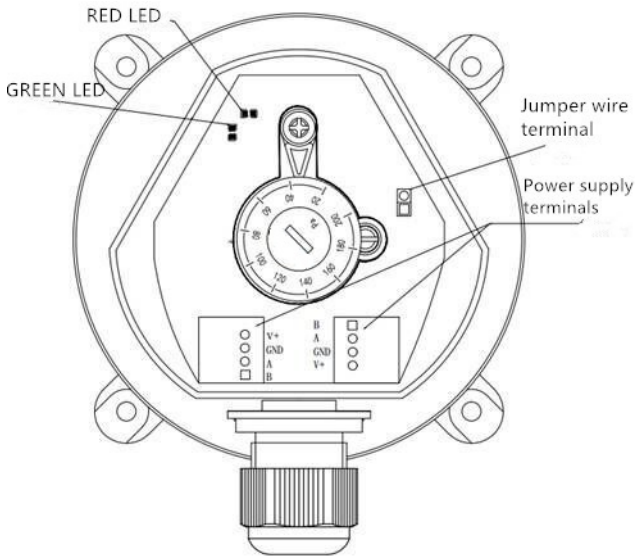
LF32-xx-MOD Pressure switch

LF32-MOD series pressure switches are capable of sensing very small pressure changes and are widely used for air conditional control monitoring such as fan proving and dirty filter alarming. Due to its outstanding design, the set point is easy to see and adjust.

The LF32-MOD communicates the ON/OFF status of the pressure switch operation over an RS485 network, utilising the Modbus RTU protocol standard.

Other features are:

- LED indication of switch-state
- End-Of-Line termination jumper
- Spring clamp wiring terminals (screw-less)



Red LED: Indicates when the pressure switch state is low

Green LED: Indicates when the pressure switch state is high

Jumper: RS485 End-Of-Line termination (120Ω when jumper is in place)

Power supply terminals:

V+	Power supply positive
GND	Power supply negative
A	Communication port +
B	Communication port –

HRW Limited
Unit E, 11/F, Sun Ying Industrial Centre
9 Tin Wan Close, Tin Wan
Hong Kong
Ph +852 2546 7402
Fax +852 2546 7403
www.hrw.hk

Communication Protocol

The RS485 network communication protocol utilizes the Modbus RTU standard.

Data format

Start bits: 1
Data bits: 8
Parity: None
Stop bits: 1
Baud Rate: 9600 bps

Slave equipment ID address

The default address is 01 and may be changed in the range 1…255 through communication by commanding register 05 (F06 / Write).

Register 05 is write only.

Pressure Switch Status Register

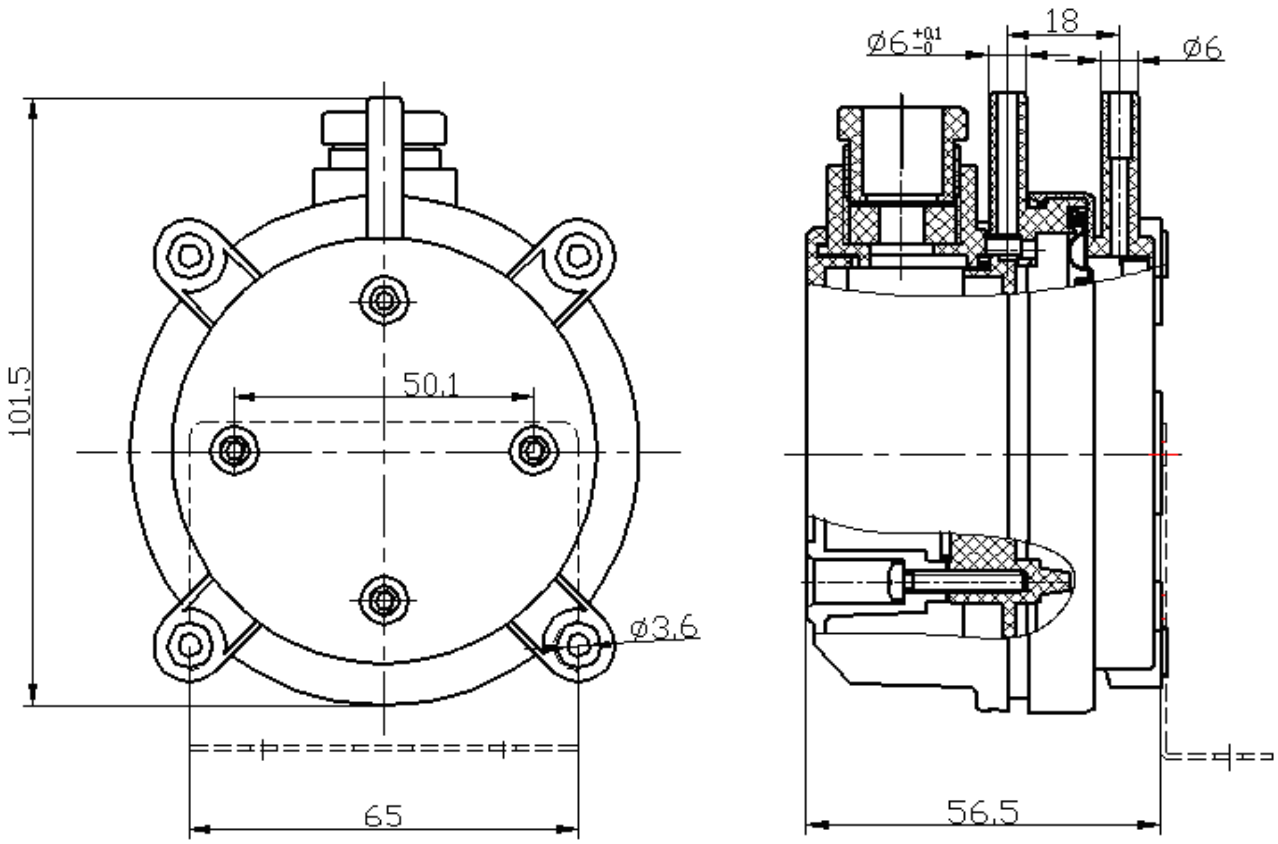
The ON/OFF state of the pressure switch may be read at register 01 (F01 / Coil [Binary Output]).

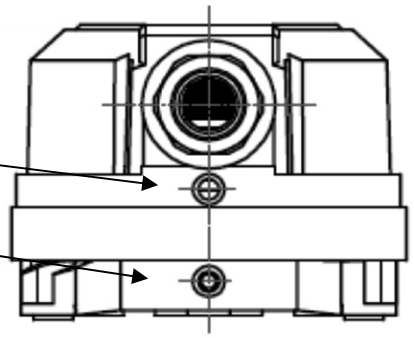
A returned value of 0 = OFF
A returned value of 1 = ON

Error Codes

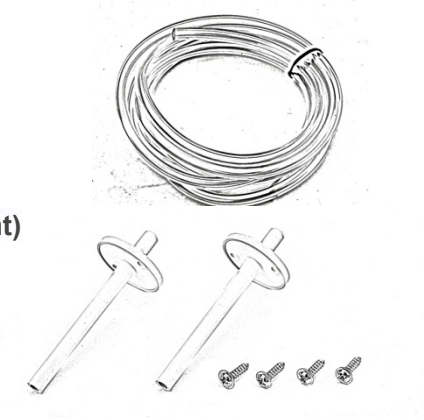
0x01	Illegal function code. Only reading the switch state (F01) or the device address (F03), and Writing the device address (F06) are supported
0x02	Error in reading the switch register address or switch address
0x03	Error in writing register address or device address
0x04	Illegal data format

Dimensions & Accessories





DFK200 Accessory Kit
(included when 'A' order code part is present)



Technical Data

Model	LF32-xxA-MOD xx: 02 = 20…200Pa 03 = 30…300Pa 05 = 50…500Pa 10 = 100…1000Pa A: Optional. If A is included in the order code then the DFK200 accessory kit will be included (air tubes, duct nozzles & mounting screws)
Media	Air, non-combustible and non-aggressive gases
Max operating pressure	10kPa
Mounting position	Diaphragm in any vertical plane
Degree of protection	IP45(with cover)
Operating temperature	-40℃…85℃
Protocol	RS485, Modbus RTU
Electrical Rating	Input voltage：DC12-24V±10% Power consumption：140mW（DC20V power supply）
Terminals	Base：distance 2.54mm 4pin × 2 terminals Resistance：20mΩ Wire gauge：24-20AWG 1mm² Stripping wire length： 11mm
Wiring	For daisy-chain network & DC power wiring use Belden 9842 or equivalent (2 twisted pairs c/w foil shield and braided shield)
Air Connection	Φ6.0mm tube