

Electro-mechanical hydraulic pressure switches

ATEX certified

18D 5 ... 420 bar
G 1/4 & Flange



For Ex applications conforming to ATEX 100a:
Zone 2 category ATEX 3G (gases)
Zone 22 category ATEX 3D (dusts)
TÜV approval: EX 8 03 01 11122 007
Microswitch with gold plated contacts
High number of switching cycles
Vibration resistant to 15 g
Microswitch approved by UL and CSA
Intrinsically safe operation

Degree of protection:

IP65 for DIN EN 175301-803
IP67 for M12 x 1 connection

Mounting position:

Optional

Electrical connection:

DIN EN 175301-803 (DIN 43650)
form A
M12 x 1 IEC 947-5-2

TECHNICAL DATA

Medium:

For neutral, self lubricating fluids,
hydraulic oil, lube oil, light fuel oil

Operation:

Softseal piston

Approvals:

TÜV (technical inspection agency): EX 8 03 01
11122 007

Zone 2 category: Ex II 3 G EEx NA / C IIC T6

Zone 22 category: EX II 3 D IP 65 T 80°C

Temperature:

Fluid/Ambient

-25* ... +80°C

*Please contact our technical service for use below +2°C

Media viscosity:

Up to 1000 mm²/s

Switching pressure difference/hysteresis:

Fixed

Repeatability:

±3%, for vacuum ±4% of final value

(depending on regulating pressure)

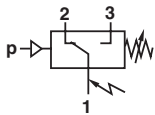
Switching element:

Microswitch with gold plated contacts

MATERIALS

Housing: aluminium/steel

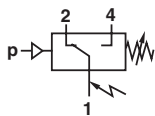
Sealing: teflon/perbunan



Switching function conforming to
DIN EN 175301-803, form A:
Microswitch SPDT
(commutator)

Terminals 1 - 3:
Contacts close on rising pressure

Terminals 1 - 2:
Contacts open on rising pressure



Switching function conforming to
IEC 947-5-2, M12 x 1:
Microswitch SPDT
(commutator)

Terminals 1 - 4:
Contacts close on rising pressure

Terminals 1 - 2:
Contacts open on rising pressure

18D Hydraulic ATEX

DIN plug connection - plug included in scope of supply

The Ex approval refers to the pressure switch in combination with the plug supplied

Pressure range *1) (bar)	Switching pressure difference		Max. over pressure *2) (bar)	Switching cycles (1/min)	Materials pressure sensor		Port size	Weight (kg)	Dimension no.	MODELS
	Lower range (bar)	Upper range (bar)			Body	Seals				
5 ... 70	10,5	15	400	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882180
10 ... 160	11	17	400	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882280
25 ... 250	13	21	400	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882380
40 ... 420	17	38	600	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882480
5 ... 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883180
10 ... 160	11	17	400	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883280
25 ... 250	13	21	400	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883380
40 ... 420	17	38	600	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883480

*1) Setpoints should be ideally in the middle of the switching pressure range. Reference pressure = atmospheric pressure.
The switching pressure must not exceed the listed values.

*2) Max. values.

For further information



www.norgren.com/info/en5-012

18D Hydraulic ATEX

M12 x 1 Connection - plug not included

Max. allowable voltage 30 V

The pressure switch will loose its Ex approval if used with plugs and leads other than those listed below.

Pressure range *1) (bar)	Switching pressure difference		Max. over pressure *2) (bar)	Switching cycles (1/min)	Materials pressure sensor		Port size	Weight (kg)	Dimension no.	MODELS
	Lower range (bar)	Upper range (bar)			Housing	Seals				
5 ... 70	10,5	15	400	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882181
10 ... 160	11	17	400	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882281
25 ... 250	13	21	400	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882381
40 ... 420	17	38	600	100	AL/Steel	PTFE/NBR	G1/4	0,2	2	0882481
5 ... 70	10,5	15	400	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883181
10 ... 160	11	17	400	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883281
25 ... 250	13	21	400	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883381
40 ... 420	17	38	600	100	AL/Steel	PTFE/NBR	Flange	0,2	3	0883481

*1) Reference pressure is the atmospheric air pressure

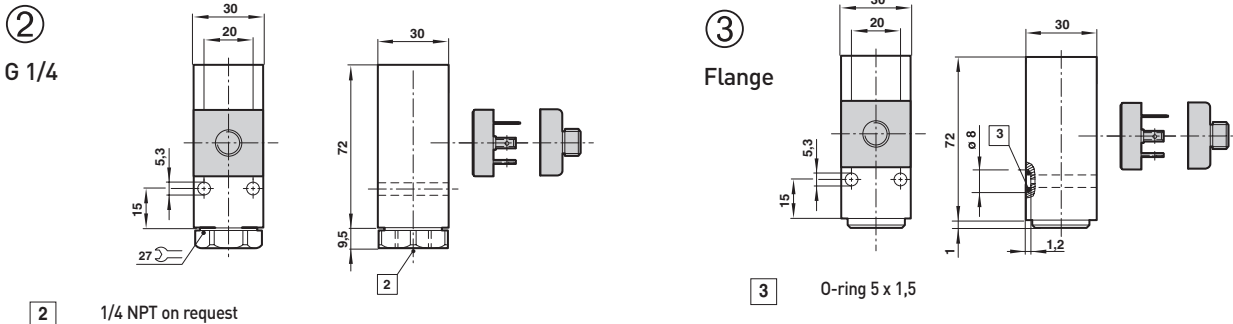
*2) Setpoints should be ideally in the middle of the switching pressure range. Reference pressure = atmospheric pressure. Switching pressure must not exceed the indicated values.

ACCESSORIES

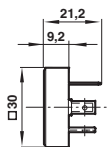
Pressure port reducing nipple	Surge damper	Cover (via adjustment screw)	Connector M12 x 1 90°	Connector M12 x 1 90°
0574767 (brass) 0550083 (stainless steel)	0574773 (brass) 0553258 (stainless steel)	0554737	0523058 (2 m cable, 4-pin) 0523053 (5 m cable, 4-pin)	0523056 (without cable)

Switching capacity, spark quenching / intrinsically safe with d.c. voltage see page 5-007

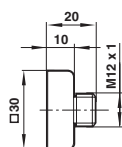
DIMENSIONS



Electrical connection conforming to DIN EN 175301-803, form A

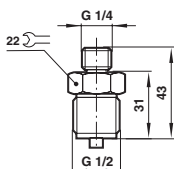


Electrical connection M12 x 1

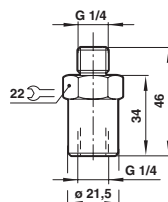


ACCESSORIES

Pressure port/Reducing nipple
Material: brass
Model: 0574767



Surge damper
Material: brass
Model: 0574773



Cover
Model: 0554737

