Male fittings for use with compression couplings

DIN 3871

ICS 23.040.60

Supersedes November 1982 edition.

Descriptors: Compression couplings, male fittings.

Lötlose und gelötete Rohrverschraubungen; Überwurfschrauben

In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

Foreword

This standard has been prepared by Technical Committee *Rohrverschraubungen*.

Amendments

The following amendments have been made to the November 1982 edition.

a) Specifications for types LL3 and ALL4 M10 × 1 fittings are no longer included.

b) A reference to DIN 3863 has been included for type B fittings.

c) The standard has been editorially revised.

Previous editions

DIN 3871: 1954x-11, 1982-11.

1 Scope and field of application

This standard specifies dimensions and materials for male fittings for use with compression couplings. Such fittings are intended to fit into threaded holes as specified in DIN 3854.

2 Normative references

This standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the titles of the publications are listed below. For dated references, subsequent amendments to or revisions of any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

DIN 13-5
ISO metric screw threads; 1 mm and 1,25 mm fine pitch threads with diameters from 7,5 mm to 200 mm; nominal sizes

DIN 13-6
ISO metric screw threads; 1,5 mm fine pitch threads with diameters from 12 mm to 300 mm; nominal sizes

DIN 13-14
ISO metric screw threads; tolerance system for threads 1 mm in diameter and larger

DIN 2401-1
Pressure and temperature specifications for components subject to internal or external pressure; concepts and nominal pressure stages

DIN 3854
Threaded holes for male fittings for use with compression couplings

DIN 3859
Compression couplings; technical delivery conditions

DIN 3861
Olives for use with compression couplings and fittings; design and type W port

DIN 3862
Double cones for use with compression couplings; design and type X port

DIN 3863
Spherical liners for use with compression couplings; design and type U and Y ports

DIN 50 942
Phosphating of metals; methods of test

Continued on pages 2 and 3.

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In case of doubt, the German-language original should be consulted as the authoritative text.

3 Dimensions

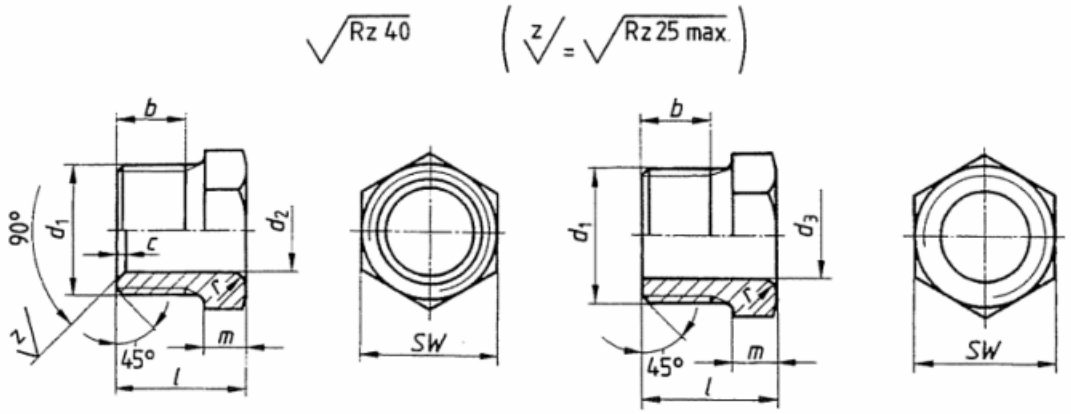
Dimensions in mm

Type A

for use with DIN 3861 olives or DIN 3862 double cones

Type B

for use with DIN 3863 spherical liners



Thread chamfered down to minor diameter.

Figure 1 **Figure 2**

Designation of a type A (A) light duty series (L) steel (St) male fitting for a pipe outside diameter of 12 mm:

Male fitting DIN 3871 – AL 12-St

Table 1

Compression coupling		Nominal pressure (as in DIN 2401-1) [1], [2]	Thread size (d_1)		d_2	d_3	l	m	b	c	r	SW	Approximate mass (7,85 kg/dm³) per 100 units, in kg	
Series	Pipe outside diameter		Type A	Type B	B11	A11	± 0,2	min.					Type A	Type B
LL Very light duty series	4	100	M8 × 1,0	–	4	–	12	4	6,4	1	1,6	8	0,30	–
			–	M10 × 1	–	5,5	13	4	7,4	–	1,6	10	–	0,50
	5		M10 × 1	M10 × 1	5	6,5				1			0,55	0,40
	6		M10 × 1	–	6	–							0,45	–
	8		M12 × 1	–	8	–	14	4,5	7,9	1	1,6	12	0,60	–
L Light duty series	6	250	M12 × 1,5	M12 × 1,5	6	7,5	16	4,5	9	1	1,6	12	0,90	0,70
	8		M14 × 1,5	M14 × 1,5	8	9,5	16	4,5	9	1	1,6	14	1,15	0,85
	10		M16 × 1,5	M16 × 1,5	10	11,5	17	5,5	9	1,3	2	17	1,60	1,20
	12		M18 × 1,5	M18 × 1,5	12	13,5	18	6	9,5	1,3	2	19	1,95	1,50

[1] Applies to steel only; see technical delivery conditions specified in DIN 3859.

[2] The nominal pressures indicated apply only to fittings for use with DIN 3861 olives.

4 Material

Male fittings shall normally be manufactured from steel as specified in DIN 3859. If they are to be manufactured from other materials (cf. DIN 3859), this shall be specified in the standard designation by appending the apppropriate material symbol.

5 Screw thread and finish

Male fittings shall have an ISO metric screw thread as specified in DIN 13-5 and DIN 13-6 made to tolerances as specified in DIN 13-14, tolerance class 'medium'.

The standard finish of male fittings shall be Znph r5f as specified in DIN 50 942. Other possible types of finish (cf. DIN 3859) shall be specified in the standard designation by appending the appropriate symbol.

6 Technical delivery conditions

Male fittings shall comply with the technical delivery conditions specified in DIN 3859.