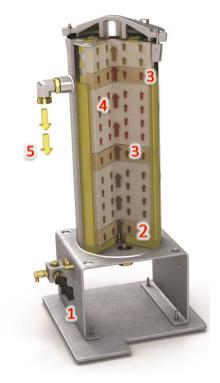
puraDYN M85



The M85 (previously MTS-240) is a multi-stage, highly efficient bypass oil filtration system for engine, hydraulic, or transmission applications with an oil sump capacity of up to 85 gallons.

Working much the same way as a kidney dialysis machine, the **pura**DYN System diverts a small amount of engine oil at a slow rate of flow. Leveraging a proprietary solution, the filter continuously and safely cleans lubricant of impurities down to one micron, removes water, and replenishes key additives to keep oil like new.

| Common contaminates : | Effects of Contamination | | | |
|--|---|--|--|--|
| Engines: | | | | |
| Solid particulate | Accelerated component failure | | | |
| Water Particulate | Reduction in viscosity | | | |
| Wear Metals | Shorter engine life, filter plugging | | | |
| Transmissions: | | | | |
| Sealing material | Accelerated bearing wear or failure | | | |
| Oil oxidation products | Accelerated clutch wear | | | |
| Dirt | Accelerated gear wear | | | |
| Metals | Shifting issues due to plugged control valves | | | |
| Water | Accelerated component wear | | | |
| Hydraulics: | | | | |
| Water | Reduction in viscosity, load-carrying ability, and hydrodynamic-film thickness, corrosion, rust | | | |
| Silt caused by small- sized particulate | Valves function improperly due to gradual erosion of surfaces | | | |
| Larger-sized particulate | Blockage of orifices, component jamming, improper seating of relief valves | | | |
| Slime / Sludge | Increased strain on components (i.e., pumps); clogged nozzles, jets, and orifices | | | |



- STEP 1. OIL ENTERS SYSTEM AT SLOW RATE OF 6-8 GPH / 22-40 LPH (ENGINE) OR 12-16 GPH / 45-60 LPH (HYDRAULIC) AND INTO THE INNER DISPOSABLE ELEMENT WHERE THE FOLLOWING PROCESSES OCCUR:
- STEP 2. WATER REMOVAL VIA POLYDRY® TECHNOLOGY
- STEP 3. OIL FLOWS THROUGH TIME-RELEASED ADDITIVE, REPLENISHING BASE ADDITIVE LEVELS IN ENGINE OIL.
- STEP 4. OIL CONTINUES FILTERING THROUGH THE DISPOSABLE ELEMENT COMPRISED OF COTTON MEDIA TREATED WITH CGP®, A PROCESS FOR CHEMICAL GRAFTING, AND THEN SLOWLY EXITS THE ELEMENT.
- STEP 5. OIL IS GRAVITY-FED BACK TO ENGINE.

puraDYN filtration systems

- Proudly manufactured in Boynton Beach, FL for over 30 years
- Will not void manufacturer's warranty
- Carries a \$5m per occurrence liability coverage
- Five-Year unlimited miles/hours warranty on unit



puraDYN M85



| Weight | | |
|---|-----------------------|--|
| System w/Dry Filter | 44 LBS / 20 KGS | |
| Boxed | 52 LBS / 23.6 KGS | |
| Vertical Clearance Requirements | 20 IN / 51 CM | |
| Dimensions - Overall | | |
| Height (H) | 29.4 IN / 75 CM | |
| Width (W) | 10 IN / 25 CM | |
| Depth (D) | 11.8 IN / 30 CM | |
| Capacity | | |
| Max Lube Oil Sump Capacity | 85 GAL / 322 L | |
| Make-up Oil | 3 GAL / 11.4 L | |
| Particulate removal | 3.9 LBS / 1785 G | |
| Water removal | 27.05 oz / 800 ML | |
| Fluid Specs | | |
| Pressure- Maximum Input | 100 psi / 690 kPa | |
| Flow Rate Range Filtration (engine) | 6-8 GPH / 22-40 LPH | |
| Flow Rate Range Filtration (hydraulics) | 12-16 GPH / 45-60 LPH | |
| Approximate Operating Temperature | 220 °F / 104 °C | |

Double and Triple System configurations available





*All M85 model specifications are approximate and will vary with options. Specs are based on single unit use and will vary with multiples configuration.

Popular M85 Applications (additional kits available in 1-, 2-, or 3-System configurations):

| Part Number: | Typical Application | Equipment Example | Max Sump Capacity | Max psi / kPa** |
|---|--------------------------------|------------------------|----------------------|-------------------|
| 01-A1M85X-K2 (prev. 01-70002MTS-DL) | Genset | Caterpillar C3512 | 85 gal / 322 L | 100 psi / 690 kPa |
| 01-A1M85X-K7 (prev. 01-71002MTS-DL6) | Frac Truck | MTU 4000 C3512 | 85 gal / 322 L | 100 psi / 690 kPa |
| 01-A1M85X-C (prev. 01-70002MTS-DL4) | Genset | Cummins QSK50 | 85 gal / 322 L | 100 psi / 690 kPa |
| 01-A2M85X-K1 (prev. 01-70003MTS-DL 2-Unit) | Genset (Deep Sump) | Caterpillar C3512 | 170 gal / 644 L | 100 psi / 690 kPa |
| 01-A2M85S-K (prev. 01-70003MTS-DL8 2-Unit) | Genset (Deep Sump SNG) | Caterpillar C3512 | 170 gal / 644 L | 100 psi / 690 kPa |
| 01-A3M85X-K2 (prev. 01-70006MTS-DL7 3-Unit) | Genset (Deep Sump Marine) | Caterpillar C3516 | 255 gal / 965 L | 100 psi / 690 kPa |
| 01-A3M85S-R (prev. 01-70006MTS-DL9 3-Unit) | Compressor | Ingersoll Rand KVG-123 | 255 gal / 965 L | 100 psi / 690 kPa |

^{**}Listed maximum "psi/kPa" values based upon bypass filter systems with pressure reducing valve kit employed, as part of included kit materials.

Larger M-Series models can be used in multiple configurations to effectively filter large sump capacity engines. This document is for informational purposes only and should not be the deciding factor when selecting a **pura**DYN System. Severe applications and operating environments may require model size adjustment from that shown on the standard sizing chart above. Please contact your local distributor or Puradyn directly with questions about specifics for your application or environment.