HPS SER-8884-BLK

HPS SER-8884-BLK Silicone 45 Degree Elbow Reducer Coupler Hose Instruction Manual

Introduction

This manual provides detailed instructions and information for the HPS Silicone 45 Degree Elbow Reducer Coupler Hose, model SER-8884-BLK. This high-performance silicone hose is engineered for demanding applications requiring robust connections and resistance to high temperatures.

Product Features

- **Inside Diameter:** 2-1/2 inches (63mm) to 3-1/4 inches (83mm)
- **Leg Length:** 4-1/2 inches on each side (straight section)
- **Reinforcement:** High temperature 4-ply construction
- **Maximum Working Pressure:** 55 psi
- **Temperature Range:** -65°F to +350°F (-54°C to +177°C)
- **Wall Thickness:** 5mm
- **Material Compatibility:** Compatible with air, water, and anti-freeze (coolant).**Not compatible with fuel or oil.**
- **Standards:** Meets and exceeds SAEJ20 industry standards
- **Applications:** Suitable for heavy-duty pressure connections and high-temperature environments in automotive racing, turbo diesel pickup trucks, heavy equipment, custom cooling systems, DIY turbo intercooler piping, commercial trucking, buses, marine, military vehicles, aerospace, generators, agricultural tractors, and general construction.

Specifications

Specification	Value
Model Number	SER-8884-BLK
Brand	HPS
Material	Silicone

Specification	Value
Color	Black
Item Weight	1.4 Pounds
Maximum Pressure	55 Pound per Square Inch
Package Dimensions	10 x 10 x 7 inches

Installation and Setup

Proper installation is crucial for the performance and longevity of your HPS silicone hose. Follow these general guidelines:

1. **Preparation:** Ensure all mating surfaces are clean, dry, and free from oil, grease, or debris.
2. **Fitment:** Verify that the hose dimensions match the application requirements. The reducer ends should fit snugly over the connecting pipes.
3. **Clamping:** Use high-quality hose clamps appropriate for the application. Position clamps securely over the hose and connecting pipe.
4. **Tightening:** Tighten clamps evenly to create a leak-free seal. Avoid over-tightening, which can damage the hose material.
5. **Alignment:** Ensure the hose is installed without kinks, sharp bends, or excessive tension. Proper alignment prevents stress on the hose and connections.
6. **Inspection:** After installation, visually inspect the entire assembly for proper fitment and any potential leak points.

Figure 1: HPS Black Silicone 45 Degree Elbow Reducer Coupler Hose. This image shows the product's overall shape and color, highlighting its 45-degree bend and reducer design.

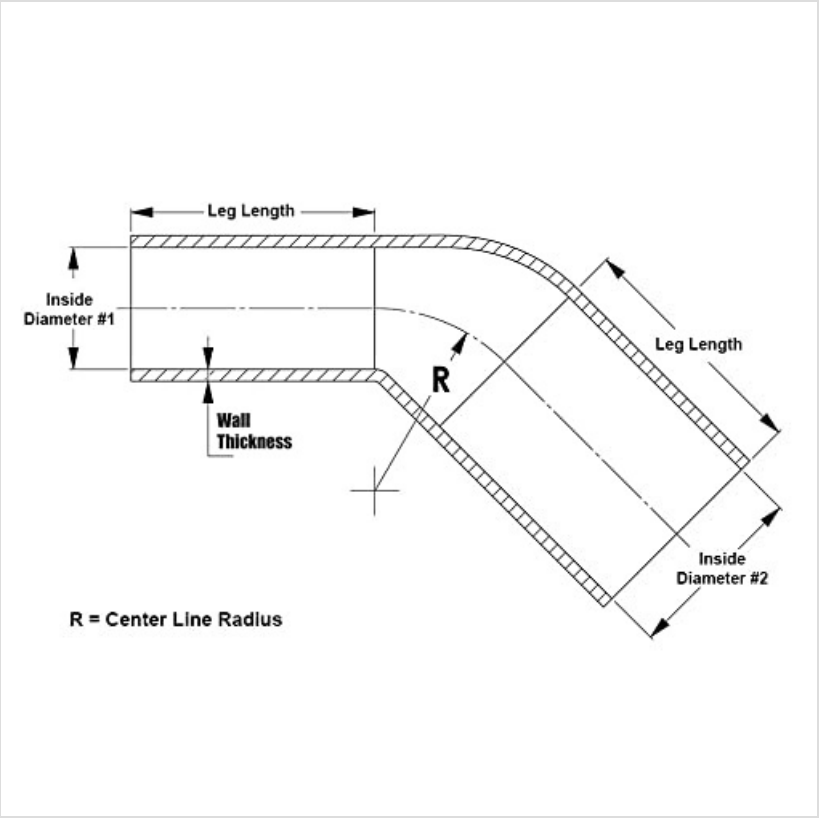

Figure 2: Technical Diagram of HPS Silicone Hose Dimensions. This diagram illustrates key measurements such as Inside Diameter #1, Inside Diameter #2, Leg Length, Wall Thickness, and Center Line Radius (R), providing essential information for proper fitment and application planning.

Operating Conditions

This HPS silicone hose is engineered for specific operating parameters. Adhering to these conditions is essential for optimal performance and safety:

- **Temperature:** The hose is designed to withstand temperatures ranging from -65°F to +350°F (-54°C to +177°C). Operating outside this range may lead to material degradation or failure.
- **Pressure:** The maximum working pressure for this hose is 55 psi. Do not exceed this pressure rating to prevent rupture or leaks.
- **Fluid Compatibility:** This hose is compatible with air, water, and anti-freeze (coolant). It is**not suitable for use with fuel or oil**, as these substances can cause the silicone to swell, soften, or degrade.

Maintenance

Regular maintenance helps extend the lifespan of your silicone hose:

- **Visual Inspection:** Periodically inspect the hose for any signs of wear, cracks, cuts, bulges, hardening, or discoloration. Check for any fluid seepage around the clamps.
- **Clamp Security:** Ensure all hose clamps remain tight and secure. Re-tighten if necessary, but avoid over-tightening.
- **Cleaning:** Clean the exterior of the hose as needed using mild soap and water. Avoid harsh chemicals or solvents that could damage the silicone.
- **Contaminant Avoidance:** Prevent the hose from coming into prolonged contact with fuel, oil, or other incompatible chemicals.
- **Replacement:** Replace the hose immediately if any signs of damage or degradation are observed.

Troubleshooting

If you encounter issues with your HPS silicone hose, consider the following:

- **Leakage:**
  - Check that hose clamps are properly tightened and positioned.
  - Inspect the hose for any cuts, punctures, or tears.
  - Ensure mating surfaces are clean and free of burrs or imperfections.
- **Reduced Flow:**
  - Inspect the hose for kinks or sharp bends that could restrict fluid passage.
  - Check for any internal obstructions within the hose or connecting pipes.
- **Premature Wear or Degradation:**
  - Verify that the operating temperature and pressure are within the specified limits.
  - Confirm that the hose has not been exposed to incompatible fluids like fuel or oil.
  - Ensure the hose is not rubbing against other components, causing abrasion.

Warranty and Support

HPS silicone hoses are backed by the HPS Performance Products Limited Lifetime Warranty. For detailed warranty information, claims, or technical support, please contact HPS Performance Products directly through their official channels.