

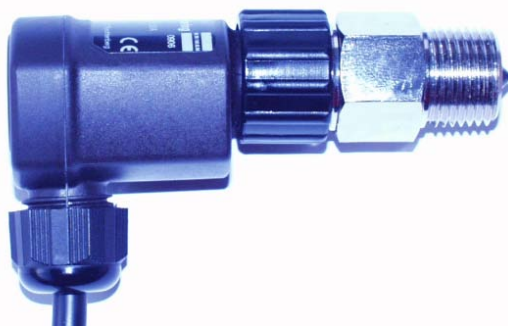


Technical Bulletin (TB-0023)

CSH3 / CSW Screw Compressors

Revision 1, November 2010

Oil Level Monitoring Using OLC-S1



Overview

BITZER's OLC-S1 is an electronic oil sensor that monitors the oil supply in a compressor by means of an infrared light.

It consists of two parts, a prism unit to focus the light beam and an electrical unit to produce it. The prism is screwed directly into the crankcase and the electrical unit is then screwed into the prism unit.

This setup allows for oil monitoring without an external control module.

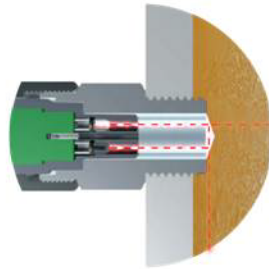
BITZER is now offering the OLC-S1 oil level sensor for all CSW and CSH3 series screw compressors.

BITZER Part Numbers

Part Number	Voltage	Thread
347962-01	230V	1-1/8"-18 UNEF
347962-02	115V	1-1/8"-18 UNEF
347962-03	24V AC/DC	1-1/8"-18 UNEF

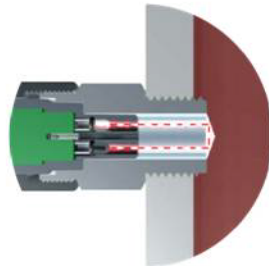
For additional technical information and mounting instructions, please visit ww.bitzerus.com to download BITZER bulletin ST-130-1 and SH-170. Our Application Engineering Department can be contacted at techsupport@bitzerus.com for more information.

Optical Measuring Principal



Signal path when oil is present

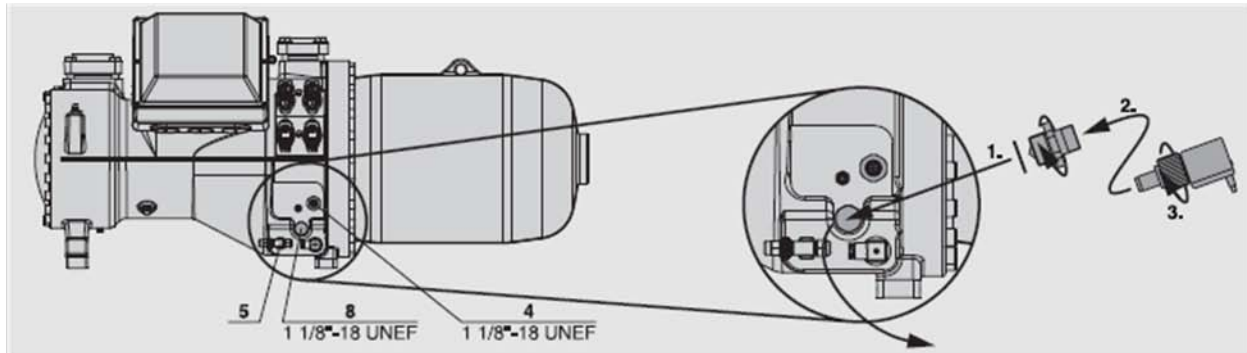
- Test signal (infrared light) is absorbed by oil in the compressor
- Red LED light remains off
- Status - Good - Oil is present



Signal path when oil is not present

- Test signal (infrared light) is reflected back to the LED unit
- Red LED light activates on unit
- Status - Compressor shuts off

Mounting Location / Components



- 8 – Minimum Oil Level
- 4 – Sight Glass, Maximum Oil Level
- 5 – Oil Service Valve

- 1 – Prism Unit
- 2 – Prism Glass
- 3 – Gasket
- 4 – Optical Electronic Unit
- 5 – Cable
- 6 – Screw Cap

