

Low-pressure PE converter
Type PE-VK-5.1

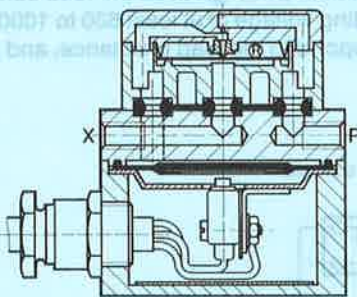


A pneumatic signal at the pilot port pressurises a diaphragm, which in turn actuates the stem of a microswitch (changeover switch). An air supply must be provided at Port P, which normally exhausts through R until sealed of by diaphragm an application of pilot pressure.

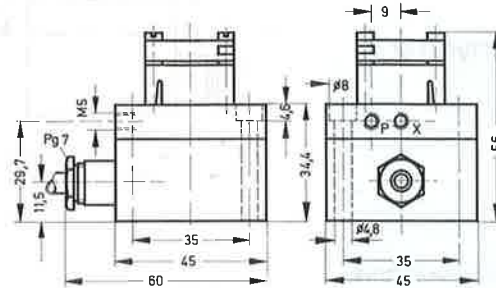
Permissible electrical load

DC			AC		
Voltage V =	Resistive load A (Ohm)	Inductive load A	Voltage V~	Resistive load A (Ohm)	Inductive load A
up to 15	15	5	up to 110	10	5
30	2	1	230	5	5
115	0.4	0.03			
230	0.2	0.02			

The values above are guide values based on a switching frequency of 60 cycles/min.



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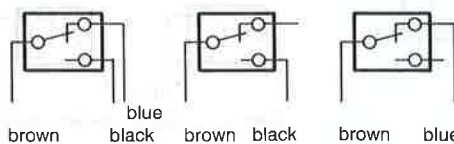
At higher switching frequencies, or when high inductances need to be switched, an R-C spark arrester must be provided for DC operation. This should preferably be wired parallel to the switch or load, with R and C in series.

The following relationships should be observed for spark suppression elements:

The value of the capacitor C in μF should be as great as the load current I in A, and should be rated for an operating voltage of at least 630 to 1000 V. The value of the resistor R should correspond to the load resistance, and should have a power rating of $1/2$ to 1 W.

Contact configurations:

Changeover contacts N/O contacts N/C contacts



P = Supply port (compressed air)
X = Pilot signal line

Order code	Part No./Type	7451 PE-VK-5.1
Medium		Compressed air (filtered, unlubricated)
Design		Pneumatically-actuated electrical microswitch
Mounting		2 through-holes in housing
Connection	pneumatic	M5
	electrical	4-core cable with protective conductor, 1 m long
Supply pressure range		0.1 to 0.25 bar
Pilot signal pressure range		0.5 to 250 mbar
Constant air consumption when not actuated		0.7 l/min
Switching capacity		See table
Degree of protection to DIN 40050		IP 65
Temperature range		- 10 to +50 °C
Materials		Housing: anodized aluminium, ABS; seals: perbunan
Weight		0.250 kg