Pressure switches hex 24 with integrated connector



0110 / 0111
Deutsch DT04-2P
IP67, IP6K9K



0112 / 0113
AMP Superseal 1.5®
IP67



0114 / 0115
Packard MetriPack 280®
IP67



0116 / 0117
Deutsch DT04-3P
IP67, IP6K9K



0118 / 0119
AMP Junior Timer®
IP65, IPx4K



0120 / 0121
Bayonet DIN 72585
IP67, IP6K9K



0122 / 0123
M12x1 DIN EN 61076-2-101-A
IP67

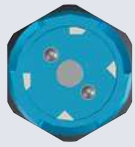
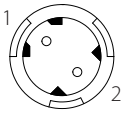
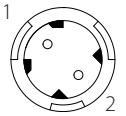
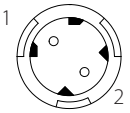
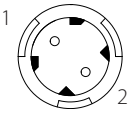


0124 / 0125
M12x1 DIN EN 60947-5-2
IP67

Technical details

Rated working voltage:	10 … 42 VAC/DC	
Rated current range (resistive load, DC12 / AC12):	10 mA … 4 A	
Switching power DC12 / AC12:	100 W / 100 VA	
Temperature resistance of sealing materials:	NBR (in diaphragm pressure switch)	-40 °C … +100 °C
	NBR (in piston pressure switch)	-30 °C … +100 °C
	EPDM	-30 °C … +120 °C
	FKM (in diaphragm pressure switch)	-5 °C … +120 °C
	FKM (in piston pressure switch)	-15 °C … +120 °C
	FFKM	-20 °C … +120 °C
	Silicone	-40 °C … +120 °C
	HNBR	-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. 50 bar)	
Pressure rise rate:	≤ 1 bar/ms	
Hysteresis:	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/s²; 14 ms half sine wave; DIN EN 60068-2-27	
Protection class:	Up to IP67 / IP6K9K according to manufacturer's specifications for the respective plug-in system only when plugged in, otherwise IP00	
Weight:	approx. 90 g	

Contact assignment for bayonet connectors

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

0110/0112/0114/0116/0118/0122/0124

Diaphragm pressure switches with integrated connector

- Setting ranges to up to 50 bar (higher settings refer to page 26)
- NC or NO, maximum voltage 42 V
- Zinc-plated steel (Cr VI-free)
- Overpressure safety up to 300 bar[1)]

Plug-in types for diaphragm pressure switches

Deutsch DT04-2P	0110 - XXX XX - X - XXX	0110 - XXX XX - X - XXX
AMP Superseal 1.5®	0112 - XXX XX - X - XXX	0112 - XXX XX - X - XXX
Packard MetriPack 280®	0114 - XXX XX - X - XXX	0114 - XXX XX - X - XXX
Deutsch DT04-3P	0116 - XXX XX - X - XXX	0116 - XXX XX - X - XXX
AMP Junior Timer®	0118 - XXX XX - X - XXX	0118 - XXX XX - X - XXX
M12x1 DIN EN 61076-2-101-A (PIN 1+3)	0122 - XXX XX - X - XXX	0122 - XXX XX - X - XXX
M12x1 DIN EN 60947-5-2 (PIN 1+2 / PIN 1+4)	0124 - XXX XX - X - XXX	0124 - XXX XX - X - XXX

Adjustment range (Tolerance at room temperature)	Male thread	Order number NO ⟶ |:	Order number NC ⟶ :|

Diaphragm pressure switches with integrated connector

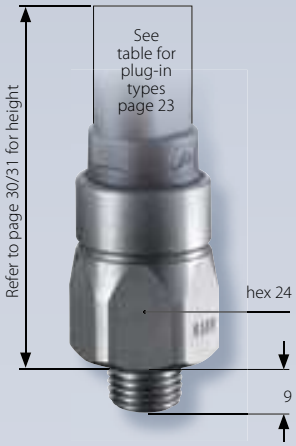
0.1 - 1 (± 0.2) bar	G1/4	XXXX - 403 03 - X - 011	XXXX - 404 03 - X - 015
	G1/8	XXXX - 403 28 - X - 603	XXXX - 404 28 - X - 604
	M10x1 cyl.	XXXX - 403 13 - X - 003	XXXX - 404 13 - X - 004
	M10x1 con.	XXXX - 403 01 - X - 009	XXXX - 404 01 - X - 013
	M12x1.5 cyl.	XXXX - 403 02 - X - 010	XXXX - 404 02 - X - 014
	NPT1/8	XXXX - 403 04 - X - 012	XXXX - 404 04 - X - 016
0.5 - 3 (± 0.3) bar	G1/4	XXXX - 423 03 - X - 070	XXXX - 424 03 - X - 070
	G1/8	XXXX - 423 28 - X - 070	XXXX - 424 28 - X - 070
	M10x1 cyl.	XXXX - 423 13 - X - 070	XXXX - 424 13 - X - 070
	M10x1 con.	XXXX - 423 01 - X - 070	XXXX - 424 01 - X - 070
	M12x1.5 cyl.	XXXX - 423 02 - X - 070	XXXX - 424 02 - X - 070
	NPT1/8	XXXX - 423 04 - X - 070	XXXX - 424 04 - X - 070
1 - 10 (± 0.5) bar	G1/4	XXXX - 407 03 - X - 027	XXXX - 408 03 - X - 031
	G1/8	XXXX - 407 28 - X - 607	XXXX - 408 28 - X - 608
	M10x1 cyl.	XXXX - 407 13 - X - 007	XXXX - 408 13 - X - 008
	M10x1 con.	XXXX - 407 01 - X - 025	XXXX - 408 01 - X - 029
	M12x1.5 cyl.	XXXX - 407 02 - X - 026	XXXX - 408 02 - X - 030
	NPT1/8	XXXX - 407 04 - X - 028	XXXX - 408 04 - X - 032

Seal material – Application areas

NBR	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
FFKM	Chemical acids, diluted alkalis, ketones, ester's, alcohols	6
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:	01XX – XXX XX – X – XXX



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

M.1
hex 24 integrated

0110/0112/0114/0116/0118/0122/0124
Diaphragm pressure switches with integrated connector

- Setting ranges up to 50 bar (lower settings refer to page 25)
- NC or NO, maximum operating voltage up to 42 V
- Zinc-plated steel (Cr VI-free)
- Overpressure safety up to 300 bar[1)]



0122 Coding: PIN 1+3



0124 Coding: PIN 1+4 (NO)



0124 Coding: PIN 1+2 (NC)



Plug-in types for diaphragm pressure switches

Deutsch DT04-2P	0110 - XXX XX - X - XXX	0110 - XXX XX - X - XXX
AMP Superseal 1.5®	0112 - XXX XX - X - XXX	0112 - XXX XX - X - XXX
Packard MetriPack 280®	0114 - XXX XX - X - XXX	0114 - XXX XX - X - XXX
Deutsch DT04-3P	0116 - XXX XX - X - XXX	0116 - XXX XX - X - XXX
AMP Junior Timer®	0118 - XXX XX - X - XXX	0118 - XXX XX - X - XXX
M12x1 DIN EN 61076-2-101-A (PIN 1+3)	0122 - XXX XX - X - XXX	0122 - XXX XX - X - XXX
M12x1 DIN EN 60947-5-2 (PIN 1+2 / PIN 1+4)	0124 - XXX XX - X - XXX	0124 - XXX XX - X - XXX

Adjustment range (tolerance at room temperature)	Male thread	Order number NO ⟶ |:	Order number NC ⟶ :|

Diaphragm pressure switches with integrated connector

10 - 20 (± 1) bar	G1/4	XXXX - 411 03 - X - 043	XXXX - 412 03 - X - 047
	G1/8	XXXX - 411 28 - X - 611	XXXX - 412 28 - X - 612
	M10x1 cyl.	XXXX - 411 13 - X - 011	XXXX - 412 13 - X - 012
	M10x1 con.	XXXX - 411 01 - X - 041	XXXX - 412 01 - X - 045
	M12x1.5 cyl.	XXXX - 411 02 - X - 042	XXXX - 412 02 - X - 046
	NPT1/8	XXXX - 411 04 - X - 044	XXXX - 412 04 - X - 048
20 - 50 (± 2) bar	G1/4	XXXX - 415 03 - X - 059	XXXX - 416 03 - X - 063
	G1/8	XXXX - 415 28 - X - 615	XXXX - 416 28 - X - 616
	M10x1 cyl.	XXXX - 415 13 - X - 015	XXXX - 416 13 - X - 016
	M10x1 con.	XXXX - 415 01 - X - 057	XXXX - 416 01 - X - 061
	M12x1.5 cyl.	XXXX - 415 02 - X - 058	XXXX - 416 02 - X - 062
	NPT1/8	XXXX - 415 04 - X - 060	XXXX - 416 04 - X - 064

Seal material – Application areas

NBR	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
FFKM	Chemical acids, diluted alkalis, ketones, ester's, alcohols	6
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:	01XX – XXX XX – X – XXX

RoHSII compliant

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