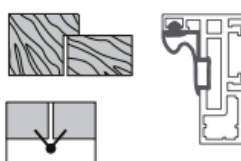
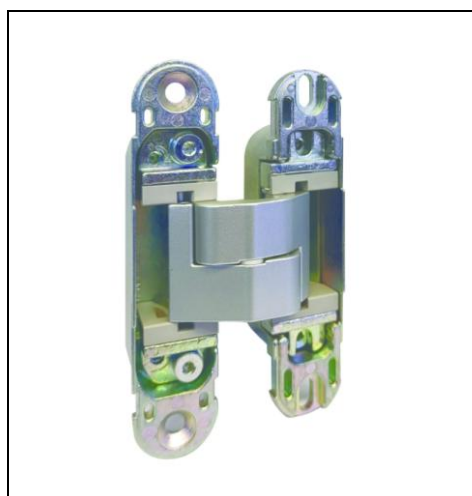


TEST REPORT

VCF
n°1436_S3
del 10/03/25

Product	Door hinge mod. BS3.2
Manufacturer	BONAITI SERRATURE SPA
Test norm	EN 1935:2002
Test machine	Tested for EN 1935:2002
Test period	March 2025



MATERIALE DI PROVA	
Code	AHS32024XX
Description	HINGE BS3.2
Material	Zamak 15 UNI3717
Hinge Height	104,8 mm
Hinge pin material	Steel
Maximum Angle of opening	180°
Door weight	50 Kg
Maintenance	In accordance with the maintenance and assembly instructions for this model

CLASSIFICATION RESULTS ACCORDING TO EN 1935 OBTAINED AFTER THE TESTS CONDUCTED:

1	2	3	4	5	6	7	8
Category of Use	Durability Test Cycles	Mass of the door	Fire/Smoke suitability	Safety	Corrosion Resistance	Security-Burglar resistance	Hinge grade
2	7	2	1	1	4	0	7

Please note: Tests were conducted according to EN1935:2002 adapted for use on multi-axis hinges

STATIC LOAD AND OVERLOAD TESTS

a) Static load test: the hinge is installed on a test support and is loaded with a weight equal to double that declared in the capacity and moved for 20 cycles at approximately 90° opening. Sagging checks are then performed within a predetermined field.

RESULTS OBTAINED:

CRACKS	BREAKAGES	MEETS STATIC FALL LIMITS (according to EN1935 graph figure G1)
NONE ✓	NONE ✓	YES ✓

b) Overload test: the hinge is overloaded with a weight 3 times greater than that declared in the hinge capacity. It is then moved for 5 cycles. Afterwards, no breakages must occur, and the door must remain connected to the frame.

RESULTS OBTAINED:

CRACKS	BREAKAGES	REMAINS CONNECTED TO THE FRAME
NONE ✓	NONE ✓	YES ✓

1) DURABILITY TEST:

The test door is equipped with 2 hinges and then loaded with a weight equal to the maximum expected load capacity. **It is then moved for 200.000 cycles.**

RESULTS OBTAINED:

CRACKS	BREAKAGES	MEETS STATIC FALL LIMITS (according to EN1935 graph figure G1)
NONE ✓	NONE ✓	YES ✓

Overload test after durability: the hinge is overloaded with a weight 3 times greater than that declared in the capacity of the hinge. It is then moved for 5 cycles. Afterwards, no breakages must occur and the door must remain connected to the frame.

RESULTS OBTAINED:

CRACKS	BREAKAGES	REMAINS CONNECTED TO THE FRAME
NONE ✓	NONE ✓	YES

3) CORROSION TEST:

The hinges are subjected to exposure test in a neutral salt spray chamber NSS according to UNI EN 9227.

RIFERIMENTI E PARAMETRI DI PROVA							
Standard	NSS chamber temperature	Nebulization pressure	Humidifier temperature	NSS distribution check	Sample positioning	Saline solution	Solution pH
UNI EN ISO 9227 :2012 test NSS	35° ± 2°C	0,7 - 1,4 bar	45-52 °C	1,5 ± 0,5 ml/h	20° ± 5°	NaCl (50 ± 5 g/l)	6-7
Validation parameters	✓	✓	✓	✓	✓	✓	✓

RESULTS OBTAINED:

GRADE VERIFIED according to EN 1670	Grade 4: Meets requirements	✓
NSS HOURS FOR GRADE 4	240 h	✓

The validation of the test according to EN 1935:02 adapted to the use on multi-axis hinges is certified	Signed QC 
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