

PRODUCT DATASHEET

Automatic Self-Cleaning Filters

Online Backwash Process | 1 to 2,000 micron | 2 to 1,250 m³/h

DATASHEET NO.

DS-YS-SCF-R03

ENGINEERING BASIS

ONLINE

CLEANING WITHOUT MAIN-FLOW SHUTDOWN

The suction scanner removes retained solids while the remaining filtration area stays in service.

0.5 bar

PUBLISHED MINIMUM PRESSURE

The selected model must maintain its required inlet pressure throughout the cleaning cycle.

1-2,000 µm

SERIES-DEPENDENT FILTRATION

Screen and fine-media series cover different ratings; nominal capture basis is confirmed at selection.

2-1,250 m³/h

SINGLE-FILTER RANGE

Parallel banks provide higher total flow and redundancy when required.

PRODUCT OVERVIEW

YORA automatic self-cleaning filters provide reliable removal of suspended solids without stopping the main water flow. Solids accumulate on the selected screen or filtration media; the automatic online backwash process then moves the internal suction assembly across the element and discharges the concentrated solids stream. The result is stable downstream protection with reduced operator intervention.



Parallel filter bank for higher-flow service.



Duplex installation with common inlet and outlet headers.

Illustrative horizontal automatic filter and installed multi-filter arrangements. Final orientation and connection layout are project specific.

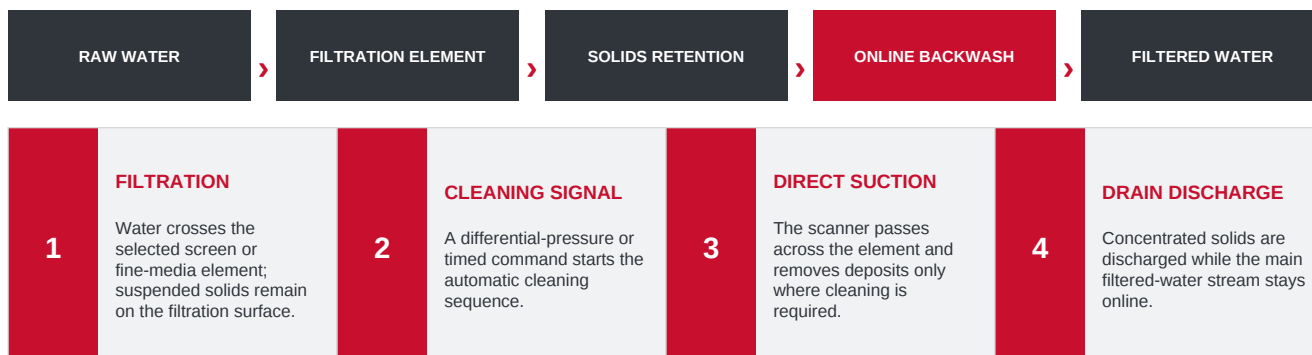
PRODUCT DATASHEET

Technology & Technical Configuration

Automatic filtration with an online backwash process

HOW THE ONLINE BACKWASH PROCESS WORKS

During normal filtration, water passes across the selected element and suspended solids are retained on its surface. When the cleaning sequence is initiated, the drive moves the suction scanner while localized suction lifts the retained material into the drain line. Filtration continues through the remaining screen area throughout the cleaning cycle.



TECHNICAL CONFIGURATION

ITEM	STANDARD / AVAILABLE CONFIGURATION
Housing material	SS304 or SS316 stainless steel
Filtration element	AISI 316 stainless-steel net; screen or fine-media arrangement selected for duty
Filtration media	Monofilament or 3D fabric options for coarse, algae, colloidal and fine suspended-solids duty
Cleaning assembly	Internal suction scanner / nozzle assembly with automatic travel drive
Control basis	Differential-pressure and / or timer-initiated cleaning sequence
Installation	Horizontal or vertical configuration, single unit or parallel filter bank
Connections	Project-specific flanged inlet, outlet and drain connections

TYPICAL OPERATING ENVELOPE

PARAMETER	INDICATIVE RANGE	NOTES
Flow per filter	2 to 1,250 m ³ /h	Series and filtration degree dependent
Filtration degree	2,000 to 1 micron	Series-specific screen or fine-media configuration
Operating pressure	0.5 to 10 bar	Maximum varies by selected series
Listed minimum operating pressure	0.5 bar	Cleaning pressure requirement confirmed by model and site hydraulics
Listed wash hydraulic basis	12 m ³ /h per m ²	Reference basis; drain flow, duration and volume per cycle confirmed at selection
Cleaning mode	Automatic, online	Main filtration remains in service

Final pressure class, filtration degree, materials, wash hydraulics, controls, applicable standards and guarantees are confirmed against actual water, operating conditions and client specifications.

PRODUCT DATASHEET

Range, Applications & Selection

Indicative sizing bands with additional sizes available on request

INDICATIVE PRODUCT RANGE

RANGE	FLOW m3/h	FILTRATION	PRESSURE	TYPICAL USE
Compact screen	2 to 15	300 to 25 micron	0.5 to 6 bar	Low-flow utility and process-water protection
Large-flow screen	2 to 1,250	2,000 to 25 micron	0.5 to 10 bar	Intake, cooling, irrigation and high-flow process water
Compact fine	2 to 15	20 to 1 micron	0.5 to 6 bar	Fine polishing and point-of-use protection
Large-flow fine	2 to 260	20 to 5 micron	0.5 to 10 bar	Fine suspended solids, algae and membrane pretreatment

The listed 1-micron selection applies only to the relevant fine-media series. Rating type and effective capture performance are confirmed for the selected element. Additional sizes and pressure classes are available on request.

REPRESENTATIVE OPERATING DUTIES

APPLICATION	ARRANGEMENT	FILTRATION	TOTAL FLOW	WORK / WASH PRESSURE
Lagoon water	24-filter bank	50 micron	8,000 m3/h	1.2 / 0.8 bar
River drinking water	2-filter bank	5 micron	180 m3/h	1.5 / 1.1 bar
Well drinking water	2-filter bank	5 micron	60 m3/h	1.6 / 1.2 bar

APPLICATIONS

WATER & MUNICIPAL	INDUSTRIAL & UTILITIES
› Surface-water and well-water pretreatment › Drinking-water process protection › Wastewater tertiary filtration › Irrigation and reuse-water systems › Membrane and disinfection-system protection	› Cooling-water side-stream filtration › Heat-exchanger and nozzle protection › Process-water recirculation loops › Seawater-intake and desalination pretreatment › Algae and colloidal suspended-solids removal

STANDARD SUPPLY SCOPE	EXTRA OPTIONS
› Filter housing and selected filtration element › Internal suction scanner and cleaning drive › Differential-pressure instrumentation › Automatic cleaning controller › Drain connection and local pressure indication	› Parallel duty / standby or duplex arrangement › Common inlet, outlet and drain manifolds › Skid-mounted valves, piping and instrumentation › Remote PLC / SCADA communication › Special seals, filtration media and project coatings

INFORMATION REQUIRED FOR FINAL SELECTION

1 DESIGN FLOW	2 WATER QUALITY	3 FILTRATION DUTY	4 SITE BASIS
Normal, peak and minimum operating flow	Solids loading, particle size and water chemistry	Required micron rating and downstream equipment	Pressure, temperature, utilities and connection layout