

Flexible conduits ICTA 3422

Number(s) : 651216, 651220, 651225, 651232, 651240, 651250, 651263



6512 16

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Flexible conduits

ICTA 3422

LEGRAND Grand Export

References :

651 216 / 651 220 / 651 225 / 651 232 / 651 240 / 651 250 / 651 263

1. Product definition

Conduits with straight circular section which profile is corrugated, insulating and elastic across the section, used for electrical installation. The "conduit system" includes conduits and accessories

2. Range

 Grey : **Flame-retardant**

ICTA Grey with cable puller

Ø	16	20	25	32	40	50	63
Roll (m)	100 m	100 m	100 m	50 m	50 m	50 m	25 m
ICTA Grey with cable puller	651 216	651 220	651 225	651 232	651 240	651 250	651 263

3. Installation

Installation according to C 15-520 "guide".

3.1 Dimension of conduits :

The internal dimensions of the conduits and accessories must allow pulling easily wires and cables after installing the system. This rule is fulfilled if the sum of insulated wires section (S_n), is inferior to 1/3 of the internal section of the conduit (S_i)

$$\Sigma S_n < S_i / 3$$

Ø	1/3 of the internal section $S_i / 3$ (mm ²)
16	30
20	52
25	88
32	155
40	255
50	410
63	724

3.2) Fitting

EMBEDDED IN STRUCTURE	SURFACE MOUNTED	
	Outside	Inside
Allowed	Not advised	Allowed

4. Dimensions and weight

4.1 Conduit

Ø	16	20	25	32	40	50	63
Outside Ø (mm)	0 16 - 0.3	0 20 - 0.3	0 25 - 0.4	0 32 - 0.4	0 40 - 0.4	0 50 - 0.5	0 63 - 0.6
Minimum internal Ø (mm)	10.7	14.1	18.3	24.3	31.2	39.6	52.6

4.2 Packaging (roll)

Ø	(m)	Outside Ø (mm)	Internal Ø (mm)	Width (mm)	Size (m ³)	Weight (kg)
16	100	540	260	150	0.043	4.723
20	100	580	220	190	0.063	6.173
25	100	580	220	280	0.094	8.573
32	50	540	250	280	0.081	5.362
40	50	740	460	320	0.175	7.525
50	50	870	420	300	0.227	10.175
63	25	820	490	270	0.181	7.331

4.3 Palets

Ø	(m)	Lenght (mm)	Width (mm)	Height (mm)	Size (m ³)	Weight (kg)
16	2800	1150	1050	1100	1.328	143.51
20	2400	1150	1150	1200	1.587	159.749
25	1600	1150	1150	1200	1.587	149.413
32	800	1150	1050	1200	1.449	98.667
40	200	800	800	1350	0.864	43.425
50	200	870	870	1200	0.908	54.025
63	100	820	820	1200	0.806	42.783

5. General characteristics

5.1 Mechanical characteristics :

- Index of protection : **I.P. 68 (conduit only)**
- Compression: **750 Newtons at + 23° C.**
- Impact : **6 joules at - 5° C**
- Dielectric Strength : **2 000 Volts under 50 Hertz during 15 minutes**
- Resistance greater or equal to **100 MΩ/m under 500 Vcc**
- Very good resistance to **acids, bases and to salines solutions.**
- Temperature performances :

Transport, use during installation :

- ≥ - 5 degrés C.**
- ≤ + 90 degrés C.**
- Outside use with UV ambiances is not advised

Bending radius during tests

Ø	16	20	25	32	40	50	63
Mini bending radius (mm)	48	60	75	96	160	200	252

- Cable puller :

Nylonised steel Ø 0,9mm.
Undulation = 4%
Strength at break : **500 Newton.**

5.2 Mechanical characteristics of the system:

- Index of protection : **I.P. 44 conduit + coupling**
- Impact : **6 joules à -5° C**
- Glow wire test: **750° C.**

5.3 Material characteristics :

Conduit and accessories: **Additived polyolefines**

Color : **Grey RAL 7012**

6. Conformities :

European norms :

EN 61386-1 (2004)

EN 61386-22 (2004)

Normative marking on the conduits (at least every 3m)

Normative marking on each accessory.

Marking sample on conduits :

NF - USE 20 ICTA 3422 EN 61386-22 LEGRAND 603

20 : Outside Ø

ICTA : Isolant Cintrable Transversalement élastique Annelé

3422 : 3 : Squashing resistance

4 : Chocs resistance

2 : Mini T°



2 : Maxi T°

603 : Factory id number

Marking sample on accessory:

NF-USE LEGRAND
20 603

7. Systeme accessories :

Types of accessories	Designations	Use	References
	Coupling 16	Link between two conduits of Ø 16	651 601
	Coupling 20	Link between two conduits of Ø 20	651 602
	Coupling 25	Link between two conduits of Ø 25	651 603
	Coupling 32	Link between two conduits of Ø 32	651 604
	Coupling 40	Link between two conduits of Ø 40	651 605
	Coupling 50	Link between two conduits of Ø 50	651 606
	Coupling 63	Link between two conduits of Ø 63	651 607
	Reducers 20/16	Link between a Ø 16 or Ø 20 conduits	651 608
	Reducers 25/20	Link between a Ø 20 or Ø 25 conduits	651 609