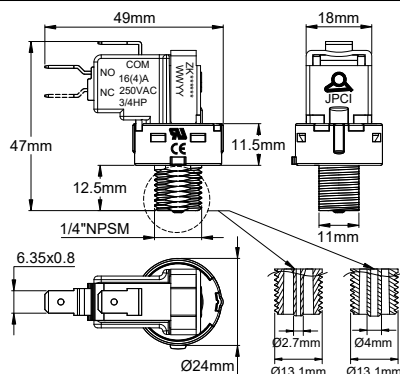




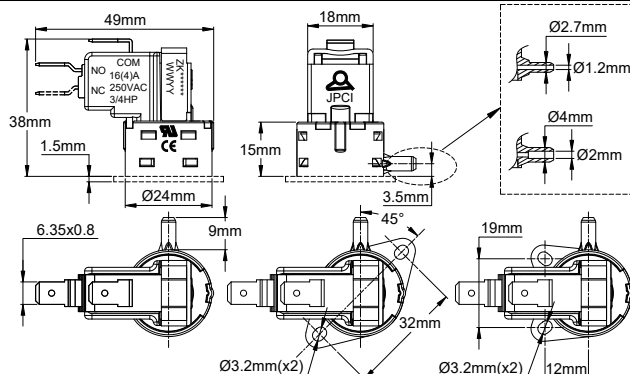
# Air switches for spas and swimming pools

## Snap action contact air switch, single pole, momentary or latching action New high sensitivity types

Fitting	Standard rating	Maximum rating	Maximum remote actuating distance (Manual button, 3mm ID tube)	Type
PA66	16A, ¼HP, 250VAC	22A, 2HP, 250VAC	7 (5)m	<b>ZK</b>



¼" NPSM thread



Side spout

### Main applications :

Direct actuating of pumps and blowers in whirlpool baths, hot tubs, jacuzzis and swimming pools, sink erasers, garbage disposers, medical equipment, plumbing or home appliances used with risks of water splashing. Resist to spas and swimming pools ozone concentration.

**They feature in standard a patented barometric and thermometric compensation, anti-vibration locking, and are protected against tampering.** Compared to the old ZP model, although in a smaller footprint, the design of the mechanical assembly and the diaphragm greatly increases the length of the usable connecting tube.

### Technical features :

**Fluid:** Air only

**Pressure port connection:** Plastic spout

- For ⅛" (3mm) ID flexible plastic tubing
- For ¼" (6.35mm) ID flexible plastic tubing

Maximum PVC tube hardness 70 shore A

**Membrane:** Silicone, 22mm diameter.

**Housing:** PA66

**Contact:** Snap action, SPNO.

**Electrical rating:**

- Standard rating micro-switch: 16A 125/250VAC; ½HP 125VAC; ¾HP 250VAC

- On request: up to 22A, 2HP 250VAC

**Action (2 styles of action are possible):**

- Momentary: the contact switches when under pressure, and returns to its original position when there is no more pressure.

- Latching: a first pressure pulse switches the contact, which remains in this position, and only returns to its initial position with a second pressure pulse.

**Electrical connection:** 6.35 × 0.8mm quick connect terminals

**Maximum operating pressure:** 120 kPa (1200 mbar, 17 PSI)

**Ambient temperature limits:** Air: -10 ~ 85°C (14 to 185°F).

Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice



# Air switches for spas and swimming pools

**Barometric compensation:** Calibrated flow leak orifice inside the pressure chamber

**Mounting fittings:** ¼" NPSM with 2 flats at 11 mm distance on thread, for installation through a board, or without thread, with side spout, for mounting on a board surface with 2 screws with 19mm distance.

**Switch operation:** Operates on a sealed pressure air displacement, with patented calibrated micro-leak providing barometric and temperature compensation.

**Caution:** Use air transmitters with enough air volume to achieve minimum operating pressure.

Too long connection tubes and/or too small pressure transmitter will not operate the air switch or will operate it with a momentary action.

**Accessories, in option or available as spare parts:** ABS plastic nut (Maximum tightening torque 1.5 Nm) and tube securing nut (Maximum tightening torque 2 Nm).

## How the locking nut tighten the PVC connecting tube :

	<p>In this series, the use of a connecting tube locking nut increases the force required to disconnect the tube by 350%. (It can then reach 14 daN)</p>		<p>¼"NPSM nut reference <b>if ordered as a spare part:</b></p> <p>Z6VE10003500003A</p>
			<p>¼"NPSM securing nut reference <b>if ordered as a spare part:</b></p> <p>Z6VE10003500006A</p>

## Maximum actuating distances with flexible PVC connecting tube. (With air button and air pedal of this catalogue)

Tests with reproducible automatic test equipment, 5.6 cm<sup>3</sup> (3.4 cubic inches) pneumatic button chamber, 75 kPa (750 mbar, 10.9 PSI) pressure impulse for 3 seconds

Switch operating force	Nominal tube I.D.	With air button	With foot pedal
100 gr.	1.5 mm	20 m (65 ft. 7 in.)	39 m (127 ft. 11 in.)
	3 mm	7 m (23 ft.)	19 m (62 ft. 4 in.)
160 gr.	1.5 mm	13 m (42 ft. 8 in.)	30 m (98 ft. 5 in.)
	3 mm	5 m (16 ft. 5 in.)	12 m (39 ft. 4 in.)

## Part numbers with normally open contact, **latching** action\*

Pressure port fitting	Included accessories	Standard switch (16A 250VAC, 3/4HP 250VAC)	High rating switch (22A 250VAC, 2HP 250VAC)
¼" NPSM with spout for ⅜" (3mm) internal diameter PVC tube**	None	ZK1020U500000000	ZK1720U600000000
	¼" NPSM nut	<b>ZK1020U500000006</b>	ZK1720U600000006
	¼" NPSM tube securing nut	ZK1020U500000007	ZK1720U600000007
	¼ NPSM nut + ¼" NPSM tube securing nut	<b>ZK1020U500000005</b>	ZK1720U600000005
Spout on the side for ⅜" (6x3mm) tube on the side	None	<b>ZK1022U500000000</b>	ZK1722U600000000
Spout on the side for ⅜" (3x1.5mm) tube on the side	None	ZK152BU100000000	ZK172BU600000000

## Part numbers with normally open contact, **momentary** action\*

Pressure port fitting	Included accessories	Standard switch (16A 250VAC, 3/4HP 250VAC)	High rating switch (22A 250VAC, 2HP 250VAC)
¼" NPSM with spout for ⅜" (3mm) internal diameter PVC tube**	None	ZK2520U100000000	ZK2720U600000000
	¼" NPSM nut	<b>ZK2520U100000006</b>	ZK2720U600000006
	¼" NPSM tube securing nut	ZK2520U100000007	ZK2720U600000007
	¼" NPSM nut + ¼" NPSM tube securing nut	<b>ZK2520U100000005</b>	ZK2720U600000005
Spout on the side for ⅜" (6x3mm) tube on the side	None	<b>ZK2522U100000000</b>	ZK2722U600000000
Spout on the side for ⅜" (3x1.5mm) tube on the side	None	ZK252BU100000000	ZK272BU600000000

**In bold:** the most common models.

\* Models with change-over (SPDT) contact: replace the 5th character "2" in the reference by "3".

\*\* Models with spout for ⅜" (1.5mm) internal diameter tube instead of ⅜" (3mm ID): replace the characters "20" in the reference by "2A"