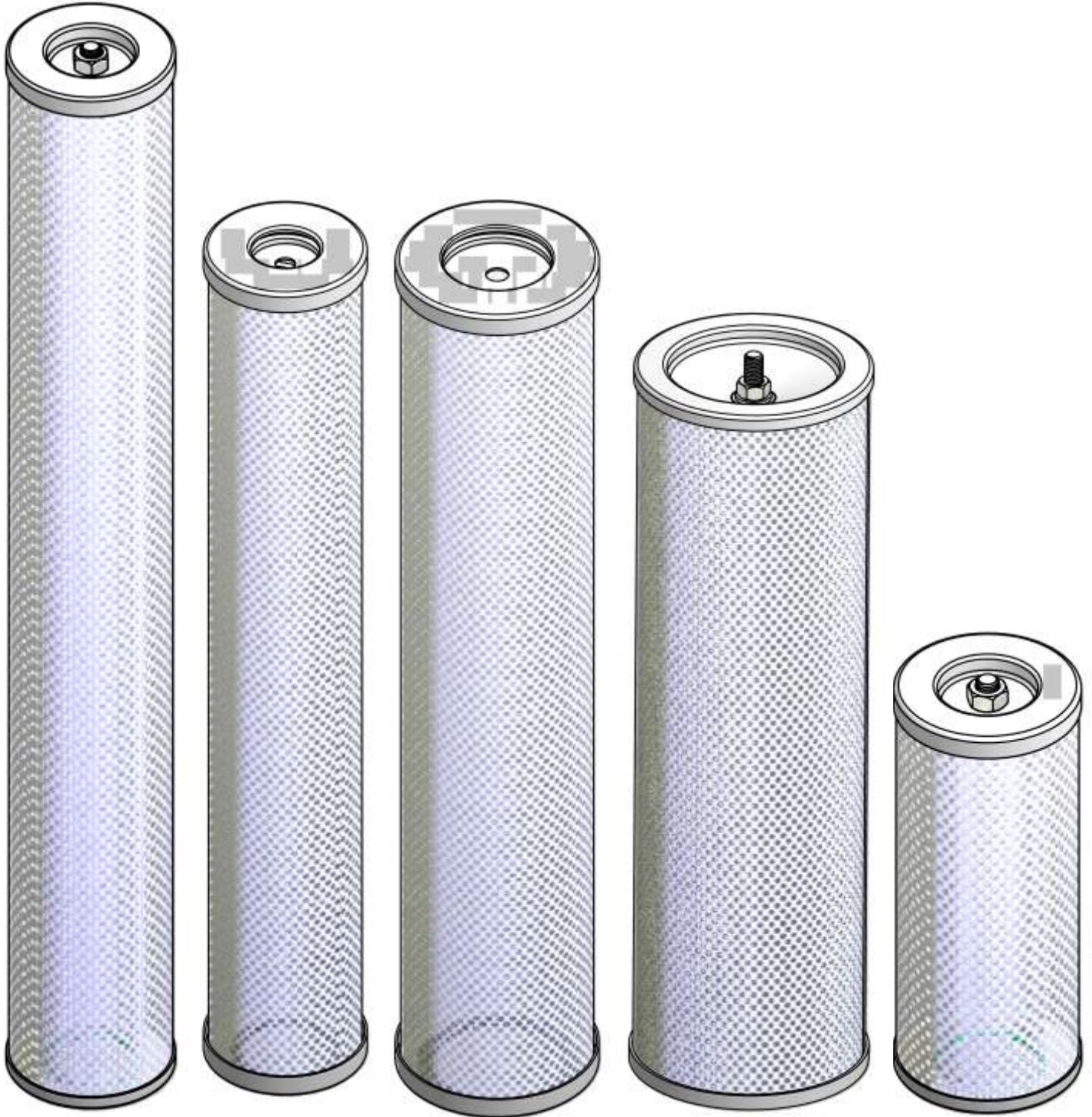
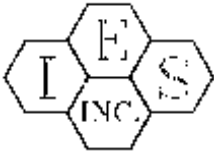


IES-TP-004  
2009

# OIL FILTER ELEMENTS





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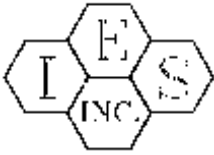
10.0 5, 10, 15 Micron Oil Filter Element (100, 150 GPM Nominal Flow Rate)..... 12,13

## 1.0 DESCRIPTION

IES Pleated micro-glass media elements are designed to achieve the highest dirt holding while maintaining maximum filtration performance in a wide range of oil, water, and chemical fluid applications. These elements provide high structural integrity and chemical resistant media to handle tough industrial filtration problems. The advanced, supported, micro-glass media allows the elements to resist deterioration and softening caused by long term use in oil, water based, and chemical fluids. IES elements are recommended for use in critical filtration applications such as lubricating oil and hydraulic system.

## 2.0 SPECIAL FEATURES PER API-614 STANDARD

- 2.1 Filter Element core is re-enforced to withstand differentials of more then 100 psi without collapse.
- 2.2 Media for filtration is laminated with scrim on the downstream side and further protected with 304 Stainless Steel mesh. The arrangement allows the filter element to trap and retain contamination during upsets and even pulsating flows.
- 2.3 Filter media is non-hydroscopic and does not deteriorate in the presence of water contamination of greater then 5 percent. Clean element pressure drop was maintained in filter elements soaked in oil with over 5% water for 2 weeks prior to multi-pass test.
- 2.4 All filter cartridge material is water and corrosion resistant. Inner and outer cores are tin coated, caps are protected with rust inhibitor. All removable cartridge mounting hardware is 304 Stainless Steel, spring reinforcing the inner core is galvanized and all media supporting mesh is 304 Stainless Steel.
- 2.5 Pressure drop for clean filter elements is less than 5 psi at 40 °C (104 °F) and normal flow.

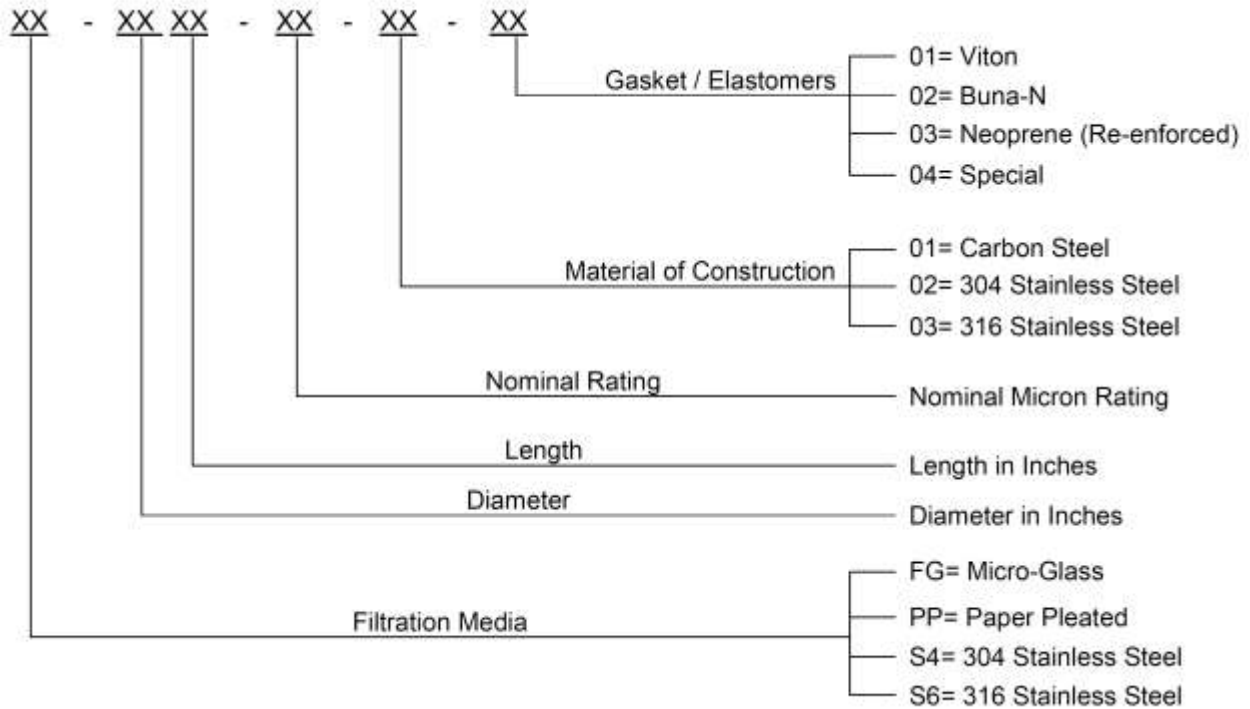


**3.0 FILTER ELEMENT RELIABILITY**

To achieve highest reliability, IES Filter Elements are constructed to meet the following goals:

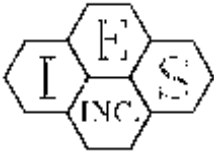
- No failure of element during normal operation.
- No plugging of element during normal operation.
- No release of contaminants during process upset or pulsating flows.
- No collapse or release of trapped particles up to 100 psi differential pressure.

**4.0 MODEL NUMBER EXPLANATION**



**5.0 ORDERING GUIDE**

- 5.1** Example 1:  
Specify a 15 GPM, 10 Micron, C.S., Oil Filter Element of Micro-Glass, with a Neoprene Gasket  
**FG-0408-10-01-01**
- 5.2** Example 2:  
Specify a 45 GPM, 20 Micron, 304 SS, Oil Filter Element of Micro-Glass, with a Neoprene Gasket  
**S4-0418-20-01-01**



## 5 MICRON OIL FILTER ELEMENTS (12-75 GPM NOMINAL FLOW RATE)

IES-TP-004  
2009

### APPLICATIONS

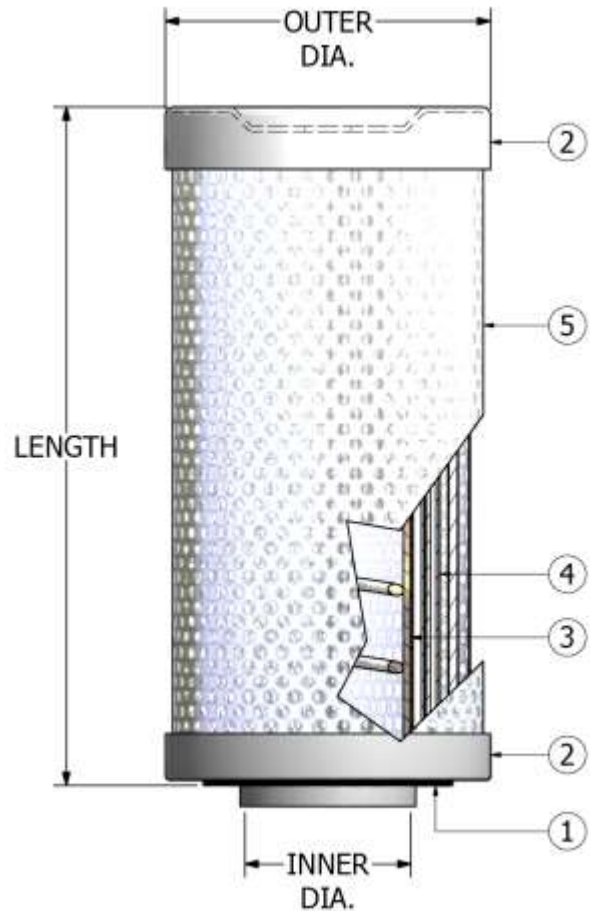
- Lubricating Oil, Synthetic and Hydro Treated, For Gas and Refrigeration Compressors
- Hydraulic and Gear Oils
- Fuels and Coolants
- Flushing Filter Element for Oil-Flooded Screw Compressors and API-614 Lube Oil System.

### CONSTRUCTION

- Gasket Material (1)
- Carbon Steel End Caps (2)
- Perforated (non-lead) Steel Center Tube (Tin Coated) with Galvanized Inner Spring (3)
- Specially Formulated Pleated Micro-Glass Media with Nylon Backing and 30 Mesh 304 SS Support) (4)
- Perforated Outer Core (Tin Coated) (5)

### PERFORMANCE

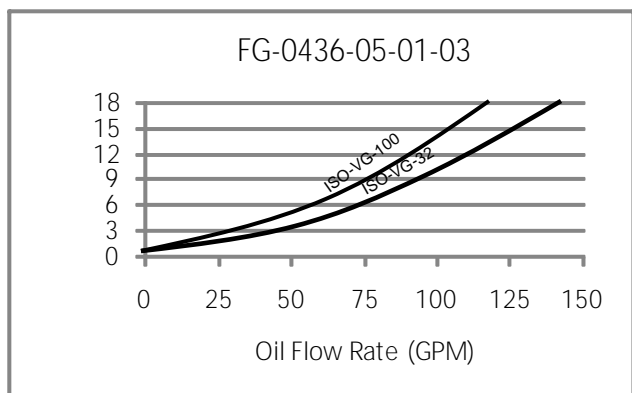
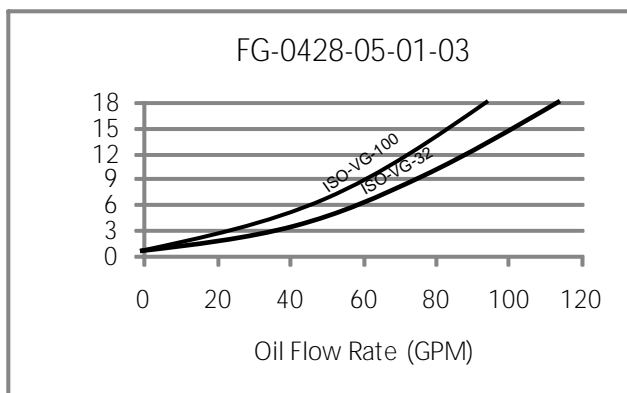
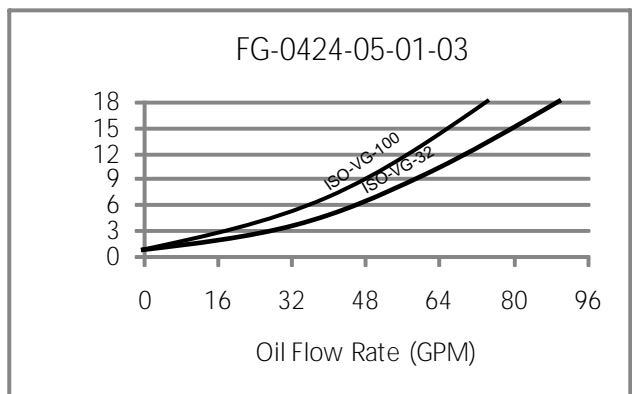
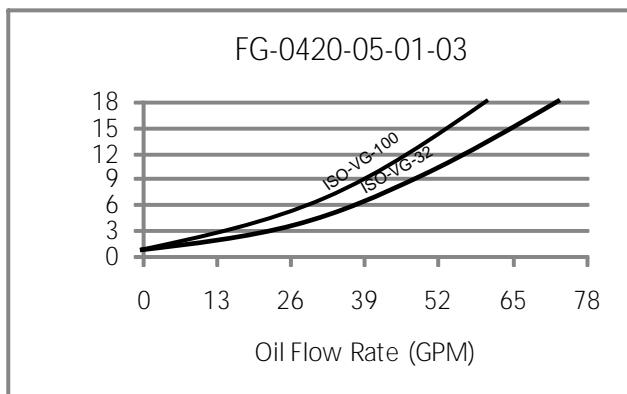
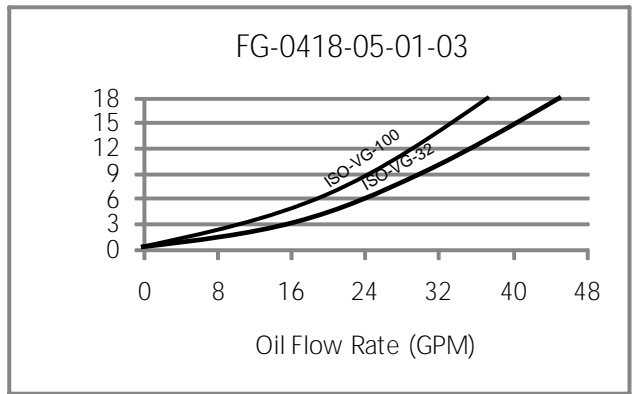
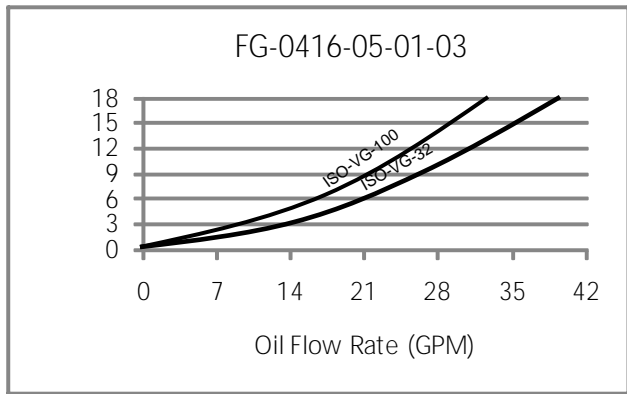
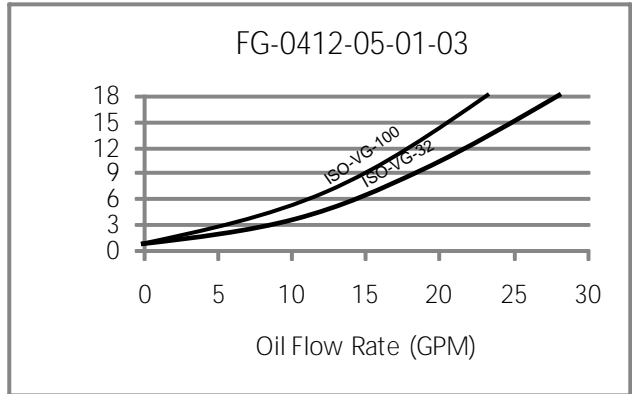
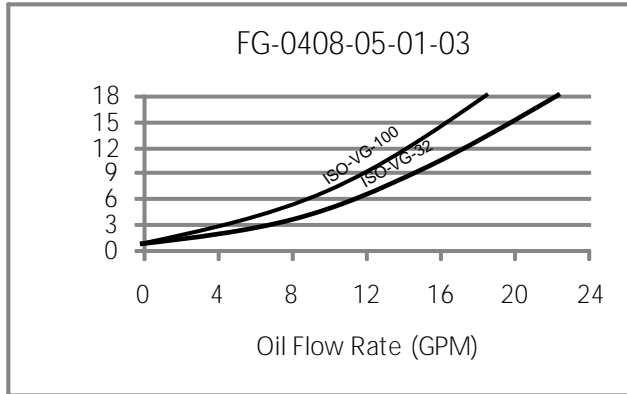
- Nominal Micron Rating 5
  - $\beta_5 \geq 10$  PRE= 90%
  - $\beta_{10} \geq 200$  PRE= 99.5%
- Replacement, Delta Press., PSID 15
- Min/Max Temperature, °F -20/250
- Minimum Collapse, Delta Press., PSID 100
- Flow Directions Outside-In
- Element Test Standard ISO 4572

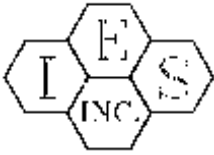


ELEMENT MODEL NUMBER	OUTER DIAMETER (INCHES)	INNER DIAMETER (INCHES)	OVERALL LENGTH (INCHES)	NOMINAL FILTRATION (MICRON)	FLOW CAPACITY WITH ISO-VG-32 OIL @ 100°F * (GPM)	WEIGHT (LBS.)
FG-0408-05-01-03	4	2	8	05	12	2
FG-0412-05-01-03	4	2	12	05	15	3
FG-0416-05-01-03	4	2	16	05	20	5
FG-0418-05-01-03	4	2	18	05	25	6
FG-0420-05-01-03	4	2	20	05	40	8
FG-0424-05-01-03	4	2	24	05	48	9
FG-0428-05-01-03	4	2	28	05	60	11
FG-0436-05-01-03	4	2	36	05	75	13

\* RECOMMENDED OPTIMUM FLOW CAPACITY

**OIL FLOW VS. PRESSURE DROPS FOR 5 MICRON FILTER ELEMENTS FOR VARIOUS VISCOSITY GRADE OILS @ 100°F**





# 10 MICRON OIL FILTER ELEMENTS (12-75 GPM NOMINAL FLOW RATE)

IES-TP-004  
2009

### APPLICATIONS

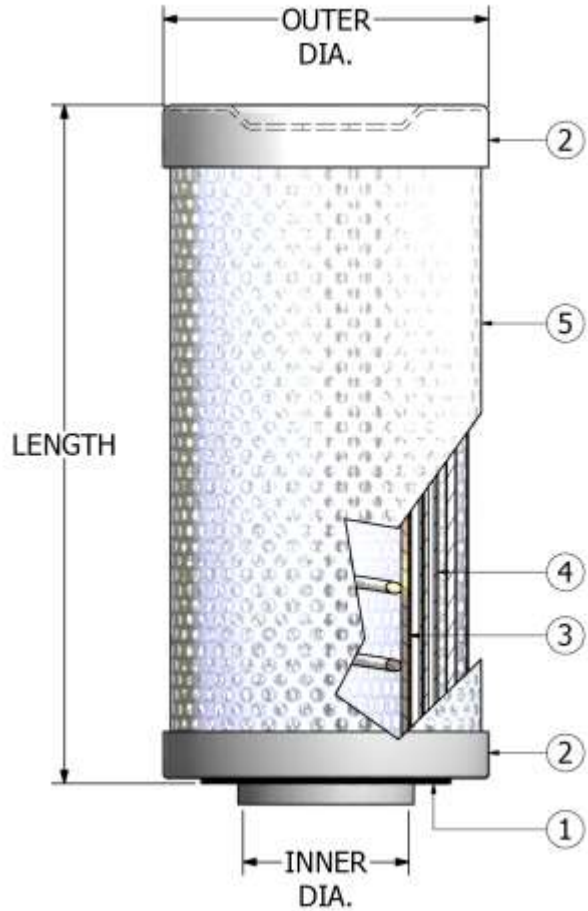
- Lubricating Oil, Synthetic and Hydro Treated, For Process Gas and Refrigeration Compressors
- Hydraulic and Gear Oils
- Fuels and Coolants

### CONSTRUCTION

- Reinforced Neoprene Gasket Material (1)
- Carbon Steel End Caps (2)
- Perforated (non-lead) Steel Center Tube (Tin Coated) with galvanized Inner Spring (3)
- Specially Formulated Pleated Micro-Glass Media with Nylon Backing and 30 Mesh 304 SS support (4)
- Perforated Outer Core (Tin Coated) (5)

### PERFORMANCE

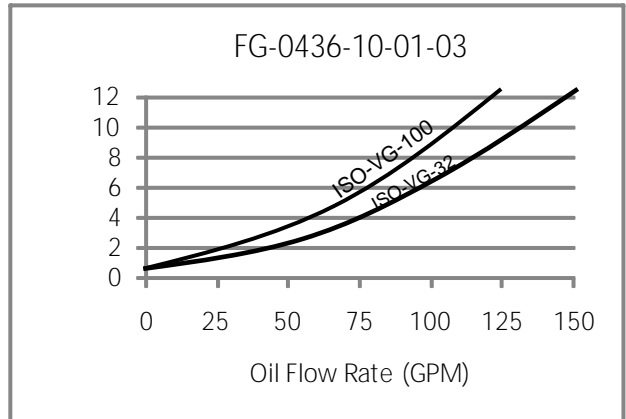
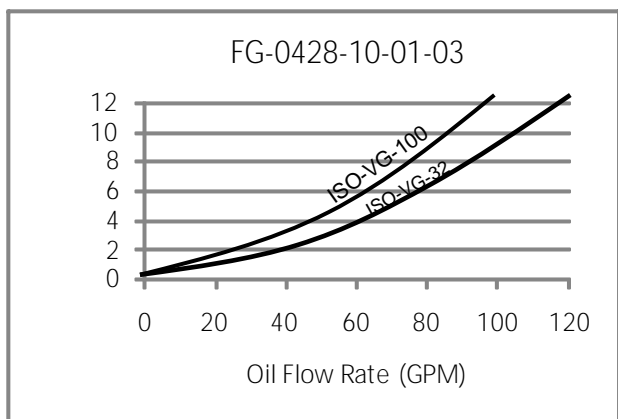
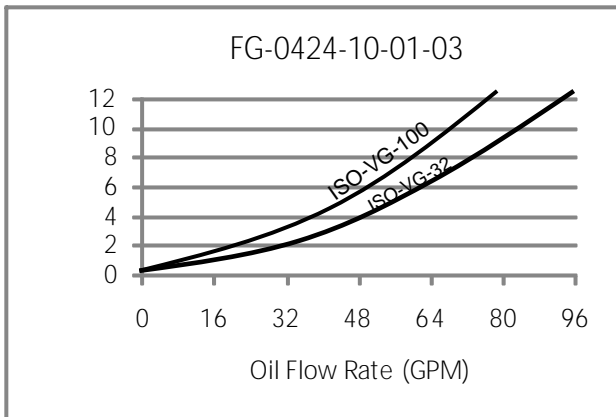
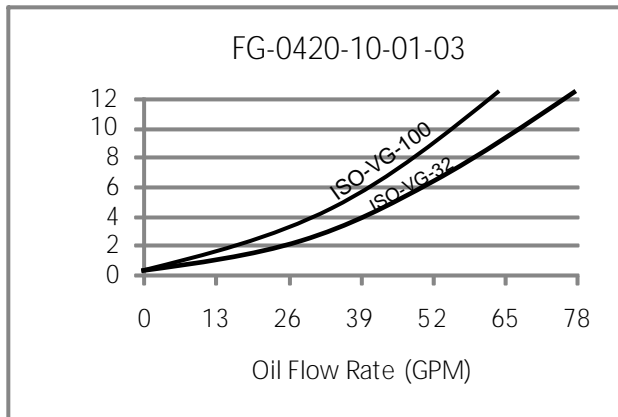
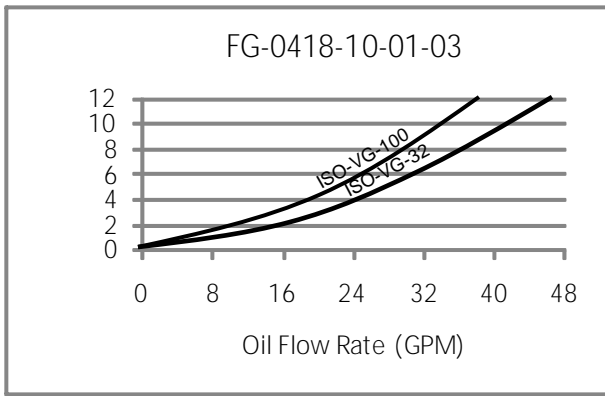
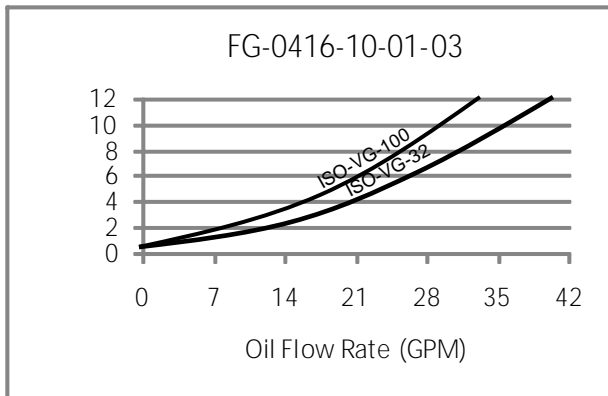
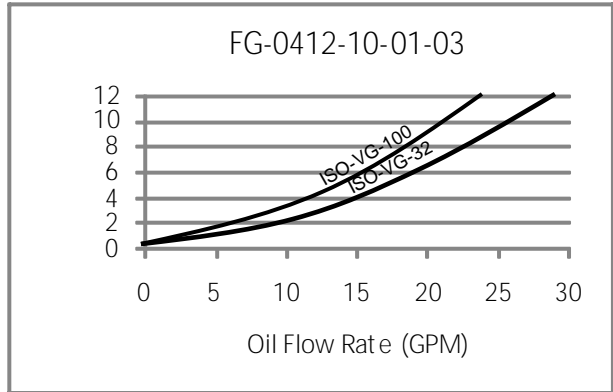
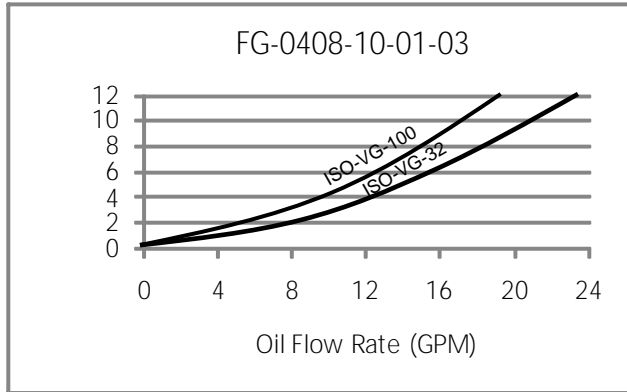
- Nominal Micron Rating 10
  - $\beta_{10} \geq 10$  PRE= 90%
  - $\beta_{15} \geq 200$  PRE= 99.5%
- Replacement, Delta Press., PSID 15
- Min/Max Temperature, °F -20/250
- Minimum Collapse, Delta Press., PSID 100
- Flow Directions Outside-In
- Element Test Standard ISO 4572

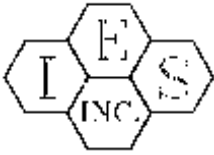


ELEMENT MODEL NUMBER	OUTER DIAMETER (INCHES)	INNER DIAMETER (INCHES)	OVERALL LENGTH (INCHES)	NOMINAL FILTRATION (MICRON)	FLOW CAPACITY WITH ISO-VG-32 OIL @ 100°F *(GPM)	WEIGHT (LBS.)
FG-0408-10-01-03	4	2	8	10	12	2
FG-0412-10-01-03	4	2	12	10	15	3
FG-0416-10-01-03	4	2	16	10	20	5
FG-0418-10-01-03	4	2	18	10	25	6
FG-0420-10-01-03	4	2	20	10	40	8
FG-0424-10-01-03	4	2	24	10	48	9
FG-0428-10-01-03	4	2	28	10	60	11
FG-0436-10-01-03	4	2	36	10	75	13

**\* RECOMMENDED OPTIMUM FLOW CAPACITY**

**OIL FLOW VS. PRESSURE DROPS FOR 10 MICRON FILTER ELEMENTS FOR VARIOUS VISCOSITY GRADE OILS @ 100°F**





# 15 MICRON OIL FILTER ELEMENTS (12-75 GPM NOMINAL FLOW RATE)

IES-TP-004  
2009

### APPLICATIONS

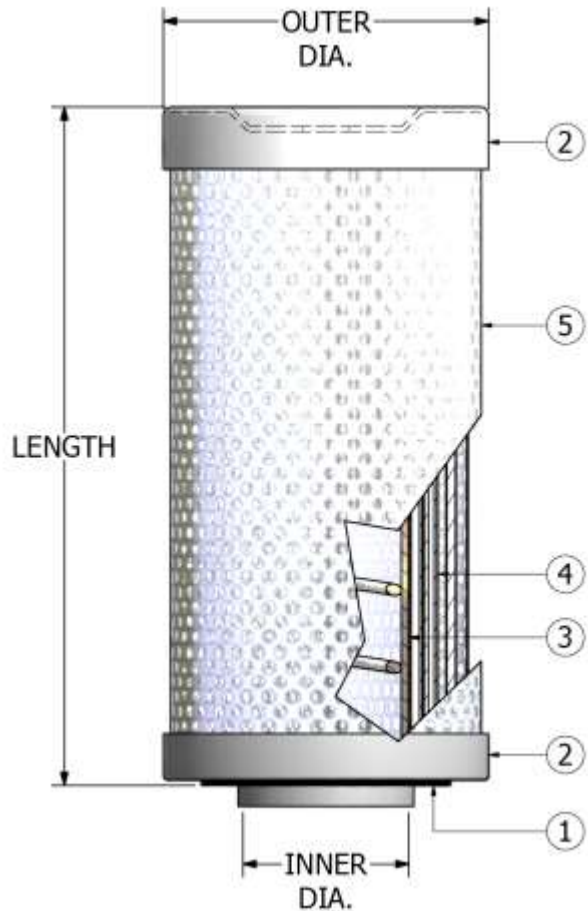
- Lubricating Oil, Synthetic and Hydro Treated, For Gas and Refrigeration Compressors
- Hydraulic and Gear Oils
- Fuels and Coolants
- Flushing Filter Element for Oil-Flooded Screw Compressors and API-614 Lube Oil System.

### CONSTRUCTION

- Gasket Material (1)
- Carbon Steel End Caps (2)
- Perforated (non-lead) Steel Center Tube (Tin Coated) with Galvanized Inner Spring (3)
- Specially Formulated Pleated Micro-Glass Media with Nylon Backing and 30 Mesh 304 SS Support) (4)
- Perforated Outer Core (Tin Coated) (5)

### PERFORMANCE

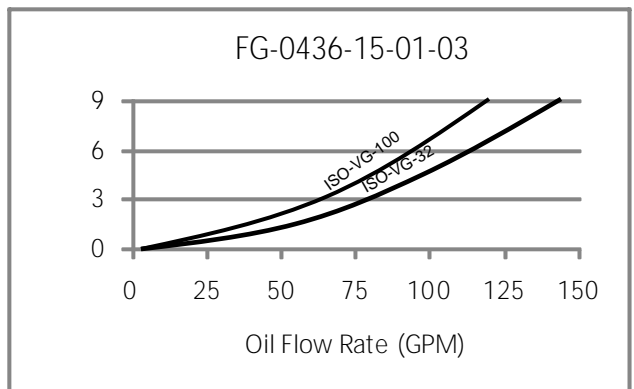
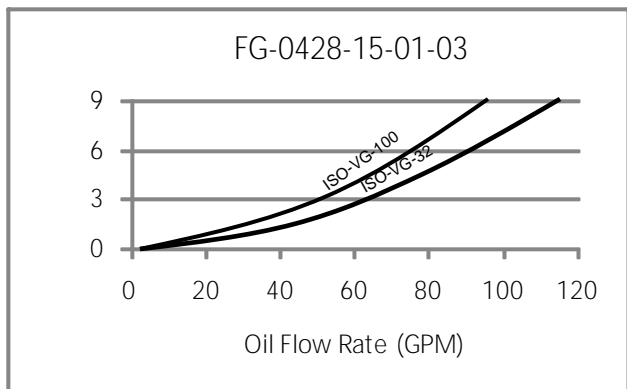
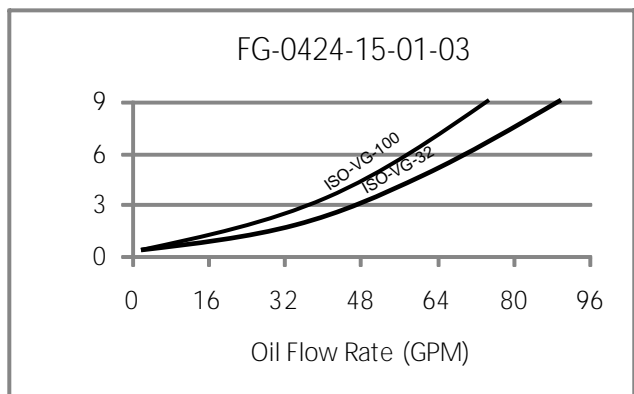
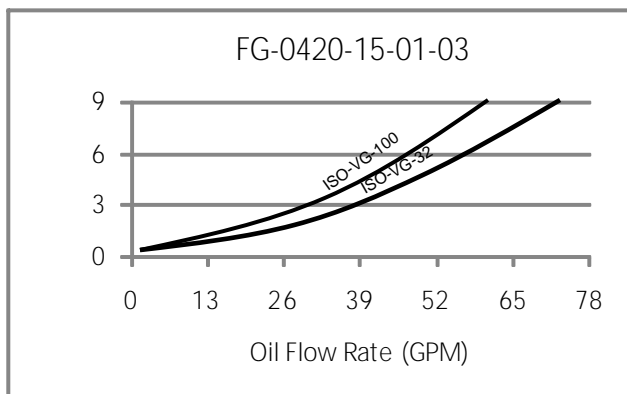
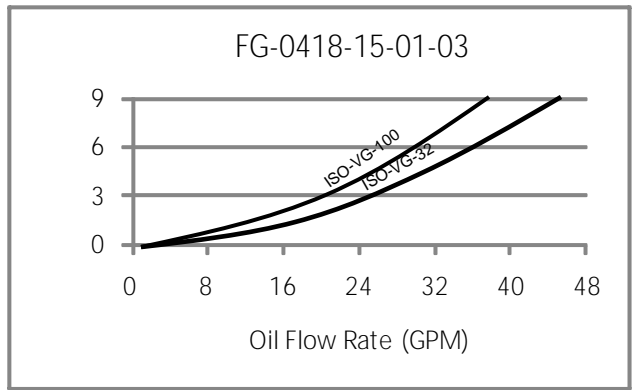
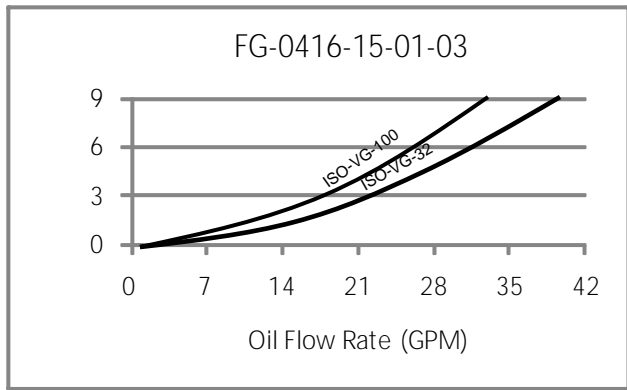
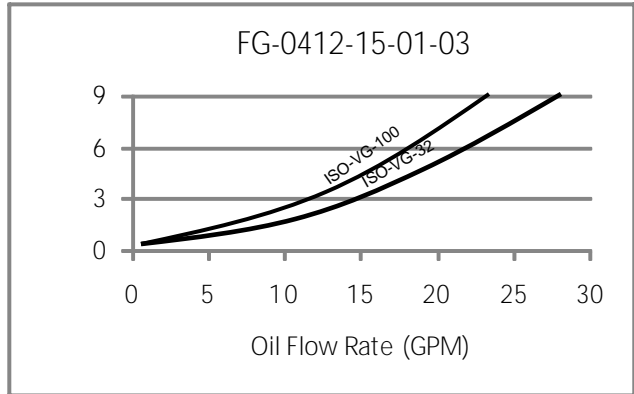
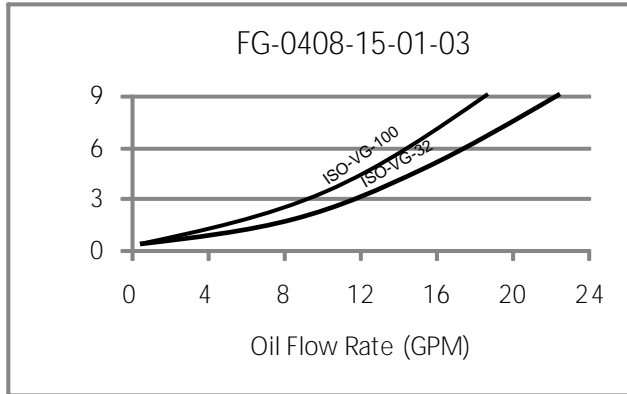
- Nominal Micron Rating 15
  - $\beta_5 \geq 10$  PRE= 90%
  - $\beta_{10} \geq 200$  PRE= 99.5%
- Replacement, Delta Press., PSID 15
- Min/Max Temperature, °F -20/250
- Minimum Collapse, Delta Press., PSID 100
- Flow Directions Outside-In
- Element Test Standard ISO 4572

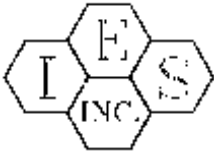


ELEMENT MODEL NUMBER	OUTER DIAMETER (INCHES)	INNER DIAMETER (INCHES)	OVERALL LENGTH (INCHES)	NOMINAL FILTRATION (MICRON)	FLOW CAPACITY WITH ISO-VG-32 OIL @ 100°F * (GPM)	WEIGHT (LBS.)
FG-0408-15-01-03	4	2	8	15	12	2
FG-0412-15-01-03	4	2	12	15	15	3
FG-0416-15-01-03	4	2	16	15	20	5
FG-0418-15-01-03	4	2	18	15	25	6
FG-0420-15-01-03	4	2	20	15	40	8
FG-0424-15-01-03	4	2	24	15	48	9
FG-0428-15-01-03	4	2	28	15	60	11
FG-0436-15-01-03	4	2	36	15	75	13

**\* RECOMMENDED OPTIMUM FLOW CAPACITY**

**OIL FLOW VS. PRESSURE DROPS FOR 15 MICRON FILTER ELEMENTS FOR VARIOUS VISCOSITY GRADE OILS @ 100°F**





## 5, 10, 15 MICRON OIL FILTER ELEMENTS (85, 125 GPM NOMINAL FLOW RATE)

IES-TP-004  
2009

### APPLICATIONS

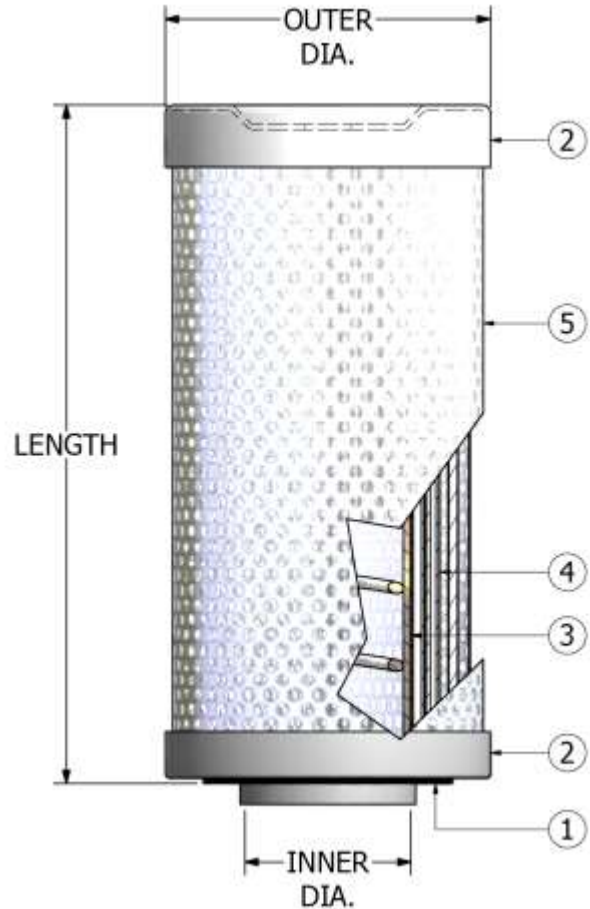
- Lubricating Oil, Synthetic and Hydro Treated, For Process Gas and Refrigeration Compressors
- Hydraulic and Gear Oils
- Fuels and Coolants

### CONSTRUCTION

- Reinforced Neoprene Gasket Material (1)
- Carbon Steel End Caps (2)
- Perforated (non-lead) Steel Center Tube (Tin Coated) with galvanized Inner Spring (3)
- Specially Formulated Pleated Micro-Glass Media with Nylon Backing and 30 Mesh 304 SS support (4)
- Perforated Outer Core (Tin Coated) (5)

### PERFORMANCE

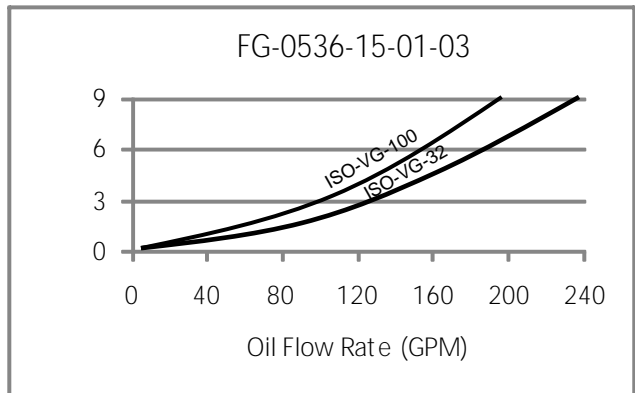
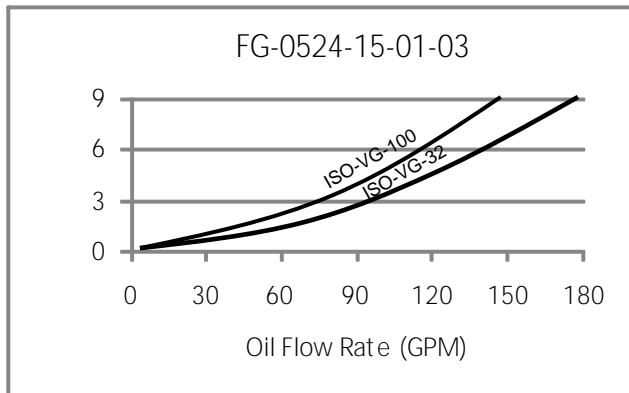
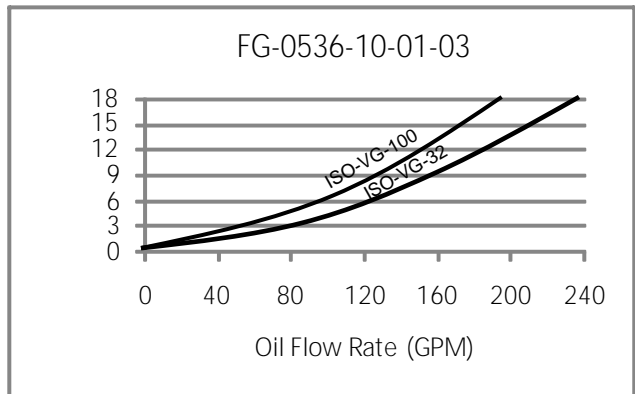
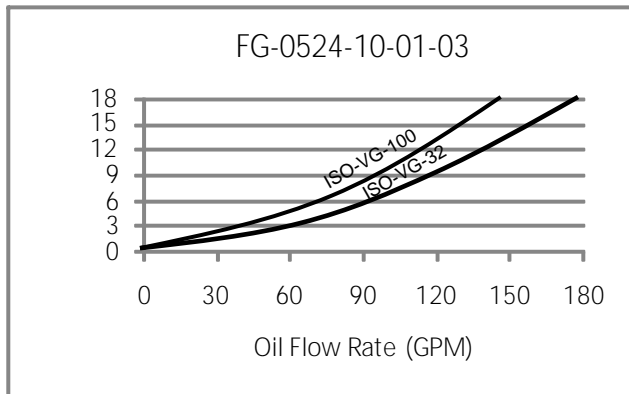
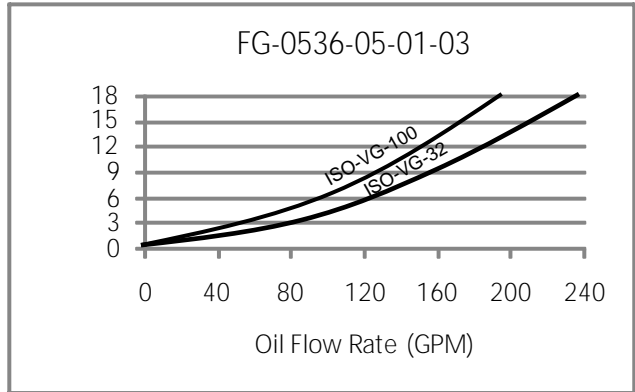
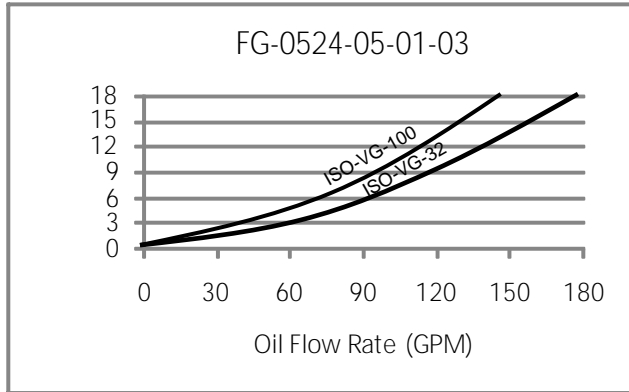
- Nominal Micron Rating 10
  - $\beta_{10} \geq 10$  PRE= 90%
  - $\beta_{15} \geq 200$  PRE= 99.5%
- Replacement, Delta Press., PSID 15
- Min/Max Temperature, °F -20/250
- Minimum Collapse, Delta Press., PSID 100
- Flow Directions Outside-In
- Element Test Standard ISO 4572

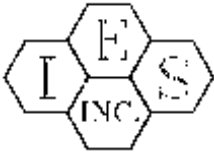


ELEMENT MODEL NUMBER	OUTER DIAMETER (INCHES)	INNER DIAMETER (INCHES)	OVERALL LENGTH (INCHES)	NOMINAL FILTRATION (MICRON)	FLOW CAPACITY WITH ISO-VG-32 OIL @ 100°F *(GPM)	WEIGHT (LBS.)
FG-0524-05-01-03	5	3	24	5	85	12
FG-0536-05-01-03	5	3	36	5	125	15
FG-0524-10-01-03	5	3	24	10	85	12
FG-0536-10-01-03	5	3	36	10	125	15
FG-0524-15-01-03	5	3	24	15	85	12
FG-0536-15-01-03	5	3	36	15	125	15

**\* RECOMMENDED OPTIMUM FLOW CAPACITY**

**OIL FLOW VS. PRESSURE DROPS FOR 5, 10, 15 MICRON FILTER ELEMENTS FOR  
VARIOUS VISCOSITY GRADE OILS @ 100°F**





## 5, 10, 15 MICRON OIL FILTER ELEMENTS (100, 150 GPM NOMINAL FLOW RATE)

IES-TP-004  
2009

### APPLICATIONS

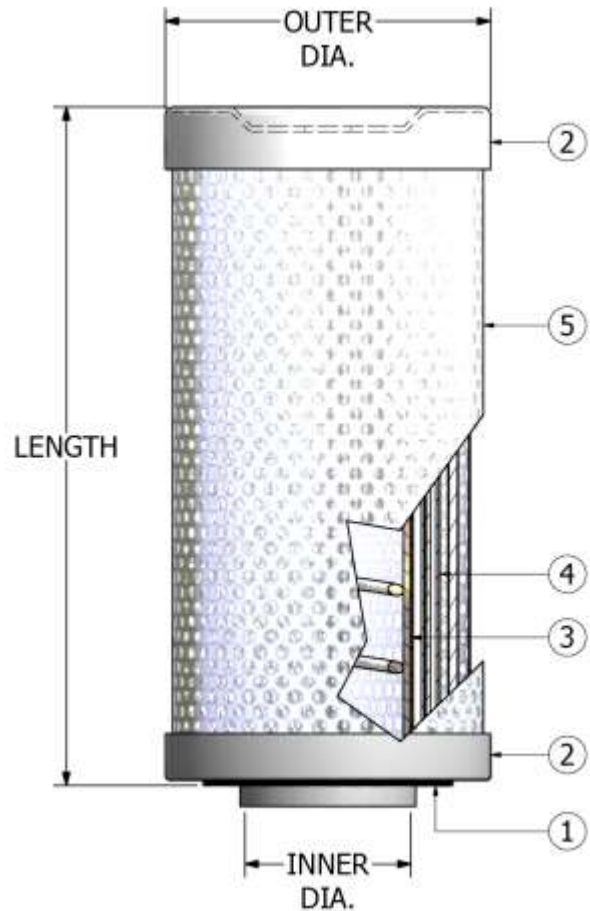
- Lubricating Oil, Synthetic and Hydro Treated, For Process Gas and Refrigeration Compressors
- Hydraulic and Gear Oils
- Fuels and Coolants

### CONSTRUCTION

- Reinforced Neoprene Gasket Material (1)
- Carbon Steel End Caps (2)
- Perforated (non-lead) Steel Center Tube (Tin Coated) with galvanized Inner Spring (3)
- Specially Formulated Pleated Micro-Glass Media with Nylon Backing and 30 Mesh 304 SS support (4)
- Perforated Outer Core (Tin Coated) (5)

### PERFORMANCE

- Nominal Micron Rating 10
  - $\beta_{10} \geq 10$  PRE= 90%
  - $\beta_{15} \geq 200$  PRE= 99.5%
- Replacement, Delta Press., PSID 15
- Min/Max Temperature, °F -20/250
- Minimum Collapse, Delta Press., PSID 100
- Flow Directions Outside-In
- Element Test Standard ISO 4572



ELEMENT MODEL NUMBER	OUTER DIAMETER (INCHES)	INNER DIAMETER (INCHES)	OVERALL LENGTH (INCHES)	NOMINAL FILTRATION (MICRON)	FLOW CAPACITY WITH ISO-VG-32 OIL @ 100°F *(GPM)	WEIGHT (LBS.)
FG-0624-05-01-03	6	4	24	5	100	15
FG-0636-05-01-03	6	4	36	5	150	18
FG-0624-10-01-03	6	4	24	10	100	15
FG-0636-10-01-03	6	4	36	10	150	18
FG-0624-15-01-03	6	4	24	15	100	15
FG-0636-15-01-03	6	4	36	15	150	15

**\* RECOMMENDED OPTIMUM FLOW CAPACITY**

**OIL FLOW VS. PRESSURE DROPS FOR 5, 10, 15 MICRON FILTER ELEMENTS FOR  
VARIOUS VISCOSITY GRADE OILS @ 100°F**

