

ENGINEERING DATA SHEET

SERIES 1910, 1915, 1920, 1970, 1975 MINIATURE LIMIT SWITCH 1 PDT, 3 AMP



Meet the requirements of AIR8461 AIR9461 AIR0711

PRINCIPLE TECHNICAL CHARACTERISTICS

Miniature plunger switch (quick make/break)

Simple push button operation (axial command only)

Operated by roller-ended plunger (compatible with oblique actuation force)

Actuation force management by locknuts and positioning washers within a smooth housing

Weight **10 to 20 grams ±5%**
see P/N chart

Nickel plated brass frame

Solder pin terminals in are insulated base or
NAS 1599 type, 22 gauge, fast-connect contact terminals.
- connection by removable crimp male contacts (supplied).
- cable size 0.34 mm² to 1.37 mm², insulator Ø 2.1 mm max.

CONTACT ELECTRICAL CHARACTERISTICS

Load type	Electrical ratings			
	30Vdc		115Vac / 400Hz	
	Nominal rating (Amps)	Overload rating (Amps)	Nominal rating (Amps)	Overload rating (Amps)
Resistive	3	4.5	2	3
Inductive (L/R=5ms)	2	5	1.5	4.5
Lamp	1.5	4	1	3



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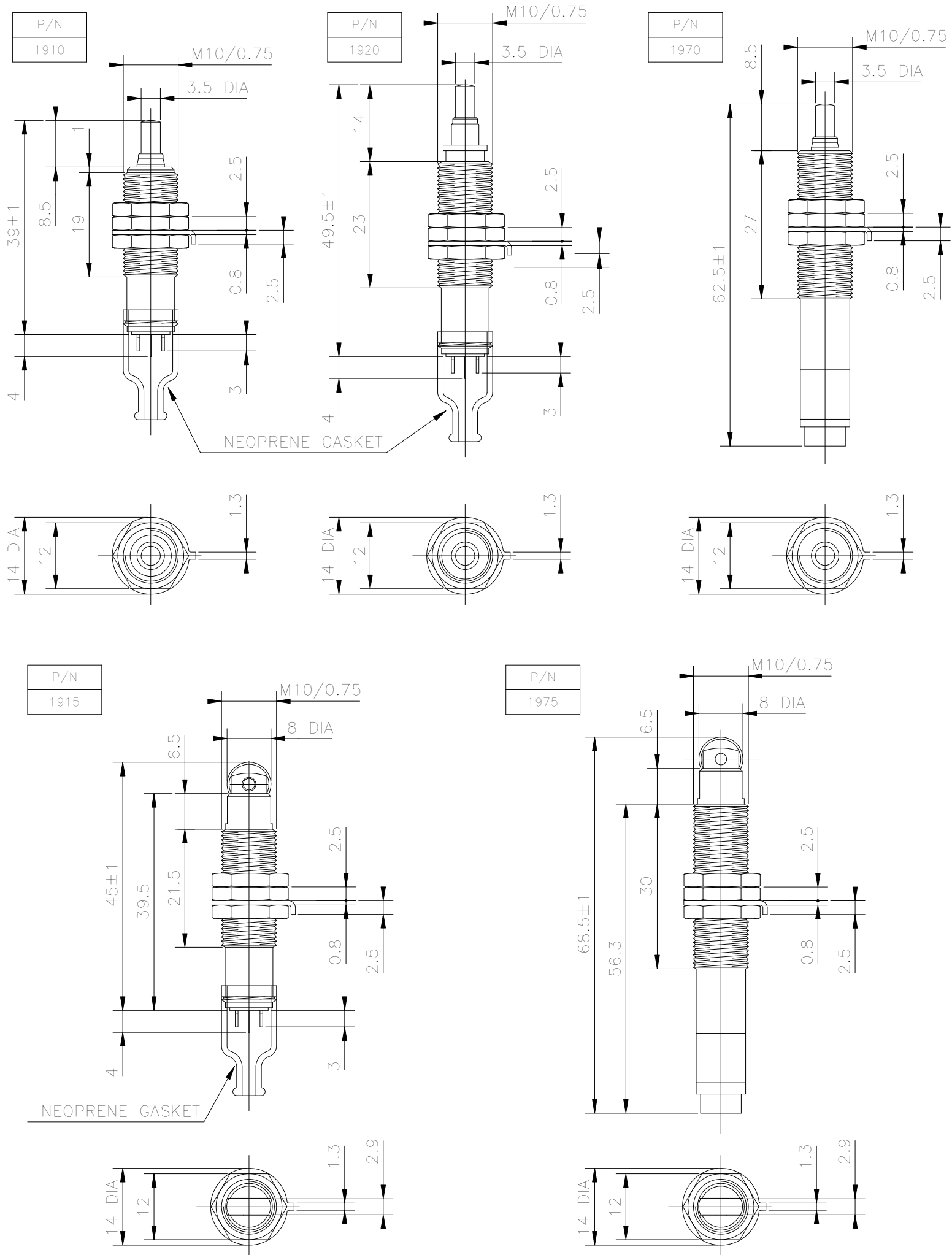
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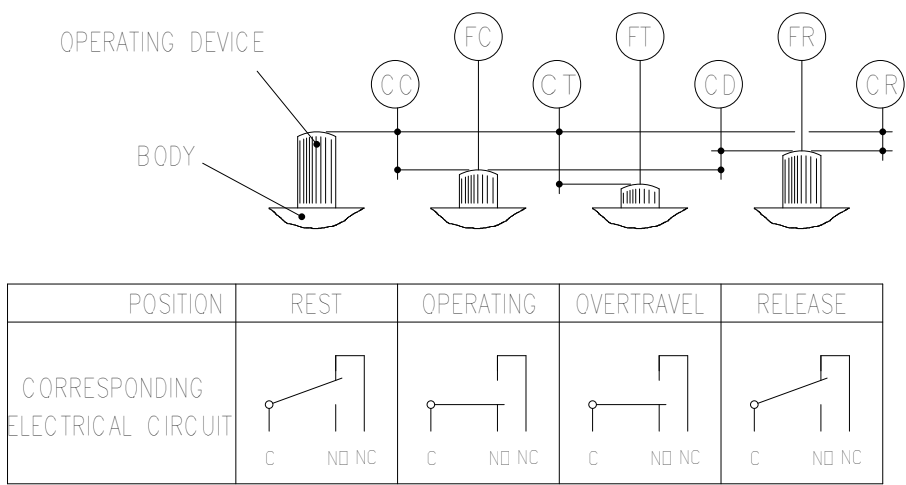
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Data sheets are for initial product selection and comparison. Contact Esterline Power Systems prior to choosing a component.



DIMENSIONS IN MM
STANDARD TOLERANCE : ±0.5



TRAVELS

CC = Operating travel
CT = Total travel max
CD = Differential travel
CR = Residual travel

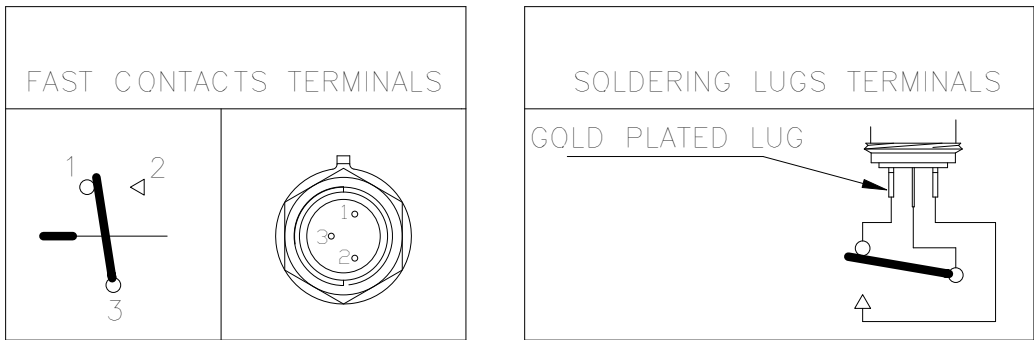
FORCES

FC = Operating force
FT = Total travel force
FR = Release force
FM = Max overtravel force

		1 PDT	FORCES		daN
TRAVELS		mm	FC	Operating	< 1.5
CC	Operating	< 1.8	FT	Total max	< 4
CT	Total max	4	FR	Release	> 0.4
CD	Differential	< 1	FM	Max	8

- Angular command capability only for roller-ended plunger models, in accordance with max travels. (see curve last page)
- For optimum device use, nominal travel must be around the median between operating and total travel values.

SCHEMATIC DIAGRAM



TERMINALS

3 soldering lugs or
3 female contacts NAS 1599
fast sealed termination

PART NUMBERS

P/N	Weight	Type	Actuator		Terminals	
	in grams $\pm 5\%$	Waterproof	Plain plunger	Roller-ended plunger	Soldering lugs	NAS 1599 contacts
1910	10		●		○	
1915	15			●	○	
1920	20	■	●		○	
1970	20		●			○
1975	20			●		○

GENERAL CHARACTERISTICS

SERIES 1910, 1915, 1920, 1970, 1975

Temperature range	-40°C to +80°C
Minimum operating cycles (life) at rated load	50,000 cycles
Dielectric strength at sea level	500 Vrms
Dielectric strength at max altitude	300 Vrms
Insulation resistance at 500 Vdc	100 M Ω
Sinusoidal vibration	10G / 20 to 2000 Hz
Shock	50G / 11 ms
Contact voltage drop, initial value	60 mV (lugs) 120 mV (contacts)
Assembly torque (C)	5 Nm less than or equal to C greater than or equal to 6 Nm

NOTES

Admissible limits curve for angular command

PANEL CUTOUT

OTAN CODES

Type	N.N.O.
1910.....	
1915.....	5930 14 318 0000
1920.....	5930 14 350 6520
1970.....	5930 14 359 9708
1975.....	