
Rims for agricultural, forestry and construction machines

*Jantes pour machines agricoles, engins forestiers et engins de
construction*

STANDARDSISO.COM : Click to view the full PDF of ISO 18804:2021



STANDARDSISO.COM : Click to view the full PDF of ISO 18804:2021



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General	1
5 Rim diameter and circumferences	1
6 Rim contours and valve holes	3
6.1 Drop-centre W, DW and TW rims	3
6.2 Drop-centre DH rims	6
6.3 Drop-centre MW rims	8
6.4 Drop-centre DD rims	9
6.5 Other drop-centre rims	10
6.6 Semi-drop-centre rims (multi-piece)	14
6.7 Divided rims	15
6.8 5° and 3° flat base rims (multi-piece) — DWM, VF and HF	16
6.9 Full tapered bead seat rims (multi-piece) — TH	18
6.10 AG 15° drop-centre rims	18
7 Rim knurling	20
Annex A (normative) Rim diameter measurements	22
Annex B (informative) 5° drop-centre rims with nominal diameter codes 15.3 and 16.1	24
Annex C (informative) 15° drop-centre rims with nominal diameter codes 14.5, 15.5, 16.5, and 17.5	25
Bibliography	26

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 5, *Agricultural tyres and rims*.

This second edition cancels and replaces the first edition (ISO 18804:2017), which has been technically revised.

The main changes compared to the previous edition are as follows:

- all figures and tables have been corrected;
- the valve hole description for other drop-centre rims has been revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Rims for agricultural, forestry and construction machines

1 Scope

This document specifies rim dimensions for rims for agricultural, forestry, and construction machines.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 3911, *Wheels and rims for pneumatic tyres — Vocabulary, designation and marking*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 3911 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 General

All dimensions in this document are given in millimetres and are applicable to the side of the rim which is in contact with the tyre during the mounting and in service.

5 Rim diameter and circumferences

Nominal rim diameter codes, D_R , are shown in [Table 1](#) in relation to the specified rim diameter given in [Figure 1](#).

Actual rim diameter measurements shall be as given in [Annex A](#).

Table 1 — Rim diameters

Dimensions in millimetres

5° drop-centre rims

Nominal rim diameter code D_R	Specified rim diameter ^a D
4	100,8
6	151,6
8	202,4
9 ^b	227,8
10	253,2
12	304,0
13 ^b	329,4
14	354,8
15	380,2
16	405,6
17 ^b	436,6
18	462,0
19 ^b	487,4
20	512,8
22	563,6
24	614,4
26	665,2
28	716,0
30	766,8
32	817,6
34	868,4
36	919,2
38	970,0
40	1 020,8
42	1 071,6
44	1 122,4
46	1 173,2
48	1 224,0
50	1 274,8
52	1 325,6
54	1 376,4

^a The specified rim diameters, D , in millimetres, are derived from the nominal rim diameter codes, D_R , as follows:

a) $D_R > 16$, $D = 25,4 (D_R + 0,187 5)$;

b) $D_R \leq 16$, $D = 25,4 (D_R - 0,031 25)$.

The values are rounded to 0,1 mm.

^b Value not recommended.

See [Annex B](#) for additional regionally recognized 5° diameter codes.

15° drop-centre rims

Nominal rim diameter code D_R	Specified rim diameter D
19.5	495,3
22.5	571,5
24.5	622,3
26.5	673,1
28.5	723,9
30.5	774,7
See Annex C for additional regionally recognized 15° diameter codes.	

Semi-drop-centre rims (multi-piece)

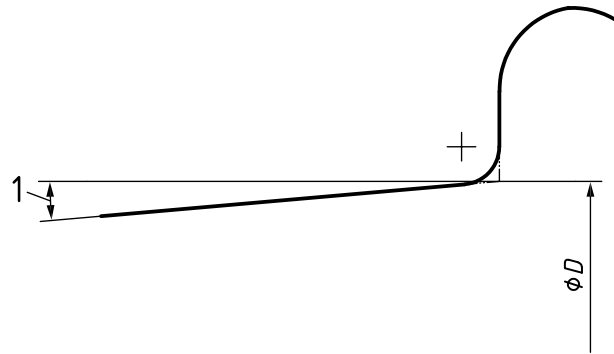
Nominal rim diameter code D_R	Specified rim diameter D
20	512,8
24	614,4
See 6.6 .	

Divided rims

Nominal rim diameter code D_R	Specified rim diameter D
4	100,8
6	151,6
8	202,4
9	227,8
10	253,2
12	304,0
See 6.7 .	

Flat base rims and full tapered bead seat rims

Nominal rim diameter code D_R	Specified rim diameter D
20	514,4
25	635,0
32	817,6
See 6.8 and 6.9 .	

**Key**

1 bead taper

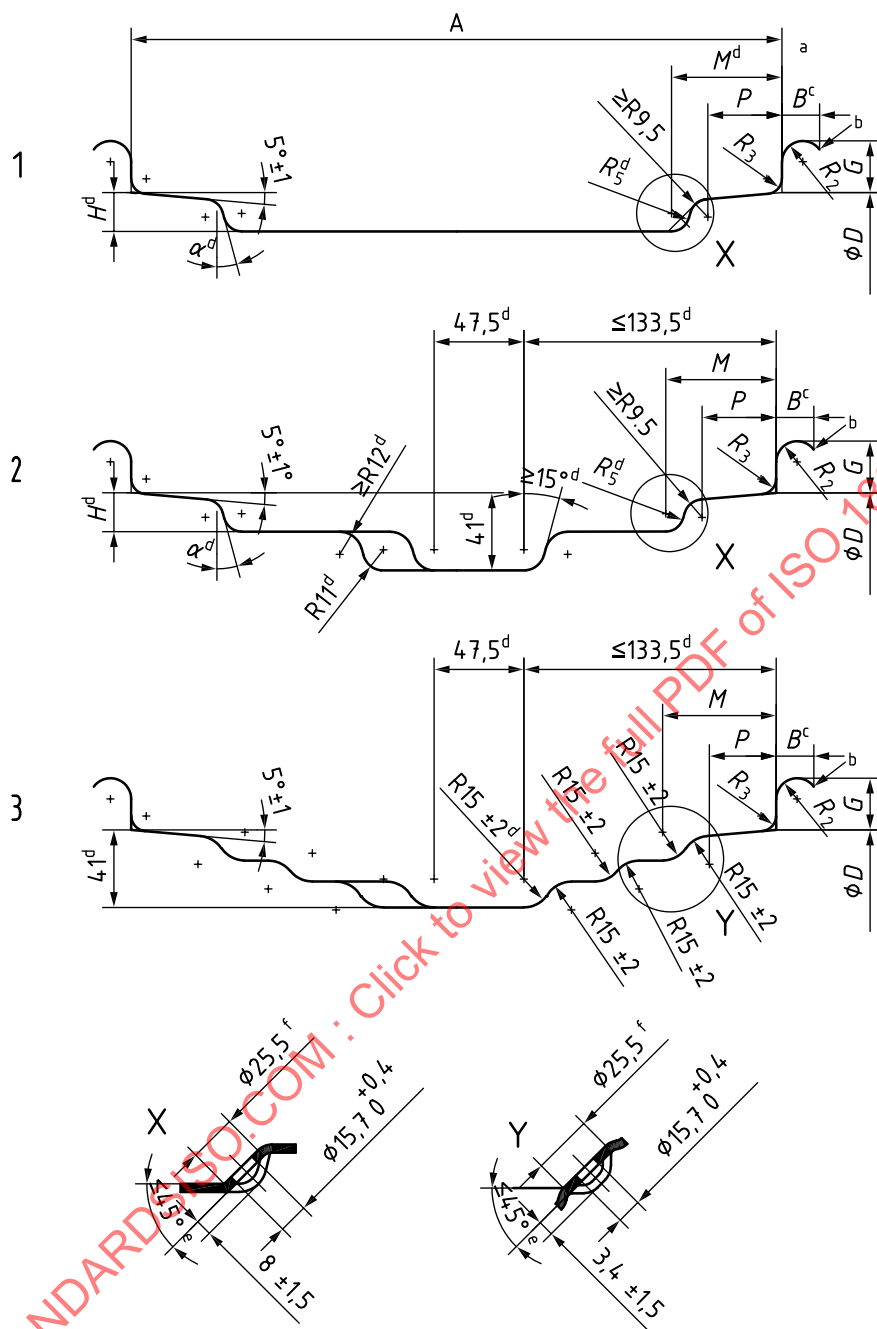
Figure 1 — Specified rim diameter**6 Rim contours and valve holes****6.1 Drop-centre W, DW and TW rims**

Dimensions and tolerances of drop-centre W, DW and TW rims (includes all suffixes, for example, DW-A) shall be as given in [Table 2](#) and shown in [Figure 2](#). For W-C rims, refer to [Annex B](#).

The valve hole shall have a diameter of $15,7 \text{ mm}^{+0,4}_0$ and may be on either side of the rim.

The nominal valve seat angle is $30^\circ \pm 5^\circ$. To provide for valve-to-vehicle clearance, optional valve seat angles of 45° maximum are permissible. For any angle selected for a given rim, the tolerance is $\pm 5^\circ$.

Dimensions in millimetres

**Key**

- 1 W contour
- 2 DW contour
- 3 TW contour
- X valve hole detail (W and DW contour)
- Y valve hole detail (TW contour)
- a The tyre-mounting side is that side of the rim for which the dimension M is shown.
- b The break corner is equivalent to $R = 0,5 \text{ min}$.
- c The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange. For suffix B (example: DW20B), the contour can either follow a continuation of R_2 to full width or, if conical shaped, a minimum 30° angle applies between the upper G horizontal reference line.

- d These dimensions comprise the minimum well envelope for tyre-mounting purposes.
- e For any angle selected for a given rim, the tolerance is $\pm 5^\circ$.
- f Flat surface for valves.

EXAMPLE Dimensions A , B , G , M , P , R_2 and R_3 all apply to W, DW and TW contours; H and R_5 apply to W and DW contours.

Figure 2 — Contour W, DW and TW rims

Table 2 — Dimensions of W, DW and TW rims

Dimensions in millimetres

Rim width code	A	A _{tol}	B _{min}	G ± 1,0	H _{min}	M _{max}	P _{min}	R ₂	R _{3,max}	R _{5,max}	α _{min}							
W6	152,5	±2,5	10,0	22,5	20,5	44,5	23,5	9,5	6,5	11,0	6°							
W7	178,0			19,3		44,5		33,0			11,0	15°						
W7L													22,5	51,0	27,0	6°		
W8	203,0		11,5	25,5		57,5	11,0	8,0			6,5							
W8H				22,0		57,5						15°						
W8L				25,5		66,0							41,0	15,0	8,0			
W9	228,5		11,5	25,5		57,5	66,0	41,0	15,0		8,0	15°						
W10	254,0					22,0	57,5	33,0	11,0		6,5							
W10A													27,0	11,0	6,5			
W10H																27,0	11,0	6,5
W10L																		
W11	279,5					66,0	41,0	15,0	8,0									
W11H											57,5		27,0	11,0	6,5			
W12	305,0					66,0	41,0	15,0	8,0									
W12A											57,5		27,0	11,0	6,5			
W13	330,0					66,0	41,0	15,0	8,0									
W13A											57,5		27,0	11,0	6,5			
W14L	±5,0	11,5	57,5	27,0		11,0	6,5											
W15A		16,0	66,0	41,0		15,0	8,0											
W15L		11,5	57,5	33,0		11,0	6,5											
W16A		16,0	66,0	41,0		15,0	8,0											
W16L		11,5		33,0		11,0												
W17L		432,0		41,0		15,0												
W18A		457,0		16,0		33,0		11,0										
W18L				11,5		33,0		11,0										

Nominal rim diameters 16 to 54 for W rims and 24 to 54 for DW and TW rims; see details in [Table 1](#) on 5° drop-centre rims.

NOTE 1 Where DW rims are specified, also the optional TW contour is allowed.

NOTE 2 Rim width guidelines:

- rim width codes to be in increments of 2,00 for width codes ≤ 48 ;
- rim width codes to be in increments of 4,00 for width codes > 48 .

Table 2 (continued)

Rim width code	A	A _{tol}	B _{min}	G ± 1,0	H _{min}	M _{max}	P _{min}	R ₂	R _{3,max}	R _{5,max}	α _{min}						
DW10	254,0	±2,5	11,5	25,5	20,5	54,0	27,0	11,0	6,5	14,5	15°						
DW11	279,5																
DW12	305,0																
DW13	330,0																
DW13L	330,0	±5,0			27,0	63,5	36,5		8,0								
DW14L	355,5																
DW15L	381,0																
DW16L	406,5				27,0	95,5	50,5										
DW17L	432,0																
DW18L	457,0																
DW10A	254,0	±2,5	16,0	25,5	20,5	66,0	41,0	15,0	8,0	14,5	15°						
DW11A	279,5					57,0											
DW12A	305,0					66,0											
DW13A	330,0					63,5											
DW14A	355,5	±5,0			27,0	66,0	36,5										
DW15A	381,0					63,5											
DW16A	406,5					66,0											
DW18A	457,0					41,0											
DW20B	508,0	±6,5				21,0	29,0					95,5	50,5	15,0	8,0	14,5	15°
DW21B	535,5																
DW23B	584,0																
DW24B	609,5																
DW25B	635,0																
DW27B	686,0																
DW28B	711,0																
DW30B	762,0																
DW31B	787,5																
DW36B	914,5																
DW44B	1 117,5																

Nominal rim diameters 16 to 54 for W rims and 24 to 54 for DW and TW rims; see details in [Table 1](#) on 5° drop-centre rims

NOTE 1 Where DW rims are specified, also the optional TW contour is allowed.

NOTE 2 Rim width guidelines:

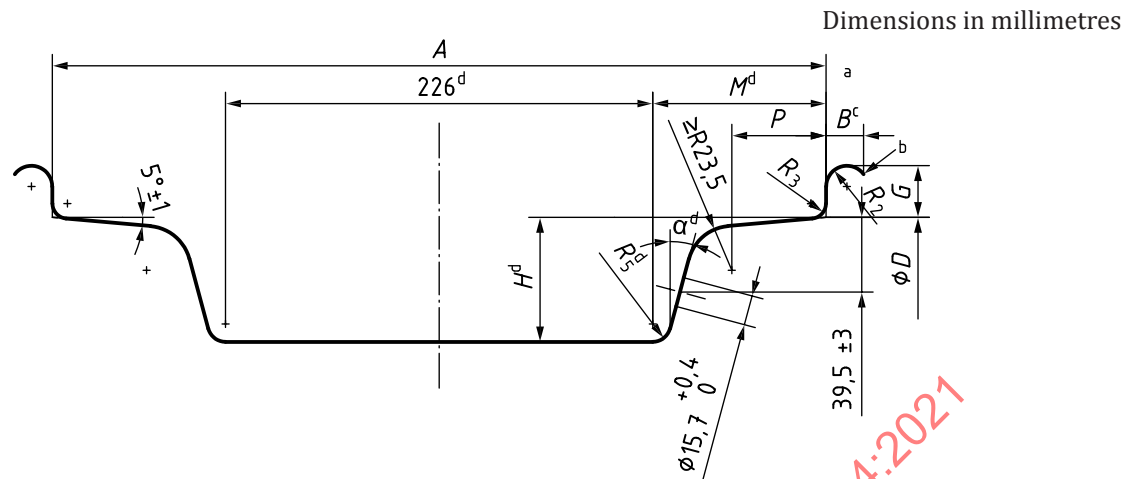
— rim width codes to be in increments of 2,00 for width codes ≤ 48;

— rim width codes to be in increments of 4,00 for width codes > 48.

6.2 Drop-centre DH rims

Dimensions and tolerances of drop-centre DH rims (includes all suffixes, for example, DH-H) shall be as given in [Table 3](#) and shown in [Figure 3](#).

The valve hole shall have a diameter of 15,7 mm $^{+0,4}_0$ with location shown in [Figure 4](#).



- a The tyre-mounting side is that side of the rim for which the dimension M is shown.
- b The break corner is equivalent to $R = 0,5$ min.
- c The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange. For suffix B, the contour can either follow a continuation of R_2 to full width or, if conical shaped, a minimum 30° angle applies between the upper G horizontal reference line.
- d These dimensions comprise the minimum well envelope for tyre-mounting purposes.

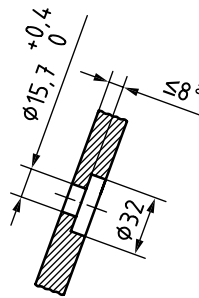
Figure 3 — Contour of DH rims

Table 3 — Dimensions of DH rims

Dimensions in millimetres

Rim width code	A	A _{tol}	B _{min}	G ± 1,0	H _{min}	M _{max}	P _{min}	R ₂	R _{3,max}	R _{5,max}	α _{min}	
DH21	533,5	±6,5	16,0	29,0	69,0	121,0	54,0	15,0	8,0	22,0	22°	
DH21H			21,0				60,0					
DH21HB			16,0				54,0					
DH27	686,0		16,0				60,0					
DH27H	21,0		54,0									
DH27HB	16,0		60,0									
DH31	787,5		16,0				54,0					
DH31H			21,0				60,0					
DH31HB			16,0				54,0					
DH36	914,5		16,0				60,0					
DH36H			21,0				54,0					
DH36HB			16,0				60,0					
DH44	1 117,5		16,0				54,0					
DH44H			21,0				60,0					
DH44HB			16,0				60,0					

Nominal rim diameters 32 and 46; see details in [Table 1](#) on 5° drop-centre rims.



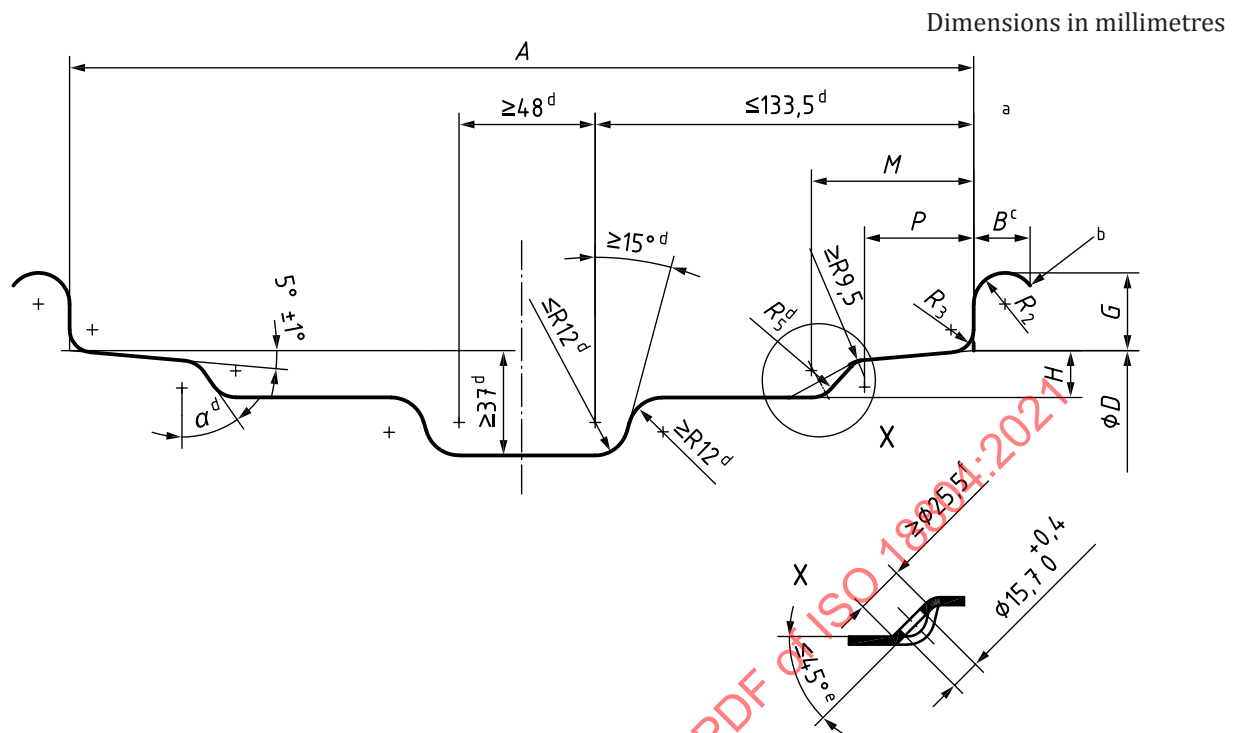
- ^a Maintain 8 maximum dimension by counterboring on the weather side of the rim only.

Figure 4 — Dimension of the valve holes in DH rims

6.3 Drop-centre MW rims

Dimensions and tolerances of drop-centre MW rims (includes all suffixes, for example, MW-A) shall be as given in [Table 4](#) and shown in [Figure 5](#).

The valve hole shall have a diameter of 15,7 mm $\begin{smallmatrix} +0,4 \\ 0 \end{smallmatrix}$ and may be on either side of the rim.



- a The tyre-mounting side is that side of the rim for which the dimension M is shown.
- b The break corner is equivalent to $R = 0,5 \text{ min}$.
- c The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange. For suffix B (e.g. MW23B), the contour can either follow a continuation of R_2 to full width or, if conical shaped, a minimum 30° angle applies between the upper G horizontal reference line.
- d These dimensions comprise the minimum well envelope for tyre-mounting purposes.
- e For any angle selected for a given rim, the tolerance is $\pm 5^\circ$.
- f Flat surface for valves.

Figure 5 — Contour of MW rims

Table 4 — Dimensions of MW rims

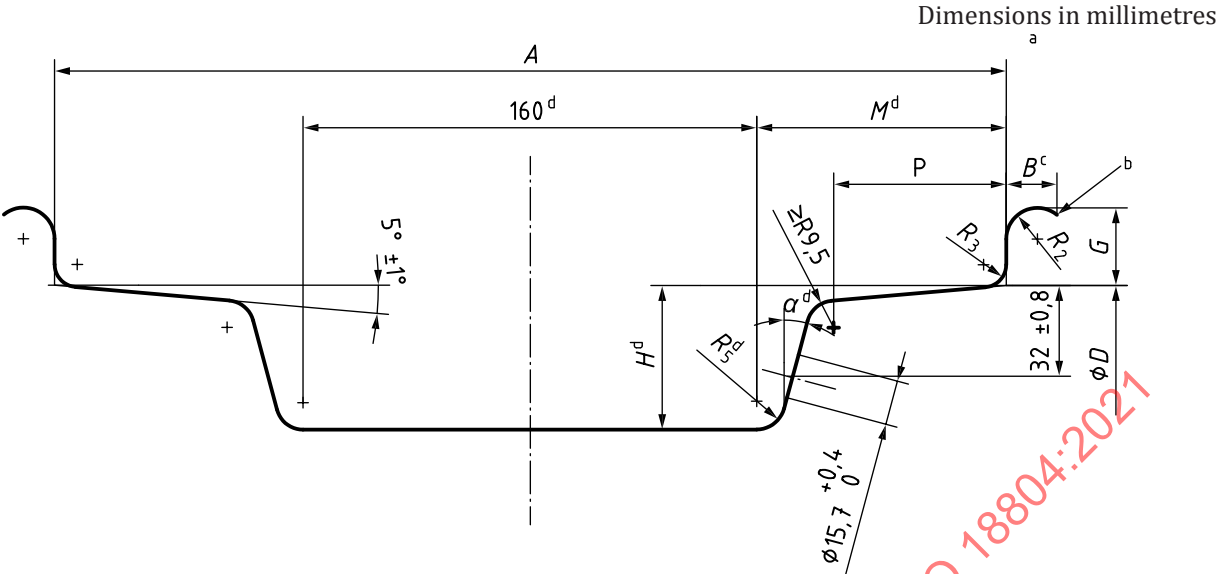
Dimensions in millimetres

Rim width code	A	A _{tol}	B _{min}	G ± 1,0	H _{min}	M _{max}	P _{min}	R ₂	R _{3,max}	R _{5,max}	α _{min}
MW20B	508,0	±6,5	21,0	29,0	19,0	95,5	50,5	15,0	8,0	14,5	15°
MW23B	584,0										
MW25B	635,0										
MW28B	711,0										
Nominal rim diameters 34 to 46; see details in Table 1 on 5° drop-centre rims.											

6.4 Drop-centre DD rims

Dimensions and tolerances of drop-centre DD rims shall be as given in Table 5 and shown in Figure 6.

The valve hole shall have a diameter of $15,7 \text{ mm}^{+0,4}_0$ and may be on either side of the rim.



- a The tyre-mounting side is that side of the rim for which the dimension M is shown.
- b The break corner is equivalent to $R = 0,5 \text{ min}$.
- c The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange.
- d These dimensions comprise the minimum well envelope for tyre-mounting purposes.

Figure 6 — Contour of DD rims

Table 5 — Dimensions of DD rims

Dimensions in millimetres											
Rim width code ^a	A	A_{tol}	B_{min}	$G \pm 1,0$	H_{min}	M_{max}	P_{min}	R_2	$R_{3,\text{max}}$	$R_{5,\text{max}}$	α_{min}
DD16	406,5	±5,0	16,0	25,5	71,0	152,5	41,0	15,0	8,0	57,0	15°
DD18	457,0										
^a Rims are also identified as DD..L. Nominal rim diameters 34 to 54; see details in Table 1 on 5° drop-centre rims.											

6.5 Other drop-centre rims

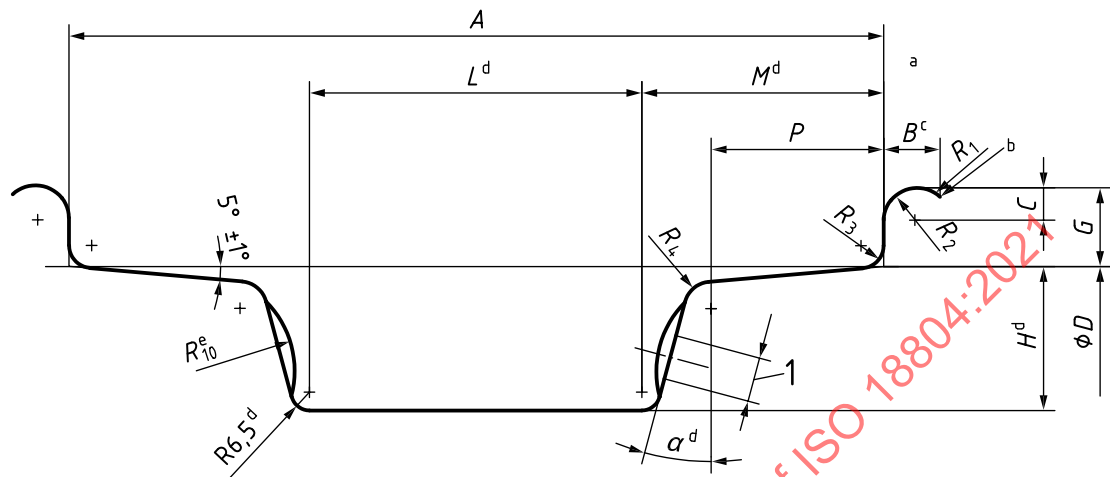
Dimensions and tolerances of other drop-centre rims shall be as given in [Table 6](#) and shown in [Figure 7](#). The normal location of valve holes in these rims is shown in [Figure 7](#). The valve hole may be on either side of the rim well. The valve hole diameter shall be:

- a) $15,7 \text{ mm}^{+0,4}_0$ for rims of nominal rim diameter code 15 and above;
- b) $15,7 \text{ mm}^{+0,4}_0$, optional $11,3 \text{ mm}^{+0,4}_0$ if there is technical difficulty, for rims of nominal rim diameter code 14 and below.

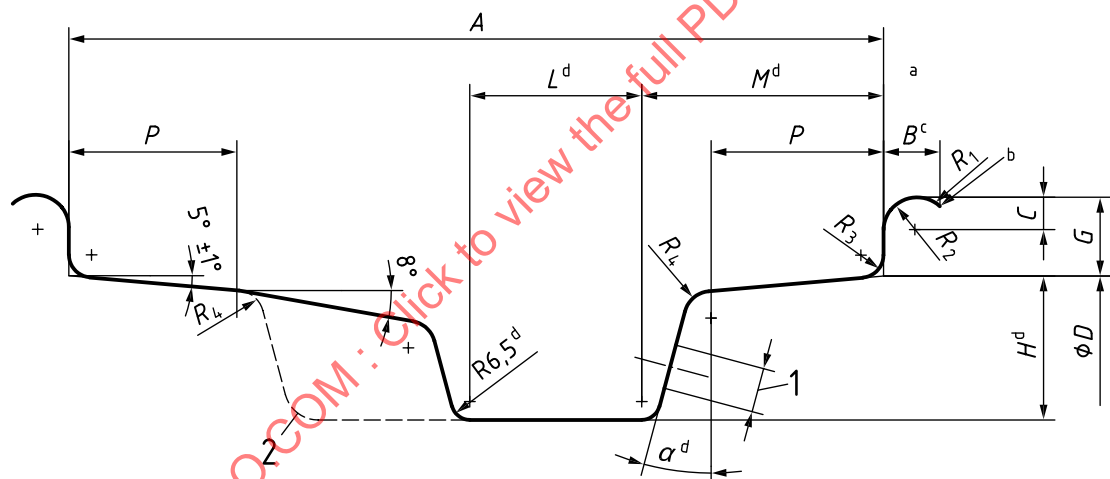
An optional location of valve holes in rims of diameter code 15 and above (valve hole diameter $15,7 \text{ mm}^{+0,4}_0$) is shown in [Figures 8, 9 and 10](#).

A valve hole in the corner of the well, as shown in Figure 9, is an optional location and provides valve-to-vehicle clearance. Valve seat angles of 15° to 50° are permissible. For any angle selected for a given rim, the tolerance is $\pm 5^\circ$.

Dimensions in millimetres



a) Rims for 4.00 E to 7 J A



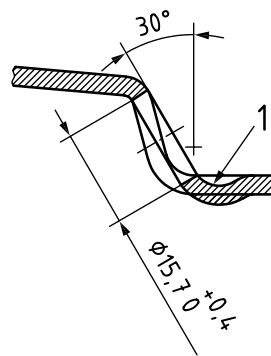
b) Rims for 9 to 16.00

Key

- 1 valve hole
- 2 alternative contour
- a The tyre-mounting side is that side of the rim for which the dimension M is shown.
- b The break corner is equivalent to $R = 0,5 \text{ min}$.
- c The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange.
- d These dimensions comprise the minimum well envelope for tyre-mounting purposes.
- e Optional.

Figure 7 — Contour of other drop-centre rims

Dimensions in millimetres

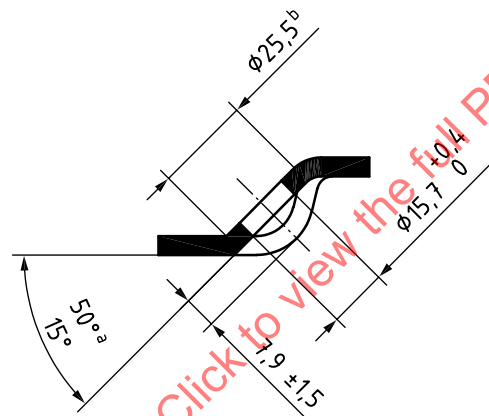


Key

- 1 local depression to clear valve head

Figure 8 — Optional location of 15,7 mm valve hole

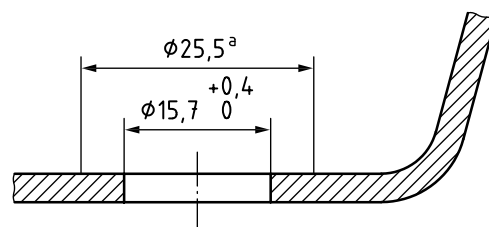
Dimensions in millimetres



- a For any angle selected for a given rim, the tolerance is $\pm 5^\circ$.
b Flat surface for valves.

Figure 9 — Location of valve hole in the corner of the well

Dimensions in millimetres



- a Flat surface for valves.

Figure 10 — Location of valve hole in the bottom of the well

Table 6 — Dimensions of other drop-centre rims

Dimensions in millimetres

Rim width code	A	A _{tol}	B _{min}	G±1,0	H ^a	C	L	M _{max}	P _{min}	R ₁	R ₂	R _{3,max}	R _{4,min}	R ₁₀	α ^a _{min}	Valve hole																			
2.50 A	63,5	±2,0	9,5	11,5	12,0	6,5	12,5	25,5	11,5	—	6,5	4,0	4,0	—	10°	See Figure 7, 8, or 9																			
2.50 C			11,0	16,5	13,5	11,5		25,5	12,0	7,5	12,0	3,5	6,0	28,5	13°																				
3.00 D ^b	76,0		11,5	18,0	18,0	12,5	17,5	29,0	14,0	8,0	13,0	6,5		32,0																					
3.50 D	89,0						19,0	34,0	15,5			35,0																							
3.75 I	95,5		10,0	16,0	22,0	9,0	25,0	35,0	14,0	—	9,0	4,5	6,0	—	10°																				
4.00 E	101,5		12,5	20,0	19,0	13,5	19,0		18,0	8,5	14,0	6,5		38,0																					
4 JA			8,5	16,0		8,0	23,0	38,5	17,5	—	8,0	5,5		15°	10°																				
4.25 KA	108,0		9,5	20,0	26,0	10,5	22,0	42,0	20,5	—	10,5	6,5																							
4.50 E	114,5		12,5		23,0	13,5		40,0	18,0		8,5						14,0																		
4 1/2 K			12,0		20,0	10,5	21,0	47,0	19,5	—	10,5		6,0		15°																				
4 1/2 KB			10,0				22,0	45,0																											
5.00 F	127,0		13,0	22,5	26,0	14,5	25,0	54,0	23,5	9,5	15,5	6,5																							
5 JA			8,5	16,0	19,0	8,0	48,0	38,5	17,5	—	8,0																								
5 K			12,0	20,0	20,0	10,5	21,0	47,0	19,5																										
5 KB			10,0					45,0																											
5.375 I	136,5		10,0	16,0	22,0	9,0	25,0	35,0	17,5		9,0	4,5	6,0		10°																				
5.50 F	139,5		13,0	22,5	26,0	14,5		54,0	23,5	9,5	15,5	6,5	6,0		15°																				
5 1/2 K			12,0	20,0	20,0	10,5	21,0	47,0	19,5	—	10,5																								
5 1/2 KB			10,0	19,5			25,0	45,0			7,0	6,0			10°																				
6.00 F	152,5		±2,5	13,0	22,5	26,0	25,0	54,0	23,5	9,5	15,5				6,5		6,0	15°																	
6 KB			±2,0	10,0	19,5	20,0	22,0	45,0	19,5	6,5	10,5	7,0	4,0		10°																				
6 L			±2,5	12,5	26,0	11,0		28,5	23,5	9,5	12,0	6,5			15°																				
6 LB				10,0	27,0				25,0	7,0		6,0	—	10°	See Figure 7 or 9																				
7.00	178,0		12,0	20,5	31,0	9,0	30,0	60,0	19,5	—	11,0			4,5			10°																		
7.00 I			±2,0	10,0	16,0	22,0	25,0	35,0	17,5		9,0						10°	See Figure 7 or 8																	
7 JA				8,5	16,0	19,0	8,0	99,0	38,5		8,0			5,5	15°																				
7 KB			±2,5	19,5	20,0	11,0	25,0	45,0	19,5	6,5	10,5	7,0	6,0	10°	See Figure 7 or 9																				
7 LB	203,0			22,0	27,0	11,0	28,5	54,0	25,0	7,0	12,0	6,5																							
8.00 I	216,0		±2,0	10,0	16,0	22,0	25,0	35,0	17,5	—	9,0	4,5																							
8 KB	±2,5			19,5	20,0	11,0		45,0	19,5	6,5	10,5	7,0																							
8 LB			22,0	27,0	28,5	54,0	25,0	7,0	12,0	6,5	6,0	10°	See Figure 7 or 9																						
8.50 I	216,0		±2,0	10,0	16,0	22,0	25,0	35,0	17,5						9,0	4,5																			
8 1/2 JA	216,0			8,5	16,0	19,0	8,0	138,0	38,5	8,0					5,5																				
9	228,5	±2,5	10,0	25,5	31,0	11,0	50,0	60,0	27,0	—			11,0		6,5	15°																			
9 1/2 JA	241,0	±2,0	8,5	16,0	19,0	8,0	163,0	38,5	17,5				8,0		5,5																				
10 LB	254,0	±2,5	10,0	22,0	27,0	11,0	28,5	54,0	25,0	7,0	12,0	6,5	6,0	10°	See Figure 7 or 9																				
10 1/2 JA	267,0	±2,0	8,5	16,0	19,0	8,0	99,0	38,5	17,5	—	8,0	5,5																							
11	279,5	±2,5	10,0	25,5	31,0	11,0	60,0	65,0	31,5		11,0	6,5																							
12 LB	305,0			22,0	27,0	12,0	28,5	54,0	25,0	7,0	12,0	7,0			10°																				
13.00	330,0	±2,5	12,0	19,0	31,0	11,0	61,0	65,0	30,0	—	11,0	6,5	6,0	—	15°	See Figure 7 or 9																			
13				25,5			90,0		31,5																										
13 LB			10,0	22,0	27,0	12,0	28,5	54,0	25,0	7,0	12,0	7,0			10°																				
14.00	355,5			25,5	31,0		90,0	65,0	31,5	—	6,5	15°																							

^a Larger values may be required to ensure sufficient space for tubeless tyre valve seating.^b For rim width codes 3,00 B, 4 J, 4 1/2 J and 5 1/2 J, see ISO 4000-2.

Nominal rim diameters 4 to 24; see details in Table 1 on 5° drop-centre rims.

6.6 Semi-drop-centre rims (multi-piece)

Dimensions and tolerances of semi-drop-centre rims shall be as given in Table 7 and shown in Figure 11.

The location of valve holes is shown in Figure 12.

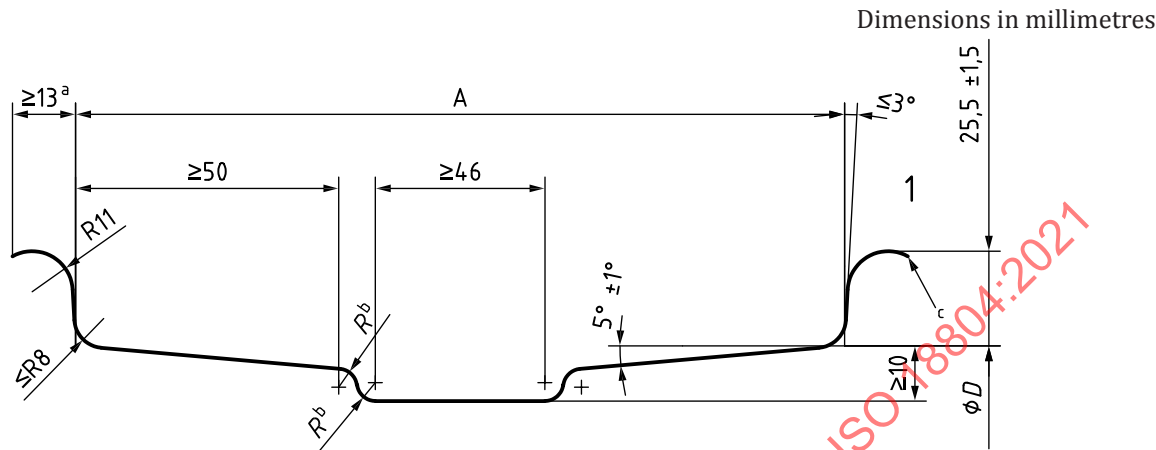
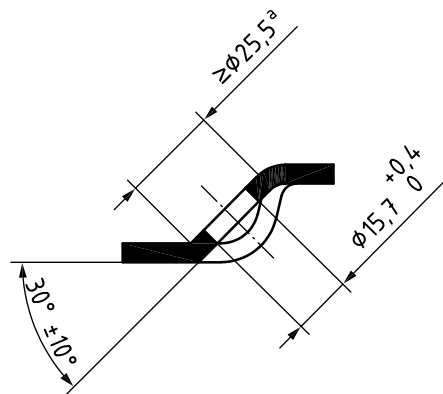


Figure 11 — Contour of semi-drop-centre rims (multi-piece)

Table 7 — Dimensions of semi-drop-centre rims (multi-piece)

Dimensions in millimetres		
Rim width code	A	tol.
11	279,5	±5,0
12	305,0	±6,5
13	330,0	
For nominal rim diameters see Table 1 on semi-drop-centre rims (multi-piece).		



a Flat surface for valves.

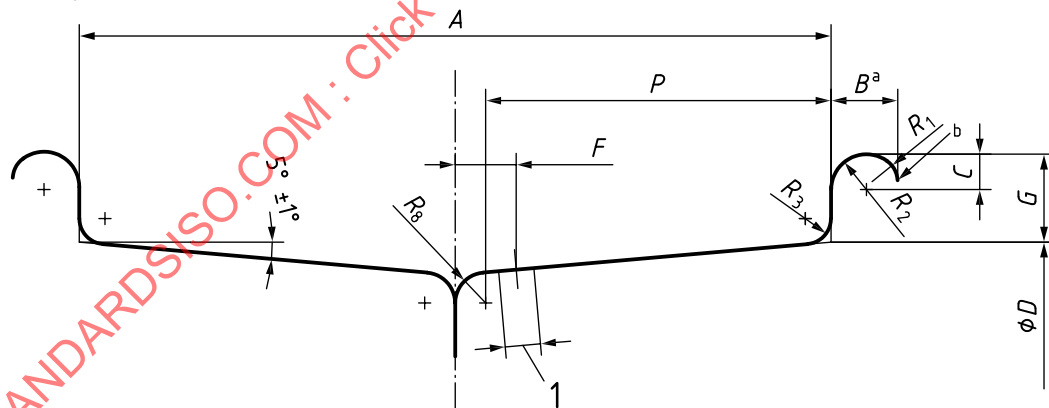
Figure 12 — Location of valve holes in semi-drop-centre rims

6.7 Divided rims

Dimensions and tolerances of divided rims shall be as given in Table 8 and shown in Figure 13.

The location of valve holes is shown in Figure 13. The valve hole diameter shall be:

- a) 15,7 mm $\begin{smallmatrix} +0,4 \\ 0 \end{smallmatrix}$ for rims of nominal rim diameter code 15 and above;
- b) 11,3 mm $\begin{smallmatrix} +0,4 \\ 0 \end{smallmatrix}$ for rims of nominal rim diameter code 14 and below.



Key

- 1 valve hole
- a The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange.
- b The break corner is equivalent to $R = 0,5$ min.

Figure 13 — Contour of divided rims

Table 8 — Dimensions of divided rims

Dimensions in millimetres

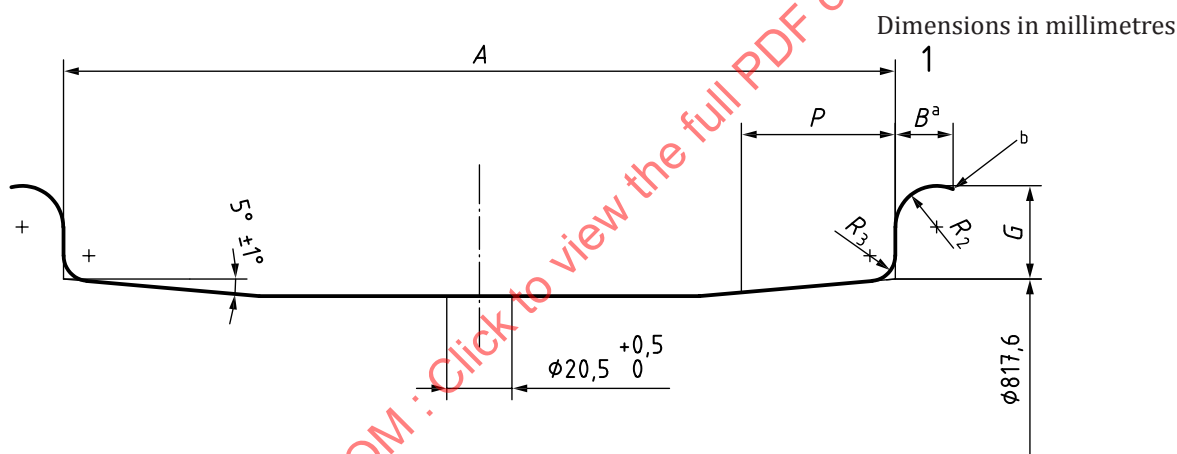
Rim width code	$A \pm 2,0$	$B_{\min}$	$G \pm 1,0$	C	$P_{\min}$	R_1	R_2	$R_{3,\max}$	$R_{8,\max}$	$F_{\min}$	$F_{\max}$
2.50 C	63,5	11,0	16,5	11,5	12,0	7,5	12,0	3,5	5,0	9,0	14,0
3.00 D	76,0	11,5	18,0	12,5	14,0	8,0	13,0	6,5	10,0	11,0	
4.00 E	101,5	12,5	20,0	13,5	25,0	8,5	14,0			12,0	16,0
5.00 F	127,0	13,0	22,5	14,5	23,5	9,5	15,5		12,0	11,0	21,0
5.50 F	139,5									20,0	26,0
5 1/2 K		12,0	20,0	10,5	19,5	—	10,5		9,5	13,0	17,5
6.00 F	152,5	13,0	22,5	14,5	23,5	9,5	15,5		12,0	20,0	26,0

For nominal rim diameters see [Table 1](#) on divided rims.

For nominal rim diameters see Table 1 on divided rims.

6.8 5° and 3° flat base rims (multi-piece) — DWM, VF and HF

Dimensions and tolerances of flat base rims shall be as given in Tables 9, 10, and 11 and shown in Figures 14, 15 and 16.



Key

- 1 flange and bead seat removable on this side of rim
- a The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange. The contour can either follow a continuation of R_2 to full width or, if conical shaped, a minimum 30° angle applies between the upper G horizontal reference line.
- b The break corner is equivalent to $R = 0,5 \text{ min}$.

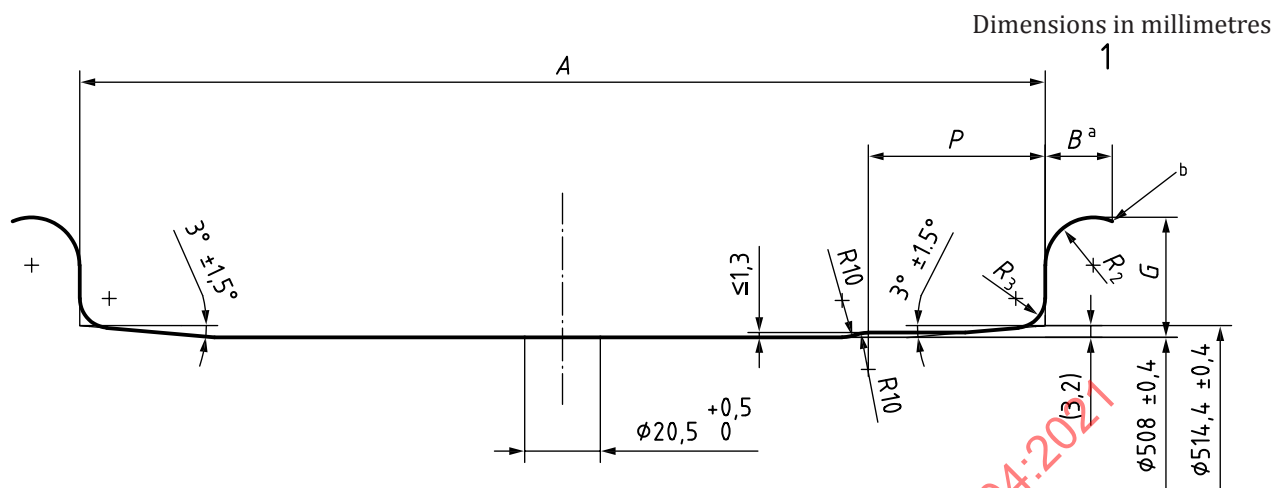
Figure 14 — Contour of flat base DWM rims

Table 9 — Dimensions of flat base DWM rims

Dimensions in millimetres

Rim width code	A	A_{tol}	$B_{\min}$	$G \pm 1,0$	$P_{\min}$	R_2	$R_{3,\max}$
31DWM	787,5	$\pm 6,5$	21,0	29,0	59,7	15,0	8,0
36DWM	914,5						
44DWM	1 117,5						

Nominal rim diameter 32; see details in Table 1 on flat base rims and full tapered bead seat rims.



Key

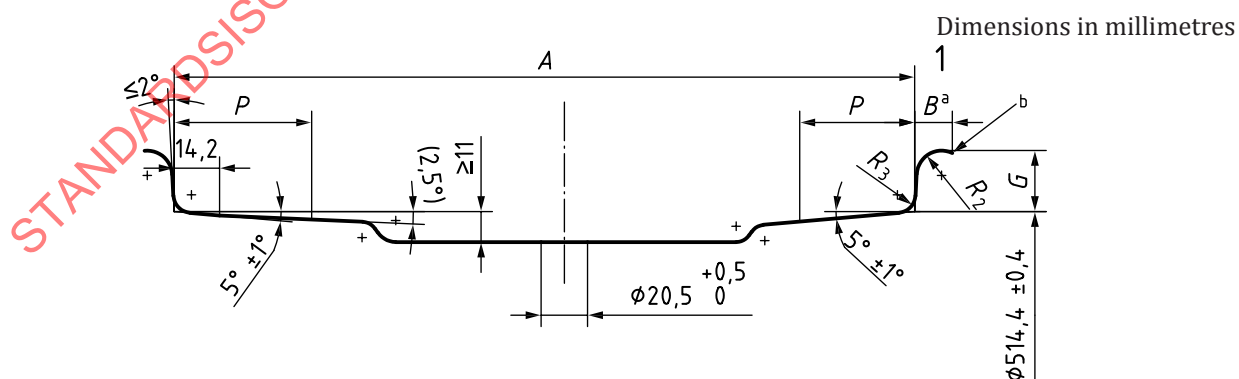
- 1 flange and bead seat removable on this side of rim
- a The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange.
- b The break corner is equivalent to $R = 0,5$ min.

Figure 15 — Contour of flat base VF rims

Table 10 — Dimensions of flat base VF rims

Dimensions in millimetres							
Run with code	A	A_{tol}	B_{min}	$G \pm 1,2$	P_{min}	R_2	$R_{3,max}$
20.50VF	520,5						
26.00VF	660,5	±3,2	25,5	44,5	45,7	27,0	8,0
36.00VF	914,5						

Nominal rim diameter 20; see details in [Table 1](#) on flat base rims and full tapered bead seat rims.



Key

- 1 flange and bead seat removable on this side of rim
- a The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange.
- b The break corner is equivalent to $R = 0,5$ min.

Figure 16 — Contour of flat base HF rims

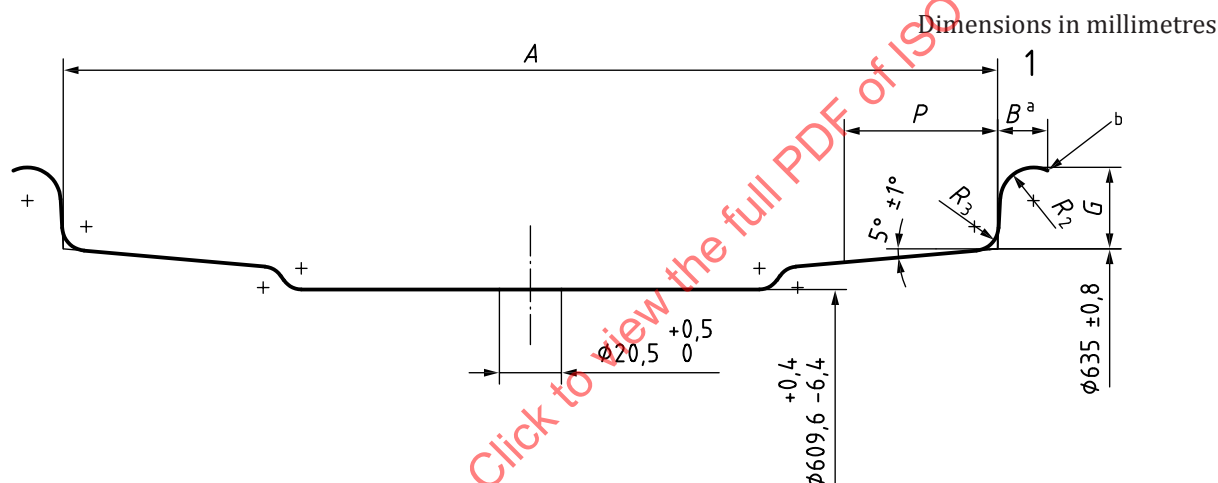
Table 11 — Dimensions of flat base HF rims

Dimensions in millimetres

Rim width code	A	A_{tol}	B_{min}	$G \pm 1,2$	P_{min}	R_2	$R_{3,\text{max}}$
10.00HF	254,0	$\pm 3,2$	24,6	43,2	59,7	22,9	8,0
20.50HF	520,5						
26.00HF	660,5						
36.00HF	914,5						
Nominal rim diameter 20; see details in Table 1 on flat base rims and full tapered bead seat rims.							

6.9 Full tapered bead seat rims (multi-piece) — TH

Dimensions and tolerances of full tapered bead seat rims shall be as given in [Table 12](#) and shown in [Figure 17](#).



Key

- 1 flange and bead seat removable on this side of rim
- a The flange width includes the edge radius. The portion of flange beyond the minimum width shall be lower than the highest point of the flange.
- b The break corner is equivalent to $R = 0,5 \text{ min}$.

Figure 17 — Contour of full tapered bead seat rims**Table 12 — Dimensions of full tapered bead seat rims**

Dimensions in millimetres

Rim width code	A	A_{tol}	B_{min}	$G \pm 1,2$	P_{min}	R_2	$R_{3,\text{max}}$
30.0TH	762,0	$\pm 6,4$	27,2	38,1	59,7	25,4	8,0
36.0TH	914,5						
Nominal rim diameter 25; see details in Table 1 on flat base rims and full tapered bead seat rims.							

6.10 AG 15° drop-centre rims

Dimensions and tolerances of AG 15° drop-centre rims shall be as given in [Table 13](#) and shown in [Figure 18](#).

1 optional hump contour

- 1 optional hump contour
a The tyre-mounting side is that side of the rim for which the dimension 70 maximum is shown.
b The break corner is equivalent to $R = 0,5 \text{ min.}$
c The flange width includes the edge radius.
d These dimensions comprise the minimum well envelope for tyre-mounting purposes.

Figure 18 — Contour of AG 15° drop-centre rims

Table 13 — Dimensions of AG 15° drop-centre rims

Dimensions in millimetres

Rim width code	Nominal diameter codes	$A \pm 5,0$	$B_{\min} - B_{\max}$	$h_{\min}$	$L_{\min}$	$P_{\min}$	Optional hump location <i>E</i>
AG7.50	19.5	190,5	19 – 29	10	30	34	—
AG8.25	19.5	209,5	18 – 27	10	30	34	—
AG11.75	19.5, 22.5	298,5	19 – 29	11	50	34	32 min.
AG13.00	19.5, 22.5, 26.5	330	19 – 29	11	50	34	
AG14.00	19.5, 22.5	355,5	19 – 29	11	50	34	
AG16.00	22.5, 26.5	406,5	19 – 29	11	50	34	36 min.
AG20.00	22.5, 24.5, 26.5, 30.5	508	19 – 29	11	50	44	
AG22.00	22.5, 24.5, 26.5, 30.5	559	19 – 29	11	50	44	
AG24.00	22.5, 24.5, 26.5, 28.5, 30.5	609,5	19 – 29	11	50	44	
AG26.00	26.5, 28.5	660,5	19 – 29	11	50	44	
AG28.00	26.5, 30.5	711	19 – 29	11	50	44	

Nominal rim diameters 19.5 to 30.5 see details in [Table 1](#) on 15° drop-centre rims.

H2 marking to follow the rim width code designation when optional humps are added to both bead seats (e.g. “AG16.00H2”).

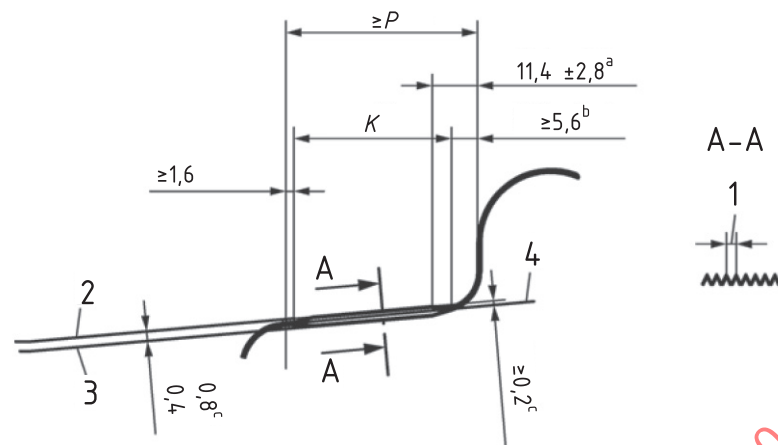
7 Rim knurling

Transverse knurling on bead seats is shown in [Figure 19](#) for W, DW, TW, DH, MW, DD, and DWM rims. The rim knurling application and width are shown in [Tables 14](#) and [15](#). The pitch of knurling shall be 1,6 to 3,2.

Table 14 — Rim knurling application

Rim width code	Rim diameter code	
	< 24	24 and above
Up to rim code 13	optional	optional
Rim code 14 and above	optional	mandatory

Dimensions in millimetres



Key

- 1 knurl pitch
- 2 knurl crest
- 3 knurl root
- 4 bead seat surface
- K full knurl width
- ^a To full knurl height.
- ^b To knurl lead-in taper.
- ^c The knurl crest shall not be below bead seat surface.

Figure 19 — Bead seat knurling

Table 15 — Rim knurling width

$P_{\min}$	Full knurl width $K_{\min}$
< 33	10,2
33 to 41,3	20,6
> 41,3	25,4