

 Y-LOCK<sup>®</sup>  
PULLFORCE

# Y-Lock Pullforce Connector and Cable System

Series Y-LPF

## Series Y-LPF Y-Lock® Pullforce System

Developments of new products in the current market situation require good performance and use of the technical complexity and space available, especially when it comes down to efficiency!

Efficiency means the achievement of a full range of functions on the smallest of available space. With our Y-Lock® Pullforce connector system we realise these requirements. Because Y-Lock® Pullforce fulfills the need for a smart technology, space-saving design and the reduction of handling costs in different areas

### Applications:

Due to the special design features the Y-Lock Pullforce fulfils the highest requirements and can be used in applications which have a need for very high demands.

- Automotive systems
- Lightning systems
- Industrial Process Systems
- Medical equipments

### Functionality of locking mechanism:

Lock mechanism by use of small hooks at the board connector

The hooks lock the FFC/FPC behind the supporting tape

Use of standard FFC/FPC under compliance with tolerances:

- Supporting Tape: 4.5mm +/- 0.5mm (0.5mm pitch)  
4.5mm +/- 0.8mm (1.0mm pitch)
- Stripped length: 3.0mm +/- 0.5mm

### Optional use of an additional stiffener

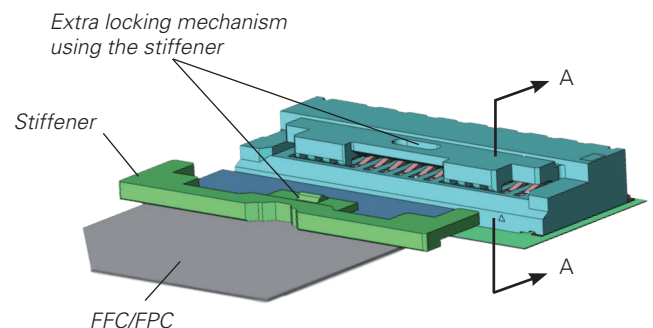
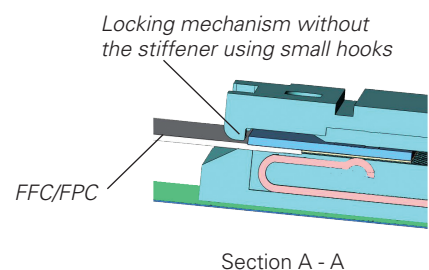
The design of the additional stiffener avoids wrong insertion

Optimized security during the plugging, e.g. against strong vibrations

Yamaichi Electronics offers the complete assembly of the FFC/FPC with the additional stiffener

### Advantages:

- New design for an easy, quick and secure assembly for a Board-to-cable solution "One-push lock" system
- Standard FFC/FPC with supporting tape. Optional use of an additional stiffener
- Pitches: 0.5 and 1.0mm
- 90° and 180° versions
- Various pin counts available
- Non-ZIF system
- Automatic assembly is possible



# Y-Lock Connector and Cable System

## Series Y-LPF Y-Lock® Pullforce System



### Ordering Code for Board Connectors

Y-LPF	- C	X	-XX	-S	X	- X	X	- R
Serie	Connector	Pitch 1 = 1.0mm 5 = 0.5mm	Pin Count 12 16 etc.	SMT	Orientation 1 = 180° 9 = 90°	Plating Mating Area B = 0.3µm Au L = Tin	Plating Termination Area F = Au Flash L = Tin	Packaging

### Ordering Code for FFC / FPC Cable

= Standard length minus 6mm

Y-LPF	- X	X	- XX	- XXX	- X	X	- X	- X
Serie	F = FFC P = FPC	Pitch 1 = 1.0mm 5 = 0.5mm	Pin Count 12 to 30	Insulation Lenght	Direction Supporting Tape A = same B = opposite	Additional Stiffener 0 = none 1 = one side 2 = both sides	Plating Termination Area F = Au Flash L = Tin	UL No.  S = UL2896  V = UL20706

### Product Line Status

Pitch	Part Number	Pin Count	Orientation
1.00mm	Y-LPF-C5-30-S1-BF-R	**	180°C
	Y-LPF-C5-30-S9-BF-R	**	90°C
0.50mm	Y-LPF-C5-30-S1-BF-R	30	180°C
	Y-LPF-C5-30-S9-BF-R	30	90°C

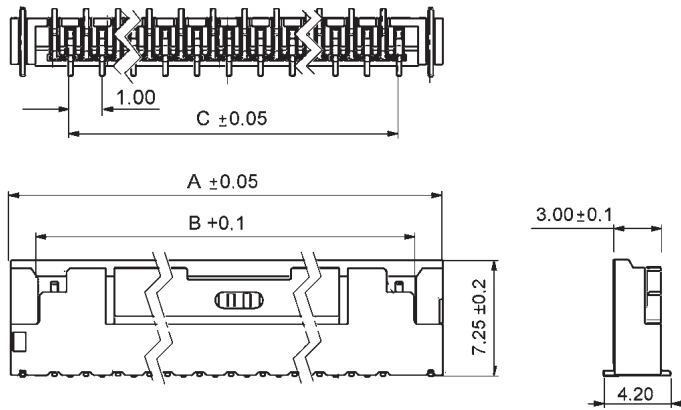
\*\* Available Pin Counts: 12, 14, 16, 18, 20, 22, 24, 26, 28 and 30

### Features

Description	Pitch 0.5mm	Pitch 1.0mm
Temperature Range	-40°C to +105°C	
Solder Connection	SMT	
Solder Process	Reflow	
Mating Cycles	Minimum 10	
Contact Plating	0.3µm AU	Tin
Voltage Rating	50V DC	125V DC
Current Rating	0.5A	1A
Packaging	Tape & Reel (180° version with Pick & Place cap)	

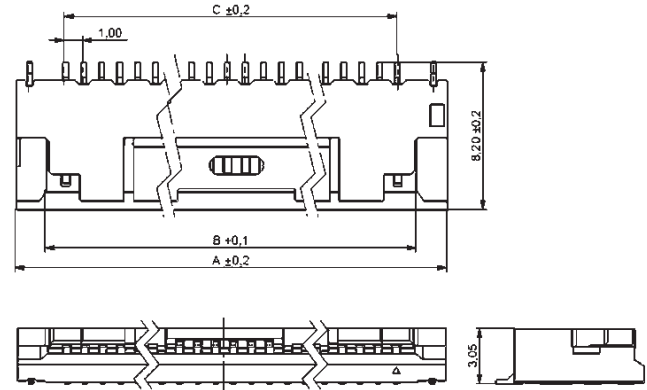
Example Outline Dimensions for 1.00mm Pitch 180° and 90° Types

**Y-LPF-C1-x-S1-LL-R**  
180° Type



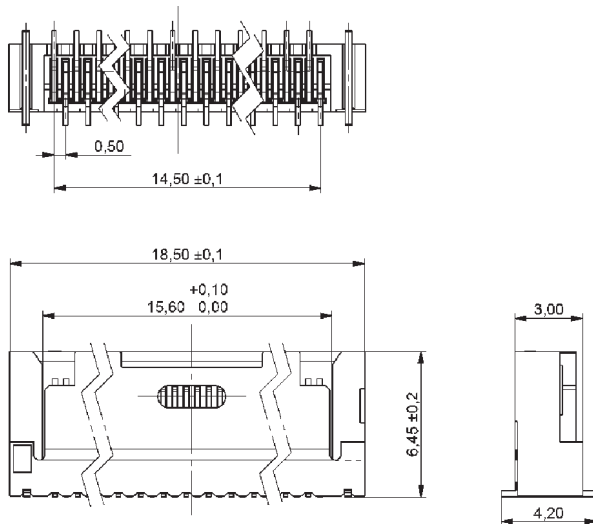
Dimension Examples	12 Pin	16 Pin	30 Pin
A	16.50	20.50	34.50
B	13.10	17.10	31.10
C	11.00	15.00	29.00

**Y-LPF-C1-x-S9-LL-R**  
90° Type

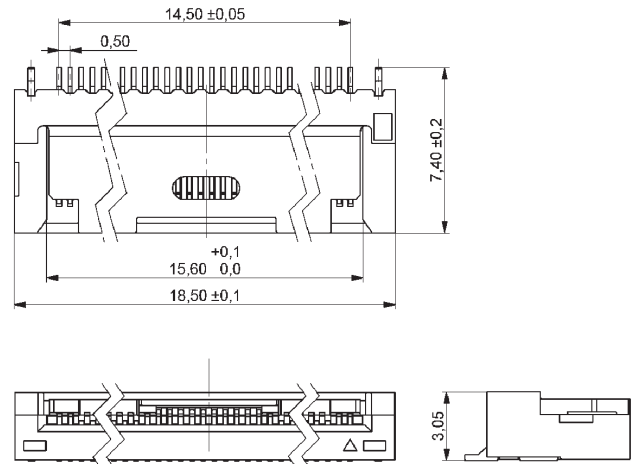


Example Outline Dimensions for 0.5mm Pitch 180° and 90° Types

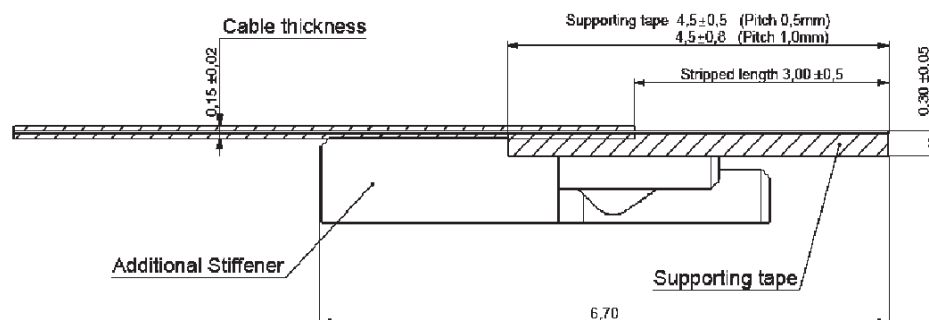
**Y-LPF-C5-30-S1-BF-R**  
180° Type



**Y-LPF-C5-30-S9-BF-R**  
90° Type



Example Outline Dimensions for Y-Lock Pullforce Locking and Cable System



Specifications in this document are reference values for representative products of each series. Since product improvement entails changes to electrical, material and mechanical properties, the purchasing party is strongly encouraged to inquire about the latest specifications before placing a purchase order.