nitrogen regulator 200-50 bar with bracket	-
0	11001060	BN2/1-TPED	Nitrogen cartridge 950 cc	12
	11001112	AZOIDRO	Azoidro cartridge1 litre	12
0	11003011	BAZ 50/1	Nitrogen bottle 5 litres	-
	11003020	AZOIDRO/5	Azoidro bottle 5 litres	-



VACUUM AND CHARGING KIT





KIT K-EX-46D/D6

Vacuum and charging kit for R600a-R290-R1270

The K-EX46D kit is equipped with an ATEX-certified vacuum pump, in accordance with workplace safety recommendations in the use of hydrocarbons and flammable refrigerants.

The kit is equipped with the quick assembly kit of the manifold on the vaccum 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.

Code	Model	
01010008001	K-EX46D/D6	
Code	Dimensions	Weight
01010008001	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









Ref	Code	Model	Description	Mn. Qty
A	06053010		Steam exhaust pipe 5 m	-
3	06071002001	GYSS/4-4/60 B	Hose 1500 mm 1/4 x 1/4 - Blue	-
•	06071002002	GYSS/4-4/60 R	Hose 1500 mm 1/4 x 1/4 - Red	-
0	12002003	K1L	Mineral oil 1 l	10 pz



RS3D-EX

ATEX high vacuum pump

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

Equipped with:

• Vapour discharge hose 5 m.

Code	Model	Dimensions	Weigh
02002052	RS3D-EX	267 x 150 x 250 mm	6,4 kg



Technical features

Swept volume 46 l/min	
Ultimate vacuum 1x10 ⁻² mbar	
Power supply 220-240/1/50-6	50
Nominal power 120 W	
Protection degree IP54	
Oil charge 300 cc	
Connections 1/4" NPT-F	



Spare parts

Code	Description
06053010	Vapour discharge hose 5 m



CE ATEX II 3G c T3





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

With regulation screw.

Code	Model	Rerfrigerants	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 N	
05059049001	140 x 100 x 20 mm	0,1 kg	



BOTTLES R600a - R290





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
0	05002003001	BVR-4	Valve	7/16"F x 1/4"SAE M
•	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 ACMESX	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
•	05104052		Support + 90° hose	1/2" - 16 ACME SX F x 1/4" SAE F





PIERCING PLIER

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	Connec	ctions	Ø tubes mm
A	08006007	PT-109	1/4"	SAE	1/4"-1/2" (6-12 mm)
B	08006011	PP-343	1/4"5	SAE	1/4" (6 mm)
Ref	Code	Dimens	ions	Weigl	ht
A	08006007	300 x 130 x	25 mm	0,26 k	cq





TUBE PIERCING VALVES

Ref	Code	Model	Connections	Ø tubes mm	Mn. Qty
A	05004004	W341	1/4" SAE	4,8 ÷ 9,6	-
(3)	05004005	WPV31	1/4"SAE	6,3-7,9-9,5-10	10
•	05004002	BPV 21	1/4" SAE	12,7-15,8	8
0	05004003	BPV 31	1/4"SAE	6,3-7,9-9,5	12
Ref	Code	Dir	mensions	Weight	
A	05004004	70 x 3	30 x 30 mm	0,1 kg	
B	05004005	150 x 1	L00 x 65 mm	0,7 kg	
•	05004002	135 x	85 x 80 mm	1,0 kg	
•	05004003	150 x 3	100 x 65 mm	1,2 kg	



PINCH-OFF PLIER

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

Ref	Code	Model	Ø tul	oes mm
A	08006001	RR	1/8"	- 3/8"
B	08006012	POP-201	1/8"	- 3/8"
Ref	Code	Dimensic	ns	Weight
A	08006001	250 x 80 x 2	0 mm	0,36 kg
0	08006012	190 x 60 x 2	0 mm	0.35 ka





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 mr	m 0,2 kg













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		
05108109	1/4" 6mm	40 gr
05108109001	1/4" 6mm	400 gr



Insert the tube into the EASY CAP system.



Tighten the nut until the signal.



 Loosen to check the quality of the work obtained.



• 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 HC R290 R600 1/4"	500
05108110001	M1/4"-R290/VK	Kit 10 pz internal core 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





SYSTEM FOR REFRIGERANT TRANSFER AND FAN

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
8	11001124	W2-WR9K/48/5	12.5 It refillable bottle without refrigerant with liquid and vapour valve
Ref	Code	Dimensions	Weight
A	13001026	580 x 255 x 140 mm	n 3 kg
6	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 a mean of 40/45 pumpings er minute.

FAN25-EX

Atex Fan

Essential service accessory to be used wth flammable refrigerants.

- Capacity: 25 m³/min.
- Diameter: 200 mm.
- Speed: 2920 r/min .

Code	Model	Dimensions	Weight
14006056	FAN25-EX	350 x 270 x 370 mm	10 kg



LEAK DETECTORS











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. (Propano, Isobutano, 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, etc.

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



Technical features

semi-conductor
<50 ppm
automatic
from 25 to 90 seconds
5 seconds
30 cm
2x 1,5V AA alkaline batteries
11 hours









EX DETECTOR

Personal detector for flammable gases

Specific personal detector for flammable gases, useful for controlling and monitoring areas during service operations.

- · Alarms are triggered as different thresholds are reached %LEL.
- · Sound, visual and vibration alarms,
- Suitable for Zone Atex 2.
- · Contained dimensions and system for simple fastening to belt/clothing.
- Included connector for connection to titillated cylinders for calibration/test.

Code	Model	Dimensions	Weight
09001118	EX-DETECTOR	132 x 63 x 34 mm	0,28 kg



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

INSTRUMENTS



ELECTRONIC SCALES COMPARATIVE TABLE







W8025

Electronic scale up to 5 g

Code	Model	Dimensions	Weight
09013018	W8025	235 x 130 x 40 mm	0,5 kg



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



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

230/1/50-60Hz



PRATIKA-WL 100-05

Wireless electronic scale up to 100 kg

• WIRELESS technology.

Power supply

- Increased platform 270x270 mm.
- Memory function for bottle replacement.
- Acoustic signal on reaching of 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-WI 100-05/RT	Scale with calibration report



ELECTRONIC SCALES





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-PILIS 100-05/RT	Scale with calibration report



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



INFRARED LEAK DETECTORS











VOYAGER-IR

Infrared leak detector for HVAC and A/C

The VOYAGER IR infrared refrigerant leak detector has been designed to facilitate the work of the HVAC and A/C technicians and make it easier, faster, safer and more effective.

Why the infrared technology?

The infrared sensors are long lasting. They last much longer than the standard sensors used in leak detectors for HVAC market.

Advantage over other types of refrigerant leak detectors:

- 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



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

Tecnology	infrared
Maximum sensitivity	4 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	6 hours continue
Compliance	CE n. 1516 2007



HALOGENATED REFRIGERANT LEAK DETECTORS

VOYAGER

Semi-conductor electronic leak detector

- 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.
- Sturdy case.
- 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	R600 - R290



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	











Technical features

Tecnology	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

HALOGENATED REFRIGERANTS LEAK DETECTORS





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. These include, but are not limited to:

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

Tecnology	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



C	ode	Model	Description
0	9050073	FI S-H	Sensing tip for FLD-H





ELD-D

R744 (CO₂) infrared leak detector

- Sensibility less than 400 ppm to 350 ppm in the environment.
- · Light and ergonomic.
- · Visual and sound loss signal.
- · Simple, one button.
- Two levels of sensitivity.
- · Self-off function.

Code	Model	Dimensions	Weight
09001083	ELD-D	310 x 210 x 80 mm	1.1 ka



Technical features

Technology	infrared
Maximum sensitivity	< 400 ppm to 350 ppm environment
Calibration	automatic
Warm-up time	10 seconds
Response time	1 second
Reset time	1 second
Probe length	30 cm
Power supply	4x 1,5V AA alkaline batteries
Batteries life	20 hours





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. (Propano, Isobutano, 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, etc.

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



Technical features

semi-conductor
<50 ppm
automatic
from 25 to 90 seconds
5 seconds
30 cm
2x 1,5V AA alkaline batteries
11 hours









Code	Model	Description
09050074	ELS-C	Sensing tip for ELD-C EX

AZOIDRO (N,-H,) LEAK DETECTOR







ELD-A

AZOIDRO leak detector

ELD-A leak detector uses a specific sensor for the Azoidro mixture (95% Nitrogen and 5% Hydrogen). This mixture was created in accordance with Regulation (EC) n.1516/2007.

Code	Model	Dimensions	Weight	
09001107	ELD-A	310 x 210 x 80 mm	0,9 kg	



Technical features

Tecnology	Semi-conductor
Maximum sensitivity	< 8 ppm H2 (<4,9 g/year R134a equivalent)
Calibration	automatic
Warm up time	25 for 90 seconds
Response time	5 seconds
Probe length	30 cm
Power supply	2x 1,5V alkaline batteries AA
Batteries life	11 hours
Leak side indicator	3 colours LED



Code	Model	Description
09050109	ELS-A	Sensing tip



RL-134/H2N2 • RL410/32

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!

Fasy checking and immediate answer

Easy checking and immediate answer						
Ref	Code	Model	Descr	iption		
A	09050099	RL-134/H2N2	Refere	ence leak f	or R134a and Azoidro- 5g/year	
A	09050100	RL-410/32	Refere	ence leak	for R410A/R32 - 5g/year	
0	11001090	WR1K/134	Cartri	dge R134	a - 900g	
(3)	11001088	WR1K/410	Cartri	dge R410.	A - 800g	
•	05001003001	121-RG-4	Valve	for WR1/	134 1/4"F swivel x 1/4"M	
0	05001033001	121-RG5-4	Valve	for WR1/4	410 5/16"F swivel x 1/4"M	
Ref						
A	09050099	55 x 25 x 25	5 mm	0,03 kg		
A	09050100	55 x 25 x 25	5 mm	0,03 kg		
0	11001090	240 x 80 x 8	0 mm	2 kg		
a	11001088	240 x 80 x 8	0 mm	2 ka		

140 x 100 x 20 mm 0,1 kg

140 x 100 x 20 mm 0,1 kg











For use with R134a, R410A and R32



• Connect the reference leak to the cylinder valve (closed). Bring the leak detector sensor near to the white positioner.



Open the cylinder valve.



If the performances of the leak detector are OK (5g/year), the instrument will answer within a few seconds.

For use with AZOIDRO

05001003001

05001033001

Connect to an Azoidro catridge through a pressure regulator calibrated at 9 bar.

LEAK DETECTOR SPRAY





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

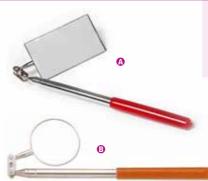


32850 SURE CHECK

"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

INSTRUMENTS



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.
- 1 pre-charge cartridge (7,5 ml).
- 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





Suggested quantities

HVAC system refrigerating capacity Suggested fluid quantity

< 18000 BTUH 300ml oil</p>
30 ml
18000 to 60000 BTU/H 900ml oil
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	-
8	05059023001	RG180/5-4	Straight adapter	-	5/16" SAE F swivel x 1/4" SAE M

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 hose1/4" 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.

09001110

• 1 Rechargeable battery.

/HVAC Complete kit
Weight

1,5 kg

380 x 300 x 100 mm



Spare parts and accessories









Rif	Code	Model	Description	Dimensions	Weight
A	09001108	TORCH-PRO	Lamp PRO-UV high performance 365nm – with glasses	80 x 190 x 70 mm	0,5 kg
3	14028028	BELLOW-IN36	Plastic injector for bellow carridges	190 x 87 Ø mm	0,3 kg
•	12001058	UV-BELLOW-60	Dye bellow cartridge 60ml (10 doses)	110 x 36 Ø mm	0,07 kg
0	12099008	BELLOW-HOSE-NRV	1/4 adapter hose with no return valve	-	-
	05059023001	RG180/5-4	Adapter 5/16" SAE F swivel x 1/4" SAE M	-	-
(3	13005067	UV-CLEAN250	Detergent 250 ml	190 x 87 Ø mm	0,27 kg
(3)	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





	TIR-50C	SA 880 SSX	TFC-502	TFC-201	THA-261
	N. S.	digi-tharms		W Strike	247 247 247 247 247 247
Thermometer	✓	✓	✓	1	1
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).
- Backlight 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
Distace	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	ves





SA 880 SSX

Digitales thermometer

ı	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
09055000		thermometers with 2 calibrated probes



TK109 Fiber glass insulated thermocouple

Code	Model	Measuring range	Cable lenght	Dimensions	Weight
09012013	TK109	-50 to +200°C	3 m	100 x 80 x 10 mm	0,02 kg



Calibration

WWGM

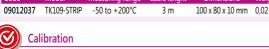
Code	Description
09053005	Calibration report ref. Accredia for TK109



TK109-STRIP Fiber glass insulated thermocouple with strip

Calibration report ref. Accredia for TK109-STRIP

Code	Model	Measuring range	Cable lenght	Dimensions	Weight
09012037	TK109-STRIP	-50 to +200°C	3 m	100 x 80 x 10 mm	0,02 kg



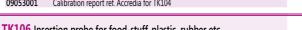


TK104 Fast reacting probe for air and gases

Code	Model	Measuring range	Cable lenght	Dimensions	Weight
09012019	TK104	-50 to +800°C	27 cm	380 x 100 x 10 mm	0,12 kg



Code	Description
09053001	Calibration report ref. Accredia for TK104
	·



TK106 Insertion probe for food-stuff, plastic, rubber etc.

Code	Model	Measuring range	Cable lenght	Dimensions	Weight	ı
09012016	TK106	-50 to +700°C	27 cm	380 x 100 x 10 mm	0,09 kg	





TK105 Surface probe

Code	Model	Measuring range	Cable lenght	Dimensions	Weight
09012020	TK105	-50 to +400°C	27 cm	$380 \times 100 \times 10 \text{ mm}$	0,14 kg





Code	Description
09053002	Calibration report ref. Accredia for TK105

TK107 Clamp on probe for measurements on pipes

09053004 Calibration report ref. Accredia for TK107

Code	Model	Measuring range	Cable lenght	Dimensions	Weight
09012017	TK107	-50 to +120°C	54 cm	230 x 100 x 40 mm	0,16 kg





THERMOMETERS







Digital thermometer

Rif	Code	Model	Dimensions	Weight
A	09011023	ST09	210 x 80 x 20 mm	0,04 kg
0	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



EWTL300

Digital LCD thermometer

Code	Model	Dimensions	Weight
09011033	EWTL300	60 x 70 x 20 mm	0,04 kg



Technical features

Temperature range	-50 to 70°C	
Temperature resolution	0.1℃	
Probe	1 m	
Power supply	DC 1,5V LR44	
Dimensions	48 x 48 x 16 mm	



F87 R100

Thermometer with reversible flange

Code	Model I	Flange diameter	Measuring range
09011019	F87 R100	100 mm	-40 to +40°C
Code	Dimensions	s 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 $^{\circ}$ C).



TEMPERATURE RECORDERS



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



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 AND HYGROMETER





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 $\pm 0.5^{\circ}$ from 0°C to 45°C Measuring units $^{\circ}$ C - $^{\circ}$ 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 $\pm 0.2 \text{ m/s} + 2\% \text{ of reading}$



DTH-11

Digital thermo-hygrometer

Code	Model	Dimensions	Weight
09011052	DTH-11	180 x 120 x 30 mm	0,2 kg



Technical features

Indoor temperature range -30 to +50°C

Outdoor temperature range -50 to +70°C

Temperature resolution 0,1°C

Humidity range 20% to 99%

Power supply DC 1,5V alkaline



9001

Digital clamp-on meter

- · Maximum reading of 3999.
- · Heavy duty test leads.
- ACA Measurement up to 600A.
- Dimensions of conductor : Ø35 mm.
- Ohm, Diode, Continuity, Capacitance, Frequency and Duty input Protection to 600V 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.
- EN61010-1 Approval, Over-Voltage Category III 1000V.

Code	Model	Dimensions	Weight
09006007	9001	260 x 130 x 60 mm	0,6 kg



Electrical specifications

	Range
AC voltage	40A, 400A, 600A
AC voltage	0.1V to 600V 400mV (manu), 4V, 40V, 400V, 600V
DC current	0.1V to 600V 400mV (manu), 4V, 40V, 400V, 600V
Resistance	400'Ω, $4Κ'Ω$, $40Κ'Ω$, $400Κ'Ω$, $4Μ'Ω$, $40m'Ω$
Frequency	5.12Hz, 51.2Hz, 512Hz, 5.12kHz, 512kHz, 5.12MHz
Duty cicle (2Hz to 20KHz)	10% to 90%



Calibration

Code	Model	Description
09053017		Calibration report ref. Accredia for clamp-on meter
09006007001	9001/CT	Clamp-on meter with calibration report





WIRELESS DIGITAL CLAMP-ON METER









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	400'Ω, 40Κ'Ω, 400Κ'Ω, 4Μ'Ω, 40m'Ω
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







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





	ICG-220	PO-230	RO-82	RO-62	RO-42	RCO-820	RCO-620	RCO-420
Relay	Х	Х	Х	Х	Х	Х	Х	Х
Overload	-	-	Х	Х	Х	Х	Х	Х
Start capacitor	-	-	-	-	-	Х	Х	Х
Mounting	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

STARTER AND TIMER









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



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



- Standard size and mounting to fit most applications.
- Standard terminal configuration to accomodate most connections.
- No ground wire.
- · Dustproof case.
- · State of the art extra long life electronic circuity.

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



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.



Application:

- · 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 millisec.
- 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.
- Mount. I note 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

TOOLS, VALVES AND FITTINGS



RATCHET FLARING TOOL





W850-AVIO

Rachet flaring tool

New light alluminium body.

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



Possibility to operate by manual retched and electric drill.



Standstill device for copper tube.



Bar fast disconnecting system.



Supplied in plastic case.



W810A

Eccentric flaring tool with ratchet

Code	Model		Fo	r OD tubing
08001024	W810A	1/4"- 3	/16" - 5/1	6"- 3/8" - 1/2"- 5/8"- 3/4"
Code	Dimen:	sions	Weight	
08001024	250 x 220 :	x 50 mm	1,9 kg	
Supplied in pla	istic case			



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 TOOLS

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 TOOIN 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 lubrefication, 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





FLARING TOOLS







UNIVERSAL FLARING TOOL

Code	Model	For O	tubing tubing	Dimensions	Weight
08001001	525F	5 ÷ 16 mm	3/16" ÷ 5/8"	200 x 120 x 30 mm	0,86 kg





FLARING AND SWAGING TOOL

Code	Model	For OD tubing	Dimensions	Weight
08001012	275 FS	1/8"-3/16"-1/4"-5/16"-3/8" 7/16"-1/2"-5/8"-3/4"	254 x 215 x 45 mm	1,40 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 lubrefication, 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

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
3	08002017	W274	1/8" ÷ 1-1/8"	4 ÷ 28 mm	130 x 60 x 40 mm	0,30 kg
•	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



RACHET TUBE CUTTERS

Model			Sizes
WR-TC12	from	1/8" to 1,	/2" (from 3 mm to 12 mm)
WR-TC22	from	1/4" to 7	/8" (from 6 mm to 22 mm)
WR-TC29	from	5/16" to 1	1/8" (from 8 mm a 29
190 x 100 x 3	30 mm	0,20 kg	
130 x 260 x 5	50 mm	0,35 kg	
125 x 270 x 5	50 mm	0,38 kg	
	WR-TC12 WR-TC22 WR-TC29 Dimension 190 x 100 x 3 130 x 260 x 3	WR-TC12 from WR-TC22 from from	WR-TC12 from 1/8" to 1, WR-TC22 from 5/16" to 1 WR-TC29 from 5/16" to 1 Dimensions Weight 190 x 100 x 30 mm 0,20 kg 130 x 260 x 50 mm 0,35 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	Descrip	
A	08008034	W209	Inner/c	outer ream
3	08008049	W210	Pen rea	amer with I
•	08008050	W211	Pen rea	amer
Ref	Code	Dime	nsions	Weight
A	08008034	60 x 60	x 60 mm	0,22 kg
(3)	08008049	240 x 80	x 20 mm	0,05 kg
•	08008050	220 x 80	x 20 mm	0,05 kg



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
•	08002005	174 FC	10 ÷ 28 mm	76 x 56 x 31 mm	0,07 kg
0	08002007	312 FC	17 ÷ 41 mm	159 x 66 x 35 mm	0,32 kg
(3	08002009	206 FB	10 ÷ 66 mm	213 x 96 x 41 mm	0,88 kg





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



CARRYING CASE FOR WE01 TUBE EXPANDER

WWGM

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

SWAGING PUNCHES

Code	Model	Descri	ption	For OD tubing
08004002	193 S	Swagir	ng punches serie	1/4"-3/8"-1/2"-5/8" inches
Code	Dimer	nsions	Weight	
08004002	160 x 90	x 30 mm	0,4 kg	



TUBE BENDERS





RATCHET TUBE BENDER

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"
Pof	Code	Dimen	sions 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 BENDER

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"

08003082	370 x 300 x 80 mm	3,5 kg
08003081	370 x 300 x 80 mm	3,4 kg



DOUBLE HANDLER TUBE BENDER

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	n 0,6kg	
A	08003038	400 x 130 x 90 mr	n 2 kg	
A	08003044	400 x 130 x 90 mr	n 2 kg	
B	08003041	730 x 130 x 80 mr	n 2,5 kg	
B	08003040	730 x 130 x 80 mr	n 2,5 kg	





PIEGATUBI MULTIPLO

08003046

B 08003056

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

820 x 130 x 90 mm 3,2 kg

820 x 140 x 90 mm 3,5 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





TORQUE WRENCHES





Technical features

Wtench		Tightening torque Nm	Lenght	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 possibile 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		Weight	
08007025	380 x 290 x 60 ı	nm 1.75 kg	



UNIVERSAL OIL FOR FLARE

Universal oil essential for the flare lubrefication, 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





TORQUE WRENCHES





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

8 ÷ 85 N.m

Working range 71 ÷ 1195 lbf.in $6 \div 63$ lbf.ft

1 ÷ 8 kgf.m

Accuracy \pm 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 en size 10 ÷ 32 mm

Power supply $3V (2 \times AAA \text{ batteries})$ Operating temperature $0 \div 40^{\circ}\text{C}$

Storage temperature -20 ÷ 45°C
Wrench lenght 390 mm



Calibration

O9053035 Calibration report for wrench









CAPILLARY TUBE CUTTER AND PINCH-OFF PLIER

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

3 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.

R	lef	Code	Model		Dimensions	Weight
	A	08008008	C4751/015	0,45 ÷ 1,5 mm	120 x 75 x 30 mm	0,03 kg
(3	08008009	C4751/0130	1,5 mm \div 3 mm	120 x 75 x 30 mm	0,03 kg



WRENCHES







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
•	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





DIGITAL TORQUE SCREWDRIVER - MAGNET FOR SOLENOID VALVE

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
A	08008002	W32000
B	08008003	CTV 1
Ref	Dimension	ns Weight
Ref A	Dimensior 190 x 70 x 30	



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
	3	08007038	MAS20-WIG	Kit of 8 open-release magnet for solenoid valve
ì	Ref	Dimension	s Weight	
ľ	A	50 x 50 x 40 r		
	0	120 y 220 y 00		



LOCK-VALVE-CARE - GASKETS REPLACEMENT TOOL





LOCK-VALVE-CARE

08008059 08008065

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 seal 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 a internal compartment to store the tip and any spare gaskets.

The solution is available in a single blister or in counter display containing 10pcs.

	Ref	Code	Model	Description	
	A	08008059	LOCK VALVE CARE	Gasket replacement tool for Lock valves, EW and hoses	-
	B	08008065	LOCK-VALVE-CARE-WIG	E10pcs LOCK-VALVE-CARE counter display	10
i	R△f	Code	Dimensions	Weight	

0,04 kg

0,51 kg





220 x 60 x 18 mm

235 x 145 x 65 mm



Inserting new gasket





Accessories and Spare parts











Ref	Code	Model	Description	
A	14020097	G-LV/T-WIG	Kit 5pcs gaskets for LOCK-VALVE and EW3900/4900	5
3	14020014001	G19020	Kit 10 gaskets 1/4"SAE, 1/2"-16ACME in NBR	10
•	14020071001	G19020/T	Kit 10pcs gaskets - PTFE-1/4" SAE	10
	14020048001	G19516	Kit 10 gaskets 5/16"SAE	10
0	14020015001	G19030	Kit 10pcs gaskets - NBR-3/8" SAE	10
(3	14023001001	D19302	Kit (10pcs) valve openers	10



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.

Code	Model	D	escription
05059049001	LOCK-VALVE 1/	4" 1/	'4" SAE F x 1/4" SAE M
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
05059049001	140 x 100 x 20 mm	0,10 Kg	
05059050001	140 x 100 x 20 mm	0,10 Kg	
05059053001	140 x 100 x 20 mm	0,10 Kg	
05059063001	140 x 100 x 20 mm	0,10 Kg	

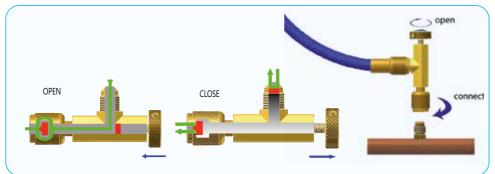


LOCK-VALVE - ACCESS VALVE





Connecting scheme





Accessories and Spare parts







Ref	Code	Model	Description	
A	14020097	G-LV/T-WIG	GASKETS KIT 5PCS FOR LOCK-VALVE AND EW3900/4900	5
B	08008059	LOCK-VALVE-CARE	Gasket easy replacement tool	
•	08008065	LOCK-VALVE-CARE-WIG	Counter display 10 pcs LOCK-VALVE-CARE	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			
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 doble connections
08008060003	EW 4900/5	5/16" core removal solution with doble connections

			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	Kit 5 pcs gaskets for LOCK-VALVE and EW3900/EW4900
06140001	IVSS/6-6/36	Kit 10 pcs gaskets for hoses 1/4" SAE, 1/2"-16 ACME-NBR
14020097	G-LV/T-WIG	Kit 10 pcs gaskets for hoses 1/4" SAE, 1/2"-16 ACME-PFTE
08008059	LOCK VALVE CARE	Kit 10 pcs gaskets for hoses 5/16" SAE
05108043001	M1/4"-R134A/V-RK	Kit 10 pcs gaskets for hoses 3/8" SAE
05055048	404/5	Kit 10 pcs valve openers for hoses



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	Descript	ion	
A	05059005	16 C	1/4" SAE	male x 1/	4" SAE female
A	05059038	26 C	5/16" SA	E male x 5	5/16" SAE female
B	05059007	17 C	1/4" SAE	male 1/4	' SAE female
B	05059039	27 C	5/16" SA	AE male 5/	16" SAE female
Ref	Code	Dimer		Weight	
A	05059005	165 x 135	x 20 mm	0,07 kg	
•	05059038	165 x 135	v 20 mm	0,07 kg	
A	03033030	103 X 133	A 20 IIIIII	0,07 kg	
B	05059007	165 x 135		0,07 kg	







Spare parts

Code	Model	Description	For	
14020087	\$8920071	Female coupler-sleeve	16C	10
14020088	\$8920072	Female coupler-retaine	16C	10
14020047	\$8920073	Female coupler-gasket kit	16C-17C	10
14020022	\$8920077	Female coupler-o-ring	16C-17C-26C-27C	10
14020023	\$8920263	Female coupler-3/16"	19C	10
14020081	\$10000996	Female coupler-gasket kit	26C-27C	10

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 contamined 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!









FITTINGS





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.

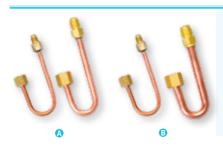
Code	Model	Description
05108075001	EASY-JOINT1/4"	Self-flaring connections kit 1/4"
05108076001	EASY-JOINT 3/8"	Self-flaring connections kit 3/8"
05108077001	EASY-JOINT 1/2"	elf-flaring connections kit 1/2"
Code	Dimensions	Weight
05108075001	140 x 100 x 30 mm	0,15 kg
05108076001	140 x 100 x 30 mm	0,15 kg
05108077001	140 x 100 x 30 mm	0,15 kg



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.





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"	-
			Weight	
A	05108080	200 x 150 x 30 mm	n 0,20 kg	
B	05108081	200 x 150 x 30 mm	n 0,20 kg	





121RG SERIES WITH DEPRESSOR

		A	B			
Code	Model	Female swivel connections	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





Spare parts

Ref	Code	Model	Description	
A	14022191001	K-PLATE/B	Kit 10 pcs blue colored plates	10
B	14022191002	K-PLATE/R	Kit 10 pcs red colored plates	10
•	14022191003	K-PLATE/Y	Kit 10 pcs yellow colored plates	10



		A	B		
Code	Model	Female swivel connections	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



		Δ	B		
Code	Model	Female swivel		Dimensions	Weight
		connections	connect		
05059001001	RG180F	1/4" SAE	1/4" SAE	140 x 100 x 20 mm	0,04 kg

*		B
(A)	I	A

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



QUICK CONNECTOR, COUPLINGS, PIERCING PLIER





GIUNTI A FARFALLA

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 Ø8		140 x 100 x 20 mm	0,20 kg





/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
(3)	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
•	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



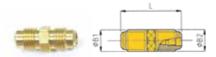




The "C" after 1/4" indicates that the connection is suitable to fit the access valve.

SAE FLARE UNIONS

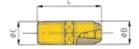
Code	Model	Description	exag.	L mm	ØB1	ØB2	Weight	Min. Qty
05102003	3BA	Valve body	11	35	1/4"	1/4"C	22 g	500
05102030	512 3BA	Valve complete with core and cap	11	35	1/4"	1/4"C	22 g	500
05108026001	512 3BAK	Kit of 10 pcs. Valve complete with core and cap	11	35	1/4"	1/4"C	220 g	10



SAE FLARE X NPT UNIONS

Code	Model	Description	exag.	Lmm	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

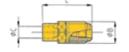




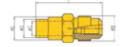
SAE FLARE X O.D.S. UNIONS

Ref	Code	Model	Description	exag.	Lmm	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
3	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
3	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









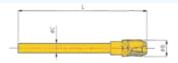
CORES AND CAPS



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. Cap with gasket	10
A	05063042	CP5/16"	5/16" flare cap with gasket	100
B	05063053	CP1/4"-CTV	1/4" flare cap with gasket with wrench	50





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
		-,-		



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





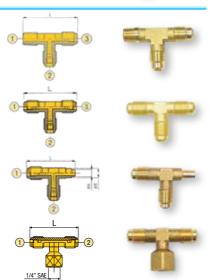
TEES

Code	Model	Lmm	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	10

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	10

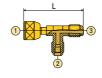
Code	Model	L mm	1 flare	2 flare	Weight	Min. Qty
05057001	892/02	40	1/4"C	1/4"C	20 g	100

Code	Model	Lmm	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	10



TEES WITH SWIVEL NUT

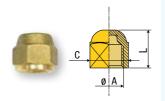
Code	Model	Lmm	1 NTP	2 flare	3 flare	Weight	Min. Qty
05057029	891/02	52	1/4"N	1/4"C	1/4"C	47 g	100
05108115001	891/02K	52	1/4"N	1/4"C	1/4"C	470 g	10





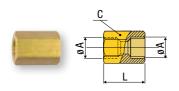
UNIONS





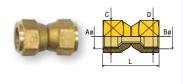
SAE FLARE CAPS

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
•	05053014001	MG6-6	3/8" SAE x 3/8" SAE
•	05053014001	MG6-6	3/8" SAE x 3/8" SAE



SAE FLARE NUTS FOR INCH TUBES

Code	Model	Description	ØA	ØB	C esag.	Lmm	Weight	Min. Oty
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 10 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.	Lmm	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

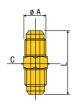
Code	Model	Description	ØA	ØB	C esag.	L mm	Weight	Min. Qty
05062002	NS4-4/6	Nuts for inch tubes	1/4"	6	17	15	19 g	100
05108007001	NS4-4/6K	Kit 10 pcs. nuts for inch tubes	1/4"	6	17	15	190 g	10
05062006	NS4-6/8	Nuts for inch tubes	3/8"	8	22	18	33 g	100
05108058001	NS4-6/8K	Kit 10 pcs. nuts for inch tubes	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





UNIONS

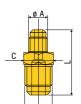






SAE FLARE UNIONS

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

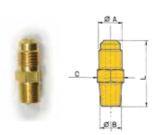
Universal oil essential for the flare lubrefication, during flaring operation and before clamping with torque wrenches.

Code	Model	Min. Qty	Capacity	Dimensions	Weight
12002015	FO-200	12	200 ml	170 x 50 x 50 mm	0,2 kg



SAE FLARE M X NPT M UNIONS

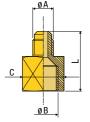
Code	Model	ØA	ØB NPT	C esag.	Lmm	Weight	Min. Qty
05052001	U1-4A (24F4)	1/4"	1/8"	11	31	16 g	100
05052011	U1-4B (48F4)	1/4"	1/4"	14	36	29 g	100
05052026	U1-4C	1/4"	3/8"	17	38	41 g	100
05108130001	U1-4CK	1/4"	3/8"	22	42	410 g	10
05052013	U1-6A (24F6)	3/8"	1/8"	17	36	33 g	50
05052012	U1-6B (48F6)	3/8"	1/4"	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

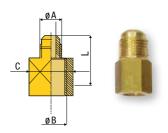
Codo	Model	CΛ	OD NOT	C	Lucius	Majaht	Min. Oh.
Code	Model	ØA 1/4″	ØB NPT	C esag.	L mm	Weight	Min. Qty
05055018	UR3-46	1/4"	3/8"	22	33	50 g	50
05108133001	UR3-46	1/4"	3/8"	22	33	500 g	10
05055024	UR3-48	1/4"	1/2"	25	37	73 g	50
05108134001	UR3-48K	1/4"	1/2"	25	37	730 g	10
05055017	UR3-64	3/8"	1/4"	17	33	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





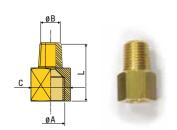
REDUCED UNIONS





REDUCED UNIONS SAE FLARE M X NPT F

Code	Model	ØA	ØB NPT	C esag.	Lmm	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

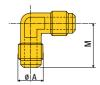
Code	Model		ØB NPT	C esag.		Weight	Min. Qty
05055040	U5-4A	1/4"	1/8"	17	28	21 g	100
05108143001	U5-4AK	1/4"	1/8"	17	28	210 g	10
05055041	U5-4B	1/4"	1/4"	17	30	39 g	100
05108144001	U5-4BK	1/4"	1/4"	17	30	390 g	10
05055042	U5-6B	3/8"	1/4"	22	34	51 g	100
05108145001	U5-6BK	3/8"	1/4"	22	34	255 g	5
05055043	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 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

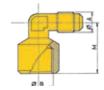




SAE FLARE M X SAE F ELBOWS

Code	Model	ØA flare	ØB flare	M mm	Weight	Min. Qty
05056030	ER3-44	1/4"	1/4"	27	59 g	50

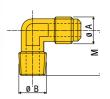




SAE FLARE M X NPT M ELBOWS

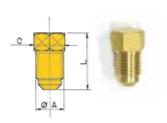
Code	Model	ØA flare	ØB NPT	M mm	Weight	Min. Qty
05056011	E1-4A	1/4"	1/8"	23	20 g	100
05056012	E1-4B	1/4"	1/4"	25	31 g	100
05108147001	E1-4BK	1/4"	1/4"	25	310 g	10
05056010	E1-6B	3/8"	1/4"	27	44 g	50
05056039	E1-6C	3/8"	3/8"	27	55 g	50





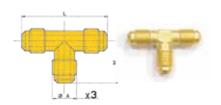
FLARE PLUGS AND TEES





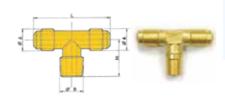
SAE FLARE PLUGS

Code	Model	ØA flare	C esag.		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



SAE FLARE TEES

Code	Model	ØA flare		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
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	Lmm	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



WATER DISSIPATER





IT IS THUS RECOMMENDED TO MEASURE THE VOLUME OF WATE



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.

B. C. L. L. C. C. C. C.

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	Desdcription
02042034	Completion fitting kit for HYPPO



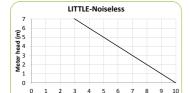


LITTLE-NOISELESS

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			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

		Desdcription
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			
02042033	SMART-12	154 x 30 x 34 mm	0,5 kg



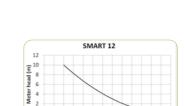
Technical features

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	Desacription
02042022	Detection unit with cable



6 7 8

Flow rate (I/h)

9 10 11 12 13

2 3

CONDENSATION WATER PUMP

NEW

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-spilt units.

Very low noise.

Easy installation thanks to the complete set of electrical and hydraulic connections.

Code			
02042028	CUB-18	260 x 170 x 60 mm	0,7 kg



Technical features

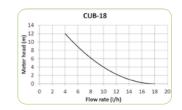
For split units up to	12 kW
Maximum flow rate	18 l/h
Maximum discharge head	10 m
Maximum suction	2 m
Voltage	100-230V/50-60Hz
Alarm contact	NC 3A-250V
Dimensions pump body	104 x 49 x 46 mm
Dimensions detection unit	86 x 40 x 45 mm



Spare parts and accessories

Code	Desdcription
02042022	Detection unit with 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.

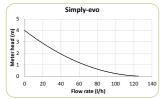
Code	Model	Dimensions	Weight
02042027	SMILE-EVO	160 x 100 x 130 mm	0,6 kg



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 125I/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
Power consumption	NO/NC 230-5A





SILENT

Condensate water pump without neutralization system

Usable for air-conditioner and evaporator coils and cold show windows. Usable for gaz boilers up to 400 kW.

Made from ABS plastic and is resistant to acidic condensate (PH3). Extremely quiet.

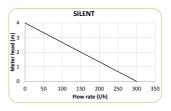
Code	Model	Dimensions	Weight
02042002	SILENT	185 x 85 x 100 mm	1,6 kg



CONDENSATION WATER PUMP



For gaz poliers up to	400 KW
Maximum flow rate	350 l/h
Max delivery height	4 m
Tank capacity	0,5
Fluid temperature	70°C
Voltage	230V - 50/60Hz
Alarm contact	Máx 24V. 6VA(NA) Ohm load



AN-30

Condensate neutralizaton system

Condensate neutralization system for boilers up to 30kW.

The exchange capacity of its special neutralization cartridge from acid PH to neutral PH is immediate and sure.

AN-30 is equipped with a by-pass that prevents the treated condensate to go back to the boiler in case of inner obstructions.

The cartridge lasts approximately one year: anyway, we suggest to check the outlet condensate at least every 5 months.

Code				
02042031	AN-30	Cartridge	240 x 55 x 55 mm	0,8 kg
02042032	CART-30	Spare	240 x 55 x 55 mm	0,6 kg



Technical features

For gaz boilers up to	30 kW
Connections	16 mm
Lenght	240 mm
Diameter	38 mm







WELDING-CONSUMABLES



WELDING





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.
- Kit of 4 lances for head.
- Protection goggles.
- Multipurpose wrench.

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
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	Oxigen 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	-	-	-



11509-COOL GEL

Heat dissipating spray

Helps prevent heat damage to components and surrounding materials during soldering.

Helps protect rubber, plastic, painted and finished surfaces during soldering.

Unique gelled formula sticks to surfaces without dripping or running off.

Safe, non-toxic, harmless to skin and odorless.

Reduces danger of fire to surrounding surfaces.

Convenient trigger spray.

Code				
12003007	11509	0,947 lt	320 x 80 x 80 mm	1,06 kg



SPITFIRE/PRO

Complete kit with 1 torch SPITFIRE and 2 MAP-HP cartridges

Features

Large and high intensivity flame.

Up to 2200°C high temperature powerful swirl flame.

For use with MAP-HP and Propane gas.

Piezo igniter for istant 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

For use with MAP-HP or propane.

Larger and high.

Intensive flamme.

10001036	SPITFIRE	320 x 160 x 40 mm	0,46 kg





MAP-HP

New-generation cartridges MAP-HP

Rif	Code	Model	Description		Capacit	Min. Qty
A	11003022	MAP-HP	Cartridge		400 g	12
(3)	05055071	-	Adapter for use with TUR	BO SET 90	-	-
A	11003022	1982°C	470 x 160 x 280 mm	11,1kg		
3	05055071		140 x 100 x 20 mm	0,10 kg		





PROPANE AND OXYGEN WELDING KIT





80P/B

Propane and oxygen bottles kit on metal frame

			Empty oxygen be	
A	10001022	80P/B	51	2 kg
A	10001022	690 x 430 x 28	30 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				
3	10001023	80P/R	360 x 360 x 210 mm	4,7 kg





Spare parts and accessories for oxygen

Rif						
A	11002002	BOS 50	Empty oxygen bottle	51	550 x 150 x 150 mm	7,6 kg
B	05002026	VO 5	Oxygen valve for BOS 50	-	-	-





Spare parts and accessories for propane

Code					Weight
11003004	BOP 5	Empty propane bottle	2 kg	270 x 200 x 200 mm	3,3 kg





ACETYLENE AND OXYGEN WELDING KIT

80A/B

Acetylene and oxygen bottles kit on metal frame

	Code	Model	Empty oxygen bottle	Full acetylene bottle
A	10001026	80A/B	51	51
A	10001026	690 x 430 x 2	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				
3	10001027	80A/R	360 x 360 x 210 mm	5,2 kg





Spare parts and accessories for oxygen

						Weight
A	11002002	BOS 50	Empty oxygen bottle	51	550 x 150 x 150 mm	7,6 kg
B	05002026	VO 5	Oxygen valve for BOS 50	-	-	-



Spare parts and accessories for acetylene

Code					Weight
11003017	BAC 50/C	Full acetylene bottle	51	550 x 150 x 150 mm	11,6 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
(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
(3	10002002	OS15	Oxygen regulator	0÷315	0÷16	10
()	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

		Description
10010023	95513	Diaphragm for regulator
10010015	TB	Twin hose
10005001	IM	Handle
10004XXX	LA	Acetylene welding head 25÷315 l
10004XXX	LP	Propane welding head 25÷500 l
10010012	VO	Straight oxygen check valve
10010002		Lighter
10010013	VSP	Traight propane- acetylen check valve
10010XXX		Replacement gauge for regulator
	10010023 10010015 10005001 10004XXX 10004XXX 10010012 10010002 10010013	10010023 95513 10010015 TB 10005001 IM 10004XXX LA 10004XXX LP 10010012 VO 10010002 10010013 VSP



734

Brazing alloy for copper-brass welding

Code							
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

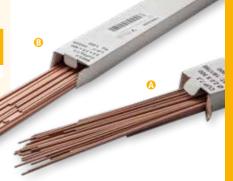
Code	Model	Diameter	Alloys	composi	itions%	Temp. fusione	Conf.
10003014	734R	1.5 m	34	36	27	630-730 °C	500 a



615/654

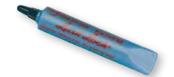
Brazing alloy for copper-copper welding

A	10003001	615	2,0	-	92,4	7,6	705-800 °C	1000 g		
(3)	10003006	654	2,0	0,4	92,6	7	680-745 °C	1000 g		



SEALERS





10001

Thread locker

Code					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					
12003004	HST	11,7 g	140 x 120 x 150 mm	0,35 kg	12



L542/LX53-14

Threaded sealers

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-condesation flexible and reinforced ribbon for heat insulation Anti-condesation ribbon in synthetic rubber.

Code					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.

Code				Weight	Min. Qty
12004002	NAL50	0,03 x 50 mm x 50 m	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



OWIKCHECK

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.

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.

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, sulfer 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			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 the charge of the oil in HVAC systems.

Suitable for the removal of the oils from the HVAC systems.

Complete with aspiration hose and a pressure hose with adapters.

Suitable for the flushing of the systems using FORMULA fluid and the connecting kit KIT-ETO-HVAC (see pag. 22).

Code			
02041028	ETO-4	290 x 200 x 275 mm	7 kg



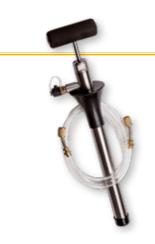
TRANSFER AND FLUSHING PUMP

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				Weight
13001026	R-ECOPUMP	125 ml	580 x 255 x 140 mm	3 kg



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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.

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