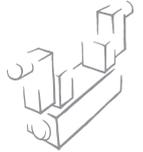


# 10-mm SOLENOID VALVES series "PLT-10"



LEHENGOVAK, S. A.



PLT-10 solenoid valves are the latest development in modern pneumatic design, where the main trends focus on miniaturisation, enhanced performance, reduced power and reliability. Numerous versions are available, all with an ISO 15218 pneumatic interface. The power required to operate the PLT-10 has been greatly reduced, ranging from 0.3 to 0.8 Watts. It is available with a LED indicating when it is active. Monostable manual control is also possible. None of the versions will get damaged if the polarity is accidentally inverted.



## STURDY CONSTRUCTION

## COMPACTING SCREWS

**NO!**

~~PIN AND ELECTRONIC BOARD SOLDERING~~

**NO!**

~~TIN SOLDERING~~

**NO!**

~~METAL CLIPS TO JOIN THE PARTS~~

**NO!**

~~PLASTIC SNAP FITTINGS~~



Our engineers have focused on sturdy, highly reliable solutions. The criticalities of conventional pilots have been avoided: pin and electronic board soldering; breakage due to vibration; tin soldering, which is difficult to control; snap clips and fittings between the body and coil, which can yield or alter the distance between the parts.

The main components of the pilot - body, coil and cover - are anchored firmly together and compacted by means of two screws.

**LIMITED NUMBER OF COMPONENTS**



To assemble a PLT-10 all you have to do is connect 5 ready-mounted subassemblies. Traditional solutions have 9 or 10 separate components. The stroke of the mobile core is influenced by the tolerance of 3 components only, compared to 5 or 6 in previous solutions.

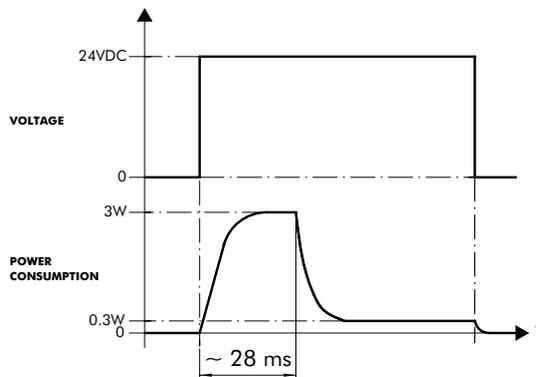
**HIGHLY COMPATIBLE**

**FKM/FPM**



The gaskets in contact with the fluid are made of FKM/FPM, a material that is compatible with most oils and fluids. The fluid does not come into contact with any copper parts.

**SPEED-UP**



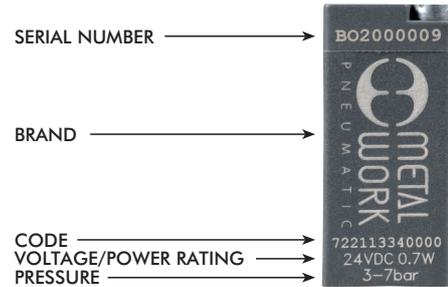
Speed-up valves have very high capacities and fast response times, despite very low power consumption. When a command is received, a high power is generated for a brief period of time so that the valve switches rapidly. Position maintenance power is then delivered, being about one tenth the former value. This solution also allows very low valve temperatures.

**HEAVY-DUTY**

**20 μm FILTERING: OK!**

The inside has been designed to allow operation even with unpurified air, within certain limits. The required degree air filtration is just 20 μm. Lubricated air is not required.

**LASER MARKING**

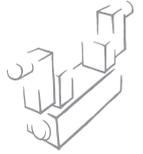


Despite its small size, each PLT-10 is laser-marked with the main data. The serial number incorporates the date of manufacture, the production lot and the test data. This allows full traceability of the valve and its components.

**ENVIRONMENT**

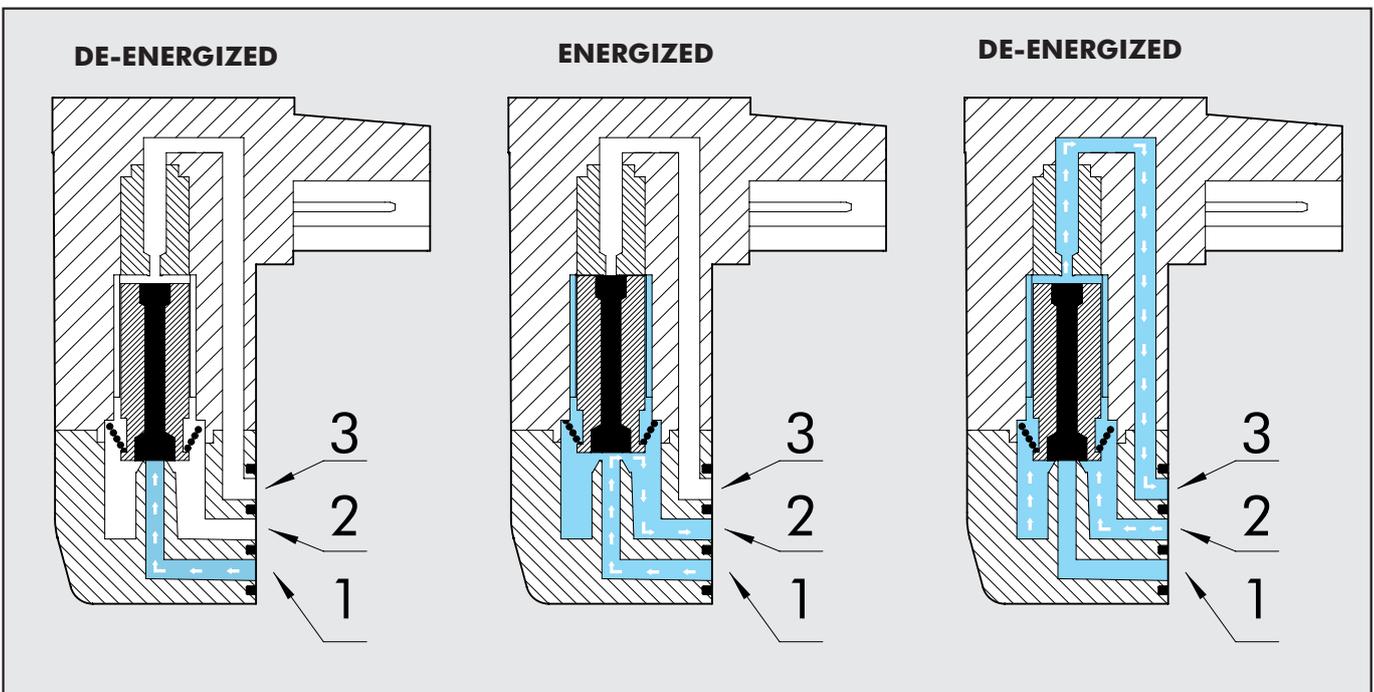


Thanks to its reduced input power, even the little PLT-10 helps save energy. If we compare the 0.3 or 0.8W of the various PLT-10 with the 2.5 or 5W of conventional valves, and multiply the millions of items produced by the thousands of hours/year operation, we calculate that 200-400 tonnes of crude oil can be saved each year!



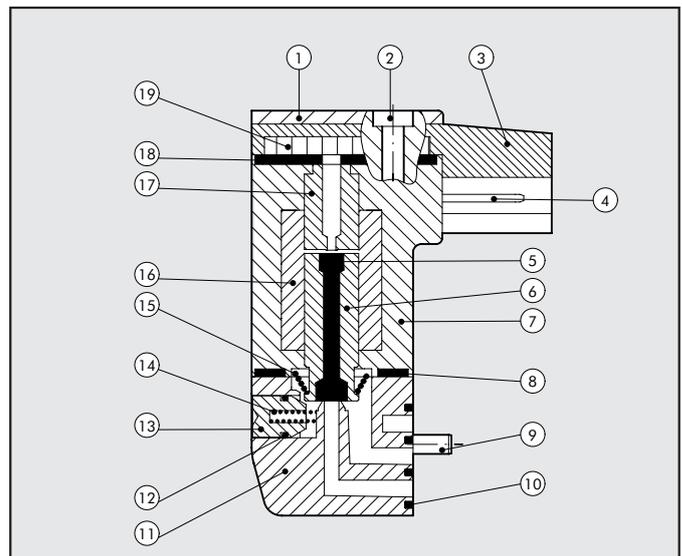
TECHNICAL DATA		
Type		3/2 NC
Operating temperature range	T <sub>e</sub>	5° ÷ 50° C
Fluid temperature	T <sub>g</sub>	5° ÷ 50° C
Fluid		Filtered, lubricated or unlubricated air
Operating life		Over 50 million cycles
Weight	g	12
Voltage tolerance	ΔV	± 10 %
Max operating frequency	f	30 Hz
Switching factor	ED	100 %
Insulation class		F155
Index of protection		IP51
Power connection		PLUG IN

## OPERATING CHART

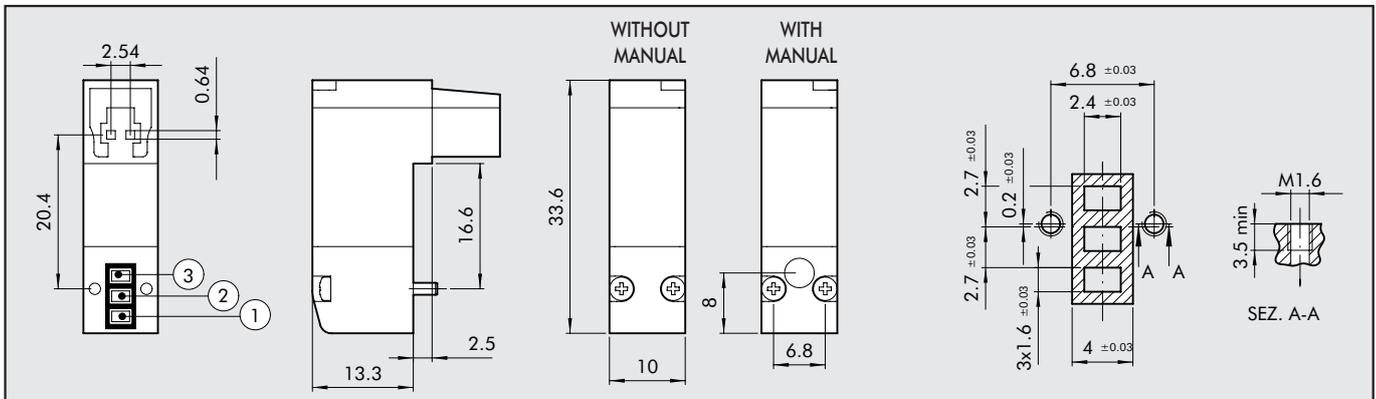


## COMPONENTS

- ① Transparent cover: PA612-transparent
- ② Assembly screws: galvanized steel
- ③ Cover: PA66
- ④ PIN
- ⑤ Mobile core over-stamping: FKM/FPM
- ⑥ Mobile core: AISI 403F
- ⑦ Coil over-stamping: PA66
- ⑧ Body-coil gasket: NBR70
- ⑨ Assembly screws: galvanized steel
- ⑩ Body gasket: NBR
- ⑪ Body: PA66
- ⑫ Manual gasket: NBR (only for version with manual operated)
- ⑬ Manual control: OT58 nickel-plated brass (only for version with manual operated)
- ⑭ Manual spring: AISI 302 (only for version with manual operated)
- ⑮ Spring: AISI 302
- ⑯ Winding: PPS - Copper wire
- ⑰ Fixed core: AISI 430F
- ⑱ Coil-cover gasket: NBR
- ⑲ Electronic board (only for version with electronic board)

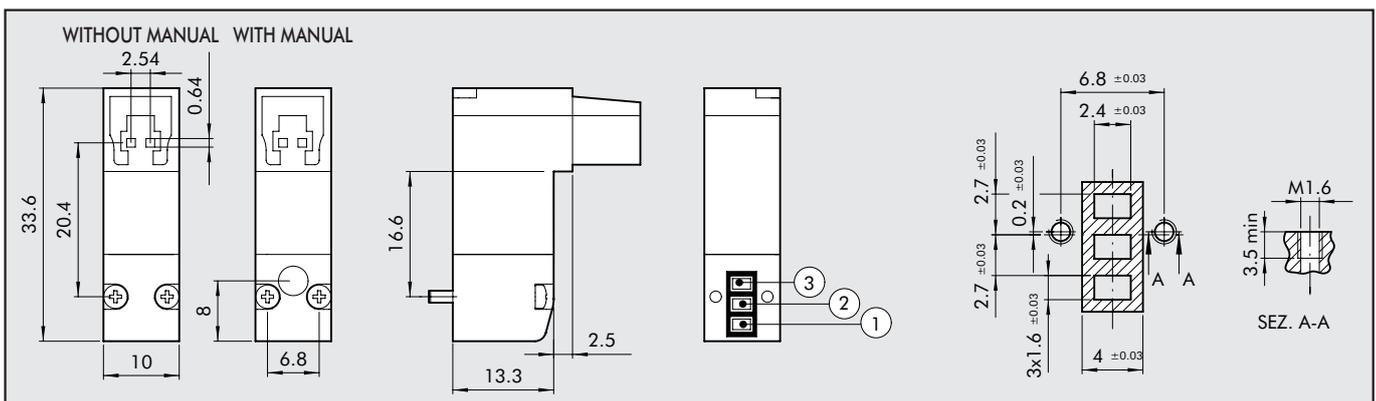


**PLT-10 WITH BASE AND CONNECTION ON THE SAME SIDE**

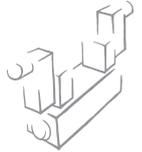


	VERSION (3/2 NC)	Code	Manual	Voltage [Volt]	Power [Watt]	Through Ø mm	Operating pressure bar	Flow rate at 6 ΔP=1 bar [NI/min]	TMax coil T at 24VDC Te 20°C at ED100% [°C]	Weight [g]
SENZA LED		722113340000	without	24VDC	0.7 W	0.6	3÷7	9	93	12
		722113340100	with	24VDC	0.7 W	0.6	3÷7	9	93	12
CON LED		722113541000	without	24VDC	0.9 W	0.6	3÷7	9	93	12
		722113541100	with	24VDC	0.9 W	0.6	3÷7	9	93	12
SPEED-UP LED		722116841000	without	24VDC	3/0.3 W	1.2	2÷7	16	51	12
		722116841100	with	24VDC	3/0.3 W	1.2	2÷7	16	51	12

**PLT-10 WITH TIMER BASE AND CONNECTION ON OPPOSITE SIDES**



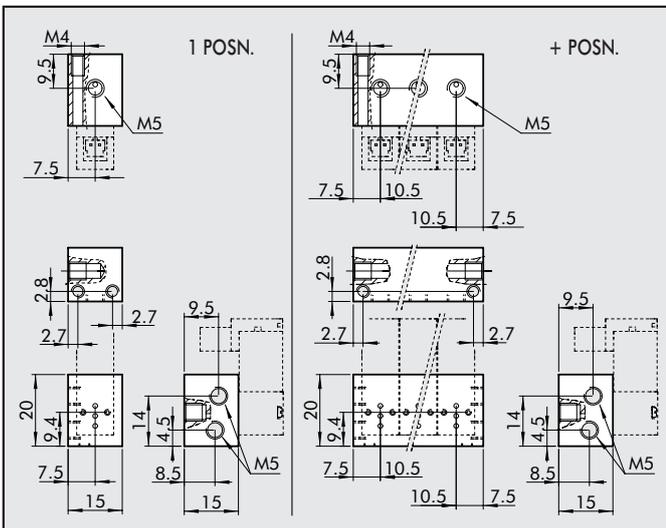
	VERSION (3/2 NC)	Code	Manual	Voltage [Volt]	Power [Watt]	Through Ø mm	Operating pressure bar	Flow rate at 6 ΔP=1 bar [NI/min]	TMax coil T at 24VDC Te 20°C at ED100% [°C]	Weight [g]
SENZA LED		722213340000	without	24VDC	0.7 W	0.6	3÷7	9	93	12
		722213340100	with	24VDC	0.7 W	0.6	3÷7	9	93	12
CON LED		722213541000	without	24VDC	0.9 W	0.6	3÷7	9	93	12
		722213541100	with	24VDC	0.9 W	0.6	3÷7	9	93	12
SPEED-UP LED		722216841000	without	24VDC	3/0.3 W	1.2	2÷7	16	51	12
		722216841100	with	24VDC	3/0.3 W	1.2	2÷7	16	51	12



**KEY TO CODES**

7	2	2	1	1	3	3	4	0	1	00
FAMILY	POSITIONING		POWER CONNECTION	Through Ø	POWER	VOLTAGE	LED	MANUAL CONTROL	VERSION	
Solenoid valves series "PLT-10"	1	Base and Connection on same side	1 Plug-in	3 0.6 mm 6 1.2 mm	3 0.7 W 5 0.9 W 8 3/0.3 W	4 24VDC	0 - 1 LED	0 - 1 manual monostable	00 Standard	
	2	Base and Connection on opposite sides								

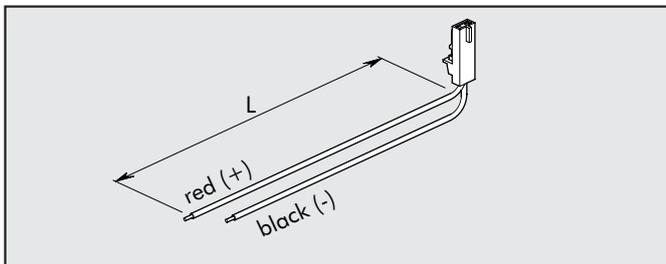
**DIMENSIONS OF BASES FOR PLT-10**



Code	Description
W0400100101	ACC. BASE 1 POSN. FOR PLT-10
W0400100102	ACC. BASE 2 POSN. FOR PLT-10
W0400100103	ACC. BASE 3 POSN. FOR PLT-10
W0400100104	ACC. BASE 4 POSN. FOR PLT-10
W0400100105	ACC. BASE 5 POSN. FOR PLT-10
W0400100106	ACC. BASE 6 POSN. FOR PLT-10
W0400100107	ACC. BASE 7 POSN. FOR PLT-10
W0400100108	ACC. BASE 8 POSN. FOR PLT-10
W0400100109	ACC. BASE 9 POSN. FOR PLT-10
W0400100110	ACC. BASE 10 POSN. FOR PLT-10

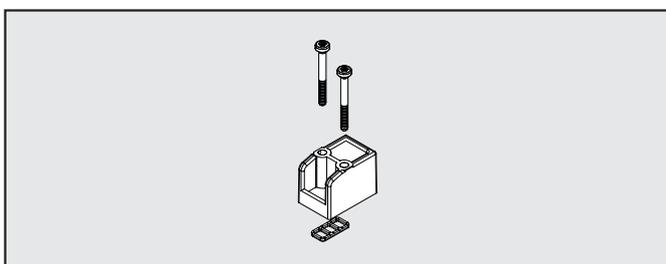
**ACCESSORIES**

**PLUG-IN CONNECTOR**



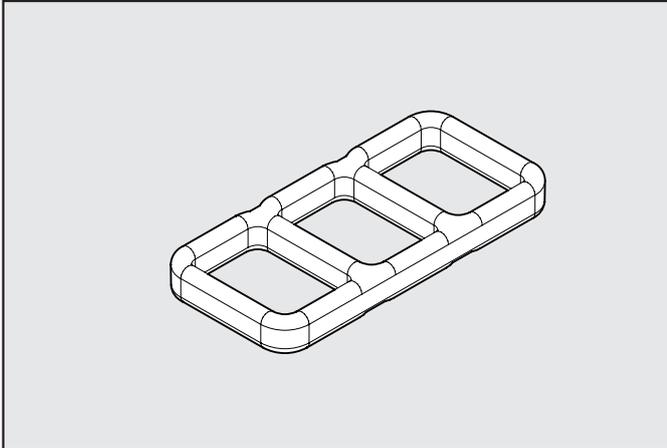
Code	Description
W0970512000	MACH 11 PLUG-IN CONNECTOR L=300

**CAP FOR UNUSED POSITION**



Code	Description	Weight [g]
W0400100200	ACC. CAP 10 mm	6

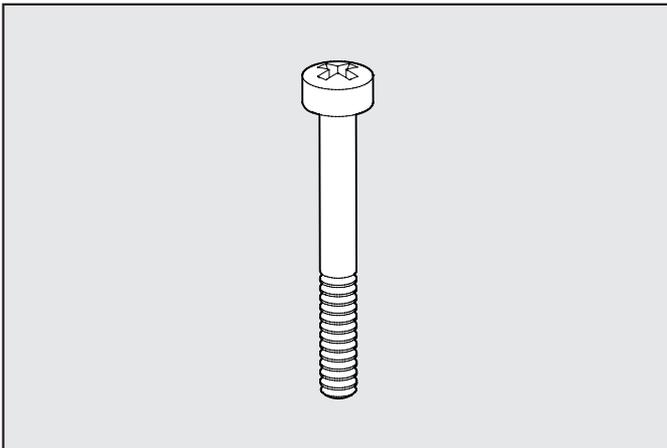
**INTERFACE GASKET**



Code	Description
0226009701	PLT-10 GASKET

N.B. 50 per pack

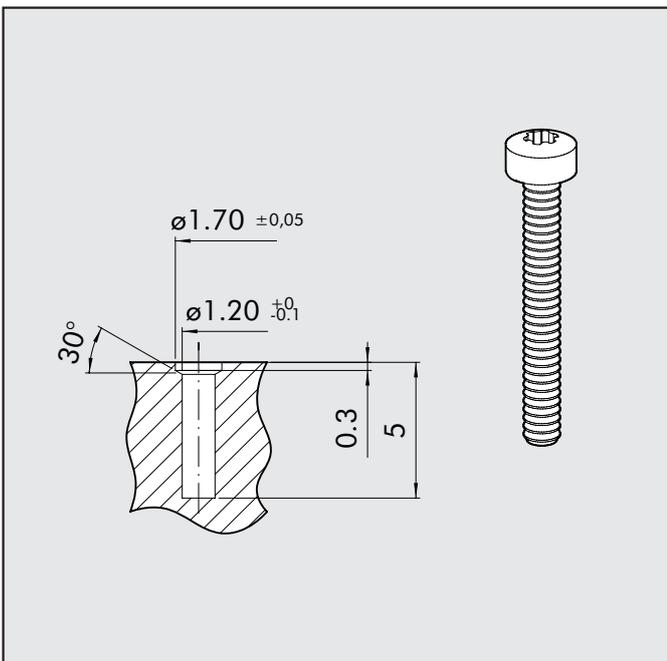
**STANDARD SECURING SCREW (FOR ALUMINIUM)**



Code	Description
0226009702	PLT-10 SCREW FOR ALUMINIUM

N.B. 100 per pack

**SECURING SCREWS FOR TECHNOPOLYMER**



Code	Description
0226009703	PLT-10 SCREWS FOR TECHNOPOLYMER

N.B. 100 per pack

When mounting on technopolymer bodies, use these screws instead of the ones supplied with the PLT-10.

**ATTENTION: approximative dimensions for not added glass plastic materials  
It's always advisable to effect assembling tests.**