

# Series 3 valves and solenoid valves

2x3/2, 3/2, 5/2 and 5/3-way CC CO CP  
Ports: G1/8 and G1/4



Series 3 solenoid valves with G1/8 and G1/4 ports have been designed in the 3/2, 2 x 3/2, 5/2, 5/3 versions and with the following two devices of actuation:

- Electropneumatically actuated with mechanical spring return
- Electropneumatically actuated with external and internal air pressure supply

Series 3 valves are equipped with a manual override which allows a stable operation and they can use Series U or G solenoids (22x22).

Pneumatically actuated valves 3/2 NC become NO when the supply is on connection 3.

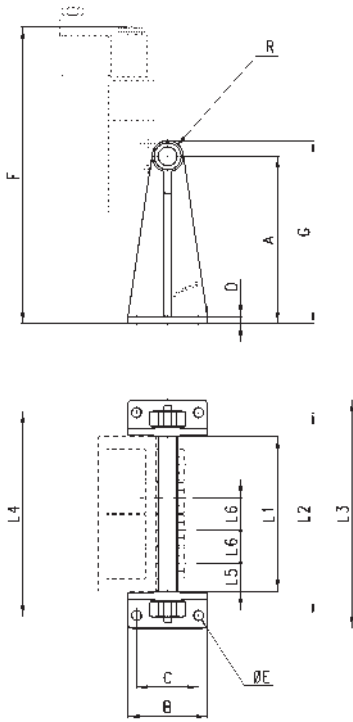
## GENERAL DATA

|                       |   |
|-----------------------|---|
| Construction          | spool - type  |
| Valve group           | 2x3/2 - 3/2 - 5/2 - 5/3-way CC CO CP  |
| Materials             | AL body, stainless steel spool, NBR seals   |
| Ports                 | G1/8 - G1/4   |
| Installation          | in any position   |
| Operating temperature | 0 ÷ 60°C (with dry air at -20°C)  |
| Operating pressure    | see tables  |
| Fluid                 | filtered air, without lubrication. If lubricated air is used, it is recommended to use ISOVG32 oil. Once applied the lubrication should never be interrupted. |

**Manifold bars with separate exhausts (low version)**



The following is supplied:  
2x feet  
1x manifold  
1x inlet fitting  
1x plug  
4x washers



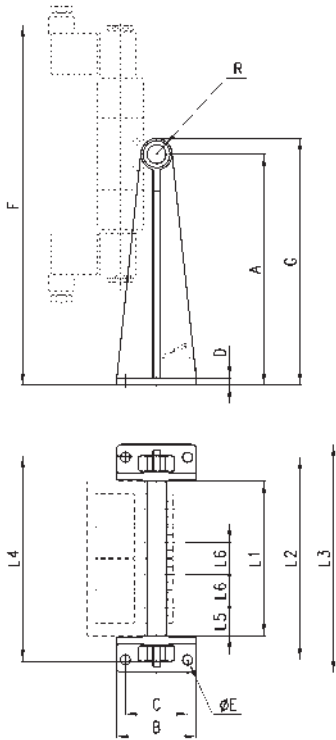
| DIMENSIONS |             |    |    |    |   |    |     |    |      |     |     |     |     |    |    |                     |
|------------|-------------|----|----|----|---|----|-----|----|------|-----|-----|-----|-----|----|----|---------------------|
| Mod.       | Nrof valves | A  | B  | C  | D | ØE | F   | G  | R    | L1  | L2  | L3  | L4  | L5 | L6 | Suitable for Series |
| CNV-318-2  | 2           | 73 | 56 | 44 | 5 | 7  | 178 | 83 | G1/4 | 63  | 97  | 115 | 99  | 20 | 23 | 3 - G1/8            |
| CNV-318-3  | 3           | 73 | 56 | 44 | 5 | 7  | 178 | 83 | G1/4 | 86  | 120 | 138 | 119 | 20 | 23 | 3 - G1/8            |
| CNV-318-4  | 4           | 73 | 56 | 44 | 5 | 7  | 178 | 83 | G1/4 | 109 | 143 | 161 | 142 | 20 | 23 | 3 - G1/8            |
| CNV-318-5  | 5           | 73 | 56 | 44 | 5 | 7  | 178 | 83 | G1/4 | 132 | 166 | 184 | 165 | 20 | 23 | 3 - G1/8            |
| CNV-318-6  | 6           | 73 | 56 | 44 | 5 | 7  | 178 | 83 | G1/4 | 155 | 189 | 207 | 188 | 20 | 23 | 3 - G1/8            |

The fixing screws of the valves  
Mod. 1631 01-1/8 must be ordered  
separately.

**Manifold bars with separate exhausts (high version)**



The following is supplied:  
2x feet  
1x manifold  
1x inlet fitting  
1x plug  
4x washers



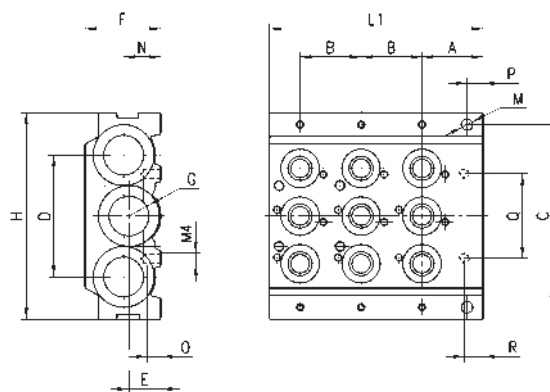
| DIMENSIONS |              |     |    |    |   |    |     |     |      |     |     |     |     |    |    |                     |
|------------|--------------|-----|----|----|---|----|-----|-----|------|-----|-----|-----|-----|----|----|---------------------|
| Mod.       | Nr of valves | A   | B  | C  | D | ØE | F   | G   | R    | L1  | L2  | L3  | L4  | L5 | L6 | Suitable for Series |
| CNV-328-2  | 2            | 118 | 56 | 44 | 5 | 7  | 223 | 128 | G1/4 | 63  | 97  | 115 | 99  | 20 | 23 | 3 - G1/8            |
| CNV-328-3  | 3            | 118 | 56 | 44 | 5 | 7  | 223 | 128 | G1/4 | 86  | 120 | 138 | 119 | 20 | 23 | 3 - G1/8            |
| CNV-328-4  | 4            | 118 | 56 | 44 | 5 | 7  | 223 | 128 | G1/4 | 109 | 143 | 161 | 142 | 20 | 23 | 3 - G1/8            |
| CNV-328-5  | 5            | 118 | 56 | 44 | 5 | 7  | 223 | 128 | G1/4 | 132 | 166 | 184 | 165 | 20 | 23 | 3 - G1/8            |
| CNV-328-6  | 6            | 118 | 56 | 44 | 5 | 7  | 223 | 128 | G1/4 | 155 | 189 | 207 | 188 | 20 | 23 | 3 - G1/8            |

The fixing screws of the valves  
Mod. 1631 01-1/8 must be ordered  
separately.

## Initial / final Module with three positions - Mod. CNVL-...



The following is supplied:  
3x interface O-Rings manifold/manifold;  
2x fixing nuts;  
2x junction plugs;  
9x interface seals valve/manifold (CNVL-3H3)  
or 3x interface seals valve/manif. (CNVL-4H3);  
6x fixing screws for valves



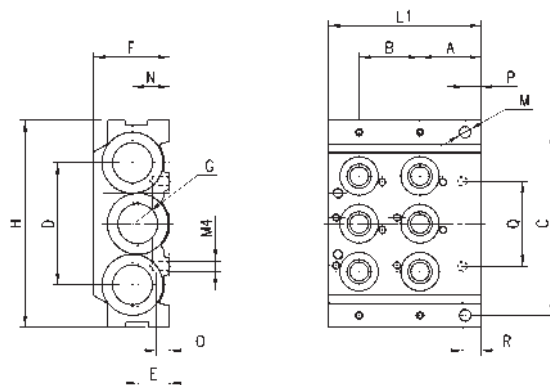
| DIMENSIONS |    |    |      |    |    |    |    |      |     |    |   |   |    |   |     |
|------------|----|----|------|----|----|----|----|------|-----|----|---|---|----|---|-----|
| Mod.       | A  | B  | C    | D  | E  | F  | H  | L1   | M   | N  | O | P | Q  | R | G   |
| CNVL-3H3   | 23 | 23 | 69,2 | 46 | 12 | 29 | 78 | 80,5 | 4,3 | 14 | 5 | 6 | 32 | 7 | 3/8 |
| CNVL-4H3   | 26 | 26 | 88   | 60 | 14 | 29 | 98 | 91   | 4,3 | -  | 5 | 5 | 38 | 7 | 1/2 |

CNVL-3H3: for Series 3, G1/8  
CNVL-4H3: for Series 3, G1/4

## Initial / final Module with 2 positions - Mod. CNVL-...



Initial module with 2 positions  
The following is supplied:  
3x interface O-Rings manifold/manifold;  
2x fixing nuts;  
2x junction plugs;  
6x interface seals valve/manifold (CNVL-3H2)  
or 2x interface seals valve/manif. (CNVL-4H2);  
4x fixing screws for valves



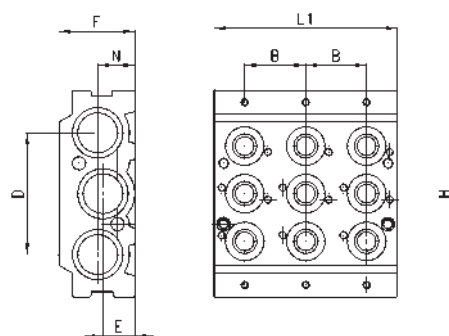
| DIMENSIONS |    |    |      |    |    |    |    |      |     |    |   |   |    |   |     |
|------------|----|----|------|----|----|----|----|------|-----|----|---|---|----|---|-----|
| Mod.       | A  | B  | C    | D  | E  | F  | H  | L1   | M   | N  | O | P | Q  | R | G   |
| CNVL-3H2   | 23 | 23 | 69,2 | 46 | 12 | 29 | 78 | 57,5 | 4,3 | 14 | 5 | 6 | 32 | 7 | 3/8 |
| CNVL-4H2   | 26 | 26 | 88   | 60 | 14 | 29 | 98 | 65   | 4,3 | -  | 5 | 5 | 38 | 7 | 1/2 |

CNVL-3H2: for Series 3, G1/8  
CNVL-4H2: for Series 3, G1/4

## Intermediate module with 3 positions - Mod. CNVL-...



The following is supplied:  
3x interface O-Rings manifold/manifold;  
2x fixing nuts;  
2x junction plugs;  
9x interface seals valve/manifold (CNVL-3I3)  
or 3x interface seals valve/manif. (CNVL-4I3);  
6x fixing screws for valves



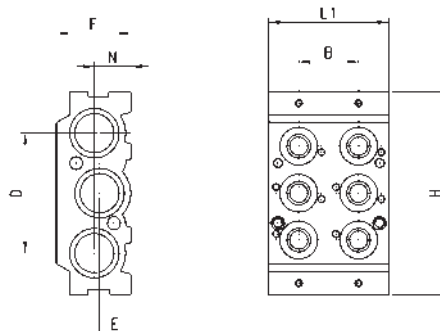
| DIMENSIONS |    |    |    |    |    |    |    |
|------------|----|----|----|----|----|----|----|
| Mod.       | B  | D  | E  | F  | H  | L1 | N  |
| CNVL-3I3   | 23 | 46 | 12 | 29 | 78 | 69 | 14 |
| CNVL-4I3   | 26 | 60 | 14 | 29 | 98 | 78 | -  |

CNVL-3I3: for Series 3, G1/8  
CNVL-4I3: for Series 3, G1/4

## Intermediate module with 2 positions - Mod. CNVL-...



The following is supplied:  
 3x interface O-Rings manifold/manifold;  
 2x fixing nuts;  
 2x junction plugs;  
 6x interface seals valve/manifold (CNVL-312)  
 or 2x interface seals valve/manif. (CNVL-412);  
 4x fixing screws for valves



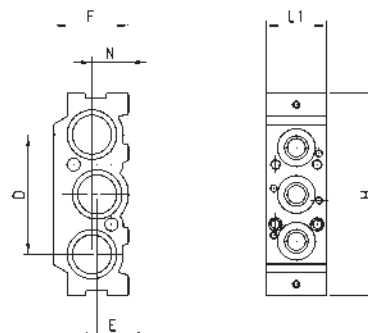
| DIMENSIONS |    |    |    |    |    |    |    |
|------------|----|----|----|----|----|----|----|
| Mod.       | B  | D  | E  | F  | H  | L1 | N  |
| CNVL-312   | 23 | 46 | 12 | 29 | 78 | 46 | 14 |
| CNVL-412   | 26 | 60 | 14 | 29 | 98 | 52 | -  |

CNVL-312: for Series 3, G1/8  
 CNVL-412: for Series 3, G1/4

## Intermediate module with 1 position - Mod. CNVL-...



The following is supplied:  
 3x interface O-Rings manifold/manifold;  
 2x fixing nuts;  
 2x junction plugs;  
 3x interface seals valve/manifold (CNVL-311)  
 or 1x interface seal valve/manif. (CNVL-411);  
 2x fixing screws for valves



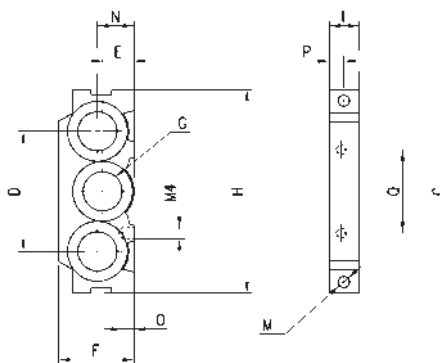
| DIMENSIONS |    |    |    |    |    |    |
|------------|----|----|----|----|----|----|
| Mod.       | D  | E  | F  | H  | L1 | N  |
| CNVL-311   | 46 | 12 | 29 | 78 | 23 | 14 |
| CNVL-411   | 60 | 14 | 29 | 98 | 26 | -  |

CNVL-311: for Series 3, G1/8  
 CNVL-411: for Series 3, G1/4

## Terminal module Mod. CNVL-\*H



The following is supplied:  
 2x fixing nuts



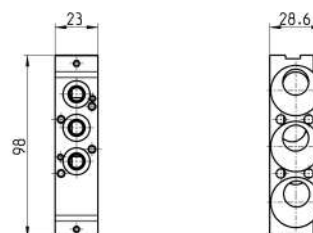
| DIMENSIONS |      |    |    |    |    |      |     |    |   |   |    |     |
|------------|------|----|----|----|----|------|-----|----|---|---|----|-----|
| Mod.       | C    | D  | E  | F  | H  | I    | M   | N  | O | P | Q  | G   |
| CNVL-3H    | 69,5 | 46 | 12 | 29 | 78 | 11,5 | 4,3 | 14 | 5 | 6 | 32 | 3/8 |
| CNVL-4H    | 88   | 60 | 14 | 29 | 98 | 13   | 4,3 | -  | 5 | 8 | 29 | 1/2 |

CNVL-3H: for Series 3, G1/8  
 CNVL-4H: for Series 3, G1/4

## Interface module manifold between Series 3 G1/8 and G1/4



The following is supplied:  
 3x interface seal  
 2x screws  
 2x pins  
 4x plugs  
 6x O-Rings



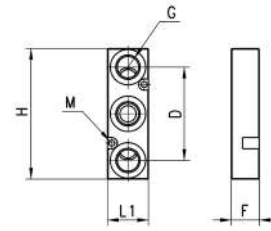
| Mod.       |
|------------|
| CNVL-4H-3H |

It is possible to seat 1 valve, series 3  
 with G1/8 port.

### Intermediate plate for additional inlet and exhaust pressure



The following is supplied:  
3x O-Rings  
2x fixing screws



| DIMENSIONS     |      |    |     |    |    |    |    |
|----------------|------|----|-----|----|----|----|----|
| Mod.           | G    | H  | M   | F  | L1 | D  | F  |
| <b>CNVL-3P</b> | G1/4 | 70 | 3.2 | 29 | 22 | 50 | 15 |
| <b>CNVL-4P</b> | G1/4 | 73 | 3.2 | 29 | 25 | 50 | 20 |

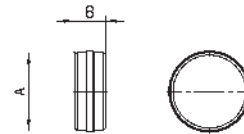
CNVL-3P: for Series 3, G1/8  
CNVL-4P: for Series 3, G1/4

### Separation diaphragm



For separation of channel: 1 - 3 - 5.

The following is supplied:  
1x diaphragm

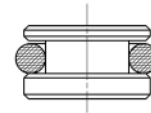


| DIMENSIONS |      |   |                    |
|------------|------|---|--------------------|
| Mod.       | A    | B |                    |
| CNVL-3H-TP | 15.6 | 6 | for Series 3, G1/8 |
| CNVL-4H-TP | 23.8 | 8 | for Series 3, G1/4 |

### Blanking plug Mod. TCNVL for manifolds



The following is supplied:  
1x blanking plug  
1x O-Ring



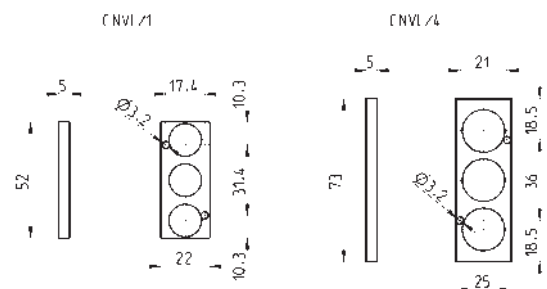
|         |                    |
|---------|--------------------|
| Mod.    |                    |
| TCNVL/3 | for Series 3, G1/8 |
| TCNVL/5 | for Series 3, G1/4 |

### Blanking plate Mod. CNVL for manifolds



It is used to blank vacant positions of a manifold.

The following is supplied:  
2x fixing screws  
3x O-Rings



|        |                    |
|--------|--------------------|
| Mod.   |                    |
| CNVL/1 | for Series 3, G1/8 |
| CNVL/4 | for Series 3, G1/4 |