

Test report 15-8302

Article: Office work chair 6234
Test requested by: Kinnarps AB, SE- 521 88 Sweden



Tests are carried out according to standard: EN 1335-1:2000, 1335-2 and -3:2009 type A chair

Discrepancies: None

Result and observations: The sample submitted for test fulfils the requirements in above mentioned standards.

Tolerance: Where not especially specified, the stated test result has a tolerance value within directions for each standard. For example: Mass $\pm 0,5\%$, Force $\pm 5\%$, Linear measure, unloaded furniture $\pm 1\text{mm}$, Linear measure, loaded seating furniture $\pm 2\text{mm}$.

Measurement uncertainty: All measurements are in mm unless stated otherwise. Where not especially specified, the measurement uncertainty is from a general point of view within the above tolerance values.

For the following items the measurement uncertainty is outside the standard tolerance range;

- $\pm 14\text{ mm}$ on dimensional measurements acc to item 6.10
- $\pm 10\text{ mm}$ on dimensional measurements acc to item 6.6
- $\pm 8\text{ mm}$ on dimensional measurements acc to item 6.12
- $\pm 6\text{ mm}$ or less on dimensional measurements in general
- $\pm 4^\circ$ on angle measurements
- $\pm 6\text{ N}$ on stability measurements on upholstered chairs
- $\pm 3\text{ N}$ on stability measurements on non-upholstered chairs

Report: This report relates to sample submitted for test and no other. The report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Kinnarp datum 1st of June, 2015



Susanne Norling
(Approved by)



Magnus Carlsson
(Tested by)

Item description:	
Date of manufacture:	2015-04-21
Date of arrival:	2015-04-22
Date of test:	2015-04-24/2015-06-01
Overall dimensions:	Width 635 mm, deep 635 mm, height 910 mm
Weight:	19,1 kg
<u>Materials, construction:</u>	
Seat and backrest	Upholstered
Armrests	PU gel filling covered with PU foil
Under frame	Five winged star base in plastic, castors Ø65 mm for hard floor, braked unloaded.
<u>Test conditions:</u>	
Laboratory atmosphere	(20 ± 5)°C
	

Our no	Test and method			Requirements	Test results	Pass/Fail or N/A
1.	DIMENSION type A EN 1335-1:2000					
1.1	Seat height "a"	adjustable min min adjustment range	6.1	400-510 mm 120 mm	395-525 mm 130 mm	Pass
1.2	Seat depth "b"	adjustable min min adjustment range	6.2	400-420 mm 50 mm	400-470 mm 70 mm	Pass
1.3	Depth of the seat surface "c"	min depth	6.3	380 mm	475 mm	Pass
1.4	Seat width "d"	min width	6.4	400 mm	450 mm	Pass
1.5	Inclination of seat "e"	min range min adjustment range	6.5	-2° - -7° 6°	+6,7°(-)-10,2° 16,9°	Pass
1.6	Backrest height to supporting point S "f"	min range min adjustment range	6.6	170-220 mm 50 mm	160-250 mm	Pass
1.7.	Height of the back pad "g"	adjustable min non adjustable	6.7	220 mm 260 mm	450 mm -	Pass
1.8	Height of the upper edge of backrest "h"	above seat min height	6.8	360 mm	515-605 mm	Pass
1.9	Width of backrest "i"	min width	6.9	360 mm	425 mm	Pass
1.10	Horizontal radius of backrest "k"	min radius, concave form	6.10	r 400	R 550	Pass
1.11	Backrest inclination "l"	min adjustment range	6.11	15°	19,4°	Pass
1.12	Length of armrests "n"	min length	6.12	200 mm	255 mm	Pass
1.13	Width of armrests "o"	min width	6.13	40 mm	80-110 mm	Pass
1.14	Height of armrests above seat "p"	adjustable min non adjustable between	6.14	200-250 mm 200-250 mm	200-300 mm -	Pass

Our no	Test and method	Requirements	Test results	Pass/Fail or N/A
1.15	Distance from front of armrests to front edge of seat surface (in point A) "q" min distance	6.15 100 mm	> 100 mm	Pass
1.16	Clear width between armrests "r" between	6.16 460-510 mm	-	N/A
1.17	Maximal offset of the under frame "s" max size with castors	6.17 415 mm	345 mm	Pass
1.18	Stability dimension "t" min size	6.18 195 mm	235 mm	Pass
2.	SAFETY	EN 1335-2:2009		
2.1	Safety distance accessible moving parts	4.1.1 ≤ 8 mm or ≥ 25 mm	No remarks	Pass
2.2	Edge/corner round-edged/radius min radius	4.1.1 2 mm	No remarks	Pass
2.3	All other edges	4.1.1 no rough surfaces, burrs or sharp edges	No remarks	Pass
2.4	End of hollow components	4.1.1 closed or capped	-	N/A
2.5	Components/assembly parts	4.1.2 injures and inadvertent operations are avoided	No remarks	Pass
2.6	Adjusting devices	4.1.2 manipulate from sitting position	No remarks	Pass
2.7	Adjustable/connection parts	4.1.3 no chance to come loose	No remarks	Pass
2.8	Part with consistent grease	4.1.4 not accessible	No remarks	Pass
2.9	Support to floor	4.4 identical constructions	No remarks	Pass
2.10	User information	5 Intended use, adjustment, ergonomic, upkeep, type of wheel	No remarks	Pass
2.11	Branding on chair or information in instruction for use	5 expert shall handle gas spring change/repair	No remarks	Pass

Our no	Test and method	Requirements	Test results	Pass/Fail or N/A
3.	SAFETY, STABILITY EN 1335-2 and -3 :2009			
3.1	Front edge overturning 27 kg	7.1.1 not overbalance	> 27 kg	Pass
3.2	Forwards overturning 600N	7.1.2 not overbalance with horizontal force 20N	> 20 N	Pass
3.3	Forward overturning for chair with foot rest 1100N	7.1.3 not overbalance with horizontal force 20N	-	N/A
3.4	Sideways overturning for chair without armrests Vertical seat 600N	7.1.4 not overbalance with horizontal force 20N	-	N/A
3.5	Sideways overturning for chair with armrests Vertical seat 250N Vertical armrest 350N	7.1.5 not overbalance with horizontal force 20N	> 20 N	Pass
3.6	Rearwards overturning Chairs without backrest inclination Vertical seat 600N Horizontal backrest 192N	7.1.6 not overbalance	-	N/A
3.7	Rearwards overturning Chair with backrest inclination Load with 13 discs á 10 kg	7.1.7 not overbalance	> 13 discs	Pass
4.	SAFETY, DURABILITY EN 1335-3:2009	No damage or fracture		
4.1	Seat front edge static load 1600N 10 times	7.2.1	No damage	Pass
4.2	Combined seat and back static load test 1600N 10 times 560N	7.2.2	No damage	Pass
4.3	Foot rest static load test 1300N 10 times	7.2.6	-	N/A

Our no	Test and method	Requirements	Test results	Pass/Fail or N/A
4.4	Seat and back durability 7.3.1	No damage or fracture		
a	Loading point A 1500N 120 000 c		No damage	Pass
b	Loading point C 1200N 80 000 c Loading point B 320N 80 000 c		No damage	Pass
c	Loading point J 1200N 20 000 c Loading point E 320N 20 000 c		No damage	Pass
d	Loading point F 1200N 20 000 c Loading point H 320N 20 000 c		No damage	Pass
e	Loading point D and G (alternating) 1100N 20 000 c		No damage	Pass
4.5	Armrest fatigue 10° outwards from vertical 400N 60 000 c 7.3.2		No damage	Pass
4.6	Armrest downward static load - central Before stability test 750N 5 times/arm 7.2.3		No damage	Pass
4.7	Armrest downward static load - central After stability test 900N 5 times/arm		No damage	Pass
4.8	Rolling resistance of unloaded chair 7.4	≥ 12N	No remarks	Pass
5	FUNCTIONAL TESTS EN 1335-3:2009 Annex C	No damage or fracture		
5.1	Armrest downward static load – front 450N 5 times/arm 7.2.4		No damage	Pass
5.2	Armrest sideway static load test 400N 10 times 7.2.5		No damage	Pass
5.3	Swivel test 60 kg/35 kg 120 000 c 7.3.3		No damage	Pass
5.4	Foot rest durability 900N 50 000 c 7.3.4		No damage	Pass
5.5	Castor and chair base durability 110 kg 36 000 c 7.3.5		No damage	Pass
Remarks, comments				

End of report