

## Plugable Inductors (Pin Type Coils)

FASTRON plugable inductors offer a wide range of inductance values from 1μH to 150 000μH, a high Q and also suitable for high currents and high voltages. They come in shielded, tube and cap versions able to protect the winding. They are available in reel packing and ammopack.

**Applications** Applied in DC-DC converters and all types of electronic instruments, such as digital amplifier LPF and signal filtering applications.

### Technical Data

L – Value (rated inductance)	Measured with Bode 100 Vector Network Analyzer or equivalent at frequency $f_L$
Q – Factor (min)	Measured with Bode 100 Vector Network Analyzer or equivalent at frequency $f_Q$
SRF (min)	≥ 40 MHz measured with HP8753ES Network Analyzer or equivalent < 40 MHz measured with Bode 100 Vector Network Analyzer or equivalent
DCR (max)	Measured at 25°C
Rated DC Current	I based on temperature rise, determined at the point where the temperature rise does not exceed 40°C above the ambient temperature of 25°C Isat Current based on inductivity drop of 10% related to the unloaded inductivity
Operating Temperature	For plugable inductors : -55°C to +125°C (including component self-heating) For 07HCP, 07HVP, 09HCP, 09HVP : -55°C to +150°C (including component self-heating) For 07HCP/T, 07HVP/T, 09HCP/T, 09HVP/T : -55°C to +125°C (including component self-heating)
Recommended soldering method	Wave
Moisture Sensitivity Levels (MSL)	MSL Level 1, indicating unlimited floor life at ≤ 30°C / 85% relative humidity
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards : IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +85°C (plugable, 07HCP/T, 07HVP/T, 09HCP/T, 09HVP/T) and +150°C (07HCP, 07HVP, 09HCP, 09HVP) for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle : For plugable, 07HCP/T, 07HVP/T, 09HCP/T, 09HVP/T : -55°C to +85°C to -55°C : For 07HCP, 07HVP, 09HCP, 09HVP : -55°C to +150°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Tensile Strength of Leads (Pull Test)	Components withstand a pulling force of 10N for 10 ± 1 second For 05HCP, 05HCP/T : Components withstand a pulling force of 5N for 10 ± 1 second IEC 60068-2-21 (Ua1)
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

Remarks : Above technical data is for non-shielded type only.

**Ordering Code** Example: 09P-101X-YY

**09P** - **101** **X** - **YY** → **09P-101K-51**  
(Model) (Inductance Value) (Tolerance) (Packing Code)

Core Type - Ferrite

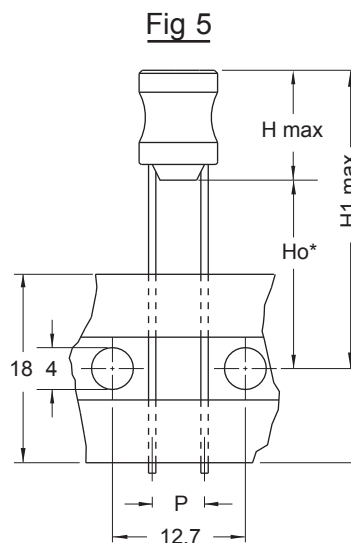
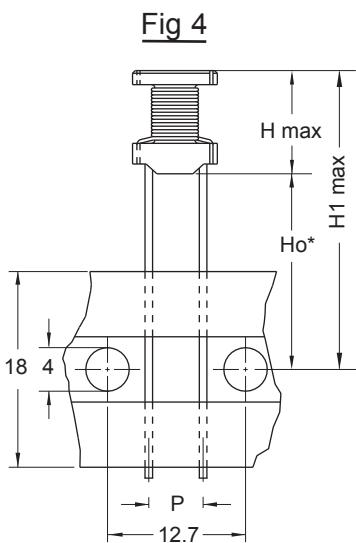
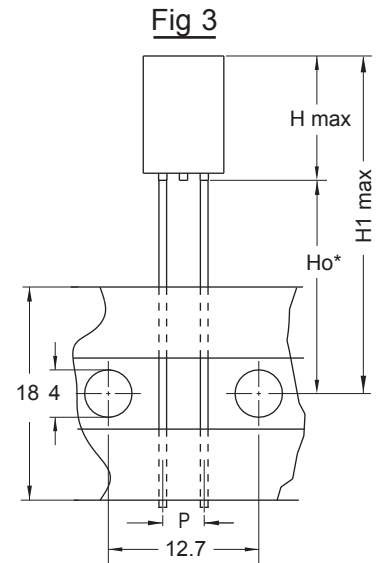
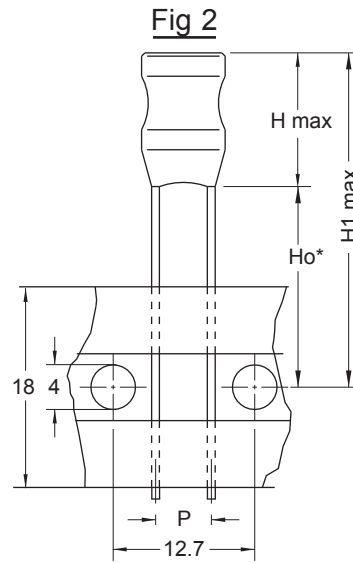
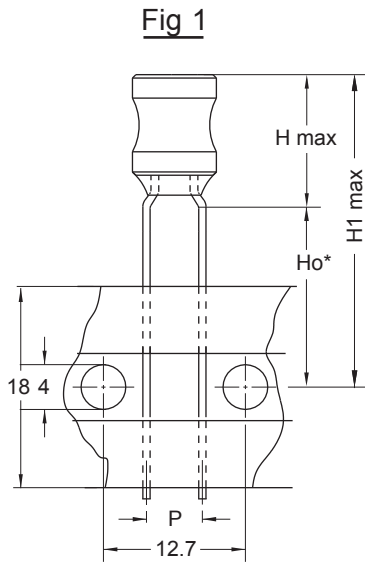
Tolerances - J (5%), K (10%), M (20%)

Packing Code - 50 (Loose in Box) / (Tray / Box), 51 (Taped / Reel)

## Plugable Inductors (Pin Type Coils)

**Packing Specification**

**Reel Taping**  
Packing code : 51



\*according to IEC 286

Series	H max	Ho	H1 max	P	Fig
07P	12.5	16	28	5	1
07P/F	10.5	18	32.2	3.5	3
09P	12.5	18	32.2	5	2
09P/F	13.4	18	32.2	5	3
07HCP & 07HVP	10	18	32.2	5	4
07HCP/T & 07HVP/T	10.5	18	32.2	5	5
11P / 11PHC	15	18	34	5	2
05HCP	7.5	18	28.5	2.5	4
05HCP/T	7.5	18	28.5	2.5	5