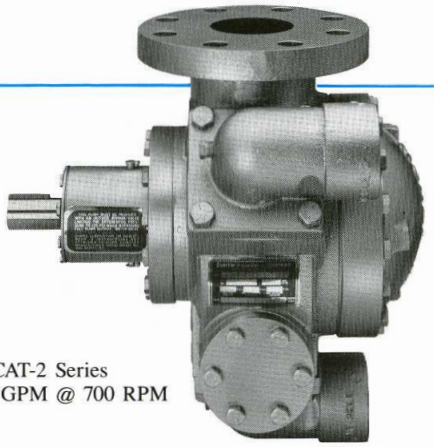
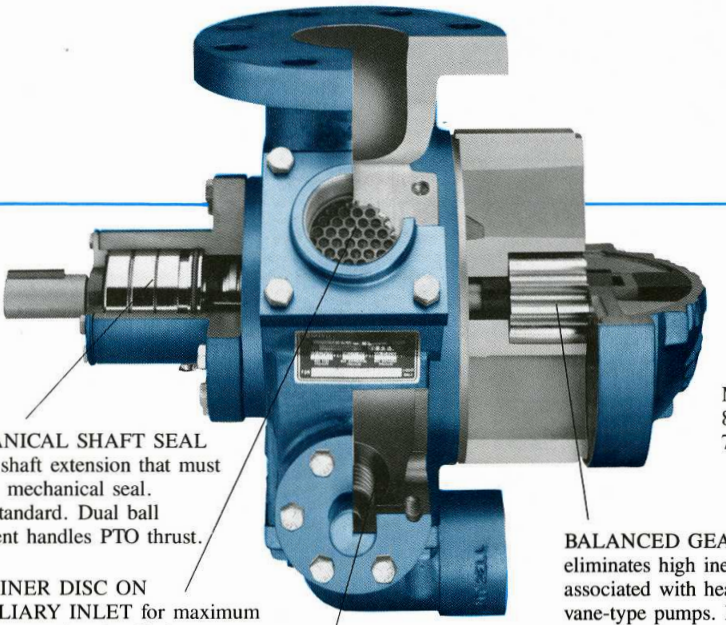


MCAT-2 Series
42 GPM @ 700 RPM



MCAT-3 Series
85 GPM @
700 RPM

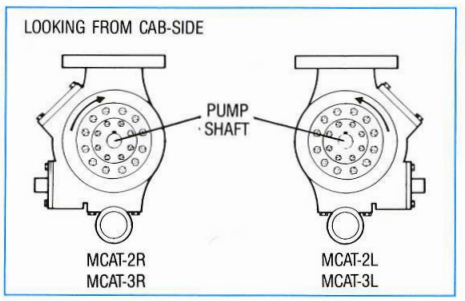
SINGLE MECHANICAL SHAFT SEAL eliminates double shaft extension that must have an additional mechanical seal. SUPERSEAL is standard. Dual ball bearing arrangement handles PTO thrust.

STRAINER DISC ON AUXILIARY INLET for maximum pump protection should the auxiliary inlet be used for self-loading.

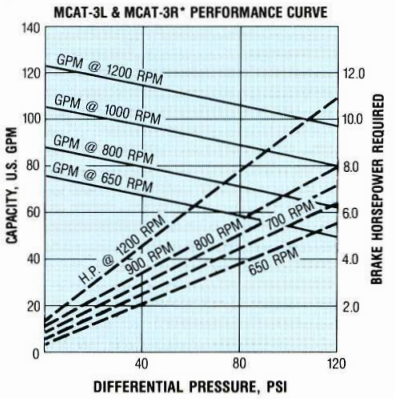
BUILT-IN BYPASS RELIEF VALVE designed with stainless steel spring to minimize overpressure.

BALANCED GEAR SET eliminates high inertia associated with heavy rotored vane-type pumps. Ensures smooth, non-pulsating flow and maximizes useful life of universal joints on PTO. Gear set can easily be replaced WITHOUT disturbing the mechanical shaft seal.

ROTATION



PERFORMANCE CURVES[4]



*NOTE: Models MCAT-2L, MCAT-2R will deliver one-half the values shown.

4. Performance curves based on delivery rates of propane at 75°F. Delivery rates will be reduced by approximately 15% at temperatures approaching 32°F. For exact capacity and horsepower, use empirical formulae provided under engineering data on the last page.

NO OVERSPEEDING DAMAGE

All Smith MCAT-series 3″ flange mount truck pumps are designed for 1200 RPM maximum shaft speed and deliver comparably to other makes at 650 RPM PTO speed. This means damage associated with over-revving is eliminated and will allow for faster fuel deliveries where larger meters can be utilized.

SINGLE MECHANICAL SEAL

The MCAT-series utilizes a SINGLE mechanical shaft seal instead of two that double shaft extended type pumps provide.

HEAVY DUTY OPTIONS STANDARD

All MCAT-series pumps incorporate the heavy duty NSSA option (see option page in this catalog) as standard equipment. Aircraft quality steel gear sets and Tungsten Carbide idler gear shafts allow for maximum efficiency at higher differential pressures.

BALANCED LOADING

Unlike vane pumps that are unbalanced, especially at higher differential pressures, all MCAT-series pumps feature balanced internal porting that greatly enhances pump life.

EASE OF MAINTENANCE

All MCAT-series pumps feature the patented SUPERSEAL mechanical shaft seal assembly that does not have to be removed from the pump in the event the gear set needs to be replaced; no loose seal components to worry about.

STRAINER DISC ON AUXILIARY INLET

All MCAT-series pumps incorporate a reinforced 30-mesh strainer disc on the auxiliary inlet should the pump ever be used to self load.

OVERSIZED INTERNAL BYPASS RELIEF VALVE

All MCAT-series pumps are designed for minimal overpressure should the internal bypass relief valve ever open. Bypass valve porting is oversized to minimize damage due to cavitation. Internal relief valve is set at 150 psid and as such, an external bypass valve is required by the Underwriters Laboratories.

OPTIONAL FLANGES

All MCAT-series pumps are provided with two 90° threaded elbows for the discharge and auxiliary inlet. Optional flanges includes a blind flange for the auxiliary inlet, threaded or weld type flanges, 2″ NPT, for the discharge or auxiliary inlet.

PUMP SELECTION

PUMPS ONLY	AVERAGE DELIVERY RATE IN GALLONS PER MINUTE @ 700 RPM[1]		MAXIMUM DIFFERENTIAL PRESSURE[2]	OUTLET SIZE[3]	PUMP WEIGHT
MODEL	40 PSID	75 PSID	PSI	INCHES	POUNDS
MCAT-2R, 2L	39	35	125	2″ NPT FEMALE THREADED 90° ELBOW	108
MCAT-3R, 3L	78	70	125	"	137

1. Rated capacity for MCAT-3L, 3R is 85 GPM @ 700 RPM. Rated capacity for MCAT-2L, 2R is 42 GPM @ 700 RPM.
2. Maximum differential pressure limited to 125 PSID as outlined in U.L.-51 standard.
3. Optional flanges available; threaded or weld type, 2″ NPT, for the discharge or auxiliary inlet.