

Automation & Controls Product Group of SVF Flow Controls



NEXUS-LP™ is a discrete valve controller providing an optimized solution for on/off valve control & position sensing for the process industries.

Equipped with a low watt miniature pilot valve and position switches or sensors, the **NEXUS-LP™** helps plants, platforms, and pipelines improve productivity and increase safety in the harshest environments and toughest applications.

NEXUS-LP™ DESIGN FEATURES

- ▼ Integrated Solution (switches, sensors, pilot and spool valve in a single platform)
- ▼ NEMA 4/4X, IP67 certified
- ▼ Suitable for use on rotary applications for double acting or spring return actuators
- ▼ NAMUR and ISO 5211 adjustable mounting bracket
- ▼ 5/2 Aluminum spool valve, anodized and polyester coated
- ▼ 2 x 1/2" NPT conduit entries
- ▼ Single pilot actuated, with manual operator (Cv=1.4)
- ▼ Optional C3 Coil for Intrinsic Safe Applications

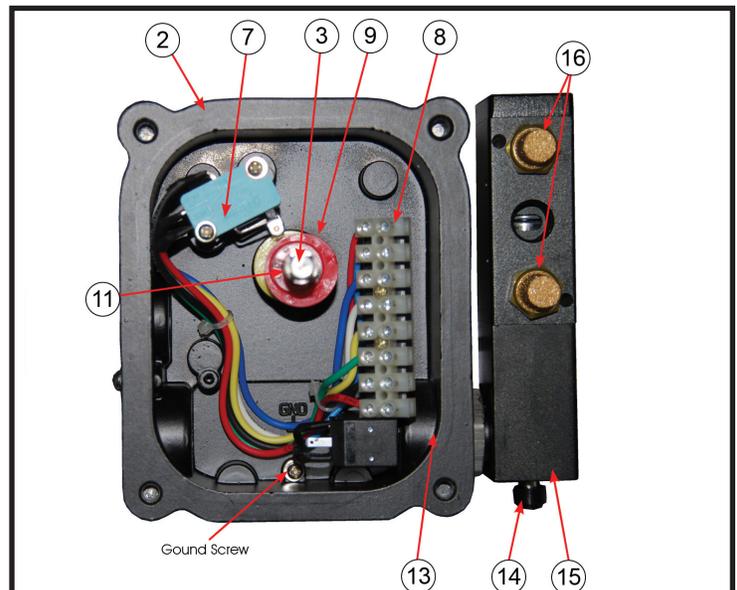
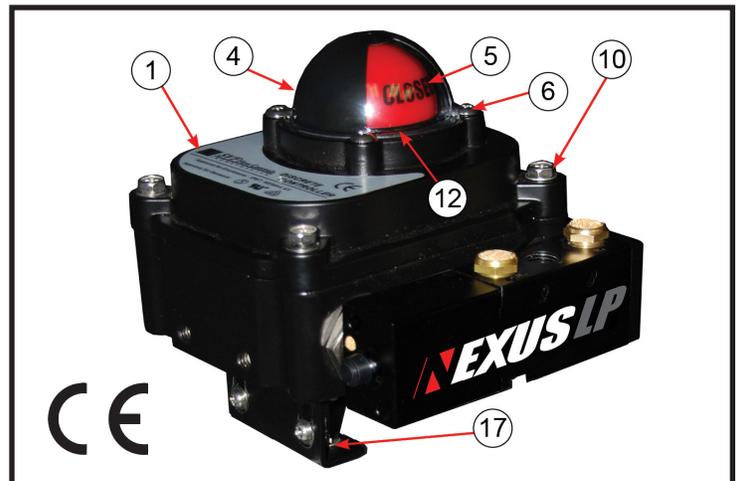
SVF Flow Controls was named among this year's Flow Control Innovation Awards winners for the key innovations represented by our NEXUS-LP/LPX Integrated Solenoid Valve & Limit Switch System. Based on votes from readers of Flow Control Magazine, the NEXUS-LP/LPX was honored this year for novel features and contributions to the process of fluid movement, measurement and/or containment.



MATERIALS OF CONSTRUCTION

ITEM #	DESCRIPTION	MATERIALS SPECIFICATIONS (Additional options available)
1	BOX COVER	DIE CAST ALUMINUM*
2	BOX HOUSING	DIE CAST ALUMINUM*
3	SHAFT	STAINLESS STEEL
4	INDICATOR COVER	POLYCARBONATE
5	INDICATOR	ABS
6	INDICATOR FASTENERS	STAINLESS STEEL
7	SWITCHES	MECHANICAL SWITCHES
8	TERMINAL STRIP	POLYCARBONATE
9	CAMS	POLYCARBONATE
10	COVER FASTENERS	STAINLESS STEEL
11	SHAFT O-RING (Not Shown)	BUNA "N"
12	INDICATOR O-RING	BUNA "N"
13	PILOT BASE	DIE CAST ALUMINUM
14	MANUAL OPERATOR	DIE CAST ALUMINUM
15	SPOOL VALVE	DIE CAST ALUMINUM
16	BREATHERS	COPPER ALLOY
17	MOUNTING BRACKET (NAMUR)	CARBON STEEL*

*With Polyester Coating



WORKING PRESSURE: 40 psi ~ 120 psi (2.8 bar ~ 8 bar)
 WORKING MEDIUM: Filtered and dried air
 TEMPERATURE RATING: -4°F ~ +185°F (-20°C ~ +85°C)

NEXUS-LP™ DIMENSIONS, WEIGHT

Item	Dimension	
	in.	mm
A	5.43	138
B	1.06	27
C	0.79	20
D	1.18	30
E	0.16	4
F	0.79	20
G	3.15	80
H	5.12	130
J	5.20	132
K	5.65	144
L	4.33	110
M	0.43	11
N	4.53	115
P	1.50	38
R	1.18	30
S	1.06	27
T	1.57	40

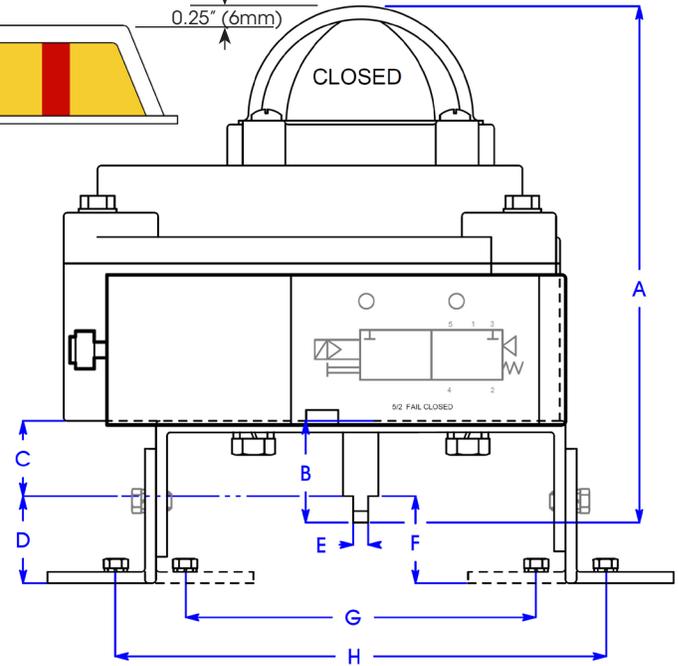
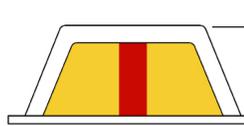
Weight:
2.5lbs. (1.13 kg)

NEXUS-LP
Discrete VALVE CONTROLLER

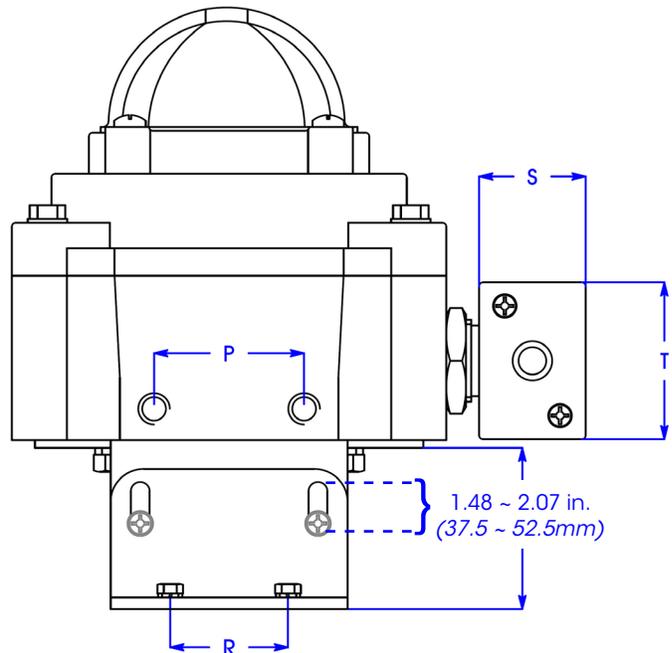
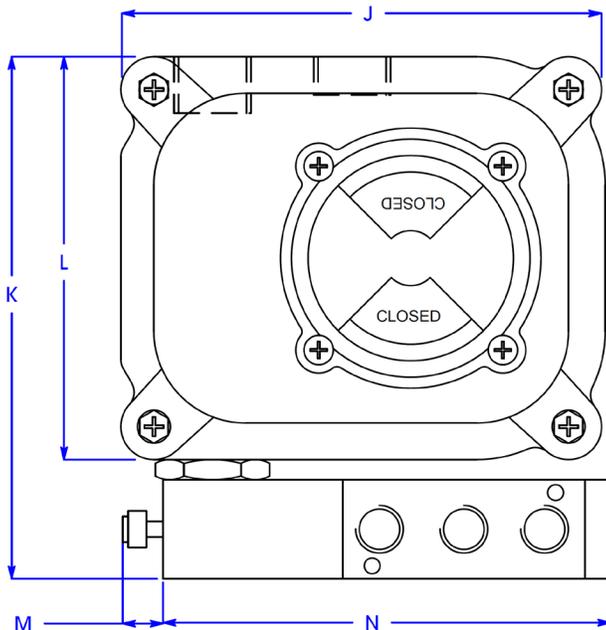


NEXUS-LP™
Discrete Valve Controller
shown with *aero2*
actuator &
SVF B41C ANSI Class
150# Flanged Ball Valve.
(Shown with optional
stainless steel tubing)

Optional High Visibility "L"
and "T" Port Indicator Covers



The overall height of the NEXUS-LP including the mounting bracket is:
5.93" when installing on *aero2* models A2DS-10 ~ A2DS-500 (Quad4 Models Q15 ~ Q45)
6.33" when installing on *aero2* models A2DS-550 ~ A2DS-700 (Quad4 Models Q60 & Q75)

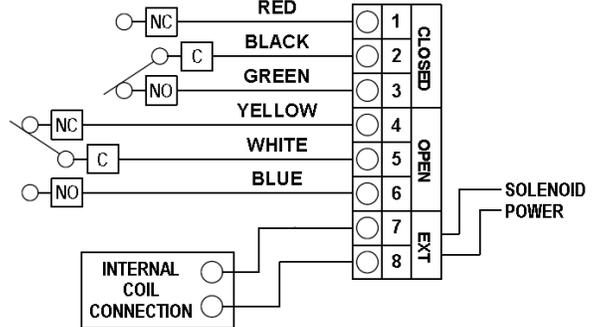
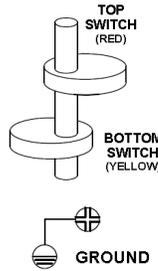


NEXUS-LP™ STANDARD WIRING DIAGRAM



Wiring Diagram located inside top cover.

Mechanical Switches M2B= (Standard) 2 SPDT, 15A 125-250VAC
Part # NEXUSLP(*)M2B(**) - Wiring Diagram # WDNX2PM2C



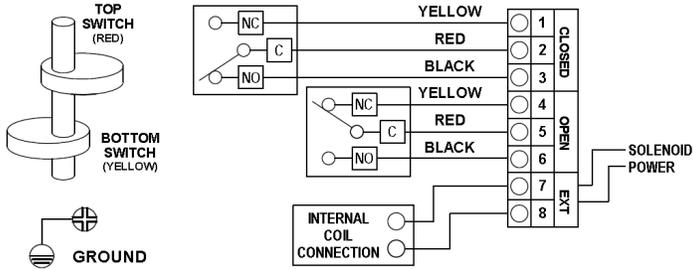
See next page for Wiring Diagrams for Optional Switches & Sensors

NEXUS-LP™ HOW TO ORDER GUIDE

SERIES	PILOT COIL VOLTAGE	SWITCHES/SENSORS	POSITION INDICATOR
<p>NEXUSLP= TWO POSITION DISCRETE VALVE CONTROLLER</p> <p>NEMA 4, 4X. IP67</p> 	<p>4 = 110 VAC (< 2.8VA) (Standard)</p> <p>2 = C2 Coil 24VDC (< 1 W)</p> <p>5 = 220VAC (< 2.8VA)</p> <p>For Intrinsically Safe *</p> <p>3 = C3 Coil 24VDC (<1W)</p>	<p>Mechanical Switches M2B= (Standard) 2 SPDT 15A 125-250VAC, 3A/24VDC</p> <p>M50= 2 DPDT 15A 125-250VAC, 3A/24VDC</p> <p><u>Optional Switches:</u> Proximity Sensors</p> <p>Q30 = Magnetic Reed Switch 2 SPDT 5-240VAC/VDC, 300mA</p> <p>P30 = Inductive NPN-NO 3 wire 10-30 VDC, 150mA</p> <p>P3A = Inductive NPN-NC 3 wire 10-30 VDC, 150mA</p> <p>P3B = Inductive PNP-NO 3 wire 10-30 VDC, 150mA</p> <p>P3C = Inductive PNP-NC 3 wire 10-30 VDC, 150mA</p> <p>PP0 = (P & F) Inductive, NC 2 wire 8VDC, 1mA</p> <p>P20 = Inductive, NO 2 wire 10-30VDC, 150mA</p>	<p>Leave Blank for Standard 90 degree Position Indicator Yellow Open, Red Closed</p>  <p>L = High Visibility Three Way "L" Yellow Base, Red Flow Bar</p>  <p>T = High Visibility Three Way "T" Yellow Base, Red Flow Bar</p>  <p>Consult SVF for other options available.</p>
<p>Order Example: (NEXUSLP4M2B)</p>			
<p>NEXUS-LP two-position discrete valve controller, 110VAC (Standard), M2B Mechanical Switches (Standard), 90 Degree Open/Closed Position Indicator.</p>			
NEXUSLP	4	M2B	(BLANK)

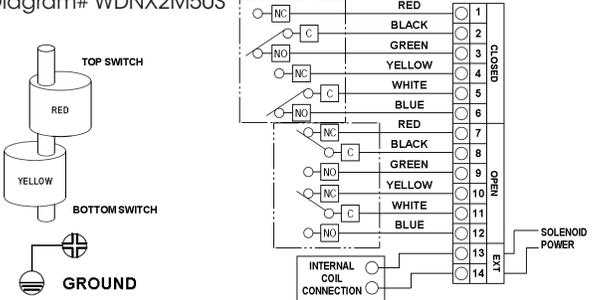
WIRING DIAGRAMS FOR SWITCHES & SENSORS

Wiring Diagram# WDNX2Q30S



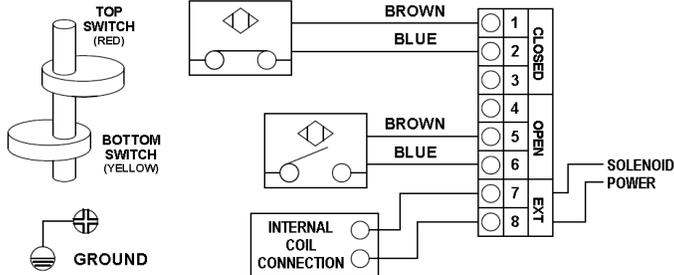
Part # NEXUSLP(*)Q30(**) = Proximity Sensors NC (3-Wire) Magnetic Sensors

Wiring Diagram# WDNX2M50S



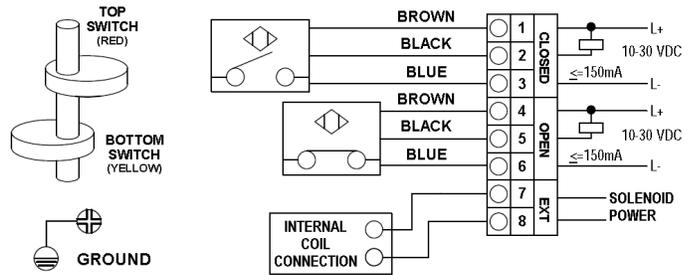
Part # NEXUSLP(*)M50(**) = Mechanical Switches 2 DPDT

Wiring Diagram# WDNX2P20S



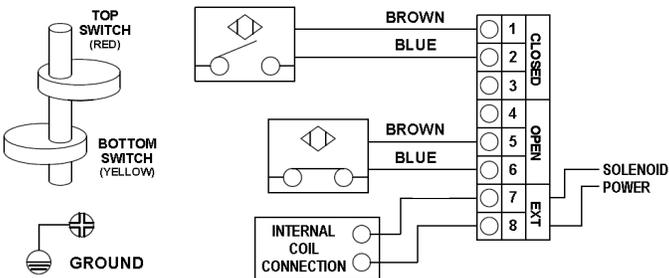
Part # NEXUSLP(*)P20(**) = Proximity Sensors NO (2-Wire) Inductive Sensors

Wiring Diagram# WDNX2P3AS



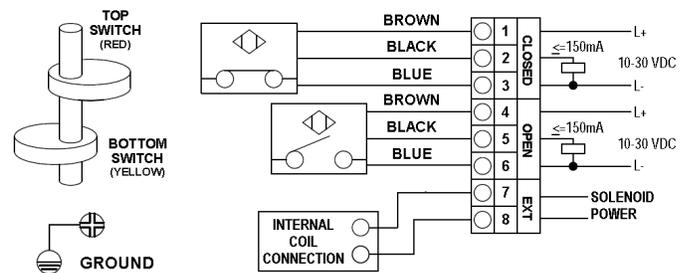
Part # NEXUSLP(*)P3A(**) = Proximity Sensors NPN NC (3-Wire) Inductive Sensors

Wiring Diagram# WDNX2PP0S



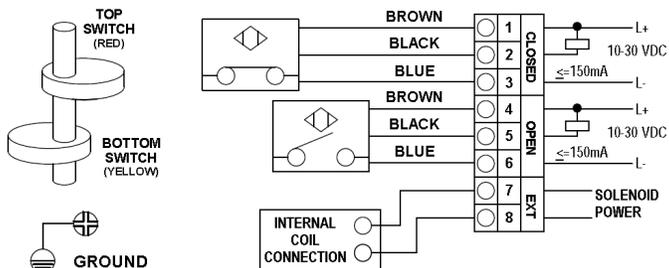
Part # NEXUSLP(*)PP0(**) = Proximity Sensors NC (2-Wire) (P & F) Inductive Sensors

Wiring Diagram# WDNX2P3BS



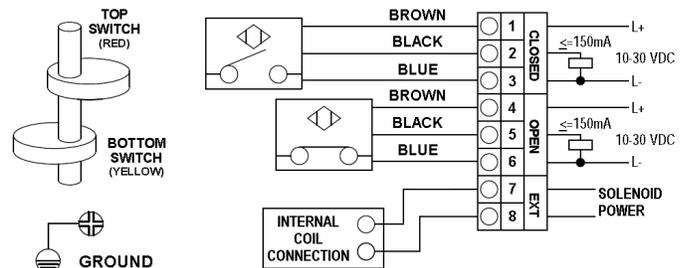
Part # NEXUSLP(*)P3B(**) = Proximity Sensors PNP NO (3-Wire) Inductive Sensors

Wiring Diagram# WDNX2P30S



Part # NEXUSLP(*)P30(**) = Proximity Sensors NPN NO (3-Wire) Inductive Sensors

Wiring Diagram# WDNX2P3CS



Part # NEXUSLP(*)P3C(**) = Proximity Sensors PNP NC (3-Wire) Inductive Sensors