

SERVICE MANIFOLDS, GAUGES and CHARGING HOSES



" ITE " STANDARD SERVICE MANIFOLDS

DESCRIPTION

- High density aluminium body. Stainless steel hook.
- Tested leakproof sight glass. Colour coded handwheels.
- **Superior for deep vacuum service with 2, 4 and 5 way options.**
- Deep vacuum valve design. One turn for full opening.
- Require only fingertip pressure to close tightly.
- Proven replaceable leakproof diaphragm type soft seat valves.
- Suitable for all **CFC, HCFC, HFC** and their lubricants.

"PULSE FREE" 80 mm GAUGES (1/8" Male NPT)

- All these Manifolds (for **CFC, HCFC** and **HFC**) are provided with **80 mm "820 PULSE FREE SERIES"** gauges (see page 54).
- **"823"** High pressure series up to 34 bar with an HP scale:
From **0 to 34 bar** supplementary for BPC gauges:
From **0 to 500 Psi**.
- **"825"** Compound series up to 17 bar with an LP scale:
From **-1 to 8 bar** supplementary for BPC gauges:
From **-30 inch Hg to 120 Psi**.

"STANDARD" & "HEAVY DUTY" HOSES

- Manifolds for regular **CFC** refrigerants are supplied with **3 or 4 "STANDARD"** hoses (see also page 59).
- Manifolds for **HCFC** and **HFC** refrigerants are supplied with **3 or 4 "HEAVY DUTY"** hoses (see also page 60).

"SCALE" & "REFRIGERANTS" SUFFIX EXPLANATION

- Scales: **PRESSURES (bar & Psi)** and **TEMPERATURES (°C)**.
- Suffixes: Add following suffix to part number to select refrigerant scales required. (Example: 2831-BPC is single valve manifold with scales for bar, Psi and °C for R12, R22 and R502).

1. " ITE " SINGLE VALVE DIAPHRAGM MANIFOLDS

SUFFIXES

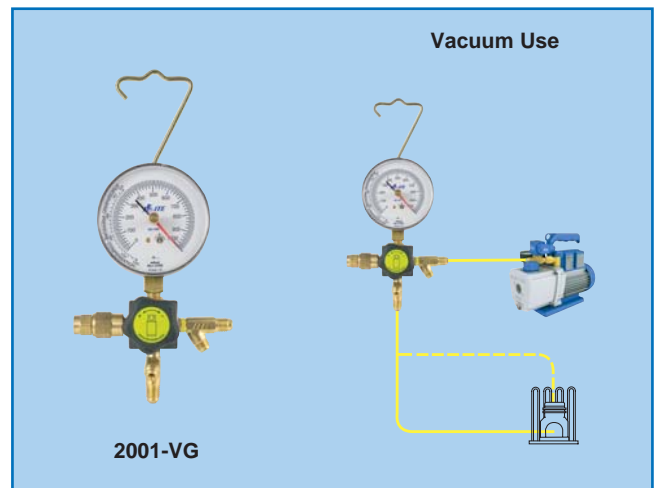
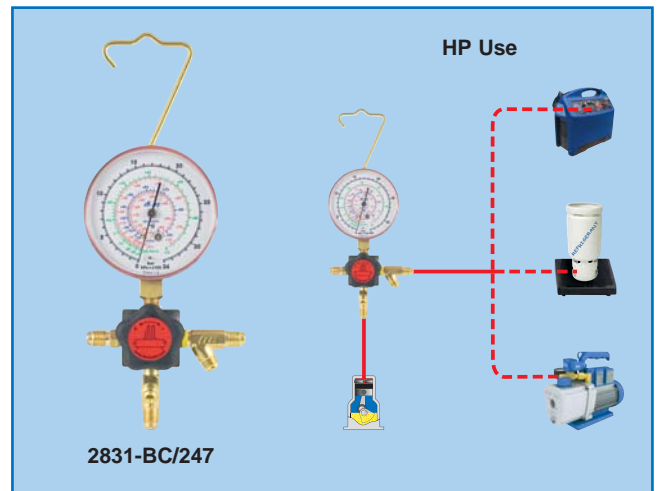
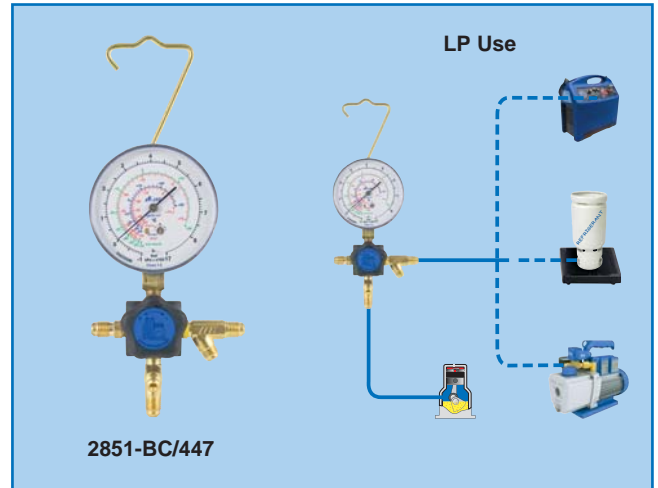
BC*	bar/°C	for R12, R22, R502
BPC	bar/Psi/°C	for R12, R22, R502
BPC/410*	bar/Psi/°C	for R410A
BPC/410/27	bar/Psi/°C	for R22, R407C, R410A
BC/4	bar/°C	for R134a, R404A
BC/447*	bar/°C	for R134a, R404A, R407C, R507
BC/27	bar/°C	for R22, R407C
BC/247	bar/°C	for R22, R134a, R404C, R407C

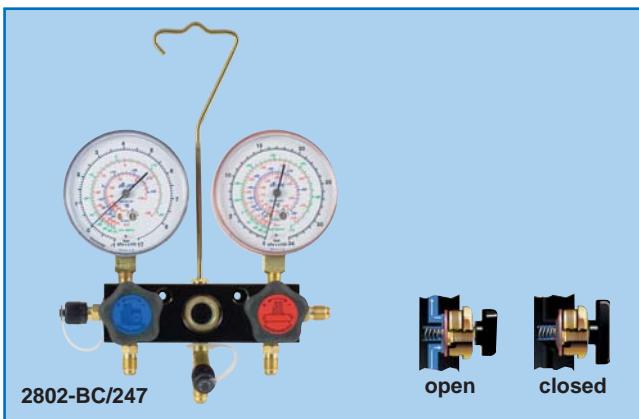
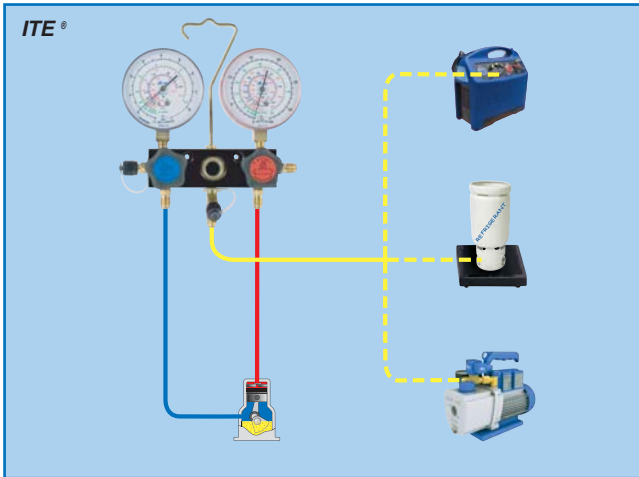
* = available in class 1.0

DESCRIPTION

- Single valve unit. Ideal for quick single point testing and/or charging.
- **Soft seat diaphragm** two way valve for fingertip precision control.
- Equipped as standard with **80 mm "PULSE FREE"** gauges and hook.

MB1-ADS	SINGLE MANIFOLD BODY only with hook and 2 labels (1 red and 1 blue).
MB1-ADS/VAC	VAC MANIFOLD BODY only with hook (1 yellow valve) Right: 1/4" male flare SAE connection Bottom: 1/4" male flare SAE connection Left: safety valve to protect against overpressure
2831-SUFFIX	HP MANIFOLD with 80 mm gauge and hook 2 x 1/4" male flare SAE connections (1 red valve) Add your SUFFIX from the above list (example: 2831-BC)
2851-SUFFIX	LP MANIFOLD with 80 mm gauge and hook 2 x 1/4" male flare SAE connections (1 blue valve) Add your SUFFIX from the above list (example: 2851-BC)
2001-VG	VAC MANIFOLD with 80 mm vacuum gauge and hook MB1-ADS/VAC manifold body with 827-VRP relative vacuum gauge
CLASS "1.0" MANIFOLDS	CLASS "1.0" MANIFOLDS with "PULSE FREE - Class 1.0" tested, calibrated gauges, according to DIN 16005 (max 1% error) can be obtained by adding suffix "1.0" to the above manifold part numbers marked with * (example: 2831-BC-1.0)





2. "ITE" TWO VALVE DIAPHRAGM MANIFOLDS

SUFFIXES

BC*	bar/°C	for R12, R22, R502
BPC	bar/Psi/°C	for R12, R22, R502
BPC/410*	bar/Psi/°C	for R410A used on special body, see page 50
BPC/410/27	bar/Psi/°C	for R22, R407C, R410A used on special body, see page 50
BC/4	bar/°C	for R134a, R404A
BC/447*	bar/°C	for R134a, R404A, R407C, R507
BC/27	bar/°C	for R22, R407C
BC/247	bar/°C	for R22, R134a, R404A, R407C

* = available in class 1.0

G-BC	bar/°C	glycerine filled for R12, R22, R502
G-BPC	bar/Psi/°C	glycerine filled for R12, R22, R502
G-BC/4	bar/°C	glycerine filled for R134a, R404A
G-BC/447	bar/°C	glycerine filled for R134a, R404A, R407C, R507
G-BC/247	bar/°C	glycerine filled for R22, R134a, R404A, R407C

DESCRIPTION

- **Flat back, high density aluminium body.** Provided with an extra 1/4" male flare SAE schrader port on the low pressure side for connecting to a vacuum hose.
- **Deep vacuum valve design:** Proven leakproof diaphragm type. Soft seat valves require only fingertip pressure to close tightly. One turn for full opening. Tested leakproof sight glass.
- **Ideal for holding deep vacuum in service.**
- **Five (5) port connections:** Extra access valve on low pressure side permits connection of four (4) charging hoses to vacuum pump and/or vacuum gauges. Stainless steel hook provided.
- **Gauges: 80 mm "PULSE FREE" gauges** are provided as standard.

MB2-ADS

HP/LP 2-WAY ALUMINIUM MANIFOLD BODY
only with **hook**
5 x 1/4" male flare SAE connections
WITHOUT: Gauges, hoses and carrying case

2802-SUFFIX

HP/LP 2-WAY ALUMINIUM MANIFOLD BODY
(2 red and blue valves) (in carton).
5 x 1/4" male flare SAE connections
Add your SUFFIX from the above list (example: 2802-BC)
WITH: 2 "PULSE FREE" 80 mm gauges and hook
WITHOUT: hoses and carrying case

2812-SUFFIX

HP/LP 2-WAY ALUMINIUM MANIFOLD BODY
(2 red and blue valves) (in carton).
5 x 1/4" male flare SAE connections
Add your SUFFIX from the above list (example: 2812-BC)
WITH: 2 "PULSE FREE" 80 mm gauges and hook
WITH: 3 "STANDARD" 1/4" female flare hoses
(90 cm) for regular **CFC** refrigerants
OR **3 "HEAVY DUTY" 1/4" female flare hoses**
(90 cm) for **HCFC** and **HFC** refrigerants
WITHOUT: carrying case

2822-SUFFIX

HP/LP 2-WAY ALUMINIUM MANIFOLD BODY
(2 red and blue valves) (complete set).
5 x 1/4" male flare SAE connections
Add your SUFFIX from the above list (example: 2822-BC)
WITH: 2 "PULSE FREE" 80 mm gauges and hook
WITH: 3 "STANDARD" 1/4" female flare hoses
(90 cm) for regular **CFC** refrigerants
OR **3 "HEAVY DUTY" 1/4" female flare hoses**
(90 cm) for **HCFC** and **HFC** refrigerants
WITH: 1 anti-shock and portable carrying case

CLASS "1.0" MANIFOLDS

CLASS "1.0" MANIFOLDS with **"PULSE FREE"** - Class 1.0 tested, calibrated gauges, according to **DIN 16005** (max 1% error) can be obtained by adding suffix **"1.0"** to the above manifold part numbers marked with * (example: **2822-BC-1.0**)

SPARE PARTS

See **MANIFOLD SPARE PARTS** page 49.

3. "ITE" FOUR VALVE DIAPHRAGM MANIFOLDS

SUFFIXES

BC*	bar/°C	for R12, R22, R502
BPC	bar/Psi/°C	for R12, R22, R502
BC/4	bar/°C	for R134a, R404A
BC/447 *	bar/°C	for R134a, R404A, R407C, R507
BC/27	bar/°C	for R22, R407C
BC/247	bar/°C	for R22, R134a, R404A, R407C

* = available in class 1.0

G-BC	bar/°C	glycerine filled for R12, R22, R502
G-BPC	bar/Psi/°C	glycerine filled for R12, R22, R502
G-BC/4	bar/°C	glycerine filled for R134a, R404A
G-BC/447	bar/°C	glycerine filled for R134a, R404A, R407C, R507
G-BC/247	bar/°C	glycerine filled for R22, R134a, R404A, R407C

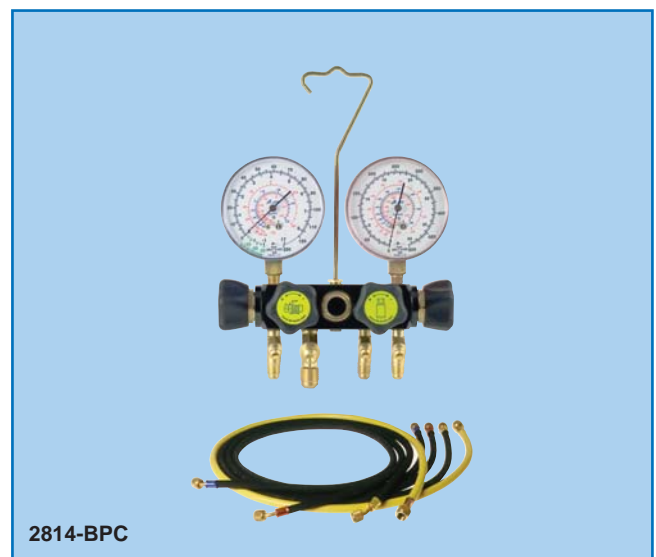
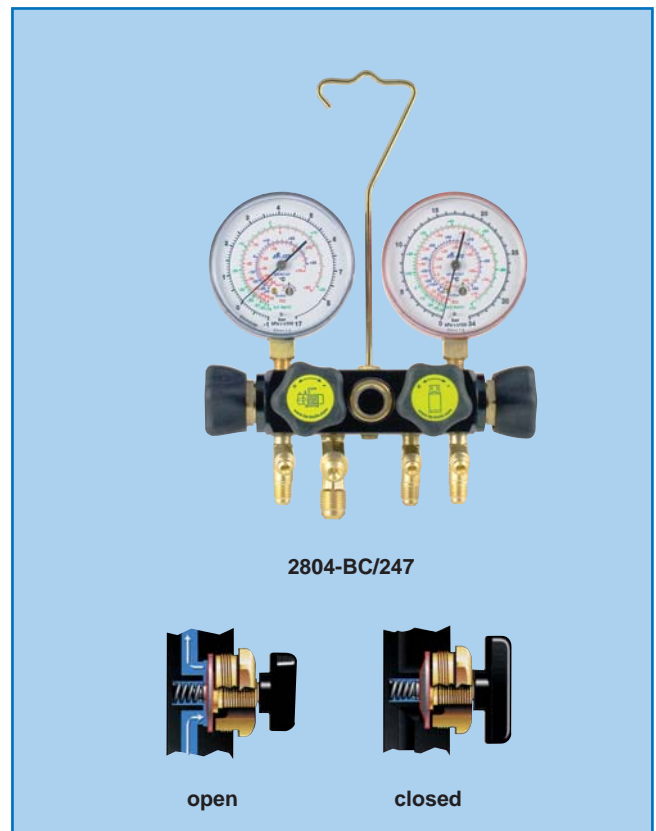
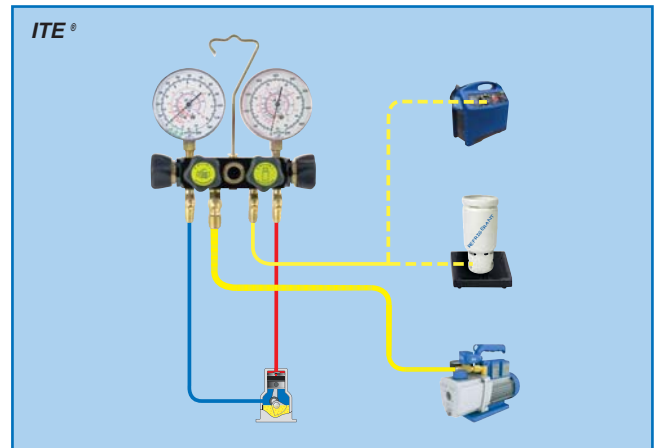
DESCRIPTION

- **Flat back, high density** aluminium body.
- **Deep vacuum valve design:** Proven leakproof diaphragm type. Soft seat valves require only fingertip pressure to close tightly. One turn for full opening. Stainless steel hook provided.
- Ideal for holding deep vacuum in service.
- **Five (5) port connections:** The four valve MANIFOLD has a fifth bottom connection (closed off through a blind plug). Removal of the plug allows installation of a fifth extra service connection ball-valve for connecting hoses to vacuum pump and/or vacuum gauges.
- **Two 80 mm "PULSE FREE" gauges** are provided as standard.

MB4-ADS **HP/LP 4-WAY ALUMINIUM MANIFOLD BODY**
only with **hook** and **bracket**
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
WITHOUT: gauges, hoses and carrying case

2804-SUFFIX **HP/LP 4-WAY ALUMINIUM MANIFOLD BODY**
(4 coloured valves) (in carton).
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
Add your SUFFIX from the above list (example: 2804-BC)
WITH: 2 "PULSE FREE" 80 mm gauges and hook
WITHOUT: hoses and carrying case

2814-SUFFIX **HP/LP 4-WAY ALUMINIUM MANIFOLD BODY**
(4 coloured valves) (in carton).
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
Add your SUFFIX from the above list (example: 2814-BC)
WITH: 2 "PULSE FREE" 80 mm gauges and hook
WITH: 3 "STANDARD" 1/4" female flare hoses (150 cm) for regular **CFC** refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)
OR 3 "HEAVY DUTY" 1/4" female flare hoses (150 cm) for **HCFC** and **HFC** refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)
WITHOUT: carrying case





2824-BC/247

2824-SUFFIX

HP/LP 4-WAY ALUMINIUM MANIFOLD BODY

(4 coloured valves) (complete set).
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
Add your SUFFIX from the above list (example: 2824-BC)

WITH: 2 "PULSE FREE" 80 mm gauges and hook

WITH: 3 "STANDARD" 1/4" female flare hoses (150 cm) for regular CFC refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)

OR 3 "HEAVY DUTY" 1/4" female flare hoses (150 cm) for HCFC and HFC refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)

WITH: 1 anti-shock and portable carrying case

CLASS "1.0" MANIFOLDS

CLASS "1.0" MANIFOLDS with "PULSE FREE" - Class 1.0" tested, calibrated gauges, according to DIN 16005 (max 1% error) can be obtained by adding suffix "1.0" to the above manifold part numbers marked with * (example: 2824-BC-1.0)

SPARE PARTS

See **MANIFOLD SPARE PARTS** page 49.

4. "ITE" FIVE VALVE DIAPHRAGM MANIFOLDS

SUFFIXES

BC*	bar/°C	for R12, R22, R502
BPC	bar/Psi/°C	for R12, R22, R502
BC/4	bar/°C	for R134a, R404A
BC/447 *	bar/°C	for R134a, R404A, R407C, R507
BC/27	bar/°C	for R22, R407C
BC/247	bar/°C	for R22, R134a, R404A, R407C

* = available in class 1.0

G-BC	bar/°C	glycerine filled for R12, R22, R502
G-BPC	bar/Psi/°C	glycerine filled for R12, R22, R502
G-BC/4	bar/°C	glycerine filled for R134a, R404A
G-BC/447	bar/°C	glycerine filled for R134a, R404A, R407C, R507
G-BC/247	bar/°C	glycerine filled for R22, R134a, R404A, R407C

DESCRIPTION

- **Flat back:** Wall mounting is possible through holes in back of body. High density aluminum body.
- **Deep vacuum valve design:** Proven leakproof diaphragm type. Soft seat valves require only fingertip pressure to close tightly. One turn for full opening. Stainless steel hook provided.
- Ideal for holding deep vacuum in service.
- **Gauges:** 80 mm "PULSE FREE" gauges are provided as standard.
- Provided with special vacuum gauge (827-VRP), which is protected against overpressure by a safety valve

MB5-ADS

HP/LP 5-WAY ALUMINIUM MANIFOLD BODY

only with **hook**
4 x 1/4" male flare SAE connections (one with blind plug)
1 x 3/8" male flare SAE connection
WITHOUT: gauges, hoses and carrying case

2805-SUFFIX

HP/LP 5-WAY ALUMINIUM MANIFOLD BODY

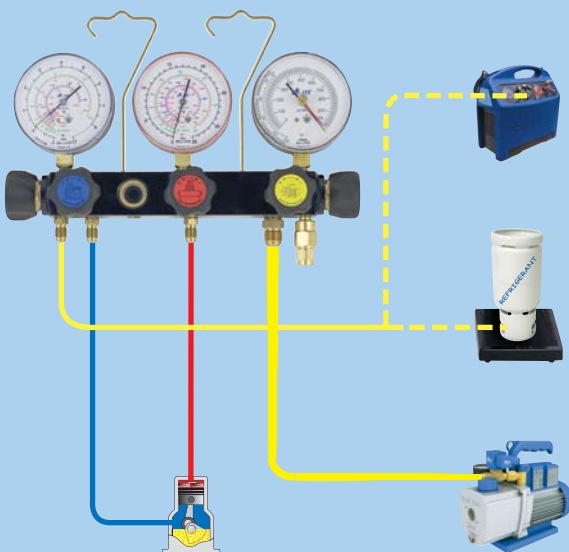
(5 coloured valves) (in carton).
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
1 x 1/4" male flare SAE connection with blind plug
Add your SUFFIX from the above list (Example: 2805-BC)

WITH: 2 "PULSE FREE" 80 mm gauges and hook

WITH: 1 "VACUUM GAUGE" 827-VRP (see page 57) protected against overpressure by safety valve in body

WITHOUT: hoses and carrying case

ITE®



2815-SUFFIX

HP/LP 5-WAY ALUMINIUM MANIFOLD BODY

(5 coloured valves) (in carton).
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
1 x 1/4" male flare SAE connection with blind plug
Add your SUFFIX from the above list (example: 2815-BC)

WITH: 2 "PULSE FREE" 80 mm gauges and hook

WITH: 1 "VACUUM GAUGE" 827-VRP (see page 57) protected against overpressure by safety valve in body

WITH: 3 "STANDARD" 1/4" female flare hoses (150 cm) for regular CFC refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)

OR 3 "HEAVY DUTY" 1/4" female flare hoses (150 cm) for HCFC and HFC refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)

WITHOUT: carrying case

2825-SUFFIX

HP/LP 5-WAY ALUMINIUM MANIFOLD BODY

(5 coloured valves) (complete set).
3 x 1/4" male flare SAE connections
1 x 3/8" male flare SAE connection
1 x 1/4" male flare SAE connection with blind plug
Add your SUFFIX from the above list (example: 2825-BC)

WITH: 2 "PULSE FREE" 80 mm gauges and hook

WITH: 1 "VACUUM GAUGE" 827-VRP (see page 57) protected against overpressure by safety valve in body

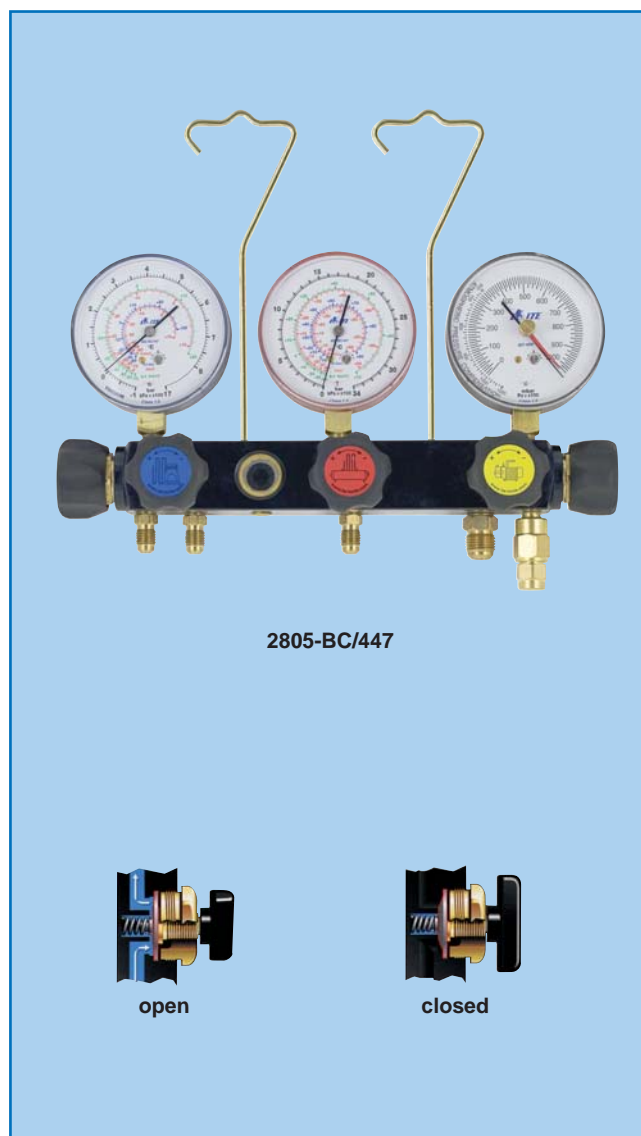
WITH: 3 "STANDARD" 1/4" female flare hoses (150 cm) for regular CFC refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)

OR 3 "HEAVY DUTY" 1/4" female flare hoses (150 cm) for HCFC and HFC refrigerants
+ 1 "STANDARD" 3/8" female flare hose (150 cm)

WITH: 1 anti-shock and portable carrying case

CLASS "1.0" MANIFOLDS

CLASS "1.0" MANIFOLDS with "PULSE FREE" - Class 1.0" tested, calibrated gauges, according to DIN 16005 (max 1% error) can be obtained by adding suffix "1.0" to the above manifold part numbers marked with * (example: 2825-BC-1.0)



5. STANDARD SPARE PARTS FOR ALL "ITE" MANIFOLDS

MB-EP

MB-HH

MB-IP

MB-SP

MB-SR

CRISTAL CLEAR

84617-E/N

EXTERNAL SPARE PARTS KIT

SPARE HOOK

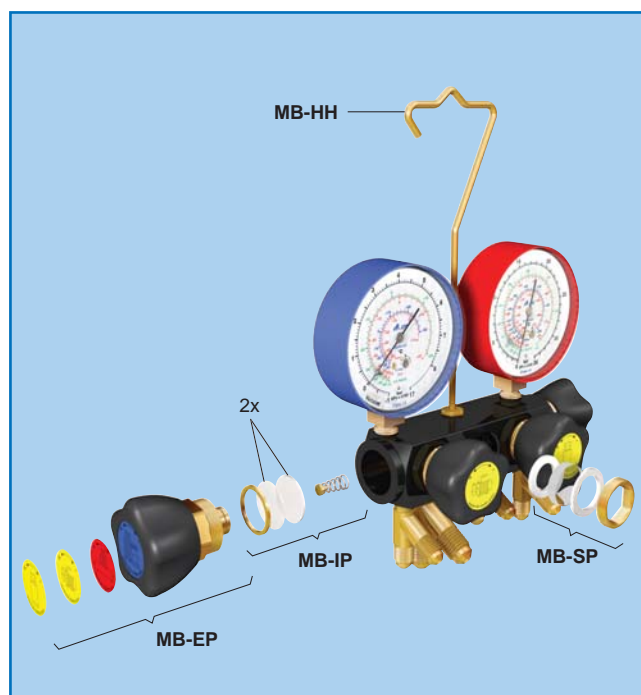
INTERNAL SPARE PARTS KIT + set of 4 coloured labels

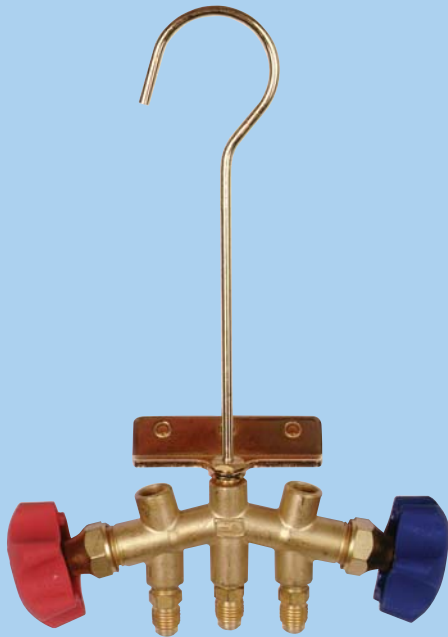
SIGHT GLASS PARTS

SIGHT GLASS REMOVER

PLASTIC SCREW-ON GAUGE LENS (80 mm)

ABS CARRYING CASE





M2-16

6. THE ORIGINAL "FREE-FLOATING" TRUE PISTON MANIFOLD

SUFFIXES

BC*	bar/°C	for R12, R22, R502
BPC	bar/Psi/°C	for R12, R22, R502
BPC/410*	bar/Psi/°C	for R410A
BPC/410/27	bar/Psi/°C	for R22, R407C, R410A
BC/4	bar/°C	for R134a, R404A
BC/447*	bar/°C	for R134a, R404A, R407C, R507
BC/247	bar/°C	for R22, R134a, R404A, R407C

* = available in class 1.0

DESCRIPTION

- Piston bar manifold. Two colour coded handwheels.
- This is the professional choice.
- Exclusive "KNUCKLE CLEARANCE" angled bar design.
- Ample room between gauges and handwheels for even the largest hands. More compact than many and fully anti-shock proof.
- Pull-out proof hanging hook.
- Hose holder mounts to front or back of body bar.
- Very compact design for field service work.

FOR R410A

M2-16	HP/LP BRASS MANIFOLD BODY 3 x 1/4" male flare SAE for hose connections 2 x 1/8" female NPT for std gauge connections WITH: hook and bracket (3 x 1/4") WITHOUT: gauges and hoses
1602-BC/410	M2-16 2-WAY PISTON BAR MANIFOLD with hook and bracket in carton WITH: 2 "PULSE FREE" 63 mm gauges WITHOUT: carrying case
1612-BC/410	M2-16 2-WAY PISTON BAR MANIFOLD with hook and bracket in carton WITH: 2 "PULSE FREE" 63 mm gauges WITH: 3 x 90 cm "HEAVY DUTY" coloured hoses, 2 x 5/16" and 1 x 1/4" connections especially for R410A WITHOUT: carrying case
1622-BC/410	M2-16 2-WAY PISTON BAR MANIFOLD with hook and bracket in carton WITH: 2 "PULSE FREE" 63 mm gauges WITH: 3 x 90 cm "HEAVY DUTY" coloured hoses, 2 x 5/16" and 1 x 1/4" connections especially for R410A WITH: 1 anti-shock and portable carrying case
1802-BPC/410	M2-16 2-WAY PISTON BAR MANIFOLD with hook and bracket in carton WITH: 2 "PULSE FREE" 80 mm gauges
1812-BPC/410	M2-16 2-WAY PISTON BAR MANIFOLD with hook and bracket in carton WITH: 2 "PULSE FREE" 80 mm gauges WITH: 3 x 90 cm "HEAVY DUTY" coloured hoses, 2 x 5/16" and 1 x 1/4" connections especially for R410A
1822-BPC/410	M2-16 2-WAY PISTON BAR MANIFOLD with hook and bracket in carton WITH: 2 "PULSE FREE" 80 mm gauges WITH: 3 x 90 cm "HEAVY DUTY" coloured hoses, 2 x 5/16" and 1 x 1/4" connections especially for R410A WITH: 1 anti-shock and portable carrying case

SPARE PARTS for M2-16

M2-16-M	BAR BODY ONLY
M2-16-HB	BLUE HANDWHEEL
M2-16-HR	RED HANDWHEEL
M2-16-N	NUT
M2-16-P	PISTON, SEAT & "O" RINGS
M2-16-B	BRACKET 3 x 1/4"
M2-16-B2	BRACKET 5/16" x 1/4" x 5/16"
M2-16-HH	HANGING HOOK for use with 60 mm gauges
M2-16-HHB	HANGING HOOK for use with 80 mm gauges



1822-BPC/410

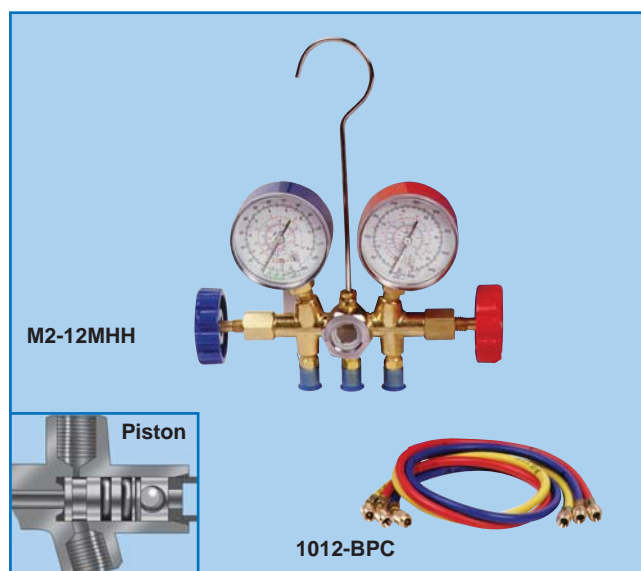
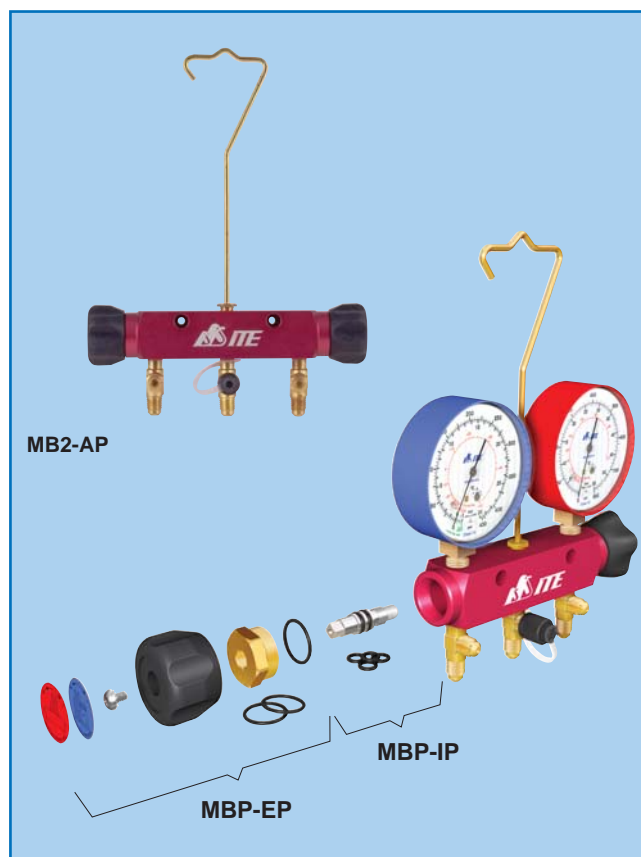
MB2-AP	HP/LP 2-WAY ALUMINIUM MANIFOLD BODY (piston action) for R410A only, without sight glass 4 x 1/4" male flare SAE connections WITHOUT: Hook, bracket, gauges, hoses and carrying case
2802-BPC-1.0/410	MB2-AP as above (in carton) WITH: Hook, bracket 5/16"-1/4"-5/16" and 2 "PULSE FREE" class 1.0 80 mm gauges for R410A WITHOUT: hoses and carrying case
2802-BPC/410	Same as 2802-BPC-1.0/410 but with class 1.6 gauges for R410A with extra Psi scale
2812-BPC-1.0/410	MB2-AP as above (in carton) WITH: Hook, bracket 5/16"-1/4"-5/16" and 2 "PULSE FREE" class 1.0 80 mm gauges for R410A WITH: 3 "HEAVY DUTY" hoses (90 cm) especially for R410A WITHOUT: carrying case
2812-BPC/410	Same as 2812-BPC-1.0/410 but with class 1.6 gauges for R410A with extra Psi scale
2822-BPC-1.0/410	MB2-AP as above (Complete set). WITH: Hook, bracket 5/16"-1/4"-5/16" and 2 "PULSE FREE" class 1.0 80 mm gauges for R410A WITH: 3 "HEAVY DUTY" hoses (90 cm) especially for R410A WITH: 1 anti-shock and portable carrying case
2822-BPC/410	Same as 2822-BPC-1.0/410 but with class 1.6 gauges for R410A with extra Psi scale

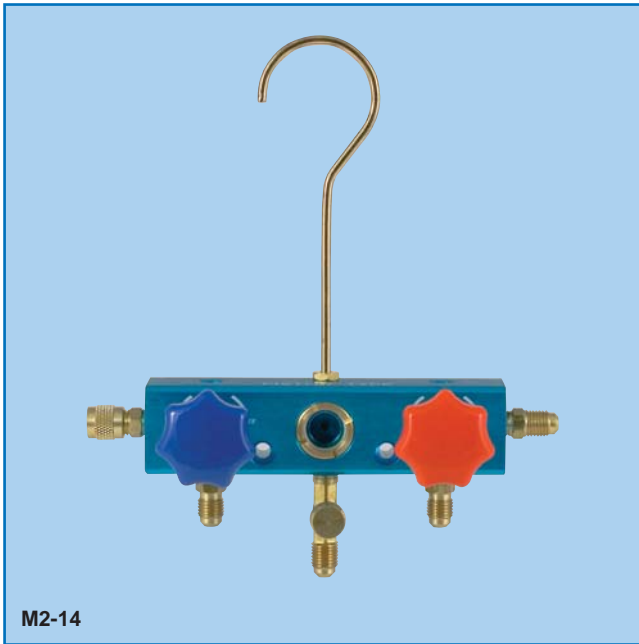
SPARE PARTS for MB2-AP

MBP-EP	EXTERNAL PARTS KIT
MBP-IP	INTERNAL PARTS KIT + set of two coloured labels

FOR OTHER REFRIGERANTS

M2-12MHH	HP/LP BRASS MANIFOLD BODY 3 x 1/4" male flare SAE for hose connections 2 x 1/8" female NPT for std gauge connections WITH: hook, bracket and sightglass WITHOUT: gauges and hoses
1002-SUFFIX	M2-12MHH as above with hook and bracket in carton Add your suffix from the above list (example: 1002-BPC) WITH: 2 "PULSE FREE" 63 mm gauges
1012-SUFFIX	M2-12MHH as above with hook and bracket in carton Add your suffix from the above list (example: 1012-BPC) WITH: 2 "PULSE FREE" 63 mm gauges WITH: 3 "STANDARD" 1/4" female flare hoses (90 cm) for regular CFC refrigerants OR 3 "HEAVY DUTY" 1/4" female flare hoses (90 cm) for HCFC and HFC refrigerants





M2-14

HP/LP ALUMINIUM BAR MANIFOLD BODY
3 x 1/4" male flare SAE for hose connections
2 x 1/8" female NPT for std gauge connections
WITH: hook and sight glass
WITHOUT: gauges and hoses

1004-SUFFIX

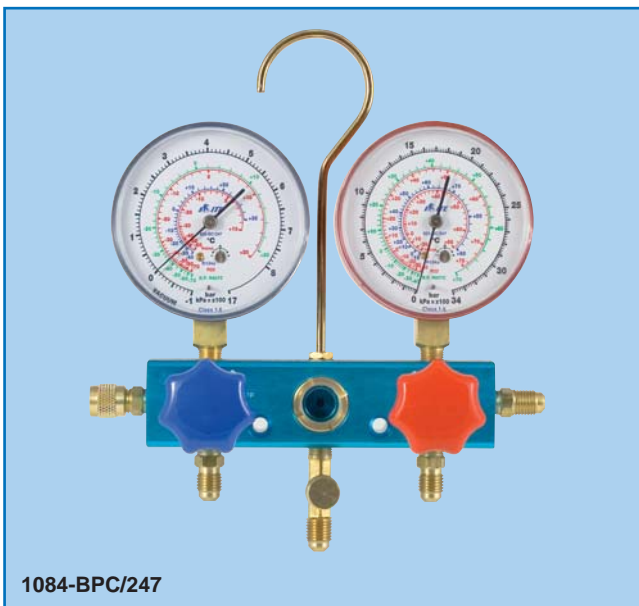
M2-14 as above with **hook** in carton
 Add your suffix from the above list (example: 1004-BPC)
WITH: 2 "PULSE FREE" 63 mm gauges

1014-SUFFIX

M2-14 as above with **hook** in carton
 Add your suffix from the above list (example: 1014-BPC)
WITH: 2 "PULSE FREE" 80 mm gauges
WITH: 3 "STANDARD" 1/4" female flare hoses (90 cm)
 for regular CFC refrigerants
 OR
 3 "HEAVY DUTY" 1/4" female flare hoses
 (90 cm) for HCFC and HFC refrigerants

1084-SUFFIX

M2-14 as above with **hook** in carton
 Add your suffix from the above list (example: 1084-BC)
WITH: 2 "PULSE FREE" 80 mm gauges
WITHOUT: hoses and carrying case



1184-SUFFIX

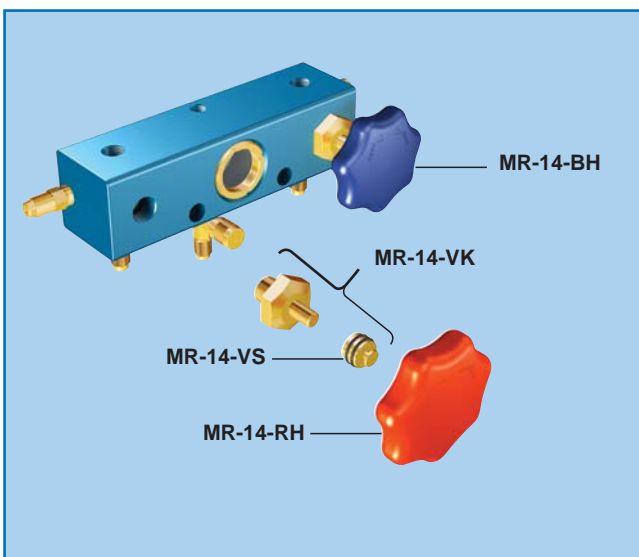
M2-14 as above with **hook** in carton
 Add your suffix from the above list (example: 1184-BC/447)
WITH: 2 "PULSE FREE" 80 mm gauges
WITH: 3 "STANDARD" 1/4" female flare hoses (90 cm)
 for regular CFC refrigerants
 OR
 3 "HEAVY DUTY" 1/4" female flare hoses
 (90 cm) for HCFC and HFC refrigerants
WITHOUT: carrying case

1284-SUFFIX

M2-14 as above
 Add your suffix from the above list (example: 1284-BC/447)
WITH: 2 "PULSE FREE" 80 mm gauges
WITH: 3 "STANDARD" 1/4" female flare hoses (90 cm)
 for regular CFC refrigerants
 OR
 3 "HEAVY DUTY" 1/4" female flare hoses
 (90 cm) for HCFC and HFC refrigerants
WITH: 1 anti-shock and portable carrying case

SPARE PARTS for M2-14

MR-14-BH	BLUE HANDWHEEL
MR-14-RH	RED HANDWHEEL
MR-14-VK	VALVE KIT COMPLETE
MR-14-VS	VALVE SEAT ONLY



COMPRESSOR TESTER

CT-34 COMPRESSOR TESTER

- To allow simple and efficient testing of the compression of used and repaired compressors.
- Pressure vessel with pressure gauge up to **34 bar**.
- Equipped with heavy duty hose with ball valve (working pressure up to 55 bar) and Hansen style quick coupler for easy connection to the compressor outlet tube.

SPARE PARTS

823-S-B	PRESSURE GAUGE (see page 54)
HDS-36-R/V	HEAVY DUTY BLACK HOSE , length 90 cm (see page 60)
QAA-04	ADAPTOR (see page 106)



CT-34

CONTROLS TEST PUMP FOR PRESSURE AND VACUUM TESTING

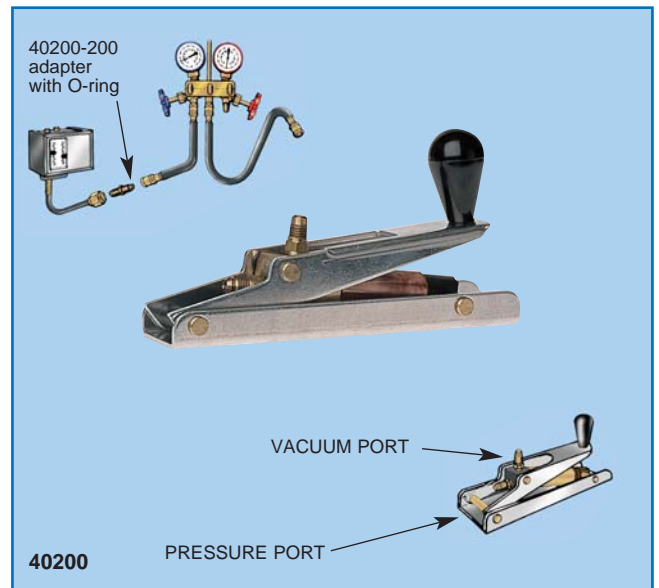
40200 MANUAL TEST PUMP (complete set)

DESCRIPTION

- Quickly and accurately test any assembly for vacuum or pressure
- Easy use for testing and setting single and dual pressure or vacuum controls
- Can be used with or for any gauge-manifold assembly
- Test range: **635 mm Hg (25 inch Hg) vacuum to 20 bar (300 Psi) pressure**
- Two **1/4" male flare SAE** connections (pressure and vacuum)
- Supplied complete with adapter (40201)

SPARE PARTS

40201-125	Replacement O-ring for adapter 40201
40200-200	Replacement pressure access adapter 1/4" x 1/4" male flare SAE with internal thread
40200-125	Replacement O-ring for piston

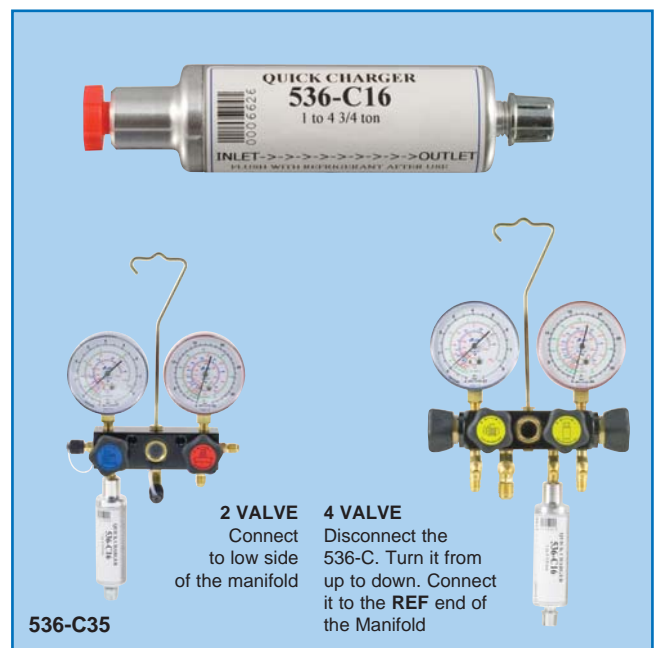


40200

QUICK CHARGERS

536-C02	QUICK CHARGER 1/4" female flare SAE (inlet) x 1/4" male flare SAE (outlet), for systems to 2.64 kW (3/4 ton)
536-C16	QUICK CHARGER 1/4" female flare SAE (inlet) x 1/4" male flare SAE (outlet), for systems from 3.52 to 16.72 kW (1 to 4 3/4 ton)
536-C35	QUICK CHARGER 1/4" female flare SAE (inlet) x 1/4" male flare SAE (outlet), for systems from 17.6 to 35.2 kW (5 to 10 ton)

- Accept **liquid refrigerant** from the refrigerant cylinder (no need to heat it) and discharge directly **into low side** of the system (via an expansion device).
- Charging rate is up to **8 times faster** than vapour charging.
- In addition, liquid charging is needed when using tracing dye.
- The quick charger is screwed-in to the low side of the charging manifold or charging station manifold. Then, charging hose is connected from the quick charger outlet to low side of the system.
- Reduce liquid flow to a level below capacity of compressor. This assures a safe, fast charge without endangering the compressor.
- A **built-in ball check-valve** automatically opens when drawing a vacuum to assure rapid, unrestricted evacuation.
- Suitable for all **CFC, HCFC and HFC** refrigerant systems.



536-C35

2 VALVE
Connect to low side of the manifold

4 VALVE
Disconnect the 536-C. Turn it from up to low. Connect it to the REF end of the Manifold



Other gauge



"ITE" pulse free gauge

"ITE®" CALIBRATABLE PRESSURE GAUGES

1. DRY PULSE-FREE GAUGES Series 820 Class 1.6 - Ø 80 mm

DESCRIPTION

- All "823 & 825 SERIES" gauges are for CFC, HCFC and HFC.
- 80 mm Scale Diameter. $\frac{1}{8}$ " male NPT or $\frac{1}{4}$ " male flare SAE.
- "PULSE FREE" mechanism offers a reading as stable as oil filled gauges but *WITH NO OIL*. Effective dampening of compressor pulsations on pointershaft.
- Gauges are calibratable (easy "zero positioning" needle)

TYPES FOR ORDERING

- **823 RED HIGH PRESSURE SERIES**
From **0 bar** (0 Psi) to **34 bar** (500 Psi)
For R410A gauges from **0 bar** (0 Psi) to **55 bar** (800 Psi)
- **825 BLUE LOW PRESSURE COMPOUND SERIES**
From **-1 bar** (-30 inch Hg) to **8 bar** (120 Psi) linear with retard up to **17 bar** (250 Psi)
For R410A gauges from **-1 bar** (-30 inch Hg) to **30 bar** (440 Psi)

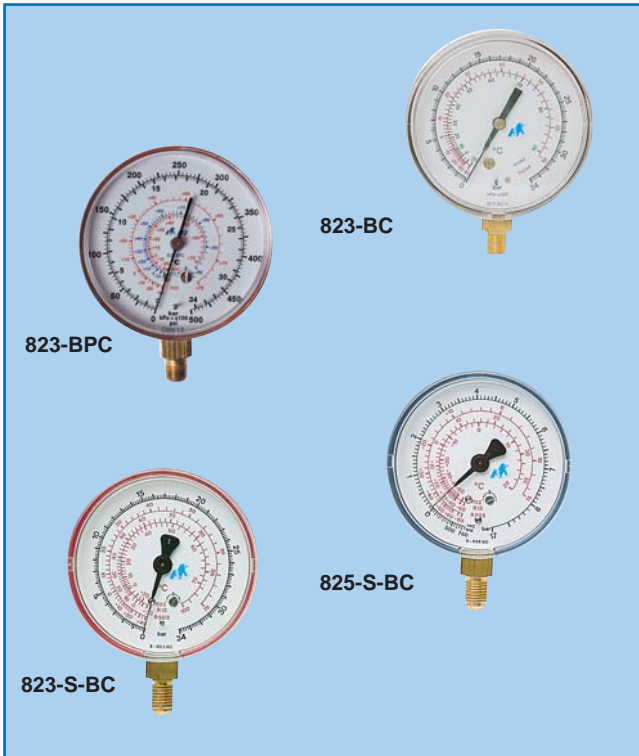
SUFFIXES FOR GAUGE ORDERING

- Select it and Add it to the "823" or "825" gauge part number

B	bar only	
BC	bar/°C	for R12, R22, R502
BPC	bar/Psi/°C	for R12, R22, R502
BPC/410	bar/Psi/°C	for R410A
BPC/410/27	bar/Psi/°C	for R22, R407C, R410A
BC/4	bar/°C	for R134a, R404A
BC/447	bar/°C	for R134a, R404A, R407C, R507
BC/27	bar/°C	for R22, R407C
BC/247	bar/°C	for R22, R134a, R404A, R407C

TYPES OFFERED

823-SUFFIX	RED (HP) GAUGE (HIGH PRESSURE) $\frac{1}{8}$ " male NPT vertical bottom connection Add your <i>SUFFIX</i> (example: 823-BC)
825-SUFFIX	BLUE (LP) GAUGE (COMPOUND) $\frac{1}{8}$ " male NPT vertical bottom connection Add your <i>SUFFIX</i> (example: 825-BC)
823-S-SUFFIX	RED (HP) GAUGE (HIGH PRESSURE) $\frac{1}{4}$ " male flare SAE vertical bottom connection Add your <i>SUFFIX</i> (example: 823-S-BC)
825-S-SUFFIX	BLUE (LP) GAUGE (COMPOUND) $\frac{1}{4}$ " male flare SAE vertical bottom connection Add your <i>SUFFIX</i> (example: 825-S-BC)
823-C-SUFFIX	RED (HP) GAUGE (HIGH PRESSURE) $\frac{1}{4}$ " male flare SAE center back connection Add your <i>SUFFIX</i> (example: 823-C-BC)
825-C-SUFFIX	BLUE (LP) GAUGE (COMPOUND) $\frac{1}{4}$ " male flare SAE center back connection Add your <i>SUFFIX</i> (example: 825-C-BC)
823-WM-SUFFIX	RED (HP) GAUGE + front ring wall mounting $\frac{1}{4}$ " male flare SAE vertical bottom connection Add your <i>SUFFIX</i> (example: 823-WM-BC)
825-WM-SUFFIX	BLUE (LP) GAUGE + front ring wall mounting $\frac{1}{4}$ " male Flare SAE vertical bottom connection Add your <i>SUFFIX</i> (example: 825-WM-BC)



ACCESSORIES

PM-80-B	BLUE FRONT RING PANEL MOUNTING (80 mm)
PM-80-R	RED FRONT RING PANEL MOUNTING (80 mm)
WM-80-B	BLUE FRONT RING WALL MOUNTING (80 mm)
WM-80-R	RED FRONT RING WALL MOUNTING (80 mm)
M2-106	1/8" GAUGES MOUNTING BRACKET (brass)
M2-108	1/4" GAUGES MOUNTING BRACKET (brass)
U3-04A	ALL GAUGES CONNECTOR FITTING (brass)
	1/8" female NPT x 1/4" male flare SAE
U3-04B	ALL GAUGES CONNECTOR FITTING (brass)
	1/4" female NPT x 1/4" male flare SAE
CRISTAL CLEAR	PLASTIC SCREW-ON GAUGE LENS (80 mm)
RK-800B	RUBBER GAUGE PROTECTOR BLUE
RK-800R	RUBBER GAUGE PROTECTOR RED



2. DRY PULSE-FREE GAUGES Series 820 Class 1.0 - Ø 80 mm

DESCRIPTION

- These gauges are similar to "823 & 825 SERIES STANDARD CLASS 1.6" shown on the previous page, except for accuracy.
- These gauges are **CLASS 1.0** tested, calibrated and marked with **KI. 1.0** according to **DIN 16005** (1% max error in function).

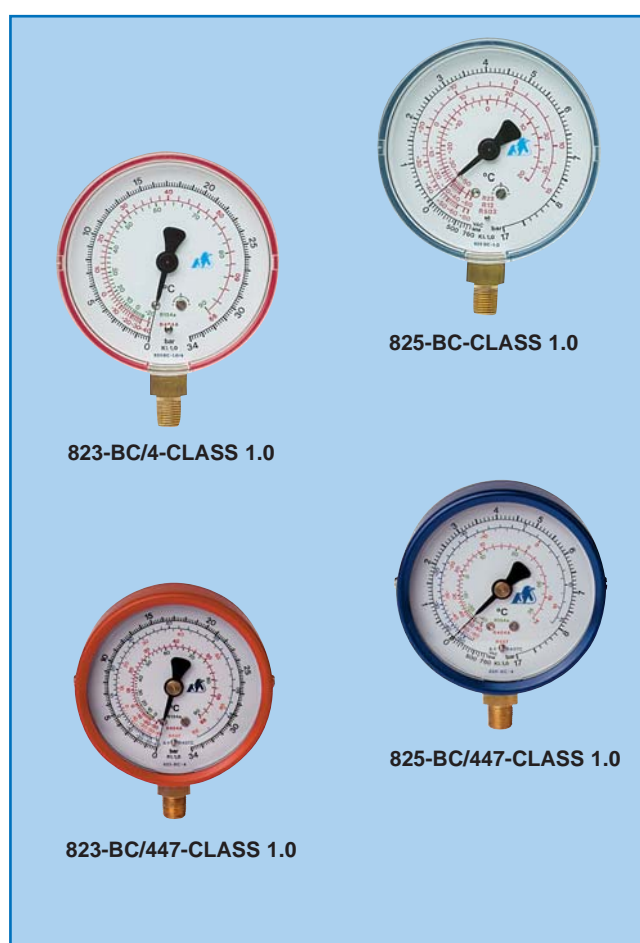
SUFFIXES FOR GAUGE ORDERING

- Select it and add it to the "823" or "825" gauge part number

BC	bar/°C	for R12, R22, R502
BC/447	bar/°C	for R134a, R404A, R407A, R507
BPC/410	bar/°C	for R410A

TYPES OFFERED

823-SUFFIX-1.0	CLASS 1.0 (HP) RED GAUGE (HIGH PRESSURE) 1/8" male NPT vertical bottom connection Add your SUFFIX (ex: 823-BC-1.0)
825-SUFFIX-1.0	CLASS 1.0 (LP) BLUE GAUGE (COMPOUND) 1/8" male NPT vertical bottom connection Add your SUFFIX (ex: 825-BC-1.0)
823-S-SUFFIX-1.0	CLASS 1.0 (HP) RED GAUGE (HIGH PRESSURE) 1/4" male flare SAE vertical bottom connection Add your SUFFIX (ex: 823-S-BC-1.0)
825-S-SUFFIX-1.0	CLASS 1.0 (LP) BLUE GAUGE (COMPOUND) 1/4" male flare SAE vertical bottom connection Add your SUFFIX (ex: 825-S-BC-1.0)

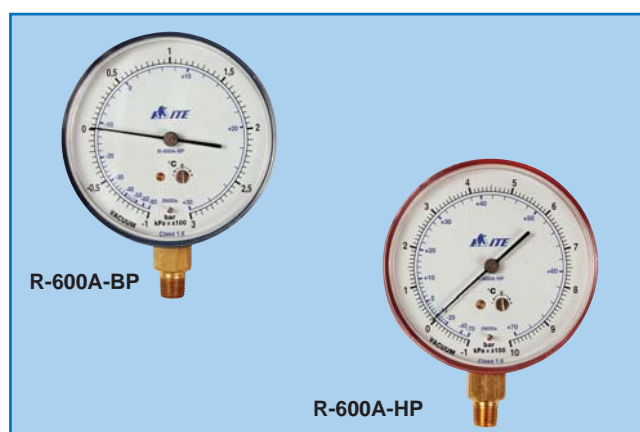


3. DRY PULSE-FREE GAUGES Series R-600 Class 1.6 - ISO-BUTANE

R-600A-BP	LOW PRESSURE GAUGE (-1 to 3 bar)
R-600A-HP	HIGH PRESSURE GAUGE (-1 to 10 bar)

DESCRIPTION

- Calibration for ISO-BUTANE application. 80 mm scale diameter.
- High and low pressure gauges. 1/8" male NPT connection.
- Zero-screw recalibration.





4. GLYCERINE FILLED GAUGES Series 820-G Class 1.6 - Ø 80 mm

SUFFIXES FOR GAUGE ORDERING

- Select it and add it to the "823" or "825" gauge part number
- | | | |
|--------|------------|-------------------------------|
| BC | bar/°C | for R12, R22, R502 |
| BPC | bar/Psi/°C | for R12, R22, R502 |
| BC/4 | bar/°C | for R134a, R404A |
| BC/447 | bar/°C | for R134a, R404A, R407C, R507 |
| BC/247 | bar/°C | for R22, R134a, R404A, R407C |

823-G-SUFFIX	(HP) RED GAUGE (HIGH PRESSURE) 1/8" male NPT vertical bottom connection Add your SUFFIX (ex: 823-G-BC)
825-G-SUFFIX	(LP) BLUE GAUGE (COMPOUND) 1/8" male NPT vertical bottom connection Add your SUFFIX (ex: 825-G-BC/447)

DESCRIPTION

- Glycerine filled to dampen the moving components against the effects of vibration and provide accurate readings.
- These gauges are similar to "823 & 825 SERIES STANDARD CLASS 1.6 Ø 80 mm GAUGES".
- Nylon housing - 15% glass filled.
- Stainless steel crimped-on bezel ring.
- Bourdon tube system.
- Inlet fitted with 0,3 mm restrictor to smooth out possible surges in pressure.
- Externally zero adjustable.
- Gauges comply with ASA16005 and ANSI B4.1.
- Protection class IP67

Note: For skin packed gauges, add suffix SP to the part number (ex: 825-G-BC-SP) see page 85 for spanners ORS-14, IMS-14

5. DRY PULSE-FREE GAUGES Series 620 Class 1.6 - Ø 60 mm

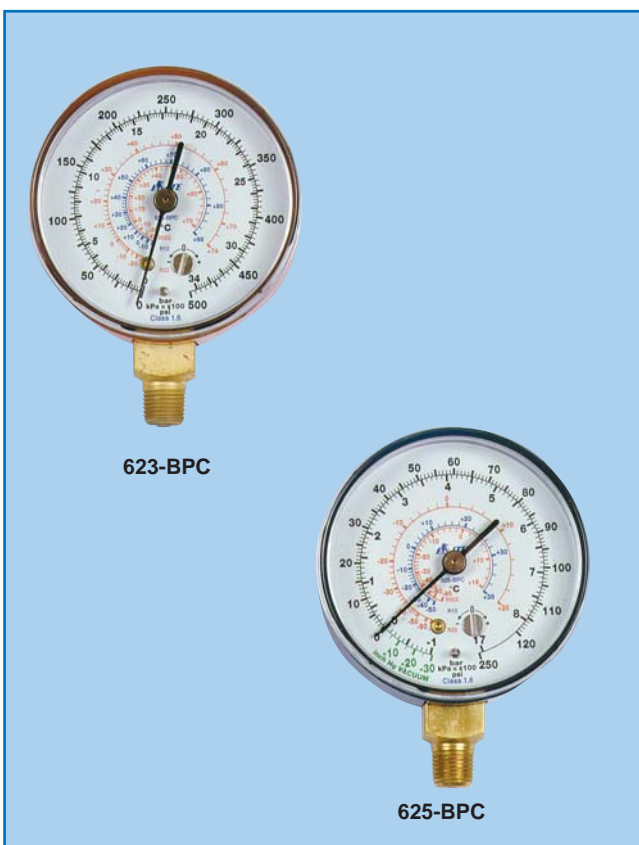
SUFFIXES FOR GAUGE ORDERING

- Select it and add it to the "623" or "625" gauge part number
- | | | |
|--------|------------|-------------------------------|
| BPC | bar/Psi/°C | for R12, R22, R502 |
| BC/447 | bar/°C | for R134a, R404A, R407C, R507 |
| BC/410 | bar/°C | for R410A |
| BC/247 | bar/°C | for R22, R134a, R404A, R407C |

623-SUFFIX	RED GAUGE (HP) (HIGH PRESSURE) 1/8" male NPT vertical bottom connection Add your SUFFIX (ex: 623-BC/410)
625-SUFFIX	BLUE GAUGE (LP) (LOW PRESSURE) 1/8" male NPT vertical bottom connection Add your SUFFIX (ex: 625-BC/410)

DESCRIPTION

- Certificate of conformity:** For each gauge upon request.
- Dry pressure gauges. classic 63 mm scale diameter.
- 1/8" male NPT vertical bottom connection.
- Zero-screw recalibration and unbreakable gauge front.



6. "MECHANICAL SERIES" "ITE" VACUUM GAUGES

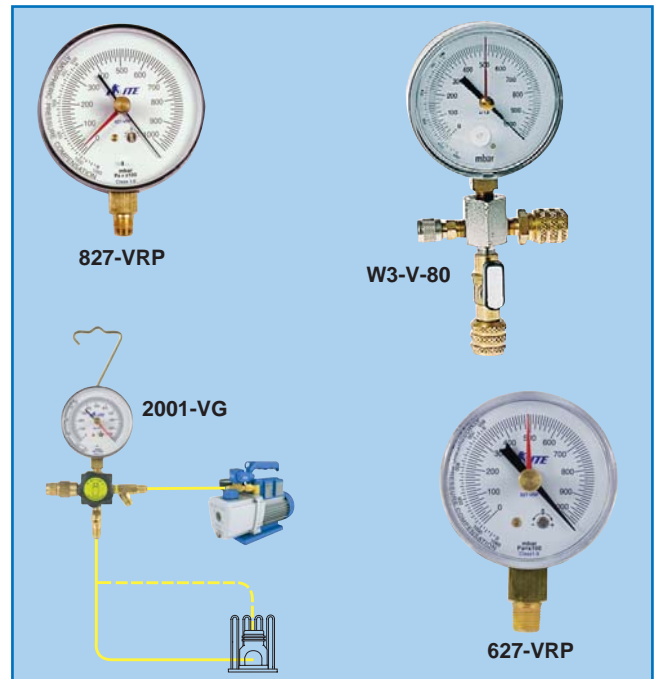
827-VRP RELATIVE VACUUM GAUGE Ø 80 mm

- 80 mm "PULSE FREE" relative vacuum gauge
- Adjustable red pointer for reference mark
- **1/8" male NPT** bottom connection
- Reading in mbar, 1000 – 0 mbar. Class 1.6
- Zero calibration screw
- 1/4" turn screw-type crystal lens
- Gauge has 3 holes in the back for fitting a wall mount bracket

627-VRP RELATIVE VACUUM GAUGE Ø 60 mm

- 60 mm "PULSE-FREE" relative vacuum gauge
- Adjustable red pointer for reference mark
- **1/8" male NPT** bottom connection
- Reading in mbar, 1000 - 0 mbar. Class 1.6
- Zero calibration screw
- 1/4" turn screw-type crystal lens

- 2001-VG** VAC MANIFOLD with **80 mm vacuum gauge** and **hook MB1-ADS/VAC manifold body** with 827-VRP relative vacuum gauge
- W3-V-80** **3-WAY MANIFOLD** with **relative vacuum gauge** and ball valve, Ø 80 mm
1/4" SAE OD x 3/8" SAE OD x 3/8" SAE ID



7. ELECTRONIC MICRON VACUUM GAUGES

ITE-50V LED VACUUM GAUGE (complete)

DESCRIPTION

- A durable self contained battery powered vacuum gauge which displays the level of vacuum on **10 LED** color read out.
- Unique design for "in line" connection through the system or directly to the vacuum pump. Zipped vinyl carrying case.
- Pocket size: only **140 x 45 x 38 mm**.
- Cleanable thermistor sensor for repeat accuracy.
- Single switch operation (no adjustment required).
- Low battery indication. Colour coded LED display.
- Hanger and stand support for remote connections.
- High impact satin polycarbonate shell.

SPECIFICATIONS

- **10 LED** Segments from **atmosphere** to **50 microns**.
- Connections: Standard **1/4" male flare SAE**.
- Power one battery (not included). Optional A/C adaptor.
- **CE approval**.

ITE-54V DIGITAL VACUUM GAUGE

DESCRIPTION

- Suitable for field or laboratory use
- Cleanable thermistor sensor, cleaning port provides quick cleaning and drying
- Standard 1/4 inch male flare fitting
- Built-in hanger

SPECIFICATIONS

- Display updated every 1/2 second. 1 micron resolution below 200 microns of vacuum
- Vacuum range: **0 - 12,000 microns** (0 - 1,600 Pascals) with vacuum increasing/decreasing indicator when above 12,000 microns
- Reads vacuum in 7 selectable international units: Microns, Psi, InHg, millibars, Pascals, Torr, milliTorr
- Operating temperature range: **+2°C** (+35°F to +125°F)
- Overpressure: **20 bar max** (300 Psi)
- Accuracy: **± 10%** (0 to 1000 microns)
- Power source: **9 Volt Alkaline Battery** (not included), continuous usage over 35 hours
- Auto shutoff after 10 minutes when vacuum reading is above 12,000 Microns (12 Torr)
- Dimensions: **140 x 76 x 32 mm** (5 1/2" x 3" x 1 1/4")
- Weight: **190 gr** (6.7 ounces)



GAUGES, MANIFOLDS AND HOSES FOR AMMONIA

1. PULSE-FREE GAUGES Serie NH₃

623-WG	AMMONIA HIGH PRESSURE GAUGE -1 to +21 bar °C temp. scales
625-WG	AMMONIA LOW PRESSURE GAUGE -1 to +11 bar °C temp. scales

DESCRIPTION

- 63 mm scale diameter
- 316 stainless steel bourdon tube
- 1/4" MPT steel connection
- Steel casing, black painted
- Polycarbonate crystals

2. "AMMONIA SERIES" SERVICE HOSES

NHA-48	AMMONIA HOSE: Length: 120 cm (48") 1/4" female flare SAE STRAIGHT end x 1/4" female flare SAE 45° ANGLE end
NHA-72	AMMONIA HOSE: Length: 180 cm (72") Same as above NHA-48
NHA-120	AMMONIA HOSE: Length: 300 cm (120") Same as above NHA-48
NBC-72	AMMONIA HOSE: Length: 180 cm (72") 3/8" female flare SAE STRAIGHT end x 3/8" female flare SAE STRAIGHT end
NBC-120	AMMONIA HOSE: Length: 300 cm (120") Same as above NBC-72

DESCRIPTION

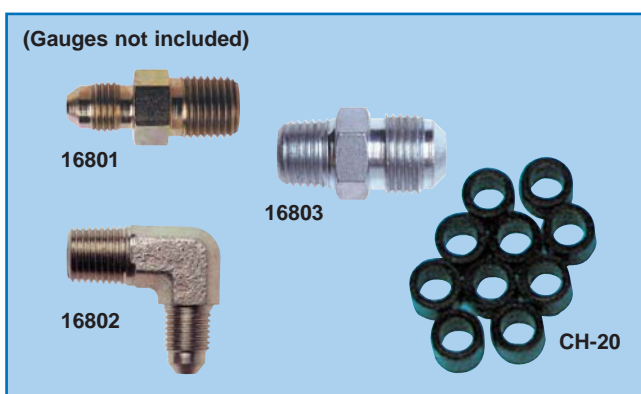
- Designed with nickel plated steel quick *SWIVEL COUPLERS* at both ends. Nickel plated steel *CRIMPINGS*.
- Available in soft black material only.
- Working pressure for 1/4": **60 bar** (900 Psi)
- Burst pressure for 1/4": **240 bar** (3500 Psi)
- Working pressure for 3/8": **35 bar** (500 Psi)
- Burst pressure for 3/8": **140 bar** (2000 Psi)

OTHER NH₃ (AMMONIA) COMPONENTS

- See NH₃ "3000 STEEL FITTINGS" pages 143 to 149.
- See NH₃ "GAUGES" above.

40190	AMMONIA FORGED STEEL MANIFOLD Non rotative Teflon seat. Finger-tight 2 x 1/4" female NPT (for gauges) 3 x 1/4" male flare SAE (for hoses)
40192	FORGED STEEL BODY 40190 with 623-WG and 625-WG Ammonia gauges (see above)
40193	Same as 40192, but with extra 3 NHA-48 hoses

16801	STEEL FITTING (1/4" male flare x 1/4" Male NPT)
16802	STEEL FITTING (same as 16801 but 90° ANGLE)
16803	STEEL FITTING (3/8" male flare x 1/4" male NPT)
CH-20	GASKET for 1/4" female flare NHA hoses



3. "AMMONIA SERIES" PERMANENT HOSES

NHA-78506	AMMONIA HOSE: Length: 180 cm (72") 1/4" male pipe NPT x 1/4" male NPT
NHA-78406	AMMONIA HOSE: Length: 180 cm (72") 3/8" male pipe NPT x 3/8" male NPT
NHA-78306	AMMONIA HOSE: Length: 180 cm (72") 1/2" male pipe NPT x 1/2" male NPT
NHA-78510	AMMONIA HOSE: Length: 300 cm (120") 1/4" male pipe NPT x 1/4" male NPT
NHA-78410	AMMONIA HOSE: Length: 300 cm (120") 3/8" male pipe NPT x 3/8" male NPT

DESCRIPTION

- Special internal **1/2"** full flow diameter.
- Minimum working temperature: **-45°C (-50°F)**.
- Working pressure: **35 bar (500 Psi)**
- Burst pressure: **135 bar (1900 Psi)**

SPARE PARTS See page 58 for NH₃ GAUGES, MANIFOLD and STEEL FITTINGS



STANDARD "ITE" SERVICE HOSES

DESCRIPTION

- Working pressure: **50 bar (700 Psi)**.
- Burst pressure: **200 bar (2800 Psi)**.
- **IMPORTANT:** Safety **PURGING SLOTS** in swivel ends.
- **IMPORTANT:** **8 POINT CRIMP**.
- Made in Germany
- Special length upon request

1. E300 - STANDARD SERIES

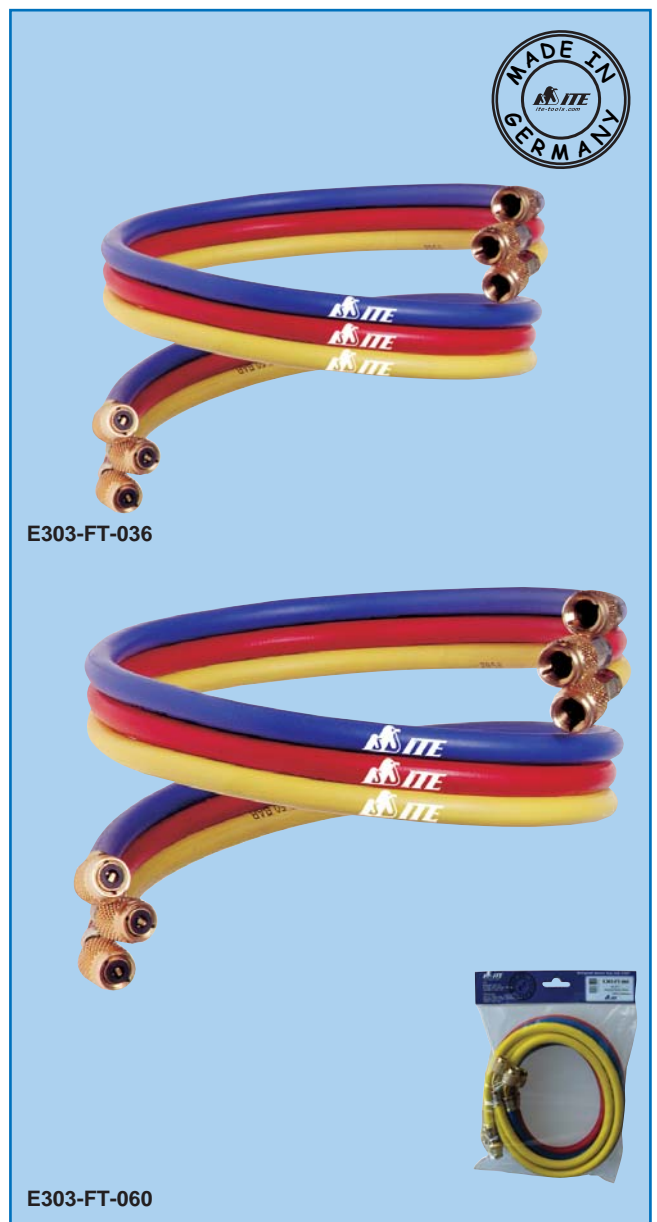
2 x 1/4" Female Flare SAE

- One **STRAIGHT** swivel end and one **45° ANGLE**.
- "STANDARD SERIES" **1/4" Female Flare SAE** range.
- One adjustable and replaceable **CORE DEPRESSOR**.
- Colour-coded hoses: **BLUE, RED** and **YELLOW**.

E314-FTY	Standard yellow hose	L = 36 cm (15")
E336-FTB	Standard blue hose	L = 90 cm (36")
E336-FTR	Standard red hose	L = 90 cm (36")
E336-FTY	Standard yellow hose	L = 90 cm (36")
E348-FTB	Standard blue hose	L = 120 cm (48")
E348-FTR	Standard red hose	L = 120 cm (48")
E348-FTY	Standard yellow hose	L = 120 cm (48")
E360-FTB	Standard blue hose	L = 150 cm (60")
E360-FTR	Standard red hose	L = 150 cm (60")
E360-FTY	Standard yellow hose	L = 150 cm (60")
E372-FTB	Standard blue hose	L = 180 cm (72")
E372-FTR	Standard red hose	L = 180 cm (72")
E372-FTY	Standard yellow hose	L = 180 cm (72")
E3120-FTB	Standard blue hose	L = 300 cm (120")
E3120-FTR	Standard red hose	L = 300 cm (120")
E3120-FTY	Standard yellow hose	L = 300 cm (120")

SET OF 3 HOSES (Blue + Red + Yellow)

E303-FT-036	SET OF 3 HOSES (L = 90 cm / 36")
E303-FT-048	SET OF 3 HOSES (L = 120 cm / 48")
E303-FT-060	SET OF 3 HOSES (L = 150 cm / 60")
E303-FT-072	SET OF 3 HOSES (L = 180 cm / 72")
E303-FT-120	SET OF 3 HOSES (L = 300 cm / 120")





2. E500 - STANDARD SERIES

2 x 3/8" Female Flare SAE

- Two swivel ends: *STRAIGHT*.
- Only one colour: *YELLOW*
- *NO CORE DEPRESSOR*.
- *IMPORTANT*: Safety *PURGING SLOTS* in swivel ends.

E536-FTY	Yellow standard hose	L = 90 cm (36")
E548-FTY	Yellow standard hose	L = 120 cm (48")
E560-FTY	Yellow standard hose	L = 150 cm (60")
E572-FTY	Yellow standard hose, without purging slots	L = 180 cm (72")
E5120-FTY	Yellow standard hose	L = 300 cm (120")

3. SPARE PARTS

7958301	1/4" GASKET for "STANDARD" and "HEAVY DUTY" HOSES
7958302	3/8" GASKET for "STANDARD" and "HEAVY DUTY" HOSES
8921626-E	CORE-DEPRESSOR for "STANDARD" and "HEAVY DUTY" HOSES

REFRIGERATION "ITE" SERVICE HOSES

DESCRIPTION

- Working pressure: **50 bar** (700 Psi).
- Burst pressure: **250 bar** (3500 Psi)
- Designed according to **SAE J2196** Norm (for no permeability).
- To be used with all **CFC, HCFC, HFC** and their specific lubricants.
- Colour coded *SWIVEL ends* (*BLUE, RED* and *YELLOW*).
- *IMPORTANT*: Real 1/4" diameter full flow and soft black material.
- *IMPORTANT*: Safety *PURGING SLOTS* in swivel ends.
- *IMPORTANT*: *8 POINT CRIMP*.
- Made in Germany
- Special length upon request
- Heavy duty black or coloured hose (also for 410)

1. STRAIGHT SERVICE HOSES

1/4" Female Flare WITHOUT ball valve

- *TWO STRAIGHT* connecting swivel colour coded ends

HDS-12-R	HD black hose, red ends	L = 30 cm (12")
HDS-12-Y	HD black hose, yellow ends	L = 30 cm (12")

1/4" Female Flare WITH ball valve

- *TWO STRAIGHT* connecting swivel colour coded ends
- Plus one end with one colour coded 1/4 turn *BALL VALVE* equipped with one *CORE DEPRESSOR* (allows trapping gas and avoiding loss and spillage into the atmosphere)

HDS-12-B/V	HD black hose, blue ends	L = 30 cm (12")
HDS-12-R/V	HD black hose, red ends	L = 30 cm (12")
HDS-12-Y/V	HD black hose, yellow ends	L = 30 cm (12")

HDS-36-B/V	HD black hose, blue ends	L = 90 cm (36")
HDS-36-R/V	HD black hose, red ends	L = 90 cm (36")
HDS-36-Y/V	HD black hose, yellow ends	L = 90 cm (36")

HDS-60-B/V	HD black hose, blue ends	L = 150 cm (60")
HDS-60-R/V	HD black hose, red ends	L = 150 cm (60")
HDS-60-Y/V	HD black hose, yellow ends	L = 150 cm (60")

HDS-72-B/V	HD black hose, blue ends	L = 180 cm (72")
HDS-72-R/V	HD black hose, red ends	L = 180 cm (72")
HDS-72-Y/V	HD black hose, yellow ends	L = 180 cm (72")

HDS-120-B/V	HD black hose, blue ends	L = 300 cm (120")
HDS-120-R/V	HD black hose, red ends	L = 300 cm (120")
HDS-120-Y/V	HD black hose, yellow ends	L = 300 cm (120")

SET OF 3 HOSES (Blue + Red + Yellow)

3HDS-36/V	Set of 3 hoses	L = 90 cm (36")
3HDS-60/V	Set of 3 hoses	L = 150 cm (60")
3HDS-72/V	Set of 3 hoses	L = 180 cm (72")

3/8" Female Flare WITHOUT ball valve

- Two *STRAIGHT* ends with *NO CORE DEPRESSOR*.
- All colour coded *SWIVEL* ends (*BLUE*, *RED* and *YELLOW*).
- **IMPORTANT:** Safety *PURGING SLOTS* in all swivel ends.
- **IMPORTANT:** Full 3/8" flow.

HDS6-36-B	HD black hose, blue ends	L = 90 cm (36")
HDS6-36-R	HD black hose, red ends	L = 90 cm (36")
HDS6-36-Y	HD black hose, yellow ends	L = 90 cm (36")

HDS6-60-B	HD black hose, blue ends	L = 150 cm (60")
HDS6-60-R	HD black hose, red ends	L = 150 cm (60")
HDS6-60-Y	HD black hose, yellow ends	L = 150 cm (60")

HDS6-72-B	HD black hose, blue ends	L = 180 cm (72")
HDS6-72-R	HD black hose, red ends	L = 180 cm (72")
HDS6-72-Y	HD black hose, yellow ends	L = 180 cm (72")

SET OF 3 HOSES (Blue + Red + Yellow)

3HDS6-60	Set of 3 hoses	L = 150 cm (60")
3HDS6-72	Set of 3 hoses	L = 180 cm (72")

3/8" Female Flare WITH ball valve

- Two *STRAIGHT* ends with *NO CORE DEPRESSOR*.
- Colour coded *SWIVEL* ends (*BLUE*, *RED* and *YELLOW*).
- One colour-coded *BALL VALVE* (*BLUE*, *RED* and *YELLOW*) which allows trapping gas and avoiding loss and spillage into the atmosphere.
- **IMPORTANT:** Safety *PURGING SLOTS* in all swivel nuts.

HDS6-12-B/V	HD black hose, blue ends	L = 30 cm (12")
HDS6-12-R/V	HD black hose, red ends	L = 30 cm (12")
HDS6-12-Y/V	HD black hose, yellow ends	L = 30 cm (12")

HDS6-36-B/V	HD black hose, blue ends	L = 90 cm (36")
HDS6-36-R/V	HD black hose, red ends	L = 90 cm (36")
HDS6-36-Y/V	HD black hose, yellow ends	L = 90 cm (36")

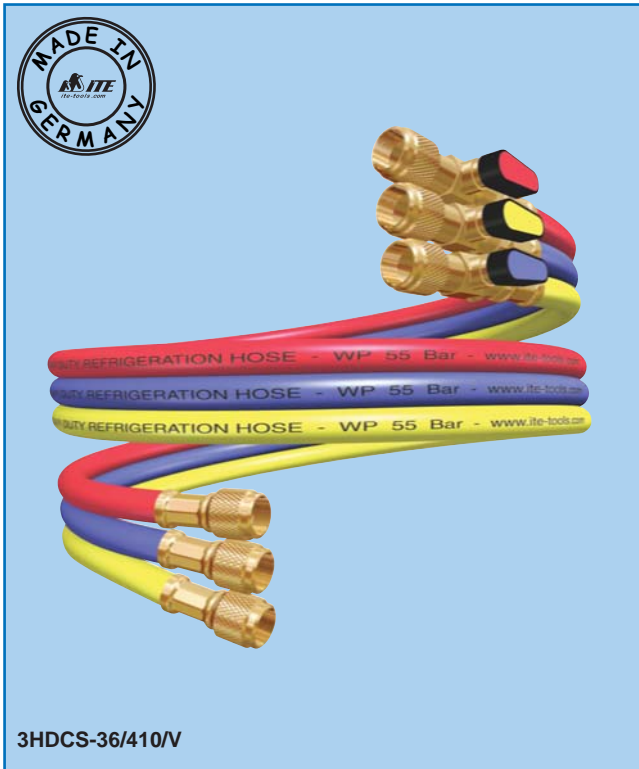
HDS6-60-B/V	HD black hose, blue ends	L = 150 cm (60")
HDS6-60-R/V	HD black hose, red ends	L = 150 cm (60")
HDS6-60-Y/V	HD black hose, yellow ends	L = 150 cm (60")

HDS6-72-B/V	HD black hose, blue ends	L = 180 cm (72")
HDS6-72-R/V	HD black hose, red ends	L = 180 cm (72")
HDS6-72-Y/V	HD black hose, yellow ends	L = 180 cm (72")

SET OF 3 HOSES (Blue + Red + Yellow)

3HDS6-60/V	Set of 3 hoses	L = 150 cm (60")
3HDS6-72/V	Set of 3 hoses	L = 180 cm (72")





5/16" x 1/4" WITH ball valve

- Two *STRAIGHT* ends with *NO CORE DEPRESSOR*.
- One colour-coded *BALL VALVE* (BLUE, RED and YELLOW) which allows trapping gas and avoiding loss and spillage into the atmosphere.
- *IMPORTANT*: Safety *PURGING SLOTS* in all swivel nuts.

HDCS-36-B/410/V	HD blue hose 5/16"	L = 90 cm (36")
HDCS-36-R/410/V	HD red hose 5/16"	L = 90 cm (36")

SET OF 3 HOSES (Blue + Red + Yellow)

3HDCS-36/410/V	Set of 3 hoses	L = 90 cm (36")
	HD Blue hose 5/16" female flare	
	HD Red hose 5/16" female flare	
	HD Yellow hose 1/4" female flare	

3HDCS-60/410/V	Set of 3 hoses	L = 150 cm (60")
	HD Blue hose 5/16" female flare	
	HD Red hose 5/16" female flare	
	HD Yellow hose 1/4" female flare	

3HDCS-72/410/V	Set of 3 hoses	L = 180 cm (72")
	HD Blue hose 5/16" female flare	
	HD Red hose 5/16" female flare	
	HD Yellow hose 1/4" female flare	

2. ANGLED SERVICE HOSES 45°

1/4" Female Flare WITHOUT ball valve

- One threaded *STRAIGHT* end for optional core depressor.
- One 45° *ANGLE* End with an adjustable and replaceable *CORE DEPRESSOR*.

HDA-36-B	HD black hose, blue ends	L = 90 cm (36")
HDA-36-R	HD black hose, red ends	L = 90 cm (36")
HDA-36-Y	HD black hose, yellow ends	L = 90 cm (36")

HDA-60-B	HD black hose, blue ends	L = 150 cm (60")
HDA-60-R	HD black hose, red ends	L = 150 cm (60")
HDA-60-Y	HD black hose, yellow ends	L = 150 cm (60")

HDA-72-B	HD black hose, blue ends	L = 180 cm (72")
HDA-72-R	HD black hose, red ends	L = 180 cm (72")
HDA-72-Y	HD black hose, yellow ends	L = 180 cm (72")

HDA-120-B	HD black hose, blue ends	L = 300 cm (120")
HDA-120-R	HD black hose, red ends	L = 300 cm (120")
HDA-120-Y	HD black hose, yellow ends	L = 300 cm (120")

SET OF 3 HOSES (Blue + red + Yellow)

3HDA-36	Set of 3 hoses	L = 90 cm (36")
3HDA-48	Set of 3 hoses	L = 120 cm (48")
3HDA-60	Set of 3 hoses	L = 150 cm (60")
3HDA-72	Set of 3 hoses	L = 180 cm (72")
3HDA-120	Set of 3 hoses	L = 300 cm (120")

5/16" x 1/4" WITHOUT ball valve

- One threaded *STRAIGHT* end 1/4" for optional core depressor.
- One 45° *ANGLE* End with an adjustable and replaceable *CORE DEPRESSOR*.
- Sets have coloured Heavy Duty hoses.

HDA-36-R/410	HD black hose, red ends 5/16"	L = 90 cm (36")
HDA-36-Y/410	HD black hose, yellow ends 1/4"	L = 90 cm (36")



HDA-60-R/410	HD black hose, red ends $\frac{5}{16}$ " L = 150 cm (60")
HDA-60-Y/410	HD black hose, yellow ends $\frac{1}{4}$ " L = 150 cm (60")

SET OF 3 HOSES (Blue + Red + Yellow)

3HDCA-36/410	Set of 3 hoses HD Blue hose $\frac{5}{16}$ " female flare HD Red hose $\frac{5}{16}$ " female flare HD Yellow hose $\frac{1}{4}$ " female flare L = 90 cm (36")
3HDCA-48/410	Set of 3 hoses HD Blue hose $\frac{5}{16}$ " female flare HD Red hose $\frac{5}{16}$ " female flare HD Yellow hose $\frac{1}{4}$ " female flare L = 120 cm (48")
3HDCA-60/410	Set of 3 hoses HD Blue hose $\frac{5}{16}$ " female flare HD Red hose $\frac{5}{16}$ " female flare HD Yellow hose $\frac{1}{4}$ " female flare L = 150 cm (60")
3HDCA-72/410	Set of 3 hoses HD Blue hose $\frac{5}{16}$ " female flare HD Red hose $\frac{5}{16}$ " female flare HD Yellow hose $\frac{1}{4}$ " female flare L = 180 cm (72")

3. ANGLED SERVICE HOSES 90°

$\frac{1}{4}$ " Female Flare x $\frac{1}{4}$ " Male Flare WITHOUT ball valve

- One threaded *STRAIGHT* end for optional core depressor.
- One 90° *ANGLE* end with an adjustable and replaceable *CORE DEPRESSOR*.

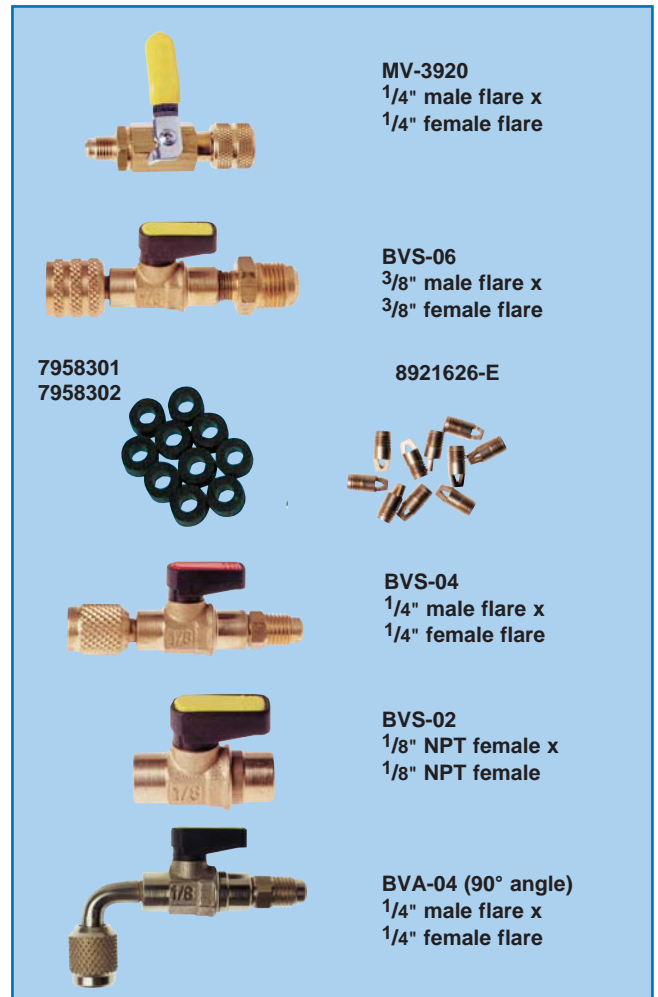
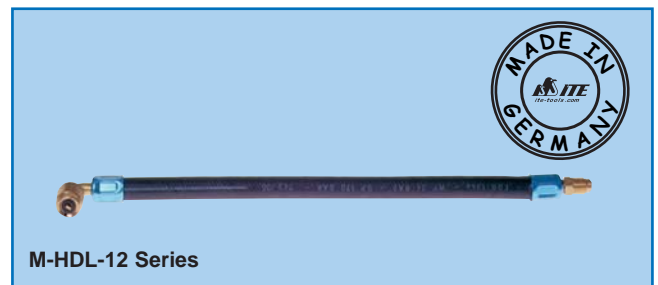
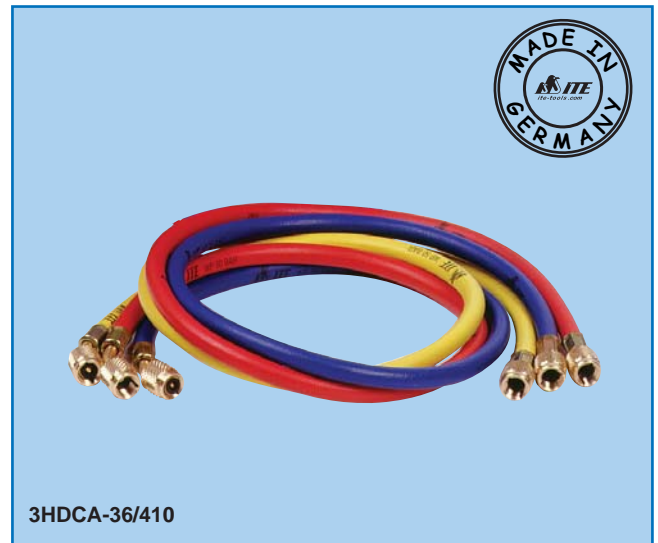
M-HDL-6-B	HD black hose, blue ends	L = 15 cm (6")
M-HDL-6-R	HD black hose, red ends	L = 15 cm (6")
M-HDL-12-B	HD black hose, blue ends	L = 30 cm (12")
M-HDL-12-R	HD black hose, red ends	L = 30 cm (12")
M-HDL-12-Y	HD black hose, yellow ends	L = 30 cm (12")

4. SPARE PARTS

7958301	$\frac{1}{4}$" GASKET for "STANDARD" and "HEAVY DUTY" HOSES
7958302	$\frac{3}{8}$" GASKET for "STANDARD" and "HEAVY DUTY" HOSES
8921626-E	CORE-DEPRESSOR for "STANDARD" and "HEAVY DUTY" HOSES

5 ADAPTERS for R410a hoses

QCS-$\frac{5}{16}$x$\frac{1}{4}$	STRAIGHT ADAPTER for R410A $\frac{5}{16}$ " female flare SAE swivel with core depressor x $\frac{1}{4}$ " male flare SAE
QCA-$\frac{5}{16}$x$\frac{1}{4}$	90° ANGLED ADAPTER for R410A $\frac{5}{16}$ " female flare SAE swivel with core depressor x $\frac{1}{4}$ " male flare SAE



A/C “ITE” SERVICES HOSES

DESCRIPTION

- Special hoses for *AUTOMOTIVE AIR CONDITIONING* systems.
- When using *BALL VALVE HOSES*, you can trap the gas, avoiding loss and spillage into the atmosphere.
- Colour-coded ends: *BLUE*, *RED* and *YELLOW*.
- *IMPORTANT: 8 POINT CRIMP.*

1. 2 x 1/2” - 16 ACME WITHOUT ball valve

AA-HDS-36-B	AUTO A/C hose, blue end	L = 90 cm (36")
AA-HDS-36-R	AUTO A/C hose, red end	L = 90 cm (36")
AA-HDS-36-Y	AUTO A/C hose, yellow end	L = 90 cm (36")

AA-HDS-60-B	AUTO A/C hose, blue end	L = 150 cm (60")
AA-HDS-60-R	AUTO A/C hose, red end	L = 150 cm (60")
AA-HDS-60-Y	AUTO A/C hose, yellow end	L = 150 cm (60")

AA-HDS-72-B	AUTO A/C hose, blue end	L = 180 cm (72")
AA-HDS-72-R	AUTO A/C hose, red end	L = 180 cm (72")
AA-HDS-72-Y	AUTO A/C hose, yellow end	L = 180 cm (72")

2. 2 x 1/2” - 16 ACME WITH ball valve

AA-HDS-36-B/V	AUTO A/C hose, blue end	L = 90 cm (36")
AA-HDS-36-R/V	AUTO A/C hose, red end	L = 90 cm (36")
AA-HDS-36-Y/V	AUTO A/C hose, yellow end	L = 90 cm (36")

AA-HDS-60-B/V	AUTO A/C hose, blue end	L = 150 cm (60")
AA-HDS-60-R/V	AUTO A/C hose, red end	L = 150 cm (60")
AA-HDS-60-Y/V	AUTO A/C hose, yellow end	L = 150 cm (60")

3. 1/2” - 16 ACME x M14 x 1,5 (mm) WITHOUT ball valve

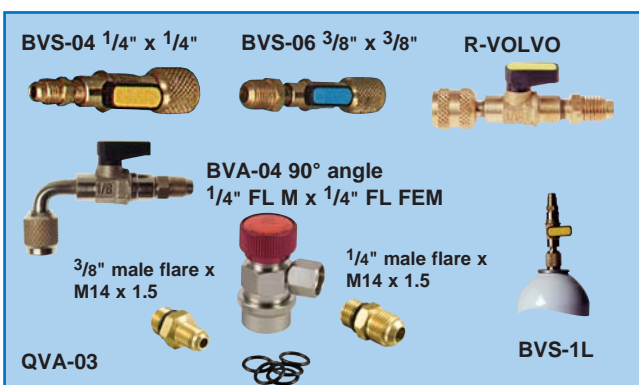
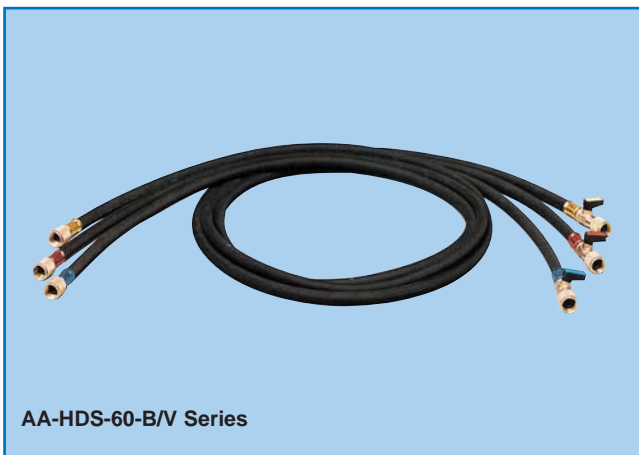
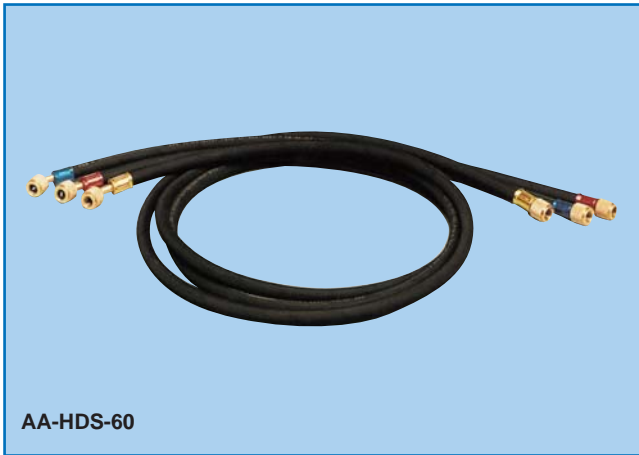
AM-HDS-36-B	AUTO A/C hose, blue end	L = 90 cm (36")
AM-HDS-36-R	AUTO A/C hose, red end	L = 90 cm (36")
AM-HDS-36-Y	AUTO A/C hose, yellow end	L = 90 cm (36")

AM-HDS-60-B	AUTO A/C hose, blue end	L = 150 cm (60")
AM-HDS-60-R	AUTO A/C hose, red end	L = 150 cm (60")
AM-HDS-60-Y	AUTO A/C hose, yellow end	L = 150 cm (60")

AM-HDS-72-B	AUTO A/C hose, blue end	L = 180 cm (72")
AM-HDS-72-R	AUTO A/C hose, red end	L = 180 cm (72")

4. SPARE PARTS FOR ALL HOSES

7958301-HD	GASKET for all AUTO A/C hoses (25 pcs)
QVA-05	AUTOMOTIVE Low pressure service valve with U1-04M14, U1-06M14 adapters and spare gaskets
QVA-03	AUTOMOTIVE High pressure service valve with U1-04M14, U1-06M14 adapters and spare gaskets
U1-04M14	ADAPTER 1/4" x M14
U1-06M14	ADAPTER 3/8" x M14 + O-ring



FLEXIBLE CAPILLARY TUBE

The advent of new refrigerants and environmental issues has lead to re-thinking refrigerant systems. One of the major concerns is the reduction of refrigerant loss into the atmosphere due to system leaks. Service and maintenance people are well aware of how frequently systems can fail due to fracture of copper tubing (particularly capillary ones). To overcome this problem there has been an increase in the use of flexible hoses for this application.

Flexible capillary tube complies with the new European standard CEN pr EN 1736, specifically designed for refrigeration hose purposes.

FEATURES

- Suitable for all CFC, HFC & HCFC refrigerants and natural gases.
- Only hose compatible with ammonia.
- Lining is made out of convoluted polyamide, specially formulated to suit new refrigerant gasses requirements.
- Reinforced with high tensile polyester braid.
- Covered by flame retarder polyester (UL 94 HB class), black cover.
- Working temperature: -40°C to +130°C maximum.
- Working pressure: 50 bar
- Min. bend radius: 10 mm.

FCT-2059	FLEXIBLE CAPILLARY TUBE, 2 mm ID x 5,9 mm OD Roll of 100 metres.
FCT-2059-1000 FCT-2059-5000	same as FCT-2059, but roll of 10 metres. same as FCT-2059, but roll of 50 metres.
FCT-FS-2059	STRAIGHT CRIMPED FITTING KIT for FCT-2059, 1/4" female flare SAE
FCT-FA-2059	90° ANGLED CRIMPED FITTING KIT for FCT-2059, 1/4" female flare SAE
FCT-FT-2059	TEE CRIMPED FITTING KIT 3 times barb for FCT-2059, 1/4" female flare SAE
FCT-FNB-2059	TEE CRIMPED FITTING KIT 2 times barb x female swivel on branch. for FCT-2059, 1/4" female flare SAE
FCT-FNR-2059	TEE CRIMPED FITTING KIT 2 times barb x female swivel on run for FCT-2059, 1/4" female flare SAE

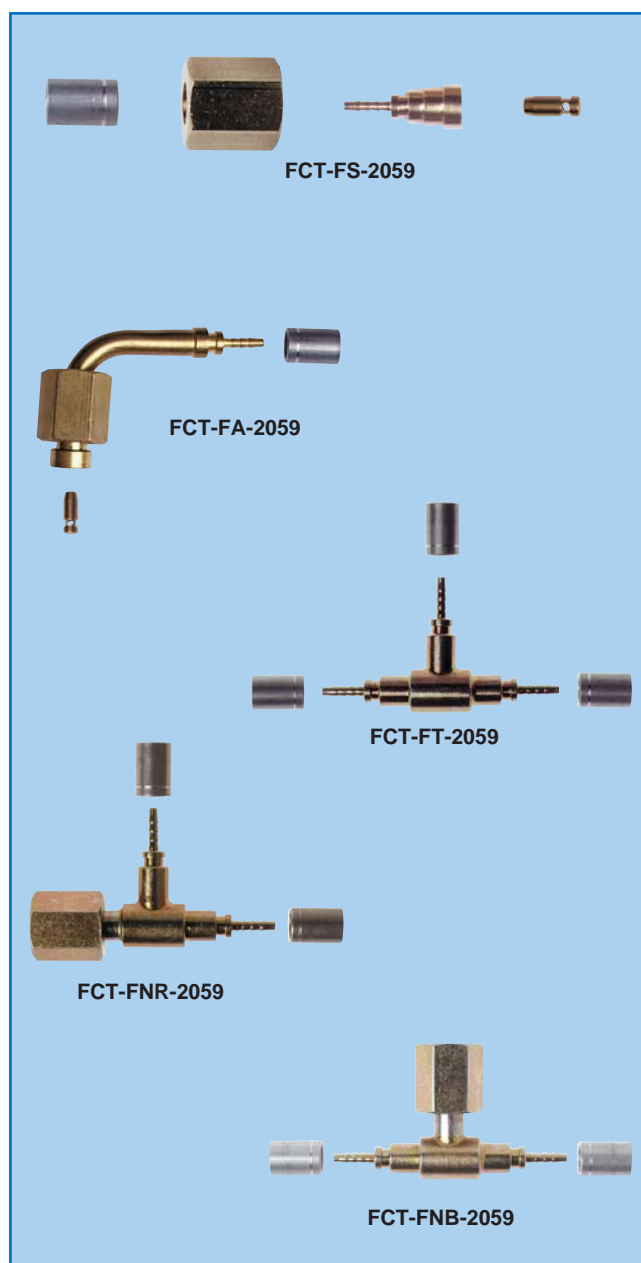
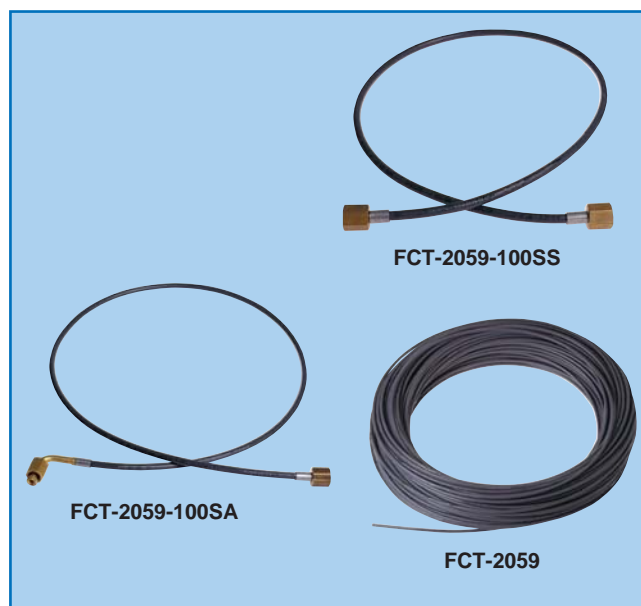
FEATURES

- Nut made of brass.
- Ferrule, female insert made of aluminium.
- Supplied with brass core depressor.

FCT-2059-050SS	FLEXIBLE CAPILLARY TUBE, length 50 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.
FCT-2059-050SA	FLEXIBLE CAPILLARY TUBE, length 50 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.
FCT-2059-100SS	FLEXIBLE CAPILLARY TUBE, length 100 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.
FCT-2059-100SA	FLEXIBLE CAPILLARY TUBE, length 100 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.
FCT-2059-150SS	FLEXIBLE CAPILLARY TUBE, length 150 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.
FCT-2059-150SA	FLEXIBLE CAPILLARY TUBE, length 150 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.
FCT-2059-200SS	FLEXIBLE CAPILLARY TUBE, length 200 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.
FCT-2059-200SA	FLEXIBLE CAPILLARY TUBE, length 200 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.

Other sizes available upon request

FCT-SET-2059C	SET in plastic case, consisting of: <ul style="list-style-type: none"> • 20 metres flexible capillary tube FCT-2059 • 20 x FCT-FS-2059 straight crimped fitting kit • 20 x FCT-FA-2059 90° angled crimped fitting kit • 5 x FCT-FT-2059 tee end fitting kit
----------------------	---



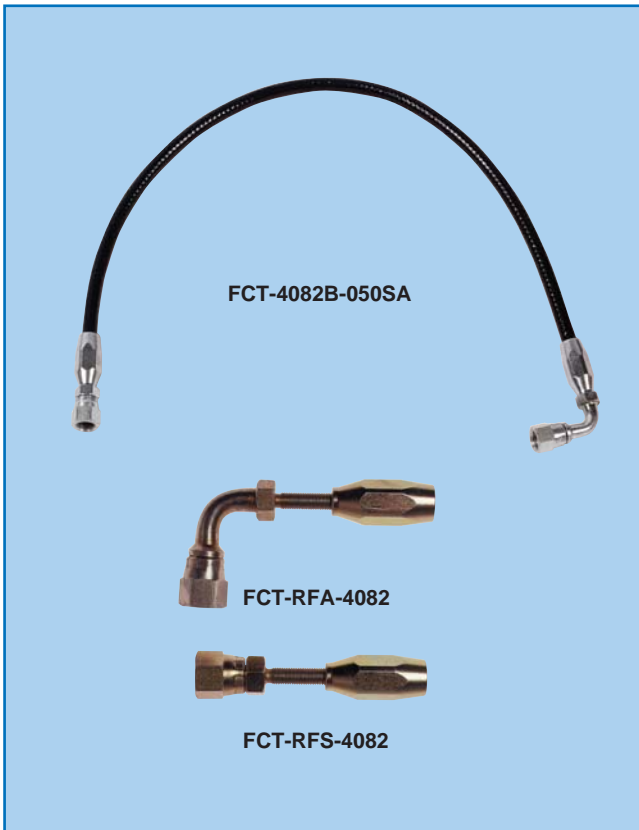


FCT-1

MANUAL CRIMPING PLIER
for FCT-2059 series

FEATURES

- Die sets are easily interchangeable with a screwdriver
- Precision full cycle ratchet for accurate, repeatable crimps every cycle.
- Frames feature a tension adjustment preset at the factory for optimum performance.



FCT-4082B-1000

FLEXIBLE CAPILLARY TUBE

4 mm ID x 8,2 mm OD, roll of 10 metres.

FCT-4082B-5000

same as FCT-4082B-1000, but roll of 50 metres.

FEATURES

- Suitable for all CFC, HFC & HCFC refrigerants and natural gases.
- Only hose compatible with ammonia.
- Lining is made out of convoluted polyamide, specially formulated to suit new refrigerant gasses requirements.
- Reinforced with high tensile polyester braid.
- Covered by flame retarder polyester (UL 94 HB class), black cover.
- Working temperature for hose assemblies with reusable fittings: -30°C to +90°C
- Working pressure: 40 bar
- Min. bend radius: 35 mm

FCT-RFS-4082

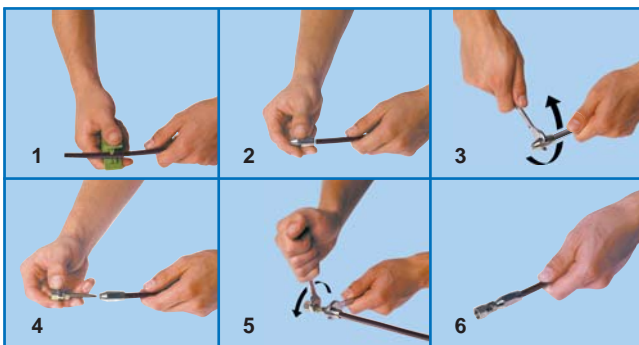
STRAIGHT REUSABLE FITTING KIT

for FCT-4082, 1/4" female flare SAE

FCT-RFA-4082

ANGLED REUSABLE FITTING KIT

for FCT-4082, 1/4" female flare SAE



FCT-4082B-050SS

FLEXIBLE CAPILLARY TUBE, length 50 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.

FCT-4082B-050SA

FLEXIBLE CAPILLARY TUBE, length 50 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.

FCT-4082B-100SS

FLEXIBLE CAPILLARY TUBE, length 100 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.

FCT-4082B-100SA

FLEXIBLE CAPILLARY TUBE, length 100 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.

FCT-4082B-150SS

FLEXIBLE CAPILLARY TUBE, length 150 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.

FCT-4082B-150SA

FLEXIBLE CAPILLARY TUBE, length 150 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.

FCT-4082B-200SS

FLEXIBLE CAPILLARY TUBE, length 200 cm with 2 x 1/4" female flare SAE fitting straight and core depressors.

FCT-4082B-200SA

FLEXIBLE CAPILLARY TUBE, length 200 cm with 2 x 1/4" female flare SAE fitting (1 x straight, 1 x 90° angled) and core depressors.

Other sizes available upon request

Note: • Using a bit of oil on the reusable fittings will assure a problem free assembling-action and will facilitate this action.

- In re-using a disassembled fitting, you should cut off the already used and damaged tube-end first.



TC-307

PLASTIC TUBE CUTTER 1/16" to 1/2"
(1 to 13 mm). See also page 72.

PC-42

PLASTIC TUBE CUTTER 15/8" (42 mm).
See also page 73.

PROFESSIONAL SERVICE TOOL KITS

DESCRIPTION

- Molded **ABS** and sturdy shock resistant portable cases.
- Internal arrangements for tools. See INDEX 4.

SK-1I CARRYING TOOL KIT

Consisting of:

BS-102-04	Tube bender Ø 1/4"
BS-102-06	Tube bender Ø 3/8"
BS-102-08	Tube bender Ø 1/2"
BS-102-10	Tube bender Ø 5/8"
BS-102-12	Tube bender Ø 3/4"
RW-127	Ratchet wrench (1/4", 3/8", 3/16" and 5/16")
RIO-208	Reamer for reaming internal and external tubes from 1/8" to 1 5/8"
FST-275	Flaring (SAE 45°) and swaging kit case for 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8" and 3/4" tubing.
TC-274	Tube cutter for 1/8" to 1 1/8"
E303-FT-036	Set of 3 charging hoses (90 cm) (with 1/4" female flare SAE swivel nuts)
2802-BPC	Two valve manifold with gauges (page 46)

SK-2I CARRYING TOOL KIT

Consisting of:

TC-274	Tube cutter for 1/8" to 1 1/8" tubing
TC-127	Tube cutter for 1/8" to 5/8" tubing
FT-500-M	Flaring tool for 6, 8, 10, 12, 15 and 16 mm OD tubing.
16-C	Service port quick coupler (for all 1/4" flare SAE charging hoses).
RIO-208	Reamer for reaming internal and external tubes from 1/8" to 1 5/8" .
RW-127	Ratchet wrench (1/4", 3/8", 3/16" and 5/16").
MIR-1	Circular telescopic pocket mirror
2802-BC	Two valve manifold with gauges (page 46)
MB-EP	External spare parts kit (2x)
MB-IP	Internal spare parts kit (1x)
E303-FT-036	Set of 3 charging hoses (90 cm) (with 1/4" female flare SAE swivel nuts)
	Adjustable spanner till 22 mm
	Adjustable spanner till 32 mm

SK-2IA as SK-2I but with
FT-525 flaring tool instead of FT-500-M

SK-2IE as SK-2I but with
FT-500 instead of FT-500-M

- Other refrigerants on request.



SK-1I



SK-2IA



SK-6I

SK-6I

CARRYING TOOL KIT

Consisting of :

TE-6-01

Tube expander tool only

H-12 mm

Head 12 mm

H-15 mm

Head 15 mm

H-18 mm

Head 18 mm

H-22 mm

Head 22 mm

H-28 mm

Head 28 mm

RIO-208

Reamer for reaming internal and external tubes from 1/8" to 1 5/8"

FT-525

Flaring tool

RB-4240

Coat. Silver alloy 30% AG, 2mm

MIR-2

Inspection mirror

L-22101

Regular flux 2 Oz

L-11575

Heat seal stick

PTR-1

Heavy duty deburring tool

TB-06

Tube brush

TB-16

Tube brush

TX-9

Propane cylinder

STB-7000

Auto-start propane torch

TC-274

Tube cutter

SK-6/Inch

Same as above SK-6I, but with 3/8", 1/2", 5/8", 3/4" and 1 1/8" heads



LTC-1

LTC-1

LEATHER TOOL CASE

Natural black leather box for the professional service engineer. Supplied with carrying belt. Can easily store all essential tools for AC & R system. Equipped with many compartments and elastic strips. Tools not included.

Part. nr.	Pdf file
2001-VG	see Service manifolds, gauges and charging hoses
2001-VG	see Service manifolds, gauges and charging hoses
203-FA	see Tube working tools
2041-BT-2	see Fluid control components
2041-BT-2	see Fluid control components
2041-BT-2S2	see Fluid control components
2041-BT-2S2	see Fluid control components
2041-BT-3	see Fluid control components
2041-BT-3	see Fluid control components
2041-BT-3S3	see Fluid control components
2041-BT-3S3	see Fluid control components
2041-BT-4	see Fluid control components
2041-BT-4	see Fluid control components
2041-BT-4S4	see Fluid control components
2041-BT-4S4	see Fluid control components
2041-BT-4S5	see Fluid control components
2041-BT-4S5	see Fluid control components
2041-BT-5	see Fluid control components
2041-BT-5	see Fluid control components
2041-BT-5S5	see Fluid control components
2041-BT-5S5	see Fluid control components
2041-BT-5S6	see Fluid control components
2041-BT-5S6	see Fluid control components
2041-BT-5S6	see Fluid control components
2041-BT-5S7	see Fluid control components
2041-BT-5S7	see Fluid control components
205-P06	see Evacuating and charging equipment
205-P06	see Refrigeration accessories
205-P1	see Evacuating and charging equipment
205-P1	see Refrigeration accessories
205-P4	see Evacuating and charging equipment
205-P4	see Refrigeration accessories
206-FB	see Tube working tools
20-A	see Automatic access valves & fittings
21702-0	see Evacuating and charging equipment
21751	see Evacuating and charging equipment
227-FA	see Tube working tools
2444-RC	see Refrigeration accessories
25563	see Electronic measurement and control instruments
25860	see Refrigeration accessories
25863	see Refrigeration accessories
25869	see Refrigeration accessories
25870	see Refrigeration accessories
260-FHA	see Tube working tools
268	see Electronic measurement and control instruments
26880	see Tube working tools
26-C	see Automatic access valves & fittings
270-F-06	see Tube working tools
270-F-08	see Tube working tools
270-F-10	see Tube working tools
270-F-12	see Tube working tools
270-F-14	see Tube working tools
270-F-16	see Tube working tools
270-F-18	see Tube working tools
271-F	see Tube working tools
275-FS	see Tube working tools
275-FSC	see Tube working tools
275-FSM	see Tube working tools
27805	see Tube working tools
27806	see Tube working tools
27806M	see Tube working tools
27808	see Tube working tools
27808M	see Tube working tools
27810	see Tube working tools
27810M	see Tube working tools
27812	see Tube working tools
27812M	see Tube working tools
27814M	see Tube working tools
27816M	see Tube working tools
27818M	see Tube working tools
27820M	see Tube working tools
27-C	see Automatic access valves & fittings
2802-BC	see Service manifolds, gauges and charging hoses
2802-BC	see Service manifolds, gauges and charging hoses
2802-BC/247	see Service manifolds, gauges and charging hoses
2802-BC/27	see Service manifolds, gauges and charging hoses
2802-BC/4	see Service manifolds, gauges and charging hoses
2802-BC/447	see Service manifolds, gauges and charging hoses
2802-BPC	see Service manifolds, gauges and charging hoses
2802-BPC	see Service manifolds, gauges and charging hoses
2802-BPC/410	see Service manifolds, gauges and charging hoses
2802-BPC/410	see Service manifolds, gauges and charging hoses
2802-BPC/410/27	see Service manifolds, gauges and charging hoses
2802-BPC-1.0/410	see Service manifolds, gauges and charging hoses
2802-G-BC	see Service manifolds, gauges and charging hoses
2802-G-BC/247	see Service manifolds, gauges and charging hoses
2802-G-BC/4	see Service manifolds, gauges and charging hoses
2802-G-BC/447	see Service manifolds, gauges and charging hoses
2802-G-BPC	see Service manifolds, gauges and charging hoses
2804-BC	see Service manifolds, gauges and charging hoses
2804-BC/247	see Service manifolds, gauges and charging hoses
2804-BC/27	see Service manifolds, gauges and charging hoses
2804-BC/4	see Service manifolds, gauges and charging hoses
2804-BC/447	see Service manifolds, gauges and charging hoses
2804-BPC	see Service manifolds, gauges and charging hoses
2804-G-BC	see Service manifolds, gauges and charging hoses

[illegible]

[illegible]

	Part. nr.	Pdf file		Part. nr.	Pdf file		Part. nr.	Pdf file
5240-159-08 5240-159-133 5240-16-10 5240-16-12 5240-16-14	see	Copper tubes, coils & solder fittings (Inch & Metric)	5243-42-15 5243-42-18 5243-42-22 5243-42-28 5243-42-35	see	Copper tubes, coils & solder fittings (Inch & Metric)	68481/TB 68481/TB 701501 74760 74770	see	Tube working tools
5240-16-15 5240-18-10 5240-18-12 5240-18-14 5240-18-15	see	Copper tubes, coils & solder fittings (Inch & Metric)	5243-54-22 5243-54-28 5243-54-35 5243-54-42 5243-64-35	see	Copper tubes, coils & solder fittings (Inch & Metric)	75020 75530 75540 77510 77520	see	Tube working tools
5240-18-16 5240-22-10 5240-22-12 5240-22-14 5240-22-15	see	Copper tubes, coils & solder fittings (Inch & Metric)	5243-64-42 5243-64-54 5243-67-35 5243-67-42 5243-67-54	see	Copper tubes, coils & solder fittings (Inch & Metric)	7885805 7885805 78931 789205 7931805	see	Tube working tools
5240-22-16 5240-22-18 5240-28-12 5240-28-14 5240-28-15	see	Copper tubes, coils & solder fittings (Inch & Metric)	5243-70-54 5243-70-64 5243-76-35 5243-76-42 5243-76-54	see	Copper tubes, coils & solder fittings (Inch & Metric)	7958301 7958301 7958301-HD 7958302 7958302	see	Service manifolds, gauges and charging hoses
5240-28-16 5240-28-18 5240-28-22 5240-35-15 5240-35-18	see	Copper tubes, coils & solder fittings (Inch & Metric)	5243-76-64 5243-76-70 5243-80-54 5243-80-64 5243-80-67	see	Copper tubes, coils & solder fittings (Inch & Metric)	7976105 7976107 800 801000 801001	see	Tube working tools
5240-35-22 5240-35-28 5240-42-18 5240-42-22 5240-42-28	see	Copper tubes, coils & solder fittings (Inch & Metric)	5243-89-76 525-F 525-F SP 5270-06 5270-08	see	Copper tubes, coils & solder fittings (Inch & Metric)	801003 801004 801005 801009 801010	see	Copper tubes, coils & solder fittings (Inch & Metric)
5240-42-35 5240-54-22 5240-54-28 5240-54-35 5240-54-42	see	Copper tubes, coils & solder fittings (Inch & Metric)	5270-10 5270-108 5270-12 5270-133 5270-14	see	Copper tubes, coils & solder fittings (Inch & Metric)	801011 801017 801019 801021 801022	see	Copper tubes, coils & solder fittings (Inch & Metric)
5240-64-35 5240-64-42 5240-64-54 5240-67-54 5240-70-54	see	Copper tubes, coils & solder fittings (Inch & Metric)	5270-15 5270-159 5270-16 5270-18 5270-22	see	Copper tubes, coils & solder fittings (Inch & Metric)	801023 801025 801027 801028 801029	see	Copper tubes, coils & solder fittings (Inch & Metric)
5240-70-64 5240-76-54 5240-76-64 5240-76-70 5240-80-54	see	Copper tubes, coils & solder fittings (Inch & Metric)	5270-28 5270-35 5270-42 5270-54 5270-64	see	Copper tubes, coils & solder fittings (Inch & Metric)	801030 801031 801034 801035 801036	see	Copper tubes, coils & solder fittings (Inch & Metric)
5240-80-64 5240-80-70 5240-80-76 5240-89-76 5243-08-06	see	Copper tubes, coils & solder fittings (Inch & Metric)	5270-67 5270-70 5270-76 5270-80 5270-89	see	Copper tubes, coils & solder fittings (Inch & Metric)	801037 801038 801040 801047 801049	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-10-06 5243-10-08 5243-108-54 5243-108-64 5243-108-76	see	Copper tubes, coils & solder fittings (Inch & Metric)	5270S-12 5270S-15 5270S-18 5270S-22 5270S-28	see	Copper tubes, coils & solder fittings (Inch & Metric)	801050 801051 801052 801055 801056	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-108-89 5243-12-06 5243-12-08 5243-12-10 5243-133-108	see	Copper tubes, coils & solder fittings (Inch & Metric)	5270S-35 5270S-42 5270S-54 5301-10 5301-108	see	Copper tubes, coils & solder fittings (Inch & Metric)	801058 801060 801062 801063 801064	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-133-76 5243-133-89 5243-14-10 5243-14-12 5243-15-08	see	Copper tubes, coils & solder fittings (Inch & Metric)	5301-12 5301-14 5301-15 5301-16 5301-18	see	Copper tubes, coils & solder fittings (Inch & Metric)	801065 801067 801069 801072 801073	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-15-10 5243-15-12 5243-15-14 5243-159-108 5243-159-133	see	Copper tubes, coils & solder fittings (Inch & Metric)	5301-22 5301-28 5301-35 5301-42 5301-54	see	Copper tubes, coils & solder fittings (Inch & Metric)	801074 801075 801077 801079 801082	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-16-10 5243-16-12 5243-16-14 5243-16-15 5243-18-10	see	Copper tubes, coils & solder fittings (Inch & Metric)	5301-64 5301-67 5301-76 5301-89 536-C02	see	Copper tubes, coils & solder fittings (Inch & Metric)	801083 801084 801085 801086 801092	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-18-12 5243-18-14 5243-18-15 5243-18-16 5243-22-10	see	Copper tubes, coils & solder fittings (Inch & Metric)	536-C02 536-C16 536-C16 536-C35 536-C35	see	Service manifolds, gauges and charging hoses	801093 801094 801095 801105 801106	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-22-12 5243-22-14 5243-22-15 5243-22-16 5243-22-18	see	Copper tubes, coils & solder fittings (Inch & Metric)	540 623-BC/247 623-BC/410 623-BC/447 623-BPC	see	Inline components and accessories	801107 801109 801110 801113 801114	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-28-12 5243-28-14 5243-28-15 5243-28-16 5243-28-18	see	Copper tubes, coils & solder fittings (Inch & Metric)	623-WG 625-BC/247 625-BC/410 625-BC/447 625-BPC	see	Service manifolds, gauges and charging hoses	801115 801116 801123 801124 801125	see	Copper tubes, coils & solder fittings (Inch & Metric)
5243-28-22 5243-35-15 5243-35-18 5243-35-22 5243-35-28	see	Copper tubes, coils & solder fittings (Inch & Metric)	625-WG 627-VRP 627-VRP 66914 66914	see	Service manifolds, gauges and charging hoses	801126 801129 801130 801131 801132	see	Copper tubes, coils & solder fittings (Inch & Metric)

[illegible]

[illegible]

[illegible]

- 7 -

Part. nr.	Pdf file
CRISTAL CLEAR	see Service manifolds, gauges and charging hoses
CRISTAL CLEAR	see Service manifolds, gauges and charging hoses
CRPEN	see Electronic measurement and control instruments
CRPENB	see Electronic measurement and control instruments
CRPENB	see Electronic measurement and control instruments
CRPENR	see Electronic measurement and control instruments
CRPENR	see Electronic measurement and control instruments
CRX-02	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-03	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-02	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-03	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-16	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-20	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CRX-S-24	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
CSL-144-S	see Fluid control components
CSL-145-S	see Fluid control components
CSL-146-S	see Fluid control components
CSL-147-S	see Fluid control components
CSL-149-S	see Fluid control components
CST-080	see Electronic measurement and control instruments
CST-120	see Electronic measurement and control instruments
CT-34	see Service manifolds, gauges and charging hoses
CT-ACP	see Refrigeration accessories
CTP-1	see Tube working tools
CV-1G	see Automatic access valves & fittings
CV-2G	see Automatic access valves & fittings
CV-3G	see Automatic access valves & fittings
CW08-22	see Tube working tools
CW08-32	see Tube working tools
CW10-22	see Tube working tools
D02050	see Copper tubes, coils & solder fittings (Inch & Metric)
D03050	see Copper tubes, coils & solder fittings (Inch & Metric)
D04050	see Copper tubes, coils & solder fittings (Inch & Metric)
D05050	see Copper tubes, coils & solder fittings (Inch & Metric)
D06050	see Copper tubes, coils & solder fittings (Inch & Metric)
D08050	see Copper tubes, coils & solder fittings (Inch & Metric)
D-1 (WS-33)	see Refrigeration accessories
D10050	see Copper tubes, coils & solder fittings (Inch & Metric)
D12050	see Copper tubes, coils & solder fittings (Inch & Metric)
D14050	see Copper tubes, coils & solder fittings (Inch & Metric)
D18050	see Copper tubes, coils & solder fittings (Inch & Metric)
D22050	see Copper tubes, coils & solder fittings (Inch & Metric)
D26050	see Copper tubes, coils & solder fittings (Inch & Metric)
DB-009	see Refrigeration accessories
DB-061	see Refrigeration accessories
DB-152	see Refrigeration accessories
DB-157	see Refrigeration accessories
DB-162	see Refrigeration accessories
DC-5150	see Tube working tools
DETEX	see Refrigeration accessories
DGT-1415C	see Electronic measurement and control instruments
DHC-0x09 mm	see Refrigeration accessories
DHC-0x09/1M	see Refrigeration accessories
DLC-040	see Electronic measurement and control instruments
DLC-040-E	see Electronic measurement and control instruments
DLC-052	see Electronic measurement and control instruments
DLC-060	see Electronic measurement and control instruments
DLC-080	see Electronic measurement and control instruments
DLC-080-E	see Electronic measurement and control instruments
DLC-120	see Electronic measurement and control instruments
DLC-120-E	see Electronic measurement and control instruments
DLC-160	see Electronic measurement and control instruments
DLC-160-E	see Electronic measurement and control instruments
DLC-200	see Electronic measurement and control instruments
DLC-240	see Electronic measurement and control instruments
DLC-240-E	see Electronic measurement and control instruments
DLC-320	see Electronic measurement and control instruments
DLC-360	see Electronic measurement and control instruments
DLC-400	see Electronic measurement and control instruments
DM-120C	see Electronic measurement and control instruments
DM-1676	see Fluid control components
DM-1677	see Fluid control components
DM-1678	see Fluid control components
DM-1679	see Fluid control components
DMF-S-02	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-03	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-16	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-20	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DMF-S-24	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
DPS-300C	see Electronic measurement and control instruments

- 9 -

Part. nr.	Pdf file
HC-2341-1	see Electronic measurement and control instruments
HC-2341-150	see Electronic measurement and control instruments
HC-234-150	see Electronic measurement and control instruments
HC-2341-50	see Electronic measurement and control instruments
HC-234-50	see Electronic measurement and control instruments
HCT-212	see Tube working tools
HCT-B	see Tube working tools
HCTK-239	see Electronic measurement and control instruments
HCT-P	see Tube working tools
HCT-S	see Tube working tools
HDA-120-B	see Service manifolds, gauges and charging hoses
HDA-120-R	see Service manifolds, gauges and charging hoses
HDA-120-Y	see Service manifolds, gauges and charging hoses
HDA-36-B	see Service manifolds, gauges and charging hoses
HDA-36-R	see Service manifolds, gauges and charging hoses
HDA-36-Y	see Service manifolds, gauges and charging hoses
HDA-60-B	see Service manifolds, gauges and charging hoses
HDA-60-R	see Service manifolds, gauges and charging hoses
HDA-60-Y	see Service manifolds, gauges and charging hoses
HDA-60-Y/410	see Service manifolds, gauges and charging hoses
HDA-60-B	see Service manifolds, gauges and charging hoses
HDA-60-R	see Service manifolds, gauges and charging hoses
HDA-60-R/410	see Service manifolds, gauges and charging hoses
HDA-60-Y	see Service manifolds, gauges and charging hoses
HDA-60-Y/410	see Service manifolds, gauges and charging hoses
HDA-72-B	see Service manifolds, gauges and charging hoses
HDA-72-R	see Service manifolds, gauges and charging hoses
HDA-72-Y	see Service manifolds, gauges and charging hoses
HDCS-36-B/410/V	see Service manifolds, gauges and charging hoses
HDCS-36-R/410/V	see Service manifolds, gauges and charging hoses
HDS-120-B/V	see Service manifolds, gauges and charging hoses
HDS-120-R/V	see Service manifolds, gauges and charging hoses
HDS-120-Y/V	see Service manifolds, gauges and charging hoses
HDS-12-B/V	see Service manifolds, gauges and charging hoses
HDS-12-R	see Service manifolds, gauges and charging hoses
HDS-12-R/V	see Service manifolds, gauges and charging hoses
HDS-12-Y	see Service manifolds, gauges and charging hoses
HDS-12-Y/V	see Service manifolds, gauges and charging hoses
HDS-36-B/V	see Service manifolds, gauges and charging hoses
HDS-36-R/V	see Service manifolds, gauges and charging hoses
HDS-36-Y/V	see Service manifolds, gauges and charging hoses
HDS-60-B/V	see Service manifolds, gauges and charging hoses
HDS-60-R/V	see Service manifolds, gauges and charging hoses
HDS-60-Y/V	see Service manifolds, gauges and charging hoses
HDS-60-Y/V	see Service manifolds, gauges and charging hoses
HDS-60-Y/V	see Service manifolds, gauges and charging hoses
HDS6-12-B/V	see Service manifolds, gauges and charging hoses
HDS6-12-R/V	see Service manifolds, gauges and charging hoses
HDS6-12-Y/V	see Service manifolds, gauges and charging hoses
HDS6-36-B	see Service manifolds, gauges and charging hoses
HDS6-36-B/V	see Service manifolds, gauges and charging hoses
HDS6-36-R	see Service manifolds, gauges and charging hoses
HDS6-36-R/V	see Service manifolds, gauges and charging hoses
HDS6-36-Y	see Service manifolds, gauges and charging hoses
HDS6-36-Y/V	see Service manifolds, gauges and charging hoses
HDS6-60-B	see Service manifolds, gauges and charging hoses
HDS6-60-B/V	see Service manifolds, gauges and charging hoses
HDS6-60-R	see Service manifolds, gauges and charging hoses
HDS6-60-R/V	see Service manifolds, gauges and charging hoses
HDS6-60-Y	see Service manifolds, gauges and charging hoses
HDS6-60-Y/V	see Service manifolds, gauges and charging hoses
HDS6-72-B	see Service manifolds, gauges and charging hoses
HDS6-72-B/V	see Service manifolds, gauges and charging hoses
HDS6-72-R	see Service manifolds, gauges and charging hoses
HDS6-72-R/V	see Service manifolds, gauges and charging hoses
HDS6-72-Y	see Service manifolds, gauges and charging hoses
HDS6-72-Y/V	see Service manifolds, gauges and charging hoses
HDS-72-B/V	see Service manifolds, gauges and charging hoses
HDS-72-R/V	see Service manifolds, gauges and charging hoses
HDS-72-Y/V	see Service manifolds, gauges and charging hoses
HER-319	see Fluid control components
HNS4-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
HNS4-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
HNS4-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
HNS4-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
HNS4-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
HP-3700	see Fluid control components
HP-3701	see Fluid control components
HP-3702	see Fluid control components
HP-3703	see Fluid control components
HP-3704	see Fluid control components
HP-3706	see Fluid control components
HP-3738	see Fluid control components
HPBV-04P	see Fluid control components
HPBV-06MMP	see Fluid control components
HPBV-06P	see Fluid control components
HPBV-08P	see Fluid control components
HPBV-10MMP	see Fluid control components
HPBV-10P	see Fluid control components
HPBV-12MMP	see Fluid control components
HPBV-12P	see Fluid control components
HPBV-14P	see Fluid control components
HPBV-16MMP	see Fluid control components
HPBV-18P	see Fluid control components
HPBV-19MMP	see Fluid control components
HPBV-22MMP	see Fluid control components

Part. nr.		Pdf file
MF-1150C-048U	see	Fluid control components
MF-1150C-230U	see	Fluid control components
MF-1360C-110U	see	Fluid control components
MF-1900C-024U	see	Fluid control components
MF-4	see	Evacuating and charging equipment
MF-4+LP-4	see	Evacuating and charging equipment
MFF-S-02	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-03	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-04	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-06	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-08	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-10	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-12	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-16	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-20	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-24	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MFF-S-32	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-HDL-12-B	see	Service manifolds, gauges and charging hoses
M-HDL-12-R	see	Service manifolds, gauges and charging hoses
M-HDL-12-Y	see	Service manifolds, gauges and charging hoses
M-HDL-6	see	Evacuating and charging equipment
M-HDL-6-B	see	Service manifolds, gauges and charging hoses
M-HDL-6-R	see	Service manifolds, gauges and charging hoses
MI-CAP	see	Fluid control components
MIR-1	see	Service manifolds, gauges and charging hoses
MIR-1	see	Tube working tools
MIR-1R	see	Tube working tools
MIR-2	see	Tube working tools
MIR-2	see	Service manifolds, gauges and charging hoses
MIR-2R	see	Tube working tools
MIR-3	see	Tube working tools
MIR-3R	see	Tube working tools
MIR-4	see	Tube working tools
MIR-4R	see	Tube working tools
MIR-5	see	Tube working tools
MIR-5R	see	Tube working tools
MK-040-DS	see	Evacuating and charging equipment
MK-060-DS	see	Evacuating and charging equipment
MK-120-DS	see	Evacuating and charging equipment
MK-180-DS	see	Evacuating and charging equipment
MK-240-DS	see	Evacuating and charging equipment
MK-280-DS	see	Evacuating and charging equipment
M-MM-02	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-03	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-04	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-06	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-08	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-10	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-12	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
M-MM-16	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MMS-200	see	Fluid control components
MMS-80	see	Fluid control components
MP-02	see	Refrigeration accessories
MP-02C	see	Refrigeration accessories
MP-03	see	Refrigeration accessories
MP-03C	see	Refrigeration accessories
MP-04	see	Refrigeration accessories
MP-04C	see	Refrigeration accessories
MP-06	see	Refrigeration accessories
MP-06C	see	Refrigeration accessories
MP-08	see	Refrigeration accessories
MP-08C	see	Refrigeration accessories
MP-12	see	Refrigeration accessories
MP-12C	see	Refrigeration accessories
MP-18	see	Refrigeration accessories
MP-18C	see	Refrigeration accessories
MPF-M10	see	Refrigeration accessories
MPF-M12	see	Refrigeration accessories
MPF-M16	see	Refrigeration accessories
MPR-M08	see	Refrigeration accessories
MPR-M10	see	Refrigeration accessories
MPR-M12	see	Refrigeration accessories
MPR-M16	see	Refrigeration accessories
MR-14-BH	see	Service manifolds, gauges and charging hoses
MR-14-RH	see	Service manifolds, gauges and charging hoses
MR-14-VK	see	Service manifolds, gauges and charging hoses
MR-14-VS	see	Service manifolds, gauges and charging hoses
MR-MM-032	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-042	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-043	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-064	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-082	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-084	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-086	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-106	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MR-MM-108	see	Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MS-04	see	Fluid control components
MS-06	see	Fluid control components
MS-08	see	Fluid control components
MS-10	see	Fluid control components
MS-12	see	Fluid control components
MS-14	see	Fluid control components
MS-18	see	Fluid control components
MS-22	see	Fluid control components
MS-26	see	Fluid control components

Part. nr.	Pdf file
MS-34	see Fluid control components
MSK-08	see Tube working tools
MSSK-26	see Tube working tools
MT-02	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-03	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-16	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-20	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MT-24	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MTS-04	see Fluid control components
MTS-06	see Fluid control components
MTU-06	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-08	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-10	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-12	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-15	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-16	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-18	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-22	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-28	see Copper tubes, coils & solder fittings (Inch & Metric)
MTU-35	see Copper tubes, coils & solder fittings (Inch & Metric)
MULTI-R-COMBI/V2	see Evacuating and charging equipment
MV-0077	see Automatic access valves & fittings
MV-0099	see Automatic access valves & fittings
MV-0101	see Automatic access valves & fittings
MV-0111	see Automatic access valves & fittings
MV-1010	see Automatic access valves & fittings
MV-1050	see Automatic access valves & fittings
MV-1060	see Automatic access valves & fittings
MV-1090	see Automatic access valves & fittings
MV-1200	see Automatic access valves & fittings
MV-1212	see Automatic access valves & fittings
MV-1414	see Automatic access valves & fittings
MV-1414C	see Automatic access valves & fittings
MV-1428	see Automatic access valves & fittings
MV-1438	see Automatic access valves & fittings
MV-1440	see Automatic access valves & fittings
MV-1441	see Automatic access valves & fittings
MV-1444	see Automatic access valves & fittings
MV-1446	see Automatic access valves & fittings
MV-1454	see Automatic access valves & fittings
MV-1777	see Automatic access valves & fittings
MV-1808	see Automatic access valves & fittings
MV-1818	see Automatic access valves & fittings
MV-1818C	see Automatic access valves & fittings
MV-2000	see Automatic access valves & fittings
MV-2010	see Automatic access valves & fittings
MV-2010 (QC-E4)	see Automatic access valves & fittings
MV-2012	see Automatic access valves & fittings
MV-2014	see Automatic access valves & fittings
MV-2018	see Automatic access valves & fittings
MV-2019	see Automatic access valves & fittings
MV-2020	see Automatic access valves & fittings
MV-2022	see Automatic access valves & fittings
MV-2022	see Automatic access valves & fittings
MV-2024	see Automatic access valves & fittings
MV-2028	see Automatic access valves & fittings
MV-2035	see Automatic access valves & fittings
MV-2037	see Automatic access valves & fittings
MV-2038	see Automatic access valves & fittings
MV-2041	see Automatic access valves & fittings
MV-2050	see Automatic access valves & fittings
MV-2060	see Automatic access valves & fittings
MV-2070	see Automatic access valves & fittings
MV-2070	see Automatic access valves & fittings
MV-2090	see Automatic access valves & fittings
MV-2094	see Automatic access valves & fittings
MV-2098	see Automatic access valves & fittings
MV-2120	see Automatic access valves & fittings
MV-2140	see Automatic access valves & fittings
MV-2160	see Automatic access valves & fittings
MV-2210	see Automatic access valves & fittings
MV-2215	see Automatic access valves & fittings
MV-2216	see Automatic access valves & fittings
MV-2219	see Automatic access valves & fittings
MV-2220	see Automatic access valves & fittings
MV-2225	see Automatic access valves & fittings
MV-2235	see Automatic access valves & fittings
MV-2243	see Automatic access valves & fittings
MV-2245	see Automatic access valves & fittings
MV-2245	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
MV-2250	see Automatic access valves & fittings
MV-2380	see Automatic access valves & fittings
MV-2500	see Automatic access valves & fittings
MV-2525	see Automatic access valves & fittings
MV-2540	see Automatic access valves & fittings
MV-2541	see Automatic access valves & fittings
MV-2542	see Automatic access valves & fittings
MV-2580	see Automatic access valves & fittings
MV-2594	see Automatic access valves & fittings
MV-2595	see Automatic access valves & fittings

[illegible][illegible]

Part. nr.	Pdf file
QCS-5/16x1/4	see Service manifolds, gauges and charging hoses
QCS-5/16x1/4	see Automatic access valves & fittings
QC-S64	see Automatic access valves & fittings
QVA-03	see Automatic access valves & fittings
QVA-03	see Evacuating and charging equipment
QVA-03	see Service manifolds, gauges and charging hoses
QVA-05	see Evacuating and charging equipment
QVA-05	see Service manifolds, gauges and charging hoses
QVA-05	see Automatic access valves & fittings
QVA-103	see Automatic access valves & fittings
QVA-105	see Automatic access valves & fittings
QVA-SET	see Automatic access valves & fittings
QVA-SET1	see Automatic access valves & fittings
QWIKCHECK	see Refrigeration accessories
R-600A-BP	see Service manifolds, gauges and charging hoses
R-600A-HP	see Service manifolds, gauges and charging hoses
RA-500	see Electronic measurement and control instruments
RA-500P	see Electronic measurement and control instruments
RACK-06	see Tube working tools
RACK-08	see Tube working tools
RB-1	see Tube working tools
RB-4240	see Service manifolds, gauges and charging hoses
RB-4240	see Copper tubes, coils & solder fittings (Inch & Metric)
RCH-10	see Evacuating and charging equipment
RCH-10	see Evacuating and charging equipment
RCH-10	see Evacuating and charging equipment
RCH-10	see Refrigeration accessories
RCO-420	see Refrigeration accessories
RCYL-12L	see Evacuating and charging equipment
RCYL-30L	see Evacuating and charging equipment
RCYL-50L	see Evacuating and charging equipment
RED-FF-S-0021	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0032	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0042	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0043	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0062	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0063	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0064	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0082	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0083	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0084	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0086	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0102	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0103	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0104	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0106	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0108	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0122	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0123	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0124	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0126	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0128	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0162	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0163	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0164	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0166	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0168	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-0208	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-1210	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-1612	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-2012	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-2016	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-2412	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-2416	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-FF-S-2420	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0032	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0042	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0043	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0062	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0064	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0084	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0086	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0106	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0108	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-0128	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-1210	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0032	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0042	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0043	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0062	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0063	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0064	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0082	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0083	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0084	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0086	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0104	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0106	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0108	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0122	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0123	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0124	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0126	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0128	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
RED-MF-S-0164	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"

Part. nr.	Pdf file
SUNISO-4GS-20	see Refrigeration accessories
SUNISO-5G-04	see Refrigeration accessories
SUNISO-SL32-04	see Refrigeration accessories
SUPER-3790	see Refrigeration accessories
SUPER-947	see Refrigeration accessories
SV2W-38/110	see Evacuating and charging equipment
SV2W-38/220	see Evacuating and charging equipment
SV2W-38/627-VRP-110	see Evacuating and charging equipment
SV2W-38/627-VRP-220	see Evacuating and charging equipment
SWM-4D-41	see Tube working tools
T1-04A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-04B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-04C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-06B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-06C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-08C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-08D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-10C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T1-10D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T2-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T2-05	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T2-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T2-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T2-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T2-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3-04A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3-04B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3-06B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3-08D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3-10D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3-12E	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-02	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-03	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-16	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-02	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-03	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-04	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-06	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-08	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-10	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-12	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-16	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-20	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
T3F-S-24	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
TE-6	see Forged brass & steel fittings "NPT" & "NPT 45" SAE
TAHL-5	see Electronic measurement and control instruments
TB-03	see Tube working tools
TB-06	see Tube working tools
TB-06	see Service manifolds, gauges and charging hoses
TB-16	see Tube working tools
TB-16	see Service manifolds, gauges and charging hoses
TB-364-04	see Tube working tools
TB-364-05/8mm	see Tube working tools
TB-364-05/8mm	see Tube working tools
TB-364-06	see Tube working tools
TB-364-06mm	see Tube working tools
TB-364-08	see Tube working tools
TB-364-10	see Tube working tools
TB-364-10mm	see Tube working tools
TB-364-12	see Tube working tools
TB-364-12/H	see Tube working tools
TB-364-12mm	see Tube working tools
TB-364-15mm	see Tube working tools
TB-364-16mm	see Tube working tools
TC-0316	see Tube working tools
TC-0316-H	see Tube working tools
TC-0328	see Tube working tools
TC-0328-H	see Tube working tools
TC-0432-ZR	see Tube working tools
TC-0432-ZRH	see Tube working tools
TC-0638-R	see Tube working tools
TC-0638-RH	see Tube working tools
TC-1000	see Tube working tools
TC-1000-SP	see Tube working tools
TC-10168-Z	see Tube working tools
TC-10168-ZC	see Tube working tools
TC-1020	see Tube working tools
TC-1050	see Tube working tools
TC-1050-SP	see Tube working tools
TC-127	see Service manifolds, gauges and charging hoses
TC-127	see Tube working tools
TC-2050	see Tube working tools
TC-206	see Tube working tools
TC-274	see Service manifolds, gauges and charging hoses
TC-274	see Service manifolds, gauges and charging hoses
TC-274	see Tube working tools
TC-274	see Service manifolds, gauges and charging hoses
TC-307	see Service manifolds, gauges and charging hoses
TC-307	see Tube working tools
TC-312	see Tube working tools

[illegible]

Part. nr.	Pdf file
VASC-10 mm	see Fluid control components
VASC-11	see Fluid control components
VASC-12 mm	see Fluid control components
VASC-16 mm	see Fluid control components
VASC-18 mm	see Fluid control components
VASC-22 mm	see Fluid control components
VASC-28 mm	see Fluid control components
VASC-35 mm	see Fluid control components
VASC-42 mm	see Fluid control components
VASC-54 mm	see Fluid control components
VASC-82	see Fluid control components
VASC-83	see Fluid control components
VASC-84	see Fluid control components
VASC-85	see Fluid control components
VASC-86	see Fluid control components
VG-10	see Tube working tools
VG-12	see Tube working tools
VG-12ING	see Tube working tools
VG-14	see Tube working tools
VG-14G	see Tube working tools
VG-14I	see Tube working tools
VG-15	see Tube working tools
VG-16	see Tube working tools
VG-17	see Tube working tools
VG-18	see Tube working tools
VG-19	see Tube working tools
VN—05-13/1056/V2	see Refrigeration accessories
VN—10-20/1103/V2	see Refrigeration accessories
VNT—18-30/46/V2	see Refrigeration accessories
VNT—25-40/25/V2	see Refrigeration accessories
VNT—34-45/25/V2	see Refrigeration accessories
VOC-10	see Tube working tools
VOC-10	see Fluid control components
VOC-15	see Tube working tools
VOC-15	see Fluid control components
VOC-18	see Tube working tools
VOC-18	see Fluid control components
VPC-40	see Evacuating and charging equipment
VPP-40	see Evacuating and charging equipment
VT-400	see Evacuating and charging equipment
W3-V-80	see Service manifolds, gauges and charging hoses
WA-1000	see Tube working tools
WB-1	see Tube working tools
WBO-100	see Refrigeration accessories
WBO-100N	see Refrigeration accessories
WBO-120	see Refrigeration accessories
WBO-120N	see Refrigeration accessories
WBO-150R	see Refrigeration accessories
WBO-250	see Refrigeration accessories
WBO-K10	see Refrigeration accessories
WBO-K10N	see Refrigeration accessories
WBO-K12	see Refrigeration accessories
WBO-K12N	see Refrigeration accessories
WBO-K15	see Refrigeration accessories
WBO-K15R	see Refrigeration accessories
WBO-K25	see Refrigeration accessories
WCP-010/230V	see Refrigeration accessories
WCP-020/230V	see Refrigeration accessories
WDT-128 BODY	see Electronic measurement and control instruments
WDT-128C	see Electronic measurement and control instruments
WDT-128R	see Electronic measurement and control instruments
WKL-5	see Tube working tools
WM-80-B	see Service manifolds, gauges and charging hoses
WM-80-R	see Service manifolds, gauges and charging hoses
WPP-9	see Tube working tools
WS-005	see Electronic measurement and control instruments
WS-005-1L-1/4	see Electronic measurement and control instruments
WS-005-1L-5/16	see Electronic measurement and control instruments
WS-005-1L-7/16	see Electronic measurement and control instruments
WS-055	see Electronic measurement and control instruments
WS-150	see Electronic measurement and control instruments
WS-30	see Evacuating and charging equipment
WS-AC	see Electronic measurement and control instruments
WS-AC-EU	see Electronic measurement and control instruments
WS-AC-UK	see Electronic measurement and control instruments
WS-AC-USA	see Electronic measurement and control instruments
WS-ASV	see Electronic measurement and control instruments
WT-389	see Electronic measurement and control instruments
WT-389/P	see Electronic measurement and control instruments
XLD-6050	see Electronic measurement and control instruments
XPC-06M	see Tube working tools
XPC-07I	see Tube working tools
XPC-T	see Tube working tools
ZERICE	see Refrigeration accessories
ZEROL-150-5L	see Refrigeration accessories