

# FILTER ELEMENTS

## MA & MG Series

### Spin-On Elements



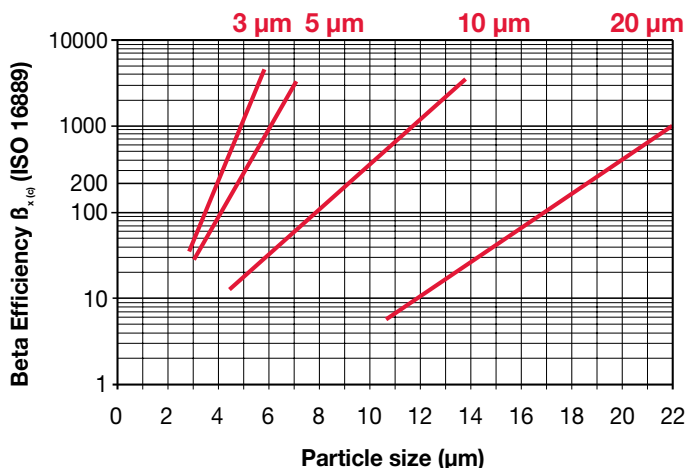
### Features

- HYDAC Betamicon® elements are available with Multi-Layer Betamicon® media with absolute ratings of 3, 5, 10, and 20 microns.
- Proper support of the filter media provides high Beta Ratio values (particle removal efficiency) even at high differential pressures. The efficiency of many competitive elements drastically deteriorates as the element clogs and differential pressure increases.
- Betamicon® filter media is firmly supported to achieve flow fatigue resistance during significant pressure flow pulsations.
- High quality adhesive is used to bond the seam of the media and the endcaps to the media.
- Heavy gauge perforated support tubes are used to provide proper flow distribution and protection against element collapse.

### Technical Specifications

<b>Construction Materials</b>	Steel
<b>Flow Capacity</b>	
40	7 gpm (26 lpm)
80	15 gpm (57 lpm)
85	25 gpm (95 lpm)
90	15 gpm (57 lpm)
95	25 gpm (95 lpm)
160/190	30 gpm (114 lpm)
180/195	60 gpm (227 lpm)
<b>Housing Pressure Rating</b>	
Max. Operating Pressure	120 psi (8 bar)/250 psi (17 bar) (MF90/95)
Proof Pressure	180 psi (12.4 bar)/375 psi (25.8 bar) (MF90/95)
Fatigue Pressure	Contact HYDAC
Burst Pressure	Contact HYDAC
<b>Element Collapse Pressure Rating</b>	
BN, P, AM	80 psid (5.5 bar)
<b>Fluid Temperature Range</b>	-22°F to 212°F (-30°C to 100°C) Consult HYDAC for applications below 14°F (-10°C)
<b>Fluid Compatibility</b>	Compatible with all petroleum oils rated for use with Nitrile rubber (NBR) seals.
<b>Bypass Valve Cracking Pressure</b>	$\Delta P = 3 \text{ psid (0.2 bar) + 10\% (for suction applications)}$ $\Delta P = 25 \text{ psid (1.7 bar) + 10\% (standard for nominal filters)}$ $\Delta P = 43 \text{ psid (3 bar) + 10\% (standard for absolute [BN] filters)}$ $\Delta P = 50 \text{ psid (3.4 bar) + 10\% (standard for absolute [BN] filters, MF 90/95/190/195)}$

### Beta Ratio ( $\beta$ ) Values for Betamicon



## Model Code

**0080 MA 005 BN**

### Size

0040, 0080, 0090 = Standard Length Elements (*not available with 3 μm BN elements*)  
 0085 (*not available with BN or AM elements*)  
 0095 (*not available with 20 μm BN elements*)  
 0160  
 0180

Extended Length Elements

### Type

MA = UN Tap Plate Thread (*standard*)

Size	Thread
0040	3/4" - 16 UN-2B
0080/0085	1"-12 UN-2B
0090/0095	1 1/2"-16UN-2B
0160/0180	1 1/2"-16UN-2B

MG = BSPP Tap Plate Thread (*special*)

Size	Thread
0080	3/4" BSPP
0160	1 1/4" BSPP

Not required for BSPP ported heads produced in the USA,  
 MA elements used on USA port codes "1.0"

### Filtration Rating (*microns*)

3, 5, 10, 20 = BN Filtration Rating ( $\beta_{x(e)} \geq 200$ )      3, 10, 25 = P  
 040 = AM

### Element Media

BN = Betamicron® (*Low Collapse*)  
 P = Paper  
 AM = Aquamicron® Water Removal (*not available 0085*)

### Supplementary Details

Bypass size 0040 only (*bypass in element*)  
 B1.3 = 18 PSID Bypass  
 B1.7 = 25 PSID Bypass

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