

LOW PRESSURE DIAPHRAGM SWITCH

- Industrial diaphragm switch 300 Bar overpressure (600 Bar option)
- Zinc plated steel body
- Ranges from 0.1 - 1 Bar, to 20 - 50 Bar
- Nitrile, EPDM, Viton diaphragm seals
- Standard push on terminals
- NC or NO contacts

Type

0166



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.2mm diameter cable

Part Number
1166 621 003



Protective cap giving IP65 rating with central cable duct for 1.5 - 5mm diameter cable

Part Number
1166 621 010

TECHNICAL DATA

Contact rating	AC: 100vA DC: 60w
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to diaphragm material)
Maximum voltage	42V
Mechanical life	10 ⁶ operations
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65, terminals IP00

There are three diaphragm types available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Normally open → ·			Normally closed → ·			Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar
40302		010	40402		014	M12 x 1.5	0.1 - 1	±0.2	300* (600* Bar overpressure an option please ask)
40303		011	40403		015	1/4" BSP			
40304		012	40404		016	1/4" NPT			
40702		026	40802		030	M12 x 1.5	1 - 10	±0.5	
40703		027	40803		031	1/4" BSP			
40704		028	40804		032	1/4" NPT			
41102		042	41202		046	M12 x 1.5	10 - 20	±1.0	
41103		043	41203		047	1/4" BSP			
41104		044	41204		048	1/4" NPT			
41502		058	41602		062	M12 x 1.5	20 - 50	±2.0	
41503		059	41603		063	1/4" BSP			
41504		060	41604		064	1/4" NPT			

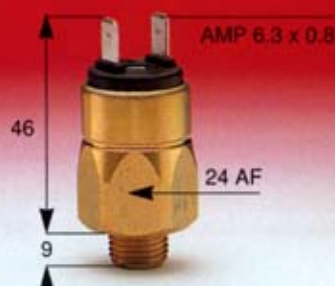
* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select NO or NC contacts, thread type and pressure range, inserting a 1, 2 or 3 for the diaphragm material appropriate for the liquid/medium being used. e.g. NO contacts, 1/4" bsp thread, 1-10 bar range being used with hydraulic oil would be as below.

Order info: 0 1 6 6 4 0 7 0 3 1 0 2 7

Please note that all switches can be set & adjusted via the central turning screw.

N.B. when using oxygen, the relating accident prevention regulations are to be observed. Above that, we recommend not to exceed a maximum operational pressure of 10 bar.



HIGH PRESSURE PISTON SWITCH

- Industrial piston switch 600 Bar overpressure
- Zinc plated steel body
- Nitrile, EPDM, Viton piston seals
- Range 50 - 150 Bar
- Standard push on terminals
- NC or NO contacts

Type

0169



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.2mm diameter cable

Part Number
1166 621 003



Protective cap giving IP65 rating with central cable duct for 1.5 - 5mm diameter cable

Part Number
1166 621 010

TECHNICAL DATA

Contact rating	AC: 100vA DC: 60w
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to piston seal material)
Maximum voltage	42V
Mechanical life	10 ⁶ operations
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65, terminals IP00

There are three piston seals available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Normally open contacts →	Normally closed →	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar
41902 010	42002 014	M12 x 1.5	50 - 150	±0.5	600*
41903 011	42003 015	1/4" BSP			
41904 012	42004 016	1/4" NPT			
41921 306	42021 308	9/16" - 18 UNF			
41909 311	42009 312	1/4" NPT			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

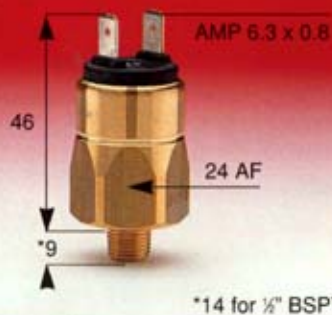
To order: Select NO or NC contacts, thread type, inserting a 1, 2 or 3 for the piston seal material appropriate for the liquid/medium being used. e.g. NC contacts, 1/4" NPT thread, being used with hydraulic oil would be as below.

Order info: 0 1 6 9 4 2 0 0 4 1 0 1 6

Please note that all switches can be set & adjusted via the central turning screw.
Piston pressure switches are not suited for gaseous media, especially not for the use of oxygen.



PRESSURE AND VACUUM SWITCHES



LOW PRESSURE DIAPHRAGM BRASS BODIED SWITCH

- Industrial diaphragm pressure switch 20 Bar overpressure
- Brass body
- Nitrile, EPDM, Viton diaphragm seals
- Ranges from 0.1 - 1 Bar up to 10 - 20 Bar
- Standard push on terminals
- NC or NO contacts

Type

0167



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.2mm diameter cable
Part Number
1166 621 003

















Protective cap giving IP65 rating with central cable duct for 1.5 - 5mm diameter cable
Part Number
1166 621 010

TECHNICAL DATA

Contact rating	AC: 100vA DC: 60w
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to piston seal material)
Maximum voltage	42V
Mechanical life	10 ⁶ operations
Body material	Brass
Protection	IP65, terminals IP00

There are three diaphragm types available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Normally open → 			Normally closed → 			Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar
40312		008	40412		011	1/8" BSPT	0.1 - 1	±0.2	20
40307		009	40407		012	1/8" BSPT			
40712		020	40812		023	1/8" BSPT	1 - 10	±0.5	
40707		021	40807		024	1/8" BSPT			
41112		032	41212		035	1/8" BSPT	10 - 20	±1.0	
41107		033	41207		036	1/8" BSPT			

To order: Select NO or NC contacts, thread type and pressure range, inserting a 1, 2 or 3 for the diaphragm material appropriate for the liquid/medium being used. e.g. NC contacts, 1/8" BSPT thread, 1-10 bar range being used with water would be as below.

Order info: 0 1 6 7 4 0 8 0 7 2 0 2 4

Please note that all switches can be set & adjusted via the central turning screw.

N.B. when using oxygen, the relating accident prevention regulations are to be observed. Above that, we recommend not to exceed a maximum operational pressure of 10 bar.



DIAPHRAGM PRESSURE SWITCH WITH CHANGEOVER CONTACTS

- Industrial diaphragm switch 300 Bar overpressure
- Ranges from 0.3 - 1.5 Bar, to 10 - 100 Bar
- SPDT changeover contact
- Zinc plated steel body
- Standard push on terminals
- Nitrile, EPDM, Viton diaphragm seals
- Gold contacts as standard on 0190 type

Type
0170
0190- Gold contacts



CONNECTOR

Part Number
1180 652 002

CHANGEOVER CONTACT DETAILS



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.3mm diameter cable

Part Number 1170 621 007

TECHNICAL DATA

Contact rating	42V/4A (Gold contacts 24V/50mA max)
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to diaphragm material)
Maximum voltage	42V
Hysteresis	10 to 30% adjustable
Mechanical life	10 ⁶ operations at 50 bar pressure
Body material	Zinc plated steel (Fe/Zn 12c)
Protection	IP65, terminals IP00

There are three diaphragm types available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0170 or 0190 (Gold contacts)	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
45702	M12 x 1.5	0.3 - 1.5	±0.2	100*
45703	1/4" BSP			
45704	1/4" NPT			
45802	M12 x 1.5	1 - 10	±5.0	100*
45803	1/4" BSP			
45804	1/4" NPT			
45802	M12 x 1.5	1 - 10	±5.0 - 1.0	
45803	1/4" BSP			
45804	1/4" NPT			
45902	M12 x 1.5	10 - 50	±3.0	300*
45903	1/4" BSP			
45904	1/4" NPT			
46102	M12 x 1.5	10 - 100	±3.0 - 5.0	
46103	1/4" BSP			
46104	1/4" NPT			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select either standard or gold contacts, thread type and pressure range, inserting a 1, 2 or 3 for the diaphragm material appropriate for the liquid/medium being used. e.g. standard contacts 1/4" BSP, 10 - 50 bar, being used with hydraulic fluid would be as below.

Order info: 0 1 7 0 4 5 9 0 3 3 0 0 9

Please note that all switches can be set & adjusted via the central turning screw.

N.B. When using oxygen, the relating accident prevention regulations are to be observed. Above that we recommend not to exceed a maximum operational pressure of 10 bar.



PISTON PRESSURE SWITCH WITH CHANGEOVER CONTACTS

- Industrial piston switch 600
- Bar overpressure
- Range 50 - 200 Bar
- SPDT Changeover contact
- Zinc plated steel body
- Standard push on terminals
- Nitrile, EPDM, Viton piston seals
- Gold contacts as standard on 0191 type

Type
0171
0191- Gold contacts



CONNECTOR

Part Number
1180 652 002

CHANGEOVER CONTACT DETAILS



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.3mm diameter cable

Part Number 1170 621 007

TECHNICAL DATA

Contact rating	42V/4A (Gold contacts: 24V 150mA max)
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to piston seal material)
Maximum voltage	42V
Hysteresis adj.	10 to 30%
Mechanical life	10 ⁶ operations
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65, terminals IP00

There are three piston seal materials available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0171 or 0191 (Gold contacts)	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
46002	M12 x 1.5	50 - 200	±5.0	600*
46003	1/4" BSP			
46004	1/4" NPT			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select either standard or gold contacts, thread type, insert a 1, 2 or 3 for the piston seal appropriate for the liquid/medium being used, e.g. Gold contacts, 1/4" NPT thread, being used with engine oil would be as below.

Order info: 0 1 9 1 4 6 0 0 4 1 3 0 4

Please note that all switches can be set & adjusted via the central turning screw.

N.B. Piston pressure switches are not suited for gaseous media, especially not for the use of oxygen.



PRESSURE AND VACUUM SWITCHES



DIAPHRAGM PRESSURE SWITCH WITH 4A RATED CHANGEOVER CONTACTS

- Industrial diaphragm switch 300 Bar overpressure
- Ranges from 0.3 - 1.5 Bar, to 10 - 100 Bar
- SPDT changeover contact
- Zinc plated steel body
- Standard push on terminals
- Nitrile, EPDM, Viton diaphragm seals

Type

0180



CONNECTOR

Part Number
1180 652 002

CHANGEOVER CONTACT DETAILS



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.3mm diameter cable

Part Number 1170 621 007

TECHNICAL DATA

Contact rating	4A
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to diaphragm material)
Maximum voltage	250VAC
Hysteresis	10 to 30% adjustable
Mechanical life	10 ⁶ operations at 50 bar pressure
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65, terminals IP00

There are three diaphragm types available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0180			Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
45702		002	M12 x 1.5	0.3 - 1.5	±0.2	100*
45703		003	1/4" BSP			
45704		318	1/8" NPT			
45802		005	M12 x 1.5	1 - 10	±5.0	100*
45803		006	1/4" BSP			
45804		319	1/8" NPT			
45802		041	M12 x 1.5	1 - 10	±5.0 - 1.0	300*
45803		042	1/4" BSP			
45804		343	1/8" NPT			
45902		008	M12 x 1.5	10 - 50	±3.0	
45903		009	1/4" BSP			
45904		320	1/8" NPT			
46102		011	M12 x 1.5	10 - 100	±3.0 - 5.0	
46103		012	1/4" BSP			
46104		321	1/8" NPT			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select thread type and pressure range, inserting a 1, 2 or 3 for the diaphragm material appropriate for the liquid/medium being used. e.g. 1/4" bsp thread, 10-100 bar range being used with hydraulic fluid would be as below.

Order info 0 1 8 0 4 6 1 0 3 3 0 1 2

Please note that all switches can be set & adjusted via the central turning screw.

N.B. When using oxygen, the relating accident prevention regulations are to be observed. Above that we recommend not to exceed a maximum operational pressure of 10 bar.



PISTON PRESSURE SWITCH WITH 4A RATED CHANGEOVER CONTACTS



- Industrial piston switch 600 Bar overpressure
- Range 50 - 200 Bar
- SPDT changeover contact
- Zinc plated steel body
- Standard push on terminals
- Nitrile, EPDM, Viton piston seals

Type

0181



CONNECTOR

Part Number
1180 652 002



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.3mm diameter cable

Part Number 1170 621 007

TECHNICAL DATA

Contact rating	4A
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to piston seal material)
Maximum voltage	250VAC
Hysteresis adj.	10 to 30%
Mechanical life	10 ⁶ operations
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65, terminals IP00

CHANGEOVER CONTACT DETAILS



There are three piston seal materials available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

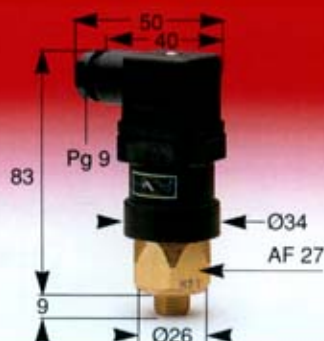
Type 0181	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
46002	M12 x 1.5	50 - 200	±5.0	600*
46003	1/4" BSP			
46004	1/8" NPT			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select thread type, insert a 1, 2 or 3 for the piston seal material appropriate for the liquid/medium being used. e.g. 1/8" NPT thread, being used with brake fluid would be as below.

Order info: 0 1 8 1 4 6 0 0 4 2 3 0 4

Please note that all switches can be set & adjusted via the central turning screw.
N.B. Piston pressure switches are not suited for gaseous media, especially not for the use of oxygen.



DIAPHRAGM PRESSURE SWITCH WITH 4A RATED CHANGEOVER CONTACTS AND BUILT IN CONNECTOR

- Pressure range from 0.3 - 1.5 Bar, to 10 - 100 Bar
- Up to 300 Bar overpressure
- SPDT changeover contact
- Zinc plated steel body
- Nitrile, EPDM, Viton diaphragm seals

Type

0184

CHANGEOVER CONTACT DETAILS



TECHNICAL DATA

Contact rating	4A
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to diaphragm material)
Maximum voltage	250VAC
Hysteresis adj.	10 to 30%
Mechanical life	10 ⁶ operations at 50 Bar pressure
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65

There are three diaphragm types available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0184			Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
45702		002	M12 x 1.5	0.3 - 1.5	±0.2	100*
45703		003	1/4" BSP			
45802		041	M12 x 1.5	1 - 10	±0.5 - 1.0	300*
45803		042	1/4" BSP			
45902		008	M12 x 1.5	10 - 50	±3.0	
45903		009	1/4" BSP			
46102		011	M12 x 1.5	10 - 100	±3.0 - 5.0	
46103		012	1/4" BSP			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select thread type and pressure range, insert a 1, 2 or 3 for the diaphragm material appropriate for the liquid/medium being used. e.g. M12 x 1.5, 10 - 100 bar, being used with brake fluid would be as below.

Order info: 0 1 8 4 4 6 1 0 2 2 0 1 1

Please note that all switches can be set & adjusted via the central turning screw.

N.B. When using oxygen, the relating accident prevention regulations are to be observed. Above that we recommend not to exceed a maximum operational pressure of 10 bar.



PISTON PRESSURE SWITCH WITH 4A RATED CHANGEOVER CONTACTS AND BUILT IN CONNECTOR



- Range 50 to 200 Bar
- SPDT changeover contact
- Zinc plated steel body
- Standard push on terminals
- Nitrile, EPDM, Viton diaphragm seals

Type

0185

CHANGEOVER CONTACT DETAILS



TECHNICAL DATA

Contact rating	4A
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to piston seal material)
Maximum voltage	250VAC
Hysteresis adj.	10 to 30%
Mechanical life	10 ⁶ operations
Body material	Zinc plated steel (Fe/Zn 12cC)
Protection	IP65

There are three piston seal materials available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0185	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
46002	M12 x 1.5	50 - 200	±5.0	600*
46003	1/4" BSP			

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select thread type, insert a 1, 2 or 3 for the piston seal material appropriate for the liquid/medium being used. e.g. 1/4" BSP, being used with acetylene would be as below.

Order info: 0 1 8 5 4 6 0 0 3 2 0 0 3

Please note that all switches can be set & adjusted via the central turning screw.
Piston pressure switches are not suited for gaseous media, especially not for the use of oxygen.



STAINLESS STEEL DIAPHRAGM & PISTON PRESSURE SWITCH WITH 4A RATED CHANGEOVER CONTACTS



- Full stainless steel (1.4305) body
- Up to 600 Bar overpressure
- Range from 0.5 - 5 Bar to 50 - 200 Bar
- SPDT changeover contact
- Standard push on terminals
- Nitrile, EPDM, Viton seals

Type

0186 - Diaphragm
0187 - Piston



CONNECTOR

Part Number
1180 652 002

CHANGEOVER CONTACT DETAILS



Protective cap giving IP65 rating with dual cable duct for 1.7 - 2.3mm diameter cable

Part Number 1170 621 007

TECHNICAL DATA

Contact rating	4A/250VAC
Maximum operation	200/min
Temperature range	-30°C to +120°C (According to diaphragm/piston seal material)
Maximum voltage	250VAC
Hysteresis adj.	10 to 30%
Mechanical life	10 ⁶ operations at up to 50 Bar pressure
Diaphragm type	10 ⁶ operations
Piston type	
Body material	Stainless steel (1.4305)
Protection	IP65, terminals IP00

There are three diaphragm/piston seal materials available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0186 with diaphragm	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
45703 003	1/4" BSP	0.5 - 5	± 0.2	300*
45803 006	1/4" BSP	1 - 10	± 0.5	
45903 009	1/4" BSP	10 - 50	± 3.0	
46103 012	1/4" BSP	10 - 100	± 3.0 - 5.0	

Type 0187 with piston	Thread type	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
46003 003	1/4" BSP	50 - 200	± 5.0	600*

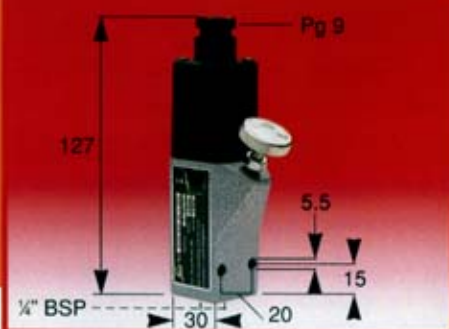
* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select pressure range, insert a 1, 2 or 3 for the diaphragm/piston seal appropriate for the liquid/medium being used. e.g. 50 - 200 bar range, being used with brake fluid would be as below.

Order info: 0 1 8 7 4 6 0 0 3 2 0 0 3

Please note that all switches can be set & adjusted via the central turning screw.

N.B. when using oxygen, the relating accident prevention regulations are to be observed. Above that, we recommend not to exceed a maximum operational pressure of 50 bar.



MANIFOLD STYLE PRESSURE SWITCH WITH EXTERNAL SETPOINT ADJUSTMENT

- Industrial switch up to 600 Bar overpressure
- Range from 0.2 - 2 Bar, to 100 - 400 Bar
- SPDT changeover contact
- Nitrile, EPDM, Viton seals
- Aluminium body
- External set point adjustment
- 1/4" BSP female connection



Type

0159

CHANGEOVER CONTACT DETAILS



TECHNICAL DATA

Contact rating Resistive Inductive	2A at 24Vdc and 0.2A at 220Vac 2A at 24Vdc and 1 amp at 220Vac
Maximum operation	200/min
Temperature range	-20°C to +100°C (According to piston seal material)
Maximum voltage	250VAC
Hysteresis	10 to 30%
Mechanical life	10 ⁶ operations
Body material	Aluminium (AlMg Si 1 F 28)
Connection type	Bottom entry, 1/4" BSP female
Protection	IP65

There are three diaphragm/piston seal types available, suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0159 with diaphragm	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
42614	0.2 - 2	± 0.2 - 0.3	200*
42714	0.5 - 5	± 0.2 - 0.5	
42814	1 - 10	± 0.5	
42914	2 - 20	± 1.0	
43014	5 - 50	± 3.0	
43114	10 - 100	± 3.0 - 5.0	

Type 0159 with piston			Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
43214		001	10 - 100	± 3.0 - 5.0	600*
43314		001	25 - 250	± 5.0 - 7.0	
43414		001	40 - 400		

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select pressure range, insert a 1, 2 or 3 for the diaphragm/piston seal material appropriate for the liquid/medium being used. e.g. 25 - 250 bar, being used with acetylene would be as below.

Order info: 0 1 5 9 4 3 3 1 4 2 0 0 1

The switches are set by loosening the locking nut and turning the knurled adjustment screw either clockwise to increase or anticlockwise to decrease the switch point. N.B. when using oxygen, the relating accident prevention regulations are to be observed. Above that, we recommend not to exceed a maximum operational pressure of 10 bar.



MANIFOLD STYLE PRESSURE SWITCH WITH BUILT IN CONNECTOR

- Industrial switch up to 600 Bar overpressure
- Range from 0.5 - 1 Bar, to 100 - 400 Bar
- SPDT changeover contact
- Nitrile, EPDM, Viton diaphragm/piston seals
- 1/4" BSP female connection (0161)
- Side entry manifold type available as standard (0162)

CE

Type
0161
0162- Manifold Type

CHANGEOVER CONTACT DETAILS



TECHNICAL DATA

Type	0161	0162
Contact rating		
Resistive	2A at 24Vdc and 0.2A at 220Vac	
Inductive	2A at 24Vdc and 1 amp at 220Vac	
Maximum operation	200/min	
Temperature range	-20°C to +100°C (According to piston seal material)	
Maximum voltage	250VAC	
Hysteresis adj.	10 to 30%	
Mechanical life	10 ⁶ operations	
Body material	Aluminium (AlMg Si 1 F 28)	
Connection type	Bottom entry, 1/4" BSP female	as 0161 type with NBR o-ring 5x1.5
Protection	IP65	

There are three diaphragm/piston types available, suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0161 with diaphragm 0162	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
43614	001	0.5 - 1	200*
43714	001	0.5 - 5	
43814	001	1 - 10	
43914	001	10 - 50	
44014	001	50 - 100	

Type 0161 with piston 0162	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
441141	001	100 - 400	600*

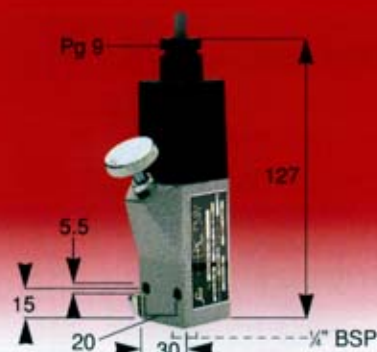
* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

To order: Select standard or manifold type, pressure range, insert a 1, 2 or 3 for the diaphragm/piston seal material appropriate for the liquid/medium being used. e.g. Manifold, 10 - 50 bar, being used with hydraulic oil would be as below.

Order info: 0 1 6 2 4 3 9 1 4 1 0 0 1

The switches are set by loosening the locking nut (protected by the black cap) and then turning the adjustment screw either clockwise to increase or anti clockwise to decrease the switchpoint.

N.B. when using oxygen, the relating accident prevention regulations are to be observed.



EX PROOF MANIFOLD STYLE PRESSURE SWITCH, EXTERNAL SETPOINT ADJUSTMENT

- Up to 600 Bar overpressure
- Ranges from 1 - 6 Bar, to 100 - 400 Bar
- SPDT changeover contact
- Aluminium body
- Nitrile, EPDM, Viton diaphragm/piston seals
- 1/4" BSP female connection
- Externally adjustable set point
- 2m cable

Type
0165

CHANGEOVER CONTACT DETAILS



Note: The three core cable is moulded into the switch.

1 = White
2 = Green
4 = Brown

TECHNICAL DATA

Contact rating	0.25A at 250Vdc and 1A at 25Vac
Maximum operation	200/min
Temperature range	-30°C to +80°C (According to diaphragm/piston seal material)
Maximum voltage	250VAC
Hysteresis	10 to 30%
Mechanical life	10 ⁶ operations
Body material	Aluminium (AlMg Si 1 F 28)
Protection	IP65
"Cenelec" approval	EEx d11 C T6
Test certificate no.	PTB-No. Ex 84/1052
Length of cable	2 m (standard)
Connection type	Bottom entry, 1/4" BSP female

There are three diaphragm/piston types available, each one suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
1	Nitrile (NBR)	Hydraulic oil, engine oil, heating oil, turpentine, air
2	EPDM	Water, Hydrogen, Seawater, Acetylene, Ozone, Oxygen, Brake Fluid
3	Viton (FKM)	Hydraulic fluid (i.e. HFA, HFB, HFC, HFD), Gasoline

Type 0165 with diaphragm	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
44814 001	1 - 6	± 0.5	200*
44914 001	5 - 50	± 3.0	

Type 0165 with piston	Adjustment range in Bar	Tolerance in Bar at room temp	Overpressure up to Bar*
45014 001	20 - 100	± 3.0 - 5.0	600*
45114 001	100 - 400	± 5.0 - 9.0	

* Over pressure safety levels refer to the hydraulic or pneumatic part of the pressure switch.

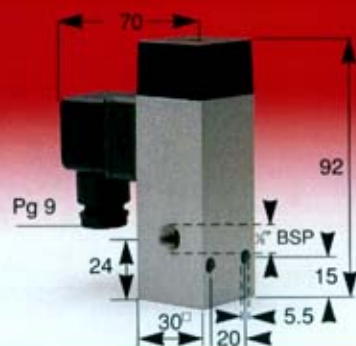
To order: Select pressure range, insert a 1, 2 or 3 for the diaphragm/piston seal suitable for the liquid/medium being used. e.g. 20 - 100 bar, being used with heating oil would be as below.

Order info 0 1 6 5 4 5 0 1 4 1 0 0 1

The switches are set by loosening the locking nut and turning the knurled adjustment screw either clockwise to increase or anticlockwise to decrease the switchpoint. N.B. When using oxygen, the relating accident prevention regulations are to be observed. Above that we recommend not to exceed a maximum operational pressure of 10 bar.



PRESSURE AND VACUUM SWITCHES



MANIFOLD STYLE VACUUM SWITCH WITH CHANGEOVER CONTACTS AND BUILT IN CONNECTOR



- Industrial vacuum switch, 20 Bar pressure
- Range from 100 - 1000 mBar
- SPDT changeover contact
- Aluminium body
- 1/8" BSP female connection (side entry)

Type

0150

CHANGEOVER CONTACT DETAILS



TECHNICAL DATA

Contact rating	
Resistive	6A at 24Vdc and 0.5A at 220V
Inductive	6A at 24Vdc and 3A at 220Vac
Maximum operation	200/min
Temperature range	-30°C to +100°C (According to piston seal material)
Maximum voltage	250VAC
Hysteresis	100 mBar approx
Mechanical life	10 ⁶ operations
Body material	Aluminium (AlMg Si 1 F 28)
Connection type	Side entry, 1/8" BSP female
Protection	IP65

There is one diaphragm type available, suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
4	ECO	Air, Oil, Grease, Fuel (epichlorohydrin rubber)

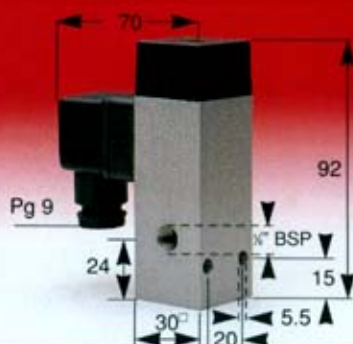
Type 0150	Adjustment range in mBar	Tolerance in mBar at room temp	Overpressure up to Bar
45615 4 001	100 - 1000	± 50	20

To order: Part number as below.

Order info. 0 1 5 0 4 5 6 1 5 4 0 0 1

Please note that the vacuum switches can be either factory set (stated at the time of order) or adjusted on site. The switches are set by loosening the locking nut (protected by the black cap) and then turning the adjustment screw either clockwise to increase or anticlockwise to decrease the switchpoint.

N.B. when using oxygen, the relating accident prevention regulations are to be observed. Above that, we recommend not to exceed a maximum operational pressure of 10 bar.



MANIFOLD STYLE VACUUM SWITCH WITH CHANGEOVER CONTACTS AND BUILT IN CONNECTOR

- Industrial vacuum switch, 20 Bar pressure
- Range from 100 - 1000 mBar
- SPDT changeover contact
- Aluminium body
- 1/8" BSP female connection (side entry)



Type

0150

CHANGEOVER CONTACT DETAILS



TECHNICAL DATA

Contact rating	
Resistive	6A at 24Vdc and 0.5A at 220V
Inductive	6A at 24Vdc and 3A at 220Vac
Maximum operation	200/min
Temperature range	-30°C to +100°C (According to piston seal material)
Maximum voltage	250VAC
Hysteresis	100 mBar approx
Mechanical life	10 ⁶ operations
Body material	Aluminium (AlMg Si 1 F 28)
Connection type	Side entry, 1/8" BSP female
Protection	IP65

There is one diaphragm type available, suitable for the following mediums.

SUCO Diaphragm type	Material	Suitable for
4	ECO	Air, Oil, Grease, Fuel (epichlorohydrin rubber)

Type 0150	Adjustment range in mBar	Tolerance in mBar at room temp	Overpressure up to Bar
45615 4 001	100 - 1000	± 50	20

To order: Part number as below.

Order info: 0 1 5 0 4 5 6 1 5 4 0 0 1

Please note that the vacuum switches can be either factory set (stated at the time of order) or adjusted on site. The switches are set by loosening the locking nut (protected by the black cap) and then turning the adjustment screw either clockwise to increase or anticlockwise to decrease the switchpoint.

N.B. when using oxygen, the relating accident prevention regulations are to be observed. Above that, we recommend not to exceed a maximum operational pressure of 10 bar.