

CHEMSUN Position Monitoring Switch

Type ATS Series

Application: Petroleum, chemical, water treatment, power plants, nuclear power, Mining etc.

Body Material	Cast Aluminium, CF8/304SS, Duplex
Switch Structure	Proximity, Mechanical
Explosion Protected	ATEX I M2 Ex ia I M2 Exd IIC T4 / Exia, IICT4, IP67
Temperature Range	-45 to +120°C



Rigid and compact design constructed from aluminum alloy die-casting capable of operating even in arduous conditions.

ATS 510 series

ATS 510 series are designed suitable for valve and actuators in hazardous area application, having compact but robust construction conforms to EN50014 and 50018 also suitable in Zone 1 and 2, and ingress protection IP67 Standard aluminum housing provides reliable explosion proof performance.



ATS 510S304 series

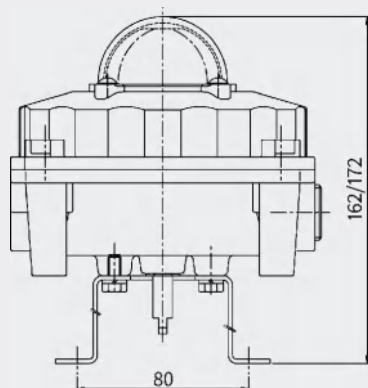
Special stainless steel housing (304L or Duplex) provide very high protection performance against extremely corrosive environmental condition. Suitable for off-shore application. Other specification is same with ATS 510S304 series except for enclosure & coating.



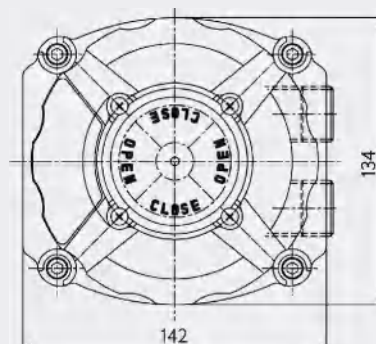
Specification	Standard	Option
Enclosure	Explosion proof Ex d IIC T6, IP67, O-ring sealed	IP 68
Outside coating	Epoxy-Polyester outside against corrosion	Nylon Coating Special color Coating
Ambient temperature	-20°C~+80°C	Higher(~100°C) and lower (-40°C~) temperature
Cable entries	2 - PF3/4", other standard threads	(NPT3/4, PF3/4", M25×1.5)
Terminal block	8 nos of terminal strips (6 for switches, 2 for solenoid valve power)	
Position indicator	Dome type 0°~90°	Others (3 way L-port, T-port)
Mounting bracket	Stainless steel acc. to VDI/VDE3845 NAMUR. SS1.SS2 as standard	SS3, MT1 as option
Switches(Sensors)	2-SPDT mechanical switch(Form C)	DPDT Switches Proximity sensors(P & F, Autonics) Magnetic sensors Position transmitter (output 0~1Kohm, 4-20mA DC)

Dimension

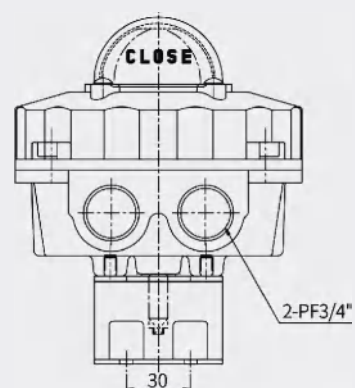
ATS 510 series



Front view



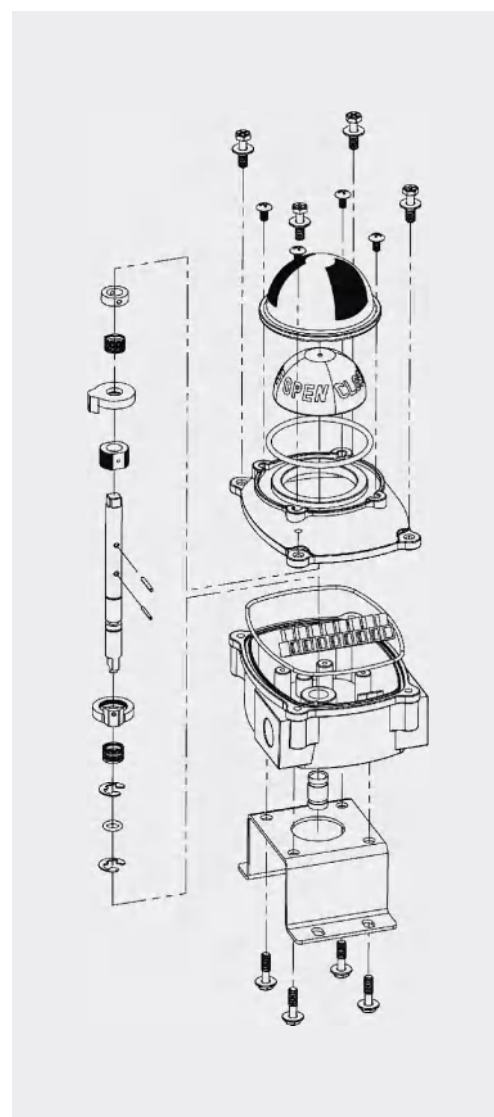
Top view



Side view

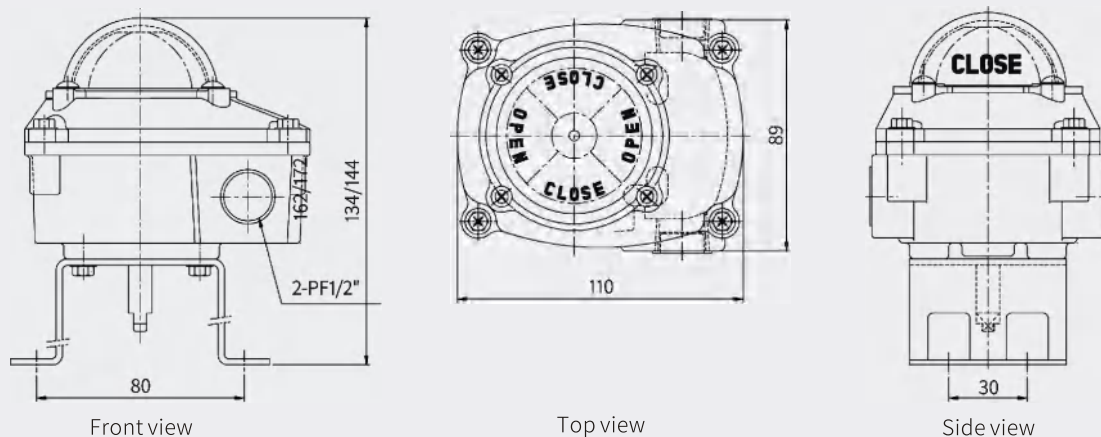
Construction Material

Housing	Low cooper aluminum die-casting
Coating	Epoxy-Polyester inside/outside(210 series) Chromated /Epoxy-Polyester(510 series) No painting on stainless steel housing
Sealing	NBR O-rings on each interface (Dome indicator, Lower/Upper housing, Shaft)
Cams	Poly-carbonate
Bushings	Bronze
Shaft	AISI303 Stainless steel
Earth Lug	Stainless steel
Bolts	All in stainless steel
Mounting bracket	Plate steel (ST series) Stainless steel (SS series and Mt1)



Dimension

ATS 210 series



ATS series position monitoring switch boxes are primary a rotary position indication device designed to integrate valve and NAMUR rotary pneumatic actuator with a variety of mounting options, internal switches or sensors and configurations.

ATS 210 series

ATS 210 series are specially designed suitable for small size pneumatic actuator and valves to reduce installation space, but provides high performance by equipping a variety of switches and sensors.

Specification	Standard	Option
Enclosure	Weather proof IP67, O-ring sealed	
Outside coating	Epoxy-Polyester inside and outside against corrosion	Nylon Coating Special color Coating
Ambient temperature	-20°C~+80°C	
Cable entries	2 - PT1/2", other standard threads	(NPT1/2", PF1/2", M20×1.5 and PG13.5)
Terminal block	8 nos of terminal strips (6 for switches, 2 for solenoid valve power)	
Position indicator	Dome type 0°~90	Others (3 way L-port, T-port)
Mounting bracket	Stainless steel acc. to VDI/VDE3845, NAMUR, SS1, SS2 as standard	SS3, MT1 as option
Switches(Sensors)	2-SPDT mechanical switch (Form C) as standard	Proximity sensors (P & F, Autonics), Others

Mechanical Switches

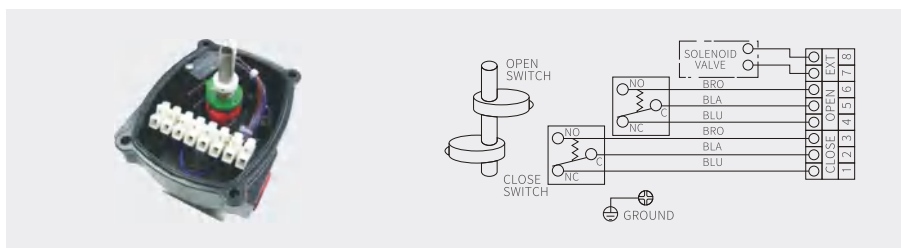
2-SPDT switches

Rating: 16A 1/2HP 125/250V AC

0.6A 125V DC

0.3A 250V DC

Approved by UL, CSA



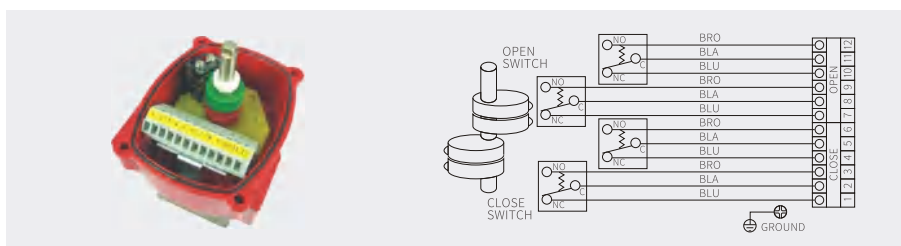
4-SPDT switches

Rating: 5A 125 V AC

3A 125 V AC

0.6A 125 V DC

Approved by UL, CSA



Mechanical DPDT switches

Rating: 10A 125 or 250V AC

2A 480V AC

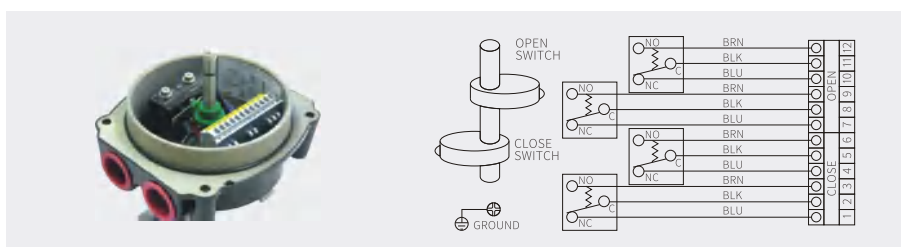
1/8HP 125V AC

0.25HP 250V AC

0.5A 125V DC

0.25A 250V DC

Approved by UL, CSA



Proximity Sensors

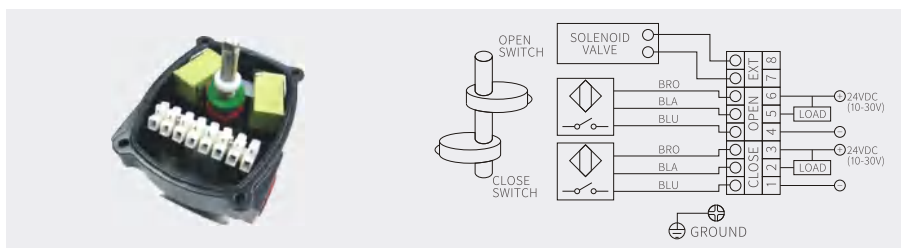
Autonics sensors

PS17-5DNU(NPN,PNP)

Voltage rating: 10~30V DC

Sensing distance: 5mm

Ambient temperature: -25°C ~+70°C



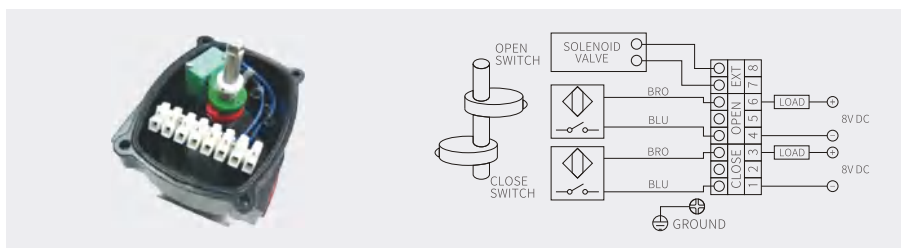
P & F sensors

NJ2-V3-N(Intrinsic safe, two wire)

Voltage rating: 8V DC

Sensing distance: 2mm

Ambient temperature: -25°C ~+100°C

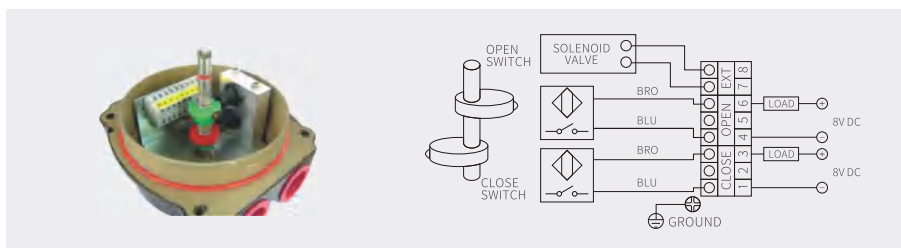


NJ4-12GK-SN

Voltage rating: 8V DC

Sensing distance: 4mm

Ambient temperature: -50°C ~+100°C



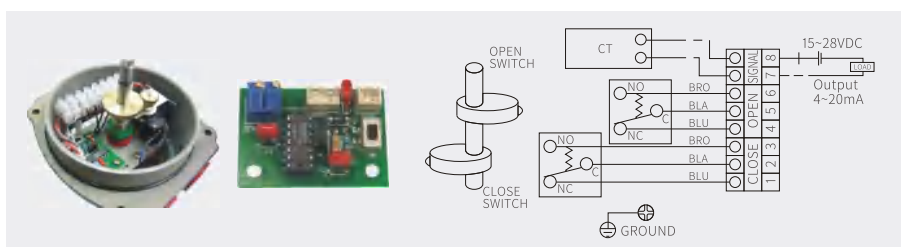
Position transmitter

Providing 4-20mA DC (or 0~1Kohm) output signal as feedback, 15-28VDC loop power (24V DC input power)

Load impedance: 0~600 Ohm,

Max output: 35mA DC

Adjustment: Zero and span



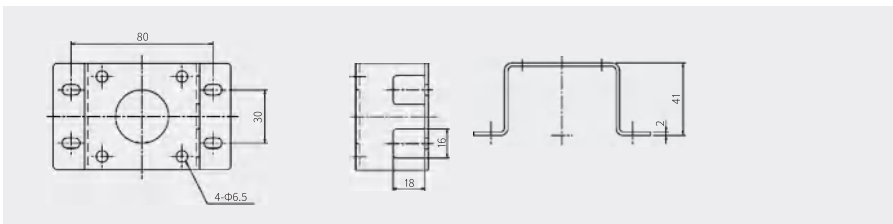
Model number Legend

ATS	2	1	0
	2: Weather proof	1: Mechanical switches	0: 2 - SPDT
			1: 3 - SPDT
	5: Explosion proof		2: 4 - SPDT
			3: 2 - SPST
	5: Special material housing(304L, Duplex)		4: 2 - DPDT
			5: 2 - SPDT + output(4-20mA)
		2: Proximity sensors	0: Autonics (PS17-5DNU)
			1: P & F (NJ2-V3-N)

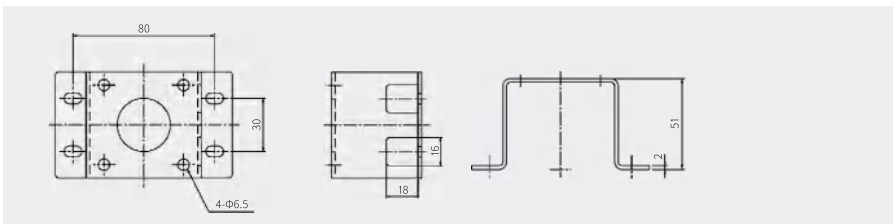
- Model numbers in Green are applicable to ATS210, 510 and 510S series
- Model numbers in Red are applicable to ATS510 and 510S series

Mounting bracket (Acc. to VDI/VDE3845)

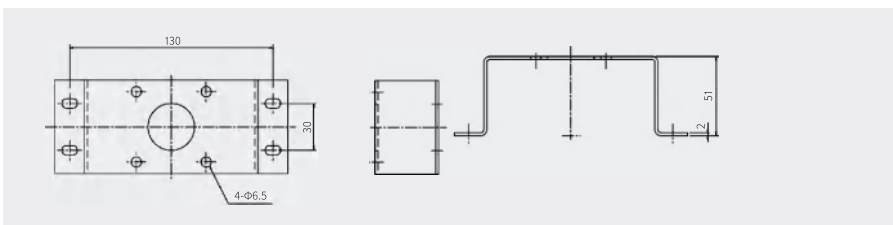
SS1



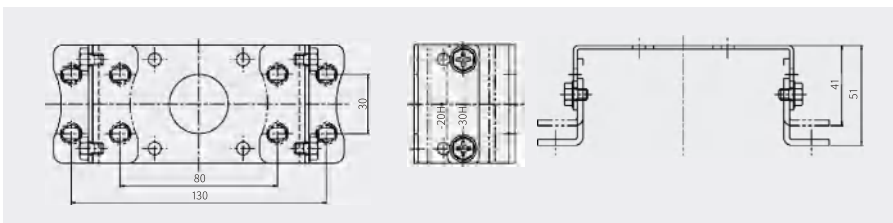
SS2



SS3



MT1



Standard bracket provided together with switch box(included)

SS1 30 × 80 × 20(H) ST1 30 × 80 × 20(H)

SS2 30 × 80 × 30(H) ST2 30 × 80 × 30(H)

Optional bracket provided with extra cost

SS3 30 × 130 × 30(H) ST3 30 × 130 × 30(H)

MT1 30 × 80 × 20(H), 30 × 80 × 30(H) Others as option

30 × 130 × 20(H), 30 × 130 × 30(H)

*** Specifications subject to change without notice, please focus on our info in web.