





This is to certify that:

D P Garg & Co PVT Ltd

B-210B Phase 2

Noida

District Gautam Budh nagar (U.P)

201305 India

Holds Certificate Number:

2797 CPR 805684

In respect of:

EN 1935:2002/AC:2003 - Building Hardware - Single-Axis Hinges

Door Hinges intended for use on door in escape routes with and without requirements for fire resistance and smoke control

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the above construction product. This certificate attests that all the provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the above standard(s) under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product(s). This certificate was first issued on the date below and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

For and on behalf of BSI, a Notified Body for the above Regulation (Notified Body Number 2797):

Graeme Tunbridge, Senior Vice President Global Regulatory & Quality

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EN 1935:2002/AC:2003 - Building Hardware - Single-Axis Hinges.

<u>Product information, Section 1: Ball Bearing Hinges, products 1.1 – 16.1</u>

Product:	Product Description	Product Description		
Hinge products 1.1 -16.1	Ball Bearing Hinges	Ball Bearing Hinges		
Intended use:	On escape route doors with and without is smoke control.	On escape route doors with and without requirements for fire resistance and smoke control.		
Essential characteristics	Clauses within EN 1935:2002/AC:2003 Compliance			
Self closing	5.1 to 5.3 inclusive 5.6	Achieved		
Durability	5.4 5.8 5.5	Achieved		
Dangerous substances	ZA.1	Achieved		
Note 1:	This details only those essential character EN 1935:2002:AC:2003 and applicable to			

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<u>Product information, Section 1: Ball Bearing Hinges, products 1.1 – 16.1, continued...</u>

Number	Model Reference	Size	Material	Description	Mfg. Loc
1.1	SHIN1001100	101mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Hinge	000
2.1	SHIN1002100	101mm x 90mm x 3mm	Stainless Steel	Two Ball Bearing Hinge	000
3.1	SHIN1003100	101mm x 101mm x 3mm	Stainless Steel	Two Ball Bearing Hinge	000
4.1	SHIN1005125	125mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Hinge	000
5.1	SHIN1006150	150mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Hinge	000
6.1	SHIN1004114	114mm x 101mm x 3.4mm	Stainless Steel	Two Ball Bearing Hinge	000
7.1	SHIN551R100	101mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
8.1	SHIN553R100	101mm x 90mm x 3mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
9.1	SHIN552R100	101mm x 101mm x 3mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
10.1	SHIN551R125	125mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
11.1	SHIN551R150	150mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
12.1	SHIN551R114	114mm x 101mm x 3.4mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
13.1	SHIN1031100	101mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Anti-ligature Hinge	000
14.1	SHIN1032100	101mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Anti-ligature Hinge, R/C	000
15.1	SHIN1021100	101mm x 76mm x 3mm	Stainless Steel	Two Ball Bearing Security Pin Hinge	000
16.1	SHIN1022100	101mm x 76mm x 3mm	Stainless Steel	Ball Bearing Security Pin Hinge, R/C	000

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<u>Product information, Section 2: Ball Bearing Hinges, products: 1.2 – 16.2</u>

Product:	Product Description	Product Description		
Hinge products 1.2 -16.2	Ball Bearing Hinges			
Intended use:	On escape route doors with and without smoke control.	requirements for fire resistance and		
Essential characteristics	Clauses within EN 1935:2002/AC:2003 Compliance			
Self closing	5.1 to 5.3 inclusive	Achieved		
	5.6	N/A		
Durability	5.4 5.8	Achieved		
	5.5			
Dangerous substances	ZA.1	Achieved		
Note 1:	This details only those essential characteristics as required in the ZA Annex of EN 1935:2002:AC:2003 and applicable to single-axis hinges.			
Note 2:	Products listed in Section 2, 1.2 - 16.2 ardoors.	e not suitable for use on fire/smoke		

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Product information, Section 2: Ball Bearing Hinges, products: 1.2 – 16.2, continued...

Number	Model Reference	Size	Material	Description	Mfg. Loc
1.2	SHIN1052100	4" x 3" x 2mm	Stainless Steel	Two Ball Bearing Hinge	000
2.2	SHIN1057100	4" x 2 5/8" x 2.5mm	Stainless Steel	Two Ball Bearing Hinge	000
3.2	SHIN1056075	3" x 2" x 2mm	Stainless Steel	Two Ball Bearing Hinge	000
4.2	SHIN1055075	3" x 2" x 2.2mm	Stainless Steel	Two Ball Bearing Hinge	000
5.2	SHIN1059100	4" x 3" x 2.5mm	Stainless Steel	Two Ball Bearing Hinge	000
6.2	SHIN1058125	5" x 2 5/8" x 2.5mm	Stainless Steel	Two Ball Bearing Hinge	000
7.2	SHIN1051100	4" x 3" x 3mm	Stainless Steel	Two Ball Bearing Hinge	000
8.2	SHIN1053100	4" x 2 5/8" x 2mm	Stainless Steel	Two Ball Bearing Hinge	000
9.2	SHIN1062100	4" x 3" x 2mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
10.2	SHIN1067100	4" x 2 5/8" x 2.5mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
11.2	SHIN1066075	3" x 2" x 2mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
12.2	SHIN1065075	3" x 2" x 2.2mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
13.2	SHIN1069100	4" x 3" x 2.5mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
14.2	SHIN1068125	5" x 2 5/8" x 2.5mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
15.2	SHIN1061100	4" x 3" x 3mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000
16.2	SHIN1063100	4" x 2 5/8" x 2mm	Stainless Steel	Two Ball Bearing Hinge, R/C	000

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<u>Product information, Section 3: Ball Bearing Hinges, products: 1.3 – 16.3</u>

Product:	Product Description	Product Description		
Hinge products 1.3 -16.3	Ball Bearing Hinges			
Intended use:	On escape route doors with and without smoke control.	requirements for fire resistance and		
Essential characteristics	Clauses within EN 1935:2002/AC:2003 Compliance			
Self closing	5.1 to 5.3 inclusive	Achieved		
	5.6	N/A		
Durability	5.4 5.8	Achieved		
	5.5			
Dangerous substances	ZA.1	Achieved		
Note 1:	This details only those essential characteristics as required in the ZA Annex of EN 1935:2002:AC:2003 and applicable to single-axis hinges.			
Note 2:	Products listed in Section 3, 1.3 - 16.3 ard doors.	e not suitable for use on fire/smoke		

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Product information, Section 3: Ball Bearing Hinges, products: 1.3 – 16.3, continued...

	Model	o:			Mfg.
Number	Reference	Size	Material	Description	Loc
1.3	SHIN1108100	4" x 3" x 2mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
2.3	SHIN1107100	4" x 2 5/8" x 2.5mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
3.3	SHIN1106075	3" x 2" x 2mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
4.3	SHIN1105075	3" x 2" x 2.2mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
5.3	SHIN1109100	4" x 3" x 2.5mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
6.3	SHIN1104125	5" x 2 5/8" x 2.5mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
7.3	SHIN1101100	4" x 3" x 3mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
8.3	SHIN1103100	4" x 2 5/8" x 2mm	Stainless Steel	Ball Bearing Hinge (2BB)	000
9.3	SHIN1118100	4" x 3" x 2mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
10.3	SHIN1117100	4" x 2 5/8" x 2.5mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
11.3	SHIN1116075	3" x 2" x 2mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
12.3	SHIN1115075	3" x 2" x 2.2mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
13.3	SHIN1119100	4" x 3" x 2.5mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
14.3	SHIN1114125	5" x 2 5/8" x 2.5mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
15.3	SHIN1111100	4" x 3" x 3mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000
16.3	SHIN1113100	4" x 2 5/8" x 2mm	Stainless Steel	Ball Bearing Hinge, (2BB) R/C	000

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Product information, Section 4: Plain Joint Butt Hinges, products 1.4 – 44.4

Product:	Product Description	Product Description			
Hinge products 1.4 -44.4	Plain Joint Butt Hinges	Plain Joint Butt Hinges			
Intended use:	On escape route doors with and without smoke control.	out requirements for fire resistance and			
Essential characteristics	Clauses within EN 1935:2002/AC:2003 Compliance				
Self closing	5.1 to 5.3 inclusive 5.6	Achieved			
Durability	5.4 5.8 5.5	Achieved			
Dangerous substances	ZA.1	Achieved			
Note 1:	This details only those essential chara- EN 1935:2002:AC:2003 and applicable	cteristics as required in the ZA Annex of e to single-axis hinges.			

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<u>Product information, Section 4: Plain Joint Butt Hinges, products 1.4 – 44.4, continued...</u>

Number	Model Reference	Size	Material	Description	Mfg. Loc
1.4	MHIN0804076	76mm x 76mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
2.4	MHIN2020076	76mm x 49mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
3.4	MHIN2020100	101mm x 71mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
4.4	MHIN5050075	76mm x 46mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
5.4	MHIN5050100	101mm x 58mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
6.4	MHIN0451075	76mm x 64mm x 2.35mm	Mild Steel	Butt Hinge Plain Joint	000
7.4	MHIN0451100	101mm x 76mm x 2.5mm	Mild Steel	Butt Hinge Plain Joint	000
8.4	MHIN451A100	101mm x 76mm x 2.85mm	Mild Steel	Butt Hinge Plain Joint	000
9.4	MHIN804R076	76mm x 76mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
10.4	MHIN2021076	76mm x 49mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
11.4	MHIN2021100	101mm x 71mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
12.4	MHIN451R075	76mm x 64mm x 2.35mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
13.4	MHIN451R100	101mm x 76mm x 2.5mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
14.4	MHIN4510100	101mm x 76mm x 2.85mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
15.4	SHIN0453075	76mm x 49mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint	000
16.4	SHIN0453100	101mm x 71mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint	000
17.4	SHIN0451076	76mm x 64mm x 2.35mm	Stainless Steel	Butt Hinge Plain Joint	000
18.4	SHIN0451100	101mm x 64mm x 2.5mm	Stainless Steel	Butt Hinge Plain Joint	000
19.4	SHIN1451100	101mm x 76mm x 2.5mm	Stainless Steel	Butt Hinge Plain Joint	000
20.4	SHIN1452100	101mm x 76mm x 2.85mm	Stainless Steel	Butt Hinge Plain Joint	000
21.4	SHIN453R076	76mm x 49mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000
22.4	SHIN453R100	101mm x 71mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000
23.4	SHIN451R076	76mm x 64mm x 2.35mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000
24.4	SHIN2451100	101mm x 76mm x 2.5mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000
25.4	SHIN2452100	101mm x 76mm x 2.85mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000

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<u>Product information, Section 4: Plain Joint Butt Hinges, products 1.4 – 44.4, continued...</u>

Number	Model Reference	Size	Material	Description	Mfg. Loc
26.4	MHIN2020090	90mm x 49mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
27.4	MHIN1738090	90mm x 49mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint, R/C	000
28.4	MHIN5050090	90mm x 46mm x 1.9mm	Mild Steel	Butt Hinge Plain Joint	000
29.4	MHIN0451090	90mm x 64mm x 2.35mm	Mild Steel	Butt Hinge Plain Joint	000
30.4	MHIN451R090	90mm x 64mm x 2.35mm	Mild Steel	Butt Hinge Plain Joint , R/C	000
31.4	MHIN451T100	101mm x 76mm x 2.5mm	Mild Steel	Butt Hinge Plain Joint (Temp Hole)	000
32.4	MHIN45RT100	101mm x 76mm x 2.5mm	Mild Steel	Butt Hinge Plain Joint (Temp Hole) R/C	000
33.4	MHIN5451100	101mm x 76mm x 2.85mm	Mild Steel	Butt Hinge Plain Joint (Temp Hole)	000
34.4	MHIN6451100	101mm x 76mm x 2.85mm	Mild Steel	Butt Hinge Plain Joint (Temp Hole) R/C	000
35.4	SHIN2020090	90mm x 49mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint	000
36.4	SHIN1738090	90mm x 49mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000
37.4	SHIN0451090	90mm x 64mm x 2.35mm	Stainless Steel	Butt Hinge Plain Joint	000
38.4	SHIN451R090	90mm x 64mm x 2.35mm	Stainless Steel	Butt Hinge Plain Joint, R/C	000
39.4	SHIN3451100	101mm x 76mm x 2.5mm	Stainless Steel	Butt Hinge Plain Joint (Temp Hole)	000
40.4	SHIN4451100	101mm x 76mm x 2.5mm	Stainless Steel	Butt Hinge Plain Joint (Temp Hole) R/C	000
41.4	SHIN5451100	101mm x 76mm x 2.85mm	Stainless Steel	Butt Hinge Plain Joint (Temp Hole)	000
42.4	SHIN6451100	101mm x 76mm x 2.85mm	Stainless Steel	Butt Hinge Plain Joint (Temp Hole) R/C	000
43.4	SHIN6463100	101mm x 71mm x 1.9mm	Stainless Steel	Butt Hinge Plain Joint (Temp Hole)	000
44.4	SHIN6461100	101mm x 64mm x 2.5mm	Stainless Steel	Butt Hinge Plain Joint (Temp Hole)	000

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<u>Product information, Section 5: Stainless Steel Ball Bearing Hinges, products 1.5 – 34.5</u>

Product:	Product Description	Product Description		
Hinge products 1.5 -34.5	Stainless Steel Ball Bearing Hinges	Stainless Steel Ball Bearing Hinges		
Intended use:	On escape route doors with and without is smoke control.	On escape route doors with and without requirements for fire resistance and smoke control.		
Essential characteristics	Clauses within EN 1935:2002/AC:2003 Compliance			
Self closing	5.1 to 5.3 inclusive 5.6	Achieved		
Durability	5.4 5.8 5.5	Achieved		
Dangerous substances	ZA.1	Achieved		
Note 1:	This details only those essential character EN 1935:2002:AC:2003 and applicable to			

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<u>Product information, Section 5: Stainless Steel Ball Bearing Hinges, products 1.5 – 34.5, continued...</u>

Number	Model Reference	Size	Material	Description	Mfg. Loc
1.5	MHIN4510075	76mm x 101mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
2.5	MHIN4511075	76mm x 50mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
3.5	MHIN4512075	76mm x 62mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
4.5	MHIN4513075	76mm x 76mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
5.5	MHIN4515100	101mm x 76mm x 2.6mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
6.5	MHIN4517100	101mm x 76mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
7.5	MHIN4519100	101mm x 88mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
8.5	MHIN4522100	101mm x 101mm x 3.2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
9.5	MHIN4523114	114mm x 101mm x 3.2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
10.5	MHIN5511075	76mm x 50mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
11.5	MHIN5512075	76mm x 62mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
12.5	MHIN5513075	76mm x 76mm x 2mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
13.5	MHIN5515100	101mm x 76mm x 2.6mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
14.5	MHIN5517100	101mm x 76mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
15.5	MHIN5519100	101mm x 88mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
16.5	MHIN5522100	101mm x 101mm x 3.2mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000
17.5	MHIN5523114	114mm x 101mm x 3.2mm	Mild Steel	Steel Ball Bearing Hinge (2BB), R/C	000

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<u>Product information, Section 5: Stainless Steel Ball Bearing Hinges, products 1.5 – 34.5, continued...</u>

Number	Model Reference	Size	Material	Description	Mfg. Loc
18.5	SHIN4510075	76mm x 101mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
19.5	SHIN4511075	76mm x 50mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
20.5	SHIN4512075	76mm x 62mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
21.5	SHIN4513075	76mm x 76mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
22.5	SHIN4515100	101mm x 76mm x 2.6mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
23.5	SHIN4517100	101mm x 76mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
24.5	SHIN4519100	101mm x 88mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
25.5	SHIN4522100	101mm x 101mm x 3.2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
26.5	SHIN4523114	114mm x 101mm x 3.2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
27.5	SHIN5511075	76mm x 50mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
28.5	SHIN5512075	76mm x 62mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
29.5	SHIN5513075	76mm x 76mm x 2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
30.5	SHIN5515100	101mm x 76mm x 2.6mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
31.5	SHIN5517100	101mm x 76mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
32.5	SHIN5519100	101mm x 88mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
33.5	SHIN5522100	101mm x 101mm x 3.2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000
34.5	SHIN5523114	114mm x 101mm x 3.2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB), R/C	000

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<u>Product information, Section 6: Grade 11 Hinges, products 1.6 – 16.6, products 1.6 – 16.6</u>

Product:	Product Description			
Hinge products 1.6 -34.6	Grade 11 Hinges	Grade 11 Hinges		
Intended use:	On escape route doors with and without smoke control.	requirements for fire resistance and		
Essential characteristics	Clauses within EN 1935:2002/AC:2003 Compliance			
Self closing	5.1 to 5.3 inclusive Achieved			
Durability	5.4 5.8 5.5	Achieved		
Dangerous substances	ZA.1 Achieved			
Note 1:	This details only those essential characteristics as required in the ZA Annex of EN 1935:2002:AC:2003 and applicable to single-axis hinges.			

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<u>Product information, Section 6: Grade 11 Hinges, products 1.6 – 16.6, continued...</u>

Number	Model Reference	Size	Material	Description	Mfg. Loc
1.6	MHIN4515100	101mm x 76mm x 2.6mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
2.6	SHIN4515100	101mm x 76mm x 2.6mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
3.6	MHIN4519100	101mm x 88mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
4.6	SHIN4519100	101mm x 88mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
5.6	MHIN4517100	101mm x 76mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
6.6	SHIN4517100	101mm x 76mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
7.6	MHIN4522100	101mm x 101mm x 3.2mm	Mild Steel	Steel Ball Bearing Hinge (2BB)	000
8.6	SHIN4522100	101mm x 101mm x 3.2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB)	000
9.6	MHIN5515100	101mm x 76mm x 2.6mm	Mild Steel	Steel Ball Bearing Hinge (2BB) R/C	000
10.6	SHIN5515100	101mm x 76mm x 2.6mm	Stainless Steel	Steel Ball Bearing Hinge (2BB) R/C	000
11.6	MHIN5519100	101mm x 88mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB) R/C	000
12.6	SHIN5519100	101mm x 88mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB) R/C	000
13.6	MHIN5517100	101mm x 76mm x 3mm	Mild Steel	Steel Ball Bearing Hinge (2BB) R/C	000
14.6	SHIN5517100	101mm x 76mm x 3mm	Stainless Steel	Steel Ball Bearing Hinge (2BB) R/C	000
15.6	MHIN5522100	101mm x 101mm x 3.2mm	Mild Steel	Steel Ball Bearing Hinge (2BB) R/C	000
16.6	SHIN5522100	101mm x 101mm x 3.2mm	Stainless Steel	Steel Ball Bearing Hinge (2BB) R/C	000

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To check its validity telephone +31 20 3460780. An electronic certificate can be authenticated online.

No. 2797 CPR 805684

EN 1935:2002/AC:2003 - Building Hardware - Single-Axis Hinges.

Manufacturing Plant

Certified Activities

Location: 000 D P Garg & Co PVT Ltd B-210B Phase 2 Noida District Gautam Budh Nagar (U.P) 201305

India

EN 1935:2002/AC:2003 - Building hardware - Single-Axis Hinges

First Issued: 2024-10-28 Latest Issue: 2024-10-28

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CERTIFICATE OF APPROVAL No CF 714

This is to certify that, in accordance with TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

D. P. GARG & CO. PVT. LTD.

B-210B, Phase-2, Noida, Gautam Budh Nagar – 201 305, India Tel: +91 120 246 00 85/86/87 Fax: +91 120 246 00 83

Have been assessed against the requirements of the Technical Schedule(s) denoted below and are approved for use subject to the conditions appended hereto:

CERTIFIED PRODUCT
D. P. Garg Steel Hinges

TECHNICAL SCHEDULE
TS24 The Contribution of
Single Axis Hinges to the Fire
Resistance of Door Assemblies

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan

Certification Manager

Issued: 24th November 2009 Reissued: 9th January 2025 Valid to: 23rd November 2029



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- 1. This certification is provided to the client for their own purposes, and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
- 2. This approval relates to the use of D. P. Garg steel, single axis hinges with either square or radiused corners. This approval relates to the following specific hinges:

Grade 13 – Stainless Steel Ball Bearing Hinges 2BB			
SHIN1001100	Stainless steel	101 x 76 x 3mm square corners	
SHIN1002100	Stainless steel	101 x 90 x 3mm square corners	
SHIN1003100*	Stainless steel	101 x 101 x 3mm square corners	
SHIN1005125	Stainless steel	125 x 76 x 3mm square corners	
SHIN1006150	Stainless steel	150 x 76 x 3mm square corners	
SHIN1004114*	Stainless steel	114 x 101 x 3.4mm square corners	
SHIN551R100	Stainless steel	101 x 76 x 3mm radiused corners	
SHIN553R100	Stainless steel	101 x 90 x 3mm radiused corners	
SHIN552R100*	Stainless steel	101 x 101 x 3mm radiused corners	
SHIN551R125	Stainless steel	125 x 76 x 3mm radiused corners	
SHIN551R150	Stainless steel	150 x 76 x 3mm radiused corners	
SHIN551R114*	Stainless steel	114 x 101 x 3.4mm radiused corners	
SHIN1021100**	Stainless steel	101 x 76 x 3 mm square corners – Security Pin	
SHIN1022100**	Stainless steel	101 x 76 x 3 mm radiused corners – Security Pin	
SHIN1031100**	Stainless steel	101 x 76 x 3 mm square corners – Antiligature	
SHIN1032100**	Stainless steel	101 x 76 x 3 mm radiused corners – Anti-ligature	

^{*} Suitable for use on minimum 54 mm thick doors only

^{**} For use with 30 and 60 minute timber-based doorsets only

Grade 11 - Steel Ball Bearing Hinges (2BB)			
MHIN4515100	Mild steel	101 x 76 x 2.6 mm square corners	
MHIN4517100	Mild steel	101 x 76 x 3 mm square corners	
MHIN4519100	Mild steel	101 x 88 x 3 mm square corners	
MHIN4522100*	Mild steel	101 x 101 x 3.2 mm square corners	
MHIN5515100	Mild steel	101 x 76 x 2.6 mm radiused corners	
MHIN5517100	Mild steel	101 x 76 x 3 mm radiused corners	
MHIN5519100	Mild steel	101 x 88 x 3 mm radiused corners	
MHIN5522100*	Mild steel	101 x 101 x 3.2 mm radiused corners	
SHIN4515100	Stainless steel	101 x 76 x 2.6 mm square corners	

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Grade 11 - Steel Ball Bearing Hinges (2BB)			
SHIN4517100 Stainless steel		101 x 76 x 3 mm square corners	
SHIN4519100	Stainless steel	101 x 88 x 3 mm square corners	
SHIN4522100*	Stainless steel	101 x 101 x 3.2 mm square corners	
SHIN5515100	Stainless steel	101 x 76 x 2.6 mm radiused corners	
SHIN5517100	Stainless steel	101 x 76 x 3 mm radiused corners	
SHIN5519100 Stainless steel 101 x 88 x 3 mm radiused corn		101 x 88 x 3 mm radiused corners	
SHIN5522100*	Stainless steel	101 x 101 x 3.2 mm radiused corners	

^{*} Suitable for use on minimum 54 mm thick doors only

Grade 7 - Steel Ball Bearing Hinges (2BB)			
MHIN4510075*	Mild steel	76 x 101 x 2 mm square corners	
MHIN4511075	Mild steel	76 x 50 x 2 mm square corners	
MHIN4512075	Mild steel	76 x 62 x 2 mm square corners	
MHIN4513075	Mild steel	76 x 76 x 2 mm square corners	
MHIN4515100	Mild steel	101 x 76 x 2.6 mm square corners	
MHIN4517100	Mild steel	101 x 76 x 3 mm square corners	
MHIN4519100	Mild steel	101 x 88 x 3 mm square corners	
MHIN4522100*	Mild steel	101 x 101 x 3.2 mm square corners	
MHIN4523114*	Mild steel	114 x 101 x 3.2 mm square corners	
MHIN5511075	Mild steel	76 x 50 x 2 mm radiused corners	
MHIN5512075	Mild steel	76 x 62 x 2 mm radiused corners	
MHIN5513075	Mild steel	76 x 76 x 2 mm radiused corners	
MHIN5515100	Mild steel	101 x 76 x 2.6 mm radiused corners	
MHIN5517100	Mild steel	101 x 76 x 3 mm radiused corners	
MHIN5519100	Mild steel	101 x 88 x 3 mm radiused corners	
MHIN5522100*	Mild steel	101 x 101 x 3.2 mm radiused corners	
MHIN5523114*	Mild steel	114 x 101 x 3.2 mm radiused corners	
SHIN4510075*	Stainless steel	76 x 101 x 2 mm square corners	
SHIN4511075	Stainless steel	76 x 50 x 2 mm square corners	
SHIN4512075	Stainless steel	76 x 62 x 2 mm square corners	
SHIN4513075	Stainless steel	76 x 76 x 2 mm square corners	
SHIN4515100	Stainless steel	101 x 76 x 2.6 mm square corners	
SHIN4517100	Stainless steel	101 x 76 x 3 mm square corners	
SHIN4519100	Stainless steel	101 x 88 x 3 mm square corners	
SHIN4522100*	Stainless steel	101 x 101 x 3.2 mm square corners	
SHIN4523114*	Stainless steel	114 x 101 x 3.2 mm square corners	
SHIN5511075	Stainless steel	76 x 50 x 2 mm radiused corners	

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CERTIFICATE No CF 714 D. P. GARG & CO. PVT. LTD.

Grade 7 - Steel Ball Bearing Hinges (2BB)			
SHIN5512075	Stainless steel	76 x 62 x 2 mm radiused corners	
SHIN5513075	Stainless steel	76 x 76 x 2 mm radiused corners	
SHIN5515100	Stainless steel	101 x 76 x 2.6 mm radiused corners	
SHIN5517100	Stainless steel	101 x 76 x 3 mm radiused corners	
SHIN5519100	Stainless steel	101 x 88 x 3 mm radiused corners	
SHIN5522100*	Stainless steel	101 x 101 x 3.2 mm radiused corners	
SHIN5523114*	Stainless steel	114 x 101 x 3.2 mm radiused corners	

^{*} Suitable for use on minimum 54 mm thick doors only

Grade 7 - Butt Hinge Plain Joint			
MHIN0804076	Mild steel	76 x 76 x 1.9 mm square corners	
MHIN2020076	Mild steel	76 x 49 x 1.9 mm square corners	
MHIN2020100	Mild steel	101 x 71 x 1.9 mm square corners	
MHIN5050075	Mild steel	76 x 46 x 1.9 mm square corners	
MHIN5050100	Mild steel	101 x 58 x 1.9 mm square corners	
MHIN0451075	Mild steel	76 x 64 x 2.35 mm square corners	
MHIN0451100	Mild steel	101 x 76 x 2.5 mm square corners	
MHIN451A100	Mild steel	101 x 76 x 2.85 mm square corners	
MHIN804R076	Mild steel	76 x 76 x 1.9 mm radiused corners	
MHIN2021076	Mild steel	76 x 49 x 1.9 mm radiused corners	
MHIN2021100	Mild steel	101 x 71 x 1.9 mm radiused corners	
MHIN451R075	Mild steel	76 x 64 x 2.35 mm radiused corners	
MHIN451R100	Mild steel	101 x 76 x 2.5 mm radiused corners	
MHIN4510100	Mild steel	101 x 76 x 2.85 mm radiused corners	
MHIN2020090	Mild steel	90 x 49 x 1.9 mm square corners	
MHIN1738090	Mild steel	90 x 49 x 1.9 mm radiused corners	
MHIN5050090	Mild steel	90 x 46 x 1.9 mm square corners	
MHIN0451090	Mild steel	90 x 64 x 2.35 mm square corners	
MHIN451R090	Mild steel	90 x 64 x 2.35 mm radiused corners	
MHIN451T100	Mild steel	101 x 76 x 2.5 mm square corners	
MHIN45RT100	Mild steel	101 x 76 x 2.5 mm radiused corners	
MHIN5451100	Mild steel	101 x 76 x 2.85 mm square corners	
MHIN6451100	Mild steel	101 x 76 x 2.85 mm radiused corners	
SHIN0453075	Stainless steel	76 x 49 x 1.9 mm square corners	
SHIN0453100	Stainless steel	101 x 71 x 1.9 mm square corners	
SHIN0451076	Stainless steel	76 x 64 x 2.35 mm square corners	
SHIN0451100	Stainless steel	101 x 64 x 2.5 mm square corners	

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Grade 7 - Butt Hinge Plain Joint			
SHIN1451100	Stainless steel	101 x 76 x 2.5 mm square corners	
SHIN1452100	Stainless steel	101 x 76 x 2.85 mm square corners	
SHIN453R076	Stainless steel	76 x 49 x 1.9 mm radiused corners	
SHIN453R100	Stainless steel	101 x 71 x 1.9 mm radiused corners	
SHIN451R076	Stainless steel	76 x 64 x 2.35 mm radiused corners	
SHIN2451100	Stainless steel	101 x 76 x 2.5 mm radiused corners	
SHIN2452100	Stainless steel	101 x 76 x 2.85 mm radiused corners	
SHIN2020090	Stainless steel	90 x 49 x 1.9 mm square corners	
SHIN1738090	Stainless steel	90 x 49 x 1.9 mm radiused corners	
SHIN0451090	Stainless steel	90 x 64 x 2.35 mm square corners	
SHIN451R090	Stainless steel	90 x 64 x 2.35 mm radiused corners	
SHIN3451100	Stainless steel	101 x 76 x 2.5 mm square corners	
SHIN4451100	Stainless steel	101 x 76 x 2.5 mm radiused corners	
SHIN5451100	Stainless steel	101 x 76 x 2.85 mm square corners	
SHIN6451100	Stainless steel	101 x 76 x 2.85 mm radiused corners	
SHIN6463100	Stainless steel	101 x 71 x 1.9 mm square corners	
SHIN6461100	Stainless steel	101 x 64 x 2.5 mm square corners	

- 3. This approval relates to the use of the above single axis hinges in contributing to the fire resistance performance of timber based doorsets and predominantly steel based doorsets, as defined in BS EN 1634-1 or BS 476: Part 22: 1987.
- 4. This approval relates to their use with the following door assemblies: -

Code ITT - 20 minute to 120** minute door assemblies door assemblies incorporating intumescent perimeter seals and consisting of timber faced and edged leaves with timber or cellulosic cores, hung in timber or cellulosic frames.

Code MM/IMM - 20 minute to 240* minute door assemblies consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with or without intumescent seals.

- * 240 minute MM/IMM approval relates to Grade 13 Stainless Steel Ball Bearing Hinges only.
- **Some hinges restricted to 30 and 60 minute timber-based doorsets only
- 5. The hinges are approved on the basis of:
 - i. Initial type testing to EN1935 and EN 1634-1
 - ii. An appraisal against TS24
 - iii. Certification of quality management system.
 - iv. Inspection and surveillance of factory production control
 - v. On-going audit testing in accordance with TS24 requirements

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- 6. The door assembly shall be a CERTIFIRE approved product or have achieved the appropriate fire resistance performance when tested at a laboratory accredited to IS/IEC 17025 (under International Laboratory accreditation Cooperation (ILAC) membership), in accordance with BS 476: Part 22: 1987 and/or BS EN 1634:1 with hinges of a similar size.
- 7. The hinges may only be fitted in the manner described in this certificate and subject to any limitations on the inclusion of hinges specified for the door leaf. This approval is applicable only to the specified hinges used with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987) and when using appropriate intumescent protection.
- 8. For ITT timber-based doorsets the hinges shall only be fitted using the fixings supplied by the hinge manufacturer.
- 9. Regard should be paid to the maximum door mass permitted to be used with the hinge (see classifications).
- 10. The ITT doorsets shall be installed in accordance with BS 8214.
- 11. The hinges should only be used with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987), the critical aspects of the doorset construction are considered to be the material of the door frame, the leaf to frame clearance gaps and the lipping material. Attention should be paid to these details and these should not be amended from that previously fire tested.

The following minimum specification shall be followed:

- a. 30 and 60 minute timber-based assemblies (ITT):
 - Door frame minimum density 460 kg/m³ (30 minutes), 640 kg/m³ (60 minutes)
 - Door leaves shall have a minimum thickness of 44 mm for 30 minute applications and 54 mm for 60 minute applications.
 - iii) Lipping minimum density 640 kg/m³.
- b. Steel-based assemblies (MM/IMM)
 - Door leaves shall have a minimum thickness of 44 mm for up to 240 minute applications.
- 12. For 90 minute and 120 minute timber-based assemblies (ITT), D. P. Garg hinges shall only be fitted to doorsets which have previously been tested with hinges of a similar size, subject to the following requirements:
 - The required intumescent protection shall be as tested by the chosen door manufacturer. In all cases this shall be a minimum of a 2 mm thick Interdens mono ammonium phosphate based intumescent sheet material incorporated beneath each hinge blade, however, this protection shall be increased as required based on the chosen doorset manufacturers test data.

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- ii) A minimum of 10 mm of perimeter intumescent fire seal shall by-passed the hinges. Where the perimeter intumescent fire seal on the original test of the chosen doorset by-passes the hinge by more than 10 mm, this shall be maintained on the doorset incorporating the D. P. Garg chosen hinges.
- iii) The critical dimensions of the D. P. Garg hinge to be used shall be based on the size of the hinge tested originally by the chosen doorset manufacturer, with the following tolerance:

Hinge specification of chosen doorset			
Component/dimension Tolerance/Rule			
Hinge blade			
Width	+0/-5% of tested hinge		
Height	+/-5% of tested hinge		
Thickness	+/-15% of tested hinge		
Knuckle			
Diameter	Minimum 11 mm		
Fixings			
Quantity	Maximum 4No. fixings tested		
Size	4.8 mm dia. Minimum		
Length	No shorter than that tested		
Position (width)	+/-10% from the positions of the fixings in the		
	tested hinge when measured with respect to		
	the centre lines of the blade		

Note: Where the D. P. Garg hinge does not comply with the parameters identified above it shall not be used in conjunction with the chosen 90 minute and 120 minute timber-based assemblies (ITT).

- 13. When fitted to timber-based door assemblies, the required additional intumescent protection will be as follows:
 - i) Mono Ammonium Phosphate sheet intumescent material as follows:
 - 1 mm thickness shall be fitted behind each blade for 30 minute applications.
 - 2 mm thickness shall be fitted behind each blade for 60 minute applications.
 - Furthermore, it a requirement that the perimeter intumescent fire seal to bypass the hinges by a minimum of 4 mm for all 60 minute applications.

Or:

- ii) 0.8 mm Flexifire graphite-based intumescent sheet material as follows:
 - 0.8 mm thickness shall be fitted behind each blade for 30 minute applications.
 - 0.8 mm thickness shall be fitted behind each blade for 60 minute applications.
 - Furthermore, it a requirement that the perimeter intumescent fire seal to bypass the hinges by a minimum of 15 mm for all 60 minute applications.

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- iii) The required intumescent protection for 90 and 120 minute ITT applications shall be as tested by the chosen door manufacturer. In all cases this shall be a minimum of a 2 mm thick Interdens mono ammonium phosphate based or graphite based intumescent sheet material incorporated beneath each hinge blade, however, this protection shall be increased as required based on the chosen doorset manufacturers test data.
- iv) Additionally or 90 and 120 minute ITT applications only, a minimum of 10 mm of perimeter intumescent fire seal shall by-passed the hinges. Where the perimeter intumescent fire seal on the original test of the chosen doorset by-passes the hinge by more than 10 mm, this shall be maintained on the doorset incorporating the D. P. Garg chosen hinges.

Failure to install the intumescent protection will invalidate this certificate

14. All door hardware is subject to the acceptance by the chosen door assembly supplier's tested, assessed, or certificated scope, which generally identifies the types of hardware approved, the required specification/design based on the key materials/ maximum size (e.g. Blade, knuckle, etc.), and the application of any additional intumescent protection.

On this basis, approval should be sought from the specific door assembly supplier to ensure compliance based on this assessed/certificated scope.

- 15. The products identified within this certificate/assessment report are marketed under the brand names of GARG, GARGS, TUFF, ELITE, EUROSTAR & SICHERN. In all case the products are identical with only branding and packaging changing.
- 16. The approval relates to ongoing production. The product and/or its immediate packaging is identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

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17. Matrix of acceptable doorset types

	Approved Door Type			
Class	IMM	MM	ITT	ITM
FD20	✓	✓	✓	*
FD30	✓	✓	✓	*
FD60	✓	✓	✓	*
FD120	✓	✓	✓	*
FD240	✓	✓	×	*
E 20	✓	✓	✓	*
El 20	✓	✓	✓	*
E 30	✓	✓	✓	×
El 30	✓	✓	✓	*
E 60	✓	✓	✓	*
EI 60	✓	✓	✓	*
E 90	✓	✓	✓	*
El 90	✓	✓	✓	*
E 120	✓	✓	✓	*
El 120	√	✓	✓	*
E 240	√ *	√ *	×	*
El 240	√ *	√ *	*	×

Kev:

✓ - approved**x** - Not approved

✓* Note: 240 minute MM/IMM approval relates to Grade 13 Stainless Steel Ball Bearing Hinges only

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18. Doors are categorised as the following types:

Code ITT - 20 minute to 120 minute door assemblies door assemblies incorporating intumescent perimeter seals and consisting of timber faced and edged leaves with timber or cellulosic cores, hung in timber or cellulosic frames.

Code ITM - 20 minute to 120 minute door assemblies door assemblies incorporating intumescent perimeter seals and consisting of timber faced and edged leaves with timber or cellulosic cores, hung in steel frames.

Code MM - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames without intumescent seals.

Code IMM - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with intumescent seals.

Scope of Approval:

- The hinges may not be fitted to timber doorsets without perimeter intumescent fire seals within the frame rebate or edge of the door leaf.
- Where graphite based intumescent sheet material is to be used in lieu of the mono ammonium phosphate tested, the proposed graphite-based intumescent sheet material, shall have suitable test evidence in the required thickness or less, with timber-based doorset of the required classification period, with steel hinges of a minimum size of 100 mm x 75 mm.
- The following hinges are approved for use on minimum 54 mm thick doors only:

SHIN1003100	MHIN5522100
SHIN1004114	MHIN5523114
SHIN552R100	SHIN4510075
SHIN551R114	SHIN4522100
MHIN4510075	SHIN4523114
MHIN4522100	SHIN5522100
MHIN4523114	SHIN5523114

 The following hinges are approved for use on 30 and 60 minute timber-based doorsets only:

SHIN1021100	SHIN1031100
SHIN1022100	SHIN1032100

 240 minute MM/IMM approval relates to Grade 13 Stainless Steel Ball Bearing Hinges only

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Classification codes

The above approval provides the following classifications:

Grade 13 - Stainless Steel Ball Bearing hinges (2BB):

Category of duty	Number of test cycles	Test door mass	Fire resistance	Safety	Corrosion resistance	Security	Hinge grade
4	7	6	1	1	4	0	13

Grade 11 - Stainless Steel Ball Bearing hinges (2BB):

Category of duty	Number of test cycles	Test door mass	Fire resistance	Safety	Corrosion resistance	Security	Hinge grade
3	7	4	1	1	3	0	11

Grade 7 - Steel Ball Bearing Hinges (2BB) and Grade 7 - Butt Hinge Plain Joint:

Category of duty	Number of test cycles	Test door mass	Fire resistance	Safety	Corrosion resistance	Security	Hinge grade
2	7	2	1	1	2	0	7

Further Information

Further information regarding the details contained in this certificate may be obtained from D. P. Garg & Co. Pvt Ltd (Tel: + 91 120 246 00 85).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777).

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