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Responsible committee: PSE/15 Flanges

Interested committees:

Title: Draft BS EN 1092-1:2018/A1 Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated. Part 1: Steel flanges.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication. No acknowledgement will normally be sent. **See overleaf for information on the submission of comments.**

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

**Flanges and their joints - Circular flanges for pipes, valves,
fittings and accessories, PN designated - Part 1: Steel
flanges**

Brides et leurs assemblages - Brides circulaires pour
tubes, appareils de robinetterie, raccords et
accessoires, désignées PN - Partie 1: Brides en acier

Flansche und ihre Verbindungen - Runde Flansche für
Rohre, Armaturen, Formstücke und Zubehörteile, nach
PN bezeichnet - Teil 1: Stahlflansche

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 74.

This draft amendment A1, if approved, will modify the European Standard EN 1092-1:2018. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 1092-1:2018/prA1:2022) has been prepared by Technical Committee CEN/TC 74 “Flanges and their joints”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

In comparison with the previous edition, the following technical modifications have been made:

- Editorial modifications
- Modification and update the clause “Normative references”
- Modifications to Table 7 “Synoptic table”
- Modifications on some figures
- Modifications to Annex C “Masses of flanges”
- Modifications to Annex D “Table D.1”
- Modifications to Annex G “G.3.1 General”
- Modifications to Annex I “Table I.3”

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of EN 1092-1:2018.

1 Modifications to European foreword

Change d) to the following:

“d) flanges Type 05 for PN 160 to PN 400 were implemented.”

2 Modifications to Normative references

Add the following:

EN 10222-4:2017+A1, *Steel forgings for pressure purposes - Part 4: Weldable fine grain steels with high proof strength*

EN 10216-2:2013+A1:2019, *Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties*

EN 10216-5:2021, *Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 5: Stainless steel tubes*

EN 10217-3:2019, *Welded steel tubes for pressure purposes - Technical delivery conditions - Part 3: Electric welded and submerged arc welded alloy fine grain steel tubes with specified room, elevated and low temperature properties*

EN 10217-7:2021, *Welded steel tubes for pressure purposes - Technical delivery conditions - Part 7: Stainless steel tubes*

EN 13445-3:2021, *Unfired pressure vessels - Part 3: Design*

EN ISO 3452-1:2021, *Non-destructive testing - Penetrant testing - Part 1: General principles (ISO 3452-1:2021)*

EN ISO 6892-1:2019, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1:2019)*

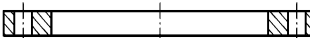
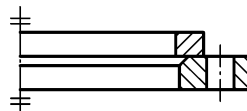
EN ISO 11666:2018, *Non-destructive testing of welds - Ultrasonic testing - Acceptance levels (ISO 11666:2018)*

EN ISO 17640:2018, *Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment (ISO 17640:2018)*

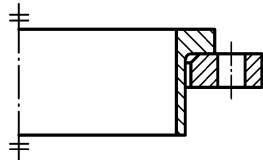
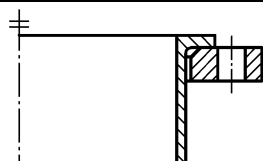
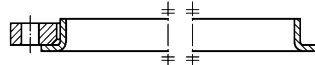
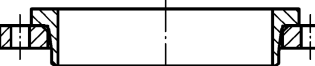
3 Modifications to Table 7

Replace Table 7:

Table 7 — Synoptic table

Flange type or collar type	DN PN	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1 000	1 200	1 400	1 600	1 800	2 000	2 200	2 400	2 600	2 800	3 000	3 200	3 400	3 600	3 800	4 000																		
 a) Type 01	2,5		dimensions identical with PN 6																					X																																		
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X																													
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X	X		X	X	X	X	X	X																														
	16	dimensions identical with PN 40								X	X	X	X	X	X	X	X	X	X		X	X	X	X	X																																	
	25	dimensions identical with PN 40												X	X	X	X	X	X	X		X	X	X																																		
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																																								
	63	dimensions identical with PN 100						X	X	X	X	X	X	X	X	X	X	X																																								
100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																																										
 b) Types 02 and 32	2,5		dimensions identical with PN 6																																																							
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X																																				
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X		X																																				
	16	dimensions identical with PN 40								X	X	X	X	X	X	X	X	X	X		X																																					
	25	dimensions identical with PN 40												X	X	X	X	X	X	X		X																																				
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X																																				
	2,5		dimensions identical with PN 6																																																							
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X																															
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X		X	X	X	X	X	X																															

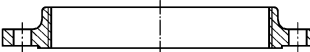
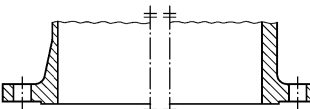
 Documents

Flange type or collar type	DN PN	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500		600	700	800	900	1 000	1 200	1 400	1 600	1 800	2 000	2 200	2 400	2 600	2 800	3 000	3 200	3 400	3 600	3 800	4 000						
 c) Types 02 and 35	16	dimensions identical with PN 40						X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X																					
	25	dimensions identical with PN 40											X	X	X	X	X	X	X	X	X		X	X	X																						
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																												
 d) Type 02 and 36	2,5	dimensions identical with PN 6																																													
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																										
	10	dimensions identical with PN 16												X	X	X	X	X																													
	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																												
 e) Type 02 and 33/37	2,5	dimensions identical with PN 16											dimensions identical with PN 10																																		
	6	dimensions identical with PN 16											dimensions identical with PN 10																																		
	10	dimensions identical with PN 16											X	X	X																																
	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X																																
 f) Type 04 and 34																																															
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X	X		X																								
	16	dimensions identical with PN 40						X	X	X	X	X	X	X	X	X	X	X	X	X		X																									
	25	dimensions identical with PN 40												X	X	X	X	X	X	X		X																									
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																													
	63																																														
	100																																														

Flange type or collar type	DN PN	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500		600	700	800	900	1 000	1 200	1 400	1 600	1 800	2 000	2 200	2 400	2 600	2 800	3 000	3 200	3 400	3 600	3 800	4 000																	
 g) Type 05	2,5		dimensions identical with PN 6																								X																															
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X																												
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X		X	X	X	X	X	X																															
	16	dimensions identical with PN 40						X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X																																	
	25	dimensions identical with PN 40												X	X	X	X	X	X	X		X																																				
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X																																				
	63	Use PN 100						X	X	X	X	X	X	X	X	X	X	X																																								
	100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																																									
	160	X	X		X		X	X	X	X	X	X	X	X	X	X																																										
	250	dimensions identical with PN	X			X		X	X	X	X	X	X	X	X	X																																										
	320	X	X		X		X	X	X	X	X	X	X	X	X																																											
	400	X	X		X		X	X	X	X	X	X	X	X																																												
 h) Type 11	2,5		dimensions identical with PN 6																								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
	16	dimensions identical with PN 40						X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X																											

Flange type or collar type	DN PN	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500		600	700	800	900	1 000	1 200	1 400	1 600	1 800	2 000	2 200	2 400	2 600	2 800	3 000	3 200	3 400	3 600	3 800	4 000					
	25	dimensions identical with PN 40												X	X	X	X	X	X	X	X	X		X	X	X	X	X																		
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X																								
	63	dimensions identical with PN 100						X	X	X	X	X	X	X	X	X	X																													
	100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																														
	160	X	X		X		X	X	X	X	X	X	X	X	X	X																														
	250	dimensions identical with PN	X		X		X	X	X	X	X	X	X	X	X																															
	320	X	X		X		X	X	X	X	X	X	X	X	X																															
400	X	X		X		X	X	X	X	X	X	X	X																																	

 i) Type 12	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																														
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X		X																								
	16	dimensions identical with PN 40						X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X																						
	25	dimensions identical with PN 40												X	X	X	X	X	X	X		X																								
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X																										
	63	dimensions identical with PN 100						X	X	X	X	X	X																																	
	100	X	X	X	X	X	X	X	X	X	X	X																																		

Flange type or collar type	DN PN	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	—	600	700	800	900	1 000	1 200	1 400	1 600	1 800	2 000	2 200	2 400	2 600	2 800	3 000	3 200	3 400	3 600	3 800	4 000			
 j) Type 13	6	X	X	X	X	X	X	X	X	X	X	X	X																															
	10	dimensions identical with PN 40						dimensions identical with PN 16																																				
	16	dimensions identical with PN 40						X	X	X	X	X	X																															
	25	dimensions identical with PN 40																																										
	40	X	X	X	X	X	X	X	X	X	X	X	X																															
	63	dimensions identical with PN 100						X	X	X	X	X	X																															
	100	X	X	X	X	X	X	X	X	X	X	X	X																															
 k) Type 21	2,5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X																		
	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X														
	10	dimensions identical with PN 40						dimensions identical with PN 16						X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X														
	16	dimensions identical with PN 40						X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X													
	25	dimensions identical with PN 40												X	X	X	X	X	X	X		X	X	X	X	X																		
	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X																						
	63	dimensions identical with PN 100						X	X	X	X	X	X	X	X	X	X	X																										
	100	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																											
	160	X	X		X		X	X	X	X	X	X	X	X	X	X																												
	250	X	X		X		X	X	X	X	X	X	X	X	X	X																												
	320	X	X		X		X	X	X	X	X	X	X	X	X																													
	400	X	X		X		X	X	X	X	X	X	X	X																														