

# Optimicron® Series

Energy efficient filtration



## Description

The Optimicron filter elements have been optimized with respect to filtration performance and energy efficiency. These elements offer the best optimization of separation efficiency, service life and differential pressure versus flow rate.

As a complete element package, the innovative characteristics of the HYDAC technology has a very positive impact on the differential pressure of the elements and high degree of filtration efficiency and performance.

## Features

- Unique HELIOS pleat geometry – optimizes media area open to flow to calm the flow in areas between pleats reducing  $\Delta P$ .
- Outer wrap perforations insure optimized flow onto the filter pleats and help to minimize pressure losses.
- Outer wrap perforations also help to distribute the fluid incidence stresses evenly in the axial and radial directions and thus increase tear resistance.

## Technical Specifications

<b>Collapse Rating</b>	290 psid (20 bar)
<b>Temperature range</b>	-22°F to 212°F (-30°C to 100°C)
<b>Flow direction</b>	outside to inside
<b>Category</b>	Disposable - single use
<b>Bypass Cracking Pressure</b>	R (only) = 43 psid (3 bar) (standard, others available)

## “D” Pressure Elements Model Code

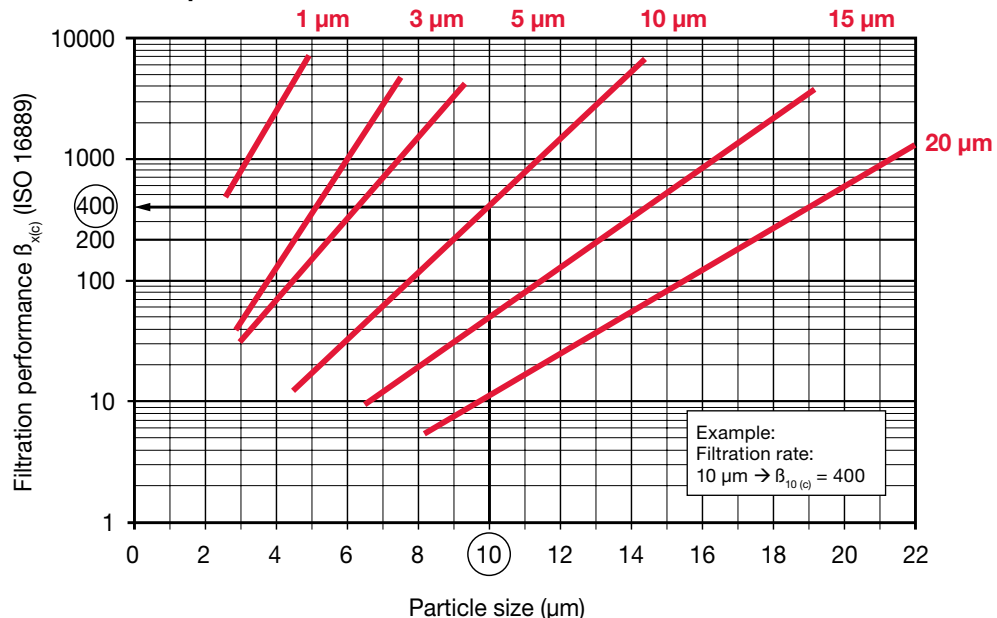
	<b>0660</b>	<b>D</b>	<b>010</b>	<b>ON / V</b>	<b>SF</b>	<b>FREE</b>
<b>Size</b>	0030, 0035, 0055, 0060, 0075, 0095, 0110, 0140, 0160, 0240, 0260, 0280, 0300, 0330, 0450, 0500, 0650, 0660, 0900, 0990, 1320, 1500					
<b>Type</b>	D = Pressure line element					
<b>Filtration Rating (microns)</b>	1, 3, 5, 10, 15, 20					
<b>Element Media</b>	ON = Optimicron®					
<b>Seal</b>	(omit) = Nitrile rubber (NBR) (standard) V = Fluorocarbon elastomer (FKM) EPR = Ethylene propylene rubber (EPR)					
<b>Supplementary Details</b>	SO263 = Modification of ON & W/HC elements for Skydrol or HYJET phosphate ester fluids SFREE = Element specially designed to minimize electrostatic charge generation					

## “R” Return Elements Model Code

	<b>0330</b>	<b>R</b>	<b>005</b>	<b>ON / V</b>	<b>B6</b>	<b>SF</b>	<b>FREE</b>
<b>Size</b>	0030, 0060, 0075, 0090, 0110, 0150, 0160, 0165, 0185, 0195, 0210, 0240, 0270, 0280, 0330, 0450, 0500, 0580, 0600, 0606, 0750, 0850, 0950, 1300, 1700, 2600						
<b>Type</b>	R = Return line element						
<b>Filtration Rating (microns)</b>	1, 3, 5, 10, 15, 20						
<b>Element Media</b>	ON = Optimicron®						
<b>Seal</b>	(omit) = Nitrile rubber (NBR) (standard) V = Fluorocarbon elastomer (FKM) EPR = Ethylene propylene rubber (EPR)						
<b>Bypass Valve</b>	(omit) = 43 psid (3 bar) (standard) B1 = 14.5 psid (1 bar) (lube or coolant) B2 = 29 psid (2 bar) (HYDAC optional return) B6 = 87 psid (6 bar) (return line extended life) KB = No bypass (flushing systems)						
<b>Supplementary Details</b>	SO263 = Modification of ON & W/HC elements for Skydrol or HYJET phosphate ester fluids SFREE = Element specially designed to minimize electrostatic charge generation						

Model Codes Containing Red are non-stock items — Minimum quantities may apply – Contact HYDAC for information and availability

## Beta Ratio (β) Values for Optimicron



# Optimicon® Power Series

Optimized Elements in Power Stations



## Description

Optimicon Power elements have been developed to both meet the heavy demands of power plant applications and comply with API-614 specifications. The elements are designed to meet stringent requirements of applications such as turbine lubrication, hydraulic turbine lift systems, and rotary compressors. Key considerations for this type of filtration are low resistance to flow (low differential pressures through the elements) and safety with regard to electrostatic discharge. This element incorporates Stat-Free® technology which safeguards and inhibits the dangerous generation of static electricity (ESD) which can cause fires and destroy sensitive electronic components and sensors.

As a complete element package, the innovative characteristics of this new technology provide low energy losses, and the compact nature of the element assures better conditioning of the flow. This homogenous flow results in better access to the contaminates and more efficient usage of the surface areas to better filter the contamination.

## Features

- API 614 compliant
- Glass fiber media, single-layer with support
- Innovative outer wrap with increased strength & better diffuser effect = homogenous flow
- Integrated Stat-Free® technology
- Low collapse only - 145 psid (10 bar)

## Technical Specifications

<b>Collapse Rating</b>	145 psi (10 bar)
<b>Temperature range</b>	-22°F to 212°F (-30°C to 100°C)
<b>Flow direction</b>	outside to inside
<b>Filtration Rating</b>	5, 10, 20 µm
<b>Category</b>	Disposable - single use
<b>Compatibility with hydraulic fluids</b>	Mineral oils: Test criteria to ISO 2943 Lubricating oils: Test criteria to ISO 2943
<b>Bypass Cracking Pressure</b>	No bypass (standard per API 614) 43 psid (3 bar) (optional) - Others available for non-API applications

# Model Code

**2600 A 010 ON/PO /**

## Size

0110, 0120, 0230, 0240, 0330, 0500, 0540, 0880, 1400, 2600, 2700 = A  
0110, 0240, 0330, 0500, 0660, 0850, 0950, 1300, 1700, 2600, 2700 = R

## Type

A = API-614 compliant (10 µm ≥ 10)  
R = Return line power (5, 10, 20 µm)

## Filtration Rating (microns)

5, 10, 20

## Element Media

ON/PO = Optimicron® Power

## Seal

(omit) = Nitrile rubber (NBR) (standard)  
V = Fluorocarbon elastomer (FKM)

## Bypass Valve

(omit) = No bypass (standard per API 614)  
B3 = 43 psid (3 bar) (non-compliant to API-614)  
B6 = 87 psid (6 bar)  
KB = No bypass

} R element only

## Supplementary Details

Optimicron® Power was developed including integrated Stat-Free® technology. It will replace all elements labeled with G/HC/-SFREE. This change also applies to filter housings currently using G/HC/-SFREE elements.

*Model Codes Containing Red are non-stock items — Minimum quantities may apply – Contact HYDAC for information and availability*