**Mott Porous Metal Data Sheet**

**Media Grade:** 0.2  
**Type:** Pressed Disc  
**Alloy:** 316LSS  
**Thickness:** 0.062 inches  
**Issued:** 06/25/10

### Manufacturing Specifications
- **Bubble Point, inch of Hg:** 5.0 - 6.9  
- **Minimum Tensile, kpsi:** --  
- **Yield Strength, kpsi:** --  
- **Young’s Modulus, x 10^6 psi:** --

### Permeability Coefficient
- **Liquid, $K_L$:** 26
- **Gas, $K_G$:** 600

### Particle Removal Efficiency
- **Liquid Efficiency:** Testing per ASTM F795
  - 90% at 0.4 µm  
  - 99% at 0.8 µm  
  - 99.9% at 1.2 µm
- **Air Efficiency:** Tested at flux of 6 acfm/ft²
  - >99.9% for all particle sizes

### Flow Characteristics

#### Liquid: Pressure Drop, psid =

$$(K_L \times \text{Flux, gpm/ft}^2) \times (\text{Visc, cp}) \times (\text{Thck, inch})$$

#### Gas: Pressure Drop, psid =

$$(K_G \times \text{Flux, acfm/ft}^2) \times (\text{Visc, cp}) \times (\text{Thck, inch})$$

### Notes:
1. Tests run at 70 °F
2. Tests run with water, other curves generated using Liquid Formula

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**Flow Characteristics on these data sheets are typical and should be used for general reference only.**
Mott Porous Metal Data Sheet

Media Grade: 0.5
Type: Pressed Disc
Alloy: 316LSS
Thickness: 0.062 inches

Issued: 06/25/10

Manufacturing Specifications
Bubble Point, inch of Hg 3.0 - 3.9
Minimum Tensile, kpsi 21.1
Yield Strength, kpsi 11.5
Young’s Modulus, x 10^6 psi 8.3

Permeability Coefficient
Liquid, K_L 8.0
Gas, K_G 190

Liquid: Pressure Drop, psid = (K_L)(Flux, gpm/ft^2)(Visc, cp)(Thck, inch)

Particle Removal Efficiency
Liquid Efficiency Testing per ASTM F795
90% at 0.9 µm
99% at 1.6 µm
99.9% at 2 µm

Air Efficiency Tested at flux of 6 acfm/ft^2
>90% for all particle sizes
>99% for all particle sizes
99.9% at 0.25 µm

Notes:
1 - Tests run at 70 °F
2 - Tests run with water, other curves generated using Liquid Formula

Notes:
1 - Tests run with air at 70 °F
2 - Tests run with upstream pressure exhausting to atmosphere

Flow Characteristics on these data sheets are typical and should be used for general reference only.
Mott Porous Metal Data Sheet

Media Grade: 2
Type: Pressed Disc
Alloy: 316LSS
Thickness: 0.062 inches

Issued: 06/25/10

Manufacturing Specifications
- Bubble Point, inch water: 17.0 - 24.0
- Minimum Tensile, kpsi: 12.8
- Yield Strength, kpsi: 7.2
- Young's Modulus, x 10^6 psi: 5.1

Permeability Coefficient
- Liquid, \( K_L \): 1.5
- Gas, \( K_G \): 24

Particle Removal Efficiency
- Liquid Efficiency
  - 90% at 4 μm
  - 99% at 5.5 μm
  - 99.9% at 9 μm

- Gas Efficiency
  - 90% at 0.3 μm
  - 99% at 0.6 μm
  - 99.9% at 2 μm

Liquid: Pressure Drop, psid = \( K_L \) \( (\text{Flux, gpm/ft}^2) \times (\text{Visc, cp}) \times (\text{Thck, inch}) \)
Gas: Pressure Drop, psid = \( K_G \) \( (\text{Flux, acfm/ft}^2) \times (\text{Visc, cp}) \times (\text{Thck, inch}) \)

Notes:
1 - Tests run at 70 °F
2 - Tests run with water, other curves generated using Liquid Formula

Notes:
1 - Tests run with air at 70 °F
2 - Tests run with upstream pressure exhausting to atmosphere

Flow Characteristics on these data sheets are typical and should be used for general reference only.
## Mott Porous Metal Data Sheet

**Media Grade:** 5  
**Type:** Pressed Disc  
**Alloy:** 316LSS  
**Thickness:** 0.062 inches  
**Issued:** 06/25/10

### Manufacturing Specifications
- **Bubble Point, inch water:** 13.0 - 16.9
- **Minimum Tensile, kpsi:** 9.5
- **Yield Strength, kpsi:** 6.8
- **Young's Modulus, x 10^6 psi:** 3.7

### Permeability Coefficient
- **Liquid:** $K_L = 1.25$
- **Gas:** $K_G = 19$

**Liquid: Pressure Drop, psid =**
\[ (K_L)(\text{Flux, gpm/ft}^2)(\text{Visc, cp})(\text{Thck, inch}) \]

**Gas: Pressure Drop, psid =**
\[ (K_G)(\text{Flux, acfm/ft}^2)(\text{Visc, cp})(\text{Thck, inch}) \]

### Particle Removal Efficiency
- **Liquid Efficiency**  
  - 90% at 5 µm  
  - 99% at 8 µm  
  - 99.9% at 13 µm  

- **Air Efficiency**  
  - Tested at flux of 6 acfm/ft²
  - 90% at 0.8 µm
  - 99% at 2 µm
  - 99.9% at 5 µm

### Notes:
1. Tests run at 70 °F
2. Tests run with water, other curves generated using Liquid Formula

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Flow Characteristics on these data sheets are typical and should be used for general reference only.
Mott Porous Metal Data Sheet

Media Grade: 10  
Type: Pressed Disc  
Alloy: 316LSS  
Thickness: 0.062 inches  
Issued: 06/25/10

Manufacturing Specifications
- Bubble Point, inch water: 7.5 - 10.9
- Minimum Tensile, kpsi: 5.0
- Yield Strength, kpsi: 3.7
- Young's Modulus, x 10^6 psi: 2.9

Permeability Coefficient
- Liquid, \( K_L \): 0.45
- Gas, \( K_G \): 8.7

Particle Removal Efficiency
- Liquid Efficiency: Testing per ASTM F795
  - 90% at 10 \( \mu \)m
  - 99% at 15 \( \mu \)m
  - 99.9% at 20 \( \mu \)m

Air Efficiency: Tested at flux of 6 acfm/ft²
- 90% at 4.5 \( \mu \)m
- 99% at 8 \( \mu \)m
- 99.9% at 13 \( \mu \)m

Notes:
1 - Tests run at 70 °F
2 - Tests run with water, other curves generated using Liquid Formula

Flow Characteristics on these data sheets are typical and should be used for general reference only.
**Mott Porous Metal Data Sheet**

**Media Grade:** 20  
**Type:** Pressed Disc  
**Alloy:** 316LSS  
**Thickness:** 0.062 inches  
**Issued:** 06/25/10

### Manufacturing Specifications
- **Bubble Point, inch water:** 5.0 - 7.0
- **Minimum Tensile, kpsi:** 4.5
- **Yield Strength, kpsi:** 2.9
- **Young’s Modulus, \(x10^6\) psi:** 2.3

### Permeability Coefficient
- **Liquid, \(K_L\):** 0.46
- **Gas, \(K_G\):** 7.6

**Liquid: Pressure Drop, psid =**  
\((K_L)(Flux, \text{ gpm/ft}^2)(\text{Visc, cp})(\text{Thck, inch})\)

**Gas: Pressure Drop, psid =**  
\((K_G)(Flux, \text{ acfm/ft}^2)(\text{Visc, cp})(\text{Thck, inch})\)

### Particle Removal Efficiency
- **Liquid Efficiency:** Testing per ASTM F795
  - 90% at 20 µm
  - 99% at 25 µm
  - 99.9% at 35 µm

- **Air Efficiency:** Tested at flux of 6 acfm/ft²
  - 90% at 8 µm
  - 99% at 12 µm
  - 99.9% at 20 µm

### Notes:
1. Tests run at 70 °F
2. Tests run with water, other curves generated using Liquid Formula

**Flow Characteristics on these data sheets are typical and should be used for general reference only.**
Mott Porous Metal Data Sheet

Media Grade: 40
Type: Pressed Disc
Alloy: 316LSS
Thickness: 0.078 inches

Issued: 06/25/10

Manufacturing Specifications
Bubble Point, inch water 3.0 - 4.0
Minimum Tensile, kpsi 3.1
Yield Strength, kpsi 2.2
Young’s Modulus, x 10^6 psi 1.8

Permeability Coefficient
Liquid, K_L 0.32
Gas, K_G 3.3

Particle Removal Efficiency
Liquid Efficiency Testing per ASTM F795
90% at 25 μm
99% at 35 μm
99.9% at 45 μm

Air Efficiency Tested at flux of 6 acfm/ft^2
90% at 12 μm
99% at 25 μm
99.9% at 45 μm

Liquid: Pressure Drop, psid = (K_L)(Flux, gpm/ft^2)(Visc, cp)(Thck, inch)
Gas: Pressure Drop, psid = (K_G)(Flux, acfm/ft^2)(Visc, cp)(Thck, inch)

Notes:
1 - Tests run at 70 °F
2 - Tests run with water, other curves generated using Liquid Formula

Flow Characteristics on these data sheets are typical and should be used for general reference only.
Media Grade: 100
Type: Pressed Disc
Alloy: 316LSS
Thickness: 0.093 inches

Manufacturing Specifications
- Bubble Point, inch water: 0.5 - 1.5
- Minimum Tensile, kpsi: 1.1
- Yield Strength, kpsi: 0.9
- Young's Modulus, x 10^6 psi: 1.3

Permeability Coefficient
- Liquid, \(K_L\): 0.060
- Gas, \(K_G\): 0.75

Particle Removal Efficiency
- Liquid Efficiency: Tested per ASTM F795
  - 90% at 50 µm
  - 99% at 100 µm
  - 99.9% at 150 µm

Air Efficiency: Tested at flux of 6 acfm/ft²
- 90% at 20 µm
- 99% at 40 µm
- 99.9% at 100 µm

Airflow Efficiency
- Liquid: Pressure Drop, psid = \(K_L \cdot (\text{Flux, gpm/ft}^2) \cdot (\text{Visc, cp}) \cdot (\text{Thck, inch})\)
- Gas: Pressure Drop, psid = \(K_G \cdot (\text{Flux, acfm/ft}^2) \cdot (\text{Visc, cp}) \cdot (\text{Thck, inch})\)

Notes:
1. Tests run at 70 °F
2. Tests run with water, other curves generated using Liquid Formula

Mott Porous Metal Data Sheet

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Flow Characteristics on these data sheets are typical and should be used for general reference only.