

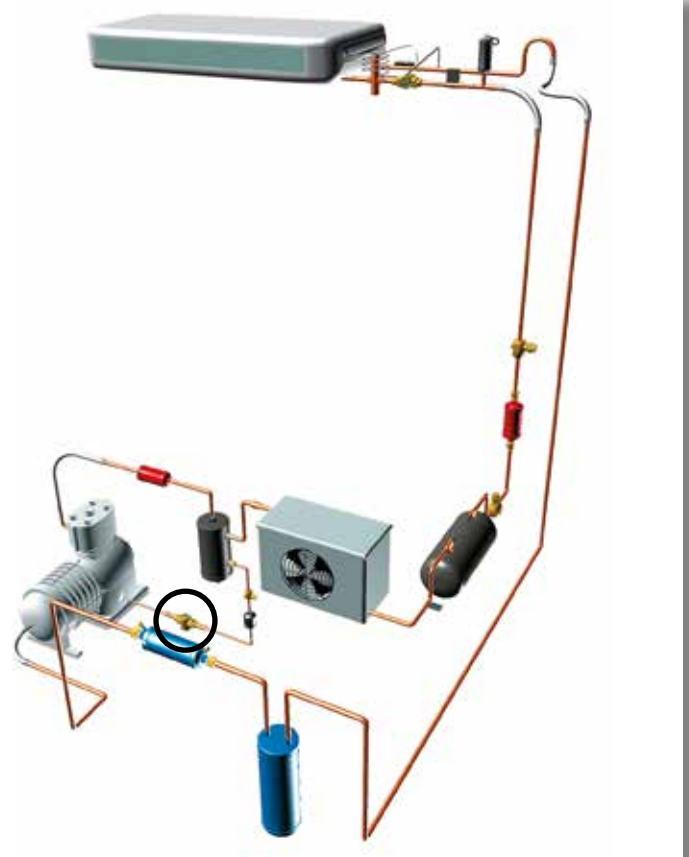


Oil sight glasses

→ HCYVP

■ Applications

- Immediate visual check of the oil presence and aspect in the oil lines of refrigerating and air conditioning installations.



■ Functional features

- Products are compatible with CFCs, HCFCs, HFCs, CO₂, as well as with their associated oils and additives. Products are designed for use of non-hazardous refrigerants from group 2 of PED 2014/68/EU. To use CARLY components with fluids of the hydrocarbon group 1 – Propane R290, Butane R600, Isobutane R600a, Propylene R1270 – with HFOs and transcritical CO₂ and for a RANKINE organic cycle application, contact CARLY technical department.
- Product classification in CE categories is done with the PED 2014/68/EU table, corresponding to a volume-based selection.
- The robust brass body guarantees a perfect resistance to corrosion.
- One-piece construction and crimping of the glass ensure a perfect air tightness thanks to a PTFE gasket.
- The sight glasses with flare connections to screw are provided with copper gaskets.



Possible customization on demand:

- Maximum working pressure higher than 42 bar

■ CARLY advantages

- Maximum working pressure 42 bar
- Those sight glasses may be used on low and high pressure oil return systems
- Good visibility ensured by the large area of the glass and the absence of any indicator ring or central tip.
- Installation facilitated by long copper sleeves for the models to be brazed and by the presence of a hexagon head bolt for positioning and tightening of flare models.
- The male/female connection simplifies the assembly of the oil line components, without having to use accessories such as dudgeon/nut, sleeve, etc...
- The very low weight of the HCYVP sight glasses requires no specific binding.



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■ Warning

Before selecting or installing any component, please refer to the chapter 0 - **WARNING**.

■ General assembly precautions

The installation of a component in a refrigeration system by a skilled professional, requires some precautions:

- Some are specific to each component, and in this case, they are specified in the

RECOMMENDATIONS SPECIFIC part defined hereafter ;

- Other are general to all CARLY components, they are presented in the chapter 115 – **GENERAL ASSEMBLY PRECAUTIONS**.

- The recommendations relating to the CARLY components for the subcritical CO₂ applications are also developed in chapter 115 – **GENERAL ASSEMBLY PRECAUTIONS**.

■ Recommendations specific to the sight glasses HCYVP

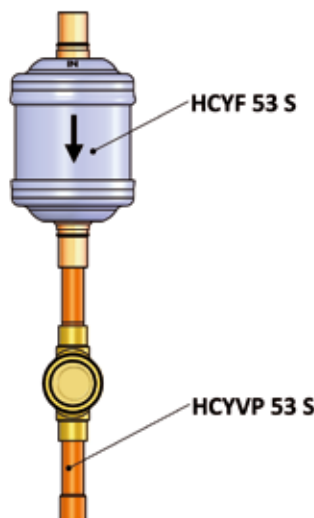
- The oil sight glasses are to be mounted on the oil return line, between the oil separator and the oil level regulator, as close as possible to the latter and, if possible, after the oil filters.
- The tightening of the oil sight glasses with flare connections must imperatively be made with two open-end spanners, in

order to avoid the twisting of the pipes, and the deterioration of their brass body (tightening with pliers proscribed).

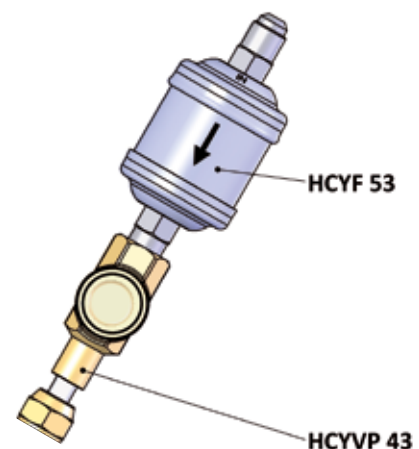
- For the oil sight glasses with connection to be brazed, imperatively cool down the body with a damp cloth or by using the calories discharger CARLYCOOL (see chapter 95).

- During installation of the oil sight glasses with female flare connections, carefully watch the correct positioning of the supplied copper seals.

- After every disassembly of the oil sight glasses with flare connections, it is imperative to replace the copper gasket before the re-assembly.



Example of assembling for components with solder connections



Example of assembling for components with screw connections

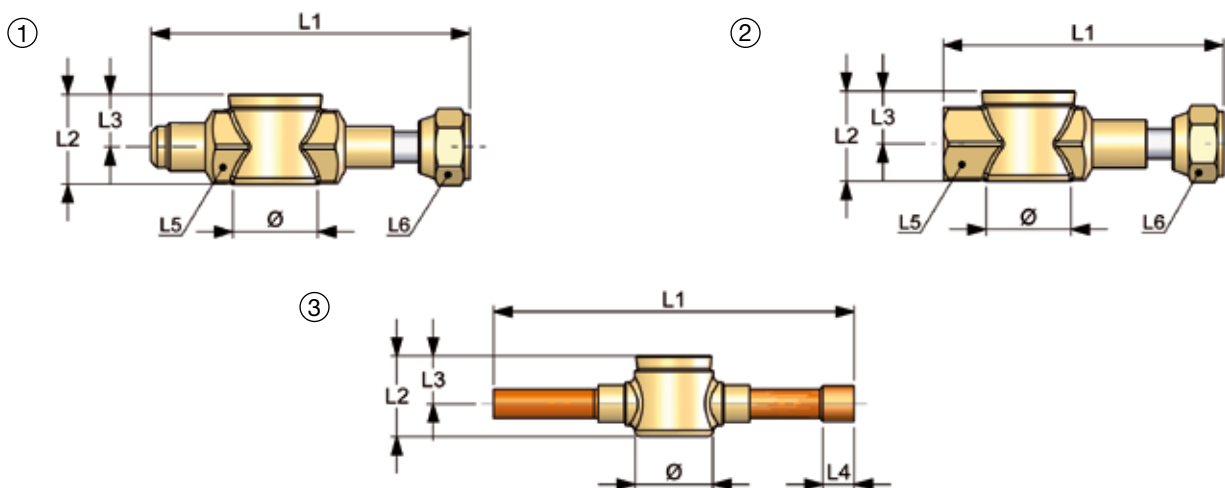


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■ Technical features

| CARLY references | Connections | | | | | | Drawing Nb | Dimensions mm | | | | | | |
|------------------|----------------------|---------------|----|----------------------|---------------|----|------------|---------------|-----|----|----|----------------|----------------|----|
| | To screw SAE inch | To solder ODM | | To screw SAE inch | To solder ODF | | | Ø1 | L1 | L2 | L3 | L4 upper faces | L5 upper faces | |
| | | inch | mm | | inch | mm | | | | | | | | |
| HCYVP 23 | 3/8 M | | | 3/8 F | | | 1 | 32 | 106 | 30 | 17 | / | 24 | 21 |
| HCYVP 43 | 3/8 F | | | 3/8 F | | | 2 | 32 | 93 | 30 | 17 | / | 24 | 21 |
| HCYVP 53 S | | 3/8 | | | 3/8 | | 3 | 25 | 119 | 27 | 16 | 10 | / | / |
| HCYVP 53 MMS | | | 10 | | | 10 | 3 | 25 | 119 | 27 | 16 | 10 | / | / |



| CARLY references | Nominal diameter | Nominal diameter | Maximal working pressure | Working pressure ⁽¹⁾ | Maximal working temperature | Minimal working temperature | Working temperature ⁽¹⁾ | CE Category ⁽²⁾ |
|------------------|------------------|------------------|--------------------------|---------------------------------|-----------------------------|-----------------------------|------------------------------------|----------------------------|
| | DN mm | DN inch | PS bar | PS BT bar | TS maxi °C | TS mini °C | TS BT °C | |
| HCYVP 23 | | 3/8 | 46 | / | 120 | -20 | / | Art4§3 |
| HCYVP 43 | | 3/8 | 46 | / | 120 | -20 | / | Art4§3 |
| HCYVP 53 S | | 3/8 | 46 | / | 120 | -20 | / | Art4§3 |
| HCYVP 53 MMS | 10 | | 46 | / | 120 | -20 | / | Art4§3 |

⁽¹⁾ The working pressure is limited to the PS BT value when working temperature is lower than or equal to TS BT value.

⁽²⁾ Classification by diameter, according to PED 2014/68/EU (refer to chapter 0).

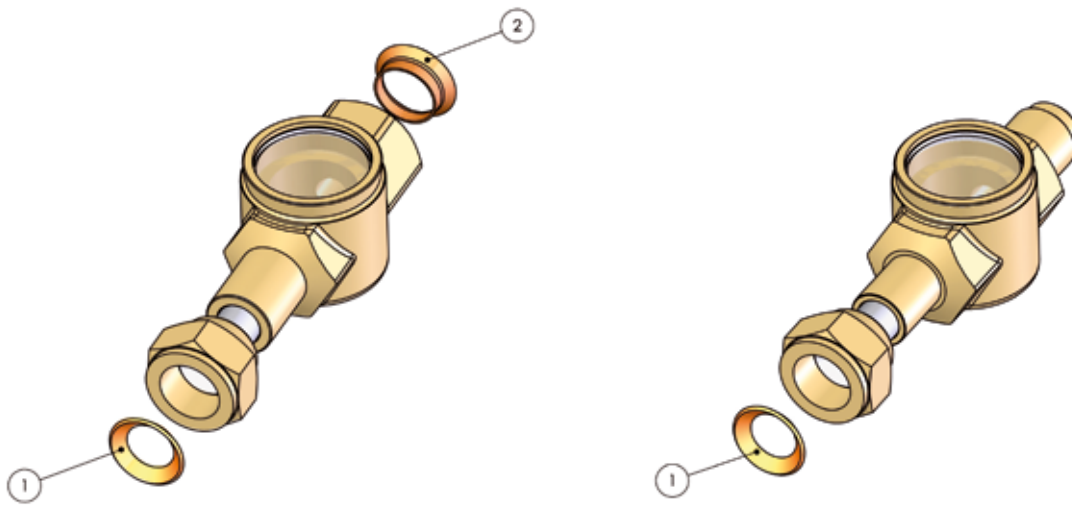


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■ Spare parts

| CARLY references | Part Nb | Description | HCYVP Types | Quantity |
|------------------|---------|--|-------------|----------|
| CY 15590020 | 1 | Set of 25 taper copper gaskets for connection with swivel nut 3/8" SAE | 43 | 1 |
| CY 15590025 | 2 | Set of 25 taper guided copper gaskets for 3/8" SAE connection | 43 | 1 |



■ Weights and packaging

| CARLY references | Unit weight kg | | Packaging number of pieces |
|------------------|-------------------|----------------------|-------------------------------|
| | With packaging | Without packaging | |
| HCYVP 23 | 0,24 | 0,23 | 1 |
| HCYVP 43 | 0,23 | 0,22 | 1 |
| HCYVP 53 S & MMS | 0,11 | 0,10 | 1 |