

Pressure-gauges, vacuum-gauges and pressure switches

Digital pressure switches, 1/8"



Main features

Series	Description	Symbol
AKP43P..	Positive pressures digital switch	
AKP43V..	Vacuum digital switch	
AKP43C..	Combined pressures digital switch	



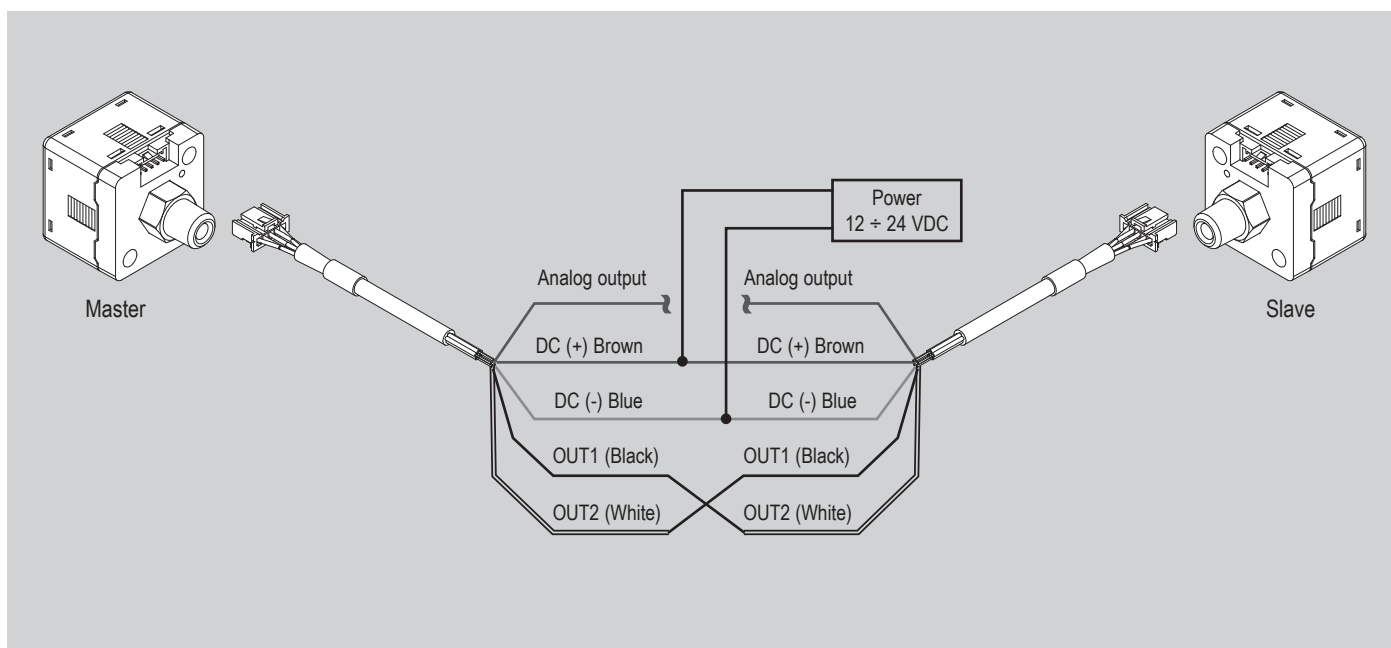
Technical data

Item	AKP43P010F	AKP43P030F	AKP43V010F	AKP43V030F	AKP43C010F	AKP43C030F
Code	024810	024811	024812	024813	024814	024815
Size - Connection	1/8" - M5					
Function	Positive pressures digital switch		Vacuum digital switch		Combined pressures digital switch	
Circuit	NPN	PNP	NPN	PNP	NPN	PNP
Fluid	Compressed filtered air, incombustible and non-corrosive gases					
Rated pressure range ⁽¹⁾	0 ÷ 10 bar		-1,01 ÷ 0 bar		-1 ÷ 1 bar	
Display pressure range ⁽²⁾	0,1 ÷ 10 bar		-1,01 ÷ + 0,1 bar		-1,01 ÷ + 1,01 bar	
Maximum pressure	15 bar		3 bar			
Pressure units	MPa, kgf/cm2, bar, psi		kPa, kgf/cm2, bar, psi, inHg, mmHg			
Pressure resolution	- 0.001 MPa 0.01 kgf/cm2 0.01 bar 0.1 psi - -		1 kPa - 0.001 kgf/cm2 0.001 bar 0.01 psi 0.01 inHg 1 mmHg			
Repeatability	≤ ±0.2% F.S. ±1 digit					
LCD display	Red / Green main&unit display - Orange sub-display (7 segment)					
Protection class	IP40					
Temperature range	0 ÷ +50°C					
Ambient humidity range	35 ÷ 85 %RH (without condense)					
Voltage	12 ÷ 24 V DC (±10%)					
Current consumption	≤ 40 mA (without load)					
Switch output (protected from over-run)	Open collector NPN (two outlets)		Open collector PNP (two outlets)			
	Max. load current: 125 mA		Max. load current: 125 mA			
	Max. supply voltage: 30V DC		Max. supply voltage: 24V DC			
	Residual voltage: ≤ 1.5V		Residual voltage: ≤ 1.5V			
	Response time: ≤ 2,5 ms (chattering-proof function 25, 100, 250, 500, 1000, 1500 ms)					
Hysteresis ⁽³⁾	Adjustable					
Analog output	Output current: 1 ÷ 5V ± 2,5% F.S.					
	Linearity ± 1% F.S.					
	Output impedance ≈ 1kΩ					
Main cable (included)	Oil resistant cable (0,15mm2) - Lenght 200 mm					

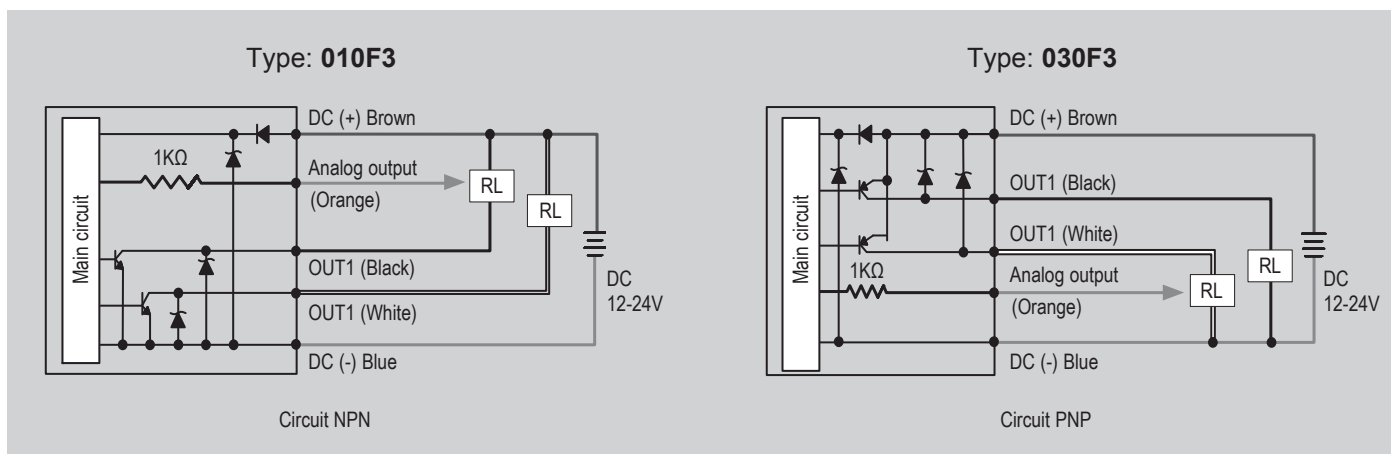
Notes

- (1) Pressure range within technical features of components are granted.
- (2) Pressure range possible to display on component. Pressure values displayed can also be off the nominal pressure range and in this case technical features are not granted.
- (3) Hysteresis value adjustable from 1 to 8 digits.

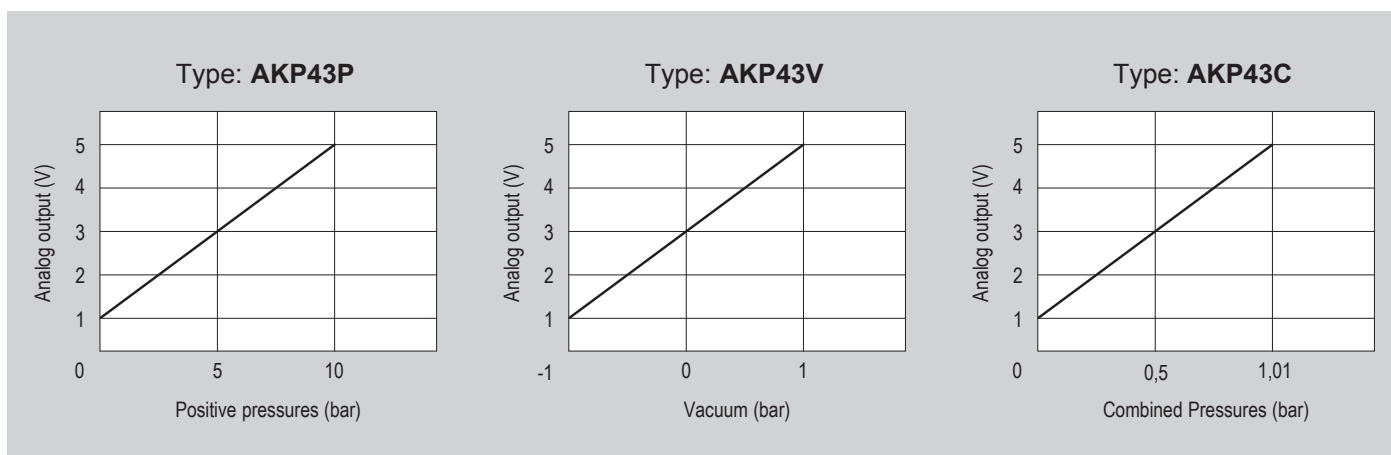
Electric scheme



Circuit diagram

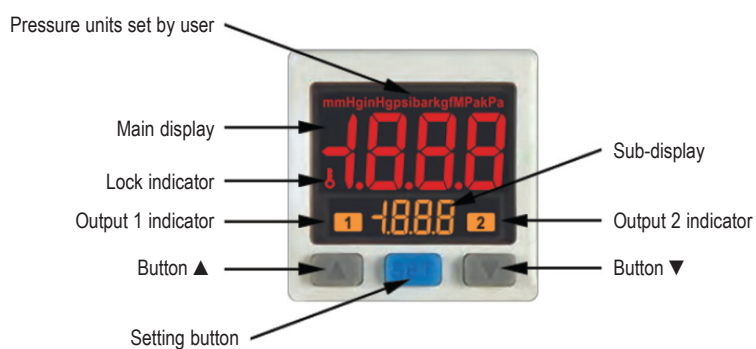


Analog output

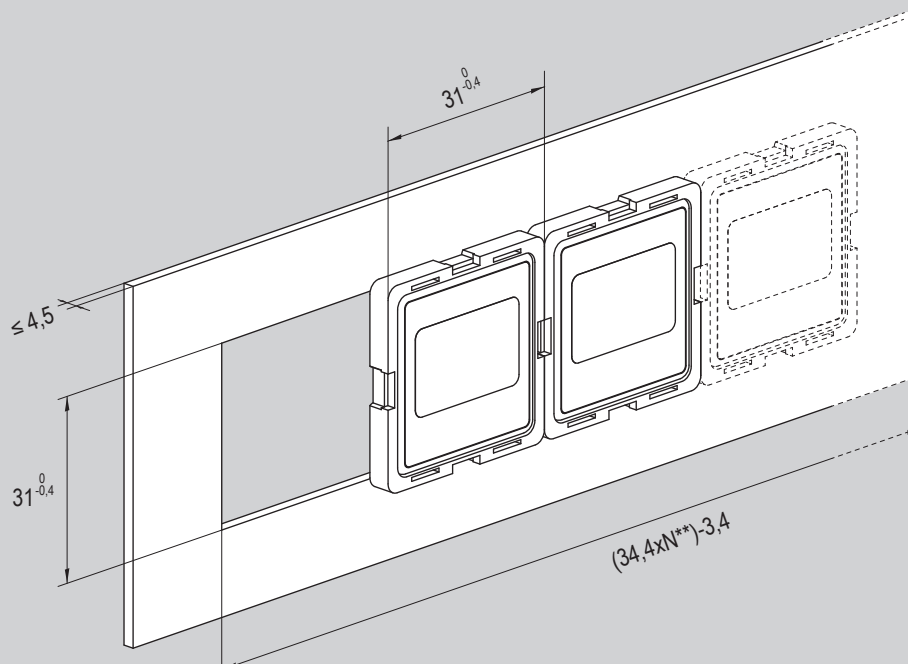


Function

AKP43..



Panel mounting*

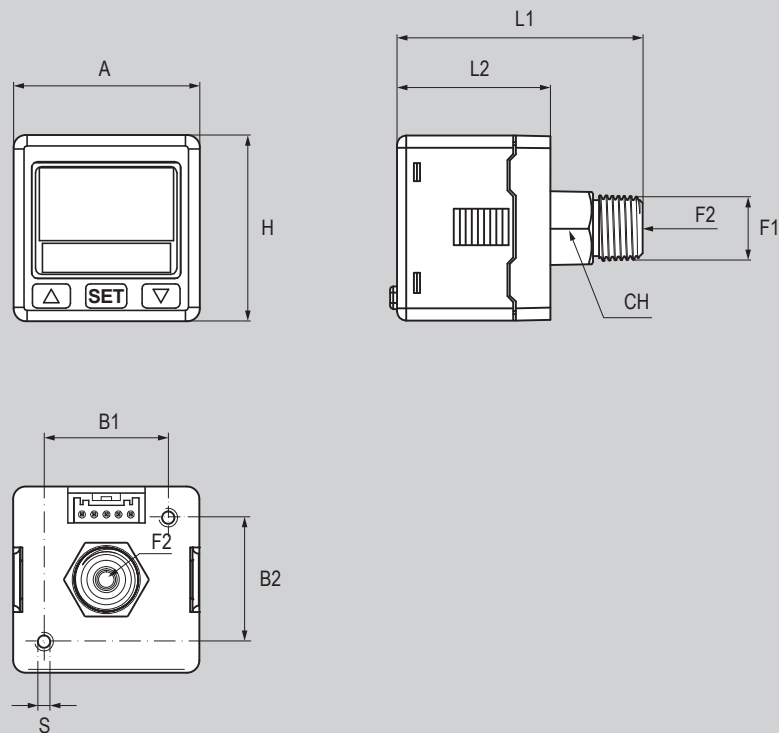


*Possible only with APAD or APAC, see page 3.30.90

**N = number of components to install

Standard dimensions

Type: **AKP43**



Item	Code	Connections	Function	Circuit	A	B1	B2	CH	F1	F2	H	L1	L2	S	Weight g
AKP43P010F	024810	1/8"-M5	Positive pressures digital switch	NPN	30	20	20	12	G1/8"	M5	30	40,3	25,2	M3	80
AKP43P030F	024811	1/8"-M5		PNP	30	20	20	12	G1/8"	M5	30	40,3	25,2	M3	80
AKP43V010F	024812	1/8"-M5	Vacuum digital switch	NPN	30	20	20	12	G1/8"	M5	30	40,3	25,2	M3	80
AKP43V030F	024813	1/8"-M5		PNP	30	20	20	12	G1/8"	M5	30	40,3	25,2	M3	80
AKP43C010F	024814	1/8"-M5	Combined pressures digital switch	NPN	30	20	20	12	G1/8"	M5	30	40,3	25,2	M3	80
AKP43C030F	024815	1/8"-M5		PNP	30	20	20	14	G1/8"	M5	30	40,3	25,2	M3	80