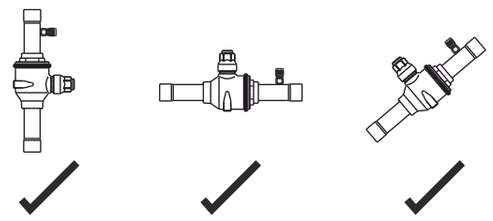
Installation Guideline

Ball Valve - Bi-Flow Refrigerant On/ Off Valve

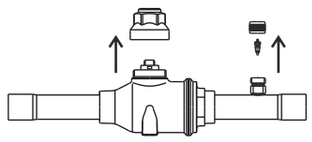
Dry All®
Full Range of HVAC&R Line Products

Installation Positions



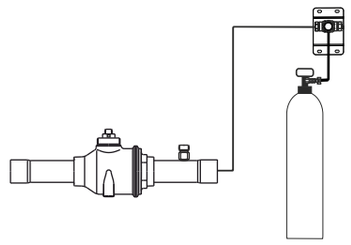
1

Remove the brass dead cap of operating spindle.
Also remove the cap and inner parts of Schrader Valve, if present.



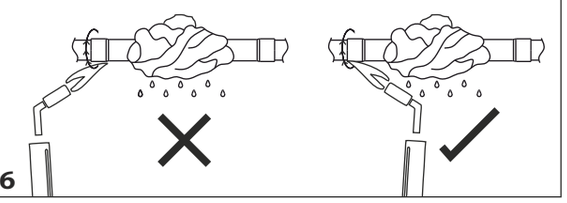
6

During brazing bleed an insert gas
(Dry Nitrogen or Co2))



11

Flame direction should be opposite to the valve body.
Do not touch the flame of the torch directly to the copper tube.
Heat the tube by turning the torch around.
Do not focus on one point.

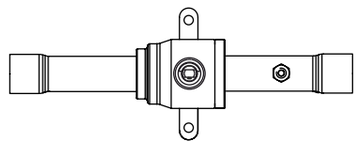


16

Do Installation work in normal,
clean and safe atmospheric conditions.
Please do not do any work in
hazardous and unsafe conditions.

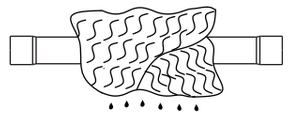
2

Turn the ball valve stem to open position.
The pin must be positioned as shown.



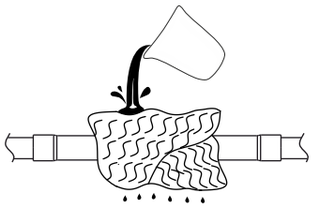
7

Wrap a wet cloth over ball valve.
It must cover the existing brazed tubes
on the body and spindle.



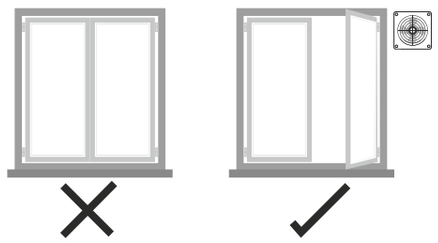
12

After brazing one side, allow it cool.
Pour cold water onto the cloth to cool it further.
Then apply the above listed steps again for the other side.



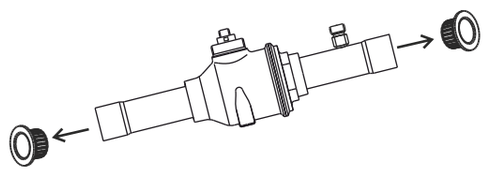
17

When working makes sure that the area
has enough ventilation or working exhaust.



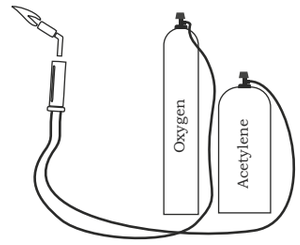
3

Remove the plastic cap ends just
when you are ready to braze.



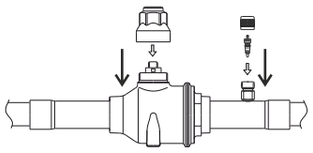
8

Preferably use oxygen-acetylene brazing equipment
and a torch capable to increase temperature to the
required value as soon as possible.



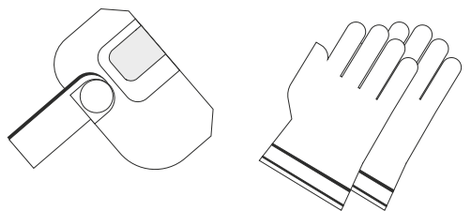
13

Do not forget to attach the brass caps and inner parts
of Schrader Valve back to their places.
Check the Schrader Valve and connections for leaks.



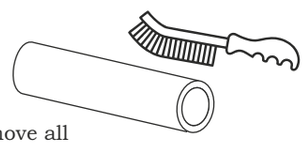
18

Use face shield or green goggles as protection
for eyes. Use heat resistance gloves.



4

Clean the mating parts with
cleaning pad or special wire brush



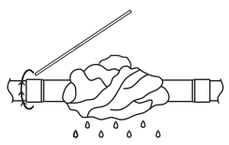
Remove all
oil and grease

Clean Outside
of copper tubing

9

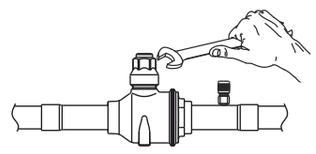
Use copper or high silver brazing Rod
as required.

Brazing Rod



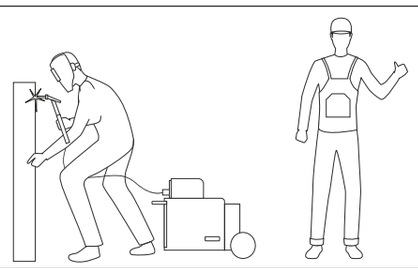
14

Tighten the cap for sealing, with the torque written on it.
Please check if the gasket is properly placed in the cap.



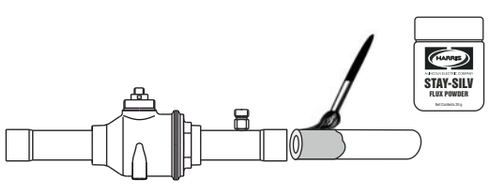
19

Wear impervious coverall clothing
with breathable fabrics.



5

Apply flux to the male connection
after cleaning operation



10

Ball Valve Connection	Mating Part	Recommended Harris Make Brazing Alloy or Equivalent.
Copper	Copper	Most Common used is Harris-0. For higher Vibration joints you may use Harris - Stay-Silv 2 / Stay-Silv 15 / Dynaflow.
Copper	Steel	Stay-Silv 25

15 **Use Brazing Flux as required**

Technical Properties

Nominal pressure : 45 bar

Temperature Range: -40°C to +150°C

Body Material : Forged brass
(EN 12420, EN 12165, CW617N)

Tube Material : Copper (EN 12735-1)