

# SERVICE EQUIPMENT

FOR SERVICING REFRIGERATION AND AIR CONDITIONING SYSTEMS





---

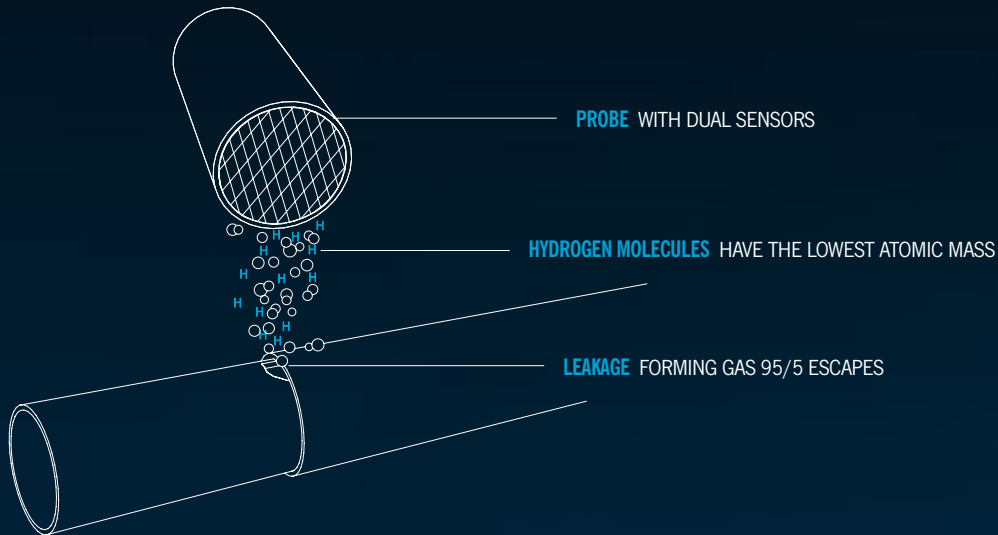
# CONTENTS

---

02	LEAK DETECTION
10	RECOVERY, EVACUATION, CHARGING
22	QUICK-COUPERS
26	REFRIGERANTS
28	MEASUREMENT AND DIAGNOSTIC DEVICES
32	FITTINGS
34	COMPRESSORS
36	USEFUL ACCESSORIES
40	ONLINE-SERVICE
41	IMPRINT

# LEAK DETECTION

## TRACE GAS LEAK DETECTION



**PAGE 04** HYDROGEN LEAK DETECTOR

**PAGE 06** TRACE GAS LEAK DETECTION KITS

**PAGE 08** REFRIGERANT LEAK DETECTOR

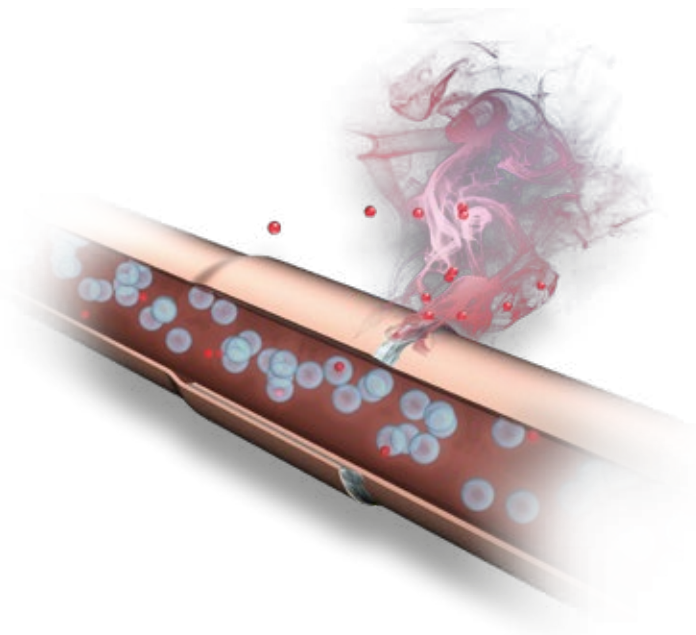
**PAGE 09** NITROGEN PRESSURE TESTING

# FIND THE LEAK!

**THE LEAK DETECTION TECHNOLOGY DEVELOPED FOR THE INDUSTRY IS PERFECTLY TAILORED TO SERVICING APPLICATIONS, AND THEREFORE GUARANTEES LEGALLY COMPLIANT, FAST, RELIABLE AND SIMPLE LEAK DETECTION.**

**FOR LEAK DETECTION**, the empty air conditioning system is charged with forming gas 95/5 consisting of 95 percent nitrogen and 5 percent hydrogen. Forming gas 95/5 is non-flammable, non-toxic, non-corrosive and not harmful to the environment. Hydrogen molecules have the smallest atomic mass of all the elements and

can escape due to even the smallest leak. With the aid of hydrogen leak detectors LOKTRACER TLD.500 and LOKTRACER TLD.1000, very small leakages can therefore be detected. The leak detectors react almost exclusively to hydrogen. There are therefore hardly any cross sensitivities



## LOKTRACE IN COMPARISON TO CONVENTIONAL LEAK DETECTION METHODS

	LOKTRACE	UV dye	Electronic refrigerant leak detectors	Nitrogen and leak detection spray
Compliance with legal requirements	✓	✗	✗	✓
Direct operability	✓	✗	✓	✓
Detects the smallest leakages	✓	✗	✓	✗
Reliability	✓	✓	✗	✓

# HYDROGEN LEAK DETECTOR

## HYDROGEN LEAK DETECTOR



- ⊕ Developed especially for refrigeration and air conditioning technology.
- ⊕ Made in Germany!
- ⊕ Effective hydrogen leak detector thanks to unique dual sensors.
- ⊕ Very low cross sensitivity to external gases.
- ⊕ Incremental approximation of major leaks (zero tracking).
- ⊕ Automatic sensor cleaning.
- ⊕ No pump or filter due to diffusion technology.
- ⊕ Integrated LED light.
- ⊕ Acoustic and optical alarm.

Article no.	Article name
L13005099	LOKTRACER TLD.500

Technical data	
Time to operability:	< 60 s
Reaction time:	1 to 2 s
Operating time:	approx. 5 h
Power supply:	rechargeable batteries

Also available separately		
Article no.	Article name	Description
L14004043	PA-TLD.500	Mains charger

**HYDROGEN LEAK DETECTOR WITH LEAKAGE RATE DISPLAY**



**Additional performance features compared to LOKTRACER TLD.500:**

- ⊕ Robust aluminium housing.
- ⊕ Lit LCD display.
- ⊕ Recovery pump enables leak detection even through floor screed, insulation and foam.
- ⊕ Swift, safe leak detection through “Search Mode”.
- ⊕ ppm measurement of leak rate through “Analyse Mode”.

Article no.	Article name
L13005244	LOKTRACER TLD.1000

**Technical data**

Time to operability:	< 60 s
Reaction time:	1 to 2 s
Operating time:	approx. 5 h
Power supply:	batteries

**Also available separately**

Article no.	Article name	Description
L14004385	PA-TLD.1000	Mains charger

# TRACE GAS LEAK DETECTION KITS

## CARRY CASE KIT FOR TRACE GAS LEAK DETECTION IN VEHICLE AIR CONDITIONING SYSTEMS



- ⊕ Complete kit for trace gas leak detection in vehicle air conditioning systems, in a robust carry case.
- ⊕ Pressure reducer connection: W21,8-14 with left-handed thread.

Article no.	Article name	Description
L13005139	LOKBOX TG-AUTO-500	with LOKTRACER TLD.500

### Also available separately

Article no.	Article name	Description
L14003951	PR-TG.10 W21,8-14	10 bar (150 psi) pressure reducer
L13005015	PA-1/LT.10	Manifold gauge 10 bar (150 psi)
L13004971	HDS-A-G+G-3000-Y	Charging hose
L13002909	HDS-J-G+G-3000-Y	Charging hose
L14002502	QC-134a-BM	Low pressure quick-coupler
L14002503	QC-134a-RM	High pressure quick-coupler

## CYLINDER TROLLEY KIT FOR TRACE GAS LEAK DETECTION IN VEHICLE AIR CONDITIONING SYSTEMS



- ⊕ Complete kit for trace gas leak detection in vehicle air conditioning systems.
- ⊕ The cylinder trolley is suitable for standard 10 l or 20 l gas cylinders.
- ⊕ The gas cylinder pictured is not included.
- ⊕ Pressure reducer connection: W21,8-14 with left-handed thread.

Article no.	Article name	Description
L13005004	LOKTRACE KA-500 W21,8-14	with LOKTRACER TLD.500
L13005184	LOKTRACE KA-1000 W21,8-14	with LOKTRACER TLD.1000

### Also available separately

Article no.	Article name	Description
L14003939	CT.10/20	Cylinder trolley
L14003951	PR-TG.10 W21,8-14	10 bar (150 psi) pressure reducer
L13005015	PA-1/LT.10	Manifold gauge 10 bar (150 psi)
L13004971	HDS-A-G+G-3000-Y	Charging hose
L13002909	HDS-J-G+G-3000-Y	Charging hose
L14002502	QC-134a-BM	Low pressure quick-coupler
L14002503	QC-134a-RM	High pressure quick-coupler
L14003969	LOKTRACE KA.DC	Dust cover



## QUICK- COUPLER FOR HFO-1234YF



- ⊕ Enables the connection of LOKTRACE leak detection kits in vehicle air conditioning systems with the refrigerant HFO-1234yf.
- ⊕ An A-1234 fitting is also required to connect to the charging hose of the LOKTRACE leak detection kit.
- ⊕ Tested according to SAE J2888 (1234yf)
- ⊕ Connection: M12 x 1.5

Article no.	Article name	Description
L14004188	QC-1234YF-BF	Low pressure quick-coupler
L14004187	QC-1234YF-RF	High pressure quick-coupler

## FITTING M12X1,5 M - 1/4" SAE M



To connect LOKTRACE leak detection kit charging hoses with quick-couplers for HFO-1234yf.

Article no.	Article name
L14004189	A-1234

## CARRY CASE KIT FOR TRACE GAS LEAK DETECTION IN REFRIGERATION AND AIR CONDITIONING SYSTEMS



- ⊕ Complete kit for trace gas leak detection in refrigeration and air conditioning systems, in a robust carry case.
- ⊕ Pressure reducer connection: W21,8-14 LH with left-handed thread.

Article no.	Article name	Description
L13005038	LOKBOX TG-HVAC-500	with LOKTRACER TLD.500
L13004643	LOKBOX TG-HVAC-1000	with LOKTRACER TLD.1000

Also available separately

Article no.	Article name	Description
L14003411	PR-H2.50	50 bar (750 psi) pressure reducer
L13005037	PA-1/LT.50	Manifold gauge 50 bar (750 psi)
L13004971	HDS-A-G+G-3000-Y	Charging hose
L13002909	HDS-J-G+G-3000-Y	Charging hose

# REFRIGERANT LEAK DETECTOR

## ELECTRONIC REFRIGERANT LEAK DETECTOR



- ⊕ Suitable for HC, PFC and HFC refrigerants.
- ⊕ Made in Germany.
- ⊕ Sensitivity  $\leq 1$  g/year (in accordance with EN14624, SAEJ1627 and E85-22).
- ⊕ Incremental approximation of major leaks (zero tracking).
- ⊕ Automatic sensor cleaning.
- ⊕ No pump or filter due to diffusion technology.
- ⊕ Integrated LED light.
- ⊕ Acoustic and optical alarm.
- ⊕ Conforms to EC regulations 1516/2007 and DIN 378.

Article no.	Article name
L13005243	LOKATOR RLD5

Technical data	
Time to operability:	< 60 s
Reaction time:	1 to 2 s
Operating time:	approx. 5 h
Power supply:	rechargeable batteries

Also available separately		
Article no.	Article name	Description
L14004043	PA-TLD.500	Mains charger

# NITROGEN PRESSURE TESTING

## NITROGEN PRESSURE TESTING KIT 50 bar (750 psi)



Complete kit for carrying out pressure testing up to 50 bar (750 psi) in refrigeration and air conditioning systems.

Article no.	Article name
L13004644	N2-KS-50

Also available separately

Article no.	Article name	Description
L13004645	N2-DMS	Nitrogen pressure reducer kit including quick connector and hose
L14003405	PR-N2.50	Nitrogen pressure reducer 50 bar (750 psi)
L14000371	SVR	Quick connector for nitrogen pressure reducer
L14000038	DF-060-02	Nitrogen cylinder 2 litre (filled)
L13002154	HDS-A-G+W-1500-Y	Charging hose

## NITROGEN PRESSURE TESTING KIT 10 bar (150 psi)



Complete kit for carrying out pressure testing up to 10 bar (150 psi) in refrigeration and air conditioning systems.

Article no.	Article name
L13001108	DF-060

Also available separately

Article no.	Article name	Description
L14000039	PR-N2.10	Nitrogen pressure reducer 10 bar (150 psi)
L14000371	SVR	Quick connector for nitrogen pressure reducer
L14000038	DF-060-02	Nitrogen cylinder 2 litre (filled)
L13002154	HDS-A-G+W-1500-Y	Charging hose

## LEAK DETECTION SPRAY



- ⊕ For the detection of leaks in tube lines under pressure.
- ⊕ Non-flammable, anti-corrosive, tolerated by the skin.
- ⊕ DIN-DVGW tested.

Article no.	Article name	Contents
L14000823	LS-400	400 ml

# RECOVERY, EVACUATION, CHARGING

## VACUUM METER



VACUUM METER V80

- [PAGE 11](#) RECOVERY UNITS
- [PAGE 12](#) VACUUM PUMP STATIONS
- [PAGE 13](#) VACUUM PUMPS
- [PAGE 14](#) MANIFOLD GAUGES
- [PAGE 16](#) GAUGES & VACUUM METERS
- [PAGE 18](#) CHARGING DEVICE
- [PAGE 19](#) DIGITAL SCALES
- [PAGE 20](#) CHARGING HOSES

# RECOVERY UNITS

## COMPACT RECOVERY UNIT



- ⊕ World's smallest, fully adequate recovery unit for all common, non-flammable refrigerants (excluding NH<sub>3</sub>).
- ⊕ Safety pressure limiter with automatic reset function.
- ⊕ Simple 2-valve control.
- ⊕ Oil-free compressor for the disposal of liquid and gaseous refrigerants.
- ⊕ Integrated dirt filter.

Article no.	Article name
L14004102	RG3000E

Technical data	
Recovery capacity (gaseous):	7 kg/h (15.4 lbs/h)
Recovery capacity (liquid):	40 kg/h (88.2 lbs/h)
Connections:	1/4" SAE
Safety pressure limiter:	38 bar (550 psi)
Pressures in:	bar and psi
Power supply:	220/240 V - 50/60 Hz
L x H x D in mm (inch):	310 x 235 x 175 (12.2 x 9.25 x 6.9)
Weight:	8 kg (17.64 lbs)

## RECOVERY UNITS



- ⊕ Compact recovery unit for all common, non-flammable refrigerants (excluding NH<sub>3</sub>).
- ⊕ Made in USA.
- ⊕ Oil-free 1/2 PS compressor.
- ⊕ Switches off automatically after process ends.
- ⊕ With Technical Inspection Association-type test.

Article no.	Article name
L14003138	RG-69000-220 TÜV

Technical data	
Recovery capacity (gaseous):	30 kg/h (66.14 lbs/h)
Recovery capacity (liquid):	84 kg/h (185.2 lbs/h)
Connections:	1/4" SAE
Safety pressure limiter:	38 bar (550 psi)
Pressures in:	bar and psi
Power supply:	220/240 V - 50/60 Hz
L x H x D in mm (inch):	432 x 254 x 305 (17 x 10 x 12)
Weight:	16 kg (2.2 lbs)

# VACUUM PUMP STATIONS

## VACUUM PUMP STATION WITH VACUUM PUMP RD.2D



- ⊕ For the evacuation and charging of refrigerant circuits.
- ⊕ 2-stage vacuum pump RD.2D (35 l/min).
- ⊕ Gauge with 80 mm (3.15") diameter.
- ⊕ Compartment for refrigerant scales.
- ⊕ 2 charging hoses 1.5 m (39.4").

Article no.	Article name	Low pressure gauge	High pressure gauge
L13001863	VPS-RD.2D/MN-01/MH-01/V80	R600a	R600a
L13005316	VPS-RD.2D/MN-11/MH-11/V80	R290, R600a	R290, R600a

Article no.	Article name	Low pressure gauge	High pressure gauge
L13001851	VPS-RD.2D/MN-01/MN-07/V80	R600a	R134a

**Technical data**

Power supply:	220/240 V - 50/60 Hz
L x H x D in mm (inch):	345 x 265 x 360 (13.6 x 10.4 x 14.2)
Weight:	12.2 kg (26.9 lbs)

## VACUUM PUMP STATION WITH VACUUM PUMP DIP-402



- ⊕ For the evacuation and charging of refrigerant circuits.
- ⊕ 2-stage vacuum pump DIP-402 (80 l/min).
- ⊕ Gauge with 80 mm (3.15") diameter.
- ⊕ Compartment for refrigerant scales.
- ⊕ 2 charging hoses 1.5 m (39.4").

Article no.	Article name	Low pressure gauge	High pressure gauge
L13005289	VPS-DIP-402/MN-11/MH-11/V80	R290, R600a	R290, R600a

**Technical data**

Power supply:	220/240 V - 50/60 Hz
L x H x D in mm (inch):	430 x 270 x 360 (16.93 x 10.6 x 14.17)
Weight:	18.5 kg (40.78 lbs)

# VACUUM PUMPS

## VACUUM PUMP RD.2D



Has a gas ballast valve and thermal overload protection.

Article no.	Article name
L14002963	RD.2D

### Technical data

Capacity:	35 l/min
Final partial pressure:	0.01 mbar (0.15 psi)
Connection power:	120 Watt
Power supply:	220/240 V – 50/60 Hz
L x H x D in mm (inch):	247 x 110 x 210 (9.72 x 4.33 x 8.27)
Weight:	6 kg (13.23 lbs)

## VACUUM PUMP DIP-402



Has a gas ballast valve and thermal overload protection.

Article no.	Article name
L14001731	DIP-402

### Technical data

Capacity:	80 l/min
Final partial pressure:	0.01 mbar (0.15 psi)
Connection power:	300 Watt
Power supply:	220/240 V – 50/60 Hz
L x H x D in mm (inch):	285 x 150 x 260 (11.22 x 5.9 x 10.24)
Weight:	10 kg (22.05 lbs)

## MINERAL VACUUM PUMP OIL



1 litre mineral vacuum pump oil.

Article no.	Article name	For vacuum pumps
L13003161	M032	RD.2D
L14000010	M068	DIP-402

# MANIFOLD GAUGES

## 1-VALVE MANIFOLD GAUGES



Gauge with 80 mm (3.15") diameter.

Article no.	Article name	For refrigerant
L13002106	PA-1/MN-01	R600a

## 2-VALVE MANIFOLD GAUGES



Gauges with 80 mm (3.15") diameter.

Article no.	Article name	For refrigerant
L13001562	PA-2/MN-01/MH-01	R600a

## 5-VALVE MANIFOLD GAUGES



Gauges with 80 mm (3.15") diameter and V80 vacuum meter.

Article no.	Article name	Low pressure gauge	High pressure gauge
L13001542	PA-5/MN-01/MH-01/V80	R600a	R600a

Article no.	Article name	Low pressure gauge 1	Low pressure gauge 2
L13001549	PA-5/MN-01/MN-02/V80	R600a	R22, R134a, R404A, R407C



## BASIC BODIES FOR MANIFOLD GAUGES



Basic bodies for manifold gauges.

PA-1/N/GK  
PA-1/H/GK

PA-2/GK

PA-5/GK

Article no.	L14000832	L14000833	L14000835
Article name	PA-1/N/GK	PA-2/GK	PA-5/GK
Description	Basic body for 1-valve manifold gauge ND	Basic body for 2-valve manifold gauge	Basic body for 5-valve manifold gauge

Article no.	L14000837
Article name	PA-1/H/GK
Description	Basic body for 1-valve manifold gauge HD

# GAUGES & VACUUM METERS

## GAUGES



- ⊕ Adjustable and vibration-free
- ⊕ Diameter 80 mm (3.15")
- ⊕ Connection thread 1/8" NPT

Article no.	Article name	Scale [ bar ]	Scale [ psi ]
L14000690	MN-01	- 1 to 3	-14.5 to 42
L14000691	MN-02	- 1 to 15	-14.5 to 215
L14000696	MN-07	- 1 to 10	-14.5 to 140
L14000779	MN-08	- 1 to 30	-14.5 to 450
L14002928	MN-11	- 1 to 10	-14.5 to 140

Article no.	Article name	Scale [ bar ]	Scale [ psi ]
L14000697	MH-01	- 1 to 10	-14.5 to 140
L14000698	MH-02	- 1 to 35	-
L14000703	MH-07	- 1 to 30	-14.5 to 450
L14000778	MH-08	- 1 to 50	-
L14002929	MH-11	- 1 to 30	-14.5 to 430

01	02	07	08	11
R600a	R22	R134a	R410A	R290
	R134a			R600a
	R404A			
	R407C			

## VACUUM METER



- ⊕ Precision scale from 0 to 1000 mbar.
- ⊕ Diameter 80 mm (3.15").
- ⊕ Connection thread 1/8" NPT.

Article no.	Article name
L14000704	V80

## DIGITAL VACUUM METER



- ⊕ For simple and precise vacuum metering between 0 mbar and 16 mbar.
- ⊕ Trend display (rising or sinking pressure) where there is more than 16 mbar.
- ⊕ Auto switch off after 10 minutes, if the measurement value is greater than 16 mbar.
- ⊕ Delivered in a robust plastic case.

Article no.	Article name
L14001096	VG64

Technical data	
Measuring range:	0 to 16 mbar (0 to 12000 Microns)
Resolution:	0.001 mbar (where measurement value < 0.260 mbar) 1 micron (where measurement value < 200 microns)
Accuracy:	± 10 % (where measurement value < 1000 microns)
Display updates:	2 x per second
Units:	[micron], [psi], [inHg], [mbar] [Pascal], [torr], [mTorr]
Overpressure protection:	up to 20 bar (290 psi)
Connections:	1/4" SAE
Working temperature:	2°C to 52°C (35°F to 125°F)
Power supply:	1 x 9 V alkaline battery (not included)
Operation time:	approx. 35 h
Dimensions, vacuum meter (L x W x H):	140 x 76 x 32 mm (5.51" x 2.99" x 1.26")
Weight, vacuum meter:	190 g (6.7 oz)

## COMPLETE DIAPHRAGM SET FOR MANIFOLD GAUGES



Consists of:

- ⊕ Diaphragm
- ⊕ Spring
- ⊕ Brass head
- ⊕ Brass ring

Article no.	Article name
L14000137	WK-G03

## DIAPHRAGM SET FOR MANIFOLD GAUGES



Article no.	Article name
L14000274	WK-G04

## VALVE SET FOR MANIFOLD GAUGES



Article no.	Article name	Description
L14000493	WK-07H	HIGH
L14000494	WK-07L	LOW
L14000272	WK-07R	REF
L14000492	WK-07V	VAC

# CHARGING DEVICE

## CHARGING DEVICE



Portable charging device for precise charging of refrigerant circuits.



Article no.	Article name
L13005734*	LOKBOX FE charging device

Also available separately

Article no.	Article name	Description
L14003840	DSL 5000	Compact digital scales
L14000009	16-C	Quick-coupler
L13005321	EY-600	Extraction valve
L13000953	FE-600a-SK	PVC hose - 1.1 m (3.61")
L13000950	FE-600a-ESK	Discharge hose - 5 m (16.4")
L14000244	121/T-VK	Ball valve
L13001971	HDS-A-G+G-260	Charging hose
L14000131	NRV-6	Non-return valve
L13001521	HFFB-1	Holder for liquid charging

\*Suitable refrigerant cartridges can be found on page 27.

# DIGITAL SCALES

## COMPACT DIGITAL SCALES



- ⊕ For precise removal of refrigerant from cartridges or aluminium compressed gas cylinders.
- ⊕ Developed especially for VULKAN Lokring by SOEHNLE PROFESSIONAL, the leading company in measurement and weighing technology.
- ⊕ Straightforward operation with three buttons.
- ⊕ Easily readable LCD display: Digit height 15 mm (0.59").
- ⊕ Without zero-tracking.
- ⊕ Without automatic switch off.
- ⊕ Unit toggle switch kg/lb.
- ⊕ Easy-care ABS plastic housing.
- ⊕ Battery operated 2 x 1.5V AA batteries\*.
- ⊕ Working temperature: 0°C to 40°C (32°F to 104°F).

\* (not included)

Article no.	Article name
L14003840	DSL 5000

### Technical data

Weighing range::	5,000 g (176.37 oz)
Intervals:	0.5 g (0.02 oz)
Platform size:	ø120 mm (4.72")
Dimensions (L x W x H):	140 x 190 x 45 mm (5.51" x 7.48" x 1.77")
Weight:	500 g (17.64 oz)

## DIGITAL SCALES



- ⊕ For the exact determination of refrigerant removal amounts or refrigerant charging amounts.
- ⊕ Robust weighing platform with overload protection.
- ⊕ Separate operating and display unit with large display.
- ⊕ Saves last weight display.
- ⊕ Easy adjustment through integrated spirit level.
- ⊕ USB connection.
- ⊕ Delivered in a robust plastic case.

Article no.	Article name
L14001836	SC 98210

### Technical data

Weighing range:	110 kg (242.51 lbs)
Resolution:	0.01 kg (0.02 lbs)
Weight units:	[kg], [lbs], [oz]
Accuracy:	± 0.01 kg, ± 0.01 lbs, ± 0.16 oz
Working temperature range:	0°C to 49°C (32°F to 120°F)
Platform size:	220 x 220 mm (8.66" x 8.66")
Power supply:	9 V alkaline battery

# CHARGING HOSES

## CHARGING HOSE; 1/4" SAE CONNECTIONS (STRAIGHT)



**Connections**

- ⊕ 1/4" SAE F straight with valve opener.
- ⊕ 1/4" SAE F straight.

Article no.	Article name	Description
L13002285	HDS-A-G+G-600-B	600 mm (23.62"), blue
L13002286	HDS-A-G+G-600-R	600 mm (23.62"), red
L13002287	HDS-A-G+G-600-Y	600 mm (23.62"), yellow

## CHARGING HOSE; 1/4" SAE CONNECTIONS (1 X STRAIGHT, 1 X 45°)



**Connections**

- ⊕ 1/4" SAE F with 45° elbow and valve opener.
- ⊕ 1/4" SAE F straight.

Article no.	Article name	Description
L13002304	HDS-A-G+W-600-B	600 mm (23.62"), blue
L13002305	HDS-A-G+W-600-R	600 mm (23.62"), red
L13002306	HDS-A-G+W-600-Y	600 mm (23.62"), yellow
L13002111	HDS-A-G+W-900-B	900 mm (35.43"), blue
L13002018	HDS-A-G+W-900-R	900 mm (35.43"), red
L13002113	HDS-A-G+W-900-Y	900 mm (35.43"), yellow
L13002023	HDS-A-G+W-1500-B	1500 mm (59.06"), blue
L13002024	HDS-A-G+W-1500-R	1500 mm (59.06"), red
L13002154	HDS-A-G+W-1500-Y	1500 mm (59.06"), yellow
L13002114	HDS-A-G+W-1800-B	1800 mm (70.87"), blue
L13002115	HDS-A-G+W-1800-R	1800 mm (70.87"), red
L13002116	HDS-A-G+W-1800-Y	1800 mm (70.87"), yellow

## CHARGING HOSE; 1/4" SAE CONNECTIONS (1 X STRAIGHT, 1 X 45°) AND BALL VALVE



**Connections**

- ⊕ 1/4" SAE F straight with valve opener and ball valve.
- ⊕ 1/4" SAE F with 45° elbow.

Article no.	Article name	Description
L13001841	HDS-A-G+W-900-B-V	900 mm (35.43"), blue
L13002048	HDS-A-G+W-900-R-V	900 mm (35.43"), red
L13001889	HDS-A-G+W-900-Y-V	900 mm (35.43"), yellow
L13001869	HDS-A-G+W-1500-B-V	1500 mm (59.06"), blue
L13001868	HDS-A-G+W-1500-R-V	1500 mm (59.06"), red
L13001867	HDS-A-G+W-1500-Y-V	1500 mm (59.06"), yellow
L13001843	HDS-A-G+W-1800-B-V	1800 mm (70.87"), blue
L13001840	HDS-A-G+W-1800-R-V	1800 mm (70.87"), red
L13001919	HDS-A-G+W-1800-Y-V	1800 mm (70.87"), yellow

# CHARGING HOSE ACCESSORIES

## BALL VALVES



121-RG-410A

Ball valves.

Article no.	Article name	Thread
L14000447	121-RG-4	1/4" SAE M x 1/4" SAE F
L14003205	121-RG-410A	1/4" SAE M x 5/16" SAE F
L14000783	121-S4	1/4" SAE M x 1/4" SAE M
L14000583	270015	1/4" SAE M x 1/8" NPT F

## REPLACEMENT SEALS MADE OF PLASTIC



Article no.	Article name
L14001360	KD-1/4"
L14001361	KD-3/8"

## REPLACEMENT SEALS MADE OF RUBBER



Article no.	Article name
L14000407	GD-1/4"
L14000408	GD-3/8"

## VALVE OPENER



Article no.	Article name
L14000575	D19302

## VALVE CORE



Article no.	Article name
L14000113	E-6200a

## VALVE CORE REMOVER WITH 3 VALVE CORES



Article no.	Article name
L14000013	E-6200

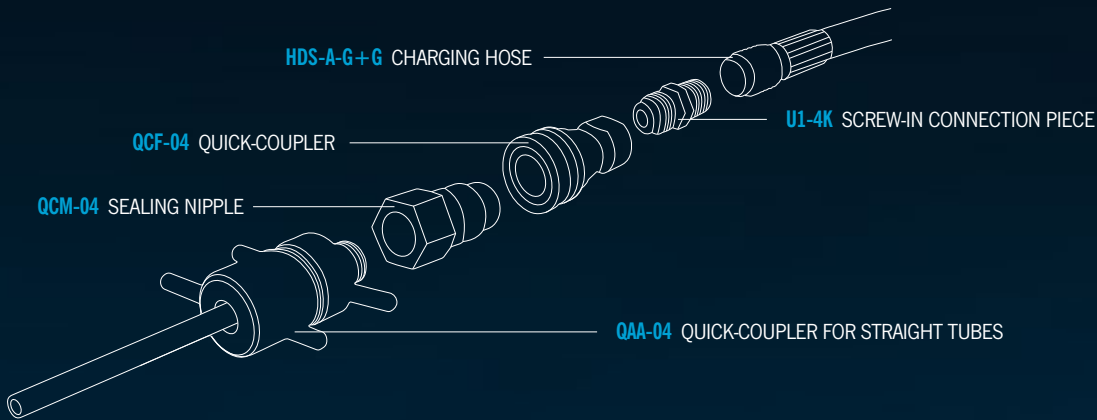
## HOSE ADAPTER FOR R410A



Article no.	Article name	Thread
L14001083	HA-R410A	1/4" SAE M x 5/16" SAE F

# QUICK-COUPPLERS

## QUICK-COUPLER SYSTEM





# QUICK-COUPERS

## 1234YF QUICK-COUPLER, CONNECTION M12 X 1.5



- ⊕ Enables the connection of LOKTRACE leak detection kits in vehicle air conditioning systems with the refrigerant HFO-1234yf.
- ⊕ An A-1234 fitting is also required to connect to the charging hose of the LOKTRACE leak detection kit.
- ⊕ Tested according to SAE J2888 (1234yf).
- ⊕ Connection: M12 x 1,5

Article no.	Article name	Connections
L14004188	QC-1234YF-BF	Low pressure quick-coupler
L14004187	QC-1234yf-RF	High pressure quick-coupler

## R134a QUICK-COUPERS



- ⊕ Connection 1/4" SAE M.
- ⊕ Tested according to SAE J497 (R134a).

Article no.	Article name	Description
L14002502	QC-134A-BM	Low pressure quick-coupler
L14002503	QC-134a-RM	High pressure quick-coupler

## R134a QUICK-COUPERS



- ⊕ Connection M14 x 1,5.
- ⊕ Tested according to SAE J497 (R134a).

Article no.	Article name	Description
L14002485	QC-134A-BF	Low pressure quick-coupler
L14002484	QC-134a-RF	High pressure quick-coupler

## EXTENSION FOR R134a HIGH PRESSURE SERVICE PORT



To extend high pressure service ports that are difficult to access e.g. for BMW E60 (5 Series), Volvo S80 and some Ford models.

Article no.	Article name
L14002876	QC-134A

# QUICK-COUPLERS

## QUICK-COUPLER FOR SCHRADER VALVES



- ⊕ To open Schrader valves without a loss of refrigerant.
- ⊕ When the quick-coupler is removed, the hose is sealed by the valve.
- ⊕ No valve opener is required in the end of the hose.
- ⊕ Quick-couplers 26-C and 27-C are suitable for R410A.

Article no.	Article name	Description
L14000009	16-C	1/4" SAE M, straight
L14000053	17-C	1/4" SAE M, 90° angle
L14002677	26-C	5/16" SAE M, straight
L14002678	27-C	5/16" SAE M, 90° angle

Available separately

L14000317	16-C/RM	Knurled nut for 16-C and 17-C
L14000264	OR-16C	O-Ring for 16-C and 17-C
L14000265	16-C/D	Seal for 16-C and 17-C
L14002926	OR-26C	O-Ring for 26-C and 27-C
L14002927	26-C/D	Seal for 26-C and 27-C
L14002925	26-C/RM	Knurled nut for 26-C and 27-C

## QUICK-COUPLER FOR STRAIGHT TUBES



- ⊕ For clamping straight tubes.
- ⊕ Seals at tube intersection and around entire tube circumference.
- ⊕ Suitable for pressure tests and evacuation as well as refrigerant charging.

Article no.	Article name	For ø
L14001655	PCV-600-2-HNBR	6 mm
L14001849	PCV-630-2-HNBR	6,35 mm (1/4")

Technical data

Vacuum-tight	up to 0.013 mbar (10 micron)
Pressure resistant	up to 45 bar (650 psi)
Working temperature	-20°C to 80°C (-4°F to 176°F)
Minimum tube length / minimum tube wall thickness	19 mm (3/4") / 0.8 mm (0.03")

## QUICK-COUPLER FOR STRAIGHT TUBES



- ⊕ For clamping straight tubes.
- ⊕ Seals around entire tube circumference.
- ⊕ Ensures maximum flow when flushing air conditioning systems.
- ⊕ Suitable for pressure tests and evacuation as well as refrigerant charging.

Article no.	Article name	For ø
L13002869	SK-40-2	2 mm
L13001369	SK-40-5	5 mm
L13001368	SK-40-6	6 mm
L13001406	SK-40-6,35	6.35 mm (1/4")
L13001431	SK-40-8	8 mm (5/16")
L13001312	SK-40-10	10 mm

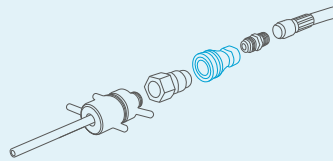
Technical data

Vacuum-tight	up to 0.013 mbar (10 micron)
Pressure resistant	up to 52 bar (754 psi)

### QUICK-COUPLER FOR SEAL NIPPLE QCM



Anvil with internal thread.

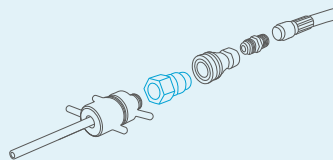


Article no.	Article name	Connection
L14000045	QCF-04	1/4" NPT F
L14001808	QCF-04-H.NBR	Rc 1/4"

### SEAL NIPPLE FOR QUICK-COUPLER QCF

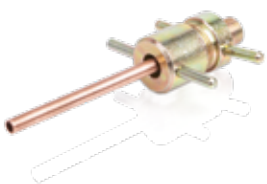


Connection adapter.

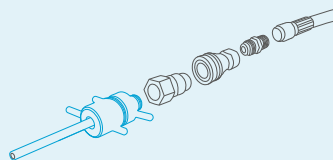


Article no.	Article name	Connection
L14000046	QCM-04	1/4" NPT F
L14001795	QCM-04-H.NBR	Rc 1/4"

### QUICK-COUPLER FOR STRAIGHT TUBES



The two adapters have the same structure, but differ in the quick-coupler inserts and seals used.



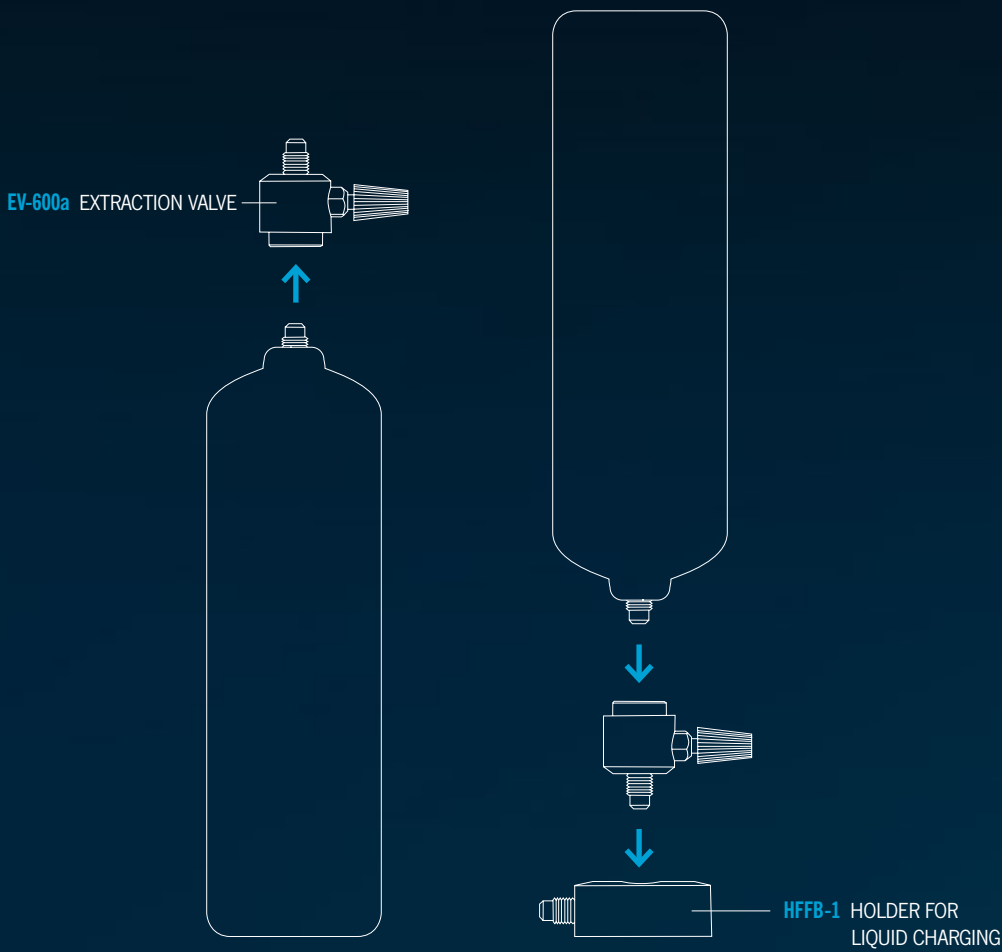
Article no.	Article name	For ø
L14000030	QAA-04	6 mm
L14000142	QAA-05	8 mm (5/16")

Available separately

L14000082	QAI-04	Quick-coupler insert
L14000028	QAI-05	Quick-coupler insert
L14000083	QAG-04	Seal
L14000021	QAG-05	Seal

# REFRIGERANTS

## RECOVERY



# REFRIGERANTS

## R290 REFRIGERANT CARTRIDGE



Article no.	Article name	Contents
L14004248	REF-R290-02*	370 g (13.05 oz)
<p>*NOTE: Cartridge does not fit into the carrying case of LOKBOX FE (L13005734).</p>		

## R600a REFRIGERANT CARTRIDGE



Article no.	Article name	Contents
L14000125	REF-R600a**	420 g (14.82 oz)
<p>**NOTE: Cartridge fits into the carrying case of LOKBOX FE (L13005734).</p>		

## EXTRACTION VALVE FOR R290 CARTRIDGES



Article no.	Article name
L14004249	EV-290

## EXTRACTION VALVE FOR R600a CARTRIDGES



Article no.	Article name
L13005321	EV-600a

## HOLDER FOR LIQUID CHARGING



Article no.	Article name
L13001521	HFFB-1

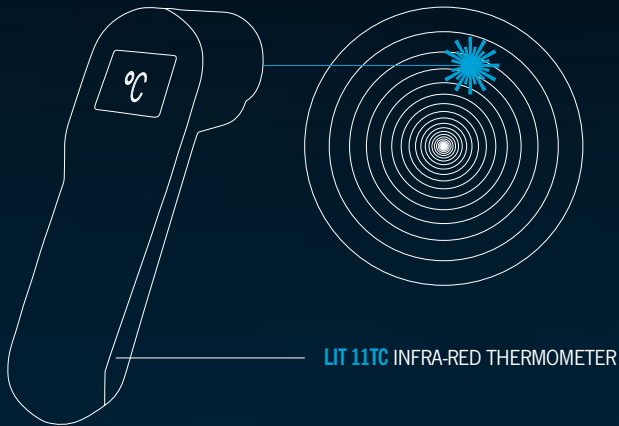
## ADAPTER FOR NON-FLAMMABLE REFRIGERANT



Article no.	Article name	Connections
L14000689	W21,8-14	W21,8-14 x 1/4" SAE M

# MEASUREMENT AND DIAGNOSTIC DEVICES

## INFRA-RED THERMOMETER



PAGE 29 INFRA-RED THERMOMETER

PAGE 30 DIGITAL QUICK RESPONSE THERMOMETER

PAGE 31 PROBE

PAGE 31 TEMPERATURE LOGGER

# INFRA-RED THERMOMETER

## INFRA-RED THERMOMETER



- For precise, non-contact temperature measurement on non-reflective surfaces.
- With additional K-type thermocouple.

Article no.	Article name
L14002969	LIT 11TC

### Technical data

Optical resolution:	11:1
Temperature range:	-60°C to 500°C (-76°F to 932°F)
Resolution:	0.1°C (0.1°F)
Accuracy:	± 1°C (1.8°F)
Emission coefficient:	0.95 adjustable
K-type thermocouple:	yes (probe included)
Probes included in the temperature range:	14°C to 250°C (57°F to 482°F)
Total temperature range:	-64°C to 1400°C (-83°F to 2552°F)
Temperature accuracy:	± 1% or 2°C (3.6°F)
Display:	LCD, lit
Automatic switch off:	Yes
Power supply:	2 x AA batteries (included)
Weight:	179 g (6.31 oz)
Dimensions:	175 x 39 x 71 mm (6.89" x 1.54" x 2.80")

# DIGITAL QUICK RESPONSE THERMOMETER

## DIGITAL QUICK RESPONSE THERMOMETER



Quick response measurement of surfaces, liquids, soft plastic materials, air, gases, very small objects etc. Only functional with freely selectable probes.

### K GTH-1150

Carry case kit includes probe

- ➔ Digital quick response thermometer
- ➔ Probe GTF-300 GS
- ➔ Alkaline battery 9 V
- ➔ Plastic carry case

### K GTH-1160

Carry case kit includes probe

- ➔ Digital quick response thermometer
- ➔ Probe GTF-300 GS
- ➔ Alkaline battery 9 V
- ➔ Plastic carry case

### K GTH-1100/2DIF

Carry case kit includes probe

- ➔ Digital quick response thermometer
- ➔ Probe GTF-300 GS
- ➔ Alkaline battery 9 V
- ➔ Plastic carry case

Article no.	L13002102	L13001858	L13002103
Article name	K GTH-1150	K GTH-1160	K GTH-1100/2DIF
Probe (not included):	1	1	2
Number of measuring ranges:	1	2	1
Measuring range 1:	-50°C to 1150°C	-50°C to 1150°C	-50°C to 1150°C
Measuring range 2:	-	-50°C to 199.9°C	-
Accuracy of measuring range 1:	± 1.0%: 20°C to 550°C; 920°C to 1150°C ± 1.5%: 550°C to 920°C	± 1.0%: 20°C to 550°C; 920°C to 1150°C ± 1.5%: 550°C to 920°C	± 1.0%: 20°C to 550°C; 920°C to 1150°C ± 1.5%: 550°C to 920°C
Accuracy of measuring range 2:	-	± 1.0%: 20°C to 199°C	-
Resolution of measuring range 1:	1°C	1°C	1°C
Resolution of measuring range 2:	-	0,1°C	-
Temperature difference measurement:	No	No	Yes
Working temperature:	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)	0°C to 45°C (32°F to 113°F)
Power supply:	1 x 9 V alkaline battery	1 x 9 V alkaline battery	1 x 9 V alkaline battery
Dimensions (L x W x H):	106 x 67 x 30 mm (4.17" x 2.64" x 1.18")	106 x 67 x 30 mm (4.17" x 2.64" x 1.18")	150 x 86 x 30 mm (5.91" x 3.89" x 1.18")
Weight (including battery):	150 g (5.29 oz)	150 g (5.29 oz)	230 g (8.11 oz)

Article no. L14000527  
Article name GTH-1150

### GTH-1150

Digital quick response thermometer, freely combinable with the probes shown on the right.

- ➔ Digital quick response thermometer
- ➔ Alkaline battery 9 V

Article no. L14000817  
Article name GTH-1160

### GTH-1160

Digital quick response thermometer, freely combinable with the probes shown on the right.

- ➔ Digital quick response thermometer
- ➔ Alkaline battery 9 V

Article no. L14000745  
Article name GTH-1100/2DIF

### GTH-1100/2DIF

Digital quick response thermometer, freely combinable with the probes shown on the right.

- ➔ Digital quick response thermometer
- ➔ Alkaline battery 9 V





# PROBE AND TEMPERATURE LOGGER

## PROBE FOR DIGITAL QUICK RESPONSE THERMOMETER



Article no.	L14000777	L14001898	L14000889
Article name	GES 1000	GOF 500	GTF-300 GS
<b>Technical data</b>			
Measuring range:	-50°C to 550°C (-58°F to 1022°F)	-265°C to 500°C (-445°F to 932°F)	-65°C to 400°C (-85°F to 752°F)
Area of application::	Soft plastic materials and liquids	Gases, liquids and solid surfaces	Gases, solid surfaces (not just liquids)
Length:	1 m (3.28")	1 m (3.28")	1 m (3.28")

## TEMPERATURE LOGGER



Standalone USB-based mini-data logger for measurements in critical climatic conditions.

### Performance features

- ⊕ Delayed start or recording review via a push button.
- ⊕ Temperature alarm with optical display on request.
- ⊕ User can select stop when memory is full, or memory roll-over for continuous recording.
- ⊕ Real-time monitoring.
- ⊕ USB connection.
- ⊕ Windows compatible software.

### Scope of supply

- ⊕ SL 300 T temperature logger.
- ⊕ Windows-based software compatible with 98SE, ME, 2000, XP, VISTA 32-bit Version (not compatible with Windows 95, NT, VISTA 64-bit Version, Windows 7 and Windows 10).
- ⊕ USB connection cable.
- ⊕ 3 V alkaline batteries.

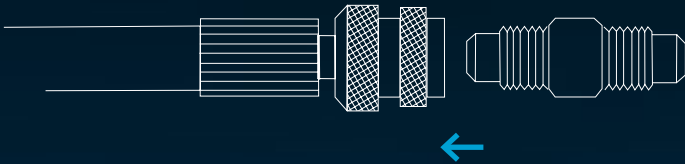
Article no.	Article name	Description
L14003035	SL 300 T	Temperature logger

### Technical data

Measuring points	44,344
Sampling rate	1 second to 18 hours
Alarm	Over and under-range alarm
Temperature measuring range	-40°C to 85°C (-40°F to 185°F)
Temperature accuracy	± 0.5°C (1°F)
Temperature resolution	0.01°C (0.02°F)
Calibration	One-point offset calibration through software
Time Accuracy	± 100 ppm at 24°C (75.2°F)
Dimensions (L x W x H)	76 x 40 x 15 mm (2.99" x 1.57" x 0.59")
Power supply	3 V lithium battery (CR 2035)
Battery lifespan	approx. 6 years

# FITTINGS

## FITTINGS



# FITTINGS

## SCREW-IN CONNECTION PIECE



Article no.	Article name	Connections
L14000047	U2-4	1/4" SAE M - 1/4" SAE M
L14000322	U1-4A	1/4" SAE M - 1/8" NPT
L14000091	U1-4B	1/4" SAE M - 1/4" NPT
L14000023	U1-4C	1/4" SAE M - 3/8" NPT

## SCREW-ON CONNECTION PIECE



Article no.	Article name	Connections
L12002408	U1-5K	1/4" SAE F - Rc 1/4"
L12002418	U1-7K	Rc 1/4" - 1/4" SAE M
L14000116	U3-4A	1/8" NPT F - 1/4" SAE M
L14000092	U3-4B	1/4" NPT F - 1/4" SAE M

## SCREW-ON CONNECTION PIECE WITH SCHRADER VALVE



Article no.	Article name	Connections
L14000097	AVU-44	1/4" SAE F - 1/4" SAE M*

\*(with Schrader valve)

## SLEEVES



Article no.	Article name	Connections
L14000445	U4-4	1/4" SAE F - 1/4" SAE F

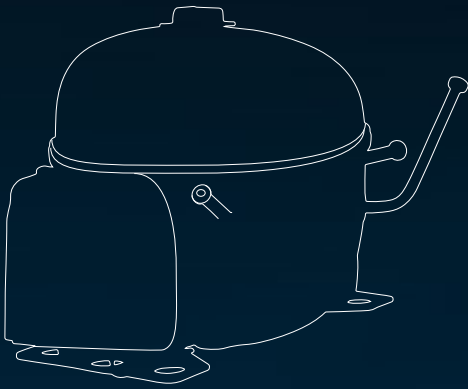
## ELBOW CONNECTORS



Article no.	Article name	Connections
L14000812	ES4-44	1/4" SAE F - 1/4" SAE M
L14000300	ES4-66	3/8" SAE F - 3/8" SAE M

# COMPRESSORS

## COMPRESSOR



PAGE 35 R600a COMPRESSORS

PAGE 35 COMPRESSOR PRESSURE TESTING DEVICE

# COMPRESSORS AND COMPRESSOR PRESSURE TESTING DEVICE

## R600a COMPRESSORS



- ⊕ For refrigeration and freezer devices.
- ⊕ Complete with all electrical parts as well as rubber feet and humidifier tray.
- ⊕ The compressors are compatible with other types of compressors (see compatibility chart).
- ⊕ Power supply: 220/240 V, 50 Hz.
- ⊕ The compatibility list was created based on the manufacturer information. We therefore recommend that only the compressors specified are used; and exclude all liability for consequential damages where any other compressors are used.

Article no.	L14000485	L14000483	L14000482
Article name	C-R600a-1/4	C-R600a-1/6	C-R600a-1/8

### Technical data

PS:	1/4	1/6	1/8
Refrigeration capacity kcal/h:	100	116	104
Refrigeration capacity watts:	233	135	121
Volumetric delivery cm <sup>3</sup> :	14.28	7.96	7.23
Nom. power consumption watts:	175.0	102.0	91.0
Dimensions L x W x D mm (inch):	220 x 250 x 180 (8.66 x 9.84 x 7.09)	180 x 220 x 150 (7.09 x 8.66 x 5.91)	170 x 230 x 150 (6.69 x 9.06 x 5.91)
Weight kg (lbs):	10.7 (23.6)	7.7 (17.0)	7.1 (15.7)

### Compatible with

Aspera	NBM1118Y	BPK1111Y	BPK1084Y
Danfoss	NLE15K/NL15K	TLES9K/TLS9K	TLES7K/TLS7K
Elektrolux	HP16AH	HL99AH/HL99AA/ HL90AH/HL90AA	HL70AH/HL70AA/HL67AH
Matsushita			SD65E
Embraco		EMI40CEP/EMI40CSC	EMI30CEP/EMI30CSC

## COMPRESSOR PRESSURE TESTING DEVICE



To check the performance of compressors.

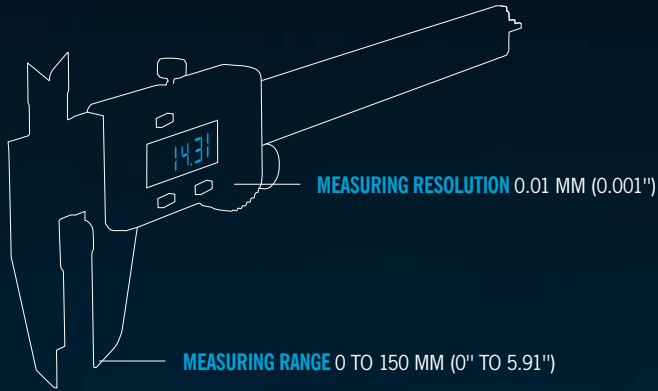
### Scope of supply

- ⊕ Pressure vessel with gauge (16 bar, filled with glycerine).
- ⊕ adjustable safety valve.
- ⊕ Charging hose NFS-A-G+W-1500-B.
- ⊕ Case.

Article no.	Article name
L13002291	KP-DG

# USEFUL ACCESSORIES

## DIGITAL CALIPER



# USEFUL ACCESSORIES

## TUBE CUTTER: 3 TO 28 MM (5/32" TO 1 1/8")



- ⊕ With roller bearing technology, which allows easy and fast cutting of tubes.
- ⊕ Diameter range: 3 to 28 mm (5/32" to 1 1/8").

Article no.	Article name	Description
L14003600	TC3-28	Tube cutter
L14003603	CW3-28	Cutting blade

## FLARING TOOL



- ⊕ For easy and fast expansion of soft copper, aluminium or brass tubes with metric or imperial diameters.
- ⊕ Suitable for tube outer diameters of 5 to 16 mm (3/16" to 5/8").

Article no.	Article name
L14002017	VRC2.D

## COLD RATCHET



Cold ratchet with usable spanners on both sides for 9/16" and 1/2" hexagon heads and 1/4" and 3/16" squares.

Article no.	Article name
L14001251	KN-70081

# USEFUL ACCESSORIES

## COOLING SPRAY



In spray cans, for testing thermostats up to -50°C (-58°F).

Article no.	Article name	Contents
L14000311	BR-400	400 ml

## DIGITAL CALIPER



Measuring range: 0 to 150 mm (0" to 5.91")  
Measurement units: Metric / imperial.

Article no.	Article name
L14003948	DGMS 150

## REPAIR KIT



For sealing aluminium evaporators. Temperature resistant from -35°C to 120°C (-31°F to 248°F) and pressure resistant up to 84 N/mm<sup>2</sup>.

Article no.	Article name	Contents
L14000688	AL-115	57 g (2 oz)

## FIN COMB SET




For smoothing and cleaning of evaporator and condenser fins.

Article no.	Article name
L14001031	FCR6



# NOTES

---

A large grid of small dots for taking notes, consisting of 20 columns and 30 rows of dots.

# ONLINE-SERVICE

FOR FURTHER INFORMATION, PLEASE REFER TO OUR WEBSITE [WWW.VULKAN.COM](http://WWW.VULKAN.COM).



## AUTHORISED DISTRIBUTORS

[www.vulkan.com/en-us/lokring/contact/](http://www.vulkan.com/en-us/lokring/contact/)



## VIDEOS

[www.vulkan.com/en-us/lokring/videos/](http://www.vulkan.com/en-us/lokring/videos/)



## TECHNICAL DOCUMENTATION AND SUBMITTAL

[www.vulkan.com/en-us/lokring/downloads/technical-documentation-and-submittal](http://www.vulkan.com/en-us/lokring/downloads/technical-documentation-and-submittal)



## CATALOGUES & BROCHURES

[www.vulkan.com/en-us/lokring/downloads/](http://www.vulkan.com/en-us/lokring/downloads/)



## CERTIFICATES

[www.vulkan.com/en-us/lokring/downloads/certificates/](http://www.vulkan.com/en-us/lokring/downloads/certificates/)

---

# IMPRINT

---

**PUBLISHER:**

VULKAN Lokring Rohrverbindungen GmbH & Co. KG  
Heerstraße 66, 44653 Herne / Germany  
Tel.: + 49 (23 25) 922-155  
Fax: + 49 (23 25) 51222  
E-mail: info.lok@vulkan.com

**CONCEPT AND DESIGN:**

Hackforth Holding GmbH & Co. KG  
VULKAN Marketing  
Heerstraße 66, 44653 Herne / Germany  
E-mail: marketing@vulkan.com

**PREPRESS:**

Hackforth Holding GmbH & Co. KG  
VULKAN Marketing  
Heerstraße 66, 44653 Herne / Germany  
E-mail: marketing@vulkan.com

**VALIDITY CLAUSE**

The LOKRING® tube connection technology represents a proven method of producing hermetically sealed metal-to-metal tube connections. The LOKRING® tube connections are mainly used in the refrigeration and air conditioning industries. The use of LOKRING® tube connection technology in other fields is to be discussed with VULKAN Lokring. VULKAN Lokring as the supplier is responsible for the qualitative delivery of the tube connections and tools which are ordered from this catalogue.

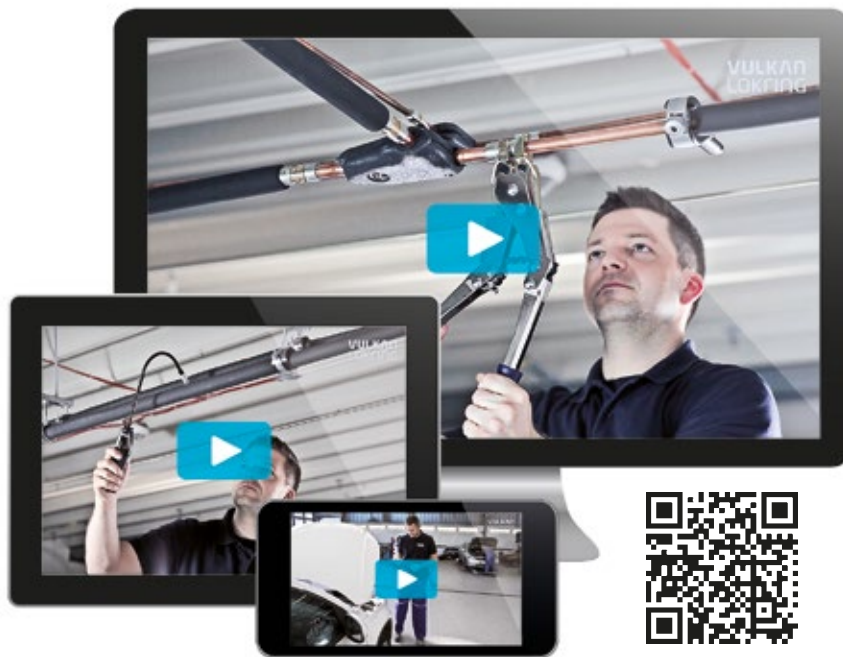
The purchaser is responsible for the use of the LOKRING® tube connections and tools as directed. The assembly has to be done accordingly to the instructions and exclusively with original LOKRING® parts. The present Vehicle Air Conditioning catalogue shall replace all previous editions, any previous printings shall no longer be valid. The data contained in this catalogue refers to the valid state of affairs in time of the copy deadline. Any changes due to technical progress are reserved.

**Status:** 04/2018

All duplication, reprinting and translation rights are reserved. Further remarks for the LOKRING® assembly are available on request.

**Article no.:** L19000322

---



[www.vulkan.com/en-us/lokring/videos/](http://www.vulkan.com/en-us/lokring/videos/)