# LUBRICATION SCIENTIFICS, LLC

THE RIGHT PRODUCTS. THE RIGHT VALUES. THE RIGHT CHOICE.



**DIRT TRAP FILTRATION SOLUTIONS** 

**HEAVY DUTY—RELIABILITY SOLUTION—DIRT TRAPPING TECHNOLOGY** 

#### LUBRICATION SCIENTIFICS, LLC - CENTRALIZED LUBRICATION SYSTEMS



#### HIGH PRESSURE IN-LINE FILTER ASSEMBLIES WITH DIRT TRAP TECHNOLOGY

#### PRODUCT DESCRIPTION

DESIGNED FOR HIGH PRESSURE HYDRAULIC & LUBRICATION APPLICATIONS.

AVAILABLE IN STEEL AND 2024 ALUMINUM CONSTRUCTION.

STEEL BODIES HAVE BOTH 1/4 & 3/8 INLET AND OUTLET NPSF CONNECTIONS

ALUMINUM BODIES HAVE BOTH 1/4 INLET AND OUTLET

NPSF CONNECTIONS

STEEL CONSTRUCTION BODIES ARE DESIGNED FOR HIGH PRESSURE SURGE APPLICATIONS.

AIRCRAFT ALUMINUM BODIES HAVE TWO INLET AND TWO OUTLETS PORTS.

BOTH BODY DESIGNS USE STANDARD DIRT TRAP ELEMENTS, WHICH ARE AVAILABLE IN BOTH GREASE AND OIL FILTRATION RANGES.

FILTER ELEMENTS EASILY CHANGED WITHOUT REMOVING TUBING CONNECTIONS.

**AVAILABLE FILTRATION RATINGS:** 

OIL

5 MICRON

10 MICRON

25 MICRON

GREASE

150 MICRON (100 MESH) 420 MICRON (40 MESH)

#### **BENEFITS & FEATURES**

AVAILABLE FOR OIL OR GREASE

FROM 5 TO 420 MICRON FILTRATION

**ELEMENTS EASILY REPLACED** 

CONTAMINATION TRAPPED INSIDE THE THROW AWAY

ELEMENT

HIGH PRESSURE APPLICATIONS

STEEL BODY - 7,500 PSI

AL 2024 BODY - 6.000 PSI

MOUNTS IN ANY ORIENTATION

MULTIPLE INLETS AND OUTLETS

FOR MONITORING PRESSURE,

**INSTALL GAUGE IN 1 INLET & 1 OUTLET** 

USE OPTIONAL OUTLET FOR AIR-BLEED PORT

### READY FOR IMMEDIATE SHIPMENT

**MADE IN** 



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#### **DIRT TRAPS**

BODIES ARE DESIGNED FOR HIGH PRESSURE
HYDRAULIC & LUBRICATION APPLICATIONS
AVAILABLE IN CRS, 316 STAINLESS STEEL & ALUMINUM

#### **DIRT TRAP FILTER ASSEMBLY**

STANDARD PACK: 1 EACH				
FILTER RATING	PLATED CARBON STEEL 7,500 PSI	AL2024 BLUE ANODIZED ALUMINUM 6,000 PSI	316 STAINLESS STEEL 7,500 PSI	
5 MICRON	DTFA-005-O	MDFA-005-O	DTFA-005-O-316	
10 MICRON	DTFA-010-O	MDFA-010-O	DTFA-010-O-316	
25 MICRON	DTFA-025-O	MDFA-025-O	DTFA-025-O-316	
150 MICRON 100 MESH	DTFA-100-G	MDFA-100-G	DTFA-100-G-316	
420 MICRON 40 MESH	DTFA-040-G	MDFA-040-G	DTFA-040-G-316	







# READY FOR IMMEDIATE SHIPMENT

**MADE IN** 



#### REMOTE FILL DIRT TRAP

BODIES ARE DESIGNED FOR HIGH PRESSURE
HYDRAULIC & LUBRICATION APPLICATIONS

AVAILABLE WITH PRESSURE RELIEF VALVE WITH MEMORY,

SAFETY RELIEF VALVE, FILL FITTING,

AND PRESSURE GAUGE



#### **AVAILABLE OPTIONS**

STANDARD PACK: 1 EACH			
FILTER RATING	PLATED CARBON STEEL 7,500 PSI		
BODY ONLY	RFDT-001		
ASSEMBLY W/ 5 MICRON FILTER	RFDTA-005-O		
ASSEMBLY W/ 10 MICRON FILTER	RFDTA-010-O		
ASSEMBLY W/ 25 MICRON FILTER	RFDTA-025-O		
ASSEMBLY W/ 150 MICRON FILTER	RFDTA-100-G		
ASSEMBLY W/ 100 MESH FILTER			
ASSEMBLY W/ 420 MICRON FILTER	RFDTA-040-G		
ASSEMBLY W/ 40 MESH FILTER			

*MUST	BUY	ELEMENT	WITH	BODY

DESCRIPTION	PART NUMBER
PRESSURE RELIEF VALVE W/ MEMORY, 1500 PSI	LPRVM-303-1500
PRESSURE RELIEF VALVE W/ MEMORY, 2000 PSI	LPRVM-303-2000
PRESSURE RELIEF VALVE W/ MEMORY, 2500 PSI	LPRVM-303-2500
PRESSURE RELIEF VALVE W/ MEMORY, 3000 PSI	LPRVM-303-3000
PRESSURE RELIEF VALVE W/ MEMORY, 3500 PSI	LPRVM-303-3500
PRESSURE RELIEF VALVE W/ MEMORY, 4000 PSI	LPRVM-303-4000
PRESSURE RELIEF VALVE W/ MEMORY, 5000 PSI	LPRVM-303-5000
SAFETY RELIEF VALVE	SRV-303-250-4000
FILL FITTING (INCLUDES PROTECTIVE CAP)	RFDT-H4F4
HOSE END COUPLER	RFDT-H4F4-C
PRESSURE GAUGE	LM-25-5K-4
SUPPLY (1/2 NPSF) RETURN (1/4 NPSF) MANIFOLD (CRS)	RFDT-SRM-000

# READY FOR IMMEDIATE SHIPMENT



# 80% OF ALL PUMP FAILURES ARE DUE TO LUBRICANT CONTAMINATION

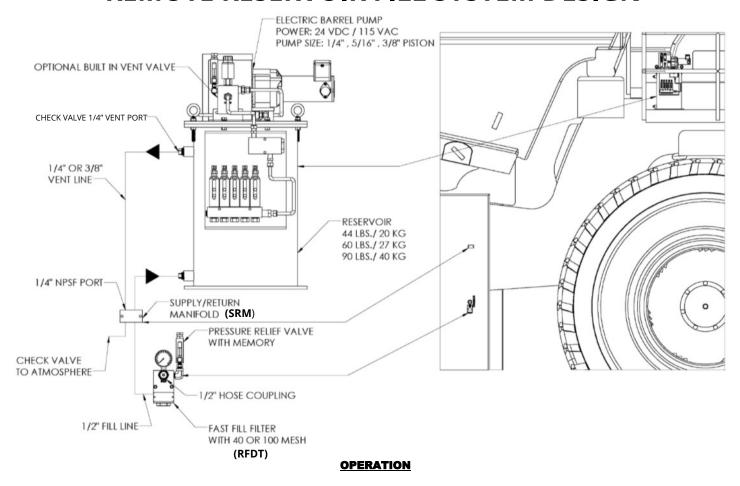
If the operation is under extreme demand and "Best Practices" are unable to be followed, the Remote Fill Filter will reduce the risk of contamination being introduced into your reservoir and destroying the pump.

A common misconception in maintenance and reliability is that new lubricant is clean and ready for immediate use.

Oil/Grease tote delivery systems may contain anywhere from 2 to 20 times the acceptable amount of particulate allowable for most lubrication pumps.



# REMOTE RESERVOIR FILL SYSTEM DESIGN



- 1. Connect hose quick coupler to fill fitting on the front of the REMOTE FILL DIRT TRAP (RFDT).
- 2. Grease is pumped through the RFDT to the fill port on the reservoir.

If the reservoir location is remote from the RFDT, install the SUPPLY/RETURN

MANIFOLD (SRM) between the RFDT and the reservoir. If there is a considerable distance between the RFDT and the remote reservoir, add additional SRM units, as required.

- 3. As grease is pumped into the reservoir, entrapped air above the follower is vented to atmosphere through a watertight breather, located on the top of the reservoir.
- 4. Once the grease reaches the **VENT PORT**, on the upper side of the reservoir, pressure will build until the **VENT PORT CHECK VALVE** opens (250 PSI), allowing grease to move down the vent line, opening the **end of vent line check valve** and providing visual indication that the reservoir is full.

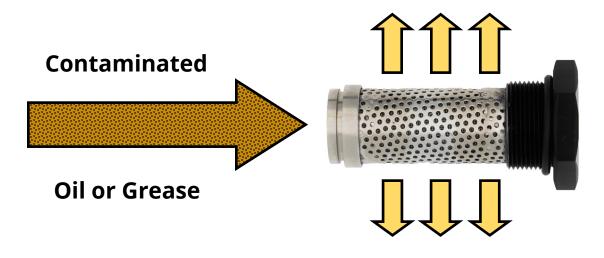
Note A: In order to insure the vent line provides **POSITIVE INDICATION** that the reservoir is full, an **end of line check valve** must be installed at the **end of the vent line**. If using a **SRM**, install the **end of line check valve** into the bottom 1/4 port on the **SRM**.

**Note B:** If this installation includes **SUPPLY/RETURN MANIFOLDS**, tube from the reservoir **VENT PORT** to the first **SRM** and then to each subsequent **SRM**. Install the terminating check valve on the bottom 1/4 NPSF port of the last **SRM**. Install the last **SRM** close enough to the **RFDT** to insure a clear view of the **end of vent line check valve**.

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#### **FUNCTION ILLUSTRATION & SPECIFICATIONS**

#### **Filtered Lubricant**



## **Filtered Lubricant**

#### **SPECIFICATIONS**

MATERIAL: ZINC PLATED CARBON STEEL OR ANODIZED AL 2024 FILTER RATING: 5,10,25 MICRONS (OIL)/150, 420 MICRONS (GREASE) PRESSURE RATING: 7,500 PSI (STEEL)/6,000 PSI (AL)

WEIGHT: 6LBS (STEEL) / 2LBS (AL)

#### **ORDERING INFORMATION & PART NUMBERS**

#### **DIRT TRAP REPLACEMENT ELEMENT**

STANDARD PACK: 1 EACH				
FILTER RATING	PART NUMBER	PART NUMBER		
FILTER RATING	ALUMINUM CAP	303 SS CAP		
5 MICRON	DT-EL-002-005MIC	DT-EL-002-005MIC-SS		
10 MICRON	DT-EL-002-010MIC	DT-EL-002-010MIC-SS		
25 MICRON	DT-EL-002-025MIC	DT-EL-002-025MIC-SS		
150 MICRON 100 MESH	DT-EL-002-100M	DT-EL-002-100M-SS		
420 MICRON 40 MESH	DT-EL-002-40M	DT-EL-002-40M-SS		





NOTE: Replacement elements are compatible with both the carbon steel and 2024 Aluminum models.

#### **DIRT TRAP MOUNTING BRACKET**

STANDARD PACK: 1 EACH		
PART NUMBER	DESCRIPTION	
LS-BRKT-KIT	316 S/S DIRT TRAP MOUNTING BRACKET	



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#### REPLACEMENT MAGNETIC DIRT TRAP ELEMENT

SPECIFICALLY DESIGNED FOR LUBRICATION AND HYDRAULIC SYSTEMS WHERE THERE IS A REASONABLE PROBABILITY THAT THE HYDRAULIC OR LUBRICATING OIL WILL BE CONTAMINATED WITH METAL DEBRIS

CONSTRUCTED FROM:
304SS CORE
316SS FILTRATION SCREEN
303SS INLET & TIE ROD
2024 AL & 303SS NUT
VITON O RING AND INLET SEAL
NEODYMIUM IRON BORON
PERMANENT MAGNETS (6)



OUR NEODYMIUM IRON BORON PERMANENT
MAGNETS ARE MUCH STRONGER AND HAVE A MUCH HIGHER RESISTANCE TO
DEMAGNETIZATION THAN CERAMIC, ALNICO AND SM-CO MAGNETS.

ALL CONTAMINANTS ARE TRAPPED INSIDE THE
FILTER ELEMENT AND ARE COMPLETELY REMOVED FROM THE SYSTEM
WHENEVER THE FILTER ELEMENT IS REPLACED

OUR MAGNETIC DIRT TRAP PROVIDES ONE MORE DEFENSE IN THE BATTLE AGAINST CONTAMINATION, THE ENEMY OF HYDRAULIC OR LUBRICATION SYSTEM RELIABILITY

A CONTAMINATION FREE HYDRAULIC OR LUBRICATION SYSTEM IS A RELIABLE SYSTEM

#### **ORDERING INFORMATION & PART NUMBERS**

#### **MAGNETIC DIRT TRAP REPLACEMENT ELEMENT**

STANDARD PACK: 1 EACH			
FILTER RATING	PART NUMBER		
FILTER RATING	ALUMINUM CAP		
3 MICRON	DT-EL-002-003MIC-MAG	DT-EL-002-003MIC-MAG-SS	
5 MICRON	DT-EL-002-005MIC-MAG	DT-EL-002-005MIC-MAG-SS	
10 MICRON	DT-EL-002-010MIC-MAG	DT-EL-002-010MIC-MAG-SS	



POWERFUL ENOUGH TO CAPTURE THE SMALLEST METAL PARTICLES.

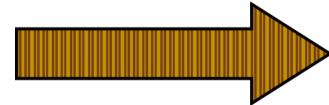


NOTE: REPLACEMENT ELEMENTS ARE COMPATIBLE WITH BOTH THE CARBON STEEL, STAINLESS STEEL, AND 2024 ALUMINUM MODELS.

#### **FUNCTION ILLUSTRATION & SPECIFICATIONS**

# **Filtered Lubricant**





### Oil or Grease





# **Filtered Lubricant**

#### **SPECIFICATIONS**

MATERIAL: ZINC PLATED CARBON STEEL OR ANODIZED AL 2024 FILTER RATING: 3, 5,10 MICRONS (OIL)/150, 420 MICRONS (GREASE)

PRESSURE RATING: 7,500 PSI (STEEL)/6,000 PSI (AL)

WEIGHT: 6LBS (STEEL) / 2LBS (AL)

#### DIRT TRAP ELEMENT REPLACEMENT INSTRUCTIONS

**Step 1:** <u>Depressurize</u> any residual pressure from the system.

**Step 2:** Remove the old filter element from the filter body. Figure 1.1

**Step 3:** Remove the old Filter Element's Seal from the bottom of the Filter Body. Throw away. Visually inspect the inner body for any debris that may have fallen in during disassembly. Refer to Figure 1.2

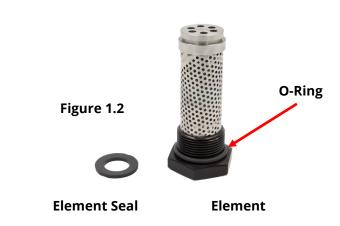
**Step 4:** <u>Lightly lubricate the new Dirt Trap</u> <u>Element Seal & O-Ring</u> with oil or grease and drop the seal in the filter body making sure it rests flat on the body floor above the inlet cavity. Refer to Figure 1.2

**Step 5:** <u>Insert the new Dirt Trap Replacement Element</u> into the filter body. Tighten until the element assembly bottoms out onto the filter housing. Figure 1.3

**Step 6:** After installing any Dirt Trap filter in an existing or new lubrication system, <u>run the system and record the differential pressure</u> (difference between inlet pressure reading and <u>outlet pressure reading</u>). When this reading increases by **50 PSI**, replace the filter element

**Tech Support:** Can't figure it out? Give us a call toll free at: (877) 452-0157







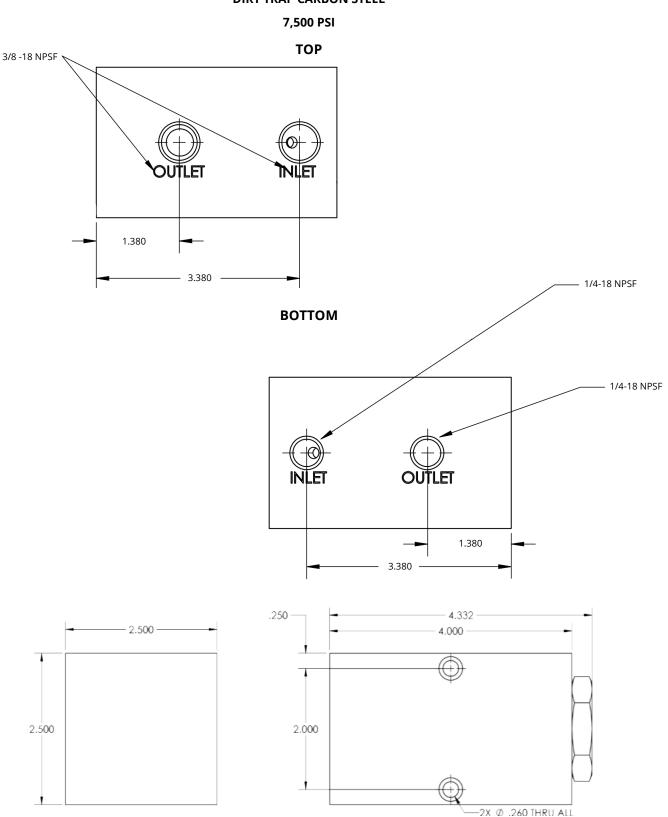


#### **DIMENSIONS & MOUNTING INFORMATION**

# 1.380

#### **DIMENSIONS ARE IN INCHES**

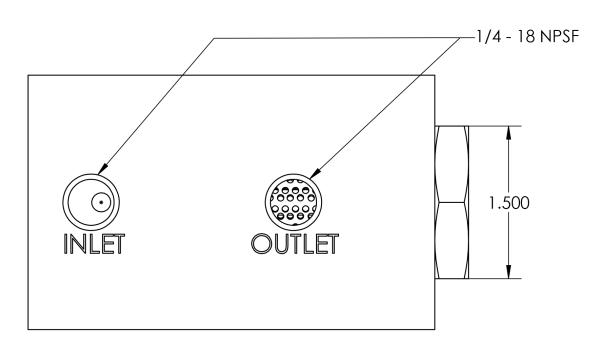
#### **DIRT TRAP CARBON STEEL**

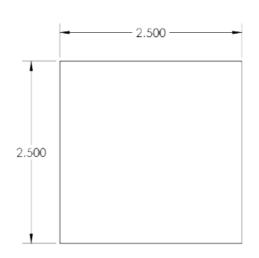


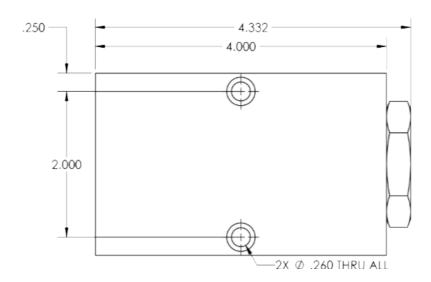
#### **DIMENSIONS & MOUNTING INFORMATION**

#### **DIMENSIONS ARE IN INCHES**

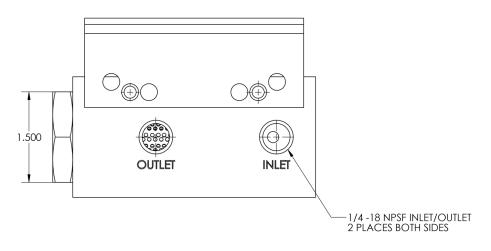
# DIRT TRAP AL2025 & 316 STAINLESS

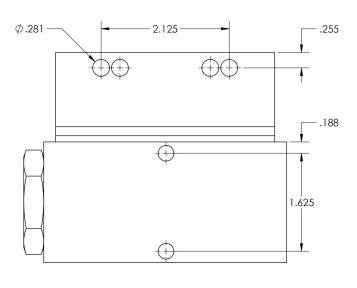


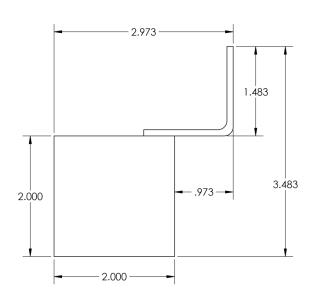




#### MOUNTING BRACKET DIMENSIONS







# LUBRICATION SCIENTIFICS, LLC - CENTRALIZED LUBRICATION SYSTEMS

<u>NOTES</u>			

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#### **CONTACT US**

# IN THE USA, FIND YOUR STATE IN THE MAP BELOW, LOOK FOR THE REGION ID NUMBER AND FIND THAT NUMBER IN THE CONTACT INFORMATION CHART.



#### **CONTACT INFORMATION CHART**

1	Call Factory Direct - 877-452-0157	1			
2	David Donahue Cell: 414-507-9513	Outs	Outside of the United States Call Factory Direct - 877-452-0157		
3	Email: d.donahue@lubricationscientifics.com  Bernie Sauve + El Paso Texas Cell: 210-702-9930 Email: bernie@lubricationscientifics.com		Richard Hanley - California - Santa Barbara, Ventura, Los Angeles, Orange, San Bernardino, Riverside, San Diego and Imperial Counties.  Nevada - Clark County.  Cell: 714-625-5539		
4	Andy Kromer Cell: 440-364-4721 Email: aklub@lubricationscientifics.com	8	Email: rth@lubricationscientifics.com  California - All Counties not covered by Richard.  Nevada - All Counties except Clark County.		
5	Call Factory Direct - 877-452-0157	Call Factory Direct - 877-452-0157		157	
6	6 Cory Walker Cell: 832-585-7065 Email: c.walker@lubricationscientifics.com		Call Factory Direct - 877-452-0157		
			Call Factory Direct - 877-452-0157		

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#### **Customer Service (877-452-0157)**

- Order status & order entry
- Pricing inquiries
- Part number look-ups
- Product availability information
- Shipment assistance
- All other general inquires

#### www.lubricationscientifics.com

- Product information, specifications, literature
- Locate sales reps and distributors
- ♦ Operator & Repair manuals
- Distributer Information
- Place orders and check current pricing
- Product Pricing



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