

DEF SPEC - OAM - H12

PAIRS OVERALL ALUMINIUM MYLAR SCREEN



DEF SPEC - H12 CABLE FOIL SCREEN

PROPERTIES

The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers.

Also available in:
H01 - unscreened
H16 - Individual & overall foil screen
H21 - Tinned copper braid screen
(in cores or pairs)

APPLICATION

These data control cables are used for insulated applications in dry, moist and wet rooms but not suitable for open air. DEF SPEC-H12 is well suited for use in areas subject to signal interference. The high level of screening reduces substantially the effects of electrical disturbances from parallel running wiring etc. The aluminium foil with drain wire screening is also often used as an "earth". The twisted pairs conform favourable cross-talk attenuation values. EMC = Electromagnetic compatibility
To optimize the EMC features we recommend contact of the tin copper drain wire on both ends.

CABLE STRUCTURE

	0.22mm ²	0.50mm ²	1.0mm ²	1.5mm ²
• CONDUCTOR:				
Number of Pairs:	Refer Table Below	Refer Table Below	Refer Table Below	Refer Table Below
Conductor Material:	Stranded Tinned Copper	Stranded Tinned Copper	Stranded Bare Copper	Stranded Bare Copper
Nominal Conductor Area:	0.22mm ²	0.50mm ²	1.00mm ²	1.50mm ²
No. of Strand/Strand Size:	7/0.18mm (±0,02mm)	16/0.18mm (±0,02mm)	32/0.18mm (±0,02mm)	30/0.24mm (±0,02mm)
• INSULATION:				
Insulation Material:	PVC	PVC	PVC	PVC
Insulation Size:	0.95mm ± 0.1mm	1.45 ± 0.1mm	2.25mm ± 0.1mm	2.55mm ± 0.1mm
Nominal Insulation Thickness:	0.20 ± 0.05mm	0.35 ± 0.05mm	0.55 ± 0.05mm	0.55 ± 0.05mm
PET Overlapped :				
Drain Wire :	7/0.18±0.004mm Tinned Copper	7/0.18±0.004mm Tinned Copper	7/0.18±0.004mm Tinned Copper	7/0.18±0.004mm Tinned Copper
Aluminium Foil :	AL Foil Inside	AL Foil Inside	AL Foil Inside	AL Foil Inside
AL Foil Overlapped/Coverage:	115%	115%	115%	115%
• OUTER JACKET:				
Outer Jacket Material:	PVC	PVC	PVC	PVC
Overall Nominal Diameter:	See Table Below	See Table Below	See Table Below	See Table Below
• MECHANICAL CHARACTERISTICS				
Operating Temperature range	-15°C to -70°C	-15°C to -70°C	-15°C to -70°C	-15°C to -70°C
• TESTED TEMPERATURE				
Min. Insulation	20°C	20°C	20°C	20°C
Breakdown Voltage	≥50MΩ*km min. 20 MOhm x km max.250 Ohm/km	≥50MΩ*km min. 20 MOhm x km max.250 Ohm/km	≥50MΩ*km min. 20 MOhm x km max.250 Ohm/km	≥50MΩ*km min. 20 MOhm x km max.250 Ohm/km
• ELECTRICAL CHARACTERISTICS				
Max. Conductor DC Resistance	@20°C: ≤128.5Ω/km	@20°C: ≤56.0Ω/km	@20°C: ≤15.0Ω/km	@20°C: ≤56.0Ω/km
Tested Voltage	0.8KV50Hz1min No Break	1.0KV50Hz1min No Break	1.5KV50Hz1min No Break	1.5KV50Hz1min No Break
Voltage	440V	440V	440V	440V

Part no.	No. of Pairs	Conductor size	Approx Nominal Ø-mm	AWG	Weight Approx kg/km	Conductor material
H121P22-GY	1	0.22mm ²	3.0	24	4.8	Tinned/Cu
H122P22-GY	2	0.22mm ²	5.0	24	9.6	Tinned/Cu
H123P22-GY	3	0.22mm ²	5.4	24	14.4	Tinned/Cu
H124P22-GY	4	0.22mm ²	6.0	24	19.2	Tinned/Cu
H126P22-GY	6	0.22mm ²	7.0	24	28.8	Tinned/Cu
H128P22-GY	8	0.22mm ²	8.1	24	38.4	Tinned/Cu
H1210P22-GY	10	0.22mm ²	8.7	24	48	Tinned/Cu
H1212P22-GY	12	0.22mm ²	9.5	24	57.6	Tinned/Cu
H1218P22-GY	18	0.22mm ²	11.8	24	86.4	Tinned/Cu
H1220P22-GY	20	0.22mm ²	12.1	24	96	Tinned/Cu
H1225P22-GY	25	0.22mm ²	13.8	24	120	Tinned/Cu
H1230P22-GY	30	0.22mm ²	14.7	24	144	Tinned/Cu
H1236P22-GY	36	0.22mm ²	16.0	24	172.8	Tinned/Cu
H1250P22-GY	50	0.22mm ²	17.1	24	240	Tinned/Cu

Dimensions & spesifications may be changed without prior notice.

DEF SPEC - OAM - H12

PAIRS OVERALL ALUMINIUM MYLAR SCREEN



Part no.	No. of Pairs	Conductor size	Approx Nominal Ø-mm	AWG	Weight Approx kg/km	Conductor material
H121P50-GY	1	0.50mm ²	4.7	20	20.0	Tinned/Cu
H122P50-GY	2	0.50mm ²	6.9	20	25.0	Tinned/Cu
H123P50-GY	3	0.50mm ²	7.2	20	31.0	Tinned/Cu
H124P50-GY	4	0.50mm ²	7.6	20	38.0	Tinned/Cu
H126P50-GY	6	0.50mm ²	10.1	20	50.0	Tinned/Cu
H128P50-GY	8	0.50mm ²	11.0	20	64.0	Tinned/Cu
H1210P50-GY	10	0.50mm ²	12.4	20	78.0	Tinned/Cu
H1212P50-GY	12	0.50mm ²	13.8	20	94.0	Tinned/Cu
H1218P50-GY	18	0.50mm ²	17.0	20	119.0	Tinned/Cu
H1220P50-GY	20	0.50mm ²	18.7	20	130.0	Tinned/Cu
H1225P50-GY	25	0.50mm ²	20.0	20	180.0	Tinned/Cu
H1230P50-GY	30	0.50mm ²	22.0	20	200.0	Tinned/Cu
H1236P50-GY	36	0.50mm ²	24.0	20	260.0	Tinned/Cu
H1250P50-GY	50	0.50mm ²	27.0	20	387.0	Tinned/Cu

0.75mm² only manufactured on request

Part no.	No. of Pairs	Conductor size	Approx Nominal Ø-mm	AWG	Weight Approx kg/km	Conductor material
H121P100-GY	1	1.00mm ²	6.2	18	70	Plain/Cu
H122P100-GY	2	1.00mm ²	7.6	18	110	Plain/Cu
H124P100-GY	4	1.00mm ²	12.0	18	190	Plain/Cu
H128P100-GY	8	1.00mm ²	16.1	18	320	Plain/Cu
H1212P100-GY	12	1.00mm ²	18.5	18	435	Plain/Cu
H1216P100-GY	16	1.00mm ²	20.0	18	560	Plain/Cu
H1220P100-GY	20	1.00mm ²	21.0	18	680	Plain/Cu
H1224P100-GY	24	1.00mm ²	23.0	18	800	Plain/Cu

Part no.	No. of Pairs	Conductor size	Approx Nominal Ø-mm	AWG	Weight Approx kg/km	Conductor material
H121P150-GY	1	1.50mm ²	6.4	16	102	Plain/Cu
H122P150-GY	2	1.50mm ²	11.8	16	161	Plain/Cu
H124P150-GY	4	1.50mm ²	14.1	16	230	Plain/Cu
H128P150-GY	8	1.50mm ²	18.0	16	377	Plain/Cu
H1212P150-GY	12	1.50mm ²	21.0	16	515	Plain/Cu
H1216P150-GY	16	1.50mm ²	23.2	16	656	Plain/Cu
H1220P150-GY	20	1.50mm ²	25.1	16	793	Plain/Cu
H1224P150-GY	24	1.50mm ²	28.0	16	952	Plain/Cu

Dimensions & specifications may be changed without prior notice.

■ COLOR CODES (61-12)

Cores	Colour	Pair	Cores	Colour	Pair	Cores	Colour	Pair
1	RED	1	18	RED/BROWN	9	35	VIOLET/BLACK	18
2	BLUE	1	19	YELLOW/BLUE	10	36	WHITE/VIOLET	18
3	GREEN	2	20	WHITE/BLUE	10	37	YELLOW/BLACK	19
4	YELLOW	2	21	BLUE/BLACK	11	38	WHITE/BLACK	19
5	WHITE	3	22	ORANGE/BLUE	11	39	ORANGE/BLACK	20
6	BLACK	3	23	BLUE/GREEN	12	40	PINK/BLACK	20
7	BROWN	4	24	GREY/BLUE	12	41	TURQUOISE/BLACK	21
8	VIOLET	4	25	YELLOW/GREEN	13	42	PINK/BLUE	21
9	ORANGE	5	26	WHITE/GREEN	13	43	TURQUOISE/BLUE	22
10	PINK	5	27	GREEN/BLACK	14	44	VIOLET/RED	22
11	TURQUOISE	6	28	ORANGE/GREEN	14	45	ORANGE/RED	23
12	GREY	6	29	GREY/GREEN	15	46	PINK/RED	23
13	RED/BLUE	7	30	YELLOW/BROWN	15	47	TURQUOISE/RED	24
14	GREEN/RED	7	31	WHITE/BROWN	16	48	GREY/RED	24
15	YELLOW/RED	8	32	BROWN/BLACK	16	49	TURQUOISE/GREEN	25
16	WHITE/RED	8	33	GREY/BROWN	17	50	BLUE/BROWN	25
17	RED/BLACK	9	34	YELLOW/VIOLET	17			