



Series SR - SU - SQ - ST

General

The limit switches, or magnetic sensors, must be mounted on cylinders with magnetic piston.

These, when hit by the magnetic field generated by the piston as it approaches, close the circuit sending an electrical signal to relay, solenoid valve or converse with the controlling electronic system of the machine. There are both ampulla Reed and Hall effect magnetic sensor available. The sensors are attached to the cylinder by a proper clamp, slot or adapter and may have an activation LED indicator.

Note: The magnetic sensors are according to the Directive **EMC 89/336/CEE** and following amendments.

Instruction on how to use the sensors properly

Particular attention should be paid in order not to exceed the wide operating limits shown in the next pages. Besides, the 2 wires sensors have never to be connected to the mains if a load has not been yet connected in series. These are the only cares that, if not followed, may cause damages to the sensor. Besides, please consider that, while loading, the current absorbed by the sensors might be 50% higher than the rated one.

In case of direct current (DC) feeding, the polarity of the connection must be observed: the brown cable must be connected to the plus (+) and the blue one to the minus (-).

For all sensors, particular attention has to be paid to external factors (like, for example, nearby live cables, electromagnetic fields generated by electric motors, nearby metallic bodies, etc.) since they can affect the magnetic field generated by the magnet inside the piston and therefore causing malfunctions.

Electrical cable length must be kept below 10 meters in order to guarantee proper functioning.

If needed, 10 meters cable length can be exceeded; Pneumax suggests the use of an inductor or resistor in series to the load in order to reduce the capacitive behavior of the cable.

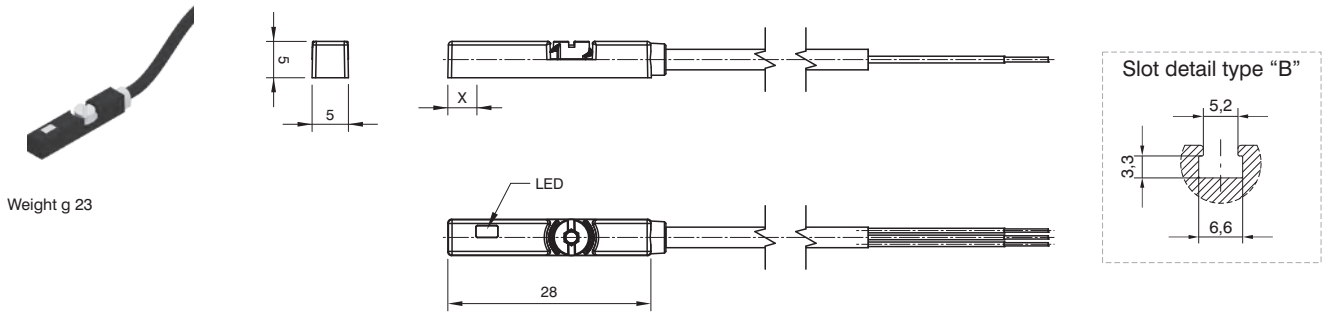
In this case, the customer is responsible for the selection of the inductor or resistor value. Pneumax assume no responsibility in case of malfunction.

When using a two wire Reed type sensor always ensure that the correct load is applied in series on any of the two wires.

In case two or more sensors need to be connected in series, pay attention to the voltage drop generated (around 3V for each sensor), and, in case, use the version designed for in series connection.

Hall effect sensors are longer lasting if compared to the Reed version since they do not include any moving mechanical part.

► Sensor with 2.5 m. cable

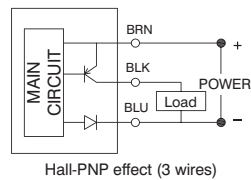


Weight g 23

Ordering code

Hall effect sensors, with led, DC, N.O. (Normally open)		X= point of commutation
1595.HAP	PNP (3 wires) cable 2.5 mt.	2.3 mm

Diagrams and connections



Technical characteristics	1595.HAP
Type of contact	N.O.
Output type	PNP
Maximum current	100 mA
Maximum permanent power	3W
Voltage range	10 - 28 VDC
Working temperature	-10 - +70°C
Maximum voltage drop	1,5V
Cable section (mm ²)	3 x 0,14 Ø2.8 mm PUR
Degree of protection	IP67