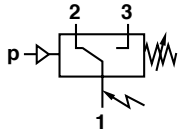


Adjustable setpoint**Gold-plated contacts****Vibration resistant to 15 g****Microswitch approved by UL and CSA**

DIN 43650

**Technical data****Medium**

Neutral, gaseous and liquid fluids

Operation

Diaphragm

Mounting position

Optional

Operating pressure

Vac to 435 psi

Over pressure

1150 psi

Ambient temperature

14°F to 185°F (-10°C to 85°C)

(NBR)

32°F to 175°F (0°C to 80°C)

(FPM)

ViscosityUp to 1000 mm²/s (±450 ssu).**Fluid temperature**

14°F to 185°F (-10°C to 85°C)

(NBR)

32°F to 175°F (0°C to 80°C)

(FPM)

Air supply must be dry enough to avoid ice formation at temperatures below 35°F (2°C)

Repeatability

+/- 3% for vacuum

+/- 4% of final value

(depending on regulating pressure)

Electrical connection

DIN 43650

Switching element

Microswitch with gold plated

contacts

Degree of protection

IP 65

Weight

.4 lbs (0.2 kg)

Materials

Housing: aluminum

Seals: NBR, FPM

'O'-ring: NBR

Model numbers - pneumatic/lubrication applications

Port size	Type	Pressure range psi (bar)		Switching pressure difference psi* (bar)		Sealing	Model	Dimension Drawing No.
				lower range	upper range			
1/4 NPT	Female	-14 - 0	(-1 - 0)	2 (0.15)	3 (0.18)	FPM	0880120000000000	1
-	Flange	-14 - 0	(-1 - 0)	2 (0.15)	3 (0.18)	FPM	0881100000000000	3
1/4 NPT	Female	3 - 30	(0.2 - 2)	2 (0.15)	4 (0.27)	FPM	0880220000000000	1
-	Flange	3 - 30	(0.2 - 2)	2 (0.15)	4 (0.27)	NBR	0881200000000000	3
1/4 NPT	Female	7 - 120	(0.5 - 8)	4 (0.2)	9 (0.65)	NBR	0880320000000000	2
-	Flange	7 - 120	(0.5 - 8)	4 (0.2)	9 (0.65)	NBR	0881300000000000	3
1/4 NPT	Female	15 - 230	(1 - 16)	4 (0.2)	13 (0.90)	NBR	0880420000000000	2
-	Flange	15 - 230	(1 - 16)	4 (0.2)	13 (0.90)	NBR	0881400000000000	3
1/4 NPT	Female	15 - 435	(1 - 30)	15 (1.0)	75 (5.0)	NBR	0880620000000000	2

Note: Switches are supplied with DIN 43650 mating connector.

* Switching pressure difference (hysteresis) is not adjustable. Typical valves are shown.

Caution: Observe switching range. Do not subject switch to maximum allowable pressure during normal operation. Even short pressure peaks must not exceed this value.

Switching capacity

Commutator with gold plated contacts

Current	type	Load type *2)	U min [V]	Max. permanent current I _{max} [A] at U *1)					Contact life
				(UL & CSA) M 12x1 30 V	DIN EN 175301-803, form A				
				30 V	48 V	125 V	250 V		
AC		ohmic, inductive	6	0.1	0.1	0.1	0.1	≥ 2 x 10 ⁵ switching cycles	
DC		ohmic, inductive	6	0.1	—	—	—		

Reference number: 20/min, Reference temperature: +20°C.

I_{min} = 1 mA at 24 VDC or 5 mA at 6 VDC

*1) Higher currents (5 A max) will cause a reduction of the durability of the micro-switch contacts. Furthermore additional measurements has to be taken to fulfill the EMV regulation 2004/108/EG by the manufacturer

*2) Spark quenching/overload protection will be necessary using inductive loads.

Recommended circuit

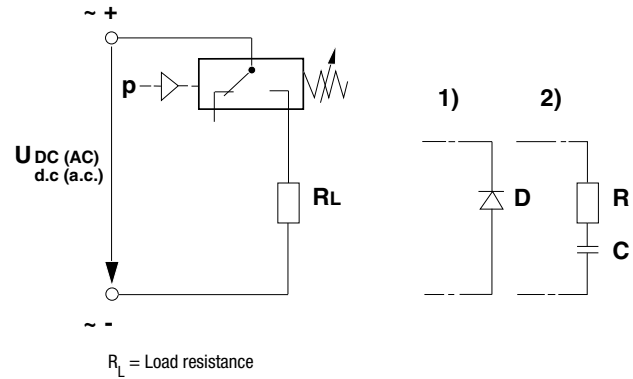
Spark quenching and EMV intrinsically safe

- Quick diode (D) with $t_v \leq 200$ ns, parallel to inductive load.
- RC link in parallel to load in parallel to switching contact.

Dimensioning principles:

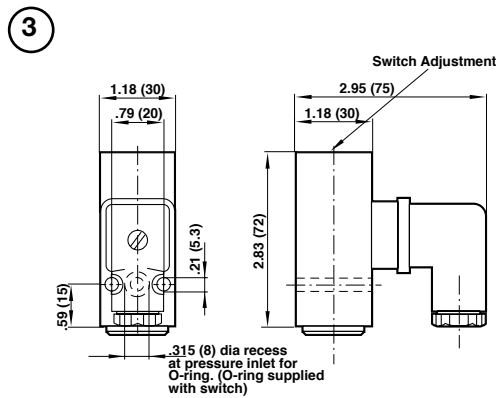
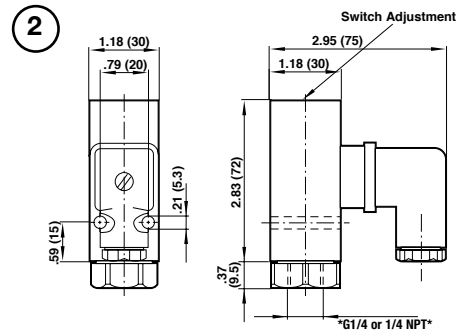
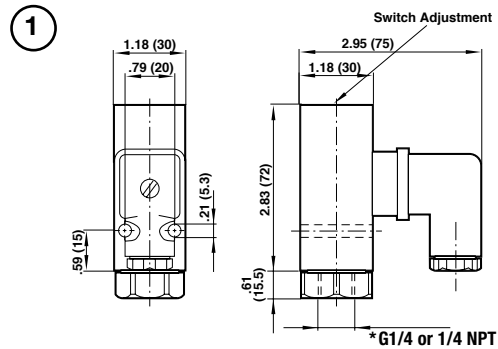
R_L in $\Omega \approx 0.2 \times R_{Load}$ in Ω

C in $[\mu F] \approx I_{Load}$ in [A]

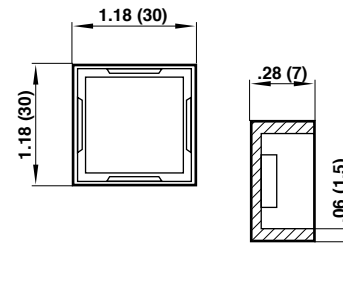


Switching function

<p>Plug DIN EN 175301-803, form A Microswitch SPDT Terminals 1 - 3: Contacts close on rising pressure. Terminals 1 - 2: Contacts open on rising pressure.</p>	<p>Switching function IEC 947-5-2, M12 x 1: Microswitch SPDT Terminals 1 - 4: Contacts close on rising pressure. Terminals 1 - 2: Contacts open on rising pressure.</p>
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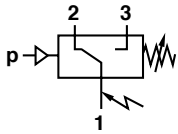


Protective Cover
 An optional elastomer cover for protection of the switch adjustment against dirt and splashing liquids Part No. 055473700000000



Dimensions in inches (mm)

- Adjustable setpoint**
- Gold-plated contacts**
- Vibration resistant to 15 g**
- Microswitch approved by UL and CSA**



DIN 43650

Technical data

Medium

For Neutral, self lubricating fluids, e.g. hydraulic oil, lube oil, light fuel oil

Operation

Softseal Piston

Mounting position

Optional

Operating pressure

70 to 6100 psi

Ambient temperature

-4°F to 175°F (-20°C to + 80°C)

Viscosity

Up to 1000 mm²/s (±450 ssu).

Fluid temperature

-4°F to 175°F (-20°C to +80°C)

Repeatability

±3%

Electrical connection

DIN 43 650

Switching element

Microswitch

Degree of protection

IP 65

Weight

.2 lbs (0.2 kg)

Materials

Housing aluminum

Port: stainless steel

Seals: PTFE/Buna-N

Model numbers - hydraulic applications

Port size	Type	Pressure range psi (bar)	Switching pressure Difference (Hysteresis)* psi (bar)				Model	Dimension Drawing No.
			Lower range	Upper range				
-	flange	70 – 1015 (5 – 70)	152	(10.5)	218	(15)	0883100000000000	2
7/16-20 UNF	female	70 – 1015 (5 – 70)	152	(10.5)	218	(15)	0882119000000000	1
1/4 NPT	female	70 – 1015 (5 – 70)	152	(10.5)	218	(15)	0882120000000000	1
-	flange	150 – 2320 (10 – 160)	160	(11)	247	(17)	0883200000000000	2
7/16-20 UNF	female	150 – 2320 (10 – 160)	160	(11)	247	(17)	0882219000000000	1
1/4 NPT	female	150 – 2320 (10 – 160)	160	(11)	247	(17)	0882220000000000	1
-	flange	360 – 3600 (25 – 250)	160	(11)	247	(17)	0883300000000000	2
7/16-20 UNF	female	360 – 3600 (25 – 250)	160	(11)	247	(17)	0882319000000000	1
1/4 NPT	female	360 – 3600 (25 – 250)	160	(11)	247	(17)	0882320000000000	1
-	flange	580 – 6100 (40 – 420)	247	(17)	508	(35)	0883400000000000	2
7/16-20 UNF	female	580 – 6100 (40 – 420)	247	(17)	508	(35)	0882419000000000	1
1/4 NPT	female	580 – 6100 (40 – 420)	247	(17)	508	(35)	0882420000000000	1

Note: Switches are supplied with DIN 43650 mating connector

* Switching pressure difference (hysteresis) is not adjustable. Maximum values are shown.

Switching capacity

Commutator with gold plated contacts

Current	type	Load type *2)	U min [V]	Max. permanent current I _{max} [A] at U *1) (UL & CSA)					Contact life
				M 12x1 30 V	DIN EN 175301-803, form A 30 V	48 V	125 V	250 V	
AC		ohmic, inductive	6	0.1	0.1	0.1	0.1	0.1	≥ 2 x 10 ⁶ switching cycles
DC		ohmic, inductive	6	0.1	—	—	—	—	

Reference number: 20/min, Reference temperature: +20°C.

I_{min} = 1 mA at 24 VDC or 5 mA at 6 VDC

*1) Higher currents (5 A max) will cause a reduction of the durability of the micro-switch contacts. Furthermore additional measurements has to be taken to fulfill the EMV regulation 2004/108/EG by the manufacturer

*2) Spark quenching/overload protection will be necessary using inductive loads.

Recommended circuit

Spark quenching and EMV intrinsically safe

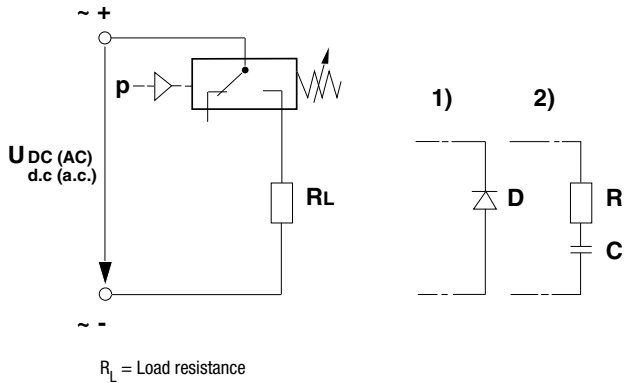
1. Quick diode (D) with t_v ≤ 200 ns, parallel to inductive load.

2. RC link in parallel to load in parallel to switching contact.

Dimensioning principles:

R_L in Ω ≈ 0.2 x RLoad in Ω

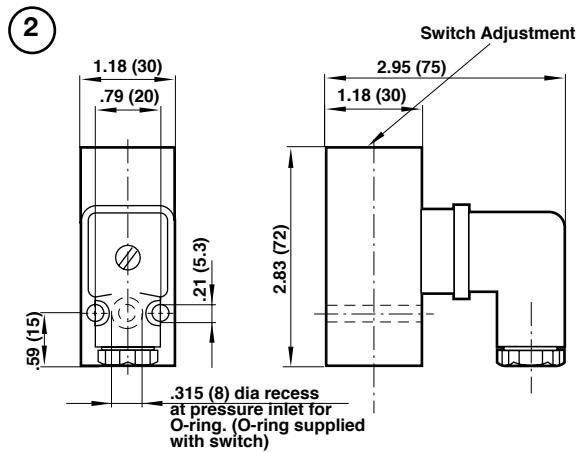
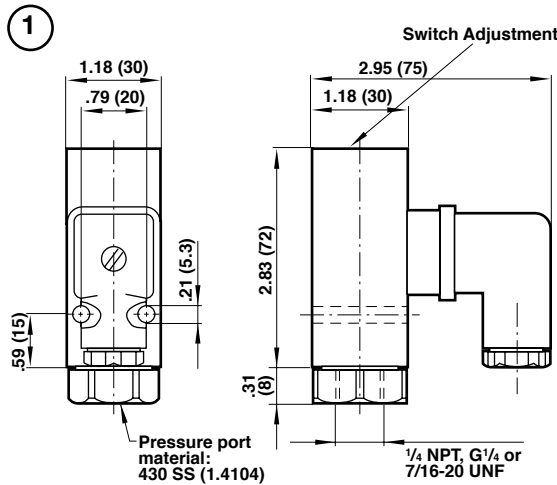
C in [µF] ≈ Load in [A]



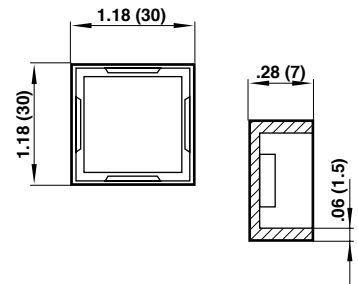
R_L = Load resistance

Switching function

<p>Plug DIN EN 175301-803, form A Microswitch SPDT Terminals 1 - 3: Contacts close on rising pressure. Terminals 1 - 2: Contacts open on rising pressure.</p>	<p>Switching function IEC 947-5-2, M12 x 1: Microswitch SPDT Terminals 1 - 4: Contacts close on rising pressure. Terminals 1 - 2: Contacts open on rising pressure.</p>
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Protective Cover
 An optional elastomer cover for protection of the switch adjustment against dirt and splashing liquids Part No. 0554737000000000



Dimensions in inches (mm)