

COMMUNICATIONS, DATA, CONSUMER DIVISION

DIN 41612 Selector Guide

PCB Connectors

DIN 41612

FCI: SETTING THE STANDARD FOR CONNECTORS

With operations in 30 countries, FCI is a leading manufacturer of connectors.

Our 13,500 employees are committed to providing customers with high-quality, innovative products for a wide range of consumer and industrial applications.

FCI DIN Selector Guide

All you want

Easy to find

FCI new DIN selector brings together our proven standard connectors, such as signal solder to board, press-fit and power. In addition to the presented products, FCI can provide other options (Selective Loading of Contacts, First Make / Last Break contacts, Harpoons / Board Locks) and backpanel accessories (Latch Frames, Latches, Shrouds, Covers).

You can find them all right here and we make it easy for you to find the right ones to design in. Getting product and samples is easier and faster too.

**48 HOUR
SAMPLES**

Up-to-date Internet website :
www.fciconnect.com/din41612

- Drawings
- Data sheets
- Selection

Select our preferred and standard solutions ! 😊

Check out the



- Initial orders ex-stock
- Best offer
- Industry standard

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DIN PCB signal solder to board

• Style C (standard format, classical gender)	6
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DIN PCB signal press-fit

• Style C (standard format)	12
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DIN 41612

Technical Characteristics

Insulator Material		: Polyester Thermoplastic UL 94 V0
Contact Material		: Copper Alloy
Contact Plating	Active zone	: Gold over Nickel
	Termination zone	: Matt Tin over Nickel (for RoHS compatible), or Tin-Lead over Nickel (for non RoHS)
Current Rating at 20°C		: 1.5 A
Maximum current		: 2 A
Temperature Range		: -55° C to +125°C
Contact Resistance		: $\leq 20 \text{ m}\Omega$
Insulation Resistance		: $\geq 10^6 \text{ M}\Omega$
Test Voltage (rms)		: 1000 V
Mating insertion force per Contact		: $\leq 0.94 \text{ N}$
Mating extraction force per Contact		: $\geq 0.15 \text{ N}$
Press-fit mean insertion force per Contact		: 60 N
Press-fit mean push-out force per Contact		: 50 N
RoHS maximum temperature		: 260°C during 3.5 s

For the right angle versions, like the present leaded versions, it is recommended to use high temperature adhesive or metallic device, to protect the nearest plastic part in contact with the solder wave, to avoid any visual plastic deterioration.

Performance classes

Standard platings are those required by DIN 41612. All active contact areas are selectively plated with gold over nickel in order to fulfill the requirements of the DIN standard. Termination areas are plated according to applications.

DIN 41612 class III	DIN 41612 class II	DIN 41612 class I
50 operations, no industrial atmosphere	200 operations + 4 days industrial atmosphere SO ₂ + 200 operations	250 operations + 21 days industrial atmosphere SO ₂ + 250 operations
Field of applications		
consumer electronics, peritelephony, office supplies	industrial electronics, data, private switching	telecommunication, public switching, datacom

Nota : All dimensions in mm

DIN 41612

Other DIN product ranges at FCI

Check FCI website at www.fciconnect.com/din41612

PCB connectors

- Signal solder to board – 8609 Series, style Q (headers only)
- Mix signal and power or coax solder to board – 8609 Series (headers only)
- Mix signal and power or coax press-fit – 8609 Series
- Medium power connectors – 5159 Series, style F
- High power connectors – 5159 Series, style H

Cable connectors

- IDC - BPS8 Series
- Wire wrap - 8609 Series

Accessories

- Shrouds
- Covers

For more information about these ranges, please contact your local FCI representative.

DIN 41612

PCB Signal solder to board

STYLE C CONNECTORS

Solder to board

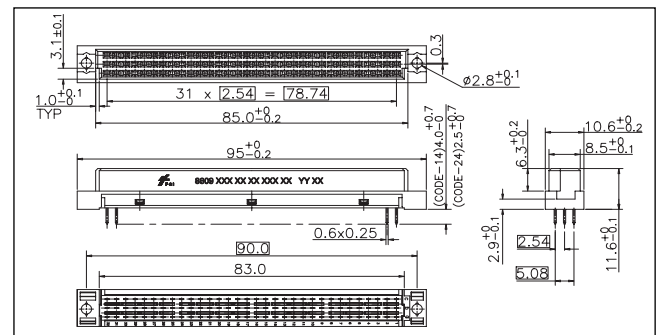
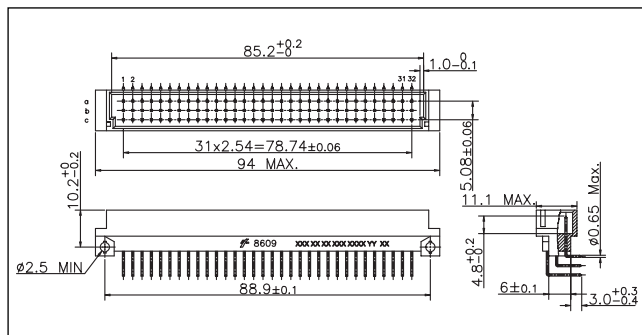
Header : Right angle
Receptacle : Straight spill



Part number

Series	8609	396	71	13	7	55	ELF
Rows fitted with contacts *							
2 rows a & c		64 contacts					
3 rows a, b & c		96 contacts					
Type of insulator							
☺ 3 rows Header insulator			71				
☺ 3 rows Receptacle insulator			81				
Termination *							
☺ Right angle spill for Header				13			
☺ Straight spill for Receptacle				14			
Straight spill for Receptacle				24			
Insulator (option)							
☺ Harpoon					H		
☺ Without harpoon					7		
Plating performance Class & Pitch *							
☺ DIN 41612 class III		2.54 mm				45	
☺ DIN 41612 class II		2.54 mm				55	
DIN 41612 class I		2.54 mm				65	
Gender							
☺ Header (RoHS compatible)							ELF
Header (non RoHS compatible)							000E
☺ Receptacle (RoHS compatible)							V1LF
Receptacle (non RoHS compatible)							V1

* For other options, please consult your local FCI representative.



**48 HOUR
SAMPLES**

86093967113755ELF	96 PIN Header right angle	86093968114755V1LF	96 PIN Receptacle straight
86094647113755ELF	64 PIN Header right angle	86094648114755V1LF	64 PIN Receptacle straight

DIN 41612

PCB Signal solder to board

STYLE C/2 CONNECTORS

Solder to board

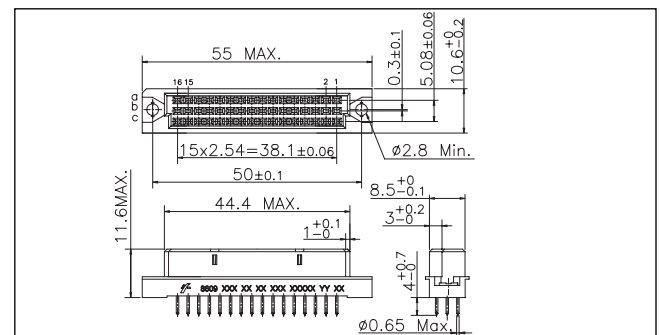
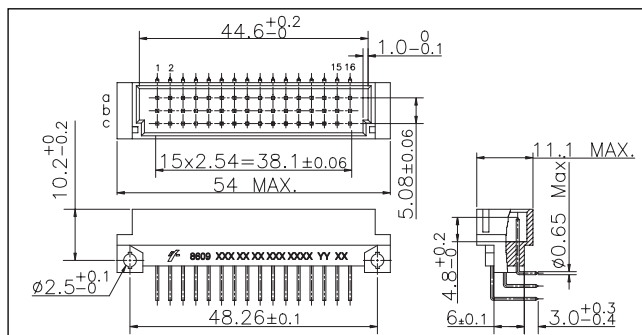
Header : Right angle
Receptacle : Straight spill



Part number

Series	8609	348	73	13	7	55	ELF
Rows fitted with contacts *							
2 rows a & c : 32 contacts		432					
3 rows a, b & c : 48 contacts		348					
Type of insulator							
☺ 3 rows Header insulator			73				
☺ 3 rows Receptacle insulator			83				
Termination *							
☺ Right angle spill for Header : 3 mm				13			
☺ Straight spill for Receptacle : 4 mm				14			
Straight spill for Receptacle : 2.5 mm				24			
Insulator (option)							
☺ Harpoon					H		
☺ Without harpoon					7		
Plating performance Class & Pitch *							
DIN 41612 class III : 2.54 mm						45	
☺ DIN 41612 class II : 2.54 mm						55	
DIN 41612 class I : 2.54 mm						65	
Gender							
☺ Header (RoHS compatible)							ELF
Header (non RoHS compatible)							000E
☺ Receptacle (RoHS compatible)							E1LF
Receptacle (non RoHS compatible)							000E1

* For other options, please consult your local FCI representative.



86093487313755ELF	48 PIN Header right angle	86093488314755E1LF	48 PIN Receptacle straight
86094327313755ELF	32 PIN Header right angle	86094328314755E1LF	32 PIN Receptacle straight

DIN 41612

PCB Signal solder to board

STYLE R CONNECTORS

Solder to board

Header : Straight spill

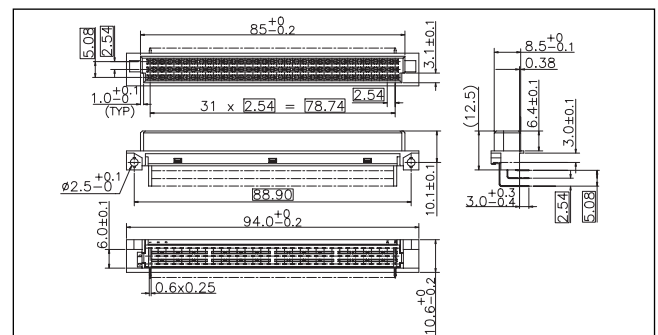
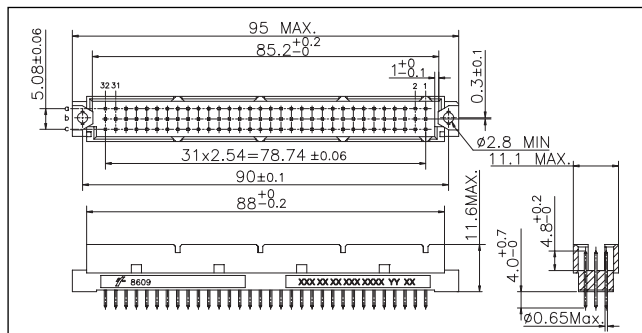
Receptacle : Right angle



Part number

Series	8609	396	88	13	7	55	V1LF
Rows fitted with contacts *							
2 rows a & c		464					
3 rows a, b & c		396					
Type of insulator							
3 rows Header insulator			78				
3 rows Receptacle insulator			88				
Termination *							
Right angle spill for Receptacle				13			
Straight spill for Header				14			
Insulator (option)							
☺ Harpoon					H		
☺ Without harpoon					7		
Plating performance Class & Pitch *							
☺ DIN 41612 class III						45	
☺ DIN 41612 class II						55	
☺ DIN 41612 class I						65	
Gender							
☺ Header (RoHS compatible)							ELF
Header (non RoHS compatible)							000E
☺ Receptacle (RoHS compatible)							V1LF
Receptacle (non RoHS compatible)							V1

* For other options, please consult your local FCI representative.



**48 HOUR
SAMPLES**

86094648813755V1LF

64 PIN Receptacle right angle

86093968813755V1LF

96 PIN Receptacle right angle

DIN 41612

PCB Signal solder to board

STYLE R/2 CONNECTORS

Solder to board

Header : Straight spill

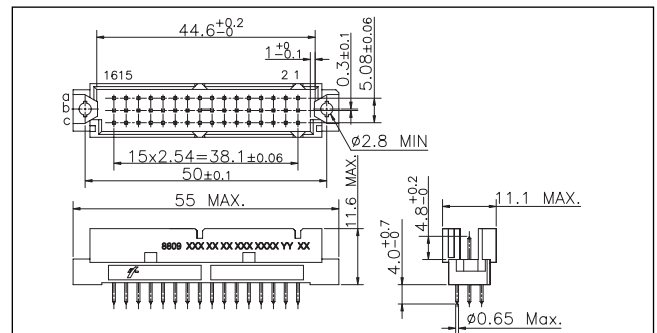
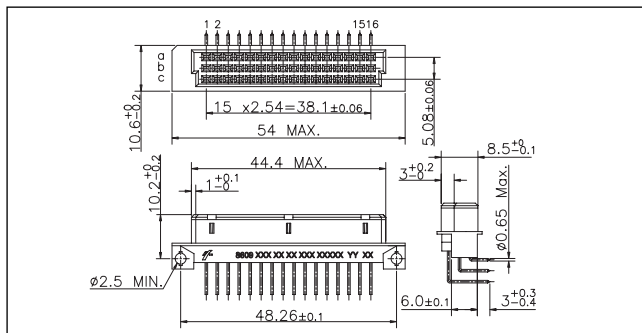
Receptacle : Right angle



Part number

Series	8609	348	76	14	7	55	ELF
Rows fitted with contacts *							
2 rows a & c : 32 contacts		432					
3 rows a, b & c : 48 contacts		348					
Type of insulator							
3 rows Header insulator			76				
3 rows Receptacle insulator			86				
Termination *							
Right angle spill for Receptacle : 3 mm				13			
Straight spill for Header : 4 mm				14			
Insulator (option)							
Harpoon					H		
Without harpoon					7		
Plating performance Class & Pitch *							
DIN 41612 class III : 2.54 mm						45	
DIN 41612 class II : 2.54 mm						55	
DIN 41612 class I : 2.54 mm						65	
Gender							
Header (RoHS compatible)							ELF
Header (non RoHS compatible)							000E
Receptacle (RoHS compatible)							E1LF
Receptacle (non RoHS compatible)							000E1

* For other options, please consult your local FCI representative.



**48 HOUR
SAMPLES**

86093488613755E1LF

48 PIN Receptacle right angle

86093488613H55E1LF

48 PIN Receptacle right angle harpoon

DIN 41612

PCB Signal solder to board

STYLE B CONNECTORS

Solder to board 2 rows

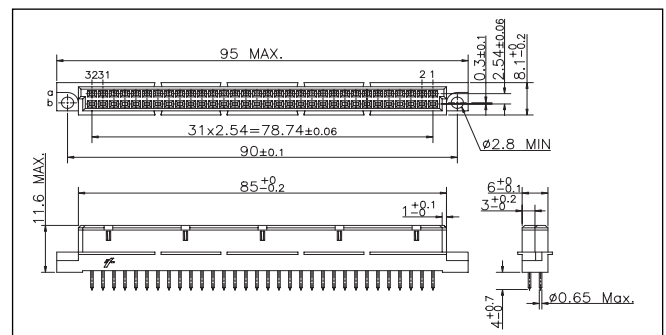
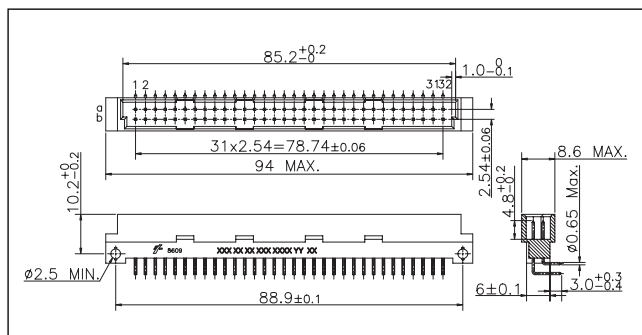
Header : Right angle
Receptacle : Straight spill



Part number

Series	8609	264	51	13	7	55	ELF
Rows fitted with contacts *							
2 rows a & b		264					
1 row a		132					
Type of insulator							
2 rows Header insulator			51				
2 rows Receptacle insulator			61				
Termination *							
☺ Right angle spill for Header				13			
☺ Straight spill for Receptacle				14			
☺ Straight spill for Receptacle				24			
Insulator (option)							
☺ Harpoon					H		
☺ Without harpoon					7		
Plating performance Class & Pitch *							
☺ DIN 41612 class III						45	
☺ DIN 41612 class II						55	
☺ DIN 41612 class I						65	
Gender							
☺ Header (RoHS compatible)							ELF
☺ Header (non RoHS compatible)							000E
☺ Receptacle (RoHS compatible)							E1LF
☺ Receptacle (non RoHS compatible)							000E1

* For other options, please consult your local FCI representative.



86092645113755ELF

64 PIN Header right angle

86092646114755E1LF

64 PIN Receptacle straight

DIN 41612

PCB Signal solder to board

STYLE B/2 CONNECTORS

Solder to board 2 rows

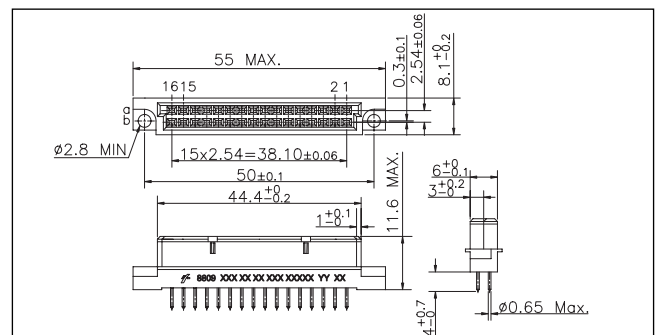
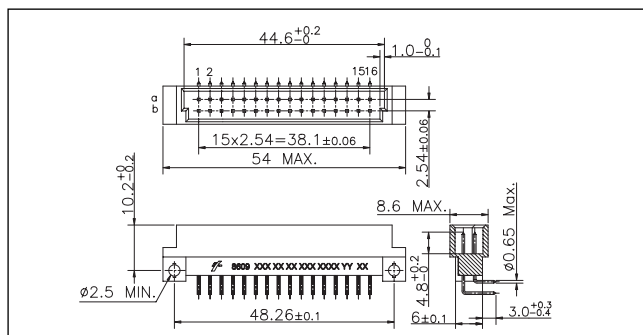
Header : Right angle
Receptacle : Straight spill



Part number

Series	8609	232	53	13	7	55	ELF
Rows fitted with contacts *							
2 rows a & b		232					
1 row a		116					
Type of insulator							
2 rows Header insulator			53				
2 rows Receptacle insulator			63				
Termination *							
☺ Right angle spill for Header	: 3 mm			13			
☺ Straight spill for Receptacle	: 4 mm			14			
Straight spill for Receptacle	: 2.5 mm			24			
Insulator (option)							
☺ Harpoon					H		
☺ Without harpoon					7		
Plating performance Class & Pitch *							
☺ DIN 41612 class III	: 2.54 mm					45	
☺ DIN 41612 class II	: 2.54 mm					55	
DIN 41612 class I	: 2.54 mm					65	
Gender							
☺ Header (RoHS compatible)							ELF
Header (non RoHS compatible)							000E
☺ Receptacle (RoHS compatible)							E1LF
Receptacle (non RoHS compatible)							000E1

* For other options, please consult your local FCI representative.



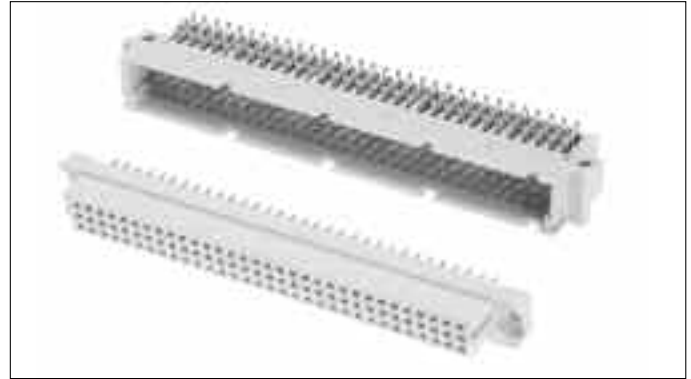
DIN 41612

PCB Signal Press-fit

STYLE C CONNECTORS

Press-fit

Header : Right angle
Receptacle : Straight spill



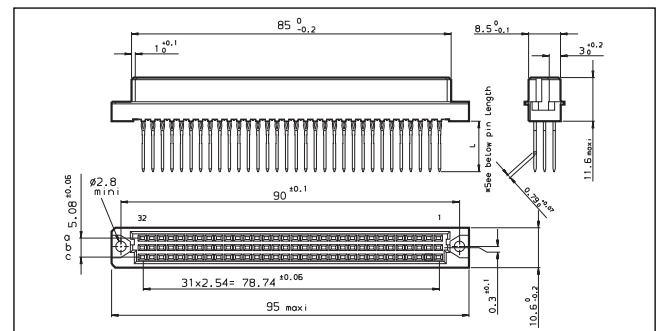
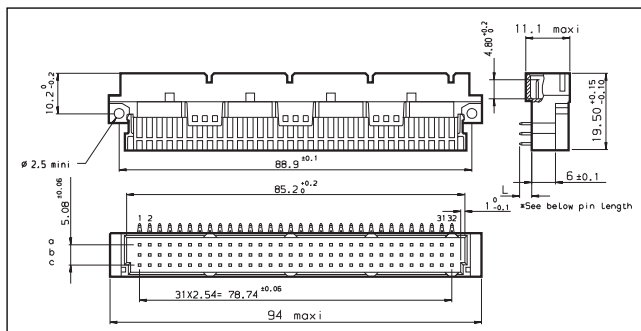
Part number

Series	8609	464	81	94	755	E3LF
Rows fitted with contacts *						
2 rows a & c : 64 contacts		464				
3 rows a, b & c : 96 contacts		396				
Type of insulator						
3 rows Right angle Header insulator			71			
3 rows Straight spill Receptacle insulator			81			
Termination *						
☺ Short post for Header and Receptacle : L = 5.25 mm				94		
☺ Wire wrap 1 wrap for Receptacle : L = 13.25 mm				91		
Plating performance Class & Pitch *						
☺ DIN 41612 class III : 2.54 mm					745	
☺ DIN 41612 class II : 2.54 mm					755	
☺ DIN 41612 class I : 2.54 mm					765	
Gender						
☺ Header (RoHS compatible)						E1LF
☺ Header (non RoHS compatible)						000E1
☺ Receptacle (RoHS compatible)						E3LF
☺ Receptacle (non RoHS compatible)						000E3

* For other options, please consult your local FCI representative.

Rear plug up solution availability
or
DIN C/2 half size availability

Check FCI website at
www.fciconnect.com/din41612



Short post L : 5.25 mm
Wire wrap L : 13.25 mm

DIN 41612

PCB Signal Press-fit

STYLE R CONNECTORS

Press-fit

Header : Straight spill

Receptacle : Right angle



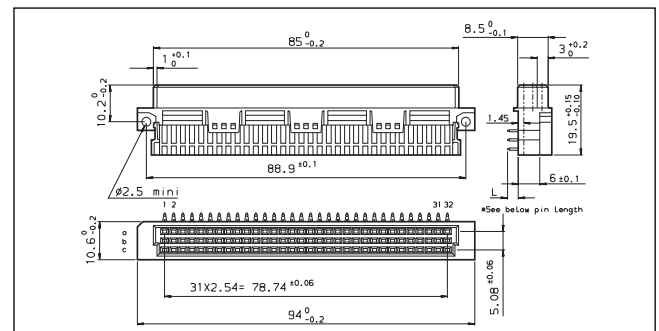
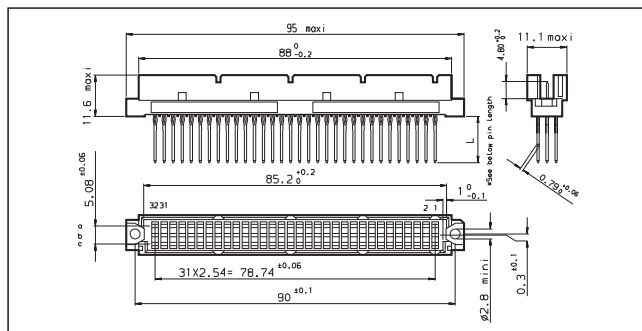
Part number

Series	8609	396	78	91	755	E1LF
Rows fitted with contacts *						
2 rows a & c : 64 contacts		464				
3 rows a, b & c : 96 contacts		396				
Type of insulator						
3 rows Straight spill Header insulator			78			
3 rows Right angle Receptacle insulator			88			
Termination *						
☺ Short post for Header and Receptacle : L = 5.25 mm				94		
☺ Wire wrap 1 wrap for Receptacle : L = 13.25 mm				91		
Plating performance Class & Pitch *						
☺ DIN 41612 class III : 2.54 mm					745	
☺ DIN 41612 class II : 2.54 mm					755	
☺ DIN 41612 class I : 2.54 mm					765	
Gender						
☺ Header (RoHS compatible)						E1LF
☺ Header (non RoHS compatible)						000E1
☺ Receptacle (RoHS compatible)						E3LF
☺ Receptacle (non RoHS compatible)						000E3

* For other options, please consult your local FCI representative.

Rear plug up solution availability
or
DIN R/2 half size availability

Check FCI website at
www.fciconnect.com/din41612



Short post L : 5.25 mm
Wire wrap L : 13.25 mm

DIN 41612

NOTES

DIN 41612

NOTES

**For more information on FCI sales offices,
headquarters, agents and local distributors,
visit www.fciconnect.com**



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