- **5 ... 420 bar Port size: G1/4 or flange**
- **Microswitch with gold plated contacts**
- **Vibration resistant to 15 g**
- **Microswitch approved by UL and CSA**
- **Intrinsically safe operation**
- **For Ex applications conforming to ATEX 100a: Zone 2 category ATEX 3G (gases): Ex nA nC IIC T6 Gc Zone 22 category ATEX 3D (dusts): Versions, form A connector: Ex tc IIIC T50 °C Dc; Versions, M12x1 connector: Ex tc IIIC T80 °C Dc Special condition to be observed during the installation**



Technical features

Medium:
For neutral, self lubricating fluids, e.g. hydraulic oil, lube oil, leight fuel oil

Operation:
Softseal piston

Operating pressure:
5 ... 420 bar (72 ... 6091 psi)
Repeatability:
±3% of final value
(depending on regulating pressure)

Media viscosity:
Up to 1000 mm^2/s

Switching pressure difference/hysteresis:
Fixed

Switching cycles:
100 1/min

Life cycle of mechanical parts:
10^7 switching cycles

Switching element:
Microswitch with gold plated contacts

Mounting position:
Optional

Degree of protection:
IP65 for DIN EN 175301-803 (DIN 43650) form A connection
IP67 for M12x1 connection

Electrical connection:
DIN EN 175301-803 (DIN 43650) form A or M12x1 IEC 947-5-2

Weight:
0,2 kg (0.44 lbs)

Ambient/Media temperature:
Versions, form A connector:
0 ... +50°C (32 ... +122°F)
Versions, M12x1 Connector:
0 ... +80°C (32 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

Materials:
Body: Aluminium/steel
Seals: PTFE, NBR

Technical data

DIN plug connection – plug included in scope of supply

Symbol	Port size	Pressure range *1) (bar)	Pressure range *1) (psi)	Switching pressure difference Lower range (bar)	Switching pressure difference Lower range (psi)	Switching pressure difference Upper range (bar)	Switching pressure difference Upper range (psi)	Max. Over pressure *2) (bar)	Max. Over pressure *2) (psi)	Materials press sensor Body	Materials press sensor Seal	Drawing No.	Model
	G1/4	5 ... 70	72 ... 1015	10,5	152	15	217	400	5801	AL/steel	PTFE/NBR	1	0882180
	Flansch	5 ... 70	72 ... 1015	10,5	152	15	217	400	5801	AL/steel	PTFE/NBR	2	0883180
	G1/4	10 ... 160	145 ... 2320	11	159	17	246	400	5801	AL/steel	PTFE/NBR	1	0882280
	Flansch	10 ... 160	145 ... 2320	11	159	17	246	400	5801	AL/steel	PTFE/NBR	2	0883280
	G1/4	25 ... 250	362 ... 3625	11	159	17	246	400	5801	AL/steel	PTFE/NBR	1	0882380
	Flansch	25 ... 250	362 ... 3625	11	159	17	246	400	5801	AL/steel	PTFE/NBR	2	0883380
	G1/4	40 ... 420	580 ... 6091	17	246	38	551	600	8702	AL/steel	PTFE/NBR	1	0882480
	Flansch	40 ... 420	580 ... 6091	17	246	38	551	600	8702	AL/steel	PTFE/NBR	2	0883480

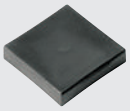
Electrical connection M12 x 1 nach IEC 947-5-2 - plug not included, max. allowable voltage 30 V
The pressure switch will loose the Ex approval when using other wire sockets than those listed in data sheet.

Symbol	Port size	Pressure range *1) (bar)	Pressure range *1) (psi)	Switching pressure difference Lower range (bar)	Switching pressure difference Lower range (psi)	Switching pressure difference Upper range (bar)	Switching pressure difference Upper range (psi)	Max. Over pressure *2) (bar)	Max. Over pressure *2) (psi)	Materials press sensor Body	Materials press sensor Seal	Drawing No.	Model
	G1/4	5 ... 70	72 ... 1015	10,5	152	15	217	400	5801	AL/steel	PTFE/NBR	1	0882181
	G1/4	10 ... 160	145 ... 2320	11	159	17	246	400	5801	AL/steel	PTFE/NBR	1	0882281
	G1/4	25 ... 250	362 ... 3625	11	159	17	246	400	5801	AL/steel	PTFE/NBR	1	0882381
	G1/4	40 ... 420	580 ... 6091	17	246	38	551	600	8702	AL/steel	PTFE/NBR	1	0882481

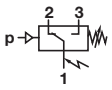
*1) Setpoints should be ideally in the middle of the switching pressure range. Reference pressure = atmospheric pressure. Switching pressure must not exceed the indicated values.
*2) Max. values

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2003 - 5290e) © 2015 Norgren GmbH

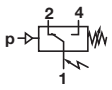
Accessories

Pressure port reducing nipple	Surge damper	Cover	Connector DIN EN 175301-803	Connector M12x1 4-pin, 90°	4-pin, straight
					
Page 3	Page 3	Page 3			
0574767 (brass)	0574773 (brass)	0554737	0524210 (Form A)	0524207 (2 m cable, 4-core)	0524206 (2 m cable, 4-core)
0550083 (stainless steel)	0553258 (stainless steel)			0524209 (5 m cable, 4-core)	0524208 (5 m cable, 4-core)

Switching function



Connector
DIN EN 175301-803, form A
Microswitch SPDT
Terminals 1 - 3:
Contacts close on rising pressure.
Terminals 1 - 2:
Contacts open on rising pressure.



Connector
IEC 947-5-2, M12x1
Microswitch SPDT
Terminals 1 - 4:
Contacts close on rising pressure.
Terminals 1 - 2:
Contacts open on rising pressure.

Switching capacity
Commutator with gold plated contacts

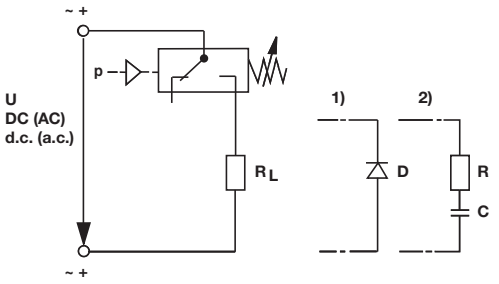
Current type	Load type *2)	U min [V]	Max. permissible persistent current Imax [A] at U *1) (UL & CSA) M12x1 30 V	DIN EN 175301-803, form A 30 V	48 V	125 V	250 V	Electrical life-time
a.c.	Ohmic, inductive	6	0,1	0,1	0,1	0,1	0,1	≥ 2 x 10^5 Switching cycles
d.c.	Ohmic, inductive	6	0,1	0,1	—	—	—	

Reference number: 20/min, Reference temperature: +20°C.
I min = 1 mA at 24 V d.c. or 5 mA at 6 V d.c.
*1) Higher currents (5 A max) will cause a reduction of the durability of the micro-switch contacts. Futhermore additional measures has to be taken to fulfil the EMV regulation 2014/30/EU by the manufacturer
*2) Spark quenching/overload protection will be necessary using inductive loads.

Recommended circuit
Spark quenching and EMV intrinsically safe

1. Quick diode (D) with tv ≤ 200 ns, parallel to inductive load.
2. RC link in parallel to load in parallel to switching contact.

Dimensioning principles:
RL in Ω ≈ 0,2 x RLoad in Ω
C in [µF] ≈ ILoad in [A]



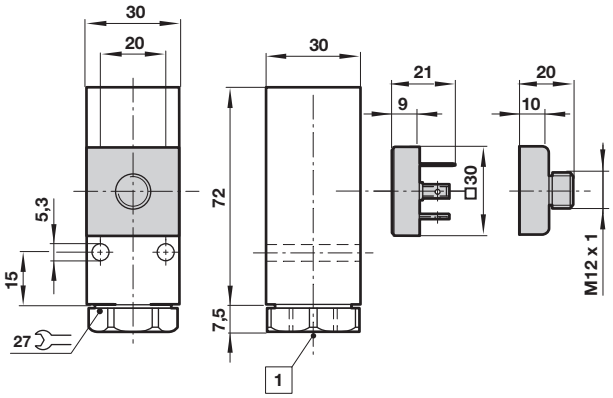
R_L = Load resistance

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2003 - 5290e) © 2015 Norgren GmbH

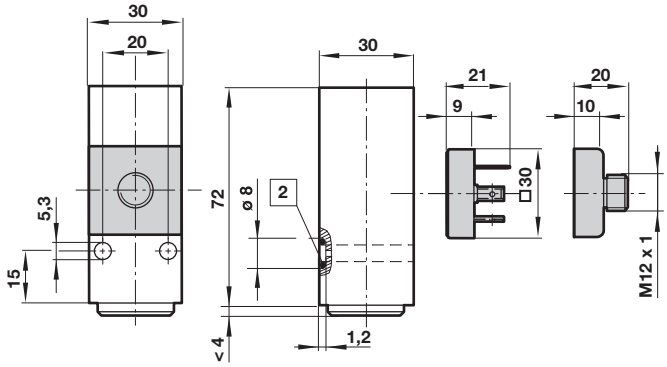
Drawings

Dimensions in mm
Projection/First angle

1



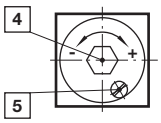
2



1 Media port
2 O-ring 5 x 1,5

Adjustable switch point

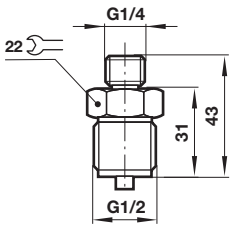
After releasing the locking screw
Clockwise rotation = increasing switch point
Counter clockwise rotation = decreasing the switch point



4 Switch point screw
5 Locking screw

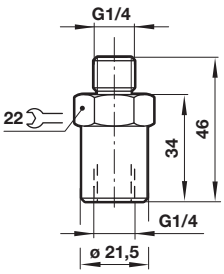
Pressure port reducing nipple

Model: 0574767 (brass)
0550083 (stainless steel)



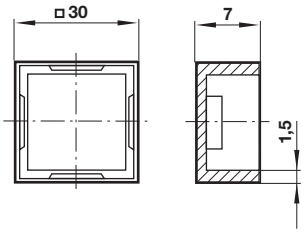
Surge damper

Model: 0574773 (brass)
0553258 (stainless steel)



Cover

Model: 0554737 (plastic)



Warning

These products are intended for use in industrial compressed air and fluid systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult
IMI Precision Engineering, Norgren GmbH.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Our policy is one of continued research and development. We therefore reserve the right to amend, without notice, the specifications given in this document. (2003 - 5290e) © 2015 Norgren GmbH