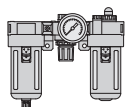
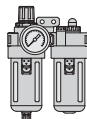


# Air unit - Modular series

CHELIC PNEUMATIC



**F.R.L. Combinations** ----- **Modular series (1/8" ~ 3/4")** ----- **P.1-2.1**



**FR.L. Combinations** ----- **Modular series (1/8" ~ 3/4")** ----- **P.1-2.9**  
**Plastic series (1/4")** ----- **P.1-2.31**



**Filter regulator** ----- **Modular series (1/8" ~ 3/4")** ----- **P.1-2.15**  
**Plastic series (1/4")** ----- **P.1-2.32**



**Air filter** ----- **Modular series (1/8" ~ 3/4")** ----- **P.1-2.19**  
**Plastic series (1/4")** ----- **P.1-2.33**

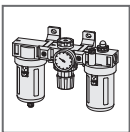


**Air regulator** ----- **Modular series (1/8" ~ 3/4")** ----- **P.1-2.23**



**Air lubricator** ----- **Modular series (1/8" ~ 3/4")** ----- **P.1-2.27**  
**Plastic series (1/4")** ----- **P.1-2.34**

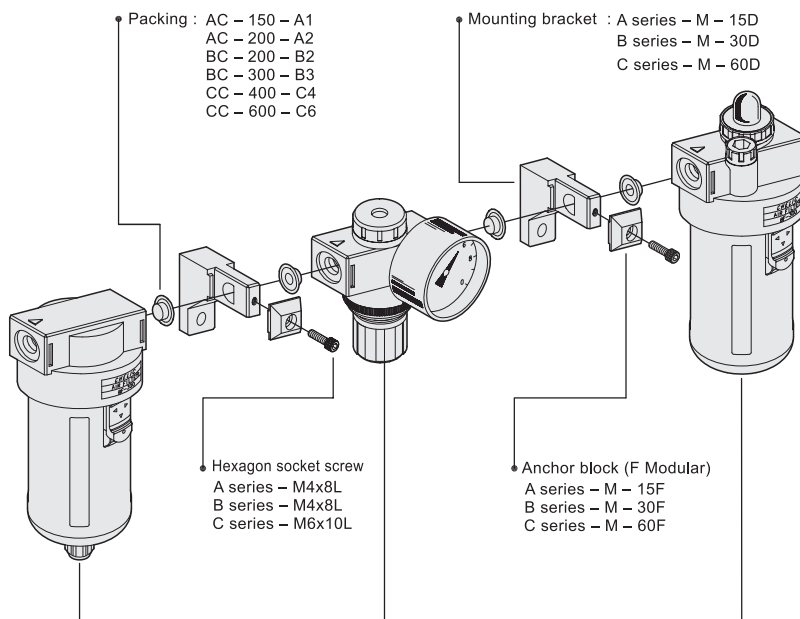
|   |
|---|
| <b>AC/BC/CC</b><br>F.R.L.<br>Combinations                 |
| <b>AFC/BFC/CFC</b><br>FR.L.<br>Combinations               |
| <input type="checkbox"/> <b>FR</b><br>Filter<br>regulator |
| <input type="checkbox"/> <b>F</b><br>Air<br>filter        |
| <input type="checkbox"/> <b>R</b><br>Regulator            |
| <input type="checkbox"/> <b>L</b><br>Lubricator           |
| <b>PFC/PER</b><br><b>PF/PL</b>                            |
| <b>A/B/C</b><br>Mounting<br>bracket                       |



# Air unit

## F.R.L. Combination - Modular series

CHELIC PNEUMATIC



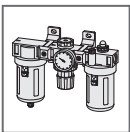
### ◯ Air flow chart

| Model  | Port size | Filter | Regulator | Lubricator | Flow rate NL/min |      |      |      |      |      |
|--------|-----------|--------|-----------|------------|------------------|------|------|------|------|------|
|        |           |        |           |            | 500              | 1000 | 1500 | 2000 | 2500 | 3000 |
| AC-150 | Rc 1/8"   | AF-150 | AR-150    | AL-150     |                  |      |      |      |      |      |
| AC-200 | Rc 1/4"   | AF-200 | AR-200    | AL-200     |                  |      |      |      |      |      |
| BC-200 | Rc 1/4"   | BF-200 | BR-200    | BL-200     |                  |      |      |      |      |      |
| BC-300 | Rc 3/8"   | BF-300 | BR-300    | BL-300     |                  |      |      |      |      |      |
| CC-400 | Rc 1/2"   | CF-400 | CR-400    | CL-400     |                  |      |      |      |      |      |
| CC-600 | Rc 3/4"   | CF-600 | CR-600    | CL-600     |                  |      |      |      |      |      |

Primary Pressure: 7 kgf/cm<sup>2</sup> , Secondary pressure : 5 kgf/cm<sup>2</sup> .

### ◯ Operating the drain cock

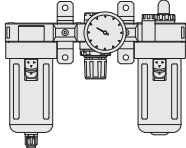
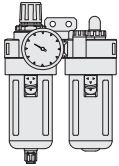
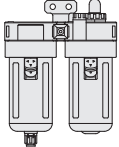
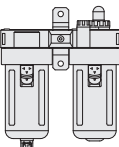
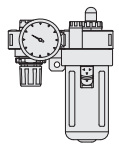
| A series drain   |   |  | B,C series drain   |  |   |   |  |
|--|---|--|--|--|---|---|--|
| -H   | BG-H-F1   | -A   | -H   | -H-F1  | -S  | -S-F2                                   | -A   |
| Manual drain cock (Standard)   | Manual drain cock (With bowl guard, Fitting)            | Auto drain (Option)  | Manual drain cock (Standard)                                 | Manual drain cock (With fitting) (Option)                    | Semi-auto drain (Option)  | Semi-auto drain (With fitting) (Option) | Auto drain (Option AD-50)  |
| Drain while pushing the button and close automatically when release. | With addition protective bowl guard device and fitting. | Employs pressure differential for automatic drain , drain automatically when the air depletion and make up produce differential. | Drain while rotating fitting (left) , close when turn right. | Drain while rotating fitting (left) , close when turn right. | The valve open to drain automatically when pressure is lower than 0.5 kg/cm <sup>2</sup> ; the valve close completely when pressure is more than 1 kg/cm <sup>2</sup> (allow manual drain as well). |   | Use float switch valve, rain automatically when water level over the float , close automatically after completely drain. |
|  |   |  |  |  |   |   |  |
| Button<br>Push   | Bowl Guard<br>F1 Fitting<br>Push                        |  | Rotate<br>Turn left to drain                                 | Rotate<br>Turn left to drain                                 | Rotate<br>Turn left to drain  | Rotate<br>Turn left to drain            |  |



# Air unit

## Modular series

CHELIC PNEUMATIC

| Combination type  | Model    | Port size | Main components |           |                  |            |       | Bracket (option) |  |
|---|----------|-----------|-----------------|-----------|------------------|------------|-------|------------------|--|
|   |          |           | Filter          | Regulator | Filter regulator | Lubricator |       |                  |  |
| <b>F+R+L ( Filter + Regulator + Lubricator )</b><br>     | AC-150   | 1/8"      | AF-150          | AR-150    | AL-150           |            | M-15D |                  |  |
|   | AC-200   | 1/4"      | AF-200          | AR-200    | AL-200           |            | M-15D |                  |  |
|   | BC-200   | 1/4"      | BF-200          | BR-200    | BL-200           |            | M-30D |                  |  |
|   | BC-300   | 3/8"      | BF-300          | BR-300    | BL-300           |            | M-30D |                  |  |
|   | CC-400   | 1/2"      | CF-400          | CR-400    | CL-400           |            | M-60D |                  |  |
|   | CC-600   | 3/4"      | CF-600          | CR-600    | CL-600           |            | M-60D |                  |  |
| <b>FR+L ( Filter Regulator + Lubricator )</b><br>        | AFC-150  | 1/8"      |                 |           | AL-150           | AFR-150    | M-15E |                  |  |
|   | AFC-200  | 1/4"      |                 |           | AL-200           | AFR-200    | M-15E |                  |  |
|   | BFC-200  | 1/4"      |                 |           | BL-200           | BFR-200    | M-30E |                  |  |
|   | BFC-300  | 3/8"      |                 |           | BL-300           | BFR-300    | M-30E |                  |  |
|   | CFC-400  | 1/2"      |                 |           | CL-400           | CFR-400    | M-60E |                  |  |
|   | CFC-600  | 3/4"      |                 |           | CL-600           | CFR-600    | M-60E |                  |  |
| <b>F+L ( Filter + Lubricator )</b><br>                 | AFL-150  | 1/8"      | AF-150          |           | AL-150           |            | M-15E |                  |  |
|   | AFL-200  | 1/4"      | AF-200          |           | AL-200           |            | M-15E |                  |  |
|   | BFL-200  | 1/4"      | BF-200          |           | BL-200           |            | M-30E |                  |  |
|   | BFL-300  | 3/8"      | BF-300          |           | BL-300           |            | M-30E |                  |  |
|   | CFL-400  | 1/2"      | CF-400          |           | CL-400           |            | M-60E |                  |  |
|   | CFL-600  | 3/4"      | CF-600          |           | CL-600           |            | M-60E |                  |  |
| <b>F+DT+L ( Filter + DT Bracket + Lubricator )</b><br> | AFTL-150 | 1/8"      | AF-150          |           | AL-150           |            |       | M-15DT           |  |
|   | AFTL-200 | 1/4"      | AF-200          |           | AL-200           |            |       | M-15DT           |  |
|   | BFTL-200 | 1/4"      | BF-200          |           | BL-200           |            |       | M-30DT           |  |
|   | BFTL-300 | 3/8"      | BF-300          |           | BL-300           |            |       | M-30DT           |  |
|   | CFTL-400 | 1/2"      | CF-400          |           | CL-400           |            |       | M-60DT           |  |
|   | CFTL-600 | 3/4"      | CF-600          |           | CL-600           |            |       | M-60DT           |  |
| <b>R+L ( Regulator + Lubricator )</b><br>              | ARL-150  | 1/8"      |                 | AR-150    | AL-150           |            | M-15E |                  |  |
|   | ARL-200  | 1/4"      |                 | AR-200    | AL-200           |            | M-15E |                  |  |
|   | BRL-200  | 1/4"      |                 | BR-200    | BL-200           |            | M-30E |                  |  |
|   | BRL-300  | 3/8"      |                 | BR-300    | BL-300           |            | M-30E |                  |  |
|   | CRL-400  | 1/2"      |                 | CR-400    | CL-400           |            | M-60E |                  |  |
|   | CRL-600  | 3/4"      |                 | CR-600    | CL-600           |            | M-60E |                  |  |

**AC/BC/CC**  
F.R.L.  
Combinations

**AFC/BFC/CFC**  
F.R.L.  
Combinations

**FR**  
Filter  
regulator

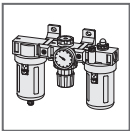
**F**  
Air filter

**R**  
Regulator

**L**  
Lubricator

**PFC/PER**  
**PF/PL**

**A/B/C**  
Mounting  
bracket



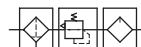
# Air unit - F.R.L. Combination unit

Operation specification and Accessory

CHELIC PNEUMATIC



Symbol :



## Specification

| Item                            | Model                     | AC-150                                       | AC-200 | BC-200 | BC-300 | CC-400 | CC-600 |
|---------------------------------|---------------------------|--|--------|--------|--------|--------|--------|
| Fluid                           |                           | Air  |        |        |        |        |        |
| Port Size                       | Rc                        | 1/8"   | 1/4"   | 1/4"   | 3/8"   | 1/2"   | 3/4"   |
| Filter grade                    |                           | 5μm  |        |        |        |        |        |
| Pressure range                  | Kgf/cm <sup>2</sup> (kpa) | 0.5~8.5 (50~850)                             |        |        |        |        |        |
| Max. pressure                   | Kgf/cm <sup>2</sup> (kpa) | 9.5 (950)                                    |        |        |        |        |        |
| Ambient and fluid temperature   | °C                        | 5~60   |        |        |        |        |        |
| Drain holding capacity          | cc                        | 15   |        | 60     |        | 100    |        |
| Lubricator oil storing capacity | cc                        | 25   |        | 90     |        | 160    |        |
| Recommended lubricants          |                           | Lubricant class 1 ( ISO-VG32 ) or equivalent |        |        |        |        |        |
| Weight                          | Kg                        | 0.7  |        | 1.3    |        | 1.5    |        |
| Material                        | Body                      | Aluminum die-casted                          |        |        |        |        |        |
|                                 | Bowl                      | Polycarbonate                                |        |        |        |        |        |
| Equipment                       | Filter                    | AF-150                                       | AF-200 | BF-200 | BF-300 | CF-400 | CF-600 |
|                                 | Regulator                 | AR-150                                       | AR-200 | BR-200 | BR-300 | CR-400 | CR-600 |
|                                 | Lubricator                | AL-150                                       | AL-200 | BL-200 | BL-300 | CL-400 | CL-600 |

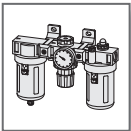
## Pressure gauge ⑥

| Pressure gauge |        | Model      |            |            |            |            |            |
|----------------|--------|------------|------------|------------|------------|------------|------------|
| Code           | Model  | AC-150     | AC-200     | BC-200     | BC-300     | CC-400     | CC-600     |
| PG10A          | PG-10A | ● (option) | ● (option) | —          | —          | —          | —          |
| PG20A          | PG-20A | —          | —          | ● (option) | ● (option) | ● (option) | ● (option) |

## Accessory ⑧

| Indication |                 |              |              |              |
|------------|-----------------|--------------|--------------|--------------|
| Model      | None (standard) | -TA (option) | -TB (option) | -TM (option) |
| AC-150     | ●               | ●            | ●            | ●            |
| AC-200     | ●               | ●            | ●            | ●            |
| BC-200     | ●               | ●            | ●            | ●            |
| BC-300     | ●               | ●            | ●            | ●            |
| CC-400     | ●               | ●            | ●            | ●            |
| CC-600     | ●               | ●            | ●            | ●            |

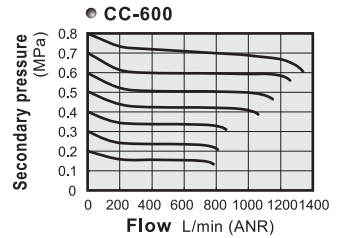
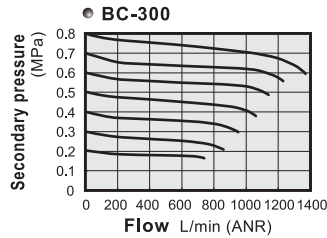
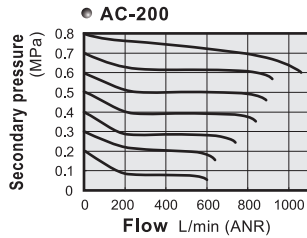
⑧ Note 1 : (standard) : Standard type ; (option) : Optional accessory.



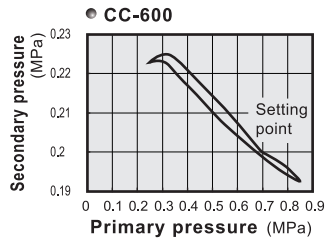
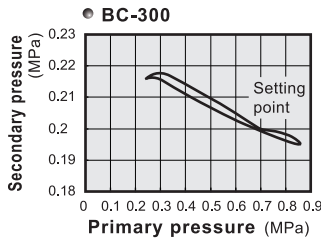
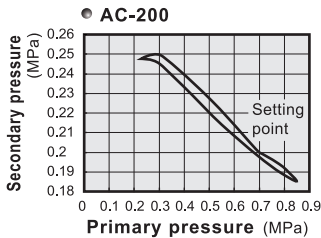
# Air unit - F.R.L. Combination unit

Characteristics and Order expression / Bowls and Drains **CHELIC PNEUMATIC**

## Flow characteristics



## Pressure characteristics



## How to order

AC - 200 - G - BG - A - F1 - PG 10A - L2 - TA

Model (1) Port size (2) Thread type (3) Bowl (4) Fitting (5) Pressure gauge (6) Max. adjustable pressure (7) Mounting (8)

|       |                 |     |     |     |     |     |      |        |     |                       |                 |                   |                    |                              |              |                                      |                             |  |
|-------|-----------------|-----|-----|-----|-----|-----|------|--------|-----|-----------------------|-----------------|-------------------|--------------------|------------------------------|--------------|--------------------------------------|-----------------------------|--|
| Model | Code            | 150 | 200 | 300 | 400 | 600 | None | G      | N   | Bowl type             |                 | Fitting           | Pressure gauge (6) | Max. adjustable pressure (7) | Mounting (8) |                                      |                             |  |
| AC    | Port size       | 1/8 | 1/4 | 3/8 | 1/2 | 3/4 | RC   | G type | NPT | None                  | Other bowl type | None              | -F1                | PG10A                        | None         | standard 8.5 kg/cm <sup>2</sup>      |                             |  |
| BC    | Port connection | ●   | ●   | ●   |     |     | ●    | ●      | ●   | PC (Short bowl)       | option          | Manual drain cock | option             | PG-10A                       | L1           | 1 kg/cm <sup>2</sup> (AC Series)     |                             | <input type="checkbox"/> None : standard |
| CC    | Port connection |     |     |     | ●   | ●   | ●    | ●      |     | Bowl guard (standard) | option          | Manual drain cock | option             | PG-20A                       | L2           | 2 kg/cm <sup>2</sup> (AC Series)     |                             | <input type="checkbox"/> TB              |
|       |                 |     |     |     |     |     |      |        |     | Bowl guard (standard) | option          |                   |                    |                              | L4           | 4 kg/cm <sup>2</sup> (AC, BC Series) | <input type="checkbox"/> TM |  |

※ F. R. L. Combination series  
 AC : Mini type series  
 BC : Medium type series  
 CC : Large type series

※ Please see the below table in detail.

※ Please see the below table in detail.

※ For A series

※ For A, B series

※ For B, C series

※ Please refer to detail in P.1-2.7

### □ Bowl and Drain cock type ← (4)

### ○ With Fitting - F1 ← (5)

### □ A series (4)

| Bowl type       | PC bowl           |                       | Bowl guard        |                       |
|-----------------|-------------------|-----------------------|-------------------|-----------------------|
|                 | Manual drain cock | Differential pressure | Manual drain cock | Differential pressure |
| Drain cock type | None              | -A                    | -BG-H             | -BG-A                 |
| Model           | None              | ● (option)            | ● (option)        | ● (option)            |
| AC-150          | ● (standard)      | ● (option)            | ● (option)        | ● (option)            |
| AC-200          | ● (standard)      | ● (option)            | ● (option)        | ● (option)            |

### □ B,C series (4)

| Bowl type       | Bowl guard        |                |            |
|-----------------|-------------------|----------------|------------|
|                 | Manual drain cock | Semi-Automatic | Auto drain |
| Drain cock type | Manual drain cock | Semi-Automatic | Auto drain |
| Model           | -H                | -S             | -A         |
| BC-200          | ● (standard)      | ● (option)     | ● (option) |
| BC-300          | ● (standard)      | ● (option)     | ● (option) |
| CC-400          | ● (standard)      | ● (option)     | ● (option) |
| CC-600          | ● (standard)      | ● (option)     | ● (option) |

### ○ A series (5)

|               |   |                         |                         |                         |
|---------------|---|-------------------------|-------------------------|-------------------------|
| A series Note | — | ● (standard)            | ● (option)              | ● (standard)            |
| Note          |   | Note1 (Outside fitting) | Note1 (Outside fitting) | Note1 (Outside fitting) |

### ○ B,C series (5)

|                 |            |            |            |
|-----------------|------------|------------|------------|
| B,C series Note | ● (option) | ● (option) | ● (option) |
|-----------------|------------|------------|------------|

🔍 Note : 1. A series are outside fitting , others are inside fitting ; please refer to P.04 auto drain construction.  
 2. (standard) : Standard accessory ; (option) : Optional accessory.

AC/BC/CC  
F.R.L.  
Combinations

AFC/BFC/CFC  
F.R.L.  
Combinations

FR  
Filter  
regulator

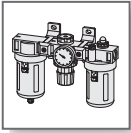
F  
Air  
filter

R  
Regulator

L  
Lubricator

PFC/PER  
PF/PL

A/B/C  
Mounting  
bracket

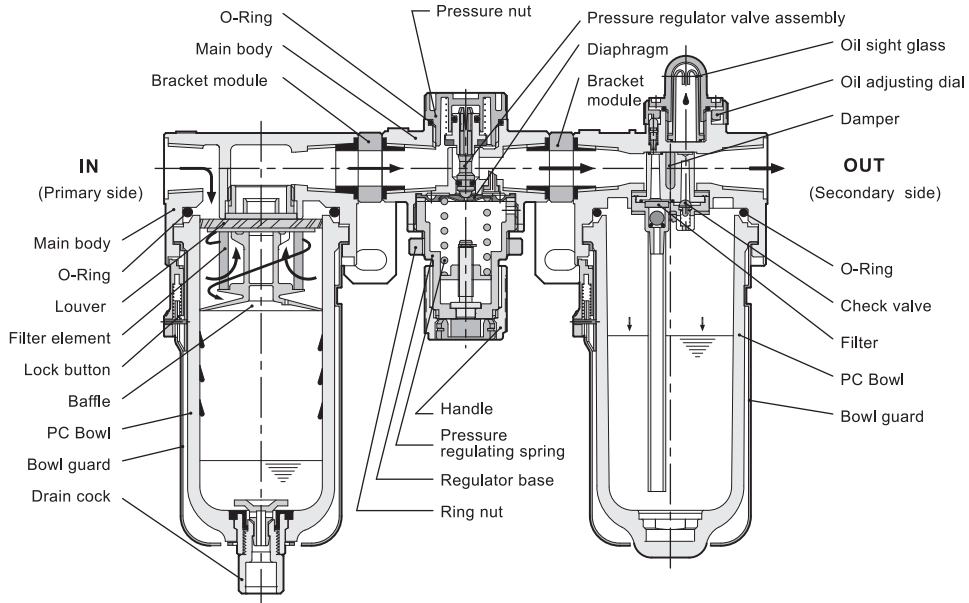


# Air unit - F.R.L. Combination unit

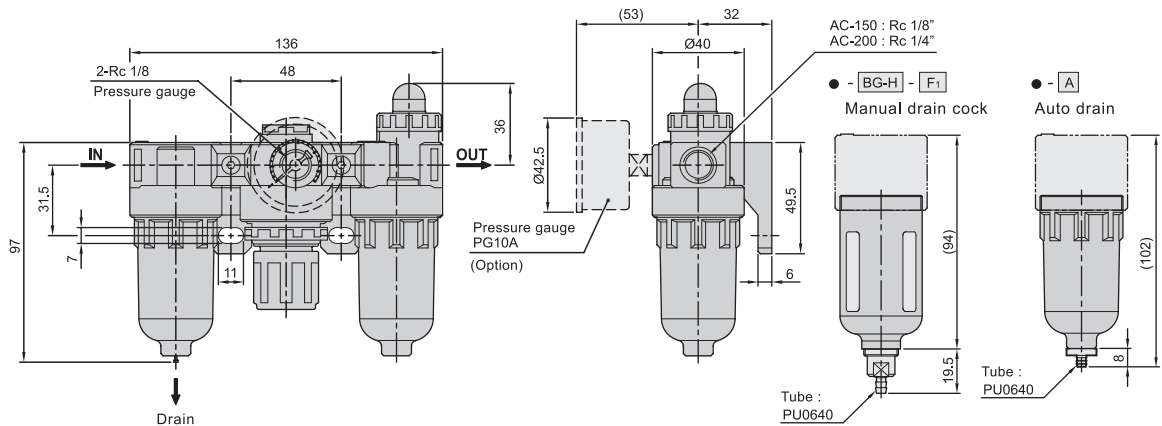
Internal construction and External dimensions

CHELIC PNEUMATIC

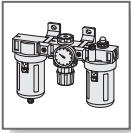
## Internal construction



## AC - 150 Standard



| - H                          | - BG - H - F1                                   | - A        |
|------------------------------|---|------------|
| Manual drain cock (standard) | Manual drain cock (include bowl guard, fitting) | Auto drain |
|                              |   |            |

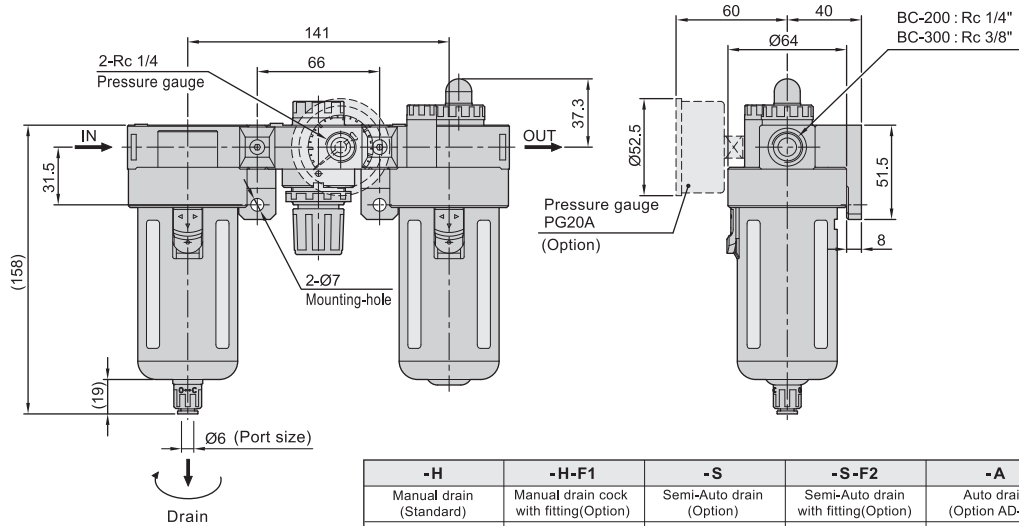


# Air unit - F.R.L. Combination unit

External dimensions

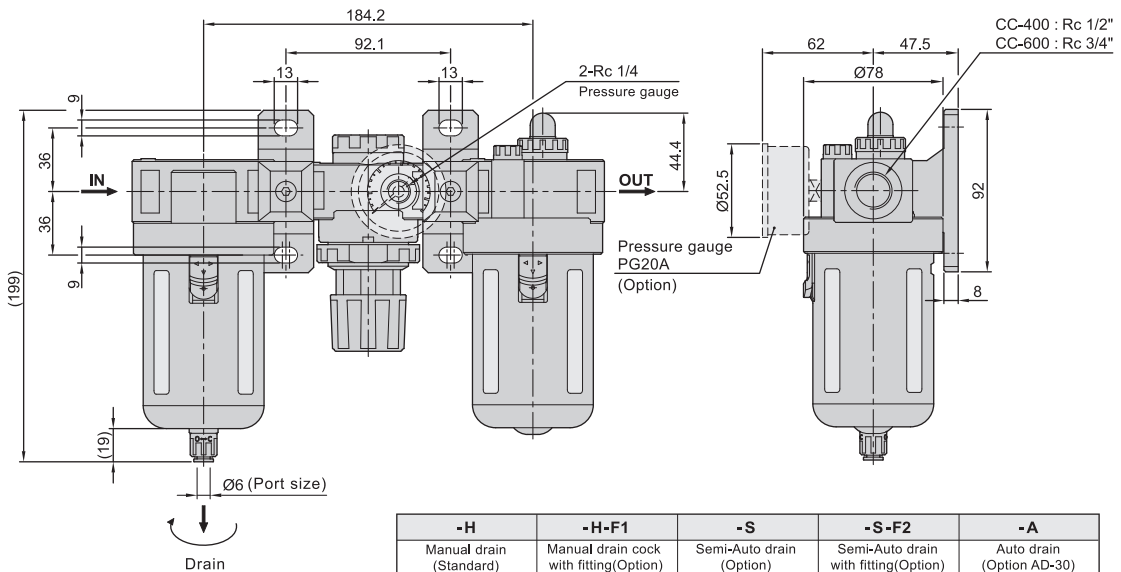
CHELIC PNEUMATIC

## BC - 200 - H Standard



| -H                      | -H-F1                                   | -S                       | -S-F2                                 | -A                        |
|-------------------------|---|--------------------------|---------------------------------------|---------------------------|
| Manual drain (Standard) | Manual drain cock with fitting (Option) | Semi-Auto drain (Option) | Semi-Auto drain with fitting (Option) | Auto drain (Option AD-30) |
|                         |   |                          |                                       |                           |

## CC - 400 - H Standard



| -H                      | -H-F1                                   | -S                       | -S-F2                                 | -A                        |
|-------------------------|---|--------------------------|---------------------------------------|---------------------------|
| Manual drain (Standard) | Manual drain cock with fitting (Option) | Semi-Auto drain (Option) | Semi-Auto drain with fitting (Option) | Auto drain (Option AD-30) |
|                         |   |                          |                                       |                           |

**AC/BC/CC**  
F.R.L.  
Combinations

**AFC/BFC/CC**  
FR.L.  
Combinations

**FR**  
Filter  
regulator

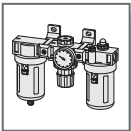
**F**  
Air filter

**R**  
Regulator

**L**  
Lubricator

**PFC/PER**  
**PF/PL**

**A/B/C**  
Mounting  
bracket



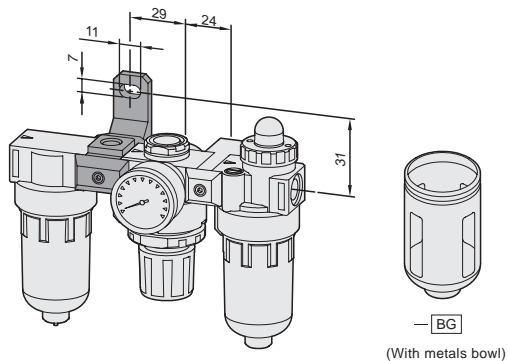
# Air unit - F.R.L. Combination unit

## Mounting bracket

CHELIC PNEUMATIC

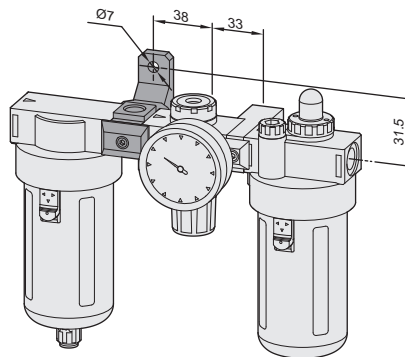
### AC - 150 - TA - H

Suitable for air gun operating



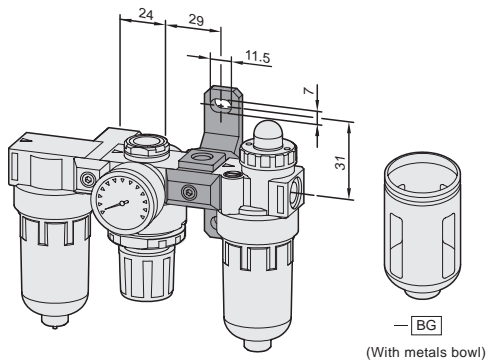
### BC - 200 - TA - H

Suitable for air gun operating



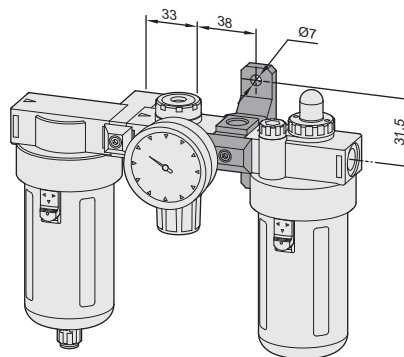
### AC - 150 - TB - H

Suitable for vacuum operating space



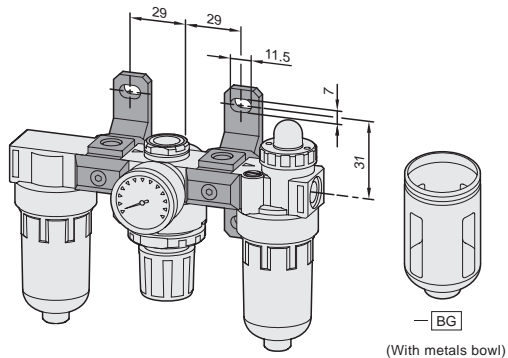
### BC - 200 - TB - H

Suitable for vacuum operating space



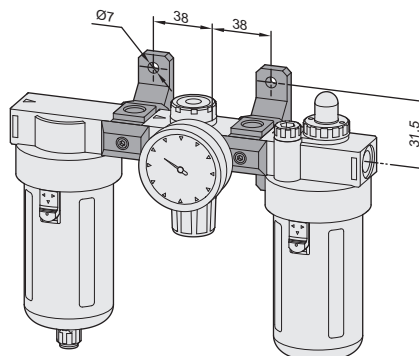
### AC - 150 - TM - H

Suitable for air gun + vacuum operating

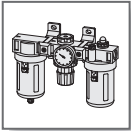


### BC - 200 - TM - H

Suitable for air gun + vacuum operating







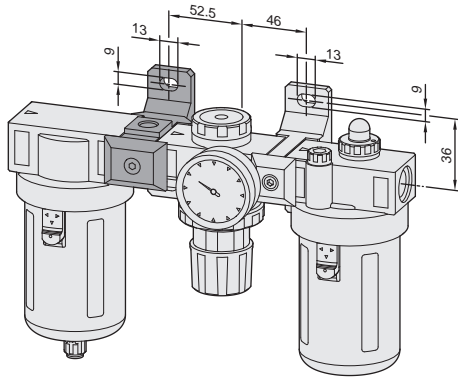
# Air unit - F.R.L. Combination unit

## Mounting bracket

CHELIC PNEUMATIC

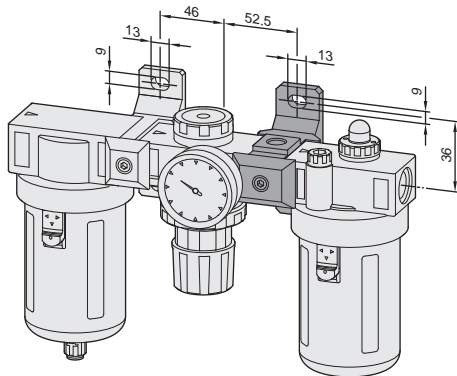
### CC - 400 - TA - H

Suitable for air gun operating



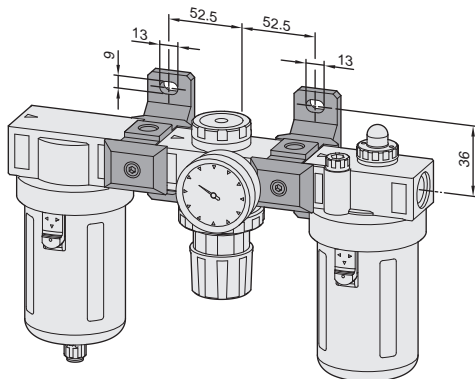
### CC - 400 - TB - H

Suitable for vacuum operating space



### CC - 400 - TM - H

Suitable for air gun + vacuum operating



**AC/BC/CC**  
F.R.L.  
Combinations

**AFC/BFC/CFC**  
FR.L.  
Combinations

**FR**  
Filter  
regulator

**F**  
Air filter

**R**  
Regulator

**L**  
Lubricator

**PFC/PFR**  
**PF/PL**

**A/B/C**  
Mounting  
bracket