

MOISTURE LIQUID INDICATORS

“MULTI-POSITIVE DIAGNOSIS”

FEATURES

- Heavy forged brass body. Brass or copper fittings.
- Clear fused glass window. Color scale for multi-positive *LIQUID* and *MOISTURE READINGS* of the refrigerant condition in air-conditioning or refrigeration systems.

SPECIFICATIONS

- For **R12, R22, R502, R134a, R404A, R407C, R507** and other blends with their specific oil and lubricant.
- Safe working pressure: **35 bar** (500 psi).
- Minimum burst pressure: **175 bar** (2500 psi).
- Maximum temperature rating: **+93°C** (+200°F).
- **CE** approved (PED).

INSTALLATION & RECOMMENDATIONS

- When installed, the moisture Indicator element will be *PINK*, indicating moisture in the ambient atmosphere. Always, install it at the *OUTLET* of any drier and let the system operate at least **12 hours**. After such a delay, if the moisture element remains *PINK* or *LIGHT VIOLET*, install a new drier and continue to run the system until the element becomes *BLUE*.
- For moisture Indicators equipped with a replaceable cap assembly (**MI-CAP**), remove it before brazing. To replace any cap assembly **MI-CAP**, wrench tighten 1/2 turn beyond handtight position or use a proper sealing torque of **34,3 N.m** approx or **3,5 kgm** or **25 ft.lbs**.

MOISTURE INDICATIONS

- Because of the different solubility limits expressed in **PPM of water** (Part Per Million), the color change will not occur at the same level for all refrigerants. Also, because the temperature of the refrigerant liquid will affect this solubility level, the color change will occur at a different level, according to the liquid temperature. Of course, the moisture color change does not occur until the moisture value stays under the solubility level.

NO MOISTURE

The solubility level is generally given (in PPM) by the manufacturer for each of its refrigerants. Under such a level, PPM's are completely solubilized and can not be detected. In such a state, refrigerants are considered perfectly dry and safe.

MOISTURE DIAGNOSIS

See our **1. MOISTURE COLOR TABLE** for a positive PPM moisture diagnosis of your system.

REVERSIBILITY

The color changes of our moisture Indicators are fully **REVERSIBLE** in the liquid line, offering a positive and permanent moisture reading.

COLOR INDICATIONS

BLUE: Safe (no dangerous PPM of water in the line. (The refrigerant is dry and safe).

LIGHT VIOLET: Caution (you must change the drier now. The moisture reaches the solubility level).

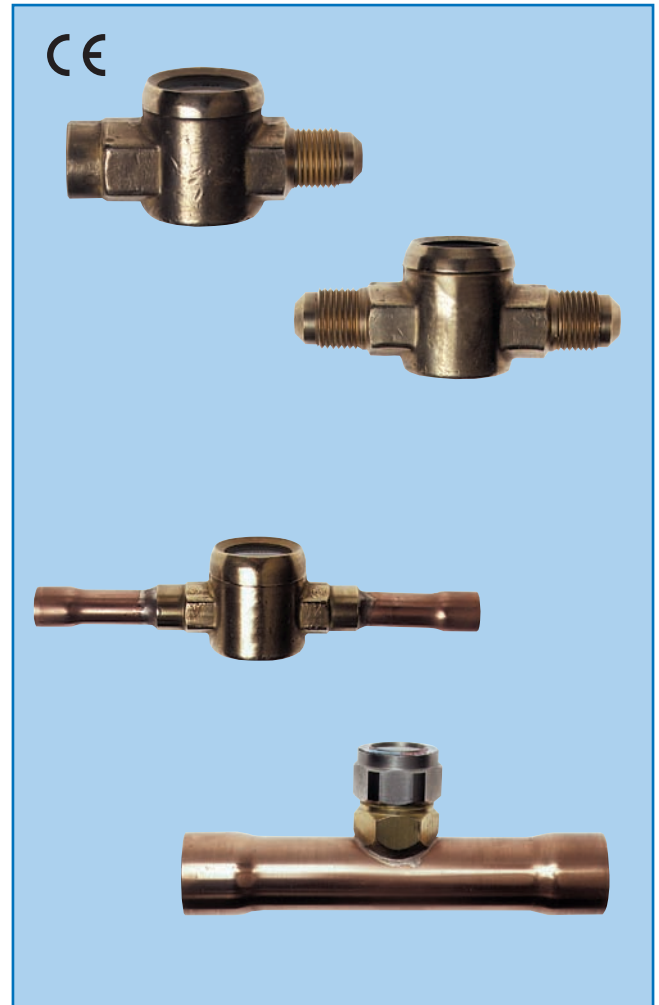
PINK: Danger (dangerous moisture in the system).

OTHER INDICATIONS

DISCOLORED: Danger (system with excessive amount of water or containing liquid dehydrating agents or liquid leak detectors).

DARK GRAY/BLACK: Danger (oil separation problems).

BUBBLES: Danger (high pressure drop: clogged drier or solid cores, Loss of refrigerant, etc...).



REFRIG. TYPE	PPM MOISTURE CONTENT (Part Per Million)			
	TEMP. (°C/°F)	COLOR INDICATIONS		
		BLUE	LIGHT VIOLET	PINK
R12	24° / 75°	< 5	5 through 15	>15
	38° / 100°	<10	10 through 30	>30
	52° / 125°	<15	15 through 45	>45
	24° / 75°	<30	30 through 120	>120
R22	38° / 100°	<45	45 through 180	>180
R500	24° / 75°	<15	15 through 60	>60
	52° / 125°	<60	60 through 240	>240
R502	24° / 75°	<15	15 through 60	>60
	38° / 100°	<25	25 through 90	>90
	52° / 125°	<30	30 through 120	>120
R134a	24° / 75°	<15	15 through 80	>80
	38° / 100°	<35	35 through 120	>120
	52° / 125°	<50	50 through 150	>150
R404A	38° / 100°	<25	25 through 110	>110
	52° / 125°	<45	45 through 140	>140

NOTE:

- **BLUE** column indicates the maximum PPM solubility level under which any refrigerant is considered as dry and safe (*PPM means Part Per Million*). This is the maximum amount of water (*in PPM*) completely solubilized in the refrigerant involved.
- See right “**COLOR INDICATIONS**” explanations. Compare these *PPM* values with water retention capacities given (under their specific *PPM* level) for all *LIQUID FILTER DRIERS, SHELLS* and *CORES*, shown before.
- Above (<) means equal or below the *PPM* value.
- Above (>) means equal or above the *PPM* value.

SELECTION & ORDERING

MOISTURE INDICATOR

(MALE FLARE x MALE FLARE SAE).

US-1/4-MM INDICATOR 1/4" m. flare x 1/4" m. flare 66 x 29 mm

MOISTURE INDICATOR

(MALE FLARE x FEMALE SAE).

US-1/4-MF INDICATOR 1/4" m. flare x 1/4" f. flare 65 x 33 mm

MOISTURE INDICATORS

(O.D.S. SOLDER x O.D.S. SOLDER).

US-3/8-SS INDICATOR 3/8" O.D.S. x 3/8" O.D.S. 120 x 28 mm

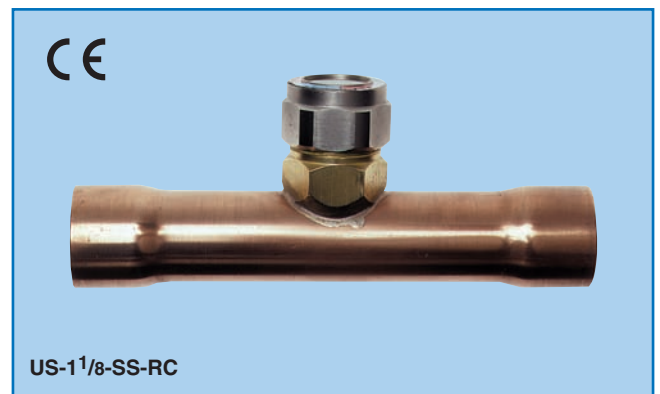
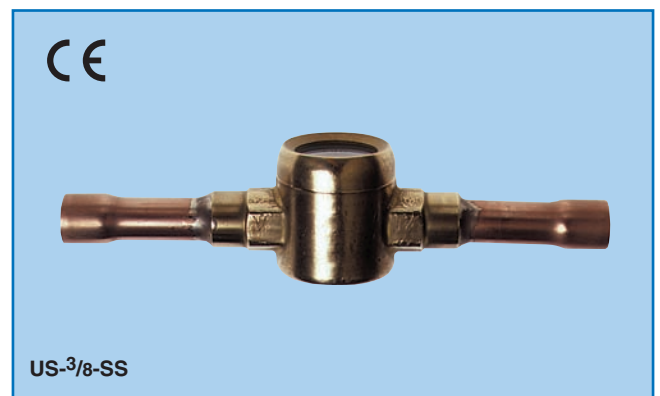
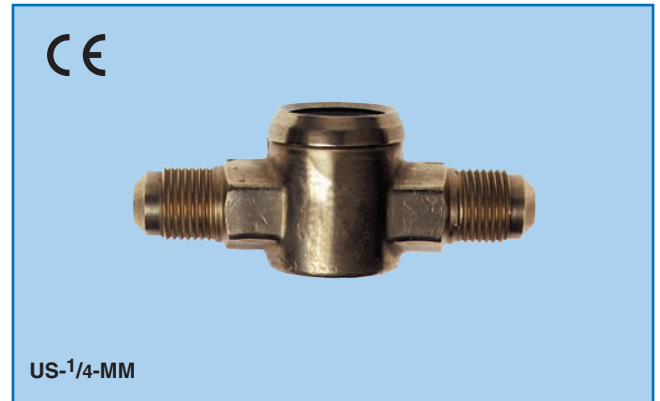
US-1/2-SS INDICATOR 1/2" O.D.S. x 1/2" O.D.S. 124 x 33 mm

US-5/8-SS INDICATOR 5/8" O.D.S. x 5/8" O.D.S. 124 x 35 mm

MOISTURE INDICATOR with "MI-CAP" REPLACEABLE HEAD

(O.D.S. SOLDER x O.D.S. SOLDER).

US-1 1/8-SS-RC INDICATOR 1 1/8" O.D.S. x 1 1/8" O.D.S. 160 x 63 mm



SADDLE TYPE BRASS BODIES
(DIRECT SOLDERING ON TUBING WITHOUT CUTTINGS)
(SADDLE GROOVE CONNECTIONS).

SA-1¹/₈	To be soldered on any 1 ¹ / ₈ " Ø tubing
SA-1³/₈	To be soldered on any 1 ³ / ₈ " Ø tubing
SA-1⁵/₈	To be soldered on any 1 ⁵ / ₈ " Ø tubing
SA-2¹/₈	To be soldered on any 2 ¹ / ₈ " Ø tubing

REPLACEABLE STD CAP MOISTURE ELEMENT
(FOR ALL ABOVE SADDLES and MI-SS INDICATORS).

MI-CAP	Standard replaceable element ready to be screwed on all above saddles and MI-SS (Tightening torque 3,5 kgm or 25 ft.lbs).
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