

PART NUMBER	STROKE	RETRACT	REV	ECN
DAP12-10A5-04LS	4.00	12.75	B	12739

SPECIFICATIONS

I. ELECTRICAL

- 1) **INPUT VOLTAGE:** 10-16 VDC.
- 2) **AMPERAGE:** 28 AMPS MAXIMUM AT 500 LB LOAD.
- 3) **OVERLOAD PROTECTION:** THERMAL BREAKER INCORPORATED IN MOTOR. EXTERNAL FUSE IS RECOMMENDED FOR ADDITIONAL PROTECTION.
- 4) **FEEDBACK:** 10K OHM POTENTIOMETER. CHANGE IN RESISTANCE OF 385 OHMS/INCH OF SCREW TRAVEL. POTENTIOMETER IS PRESET FOR MINIMUM RESISTANCE AT FULL MECHANICAL RETRACT. (<200 OHMS MAX.) POTENTIOMETER SPECIFICATIONS: TOTAL RESISTANCE 10K OHMS; ±25% LINEARITY; ±0.01% NOISE; POWER RATING; 2 WATTS AT 70°C; 0 WATTS AT 125°C; DIELECTRIC STRENGTH 1000 VAC MINIMUM; INSULATION RESISTANCE 1000M OHMS MINIMUM; RESISTANCE SHIFT 5% MAX. ACCURACY OF POSITIONAL CONTROL IS ±0.0025 UNDER UNIDIRECTIONAL LOADS. DUE TO ACTUATOR END PLAY, UNDER BIDIRECTIONAL LOADS, THE ACCURACY OF POSITIONAL CONTROL IS ±0.010. THESE VALUES DO NOT INCLUDE MOUNTING POINTS.
- 5) **LEAD WIRES:** 14 AWG STRANDED COPPER WITH 80° GPT INSULATION PER SAR J1128.
- 6) **MOTOR CONNECTOR:** PACKARD ELECTRIC 56 SERIES FEMALE BODY #2984883 WITH (2) MALE BLADE TERMINALS #2962987.
- 7) **POWER SWITCH:** DOUBLE POLE-DOUBLE THROW TYPE WITH CENTER OFF AND MOMENTARY CONTACTS (NOT PROVIDED). TO EXTEND ACTUATOR, CONNECT RED LEAD TO POSITIVE AND YELLOW LEAD TO NEGATIVE. TO RETRACT ACTUATOR, CONNECT YELLOW LEAD TO POSITIVE AND RED LEAD TO NEGATIVE.

II. MECHANICAL

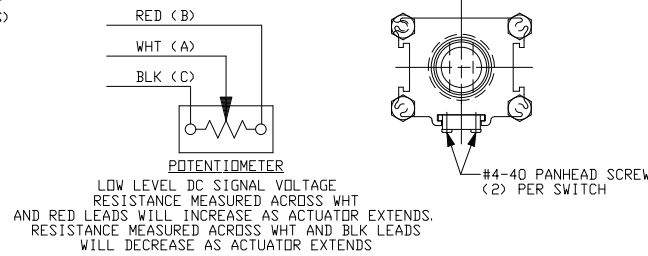
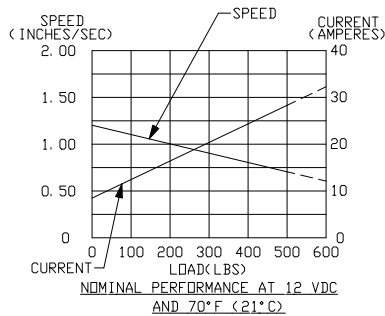
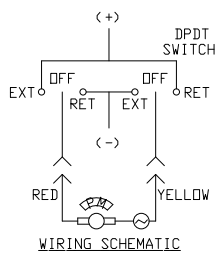
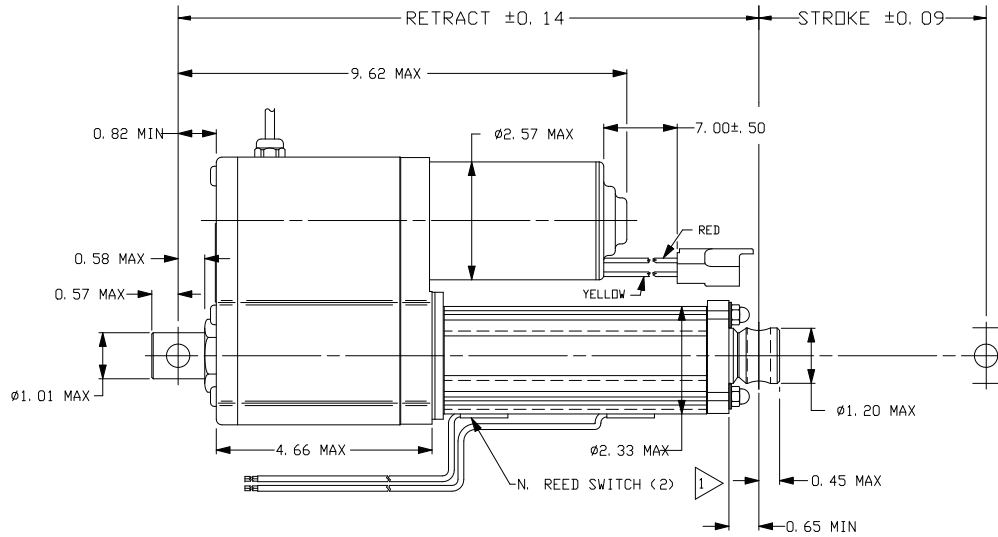
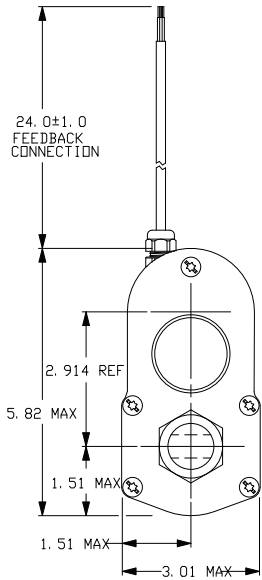
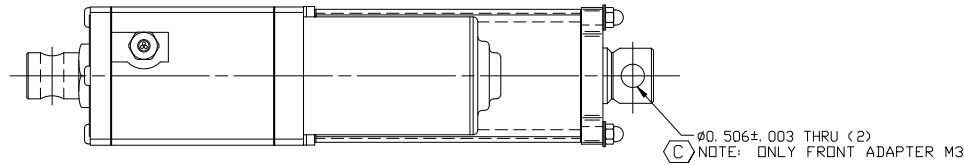
- 1) **DYNAMIC LOAD:** 500 LBS MAXIMUM.
- 2) **STATIC LOAD:** TENSION LOAD 1000 LBS MAXIMUM. COMPRESSIVE LOAD 1000 LBS MAXIMUM.
- 3) **ACTUATOR END PLAY:** 0.080 MAXIMUM (DOES NOT INCLUDE MOUNTING POINTS).
- 4) **OVERLOAD PROTECTION:** BALL DETENT CLUTCH WITH LOAD RATING BETWEEN 600 AND 1000 LBS.
- 5) **MOUNTING:** PIN TO PIN MOUNTING. MOUNTING MUST PROVIDE RESTRAINING TORQUE OF 100 IN-LBS MINIMUM. ACTUATOR CAN BE MOUNTED VERTICALLY OR HORIZONTALLY.
- 6) **RESTRAINING TORQUE:** UNIT HAS ANTI-ROTATION FEATURE.
- 7) **EXTENSION TUBE ROTATION:** EXTENSION TUBE FEATURE NOT BE ROTATED. ROTATION WILL CHANGE POTENTIOMETER SETTING AND MAY REQUIRE RESETING.

III. OPERATING CONDITIONS:

- 1) **TEMPERATURE:** OPERATING AMBIENT -15°F TO 150°F (-26°C TO 66°C).
- 2) **ENVIRONMENT:** ACTUATOR IS WEATHER PROTECTED FOR OUTDOOR USE.
- 3) **DUTY CYCLE:** DUTY CYCLE IS TIME-TEMPERATURE RELATED AND NEEDS TO BE EVALUATED UNDER ACTUAL OPERATING CONDITION. NORMAL ON TIME IS 25% AT 500 LB LOAD AND 77°F (25°C) AMBIENT TEMPERATURE. ACTUAL MAXIMUM ON TIME IS FURTHER DEFINED AS THE TIME TO COMPLETE ONE FULL EXTENSION AND RETRACTION.

IV. PACKAGING PROCEDURES

- 1) **POSITION SENSOR:** (2) N/C SENSORS (840-9008-314) WITH (4) #4-40 SCREWS (INCLUDED) MOUNTED IN TRACK FOR CUSTOMER POSITIONING. (SNUG SCREWS) AFTER POSITIONING
- 2) **SENSOR(S) TORQUE SCREWS TO 5 IN-LBS.**
2. **PACK-PACK** IN A CONTAINER AND MARK WITH PART NUMBER AND DESCRIPTION PER MP-852.



12739	C	FRT ADP WAS STD MT	KAG	1/31/05
8151	B	ADD TO SENSOR NOTE	DE	7/26/99
ECN	REV	DESCRIPTION	BY	DATE

CUSTOMER NO.	
FINISH	BLACK PAINT
HEAT TREAT	
MATERIAL	

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TOLERANCES: UNLESS OTHERWISE SPECIFIED
 .XXXX ±0.0001 .XX ±0.010
 .XXX ±0.005 .X ±0.015
 FRACTIONAL 1/64 ANGULAR 1/2° (<40°30')
 MACHINED SURFACES 125V
 DEBURR SHARP HOLES AND EDGES
 GEOMETRIC TOLERANCES PER ANSI Y14.5
 DO NOT SCALE DRAWING

REFERENCES DAP12-10A5-04LS
 DAPXX10A5XX
 DAP36-10A5XXLS

THIRD ANGLE OF PROJECTION	DRAWN BY	DATE	SCALE	SIZE
	DE	5/15/96	NONE	C
	PRODUCT RELEASE NUMBER	PAGE	DRAWING NUMBER	
	7897	1 of	DAP12-10A5-XXLS	

THOMSON		DANAHER	
1300 NORTH STATE - MARENGO, IL - 60152			
TITLE ACTUATOR OUTLINE			
DRAWING NUMBER		REV	
DAP12-10A5-XXLS		C	