

HALE TYPE APMG SERIES PUMPS

PL948AD

WARNING

EXCEEDING THESE LIMITS OR FAILURE TO FOLLOW THE RECOMMENDATIONS OUTLINED ON THIS DRAWING COULD DAMAGE THE GEARBOX AND RESULT IN PERSONAL INJURY.

MAXIMUM POWER INPUT FOR PUMPING = 100 HP (75 kW)

APMG	MAX. GEARBOX INPUT RPM
APMG*-30	2440
APMG*-26	2750
APMG*-21	3360
APMG*-19	3820
APMG*-17	4290

SEE HALE TORQUE LIMIT CHART F-72 FOR ADDITIONAL DATA.
MAXIMUM ALLOWABLE HYDROSTATIC PRESSURE: 600 PSIG (4.14 MPa)
MAXIMUM ALLOWABLE HYDRODYNAMIC PRESSURE: 600 PSIG (4.14 MPa)

MODEL NUMBER	GEAR RATIO
APMG	
APMG*-30	3.00
APMG*-26	2.67
APMG*-21	2.18
APMG*-19	1.92
APMG*-17	1.71

* RATED CAPACITY - GPM

APMG RATED PUMP CAPACITY:
500 GPM @ 150 PSI NFPA 1901 RATED

HALE TYPE APMG MODEL IDENTIFICATION

THE HALE TYPE APMG IS AVAILABLE WITH FIVE DRIVE RATIOS TO ADAPT TO A WIDE VARIETY OF APPLICATIONS (SEE RATIO CHART). THE RATING, RATIO AND DRIVE UNIT TYPE DETERMINE THE MODEL NUMBER. FOR EXAMPLE:

APMG IDENTIFICATION

THE MODEL NUMBER FOR AN APMG RATED AT 500 GPM WITH A DRIVE RATIO OF 2.67 AND HALE "G" TYPE DRIVE UNIT WOULD BE:

AP	M	G	50-26
PUMP TYPE	DRIVE STYLE	DRIVE UNIT TYPE	DRIVE RATIO (2.67 = 26) RATED CAPACITY - GPM

BE SURE TO INCLUDE THE MODEL NUMBER AND SERIAL NUMBER WHEN ORDERING PARTS OR REQUESTING INFORMATION. THE MODEL / SERIAL NUMBER PLATE IS LOCATED ON BOTTOM OF GEAR BOX AS SHOWN IN DRAWING.

WARNING

ALL WIRING AND INSTALLATION DETAILS MUST CONFORM TO ALL APPLICABLE NFPA AND SAE STANDARDS. VERIFY OPERATION OF PUMP ENGAGED INDICATOR LIGHTS AND INTERLOCKS BEFORE PLACING APPARATUS IN SERVICE.

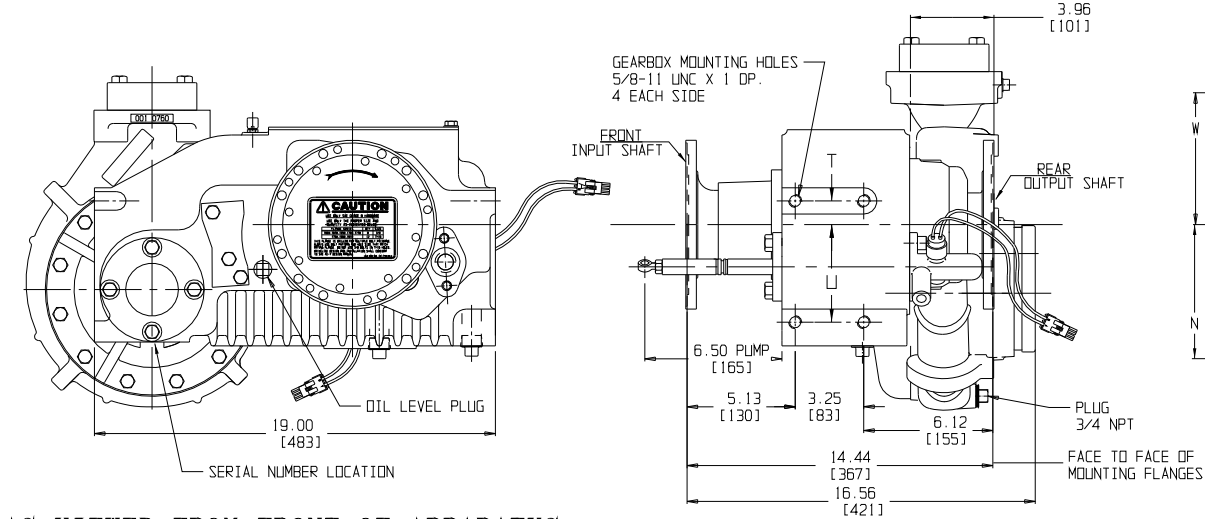
DRIVE LINE RECOMMENDATIONS:

APPARATUS BUILDER SUPPLIED DRIVELINES SHALL BE OF APPROPRIATE SIZE TO MATCH THE CHASSIS AND PUMP REQUIREMENTS WITH INDIVIDUAL JOINT CANCELLATION AND PHASING BEFORE AND AFTER THE PUMP. DRIVE SHAFT BALANCE (INCLUDING YOKES) SHALL NOT EXCEED THE RECOMMENDED LIMIT OF EITHER THE DRIVE SHAFT OR CHASSIS TRANSMISSION MANUFACTURER'S SPECIFICATIONS. DRIVE SHAFT FULL RANGE OPERATING SPEEDS SHALL NOT EXCEED 42% OF ITS CRITICAL SPEED. DRIVELINE SHALL BE INSTALLED PER SAE UNIVERSAL JOINT AND DRIVE SHAFT DESIGN MANUAL, PUBLICATION # AE-7. ALL DRIVELINES MUST CONFORM TO HALE BULLETIN #957. U-JOINT ANGLES SHOULD BE NO LESS THAN 1°; THE MAXIMUM ALLOWABLE ANGLE AND TUBE DIAMETER SHOULD BE CONFIRMED WITH THE MANUFACTURER OF THE DRIVELINE FOR THE PARTICULAR APPLICATION.

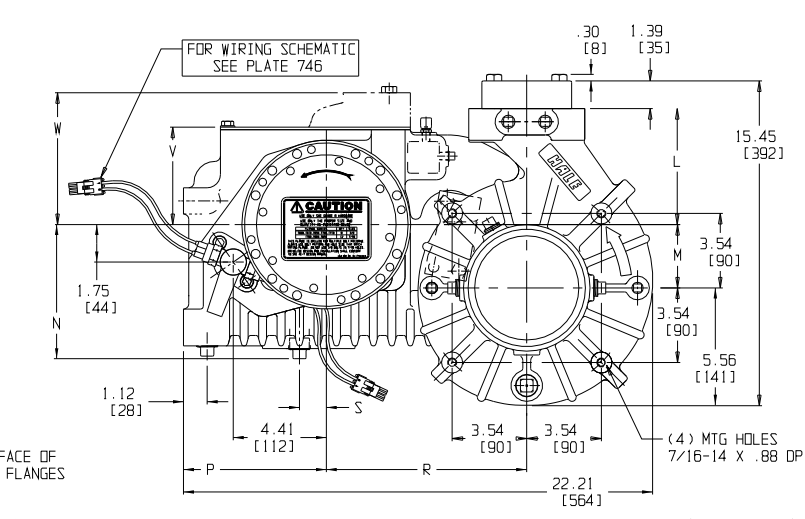
PUMP RATIO	DIMENSIONS									
	L	M	N	P	R	S	T	U	V	W
3.00	5.75	2.75	6.38	6.75	9.50	1.25	1.13	4.63	4.50	6.62
2.18	(146)	(70)	(162)	(171)	(241)	(32)	(29)	(118)	(114)	(168)
2.67	5.42	3.08	6.38	6.75	9.50	1.25	1.13	4.63	4.50	6.62
1.92	(138)	(78)	(162)	(171)	(241)	(32)	(29)	(118)	(114)	(168)
1.27	5.50	3.00	6.62	7.00	9.25	0 = DN	.88	4.88	4.25	6.38
1.00	(140)	(76)	(168)	(178)	(235)	Q	(22)	(124)	(108)	(162)
1.71	5.50	3.00	6.38	6.75	9.50	1.25	1.13	4.63	4.25	6.38
	(140)	(76)	(162)	(171)	(241)	(32)	(29)	(118)	(108)	(162)

NOTES:

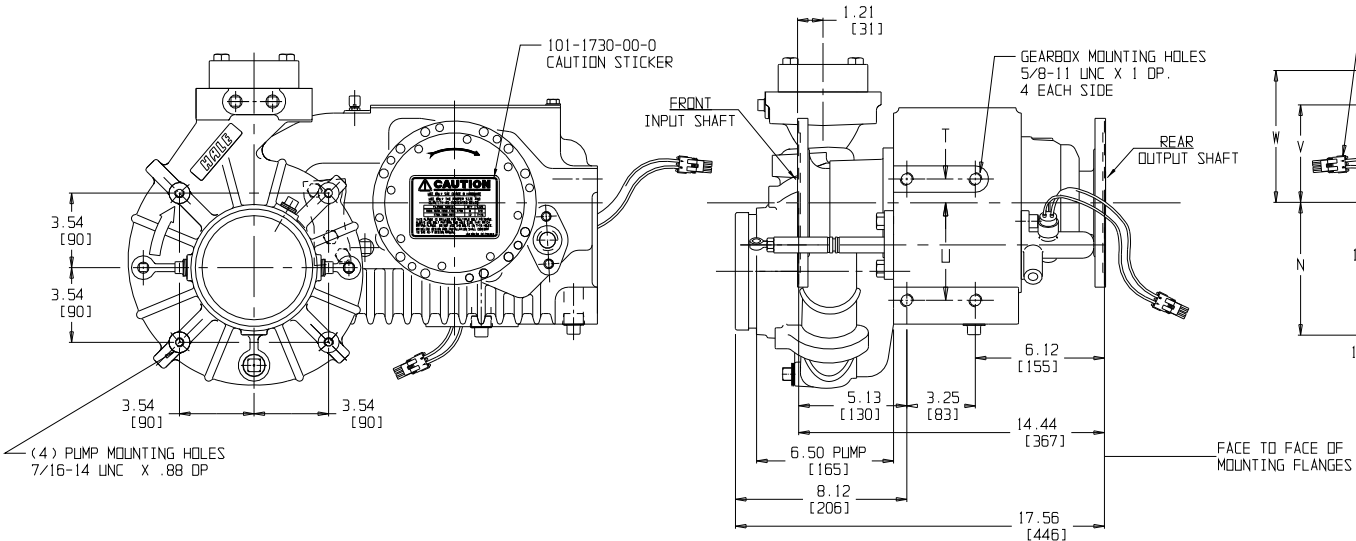
- 1) TO CONFORM TO NFPA 1901, APPARATUS MANUFACTURER MUST INSTALL SHIFT AND THROTTLE CONTROL INDICATOR LIGHTS ON THE DRIVING COMPARTMENT AND OPERATOR'S PANEL AS PER INDIVIDUAL NFPA REQUIREMENTS. CONSULT LATEST VERSION OF NFPA STANDARD FOR DETAILS.
- 3) ALL MOUNTING SCREWS TO BE MINIMUM SAE GRADE 5, UNLESS OTHERWISE NOTED.
- 4) ALL FASTENERS SHALL BE INSTALLED WITH A THREAD LOCKING ANAEROBIC ADHESIVE/SEALANT: LOCTITE #246 HIGH TEMPERATURE THREAD LOCKER OR EQUIVALENT.
- 5) PUMP VOLUTE IS FURNISHED IN VERTICAL POSITION STANDARD. VOLUTE CAN ALSO BE FACTORY CONFIGURED FOR LEFT, RIGHT, AND INVERTED DISCHARGE. CUSTOMER CAN ROTATE VOLUTE IN 30° INCREMENTS. THIS MAY REQUIRE RELOCATING COOLING LINES, DRAINS, PRIMING TAP, AND REPLACING VOLUTE GASKET.
- 6) APPROXIMATE OIL CAPACITY: 3 QUARTS (2.8 L). CAPACITIES ARE FOR REFERENCE ONLY; ALWAYS FILL TO BOTTOM OF OIL LEVEL PLUG WITH SAE EP-90 OR 80W-90 API GL-5 OIL.
- 7) DIMENSIONS ARE IN INCHES AND [MILLIMETERS].
- 8) REFER TO PLATE NO. 921 FOR PUMP CROSS-SECTION.



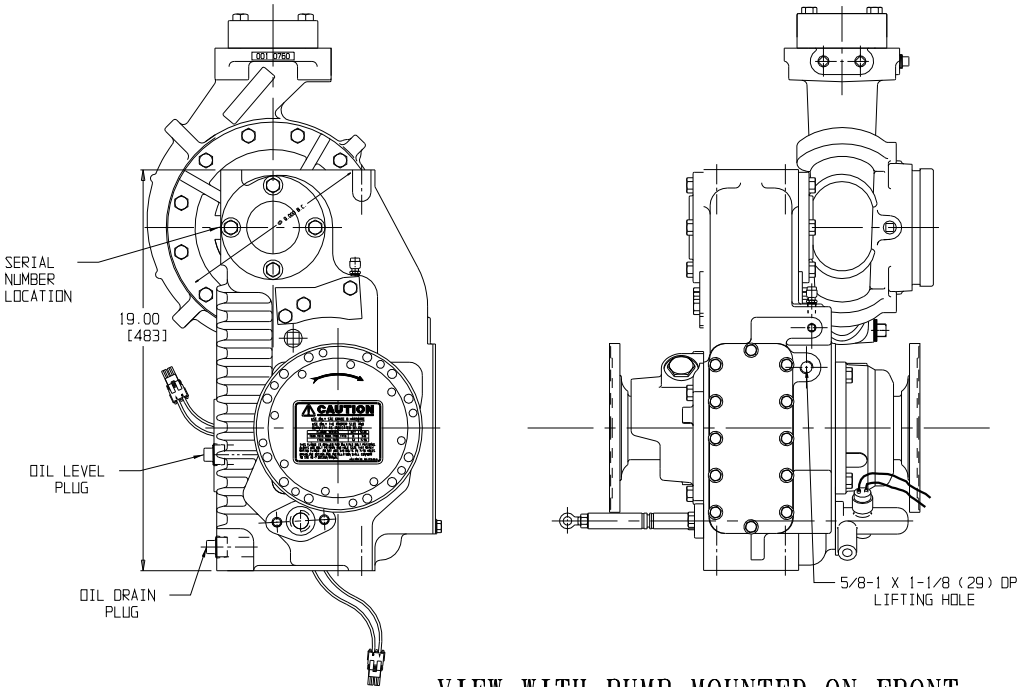
AS VIEWED FROM FRONT OF APPARATUS



SHOWN WITH PUMP MOUNTED ON REAR (OUTPUT SHAFT SIDE) OF GEAR BOX AS VIEWED FROM REAR OF APPARATUS



SHOWN WITH PUMP MOUNTED ON FRONT (INPUT SHAFT SIDE) OF GEAR BOX



VIEW WITH PUMP MOUNTED ON FRONT (INPUT SHAFT) SIDE OF VERTICAL GEAR BOX

200-0541-00-0
GREEN SEALED INDICATOR LIGHT ASSEMBLY

101-0252-00-0
INDICATOR LIGHT PLATE

200-0541-00-0
GREEN SEALED INDICATOR LIGHT ASSEMBLY

101-0252-00-0
INDICATOR LIGHT PLATE

200-0541-00-0 LIGHT ASSEMBLY (GREEN)

101-0291-00-0 INSTRUCTION PLATE

PUMP OPERATOR'S PANEL

DRIVING COMPARTMENT PANEL

PUMP SHIFT INDICATOR LIGHTS
FOR WIRING SCHEMATIC SEE PLATE NO. 746

PLATE NO 948AD

						0886	D	REDRAWN	MM	02-22-10	MAL
						0369	C	DRAFTING UPDATES	TRB	7-24-07	MAL
						0369	B	REMOVED SPLINE SHAFT	TRB	06-28-06	MAL
						0369	A	RELEASE FOR PRODUCTION	TRB	05-03-06	MAL
ECO NO	REV	CHANGED FROM	BY	DATE	APVO	ECO NO	REV	CHANGED FROM	BY	DATE	APVO



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NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY

DRAWN [] TRB []

DATE 05-03-06

SIZE []

SCALE : NTS