CA - RA - PA (series connection)

♦ Combination release valve for releasing CO₂ one-way bottles with ½" UNF thread by different methods of actuation
♦ Piercing valve of series connection type, for interconnecting the CO₂ outlet ports of several piercing valves. CO₂ outlets are mechanically connected through integrated mounting block, hence no additional pipes required for the outlet end
♦ Valve inlets to be connected with pipes as required
♦ By interconnecting the CA-RA valves, up to 10 CO₂ bottles within a group can be pierced at the same time. Using the valve blocks described in the following, it is also possible to combine several groups into one mechanical unit
♦ Minimum release pressure 8bar
♦ Maximum operating pressure 80bar
♦ Nominal bore (free cross section) of valve 4mm
♦ Nominal bore of piercing needle 2mm
♦ No tool required for tensioning the piercing needle
♦ Ambient temperature range: -20°C to +110°C
♦ CO₂ bottles are not included in our supply (see valves, accessories)

The series CA-RA-PA valves are available in 4 versions that may be combined as necessary. Required for mounting: 2 threaded rods M4, 4 nuts M4 with washer

1. CA-RA-PA-A (head block):
♦ CO₂ group outlet with 1/4" thread
♦ Intermediate or end block (see below) can be mounted on right-hand side
♦ For releasing, types HA / EA (manual / electrical release action) additionally require a CO₂ pilot bottle
♦ For pipe connection of the valve, 1 male connector 1/4" (e.g. B1-8-1/4) and 1 male T-connector 1/8" (e.g. B9-6-1/8) will be required additionally

2. CA-RA-PA-M (intermediate block):
♦ Intermediate or end block (see below) can be mounted on right-hand side
♦ Including sealing ring for connection to the preceding block
♦ For pipe connection of the valve, 1 T-connector 1/8" (e.g. B7-6-1/8) will be required additionally

3. CA-RA-PA-E (end block):
♦ Head block of following group can be mounted on right-hand side
♦ Including sealing ring for connection to the preceding block
♦ For pipe connection of the valve, 1 male elbow union 1/8" (e.g. B5-6-1/8) will be required additionally

4. CA-RA-PA-S (single block):
♦ For releasing a single CO₂ bottle. Piercing valve can be mechanically connected with groups of other piercing valves
♦ Head block or single block can be mounted on the right-hand side
♦ CO₂ group outlet 1/4" thread
♦ For pipe connection of the valve, 1 male connector 1/4" (e.g. B1-8-1/4) and 1 male connector 1/8" (e.g. B5-6-1/8) will be required additionally
Example of interconnection

1. **CA-RA-PA-3-2**: Combination release of series connection type, for pneumatically releasing

3 CO₂ bottles in the 1<sup>st</sup> group and
2 CO₂ bottles in the 2<sup>nd</sup> group.

Valve is mounted as follows (CA-RA-...):
1<sup>st</sup> group: PA-A + PA-M + PA-E,
2<sup>nd</sup> group: PA-A + PA-E.

![Diagram of valves](image-url)