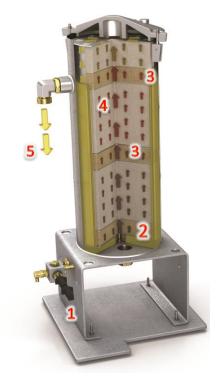
puraDYN M85



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 / 22-30 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 / 22-30 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.