

BS EN 1935:2002 CLASSIFICATION

The European Standard for single-axis hinges used on doors and windows. Testing and evaluation of the product results in an 8 digit code:

e.g. H3N1102/13 = Classification 4-7-6-1-1-3-0-13

DIGIT 1 - CATEGORY OF USE (Grades 1-4)

- Grade 1: Light Duty
- Grade 2: Medium Duty
- Grade 3: Heavy Duty
- Grade 4: Severe Duty

DIGIT 2 - DURABILITY (Grades 3, 4 + 7)

- Grade 3: 10,000 Test cycles for light duty hinges on windows only.
- Grade 4: 25,000 Test cycles for light duty hinges on windows and doors.
- Grade 7: 200,000 Test cycles for medium, heavy and severe duty hinges on doors only.

DIGIT 3 - TEST DOOR MASS (Grades 0-7)

- Grade 0: 10KG Test Door Mass
- Grade 1: 20KG Test Door Mass
- Grade 2: 40KG Test Door Mass
- Grade 3: 60KG Test Door Mass
- Grade 4: 80KG Test Door Mass
- Grade 5: 100KG Test Door Mass
- Grade 6: 120KG Test Door Mass
- Grade 7: 160KG Test Door Mass

DIGIT 4 - SUITABILITY FOR USE ON FIRE/SMOKE DOORS (Grades 0-1)

- Grade 0: Not suitable for use on smoke/fire door assemblies.
- Grade 1: Suitable for use on smoke/fire door assemblies. Subject to satisfactory assessment under BS EN 1634.

DIGIT 5 - SAFETY (Grade 1)

- Grade 1: Single-axis hinges are required to satisfy the essential requirement of safety in use.

DIGIT 6 - CORROSION RESISTANCE (Grades 0-4)

- Grade 0: No defined corrosion resistance
- Grade 1: Mild resistance
- Grade 2: Moderate resistance
- Grade 3: High resistance
- Grade 4: Very high resistance

DIGIT 7 - SECURITY (Grades 0-1)

- Grade 0: No security
- Grade 1: Suitable for application requiring a degree of security.

DIGIT 8 - HINGE GRADE (Grades 1-14)

Hinge Grade	Usage	Test Cycles	Door Mass
Grade 1:	Window	10,000	10KG
Grade 2:	Window	10,000	20KG
Grade 3:	Window/Door	25,000	20KG
Grade 4:	Door	200,000	20KG
Grade 5:	Window	10,000	40KG
Grade 6:	Window/Door	25,000	40KG
Grade 7:	Door	200,000	40KG
Grade 8:	Window	10,000	60KG
Grade 9:	Window/Door	25,000	60KG
Grade 10:	Door	200,000	60KG
Grade 11:	Door	200,000	80KG
Grade 12:	Door	200,000	100KG
Grade 13:	Door	200,000	120KG
Grade 14:	Door	200,000	160KG

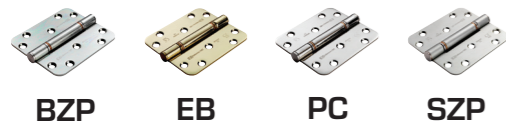
For full details of test criteria please visit www.carlislebrass.com



ENDUROMAX
EXTREME PERFORMANCE HINGES

The Home of Quality Architectural Ironmongery

AVAILABLE FINISHES:



Certified to British Standard
KM 82991

Suitable for 30 + 60 Minute
Fire Doors



Certifire Approved
CF339

Guaranteed for
25 years



BS EN 1935

CE Approved CE1121



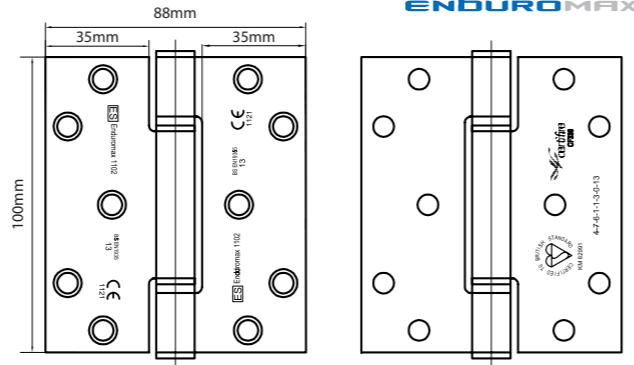
Supplied in Pairs Complete
with Fixing Screws

Maintenance Free

H3N1102/13
100x88x3mm Triple Knuckle Hinge (Square)
Grade 13



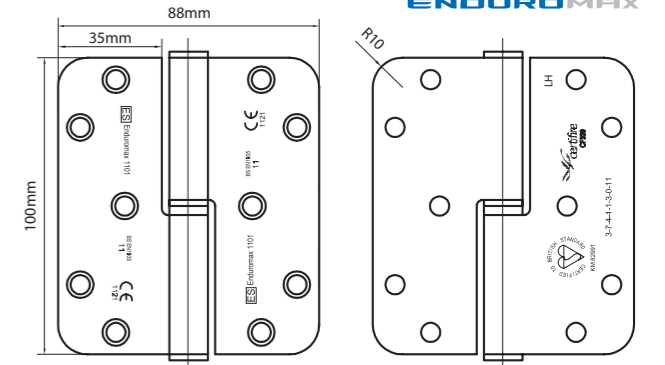
4 7 6 1 1 3 0 13



H3N1101/11/R/LEF
100x88x3mm Lift Off (Full Leaf) Hinge (Radius)
Also available in right hand H3N1101/R/RIG
Grade 11



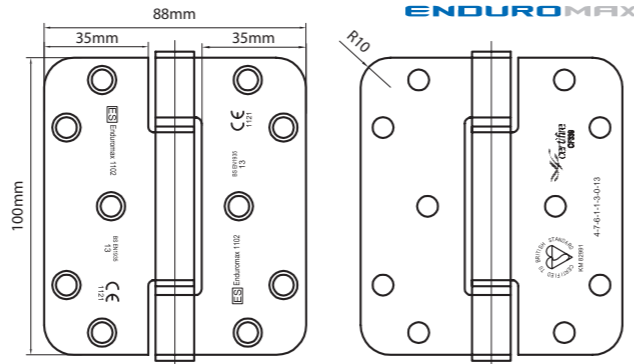
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H3N1102/13/R
100x88x3mm Triple Knuckle Hinge (Radius)
Grade 13



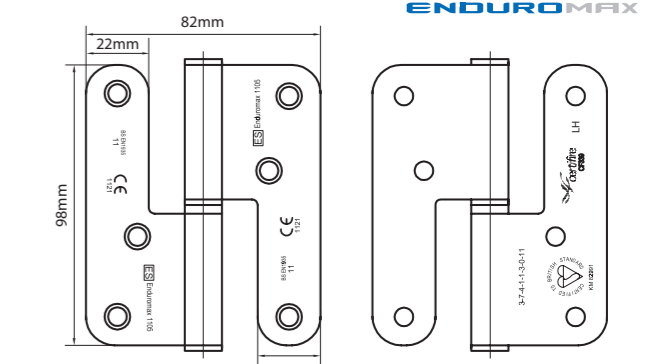
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H3N1105/11/R/LEF
98x82x3mm Lift Off (Journal Support) Hinge (Radius)
Also available in right hand H3N1105/R/RIG
Grade 11



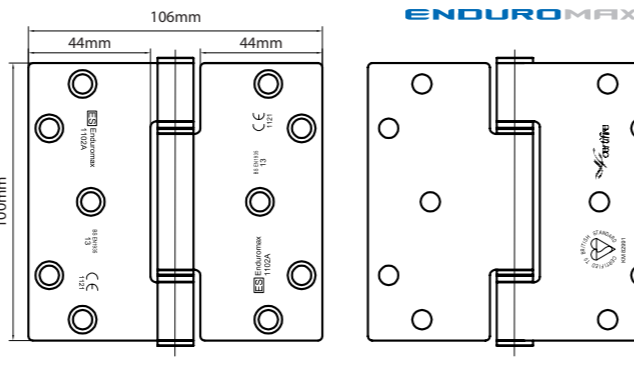
3 7 4 1 1 3 0 11



H3N1102A/13
100x106x3mm Triple Knuckle Projection Hinge (Square)
Grade 13



4 7 6 1 1 3 0 13



H3N1107/13/R/LEF
110x98x3.5mm Lift Off (Journal Support) Hinge (Radius)
Also available in right hand H3N1107/13/R/RIG
Grade 13



4 7 6 1 1 3 0 13

