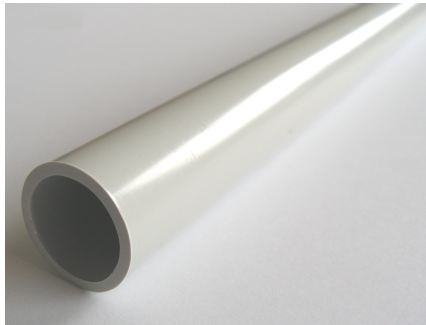


Rigid conduits IRL 3321

Number(s) : 6 514 16, 6 514 20, 6 514 25, 6 514 32, 6 514 40,
6 514 50, 6 514 63

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Rigid conduits

IRL 3321

1. LEGRAND Grand Export

References :

6 514 16 / 6 514 20 / 6 514 25 / 6 514 32 / 6 514 40 / 6 514 50 / 6 514 63

1. Product definition

Rigid 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

Rigid conduits with integrated coupling

IRL Grey : **Non Flame-propagating**

Ø	16	20	25	32	40	50	63
Roll (m)	30 m	30 m	30 m	15 m	15 m	15 m	9 m
IRL with integrated coupling	6 514 16	6 514 20	6 514 25	6 514 32	6 514 40	6 514 50	6 514 63

3. Installation

Installation according to UTE 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)

$$\Sigma S_n < S_i / 3$$

\emptyset	1/3 of the internal section $S_i / 3$ (mm ²)
16	44
20	75
25	120
32	202
40	328
50	514
63	860

3.2) Fitting

EMBEDDED IN STRUCTURE	SURFACE MOUNTED	
	Outside	Inside
Allowed	Allowed	Allowed

4. Dimensions and weight

4.1 Conduit

\emptyset	16	20	25	32	40	50	63
Outside \emptyset (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 \emptyset (mm)	12,5	16,5	21,2	27,5	35,4	45,5	57,9

4.2 Packaging

\emptyset	(m)	Width (mm)	Height (mm)	Lenght (mm)	Size (m3)	Weight (kg)
16	30	75	55	3 000	0,012	2.55
20	30	95	70	3 000	0,019	3.45
25	30	115	85	3 000	0,029	4.59
32	15	110	70	3 000	0,023	3.3
40	15	77	120	3 000	0,027	4.5
50	15	100	150	3 000	0,045	6,135
63	9	126	115	3 000	0,043	5,238

4.3 Palets

\emptyset	(m)	Width (mm)	Height (mm)	Lenght (mm)	Size (m3)	Weight (kg)
16	2730	780	470	3 000	1.1	232.05
20	2100	780	545	3 000	1.275	241.5
25	960	780	430	3 000	1.006	146.88
32	720	780	495	3 000	1.158	158.4
40	540	780	545	3 000	1.275	162
50	315	780	470	3 000	1.1	128.835
63	252	780	545	3 000	1.275	146.664

5. General characteristics

5.1 Mechanical characteristics :

- Index of protection : **I.P. 68 (conduit only)**
- Compression: **750 Newtons at + 23° C.**
- Impact : **2 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.**
- Sensitive to aromatic hydrocarbons (eg. Benzene) and ketones (eg. Acetone)
- Temperature performances :

Transport, use during installation :

≥ - 5 degrés C.
≤ + 60 degrés C.

Bending radius during tests

Ø	16	20	25
Mini bending radius (mm)	48	60	75

5.2 Mechanical characteristics of the system:

- Index of protection : **I.P. 44 conduit + coupling**
I.P. 44 conduit + bends
I.P. 44 conduit + flexible accessory bends
I.P. 40 conduit + elbows
I.P. 40 conduit + tees
- Impact : **2 joules at -5° C**
- Glow wire test: **750° C.**

5.3 Material characteristics :

Conduit, bends and flexible accessory bends : **Polyvinyl chloride (PVC)**

Coupling, tees and elbows: **Additived polyolefines**

Color : **Grey RAL 7035**
White RAL 9010

5.4) Others characteristics :

We can paint the system and accessories with specific paint :

- Paint glycérophalique
- Paint acrylique

6. Conformities :

European norms :

EN 61386-1

EN 61386-21

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

Normative marking on each accessory.

Marking sample on conduits :

Date / hour Article Code LEGRAND MEDIUM IMPACT IEC 61386-21

Marking sample on accessory:

NF-USE LEGRAND

∅ 603

7. System accessories :

Designations	Use	References
Coupling 16	Link between two conduits of ∅ 16	6 516 01
Coupling 20	Link between two conduits of ∅ 20	6 516 02
Coupling 25	Link between two conduits of ∅ 25	6 516 03
Coupling 32	Link between two conduits of ∅ 32	6 516 04
Coupling 40	Link between two conduits of ∅ 40	6 516 05
Coupling 50	Link between two conduits of ∅ 50	6 516 06
Coupling 63	Link between two conduits of ∅ 63	6 516 77
Bends 16	Change of direction ∅ 16	6 516 25
Bends 20	Change of direction ∅ 20	6 516 26
Bends 25	Change of direction ∅ 25	6 516 27
Bends 32	Change of direction ∅ 32	6 516 28
Bends 40	Change of direction ∅ 40	6 516 45
Bends 50	Change of direction ∅ 50	6 516 46
Bends 63	Change of direction ∅ 63	6 516 47
Reducers 20/16	Link between a ∅ 16 or ∅ 20 conduits	6 516 08
Reducers 25/20	Link between a ∅ 20 or ∅ 25 conduits	6 516 09
Elbows 16	Change direction ∅ 16	6 516 11
Elbows 20	Change direction ∅ 20	6 516 12
Elbows 25	Change direction ∅ 25	6 516 13
Tees 16	To join conduits together and to change direction ∅ 16	6 516 18
Tees 20	To join conduits together and to change direction ∅ 20	6 516 19
Tees 25	To join conduits together and to change direction ∅ 25	6 516 20

8) Accessories outside the system:

Designations	Use	References
Bending springs 16	Cintrage du conduit diam 16	6 516 32
Bending springs 20	Cintrage du conduit diam 20	6 516 33
Bending springs 25	Cintrage du conduit diam 25	6 516 34