

0120/0121

Diaphragm/piston pressure switches with integrated bayonet

- NC or NO, maximum operating voltage up to 42 V
- Zinc-plated steel (Cr VI-free)
- Overpressure safety up to 4,350 psi (300 bar)¹⁾ for diaphragm variant
Overpressure safety up to 8,700 psi (600 bar)¹⁾ for piston variant

Adjustment range tolerance at room temperature	Male thread	Order number NO → :	Order number NC → :
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0120 Diaphragm pressure switches with integrated connector

145 - 290 ± 14.50 psi (10 - 20 ± 1.0 bar)	M 10x1 taper	0120 - X11 01 - X - 041	0120 - X12 01 - X - 045
	1/4" BSPP	0120 - X11 03 - X - 043	0120 - X12 03 - X - 047
	1/8" NPT	0120 - X11 04 - X - 044	0120 - X12 04 - X - 048
	1/4" NPT	0120 - X11 09 - X - 353	0120 - X12 09 - X - 354
	7/16-20 UNF	0120 - X11 20 - X - 321	0120 - X12 20 - X - 323
	9/16-18 UNF	0120 - X11 21 - X - 322	0120 - X12 21 - X - 324
290 - 725 ± 29.0 psi (20 - 50 ± 2.0 bar)	M 10x1 taper	0120 - X15 01 - X - 057	0120 - X16 01 - X - 061
	1/4" BSPP	0120 - X15 03 - X - 059	0120 - X16 03 - X - 063
	1/8" NPT	0120 - X15 04 - X - 060	0120 - X16 04 - X - 064
	1/4" NPT	0120 - X15 09 - X - 357	0120 - X16 09 - X - 358
	7/16-20 UNF	0120 - X15 20 - X - 329	0120 - X16 20 - X - 331
	9/16-18 UNF	0120 - X15 21 - X - 330	0120 - X16 21 - X - 332

0121 Piston pressure switches with integrated connector

725 - 2,175 ± 72.5 psi (50 - 150 ± 5.0 bar)	M 10x1 taper	0121 - X19 01 - X - 009	0121 - X20 01 - X - 013
	1/4" BSPP	0121 - X19 03 - X - 011	0121 - X20 03 - X - 015
	1/8" NPT	0121 - X19 04 - X - 012	0121 - X20 04 - X - 016
	1/4" NPT	0121 - X19 09 - X - 311	0121 - X20 09 - X - 312
	7/16-20 UNF	0121 - X19 20 - X - 305	0121 - X20 20 - X - 307
	9/16-18 UNF	0121 - X19 21 - X - 306	0121 - X20 21 - X - 308

Coding

A1-2.1	4XX	4XX
A2-2.1	3XX	3XX
A3-2.1	2XX	2XX
A4-2.1	1XX	1XX

Seal material – Application areas

NBR (BunaN)	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM (Viton®)	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
HNBR	Hydraulic/machine oil, ester-based bio-oils	9

Refer to page 24 for the temperature range and application thresholds of sealing materials.

Your order number:

012X - XXX XX - X - XXX

M.1

hex 24 integrated



Coding A1-2.1



Coding A2-2.1



Coding A3-2.1



Coding A4-2.1



M



¹⁾ Static value. Dynamic value is 30-50 % lower. Values pertain to the hydraulic/pneumatic part of the pressure switch.

Pressure switches hex 24 with integrated connector

Technical data



Rated working voltage:	10 ... 42 VAC/DC	
Rated current range (resistive load, DC12 and AC12):	10 mA ... 4 A	
Switching power DC12 / AC12:	100 W / 100 VA	
Temperature resistance of sealing materials:	NBR (BunaN)	-40 °F ... +212 °F (-40 °C ... +100 °C)
	EPDM	-22 °F ... +248 °F (-30 °C ... +120 °C)
	FKM (Viton®) (in diaphragm pressure switch)	+23 °F ... +248 °F (-5 °C ... +120 °C)
	FKM (Viton®) (in piston pressure switch)	+5 °F ... +248 °F (-15 °C ... +120 °C)
	Silicone	-40 °F ... +248 °F (-40 °C ... +120 °C)
HNBR	-22 °F ... +248 °F (-30 °C ... +120 °C)	
Switching frequency:	200 / min.	
Mechanical life expectancy:	1,000,000 cycles (for diaphragm pressure switches, life expectancy value only applies for switching pressures to max. 725 psi / 50 bar)	
Pressure rise rate:	≤ 14.5 psi/ms (1 bar/ms)	
Differential:	Average value 5...30 % depending on type, not adjustable	
Vibration resistance:	10 g; 5...200 Hz sine wave, DIN EN 60068-2-6	
Shock resistance:	294 m/s ² ; 14 ms half sine wave; DIN EN 60068-2-27	
Protection class:	Up to IP67 / IP6K9K according to the manufacturer's specifications for the respective plug-in system only when plugged in, otherwise IP00	
Weight:	approx. 3.17 oz / 90 g	

Contact assignment for bayonet connectors

Coding A1-2.1	Coding A2-2.1	Coding A3-2.1	Coding A4-2.1

Packard MetriPack 280®	Deutsch DT06-3S (für DT04-3P)	AMP Junior Timer®	Bayonet DIN 72585 / ISO 15170 A1-2.1	M12x1 DIN EN 61076-2-101-LF
2 x 0.5 mm ² Radox cables	2 x 0.5 mm ² PUR-cables	2 x 0.5 mm ² Radox cables	2 x 0.5 mm ² Radox cables	4 x 0.34 mm ² PUR-cables
IP65	IP67	IP65	IP65	IP67
1-1-14-653-114	1-1-36-653-160	1-1-18-653-116	1-1-20-653-112	1-1-00-653-162

0114 / 0115	0116 / 0117	0118 / 0117	0120 / 0121	0122 / 0123
Packard MetriPack 280®	Deutsch DT04-3P	AMP Junior Timer®	Bayonet DIN 72585/ISO 15170	M12x1 DIN EN 61076-2-101-A
IP67	IP67, IP6K9K	IP65, IPx4K	IP67, IP6K9K	IP67
H ≈ 62 mm	H ≈ 63 mm	H ≈ 54 mm	H ≈ 49 mm	H ≈ 51 mm
			 Coding: A1-2.1	

Pressure switches hex 24 with integrated connector

NC or NO, maximum operating voltage up to 42 V



- Large selection of electrical plug-in types for quick attachment and reliable connection
- High protection class (to IP67 or IP6K9K)
- Compact and rugged design in industrial environments like construction and agricultural machinery or commercial vehicles
- Switching point can be set on site with adjusting screw in the connector¹⁾
- High overpressure resistance, compact, small switches, available as normally open or normally closed

¹⁾ Pressure switches can also be supplied preset at factory.
The switching point is embossed onto pressure switches preset at factory.

The all-rounder with the broad selection of options

NC or NO, maximum operating voltage up to 42 V

with 10 plug-in types

- Deutsch DT04-2P
- AMP Superseal 1.5°
- Packard MetriPack 280°
- Deutsch DT04-3P
- AMP Junior Timer®
- M12x1 DIN EN 61076-2-101-A

Bayonet with 4 codings

- Coding A1-2.1
- Coding A2-2.1
- Coding A3-2.1
- Coding A4-2.1

for 6 setting ranges

- 1.45 - 14.5 psi (0.1 - 1 bar)
- 7.25 - 43.5 psi (0.5 - 3 bar)
- 14.5 - 145 psi (1 - 10 bar)
- 145 - 290 psi (10 - 20 bar)
- 290 - 725 psi (20 - 50 bar)
- 725 - 2,175 psi (50 - 150 bar)

with many thread types

- 1/4 BSPP
- 1/8 BSPP
- M 10x1 cyl.
- M 10x1 con.
- M 12x1.5 cyl.
- NPT 1/8
- NPT 1/4
- 9/16-18 UNF
- 7/16-20 UNF

for a broad diversity of applications

- NBR (BunaN): Hydraulic/machine oil, heating oil, air, nitrogen, etc.
- EPDM: Brake fluid, hydrogen, oxygen, acetylene, etc.
- FKM (Viton®): Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.
- HNBR: Hydraulic/machine oil, esterbased bio-oils
- Silicone: Water, food products (FDA approval)

