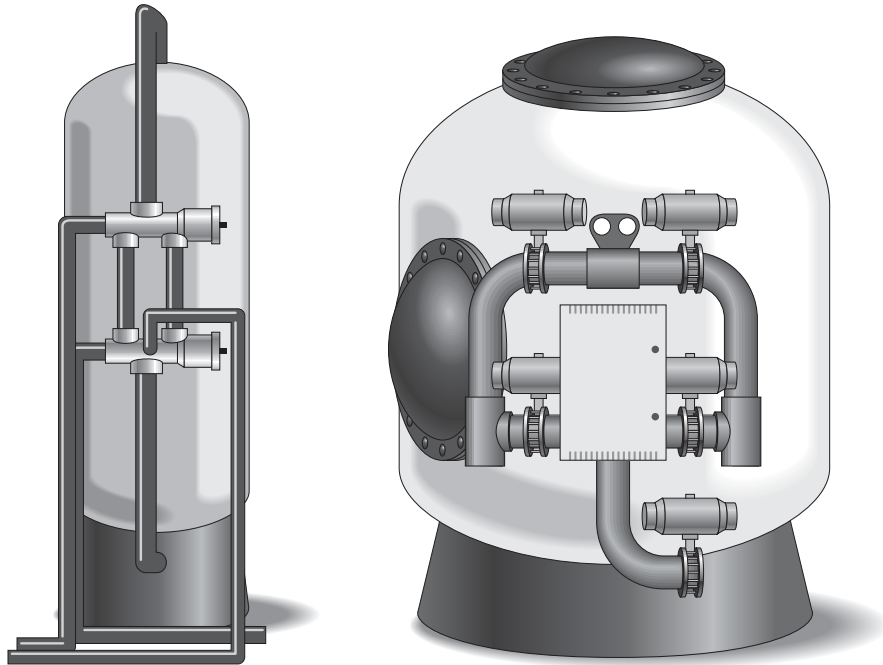


PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

QUARTZITE FILTERING

QAV series



WHAT QUARTZITE FILTERING PLANTS QAV SERIES ARE

The water destined for human consumption or industrial uses may contain suspended solids, colloids or turbidity, which have to be eliminated.

The quartzite filters perform a mechanical action while the water passes through the bed removing also small particles. Because of their effectiveness, quartzite filters are also used in the discharge water treatment for the removal of suspended solids and their related COD.

HOW QUARTZITE FILTERING PLANTS QAV SERIES WORK

The quartzite filters are made of varying gradation filtering material

with the thickest grading located on the top of the bed.

A top anthracite layer may be inserted for a further increase of the filtering capacity.

During the filtering process the particles stopped on the bed keep on gathering and therefore increase the filter charge losses. When they reach a given quantity the bed will be washed with water flowing opposite the filtering direction.

The filters are composed of cylinders containing quartzite and a valve group allowing the normal exercise procedure and the backwashing procedures, possibly using air for filters with considerable diameters.

The quartzite working and backwashing are automatically controlled by a command panel and suitably dimensioned valves; the filters may be manual and in such cases these operations have to be

Performance

| MODEL | AREA mq | CAPACITY mc/h | | | | VALVE DIAMETER DN | BED HEIGHT mm |
|----------|------------|---------------|-------------|-------------|-------------|----------------------|------------------|
| | | Vf = 10 m/h | Vf = 15 m/h | Vf = 20 m/h | Vf = 30 m/h | | |
| QAV 300 | 0,07 | 0,7 | 1,1 | 1,4 | 2,1 | 25 | 1000 |
| QAV 400 | 0,13 | 1,3 | 1,9 | 2,5 | 3,8 | 25 | 1200 |
| QAV 500 | 0,20 | 2,0 | 2,9 | 3,9 | 5,9 | 40 | 1200 |
| QAV 600 | 0,28 | 2,8 | 4,2 | 5,7 | 8,5 | 4,0 | 1200 |
| QAV 750 | 0,44 | 4,4 | 6,6 | 8,8 | 13 | 50 | 1200 |
| QAV 900 | 0,64 | 6,4 | 9,5 | 13 | 19 | 50 | 1200 |
| QAV 1050 | 0,87 | 8,7 | 13 | 17 | 26 | 65 | 1200 |
| QAV 1200 | 1,13 | 11 | 17 | 23 | 34 | 65 | 1200 |
| QAV 1400 | 1,54 | 15 | 23 | 31 | 46 | 80 | 1200 |
| QAV 1600 | 2,01 | 20 | 30 | 40 | 60 | 100 | 1200 |
| QAV 1800 | 2,54 | 25 | 38 | 51 | 76 | 100 | 1200 |
| QAV 2000 | 3,14 | 31 | 47 | 63 | 94 | 125 | 1200 |
| QAV 2350 | 4,34 | 43 | 65 | 87 | 130 | 125 | 1200 |

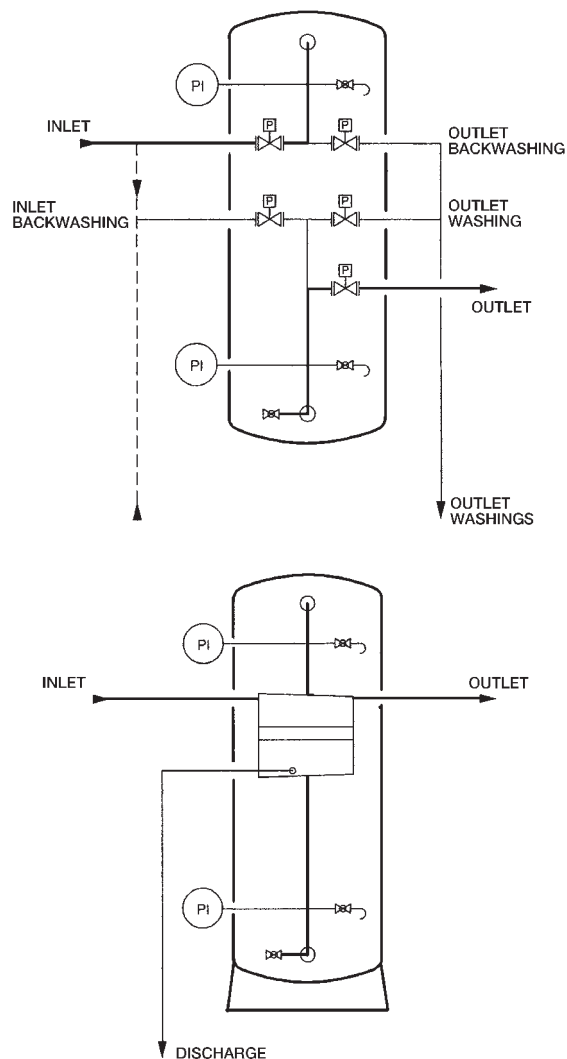
STANDARD PRODUCTION

Technical specifications

| | |
|------------------------|---|
| Working pressure | Min 1,5 – max 6 bar (4 bar QAV 1050 - 2350) |
| Cylinder | PRFV |
| Manhole | Top and side |
| Filling material | Varying gradation quartzite |
| Internal diffusion | PP diffusers |
| Piping | PVC |
| Valves < DN 50 | PVC multi-way |
| Valves > DN 50 | Butterfly valves made of cast iron and EPDM with pneumatic actuator |
| Valves command | Electro pneumatic panel on board |
| Electronic programmer | Models QAV 300 – 900 |
| Controls and samplings | Manometers and inlet/outlet valves |

Optional features

| | |
|--------------------------|---|
| Additional filling | Anthracite |
| Mixed air/water washing | Models QAV 1800 – 2350 |
| Backwashing compressor | With lobes, for mixed air/water washing |
| Flowmeters | With various areas |
| Flowmeters | Electronic, 4-20 mA |
| Electrical command panel | In compliance with the current laws |
| Support frame | Carbon steel with polyurethane cycle varnishing |



Dimensions and weights

| MODEL | FILTER DIAMETER mm | FILTER HEIGHT mm | FILTER WEIGHT kg | TOT. FILTER WEIGHT kg |
|----------|--------------------|------------------|------------------|-----------------------|
| QAV 300 | 320 | 1550 | 15 | 120 |
| QAV 400 | 410 | 1750 | 25 | 240 |
| QAV 500 | 510 | 1800 | 40 | 390 |
| QAV 600 | 620 | 2100 | 50 | 550 |
| QAV 750 | 780 | 2200 | 100 | 870 |
| QAV 900 | 940 | 2200 | 120 | 1250 |
| QAV 1050 | 1050 | 2100 | 270 | 1800 |
| QAV 1200 | 1200 | 2100 | 300 | 2300 |
| QAV 1400 | 1400 | 2200 | 380 | 3100 |
| QAV 1600 | 1600 | 2300 | 440 | 4000 |
| QAV 1800 | 1800 | 2300 | 500 | 5000 |
| QAV 2000 | 2000 | 2450 | 600 | 6100 |
| QAV 2350 | 2350 | 2700 | 750 | 8400 |

The reported values are for information only. EURO MEC keeps the right to change them any moment. By request particular solutions can be dimensioned.