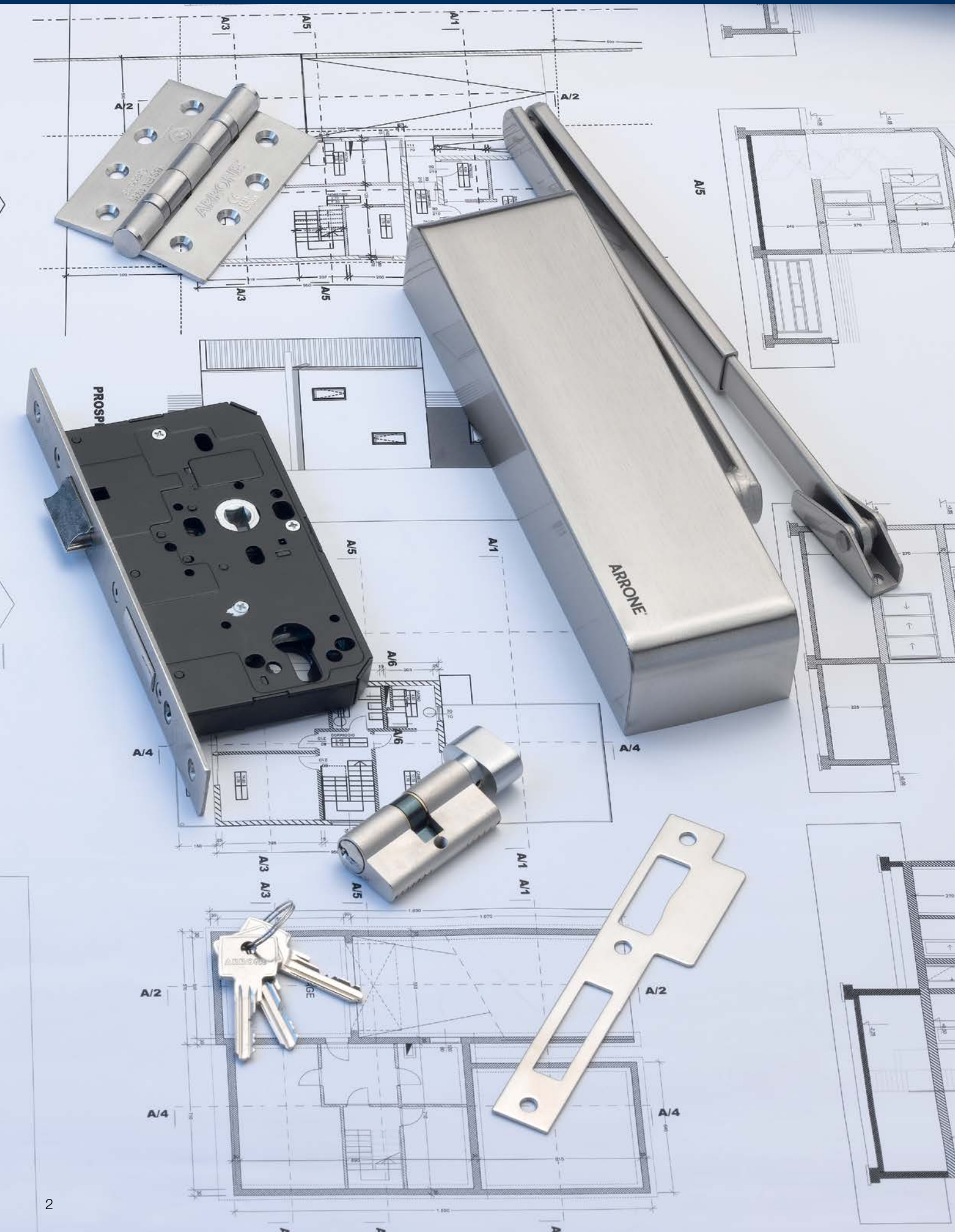


a brand of **HOPPE[®]**  **GROUP**

Hinge Range



	Page
About HOPPE (UK)	4
ARRONE – General information	5
Hinges – General information	7
ARRONE-Hinges	11
Lift Off Hinges.....	12
Ball Bearing Hinges	13-14
PBW Hinges.....	15
Concealed Bearing Hinges	15
Accessories.....	16



About HOPPE (UK)



HOPPE (UK) Ltd. is a specialist manufacturer and supplier of door and window hardware. Established in the UK in 1988, we have become the trusted partner of our customers through our focus on innovation, quality and performance.

As a member of HOPPE Group with its German origins, HOPPE (UK) benefits highly from more than 60 years of experience and knowledge in the field of architectural hardware. HOPPE Group is a company run by the owning family who have always based its leadership on high ethical standards based on values. This attitude creates a correspondingly high quality of interaction with employees and customers alike making "HOPPE – Handle of excellence." a brand-name that stands for innovation and customer-oriented added value. This way HOPPE door and window handles will offer the best possible benefit/price ratio to every market segment.

Complementary products to operate and secure the door such as closers, locks, hinges, access control, etc. are provided by "ARRONE – the Complete Range", a brand of HOPPE Group. ARRONE offers a comprehensive range of products designed for use within the commercial and residential door market. The brand is recognised for offering affordable quality hardware products.



Our dedicated staff is highly skilled, GAI trained and provides award winning service. We invest heavily in stock of core items to satisfy our customers' needs. A purpose built, state-of-the-art distribution centre at Gailey Park, seven miles north of Wolverhampton, provides the ideal location for distribution throughout the UK and Ireland. At 50,000 square feet it offers light and modern facilities for both employees and customers with a fully equipped showroom/meeting room available.

HOPPE (UK) strives for continued excellence through our commitment to long-term trusting partnerships with employees, customers and suppliers and the regions in which the company is located, thus allowing for the best overall value proposition to our strategic market partners – we call that Total Beneficial Advantage.



ARRONE – developing and enhancing the product range

Under the ARRONE brand name, HOPPE Group is able to offer a comprehensive range of architectural quality door and window hardware along with accessories. Many products are manufactured exclusively by leading hardware manufacturers throughout the world. Within the extensive range are door closers, floor springs, emergency exit devices, cylinders, architectural mortice lock cases, hinges, disabled fittings, signs and accessories.

ARRONE products are designed and manufactured to compliment the HOPPE range of aluminium, brass, stainless steel and nylon door and window hardware.

Since being acquired by HOPPE in 1997, the ARRONE product range is now firmly recognised and established within the market place. However, increasing demands for additional feature benefits and product enhancements, coupled with changes in legislation, have led to extensive product developments and additions throughout the various ranges.

Door Handles

ARRONE handles not only look good, with a range of styles and finishes to suit any design scheme, they also comply with the highest international quality and performance standards. Tested to BS EN 1906 and BS 8300, these handles can be specified with complete confidence in any building.

BS EN 1935:2002
BS EN 1634-1
Certifire
CE Marking

Pull Handles

From traditional D-shaped handles to stylish T-bar designs, the ARRONE range of pull handles is one of the widest available in the market. Our high quality handles are designed to withstand high levels of traffic and come in a range of finishes to match any design needs.

Door Controls

A combination of aesthetics and durability, the ARRONE door closers are built to last and engineered to perform. Manufactured to meet all quality and performance standards, ARRONE door controls are best suited to commercial applications. The range includes traditional overhead closers, as well as concealed overhead closers and floor springs.

BS EN 1154:1997
BS EN 1155:1997
BS EN 1634-1
Certifire
CE Marking

Panic and Emergency Hardware

Designed with safety and accessibility in mind, the ARRONE range of panic and emergency exit hardware has been designed, manufactured and fully tested to the highest European standards: EN 179 and BS EN 1125. Proven quality and optimum performance make ARRONE the perfect choice for specifiers.

Locks and Latches

A door is only as secure as its ironmongery. The ARRONE ranges of locks and latches have been manufactured to offer attractive price without compromising performance. The range is not limited to traditional mortice lock, latches and nightlatches, the ARRONE security offering also extends to the popular mechanical push button locks.

BS EN 12209:2003
BS EN 179:2008
BS EN 1634-1
Certifire
CE Marking

ARRONE – General information

BS EN 1303:2015
BS EN 1634-1

Cylinders

ARRONE not only offers the complete range, but also the complete service. We have a broad offering of cylinders and an in-house cylinder centre, staffed by fully qualified locksmiths. With these facilities, HOPPE UK offers a master keying service for master suites and keyed alike sets to meet all requirements.

Architectural Hinges

ARRONE architectural hinges are often found in schools, hospitals and commercial buildings with consistent and considerable traffic. In these buildings, safety and functionality are imperative. With ARRONE architectural hinges, there is no need to compromise on aesthetics or performance – you can get the product you need, the way you want it.

Architectural Accessories and Signs

The ARRONE Architectural Accessories and Signs includes a vast range of products needed for high use doors in commercial buildings, including fire doors. From letter plates to coat hooks, to door stops and flush pulls, ARRONE meets all specification needs whilst complimenting any door.

Creative Shelving

The ARRONE anti-bacterial range has an assortment of components that allow complete design flexibility. Uprights, brackets and accessories can be used together in a range of configurations to meet all shelving requirements. Shelf ends, rod brackets, ventilated shelves and baskets can be added to further enhance design choices.



Technical considerations

Normally, three hinges are fitted to each door. Their positions are determined by the weight of door and its resistance to warping or whipping.

Adjusted door weight calculation table		
Actual door weight	Doors of excess width, please refer to side loading calculation table	Actual door weight
	Door closer + 20%	
	Door closer (backcheck) + 75%	
	Extra heavy use + 10%	
	Light use + 10%	

Hinges for use with doors of excess widths

Wider doors obviously increase the pressure and bending moment exerted on the hinge. This must be allowed for by reduction in the maximum mass of the door leaf supported by each grade of hinge.

The factors by which the door mass has to be adjusted for excessive widths of door are calculated by dividing the door height by its width. For a factor of 2 or greater, no allowance has to be made. When the factor is less than 2, the door mass has to be increased by the value required to bring the factor to 2 expressed as a percentage. These percentages are shown in the side loading calculations table shown below.

Side loading calculations			
Door size		Factor	Normal increase of mass of door leaf %
Door height	Door width		
2,000mm	1,000mm	2	0
2,000mm	1,050mm	1.9	10
2,000mm	1,100mm	1.82	18
2,000mm	1,150mm	1.74	26
2,000mm	1,200mm	1.66	33
2,000mm	1,250mm	1.6	40

Standards and certification

BS EN1935 Single Axis Hinges

This European standard specifies requirements for single-axis hinges for windows and doors opening in one direction only, whose rotation axis is no more than 30mm from the face of the sash or door. It covers both fixed pin and lift-off hinges, and contains additional requirements for hinges intended for use on fire doors.

BS EN 1935:2002 classifies door furniture by using an 8-digit coding system. Each digit refers to a particular feature of the product measured against the standard's performance requirements.

1

Digit 1 – Category of use

Four categories of use are identified:

- grade 1: light duty
- grade 2: medium duty
- grade 3: heavy duty
- grade 4: severe duty

2

Digit 2 – Durability

Three grades are identified for single-axis hinges manufactured to this European standard:

- 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

3

Digit 3 – Test door mass

Eight door mass grades related to single-axis hinges are identified in this European standard as shown in table below.

Test door mass grade	Door mass
0	10 kg
1	20 kg
2	40 kg
3	60 kg
4	80 kg
5	100 kg
6	120 kg
7	160 kg

4

Digit 4 – Suitability for fire/smoke door use

Two grades of suitability are identified for single-axis hinges:

- grade 0: not suitable for fire/smoke resistant door assemblies
- grade 1: suitable for fire/smoke resistant door assemblies subject to satisfactory assessment of the contribution of the single axis hinge to the fire resistance of the specified fire/smoke door assemblies.

5

Digit 5 – Safety

Single-axis hinges are required to satisfy the essential requirements of safety in use. Therefore, only grade 1 is identified.

6

Digit 6 – Corrosion resistance

Five grades of corrosion resistance are identified in accordance with BS EN 1670:2007

- grade 0: no defined corrosion resistance
- grade 1: mild resistance
- grade 2: moderate resistance
- grade 3: high resistance
- grade 4: very high resistance

7

Digit 7 – Security

Two grades of security are identified for single-axis hinges:

- grade 0: not suitable for use on burglar-resistant door assemblies
- grade 1: suitable for applications requiring a degree of security. Annex C of this European standard details the hinge grade to use for the level of security required.

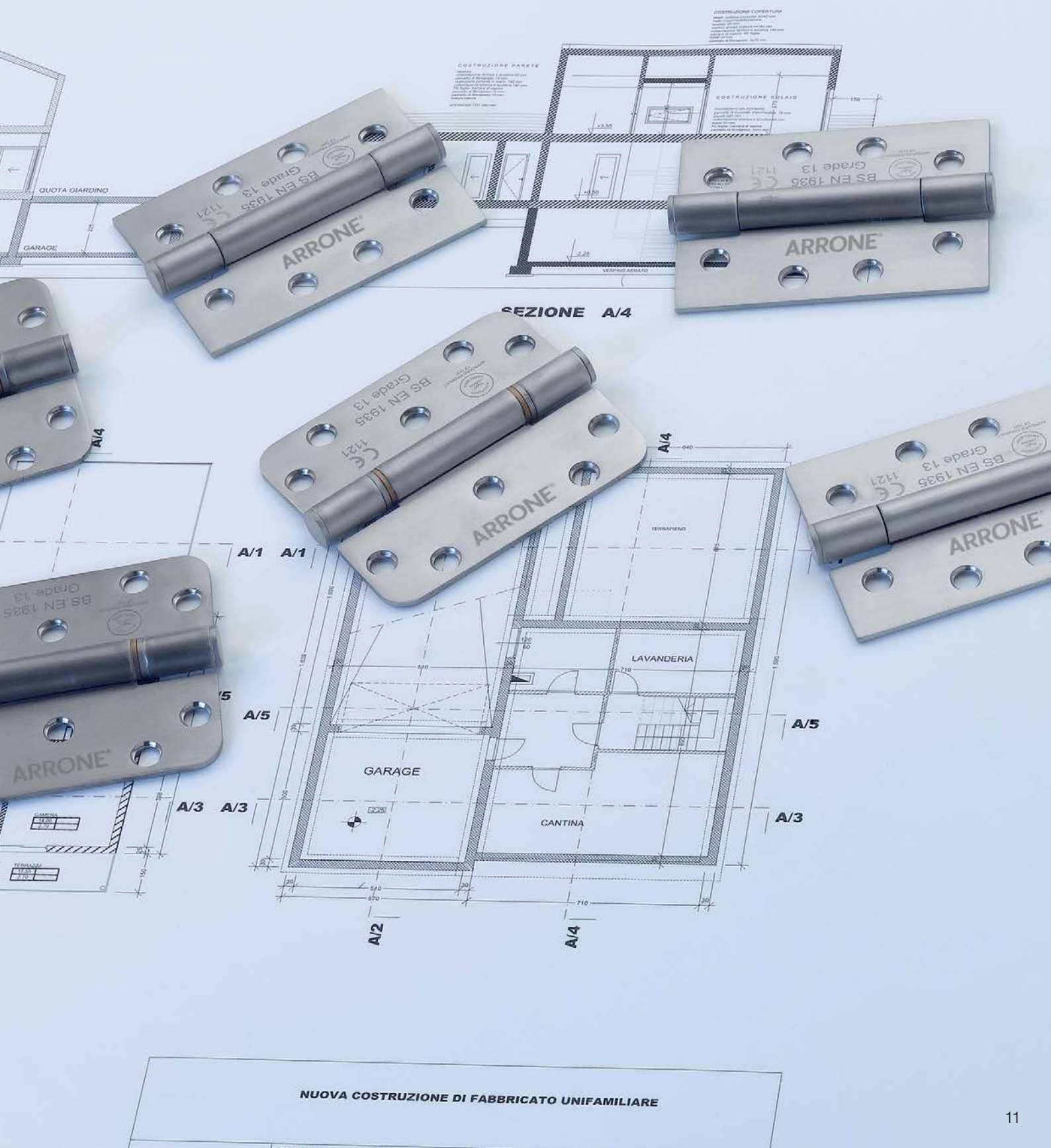
8

Digit 8 – Hinge grade

Fourteen grades are identified in this European standard and are detailed in table 2 below. The full classification is shown in the standard.

Hinge grade	Usage	Test cycles	Door mass
1	Window	10,000	10 kg
2	Window	10,000	20 kg
3	Window/Door	25,000	20 kg
4	Door	200,000	20 kg
5	Window	10,000	40 kg
6	Window/Door	25,000	40 kg
7	Door	200,000	40 kg
8	Window	10,000	60 kg
9	Window/Door	25,000	60 kg
10	Door	200,000	60 kg
11	Door	200,000	80 kg
12	Door	200,000	100 kg
13	Door	200,000	120 kg
14	Door	200,000	160 kg







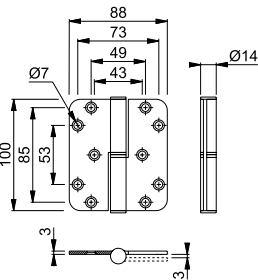
AR8782

- ARRONE stainless steel grade 13 radius corner lift off hinge:
- 100 x 88 x 3 mm
 - Sold as a pair
 - Maintenance free bearing
 - Grade 304
 - Supplied with stainless steel pozi countersunk wood screws
 - Suitable for doors up to 120kg weight
 - Intumescent pack available separately for use on timber fire doors (AR/INT-8680/8380/8780)*
 - Successfully type tested for conformity to all the requirements of BS EN1935: 2002 Grade 13

4	7	6	1*	1	4	0	13
---	---	---	----	---	---	---	----

- Included in a successful fire test to BS EN 1634 Part1. Assessed for use on 30 and 60 minutes on timber fire doors (Intumescent pack must be used)*
- CE Marked: Certificate 1121-CPR-AC5050
- CPR Declaration of Performance: HUK0063 (**See Service section**)
- Guarantee: 5 Years

Product ref.	Article description	Finish	Article no.
AR8782-LH-SSS	Lift off hinge incl. screws for wooden frames/doors, pair	SSS	50004190
AR8782-RH-SSS	Lift off hinge incl. screws for wooden frames/doors, pair	SSS	50004207





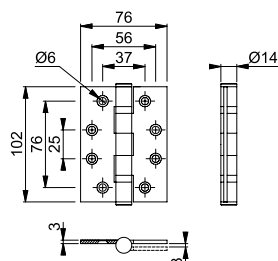
AR8180, AR7070, AR9290, AR8187

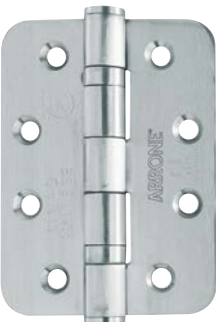
- ARRONE 2 ball bearing stainless steel Grade 13 square corner butt hinge:
- Sold as a pair
- Supplied with 16 x 201 grade stainless steel pozi countersunk wood screws
- Suitable for doors weighing up to 120 kg (Grade 13)
- Intumescent pack available separately for use on timber fire doors (AR/INT-AR8180/8580)*
- Steel door fixings available separately
- Successfully type tested for conformity to all the requirements of **BS EN 1935: 2002 Grade 13**

4	7	6	1*	1	4	0	13
---	---	---	----	---	---	---	----

- Included in a successful fire test to BS EN 1634 Part1. Assessed for use on 30, 60, 90 and 120 minutes timber fire doors and 240 minutes on steel fire doors
- CE Marked: Certificate 1121-CPD-AC0070
- CPR Declaration of Performance: HUK0016 (**See Service section**)
- Certifire approved: Certificate CF369

Product ref.	Article description	Finish	Article no.
AR8180-SSS	Butt hinge incl. screws for wooden frames/doors, pair	SSS	8567837
AR7070-PVD	Butt hinge incl. screws for wooden frames/doors, pair	PVD	87105948
AR9290-PSS	Butt hinge incl. screws for wooden frames/doors, pair	PSS	8567844
AR8187-SSS (Sold as packs of 3)	Butt hinge incl. screws for wooden frames/doors, 1.5 pair	SSS	87109450





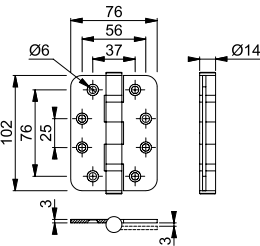
AR8182, AR9292

- ARRONE 2 ball bearing stainless steel Grade 13 square corner butt hinge:
- Sold as a pair
- Supplied with 16 x 201 grade stainless steel pozi countersunk wood screws
- Suitable for doors weighing up to 120 kg (Grade 13)
- Intumescent pack available separately for use on timber fire doors (AR/INT-8680/8380/8780)*
- Steel door fixings available separately
- Successfully type tested for conformity to all the requirements of **BS EN 1935: 2002 Grade 13**

4	7	6	1*	1	4	0	13
---	---	---	----	---	---	---	----

- Included in a successful fire test to BS EN 1634 Part1. Assessed for use on 30, 60, 90 and 120 minutes timber fire doors and 240 minutes on steel fire doors
- CE Marked: Certificate 1121-CPD-AC0070
- CPR Declaration of Performance: HUK0016 (**See Service section**)
- Certifire approved: Certificate CF369

Product ref.	Article description	Finish	Article no.
AR8182-SSS	Radiused corner butt hinge incl. screws for wooden frames/doors, pair	SSS	87105952
AR9292-PSS	Radiused corner butt hinge incl. screws for wooden frames/doors, pair	PSS	87105953



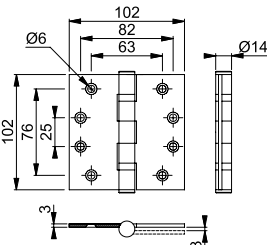
AR8184

- ARRONE 2 ball bearing stainless steel Grade 13 square corner butt hinge:
- Sold as a pair
 - Supplied with 16 x 201 grade stainless steel pozi countersunk wood screws
 - Suitable for doors weighing up to 120 kg (Grade 13)
 - Intumescent pack available separately for use on timber fire doors (AR/INT-AR8180/8580)*
 - Steel door fixings available separately
 - Successfully type tested for conformity to all the requirements of **BS EN 1935: 2002 Grade 13**

4	7	6	1*	1	4	0	13
---	---	---	----	---	---	---	----

- Template drilled
- Included in a successful fire test to BS EN 1634 Part1. Assessed for use on 30 and 60 minutes on timber fire doors and 240 minutes on steel fire doors
- CE Marked: Certificate 1121-CPD-AC0070
- CPR Declaration of Performance: HUK0017 (**See Service section**)
- Certifire approved: Certificate CF369

Product ref.	Article description	Finish	Article no.
AR8184-SSS	Butt hinge incl. screws for wooden frames/doors, pair	SSS	87105949





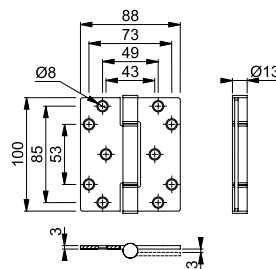
AR8380, AR8382

- ARRONE phosphor bronze bearing stainless steel Grade 13 square corner butt hinge:
- Sold as 1.5 pairs
- Maintenance free bearing
- Supplied with stainless steel pozi countersunk wood screws
- Suitable for doors up to 120 kg weight
- Intumescent pack available separately for use on timber fire doors (AR/INT-8680/8380)*
- Successfully type tested for conformity to all the requirements of **BS EN 1935: 2002 Grade 13**

4	7	6	1*	1	4	0	13
---	---	---	----	---	---	---	----

- Included in a successful fire test to BS EN 1634 Part1. Assessed for use on 30 and 60 minutes timber fire doors (Intumescent pack must be used)*
- CE Marked: Certificate 1121-CPD-AC5027
- CPR Declaration of Performance: HUK0049 (**See Service section**)
- Certifire approved: Certificate CF5197
- Guarantee: 25 Years

Product ref.	Article description	Finish	Article no.
AR8380-SSS	Butt hinge incl. screws for wooden frames/doors, 100 x 88 x 3 mm, 1,5 pair	SSS	87139242
AR8382-SSS	Butt hinge incl. screws for wooden frames/doors, 100 x 88 x 3 mm, 1,5 pair	SSS	87139263



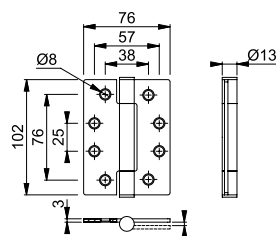
AR8580, AR8582

- ARRONE concealed bearing stainless steel Grade 13 square corner butt hinge:
- Sold as 1.5 pairs
- Maintenance free bearing
- Supplied with stainless steel pozi countersunk wood screws
- Suitable for doors up to 120 kg weight
- Intumescent pack available separately for use on timber fire doors (AR/INT-8180/8580)*
- Successfully type tested for conformity to all the requirements of **BS EN 1935: 2002 Grade 13**

4	7	6	1*	1	4	0	13
---	---	---	----	---	---	---	----

- Included in a successful fire test to BS EN 1634 Part1. Assessed for use on 30 and 60 minutes timber fire doors (Intumescent pack must be used)*
- CE Marked: Certificate 1121-CPD-AC5027
- CPR Declaration of Performance: HUK0050 (**See Service section**)
- Certifire approved: Certificate CF5197
- Guarantee: 25 Years

Product ref.	Article description	Finish	Article no.
AR8580-SSS	Butt hinge incl. screws for wooden frames/doors (sq corner), pair	SSS	87139200
AR8582-SSS	Butt hinge incl. screws for wooden frames/doors (radius corner), pair	SSS	87139221

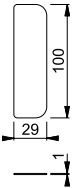




Intumescent Packs

- ARRONE Intumescent Pack:
- Intumescent pack to suit ARRONE 102 mm x 76 mm hinges
 - Consists of:
 - 6 x hinge leaf pads (for 3 hinges)

Product ref.	Article description	Article no.
AR/INT-8180/8580	To suit 102 mm x 76 mm hinges, 1 mm	50004578
AR/INT-8680/8380/8780	To suit 102 mm x 90 mm hinges, 1 mm	50004585
AR/INT-8184	To suit 102 mm x 102 mm hinges, 1 mm	50004591



Notes

[illegible]

[illegible]

