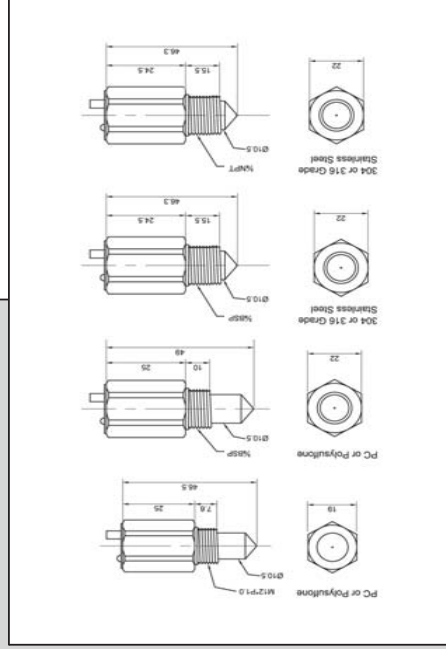


Optical Level Switches

Dimensions



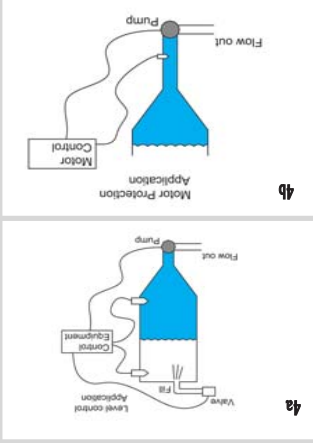
Operational principle
An optical level switch works by emitting a beam of infrared light within a prism and measuring the amount of light received. When the measured fluid reaches the sensor the amount of emitted light received drops thus triggering the contacts. As the sensor is detecting the state between material covering or not covering the prism it can be used to detect the presence or absence of fluid thus preventing damage to pumps.

The compact unit houses the infrared transmitter, the prism, the receiver and the electronics, there is also an external LED indicator to show the condition of the switch. The sensor requires a power supply of between 10-28 Volts DC. The benefit of the modern optical sensor is that there are no moving parts that can retain material and get clogged up or damaged, simply fit and forget.

For ordering information please refer to the part number breakdown on the reverse of this brochure.

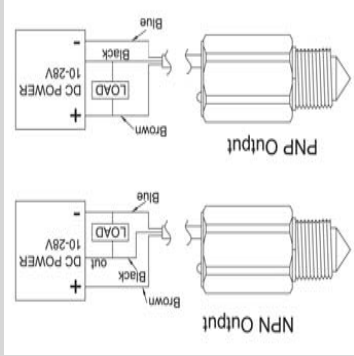
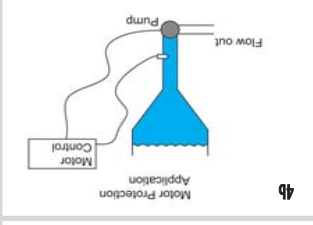
Applications

Liquid Level Control
In Fig 4a two optical switches are installed individually in the upper and lower level of the tank. When liquid rises to cover the upper optical switch it will trigger the solenoid valve to close. When the liquid level drops to the lower level the optical switch reopens the solenoid to refill the tank.



Motor protection

In Fig 4b an optical switch is installed in the lower level of the tank which will cut the power to the pump thus protecting it from damage.



Wiring

TYPE	Hex Size	Body Material	Load Current (Max)	Overload Current Protection (Max)	Ambient Light (Max)	Power Supply	Operation Temperature	Ambient Temperature	Operation Pressure	Connection Thread	Contact Model	Ingress Protection	Cable
OPT-PC	19mm	Polycarbonate	100mA	100mA	5000 Lux (visible light)	10~28 Volts DC	-10°C~125°C	-10°C~80°C	10kg/cm ²	M12 x1.0 (PC, Polysulfone Only)	NO or NC PNP or NPN output	IP68	2m (dia 3.8) 3C PVC 22 AWG, Custom made if over 2m
OPT-PS	19mm	Polysulfone	100mA	100mA	5000 Lux (visible light)	10~28 Volts DC	-10°C~125°C	-10°C~80°C	10kg/cm ²	M12 x1.0 (PC, Polysulfone Only)	NO or NC PNP or NPN output	IP68	2m (dia 3.8) 3C PVC 22 AWG, Custom made if over 2m
OPT-PC	22mm	Polycarbonate	100mA	100mA	5000 Lux (visible light)	10~28 Volts DC	-10°C~125°C	-10°C~80°C	10kg/cm ²	3/8" G (BSP)	NO or NC PNP or NPN output	IP68	2m (dia 3.8) 3C PVC 22 AWG, Custom made if over 2m
OPT-PS	22mm	Polysulfone	100mA	100mA	5000 Lux (visible light)	10~28 Volts DC	-10°C~125°C	-10°C~80°C	10kg/cm ²	3/8" G (BSP)	NO or NC PNP or NPN output	IP68	2m (dia 3.8) 3C PVC 22 AWG, Custom made if over 2m
OPT-A2	22mm	304 Grade Stainless Steel	100mA	100mA	5000 Lux (visible light)	10~28 Volts DC	-10°C~125°C	-10°C~80°C	40kg/cm ²	3/8" G (BSP)	NO or NC PNP or NPN output	IP68	2m (dia 3.8) 3C PVC 22 AWG, Custom made if over 2m
OPT-A4	22mm	316 Grade Stainless Steel	100mA	100mA	5000 Lux (visible light)	10~28 Volts DC	-10°C~125°C	-10°C~80°C	40kg/cm ²	3/8" G (BSP)	NO or NC PNP or NPN output	IP68	2m (dia 3.8) 3C PVC 22 AWG, Custom made if over 2m



Optical Level Switches



The full range of Comus products are available to view at any of the websites or contact your nearest distributor, a full list of our distributors can be found on the websites



Order Information
Example: OPT-PC-AR-1

Housing Material

PC = Polycarbonate (Standard)

P5 = Polysilone

A2 = 304 Grade Stainless Steel

A4 = 316 Grade Stainless Steel

Connection Thread

AR = G 3/8" (RSP)

AU = 3/8 NPT (SS304 & SS316 only)

M2 = M12 x 1.0 (Polycarbonate & Polysilone only)

Output

1 = PNP NC

2 = PNP NO

3 = NPN NC

4 = NPN NO

*NO: Wet. In liquid NC: Dry, out of liquid

The Comus International group of companies consists of:



Comus International

454 Allwood Road

Clifton

New Jersey 07012

U.S.A

Tel: (1)973 - 777 - 6900

Fax: (1)973 - 777 - 8405

email: info@comus-intl.com

Website: http://www.comus-intl.com

ISO 9001:2008

CERTIFICATE NO: 03-12314



Comus International SARL

Immeuble Les Julliottes

31 Cours des Julliottes

F-94700 Maisons-Alfort

France

Tel: +33 (0)1 43 968610

Fax: +33 (0)1 43 968611

email: info@comus.fr

Website: http://www.comus.fr



Assemblech Europe Limited

Unit 7, Rice Bridge Industrial Estate

Thorpe-le-Soken

Essex

England

CO16 0HL

Tel: +44 (0)1255 862236

Fax: +44 (0)1255 862014

email: sales@assemblech.co.uk

Website: http://www.assemblech.co.uk

ISO 9001:2008

CERTIFICATE NO: FN 21088



Switching Technologies Gunther

B-9-B-10, & C-1 Special Economic Zone (MEPZ)

Kadappert

Tambaram

Chennai 600 045

India

Tel: +91 44 22628093

Fax: +91 44 22628271

email: sig@sig-india.com



Comus Belgium BVBA

Overhaanlaan 40

B-3700 Tongeren

Belgium

Tel: +32 (0)12 390400

Fax: +32 (0)12 235754

email: info@comus.be

Website: http://www.comus.be



Comus Electronics and Technologies

No 3, Kamaraj Nagar 2nd Street

Tambaram Sanatorium

Chennai 600045

India

Tel: +91 44 43219090

Fax: +91 44 22628198

email: Pkamesh@sig-india.com

Website: http://www.comusindia.com

We also have a large network of worldwide agents. These can be found on any of our websites, or on our company profile brochure



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [comus](#) manufacturer:

Other Similar products are found below :

[WGA56D25Z](#) [WG660D110Z](#) [WG280A25Z](#) [PGN-SP-003](#) [WG660D10Z](#) [WGA316D25R](#) [WG660D90Z](#) [S1456](#) [S1366](#) [S1355](#) [WGA316D45R](#)
[3570.1331.121](#) [WG280D90Z](#) [WGA312D25Z](#) [WG280D10R](#) [3572.1220.051](#) [WG660D125Z](#) [WGA56A10Z](#) [CTI 302](#) [RF3002A/HFS30](#)
[WG280D90R](#) [WG280A10Z](#) [WGA012D25](#) [WG660D25Z](#) [MS24](#) [PPS24](#) [3570.1411.053](#) [WG280D45R](#) [VFS30](#) [WG480D75Z](#) [WG660D75Z](#)
[WGA56D25R](#) [PGN-SP-002](#) [WGA56D40Z](#) [WG660D50Z](#) [WG280D50Z](#) [WGA56A25Z](#) [WG280D75Z](#) [PSM](#) [S1747](#) [WG480D90Z](#)
[WG480D40Z](#) [WG280A45Z](#) [MMPSA 240/30 LH](#) [PSSM](#) [MPSM](#) [3563.1231.053](#) [WGA56D10Z](#) [WG280D45Z](#) [3570.1210.241](#)