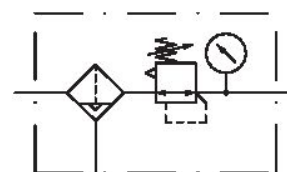


# Filter pressure regulator, Series 653

## G653APJP5GA00HN

### General series information Series 653

- The AVENTICS Series 653 is an easy-to-install line of pneumatic filters, regulators and lubricators (FRLs) that offer the industry's highest flow rates and widest temperature ratings. Available in 1/2-inch, 3/4-inch, and 1-inch port sizes, these FRLs are ideal for automotive and tire, packaging, food and beverage, and process applications requiring highly reliable operation and robust, modern-looking equipment. Available with integrated redundant safe exhaust valve and IIoT enabled air flow sensor.



### Technical data

|                          |                                       |
|--------------------------|---------------------------------------|
| Industry                 | Industrial                            |
| Parts                    | Filter pressure regulator             |
| Reservoir                | Reservoir polycarbonate               |
| Port                     | G 3/4                                 |
| Nominal flow Qn          | 9000 l/min                            |
| Filter porosity          | 25 µm                                 |
| Condensate drain         | semi-automatic, open without pressure |
| Working pressure min.    | 0 bar                                 |
| Working pressure max     | 12 bar                                |
| Min. ambient temperature | -20 °C                                |
| Max. ambient temperature | 50 °C                                 |
| Regulation range min.    | 0.5 bar                               |
| Regulation range max.    | 10 bar                                |
| Type                     | 1-part                                |
| Type                     | Can be assembled into blocks          |

|                         |                                                                     |
|-------------------------|---------------------------------------------------------------------|
| Hysteresis              | 0,4 bar                                                             |
| Medium                  | Compressed air<br>Neutral gases                                     |
| Medium temperature note | Extended temperature range min./max. (optional)<br>-40 °C ... 80 °C |
| Weight                  | 1.31 kg                                                             |

## Material

|                           |                          |
|---------------------------|--------------------------|
| Housing material          | Aluminum                 |
| Seal material             | Nitrile butadiene rubber |
| Material front plate      | Polyamide                |
| Material filter insert    | Sintered bronze          |
| Material condensate drain | Plastic                  |
| Part No.                  | G653APJP5GA00HN          |

## Technical information

Max. achievable compressed air class acc. to ISO 8573-1:2010 5 : 8 : 4 (5 µm filter porosity) und 6 : 8 : 4 (25µm filter porosity)

Other filter porosities on request.

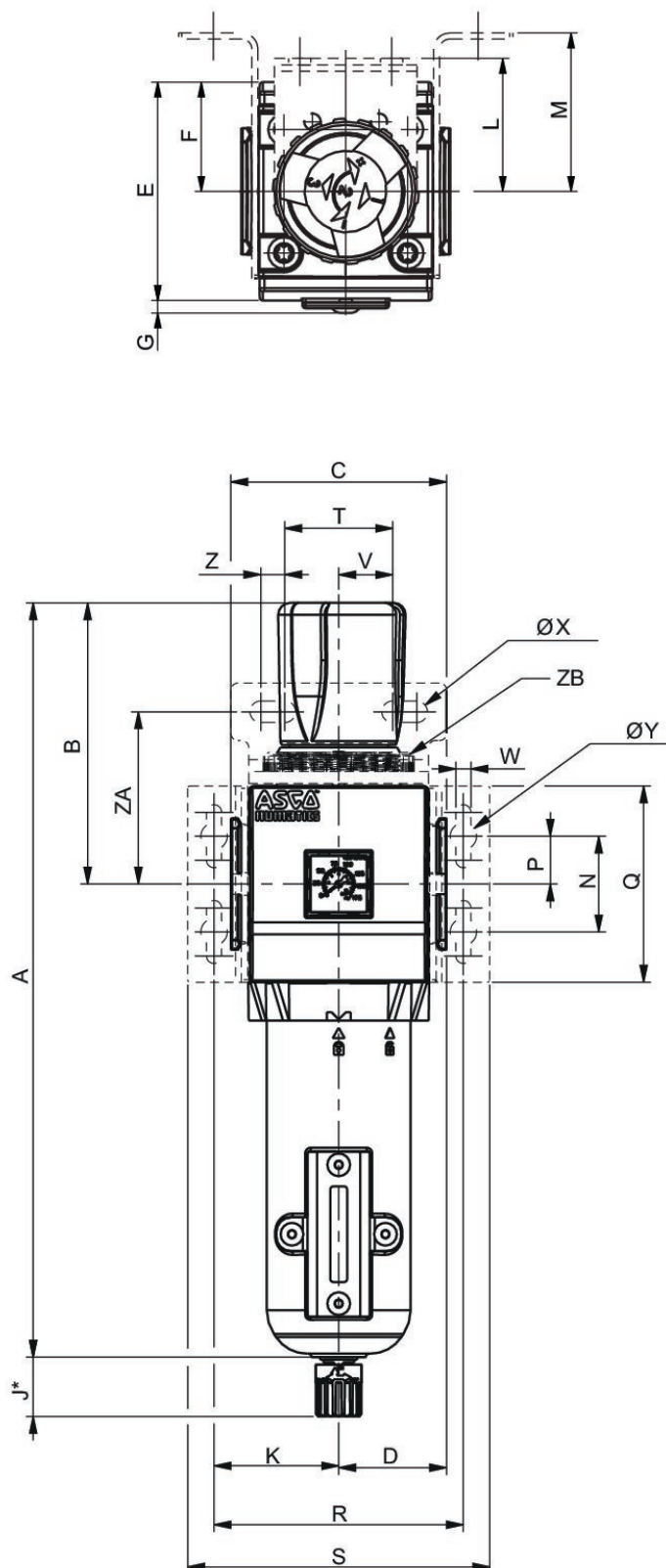
Nominal flow Qn at p1= 10 bar, p2= 6,3 bar and  $\Delta p = 1$  bar

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

## Dimensions

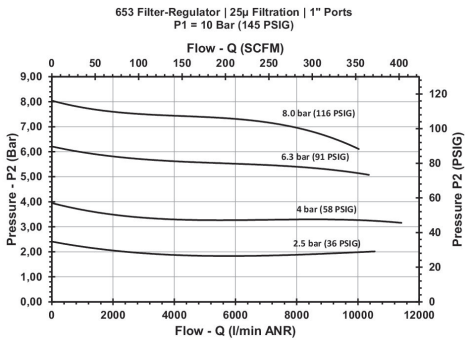


To remove the reservoir, allow a clearance of [[105] mm] from the bottom of the reservoir drain.

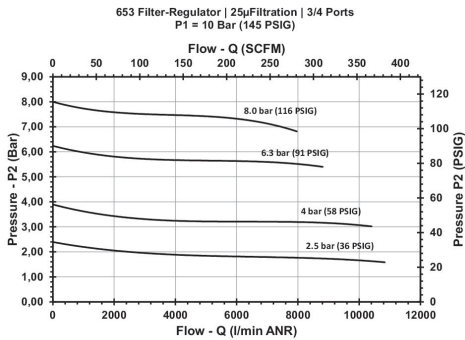
\*Variable dimension based on the type of drain specified, if an automatic drain is specified, add another [[5] mm] to the "J" dimension.

| Series | 653   |
|--------|-------|
| A      | 329,5 |
| B      | 132   |
| C      | 90    |
| D      | 45    |
| E      | 93,6  |
| F      | 46,2  |
| G      | 2,7   |
| H      | 158,9 |
| J      | 25    |
| K      | 41,75 |
| L      | 42    |
| M      | 50    |
| N      | 20    |
| P      | 10    |
| Q      | 61,5  |
| R      | 84    |
| S      | 105,5 |
| T      | 29    |
| V      | 14,5  |
| W      | 6,3   |
| X      | 7     |
| Y      | 11    |

Flow diagram  
G 1



Flow diagram  
G 3/4



## Accessories overview

