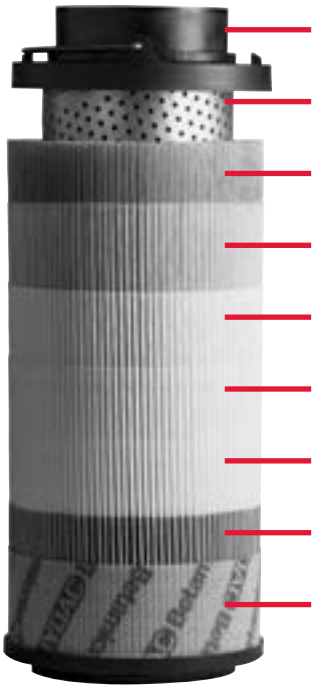
Betamicron® Series

High Pressure and Return Filter Elements

Element Construction



1. Conductive plastic end caps
2. Seam support tube
3. Inner screen to stabilize deep pleats
4. Support layer to back up active media layers
5. Final active depth layer to remove fine particles
6. Pre-filter depth layer to remove coarse particles
7. Diffusion layer to equalize flow across surface
8. Outer screen to stabilize pleats *(under cover)*
9. Multi-protection cover *(for high pressure elements)*

Description

Betamicron® filter elements have been optimized with respect to filtration performance, in fluid cleanliness, lower ΔP/Q, pleat and element protection while handling and operating, and high stability level throughout its life. These elements offer a superior level of optimization of separation efficiency, service life and differential pressure versus flow rate.

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

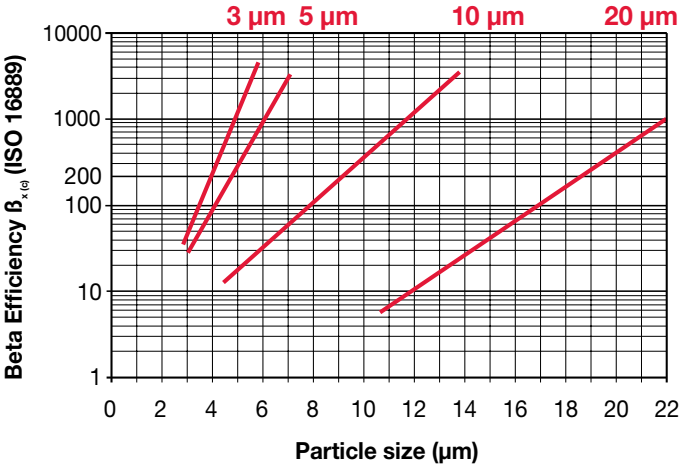
Features

- Optimized mesh pack structure maximizes the media area available to capture dirt particles and minimizes resistance to fluid flow. Optional SFREE mesh pack insures that static electricity will not be generated to dangerous levels where arcing can result.
- Improved performance *(optimized Beta efficiency, contamination retention, ΔP/Q characteristics and Beta stability)* and lowered weight due to plastic spiral lock seam support tubes.
- All plastic end caps and support tubes are carbon impregnated to conduct electricity, which ensures that static electricity will not be generated to levels high enough to arc.
- Element outer wraps are made of plastic (polyester) to reduce environment a impact and improve fatigue resistance.
- Zinc-free construction prevents zinc soaping.

Technical Specifications

Collapse Rating	290 psid (20 bar) *(R/RN, BN4HC, D/DN, BN4HC)* 3045 psid (210 bar) *(D, BH/HC)*
Temp. range	-22°F to 212°F (-30°C to 100°C)
Flow direction	outside to inside
Filtration Rating	3, 5, 10, 20 µm
Category	Disposable - single use
Bypass Cracking Pressure R *(only)* = 43 psid (3 bar) *(standard, others available)* D…BN = 87 psid (6 bar) *(standard, others available)* D…BH = No bypass *(standard)*	

Beta Ratio (ß) Values for Betamicron



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“D / DN” Pressure Elements Model Code

0660 D 005 BH4HC / V SO263

Size
- D = 0030, 0035, 0055, 0060, 0075, 0095, 0110, 0140, 0160, 0240, 0280, 0330, 0500, 0660, 0990, 1320, 1500
- DN = 0040, 0063, 0100, 0160, 0250, 0400, 0630, 1000

Pressure Element Type
- D = HYDAC pressure element
- DN = DIN Spec. 24550 pressure element

Filtration Rating *(micron)*
- 3, 6, 10, 25 = BN4/HC *(DN only)*
- 3, 5, 10, 20 = BH4HC

Element Media
- BN4HC = Betamicron®-N element *(Low Collapse)*
- BH4HC = Betamicron®-H element *(High Collapse)*

Seals
- *(omit)* = Nitrile rubber (NBR) *(standard)*
- V = Fluorocarbon elastomer (FKM)
- EPR = Ethylene propylene rubber (EPR)

Supplementary Details
- SO263 = Modification of elements for Skydrol or HYJET phosphate ester fluids
- SFREE = Element specially designed to minimize electrostatic charge generation

“R / RN” Return Elements Model Code

1300 R 005 BN4HC / _ B6 SO263

Size
- R = 0030, 0060, 0050, 0075, 0090, 0110, 0150, 0160, 0165, 0185, 0210, 0240, 0270, 0330, 0500, 0660, 0850, 0950, 1300, 1700, 2600, 2700
- RN = 0040, 0063, 0100, 0160, 0250, 0400, 0630, 1000

Return Element Type
- R = HYDAC low pressure return element
- RN = DIN Spec. 24550 return element

Filtration Rating *(micron)*
- 3, 5, 10, 20 = BN4HC

Element Media
- BN4HC = Betamicron® *(Low Collapse)* high efficiency depth element

Seals
- *(omit)* = Nitrile rubber (NBR) *(standard)*
- V = Fluorocarbon elastomer (FKM)
- EPR = Ethylene propylene rubber (EPR)

Bypass Cracking Pressure
- *(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)*

Supplementary Details
- SO263 = Modification of 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