

# Differential pressure switch

## Model DPSM-690

Switzer data sheet DPSM-690

### Applications

- Compressors
- Driers
- HVAC
- Cold storage
- Chillers

### Special features

- Wide adjustable range
- In-built sturdy mechanism
- Manual reset
- Time delay relay



Differential pressure switch, model DPSM-690

### Description

Type DPSM-690 is used as a safety device on pressure lubricated refrigeration compressors, where under any operating conditions the lubricating oil pressure has to be kept higher than the suction pressure or crankcase pressure.

The bellows marked OIL is connected to outlet side of compressor or at discharge from crankshaft lubrication system, and measures the lubricating oil pressure P1. Bellows marked LP is connected to the compressor crankcase and measures the crankcase pressure P2.

Differential Pressure (P1–P2) is the pressure available for the lubrication system. If during start up, differential pressure fails to reach the set value, or if during operation differential pressure falls below the set value, the control device breaks the circuit to compressor motor after an allowable time delay. Once the circuit is broken, it has to be reset manually by pressing the reset knob.

## General specification

### Enclosure

Powder painted Mild Steel

### Enclosure Protection

IP:30, IS:13947 (Part1),1993

### Reset

- Manual
- Auto

### Time Delay

60 seconds

### Sensing Element

Phosphor Bronze Bellows

(SS Bellows IS:110V AC for NH3 application)

### Electrical Rating

- With TDR: 2A 250V AC, 0.2A 250V DC
- Without TDR: 5A 125 / 250V AC, 0.25A 250V DC

### Cable Entry

Suitable for 6 to 14 mm dia cable

### Ambient Temperature

(-)40°C ... 60°C

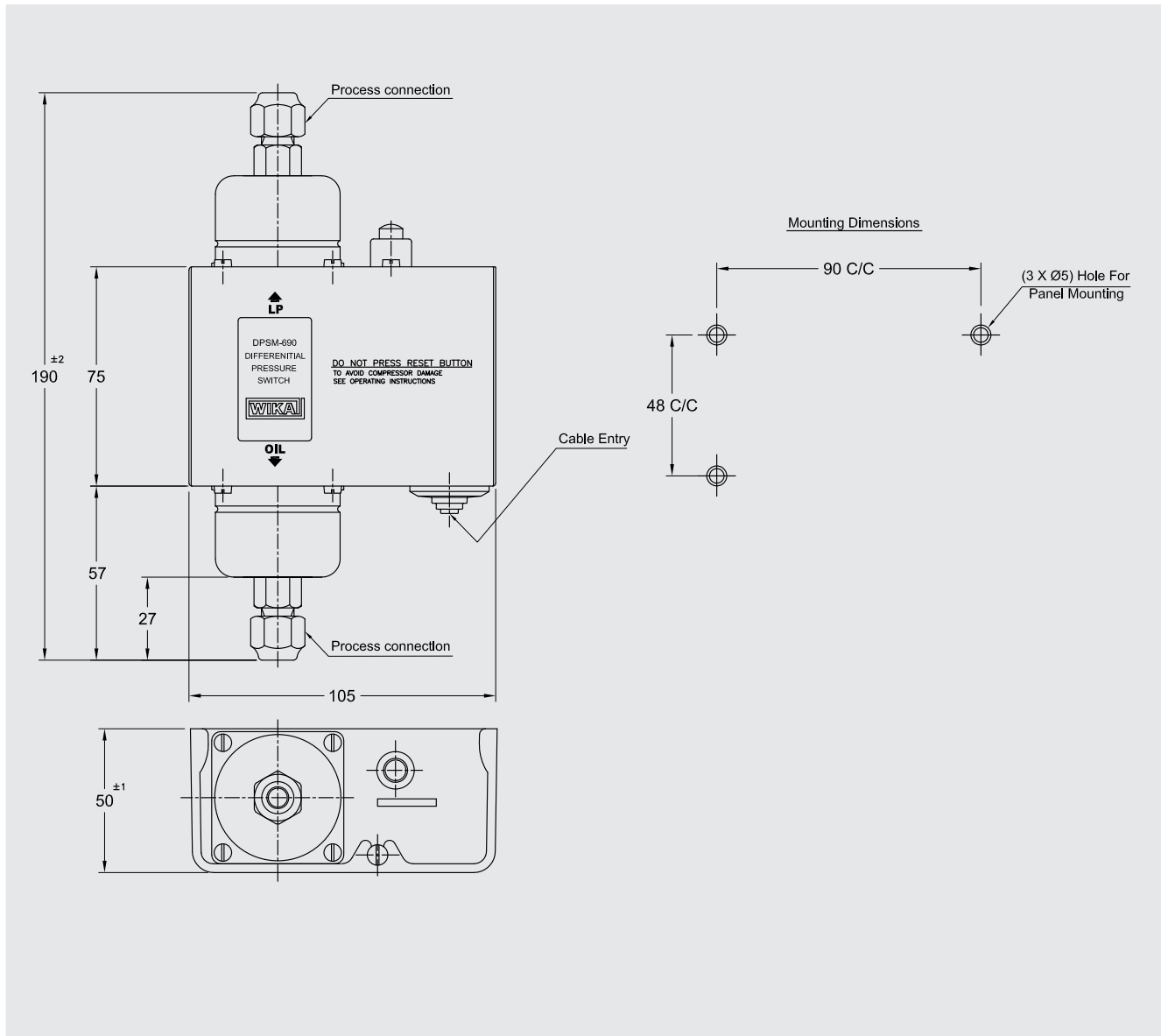
### Mounting

- Surface
- Panel

## Technical data

Model	Media	Code	Differential pressure range (bar)	Differential (bar)	Maximum pressure (bar)	Time delay	Connection size
DPSM-690	R12, R22, R40	A1	0.3 ... 4.5	0.2 Fixed	22	60 sec	1/4" Flare
	R12, R22, R40	A2				60 sec	1/4" Flare
	R717 (NH <sub>3</sub> )	A3				60 sec	G 3/8 B supplied with Ø10 mm OD and 6.5 mm ID for welding / soldering/ copper tubing
	Oil, Water, Gas	A4				Not available	G 3/8 B

## Dimensions in mm



### Ordering information

Model / Refrigerant / Differential pressure range / Differential / Maximum pressure / Connection size

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