COMMERCIAL, SEALED LIMIT SWITCH

The P6-4 series switches are commercial grade limit switches that are watertight and completely sealed to IP68S and IP69K. They are designed to be operated in extreme temperature ranges and with their stainless steel housing, are for use in the most rugged, harsh environments. These switches are available with either a ball or roller plunger actuation method. In addition, these switches can be configured as single pole and double pole plus single throw and double throw. The P6-4 offers three connection methods, solder or screw terminal plus flying wire leads.

Ball Plunger
Actuator Style
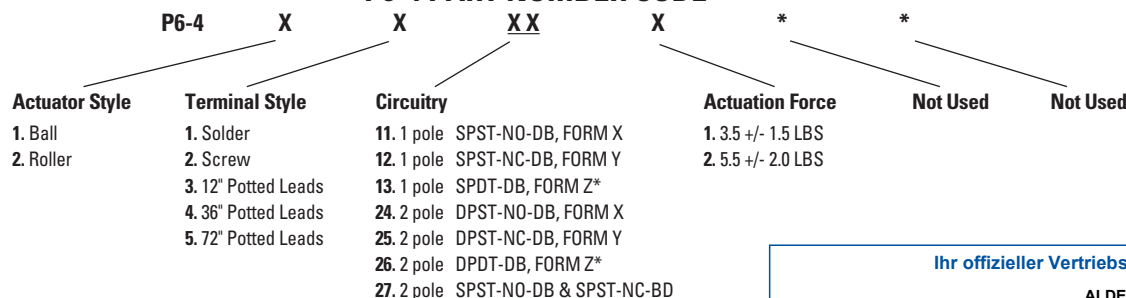
Roller Plunger
Actuator Style

Features:

- **Sealed watertight to IP68S and IP69K**
- **One-piece Stainless Steel housing**
- **Built to withstand extreme temperatures**
- **Choice of ball or roller plunger**
- **Three connection method options**

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

Load	Sea Level @ 28VDC	Sea Level 115VAC, 60Hz	Cycles
Standard Resistive	4A	4A	50,000
Standard Inductive	2A	2A	50,000
Logic Level Resistive	10mA @ 5VDC	NA	100,000
DWV	1000Vrms		

MECHANICAL:

Pretravel:	0.055 max
Actuating Force:	3.5 +/- 1.5 lbs or 5.5 +/- 2.0 lbs
Overtravel:	0.125
Full Overtravel Force:	17.0 lb. max
Releasing Force:	1.0 lb. min
Mechanical Life:	100,000 cycles

ENVIRONMENTAL:

Temperature Range:	-55˚C to 105˚C

MATERIALS:

Actuator:	Stainless steel
Case:	Stainless steel (303)
Seal:	IP68S and IP69K
Mounting Hardware:	Hex nut and lockwasher
Terminal Hardware:	Screw and lockwasher (only with screw terminal switches)

POTTED LEADS IDENTIFICATION	
SPST-NO-DB, FORM X	2 WHITE WIRE (NO POLE-1)
SPST-NC-DB, FORM Y	2 BLACK WIRE (NC POLE-1)
SPDT-DB, FORM Z	2 WHITE WIRE (NO POLE-1) 2 BLACK WIRE (NC POLE-1)
DPST-NO-DB, FORM X	2 WHITE WIRE (NO POLE-1) 2 RED WIRE (NO POLE-2)
DPST-NC-DB, FORM Y	2 BLACK WIRE (NC POLE-1) 2 YELLOW WIRE (NC POLE-2)
DPDT-DB, FORM Z	2 WHITE WIRE (NO POLE-1) 2 BLACK WIRE (NC POLE-1) 2 RED WIRE (NO POLE-2) 2 YELLOW WIRE (NC POLE-2)
SPST-NO-DB & SPST-NC-DB	2 WHITE WIRE (NO POLE-1) 2 YELLOW WIRE (NO POLE-2)

P6-4 PART NUMBER CODE

P6-4   X   X   X X   X   *   *

Actuator Style	Terminal Style	Circuitry	Actuation Force	Not Used	Not Used
1. Ball	**1.** Solder	**11.** 1 pole SPST-NO-DB, FORM X	**1.** 3.5 +/- 1.5 LBS		
2. Roller	**2.** Screw	**12.** 1 pole SPST-NC-DB, FORM Y	**2.** 5.5 +/- 2.0 LBS		
	3. 12" Potted Leads	**13.** 1 pole SPDT-DB, FORM Z*			
	4. 36" Potted Leads	**24.** 2 pole DPST-NO-DB, FORM X			
	5. 72" Potted Leads	**25.** 2 pole DPST-NC-DB, FORM Y			
		26. 2 pole DPDT-DB, FORM Z*			
		27. 2 pole SPST-NO-DB & SPST-NC-BD			

* Options not available for Screw Terminal Style (2)

COMMERCIAL, SEALED LIMIT SWITCH

ACTUATOR STYLE

.772±.020
FREE POSITION

(1.45)

.66   .39

.39

SØ.38

Ø.86

1.00 HEX

9-16-18 UNEF-2A

BALL ACTUATOR STYLE

1.375±.030
FREE POSITION

(1.45)

1.11

.75

.072
KEYWAY

.245

Ø.38

.12

1.00 HEX

9-16-18 UNEF-2A

ROLLER ACTUATOR STYLE

TERMINAL STYLE

1.45 MAX.

(.04)

.19 TYP.

.03 TYP.

(.06)

NO TERMINALS: ROUNDED END
NC TERMINALS: SQUARED END

SOLDER TERMINAL STYLE

1.41 MAX.

(.08)

8-32 UNC-2B
TYP.

SCREW TERMINAL STYLE

1.65 MAX.

12.0±1.0,
36.0±1.5,
OR
72.0±2.5
(SEE CHART)

.25±.13 TYP.

Ø1.05

18 AWG WIRES

POTTED LEADS STYLE

CIRCUITRY OPTIONS

SPST-NO-DB
FORM X
SCHEMATIC

SPST-NC-DB
FORM Y
SCHEMATIC

SPDT-DB
FORM Z
SCHEMATIC

DPST-NO-DB
FORM X
SCHEMATIC

DPST-NC-DB
FORM Y
SCHEMATIC

DPDT-DB
FORM Z
SCHEMATIC

SPST-NO-DB &
SPST-NC-DB
SCHEMATIC