

127 / HE8

The well proven technology

The 127 series is a medium-density range of multi-contact plug-in connectors for printed circuit boards. This range of 2.54 [.100] staggered grid, low profile connectors meets the common harsh environmental requirements.

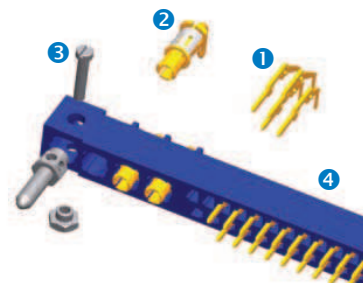
A wide range of fittings and guides, as well as numerous contact terminations, provide more flexibility to PCB designers.

A well-proven technology

- The 127 series uses a 2.54 [.100] staggered grid pitch with 2.54 [.100] between rows. Available in 2 or 3 rows.
- The contact technology is based on the tuning fork and blade concept. Using advanced copper alloys provides optimized electrical conductivity as well as long-term mechanical reliability.

A large choice of attachments on Printed Circuit Boards

- Different styles, from 17 to 144 contacts with various terminations: straight, right angled 90°, crimp barrel, solder cup, SMT and wire-wrapping.
- Hybrid patterns, with a combination of 3 to 10 special cavities, permit the usage of coaxial, power contacts, as well as optical termini.

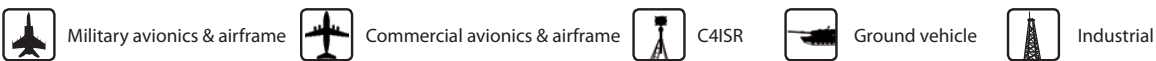


The 127 series connectors are available in 3 different versions: HE801 / HE804 / HE807

QUICK SELECTION GUIDE

Signal contacts ①		Special contacts ②	Keying & Guiding ③	Connector type
<p>FEMALE</p>	<p>MALE</p>	<p>POWER 10A</p> <p>POWER 20A</p> <p>COAXIAL</p>	<p>NON KEYING</p> <p>KEYING</p> <p>LOCKING</p> <p>NON LOCKING</p>	<p>HE801 Round male contact Standard molding size</p> <p>HE804 Rectangular male contact Molding smaller in size</p> <p>HE807 Hybrid cavities</p>
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The 127 series serves various markets, including:



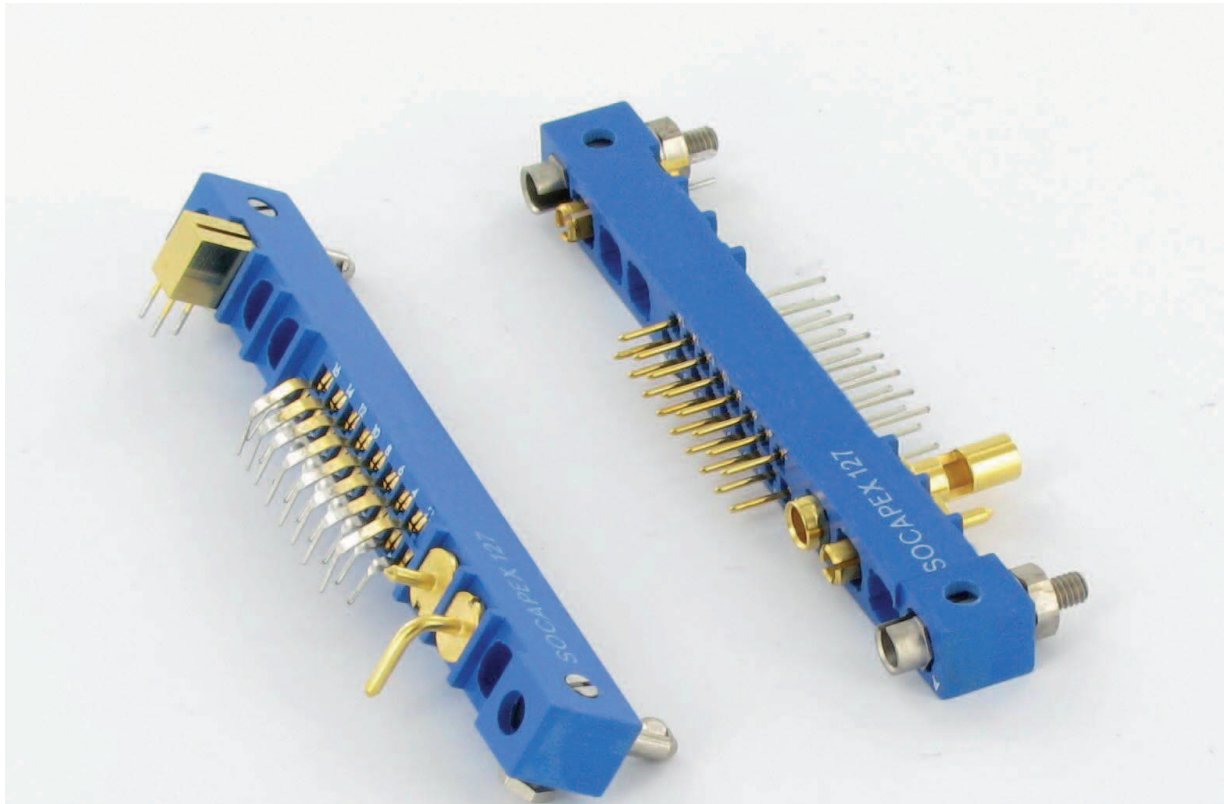
This proven range of PCB connectors complies with numerous international standards:

NFC UTE 93424
HE801, HE804 & HE807

BS9525
N0001, F0006, F0007

MIL-DTL-55302
140 to 155

All dimensions are given for information only and are in mm [inch], except as otherwise specified



127 Series

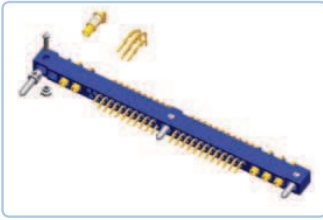
127 / HE8 Series

Proven, reliable and robust connectors

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Female fittings for receptacles	106
Male fittings for plugs	110
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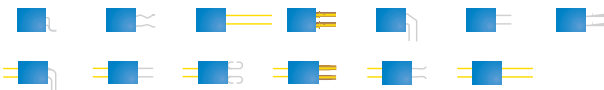


127 / HE8 >>> GENERAL SPECIFICATIONS



- 2.54 [.100] staggered grid (1.27 [.050] offset), 2.54 [.100] between rows
- Proven, reliable and robust rectangular PCB connectors
- Numerous contact terminations and fittings
- Hybrid patterns with power or coax contacts

Terminations



Recommended configurations



Standards

NFC UTE 93424
HE801, HE804 & HE807

BS9525
N0001, F0006, F0007

MIL-DTL-55302
140 to 155

Main characteristics

- Density: 0.11 cts / mm² [71 cts / inch²]
- 17 to 144 signal contacts
- 0 to 10 special contacts
- 3 A per signal contacts
- Fully compatible with all the standard connectors HE801, HE804 & HE807 on the market

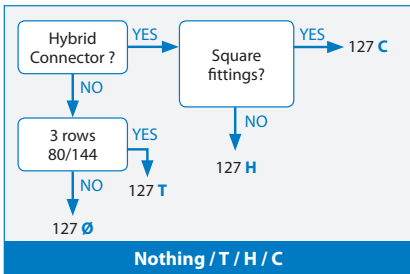
Markets



Main applications



How to order

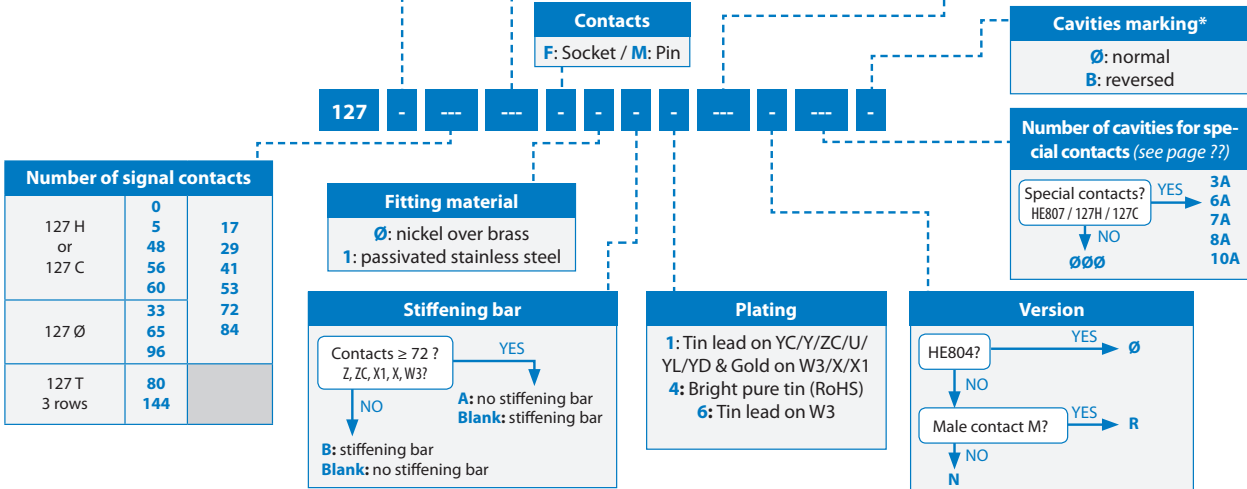


Reference	Codable	Lockable
Fittings for receptacle (X: No fittings)		
K / A / P / B / KE / AE / L	Yes	No
S / D / SC / DC	No	Yes
KD / AD / KED / AED / KT / AT / KET / AET	Yes	Yes
Fittings for plug (XL: No fittings)		
A / J / H / N / V / E / R	Yes	No
PA / PC / T	No	No
D / S / NF / EF / RF	No	Yes
AS / JS / NS / ES / RS / ET / RT	Yes	Yes

Fittings (see pages 106 to 113)

Socket	Pin	Description
YC		Right angle PC tail
YL		Long right angle PC tail
T		SMT with metallized terminals
U		SMT double sided
Y		Straight PC tail
YD		Straight PC tail (for HE804 connector only)
W3		Wire wrap connections
Z	ZC	Solder on wire
X1**	X**	Crimping tail
ØØ	ØØ	No signal contacts (HE807)

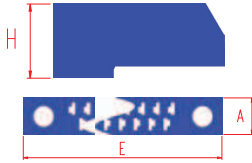
Signal contacts (see pages 102 to 105)



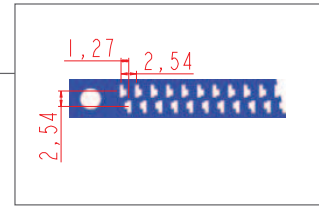
* Asymmetrical arrangements with female contacts always have plug marking. Asymmetrical arrangements with male contacts always have receptacle marking.
** Not available for HE801 and HE807 connectors.

127 / HE8 >>> TECHNICAL SPECIFICATIONS

DIMENSIONAL CHARACTERISTICS



H = 7.9 [.311] for HE801 & HE807 connectors
 H = 6.9 [.272] for HE804 connectors
 A = 6.3 [.248] for 2-row connectors
 A = 8.55 to 8.94 [.337 to .352] for 3-row connectors
 E = 37.5 to 144.2 [1.476 to 5.677]



FEMALE CONTACT



Female tuning fork contact

- Compatible with other technologies

Material

- CuSn9P (blade)

Plating

- Terminations: gold on W3, X & X1 and tin lead or bright pure tin on YD, Y, Z, YC, YL, T & U
- Active contact area: gold

MARKING

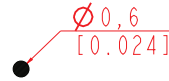
Plug marking



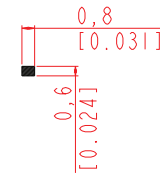
Receptacle marking



MALE CONTACT



- For HE801 & HE807 connectors
- Contact section: 0.28mm² [.0004 inch²]



- For HE804 connectors
- Contact section: 0.48mm² [.0007 inch²]

Material: CuZn (blade)

Plating

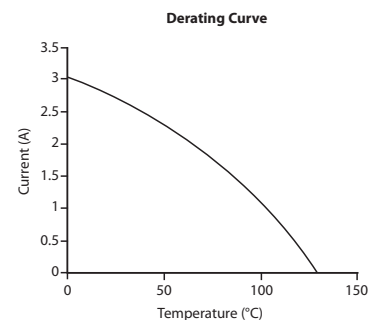
- Terminations: gold on W3, X & X1 and tin lead or bright pure tin on YD, Y, Z, YC, YL, T & U
- Active contact area: gold

MATERIALS

- **Fittings:** electroless nickel over brass or passivated stainless steel (303 ASTM)
- **Plastic insert:** thermoset DAP, 30% glass-fiber filled

	HE801	HE804	HE807
MECHANICAL CHARACTERISTICS			
Backoff¹ (mm)	1 _{MAX} [.039]	1 _{MAX} [.039]	1 _{MAX} [.039]
Mating force per contact (N)	1.60 _{MAX}	1.60 _{MAX}	1.60 _{MAX}
Unmating force per contact (N)	0.14 _{MIN}	0.14 _{MIN}	0.14 _{MIN}
Durability cycles	500	500	250
Vibrations (20 to 2000 Hz) micro discontinuity 1µs	10 g	10 g	10 g
Shocks micro discontinuity 1µs	100 g	100 g	100 g
Recommended tightening torques			
- nuts for Ø 2.5mm screws, brass m.N	0.25	0.25	0.25
- nuts for Ø 1.6mm screws, brass m.N	0.15	0.15	0.15
ENVIRONMENTAL CHARACTERISTICS			
Thermal shocks (°C)	-55 / +125	-55 / +125	-55 / +125
Salt Spray hours	96	96	96
ELECTRICAL CHARACTERISTICS			
Current rating per contacts (A)	See derating curve	See derating curve	See derating curve
Insulation resistance (GΩ)	5 _{MIN}	5 _{MIN}	5 _{MIN}
Contact resistance (mΩ)	12 _{MAX}	12 _{MAX}	12 _{MAX}
Dielectric Withstanding Voltage (Vrms)	1 000	1 000	1 000
Capacitance between contacts (pF)	5 _{MAX}	5 _{MAX}	5 _{MAX}
Service voltage at 50 Hz (Vrms)	250	250	250

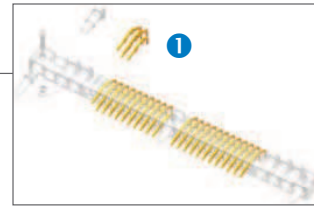
¹: When both connectors are fully mated, the backoff is the maximum distance the connectors can be unmated while functioning properly



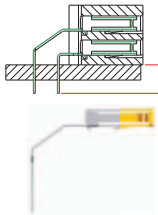
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127 / HE8 >>> SIGNAL CONTACTS (1)

FEMALE CONTACTS



Right angle PC tail

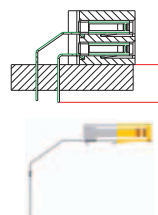


- Thru hole soldering
- Single or double sided daughter board
- Termination section: 0.5 x 0.2 [.020 x .008]
- PCB thickness: 2.5_{MAX} [.098]

Termination style

YC

Long right angle PC tail

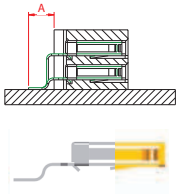


- Thru hole soldering
- Single or double sided daughter board
- Termination section: 0.5 x 0.2 [.020 x .008]
- PCB thickness: 3.5_{MAX} [.138]

Termination style

YL

SMT single side

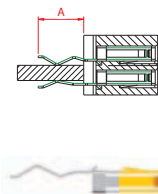


- SMT soldering
- Single side daughter board
- Surface mount area: 1.6 x 0.5 [.063 x .020]

Termination style

T

SMT double side

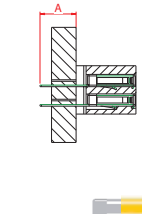


- SMT soldering
- Double side daughter board
- Surface mount area: 0.8 x 0.2 [.032 x .008]
- PCB thickness: 1.6 ± 0.3 [.063 ± .012]

Termination style

U

Straight PC tail

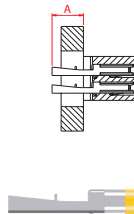


- Thru hole soldering
- Mother board
- Termination section: 0.5 x 0.2 [.020 x .008]
- PCB thickness: 3.2 [.126]

Termination style

YD/Y

Solder cup

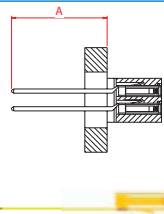


- Hard-soldering on wire
- Ø: 1 mm_{MAX} [.039] on core section 0.78 mm² [.0012 inch²]
- Termination section: 1.5 x 1.2 [.059 x .047]
- PCB thickness: 3.2 [.126]

Termination style

Z

Wire-wrap

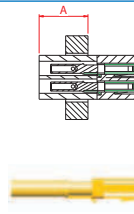


- Wire wrap connections
- AWG gauge 28 to 30
- Termination section: 0.6 x 0.6 [.024 x .024]
- PCB thickness: 3.2 [.126]

Termination style

W3

Crimp barrel



- Crimping on wire
- AWG gauge 22 to 26
- Terminations protected by a casing cemented to the moulding
- PCB thickness: 3.2 [.126]

Termination style

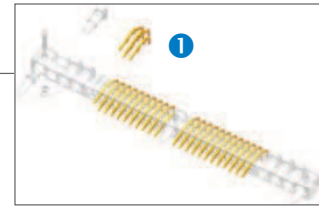
X1

	YC	YL	T	U	YD	Y	Z	W3	X1
A_{MAX} for HE801/HE807	3 [.118]	4 [.157]	2.8 [.110]	5.5 [.217]	4.7 [.185]	4.9 [.193]	4.5 [.177]	14.1 [.555]	7 [.276]
A_{MAX} for HE804			3.8 [.150]	6.5 [.256]			5.5 [.217]	15 [.591]	8 [.315]
Active contact area plating μm [μin]	2 [.080] Ni + 1 [.040] Au						2 [.08] Ni + 1 [.040] Au		
Termination plating μm [μin]	2 [.080] Ni + 3 to 6 [.120 to .240] SnPb or bright pure Sn for RoHS version						2 [.08] Ni + 0.2 [.008] Au		

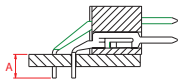
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127 / HE8 >>> SIGNAL CONTACTS (1)

MALE CONTACTS



Right angle PC tail

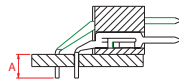


- Thru hole soldering
- Single or double sided daughter board
- Termination section: 0.35 x 0.35 [.014 x .014]
- PCB thickness: 2.6 [.102]



← Termination style **YC**

Long right angle PC tail

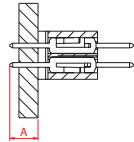


- Thru hole soldering
- Single or double sided daughter board
- Termination section: 0.35 x 0.35 [.014 x .014]
- PCB thickness: 3.7 [.146]



← Termination style **YL**

Straight PC tail

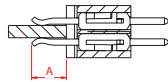


- Thru hole soldering
- Mother board
- Termination section: 0.35 x 0.35 [.014 x .014]
- PCB thickness: 3.2 [.126]



→ Termination style **Y**

SMT double side

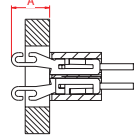


- SMT soldering
- Double sided daughter board
- Surface mount area: 0.64 x 0.6 [.025 x .024]
- PCB thickness: 1.6 ± 0.3 [.063 ± .012]



← Termination style **U**

Solder cup

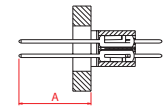


- Hard-soldering on wire
- $\varnothing: 1_{MAX} [.039]$ on core section 0.78 mm² [.0012inch²]
- PCB thickness: 3.2 [.126]



← Termination style **ZC**

Wire-wrap



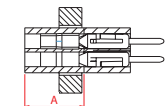
- Wire wrap connections
- AWG gauge 28 to 30
- Termination section: 0.6 x 0.6 [.024 x .024]
- PCB thickness: 3.2 [.126]



→ Termination style **W3**

The mention → or ← means the contact removal direction.

Crimp barrel



- Crimping on wire
- AWG gauge 22 to 26
- Terminations protected by a casing cemented to the moulding
- PCB thickness: 3.2 [.126]



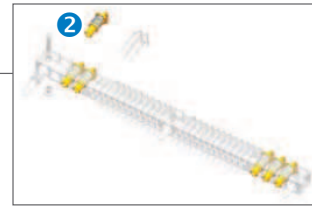
← Termination style **X**

	YC	YL	Y	U	ZC	W3	X
A_{MAX} for HE801/HE807	3.1 [.122]	4.2 [.165]	5.05 [.199]	4.2 [.165]	4.3 [.169]	15.05 [.593]	7 [.276]
A_{MAX} for HE804			5 [.197]	5.2 [.205]	5.3 [.209]	13.2 [.520]	8 [.315]
Active contact area plating μm [μin]	2 [.080] Ni + 1 [.040] Au					2 [.080] Ni + 1 [.040] Au	
Termination plating μm [μin]	2 [.080] Ni + 3 to 6 [.120 to .240] SnPb or bright pure Sn for RoHS version					2 [.080] Ni + 0.2 [.008] Au	

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127 / HE8 >>> SPECIAL CONTACTS (2)

POWER CONTACTS**



Current rating 10A

Solder cup

- Hard soldering on wire
- Wire diameter up to 2 [.079]
- Termination section: Ø 3.6 [.142]
- Current rating 10A

Pin	M121*
Socket	F121*

Straight PC tail

- Thru hole soldering
- Mother board
- Termination section: Ø 1.2 [.047]
- PCB thickness: up to 3.2_{MAX} [.126]
- Current rating 10A

Pin	M141*
Socket	F141*

Right angle PC tail

- Thru hole soldering
- Daughter board
- Termination section: Ø 1.2 [.047]
- PCB thickness: 1.6 to 2.4 [.063 to .095]
- Current rating 10A

Pin	M132*
Socket	F132*

Current rating at 5V (A)	10
Maximum current rating at 5V (A)	15
Contact resistance (mΩ)	12 _{MAX}
Operating temperature rise (°C)	20 _{MAX}
Contact retention (N)	50 _{MIN}
Insertion and extraction force per contact (N)	f ≤ F ≤ 15

Current rating 20A

Solder cup

- Hard soldering on wire
- Wire diameter up to 1.83 [.072]
- Current rating 20A

Pin	MH1*
Socket	FH1*

Straight PC tail

- Thru hole soldering
- Mother board
- Termination section: 1.4 [.053]
- PCB thickness: up to 3.2_{MAX} [.126]
- Current rating 20A

Pin	MH2*
Socket	FH2*

Current rating at 5V (A)	20
Contact resistance (mΩ)	12 _{MAX}
Operating temperature rise (°C)	20 _{MAX}
Contact retention (N)	50 _{MIN}
Insertion and extraction force per contact (N)	f ≤ F ≤ 15

Right angle PC tail

- Thru hole soldering
- Daughter board
- Termination section: 1.2 [.047]
- PCB thickness: 1.6 to 2.4 [.063 to .095]
- Current rating 20A

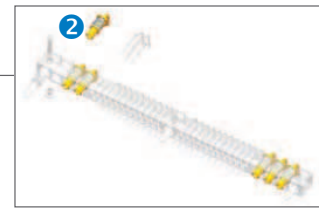
Pin	MH3*
Socket	FH3*

	M121/F121	M141/F141	M132/F132	MH1/FH1	MH2/FH2	MH3/FH3
A _{MAX}	8.2 [.323]	3.8 [.150]	3.8 [.150]	6.3 [.248]	4.2 [.165]	3.8 [.150]
Central contact area plating μm [μin]	2 [.080] Ni + 1.2 [.047] Au					
Other plating area μm [μin]	2 [.080] Ni + 0.4 [.016] Au					

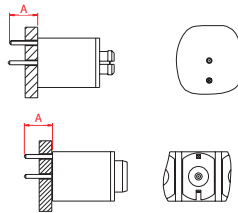
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127 / HE8 >>> SPECIAL CONTACTS (2)

COAXIAL CONTACTS**



Straight PC tail

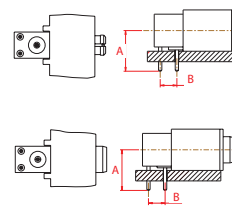


- Thru hole soldering
- Mother board
- Termination section: \varnothing 0.5 [.020]
- PCB thickness: 3.2_{MAX} [.126]



Pin	M041*
Socket	F041*

Right angle PC tail

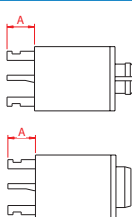


- Thru hole soldering
- Daughter board
- Termination section: \varnothing 0.5 [.020]
- PCB thickness: 1.6 to 2.4 [.063 to .095]



Pin	M032*
Socket	F032*

Straight on flexible cable

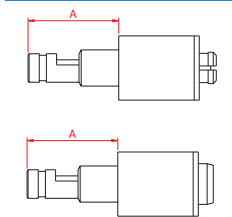


- Hard-soldering on flexible cable



Pin	M011*
Socket	F011*

Straight on flexible cable



- Hard-soldering on flexible cable
- Wire outer diameter up to 2 [.079]
- KX 21 A / RG 178 B/U



Pin	M021*
Socket	F021*

COAXIAL CONTACTS	
Impedance (Ω)	50
Voltage rating (Vrms)	180
Current rating (mA)	500
Contact retention (N)	50 _{MIN}
Frequency range (GHz)	0 to 1
Contact resistance (m Ω)	12 _{MAX}
SWR (at 1 GHz)	1.3 _{MAX}
Insertion and extraction force per contact (N)	1 \leq F \leq 15

OPTICAL TERMINI

Consult us.

	M041/F041	M021/F021	M011/F011	M032/F032
A _{MAX}	3.8 [.150]	9.2 [.362]	2.5 [.098]	6.2 [.244]
B _{MAX}				2.54 [.100]
Central contact area plating μ m [μ in]	2 [.080] Ni + 1.2 [.047] Au			
Other plating area μ m [μ in]	2 [.080] Ni + 0.4 [.016] Au			

* Coaxial contacts and power contacts have to be ordered separately against the here above part number. Example: F011

** These contacts can be mounted in all types of connectors 127H-127C/HE807.

127 / HE8 >>> FEMALE FITTINGS (3)

END FITTINGS FOR RECEPTACLES**



Codable & Non lockable fittings

K						
	- Chassis or mother board - Fixed receptacle Compatibility - Female contact: 801 / 804 / 807 - Male contact: 807 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801 / 807</td> <td>212 229</td> </tr> <tr> <td>HE 804</td> <td>201 202</td> </tr> </tbody> </table>	EF	CF	HE 801 / 807	212 229	HE 804
EF	CF					
HE 801 / 807	212 229					
HE 804	201 202					

A						
	- Chassis or mother board - Fixed receptacle Compatibility - Male contact: 801 / 804 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>212 229</td> </tr> <tr> <td>HE 804</td> <td>201 202</td> </tr> </tbody> </table>	EF	CF	HE 801	212 229	HE 804
EF	CF					
HE 801	212 229					
HE 804	201 202					

P						
	- Chassis - Floating receptacle Compatibility - Female contact: 801 / 804 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>203 202</td> </tr> <tr> <td>HE 804</td> <td>203 202</td> </tr> </tbody> </table>	EF	CF	HE 801	203 202	HE 804
EF	CF					
HE 801	203 202					
HE 804	203 202					

B						
	- Chassis - Floating receptacle Compatibility - Male contact: 801 / 804 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>203 202</td> </tr> <tr> <td>HE 804</td> <td>203 202</td> </tr> </tbody> </table>	EF	CF	HE 801	203 202	HE 804
EF	CF					
HE 801	203 202					
HE 804	203 202					

P				
	- Chassis - Floating receptacle Compatibility - Female contact: 807 - Male contact: 807 - Nickel over brass*			
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 807</td> <td>226 202</td> </tr> </tbody> </table>	EF	CF	HE 807
EF	CF			
HE 807	226 202			

L				
	- Chassis or mother board - With insulating washer Compatibility - Female contact: 804 - Nickel over brass*			
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 804</td> <td>228 202</td> </tr> </tbody> </table>	EF	CF	HE 804
EF	CF			
HE 804	228 202			

KE						
	- Daughter board or board to board mating - Free receptacle - with bracket - Connection board to board aligned with each other Compatibility - Female contact: 801 / 807 - Male contact: 807 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>208 209</td> </tr> <tr> <td>HE 807</td> <td>208 208</td> </tr> </tbody> </table>	EF	CF	HE 801	208 209	HE 807
EF	CF					
HE 801	208 209					
HE 807	208 208					

AE				
	- Daughter board or board to board mating - Free receptacle - with bracket - Connection board to board aligned with each other Compatibility - Male contact: 801 - Nickel over brass*			
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>208 209</td> </tr> </tbody> </table>	EF	CF	HE 801
EF	CF			
HE 801	208 209			

KE				
	- Daughter board or board to board mating - Free receptacle - with bracket - Connection board to board aligned with each other Compatibility - Female contact: 804 - Nickel over brass*			
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 804</td> <td>209 209</td> </tr> </tbody> </table>	EF	CF	HE 804
EF	CF			
HE 804	209 209			

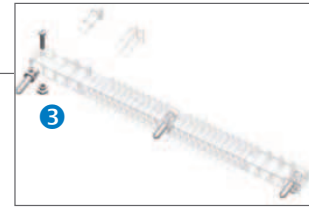
AE				
	- Daughter board or board to board mating - Free receptacle - with bracket - Connection board to board aligned with each other Compatibility - Male contact: 804 - Nickel over brass*			
	<table border="1"> <thead> <tr> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 804</td> <td>209 209</td> </tr> </tbody> </table>	EF	CF	HE 804
EF	CF			
HE 804	209 209			

EF: End Fitting / CF: Central Fitting

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> FEMALE FITTINGS (3)

END FITTINGS FOR RECEPTACLES**



Non codable & lockable fittings

S

- Cables, free receptacle
- Locking device-extractor - tapped female fitting
- Locking and unlocking shall be carried out simultaneously at both ends

Compatibility

- Female contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	219	229
HE 804	220	202

D

- Cables, free receptacle
- Locking device-extractor - tapped female fitting
- Locking and unlocking shall be carried out simultaneously at both ends

Compatibility

- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	219	229
HE 804	220	202

SC

- Cables, free receptacle
- Flex, locking device-extractor

Compatibility

- Female contact: 804
- Nickel over brass *

	EF	CF
HE 804	207	202

DC

- Cables, free receptacle
- Flex, locking device-extractor

Compatibility

- Male contact: 804
- Nickel over brass *

	EF	CF
HE 804	207	202

SC

- Chassis, floating receptacle
- Locking device-extractor

Compatibility

- Female contact: 801
- Nickel over brass *

	EF	CF
HE 801	213	229

DC

- Chassis, floating receptacle
- Locking device-extractor

Compatibility

- Male contact: 801
- Nickel over brass *

	EF	CF
HE 801	213	229

S

- Chassis, floating receptacle
- Locking device-extractor - tapped female fitting
- Locking and unlocking shall be carried out simultaneously at both ends

Compatibility

- Female contact: 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 807	213	229

	S 219	D 219	SC	DC	SC	DC	S
	220	220	207	207	213	213	213
A	Ø 5.7 [.224]		Ø 5.8 [.228]				
D	4.7 _{MAX} [.185]		6 _{MAX} [.236]				
E	2.1 _{MAX} [.083]						

	K 212/201	A 212/201	P 203	B 203	P 226	L 228	KE 208	AE 208	KE 209	AE 209
A			Ø 6 [.236]		Ø 6 [.236]	Hex 5 [.197]	Ø 3.5 [.138]		Ø 3.5 [.138]	
A'							M 2.5 [.098]		Hex 4 [.157]	
B			Ø 4.5 [.177]		Hex 4.5 [.177]				1 _{MAX} [.039]	
C	M 2.5 [.098]		M 2.5 [.098]			M 2.5 [.098]				
D	6 _{MAX} [.236]		7.2 [.283]		5.9 [.232]	6 _{MAX} [.236]	4.6 [.181]			
E	3.2 _{MAX} [.126]		2.2 [.087]		2.1 _{MAX} [.083]	2.7 _{MAX} [.106]	1.6 to 2.4 [.063 to .094]			
F					2.3 [.091]		2.35 [.093]		3.35 [.132]	
G							7.2 _{MAX} [.283]		7.2 _{MAX} [.283]	
H							5.5 [.217]			

*To order the same fitting in passivated stainless steel, change the "2" in the HE8 reference to a "4" (2xx => 4xx)

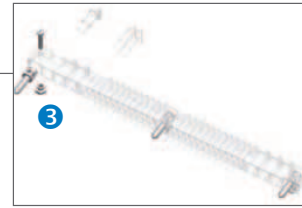
** To order the fitting alone: HE8C + xxx

EF: End Fitting / CF: Central Fitting

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> FEMALE FITTINGS (3)

END FITTINGS FOR RECEPTACLES**



Codable & lockable fittings

KD									
	- Chassis or mother board - Fixed receptacle - Locking ensuring resistance to vibrations Compatibility - Female contact: 801 / 804 / 807 - Male contact: 807 - Nickel over brass*								
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801 / 807</td> <td>221</td> <td>229</td> </tr> <tr> <td>HE 804</td> <td>221</td> <td>202</td> </tr> </tbody> </table>		EF	CF	HE 801 / 807	221	229	HE 804	221
	EF	CF							
HE 801 / 807	221	229							
HE 804	221	202							

AD									
	- Chassis or mother board - Fixed receptacle - Locking ensuring resistance to vibrations Compatibility - Male contact: 801 / 804 - Nickel over brass*								
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801 / 804</td> <td>221</td> <td>229</td> </tr> <tr> <td>HE 804</td> <td>221</td> <td>202</td> </tr> </tbody> </table>		EF	CF	HE 801 / 804	221	229	HE 804	221
	EF	CF							
HE 801 / 804	221	229							
HE 804	221	202							

KED						
	- Daughter board - Free receptacle - with bracket - Connection board to board aligned with each other - Locking ensuring resistance to vibrations Compatibility - Female contact: 804 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 804</td> <td>223</td> <td>209</td> </tr> </tbody> </table>		EF	CF	HE 804	223
	EF	CF				
HE 804	223	209				

AED						
	- Daughter board - Free receptacle - with bracket - Connection board to board aligned with each other - Locking ensuring resistance to vibrations Compatibility - Male contact: 804 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 804</td> <td>223</td> <td>209</td> </tr> </tbody> </table>		EF	CF	HE 804	223
	EF	CF				
HE 804	223	209				

KED									
	- Daughter board - Free receptacle - with bracket - Connection board to board aligned with each other - Locking ensuring resistance to vibrations Compatibility - Female contact: 801 / 807 - Male contact: 807 - Nickel over brass*								
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>224</td> <td>209</td> </tr> <tr> <td>HE 807</td> <td>224</td> <td>208</td> </tr> </tbody> </table>		EF	CF	HE 801	224	209	HE 807	224
	EF	CF							
HE 801	224	209							
HE 807	224	208							

AED						
	- Daughter board - Free receptacle - with bracket - Connection board to board aligned with each other- Locking ensuring resistance to vibrations Compatibility - Male contact: 801 - Nickel over brass*					
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>224</td> <td>209</td> </tr> </tbody> </table>		EF	CF	HE 801	224
	EF	CF				
HE 801	224	209				

KT									
	- Chassis or mother board - Fixed receptacle - Quarter turn locking on plug side Compatibility - Female contact: 801 / 804 / 807 - Male contact: 807 - Passivated stainless steel only*								
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801 / 807</td> <td>422</td> <td>429</td> </tr> <tr> <td>HE 804</td> <td>422</td> <td>402</td> </tr> </tbody> </table>		EF	CF	HE 801 / 807	422	429	HE 804	422
	EF	CF							
HE 801 / 807	422	429							
HE 804	422	402							

AT									
	- Chassis or mother board - Fixed receptacle - Quarter turn locking on plug side Compatibility - Male contact: 801 / 804 - Passivated stainless steel only								
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801</td> <td>422</td> <td>429</td> </tr> <tr> <td>HE 804</td> <td>422</td> <td>402</td> </tr> </tbody> </table>		EF	CF	HE 801	422	429	HE 804	422
	EF	CF							
HE 801	422	429							
HE 804	422	402							

KET						
	- Daughter board or board to board mating - Free receptacle - Quarter turn locking on plug side Compatibility - Female contact: 801 / 804 / 807 - Male contact: 807 - Passivated stainless steel only					
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801/804/807</td> <td>425</td> <td>425</td> </tr> </tbody> </table>		EF	CF	HE 801/804/807	425
	EF	CF				
HE 801/804/807	425	425				

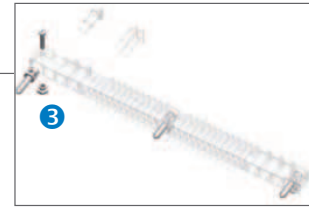
AET						
	- Daughter board or board to board mating - Free receptacle - Quarter turn locking on plug side Compatibility - Male contact: 801 / 804 - Passivated stainless steel only					
	<table border="1"> <thead> <tr> <th></th> <th>EF</th> <th>CF</th> </tr> </thead> <tbody> <tr> <td>HE 801/804</td> <td>425</td> <td>425</td> </tr> </tbody> </table>		EF	CF	HE 801/804	425
	EF	CF				
HE 801/804	425	425				

EF: End Fitting / CF: Central Fitting

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> FEMALE FITTINGS (3)

CENTRAL FITTINGS FOR RECEPTACLES**



229

Compatibility
 - Female contact: 801 / 807
 - Male contact: 801 / 807
 - **EF:** K / A / P / B / S / D / SC / DC / KD / AD
 - Nickel over brass *

HE 801/807 **229**

202

Compatibility
 - Female contact: 804
 - Male contact: 804
 - **EF:** K / A / P / B / L / S / D / SC / DC / KD / AD
 - Nickel over brass *

HE 804 **202**

429

Compatibility
 - Female contact: 801 / 807
 - Male contact: 801 / 807
 - **EF:** KT / AT
 - Passivated stainless steel *

HE 801 / 807 **429**

402

Compatibility
 - Female contact: 804
 - Male contact: 804
 - **EF:** KT / AT
 - Passivated stainless steel *

HE 804 **402**

208

Compatibility
 - Female contact: 801 / 807
 - Male contact: 801 / 807
 - **EF:** KE / AE / KED / AED
 - Nickel over brass *

HE 801 / 807 **208**

209

Compatibility
 - Female contact: 804
 - Male contact: 804
 - **EF:** KE / AE / KED / AED
 - Nickel over brass *

HE 804 **209**

425

Compatibility
 - Female contact: 801 / 804 / 807
 - Male contact: 801 / 804 / 807
 - **EF:** KET / AET
 - Passivated stainless steel *

	EF	CF
HE 801 / 804 / 807	224	208

	202 / 229 / 429 / 402	208	209	425
A	Ø 4 [.157]	Ø 3.5 [.138]	1 _{MAX} [.039]	Hex 5 [.197]
B				
D	7 _{MAX} [.276]	4.6 [.181]		4.1 _{MAX} [.161]
E		1.6 to 2.4 [.063 to .094]		
F		2.35 [.093]	3.35 [.132]	
G		7.2 _{MAX} [.283]		
H		5.5 [.217]		
A'		M 2.5 [.098]	Hex 4 [.157]	Hex 4 [.157]
C				M 2.5 [.098]

	KD / AD 221	KED / AED 223	KED / AED 224	KT / AT 422	KET / AET 425	
A	Ø 5 [.197]	Ø 5 [.197]	Ø 5 [.197]	Hex 5 [.197]	Hex 5 [.197]	
C	M 2.5 [.098]	Ø 3.5 [.138]	Ø 3.5 [.138]	M 2.5 [.098]	M 2.5 [.098]	
D	X _{HE804} = 18 _{MAX} [.709] Y _{HE804} = 26.1 _{MAX} [1.028] Z _{HE804} = 14 _{MAX} [.551]	X _{HE801/807} = 17 _{MAX} [.669] Y _{HE801/807} = 25.1 _{MAX} [.988] Z _{HE801/807} = 13 _{MAX} [.512]	Z = 14 _{MAX} [.551]	Z = 13 _{MAX} [.512]	HE804: 7 _{MAX} [.276] HE801 / 807: 6 _{MAX} [.236]	4.1 _{MAX} [.161]
D'			4.6 [.181]			
E	3.2 _{MAX} [.126]	1.6 to 2.4 [.063 to .094]				
A'	Hex 5 [.197]		M 2.5 [.098]		Hex 4 [.157]	
C'		Ø 1.6 [.063]				

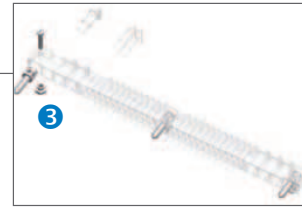
** To order the fitting alone: HE8C + xxx
 *To order the same fitting in passivated stainless steel, change the "2" in the HE8 reference to a "4" (2xx => 4xx)
 *To order the same fitting in nickel over brass, change the "4" in the HE8 reference to a "2" (4xx => 2xx)
 x: unlocked - y: screw out - z: locked

EF: End Fitting / CF: Central Fitting

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> MALE FITTINGS (3)

END FITTINGS FOR PLUGS**



Non codable & Non lockable fittings

PA

- Daughter board or extension board single or double sided
- Free plug - with plated thru holes
- Compatibility**
- Female contact: 801 / 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801 / 804 / 807	102	102

PC

- Daughter board or extension board single or double sided
- Free plug - with plated thru holes
- Compatibility**
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801 / 804	102	102

T

- Chassis or mother board
- Board to board, board to chassis, parallel to one another
- Compatibility**
- Female contact: 801 / 804 / 807
- Male contact: 801 / 804 / 807
- Nickel over brass *

	EF	CF
HE 801/807	118	129
HE 804	111	113

	PA / PC	T
A	Hex 4 [.157]	Hex 5 [.197]
C	1.6 to 2.4 [.063 to .094]	M 2.5 [.098]
D	1.3 _{MAX} [.051]	6 _{MAX} [.236]

Non codable & Non locking fittings

D

- Daughter board single or double sided
- Free plug - with plated thru holes
- Lockable on receptacle side
- Compatibility**
- Female contact: 801 / 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801/804/807	103	102

S

- Daughter board single or double sided
- Free plug - with plated thru holes
- Lockable on receptacle side
- Compatibility**
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801 / 804	103	102

EF

- Chassis or mother board
- Board to board, board to chassis, parallel to one another, board to cable or chassis to cable
- Lockable on receptacle side
- Compatibility**
- Female contact: 801 / 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801 / 807	119	129
HE 804	112	113

RF

- Chassis or mother board
- Free plug - with plated thru holes
- Lockable on receptacle side
- Compatibility**
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	119	129
HE 804	112	113

NF

- SMT daughter board aligned with connector centerline
- Lockable on receptacle side
- Compatibility**
- Female contact: 801 / 804
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	116	114
HE 804	108	104

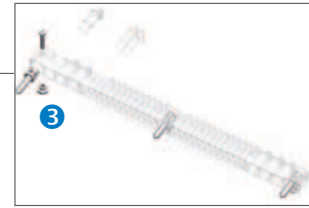
	D / S	EF	RF	NF
A	Hex 4 [.157]	Hex 5 [.197]		
C	1.6 to 2.4 [.063 to .094]	M 2.5 [.197]		1.6 [.063]
D	1.3 _{MAX} [.051]	6 _{MAX} [.236]		HE801 13.9 _{MAX} [.547] HE804 12.2 _{MAX} [.480]
F		3.2 _{MAX} [.126]		1.1 [.043]
G				3.5 [.138]

EF: End Fitting / CF: Central Fitting

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> MALE FITTINGS (3)

END FITTINGS FOR PLUGS**



Codable & Non lockable fittings

A

- Daughter board single or double sided
- Free plug - with plated thru holes
- Compatibility**
- Female contact: 801 / 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801 / 804 / 807	101	102

J

- Daughter board single or double sided
- Free plug - with plated thru holes
- Compatibility**
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801 / 804	101	102

N

- SMT daughter board aligned with connector centreline
- Free plug - with plated thru holes
- Compatibility**
- Female contact: 801 / 804
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	115	114
HE 804	106	104

V

- SMT daughter board aligned with connector centreline
- Free plug - with plated thru holes
- Compatibility**
- Female contact: 801 / 804
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	114	114
HE 804	104	104

E

- Chassis or mother board
- Board to board, board to chassis
- Compatibility**
- Female contact: 801 / 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801 / 807	117	129
HE 804	110	113

R

- Chassis or mother board (board to board, board to chassis)
- Compatibility**
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	117	129
HE 804	110	113

H

- SMT daughter board
- Offset from connector centreline
- Free plug - with plated thru holes
- Compatibility**
- Female contact: 804
- Nickel over brass *

	EF	CF
HE 804	107	105

	A	J	N	V	E	R	H
A	Hex 4 [.157]				Hex 5 [.197]		
C	1.6 to 2.4 [0.63 to 0.94]		1.6 [0.63]		M 2.5 [.098]		1.6 [0.63]
D	1.3 _{MAX} [.051]		HE801 13.9 _{MAX} [.547] HE804 12.2 _{MAX} [.480]		6 _{MAX} [.236]		13.05 _{MAX} [.514]
F			1.1 [.043]		3.2 _{MAX} [.126]		1.1 [.043]
G			3.5 [.138]				2.7 [.106]

*To order the same fitting in passivated stainless steel, change the "1" in the HE8 reference to a "3" (1xx => 3xx)

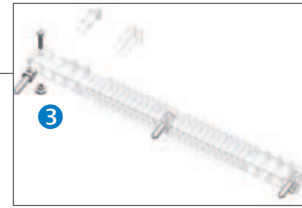
** To order the fitting alone: HE8C + xxx

EF: End Fitting / CF: Central Fitting

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127 / HE8 >>> MALE FITTINGS (3)

END FITTINGS FOR PLUGS**



Codable & lockable fittings

AS

- Daughter board single or double sided
- Free plug - with plated thru holes
- Lockable on receptacle side

Compatibility

- Female contact: 801 / 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801/ 804/ 807	124	102

JS

- Daughter board single or double sided
- Free plug - with plated thru holes
- Lockable on receptacle side

Compatibility

- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801 / 804	124	102

ES

- Chassis or mother board
- Board to board, board to chassis, parallel to one another, board to cable or chassis to cable
- Lockable on receptacle side

Compatibility

- Female contact: 801/ 804 / 807
- Male contact: 807
- Nickel over brass *

	EF	CF
HE 801	125	129
HE 804	125	113

RS

- Chassis or mother board
- Board to board, board to chassis, parallel to one another, board to cable or chassis to cable
- Lockable on receptacle side

Compatibility

- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	125	129
HE 804	125	113

ET

- Cable to board or cable to chassis
- Quarter turn locking
- Dimensions given in reset position

Compatibility

- Female contact: 801/ 804 / 807
- Male contact: 807
- Passivated stainless steel only

	EF	CF
HE 801/807	327	329
HE 804	327	313

RT

- Cable to board or cable to chassis
- Quarter turn locking
- Dimensions given in reset position

Compatibility

- Male contact: 801/ 804
- Passivated stainless steel only

	EF	CF
HE 801	327	329
HE 804	327	313

NS

- SMT daughter board aligned with fitting centerline
- Lockable on receptacle side

Compatibility

- Female contact: 801 / 804
- Male contact: 801 / 804
- Nickel over brass *

	EF	CF
HE 801	114	114
HE 804	126	104

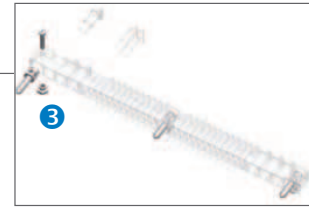
	AS	JS	ES	RS	ET	RT	NS
A	Hex 4 [.157]		Hex 5 [.197]		Ø 6 [.236]		
C	1.6 to 2.4 [.063 to .094]		M 2.5 [.098]				1.6 [.063]
D	1.3 MAX [.051]		7 MAX [.276]		16 MAX [.630]		HE801 13.9 MAX [.547] HE804 12.2 MAX [.480]
F			3.2 MAX [.126]				1.1 [.043]
G							3.5 [.138]

EF: End Fitting / CF: Central Fitting

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> MALE FITTINGS (3)

CENTRAL FITTINGS FOR PLUGS**



114

Compatibility
 - Female contact: 801
 - Male contact: 801
 - N / V / NF / NS
 - Nickel over brass *

HE 801 **114**

104

Compatibility
 - Female contact: 804
 - Male contact: 804
 - N / V / NF / NS
 - Nickel over brass *

HE 804 **104**

129

Compatibility
 - Female contact: 801 / 807
 - Male contact: 801 / 807
 - E / R / T / EF / RF / ES / RS
 - Nickel over brass *

HE 801/807 **129**

113

Compatibility
 - Female contact: 804
 - Male contact: 804
 - E / R / T / EF / RF / ES / RS
 - Nickel over brass *

HE 804 **113**

329

Compatibility
 - Female contact: 801 / 807
 - Male contact: 801 / 807
 - ER / RT
 - Passivates stainless steel *

HE 801/ 807 **329**

313

Compatibility
 - Female contact: 804
 - Male contact: 804
 - ER / RT
 - Passivated stainless steel *

HE 804 **313**

102

Compatibility
 - Female contact: 801 / 804 / 807
 - Male contact: 801 / 804 / 807
 - A / J / PA / PC / D / S / AS / JS
 - Nickel over brass *

HE 801/ 804/ 807 **102**

105

Compatibility
 - Female contact: 804
 - H
 - Nickel over brass *

HE 804 **105**

	114	104	129	113	329	313	102	105
A	1.6 [.063]		Ø 4 [.157]				Hex 4 [.157]	1.1 [.043]
D	13.9 _{MAX} [.547]	12.2 _{MAX} [.480]	7 _{MAX} [.276]				1.3 _{MAX} [.051]	12.2 _{MAX} [.480]
F	1.1 [.043]						1.6 to 2.4 [.063 to .094]	1.6 [.063]
G	3.5 [.514]							2.7 [.106]

** To order the fitting alone: HE8C + xxx
 *To order the same fitting in passivated stainless steel, change the "1" in the HE8 reference to a "3" (1xx => 3xx)
 *To order the same fitting in nickel over brass, change the "3" in the HE8 reference to a "1" (3xx => 1xx)

All dimensions are given for information only and are in mm [inch], except as otherwise specified

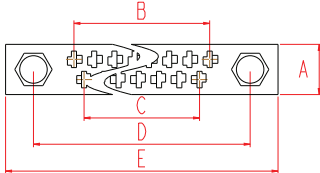
127 / HE8 >>> HE 801 & HE 804

TYPICAL ARRANGEMENTS



n indicates the total number of signal contacts

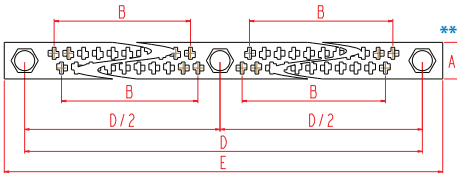
Signal contacts on 2 rows without central fitting*



n = 17, 29, 33, 41, 53 or 65

A	6.3 ^{+0.1}
B	(n-1) X 1.27
C	B - 2.54
D	B + 10.16
E	≈ D + 7

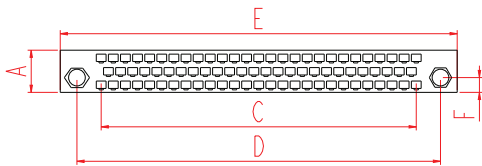
Signal contacts on 2 rows with central fittings *



n = 72, 84, or 96

A	6.3 ^{+0.1}
B	(n-4) X 0.635
D	2 X (B+10.16)
E	≈ D + 7

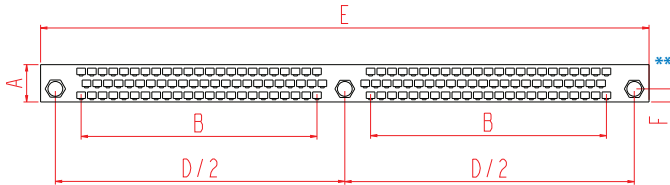
Signal contacts on 3 rows without central fittings *



n = 80

A	8.94 (female connector) or 8.55 (female connector)
C	66.04
D	76.3 _{MAX}
E	83.4 _{MAX}
F	3.1

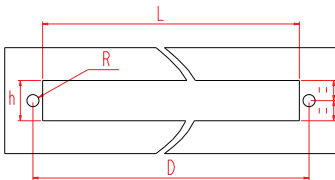
Signal contacts on 3 rows with central fittings *



n = 144

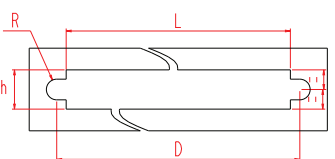
A	8.4 _{MAX}
B	58.42
D	137.16
E	144.36 _{MAX}
F	3.1

Panel drilling*



- Receptacle with A-AD-AT fittings or plug with R-RF-RS-T fittings with male contact W3-ZC-X
- Receptacle with K-KD-KT-L fittings or plug with E-EF-ES-T fittings with female contact W3-Z

D	See above
L	≈ D - 4.6
h	9.5 _{MIN}
R	∅ 2.85 _{MIN} ∅ 0.2



- Receptacle with B fitting and male contact W3-ZC-X
- Receptacle with P fitting and female contact W3-Z

D	See above
L	≈ D - 4.6
h	9.5 _{MIN}
R	∅ 5 ± 0.1 ∅ 0.2

* in mm: 1mm = 0.03937 inch

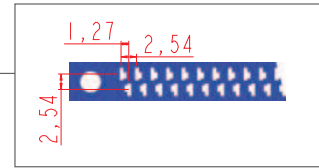
** The standard version presents a stiffening bar with W3-ZC-Z contacts and no stiffening bar with YC-V-Y-YD-X contacts. Put an A in the part number code to have no stiffening bar on the connector with W3-ZC-Z contacts or a B to have a stiffening bar on the connector with YC-U-Y-YD-X contacts.

All dimensions are given for information only and are in mm [inch], except as otherwise specified

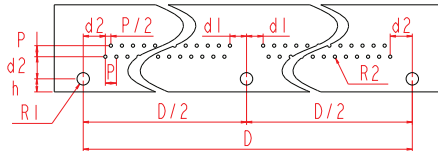
127 / HE8 >>> HE 801 & HE 804

LAYOUTS

The boards are shown from the connector side.
 The drawings show various footprints for connectors with a central attachment on board.
 For smaller connectors (17, 29, 33, 41, 53 and 65 contacts), omit the center drilling.
 All contacts outputs are equidistant. For daughterboard, the first contact's marking is indicated for reference only.

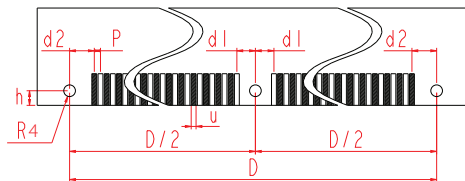


Daughterboard drilling for YC contact*



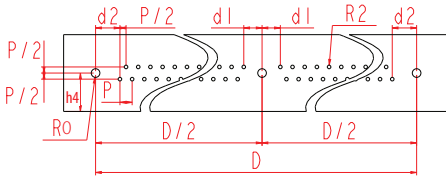
- Receptacle with KET-AET fittings or plug with A-D-AS-PA-J-S-JS-PC fittings
- YC (male and female contact)

Daughterboard drilling for U contact*



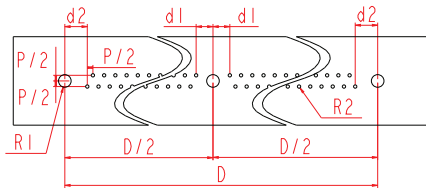
- Plug with H-N-NF-NS-V fittings
- U (male and female contact)

Daughterboard drilling for YC contact*



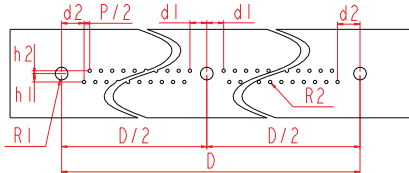
- Receptacle with KE-KED-AE-AED fittings
- YC (male and female contact)

Motherboard drilling for Y contact (male and female)*



- Receptacle with A-AD-AT fittings or plug with R-RF-RS-T fittings
- Y (male and female contact)

Motherboard drilling for YD contacts (socket only)*



- Receptacle with K-L-KD-KT fittings or plug with E-EF-ES-T fittings
- YD (female contact only)

D	d ₁	d ₂	p	p ₂	h	h ₁	h ₂	h ₄	R ₀	R ₁	R ₂	R ₄	u
See above	3.81 [.150]	5.08 [.200]	2.54 [.100]	1.27 [.050]	3 ^{MAX} [.118]	1.9 [.075]	0.64 [.025]	8 ^{MAX} [.315]	∅ 1.8 ^{MIN} [.071]	∅ 2.85 ^{MIN} [.112]	∅ 0.75 ^{MIN} [.030]	∅ 2.4 ^{MIN} [.094]	1.6 ± 0.1 [.063 ± .004]

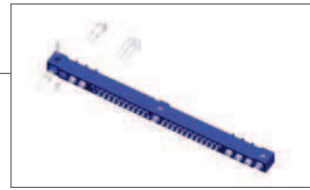
* in mm: 1mm = 0.03937 inch

All dimensions are given for information only and are in mm [inch], except as otherwise specified

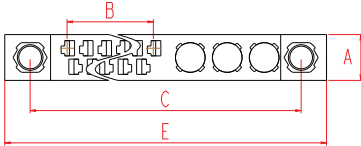
127 / HE8 >>> HE 807

TYPICAL ARRANGEMENTS

n indicates the total number of signal contacts
h indicates the total number of hybrid contacts



n signal contacts + 3 cavities without central fittings*

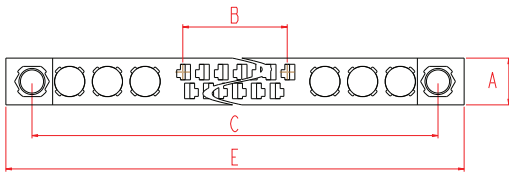


- Note:**
- Asymmetrical arrangements with female contacts always have plug marking
 - Asymmetrical arrangements with male contacts always have receptacle marking

- n = 5, 17, 29, 41 or 53
- h = 3

B	$(n - 1) \times 1.27$
D	$(n + 12) \times 1.27 + 8.89$
E	D + 7

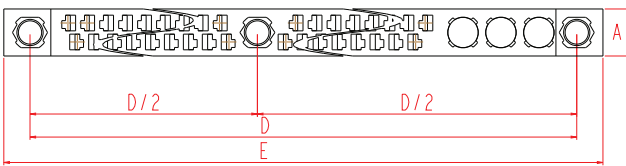
n signal contacts + 6 cavities without central fittings*



- n = 5, 17, 29 or 41
- h = 6

B	$(n - 1) \times 1.27$
D	$(n + 24) \times 1.27 + 8.89$
E	D + 7

n signal contacts + 3 cavities with central fittings*

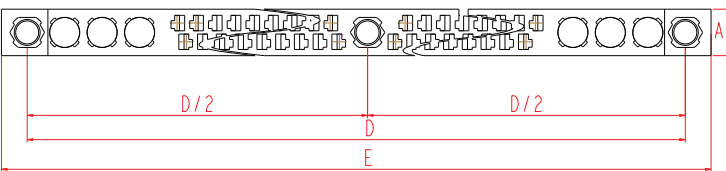


- Note:**
- Asymmetrical arrangements with female contacts always have plug marking
 - Asymmetrical arrangements with male contacts always have receptacle marking

- n = 60, 72 or 84
- h = 3

A	$6.3^{+0.1}$
D	$(n+8) \times 1.27 + 20.32$
E	D + 7

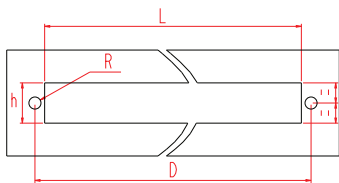
n signal contacts + 6 cavities with central fittings*



- n = 48, 60, 72
- h = 6

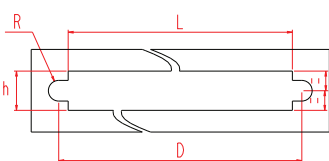
A	$6.3^{+0.1}$
D	$(n+20) \times 1.27 + 20.32$
E	D + 7

Panel drilling*



- Receptacle with K-KD-KT fittings or plug with E-EF-ES fittings and male contacts W3-ZC-X and special contacts
- Receptacle with K-KD-KT fittings or plug with E-EF-ES fittings and female contacts W3-ZC-X1 and special contacts
- F011 / M011 F021 / M021
- F121 / M121 FH1 / MH1

D	See above
L	D - 4.6
h	9.5 _{MIN}
R	$\begin{matrix} \text{Ø } 2.85 \text{ MIN} \\ \text{Ø } 0.2 \end{matrix}$



- Receptacle with P fitting with male contacts W3-ZC-X and special contacts
- Receptacle with P fitting with female contact W3-ZC-X1 and special contacts
- F011 / M011 F021 / M021
- F121 / M121 FH1 / MH1

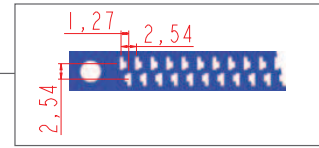
D	See above
L	D - 4.6
h	9.5 _{MIN}
R	$\begin{matrix} \text{Ø } 5 \pm 0.1 \\ \text{Ø } 0.2 \end{matrix}$

* in mm: 1mm = 0.03937 inch

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> HE 807

LAYOUTS COAXIAL CONTACTS



Daughterboard drilling YC + F032/M032 contacts*

- Receptacle with KET fittings or plug A-D-AS-PA
- YC & coaxial F032/M032 contacts (male & female)

Daughterboard drilling YC + F032/M032 contacts*

- Receptacle KE
- YC & coaxial F032/M032 contacts (male & female)

Daughterboard drilling YC + F032/M032 contacts*

- Receptacle IE
- YC & coaxial F032/M032 contacts (male & female)

Motherboard drilling Y + F041/M041 contacts*

- Receptacle with K-KD-KT fittings and plug E-EF-ES-T fittings.
- Y & coaxial F041 / M041 contacts (male & female contacts)

Contact F041/M041	Contact F032/M032

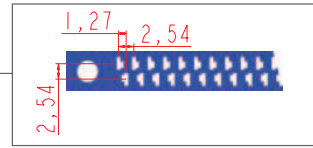
D	d ₁	d ₂	p	p ₂	h ₀	h ₁	h ₂	R ₁	R ₂	h
See above	3.81 [.150]	5.08 [.200]	2.54 [.100]	1.27 [.050]	3 ^{MAX} [.118]	1.9 [.075]	0.64 [.025]	Ø 2.85 ^{MIN} ⊕ Ø 0.2 [.112]	Ø 0.75 ^{MIN} ⊕ Ø 0.2 [.030]	9.35 [.368]

* in mm: 1mm = 0.03937 inch

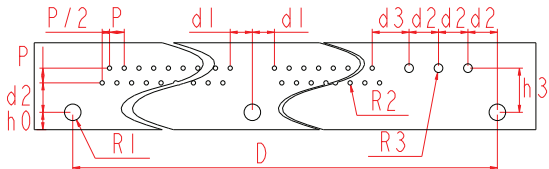
All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> HE 807

LAYOUTS. POWER CONTACTS.

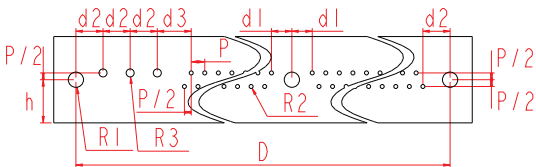


Daughterboard drilling YC + FH3/MH3 & F132/M132



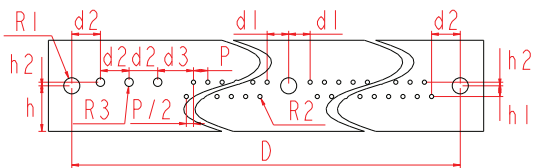
- Receptacle with KET fitting & plug with A-D-AS-PA fittings
- YC & power FH3 / MH3 & F132 / M132 contacts (male & female)

Daughterboard drilling YC + FH3/MH3 & F132/M132



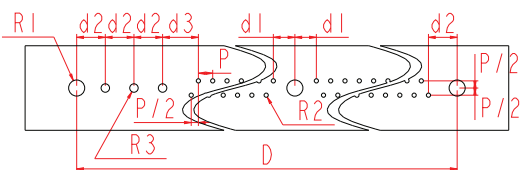
- Receptacle with KE fitting
- YC & power FH3 / MH3 & F132 / M132 contacts (male & female)

Daughterboard drilling YC + FH3/MH3 & F132/M132



- Receptacle with IE fitting
- YC & power FH3 / MH3 & F132 / M132 contacts (male & female)

Daughterboard drilling Y + FH2/MH2 & F141/M141










- Receptacle with K-KD-KT fitting with Y & power FH2 / MH2 & F141 / M141 contacts (male & female)
- Plug with E-EF-ES-T fittings with Y & power FH2 / MH2 & F141 / M141 contacts (male & female)

D	d ₁	d ₂	d ₃	p	p ₂	h ₀	h ₁	h ₂	h ₃	R ₁	R ₂	R ₃	h
See above	3.81 [.150]	5.08 [.200]	6.35 [.250]	2.54 [.100]	1.27 [.050]	3 _{MAX} [.118]	1.9 [.075]	0.64 [.025]	7.62 [.300]	∅ 2.85 _{MIN} [∅ 0.2] [.112]	∅ 0.75 _{MIN} [∅ 0.2] [.030]	∅ 1.5 _{MIN} [∅ 0.2] [.059]	9.35 [.368]

All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> TOOLING

REMOVAL TOOLS

<p>1272</p>  <ul style="list-style-type: none"> - Pin: ZC / X / YC / YL - Rear release <p>Part number 1272</p>	<p>24098</p>  <ul style="list-style-type: none"> - Pin Y / W3 / U - Front release <p>Part number 24098</p>
<p>1271</p>  <ul style="list-style-type: none"> - Socket: YC / U / Z (HE 801 & HE 804) - Rear release <p>Part number 1271</p>	<p>24099</p>  <ul style="list-style-type: none"> - Socket: YC / U / Z (HE 807) - Rear release <p>Part number 24099</p>
<p>20973</p>  <ul style="list-style-type: none"> - Socket: W3 - Rear release <p>Part number 20973</p>	<p>20143</p>  <ul style="list-style-type: none"> - Socket: Y / YD - Front release <p>Part number 20143</p>
<p>23550</p>  <ul style="list-style-type: none"> - Socket: particular contacts HE 807 - Rear release <p>Part number 23550</p>	

CRIMPING TOOLS

<p>HE 8 20 051</p>  <ul style="list-style-type: none"> - Pin: X - AWG 26 to 22 - No additional turret <p>Part number HE 8 20 051</p>	<p>809801</p>  <ul style="list-style-type: none"> - Socket: X1 - AWG 26 to 22 - Additional turret: 127.800.030 - Military reference: M22520/2-01 <p>Part number 809801</p>
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All dimensions are given for information only and are in mm [inch], except as otherwise specified

127 / HE8 >>> FITTINGS & CONTACT COMPATIBILITIES

HE801

COMPATIBLE MALE FITTINGS Connector with male contacts										FEMALE FITTING RECEPTACLE	COMPATIBLE MALE FITTINGS Connector with female contacts																								
RT							X	X	X	AET	X	X									ET														
										KET																									
		X	X	X	X						AT			X	X	X	X																		
JS NS RS								X	X	X	KT										AS NS ES														
										AED	X	X																							
		X	X	X	X						KED																								
S NF RF										AD			X	X	X	X					D NF EF														
		X	X	X	X					KD																									
		X	X	X	X						DC			X	X	X	X																		
J PC N V R T										SC										A PA N V E T															
		X	X	X	X					D			X	X	X	X																			
		X	X	X	X					S																									
		X	X	X	X	X				L																									
FEMALE CONTACTS										YD	X1	Z	W3	Y	U	T	YL	YC	YC	YL	U	Y	W3	ZC	X	MALE CONTACTS									
A B AE								X	X	X	A										K P KE														
								X	X	X	J	X	X																						
											PA																								
							X				PC	X	X																						
		X	X	X	X	X					H																								
D DC										N			X							S SC															
										V			X																						
		X	X	X	X	X				E																									
		X	X	X	X	X				R			X	X	X	X																			
AD AED							X	X	X	T			X	X	X	X			KD KED																
										D																									
		X	X	X	X	X				S	X	X																							
AT AET										NF			X						KT KET																
		X	X	X						RF			X	X	X	X																			
COMPATIBLE FEMALE FITTINGS Connector with male contacts										MALE FITTING PLUG	COMPATIBLE FEMALE FITTINGS Connector with female contacts																								

127 / HE8 >>> FITTINGS & CONTACT COMPATIBILITIES

HE804

COMPATIBLE MALE FITTINGS Connector with male contacts										FEMALE FITTING RECEPTACLE	COMPATIBLE MALE FITTINGS Connector with female contacts										
FEMALE CONTACTS											MALE CONTACTS										
RT							X	X	X	AET	X	X									ET
										KET											
										AT				X	X	X	X				
	X	X	X	X						KT											
JS NS RS							X	X	X	AED	X	X									AS NS ES
										KED											
										AD				X	X	X	X				
	X	X			X					KD											
S NF RF										DC				X	X	X	X				D NF EF
										SC											
	X	X	X	X						D				X	X	X	X				
	X	X	X	X						S											
J PC N V R T	X	X	X	X	X					L											A PA N V E T
										AE	X	X									
								X	X	X	KE										
	X	X	X	X	X					B				X	X	X	X				
A B AE										P											K P KE
										A					X	X	X	X			
										K											
	X	X	X	X	X					A											
D DC							X	X	X	J	X	X									S SC
										PA											
										PC	X	X									
	X	X	X	X	X					H											
AD AED										N				X							KD KED
										V				X							
	X	X	X	X	X					E											
										R				X	X	X	X				
AT AET										T				X	X	X	X				KT KET
										D											
										S	X	X									
	X	X	X	X	X					NF				X							
A B AE										EF											K P KE
										RF				X	X	X	X				
										AS											
	X	X	X	X	X					JS	X	X									
D DC										NS				X							S SC
										ES											
										RS				X	X	X	X				
	X	X	X	X	X					ET											
AD AED										RT					X	X	X				K P KE
										A											
										J	X	X									
	X	X	X	X	X					PA											
AT AET										PC	X	X									S SC
										H											
										N				X							
	X	X	X	X	X					V				X							
AD AED										E											K P KE
										R				X	X	X	X				
										T				X	X	X	X				
	X	X	X	X	X					D											
AT AET										S	X	X									K P KE
										NF				X							
										EF											
	X	X	X	X	X					RF				X	X	X	X				
AD AED										AS											S SC
										JS	X	X									
										NS				X							
	X	X	X	X	X					ES											
AT AET										RS				X	X	X	X				K P KE
										ET											
										RT					X	X	X				
	X	X	X	X	X					A											

127 Series

NOTES

Area with horizontal dotted lines for notes.

127 Series

