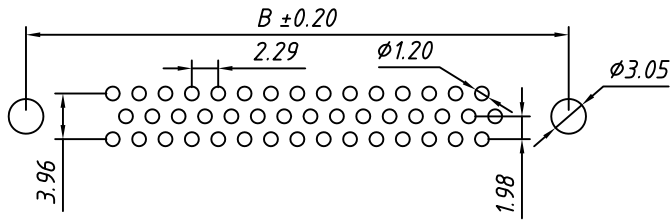
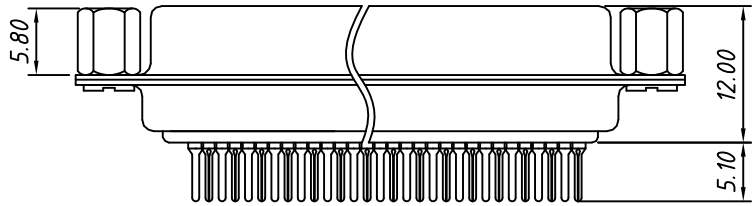
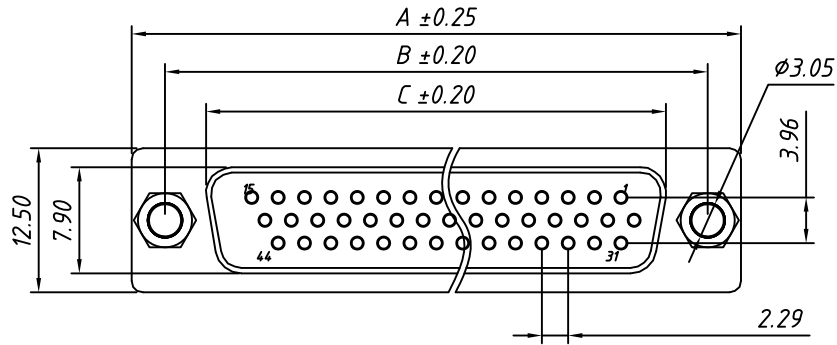


RoHS Compliant

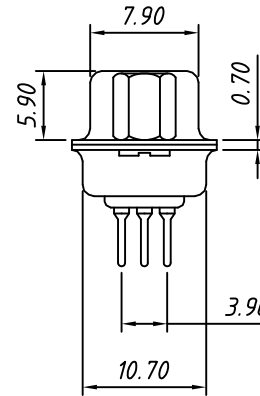


RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

| Call waiting force | | |
|--------------------|-----------|----------|
| Contacts | Insertion | Withdraw |
| 15M/15F | ≤4.0kgf | ≥2.0kgf |
| 26M/26F | ≤5.8kgf | ≥2.5kgf |
| 44M/44F | ≤6.5kgf | ≥3.5kgf |
| 62M/62F | ≤8.5kgf | ≥4.5kgf |



Order Information

L - KLS1 - 321A - XX - F - L

RoHS _____

D-SUB Connector, _____

3 Row Through Hole, Riveting Before _____

XX-No. of 15, 26, 44, 62 pins _____

Connector type: F-Female _____

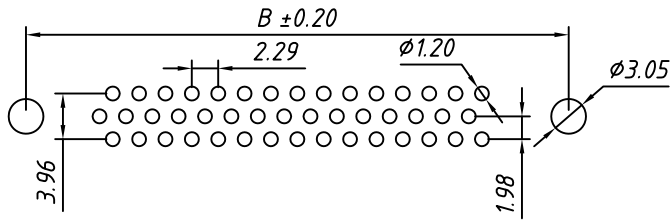
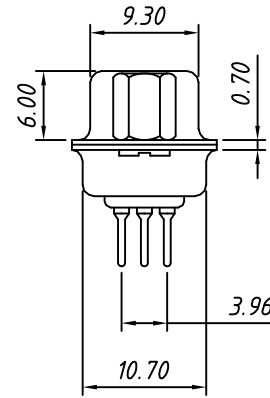
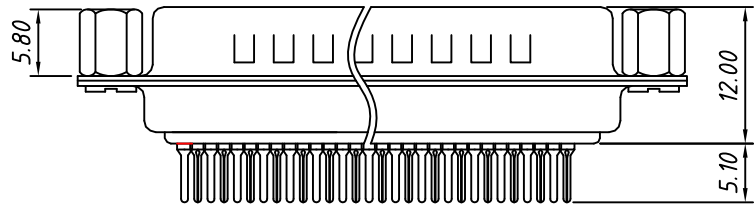
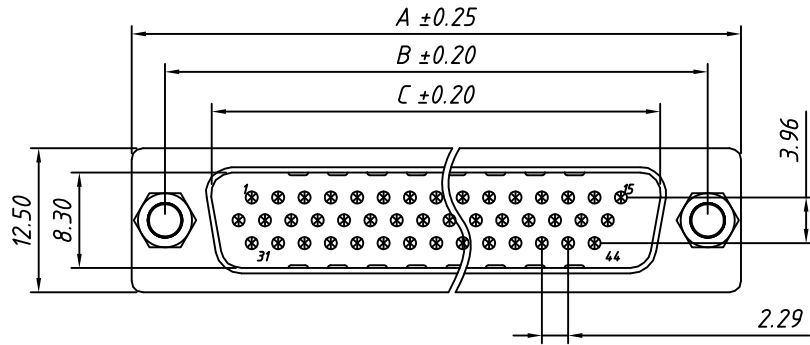
Housing Color: _____

B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|-----------|--------|--------|
| | A±0.25 | B±0.20 | C±0.20 |
| 15 | 30.80 | 24.99 | 16.30 |
| 26 | 39.20 | 33.30 | 24.60 |
| 44 | 53.10 | 47.04 | 38.30 |
| 62 | 69.34 | 63.50 | 54.80 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|-------------------|------------|------------|--|
| X. ±0.30 | UNITS | mm | D-SUB Connector, Through Hole, Female, Riveting Before |
| .X ±0.25 | SCALE | 1:1 | |
| .XX ±0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321A-XX-F-L |
| ANGLE TOLERANCE | Check by: | Daniel | NingBo KLS ELECTRONIC CO., L TD. |
| X. ±3° | Date | 2018-03-01 | |
| .X ±2° | SHEET | 1 OF 1 | |
| .XX ±1° | | | |

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: $\pm 0.05\text{mm}$

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or
Gold Plating on Contact Area,
Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000M Ω Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20m Ω Max. Initial
Operating Temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$

| Call waiting force | | |
|--------------------|----------------------|----------------------|
| Contacts | Insertion | Withdraw |
| 15M/15F | $\leq 4.0\text{kgf}$ | $\geq 2.0\text{kgf}$ |
| 26M/26F | $\leq 5.8\text{kgf}$ | $\geq 2.5\text{kgf}$ |
| 44M/44F | $\leq 6.5\text{kgf}$ | $\geq 3.5\text{kgf}$ |
| 62M/62F | $\leq 8.5\text{kgf}$ | $\geq 4.5\text{kgf}$ |

Order Information

L - KLS1 - 321A - XX - M - L

RoHS

D-SUB Connector,
3 Row Through Hole, Riveting Before

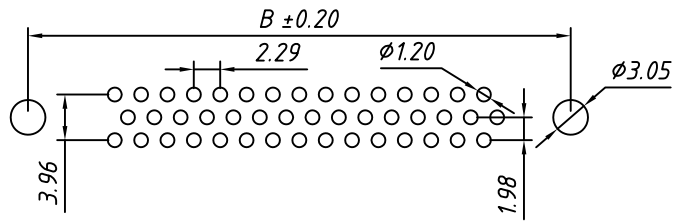
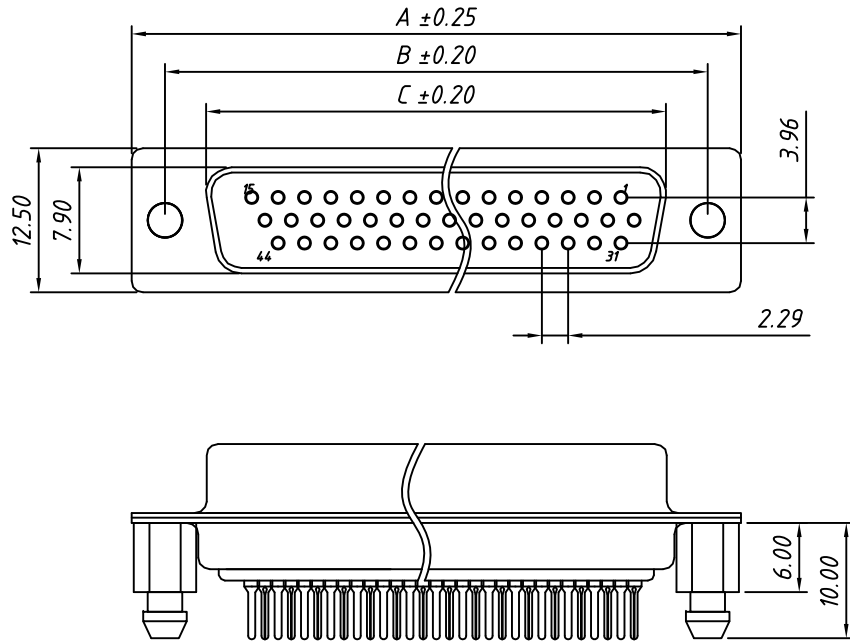
XX-No. of 15, 26, 44, 62 pins
Connector type: M-Male

Housing Color:
B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|--------------|--------------|--------------|
| | A ± 0.25 | B ± 0.20 | C ± 0.20 |
| 15 | 30.80 | 24.99 | 16.90 |
| 26 | 39.20 | 33.30 | 25.25 |
| 44 | 53.10 | 47.04 | 38.96 |
| 62 | 69.34 | 63.50 | 55.42 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|---------------------|------------|------------|---|
| X. ± 0.30 | UNITS | mm | D-SUB Connector, Through Hole, Male, Riveting Before |
| .X ± 0.25 | SCALE | 1:1 | |
| .XX ± 0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321A-XX-M-L |
| ANGLE TOLERANCE | Check by: | Daniel | NingBo KLS ELECTRONIC CO., L TD. |
| X. $\pm 3^{\circ}$ | Date | 2018-03-01 | |
| .X $\pm 2^{\circ}$ | SHEET | 1 OF 1 | |
| .XX $\pm 1^{\circ}$ | | | |

1 RoHS Compliant

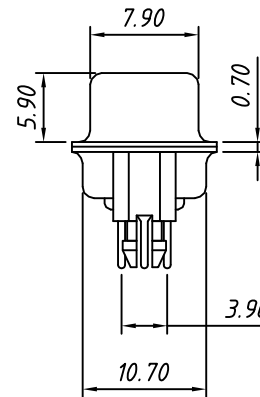


RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

| Call waiting force | | |
|--------------------|-----------|----------|
| Contacts | Insertion | Withdraw |
| 15M/15F | ≤4.0kgf | ≥2.0kgf |
| 26M/26F | ≤5.8kgf | ≥2.5kgf |
| 44M/44F | ≤6.5kgf | ≥3.5kgf |
| 62M/62F | ≤8.5kgf | ≥4.5kgf |



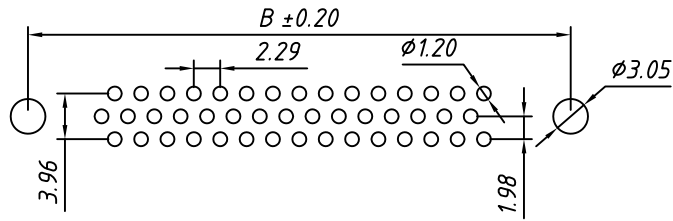
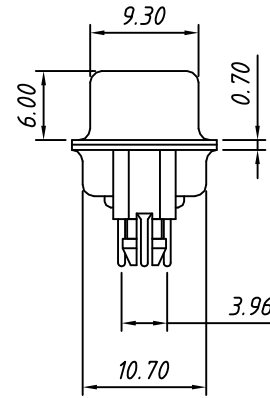
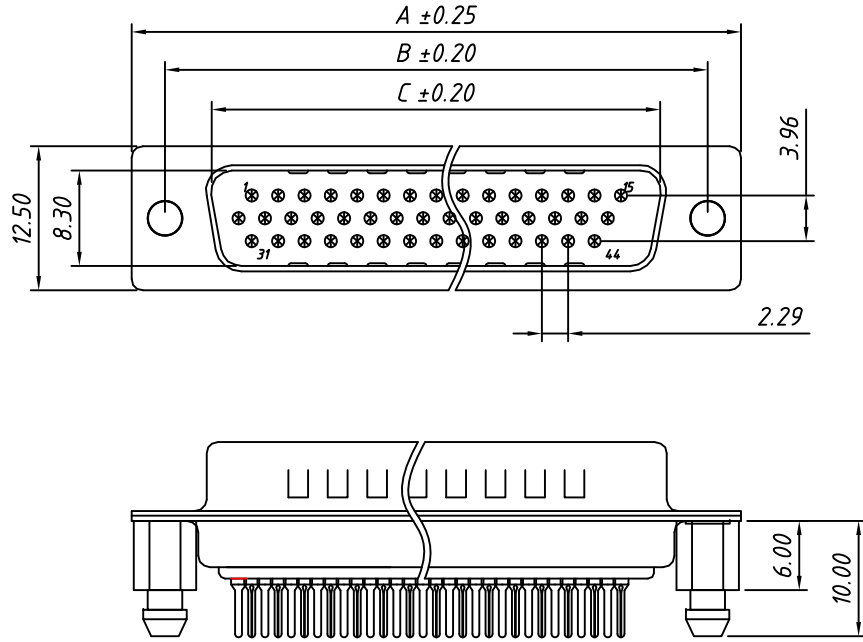
Order Information

L - KLS1 - 321B - XX - F - L
 RoHS _____
 D-SUB Connector, _____
 3 Row Through Hole, Riveting Later Harpoons
 XX-No. of 15, 26, 44, 62 pins
 Connector type: F-Female
 Housing Color: _____
 B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|-----------|--------|--------|
| | A±0.25 | B±0.20 | C±0.20 |
| 15 | 30.80 | 24.99 | 16.30 |
| 26 | 39.20 | 33.30 | 24.60 |
| 44 | 53.10 | 47.04 | 38.30 |
| 62 | 69.34 | 63.50 | 54.80 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|-------------------|------------|------------|--|
| X. ±0.30 | UNITS | mm | D-SUB Connector, Through Hole, Female, Riveting Later Harpoons |
| .X ±0.25 | SCALE | 1:1 | |
| .XX ±0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321B-XX-F-L |
| ANGLE TOLERANCE | Check by: | Daniel | NingBo KLS ELECTRONIC CO., L TD. |
| X. ±3° | Date | 2018-03-01 | |
| .X ±2° | SHEET | 1 OF 1 | |
| .XX ±1° | | | |

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: $\pm 0.05\text{mm}$

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000M Ω Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20m Ω Max. Initial
Operating Temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$

| Call waiting force | | |
|--------------------|----------------------|----------------------|
| Contacts | Insertion | Withdraw |
| 09M/09F | $\leq 4.0\text{kgf}$ | $\geq 2.0\text{kgf}$ |
| 25M/25F | $\leq 5.8\text{kgf}$ | $\geq 2.8\text{kgf}$ |
| 45M/45F | $\leq 6.8\text{kgf}$ | $\geq 2.5\text{kgf}$ |
| 62M/62F | $\leq 8.8\text{kgf}$ | $\geq 3.5\text{kgf}$ |

Order Information

L - KLS1 - 321B - XX - M - L

RoHS

D-SUB Connector, 3 Row Through Hole, Riveting Later Harpoons

XX-No. of 15, 26, 44, 62 pins

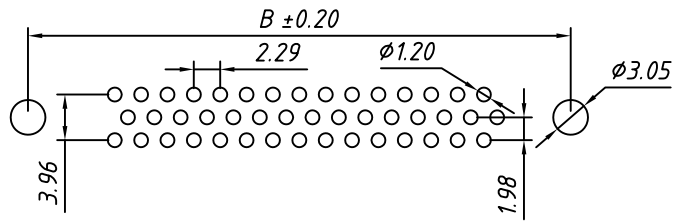
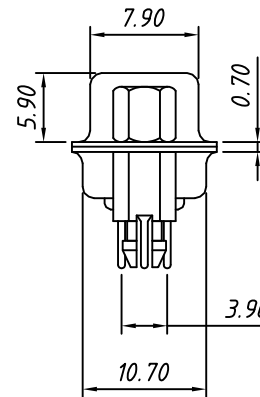
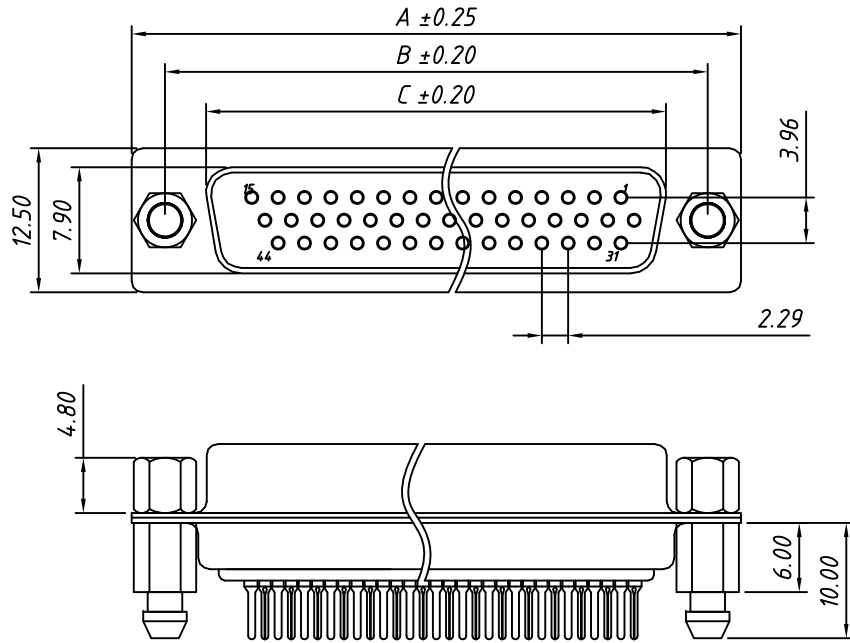
Connector type: M-Male

Housing Color: B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|--------------|--------------|--------------|
| | A ± 0.25 | B ± 0.20 | C ± 0.20 |
| 15 | 30.80 | 24.99 | 16.90 |
| 26 | 39.20 | 33.30 | 25.25 |
| 44 | 53.10 | 47.04 | 38.96 |
| 62 | 69.34 | 63.50 | 55.42 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|---------------------|------------|------------|--|
| X. ± 0.30 | UNITS | mm | D-SUB Connector, Through Hole, Male, Riveting Later Harpoons |
| .X ± 0.25 | SCALE | 1:1 | |
| .XX ± 0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321B-XX-M-L |
| ANGLE TOLERANCE | Check by: | Daniel | NingBo KLS ELECTRONIC CO., L TD. |
| X. $\pm 3^{\circ}$ | Date | 2018-03-01 | |
| .X $\pm 2^{\circ}$ | SHEET | 1 OF 1 | |
| .XX $\pm 1^{\circ}$ | | | |

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: $\pm 0.05\text{mm}$

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000M Ω Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20m Ω Max. Initial
Operating Temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$

| Call waiting force | | |
|--------------------|----------------------|----------------------|
| Contacts | Insertion | Withdraw |
| 15M/15F | $\leq 4.0\text{kgf}$ | $\geq 2.0\text{kgf}$ |
| 26M/26F | $\leq 5.8\text{kgf}$ | $\geq 2.5\text{kgf}$ |
| 44M/44F | $\leq 6.5\text{kgf}$ | $\geq 3.5\text{kgf}$ |
| 62M/62F | $\leq 8.5\text{kgf}$ | $\geq 4.5\text{kgf}$ |

Order Information

L - KLS1 - 321C - XX - F - L

RoHS _____

D-SUB Connector, _____
3 Row Through Hole, After Lock Screw Rivet Harpoons

XX-No. of 15, 26, 44, 62 pins _____

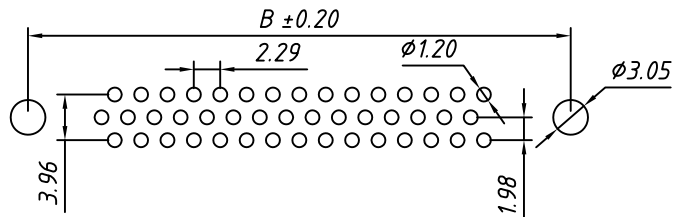
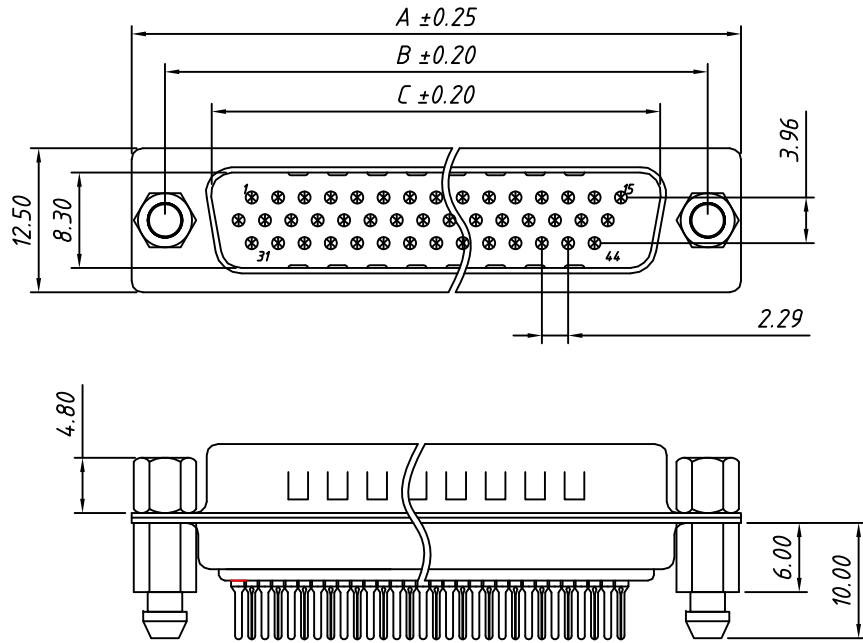
Connector type: F-Female _____

Housing Color: _____
B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|--------------|--------------|--------------|
| | A ± 0.25 | B ± 0.20 | C ± 0.20 |
| 15 | 30.80 | 24.99 | 16.30 |
| 26 | 39.20 | 33.30 | 24.60 |
| 44 | 53.10 | 47.04 | 38.30 |
| 62 | 69.34 | 63.50 | 54.80 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|---------------------|------------|------------|--|
| X. ± 0.30 | UNITS | mm | D-SUB Connector, Through Hole, Female, After Lock Screw Rivet Harpoons |
| .X ± 0.25 | SCALE | 1:1 | |
| .XX ± 0.20 | Draw by: | Daniel | |
| ANGLE TOLERANCE | Check by: | Daniel | KLS P/N: L-KLS1-321C-XX-F-L |
| X. $\pm 3^{\circ}$ | Date | 2018-03-01 | NingBo KLS ELECTRONIC CO., LTD. |
| .X $\pm 2^{\circ}$ | SHEET | 1 OF 1 | |
| .XX $\pm 1^{\circ}$ | | | |

1 RoHS Compliant

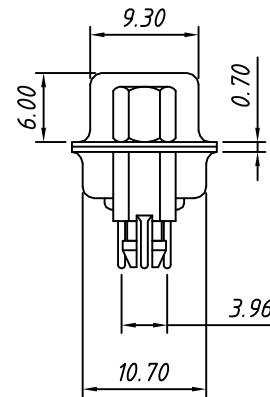


RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or
Gold Plating on Contact Area,
Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

| Call waiting force | | |
|--------------------|-----------|----------|
| Contacts | Insertion | Withdraw |
| 15M/15F | ≤4.0kgf | ≥2.0kgf |
| 26M/26F | ≤5.8kgf | ≥2.5kgf |
| 44M/44F | ≤6.5kgf | ≥3.5kgf |
| 62M/62F | ≤8.5kgf | ≥4.5kgf |



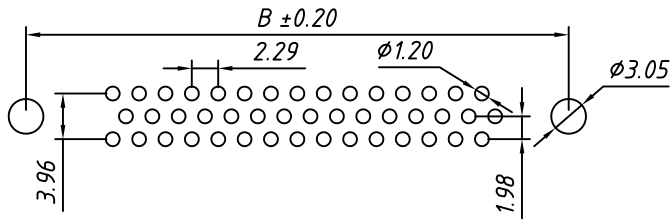
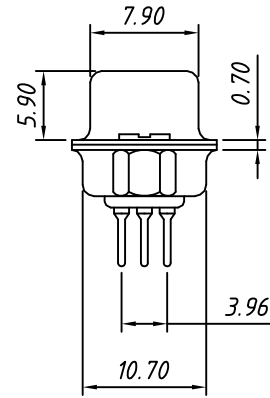
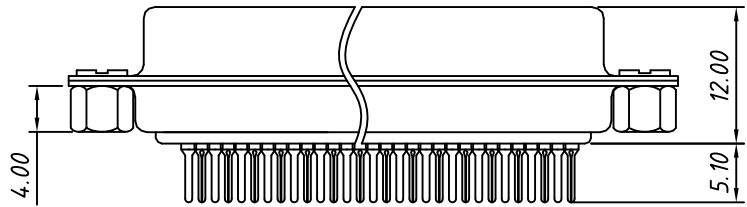
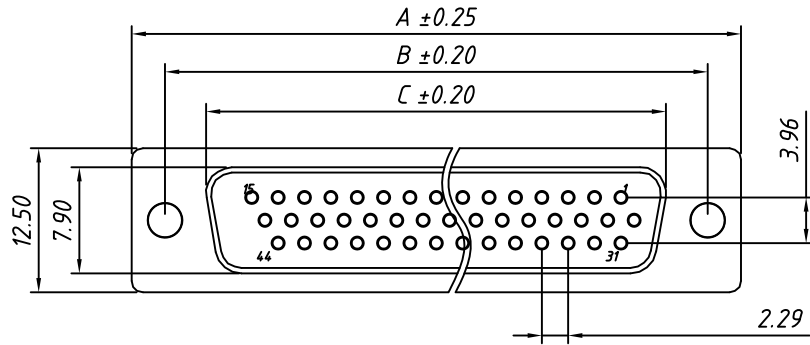
Order Information

L - KLS1 - 321C - XX - M - L
 RoHS _____
 D-SUB Connector, _____
 3 Row Through Hole, After Lock Screw Rivet Harpoons
 XX-No. of 15, 26, 44, 62 pins _____
 Connector type: M-Male _____
 Housing Color: _____
 B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|-----------|--------|--------|
| | A±0.25 | B±0.20 | C±0.20 |
| 15 | 30.80 | 24.99 | 16.90 |
| 26 | 39.20 | 33.30 | 25.25 |
| 44 | 53.10 | 47.04 | 38.96 |
| 62 | 69.34 | 63.50 | 55.42 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|-------------------|------------|------------|--|
| X. ±0.30 | UNITS | mm | D-SUB Connector, Through Hole, Male, After Lock Screw Rivet Harpoons |
| .X ±0.25 | SCALE | 1:1 | |
| .XX ±0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321C-XX-M-L |
| ANGLE TOLERANCE | Check by: | Daniel | NingBo KLS ELECTRONIC CO., L TD. |
| X. ±3° | Date | 2018-03-01 | |
| .X ±2° | SHEET | 1 OF 1 | |
| .XX ±1° | | | |

1 RoHS Compliant



RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

Material:
Housing: PBT+30% Glass filled, UL94V-0
Contacts: Brass, Gold Plating or Gold Plating on Contact Area, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

| Call waiting force | | |
|--------------------|-----------|----------|
| Contacts | Insertion | Withdraw |
| 15M/15F | ≤4.0kgf | ≥2.0kgf |
| 26M/26F | ≤5.8kgf | ≥2.5kgf |
| 44M/44F | ≤6.5kgf | ≥3.5kgf |
| 62M/62F | ≤8.5kgf | ≥4.5kgf |

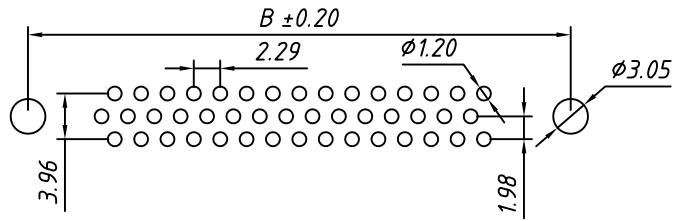
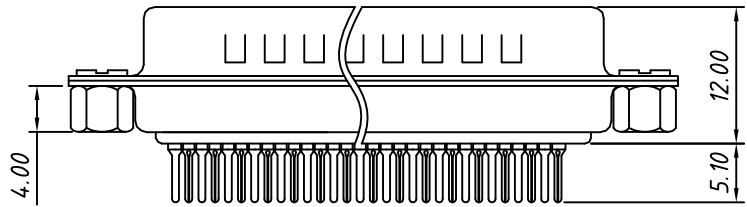
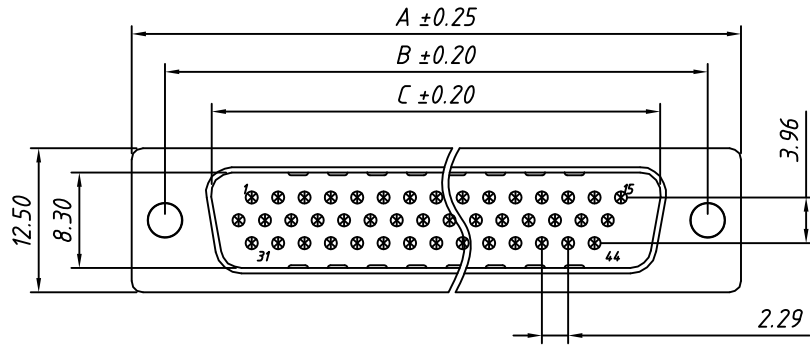
Order Information

L - KLS1 - 321D - XX - F - L
 RoHS _____
 D-SUB Connector, _____
 3 Row Through Hole, Riveting After _____
 XX-No. of 15, 26, 44, 62 pins _____
 Connector type: F-Female _____
 Housing Color: _____
 B-Black L-Blue W-White

| Number of Contacts | DIMENSION | | |
|--------------------|-----------|--------|--------|
| | A±0.25 | B±0.20 | C±0.20 |
| 15 | 30.80 | 24.99 | 16.30 |
| 26 | 39.20 | 33.30 | 24.60 |
| 44 | 53.10 | 47.04 | 38.30 |
| 62 | 69.34 | 63.50 | 54.80 |

| GENERAL TOLERANCE | PROJECTION | | Description: |
|-------------------|------------|------------|---|
| X. ±0.30 | UNITS | mm | D-SUB Connector, Through Hole, Female, Riveting After |
| .X ±0.25 | SCALE | 1:1 | |
| .XX ±0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321D-XX-F-L |
| ANGLE TOLERANCE | Check by: | Daniel | NingBo KLS ELECTRONIC CO., L TD. |
| X. ±3° | Date | 2018-03-01 | |
| .X ±2° | SHEET | 1 OF 1 | |
| .XX ±1° | | | |

1 RoHS Compliant



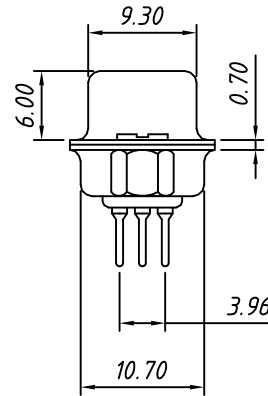
RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05mm

| Number of Contacts | DIMENSION | | |
|--------------------|-----------|--------|--------|
| | A±0.25 | B±0.20 | C±0.20 |
| 15 | 30.80 | 24.99 | 16.90 |
| 26 | 39.20 | 33.30 | 25.25 |
| 44 | 53.10 | 47.04 | 38.96 |
| 62 | 69.34 | 63.50 | 55.42 |

Material:
Housing: PBT+30% Glass filled ,UL94V-0
Contacts: Brass ,Gold Plating or Gold Plating on Contact Arer, Tin on Solder Tail.
Shell: Steel, Nickel Plating

Electrical Characteristics:
Current Rating: 5 AMP
Insulator Resistance: 1000MΩ Min. at DC 500V
Withstanding Voltage: 500V AC (rms) for 1 minute
Contact Resistance: 20mΩ Max. Initial
Operating Temperature: -40°C ~ +105°C

| Call waiting force | | |
|--------------------|-----------|----------|
| Contacts | Insertion | Withdraw |
| 15M/15F | ≤4.0kgf | ≥2.0kgf |
| 26M/26F | ≤5.8kgf | ≥2.5kgf |
| 44M/44F | ≤6.5kgf | ≥3.5kgf |
| 62M/62F | ≤8.5kgf | ≥4.5kgf |



Order Information

L - KLS1 - 321D - XX - M - L

RoHS _____

D-SUB Connector, _____
3 Row Through Hole,Riveting After

XX-No. of 15,26,44,62pins _____

Connector type: M-Male _____

Housing Color: _____
B-Black L-Blue W-White

| GENERAL TOLERANCE | PROJECTION | | Description: |
|-------------------|------------|------------|---|
| X. ±0.30 | UNITS | mm | D-SUB Connector, Through Hole, Male,Riveting After |
| .X ±0.25 | SCALE | 1:1 | |
| .XX ±0.20 | Draw by: | Daniel | KLS P/N: L-KLS1-321D-XX-M-L |
| ANGLE TOLERANCE | Check by: | Daniel | |
| X. ±3° | Date | 2018-03-01 | |
| .X ±2° | SHEET | 1 OF 1 | |
| .XX ±1° | | | |

NingBo KLS ELECTRONIC CO.,L TD.