

# KMT Aqua-Dyne Pumps

The key to KMT Aqua-Dyne's long pump life and hundreds of hours of trouble-free operation are low load packing, special filtration and a closed loop non-drip cooling and water lubrication system for alumina ceramic or tungsten carbide plungers.

The individual lightweight suction and discharge manifolds are easily removed for routine maintenance, and field changing the packing or plungers takes five minutes with no special tools required.

The unique Valve-In-Line fluid end design provides higher volumetric efficiency, lower maintenance, quick packing changes and low initial cost over conventional fluid ends available.



### C Series

- 300 to 500 HP
- 5 - 20,000PSI

### EK Series

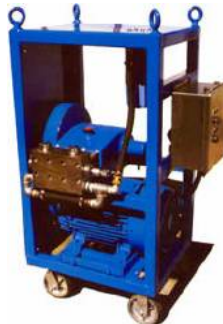
- 5 to 25 HP
- 5 - 40,000PSI

### GA Series

- 100 to 250 HP
- 5 - 40,000 PSI



C 500 DS Skid Mounted



EK 25 EF Frame Mounted



GA 200 DT Trailer Mounted

### Engine and Motor Options

- |           |   |
|-----------|---|
| Diesel:   | Several brand options                       |
| Electric: | EFC or explosion proof with voltage options |

### Frame Options

- |          |   |
|----------|---|
| Skid:    | With several mounting options                 |
| Frame:   | Single or multiple lifting bails              |
| Trailer: | Single/Dual axle with several hook-up options |
| Cart:    | EK series only                                |

# EK Series Pump Unit

The EK series is an excellent pump for applications that require high pressure at lower flow rates with a compact mobile design. Very popular for Hydrostatic testing applications.

Pump Performance Range				
Pressure PSI [Bar]	Flow Rate GPM [LPM]			
Model No. /HP	EK 5	EK 10	EK 20	EK 25
40,000 [2758]	For details on 40,000 psi call sales			
20,000 [1379]	.43 [1.63]	.85 [3.22]	1.71 [6.47]	2.14 [8.10]
15,000 [1034]	.57 [2.16]	1.14 [4.32]	2.29 [8.67]	2.85 [10.79]
10,000 [689]	.85 [3.21]	1.71 [6.47]	3.43 [12.98]	4.29 [16.24]
5,000 [345]	1.17 [4.43]	3.43 [12.98]	6.85 [25.93]	8.57 [32.44]

Flow rates are theoretical based on 100% volumetric and mechanical efficiency

## Standard Features

- Pump**  
 Horizontal, valve-in-line triplex plungers with 1.57 in. (40 MM) stroke
- Power transmission**  
 Kevlar reinforced synchronous drive system with safety belt guide.
- Discharge plumbing**  
 Manifold with interchangeable high pressure discharge connections, stainless steel glycerin filled pressure gauge and relief valve or rupture disc.
- Suction plumbing**  
 Filtration down to 1 micron



EK 25 EF  
Frame Mounted



EK 20 ES  
Skid Mounted



# EK Series Pump Unit

## Pump Specifications

### Power End

#### Power Frame:

Cast iron casing with drive system components. Includes sight glass for checking oil level.

#### Crankshaft:

Gas-nitrided, hardened and tempered alloy steel extending from both sides. Crankshaft is centered between two main roller bearings.

#### Crankshaft Bearings:

Heavy duty roller bearings with roller rim.

#### Crossheads:

Cylindrical type nodular iron. Wrist Pin is Case hardened and ground steel.

#### Lubrication:

Power ends parts are splash oil lubricated.

#### Connecting Rods:

High strength, forged steel with special anti-friction brass bearings.

#### Oil Wiper Seals:

Easily replaceable, double lip U-Cup.



### Fluid End

#### Fluid Cylinders:

Proprietarily treated stainless steel which eliminates breakage. Other materials available to Suit the application.

#### Valves and Seats:

Proprietarily treated stainless Steel enhances the Valve-in-Line life and eliminates Breakage. All valves may be reconditioned by field lapping or surface grinding.

#### Plungers:

Non-scoring solid Alumina Ceramic for up To 20,000 psi. Solid carbide or ceramic for up to 40,000 psi.

#### Packing:

Self-adjusting advanced polymer material for up to 22,500 psi.

#### Lubrication:

Plungers and Packing are non-drip, Closed loop pressure lubricated by fluid from Suction Manifold. No external lubrication is necessary.

#### Manifolds:

Individual lightweight Suction Discharge Manifolds are easily removed for simple maintenance. Different materials are available to suit applications.