

# AUTOMATIC ACCESS VALVES & FITTINGS

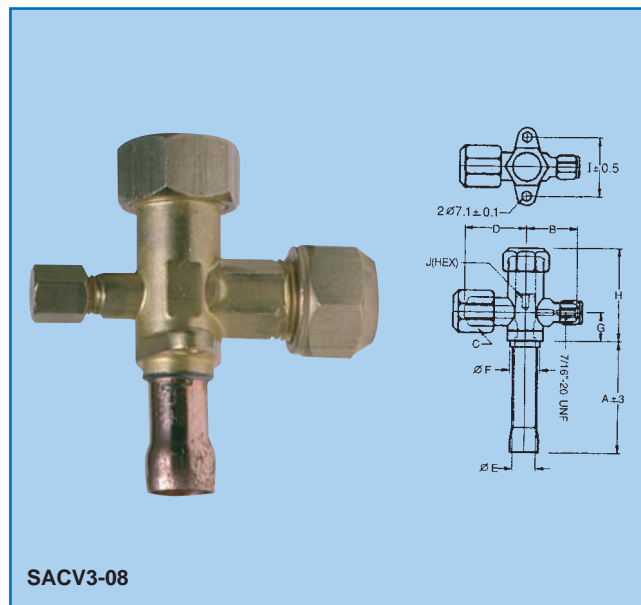


# PIERCING VALVES

## SPLIT AIR CONDITIONER VALVE

<b>SACV2-04</b>	<b>2 WAY VALVE:</b> 1/4" inlet x 1/4" flare outlet
<b>SACV3-04</b>	<b>3 WAY VALVE:</b> 1/4" inlet x 1/4" flare outlet with 1/4" access valve
<b>SACV3-06</b>	<b>3 WAY VALVE:</b> 3/8" inlet x 3/8" flare outlet with 1/4" access valve
<b>SACV3-08</b>	<b>3 WAY VALVE:</b> 1/2" inlet x 1/2" flare outlet with 1/4" access valve
<b>SACV3-10</b>	<b>3 WAY VALVE:</b> 5/8" inlet x 5/8" flare outlet with 1/4" access valve
<b>SACV3-12</b>	<b>3 WAY VALVE:</b> 3/4" inlet x 3/4" flare outlet with 1/4" access valve

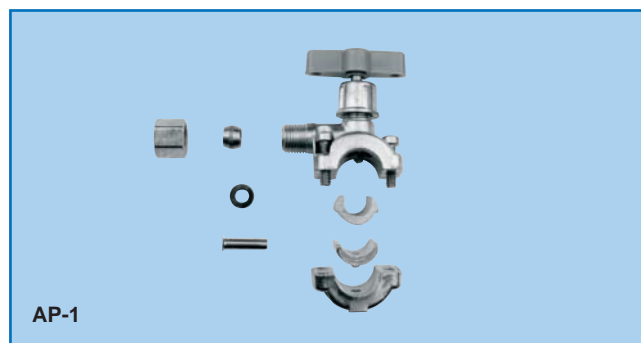
PART NUMBER	A	B	Ø Con.	D	E	F	G	H	I	J
<b>SACV2-04</b>	60	-	1/4" male SAE	28	6.5	10	17	42	38	4
<b>SACV3-04</b>	60	29	1/4" male SAE	28	6.5	10	17	42	38	4
<b>SACV3-06</b>	60	29	3/8" male SAE	28	9.6	12.7	17	43	38	4
<b>SACV3-08</b>	60	32	1/2" male SAE	33	12.8	15.4	17	52	38	5
<b>SACV3-10</b>	60	33	5/8" male SAE	38.5	16	19	19	58	38	5
<b>SACV3-12</b>	60	34	3/4" male SAE	45	19.2	22	25	68	44	6



## AP-1 AND AP-2 LINE TAP VALVE WITH ADJUSTABLE FLOW CONTROL

<b>AP-1</b>	For 3/16", 1/4", 5/16" and 3/8" tube O.D.
<b>AP-2</b>	For 3/8", 1/2" and 5/8" tube O.D.

- **AP-1** and **AP-2** line tap valves with valve handle control for charging, discharging and testing refrigeration and A/C systems.
- Easily attached with three Philips head screws, may be installed under pressure, in any position.
- Easy to grip, celcon **T handle**.
- Highly resilient, special compound seal.



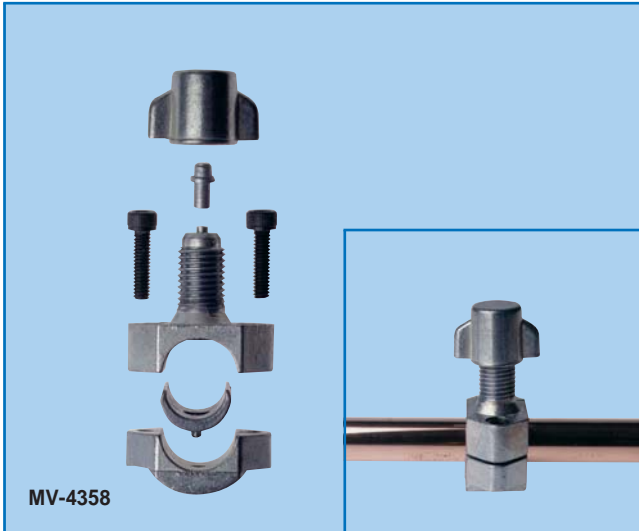
<b>LT-3G</b>	<b>CLAMP-ON</b> for 3/16" tube O.D.
<b>LT-4G</b>	<b>CLAMP-ON</b> for 1/4" tube O.D.
<b>LT-5G</b>	<b>CLAMP-ON</b> for 5/16" tube O.D.
<b>LT-6G</b>	<b>CLAMP-ON</b> for 3/8" tube O.D.
<b>LT-8G</b>	<b>CLAMP-ON</b> for 1/2" tube O.D.
<b>LT-10G</b>	<b>CLAMP-ON</b> for 5/8" tube O.D.
<b>CV-1G</b>	Standard Flow Control for <b>LT-VALVES</b>
<b>CV-2G</b>	2 Way Flow Control for <b>LT-VALVES</b>
<b>CV-3G</b>	De luxe Flow Control for <b>LT-VALVES</b>

- A quick, safe, inexpensive "**CLAMP-ON**" tapping valve for charging, discharging and testing. Seals at 3 points: Taper of needle, seal, and cap. Highly resilient special compound seal eliminates leakage problems. Line piercing and "**FLOW CONTROL**" are accomplished by using a **GOLD SEAL SWIVEL CONTROL VALVE**.

<b>LT:</b>	<b>"CLAMP-ON"</b> this control valve operates all <b>gold seal line tap valves</b> . Connected without wrenches, the control valve swivels to any position and may be removed and reused.
<b>CV-1G:</b>	<b>VALVE:</b> control valve features a port for connecting charging lines or gauges.
<b>CV-2G:</b>	<b>VALVE:</b> control valve has a double port for connecting charging hose to one port and gauges to the other. A cap is included to seal one port when both ports are not in use.
<b>CV-3G:</b>	<b>"DE LUXE VALVE"</b> features a threaded valve stem, eliminating the possibility of pistoning while under pressure. The knurled nut coupled with the hex nut locks stem in place.



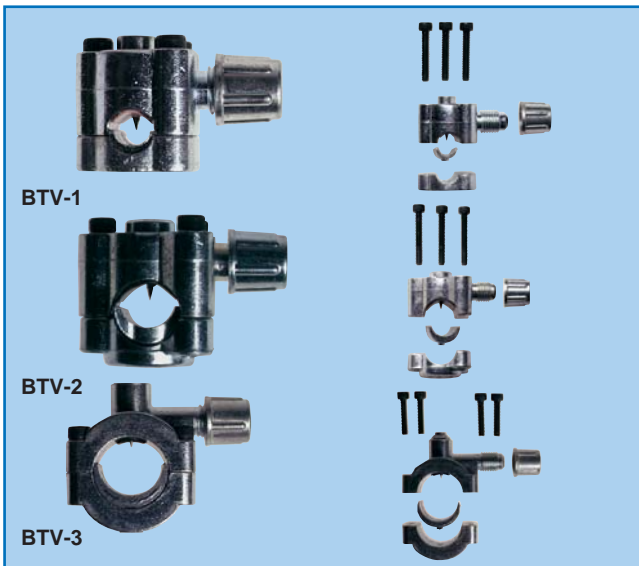




## LINE TAP VALVES

<b>MV-4338 (A-1)</b>	For 1/4", 5/16" and 3/8" tube O.D.
<b>MV-4358 (A-2)</b>	For 1/2" and 5/8" tube O.D.
<b>A-3</b>	For 3/16" and 1/4" tube O.D.

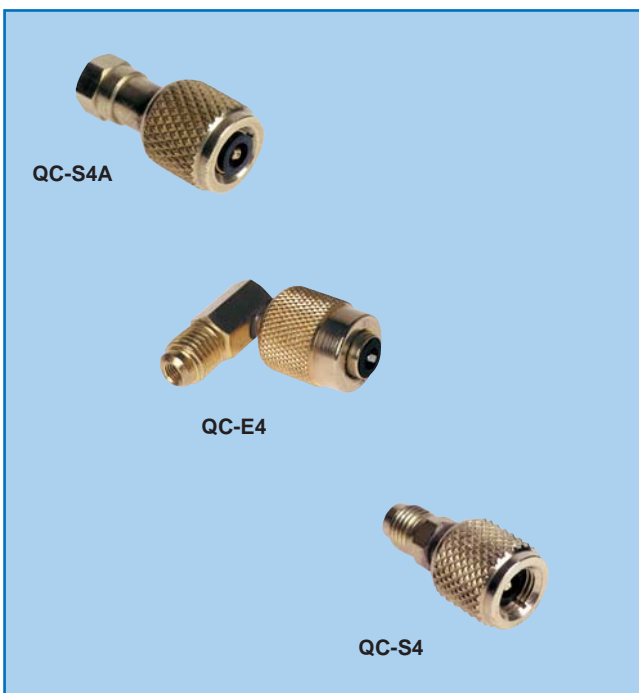
- Depressor valve for direct charging, hose connection makes it easier to use.
- No need to open and close a valve. The valve automatically closes when you remove the charging hose. The exclusive disappearing piercing needle retracts, so there is no restriction in the line while the system is in normal operation.
- Easy to install; valve is clamped to the line by two socket-head screws. hex wrench provided with each valve. Threading the wing cap on with the depressor pin pierces the line. When the wing cap is removed the valve closes, the line is pierced and ready for connection of a charging hose.
- Fast installation.
- Line piercing is simplified with throw-away depressor pin.
- Highly resilient special compound seals combined with single port design, eliminate leakage problems.
- Three models adjustable from 3/16" to 5/8" O.D. tubing.



## LINE TAP VALVES WITH FLOW CONTROL

<b>BTV-1</b>	<b>LINE TAP</b> for 1/4", 5/16" and 3/8" tube O.D.
<b>BTV-2</b>	<b>LINE TAP</b> for 1/2" and 5/8" tube O.D.
<b>BTV-3</b>	<b>LINE TAP</b> for 3/4" and 7/8" tube O.D.

- The standard "CLAMP-ON" valve, clamps to copper tube with three socket head screws and seals to the tube with an "O" ring, imbedded in the body of the valve.
- Hex wrench is included with each valve for tightening clamping screws, turning in piercing needle and opening and closing valve.



## SWIVEL DEPRESSOR ADAPTERS

- These QUICK SWIVEL ADAPTERS are used for monitoring system pressure anywhere in refrigeration or air-conditioning systems where there is a standard ACCESS VALVE.
- Knurled swivel end (90° or straight) has a standard CORE-DEPRESSOR and mates with all ACCESS VALVES.

<b>QC-S4A</b>	<b>STRAIGHT ADAPTER:</b> 1/8" NPT female pipe x 1/4" female flare SAE swivel nut
<b>QC-S4B</b>	<b>STRAIGHT ADAPTER:</b> 1/4" NPT female pipe x 1/4" female flare SAE swivel nut
<b>MV-2010 (QC-E4)</b>	<b>90° ADAPTER:</b> 1/4" male flare SAE x 1/4" female flare SAE swivel nut
<b>QC-E64</b>	<b>90° ADAPTER:</b> 1/4" male flare SAE x 3/8" female flare SAE swivel nut. <b>PLEASE NOTE: without depressor</b>
<b>QC-S4</b>	<b>STRAIGHT ADAPTER:</b> 1/4" male flare SAE x 1/4" female flare SAE swivel nut
<b>QC-S46</b>	<b>STRAIGHT ADAPTER:</b> 3/8" male flare SAE x 1/4" female flare SAE swivel nut
<b>QC-S64</b>	<b>STRAIGHT ADAPTER:</b> 1/4" male flare SAE x 3/8" female flare SAE swivel nut <b>PLEASE NOTE: without depressor</b>

<b>QC-S2</b>	<b>AUTOMOTIVE ADAPTER KIT for R134a</b> 1/2" female swivel ACME x M14 female With 3 adapters: M14 male x 1/4" male flare M14 male x 1/2" male flare M14 male x 1/8" male flare
<b>QC-S4A-134a</b>	<b>AUTOMOTIVE ADAPTER:</b> 1/2" male ACME x 1/4" female flare SAE swivel nut
<b>QC-13445-134a</b>	<b>AUTOMOTIVE ADAPTER:</b> 1/4" male flare SAE x 1/2" female ACME swivel nut
<b>QC-2342</b>	<b>A/C TOOL SET</b> 1/4" male flare SAE x 3/16" female flare SAE swivel, straight, short flexible hose 1/4" male flare SAE x 3/16" female flare SAE swivel, elbow 1/4" male flare SAE x 1/8" female flare SAE fixed, straight, short flexible hose 1/4" male flare SAE x 1/8" female flare SAE swivel, elbow 1/4" male Flare SAE x 1/4" female flare SAE swivel, elbow
<b>QCS-5/16x1/4</b>	<b>STRAIGHT ADAPTER for R410A</b> 5/16" female flare SAE swivel with core depressor x 1/4" male flare SAE
<b>QCA-5/16x1/4</b>	<b>90° ANGLED ADAPTER for R410A</b> 5/16" female flare SAE swivel with core depressor x 1/4" male flare SAE



<b>CA-1</b>	<b>HAND OPERATED STEEL SERVICE VALVE</b> 1/4" male flare SAE x 1/4" female flare SAE swivel nut
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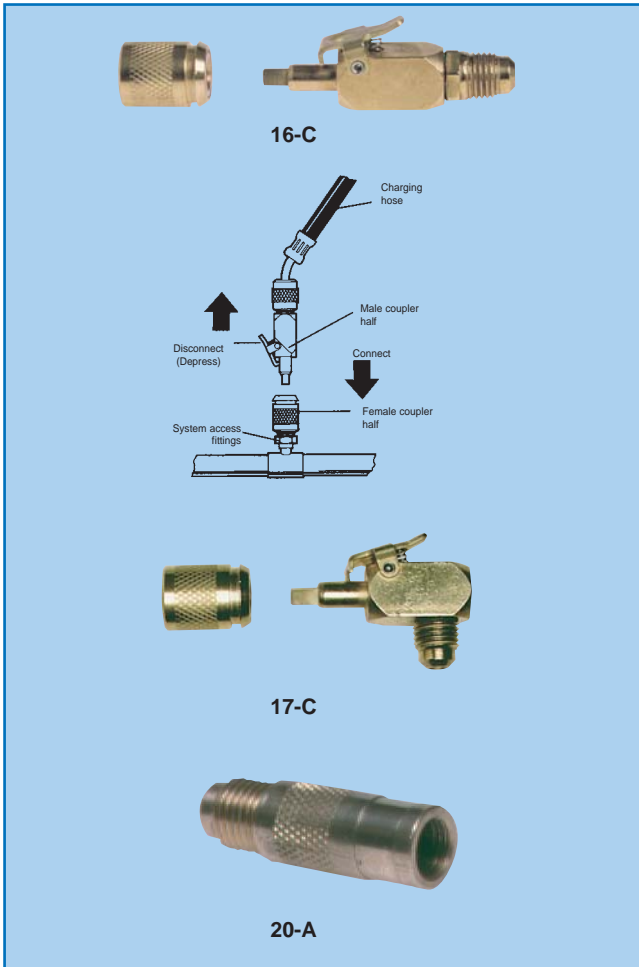
- This steel access control valve, **CA-1**, controls the flow of all 1/4" male flare depressor type valves. Valve is closed until valve handle is turned depressing the valve core. A purging port is provided for safety, allowing removal of charging hose without flash of refrigerant line can be purged through the purging port before opening the access valve.
- NOTE:** May also be used on refrigerant cylinders with depressor type valves.



## TAP-A-CAN VALVES

<b>BVS-1L</b>	<b>REFRIGERANT BOTTLE VALVE</b> 7/16 x 1/4 male flare SAE
<b>BVS-1L-WS-005-1/4 SAE bottle + 1/4" SAE</b>	<b>REFRIGERANT BOTTLE VALVE</b> 1/4 x 1/4 male flare SAE with core for WS-005
<b>BVS-1L-WS-005-5/16 SAE bottle + 1/4" SAE</b>	<b>REFRIGERANT BOTTLE VALVE</b> 5/16 x 1/4 male flare SAE with core for WS-005
<b>BVS-1L-WS-005-7/16 SAE bottle + 1/4" SAE</b>	<b>REFRIGERANT BOTTLE VALVE</b> 7/16 x 1/4 male flare SAE with core for WS-005





## SERVICE PORT QUICK COUPLERS

<b>16-C</b>	<b>STRAIGHT COUPLER</b> complete 1/4" SAE flare male x 1/4" SAE flare female
<b>17-C</b>	<b>90° ELBOW COUPLER</b> complete 1/4" SAE flare male x 1/4" SAE Flare female
<b>18-C</b>	<b>SET</b> couplers including 16-C + 17-C 1/4" SAE flare male x 1/4" SAE flare female
<b>19-C</b>	<b>SET</b> automotive couplers including 18-C + 20-A 1/4" SAE flare male x 1/4" + 3/16" SAE flare female
<b>20-A</b>	<b>ADAPTOR</b> automotive high-side 1/4" SAE flare male x 3/16" SAE flare female
<b>26-C</b>	<b>STRAIGHT COUPLER</b> complete 5/16" SAE flare male x 5/16" SAE flare female
<b>27-C</b>	<b>90° ELBOW COUPLER</b> complete 5/16" SAE flare male x 5/16" SAE Flare female

### ADVANTAGES:

- Automatic full depression of Core Valves without adjustment, regardless of core position. Coupler halves separately connect to Service Port Access Fitting and Hose end. The easy push/pull operation automatically opens or closes system without loss of costly refrigerant.
- Automatic shut-off of hose ends permits discharging of High-side hose pressure into Low-side hose through manifold. Eliminates hazardous discharge of refrigerant and oil from High-side of system when disconnecting hose. Hoses can be stored under slight overpressure, if required, in order to prevent contamination.
- Core Depressors in hose ends not necessary. **Speeds servicing** of systems with hand valves.

<b>KCK-M</b>	<b>KIT</b> of spare parts for couplers <b>16-C</b> , <b>17-C</b> , <b>18-C</b> , <b>19-C</b> containing: <b>2</b> threaded hex sleeves <b>2</b> stem assemblies with "O"-ring <b>2</b> retaining steel springs <b>1</b> tube of Loctite sealant <b>2</b> threaded sleeves <b>10</b> small lubricate o-rings <b>5</b> large o-rings for 3/16" coupler <b>5</b> gaskets
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<b>KCK-F</b>	<b>REPAIR KIT</b> for couplers <b>16-C</b> , <b>17-C</b> , <b>18-C</b> , <b>19-C</b> containing: <b>2</b> threaded sleeves <b>10</b> small lubricate o-rings <b>5</b> large o-rings for 3/16" coupler <b>5</b> gaskets
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## QUICK COUPLERS "HANSEN"

<b>QAA-04</b>	<b>ADAPTOR</b> for 1/4" ODS TUBING 1/4" NPT male x quick conn. for 1/4" ODS
<b>QAA-05</b>	<b>ADAPTOR</b> for 5/16" ODS TUBING 1/4" NPT male x quick conn. for 5/16" ODS
<b>QAA-06</b>	<b>ADAPTOR</b> for 3/8" ODS TUBING 1/4" NPT male x quick conn. for 3/8" ODS

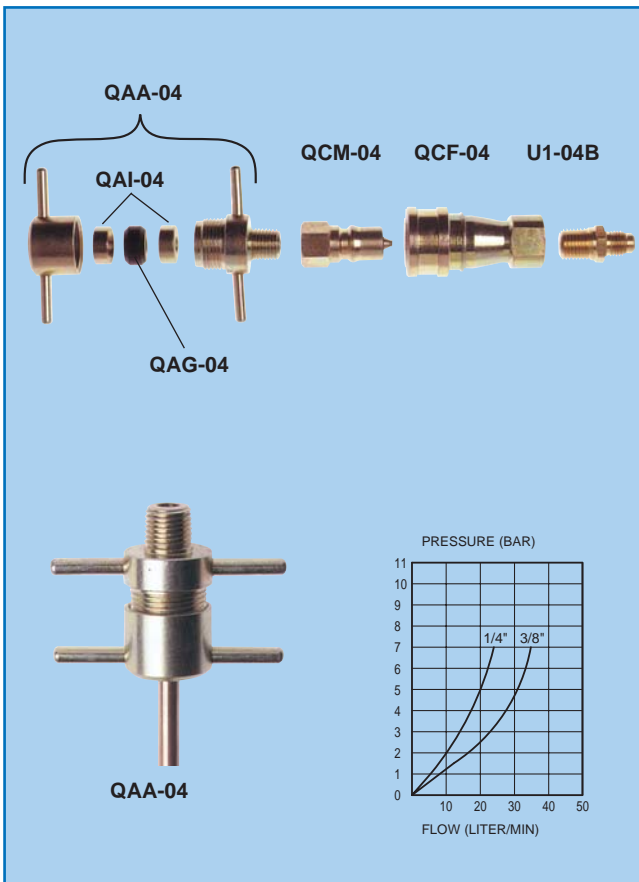
<b>QAI-04</b>	<b>ADAPTOR INSERT</b> 1/4" (6 mm) tube/hose O.D.
<b>QAI-05</b>	<b>ADAPTOR INSERT</b> 5/16" (8 mm) tube/hose O.D.
<b>QAI-06</b>	<b>ADAPTOR INSERT</b> 3/8" (9,5 mm) tube/hose O.D.

<b>QAG-04</b>	<b>ADAPTOR GASKET</b> 1/4" (6 mm) tube/hose O.D.
<b>QAG-05</b>	<b>ADAPTOR GASKET</b> 5/16" (8 mm) tube/hose O.D.
<b>QAG-06</b>	<b>ADAPTOR GASKET</b> 3/8" (9,5 mm) tube/hose O.D.

- Working pressure: 265 bar
- Temperature: -30°C to +90°C

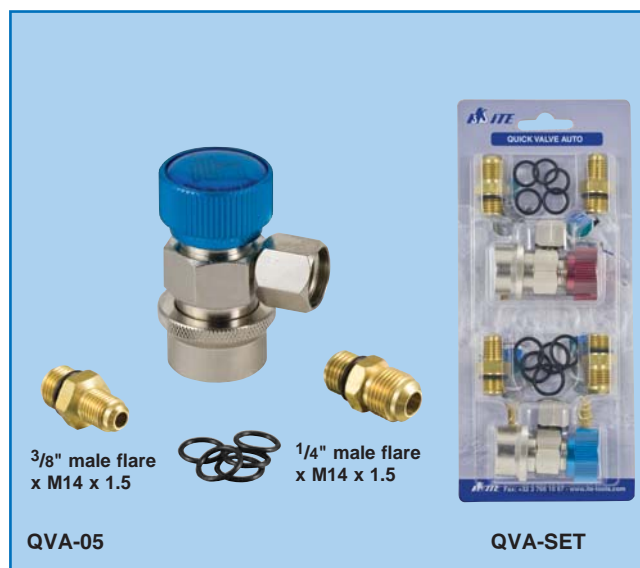
<b>QCF-04</b>	<b>COUPLER</b> half female x 1/4" female pipe (NPT)
<b>QCF-06</b>	<b>COUPLER</b> half female x 3/8" female pipe (NPT)

<b>QCM-04</b>	<b>COUPLER</b> half male x 1/4" female pipe (NPT)
<b>QCM-06</b>	<b>COUPLER</b> half male x 3/8" female pipe (NPT)



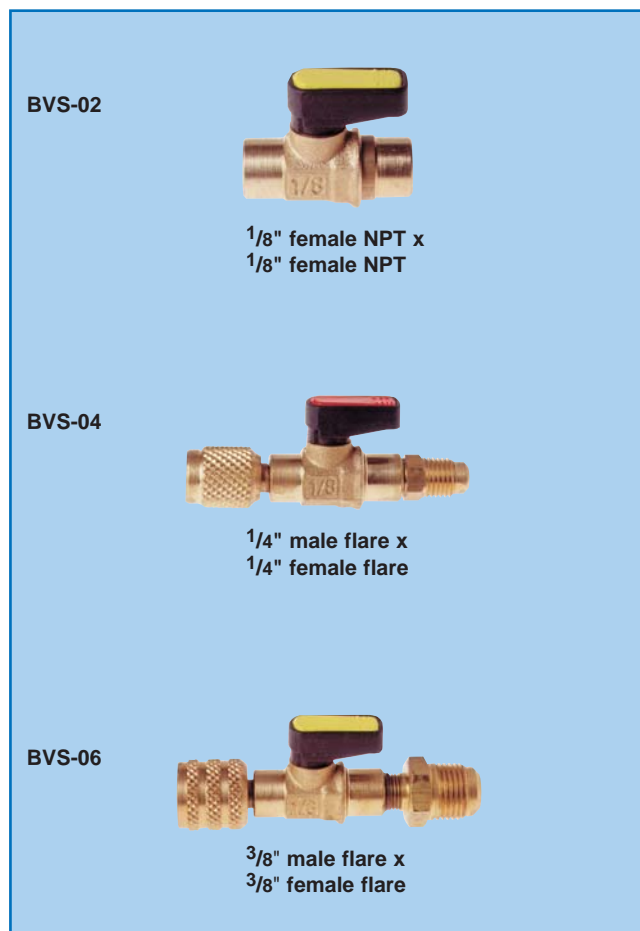
## "AUTOMOTIVE" QUICK COUPLERS R134a A/C SYSTEM APPLICATIONS

<b>QVA-03</b>	<b>COMPACT HIGH SIDE "AUTOMOTIVE" COUPLER VALVE</b> With 2 adapters: 3/8" male flare x M14 x 1.5 and 1/4" male flare x M14 x 1.5 and spare gaskets.
<b>QVA-05</b>	<b>COMPACT LOW SIDE "AUTOMOTIVE" COUPLER VALVE</b> With 2 adapters: 3/8" male flare x M14 x 1.5 and 1/4" male flare x M14 x 1.5 and spare gaskets.
<b>QVA-103</b>	<b>COMPACT HIGH SIDE "AUTOMOTIVE" COUPLER VALVE</b> with spare gaskets
<b>QVA-105</b>	<b>COMPACT LOW SIDE "AUTOMOTIVE" COUPLER VALVE</b> with spare gaskets
<b>QVA-SET</b>	<b>Set of 2 COUPLER VALVES</b> consisting of QVA-03 (High side) and QVA-05 (Low side)
<b>QVA-SET1</b>	<b>Set of 2 COUPLER VALVES</b> consisting of QVA-103 (High side) and QVA-105 (Low side)



## STRAIGHT BALL VALVES

<b>BVS-02B</b>	1/8" female NPT x 1/8" female NPT, blue
<b>BVS-02R</b>	1/8" female NPT x 1/8" female NPT, red
<b>BVS-02Y</b>	1/8" female NPT x 1/8" female NPT, yellow
<b>BVS-04B</b>	1/4" male flare SAE x 1/4" female flare SAE swivel, blue
<b>BVS-04R</b>	1/4" male flare SAE x 1/4" female flare SAE swivel, red
<b>BVS-04Y</b>	1/4" male flare SAE x 1/4" female flare SAE swivel, yellow
<b>BVS-06B</b>	3/8" male flare SAE x 3/8" female flare SAE swivel, blue
<b>BVS-06R</b>	3/8" male flare SAE x 3/8" female flare SAE swivel, red
<b>BVS-06Y</b>	3/8" male flare SAE x 3/8" female flare SAE swivel, yellow
<b>BVS-04-06B</b>	1/4" female flare SAE swivel x 3/8" male flare SAE, blue
<b>BVS-04-06R</b>	1/4" female flare SAE swivel x 3/8" male flare SAE, red
<b>BVS-04-06Y</b>	1/4" female flare SAE swivel x 3/8" male flare SAE, yellow
<b>BVS-05-04B</b>	5/16" female flare SAE swivel x 1/4" male flare SAE, blue
<b>BVS-05-04R</b>	5/16" female flare SAE swivel x 1/4" male flare SAE, red
<b>BVS-05-04Y</b>	5/16" female flare SAE swivel x 1/4" male flare SAE, yellow
<b>BVS-1/2-ACME/Y</b>	2 x 1/2-16 ACME, M x F swivel, yellow
<b>BVS-06B-M14</b>	3/8" male flare SAE x M14 Female swivel, blue

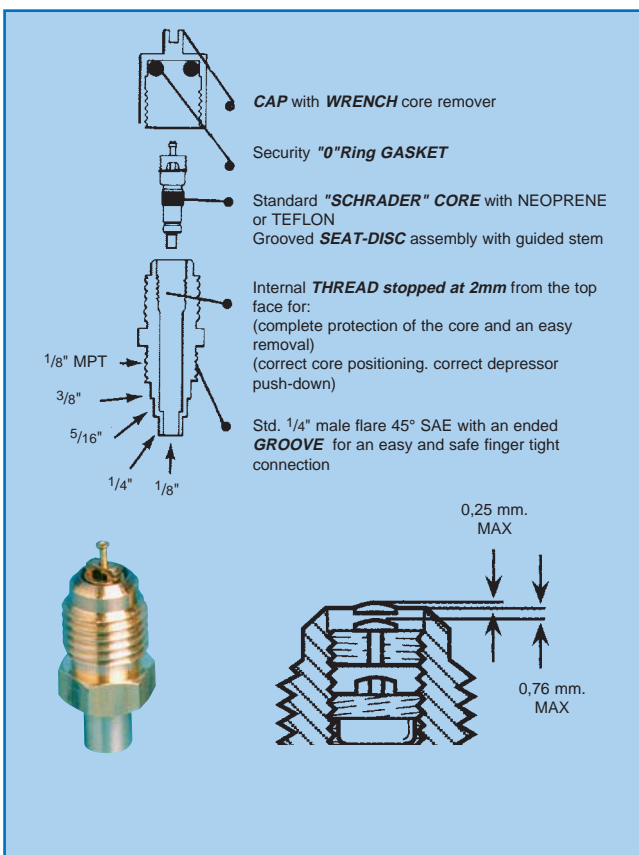
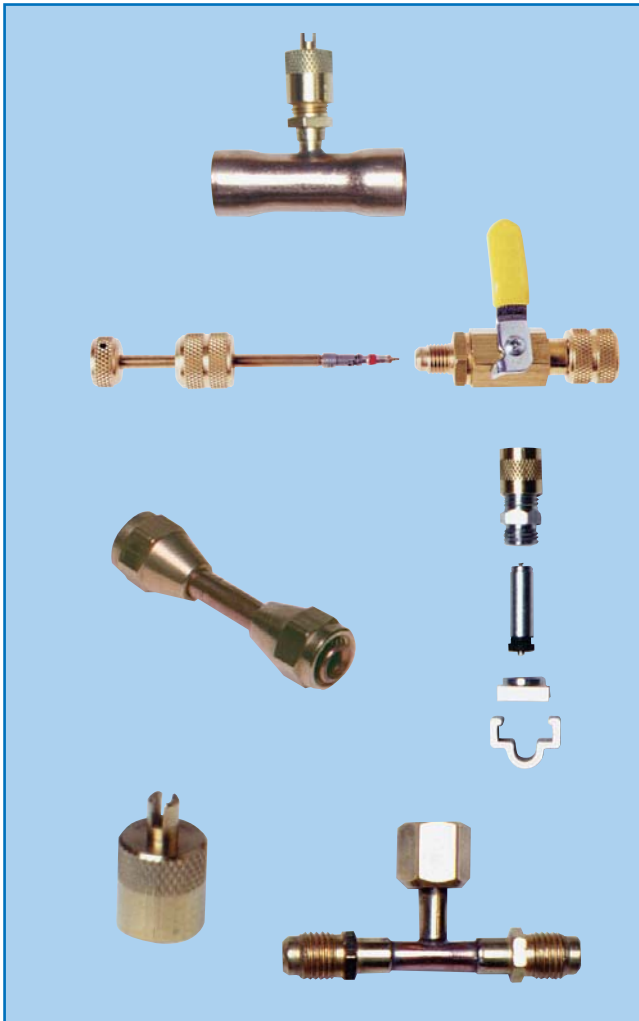


## ANGLED (90°) BALL VALVES

<b>BVA-04B</b>	1/4" male flare SAE x 1/4" female flare SAE swivel, blue
<b>BVA-04R</b>	1/4" male flare SAE x 1/4" female flare SAE swivel, red
<b>BVA-04Y</b>	1/4" male flare SAE x 1/4" female flare SAE swivel, yellow
<b>BVA-06R</b>	3/8" male flare SAE x 3/8" female flare SAE swivel, red
<b>BVA-05-04B</b>	5/16" female flare SAE swivel x 1/4" male flare SAE, blue
<b>BVA-05-04R</b>	5/16" female flare SAE swivel x 1/4" male flare SAE, red
<b>BVA-05-04Y</b>	5/16" female flare SAE swivel x 1/4" male flare SAE, yellow







# AUTOMATIC " ITE " ACCESS - VALVES

"THE TRUE ORIGINAL US STANDARD"

## DESCRIPTION

- These Access Valves are designed to offer convenient, safe and low cost access ports under pressure for each REFRIGERATION and AIR-CONDITIONING system service.
  - **1/4" MALE FLARE SAE 45°** (outlet connection)
  - **One standard AUTOMATIC CORE** (schrader type according US Std with NEOPRENE or TEFLON seat).  
NOTE: all solder types are shipped loosely assembled
  - One finger tight quick seal CAP (diverse models with or without core-wrench, shapes and gasket).
  - **One CORE-DEPRESSOR** (If needed) perfectly machined.
- The multi-connection access-valves (elbows, tees, crosses, etc...) are machined and allow for two or more access connections in one fitting plus greater flexibility in the positioning of the valve.

## PURPOSE

- The high quality and standards of these access-valves are recognised worldwide and used by major contractors and OEM's. By using them on your equipment, you will also contribute:
  - To help solving the ozone-layer problem and eliminate connecting and dis-connecting micro-leaks.
  - To built a system with permanent accesses for reclaims, charging, pressure and temperature readings and quick and easy checking, testing and diagnosis.
  - To save and protect your Access-Tools.
- These automatic access valves are used close-coupled with:
  - Manifolds, gauges, service valves, flexible hoses, etc...
  - Vacuum pumps, reclaim or charging units, cylinders...
  - Pressostats, thermostats, TXV's superheat, discharge line, pressostatic pilot line, equalizing line, etc...
- PLEASE NOTE:** do not consider trying to save money by choosing inferior quality access valves. These are high quality but very competitive access valves from " ITE " offering the very best designs and specifications.

## FEATURES

- Strictly in accordance with ARI norms and US standard. This is an assurance of proper sealing of valve and core surfaces.
- PLEASE NOTE:** DO NOT TAKE THE RISK OF MIS-CONNECTION, HALF DEPRESSING THE CORE AND MICRO-LEAKS. So, have:
  - A true 1/4" male flare 45° SAE outlet port with sufficient extended flare thread for complete and safe finger tight.
  - A **valve-core** (schrader type) **strictly normalized** to avoid any refrigerant leaks, perfectly screwed in and not too close nor too far from the outlet port face (see cut-a-way).
  - An **internal thread** (for the core) stopped at least **2 mm** from the outlet top port face and a wide enough internal groove to screw in any standard core-depressor. This allows you to completely push-down the core and open wide any access-valve with no restriction or pressure drop. A core-depressor (when fitted) according to ARI standard is to be finger tight in the right push-down position.

## REFRIGERANTS

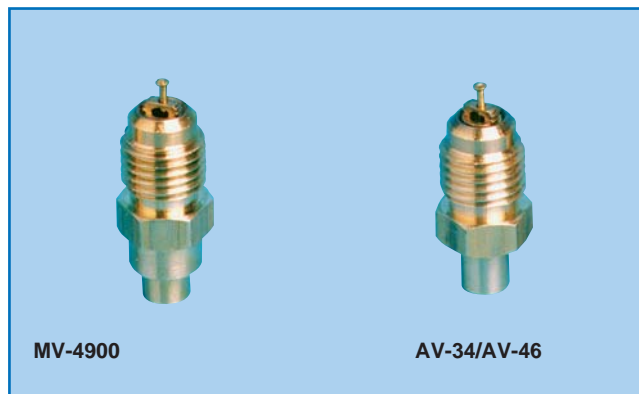
- R12, R22, R502, R134a, R404A, other refrigerants.
- Mineral and synthetic oils (including polyester, etc...)
- Resistant to alcalies and diluted mineral acids

## NORMS & SPECIFICATIONS

- Strictly ARI STANDARD 720-88 and 720-76 machined.
- Brass body CA360 and CA345 for straight access-valves.
- Brass body CA377 for shaped access-valves.
- Stainless steel and brass cores with NEOPRENE or TEFLON.
- Core torque tightening: 0,15 to 0,33 N.m (1.5 to 3 ft.lbs).
- Working temperature range: -40°C to +200°C (-40°F to +400°F).
- Working pressure: 35 bar (500 Psi).

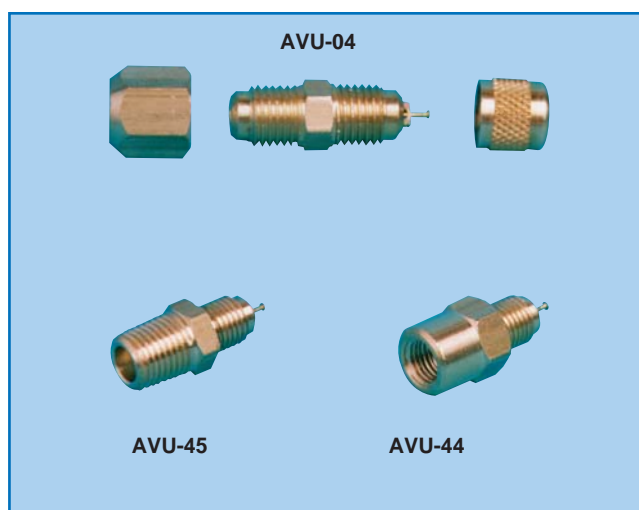
## STEP DOWN SOLDER

<b>AV-34</b>	1/4" male flare SAE x 1/4" ODS solder <i>PLEASE NOTE:</i> see new type <b>MV-1200</b> , page 112
<b>AV-46</b>	1/4" male flare SAE x 1/4" & 3/8" ODS solder <i>PLEASE NOTE:</i> see new type <b>MV-3346</b> , page 111
<b>AV2-456</b>	1/4" male flare SAE x 1/8", 3/16", 1/4" & 5/16" ODS <i>PLEASE NOTE:</i> see new type <b>MV-8400</b> , page 112
<b>MV-4900</b>	1/4" male flare SAE x 3/16", 1/4" & 3/8" ODS solder



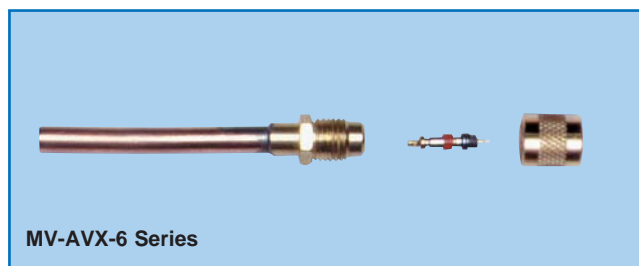
## UNION VALVES

<b>AVU-24</b>	1/4" male flare SAE x 1/8" NPT male pipe <i>PLEASE NOTE:</i> see new type <b>MV-1818</b> , page 111
<b>AVU-45</b>	1/4" male flare SAE x 1/4" NPT male pipe <i>PLEASE NOTE:</i> see new type <b>MV-1414</b> , page 111
<b>AVU-04</b>	1/4" male flare SAE x 1/4" male flare SAE <i>PLEASE NOTE:</i> see new type <b>MV-1441</b> , page 122
<b>AVU-44</b>	1/4" male flare SAE x 1/4" female flare SAE <i>PLEASE NOTE:</i> see new type <b>MV-8725</b> , page 123
<b>MV-2597</b>	1/4" male flare SAE x 1/4" female flare SAE with swivel nut



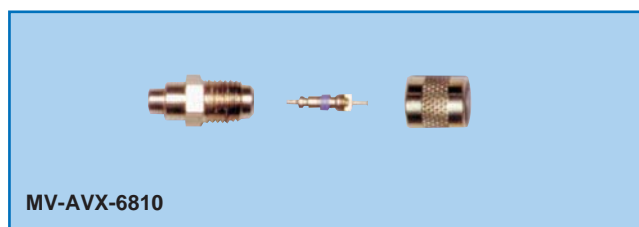
## STRAIGHT SOLDER WITH TUBE EXTENSION

<b>MV-AVX-6-050</b>	1/4" male flare SAE x ODS 6 mm compatible with R410A, max pressure: 35 bar (ext. length 50 mm)
<b>MV-AVX-6-100</b>	1/4" male flare SAE x ODS 6 mm (ext. length 100 mm)
<b>MV-AVX-6-150</b>	1/4" male flare SAE x ODS 6 mm (ext. length 150 mm)
<b>MV-8505-050</b>	5/16" male flare SAE x ODS 6 mm compatible with R410A (ext. length 50 mm)

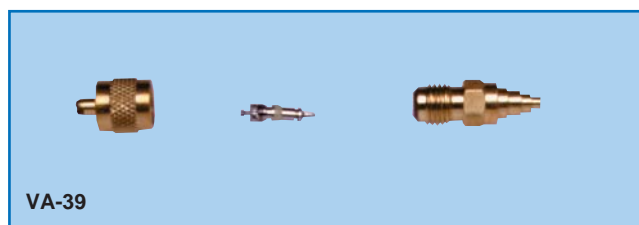


## SOLDER TYPE LINE VALVE

<b>MV-AVX-6810</b>	1/4" male flare SAE x ODS 6 mm x 7,8 mm x 9,8 mm length 28 mm
--------------------	---



<b>VA-39</b>	3/16", 1/4", 5/16", 3/8" or 1/2" tube. Also fits 3/16", 1/4" and 5/16" solder fittings or 1/8" hole may be drilled in larger size tube.
--------------	--





## PREMIUM SERVICE VALVES

<b>MV-3600</b>	1/4" male flare SAE x 1/8" IDS internal hole x 3/16", 1/4", and 5/16" ODS steps x 1/8" NPT male pipe
<b>MV-3608</b>	1/4" male flare SAE x 1/8" ODS extended copper tube
<b>MV-3603</b>	1/4" male flare SAE x 3/16" ODS extended copper tube x 1/8" NPT male pipe
<b>MV-3604</b>	1/4" male flare SAE x 1/4" ODS extended copper tube x 1/8" NPT male pipe
<b>MV-3434</b>	1/4" male flare SAE x 3/16" ODS extended copper tube x 1/8" ODS copper bushing x 1/8" NPT male pipe

- These valves offer **several O.D.S. "step" diameters** to solder and one more threaded "**step**" in **1/8" MPT male pipe**.
- The hexagonal ring allows to use a tightening counter-wrench and is standard. Also, see other hexagonal spare part counter-rings, page 127.
- All "**PREMIUM**" come with teflon "**schrader**" **core**.
- A **security cap with core-wrench remover** is standard for all these service valves.
- **PLEASE NOTE:** these service valves are **6 PIECES packed**.

<b>MV-3436</b>	1/4" male flare SAE x 1/4" ODS extended copper tube x 3/16" ODS copper bushing
<b>MV-3602</b>	1/4" male flare SAE x 1/4" ODS extended copper tube x 3/16" and 1/8" ODS bushings x 1/8" NPT Male

## STANDARD SERVICE VALVES

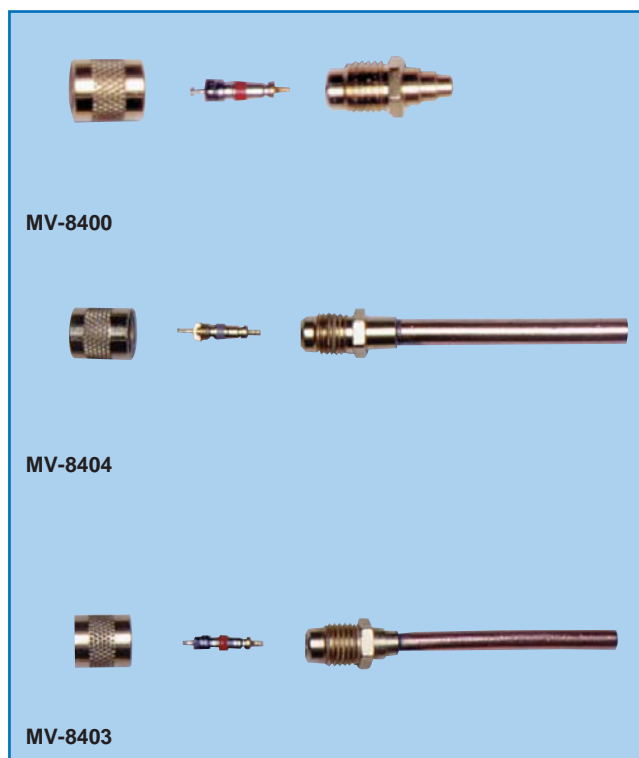
<b>MV-3619</b>	1/4" male flare SAE x 1/8" IDS hole x 3/16", 1/4" and 5/16" ODS steps
<b>MV-1010</b>	1/4" male flare SAE x 1/8" ODS extended copper tube
<b>MV-1212</b>	1/4" male flare SAE x 3/16" ODS extended copper tube
<b>MV-2525</b>	1/4" male flare SAE x 1/4" ODS extended
<b>MV-3605</b>	1/4" male flare SAE x 5/16" ODS extended copper tube
<b>MV-3606</b>	1/4" male flare SAE x 3/8" ODS extended copper tube

- These valves are identical to the above "**PREMIUM**" (see above specifications) but without 1/8" MPT male pipe threaded step.
- All "**STANDARD**" come with Teflon "**schrader**" **core** and **security cap** with core-wrench remover.
- **PLEASE NOTE:** these service valves are **6 PIECES packed**.

## ECONOMY LINE SERVICE VALVES

<b>MV-8400</b>	1/4" male flare SAE x 1/8" IDS hole x 3/16", 1/4" and 5/16" ODS steps
<b>MV-8406</b>	1/4" male flare SAE x 3/8" ODS extended copper tube
<b>MV-8405</b>	1/4" male flare SAE x 5/16" ODS extended copper tube
<b>MV-8404</b>	1/4" male flare SAE x 1/4" ODS extended copper tube
<b>MV-8403</b>	1/4" male flare SAE x 3/16" ODS extended copper tube
<b>MV-8408</b>	1/4" male flare SAE x 1/8" ODS extended copper tubing

- These service valves are identical to the previous "STANDARD" but with security cap.
- Here the economical security seal cap has NO core-wrench remover.
- **USUAL INSTALLATION INSTRUCTIONS:**
  - 1- Remove cap and core.
  - 2- Insert tubing or body into the corresponding size line or hole and braze into place.
  - 3- Replace core, tighten, evacuate and charge the system. replace cap.
- **PLEASE NOTE:** these service valves are **6 PIECES** packed.



## AUTOMATIC "BRASS BLOCK" SERVICE FITTINGS

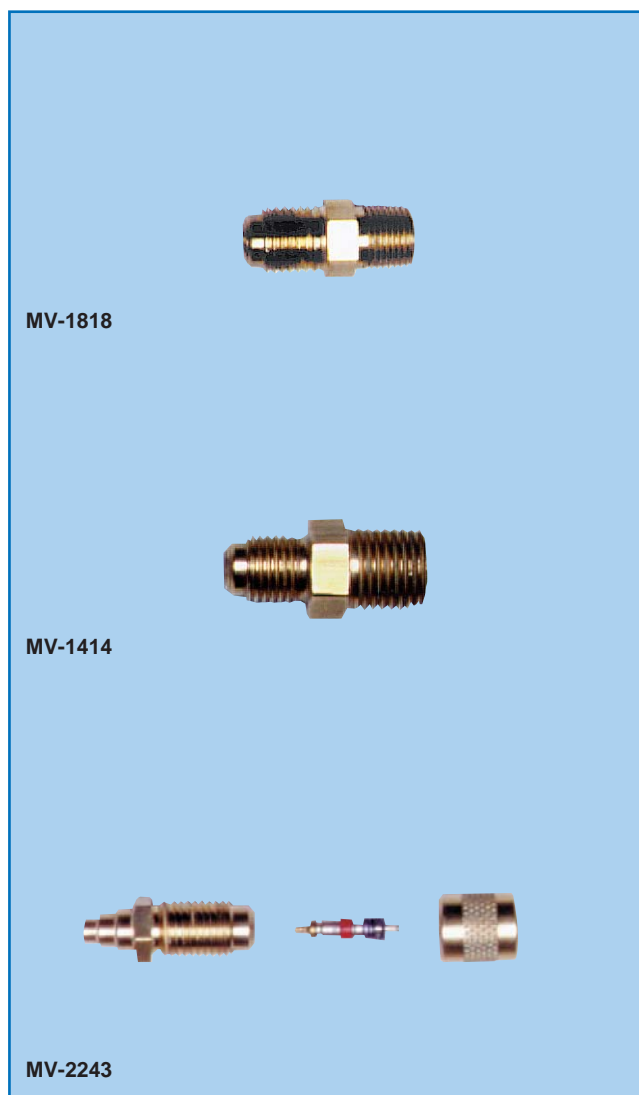
<b>MV-3346</b>	1/4" male flare SAE x 1/4" IDS internal hole x 3/8" and 7/16" ODS steps
<b>MV-3368</b>	1/4" male flare SAE x 3/8" IDS and 1/2" ODS

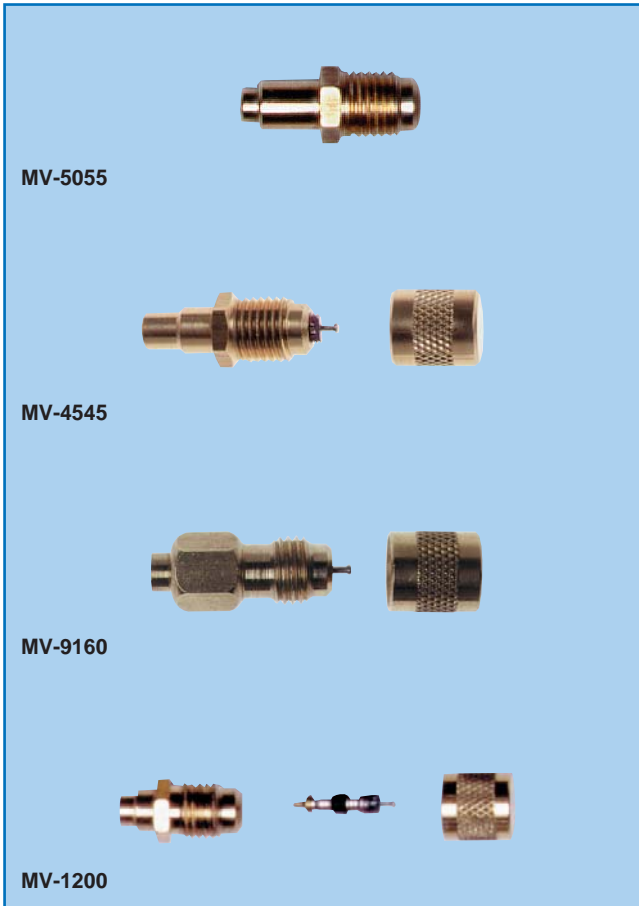
<b>MV-1818</b>	1/4" male flare SAE x 1/8" NPT male pipe <b>NB:</b> with <b>cap</b> with core-wrench remover
<b>MV-1818C</b>	Identical to MV-1818 but with <b>standard cap</b>

<b>MV-1414</b>	1/4" male flare SAE x 1/4" NPT male pipe <b>NB:</b> with <b>cap</b> with core-wrench remover
<b>MV-1414C</b>	Identical to MV-1414 but with <b>standard cap</b>

<b>MV-2243</b>	1/4" <b>extended</b> male flare SAE (length 19 mm) plus <b>large groove</b> between thread and hex pad x 1/8" IDS internal hole x 3/16", 1/4" and 5/16" ODS
----------------	--

- "ITE" has available "BRASS BLOCK" service and access fittings for a variety of standard or special purposes.
- These are stock items and indicate the wide versatility of the "ITE" stock range.
- Most of these automatic access fittings offer:
  - A hex mounting pad (for counter-wrench).
  - The classic (outlet) **1/4" male flare SAE** for service
  - A special extended (outlet) 1/4" male flare SAE for **MV-2243** and **MV-9160**.
  - A special (automotive outlet) 1/2" acme thread for **MV-7400**.
  - All have cap (no cap-wrench) and **core** (Teflon) except where noted.
- **PLEASE NOTE:** these service fittings are **6 PIECES** packed.





**MV-5055** 1/4" male flare SAE x 5/16" and 7/32" ODS

**MV-4545** 1/4" male flare SAE x 9/32" and 1/4" ODS

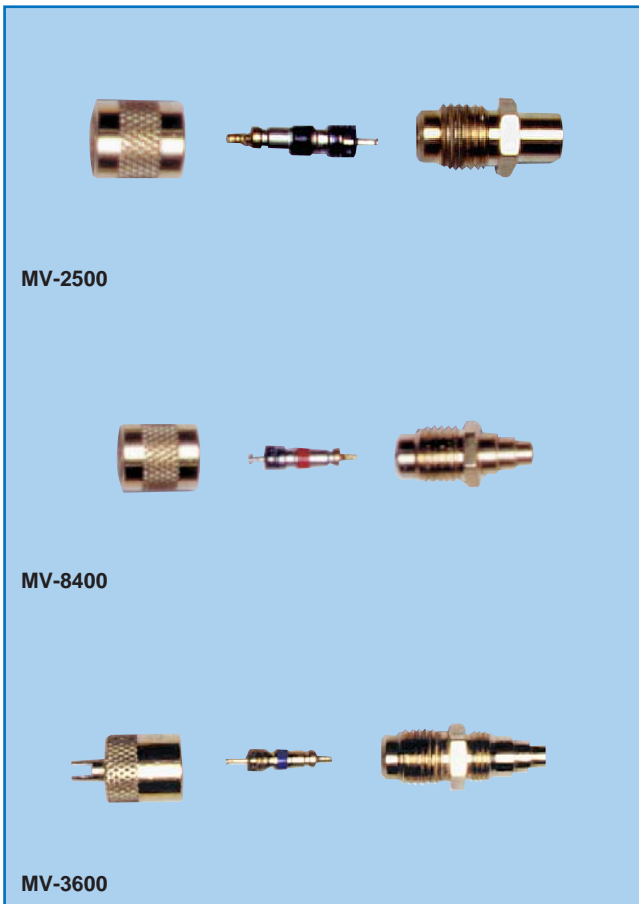
**MV-9160** 1/4" **extended** male flare SAE (Length 14 mm)  
plus **large groove** between thread and **wide**  
**hex mounting pad** (11 mm)  
x 1/4" ODS

**MV-1200** 1/4" male flare SAE x 3/16" ODS internal hole  
x 1/4" and 5/16" ODS

### PLEASE NOTE:

All these service valves and fittings (as well as references shown on following pages) offer **1/4" male flare SAE outlet**. All have a **cap** with NO core-wrench remover except where noted and TEFLON "schrader" **core**.

All are shipped **with core and cap** and **6 PIECES** packed.



**MV-2500** 1/4" male flare SAE x 1/4" IDS internal hole  
x 5/16" ODS external  
With **valve core** and **cap**

**MV-8400** 1/4" male flare SAE x 1/8" IDS internal hole  
x 3/16", 1/4" and 5/16" ODS steps  
**PLEASE NOTE:** The most popular type and the largest  
worldwide sales.  
**Real TEFLON** "schrader" core, **patents** and safety,  
**norms** and **US standard**.

**MV-3600** 1/4" male flare SAE x 1/8" IDS internal hole  
x 3/16", 1/4" and 5/16" ODS steps  
x 1/8" NPT male pipe  
**PLEASE NOTE:** the second important one identical to  
the above MV-8400 but:  
With **1/8" MPT male pipe thread** adapter in addition  
With **cap** with core-wrench remover



## 84-TS ACCESS COPPER "TEES"

**MV-8414** 1/4" male flare SAE x 2 times 1/4" ODS copper

**MV-8416** 1/4" male flare SAE x 2 times 5/16" ODS copper

**MV-8438** 1/4" male flare SAE x 2 times 3/8" ODS copper

**MV-8412** 1/4" male flare SAE x 2 times 1/2" ODS copper

**MV-8458** 1/4" male flare SAE x 2 times 5/8" ODS copper

**MV-8434** 1/4" male flare SAE x 2 times 3/4" ODS copper

**MV-8478** 1/4" male flare SAE x 2 times 7/8" ODS copper

**MV-8418** 1/4" male flare SAE x 2 times 1 1/8" ODS copper

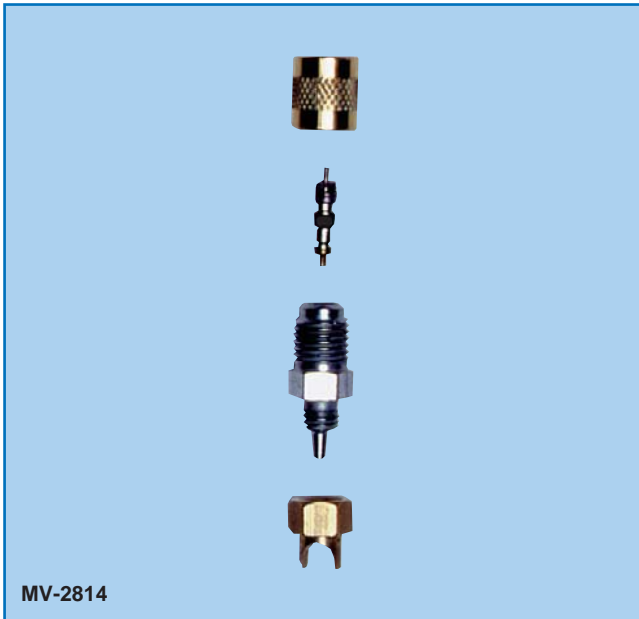
**MV-5421** 1/4" male flare SAE  
x 2 times 1/4" IDS (1/4" tube to be soldered internally)  
x 2 times 3/8" ODS (3/8" tube to be soldered externally)

**MV-8420** 1/4" male flare SAE  
x 1 time 1/4" copper tube end  
x 1 time 1/4" ODS copper

**MV-8490** 1/4" male flare SAE  
x 3/8" 90° copper elbow (50 mm or 2 1/2" long turn)

- The **84-TS series** offer a full line of copper "TEES" with body brazed on tee which takes in each end 1/4" up to 1 1/8" ODS solder tubing.
- Strong, safe and heavy pattern, "in line" soft and quick copper to copper soldering... These access tees can save time and money...
- Usual 1/4" male flare SAE outlet.
- **Cap** and gasket (with core-wrench remover).
- **INSTALLATION INSTRUCTIONS:**
  - 1- Remove cap and valve core.
  - 2- Insert tubing into each end of tee and braze into place.
  - 3- Replace core, tighten, evacuate & charge the system.
  - 4- Replace the cap
- **PLEASE NOTE:** these **ACCESS TEES** are **2 PIECES** packed.





## "BOT" STINGER ADAPTER BRASS TO COPPER VALVES

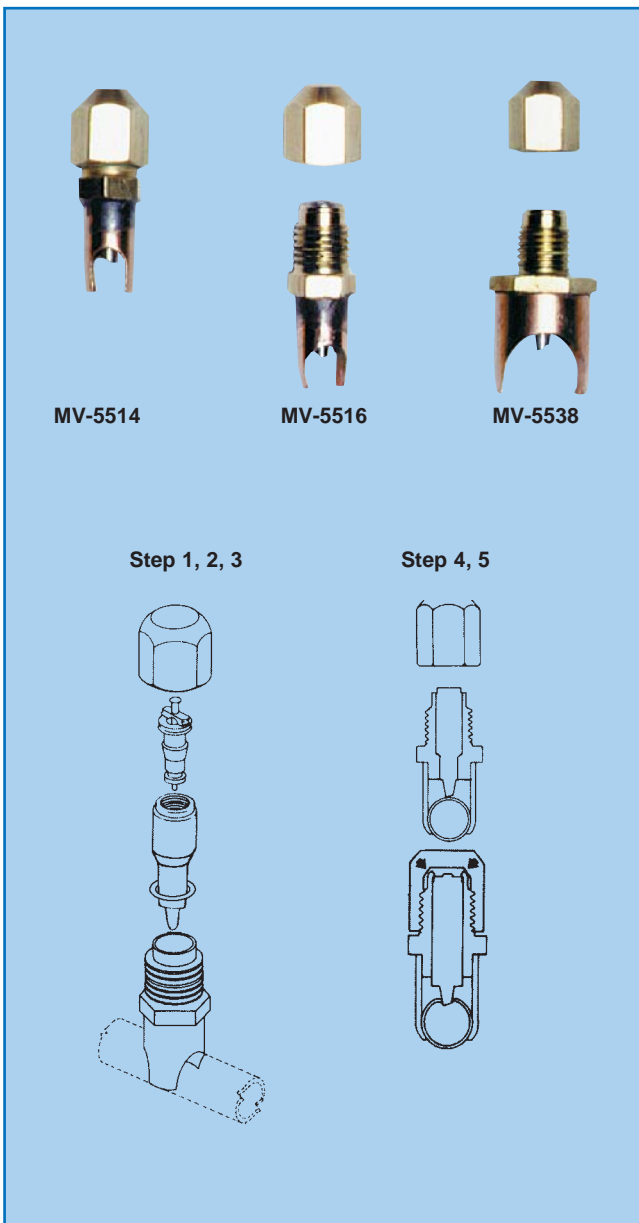
MV-2814	1/4" male flare SAE x for	1/4" tubing
MV-2816	1/4" male flare SAE x for	5/16" tubing
MV-2838	1/4" male flare SAE x for	3/8" tubing
MV-2812	1/4" male flare SAE x for	1/2" tubing
MV-2834	1/4" male flare SAE x for	3/4" tubing
MV-2878	1/4" male flare SAE x for	7/8" tubing

- Four-way seal between body and saddle:
  - 1- Press saddle onto line,
  - 2- Apply flux and braze to line,
  - 3- Allow to cool,
  - 4- Screw body with core into saddle,
  - 5- Evacuate and charge the system. Replace cap.
- Hex saddle and hex body permit using wrench and counterwrench.

### INSTRUCTIONS:

Braze SADDLE (copper/copper) then realize an automatic crimp following steps 1, 2, 3 and 4.

Tightening CAP crimps firmly brass edgeover top of the PIN.



## "M-SERIES" COPPER TO COPPER "BRAZE-ON" SERVICE VALVES

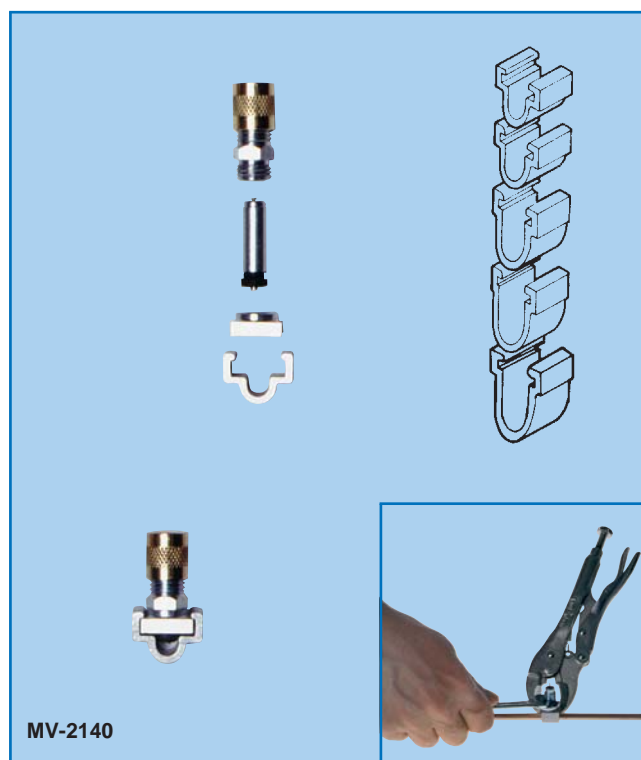
MV-5514	1/4" male flare SAE x for	1/4" tubing	(box: 6 pcs)
MV-5516	1/4" male flare SAE x for	5/16" tubing	(box: 6 pcs)
MV-5538	1/4" male flare SAE x for	3/8" tubing	(box: 6 pcs)
MV-5512	1/4" male flare SAE x for	1/2" tubing	(box: 4 pcs)
MV-5558	1/4" male flare SAE x for	5/8" tubing	(box: 2 pcs)
MV-5534	1/4" male flare SAE x for	3/4" tubing	(box: 2 pcs)
MV-5578	1/4" male flare SAE x for	7/8" tubing	(box: 2 pcs)
MV-5518	1/4" male flare SAE x for	1 1/8" tubing	(box: 2 pcs)

- The **"M SERIES"** are the first and best **"BRAZE-ON"**, self-piercing copper saddle valves.
- **NOTE:** It is widely used and easily installed on a charged line.
- After brazing the saddle portion onto line, the steel pin with valve-core penetrates the line and is locked into place simply by tightening the cap. Available **from 1/4" up to 1 1/8"**.
- **INSTALLATION INSTRUCTIONS:**
  - 1- Prepare line and clean tube. Remove cap and pin.
  - 2- Flux or solder paste saddle. Press copper saddle onto line firmly (use pliers). Heat and braze it.
  - 3- Let cool then insert pin with TEFLON "O" Ring into body.
  - 4- Put on cap and tighten it with wrench (use another backwrench on hex pad). As cap is tightened, steel pin penetrates tubing.
  - 5- Last turn crimps brass edgeover top of pin for secure forming 1/4" male flare SAE end. (Easy and cheap...).
  - 6- Remove cap and the valve is ready to use for permanent charging, testing, etc... Replace and tighten the cap or place another cap type with gasket if needed.

## "CLAMP-ON" LINE TAPPING "B SERIES" SERVICE VALVES

<b>MV-2140</b>	<b>CLAMP-ON</b> 1/4" male flare SAE x for 1/4" tubing
<b>MV-2160</b>	<b>CLAMP-ON</b> 1/4" male flare SAE x for 5/16" tubing
<b>MV-2380</b>	<b>CLAMP-ON</b> 1/4" male flare SAE x for 3/8" tubing
<b>MV-2120</b>	<b>CLAMP-ON</b> 1/4" male flare SAE x for 1/2" tubing
<b>MV-2580</b>	<b>CLAMP-ON</b> 1/4" male flare SAE x for 5/8" tubing

- A line tap service valve that is easy to use.
- **Five** individual sizes for special access jobs.
- "VITON" gasket for heat extremes.
- **INSTALLATION INSTRUCTIONS:**
  - 1- Place aluminium channel on line (any position). Insert aluminium slide into grooves on channel.
  - 2- Grip slide and channel with pliers. Place steel Pin in steel body and screw into place.
  - 3- Holding grip on channel and slide, then tighten steel housing (apply proper wrench on Hex pad). Unique wrench torque action provides permanent clamp (...**BEST PRICE, QUICK, EASY...**).
  - 4- Continue to tighten steel housing. "NEOPRENE" gasket on pin gives long-life seal.
- **PLEASE NOTE:** these "B" VALVES are **2 PIECES** packed.



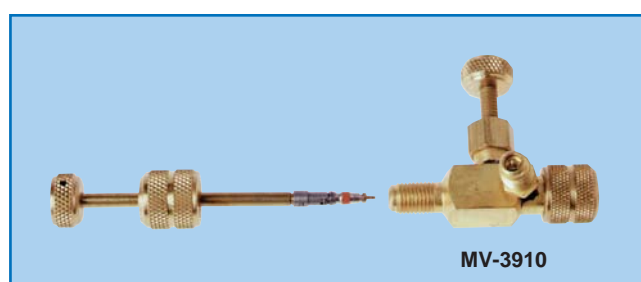
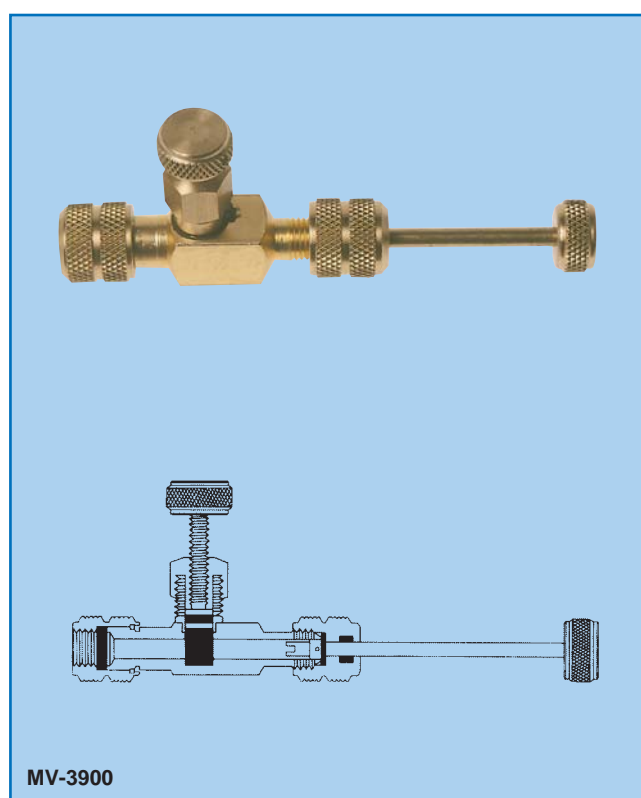
## "CRT" CORE REMOVAL TOOL "THE TRUE ORIGINAL ONE"

<b>MV-3900</b>	<b>"CRT" TOOL</b> (Also see the "BV CRT" page 125) 1/4" female flare SAE attachment x 1/4" male flare rear (after removing extractor)
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- The patented original "CRT" is strictly manufactured in accordance with the **ARI norms** and **U.S. standard**. It is a high quality professional tool and we assure **warranty** and **spare part** replacements (see page 117).
- The "CRT" has been improved with a "BALL VALVE" design (see now page 125). It is used with **KIT CASES** on previous page.
- Permits to perform many operations (see "TOOLS", page 117).
- **INSTRUCTIONS FOR USE:**
  - 1- Attach the "CRT" to any 1/4" male flare SAE valve or fitting. thumb tight.
  - 2- With the side valve completely open, push extractor rod in and grab the valve-core head.
  - 3- Turn the extractor knob counterclockwise to unscrew the core.
  - 4- Pull the extractor back as far as possible to completely close the side valve (or side handle).
  - 5- Remove the rear coupler, extractor rod & core so that the system is now accessible through the standard 1/4" male flare rear fitting of the "CRT".
  - 6- To replace a core with a new one, attach the coupler on extractor rod again to rear fitting of "CRT".
  - 7- Then again open completely the side valve (or side handle if "BV CRT") counterclockwise.
  - 8- Push extractor rod and screw the new core in fitting by turning clockwise.

<b>MV-5555</b>	<b>KIT</b> with all replacement GASKETS
<b>MV-5560</b>	<b>KIT</b> for SIDE VALVE replacement
<b>MV-5577</b>	<b>KIT</b> for EXTRACTOR ROD replacement

<b>MV-3910</b>	<b>"CRT" TOOL</b> with an extra side port including a "schrader" core but with NO extractor rod. (Also, see "BV CRT" page 125)
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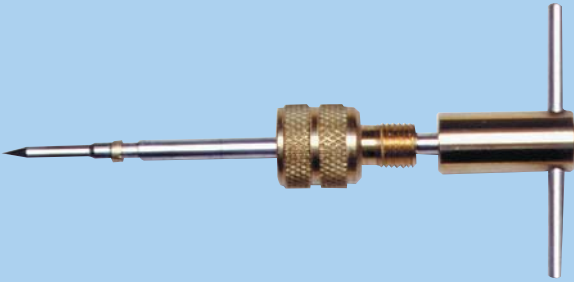




## "TPA" TUBE PIERCING ATTACHMENT TOOL

**MV-3090** TOOL to be used with "CRT" or "BV-CRT"  
(PLEASE NOTE: see also page 125)

- Tube piercing attachment. Optional tool for "CRT".
- With any "CRT" and special "V-SERIES" fitting (to be quickly copper/copper brazed) a tube can be pierced and a core inserted under pressure into "V" fitting shown on next page.



MV-3090

## "V-SERIES" SERVICE VALVES SPECIAL "BRAZE-ON" TYPE

<b>MV-3036</b>	<b>V-SERIES VALVE</b> for $\frac{3}{16}$ " tube
<b>MV-3094</b>	<b>V-SERIES VALVE</b> for $\frac{1}{4}$ " tube
<b>MV-3098</b>	<b>V-SERIES VALVE</b> for $\frac{3}{8}$ " tube
<b>MV-3092</b>	<b>V-SERIES VALVE</b> for $\frac{1}{2}$ " tube
<b>MV-3095</b>	<b>V-SERIES VALVE</b> for $\frac{5}{8}$ " tube
<b>MV-3034</b>	<b>V-SERIES VALVE</b> for $\frac{3}{4}$ " tube
<b>MV-3078</b>	<b>V-SERIES VALVE</b> for $\frac{7}{8}$ " tube
<b>MV-3018</b>	<b>V-SERIES VALVE</b> for $1\frac{1}{8}$ " tube

- Copper saddle valves for special use with MV-3090 piercing attachment tool and any core removal tool.
- Available for **9 sizes** of copper tubing.
- These ports are similar to the "M-SERIES" fittings but are internally threaded to house a valve-core.
- Copper to copper brazing of tubing under pressure.
- Come with a **MV-2245** cap.



MV-3036

## RANGE OF TOOLS & REMOVER FOR ORIGINAL "CRT" & "BV-CRT"

• See **MV-3900** "CRT" page 115 and **MV-3920** "BV-CRT" page 125.

**MV-5555** **KIT-GASKETS** for MV-3900 and MV-3910

**MV-5560** **KIT-SIDE VALVE** for MV-3900 and MV-3910

**MV-5577** **KIT-VALVE CORE GRAPPLER & EXTRACTOR** for MV-3900 and MV-3910. Remove a core without loss of refrigerant.

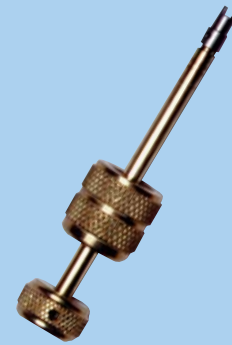
**MV-3090** **"TPA" TOOL** (see page 116). Punches a hole in copper tubing through a "V-SERIES" fitting for the installation of a core without loss of gas.

**MV-3915** **PICK TOOL** to extract a broken core from a housing without loss of refrigerant. Has left hand thread...

**MV-3916** **THREAD CHASER TOOL** to clean and re-align the internal threads of any access fitting.

**MV-3917** **SPARE KIT** containing MV-3915 & MV-3916

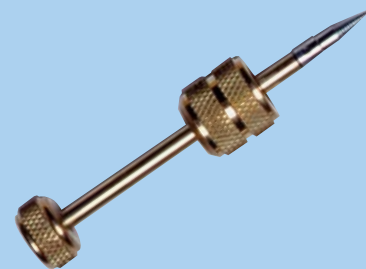
**"O" RING** See diverse **"O" RING** replacements page 127.



**MV-5577**



**MV-3090**



**MV-3915**



**MV-3916**



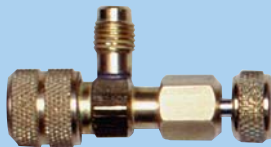
MV-5050



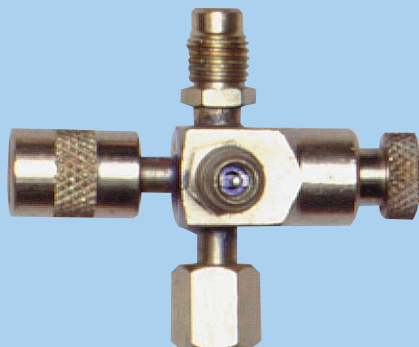
MV-2050



MV-2060



MV-2070



MV-1777

## THUMBSCREW GAS CONTROL ACCESS VALVES FOR HOSES WITH STD. CORE DEPRESSOR

**MV-5050** 1/4" male flare SAE (For hose)  
x 1/4" female flare SAE (swivel nut for all access valves or fittings)  
*SUPER COMPACT TYPE* (gasket page 127)

**MV-2050** 3/16" male flare SAE x 3/16" female flare SAE  
Identical to MV-2060 but 2 times 3/16"  
*SPECIAL AUTOMOTIVE AIR CONDITIONING*

**MV-2060** 1/4" male flare SAE (for hose)  
x 1/4" female flare SAE (swivel nut for all access valves or fittings)  
*PROFESSIONAL TYPE*

**MV-2070** 1/4" male flare SAE (for hose) x 1/4" female flare SAE  
(swivel nut for all access valves or fittings)  
WITH an ideal **check back seat** to hold the gas in all hoses when disconnected.

- These thumbscrew core depressors are designed to be used on the end of a charging hose.
- When attached to an access fitting, they can depress the core and control the flow of gas. This also means the core can be shut-off before disconnecting, thus avoiding a spit back on your hand or in the atmosphere.
- The seals on each part have broad compatibility with the **USUAL** as well as **NEW refrigerants**
- **MV-2070** is unique in that it has an internal shut-off back seat that also holds the gas in the hose when disconnected.

## "4 WAYS" MINI-MANIFOLD "MR. JUNIOR CHARGER"

**MV-1777** **MINI-MANIFOLD** with two caps and gaskets  
1/4" male flare SAE (internally free with cap)  
1/4" male flare SAE (with Teflon core + cap)  
1/4" swivel female flare SAE  
(with depressor for access fitting attachment)  
1/8" NPT male pipe (for gauge attachment)

- All brass construction.
- The 1/4" female flare SAE swivel coupler can be attached to any access valve or fitting. Opposite this coupler is the thumbscrew knob for built-in core depressor.  
Other side connections are:
  - One 1/8" NPT male pipe for attaching a gauge  
(swivel 360° out of the way)
  - Two other 1/4" male flare SAE.
- One side 1/4" male flare fitting has Teflon core compatible with all refrigerants. Both 1/4" male flare fittings are covered by a heavy duty brass cap with **NEOPRENE** seal and core-wrench on top.
- The "O" Rings and seals are made of special temperature stable **NEOPRENE** compatible with all refrigerants.
- For best and longest service, periodically apply light lubricant to "O" Rings.



## ADAPTER FITTINGS & OTHER CONNECTORS

**PLEASE NOTE:** Always 2 *PIECES* packed

**MV-2594** Swivel 1/4" female flare SAE nut  
Double flared copper adapter with an internal core depressor tip  
1/4" copper solder 31 mm long copper tubing (1 1/4").  
U.S. standard for all access fittings

**MV-2595** Same as MV-2594 but the copper end has been 1/4" ODS swaged for tubing

**MV-2597** Same as MV-2594 but with a 1/4" male flare SAE end.  
A core may be inserted in this end (not provided)  
(for OEM's we can extend the copper end)

**MV-5036** 3/16" female flare SAE (thumbscrew)  
x 1/4" male flare SAE (with security groove)  
Contains progressive loose Depressor pin  
*SPECIAL FITTING FOR AUTOMOTIVE A/C*

**MV-5014** Identical to MV-5036 but with:  
1/4" female flare SAE (thumbscrew)

**MV-2594**



**MV-2597**



**MV-5036**



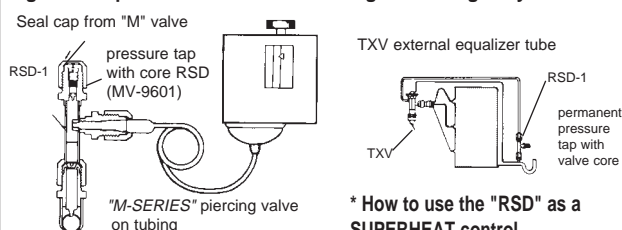
## "RSD" UNIVERSAL TEE CONNECTORS

**MV-9601** 1/4" male flare SAE with core (1)  
1/4" female flare SAE nut with hex swivel depressor (2)  
1/4" male flare SAE (free) (3)

**MV-9602** 1/4" male flare SAE (free) (1)  
1/4" male flare SAE with core (2)  
1/4" female flare SAE nut with hex swivel depressor (3)

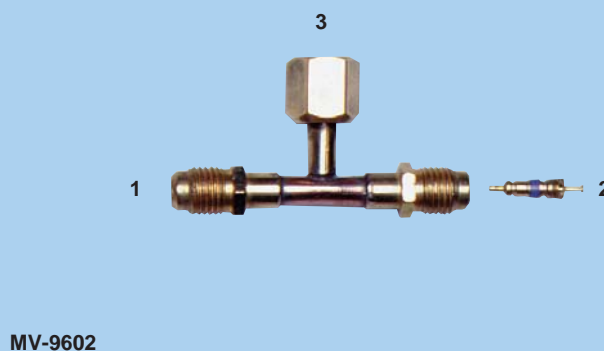
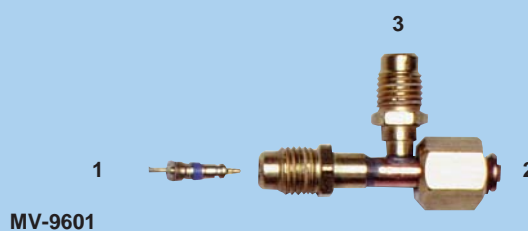
- All these "RSD" tees contain a core depressor, a Teflon "schrader" **core** and always **TWO** free 1/4" flare ends.
- The core can be **moved** on all 1/4" male flare SAE outlets.
- Can be used for (they have no caps):
  - All connect controls (temp., press., charg., TXV's)
  - Checking oil pressure on larger compressors having positive pressure oil pumps. Etc...
  - Checking accuracy of oil pressure gauges (to compare the unit gauge with yours).
- **For fully forged BRASS TEES, see page 128.**
- **PLEASE NOTE:** these "RSD" **TEES** are 2 **PIECES** packed.

\* How to use the "RSD" MV-9601 with an "M-SERIES" valve to install high or low pressure switches on a refrigerant charged system



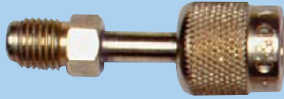
\* How to use the "RSD" as a SUPERHEAT control

FOR FULLY FORGED BRASS TEES, SEE PAGE 128

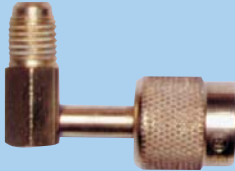


## ADAPTERS - COUPLERS

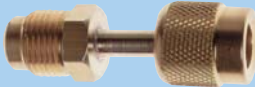
MV-2000



MV-2010



MV-2038



**MV-2000** 1/4" female flare SAE swivel with depressor and seal  
1/4" male flare SAE with hex pad

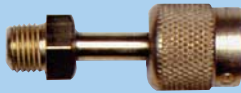
**MV-2010** Identical to above MV-2000 but 90° elbow

**MV-2038** 1/4" female flare SAE swivel with depressor tip and seal  
3/8" male flare SAE with hex pad

**MV-2018** 1/4" female flare SAE swivel with depressor tip and seal  
x 1/8" NPT male pipe with hex pad

**MV-2014** 1/4" female flare SAE swivel with depressor tip and seal  
x 1/4" NPT male pipe with hex pad

MV-2018



MV-2012



**MV-2012** 1/4" female flare SAE swivel with depressor tip and seal  
x 1/2" ACME male  
*AUTOMOTIVE AIR-CONDITIONING SYSTEM...*

**MV-2019** 1/4" female flare SAE swivel with depressor tip and seal  
1/8" NPT female pipe (hex shape)

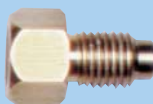
**MV-2028** 1/4" female flare SAE with depressor tip and seal  
1/4" NPT female pipe (hex shape)

**MV-2041** 1/4" female flare SAE with depressor tip and seal  
1/4" NPT female pipe (hex shape)

MV-2019



MV-2020



**MV-2020** 1/4" female flare SAE (hex solid mounting pad)  
1/2" ACME male  
*AUTOMOTIVE AIR-CONDITIONING SYSTEM...*

**MV-2022** 3/8" female flare SAE (hex solid mounting pad)  
1/2" ACME male  
*AUTOMOTIVE AIR-CONDITIONING SYSTEM...*

- These parts simply make connections between equipment with unlike threads.
- The *ADAPTERS* made from hex stock brass are for permanent installations.
- The *COUPLERS* start with a 1/4" female flare SAE **swivel** and end with **different** flare sizes, pipe threads and ACME threads
- **PLEASE NOTE:** these *FITTINGS* are **2 PIECES packed**.

## "SURE SEAL" RETAINING COUPLERS & AUTOMATIC HOSE SELF CLOSING

**MV-2035** 1/4" female flare SAE with "SURE SEAL"  
1/4" male flare SAE

**MV-2090** Identical to above MV-2035 but 90° elbow

**MV-2037** 1/4" female flare SAE with "SURE SEAL"  
3/8" male flare SAE

**MV-2098** 1/4" female flare SAE with "SURE SEAL"  
1/8" NPT female pipe

**MV-2094** 1/4" female flare SAE with "SURE SEAL"  
1/4" NPT female pipe

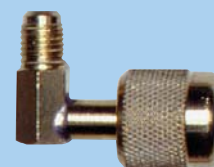
**MV-5171** **KIT** of **replacement PARTS** for all "SURE SEAL".  
Contains GASKETS, DEPRESSOR and SPRING

**MV-2070** 1/4" male flare SAE (side end for hoses)  
x 1/4" female flare  
(Swivel thumbscrew with core depressor)  
Finger wheel for expansion gas control  
Back seat retains gas in the hose

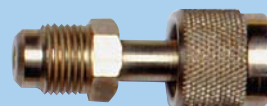
- When attached to an access valves or fitting, the "SURE SEAL" retaining coupler automatically opens and depresses the valve core all in one action. The "SURE SEAL" back checks the gas.
- When disconnected, it traps refrigerant in the charging hose.
- Leave it permanently installed on the end of the hose. The seals are compatible with **CFC, HCFC, HFC** and their lubricants.
- **NB:** If internal parts need replacing, use parts **KIT MV-5171**.
- **PLEASE NOTE:** These "SURE SEAL" are **2 PIECES** packed.



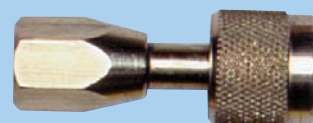
**MV-2035**



**MV-2090**



**MV-2037**



**MV-2098**



**MV-2070**



## OTHER SPECIAL ACCESS VALVES, TEES & FITTINGS

PLEASE NOTE: these "FITTINGS" are 2 PIECES packed.

MV-9610



MV-9610

1/4" female flare SAE (hex swivel nut) **(1)**  
1/4" female flare SAE (hex swivel nut with core depressor) **(2)**  
1/4" male flare SAE (with Core) **(3)**

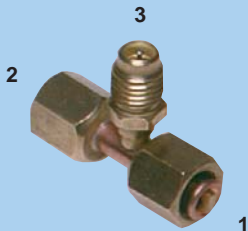
MV-1440



MV-1440

1/4" female **DOUBLE** flare SAE with hex swivel nut and depressor **(1)**  
1/8" FPT female pipe (hex shape) **(2)**

MV-9608



MV-9608

1/4" female **DOUBLE** flare SAE with hex swivel nut and depressor **(1)**  
1/8" FPT female pipe (hex swivel nut) **(2)**  
1/4" male flare SAE with **core & cap** **(3)**

MV-1446



MV-1446

1/4" female flare SAE (swivel hex nut) **(1)**  
1/4" female flare SAE (swivel hex nut) **(2)**

MV-1441



MV-1441

1/4" male flare SAE, with special cap for connecting flared tube **(1)**  
1/4" male flare SAE with inside core **(2)**  
Central hex pad for back wrench

MV-1444



MV-1444

1/4" male flare SAE with inside core **(1)**  
1/4" NPT male pipe **(2)**  
TWO hex mounting pads for wrench and back wrench

**MV-8725** 1/4" female flare SAE with a gasket  
1/4" male flare SAE with inside core (hex)  
TWO hex mounting pads for wrench and back wrench.  
The valve body is stationary. When threads of existing  
system fittings are stripped and a new core won't go in,  
use this. It has a core and NO depressor tip.

**MV-1428** 1/4" male flare SAE on the branch with Teflon core and  
cap with core-wrench  
1/8" MPT male pipe  
1/8" FPT female pipe in a full stationary hex body

**MV-1438** Identical to above MV-1428 but TWO "in line"  
1/8" MPT male pipe

**MV-5044** 1/4" female flare SAE (swivel thumbscrew WITH seal,  
without core) (2)  
1/4" male flare SAE (free) (1)  
1/4" male flare (free) (3)  
**NOTE:** one core can be inserted in (2)  
MV-5044 is 1 **PIECE** packed

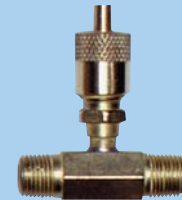
**MV-2613** 2 times "in line" 1/4" female flare SAE (1) (2)  
with 2 swivel nuts with seal and **NO** core  
1/4" male flare SAE with **NO** valve or core (3)



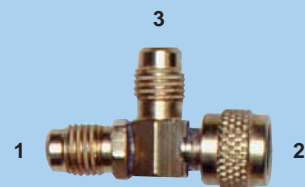
**MV-8725**



**MV-1428**



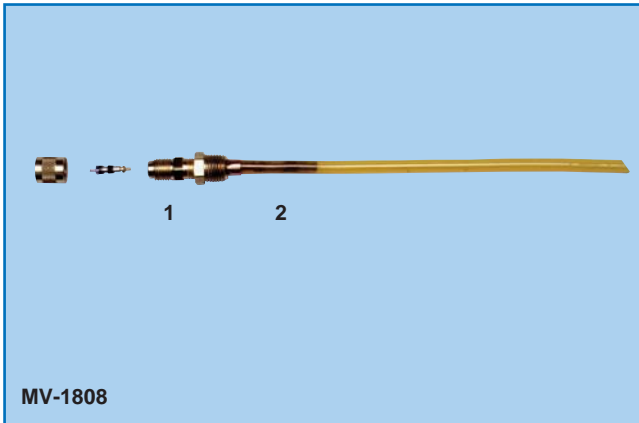
**MV-1438**



**MV-5044**



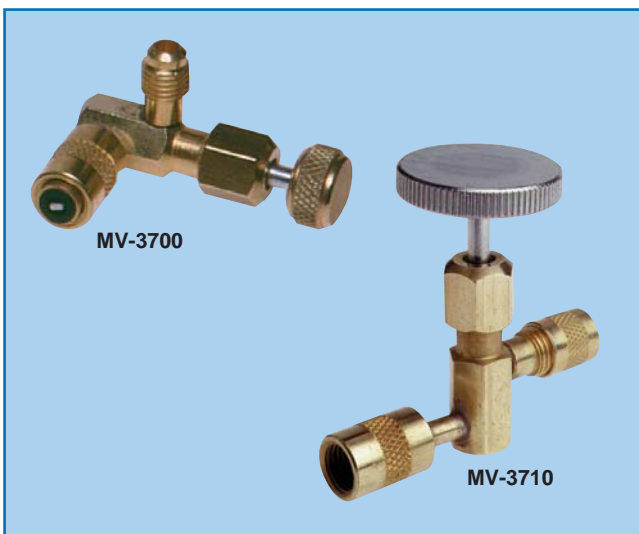
**MV-2613**



## CRANKCASE "OIL TAP"

**MV-1808** 1/4" MPT male pipe crankcase side (2)  
1/4" male flare SAE with core and cap (1)

- **PLEASE NOTE:** This "OIL TAP" is **2 PIECES** packed.
- The "OIL TAP" is installed on a semi-hermetic compressor for the changing of oil and testing procedures. The internal pressure helps discharging the oil from the crankcase and **ACID TESTS** can be made while the compressor is running. You can prevent "BURN-OUTS". In the same way it allows the addition (by vacuum) or removal (by pressure) of oil.
- Also, you can detect hazardous refrigerant pooling in the crankcase before start-up and control the removal using a compound gauge. It can be permanently installed.

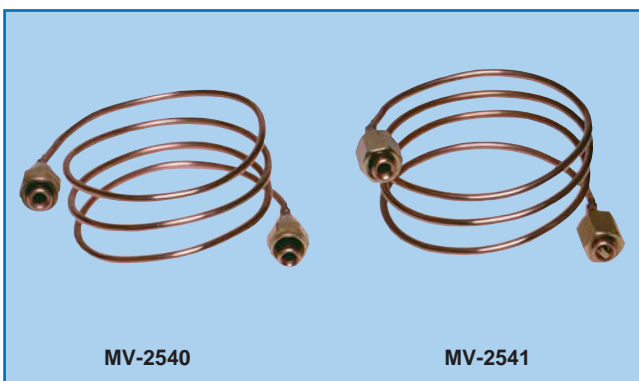


## "HIGH-SIDE" SERVICE VALVES

**MV-3700** 1/4" female flare SAE (thumbscrew swivel nut with depressor tip and gasket)  
1/4" male flare SAE (without core for hose)  
Easy thumbscrew wheel for expansion gas control

**MV-3710** Identical to above MV-3700 but "in line"

- Same service valves with different shape
- Metal to metal (steel/brass) seat



## "CAP TUBE" CAPILLARIES

**MV-2540** 2 times 1/4" female flare SAE swivel hex nuts  
**DOUBLE** flared in each hex swivel nut  
**NO** core depressor tip (for equilibrating TXV's, etc...)  
Copper capillary length: 91 cm (36 inch)  
**PLEASE NOTE:** Please, use one US wrench for nuts

**MV-2541** Identical to above but **WITH** one core depressor tip  
**MV-2542** Identical to above but **WITH** two core depressor tips



## "CHASER" CORE CONTAINER

**MV-3800** Contains SIX cores. Height: **89 mm** (3 1/2 inch)  
The thumbscrew cap offers **TWO** tools:  
**One core-wrench** on one side (for cores)  
**One thread-chaser** (to clean and re-align the inside core threads)

## ADJUSTABLE TORQUE WRENCH FOR ALL "SCHRADER" CORES & MANY OTHER USES

**MV-3820** ADJUSTABLE TORQUE WRENCH (complete)

**MV-3825** BIT designed for use with "schrader" core

**MV-3827** "PHILLIPS" head driver screw BIT

- Used to tighten "schrader" core-valve to the correct torque.
- Recommended torque: **0.0173 to 0.035 m.kg** (1.5 to 3 in.lbs)
- **PLEASE NOTE:** overtightening of a valve core can cause damage to the core and loss of refrigerant.
- Rotary torque mechanism prevents over-torquing of core.
- Wrench easily adjusting itself from **0.012 to 0.070 m.kg** (1 to 6 in.lbs) in 0.05 increments.
- A locking ring prevents accidental alteration of the torque setting.
- Accurac  $\pm 3\%$  at each increment (above accuracy of the National Institute of Standards and Technology Certification).
- To set the wrench: turn black ring to unlock internal mechanism. Adjust torque to required setting. Return black ring to locked position.



MV-3820



MV-3825



MV-3827

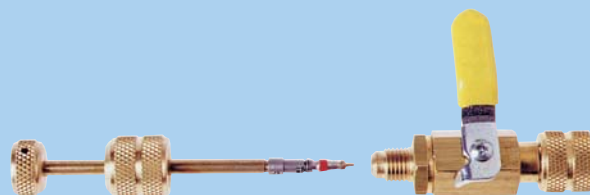
## NEW "BV-CRT" CORE REMOVAL TOOL (Issued from the "CRT" ) "THE TRUE ORIGINAL ONE"

**MV-3920** "BV-CRT" TOOL (also see "CRT" page 115)

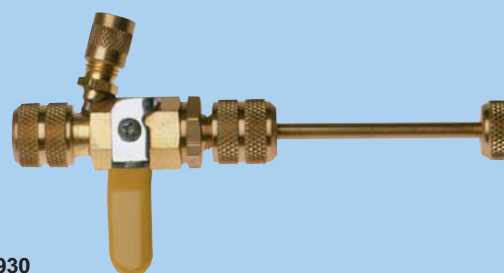
**MV-3930** "BV-CRT" TOOL. Identical as above but:  
1/4" female flare SAE attachment x  
1/4" male flare rear (after removing extractor)  
1/4" female flare SAE attachment x  
1/4" male flare rear (after removing extractor) x  
1/4" male flare SAE (side) with core and cap

- The patented original "BV-CRT" is strictly manufactured in accordance with the **ARI norms** and **U.S. standard**. The "BV-CRT" has been improved with an easy finger **ONE QUARTER TURN BALL VALVE** design.
- Also see "**INSTRUCTIONS FOR USE**" shown page 115.

**SPARE PARTS** MV-5555, MV-5560 and MV-5577 (see page 117)



MV-3920



MV-3930

## CAPS AND SPARE PARTS

MV-2250



MV-2245



**MV-2250** 1/4" flare SAE heavy duty round brass **UNIVERSAL CAP**  
With handy core-wrench on top and "NEOPRENE" seal.

**MV-2245** 1/4" flare SAE heavy duty round brass **STANDARD CAP**  
With "NEOPRENE" Seal.

**MV-4910** 5/16" flare SAE heavy duty round brass **CAP** with  
"NEOPRENE" Seal

MV-2235



MV-2225



**MV-2235** 1/4" flare SAE heavy duty HEX brass **ECONOMIC CAP**  
With DUAL "NEOPRENE" or metal seal.

**MV-2225** 1/4" flare SAE heavy duty HEX brass **LIGHT CAP**  
For use with "MV-55 SERIES" valves or metal seal.

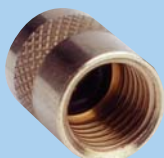
MV-2210



MV-2215



MV-2219



**MV-2210** 1/4" flare SAE glass-filled "NYLON" **BLACK CAP**  
With "NEOPRENE" "O" ring seal.

**MV-2220** Identical to above MV-2210 but for 1/2" **ACME**  
Automotive fittings

**MV-2215** 1/4" flare SAE glass-filled "NYLON" **BLACK CAP**  
With "NEOPRENE" "O" ring seal and  
"POLYETHYLENE" transparent retention strap.

**MV-2216** 3/8" flare SAE glass-filled "NYLON" **BLACK CAP**  
With "NEOPRENE" "O" ring seal and  
"POLYETHYLENE" transparent retention strap.

**MV-2219** Same as above MV-2245 but for any  
1/2" **ACME** A/C AUTOMOTIVE fittings



## CAPS AND SPARE PARTS

**MV-4445** Original valve **CORE** according to *NORM TRC1, DIN7757*  
Outside gasket: Teflon  
Inside gasket: neoprene  
Body: nickel-plated brass  
Compatible with all *USUAL* and *NEW* refrigerants and their lubricants, including R410  
Max. pressure: **35 bar**  
Heat resistance: **-30°C to +90°C**  
Torque: **0,3 to 0,35 Nm**  
Quantity packed: **10 PIECES**

**AVC-6** Plastic container with 6 cores and cap with core remover

**MV-3813** **CORE REMOVING TOOL WITH CONTAINER**  
(3 cores included)

**MV-3814** **CORE REMOVING TOOL FOR SMALL AND BIG VALVES** (cores not included)

**MV-3816** **VALVE CORE TOOLS SCREW SET**

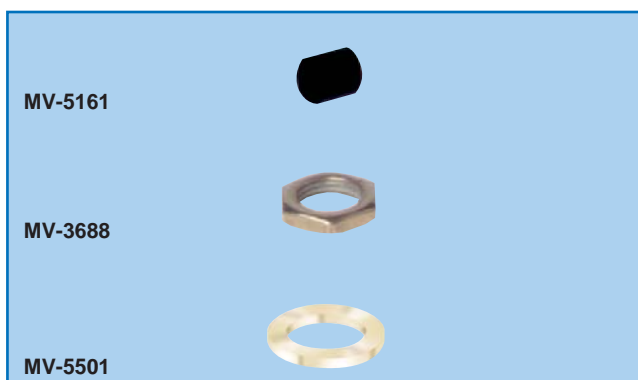
- Compact but very robust 7-in-1 tool
- Large handle to fit in the palm of your hand and to allow application of maximum force
- Ratchet handle mechanism to turn left or right, or can be fixed to use without ratchet
- 7 different bits are neatly stored in transparent handle
  - Slotted: 5.0; 6.0
  - Philips: 1; 2
  - Core removing bits: 4.4; 5.0
  - Thread chaser (to clean and repair thread in schrader service valves)

**MV-5161** 5/16" OD "**NEOPRENE**" **HOSE GASKET**  
for charging hoses.

**MV-5038** 1/2" OD "**NEOPRENE**" **HOSE GASKET** for 3/8" hoses.  
Packed in any quantity.

**MV-3688** 1/8" pipe thread brass **HEX LOCKNUT**  
(For example used with "T-36" Valves)

**MV-5501** "**TEFLON**" O-ring for M-series valve.  
Packed in quantities of 25.



## "O" RING GASKETS

- Heavy and compact "**NEOPRENE**" and "**BUNA**" composition.
- **IMPORTANT:** All are **10 PIECES** packed.

**MV-0077** 3,97 mm int. x 7,14 mm ext. (5/32"ID x 9/32"OD)

**MV-0099** For thumbscrew of core **depressor** and "**CRT**"  
3,97 mm int. x 8,73 mm thic. (5/32"ID x 11/32"CS)  
For Coupler of MV-5050

**MV-0101** 6,35 mm int. x 9,53 mm ext. x 1,59 mm thic.  
(1/4" ID x 3/8" OD x 1/16" CS)

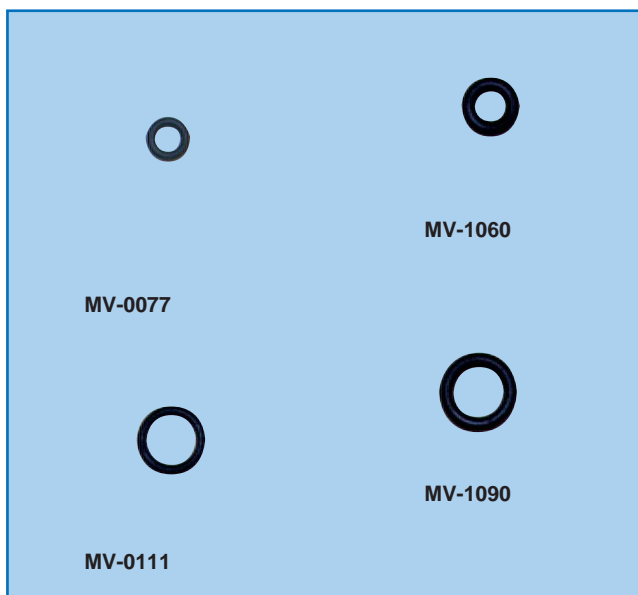
**MV-0111** 5,56 mm int. x 7,94 mm ext. x 1,59 mm thic.  
(7/32" ID x 5/16" OD x 1/16" CS)

Used in "**CRT**" and core depressor **couplers**

**MV-1050** 3,97 mm ext. x 8,73 mm int. x 2,38 mm thic.  
(5/32" ID x 11/32" OD x 3/32" CS)

**MV-1060** 4,76 mm int. x 9,53 mm ext. x 2,38 mm thic.  
(3/16" ID x 3/8" OD x 3/32" CS) for brass "**CAP**"

**MV-1090** 7,94 mm int. x 12,7 mm ext. x 2,38 mm thic.  
(5/16" ID x 1/2" OD x 3/32" CS)  
Used in "**CRT**" and core depressor **couplers**





# AUTOMATIC ACCESS " ITE " FORGED BRASS MICRO - VALVES

"HEAVY DUTY FORGED BRASS ACCESS VALVES FOR OEM'S"

## DESCRIPTION

- Some **OEM's**, **CONTRACTORS** and **AUTOMOTIVE COMPANIES** are looking for heavy duty forged brass access valves resisting shocks, severe vibrations and/or excess torque "in the field" service or for their retrofit station service.
- All " ITE " **MICRO VALVE TEES** have their 1/4" male flare SAE connections threaded to receive a valve core and all standard hoses, depressors, caps and access-tools will fit.



## NEW " ITE " AUTOMOTIVE FITTINGS

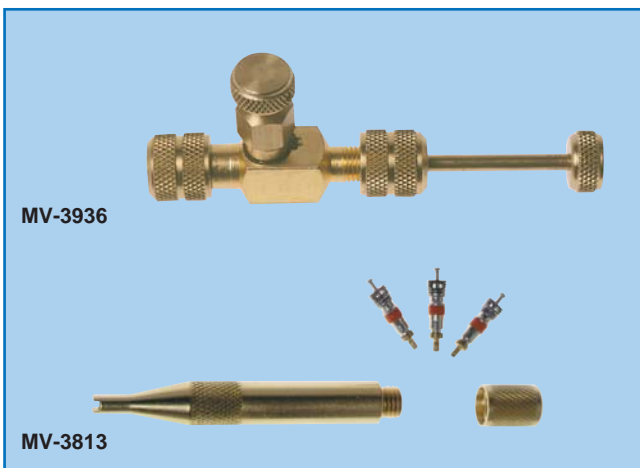
- |                |   |
|----------------|---|
| <b>MV-5013</b> | <b>R134a RETROFIT BRASS ADAPTER</b><br>Straight automotive high side stem (13 mm) x 1/4" female flare SAE ( <b>BLUE CAP</b> )<br>Ready to receive suitable valve core |
| <b>MV-5016</b> | <b>R134a RETROFIT BRASS ADAPTER</b><br>Straight automotive high side stem (16 mm) x 1/4" female flare SAE ( <b>RED CAP</b> )<br>Ready to receive suitable valve core  |

- |                |   |
|----------------|---|
| <b>MV-5036</b> | <b>AUTOMOTIVE BRASS ADAPTER</b><br>3/16" female flare SAE x 1/4" male flare SAE           |
| <b>MV-5014</b> | <b>AUTOMOTIVE BRASS ADAPTER (all uses)</b><br>1/4" female flare SAE x 1/4" male flare SAE |

- |                |   |
|----------------|---|
| <b>MV-7414</b> | <b>AUTOMOTIVE BRASS ADAPTER</b><br>1/2" male ACME access x 1/4" male pipe MPT (one valve core. No cap). |
| <b>MV-7418</b> | <b>AUTOMOTIVE BRASS ADAPTER</b><br>1/2" male ACME access x 1/8" male pipe MPT (one valve core. No cap). |



- |                |   |
|----------------|---|
| <b>MV-2022</b> | <b>AUTOMOTIVE BRASS ADAPTER</b><br>3/8" female flare SAE (hex.) x 1/2" male ACME  |
| <b>MV-2024</b> | <b>AUTOMOTIVE BRASS ADAPTER</b><br>1/4" female flare SAE (hex.) x 1/2" male ACME internally threaded for valve core (core and cap included) |



- |                |  |
|----------------|--|
| <b>MV-3936</b> | <b>AUTOMOTIVE BRASS CORE REMOVAL TOOL</b><br>Issued from "the original one" <b>MV-3900 "CRT"</b><br>See description and purposes page 115.<br>Same as "CRT" but only the coupling is sized to attach to 3/16" <b>AUTOMOTIVE male fittings</b> rather than the standard 1/4" male flare SAE |
| <b>MV-3813</b> | <b>CORE CONTAINER - WRENCH KIT</b><br>Core container with wrench. All brass with knurl easy handling. Compact design. Holds 3 valve cores  |

## " ITE " HEAVY DUTY FULLY FORGED BRASS TEES FOR OEM's

**MV-1454**

1/4" male flare SAE (with valve core) x 1/4"  
female flare SAE (swivel nut with depressor)

**MV-9611**

1: 1/4" male flare SAE with valve core  
2: 1/4" female flare SAE swivel nut with depressor  
3: 1/4" male flare SAE (free, threaded for core)

**MV-9628**

Same as **MV-9611** above **WITHOUT** depressor

**MV-9616**

1: 1/8" male pipe MPT  
2: 1/4" male flare SAE with core, cap & gasket  
3: 1/4" male flare SAE (free, threaded for core)

**MV-9612**

1: 1/4" male flare SAE (free, threaded for core)  
2: 1/4" male flare SAE (free, threaded for core)  
3: 1/4" ODS

**MV-9615**

1: 1/4" male flare SAE (free, threaded for core)  
2: 1/4" male flare SAE with core, cap & gasket  
3: 1/4" male pipe MPT

**MV-9620**

1: 1/4" male flare SAE (free, threaded for core)  
2: 1/4" male flare SAE with core, cap & gasket  
3: 1/8" male pipe MPT

**MV-9614**

1: 1/4" male pipe MPT  
2: 1/4" male flare SAE with core, cap & gasket  
3: 1/4" male flare SAE (free, threaded for core)

**MV-9613**

1 & 2: 1/4" male flare SAE with core  
3: 1/4" male flare SAE  
(All 3 ends have NO caps)

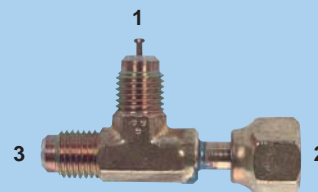
**MV-9603**

1: 1/4" male flare SAE (free, threaded for core)  
2: 1/4" male flare SAE with core  
3: 1/4" female flare SAE swivel nut with depressor

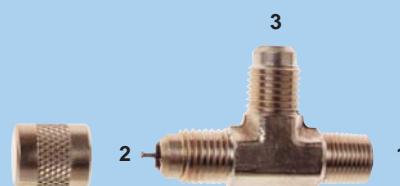
**MV-1454**



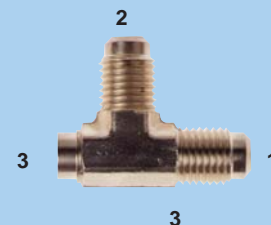
**MV-9611**



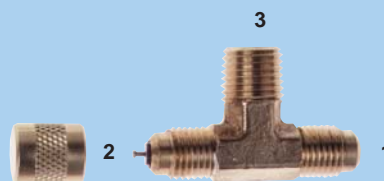
**MV-9616**



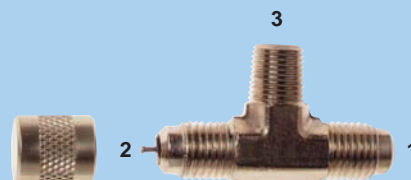
**MV-9612**



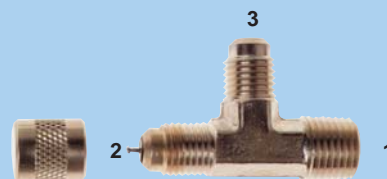
**MV-9615**



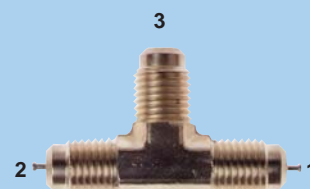
**MV-9620**



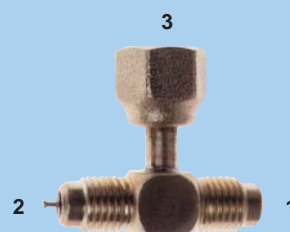
**MV-9614**



**MV-9613**



**MV-9603**





## CONVERSION FITTINGS

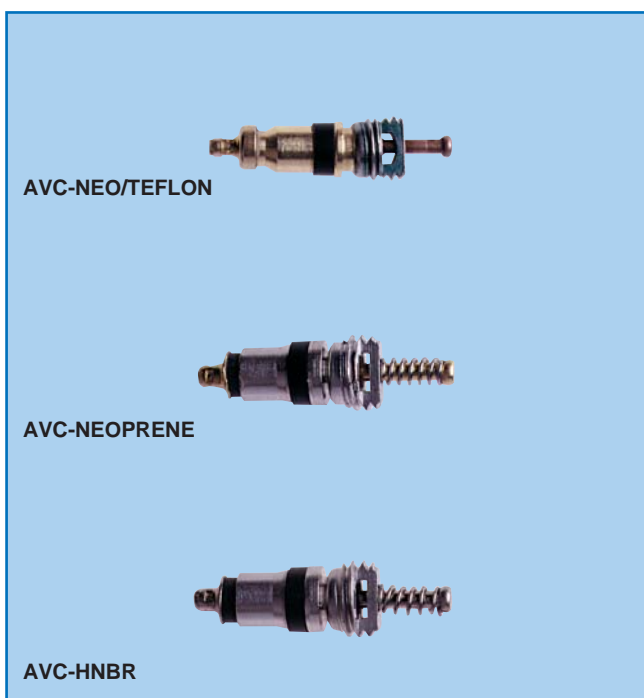
**MV-7100** Conversion fitting straight HP  $\frac{3}{16}$ " fem. SAE

**MV-7102** Conversion fitting straight LP  $\frac{1}{4}$ " fem SAE



**MV-7110** Conversion fitting 90° LP  $\frac{1}{4}$ " fem SAE

**MV-7114** Conversion fitting 90° HP  $\frac{3}{16}$ " fem SAE



## AUTOMOTIVE VALVE CORE GASKETS

- For use in refrigeration and air conditioning

**AVC-NEO/TEFLON** **VALVE CORE GASKET NEOPRENE /**  
teflon with internal mechanism  
Flow: 6 m<sup>3</sup>/h

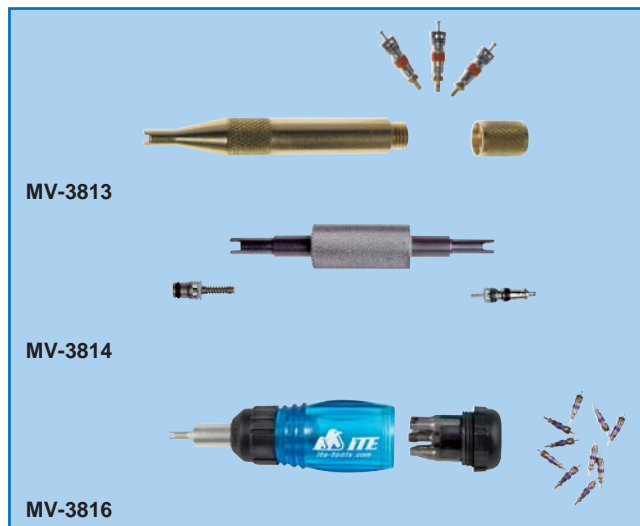
**AVC-NEOPRENE** **VALVE CORE GASKET NEOPRENE**  
Flow: 12 m<sup>3</sup>/h  
Temperature range: -40°C to +100°C with peak  
of +120°C.

**AVC-HNBR** **VALVE CORE GASKET HNBR**  
Flow: 12 m<sup>3</sup>/h  
Temperature range: -40°C to +120°C with peak  
of +150°C

**MV-3813** **CORE REMOVING TOOL WITH CONTAINER**  
(3 cores included)  
**MV-3814** **CORE REMOVING TOOL FOR SMALL AND BIG VALVES** (cores not included)

**MV-3816** **VALVE CORE TOOLS SCREW SET**

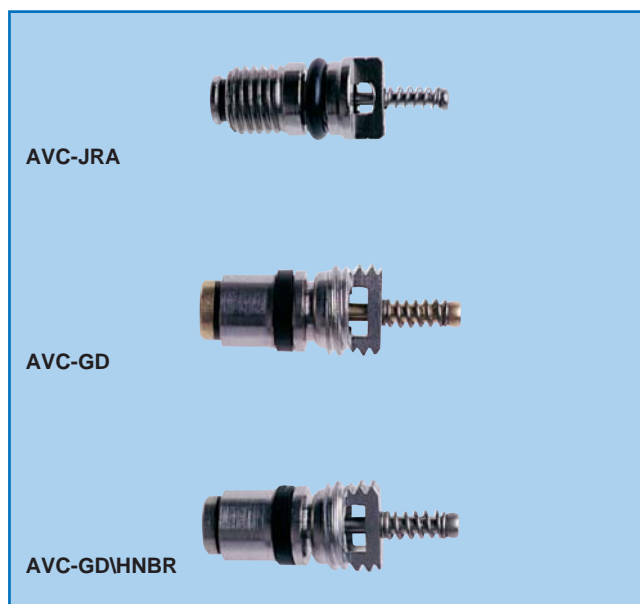
- Compact but very robust 7-in-1 tool
- Large handle to fit in the palm of your hand and to allow application of maximum force
- Ratchet handle mechanism to turn left or right, or can be fixed to use without ratchet
- 7 different bits are neatly stored in transparent handle
  - Slotted: 5.0; 6.0
  - Philips: 1; 2
  - Core removing bits: 4.4; 5.0
  - Thread chaser (to clean and repair thread in schrader service valves)



**AVC-JRA** **NICKEL PLATED JRA VALVE CORE**  
This valve core conforms to the Japan refrigeration & air conditioning industry association charging valves for automotive air conditioners, **standard JRA 2009-1991.**

**AVC-GD** **VALVE CORE GASKET NEOPRENE,**  
large flow M8 x 100  
Flow: 30 m³/h  
Temperature range: -40°C to +100°C with peak of +120°C.

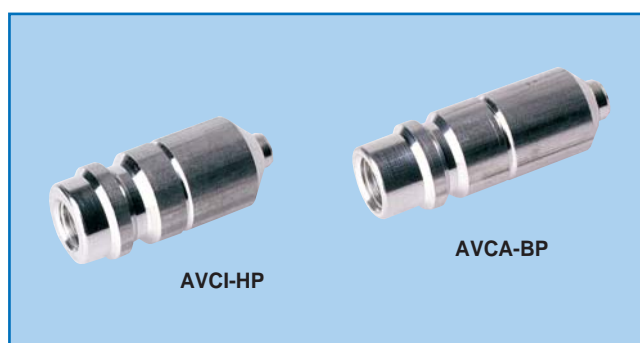
**AVC-GD/HNBR** **VALVE CORE GASKET HNBR,**  
large flow M8 x 100  
Flow: 30m³/h  
Temperature range: -40°C to +120°C with peak of +150°C



## AUTOMOTIVE HP-BP ACCESS PORTS

- For AVC-JRA, AVC-GD and AVC-GD/HNBR automotive valve core gaskets

**AVCI-HP** **ACCESS PORT** steel  
**AVCA-HP** **ACCESS PORT** aluminium  
**AVCI-BP** **ACCESS PORT** steel  
**AVCA-BP** **ACCESS PORT** aluminium



## AUTOMOTIVE CAPS

**AC-BP** Automotive SAE cap valve 'LP'  
Static pressure: 0 - 28 bar  
Temperature range: -40°C to +120°C

**AC-HP** Automotive SAE cap valve 'HP'  
Static pressure: 0 - 28 bar  
Temperature range: -40°C to +120°C





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]

- 3 -



[illegible]

[illegible]



[illegible]

Part. nr.	Pdf file
86109	see Inline components and accessories
86111	see Inline components and accessories
8694405	see Tube working tools
8694405	see Tube working tools
8921626-E	see Service manifolds, gauges and charging hoses
8921626-E	see Service manifolds, gauges and charging hoses
93-S-03	see Tube working tools
93-S-04	see Tube working tools
93-S-05	see Tube working tools
93-S-06	see Tube working tools
93-S-08	see Tube working tools
93-S-10	see Tube working tools
93-S-12	see Tube working tools
93-S-14	see Tube working tools
94-S	see Tube working tools
95-S	see Tube working tools
A01203	see Copper tubes, coils & solder fittings (Inch & Metric)
A01211	see Copper tubes, coils & solder fittings (Inch & Metric)
A01278	see Copper tubes, coils & solder fittings (Inch & Metric)
A01366	see Copper tubes, coils & solder fittings (Inch & Metric)
A01392	see Copper tubes, coils & solder fittings (Inch & Metric)
A01402	see Copper tubes, coils & solder fittings (Inch & Metric)
A01409	see Copper tubes, coils & solder fittings (Inch & Metric)
A01422	see Copper tubes, coils & solder fittings (Inch & Metric)
A01431	see Copper tubes, coils & solder fittings (Inch & Metric)
A01467	see Copper tubes, coils & solder fittings (Inch & Metric)
A01504	see Copper tubes, coils & solder fittings (Inch & Metric)
A01529	see Copper tubes, coils & solder fittings (Inch & Metric)
A01556	see Copper tubes, coils & solder fittings (Inch & Metric)
A01590	see Copper tubes, coils & solder fittings (Inch & Metric)
A02628	see Copper tubes, coils & solder fittings (Inch & Metric)
A02273	see Copper tubes, coils & solder fittings (Inch & Metric)
A02529	see Copper tubes, coils & solder fittings (Inch & Metric)
A02574	see Copper tubes, coils & solder fittings (Inch & Metric)
A02614	see Copper tubes, coils & solder fittings (Inch & Metric)
A02650	see Copper tubes, coils & solder fittings (Inch & Metric)
A02675	see Copper tubes, coils & solder fittings (Inch & Metric)
A02708	see Copper tubes, coils & solder fittings (Inch & Metric)
A03167	see Copper tubes, coils & solder fittings (Inch & Metric)
A03168	see Copper tubes, coils & solder fittings (Inch & Metric)
A03171	see Copper tubes, coils & solder fittings (Inch & Metric)
A07812	see Copper tubes, coils & solder fittings (Inch & Metric)
A07813	see Copper tubes, coils & solder fittings (Inch & Metric)
A07814	see Copper tubes, coils & solder fittings (Inch & Metric)
A07815	see Copper tubes, coils & solder fittings (Inch & Metric)
A07816	see Copper tubes, coils & solder fittings (Inch & Metric)
A07817	see Copper tubes, coils & solder fittings (Inch & Metric)
A07819	see Copper tubes, coils & solder fittings (Inch & Metric)
A-10971	see Tube working tools
A11205	see Copper tubes, coils & solder fittings (Inch & Metric)
A11206	see Copper tubes, coils & solder fittings (Inch & Metric)
A11207	see Copper tubes, coils & solder fittings (Inch & Metric)
A11216	see Copper tubes, coils & solder fittings (Inch & Metric)
A11217	see Copper tubes, coils & solder fittings (Inch & Metric)
A-3	see Automatic access valves & fittings
AA-HDS-36-B	see Service manifolds, gauges and charging hoses
AA-HDS-36-B/V	see Service manifolds, gauges and charging hoses
AA-HDS-36-R	see Service manifolds, gauges and charging hoses
AA-HDS-36-R/V	see Service manifolds, gauges and charging hoses
AA-HDS-36-Y	see Service manifolds, gauges and charging hoses
AA-HDS-36-Y/V	see Service manifolds, gauges and charging hoses
AA-HDS-60-B	see Service manifolds, gauges and charging hoses
AA-HDS-60-B/V	see Service manifolds, gauges and charging hoses
AA-HDS-60-R	see Service manifolds, gauges and charging hoses
AA-HDS-60-R/V	see Service manifolds, gauges and charging hoses
AA-HDS-60-Y	see Service manifolds, gauges and charging hoses
AA-HDS-60-Y/V	see Service manifolds, gauges and charging hoses
AA-HDS-72-B	see Service manifolds, gauges and charging hoses
AA-HDS-72-R	see Service manifolds, gauges and charging hoses
AA-HDS-72-Y	see Service manifolds, gauges and charging hoses
AC-BP	see Automatic access valves & fittings
AC-HP	see Automatic access valves & fittings
ACID-118	see Refrigeration accessories
ACK-001	see Fluid control components
ACK-003	see Fluid control components
ACK-004	see Fluid control components
ACK-004	see Fluid control components
ACK-004	see Fluid control components
ACK-004	see Fluid control components
ACK-004	see Fluid control components
ACK-004	see Fluid control components
ACK-005	see Fluid control components
ACK-007	see Fluid control components
ACK-007	see Fluid control components
ACK-007	see Fluid control components
ACK-008	see Fluid control components
ACK-008	see Fluid control components
ACT-6	see Tube working tools
ADP-0604	see Tube working tools
ADP-0608	see Tube working tools
AG-100	see Refrigeration accessories
AG-2	see Refrigeration accessories
AM-05	see Fluid control components





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-06x09 mm	see Refrigeration accessories
DHC-06x09/1M	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 -

<b>Part. nr.</b>	<b>Pdf file</b>
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-R	see Service manifolds, gauges and charging hoses
HDA-36-R/410	see Service manifolds, gauges and charging hoses
HDA-36-Y	see Service manifolds, gauges and charging hoses
HDA-36-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-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 Evacuating and charging equipment
HDS-60-Y/V	see Evacuating and charging equipment
HDS-60-Y/V	see Service manifolds, gauges and charging hoses
HD56-12-B/V	see Service manifolds, gauges and charging hoses
HD56-12-R/V	see Service manifolds, gauges and charging hoses
HD56-12-Y/V	see Service manifolds, gauges and charging hoses
HD56-36-B	see Service manifolds, gauges and charging hoses
HD56-36-B/V	see Service manifolds, gauges and charging hoses
HD56-36-R	see Service manifolds, gauges and charging hoses
HD56-36-R/V	see Service manifolds, gauges and charging hoses
HD56-36-Y	see Service manifolds, gauges and charging hoses
HD56-36-Y/V	see Service manifolds, gauges and charging hoses
HD56-60-B	see Service manifolds, gauges and charging hoses
HD56-60-B/V	see Service manifolds, gauges and charging hoses
HD56-60-R	see Service manifolds, gauges and charging hoses
HD56-60-R/V	see Service manifolds, gauges and charging hoses
HD56-60-Y	see Service manifolds, gauges and charging hoses
HD56-60-Y/V	see Service manifolds, gauges and charging hoses
HD56-72-B	see Service manifolds, gauges and charging hoses
HD56-72-B/V	see Service manifolds, gauges and charging hoses
HD56-72-R	see Service manifolds, gauges and charging hoses
HD56-72-R/V	see Service manifolds, gauges and charging hoses
HD56-72-Y	see Service manifolds, gauges and charging hoses
HD56-72-Y/V	see Service manifolds, gauges and charging hoses
HD5-72-B/V	see Service manifolds, gauges and charging hoses
HD5-72-R/V	see Service manifolds, gauges and charging hoses
HD5-72-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-1080	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

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Part. nr.	Pdf file
PMK-10-ALL	see Evacuating and charging equipment
PMK-11-ALL	see Evacuating and charging equipment
PMK-29-ALL	see Evacuating and charging equipment
PMK-30-ALL	see Evacuating and charging equipment
PO-230	see Refrigeration accessories
PPL-10	see Tube working tools
PRH-4D-24	see Tube working tools
PROBE-01/V2	see Electronic measurement and control instruments
PROBE-03/V2	see Electronic measurement and control instruments
PROBE-06/V2	see Electronic measurement and control instruments
PRT-8020	see Electronic measurement and control instruments
PSA-200B	see Electronic measurement and control instruments
PSA-200R	see Electronic measurement and control instruments
PSBD-606	see Refrigeration accessories
PSBD-606M	see Refrigeration accessories
PSBS-02	see Refrigeration accessories
PSBS-03	see Refrigeration accessories
PSBS-04	see Refrigeration accessories
PSBS-05	see Refrigeration accessories
PSBS-10	see Refrigeration accessories
PS-HP200-150	see Refrigeration accessories
PS-HP250-150	see Refrigeration accessories
PS-HP300-200	see Refrigeration accessories
PS-HP350-250	see Refrigeration accessories
PS-HP400-200	see Refrigeration accessories
PS-HP450-250	see Refrigeration accessories
PS-LP05-20	see Refrigeration accessories
PS-LP25-80	see Refrigeration accessories
PS-LP40-80	see Refrigeration accessories
PS-MC-HP-440	see Refrigeration accessories
PS-MF-HP-410	see Refrigeration accessories
PSO-2B	see Fluid control components
PSO-2ES	see Fluid control components
PSO-3B	see Fluid control components
PSO-3ES	see Fluid control components
PSO-4B	see Fluid control components
PSO-4ES	see Fluid control components
PSO-5B	see Fluid control components
PSO-5ES	see Fluid control components
PSO-7S	see Fluid control components
PSO-9S	see Fluid control components
PSS-100B	see Electronic measurement and control instruments
PSS-100R	see Electronic measurement and control instruments
PSS-200B	see Electronic measurement and control instruments
PSS-200R	see Electronic measurement and control instruments
PT-100	see Electronic measurement and control instruments
PT-109	see Tube working tools
PT-14285	see Tube working tools
PTCB-340	see Tube working tools
PTCB-350	see Tube working tools
PTCB-360	see Tube working tools
PTCB-370	see Tube working tools
PTCB-380	see Tube working tools
PTCB-390	see Tube working tools
PTR-1	see Service manifolds, gauges and charging hoses
PTR-1	see Tube working tools
PTR-1B	see Tube working tools
PTR-2	see Tube working tools
PV3P-10102	see Tube working tools
PVB-10102	see Tube working tools
PVC-200/2 mm	see Refrigeration accessories
PVC-300/3 mm	see Refrigeration accessories
PVC-CLIP-200	see Refrigeration accessories
PVC-CLIP-300	see Refrigeration accessories
PVC-RAIL	see Refrigeration accessories
PW-5014	see Tube working tools
PW-5036	see Tube working tools
QAA-04	see Service manifolds, gauges and charging hoses
QAA-04	see Automatic access valves & fittings
QAA-05	see Automatic access valves & fittings
QAA-06	see Automatic access valves & fittings
QAG-04	see Automatic access valves & fittings
QAG-05	see Automatic access valves & fittings
QAG-06	see Automatic access valves & fittings
QAI-04	see Automatic access valves & fittings
QAI-05	see Automatic access valves & fittings
QAI-06	see Automatic access valves & fittings
QC-13445-134a	see Automatic access valves & fittings
QC-2342	see Automatic access valves & fittings
QC-48-3/4	see Fluid control components
QCA-5/16x1/4	see Service manifolds, gauges and charging hoses
QCA-5/16x1/4	see Automatic access valves & fittings
QCCA	see Tube working tools
QC-E3	see Evacuating and charging equipment
QC-E64	see Automatic access valves & fittings
QCF-04	see Automatic access valves & fittings
QCF-06	see Automatic access valves & fittings
QCM-04	see Automatic access valves & fittings
QCM-06	see Automatic access valves & fittings
QC-S2	see Automatic access valves & fittings
QC-S4	see Automatic access valves & fittings
QC-S46	see Automatic access valves & fittings
QC-S4A	see Automatic access valves & fittings
QC-S4A-134a	see Automatic access valves & fittings
QC-S4B	see Automatic access valves & fittings

- 13 -



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-4	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

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Part. nr.	Pdf file
TP19-010	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-012	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-015	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-018	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-022	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-028	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-030	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-035	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-042	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-048	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-054	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-060	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-064	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-070	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-076	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-080	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-089	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-102	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-108	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-114	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-125	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-133	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-140	see Copper tubes, coils & solder fittings (Inch & Metric)
TP19-160	see Copper tubes, coils & solder fittings (Inch & Metric)
TPM-1/V2	see Electronic measurement and control instruments
TPM-2/V2	see Electronic measurement and control instruments
TPM-58	see Electronic measurement and control instruments
TPM-62	see Electronic measurement and control instruments
TR2-00446	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
TR2-00664	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
TR2-00668	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
TR2-00886	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
TRACE2-118	see Refrigeration accessories
TRACE2-3790	see Refrigeration accessories
TRACE2-474	see Refrigeration accessories
TRAX-300	see Refrigeration accessories
TRAX-40	see Refrigeration accessories
TSPM-1/V2	see Electronic measurement and control instruments
TSPM-2/V2	see Electronic measurement and control instruments
TSPM-3	see Electronic measurement and control instruments
TS-RC	see Tube working tools
TS-SC	see Tube working tools
TSMW-10	see Electronic measurement and control instruments
TSMW-2/V2	see Electronic measurement and control instruments
TSMW-30	see Electronic measurement and control instruments
TSMW-35	see Electronic measurement and control instruments
TSMW-35/EXT	see Electronic measurement and control instruments
TT1-001	see Refrigeration accessories
TT2-001	see Refrigeration accessories
TU-041	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-061	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-081	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-101	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-121	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-141	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-161	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-181	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-221	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-261	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-341	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-421	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-501	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-581	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-661	see Copper tubes, coils & solder fittings (Inch & Metric)
TU-661	see Copper tubes, coils & solder fittings (Inch & Metric)
TWM-1/V2	see Electronic measurement and control instruments
TX-9	see Tube working tools
TX-9	see Service manifolds, gauges and charging hoses
U1-03A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-04A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-04B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-04C	see Evacuating and charging equipment
U1-04C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-04D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-04M14	see Evacuating and charging equipment
U1-04M14	see Service manifolds, gauges and charging hoses
U1-05A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-05B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-05C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-06A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-06B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-06C	see Evacuating and charging equipment
U1-06C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-06D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-06E	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-06M14	see Evacuating and charging equipment
U1-06M14	see Service manifolds, gauges and charging hoses
U1-08A	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-08B	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-08C	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-08D	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-08E	see Forged brass & steel fittings "NPT" & "NPT 45" SAE"
U1-100-S03	see Fluid control components
U1-100-S05	see Fluid control components
U1-100-S06	see Fluid control components

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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