# Backwash Drum Filter (RTF) page 1 / 2

STANDARD VERSION

Fully-automatic backwash filter with self-medium backwash without interruption of the filtration process during backwashing.

Large solid particles are crushed to flush them out problem-free.

Backwash speed in the filter-element up to 10 m/s.

|  |  |  |
| --- | --- | --- |
| **Operating conditions** |  | |
| medium |  |  |
| flow rate | m³/h |  |
| working pressure | bar |  |
| filter fineness | µm |  |
| operating temperature | °C |  |
| flushing by | self-medium | |
|  |  | |
| **Design data** |  | |
| main connection flanges acc. to DIN EN 1092 | DN |  |
| design pressure | 10 bar | |
| test pressure | 14,3 bar | |
| pressure loss with clean filter approx. | 0,1 bar | |
| design temperature | 0 - 50 °C | |
| construction and design | PED 2014/68/EU and AD 2000 | |
|  |  | |
| **Technical data** |  | |
| weight empty approx. | kg |  |
| weight filled approx. | kg |  |
| volume | l |  |
|  |  | |
| **Material** |  | |
| filter housing | steel coated (RAL 3020) | |
| filter element special slotted sieve or  special wire cloth screen | stainless steel 1.4435 (AISI 316 L) or  stainless steel 1.4301/1.4401 (AISI 304/316) | |
| drive shaft | stainless steel 1.4571 (AISI 316 Ti) | |
| with wearing bushing | steel, chrome-oxyde coated | |
|  |  | |
| **Flushing water quantity** |  | |
| duration of each backwash process | ~ 20 sec | |
| flushing water quantity per each flushing process | l |  |

|  |  |
| --- | --- |
| Manufacturer | Dango & Dienenthal Filtertechnik GmbH |
|  | +49 271 401 41 23 |

# Automatic control for Backwash Drum Filter (RTF) page 2 / 2

# for filter backwash in intervals

|  |  |  |
| --- | --- | --- |
| **Backwash valve** |  | |
| butterfly valve | DN |  |
| housing | grey-cast | |
| packing | EPDM | |
| disc and shaft | stainless steel | |
| with electrical drive |  | |
|  |  | |
| **Differential pressure gauging** |  | |
| differential pressure manometer |  | |
| static pressure | bar |  |
| measuring range | bar |  |
| with 2 adjustable micro-switches, with integrated inlet-pressure indicator  incl. cocks + screwings for connection to the differential pressure transmission pipe | | |
|  |  | |
| **Electronic control unit** | for wall-attachment at site | |
| housing | steel plate | |
| protective system | IP 65 | |
| dimensions: width x height x depth | 380 x 600 x 210 mm | |
| working voltage | 400 V, 50 Hz | |
| control voltage | 24 V DC | |
| electrical cabling of all building components incl. polarized plug-type connectors | Length 5 m | |
|  |  | |
| **Filter cleaning effected by** |  | |
| differential pressure adjustable | 0 - 1,6 bar | |
| time-flushing interval adjustable | continuously - 24 hours | |
| flushing time adjustable | continuously - 24 hours | |
|  |  | |
| **Signal exchange with customer** | | |
| with potential free contact in the control cabinet | filter in operation  filter in flushing process (backwash valve opened / closed)  collective fault | |
| starting of flushing process | from the control room | |
| release of flushing process | from the control room | |
|  |  | |
| **Indicator lamp at the control cabinet** | | |
| after response of the collective fault indication the following faults will be indicated at the  control cabinet: | | |
| either | faults in the filter operation | |
| either | faults at the electrical drive | |
| or | differential pressure too high | |

|  |  |
| --- | --- |
| Manufacturer | Dango & Dienenthal Filtertechnik GmbH |
|  | +49 271 401 41 23 |