

Ronningen-Petter™ DCF-1600



Optional automation equipment shown.

Mechanically Cleaned Filter System

The DCF-1600 disc clean filter (DCF) is an innovative, proven solution for filtering a wide range of liquids in a wide range of applications.

Designed to address the challenges of increasing environmental costs and pressures, loss of valuable product, and the need for greater operator safety, the DCF is like no other filtration system on the market.

Key benefits include:

- No loss of valuable product caused by media changeout
- No replacement media costs or disposal needs
- Mechanically cleaned permanent media
- Reduced operator exposure
- Reduced environmental impact
- Reduced labor demands – no more media changeouts
- Increased profitability – improves overall system efficiency and reduces downtime
- Longer life – high screen strength and erosion resistance
- Space-saving design – small, compact footprint
- Collection and removal of contaminant from fluid being filtered – with no interruption of operation
- Unattended operation capability – with optional automation packages

How the DCF-1600 works

The patented design uses a spring-loaded cleaning disc that travels up and down inside the filter media – removing collected contaminants. Filtrate flows from the top down and from the inside of the media outward to increase retention of undesirable solids. Contaminants are trapped on the screen for easy removal and evacuation to the purge collection chamber.

On the downstroke, any remaining contaminants are driven downward. This process concentrates the solids for easy, complete elimination through the purge chamber.



On the upstroke, the cleaning disc removes particles from the media surface. System fluid flow washes the particles downward toward the purge chamber past the cleaning disc.



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**Industrial liquid filtration,
separation and mixing solutions**

Ronningen-Petter DCF-1600

Mechanically Cleaned Filter System

Product Specifications

Dimensions

Weight: 215 lbs (98 kg)
 Height: 81.9 in. (2,082 mm)
 Service: 104.9 in. (2,666 mm)
 Footprint: 19.6 in. (498 mm) x
 18 in. (457 mm)
 Volume: 13 gal (49 l) total
 Debris Volume: 2 gal (7.6 l) capacity

Connection

Standard: 3 in. (80 mm) I/O NPTE
 thread, 2 in. (50 mm) purge
 valve NPTI thread
 Optional: Flanged (ANSI, DIN), tri-
 clamp or BST thread

Process Parameters

Temperature: 400°F (204°C) max.
 Flow: 30–200 gpm (114–757
 l/min)
 Operating pressure: 30–150 psig
 (2–10.5 bar)

Media

Wedge wire: 15 μ – 1125 μ , or
 defined pore 25 μ – 100 μ
 Screen: diameter 8 in. (203 mm),
 length 24 in. (610 mm), area
 610in² (3935 cm²)

Elastomer Seals

Standard:
 Element and lid: Viton® (400°F
 (204°C) maximum),
 Shaft seal: urethane (220°F
 (105°C) maximum)
 Optional:
 Element and lid: EPT (300°F
 (149°C) maximum), or Teflon®
 400°F (204°C) maximum)
 Shaft seal: Teflon (400°F
 (204°C) maximum)

Cleaning Disc

Standard: Polyethylene (UHMWPE)
 (<180°F/82°C)
 Optional: Teflon (<400°F/204°C)
 Kynar (<285°F/140°C)

Housing/Wetted Parts Materials

Standard: 316 stainless steel, glass
 bead blasted

Stand Materials

Standard: 304 stainless steel

Controllers

Standard: continuous cleaning
 valve (CCV)
 Options: push button, semi-automatic
 electric, electric timer, single
 pneumatic timer, dual pneumatic
 timer, PLC minicomputer

Utilities

Electrical: (if equipped with option-
 al electric automatic control
 timer): 110 or 220 Volt, 50 or
 60 Hz,
 single-phase.
 Air: 60 psig (4 bar) at 5 CFM
 (140 m³/m). Air must be clean,
 dry, and non-lubricated
 Water:

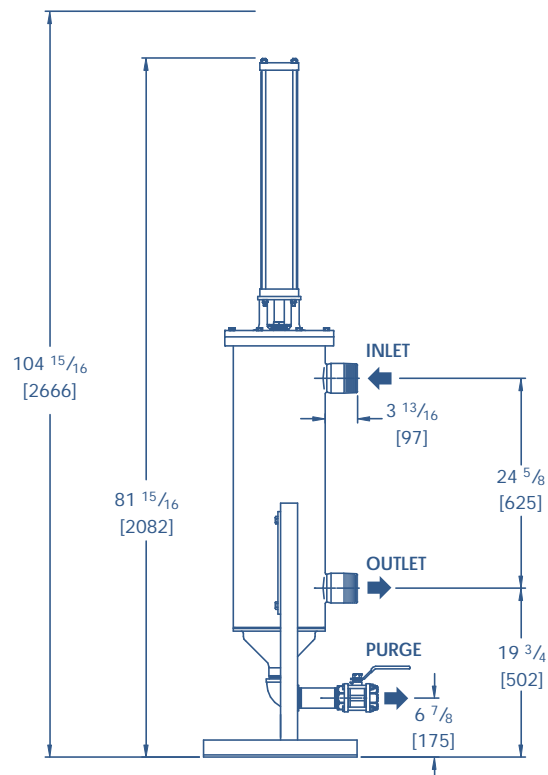
when equipped with
 optional FluidSeal: flow rate <1
 gpm (3.8 l/min)
 when using water (rather than
 filtrate) with optional Stealth
 Purge: 35 psig (2.4 bar) or less
 than filter's inlet pressure

FluidSeal Option

Advanced dual seal design replaces
 standard single seal. Available
 in Teflon or urethane to suit liquid
 properties. With Twin Actuators,
 also available as a retrofit kit.

Other Options

Stealth Purge with semi-automatic or
 PLC mini computer – water flush
 available
 Steam jacketed housing
 ASME UM code
 Electropolish external/internal
 Polished interior surface finish
 1/4in. (6.4 mm) NPTI gauge ports
 Multiplex configuration



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