



# TYRE DATA BOOKLET

**305/680-18 DHF**

**305/680-18 WH**

**2022 | 2023**

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# ***INTRODUCTION***

## **INTRODUCTION**

This document provides the user with technical information regarding several aspects of the tyre characteristics. The data was acquired using indoor testing methods on physical tyres.

For individual car fitments, usage guidelines and prescriptions for camber and pressure please refer to the relevant Pirelli Technical Booklet, which is included as part of this Pirelli Data Package.



## STATIC MEASUREMENTS

Slick Tyres				
Size & Fitment	Nominal Weight	Max Width (C)	Circumference ( $\pi D$ )	Tread Width (Cb)
	(kilograms)	(mm)	(mm)	(mm)
<b>305/680-18</b> <b>DHF</b> <b>18"x11.0J</b>	11.2	311	2152	283
<b>305/680-18</b> <b>DHF</b> <b>18"x10.5J</b>	11.2	304	2150	283

Wet Tyres				
Size & Fitment	Nominal Weight	Max Width (C)	Circumference ( $\pi D$ )	Tread Width (Cb)
	(kilograms)	(mm)	(mm)	(mm)
<b>305/680-18</b> <b>WH</b> <b>18"x11.0J</b>	13.5	309	2149	280



**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

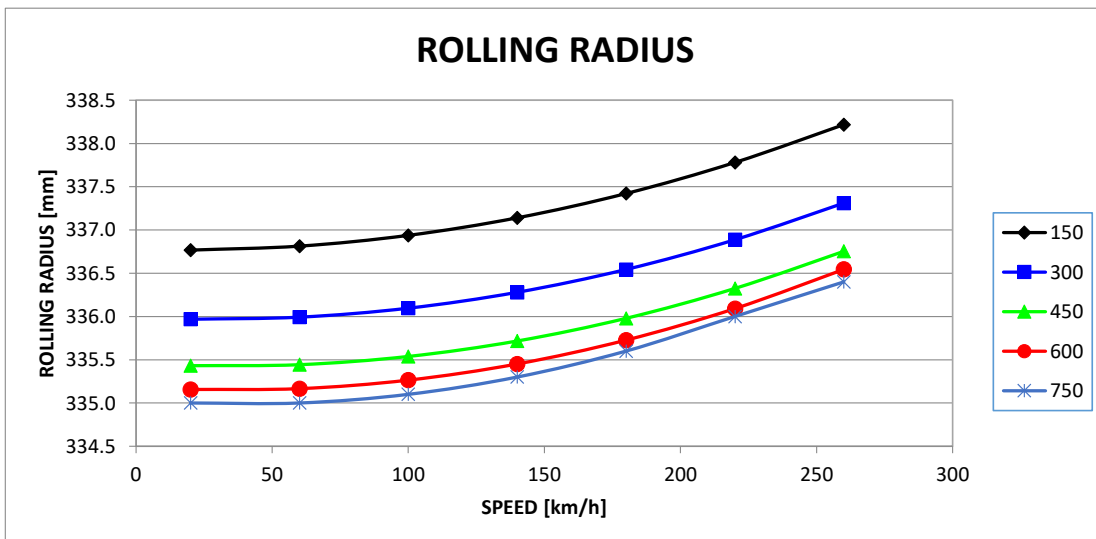
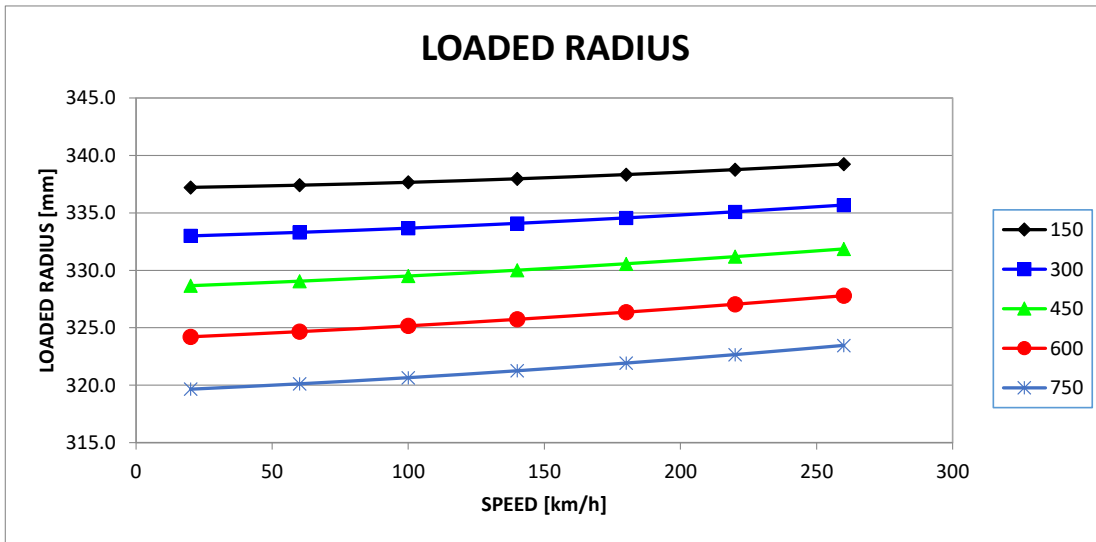
305/680-18x10.5J DHF

**LOADED RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	337.2	333.0	328.7	324.2	319.7
	60	337.4	333.3	329.1	324.7	320.1
	100	337.7	333.7	329.5	325.2	320.7
	140	338.0	334.1	330.0	325.7	321.3
	180	338.3	334.6	330.6	326.4	321.9
	220	338.8	335.1	331.2	327.0	322.7
	260	339.2	335.7	331.9	327.8	323.5
	280					
	300					

**ROLLING RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	336.8	336.0	335.4	335.2	335.0
	60	336.8	336.0	335.4	335.2	335.0
	100	336.9	336.1	335.5	335.3	335.1
	140	337.1	336.3	335.7	335.5	335.3
	180	337.4	336.5	336.0	335.7	335.6
	220	337.8	336.9	336.3	336.1	336.0
	260	338.2	337.3	336.8	336.5	336.4
	280					
	300					





**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

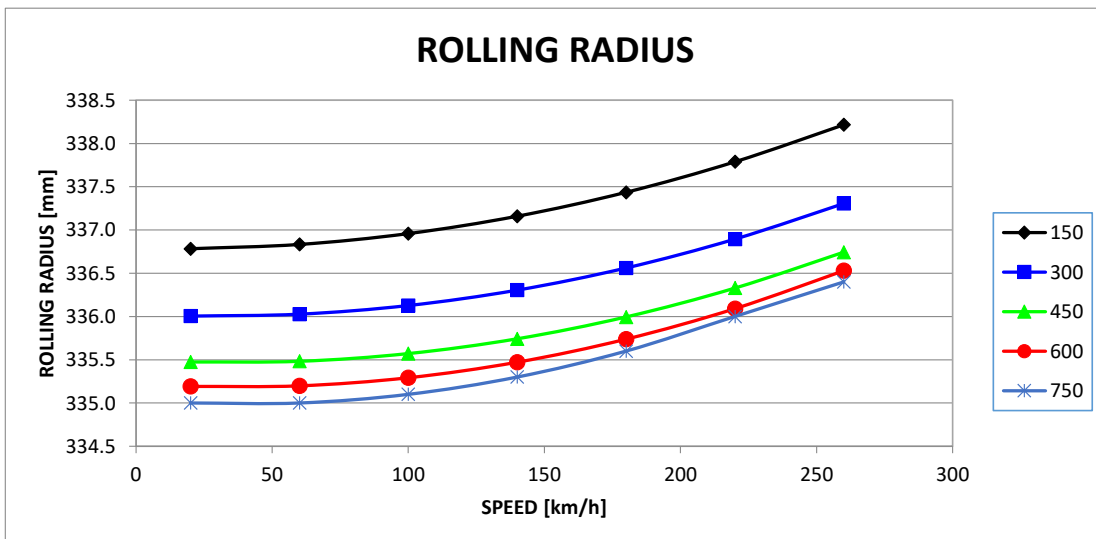
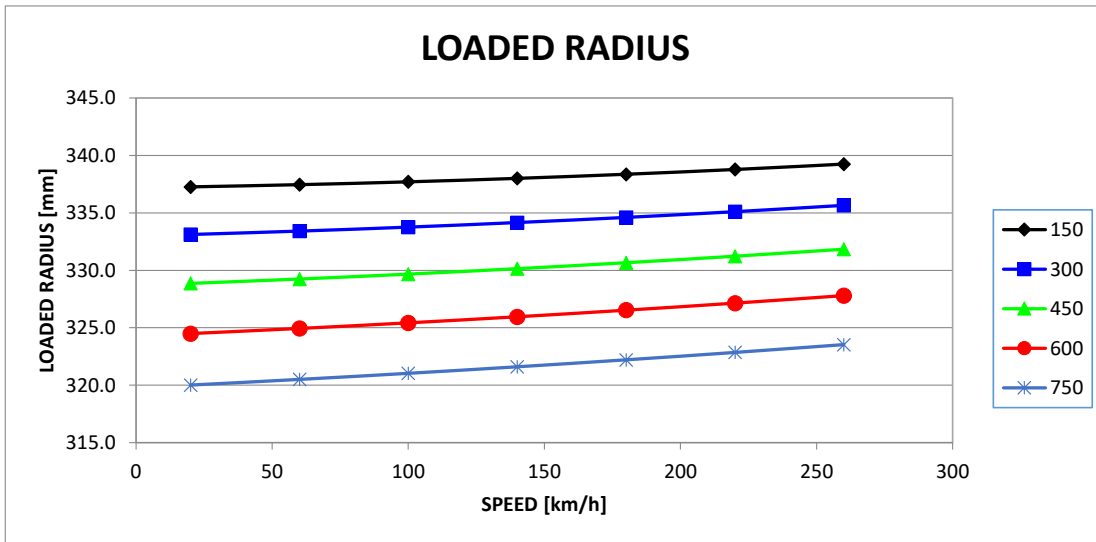
305/680-18x11.0J DHF

**LOADED RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	337.3	333.1	328.9	324.5	320.0
	60	337.5	333.4	329.2	324.9	320.5
	100	337.7	333.8	329.7	325.4	321.0
	140	338.0	334.2	330.1	326.0	321.6
	180	338.4	334.6	330.7	326.5	322.2
	220	338.8	335.1	331.2	327.1	322.9
	260	339.2	335.7	331.8	327.8	323.5
	280					
	300					

**ROLLING RADIUS**

		LOAD [kg]				
		150	300	450	600	750
SPEED [km/h]	20	336.8	336.0	335.5	335.2	335.0
	60	336.8	336.0	335.5	335.2	335.0
	100	337.0	336.1	335.6	335.3	335.1
	140	337.2	336.3	335.7	335.5	335.3
	180	337.4	336.6	336.0	335.7	335.6
	220	337.8	336.9	336.3	336.1	336.0
	260	338.2	337.3	336.7	336.5	336.4
	280					
	300					





**DYNAMIC MEASUREMENTS @ 2.0bar (29psi), CA 0.0°**

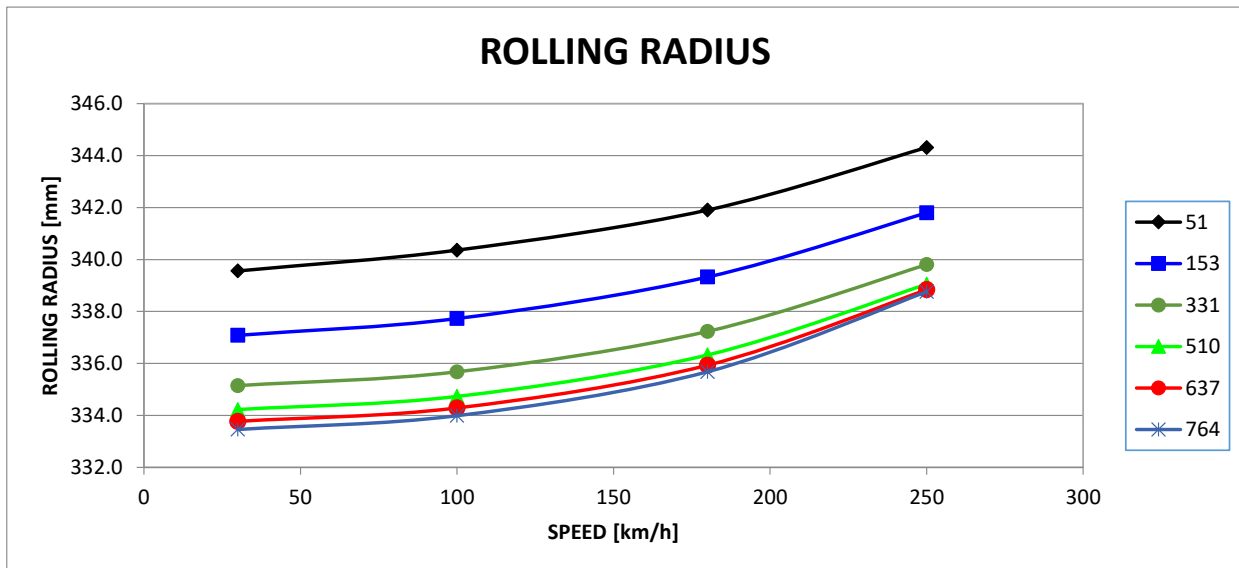
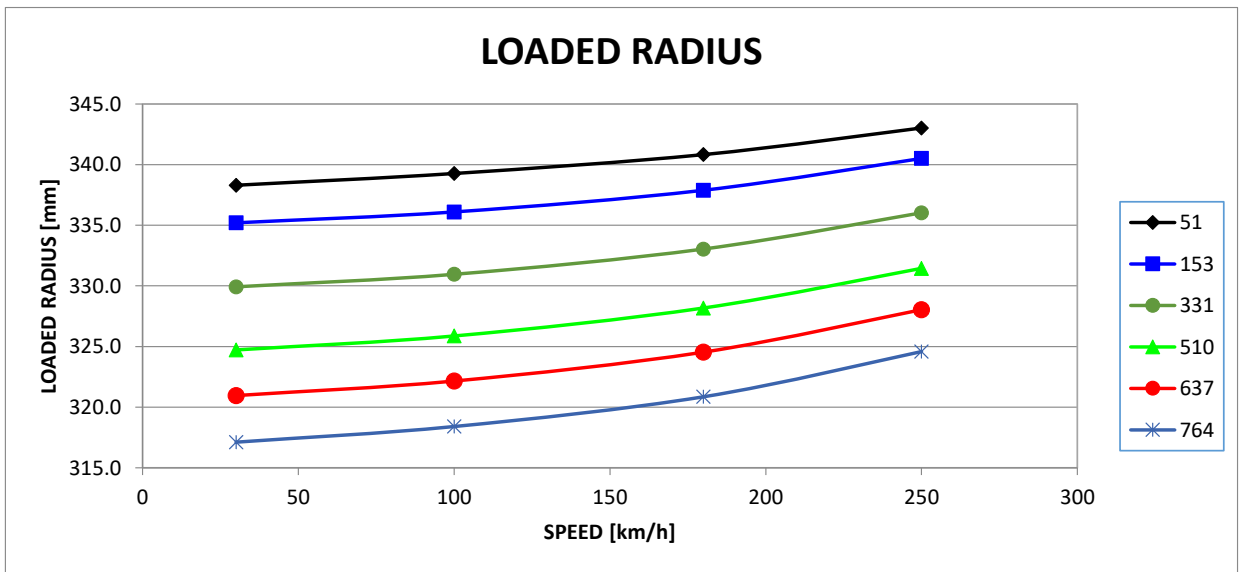
**305/680-18x11.0J WH**

**LOADED RADIUS**

		LOAD [kg]					
		51	153	331	510	637	764
SPEED [km/h]	30	338.3	335.2	329.9	324.7	321.0	317.1
	100	339.3	336.1	331.0	325.9	322.2	318.4
	180	340.8	337.9	333.0	328.2	324.5	320.9
	250	343.0	340.5	336.0	331.4	328.0	324.6

**ROLLING RADIUS**

		LOAD [kg]					
		51	153	331	510	637	764
SPEED [km/h]	30	339.6	337.1	335.1	334.2	333.8	333.5
	100	340.4	337.7	335.7	334.7	334.3	334.0
	180	341.9	339.3	337.2	336.3	335.9	335.7
	250	344.3	341.8	339.8	339.0	338.8	338.8



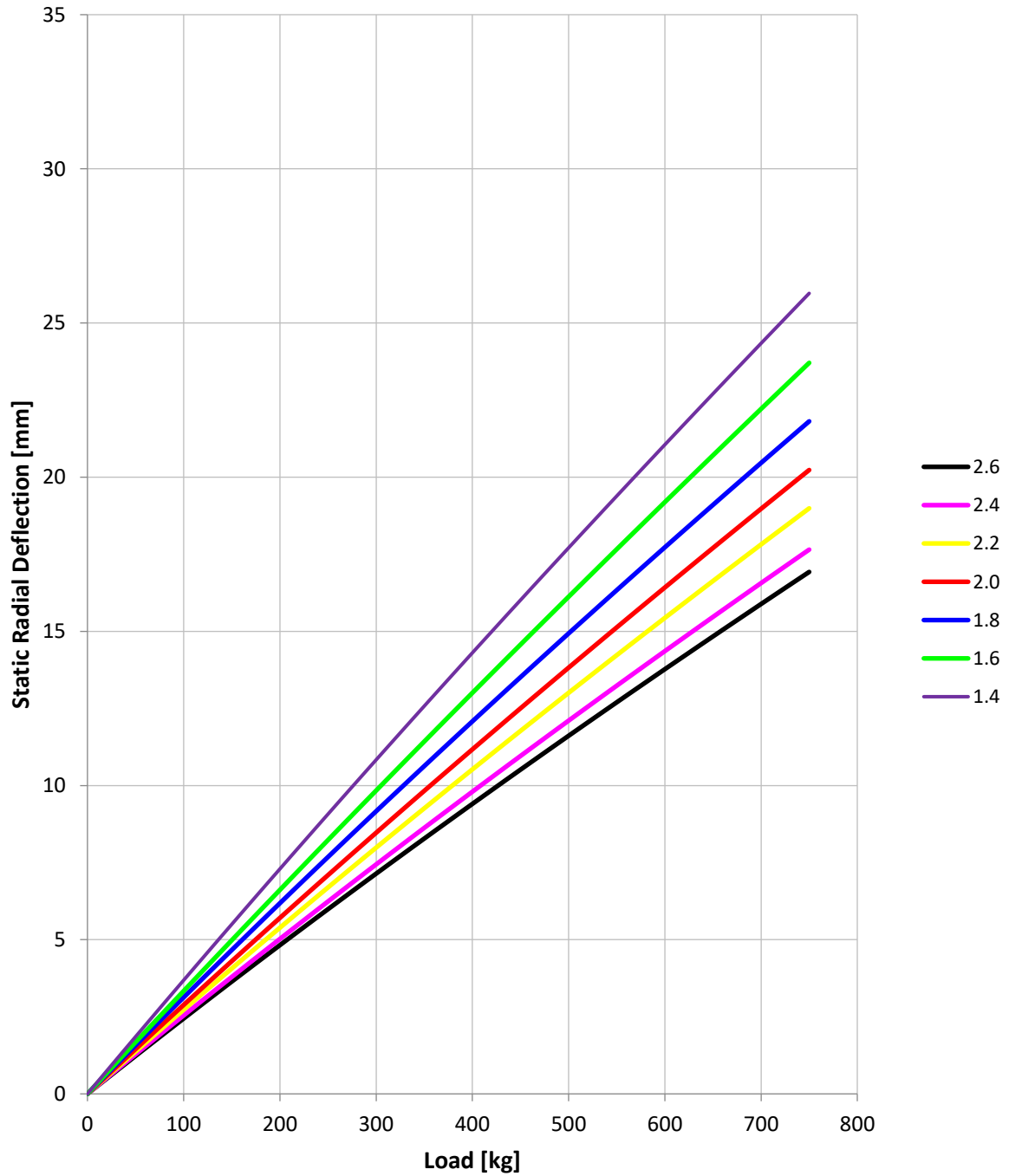


**STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA 0.0 ° DHF**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.6	0.6	0.7	0.7	0.8	0.8	0.9
50	1.2	1.3	1.4	1.5	1.6	1.7	1.9
75	1.8	1.9	2.1	2.2	2.4	2.5	2.8
100	2.4	2.5	2.7	2.9	3.1	3.3	3.7
125	3.0	3.2	3.4	3.6	3.9	4.2	4.6
150	3.6	3.8	4.1	4.3	4.7	5.0	5.5
175	4.2	4.4	4.7	5.0	5.4	5.8	6.4
200	4.8	5.0	5.4	5.7	6.2	6.6	7.3
225	5.4	5.6	6.0	6.4	6.9	7.4	8.2
250	6.0	6.2	6.7	7.1	7.7	8.2	9.1
275	6.6	6.8	7.3	7.8	8.4	9.0	10.0
300	7.1	7.4	8.0	8.5	9.2	9.8	10.8
325	7.7	8.0	8.6	9.1	9.9	10.6	11.7
350	8.3	8.6	9.3	9.8	10.6	11.4	12.6
375	8.8	9.2	9.9	10.5	11.4	12.2	13.4
400	9.4	9.8	10.5	11.2	12.1	13.0	14.3
425	10.0	10.4	11.1	11.8	12.8	13.8	15.2
450	10.5	11.0	11.8	12.5	13.5	14.6	16.0
475	11.1	11.5	12.4	13.2	14.2	15.3	16.9
500	11.6	12.1	13.0	13.8	14.9	16.1	17.7
525	12.2	12.7	13.6	14.5	15.6	16.9	18.6
550	12.7	13.2	14.2	15.1	16.3	17.7	19.4
575	13.2	13.8	14.8	15.8	17.0	18.4	20.2
600	13.8	14.4	15.4	16.4	17.7	19.2	21.1
625	14.3	14.9	16.0	17.1	18.4	20.0	21.9
650	14.8	15.5	16.6	17.7	19.1	20.7	22.7
675	15.4	16.0	17.2	18.3	19.8	21.5	23.5
700	15.9	16.6	17.8	19.0	20.5	22.2	24.3
725	16.4	17.1	18.4	19.6	21.1	23.0	25.2
750	16.9	17.7	19.0	20.2	21.8	23.7	26.0
775							
800							



**STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA 0.0° DHF**





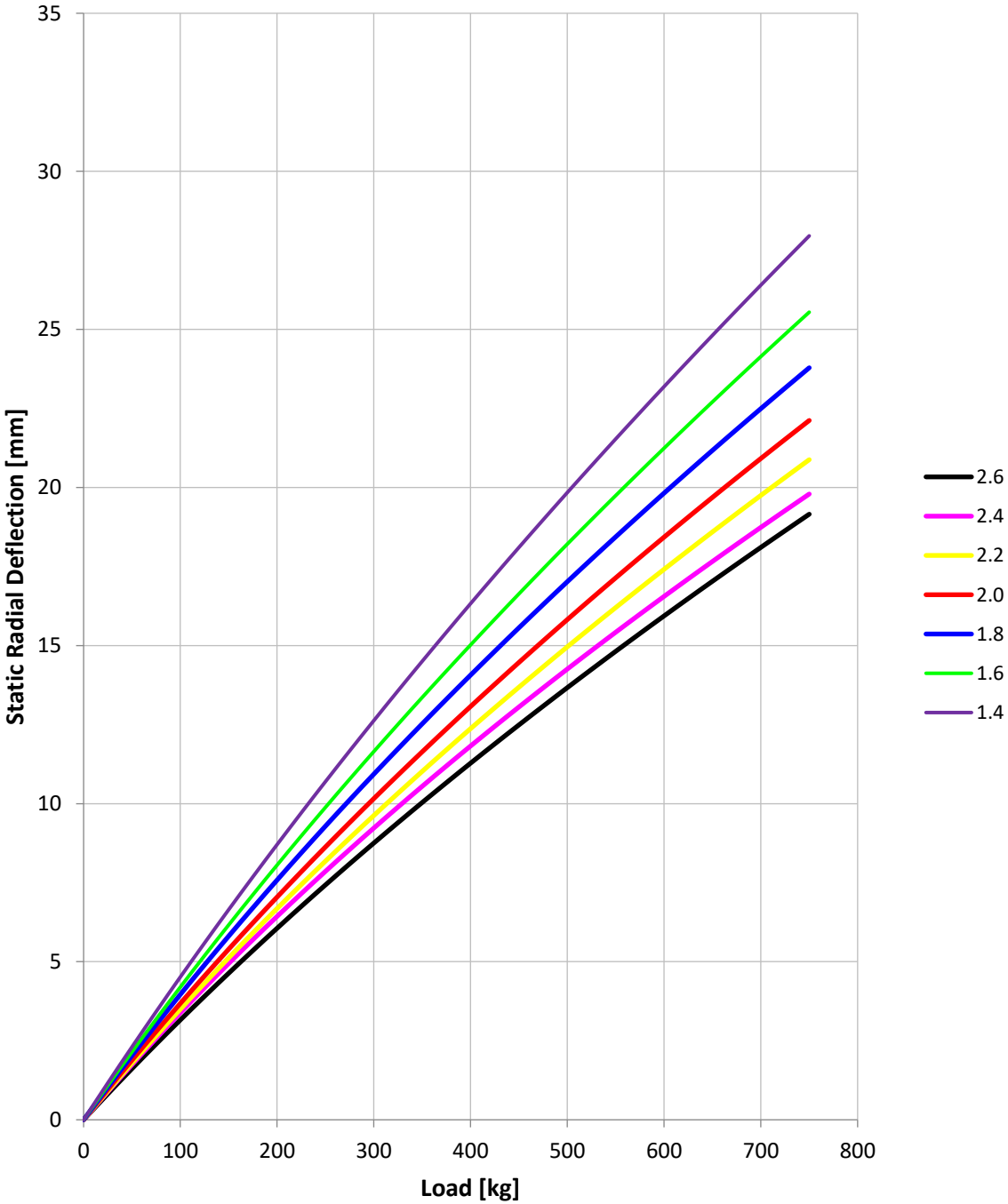


**STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA -3.0 ° DHF**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.8	0.9	0.9	1.0	1.0	1.1	1.2
50	1.6	1.7	1.8	1.9	2.0	2.1	2.3
75	2.4	2.6	2.7	2.8	3.0	3.2	3.4
100	3.2	3.4	3.5	3.7	4.0	4.2	4.5
125	3.9	4.2	4.3	4.6	4.9	5.2	5.6
150	4.6	4.9	5.1	5.4	5.8	6.2	6.6
175	5.4	5.7	5.9	6.2	6.7	7.1	7.7
200	6.1	6.4	6.7	7.0	7.6	8.1	8.7
225	6.8	7.2	7.4	7.8	8.4	9.0	9.7
250	7.4	7.9	8.2	8.6	9.3	9.9	10.7
275	8.1	8.6	8.9	9.4	10.1	10.8	11.7
300	8.8	9.2	9.6	10.2	10.9	11.7	12.6
325	9.4	9.9	10.3	10.9	11.7	12.5	13.6
350	10.0	10.5	11.0	11.6	12.5	13.4	14.5
375	10.7	11.2	11.7	12.4	13.3	14.2	15.4
400	11.3	11.8	12.4	13.1	14.1	15.0	16.3
425	11.9	12.4	13.0	13.8	14.8	15.8	17.2
450	12.5	13.1	13.7	14.5	15.6	16.6	18.1
475	13.1	13.7	14.3	15.2	16.3	17.4	19.0
500	13.7	14.3	15.0	15.8	17.0	18.2	19.8
525	14.2	14.8	15.6	16.5	17.7	19.0	20.7
550	14.8	15.4	16.2	17.1	18.4	19.7	21.5
575	15.4	16.0	16.8	17.8	19.1	20.5	22.4
600	15.9	16.6	17.4	18.4	19.8	21.2	23.2
625	16.5	17.1	18.0	19.1	20.5	22.0	24.0
650	17.0	17.7	18.6	19.7	21.2	22.7	24.8
675	17.6	18.2	19.2	20.3	21.8	23.4	25.6
700	18.1	18.7	19.8	20.9	22.5	24.1	26.4
725	18.6	19.3	20.3	21.5	23.1	24.8	27.2
750	19.2	19.8	20.9	22.1	23.8	25.5	28.0
775							
800							



STATIC RADIAL DEFLECTION – 305/680-18x10.5J @ CA -3.0° DHF



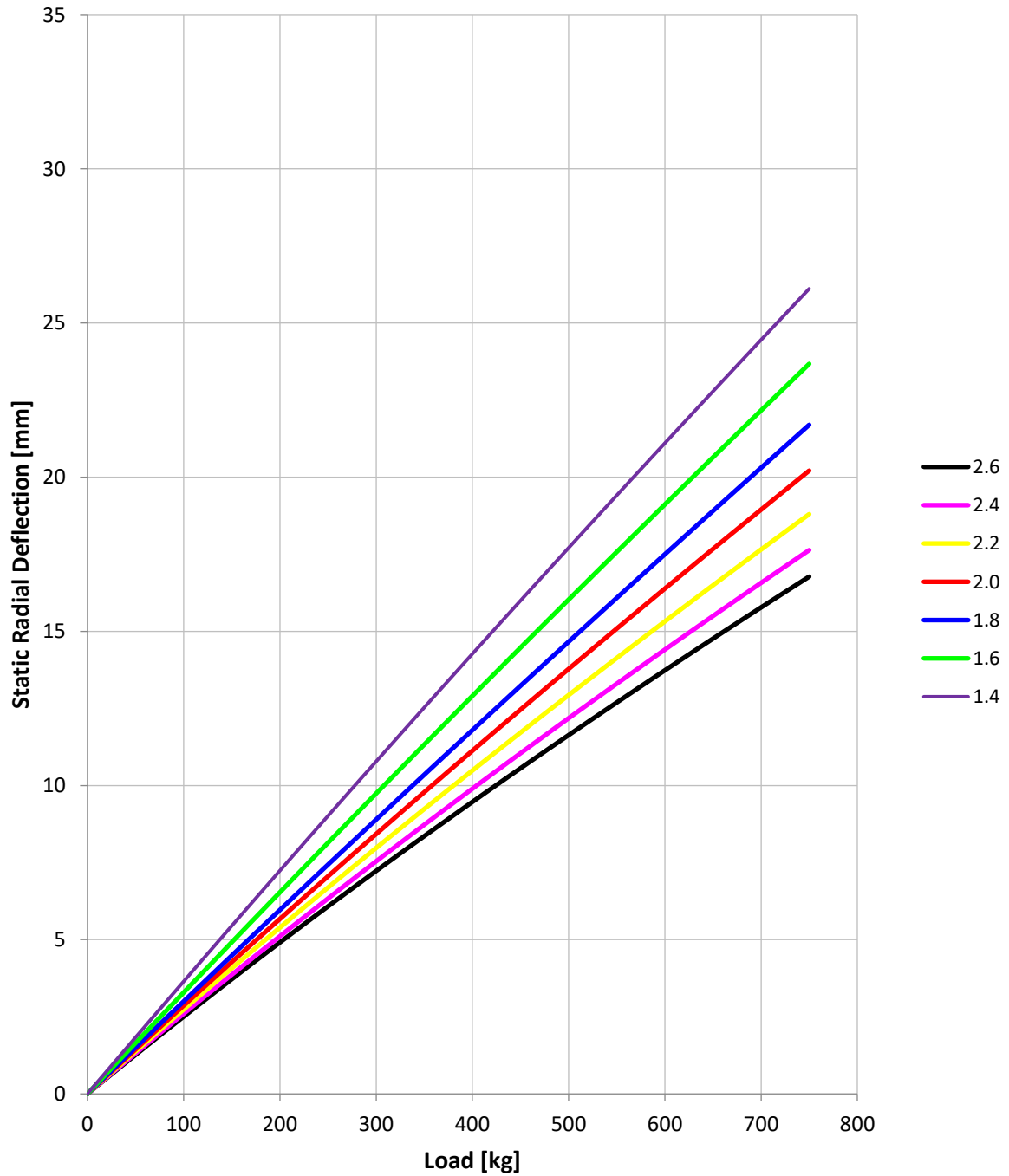


**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0 ° DHF**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.6	0.7	0.7	0.7	0.8	0.8	0.9
50	1.3	1.3	1.4	1.4	1.5	1.7	1.8
75	1.9	2.0	2.1	2.2	2.3	2.5	2.7
100	2.5	2.6	2.7	2.9	3.0	3.3	3.6
125	3.1	3.2	3.4	3.6	3.7	4.1	4.6
150	3.7	3.9	4.1	4.3	4.5	4.9	5.5
175	4.3	4.5	4.7	5.0	5.2	5.7	6.3
200	4.9	5.1	5.4	5.7	6.0	6.5	7.2
225	5.5	5.7	6.0	6.4	6.7	7.3	8.1
250	6.1	6.3	6.7	7.1	7.4	8.1	9.0
275	6.7	6.9	7.3	7.7	8.2	8.9	9.9
300	7.2	7.5	8.0	8.4	8.9	9.7	10.8
325	7.8	8.1	8.6	9.1	9.6	10.5	11.7
350	8.4	8.7	9.2	9.8	10.4	11.3	12.5
375	8.9	9.3	9.9	10.5	11.1	12.1	13.4
400	9.5	9.9	10.5	11.1	11.8	12.9	14.3
425	10.0	10.5	11.1	11.8	12.5	13.7	15.1
450	10.6	11.0	11.7	12.5	13.2	14.5	16.0
475	11.1	11.6	12.3	13.1	13.9	15.3	16.9
500	11.6	12.2	12.9	13.8	14.7	16.0	17.7
525	12.2	12.7	13.5	14.4	15.4	16.8	18.6
550	12.7	13.3	14.1	15.1	16.1	17.6	19.4
575	13.2	13.9	14.7	15.7	16.8	18.3	20.3
600	13.7	14.4	15.3	16.4	17.5	19.1	21.1
625	14.3	15.0	15.9	17.0	18.2	19.9	21.9
650	14.8	15.5	16.5	17.7	18.9	20.6	22.8
675	15.3	16.0	17.1	18.3	19.6	21.4	23.6
700	15.8	16.6	17.7	18.9	20.3	22.2	24.5
725	16.3	17.1	18.2	19.6	21.0	22.9	25.3
750	16.8	17.6	18.8	20.2	21.7	23.7	26.1
775							
800							



STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA 0.0° DHF





**STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0 ° DHF**

Load [kg]	Inflation Pressure [bar]						
	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.8	0.9	0.9	1.0	1.0	1.1	1.1
50	1.6	1.7	1.8	1.9	2.0	2.1	2.2
75	2.4	2.5	2.7	2.8	2.9	3.1	3.3
100	3.1	3.3	3.5	3.7	3.8	4.1	4.4
125	3.8	4.1	4.3	4.5	4.7	5.1	5.5
150	4.6	4.9	5.1	5.4	5.6	6.0	6.5
175	5.3	5.6	5.9	6.2	6.5	7.0	7.5
200	6.0	6.4	6.7	7.0	7.4	7.9	8.6
225	6.6	7.1	7.5	7.8	8.2	8.8	9.6
250	7.3	7.8	8.2	8.6	9.1	9.7	10.6
275	8.0	8.4	8.9	9.4	9.9	10.6	11.5
300	8.6	9.1	9.7	10.1	10.7	11.5	12.5
325	9.2	9.8	10.4	10.9	11.5	12.4	13.5
350	9.9	10.4	11.1	11.6	12.3	13.2	14.4
375	10.5	11.0	11.7	12.3	13.1	14.1	15.3
400	11.1	11.7	12.4	13.0	13.9	14.9	16.2
425	11.7	12.3	13.1	13.7	14.6	15.8	17.2
450	12.3	12.9	13.7	14.4	15.4	16.6	18.1
475	12.9	13.5	14.4	15.1	16.1	17.4	19.0
500	13.4	14.1	15.0	15.8	16.9	18.2	19.8
525	14.0	14.7	15.6	16.4	17.6	19.0	20.7
550	14.6	15.2	16.2	17.1	18.3	19.8	21.6
575	15.1	15.8	16.8	17.7	19.0	20.5	22.4
600	15.7	16.4	17.4	18.4	19.7	21.3	23.3
625	16.2	16.9	18.0	19.0	20.4	22.1	24.1
650	16.8	17.4	18.6	19.6	21.1	22.8	25.0
675	17.3	18.0	19.2	20.2	21.8	23.6	25.8
700	17.8	18.5	19.8	20.8	22.4	24.3	26.6
725	18.3	19.0	20.3	21.4	23.1	25.0	27.4
750	18.8	19.6	20.9	22.0	23.8	25.7	28.2
775							
800							



STATIC RADIAL DEFLECTION – 305/680-18x11.0J @ CA -3.0° DHF

