

## TECHNICAL SHEET

# AUTOJET

Automatic filter pressurized jets

AISI 304 - AISI 316

**AUTOJET** is a self-cleaning screen filter with stainless steel body. The internal filtrating cartridge consists of an AISI 316 stainless steel tubular screen on which can be inserted a polyester filtrating mesh (PES) or a stainless steel AISI 316 filtering double screen (REPS). The filtration range is between 25 to 2000 µm. The cartridge is cleaned by pressurized nozzles (fed by clean water) which are fixed on a rotating shaft moved by a 24 Vcc electric motor. The filter is supplied and already wired with: automation group, valves and pressure gauges. For its best performance, **AUTOJET** needs an inlet pressure of at least 2 bars, ensuring short times and low water consumption during the cleaning cycles. During this phase the inlet and the outlet fluxes are automatically stopped.

## General informations

| Materials    |                |
|--------------|----------------|
| Body         | AISI 304 - 316 |
| Cover        | AISI 304 - 316 |
| Screen supp. | AISI 316       |
| Screen       | PES / REPS     |
| Gasket       | Epdm           |

| Connectins |                                                                                                                    |
|------------|--------------------------------------------------------------------------------------------------------------------|
| DN         | Type                                                                                                               |
| 2"         |  BSP ANSI 150 - NPT Male threaded |
| 80         |  ISO PN 16/10 Flanged             |
| 100        |                                                                                                                    |

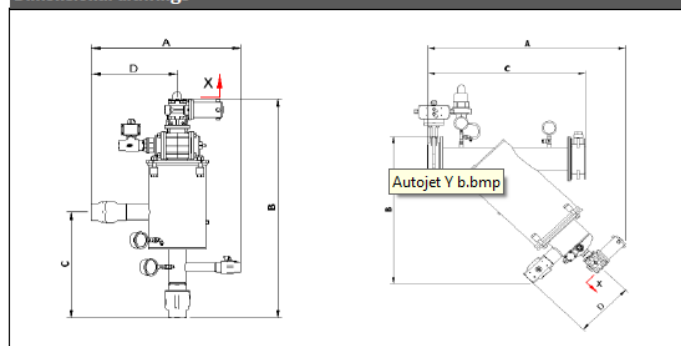
| Application limits |            |
|--------------------|------------|
| Filtration field   | 2000÷25 µm |
| PN                 | 10 bar     |
| T                  | < + 60°C   |

## Technical informations

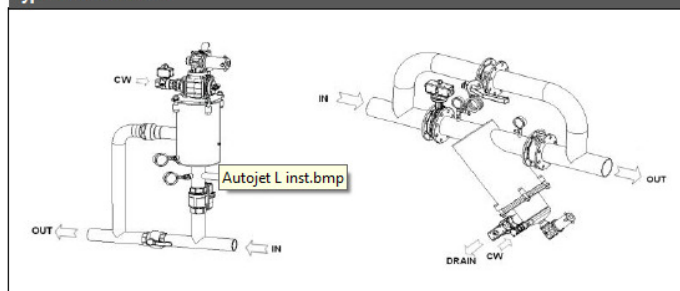
|  | Model          | In/Out<br>[in-mm] | Drain<br>[in-mm] | Area<br>[cm²] | Q <sub>max</sub> *<br>[m³/h] | Weight<br>[kg] | Dimensions [mm] |      |     |     |     |
|--|----------------|-------------------|------------------|---------------|------------------------------|----------------|-----------------|------|-----|-----|-----|
|  |                |                   |                  |               |                              |                | A               | B    | C   | D   | X   |
|  | AJM L 2" / 10A | 2"                | 1"               | 1.500         | 40                           | 30             | 540             | 890  | 415 | 308 | 350 |
|  | AJM L 80/20    | 80                | 1" ½             | 2.200         | 80                           | 37             | 520             | 1030 | 342 | 270 | 500 |
|  | AJM L 100/35   | 100               | 1" ½             | 3.300         | 140                          | 56             | 615             | 1060 | 398 | 300 | 500 |
|  | AJM L 100/40P  | 100               | 2"               | 5.400         | 150                          | 65             | 615             | 1370 | 398 | 300 | 800 |
|  | AJM Y 2" / 10A | 2"                | 1" ½             | 1.500         | 40                           | 30             | 790             | 680  | 620 | 165 | 350 |
|  | AJM Y 80/20    | 80                | 1" ½             | 2.200         | 80                           | 37             | 850             | 850  | 560 | 165 | 500 |
|  | AJM Y 100/35   | 100               | 2"               | 3.300         | 140                          | 56             | 900             | 960  | 715 | 165 | 500 |
|  | AJM Y 100/40P  | 100               | 2"               | 5.400         | 150                          | 65             | 1120            | 1170 | 715 | 190 | 800 |

\* Flow rates are referred to filters with filtrating mesh from 120 µm and water with temperature of 20 °C and NTU < 1.

### Dimensional drawings

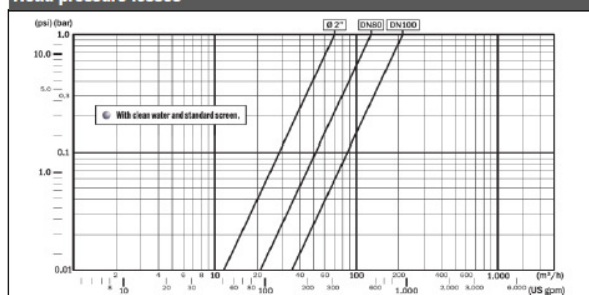


## Typical installations



## Head pressure losses and cleaning cycle informations

### Head pressure losses



### Cleaning cycle informations

|                               |                                    |
|-------------------------------|------------------------------------|
| Cleaning device               | stainless steel pressurized jets   |
| Drain valve                   | Brass air ball<br>1" - 1 1/2" - 2" |
| Cleaning cycle time           | 45÷75 seconds                      |
| Minimum fluxe for cleaning    | 50-75-150 l/min                    |
| Minimum pressure for cleaning | 5 bar                              |

| Model                             | /10A | /20 | /35 | /40P |
|-----------------------------------|------|-----|-----|------|
| Water for cleaning cycle [liters] | 50   | 75  | 75  | 130  |
| Filter water drained [liters]     | 10   | 15  | 25  | 45   |
| Total water used [liters]         | 60   | 90  | 100 | 175  |

|                   | Filtrating elements |       |       | Model   |         |
|-------------------|---------------------|-------|-------|---------|---------|
|                   | 80 µm               | 53 µm | 25 µm | L       | Y       |
| Recommended flows | 25                  | 20    | 15    | 2"/10A  | 2"/10A  |
|                   | 60                  | 40    | 20    | 80/20   | 80/20   |
|                   | 70                  | 50    | 30    | 100/35  | 100/35  |
|                   | 90                  | 60    | 45    | 100/40P | 100/40P |

## Included elements

### Filtrating elements available

| Cartridge Kit                                                                                                                                                                         |                                                                                     | Body model | Øi [mm] | Lenght [mm] |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|---------|-------------|
| Stainless steel AISI 316 filtrating screen, polyester filtrating mesh (PES) and double EPDM gaskets<br>Filtration degrees available:<br>25 - 53 - 80 - 120 - 200 - 400 - 580 - 810 µm |  | /10A       | 145     | 337         |
|                                                                                                                                                                                       |                                                                                     | /20        | 145     | 490         |
|                                                                                                                                                                                       |                                                                                     | /35        | 218     | 490         |
|                                                                                                                                                                                       |                                                                                     | /40P       | 218     | 800         |
| Or, for aggressive fluids, instead of polyester screen, you should install:                                                                                                           |                                                                                     |            |         |             |
| Stainless steel AISI 316 cartridge REPS double layer and double EPDM gaskets<br>Filtration degrees available:<br>110 - 200 - 400 - 800 µm                                             |  | /10A       | 145     | 337         |
|                                                                                                                                                                                       |                                                                                     | /20        | 145     | 490         |
|                                                                                                                                                                                       |                                                                                     | /35        | 218     | 490         |
|                                                                                                                                                                                       |                                                                                     | /40P       | 218     | 800         |
| Or:                                                                                                                                                                                   |                                                                                     |            |         |             |
| Stainless steel AISI 316 screen and double EPDM gaskets<br>Filtration degrees available:<br>1000 - 2000 µm                                                                            |  | /10A       | 145     | 337         |
|                                                                                                                                                                                       |                                                                                     | /20        | 145     | 490         |
|                                                                                                                                                                                       |                                                                                     | /35        | 218     | 490         |
|                                                                                                                                                                                       |                                                                                     | /40P       | 218     | 800         |



| Automation group available                                                                                                                     |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Saticon 3T-AJ electronic filter controller</b><br>Power 230Vac<br>Differential pressure gauge<br>Activation for preset times and $\Delta p$ |  |

| Included elements                                                                   |                                                                                 |           |    |                   |                   |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------|----|-------------------|-------------------|
| Description                                                                         |                                                                                 | Ø [mm-in] | n° | L                 | Y                 |
|    | Pressure gauge Bourdon Ø63 G1/4" radial - stainless steel - glycerin - 0÷10 bar | 1/4"      | 2  | All models        |                   |
|    | Pneumatic sphere valve 3/4" brass - 2 ways F/F - total passage*                 | 3/4"      | 1  |                   | All models        |
|                                                                                     | Pneumatic sphere valve 1" brass - 2 ways F/F - total passage*                   | 1"        |    | All models        |                   |
|    | Pneumatic sphere valve 1" brass - 2 ways F/F - total passage*                   | 1"        | 1  | 2"/10A            |                   |
|                                                                                     | Pneumatic sphere valve 1 1/2" brass - 2 ways F/F - total passage*               | 1 1/2"    |    | 80/20<br>100/35   | 2"/10A<br>80/20   |
|                                                                                     | Pneumatic sphere valve 2" brass - 2 ways F/F - total passage*                   | 2"        |    | 100/40P           | 100/35<br>100/40P |
|    | Pneumatic sphere valve 2" brass - 2 ways F/F - total passage*                   | 2"        | 1  | 2"/10A            | 2"/10A            |
|                                                                                     | Pneumatic throttle DN80 wafer - cast iron GG25 - lens AISI316 - EPDM*           | 80        |    | 80/20             | 80/20             |
|    | Pneumatic throttle DN100 wafer - cast iron GG25 - lens AISI316 - EPDM*          | 100       |    | 100/35<br>100/40P | 100/35<br>100/40P |
|   | Spring check valve 2" - F/F - AISI304                                           | 2"        | 1  | 2"/10A            | 2"/10A            |
|  | Check valve DN80 Clapet - wafer - PP                                            | 80        |    | 80/20             | 80/20             |
|                                                                                     | Check valve DN100 Clapet - wafer - PP                                           | 100       |    | 100/35<br>100/40P | 100/35<br>100/40P |
|  | Automatic vent valve - simple kinetic effect - G1/2" M - PP                     | 1/2"      | 1  | All models        |                   |

\* The pneumatic valve actuators require compressed air (3-5bar) with adjustable pressure regulator.

| Functional elements                                                                 |                                   |      |     |       |    |            |   |
|-------------------------------------------------------------------------------------|-----------------------------------|------|-----|-------|----|------------|---|
| Motor                                                                               |                                   | RPM  | Vcc | A     | W  | L          | Y |
|  | Electric motor                    | 1500 | 12  | 6,3   | 57 | All models |   |
| Or:                                                                                 |                                   |      |     |       |    |            |   |
|  | Electric motor                    | 3000 | 24  | 4,1   | 66 | All models |   |
| Adapter                                                                             |                                   |      |     | Ratio |    | L          | Y |
|  | Worm screw - Oil bath - Aluminium |      |     | 1/100 |    | All models |   |

