

## Fuel filler security Type BAK-Q80, BAK-Q60

Filler security Q80 and Q60 is a control device that protects and monitors fuel fillers in power units' fuel tanks.



### Designated use

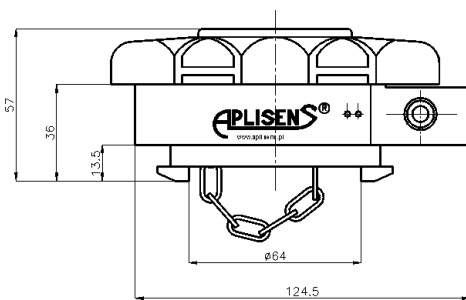
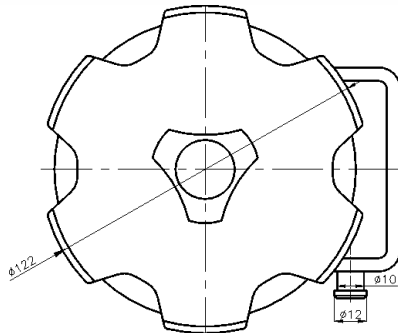
The system is composed of three modules:

- "Q80 or Q60 PLUG MODULE"
- "CABIN SIGNALLING DEVICE MODULE"
- "ANTI-THEFT STRAINER MODULE",

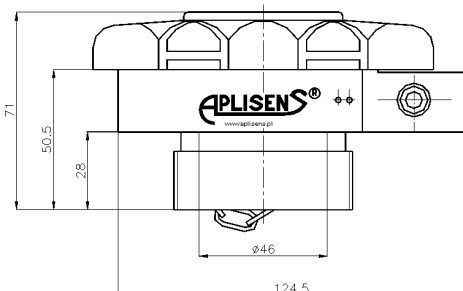
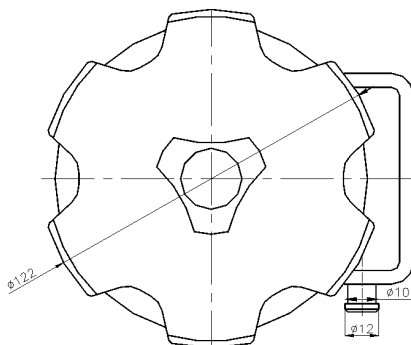
The plug module BAK-Q80, BAK-Q60 controls and monitors fuel filler access on trucks, machinery, construction equipment. As an option, it can be equipped with additional event signaling devices for the driver and an anti-burglary strainer, both of which can also function as separate devices. "PLUG MODULE" and/or "CABIN SIGNALLING DEVICE MODULE" is connected to the monitoring system. "CABIN SIGNALLING DEVICE MODULE" has a preset number of elements for signaling events to the driver.

### Accessories:

- Float seal (pic.1) - prevents unscrewing the float and disconnecting the return hose.
- Anti-theft strainer (pic.2 i 3) is a pipe with perforated walls and bottom. The shape of the bottom and size of holes have been fitted so as not obstruct the filling operation while protecting against theft.
- Plug cover (pic.4) - protects the plug locking mechanism from dirt, making the plug more comfortable to use and prolonging its life.



BAK-Q80



BAK-Q60

## Structure and operation

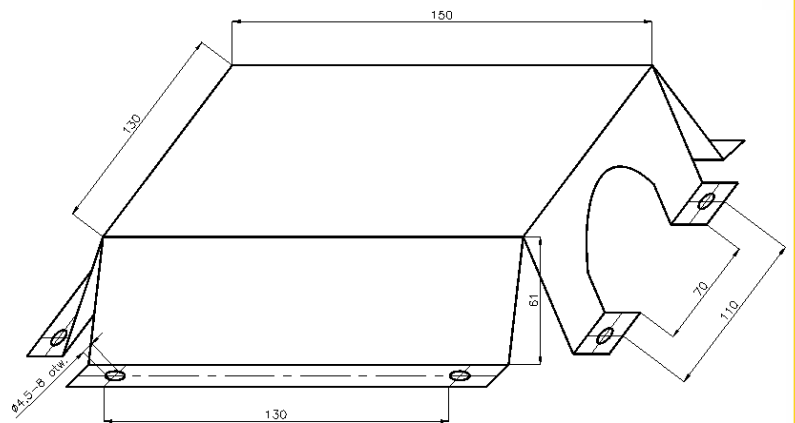
BAK-Q80 and BAK-Q60 both work by controlling the presence of the transponder, situated in the fuel plug, over the "PLUG MODULE" mounted in the tank's filler. The system interprets unscrewing the plug as a change in output state or sabotage, cutting the cable through loss of signal on communication cord. The cord can be connected to the monitoring system and/or "CABIN SIGNALLING DEVICE MODULE". The "CABIN SIGNALLING DEVICE MODULE" notifies of the plug having been unscrewed (the cable having been cut - sabotage) with a LED diode and a beeper in the driver's cabin. It can be connected to the monitoring system that records all events. Optionally, "CABIN SIGNALLING DEVICE MODULE" operates with SILENT OPENING feature (unscrewing the plug is not signaled with a beep in the cabin) and ALERT MEMORY feature (information of unscrewing the plug is stored when the driver is not present in the cabin). "CABIN SIGNALLING DEVICE MODULE" generates two types of signals for unscrewing the plug: normal opening NO and normal connection NC. All signals are generated in OC type (opened collector). "ANTI-THEFT STRAINER MODULE" is a pipe with perforated walls and bottom. The shape of the bottom and size of holes have been fitted so as not obstruct the filling operation while protecting against theft. "ANTI-THEFT STRAINER MODULE" is an integral part of "PLUG MODULE" and is mounted during production.

### Assembly and usage

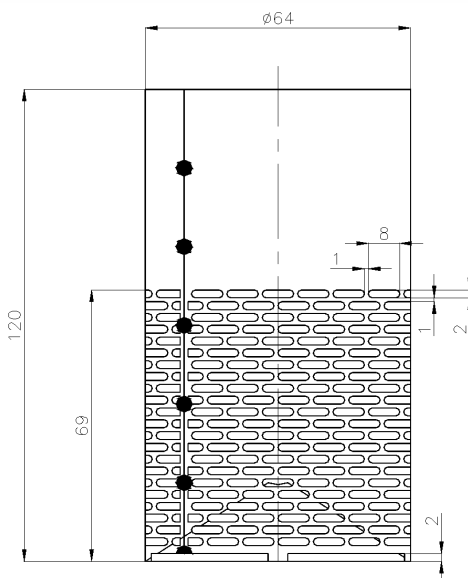
Filler security BAK-Q80 and BAK-Q60 is mounted directly on the fuel filler. A detailed assembly instruction is provided in Operation & Maintenance Manual.

### Technical Specification

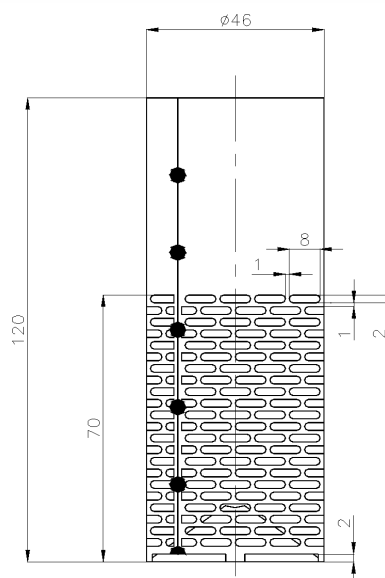
Power  $8 \div 32V$  DC, max 35V  
 Current draw 35mA  
 Working temperature  $-25...+80^{\circ}C$   
 OC signal parameters  
 $U_{max} = V$  of power;  $I_{max} = 20$  mA DC



Pic.1 Float seal



Pic.2 Anti-theft strainer  
BAK-Q80



Pic.3 Anti-theft strainer  
BAK-Q60



Pic.4 Plug cover