

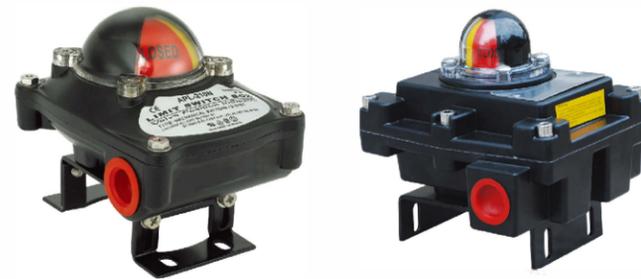
APL limit switch

APL-210N and APL-410N limit switches send location signal of actuator and valve to the field of remote-control station, which can be installed on the top of actuator directly. It complies with VDI/VDE3845 standard. It is equipped with field visible location indicator and adjusting cam. Adjusting cam is installed via spline and spring. You can adjust to the needed position when cam is separated from spline. Dismantle screws on the case and two interfaces of cable inlet G1/2". Internal limit switch is connected to the terminal beforehand. There are 8 terminals, which can be used for magnetic valve connection.

Main technical parameters

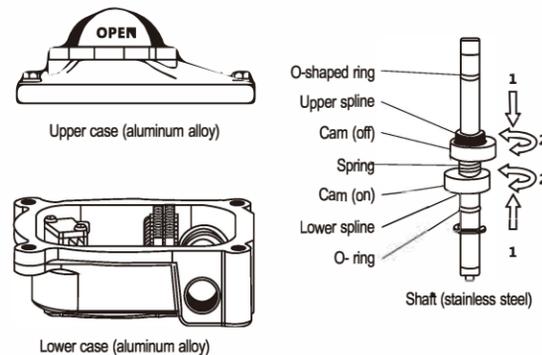
APL-210N	APL-410N
Shell protection (Ip67)	explosion-proof (EXdII BT4)
Mechanical microswitch	
Voltage: max. AC 250V, AC or DC	
Current: 0.6A 125VDC, 0.3A 250VDC, 16A 1/2HP 125, 250V AC 16(3)A 250V-T105	
Electrical interface G1/2"	

Option: Send current output signal.
Proximity switch, resistive potentiometer output signal.



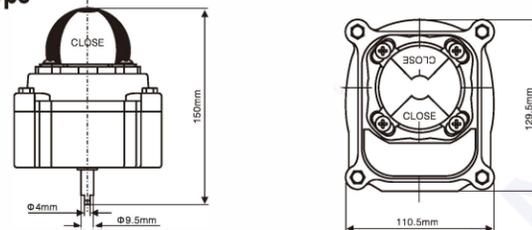
Operation instruction

Adjust the switch location according to arrow instruction:
1. Push cam spring, and the cam separate from spline engaging.
2. Rotate the cam casually to adjust to the needed location, after which loosen the cam. Make sure the cam has been pushed back to reset engaging by

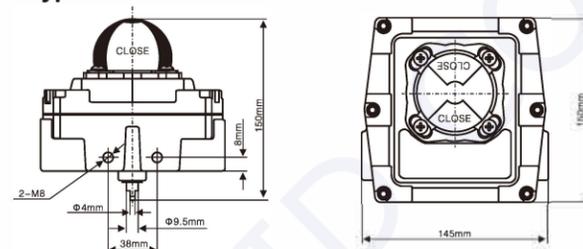


Dimension and connection size

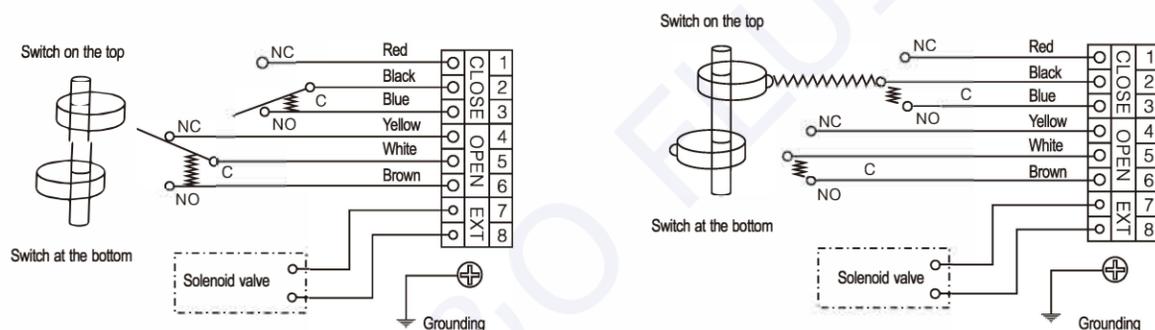
210N Type



410N Type



Wiring



Mechanical switch (2 SPDT)

Proximity switch (2 SPDT)

clutch gear operator

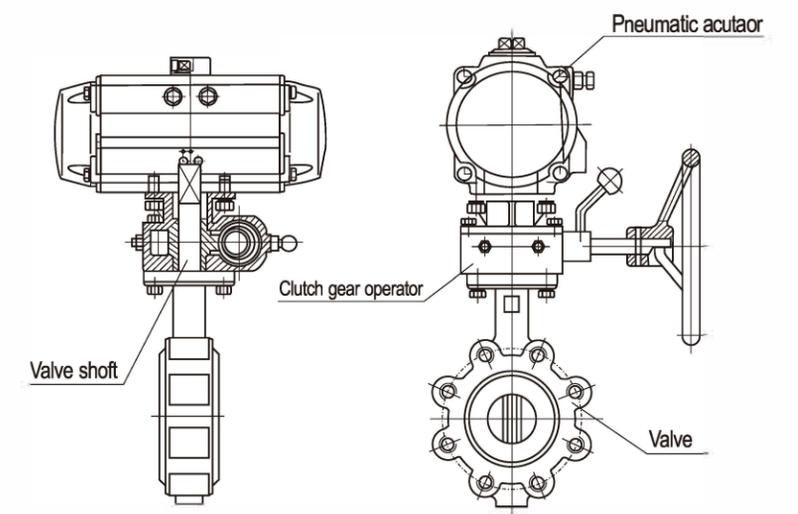
This gear operator is used for butterfly valve, ball valve and cock valve together with pneumatic device to realize manual and pneumatic drive.

Features

1. Small in volume, light weight, reasonable design and novel pattern.
2. It consists of a series of products, so output torque matches with all kinds of pneumatic devices and valves.
3. There are two keyway apart 90 in the inner hole of worm gear so as to be convenient for customer to choose relative position between gear operator and valve.
4. Pull out the position pin and rotate off center device with 180° to realize pneumatic drive by positioning pin acted or to realize manual drive in the opposite way.
5. The gear operator is filled with special lubricant before leaving the factory. It is solid sealed with valve after installation possessing dustproof and waterproof function with protection grade Ip65.

Operation Instructions

1. The bottom of gear operator should be connected with valve, bracket surface connected with cylinder, valve stem go through the inner hole of worm gear and the square on the end of stem matches with square hole of cylinder. (working procedures; The cylinder drives valve stem and worm gear rotating together when pneumatic drive, and worm shaft meshes with worm gear to drive valve stem rotating along with piston of cylinder moving when manual drive when pneumatic drive, pull out the pneumatic drive by worm gear rotated following with pneumatic valve stem. Just make the worm shaft mesh to realize manual drive.)
2. No mesh may occur when move handle toward outside by 180 and close the worm shaft. please rotate hand-wheel by and angle to make it.
3. Three types of bracket are available so that customers can choose from them to match with different cylinder as need.
4. It cannot be operated by pneumatic and manual driven at the same time.



Examples of the installation