capacity of U-PVC DLP trunking systems
for installation

■ New standard EN 50085-2-1

Classification EN 50085-2-1		Level
6.1	Void	
6.2	Resistance to impact for installation and application	2.0 J
6.3	Minimum storage and transport temperature	- 25 °C
6.3	Minimum installation and application temperature	- 5 °C
6.3	Maximum application temperature	+ 60 °C
6.4	Resistance to flame propagation	Non-flame propagating
6.5	Electrical continuity characteristic	Without electrical continuity characteristic
6.6	Electrical insulating characteristic	With electrical insulating characteristic
6.7	Degrees of protection provided by enclosure	IP 40
6.9	System access cover retention	With a tool
6.101	Position when surface mounted	Wall fixed, ceiling fixed, wall fixed and supported by the floor or other horizontal surface
6.102	Prevention of contact between liquids and insulated conductors and live parts in case of CTS/CDS mounted in a skirting position and wet-treatment of floor	Instructions restricting the installation position
6.103	The functions provided	Type 2: 0 104 32/33/52/53, type 3: other Cat.Nos
Rated current		500 V
Against mechanical shocks		IK 07

Type 1, type 2 distribution, type 3 installation

Insulation resistance : all the DLP plastic range (including accessories) insulation resistance superior to 5 megohms

CV : Cover

1 Cross-section in mm² (or diameter for ELV cables) depending on number of conductors

Normal cross-section of cores (mm²)	Cable									
	1 conductor		2 conductors		3 conductors		4 conductors		5 conductors	
	Usable cross-section (mm²)	Maximum Ø (mm)	Usable cross-section (mm²)	Maximum Ø (mm)	Usable cross-section (mm²)	Maximum Ø (mm)	Usable cross-section (mm²)	Maximum Ø (mm)	Usable cross-section (mm²)	Maximum Ø (mm)
1.5	44	6.6	111	10.5	121	11.0	144	12.0	169	13.0
2.5	49	7.0	133	11.5	157	12.5	169	13.0	211	14.5
4	58	7.6	169	13.0	183	13.5	211	14.5	256	16.0
6	68	8.2	196	14.0	225	15.0	256	16.0	307	17.5
10	85	9.2	256	16.0	289	17.0	343	18.5	400	20.0
16	111	10.5	43	18.5	381	19.5	441	21.0	529	23.0
25	157	12.5	484	22.0	553	23.5	651	25.5	784	28.0
35	183	13.5	601	24.5	676	26.0	813	28.5	993	31.5
50	225	15.0	-	-	841	29.0	1 057	32.5	-	-

Example

A - Description :

2 cables 3 x 1.5² • 4 cables 4 x 2.5²
10 cables 4 x 4²

B - Calculation of cumulative cable cross-sections: See table 1

		Theoretical cross-section (mm²)		Pratical cross-section (mm²)
2 cables	3 x 1.5²	2 x 121 =	242	
4 cables	4 x 2.5²	4 x 169 =	676	
10 cables	4 x 4²	10 x 211 =	2 110	
TOTAL			3 028	3 330*

*K (filling factor) = 1.10 Section = 3 028 x 1.10 = **3 330 mm²**

C - Trunking selection See table 2

2 Capacity of trunking (CV : Cover)

	Cross-section (mm²) Max. Ø (mm²)	80 x 50	105 x 50		
		CV65	CV40	CV40	CV85
Trunking only	Cross-section	3380	1930	1930	4330
	Max. Ø	40	28	43	28
With Arteor™ support	Cross-section	1830	1410	1410	2300
	Max. Ø	2 x 18	2 x 21	2 x 21	2 x 24

	Cross-section (mm²) Max. Ø (mm²)	150 x 50							
		CV40	CV40	CV40	CV65	CV65	CV40	CV85	CV130
Trunking only	Cross-section	2000	1570	2000	3020	3020	2000	4020	6470
	Max. Ø	28	28	43	43	2x43	43	28	28
With Arteor™ support	Cross-section	1480	1050	1480	1470	1470	1480	1990	-
	Max. Ø	24	2x17	24	18	18	24	26	-

	Cross-section (mm²) Max. Ø (mm²)	195 x 50																	
		CV40	CV40	CV40	CV40	CV65	CV40	CV65	CV65	CV65	CV40	CV40	CV85	CV40	CV130	CV40	CV85	CV85	CV180
Trunking only	Cross-section	2000	1570	1570	2000	3020	1570	3020	3020	2580	2000	2000	3590	2000	6040	2000	4020	4020	8470
	Max. Ø	28	28	28	28	43	28	43	43	42	28	28	42	28	2 x 42	28	43	43	3 x 42
With Arteor™ support	Cross-section	1480	1050	1050	1480	1470	1050	1470	1470	1030	1480	1480	1560	1480	-	1480	1990	1990	-
	Max. Ø	2 x 21	2 x 17	2 x 17	2 x 21	18	2 x 17	18	18	14	2 x 21	2 x 21	2 x 18	2 x 21	-	2 x 21	26	26	-