

## ELF SERIES PLUG AND HEADER SYSTEMS

Amphenol PCD ELF line comprises a family of durable pluggable terminal blocks and headers on 5mm (.197") spacing that provide flexible wire-to-board interconnect solutions for a wide variety of applications. ELF design and materials include numerous features and advantages which combine to make this the most advanced pluggable block available. The ELF family is UL, CSA and TUV recognised.

ELF series plugs mate with ELF series headers, and accommodate competitive headers as well. The moving vise clamp ensures high-reliability wire termination by providing a direct, high-pressure connection between contact and wire. Precision molded housings allow wire termination while the connector is either plugged or unplugged.

Please visit [www.amphenolpcd.com](http://www.amphenolpcd.com) to view the complete Amphenol PCD terminal line.

### Features / Options ELFP / ELFF Series

- ELFP feature wire entry parallel to contact and mating direction
- ELFF "front-front" feature wire insertion and screw actuation from the front of the plug
- High reliability wire termination
- Smooth mating / unmating
- High performance materials
- Wiring while engaged
- Easy screwdriver separation

### Features / Options ELFH Series

- Precision molded from tough, stable PBT
- Smooth mating / unmating
- Easy screwdriver separation

### Features / Options ELFA Series

- Two tier aligned
- Increase board density
- Precision molded in high temperature polyamide
- Smooth mating / unmating
- Easy screwdriver separation

Request catalogue CAT-AMPHENOL801

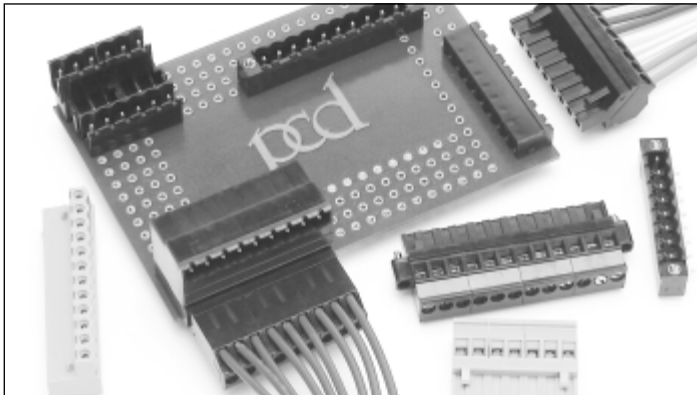
### Ordering Codes

We have listed the more common ordering codes in each section. Please contact us if you need any further assistance.

### Simple steps to guide you in using this catalogue

- 1) Identify the product group listed in Contents on Page 1 and go directly to that page number.
- 2) Each product group cover page then details information and options available.
- 3) Refer to the product detail pages and identify the product you require pictorially.
- 4) Read the product description column for the products standard features.
- 5) Use pins column to determine number of contacts.
- 6) Identify part number.
- 7) In the event the particular option you require is not listed please refer to the part number breakdown page at the end of each section.
- 8) Please contact us directly if you have any further problems.





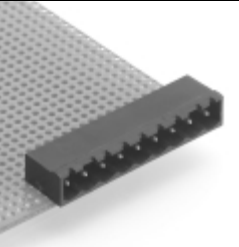
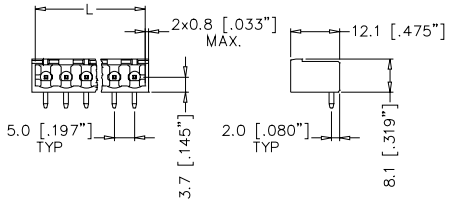
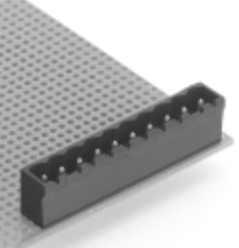
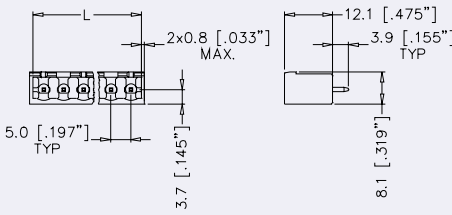
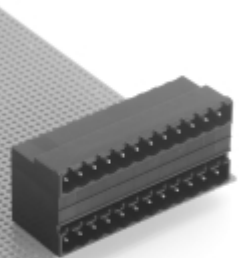
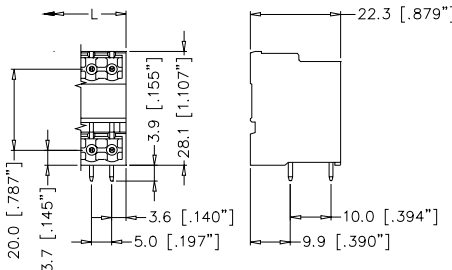
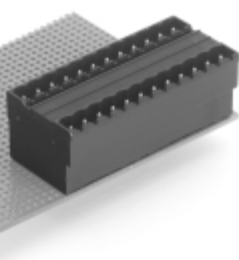
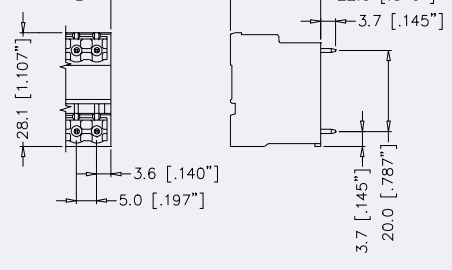
**Features:**

- High reliability wire termination
- Smooth mating / unmating
- High performance materials
- Black housings
- Wiring while engaged
- Easy screwdriver separation
- Contact us for positions not listed below
- Custom marking and polarising keys available on request

**Specifications: Page 86**

PRODUCT - FIGURE	DRAWING	DESCRIPTION	POS.	L DIMENSIONS mm (inches)	PART NUMBER
		ELFP Right angle plug, 5.0mm (.197") pitch, Black.	2	10 (0.39)	ELFP02110
			3	15 (0.59)	ELFP03110
			4	20 (0.78)	ELFP04110
			5	25 (0.98)	ELFP05110
			6	30 (1.18)	ELFP06110
			8	40 (1.57)	ELFP08110
			10	50 (1.96)	ELFP10110
			12	60 (2.36)	ELFP12110
			16	80 (3.14)	ELFP16110
			20	100 (3.93)	ELFP20110
			24	120 (4.72)	ELFP24110
					ELFF Top entry plug, 5.0mm (.197") pitch, Black.
3	15 (0.59)	ELFF03130			
4	20 (0.78)	ELFF04130			
5	25 (0.98)	ELFF05130			
6	30 (1.18)	ELFF06130			
8	40 (1.57)	ELFF08130			
10	50 (1.96)	ELFF10130			
12	60 (2.36)	ELFF12130			
16	80 (3.14)	ELFF16130			
20	100 (3.93)	ELFF20130			
24	120 (4.72)	ELFF24130			

ELF SERIES

PRODUCT - FIGURE	DRAWING	DESCRIPTION	L (inches)	POS.	PART NUMBER
		ELFH Horizontal – closed header, 5.0mm (.197") pitch, Black.	10 (0.39)	2	ELFH02110
			15 (0.59)	3	ELFH03110
			20 (0.78)	4	ELFH04110
			25 (0.98)	5	ELFH05110
			30 (1.18)	6	ELFH06110
			40 (1.57)	8	ELFH08110
			50 (1.96)	10	ELFH10110
			60 (2.36)	12	ELFH12110
			80 (3.14)	16	ELFH16110
			100 (3.93)	20	ELFH20110
120 (4.72)	24	ELFH24110			
		ELFH Vertical – closed header, 5.0mm (.197") pitch, Black.	10 (0.39)	2	ELFH02150
			15 (0.59)	3	ELFH03150
			20 (0.78)	4	ELFH04150
			25 (0.98)	5	ELFH05150
			30 (1.18)	6	ELFH06150
			40 (1.57)	8	ELFH08150
			50 (1.96)	10	ELFH10150
			60 (2.36)	12	ELFH12150
			80 (3.14)	16	ELFH16150
			100 (3.93)	20	ELFH20150
120 (4.72)	24	ELFH24150			
		ELFA Horizontal header, 2-Tier aligned, 5.0mm (.197") pitch, Black.	12 (0.47)	4	ELFA04110
			17 (0.66)	6	ELFA06110
			22 (0.86)	8	ELFA08110
			27 (1.06)	10	ELFA10110
			32 (1.26)	12	ELFA12110
			42 (1.65)	16	ELFA16110
			52 (2.04)	20	ELFA20110
			62 (2.44)	24	ELFA24110
		ELFA Vertical header, 2-Tier aligned, 5.0mm (.197") pitch, Black.	12 (0.47)	4	ELFA04150
			17 (0.66)	6	ELFA06150
			22 (0.86)	8	ELFA08150
			27 (1.06)	10	ELFA10150
			32 (1.26)	12	ELFA12150
			42 (1.65)	16	ELFA16150
			52 (2.04)	20	ELFA20150
			62 (2.44)	24	ELFA24150

## STANDARD DATA ELF SERIES

		VALUE			
<b>GENERAL CHARACTERISTICS</b>	Series	ELFP	ELFF	ELFH	ELFA
	Termination	Screw		PCB	
	Wire Gauge	12-26 AWG		Not Applicable	
	Wire Strip Length	7.87mm (.310)	7.87mm (.310) (14-26 AWG) 12.44mm (.490) (12 AWG)	Not Applicable	
	Hole Diameter	Not Applicable		1.40mm (.055) min.	
<b>ELECTRICAL CHARACTERISTICS</b>	Operating Voltage	300V			
	Dielectric Withstanding	< 3000V			
	Current Carrying Capacity	15A			
	Insulation Resistance	> 10 <sup>5</sup> MΩ			
<b>CLIMATIC CHARACTERISTICS</b>	Operating Temperature	105°C (221°F) max			
<b>MECHANICAL CHARACTERISTICS</b>	Wire Pullout Force	Per UL 486E, Section 14		Not Applicable	
	Recommended Tightening Torque	0.79N-m (7lb-in.)		Not Applicable	
<b>MATERIALS</b>	Housing (Black)	PPO, UL 94V-0		PBT, UL 94V-0	PA 46, UL 94V-0
	Contact / Finish	Copper Alloy / Tin-Lead			
	Clamp Screw / Finish	Steel / Nickel		Not Applicable	
	Wire Clamp / Finish	Copper Alloy / Nickel		Not Applicable	