



# HYDRA BIG Filtration System

## Point-of-Entry, Large Sediment Filtration Reduction

For whole house applications with patented self-cleaning design

Atlas Filtri® HYDRA BIG, self-cleaning filtration technology, is designed for the reduction of large particles and heavy amounts of sediment in the water supply.

The unique filter system automatically back washes from the center of the cartridge out when the drain valve is opened. The product line offers a proprietary stainless steel or polypropylene filter cartridge in 50- or 90-micron. Flow rates vary from 26 GPM to 60 GPM.

The unit flushes when the ball valve at the bottom of the housing is manually opened. This causes the filter cartridge to compress against the spring, redirecting the water to the center of the cartridge out and moving sediment off the surface to drain. When the ball valve is closed, the cartridge returns to service mode.

The housings are available in plastic or with lead-free brass inserts in 1" FNPT or in 1.5" FNPT, plastic only. Pressure rating is 120 PSI and a maximum working temperature of 113°F. Standard head unit is reinforced polypropylene and sump is PET. Standard O-ring is EPDM.

The units are available in a variety of system designs. These include the DP Big DUO and TRIO head units, with and without gauges, in clear and opaque housings.

Atlas Filtri is driven to providing our customer with the best available products to meet specific filtration requirements. This is done by using the most advanced manufacturing and design methods. The international patents received come from a constant commitment to research and develop that result in new and innovative products.

Check out more about Atlas Filtri at [us.atlasfiltri.com](http://us.atlasfiltri.com).



HYDRA BIG Filtration System  
Self-cleaning Filter Design  
50 or 90 Micron

Stainless Steel or Polypropylene  
Filter Cartridge



Included Items

### Features

- Designed for residential, well, irrigation, and light commercial filtration applications
- Accommodates proprietary stainless or polypropylene filter cartridges
- 1" FNPT or 1.5" FNPT inlet and outlet fitting connections
- Lead-free brass inserts in 1" FNPT only
- Includes pressure-relief feature that includes an O-ring seal. No spring is used that can result in water leaks
- Knife-edge seal at both cartridge ends for a positive and seal eliminating by-pass
- Proprietary designed filtration cartridge for high flow applications

All components sold separately

### Specifications

#### Materials:

Head Connection: Reinforced Polypropylene  
Housing Construction: PET  
Seal: Silicone O-ring  
Filter Construction: Polypropylene  
Filter Media: Stainless Steel or Polypropylene

#### Working Conditions:

Working Temperature Range:  
Min 39.2°F (4°C) – Max 113°F (45°C)

#### Working Pressure Range:

Maximum: 120 PSI (8.3 BAR)  
Minimum: 26 PSI (1.8 BAR)

#### Minimum Flow Rate:

Stainless Steel Design: (RAH) 8.8 GPM  
Polypropylene Design: (RLH) 10.5 GPM



HYDRA BIG self-cleaning filter series is certified by IAPMO R&T against NSF/ANSI Standards 42, 61, 372 and CSA B483.1 for material safety, structural integrity and lead-free requirements.

## PRODUCT SPECIFICATION and PERFORMANCE

Listed HYDRA BIG housings in standard models available with Gauges or Lead-free Brass Inserts

HYDRA BIG - Standard Plastic - FNPT Threads with Stainless Steel or Polypropylene Filter Cartridge

PART NUMBER	MODEL	NOMINAL FILTRATION mcr	IN/OUT	MAX FLOW RATE l/h	MAX FLOW RATE gpm	DIMENSIONS mm		
						A	B	C
RA6314000	HYDRA BIG 1" RLH 50 mcr NPT IN	50	1"	6000	26	500	190	185
RA6314003	HYDRA BIG 1"1/2 RLH 50 mcr NPT IN	50	1"1/2	15000	66	500	190	185
RA6314010	HYDRA BIG 1" RLH 90 mcr NPT IN	90	1"	6000	26	500	190	185
RA6314013	HYDRA BIG 1"1/2 RLH 90 mcr NPT IN	90	1"1/2	15000	66	500	190	185
RA6314020	HYDRA BIG 1" RAH 50mcr NPT IN	50	1"	6000	26	500	190	185
RA6314023	HYDRA BIG 1"1/2 RAH 50 mcr NPT IN	50	1"1/2	15000	66	500	190	185
RA6314030	HYDRA BIG 1" RAH 90 mcr NPT IN	90	1"	6000	26	500	190	185
RA6314033	HYDRA BIG 1"1/2 RAH 90 mcr NPT IN	90	1"1/2	15000	66	500	190	185

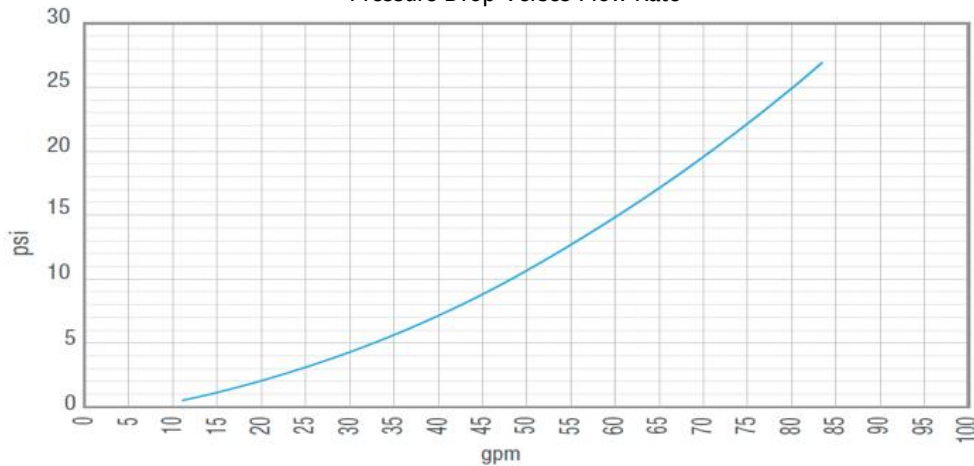
HYDRA BIG - Lead-free Brass Inserts - FNPT Threads with Stainless Steel or Polypropylene Filter Cartridge

PART NUMBER	MODEL	NOMINAL FILTRATION mcr	IN/OUT	MAX FLOW RATE l/h	MAX FLOW RATE gpm	DIMENSIONS mm		
						A	B	C
RA6316000	HYDRA BIG 1" RLH 50 mcr NPT OT	50	1"	6000	26	500	190	185
RA6316010	HYDRA BIG 1" RLH 90 mcr NPT OT	90	1"	6000	26	500	190	185
RA6316020	HYDRA BIG 1" RAH 50 mcr NPT OT	50	1"	6000	26	500	190	185
RA6316030	HYDRA BIG 1" RAH 90 mcr NPT OT	90	1"	6000	26	500	190	185

HYDRA BIG - Pressure Gauges - FNPT Threads with Stainless Steel or Polypropylene Filter Cartridge

PART NUMBER	MODEL	NOMINAL FILTRATION mcr	IN/OUT	MAX FLOW RATE l/h	MAX FLOW RATE gpm	DIMENSIONS mm		
						A	B	C
RA6314300	HYDRA BIG M 1" RLH 50 mcr NPT IN	50	1"	6000	26	570	190	185
RA6314303	HYDRA BIG M 1"1/2 RLH 50 mcr NPT IN	50	1"1/2	15000	66	570	190	185
RA6314310	HYDRA BIG M 1" RLH 90 mcr NPT IN	90	1"	6000	26	570	190	185
RA6314313	HYDRA BIG M 1"1/2 RLH 90 mcr NPT IN	90	1"1/2	15000	66	570	190	185
RA6314320	HYDRA BIG M 1" RAH 50 mcr NPT IN	50	1"	6000	26	570	190	185
RA6314323	HYDRA BIG M 1"1/2 RAH 50 mcr NPT IN	50	1"1/2	15000	66	570	190	185
RA6314330	HYDRA BIG M 1" RAH 90 mcr NPT IN	90	1"	6000	26	570	190	185
RA6314333	HYDRA BIG M 1"1/2 RAH 90 mcr NPT IN	90	1"1/2	15000	66	570	190	185

Pressure Drop Verses Flow Rate



RAH Stainless Steel Filter Cartridge  
50 micron - RA5001015  
90 micron - RA5001020



RLH Polypropylene Filter Cartridge  
50 micron - RA5001005  
90 micron - RA5001010



DP Big O-ring  
AA7530215  
Included

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A Company of the Atlas Filtri Group. World headquarters and production facilities located in Italy.