

EMMpre-wired, part numbering

HExxGW(#)Pnn(n)Exx-yyzz-A#BDDL L L L L

HExx

G

W

(#)

P

nn(n)

Exx-

yyzz-

A

#

B

D

DDL

LLL

EMM séries

Genre

Signal wire

Color wires

Integrated shape & potting

LF contact number

Fixing

HP/HF Contact number

HP/HF Wire

Color

Accessories

Harness configuration

Harness length

HE22
2 Rows

1
Male

E

No signal (LF) contacts

D

AWG30

H

AWG28

I

AWG26

J

AWG24

#

Voir table des couleurs

Z

No potting

Q

Potting

04 to 60
2 Rows

Please refer to your selected EMM serie hardware paragraph of the EMM catalogue

If not HP/HF: Ø

Z

No accessory

F
"Rylead"

B
"Back to Back"

R
"Back to Back" Inversé

LLL<100
Tolérance±5

100≤LLL<3000
Tolérance±5

3000≤LLL<1500
Tolérance±10

1500≤LLL<3000
Tolérance±50

3000<LLL
Tolérance±50

Example of codification :
HE22216P30E01-ZB0500

AWG26

500mm

Backpotting Area

First LF Contact

Female

Last LF contact

First LF Contact

Last LF Contact

Male

HE221HRP30E01-ZB0400

AWG28

Color table

#	Color
Ø	No contact
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Purple
8	Grey
9	White

R

Color order

Black

Brown

Red

Orange

Yellow

Green

Blue

Purple

Grey

White

Contact number	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	18	17	19	...

Rainbow repeated

Connector series 220 male 1 female

LF contacts number nn	Distance in mm between axes			Length in mm	LF contacts reference mark number			
	A	B	C		D	E	F	G
04	1.27	8.27	12.87	1	2	3	4	
06	2.54	9.54	14.14	1	3	4	6	
08	3.81	10.81	15.41	1	4	5	8	
10	5.08	12.08	16.68	1	5	6	10	
12	6.35	13.35	17.95	1	6	7	12	
14	7.62	14.62	19.22	1	7	8	14	
16	8.89	15.89	20.49	1	8	9	16	
18	10.16	17.16	21.76	1	9	10	18	
20	11.43	18.43	23.03	1	10	11	20	
22	12.7	19.7	24.3	1	11	12	22	
24	13.97	20.97	25.57	1	12	13	24	
26	15.24	22.24	26.84	1	13	14	26	
28	16.51	23.51	28.11	1	14	15	28	
30	17.78	24.78	29.38	1	15	16	30	
32	19.05	26.05	30.65	1	16	17	32	
34	20.32	27.32	31.92	1	17	18	34	
36	21.59	28.59	33.19	1	18	19	36	
38	22.86	29.86	34.46	1	19	20	38	
40	24.13	31.13	35.73	1	20	21	40	
42	25.4	32.4	37	1	21	22	42	
44	26.67	33.67	38.27	1	22	23	44	
46	27.94	34.94	39.54	1	23	24	46	
48	29.21	36.21	40.81	1	24	25	48	
50	30.48	37.48	42.08	1	25	26	50	
52	31.75	38.75	43.35	1	26	27	52	
54	33.02	40.02	44.62	1	27	28	54	
56	34.29	41.29	45.89	1	28	29	56	
58	35.56	42.56	47.16	1	29	30	58	
60	36.83	43.83	48.43	1	30	31	60	

1

09/02/22

Me D.

E.Du

C.Ga

Iss

Date

Drawn

Checked

Approved

Item : EMM Harness

1

09/02/22

Me D.

E.Du

C.Ga

Iss

Date

Drawn

Checked

Approved

Item : EMM Harness

Compliant matrix :

Customer reference :

General tolerance ±0.2

Scale 1:1

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PRODUCT SPECIFICATIONS

Material		Mechanical features	
Component	Characteristics	Mil 83513 Requirement	EMM Results
Insulator	Special LCP (Liquid Crystal Polymer thermoplastic) UL 94-V0	Contact engagement and separation forces EIA 364-37B	Engagement force: 1N max Separation force: 0.15 N
LF Contacts	Female: Body: Copper alloy / Ni + Au 0.125µ mini Clip: Beryllium copper / Ni + Au 1.27µ mini	Connector mating and unmating forces EIA 364-13D	Values for configurations up to 30 pins Mating Force: 1.7N max Unmating Force: 0.1N min
	Male: Copper alloy / Ni + Au 0.75µ mini	Durability : 500 cycles MIL-DTL-83513G §4, 5, 16	Values for configurations up to 30 pins Qualified
Fixing Hardware	Passivated stainless steel 300 series	Crimp tensile strength EIA 364-08B NASA-STD 8739.4	AWG 24: 49.98 N min AWG 26: 36.64 N min AWG 28: 16.90 N min AWG 30: 11.30 N min
Electrical performance requirements		Environmental features	
Mil 83513 Requirement	EMM Results	Mil 83513 Requirement	EMM Results
Dielectric withstanding voltage sea level EIA-364-20C	Dielectric withstanding voltage: 750 V RMS Breakdown voltage: 1000 V RMS Rated voltage: 250 V RMS	Sinusoidal Vibration EIA 364-28E TEST CONDITION III & IV	Values for configurations up to 30 pins Up to 45g
Dielectric withstanding voltage high altitude EIA-364-20C	Dielectric withstanding voltage @ 30 000 ft: 540 V RMS Dielectric withstanding voltage @ 70 000 ft: 480 V RMS	Shock EIA 364-27B TEST CONDITION G	Values for configurations up to 30 pins Up to 160g
Insulation Resistance EIA 364-21C	> 2000 GΩ @ 500V	Temperature cycling EIA 364-32D	-65°C +260°C
Contact Resistance EIA 364-06C	Less than 8 mΩ	Fluid immersion MIL-DTL-83513G §4, 5, 18	Qualified
Low level contact resistance EIA 364-06C	Less than 9 mΩ	Humidity EIA 364-31B - Method IV	Qualified
Magnetic permeability ASTM A342/A342M	Less than 2 gamma	Salt spray (corrosion) Duration: 96 hours 364-26B TEST CONDITION A	Values for configurations up to 30 pins Qualified
Contact Current Capability (derating) IEC 60512-5-2 Test 5b	3A@25°C and 1.6A@85°C for 30 pins	Thermal vacuum outgassing ASTM E595 (ECSS-Q-ST-70-02C)	Qualified PEEK (TML 0.18 %, CVCM 0.01 %) / LCP (TML 0.06 %, CVCM 0.01 %) / STYCAST 2651 (TML 0.43 %, CVCM 0.01 %)
		Resistance to soldering heat EIA 364-29C	Values for configurations up to 30 pins Qualified
		Marking MIL-STD-202, method 215	Qualified

Wire Specification:

MIL-W-16878/6

Stranding : 19 x 38

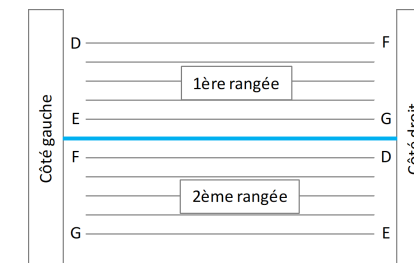
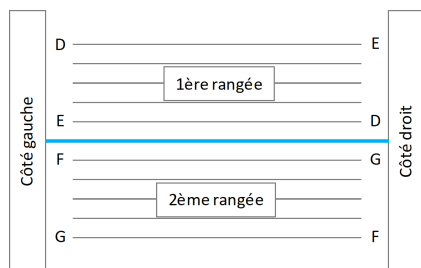
Finishing Diameter : 0.73 max. (0.029 Inch)

Conductor : Silver Coated Copper

Insulation : Extruded PTFE

Temperature rating : -65 C to 200 C

Voltage Rating : 250 V



B
"Back to back"

R
Back to back reversed

Example :
EMM 220 male

Example :
EMM 220 male



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1	09/02/22	Me D.	E.Du	C.Ga
Iss	Date	Drawn	Checked	Approved
Item : EMM Harness				

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Catalogue Reference : HExxGW#PnnExx-yyzz-A#BDLLLL

Compliant matrix :

Customer reference :



General tolerance ±0.2

Scale 1:1

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