

Non-metallic conduit fittings for electrical installations —

Part 5: Specification for rigid conduits,
fittings and boxes of insulating
material

ICS 29.120.10

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Foreword

This revision of this Part of this British Standard was prepared by Technical Committee PEL/213, *Cable Management Systems* and supersedes the 1982 edition which is now withdrawn.

The 1982 edition applied to conduit, conduit fittings and components made from suitable insulating material. It specified the requirements for components not of tubular form, for example, circular fittings and covers and reducers that were not covered in Part 1. Details were also given of the requirements for rigid conduits other than those specified in Part 1.

The title and contents of this edition of Part 5 have been revised to exclude circular conduits. Circular conduit fittings have been renamed circular conduit boxes.

The format of this edition follows that of those IEC Publications of similar content and includes standard sheets giving dimensions (metric) of non-circular conduits, couplers, bends, circular conduit boxes and other fittings.

Other Parts of this standard are:

— *Part 1: Specification for fittings and components of insulating material.*

A British Standard does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 9, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

^{A3} This Part of this British Standard specifies dimensions and requirements for conduit fitting and conduit boxes forming part of a conduit system complying with the relevant parts of the BS EN 61386 to ensure safety and interoperability. ^{A3}

^{A3} 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 61386-1, *Conduit systems for cable management – Part 1: General requirements*

3 Terms and definitions

3.1

conduit fitting

device designed to join or terminate one or more components of a conduit system, or for them to change direction

3.2

conduit box

conduit fitting, with a removable cover, designed to join or terminate one or more components of a conduit system, or for them to change direction

3.3

component

part of a conduit fitting which may be common to several conduit fittings ^{A3}

^{A3} 4 General requirements

In addition to the requirements of this standard, products shall conform to the requirements of BS EN 61386-1.

Dimensions for conduit boxes, conduit fittings and components are shown in the standard sheets as follows: ^{A3}

Non-circular conduits	sheet 1
Moulded slip type coupler, plain	sheet 2
Inspection bends, plain	sheet 3
Inspection sleeve coupler, plain	sheet 4
Expansion type coupler, plain	sheet 5
Circular conduit ^{A3} boxes ^{A3}	sheet 6
Circular conduit ^{A3} boxes ^{A3} , looping	sheet 7
Covers for circular conduit fittings	sheet 8
Plain entry reducers	sheet 9
Extension rings	sheet 10

Compliance ^{A3} shall be ^{A3} checked by measurement.

5 ^{A3} Clause deleted ^{A3}

6 Construction

~~A3~~ The lugs and fixing threads of fittings detailed in standard sheets 6, 7 and 10 shall have a minimum threaded length of 8 mm in the plastics material. Metal inserts, when provided, shall allow a threaded engagement of not less than three full threads.

Compliance shall be checked by measurement and inspection. ~~A3~~

7 ~~A3~~ Clause deleted ~~A3~~

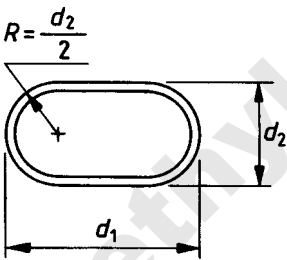
8 ~~A3~~ Clause deleted ~~A3~~

9 ~~A3~~ Clause deleted ~~A3~~

10 ~~A3~~ Clause deleted ~~A3~~

Standard sheet 1

Non-circular conduits

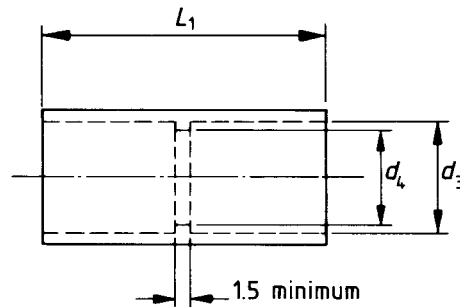


All dimensions are in millimetres.
NOTE 1 The material is insulating material.

Nominal size	d_1		d_2	
13	13	$\left. \begin{array}{c} + 0 \\ - 0.2 \end{array} \right\}$	8.1	$\left. \begin{array}{c} + 0 \\ - 0.2 \end{array} \right\}$
16	16.3		9.9	
20	22.6		11.4	
25	28.7	$\left. \begin{array}{c} + 0 \\ - 0.25 \end{array} \right\}$	11.4	$\left. \begin{array}{c} + 0 \\ - 0.25 \end{array} \right\}$
32	32.5		11.4	
NOTE 2 The preferred manufacturing length is 3 m. Other size non-circular conduits are under consideration.				

Standard sheet 2

Moulded slip type coupler, plain



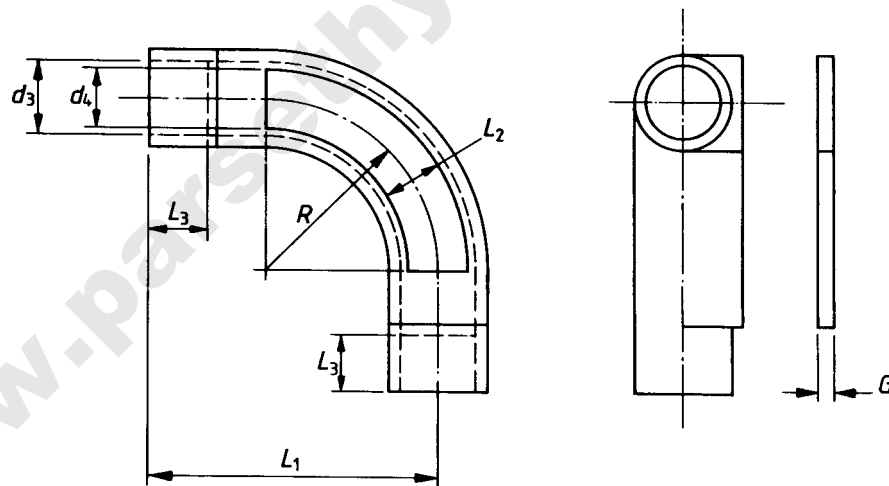
All dimensions are in millimetres.

NOTE The material is insulating material.

Nominal size	L_1 min.	d_3 max.	d_4 max.
16	33.5	16.3	14.5
20	41.5	20.3	18.5
25	51.5	25.4	23.5
32	65.5	32.4	30.5

Standard sheet 3

Inspection bends, plain



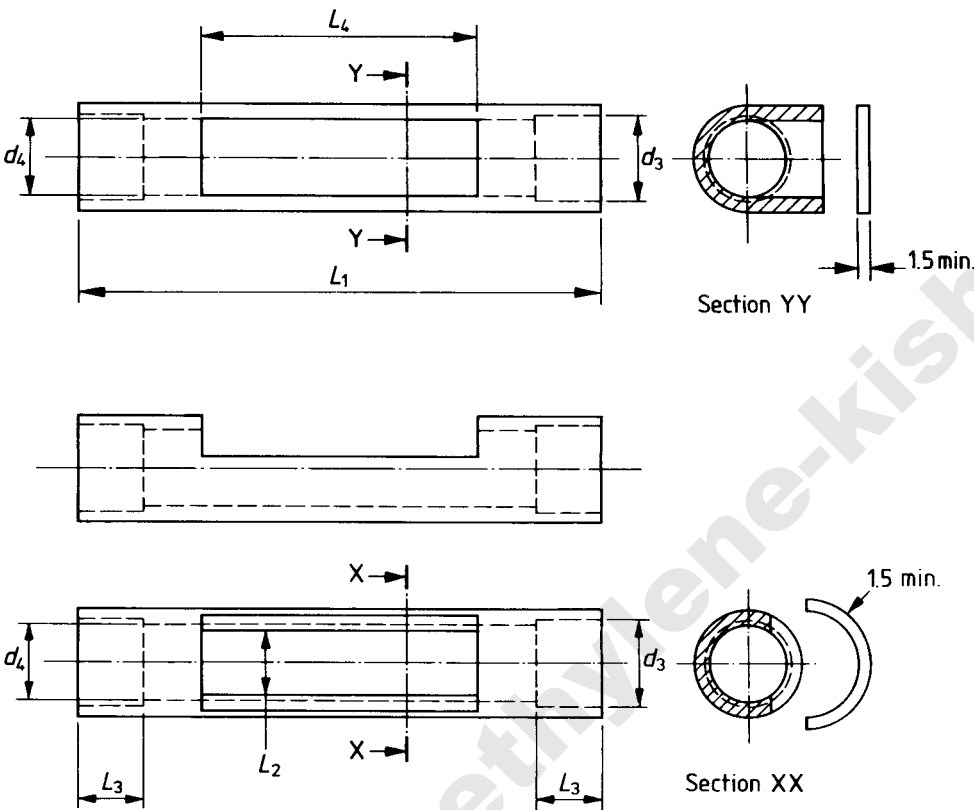
All dimensions are in millimetres.

NOTE This drawing does not purport to show constructional details. The cover is to be secured to the body by mechanical means. The material is insulating material.

Nominal size	L_1 min.	R min.	L_2 min.	G min.	L_3 min. length of entry	d_3 max.	d_4 max.
16	57	33	12	1.5	16	16.3	14.5
20	68	42	14	1.5	20	20.3	18.5
25	81	52	19	2.0	25	25.4	23.5

Standard sheet 4

Inspection sleeve coupler, plain



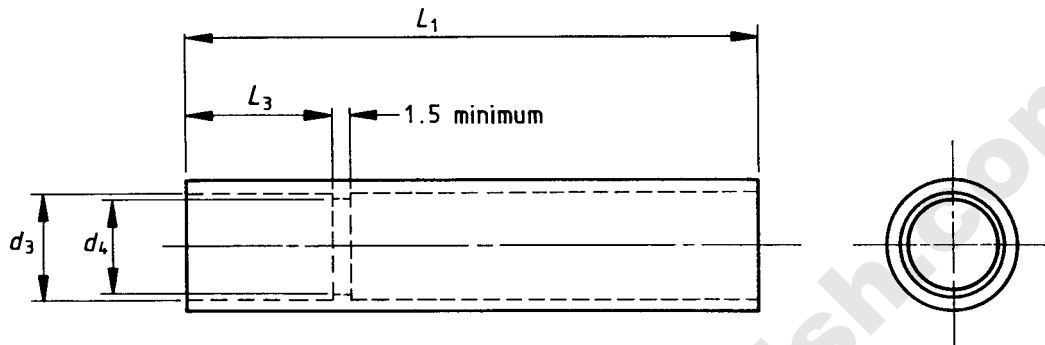
All dimensions are in millimetres.

NOTE This drawing does not purport to show constructional details. The cover is to be secured to the body by mechanical means. The material is insulating material.

Nominal size	L_1 min.	L_2 min.	L_3 min. length of entry	L_4 min.	d_3 max.	d_4 max.
16	127	12	16	76	16.3	14.5
20	140	14	20	82	20.3	18.5
25	165	19	25	95	25.4	23.5
32	228	25	32	146	32.4	30.5

Standard sheet 5

Expansion type coupler, plain



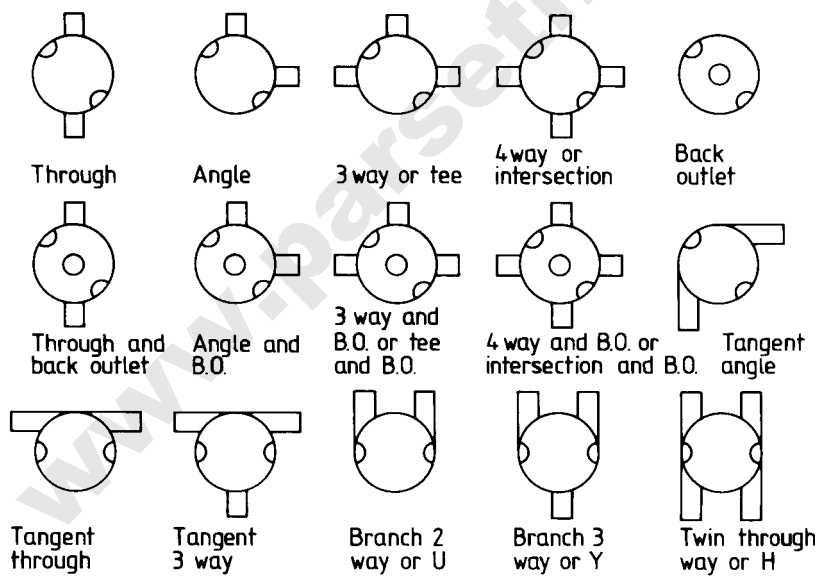
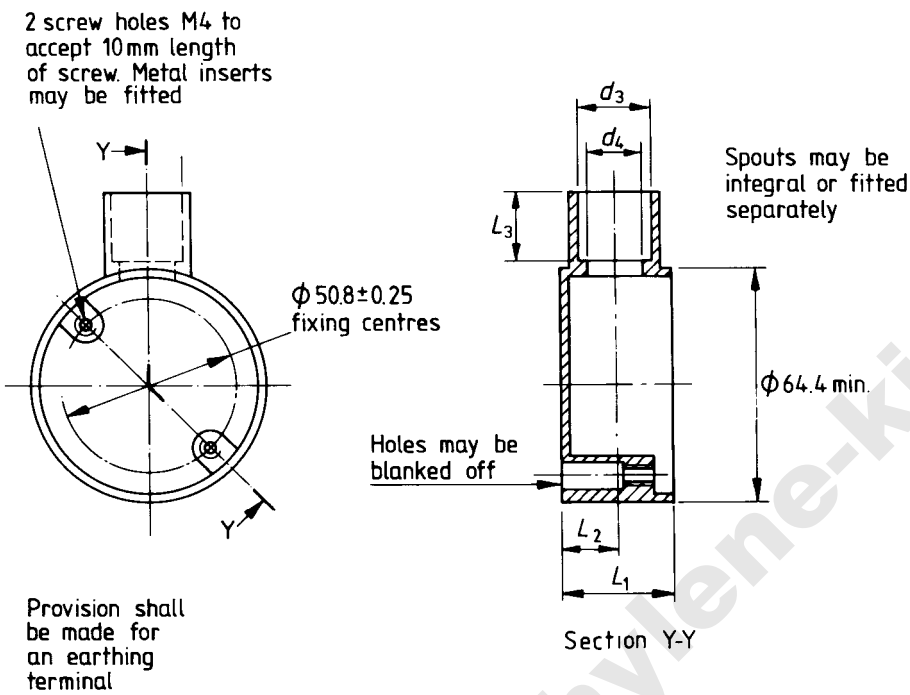
All dimensions are in millimetres.

NOTE The material is insulating material.

Nominal size	L_1 min.	L_3 min. length of entry	d_3 max.	d_4 max.
16	88	16	16.3	14.5
20	101	20	20.3	18.5
25	114	25	25.4	23.5
32	127	32	32.4	30.5

Standard sheet 6

Circular conduit $\boxed{A_3}$ boxes $\boxed{A_3}$



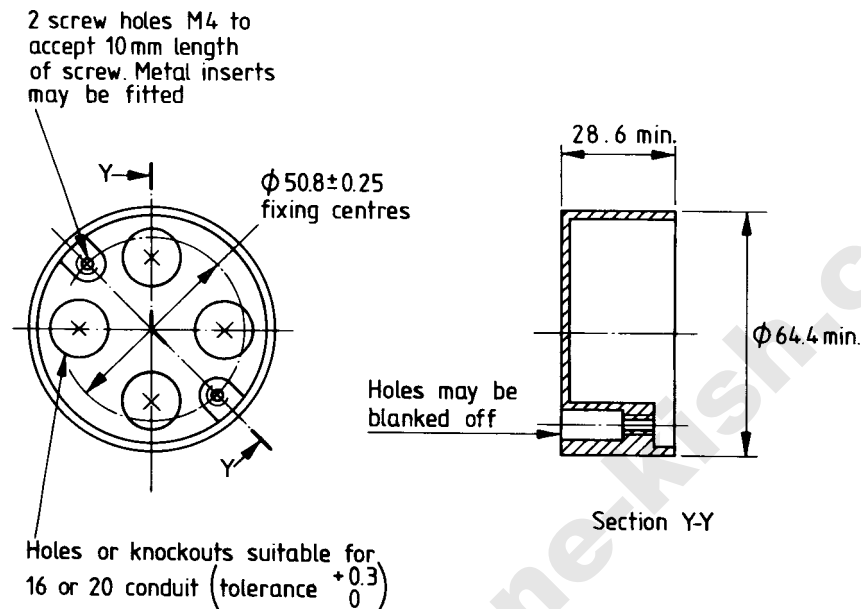
All dimensions are in millimetres.

NOTE This drawing does not purport to show constructional details. The material is insulating material.

Nominal size	L_1 min.	L_2 min.	L_3 min. length of entry	d_3 max.	d_4 max.
16	28.6	14.5	16	16.3	14.5
20	28.6	14.5	20	20.3	18.5
25	31.8	15.9	25	25.4	23.5

Standard sheet 7

Circular conduit $\boxed{A_3}$ boxes $\boxed{A_3}$, looping

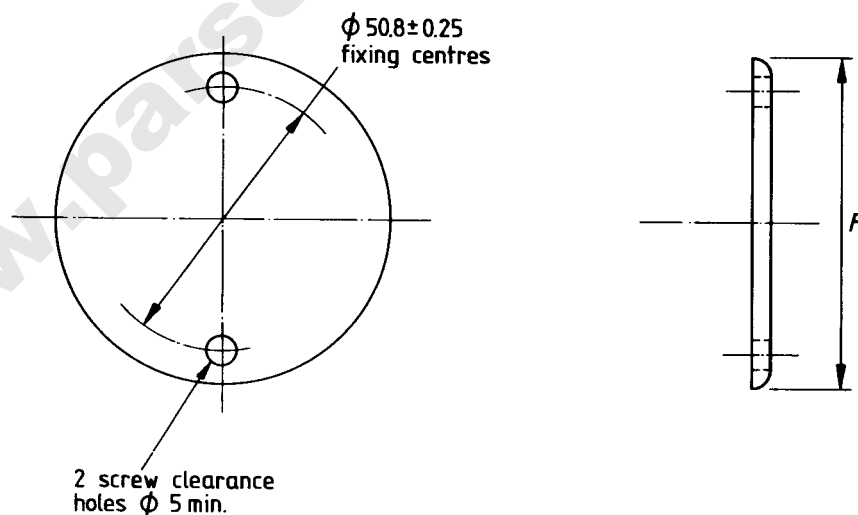


All dimensions are in millimetres.

NOTE This drawing does not purport to show constructional details. The material is insulating material.

Standard sheet 8

Covers for circular conduit $\boxed{A_3}$ boxes $\boxed{A_3}$



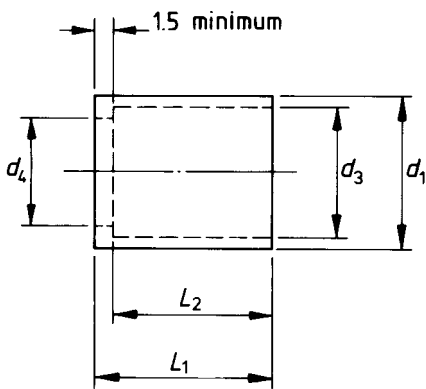
All dimensions are in millimetres.

NOTE This drawing does not purport to show constructional details. The material is insulating material.

type of cover	F min.
Standard	65
Overlapping	85

Standard sheet 9

Plain entry reducers



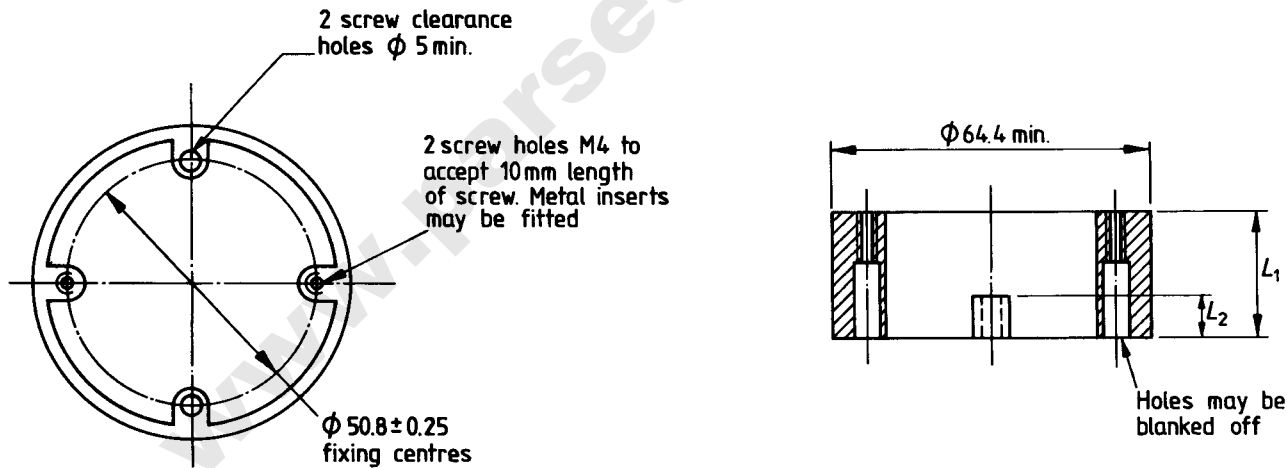
All dimensions are in millimetres.

NOTE The material is insulating material.

Nominal size		L_1 min.	L_2 min.	d_1	d_3 max.	d_4 max.
20	16	20	16	20	+ 0.0	16.3
25	20	25	20	25	- 0.3	20.3
32	25	32	25	32	+ 0.0	25.4
32	20	32	20	32	- 0.4	20.3

Standard sheet 10

Extension rings



All dimensions are in millimetres.

NOTE This drawing does not purport to show constructional details. The material is insulating material.

L_1 nominal size	L_2 min.
13	8
20	8
25	8
32	8



Figure 1 —  *Figure deleted* 





Figure 2 —  *Figure deleted* 

Figure 3 —  *Figure deleted* 

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