

QUICK STUDY GUIDE

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| | Series | Pin Configuration(s) | Description |
|---|----------------|---|---|
|  | SVK | 13, 19, 25, 37, 54, 85, 100 & 150 pins | <i>Panel & inline; IP67 waterproof rated; MIL-C-5015 compliant; gold or silver contacts</i> |
| | SVS | 72 & 101 pins | |
|  | SHD | 13, 19, 25, 37, 54, 85, 100 & 150 pins | <i>Roadline: Enhanced, robust, heavy-duty version of the SVK Series</i> |
|  | SV | 24 Audio & 6 Video (Coax) Pins | <i>Panel & Inline Audio/Video Hybrid Connectors; gold plated precision contacts</i> |
|  | SMA | 122 & 176 pins | <i>Hermaphroditic IP67 panel & inline audio, up to 56 channels; gold plated solder contacts</i> |
|  | SPK | 4, 8 & 19 pins | <i>Pro loudspeaker panel & inline; rubber locking ring; CA-COM mateable; silver & gold solder or crimp contacts</i> |
|  | SPK8 | 8 pin | <i>Adapter; CA-COM 8 compatible; male one end, female other end</i> |
|  | SB | 2, 3, 4, 6, 7, 8 & 9 pins | <i>HMI Ballast & Lamp connector; 400W - 200KW; configurable; bayonet lock & coupling roller; silver plated contacts</i> |
|  | SSX | 19 & 16 pin UL & Industrial Versions | <i>Lighting connector; Socapex 419 compatible; panel & inline; fast wiring, indestructible; IP67; first make, last break gold or silver plated contacts</i> |
|  | SPX | Single Pole High Amperage Power Connectors | <i>Power 400A - 750A; panel & inline; US, EU, UK & AU color codes; IP67; IP2X; high impact shell; silver plated contacts</i> |
| | SPZ | | |
|  | Cables | Application Specific Cables | <i>Expertly engineered pro audio & video features; power distribution; data</i> |
| | Drums | Cable Drums (featuring optional IO Side Panels) | |
|  | Glands | Metric & PG types | <i>Glands, standard or spiral flex, metal, strain relief mesh grips, hanger grips</i> |
|  | Tooling | Tooling & Accessories | <i>Contact us for more information</i> |

v14.0



SVK
& SVS
AUDIO
SERIES
MULTIPIN
CONNECTORS

syntax
no compromise

INLINE FEMALE



The new **SYNTAX® SVK** audio series has been conceived and manufactured to set a higher standard for studio applications. Its IP67 waterproof rating makes it perfectly suitable also for outdoor applications. **SVS** Slim High-Density series is also available (72 and 101 pin configurations). **SVK** audio and **SVS** Slim High Density series are compliant with military standard Mil C 5015 & VG 95234. Compared to our previous standard audio series, the new SVK has been enhanced to achieve a higher level of robustness and durability.



Special aluminium alloy shell with high-resistance black finish.

Pic. 1 - Marked knurling on the whole circumference of locking-ring for optimal grip and easy coupling. An audible click indicates that locking is complete.

Pic. 2 - Thick wall construction locking-ring for greater resistance to all possible forms of abuse.

Pic. 3 - The aluminium housing for the neoprene insert is flush with the edge of locking-ring, so to avoid ovalization due to accidental blows.

Pic. 4 - Extra wide backshell for easier wiring.

Increased size of Coupling roller pins on locking-ring for more durability.

INLINE MALE



Many of its features have been borrowed from the bigger SHD Roadline series, such as a thicker locking ring with deeper knurling for maximum ease of coupling and a thicker backshell. The new aluminium locking ring also features coupling roller pins and, just like on the SHD series, the locking ring is designed in such a way to prevent possible ovalization of the insert due to accidental blows. Protective dust caps are available. They are provided with a special high-resistance cable lacing made up of seven stainless strands, covered by an anti-abrasion Teflon black tube.

SVK audio is available in 13, 19, 25, 37, 54, 85, 100 and 150 pin configurations.

SVS Slim High-Density series is available in 72 and 101 pin configurations.

DUST CAP FOR IP67 WHEN MATED

Version for
female
connector



Version for
male
connector





PANEL FEMALE



PANEL MALE

CONTACTS

CRIMP CONTACTS TYPES AND PART N.

| Size | Connector | Plating | Part N. | Gender | Part N. | Gender |
|------|-----------------------|---------|---|---|-----------|--------|
| 16 | 13/19/25/37/54/85 pin | Silver | SVKP16SFC | Female | SVKP16SMC | Male |
| | | |  |  | | |
| | | Gold | SVKP16GFC | Female | SVKP16GMC | Male |
| | | |  |  | | |
| 18 | 100/150 pin | Gold | SVKP18GFC | Female | SVKP18GMC | Male |
| | | |  |  | | |
| 20 | 72/101 pin | Gold | SVKP20GFC | Female | SVKP20GMC | Male |
| | | |  |  | | |

SOLDER CONTACTS TYPES AND PART N.

| Size | Connector | Plating | Part N. | Gender | Part N. | Gender |
|------|-----------------------|---------|---|---|-----------|--------|
| 16 | 13/19/25/37/54/85 pin | Gold | SVKP16GFS | Female | SVKP16GMS | Male |
| | | |  |  | | |

CONTACTS RATING

| Size | Max Current | Rated Current | Max Voltage Drop | Wire section (mm ²) | Wire section AWG |
|------|-------------|---------------|------------------|---------------------------------|------------------|
| 16 | 22 A | 13 A | 74 mv | 1+1,5 | 18+16 |
| 18 | 10 A | 7,5 A | 83 mv | 0,15+0,6 | 26+20 |
| 20 | 7,5 A | 7,5 A | 83 mv | 0,15+0,3 | 26+22 |

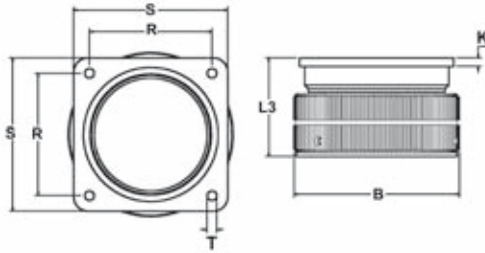
CONNECTORS RATING

| Contacts number | Operating voltage | | Test voltage | Min. Flashover |
|-----------------------|-------------------|-----|--------------|----------------|
| | Vdc | Vac | Vac | Vac |
| 13/19/25/150 - 72/101 | 250 | 200 | 1000 | 1400 |
| 37/54/85/100 | 700 | 500 | 2000 | 2800 |

OVERALL SIZE

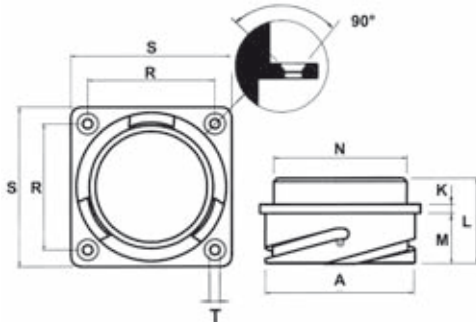
CUT-OUT DIMENSIONS

PANEL FEMALE



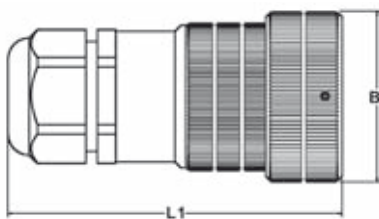
| N° pin | shell size | BØ Max | L3 | K | R | S | T |
|------------|------------|--------|------|------|-------|------|-----|
| | | | Max | ±0.2 | ±0.1 | ±0.3 | H13 |
| 13 - 19 | 20 | 43.0 | 38.1 | 4 | 29.4 | 38.0 | 3.2 |
| 25 | 24 | 50.4 | 40.6 | 4 | 34.9 | 44.5 | 3.7 |
| 37-72 | 28 | 56.0 | 40.8 | 4 | 39.7 | 50.8 | 3.7 |
| 54-101 | 32 | 63.0 | 43.7 | 4 | 44.45 | 57.0 | 4.4 |
| 85-100-150 | 40 | 75.0 | 44.8 | 4 | 55.6 | 69.8 | 4.4 |

PANEL MALE



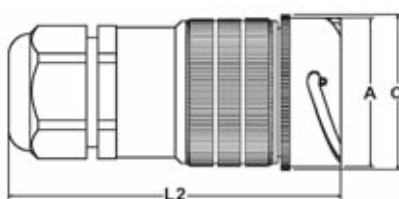
| N° pin | shell size | AØ | K | L | M | ØN | R | S | T |
|------------|------------|----------|------|------|---------|-------|------|------|-----|
| | | +0/-0.15 | ±0.2 | ±0.3 | ±0.4/-0 | Max | ±0.1 | ±0.3 | H13 |
| 13 - 19 | 20 | 34.2 | 4 | 34.5 | 19 | 31.75 | 29.4 | 38.1 | 3.2 |
| 25 | 24 | 40.9 | 4 | 35.7 | 20.6 | 35.3 | 34.9 | 44.5 | 3.7 |
| 37-72 | 28 | 46.7 | 4 | 35.7 | 20.6 | 41.4 | 39.7 | 50.8 | 3.7 |
| 54-101 | 32 | 53.4 | 4 | 37.3 | 22.2 | 47.8 | 44.5 | 57 | 4.3 |
| 85-100-150 | 40 | 65.5 | 4 | 37.3 | 22.2 | 59 | 55.6 | 69.8 | 4.3 |

INLINE FEMALE



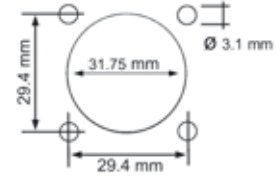
| N° pin | shell size | BØ Max | L1 Max | Cable clamp Metric | Ø cable Min.-Max. |
|----------------|------------|--------|--------|--------------------|-------------------|
| 13 - 19 | 20 | 43.0 | 103 | M 20 | 6 - 14 |
| 25 | 24 | 50.4 | 108 | M 25 | 6 - 18 |
| 37-72 | 28 | 56.0 | 116 | M 32 | 7 - 25 |
| 54-101 | 32 | 63.0 | 121 | M 32 | 7 - 25 |
| 85 - 100 - 150 | 40 | 75.0 | 147 | M 40 | 15 - 32 |

INLINE MALE

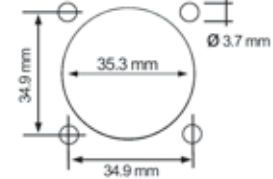


| N° pin | shell size | AØ Max | ØC | L2 Max | Cable clamp Metric | Ø cable Min.-Max. |
|----------------|------------|----------|-----|--------|--------------------|-------------------|
| | | +0/-0.15 | Max | | | |
| 13 - 19 | 20 | 40.0 | 43 | 102 | M 20 | 6 - 14 |
| 25 | 24 | 40.9 | 44 | 109 | M 25 | 6 - 18 |
| 37-72 | 28 | 46.7 | 50 | 116 | M 32 | 7 - 25 |
| 54-101 | 32 | 53.4 | 56 | 122 | M 32 | 7 - 25 |
| 85 - 100 - 150 | 40 | 65.5 | 69 | 147 | M 40 | 15 - 32 |

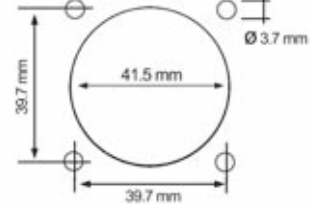
13/19 pin



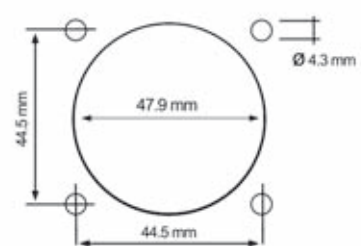
25 pin



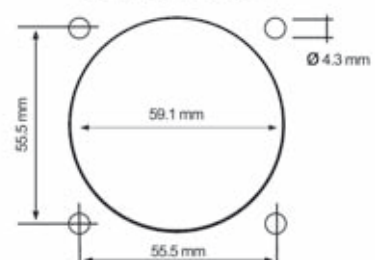
37/72 pin



54/101 pin

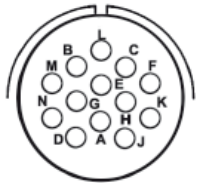


85/100/150 pin

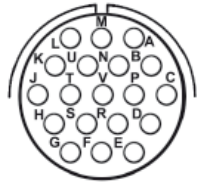


INSERT LAYOUTS AND WIRING LIST

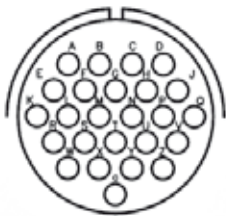
FRONT VIEW OF MALE INSERT



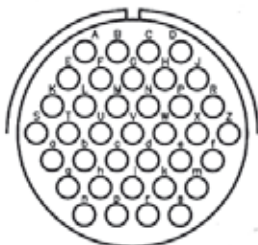
13 pin / size 20



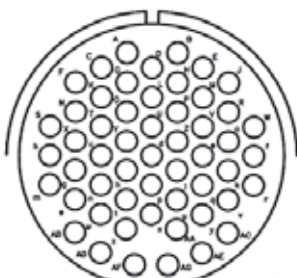
19 pin / size 20



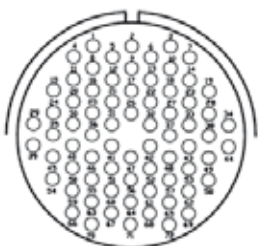
25 pin / size 24



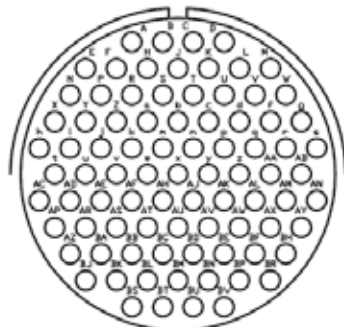
37 pin / size 28



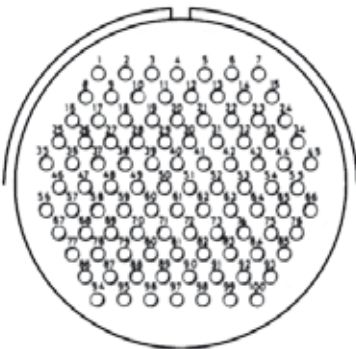
54 pin / size 32



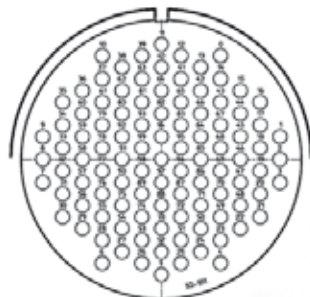
72 pin / size 28



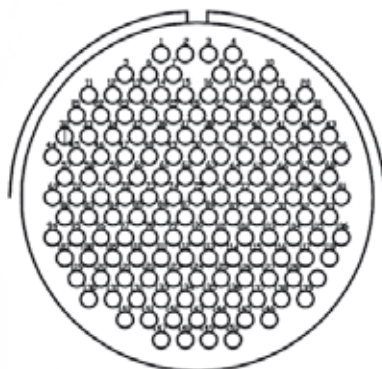
85 pin / size 40



100 pin / size 40



101 pin / size 32



150 pin / size 40

| 13 pin - 4 channels | | | |
|---------------------|-----|------|-----|
| Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ |
| 1 | M | B | L |
| 2 | N | G | E |
| 3 | D | A | H |
| 4 | J | K | F |

| 19 pin - 6 channels | | | |
|---------------------|-----|------|-----|
| Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ |
| 1 | A | M | L |
| 2 | C | P | B |
| 3 | N | U | V |
| 4 | T | J | K |
| 5 | D | R | E |
| 6 | F | G | S |

| 25 pin - 8 channels | | | |
|---------------------|-----|------|-----|
| Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ |
| 1 | A | E | F |
| 2 | G | C | B |
| 3 | D | H | J |
| 4 | M | L | K |
| 5 | Q | P | N |
| 6 | W | S | R |
| 7 | T | X | Y |
| 8 | Z | V | U |

| 37 pin - 12 channels | | | |
|----------------------|-----|------|-----|
| Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ |
| 1 | E | F | A |
| 2 | B | C | G |
| 3 | H | J | D |
| 4 | S | T | K |
| 5 | L | M | U |
| 6 | V | W | N |
| 7 | P | R | X |
| 8 | a | b | g |
| 9 | c | d | j |
| 10 | e | f | m |
| 11 | n | p | h |
| 12 | r | s | k |

| 54 pin - 16 channels | | | |
|----------------------|-----|------|-----|
| Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ |
| 1 | W | f | r |
| 2 | J | R | a |
| 3 | k | v | AC |
| 4 | E | M | V |
| 5 | e | q | y |
| 6 | B | H | P |
| 7 | Z | j | u |
| 8 | D | L | U |
| 9 | d | p | x |
| 10 | A | G | O |
| 11 | Y | h | t |
| 12 | C | K | T |
| 13 | c | n | w |
| 14 | F | N | X |
| 15 | g | s | AB |
| 16 | S | b | m |

| 85 pin - 28 channels | | | |
|----------------------|-----|------|-----|
| Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ |
| 1 | A | B | C |
| 2 | E | F | H |
| 3 | J | K | L |
| 4 | N | P | R |
| 5 | S | T | U |
| 6 | X | Y | Z |
| 7 | a | b | c |
| 8 | d | f | g |
| 9 | h | i | j |
| 10 | k | m | n |
| 11 | p | q | r |
| 12 | t | u | v |
| 13 | w | x | y |
| 14 | z | AA | AB |
| 15 | AC | AD | AE |
| 16 | AF | AH | AJ |
| 17 | AK | AL | AM |
| 18 | AP | AR | AS |
| 19 | AT | AU | AV |
| 20 | AW | AX | AY |
| 21 | AZ | BA | BB |
| 22 | BC | BD | BE |
| 23 | BJ | BK | BL |
| 24 | BM | BN | BP |
| 25 | BS | BT | BU |
| 26 | BV | BR | BF |
| 27 | BH | AN | s |
| 28 | W | M | D |

| 72 pin - 24 channels | | | | | | | |
|----------------------|-----|------|-----|-----|-----|------|-----|
| Ch | Hot | Cold | Gnd | Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ | No. | + | - | ⏏ |
| 1 | 3 | 2 | 1 | 13 | 44 | 38 | 37 |
| 2 | 5 | 6 | 7 | 14 | 41 | 42 | 43 |
| 3 | 9 | 8 | 4 | 15 | 45 | 39 | 40 |
| 4 | 13 | 14 | 10 | 16 | 48 | 47 | 46 |
| 5 | 15 | 11 | 12 | 17 | 52 | 53 | 49 |
| 6 | 18 | 17 | 16 | 18 | 54 | 50 | 51 |
| 7 | 22 | 23 | 19 | 19 | 57 | 56 | 55 |
| 8 | 24 | 20 | 21 | 20 | 61 | 62 | 58 |
| 9 | 27 | 26 | 25 | 21 | 63 | 59 | 60 |
| 10 | 33 | 34 | 28 | 22 | 69 | 65 | 64 |
| 11 | 30 | 31 | 32 | 23 | 66 | 67 | 68 |
| 12 | 36 | 35 | 29 | 24 | 72 | 71 | 70 |

| 100 pin - 32 channels | | | | | | | |
|-----------------------|-----|------|-----|-----|-----|------|-----|
| Ch | Hot | Cold | Gnd | Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ | No. | + | - | ⏏ |
| 1 | 1 | 2 | 3 | 18 | 52 | 53 | 54 |
| 2 | 4 | 5 | 6 | 19 | 55 | 56 | 57 |
| 3 | 7 | 8 | 9 | 20 | 58 | 59 | 60 |
| 4 | 10 | 11 | 12 | 21 | 61 | 62 | 63 |
| 5 | 13 | 14 | 15 | 22 | 64 | 65 | 66 |
| 6 | 16 | 17 | 18 | 23 | 67 | 68 | 69 |
| 7 | 19 | 20 | 21 | 24 | 70 | 71 | 72 |
| 8 | 22 | 23 | 24 | 25 | 73 | 74 | 75 |
| 9 | 25 | 26 | 27 | 26 | 76 | 77 | 78 |
| 10 | 28 | 29 | 30 | 27 | 79 | 80 | 81 |
| 11 | 31 | 32 | 33 | 28 | 82 | 83 | 84 |
| 12 | 34 | 35 | 36 | 29 | 85 | 86 | 87 |
| 13 | 37 | 38 | 39 | 30 | 88 | 89 | 90 |
| 14 | 40 | 41 | 42 | 31 | 91 | 92 | 93 |
| 15 | 43 | 44 | 45 | 32 | 94 | 95 | 96 |
| 16 | 46 | 47 | 48 | 33 | 97 | 98 | 99 |
| 17 | 49 | 50 | 51 | | | | |

| 101 pin - 32 channels | | | | | | | |
|-----------------------|-----|------|-----|-----|-----|------|-----|
| Ch | Hot | Cold | Gnd | Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ | No. | + | - | ⏏ |
| 1 | 3 | 2 | 1 | 17 | 54 | 53 | 52 |
| 2 | 9 | 8 | 7 | 18 | 57 | 56 | 55 |
| 3 | 12 | 11 | 10 | 19 | 60 | 59 | 58 |
| 4 | 15 | 14 | 13 | 20 | 63 | 62 | 61 |
| 5 | 18 | 17 | 16 | 21 | 66 | 65 | 64 |
| 6 | 21 | 20 | 19 | 22 | 69 | 68 | 67 |
| 7 | 24 | 23 | 22 | 23 | 72 | 71 | 70 |
| 8 | 27 | 26 | 25 | 24 | 75 | 74 | 73 |
| 9 | 30 | 29 | 28 | 25 | 78 | 77 | 76 |
| 10 | 33 | 32 | 31 | 26 | 81 | 80 | 79 |
| 11 | 36 | 35 | 34 | 27 | 84 | 83 | 82 |
| 12 | 39 | 38 | 37 | 28 | 87 | 86 | 85 |
| 13 | 42 | 41 | 40 | 29 | 88 | 89 | 90 |
| 14 | 45 | 44 | 43 | 30 | 93 | 92 | 91 |
| 15 | 48 | 47 | 46 | 31 | 96 | 95 | 94 |
| 16 | 51 | 50 | 49 | 32 | 99 | 98 | 97 |

| 150 pin - 48 channels | | | | | | | |
|-----------------------|-----|------|-----|-----|-----|------|-----|
| Ch | Hot | Cold | Gnd | Ch | Hot | Cold | Gnd |
| No. | + | - | ⏏ | No. | + | - | ⏏ |
| 1 | 1 | 2 | 3 | 25 | 75 | 76 | 77 |
| 2 | 5 | 6 | 7 | 26 | 78 | 79 | 80 |
| 3 | 8 | 9 | 10 | 27 | 82 | 83 | 84 |
| 4 | 11 | 12 | 13 | 28 | 85 | 86 | 87 |
| 5 | 14 | 15 | 16 | 29 | 88 | 89 | 90 |
| 6 | 17 | 18 | 19 | 30 | 91 | 92 | 93 |
| 7 | 21 | 22 | 23 | 31 | 94 | 95 | 96 |
| 8 | 24 | 25 | 26 | 32 | 97 | 98 | 99 |
| 9 | 27 | 28 | 29 | 33 | 100 | 101 | 102 |
| 10 | 20 | 30 | 31 | 34 | 103 | 104 | 105 |
| 11 | 32 | 33 | 34 | 35 | 56 | 81 | 106 |
| 12 | 35 | 36 | 37 | 36 | 107 | 108 | 109 |
| 13 | 38 | 39 | 40 | 37 | 110 | 111 | 112 |
| 14 | 41 | 42 | 43 | 38 | 113 | 114 | 115 |
| 15 | 44 | 45 | 46 | 39 | 116 | 117 | 118 |
| 16 | 47 | 48 | 49 | 40 | 119 | 120 | 121 |
| 17 | 50 | 51 | 52 | 41 | 122 | 123 | 124 |
| 18 | 53 | 54 | 55 | 42 | 125 | 126 | 127 |
| 19 | 57 | 58 | 59 | 43 | 139 | 128 | 129 |
| 20 | 60 | 61 | 62 | 44 | 130 | 131 | 132 |
| 21 | 63 | 64 | 65 | 45 | 133 | 134 | 135 |
| 22 | 66 | 67 | 68 | 46 | 136 | 137 | 138 |
| 23 | 69 | 70 | 71 | 47 | 140 | 141 | 142 |
| 24 | 72 | 73 | 74 | 48 | 143 | 144 | 145 |

PART NUMBER EXPLANATION

Part N.

EXAMPLE Part N. **SVK 150 F V R G S MP N**

| CONNECTOR SERIES | |
|--|------------|
| SVK = (13 - 19 - 25 - 37 - 54 - 85 - 100 - 150 pin) Back shell: standard. Locking ring: ergonomic and rubber coated | SVK |
| SVS = (72 - 101 PIN) slim series, high density. Back shell: standard. Locking ring: ergonomic and rubber coated | SVS |

| CONTACTS NUMBER | |
|---|-----|
| 013 - 019 - 025 - 037 - 054 - 072 - 085 - 100 - 101 - 150 | ... |

| CONTACT TYPE | |
|--------------|----------|
| M = male | M |
| F = female | F |

| CONNECTOR TYPE | |
|----------------|----------|
| V = inline | V |
| P = panel | P |

| COUPLING TERMINATION | |
|---|----------|
| - = with ramps | - |
| H = ergonomic locking ring with improved thickness and stronger roller pins | H |
| R = rubber coated locking ring | R |

| CONTACT PLATING TYPE | |
|---|----------|
| S = silver (13 - 19 - 25 - 37 - 54 - 85 pin) | S |
| G = gold (13 - 19 - 25 - 37 - 54 - 72 - 85 - 100 - 101 - 150 pin) | G |
| N = no contact | N |

| CONTACT TERMINATION | |
|---------------------|----------|
| C = crimp | C |
| S = solder | S |
| P = pcb | P |
| N = no contact | N |

| CABLE CLAMP RANGE - METRIC | | | | |
|----------------------------|---------------------|----------------|------------|-----------|
| Thread Size | Clamping Range (mm) | SVK (pins) | SVS (pins) | |
| M 20 x 1.5 | 6 - 12 | 13 - 19 | | MH |
| M 20 x 1.5 | 10 - 14 | 13 - 19 | | MI |
| M 25 x 1.5 | 6 - 13 | 25 | | MJ |
| M 25 x 1.5 | 13 - 18 | 25 | | ML |
| M 32 x 1.5 | 7 - 15 | 37 - 54 | 72 - 101 | MN |
| M 32 x 1.5 | 11 - 21 | 37 - 54 | 72 - 101 | MM |
| M 32 x 1.5 | 18 - 25 | 37 - 54 | 72 - 101 | MO |
| M 40 x 1.5 | 15 - 23 | 85 - 100 - 150 | | MQ |
| M 40 x 1.5 | 19 - 28 | 85 - 100 - 150 | | MP |
| M 40 x 1.5 | 22 - 32 | 85 - 100 - 150 | | MR |

| CABLE CLAMP TYPE | |
|-------------------|----------|
| N = normal | N |
| S = spiral flex | S |
| R = strain relief | R |

| SPECIAL VERSION (upon request) | |
|---|----------|
| For example: T = inserted solder termination contacts | T |

