



Cylinders and Key Systems

ASSA cylinders & key systems



Key management systems

- Master key systems designed to order.
- ASSA Keybank software makes system administration simple.
- ASSA key cabinets employ sophisticated technology to preserve the security of your keys.



Electromechanical cylinders

- The ASSA CLIQ system combines the best of electronics and mechanical technology in a single cost-effective package.
- Intelligent key systems provide maximum security, with instant cancellation of lost or stolen keys and full audit trails available.
- All standard cylinder shapes are available and the system may be re-programmed at any time, allowing maximum flexibility and maintaining the level of security over the life of the system.



Cylinders

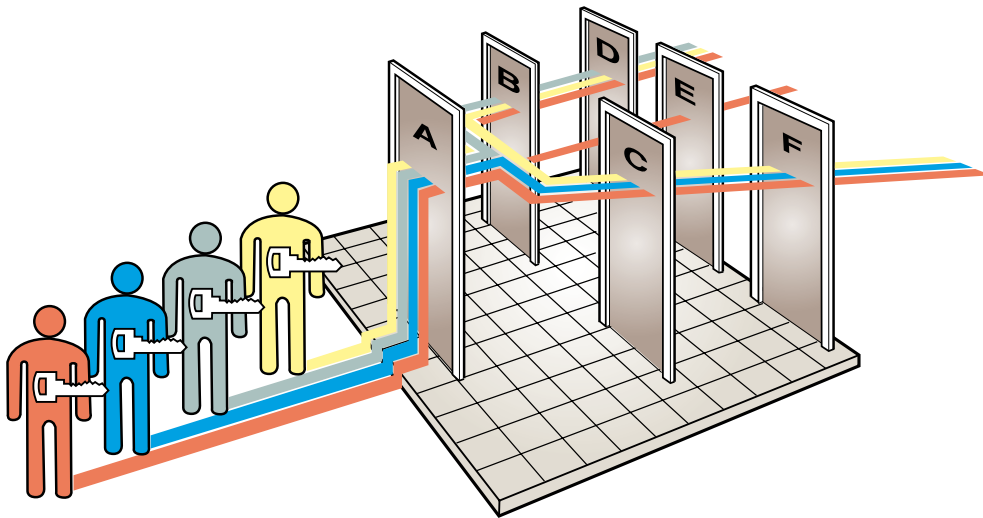
- Available at six different levels of security.
- Cylinders in the range have been tested and approved for use on the most security-conscious applications in the UK.
- A full range of shapes is available, allowing the cylinders to be used with all common makes of lockcase.



Padlocks

- Tested to the highest levels of BS EN 12320.
- May be master keyed in the same system as ASSA cylinders.
- Available in a range of sizes and shackle types to suit different applications.

ASSA master key systems



Security and convenience of movement are inevitably in conflict with each other.

A master key system is, by its very nature, a compromise between total security and totally free movement which would entail no security.

With a little thought and planning a system can be designed to suit the client's precise operational requirements within each building.

All ASSA locks can be incorporated in a master key system. These are in turn designed around the people who will use them.

This has led to systems being designed in a way that is unique to ASSA ABLOY Door Solutions. The number of locks in a building is first established, followed by the people who will use them and the areas they need to enter. Only then are the customer's

particular requirements detailed on a special chart, enabling the system to be made up to suit the specific security requirements of the customer. Users can then be issued with their own unique key which allows them to move freely - but only through areas they need to enter.

A simplified example of a typical ASSA Master Key System. Each person is issued with their own unique key which only opens doors appropriate to their job function. For example, all open door A, but only the Senior Manager can open Door E. ASSA Master Key Systems designed in this way can be extended to satisfy the requirements of large and complex installations without compromising their integrity.

- Cleaner:
Doors A, B, C, D, F
- Department Head A:
Doors A, B, D
- Department Head B:
Doors A, C, F
- Senior Manager:
All doors

ASSA supply special forms for use in recording detailed master key information in an easily intelligible manner.

Professional service & support

We have been designing and supplying master key systems in the UK for over 50 years. That expertise is at your service whenever you decide to install or upgrade an ASSA system. Our specialist in-house Systems Department will be happy to advise you on the different options available. In particular, they can ensure that your system is properly planned to accommodate all future expansion, thus avoiding the potentially costly long-term problems possible

with an "off-the-shelf" system. The system is then designed using the latest computer software aids. All these services are available to you free of charge.

Once your system has been designed, the cylinders can be assembled and supplied by your local ASSA Security Centre, thus ensuring fast and responsive service. All Security Centres are closely monitored by ASSA ABLOY Door Solutions to ensure the highest standards of quality

and security are observed. They are also required to employ staff who have been specially trained by ASSA ABLOY Door Solutions, enabling them to provide advice and ongoing support with all elements of your system. Backed up when necessary by our own Systems Department, this ensures that you can be assured of the best possible service throughout the lifetime of your system.



Key management software

Keybank for Windows™ has been designed to make the process of key management a simple one. It maintains a full record of the master key system, including a graphical door plan, lock chart, and lists of doors, keys and users. All are fully cross-referenced and automatically updated.

The features Keybank offers include:

- Detailed procedures for recording when keys are issued.
- Receipts and reminder notices.
- Key/User access reports.

The system will run on any standard Windows™ PC.



Key cabinets



Application

For use as part of a high security key management system, where keys that are not currently in use must be kept secure. Uses proximity RFID tokens or PINs to identify authorised users.



Made from heavy duty 3mm steel, with steel door.

Require 4 x 1.5 V AA-LR6 battery power supply.

Supplied with built-in RFID proximity reader and keypad, and cylinder key override.

↘ New Proxy Code (NPC)

Key Cabinet

Available in three sizes:

NPC Small: 14 keys

NPC Medium: 58 keys (expandable to 116)

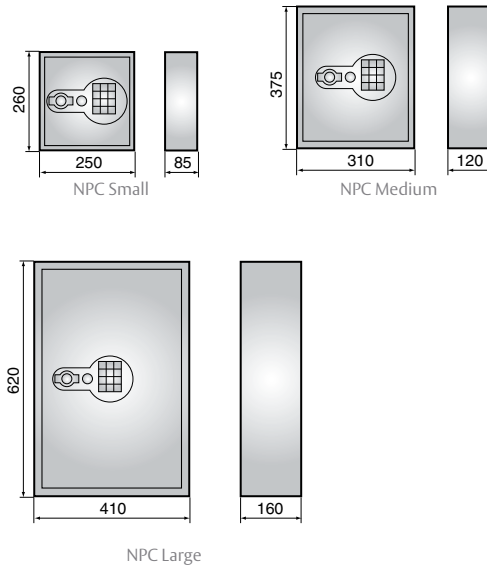
NPC Large: 284 keys (expandable to 852)

May be expanded to the maximum capacity by adding Extension Sheets.

Individual users are given a unique token and PIN to open the cabinet.

Maximum 50 users per cabinet.

Mass of NPC Small is 7kg, Medium is 15kg and Large is 33kg.



High security key cabinets



Application

For use as part of a high security key management system, where keys that are not currently in use must be kept secure. Uses access control tokens or PINs to identify authorised users.

KEYsafe Nova is recommended for applications where close monitoring of keys is essential.



Made from heavy duty 3mm steel, with steel door.

Supplied with KEYcom software. RS232 port for connection to PC. Optional Ethernet card and cable for connection to network.

Requires 220V AC mains connection. 12-hour battery back-up included.

Supplied with built-in touchtag reader and keypad, and cylinder key override. Optional magstripe card reader and mounting plates are also available.

➤ KEYsafe Nova 1

Key Cabinet

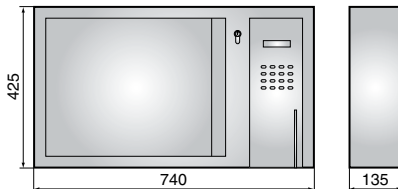
Capacity 24-48 keys. May be expanded to the maximum capacity by adding 24-key Keystrip Modules.

Individual users are given a unique token and PIN to open the cabinet, and the software then determines which key(s) they are authorised to take out. LEDs above each key hook provide a visual indication of this.

Keys are fitted with keyrings containing an identification chip. Sensors in the key cabinet monitor which keys are removed, and can sound an alarm if a user takes the wrong key.

Five inbuilt alarms and option of linking to external alarm system.

Maximum 1,024 users. 16,000 event audit trail. Mass 29kg.



➤ KEYsafe Nova 2

Key Cabinet

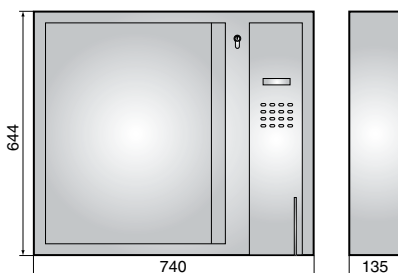
Capacity 24-96 keys. May be expanded to the maximum capacity by adding 24-key Keystrip Modules.

Individual users are given a unique token and PIN to open the cabinet, and the software then determines which key(s) they are authorised to take out. LEDs above each key hook provide a visual indication of this.

Keys are fitted with keyrings containing an identification chip. Sensors in the key cabinet monitor which keys are removed, and can sound an alarm if a user takes the wrong key.

Five inbuilt alarms and option of linking to external alarm system.

Maximum 1,024 users. 16,000 event audit trail. Mass 45kg.



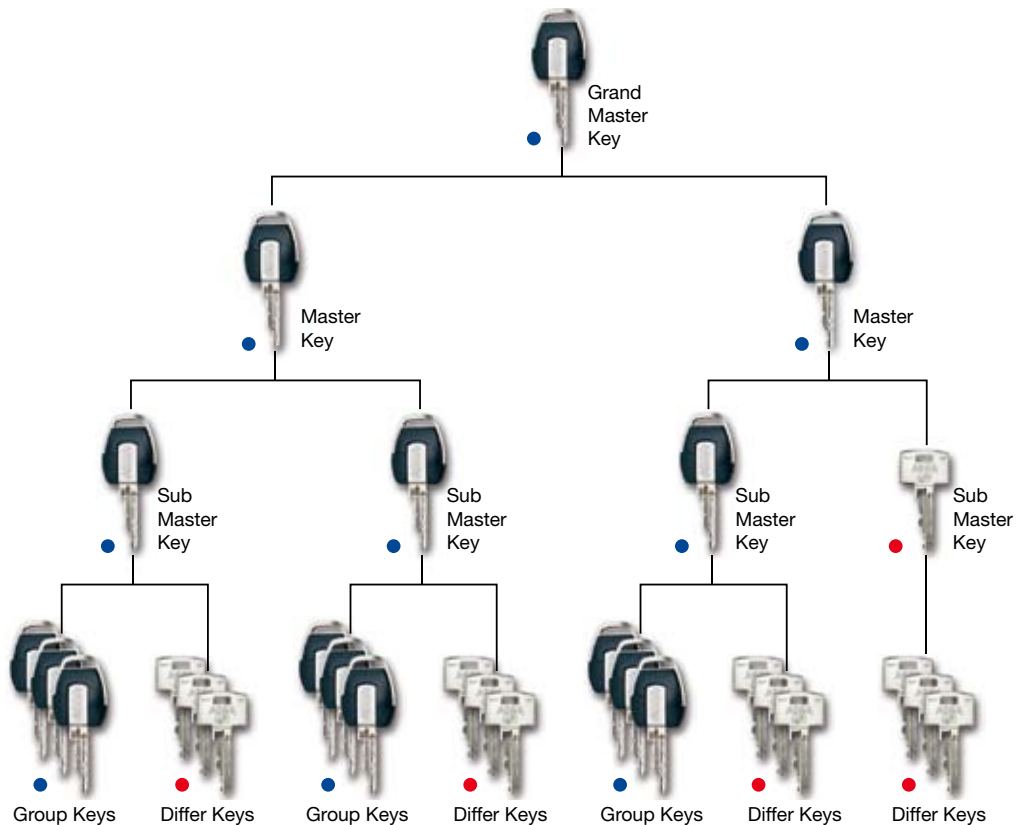
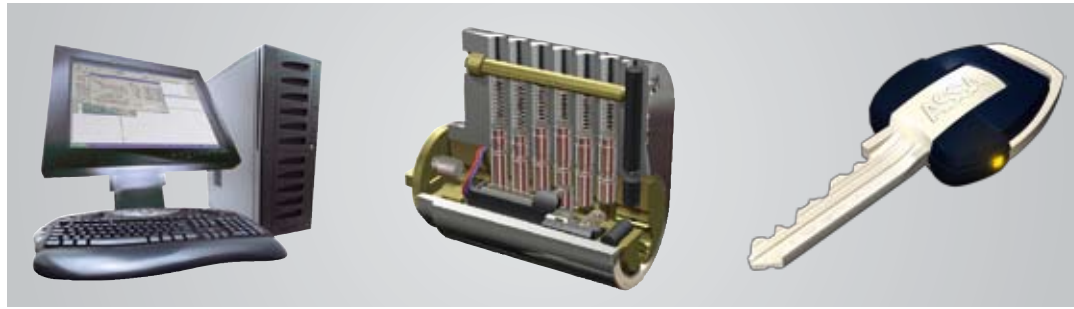
The ASSA CLIQ system

The new CLIQ technology from ASSA combines the best of design and electronics in the smartest possible manner. This intelligent lock system is built into the new generation of ASSA 4400 and 2400 lock cylinders.

CLIQ makes intelligent, flexible and high security lock systems possible. The system's mechanical design creates the basic foundation, which is made up of different security zones or levels. The electronic programming of the keys gives authorisation to individuals or to groups of individuals, allowing you to manage and control your security electronically.

The key features of CLIQ include the following:

- Off-line system.
- Instant cancellation of lost or stolen keys.
- Full audit trail of all events.
- No wiring: the system is battery-operated.
- Time schedules and restrictions may be created.
- All standard cylinder shapes and padlocks are available.
- Impossible to manipulate the system or copy keys.
- Absolute key control.
- The level of security is maintained over the life of the system.
- Cost efficient.



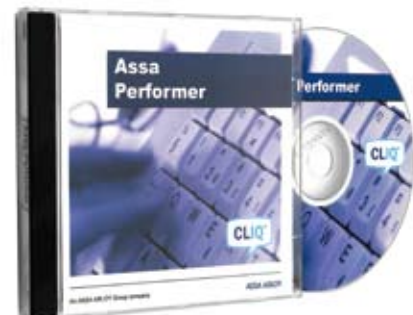
Both CLIQ and mechanical cylinders and keys may be incorporated in the same system. CLIQ cylinders may be used on perimeter and high security doors – and CLIQ padlocks can be used to secure outbuildings and gates. Mechanical cylinders can be incorporated into the master key suite for those doors not requiring either very high security, timed access or audit trail functions.

ASSA Performer software

ASSA Performer key management software provides a user-friendly yet powerful means to commission, program and administer your system.

The software package incorporates the complete system lockchart, including all mechanical and CLIQ cylinders and keys. The software can incorporate an unlimited number of master key systems, and can operate stand-alone or networked.










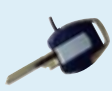
- Full programming of keys and cylinders.
- Facility to allow or remove accesses for user keys.
- Updating the status of lost or stolen keys.
- Setting time restrictions and schedules for keys.
- Full audit trail for both cylinders and keys.
- Full information on which user has access to which key, in which doors and where these are located.
- May be connected to the address book, email and calendar facilities of Microsoft Outlook® to keep track of users and issue reminders.
- Full reporting and search functions.
- Functions for handing out and returning keys.
- Ordering additional keys from suppliers.



How to specify ASSA CLIQ

A complete specification for a CLIQ system should include the following elements.

Note that CLIQ electronic cylinders may be included into a master key system with mechanical dp4400 and dp2400 cylinders.

Per Door		Per system	
	dp4400 or dp2400 series cylinder (Mechanical function) See pages 2:8-11.		ASSA Performer software (Requires PC) May operate stand-alone or networked.
	CLIQ electromechanical element (Specified as add-on to each cylinder.) Two elements required on double cylinders if the CLIQ function is required both externally and internally.		Programming device (Linked to PC) Used to program individual keys and download audit trails.
	CLIQ user keys (As required) These operate both mechanical 4400 and CLIQ electromechanical cylinders. Battery powered (2 year/20,000 operations).		Master control key (One per system) Responsible for master administration and programming of the system.
	Mechanical user keys (If required) These operate mechanical 4400 and 2400 cylinders but not CLIQ electromechanical cylinders.		Control keys (As required) Allow additional administrators to control sections of the system and facilitate bulk programming.
	Other door hardware (As required) Lockcase, accessories, lever handles, door closers, hinges, etc.		Contact key (One per system) Allows bulk programming and auditing of the system.

CLIQ Keys

CLIQ **User keys** have a unique ID and are impossible to copy for technical reasons. They incorporate an internal quartz clock and record an audit trail of the last 100 accesses, plus the last 10 foreign (non-system) key entries.

Power is supplied by an easily replaced battery within the key, reducing installation and maintenance costs. The battery supplies power for two years or 20,000 operations.

The key is water resistant and rated to IP55.

An LED on the key flashes green or red to show if access is allowed or denied. Audio feedback is also given: the key beeps once to show access is allowed or three times to show access is denied.

Note that User keys may be supplied as differ keys or master keys within a master key system.

Mechanical keys operate mechanical 4400 cylinders in the same master key system.

The **MC** (Master Control) key is used for central control, programming and administration of the system. A unique password is required for its use. One is supplied per system.

C (Control) keys allow multiple administrators to take responsibility for certain sections of the system.

A **Contact** key may be linked by cable to the programming device to allow bulk commissioning of large quantities of cylinders.



User key



Mechanical key



Programming device
(with MC key and User key inserted)



MC key



C key







Contact key

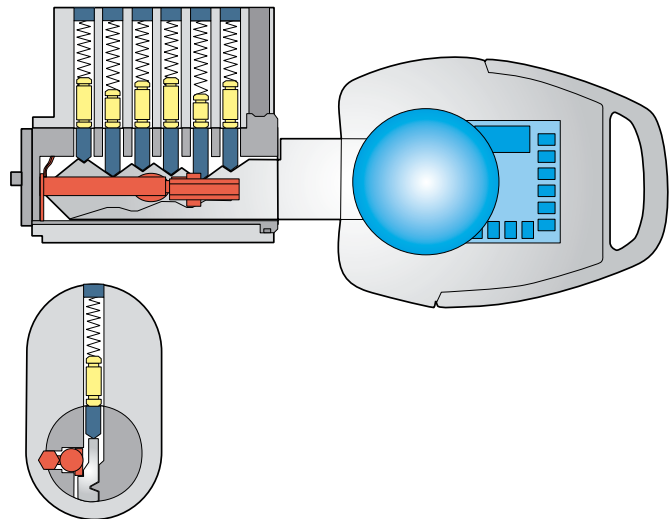
ASSA CLIQ



An ASSA CLIQ cylinder combines a CLIQ electromechanical element with an ASSA dp4400 (or dp2400) cylinder mechanism. Any of the cylinder shapes on the following pages may be fitted with the CLIQ function; please see the next section (pages 2:14-19) for compatible dp4400 and dp2400 mechanical cylinders that may also be incorporated into a master key system with CLIQ. The ASSA dp4400 cylinder offers extremely high security and full resistance to any currently known method of picking.

The dp2400 range offers a lower-cost option within an overall 4400 master key system on doors where higher security is not required.

-  All shapes of ASSA CLIQ cylinders and padlocks can be put in the same master key system. CLIQ keys can operate both electromechanical and mechanical cylinders in the same system, but mechanical keys will only operate the mechanical cylinders.
-  Dual security levels: may be combined with dp2400 cylinders in the same master key system.
-  Protected by worldwide patents.
-  Eligible for inclusion in an Option 10 Complete Package Guarantee.



BS EN 1303 : 2005
SG 6

Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

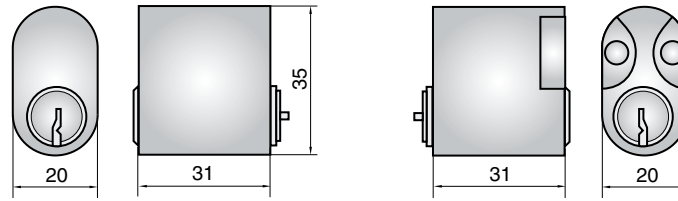
	Cylinders			Accessories			Padlocks
	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	Black chrome Fin 18
Scandinavian oval & round	✓	●	✓	✓	●	✓	
Round threaded	✓	●	✓	✓	●	✓	
Euro profile	✓	●	✓	✓	✓	✓	
Oval profile	✓	●	✓	✓	✓	✓	
Padlocks							✓

- ✓ Standard finish
- Special finish

Scandinavian oval

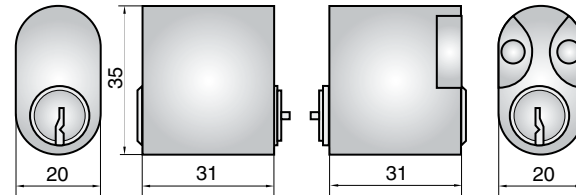
For use with ASSA Modular, Connect and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **4401***
Single cylinder (outside)

➤ **4403***
Single cylinder (inside)

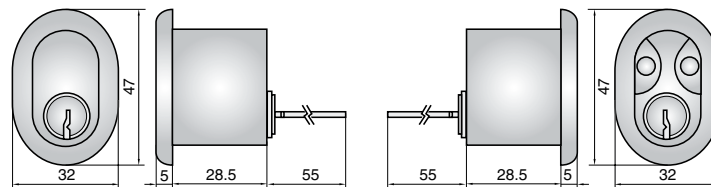


➤ **4402***
Double cylinder

For use with ASSA rim and Connect narrow profile lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.

Sleeve is not required when used with Connect 35mm backset lockcases and Narrow Profile accessories.



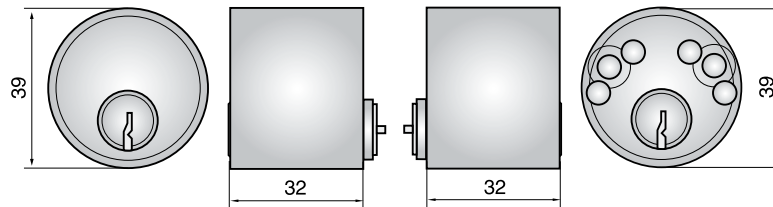
➤ **4407***
Single rim cylinder (outside)

➤ **4409***
Single rim cylinder (inside)

Scandinavian round

For use with ASSA Modular and Connect lockcases. The cylinder is fixed with four high security hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **4411***
Single cylinder (outside)

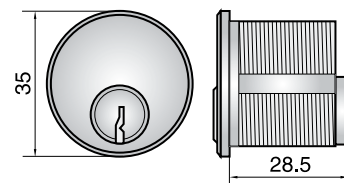
➤ **4413***
Single cylinder (inside)

➤ **4412***
Double cylinder

Round threaded

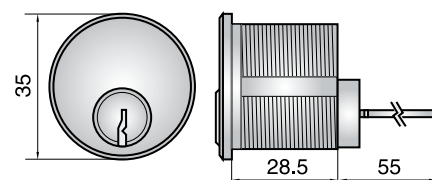
For use with locking devices accepting screw-in cylinders. State lock type when ordering to ensure that correct cam is supplied.

4451 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



➤ **4451***
Single mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



➤ **4457***
Rim cylinder

* With CLIQ function

Euro profile - M20 high security

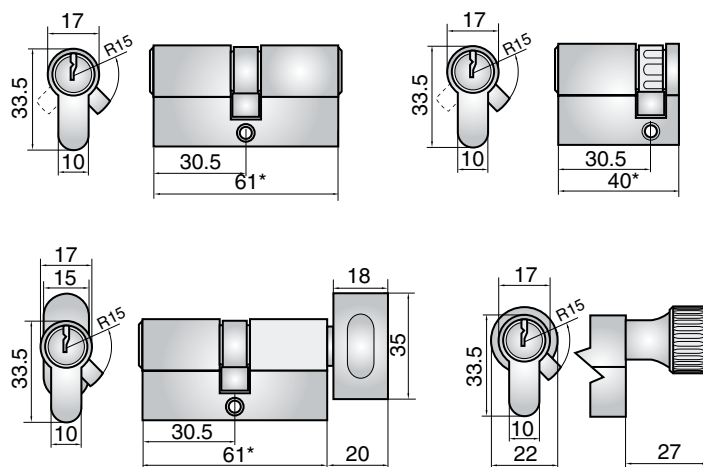
For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

Extended length cylinders are also available: see page 2:38.

Decorative and security accessories are available: see Door Furniture section.

The M20 high security Euro cylinder range offers high resistance to snapping.



➤ **44M22***
 Double cylinder

➤ **44M23***
 Single cylinder

➤ **44M27***
 Single cylinder
 with Distinction oval turn

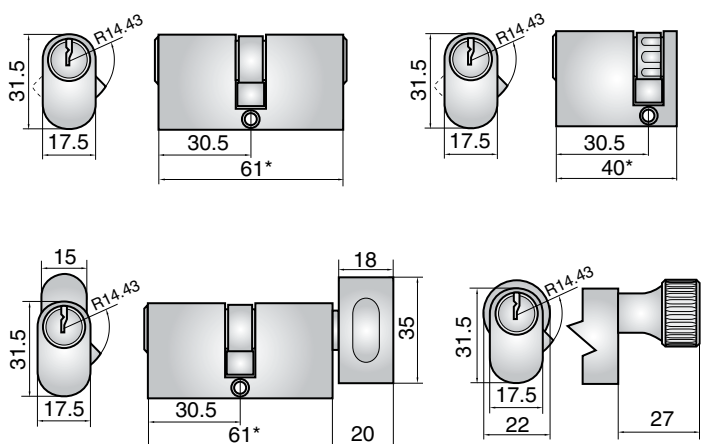
➤ **44M24***
 Single cylinder
 with small round turn

Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

CLIQ function is not available on extended cylinders (+5mm/+5+5mm).

Decorative and security accessories are available: see Door Furniture section.



➤ **4432***
 Double cylinder

➤ **4433***
 Single cylinder

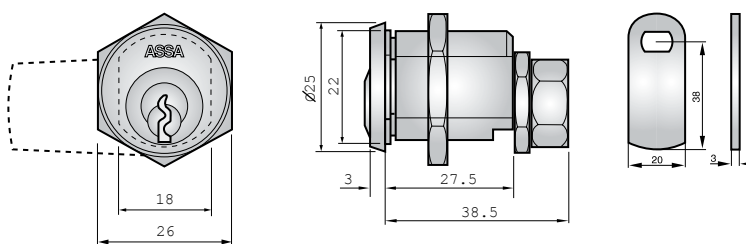
➤ **4437***
 Single cylinder
 with Distinction oval turn

➤ **4434***
 Single cylinder
 with small round turn

Master keyed cam lock

For use on cabinet doors and similar applications. Can easily be adjusted for door thicknesses up to 23mm.

Catches should be specified separately. Standard catch reference 05 is shown; please contact us for details of other options.



➤ **2471***
 Cam lock

* With CLIQ function

Padlocks

Class 2

Padlock body of extruded brass, black chrome plated.

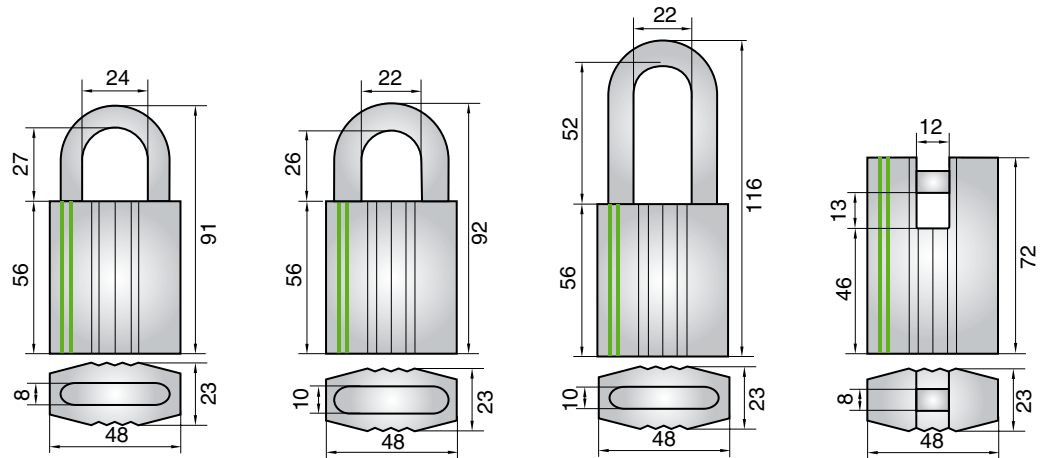
Shackle of rustproofed hardened steel, 8mm or 10mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength over 1½ tons.

Green stripes indicate Security Grade 3 to BS EN 12320.

BS EN 12320
SG 3



➤ **44241***
Key locking

➤ **44246***
Key locking
10mm dia. shackle

➤ **44247***
Key locking
extended shackle

➤ **44249***
Key locking
close shackle

Class 3

Padlock body of hardened steel, black chrome plated.

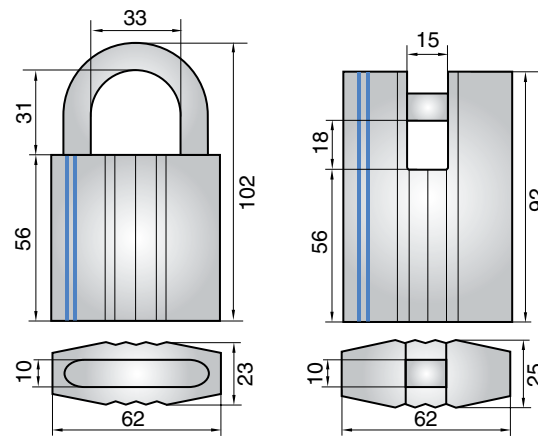
Shackle of rustproofed hardened steel, 10mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength: over 4½ tons.

Blue stripes indicate Security Grade 4 to BS EN 12320.

BS EN 12320
SG 4



➤ **44341***
Key locking

➤ **44349***
Key locking
close shackle

Class 4 / Class 5

Padlock body of hardened steel, black chrome plated.

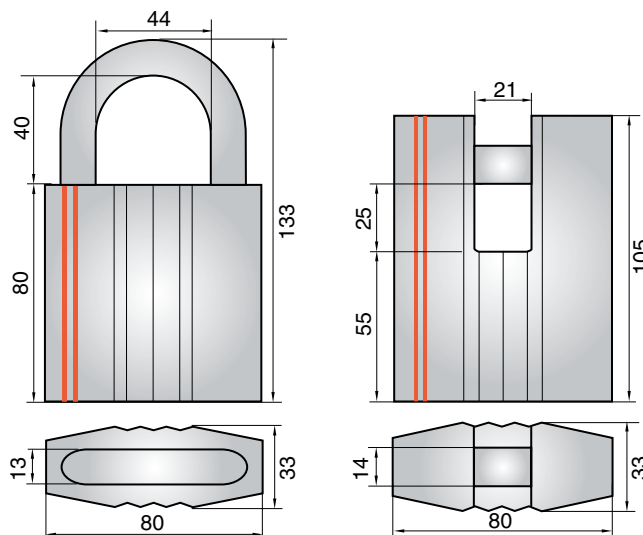
Shackle of rustproofed hardened steel, 13mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength: over 10 tons.

Red stripes indicate Security Grade 5 (open shackle) or Grade 6 (close shackle) to BS EN 12320.

BS EN 12320
SG 5 / 6



➤ **44441***
Key locking

➤ **44549***
Key locking
close shackle

* With CLIQ function

ASSA mechanical cylinder series

ASSA mechanical cylinders and padlocks are available in five series, allowing the level of security to be customised for each application.



ASSA dp4400

- ✦ Patented keys and mechanism for maximum protection against unauthorised duplication.
- ✦ Six pin tumblers plus force-controlled sidebar with false gate positions giving full resistance against all known methods of picking.
- ✦ High physical security: hardened steel inserts for drill resistance.
- ✦ Heavy duty 2.8mm thick keys made from hard-wearing nickel silver.
- ✦ Dual security level option using lower-cost dp2400 cylinders.



ASSA Twin Combi 5800

- ✦ Patented keys and mechanism with Code Level 7 function giving maximum protection against unauthorised duplication.
- ✦ Six pin tumblers plus sidebar mechanism giving full resistance against all known methods of picking.
- ✦ High physical security: hardened steel inserts for drill resistance.
- ✦ Heavy duty 2.8mm thick keys made from hard-wearing nickel silver.
- ✦ Worldwide exclusive sidecodes available for end users.



ASSA 4800

- ✦ Patented keys and mechanism for maximum protection against unauthorised duplication.
- ✦ Six pin tumblers incorporating anti-picking features.
- ✦ High physical security: hardened steel inserts for drill resistance.
- ✦ Heavy duty 2.8mm thick keys made from hard-wearing nickel silver.



ASSA Flexcore Plus














- ✦ Patented keys and mechanism for maximum protection against unauthorised duplication.
- ✦ Five pin tumblers incorporating anti-picking features.
- ✦ Medium physical security.
- ✦ Heavy duty keys made from hard-wearing nickel silver.



ASSA 5-Pin

- ✦ Five pin tumblers incorporating anti-picking features.
- ✦ Medium physical security.
- ✦ Heavy duty keys made from hard-wearing nickel silver.

Table of references

							
	ASSA dp4400	ASSA dp2400	ASSA Twin Combi 5800	ASSA 4800	ASSA Flexcore Plus	ASSA 5-pin	
	Scandinavian oval cylinders						
	Single cylinder (outside)	4401	2401	C5801	4801	FP501	R501
	Single cylinder (inside)	4403	2403	C5803	4803	FP503	R503
	Double cylinder	4402	2402	C5802	4802	FP502	R502
	Rim single cylinder (outside)	4407	2407	C5807	4807	FP507	R507
	Rim single cylinder (inside)	4409	2409	C35807	34807	FP3507	R3507
	Rim double cylinder	4408	2408	C135807	134807	FP13507	R13507
	Scandinavian round cylinders						
	Single cylinder (outside)	4411	n/a	C5811	4811	n/a	n/a
	Single cylinder (inside)	4413	n/a	C5813	4813	n/a	n/a
	Double cylinder	4412	n/a	C5812	4812	n/a	n/a
	Round threaded cylinders						
	Mortice single cylinder	4451	2451	C5851	4851	FP551	R551
	Mortice double cylinder	4452	2452	C5852	4852	FP552	R552
	Rim single cylinder	4457	2457	C5857	4857	FP557	R557
	Euro profile cylinders*						
	Single cylinder	4423	2423	C5823	4823	FP523	R523
	Double cylinder	4422	2422	C5822	4822	FP522	R522
	Single cyl with large round turn	n/a	n/a	C5821	4821	FP521	R521
	Single cyl with small round turn	4424	2424	C5824	4824	FP524	R524
	Single cylinder with oval turn	4427	2427	C5827	4827	FP527	R527
	UK oval profile cylinders*						
	Single cylinder	4433	2433	C5833	4833	FP533	R533
	Double cylinder	4432	2432	C5832	4832	FP532	R532
	Single cyl with large round turn	n/a	n/a	C5831	4831	FP531	R531
	Single cyl with small round turn	4434	2434	C5834	4834	FP534	R534
	Single cylinder with oval turn	4437	2437	C5837	4837	FP537	R537
	Cam and furniture locks						
	Cam lock	n/a	2471	C5870	4870	n/a	R5207
	Furniture lock	n/a	n/a	n/a	n/a	n/a	R5208
	Padlocks						
	Class Two snap locking	n/a	n/a	n/a	24840	FP2540	R2540
	Class Two open shackle	44241	24241	C25841	24841	FP2541	R2541
	Class Two extended shackle	44243	24243	C25843	24843	FP2543	R2543
	Class Two 10mm shackle	44246	24246	C25846	24846	n/a	n/a
	Class Two close shackle	44249	24249	C25849	24849	FP2549	R2549
	Class Three open shackle	44341	n/a	C35841	34841	n/a	n/a
	Class Three close shackle	44349	n/a	C35849	34849	n/a	n/a
	Class FPour open shackle	44441	n/a	C45841	n/a	n/a	n/a
	Class FPour close shackle	n/a	n/a	n/a	54849	n/a	n/a
	Class FPive close shackle	44549	n/a	C55849	n/a	n/a	n/a

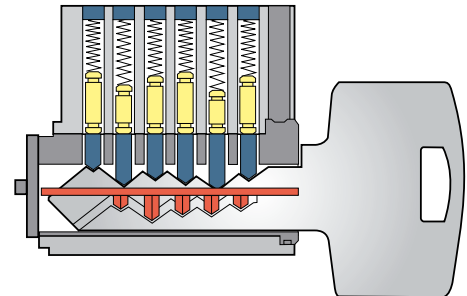
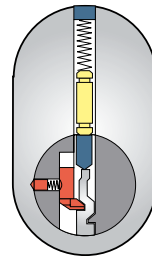
* Additional Functions available on Euro and UK Oval cylinders: **A1** classroom, clockwise. **B1** classroom, anticlockwise. **C1** clutch. **DA1** dual action.

ASSA dp4400



The ASSA dp4400 cylinder offers extremely high security and full resistance to any currently known method of picking. It includes case-hardened drill-resistant inserts, false gate positions for increased anti-picking protection, a unique patented sidebar mechanism with force-controlled sidecode function, and patented keys. Billions of usable differs are available worldwide. ASSA dp4400 keys are fully protected by new international patents against unauthorised duplication. Every key combination is unique; we undertake not to repeat one anywhere in the world.

See page 2:6 for details of ASSA Performer key management software.



MK All shapes of ASSA dp4400 (and dp2400 and ASSA CLIQ) cylinders and padlocks can be put in the same master key system.

DK Dual security levels: may be combined with ASSA CLIQ electronic cylinders (see page 2:6) or dp2400 cylinders (see page 2:18) in the same master key system.

IP Protected by worldwide patents.

10 Eligible for inclusion in an Option 10 Complete Package Guarantee.

BS EN 1303 : 2005
SG 6

Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

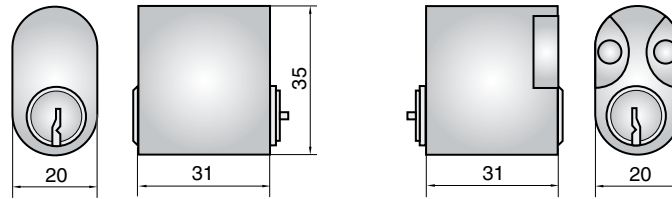
	Cylinders			Accessories			Padlocks
	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	Black chrome Fin 18
Scandinavian oval & round	✓	●	✓	✓	●	✓	
Round threaded	✓	●	✓	✓	●	✓	
Euro profile	✓	●	✓	✓	✓	✓	
Oval profile	✓	●	✓	✓	✓	✓	
Padlocks							✓

✓ Standard finish
● Special finish

Scandinavian oval

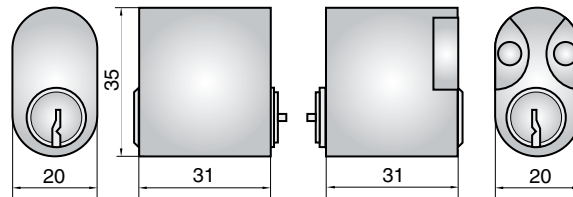
For use with ASSA Modular, Connect and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ 4401
Single cylinder (outside)

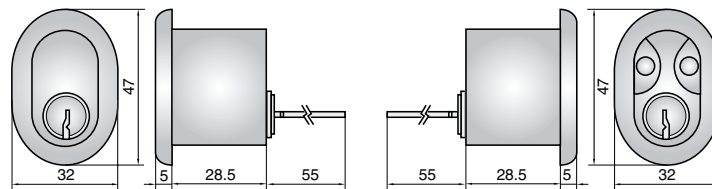
➤ 4403
Single cylinder (inside)



➤ 4402
Double cylinder

For use with ASSA rim and Connect narrow profile lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.



➤ 4407
Single rim cylinder (outside)

➤ 4409
Single rim cylinder (inside)

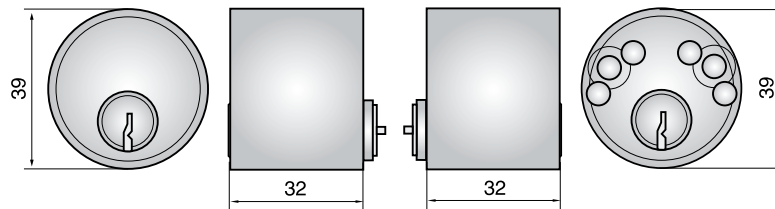
➤ 4408
Double rim cylinder

Sleeve is not required when used with Connect 35mm backset lockcases and Narrow Profile accessories. When using S4 narrow profile double accessories (only) specify two 4407 single outside cylinders rather than a double cylinder.

Scandinavian round

For use with ASSA Modular and Connect lockcases. The cylinder is fixed with four high security hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ 4411
Single cylinder (outside)

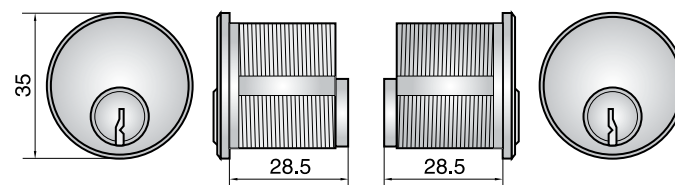
➤ 4413
Single cylinder (inside)

➤ 4412
Double cylinder

Round threaded

For use with locking devices accepting screw-in cylinders. State lock type when ordering to ensure that correct cam is supplied.

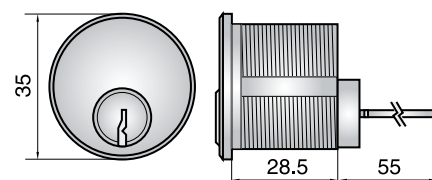
4451 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



➤ 4451
Single mortice cylinder

➤ 4452
Double mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



➤ 4457
Rim cylinder

Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

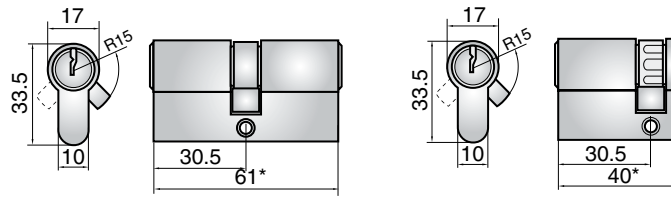
Extended length cylinders are also available: see page 2:38.

Decorative and security accessories are available: see Door Furniture section.

Optional functions

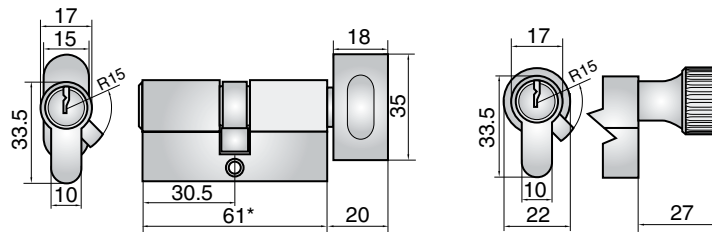
- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch
- DA1 - Dual action

The M20 high security Euro cylinder range is also available offering high resistance to snapping.



➤ 4422
 Double cylinder

➤ 4423
 Single cylinder



➤ 4427
 Single cylinder
 with Distinction oval turn

➤ 4424
 Single cylinder
 with small round turn

Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

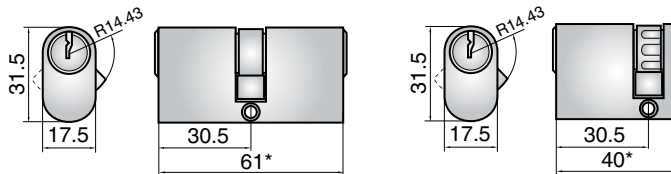
* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

Also available in:
 Single 50mm (+10)
 Double 81mm (+10+10)
 W/Turn 81mm (+10+10)

Decorative and security accessories are available: see Door Furniture section.

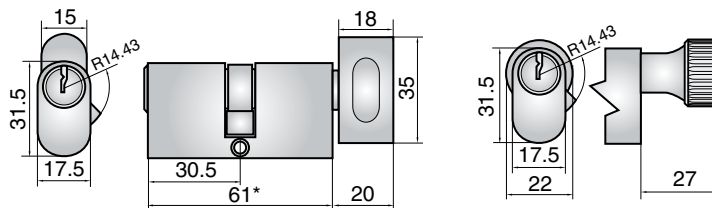
Optional functions

- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch
- DA1 - Dual action



➤ 4432
 Double cylinder

➤ 4433
 Single cylinder



➤ 4437
 Single cylinder
 with Distinction oval turn

➤ 4434
 Single cylinder
 with small round turn

Optional functions - Euro and UK Oval turn cylinders

Classroom: turn can only be rotated in one direction. This ensures that the door can be unlocked from either side, but only locked from the outside by using the key. Incorporates clutch function in addition. Example: 4427A1.

Clutch: inserting a key disengages the turn. This ensures that a keyholder can always gain access even if someone inside the room is gripping the turn to prevent it from moving. Example: 4437C1.

Optional function - Euro and UK Oval double cylinders

Dual action: external key will operate the cylinder even if another key has been left in the cylinder on the inside. Example: 4422DA1.

Padlocks

Class 2

Padlock body of extruded brass, black chrome plated.

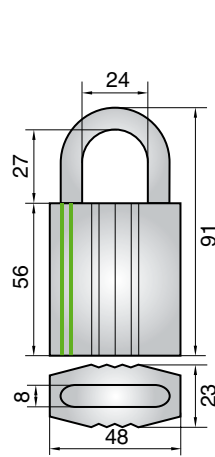
Shackle of rustproofed hardened steel, 8mm or 10mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

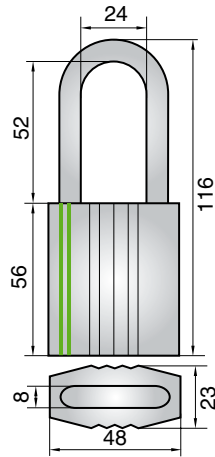
Tensile strength over 1½ tons.

Green stripes indicate Security Grade 3 to BS EN 12320.

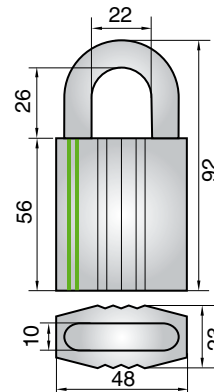
BS EN 12320
SG 3



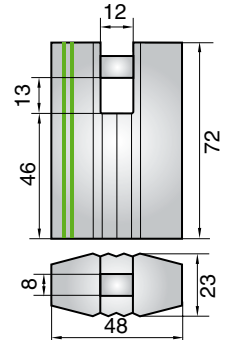
44241
Key locking



44243
Key locking
extended shackle



44246
Key locking
10mm ø shackle



44249
Key locking
close shackle

Class 3

Padlock body of hardened steel, black chrome plated.

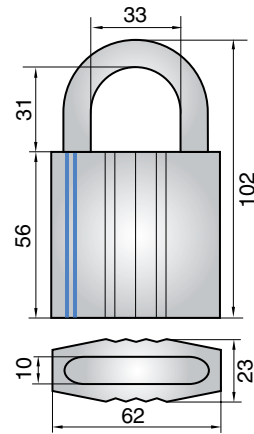
Shackle of rustproofed hardened steel, 10mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

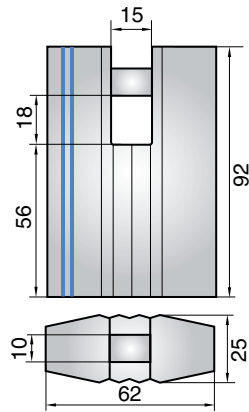
Tensile strength: over 4½ tons.

Blue stripes indicate Security Grade 4 to BS EN 12320.

BS EN 12320
SG 4



44341
Key locking



44349
Key locking
close shackle

Class 4 / Class 5

Padlock body of hardened steel, black chrome plated.

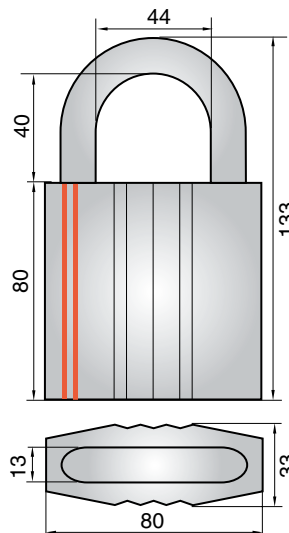
Shackle of rustproofed hardened steel, 13mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

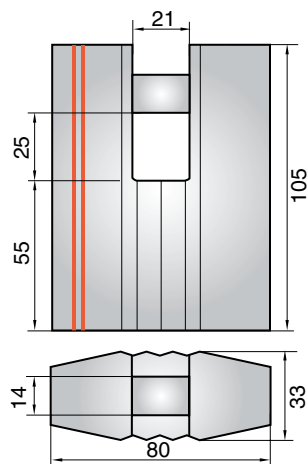
Tensile strength: over 10 tons.

Red stripes indicate Security Grade 5 (open shackle) or Grade 6 (close shackle) to BS EN 12320.

BS EN 12320
SG 5 / 6



44441
Key locking

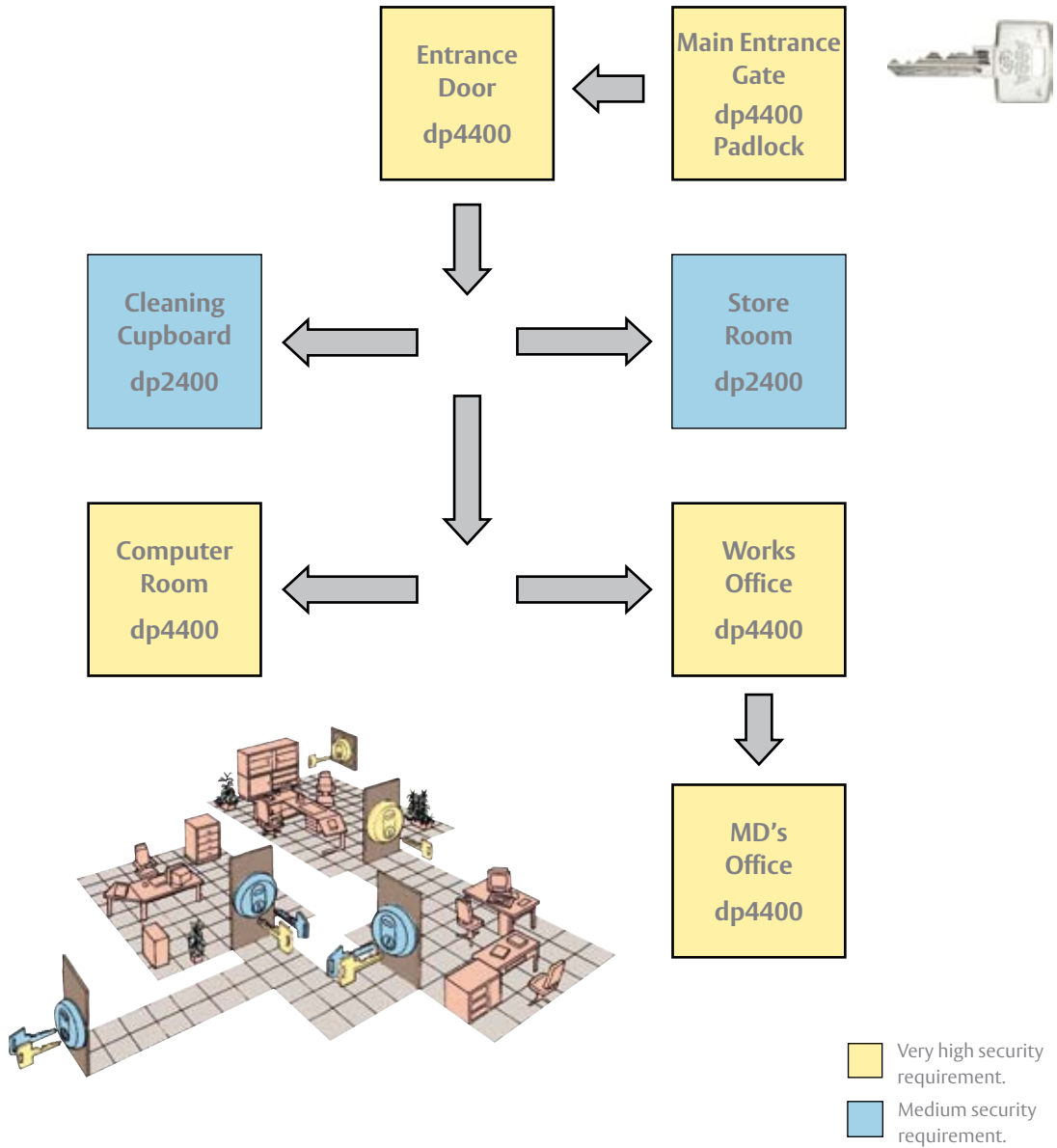


44549
Key locking
close shackle

ASSA dual systems

The ASSA dp4400 / dp2400 dual system is ideal for situations where very high security is required on certain doors, such as perimeter doors and places where high value equipment is kept. At the same time it eliminates over-specifying on doors where such a high level of security is not required. As a result it becomes both convenient and cost-effective where a high security master key system is required.

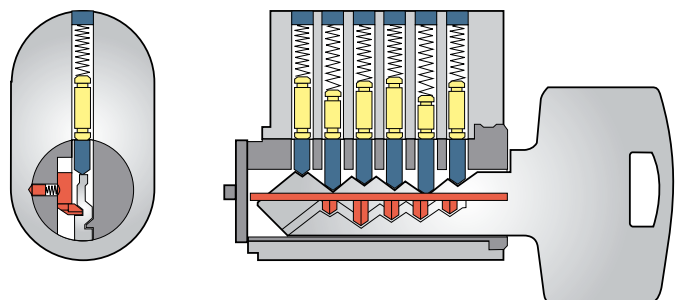
A dp dual system can also incorporate ASSA CLIQ electronic cylinders (see page 2:6).



The ASSA dp2400 system is fully compatible with dp4400 very high security cylinders. This allows the creation of dual security master key systems, with ASSA dp4400 cylinders on sensitive doors and lower-cost dp2400 cylinders on other doors. The range features a 6-pin tumbler mechanism plus a patented sidebar mechanism and case-hardened drill-resistant inserts.

ASSA dp keys are fully protected by international patents against unauthorised duplication. All ASSA dp key profiles are restricted.

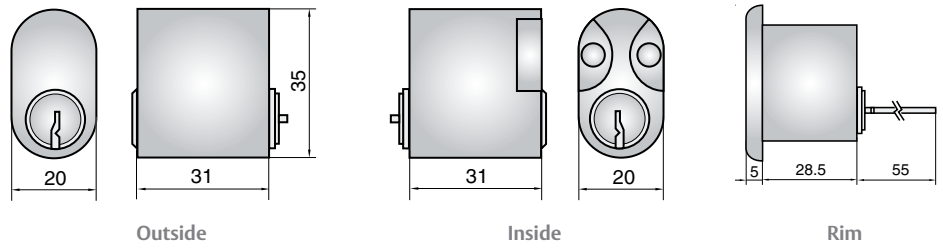
- All shapes of ASSA dp2400 (and dp4400 and ASSA CLIQ) cylinders and padlocks can be placed in the same master key system.
- Dual security levels: may be combined with ASSA dp4400 and ASSA CLIQ cylinders in the same master key system (see page 2:18).
- Protected by worldwide patents.
- Eligible for inclusion in an Option 10 Complete Package Guarantee.



Scandinavian oval

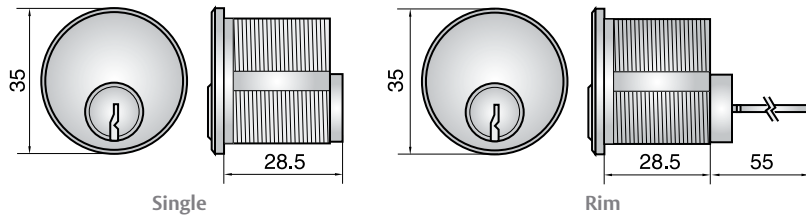
Scandinavian oval

- 2401 Single cylinder (outside)
- 2402 Double cylinder
- 2403 Single cylinder (inside)
- 2407 Rim cylinder (outside) & sleeve
- 2409 Rim cylinder (inside) & sleeve
- 2408 Rim cylinder (double) & sleeve



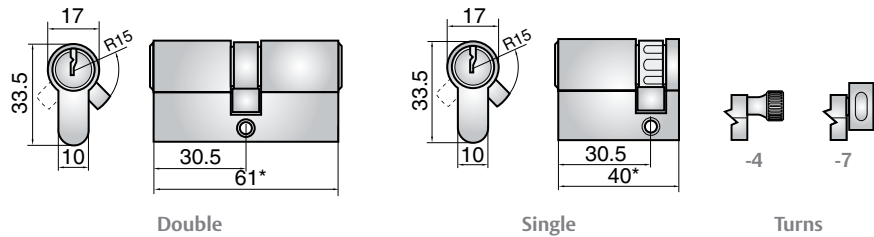
Round threaded

- 2451 Single cylinder
- 2452 Double cylinder
- 2457 Rim cylinder



Euro profile

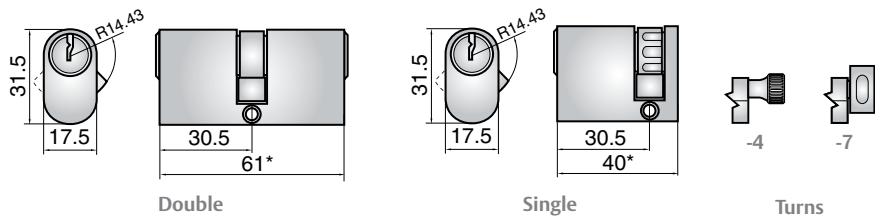
- 2424 Single cylinder with small turn
 - 2427 Single cylinder with oval turn
 - 2423 Single cylinder
 - 2422 Double cylinder
- Also available in 71mm and 81mm sizes (single cylinder 45mm and 50mm). Extended length cylinders also available: see page 2:38. M20 high security version also available.



Oval profile

- 2434 Single cylinder with small turn
- 2437 Single cylinder with oval turn
- 2433 Single cylinder
- 2432 Double cylinder

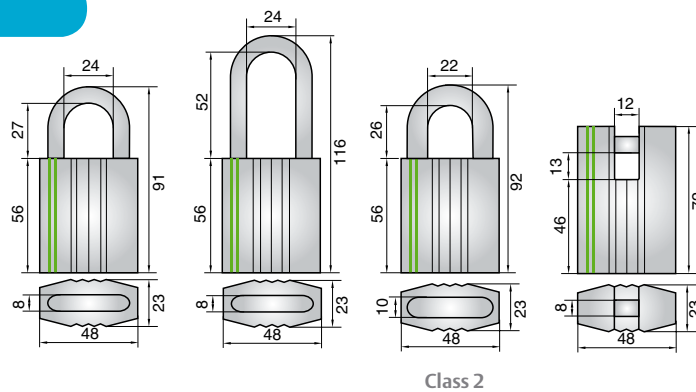
Also available in 71mm and 81mm sizes (single cylinder 45mm and 50mm).



Padlocks

Class Two

- 24241 Key locking
- 24243 Key locking, ext. shackle
- 24246 Key locking, 10mm shackle
- 24249 Key locking, close shackle



Master keyed cam locks

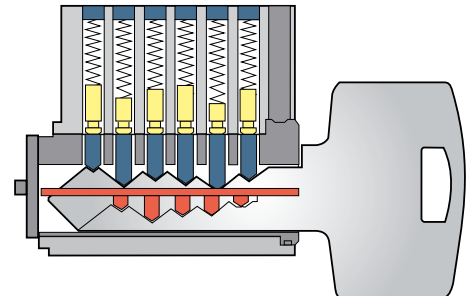
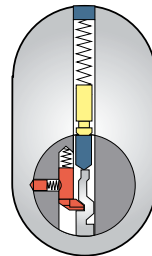
- 2471 Cam lock

Dimensions shown on page 2:10.

ASSA Twin Combi 5800



The ASSA Twin Combi 5800 cylinder offers extremely high security and full resistance to any currently known method of picking. It includes case-hardened drill-resistant inserts, a patented sidebar mechanism incorporating the Code Level 7 security function, and patented keys. Well over 1,900,000,000 usable differs are available per key profile worldwide. Twin Combi 5800 keys are fully protected by new international patents against unauthorised duplication. All ASSA Twin Combi key profiles are restricted.



MK All shapes of ASSA Twin Combi 5800 cylinders and padlocks can be put in the same master key system.

Protected by worldwide patents.

10 Eligible for inclusion in an Option 10 Complete Package Guarantee.

BS EN 1303 : 2005
SG 6

Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, stainless steel effect, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

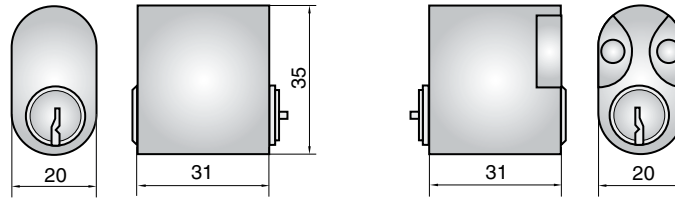
	Cylinders				Accessories				Padlocks
	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	St/Steel effect Fin 34	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	St/Steel effect Fin 31/34	Black chrome Fin 18
Scandinavian oval & round	✓	●	✓	●	✓	●	✓	✓	
Round threaded	✓	●	✓	●	✓	●	✓	✓	
Euro profile	✓	●	✓	●	✓	✓	✓	✓	
Oval profile	✓	●	✓	●	✓	✓	✓	✓	
Padlocks									✓

✓ Standard finish
● Special finish

Scandinavian oval

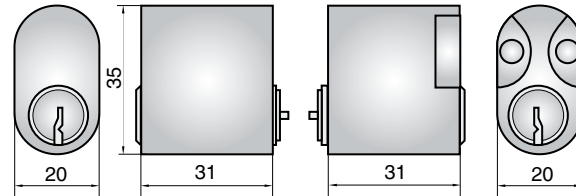
For use with ASSA Modular, Connect and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **C5801**
Single cylinder (outside)

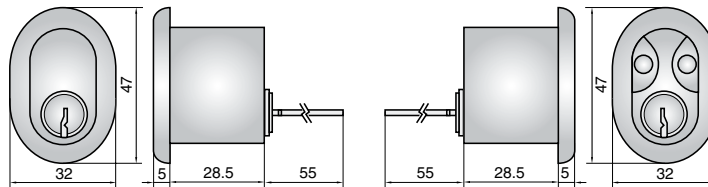
➤ **C5803**
Single cylinder (inside)



➤ **C5802**
Double cylinder

For use with ASSA rim and Connect narrow profile lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.



➤ **C5807**
Single rim cylinder (outside)

➤ **C35807**
Single rim cylinder (inside)

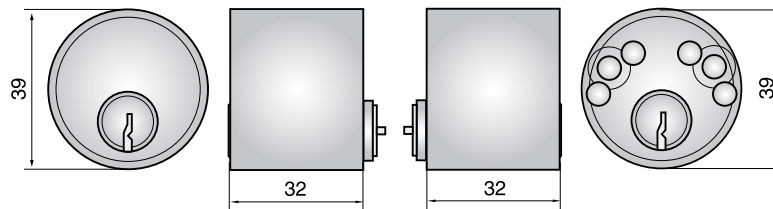
➤ **C135807**
Double rim cylinder

Sleeve is not required when used with Connect 35mm backset lockcases and Narrow Profile accessories. When using S4 narrow profile double accessories (only) specify two C5807 single outside cylinders rather than a double cylinder.

Scandinavian round

For use with ASSA Modular and Connect lockcases. The cylinder is fixed with four high security hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **C5811**
Single cylinder (outside)

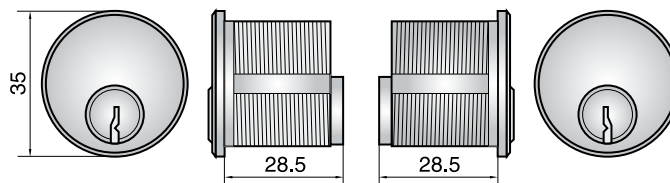
➤ **C5813**
Single cylinder (inside)

➤ **C5812**
Double cylinder

Round threaded

For use with locking devices accepting screw-in cylinders. State lock type when ordering to ensure that correct cam is supplied.

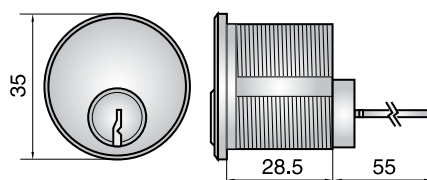
C5851 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



➤ **C5851**
Single mortice cylinder

➤ **C5852**
Double mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



➤ **C5857**
Rim cylinder

Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

Extended length cylinders are also available: see page 2:38.

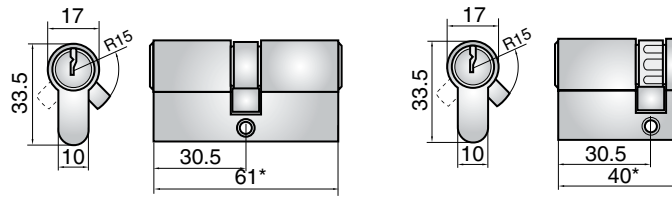
Decorative and security accessories are available: see Door Furniture section.

Optional functions

- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch

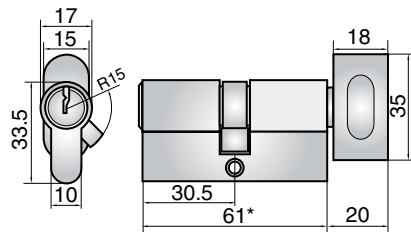
DA1 - Dual action

For further details see information box on page 2:16.

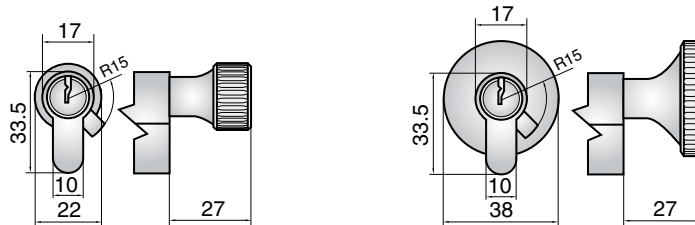


➤ C5822
 Double cylinder

➤ C5823
 Single cylinder



➤ C5827
 Single cylinder
 with Distinction oval turn



➤ C5824
 Single cylinder
 with small round turn

➤ C5821
 Single cylinder
 with large round turn

Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

Also available in:
 Single 50mm (+10)
 Double 81mm (+10+10)
 W/Turn 81mm (+10+10)

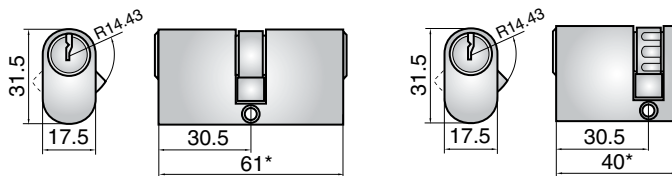
Decorative and security accessories are available: see Door Furniture section.

Optional functions

- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch

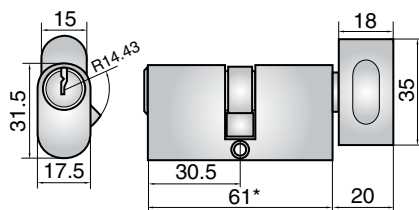
DA1 - Dual action

For further details see information box on page 2:16.

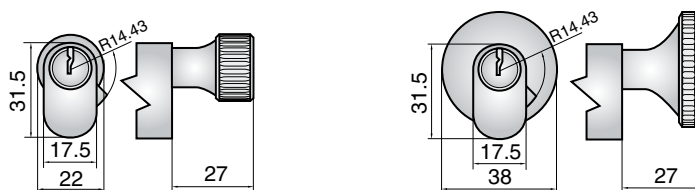


➤ C5832
 Double cylinder

➤ C5833
 Single cylinder



➤ C5837
 Single cylinder
 with Distinction oval turn



➤ C5834
 Single cylinder
 with small round turn

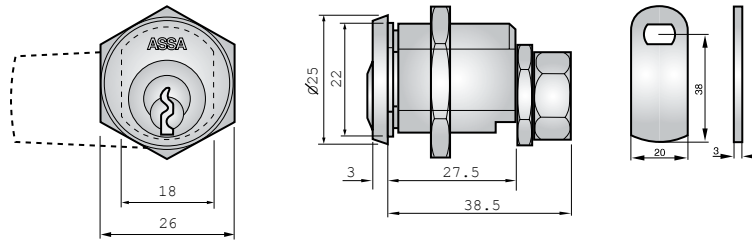
➤ C5831
 Single cylinder
 with large round turn

Master keyed cam lock

For use on cabinet doors and similar applications. Can easily be adjusted for door thicknesses up to 23mm.

Master keyed only; not available standard differ.

Catches should be specified separately. Standard catch reference 05 is shown; please contact us for details of other options.



↘ **C5870**
Cam lock

Padlocks

↘ Class 2

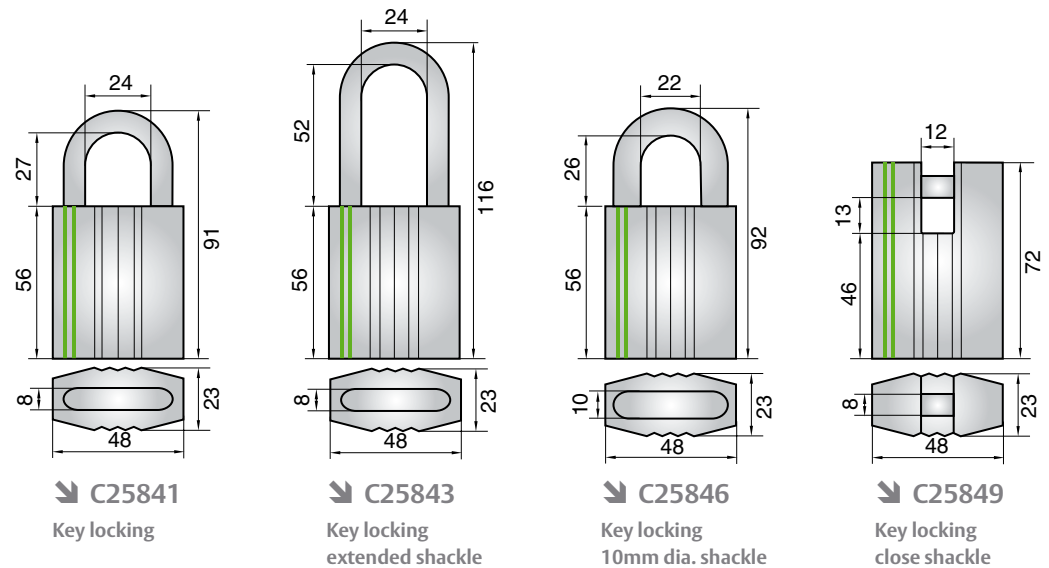
Padlock body of extruded brass, black chrome plated.

Shackle of rustproofed hardened steel, 8mm diameter (10mm on C25846).

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength over 1½ tons. Green stripes indicate Security Grade 3 to BS EN 12320.

BS EN 12320
SG 3



↘ **C25841**
Key locking

↘ **C25843**
Key locking
extended shackle

↘ **C25846**
Key locking
10mm dia. shackle

↘ **C25849**
Key locking
close shackle

↘ Class 3 / Class 4 & 5

Padlock body of hardened steel, black chrome plated.

Shackle of rustproofed hardened steel: 10mm diameter on Class 3, 14mm diameter on Class 4 & 5.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

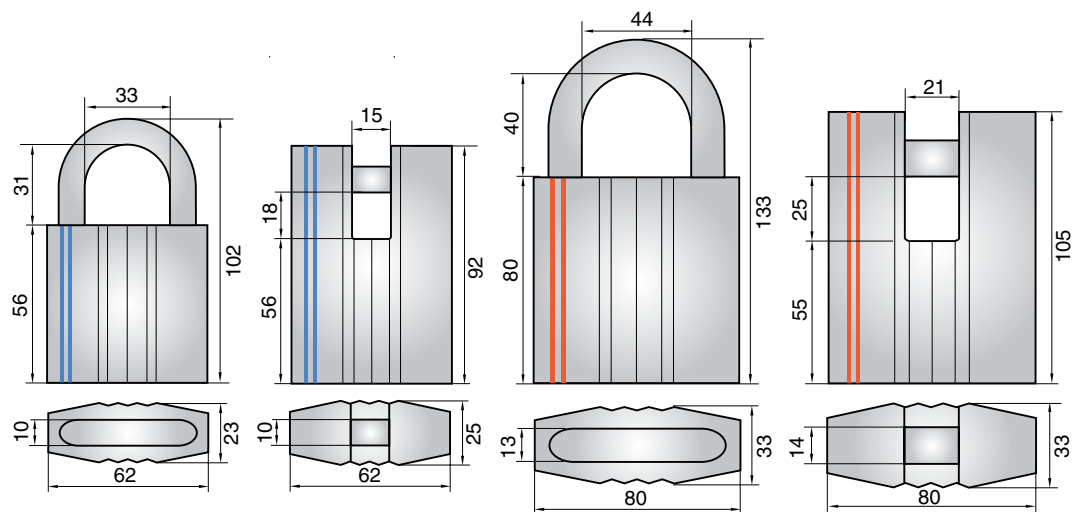
Tensile strength: over 4½ tons on Class 3, over 10 tons on Class 4 & 5.

Blue stripes indicate Security Grade 4 to BS EN 12320.

Red stripes indicate Security Grade 5 (open shackle) or Grade 6 (close shackle) to BS EN 12320.

BS EN 12320
SG 4

BS EN 12320
SG 5 / SG 6



↘ **C35841**
Key locking

↘ **C35849**
Key locking
close shackle

↘ **C45841**
Key locking

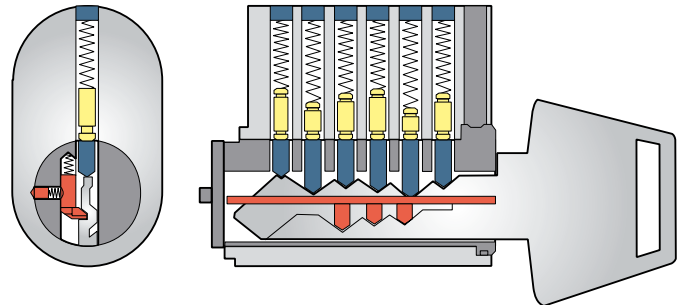
↘ **C55849**
Key locking
close shackle

ASSA 4800



The ASSA 4800 cylinder series features a high security pin tumbler mechanism, a patented sidebar and patented keys. It incorporates the latest technology to ensure maximum pick resistance and trouble-free performance. 250,000 usable differs are available per key profile, ensuring that large and complex master key systems can be catered for with ease.

All 4800 series cylinders incorporate hardened steel inserts for drill resistance. All key profiles are restricted.



MK All shapes of ASSA 4800 cylinders and padlocks can be put in the same master key system.

Protected by worldwide patents.

10 Eligible for inclusion in an Option 10 Complete Package Guarantee.

BS EN 1303 : 2005
SG 6

Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, stainless steel effect, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

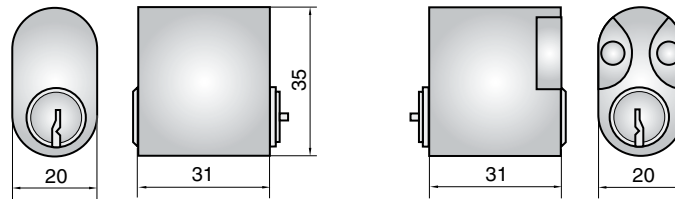
	Cylinders				Accessories				Padlocks
	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	St/Steel effect Fin 34	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	St/Steel effect Fin 31/34	Black chrome Fin 18
Scandinavian oval & round	✓	●	✓	●	✓	●	✓	✓	
Round threaded	✓	●	✓	●	✓	●	✓	✓	
Euro profile	✓	●	✓	●	✓	✓	✓	✓	
Oval profile	✓	●	✓	●	✓	✓	✓	✓	
Padlocks									✓

✓ Standard finish
● Special finish

Scandinavian oval

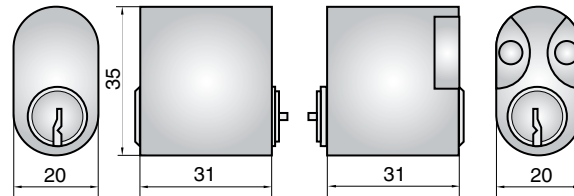
For use with ASSA Modular, Connect and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **4801**
Single cylinder (outside)

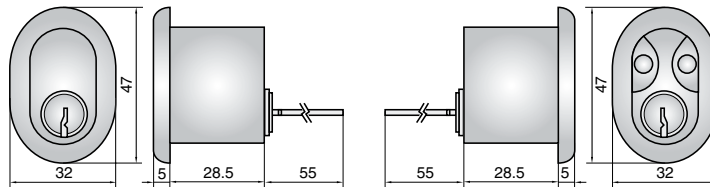
➤ **4803**
Single cylinder (inside)



➤ **4802**
Double cylinder

For use with ASSA rim and Connect narrow profile lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.



➤ **4807**
Single rim cylinder (outside)

➤ **34807**
Single rim cylinder (inside)

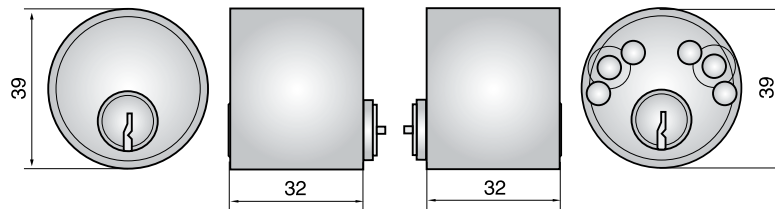
➤ **134807**
Double rim cylinder

Sleeve is not required when used with Connect 35mm backset lockcases and Narrow Profile accessories. When using S4 narrow profile double accessories (only) specify two 4807 single outside cylinders rather than a double cylinder.

Scandinavian round

For use with ASSA Modular and Connect lockcases. The cylinder is fixed with four high security hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **4811**
Single cylinder (outside)

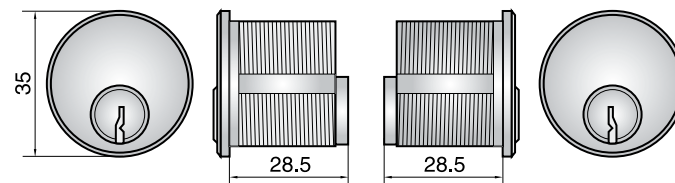
➤ **4813**
Single cylinder (inside)

➤ **4812**
Double cylinder

Round threaded

For use with locking devices accepting screw-in cylinders. State lock type when ordering to ensure that correct cam is supplied.

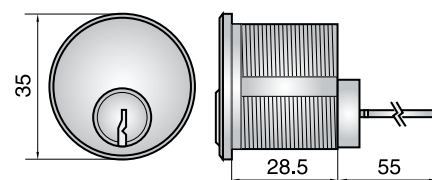
4851 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



➤ **4851**
Single mortice cylinder

➤ **4852**
Double mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



➤ **4857**
Rim cylinder

Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

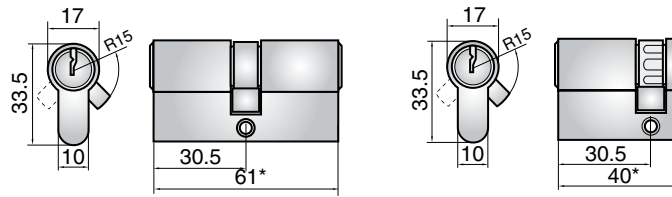
Extended length cylinders are also available: see page 2:38.

Decorative and security accessories are available: see Door Furniture section.

Optional functions

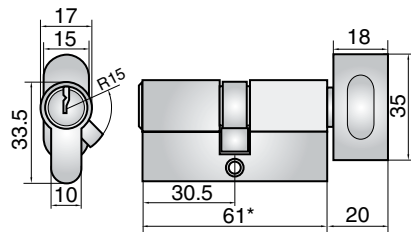
- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch
- DA1 - Dual action

For further details see information box on page 2:16.

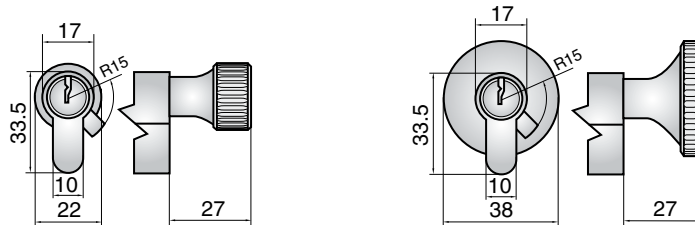


➤ 4822
 Double cylinder

➤ 4823
 Single cylinder



➤ 4827
 Single cylinder
 with Distinction oval turn



➤ 4824
 Single cylinder
 with small round turn

➤ 4821
 Single cylinder
 with large round turn

Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

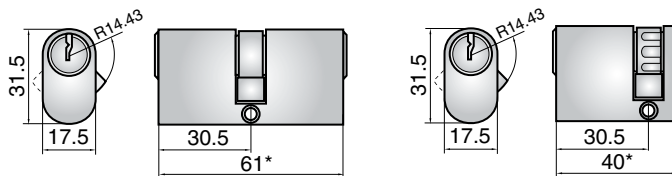
Also available in:
 Single 50mm (+10)
 Double 81mm (+10+10)
 W/Turn 81mm (+10+10)

Decorative and security accessories are available: see Door Furniture section.

Optional functions

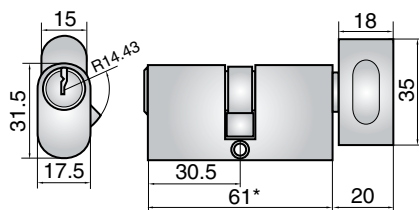
- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch
- DA1 - Dual action

For further details see information box on page 2:16.

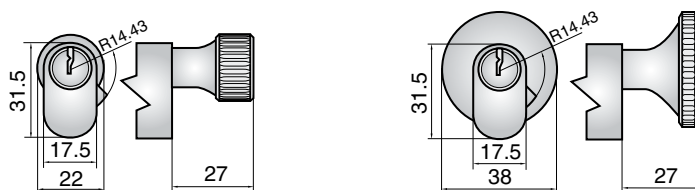


➤ 4832
 Double cylinder

➤ 4833
 Single cylinder



➤ 4837
 Single cylinder
 with Distinction oval turn

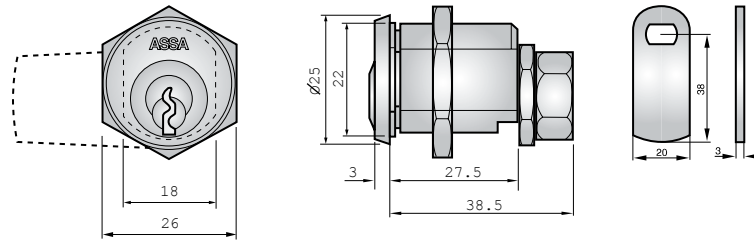


➤ 4834
 Single cylinder
 with small round turn

➤ 4831
 Single cylinder
 with large round turn

Master keyed cam lock

For use on cabinet doors and similar applications. Can easily be adjusted for door thicknesses up to 23mm. Master keyed only; not available standard differ. Catches should be specified separately. Standard catch reference 05 is shown; please contact us for details of other options.



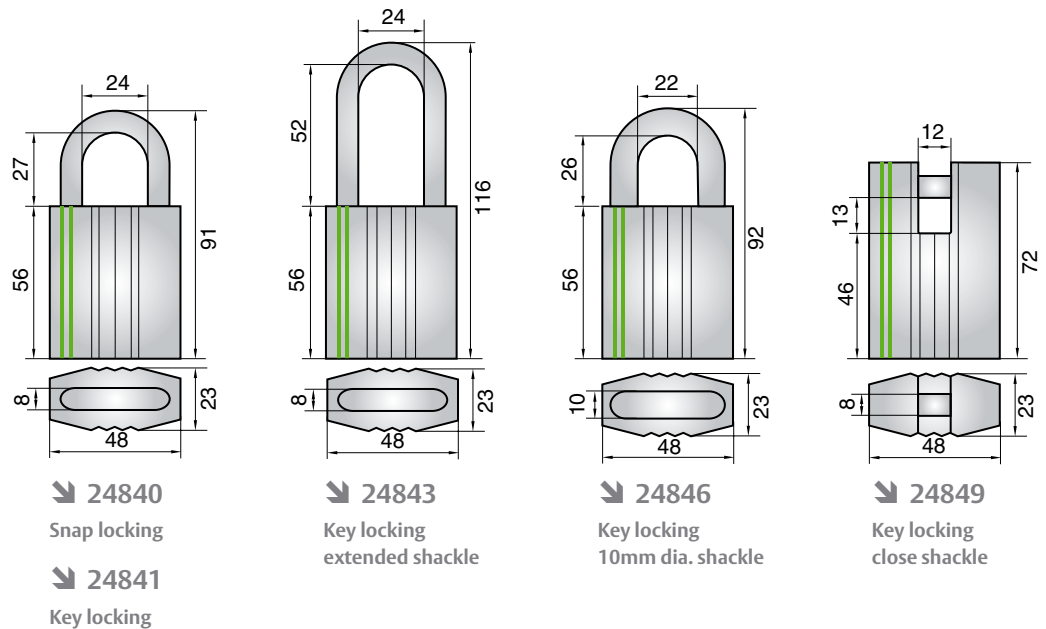
➤ **4870**
Cam lock

Padlocks

➤ Class 2

Padlock body of extruded brass, black chrome plated. Shackle of rustproofed hardened steel, 8mm diameter (10mm on 24846). Drainage holes in the padlock body prevent freezing. No external screws or rivets. Tensile strength over 1½ tons. Green stripes indicate Security Grade 3 to BS EN 12320.

BS EN 12320
SG 3



➤ **24840**
Snap locking
➤ **24841**
Key locking

➤ **24843**
Key locking
extended shackle

➤ **24846**
Key locking
10mm dia. shackle

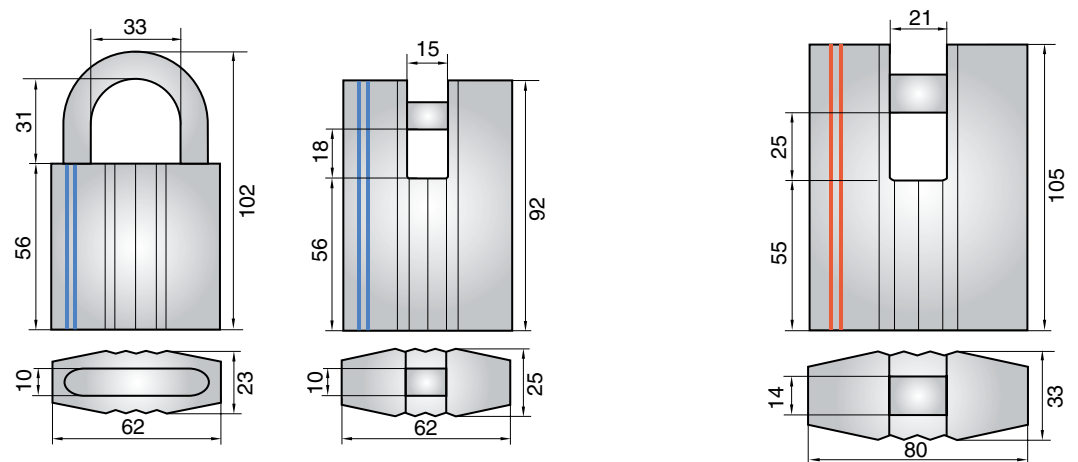
➤ **24849**
Key locking
close shackle

➤ Class 3 / Class 4

Padlock body of hardened steel, black chrome plated. Shackle of rustproofed hardened steel: 10mm diameter on Class 3, 14mm diameter on Class 4. Drainage holes in the padlock body prevent freezing. No external screws or rivets. Tensile strength: over 4½ tons on Class 3, over 10 tons on Class 4. Blue stripes indicate Security Grade 4 to BS EN 12320. Red stripes indicate Security Grade 5 to BS EN 12320.

BS EN 12320
SG 4

BS EN 12320
SG 5



➤ **34841**
Key locking

➤ **34849**
Key locking
close shackle

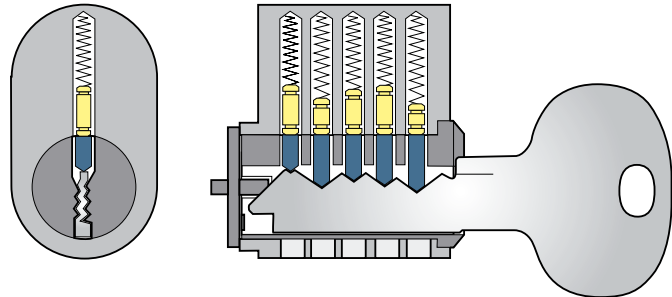
➤ **54849**
Key locking
close shackle

ASSA Flexcore



The ASSA Flexcore Plus cylinder series features a 5 pin tumbler mechanism plus a patented front profile and key. It achieves a significant level of pick resistance. 29,000 usable differs are available per key profile, allowing the creation of medium sized master key systems.

All components are manufactured from quality material ensuring a high degree of reliability. ASSA Flexcore Plus keys are fully protected by new international patents against unauthorised duplication. All ASSA Flexcore Plus key profiles are restricted.



MK All shapes of ASSA Flexcore Plus cylinders and padlocks can be placed in the same master key system.

Protected by international patents.

10 Eligible for inclusion in an Option 10 Complete Package Guarantee.

BS EN 1303 : 2005
SG 3

Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, stainless steel effect, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

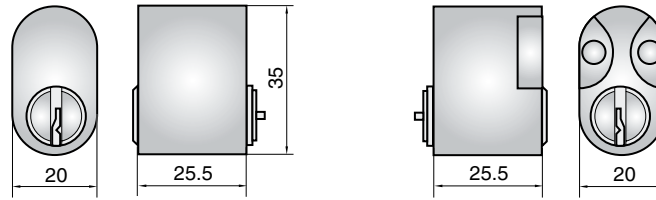
	Cylinders				Accessories				Padlocks
	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	St/Steel effect Fin 34	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	St/Steel effect Fin 31/34	Black chrome Fin 18
Scandinavian oval & round	✓	●	✓	●	✓	●	✓	✓	
Round threaded	✓	●	✓	●	✓	●	✓	✓	
Euro profile	✓	●	✓	●	✓	✓	✓	✓	
Oval profile	✓	●	✓	●	✓	✓	✓	✓	
Padlocks									✓

✓ Standard finish
● Special finish

Scandinavian oval

For use with ASSA Modular, Connect and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.

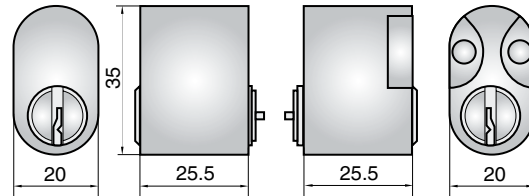


FP501

Single cylinder (outside)

FP503

Single cylinder (inside)

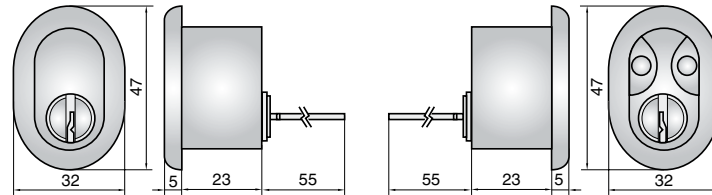


FP502

Double cylinder

For use with ASSA rim lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.



FP507

Single rim cylinder (outside)

FP3507

Single rim cylinder (inside)

FP13507

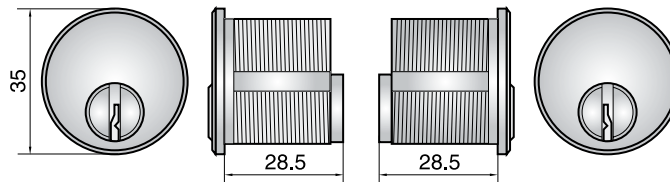
Double rim cylinder

Round threaded

For use with locking devices accepting screw-in cylinders.

State lock type when ordering to ensure that correct cam is supplied.

FP551 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



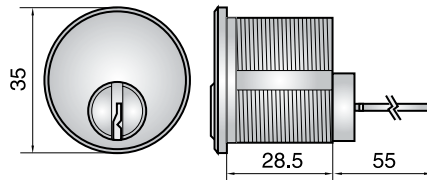
FP551

Single mortice cylinder

FP552

Double mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



FP557

Rim cylinder

Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

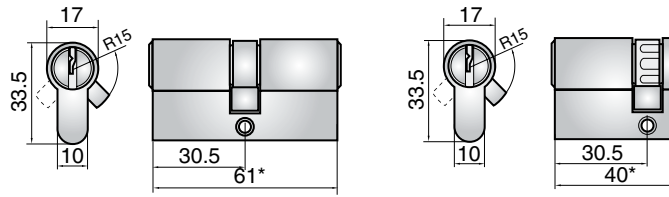
Extended length cylinders are also available: see page 2:38.

Decorative and security accessories are available: see Door Furniture section.

Optional functions

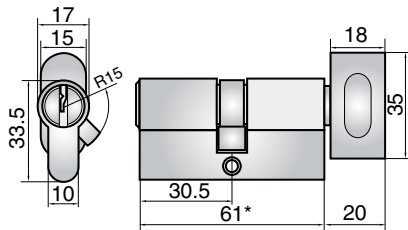
- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch
- DA1 - Dual action

For further details see information box on page 2:16.

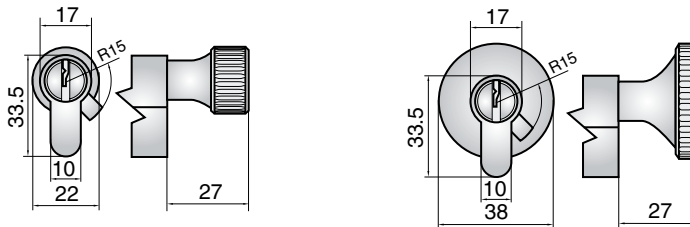


➤ **FP522**
 Double cylinder

➤ **FP523**
 Single cylinder



➤ **FP527**
 Single cylinder
 with Distinction oval turn



➤ **FP524**
 Single cylinder
 with small round turn

➤ **FP521**
 Single cylinder
 with large round turn

Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

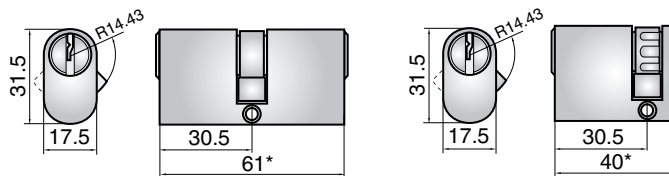
Also available in:
 Single 50mm (+10)
 Double 81mm (+10+10)
 W/Turn 81mm (+10+10)

Decorative and security accessories are available: see Door Furniture section.

Optional functions

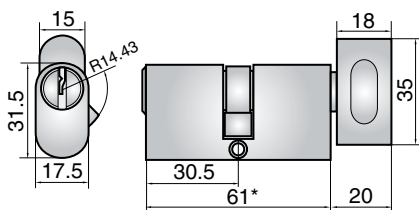
- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch
- DA1 - Dual action

For further details see information box on page 2:16.

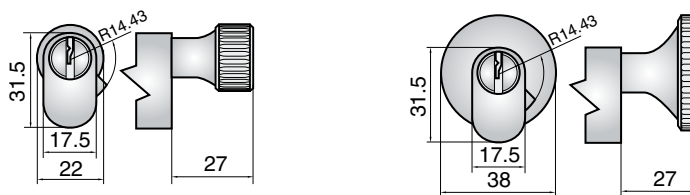


➤ **FP532**
 Double cylinder

➤ **FP533**
 Single cylinder



➤ **FP537**
 Single cylinder
 with Distinction oval turn



➤ **FP534**
 Single cylinder
 with small round turn

➤ **FP531**
 Single cylinder
 with large round turn

Padlocks

↘ **Class 2**

Padlock body of extruded brass, black chrome plated.

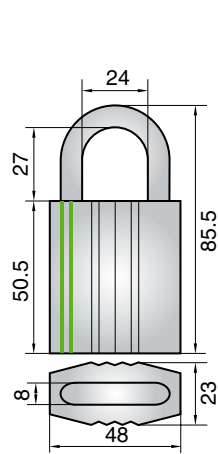
Shackle of rustproofed hardened steel, 8mm diameter.

Drainage holes in the padlock body prevent freezing. No external screws or rivets.

Tensile strength over 1½ tons.

Green stripes indicate Security Grade 3 to BS EN 12320.

BS EN 12320
SG 3

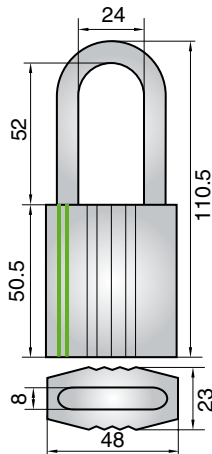


↘ **FP2540**

Snap locking

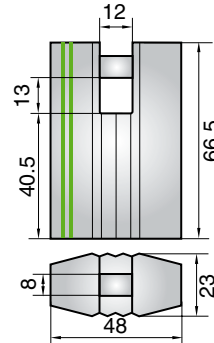
↘ **FP2541**

Key locking



↘ **FP2543**

Key locking
extended shackle



↘ **FP2549**

Key locking
close shackle

ASSA 5-Pin

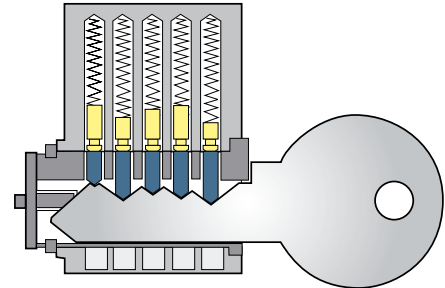
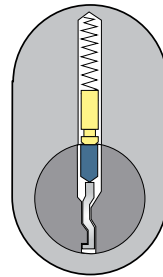


The ASSA 5-pin cylinder series features a 5 pin tumbler mechanism, and achieves a significant level of pick resistance. 29,000 usable differs are available per key profile, allowing the creation of medium sized master key systems.

All components are manufactured from quality material ensuring a high degree of reliability and durability.

MK All shapes of ASSA 5-pin cylinders and padlocks can be placed in the same master key system.

10 Eligible for inclusion in an Option 10 Complete Package Guarantee.



BS EN 1303 : 2005
SG 3

Finishes

In the increasingly polluted atmosphere in which we live, the demands on products to resist corrosion are particularly high. ASSA products have the benefit of the latest automatic plating equipment, which incorporates the best of modern plating processes.

Satin chrome, polished chrome and black chrome give extremely good weather resistance whilst polished brass is offered as a decorative finish.

In addition our products are suitable for replating, on occasions when it is important to match the finish of other ironmongery on a project.

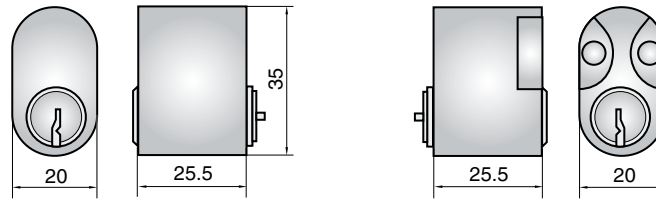
	Cylinders			Accessories			Padlocks
	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	Satin chrome Fin 13	Polished chrome Fin 11	Polished brass Fin 20	Black chrome Fin 18
Scandinavian oval & round	✓	●	✓	✓	●	✓	
Round threaded	✓	●	✓	✓	●	✓	
Euro profile	✓	●	✓	✓	✓	✓	
Oval profile	✓	●	✓	✓	✓	✓	
Padlocks							✓

✓ Standard finish
● Special finish

Scandinavian oval

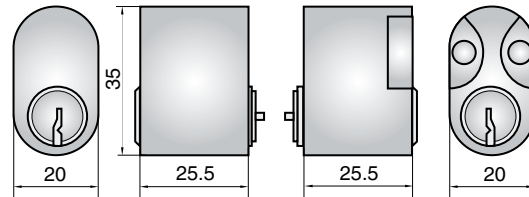
For use with ASSA Modular, Connect and Narrow Profile lockcases. The cylinder is fixed to the lockcase with two hardened steel screws, supplied with the accessory set.

ASSA accessories must be used: see page 2:38.



➤ **R501**
Single cylinder (outside)

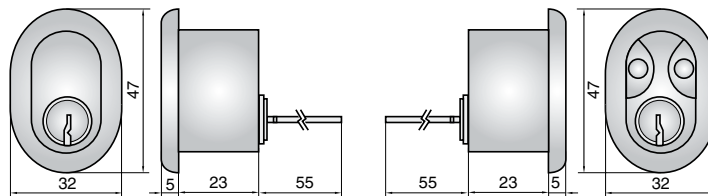
➤ **R503**
Single cylinder (inside)



➤ **R502**
Double cylinder

For use with ASSA rim lockcases. The cylinder is fixed to the lockcase with two brass screws which can be cut to length.

Supplied with rim cylinder sleeve.



➤ **R507**
Single rim cylinder (outside)

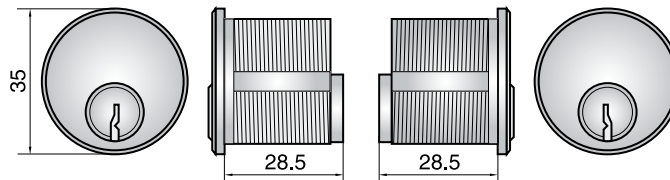
➤ **R3507**
Single rim cylinder (inside)

➤ **R13507**
Double rim cylinder

Round threaded

For use with locking devices accepting screw-in cylinders. State lock type when ordering to ensure that correct cam is supplied.

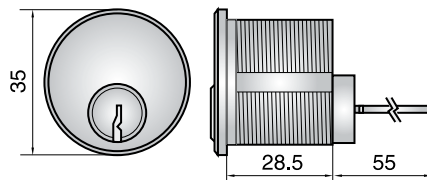
R551 Round Threaded cylinders are also available with microswitch for use as a momentary action keyswitch. See Electric Locking section for further information.



➤ **R551**
Single mortice cylinder

➤ **R552**
Double mortice cylinder

For use with rim locks and other locking devices accepting rim cylinders. Supplied with 5mm Spacer Ring and fixing screws.



➤ **R557**
Rim cylinder

Euro profile

For use with locks accepting Euro profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

Extended length cylinders are also available: see page 2:38.

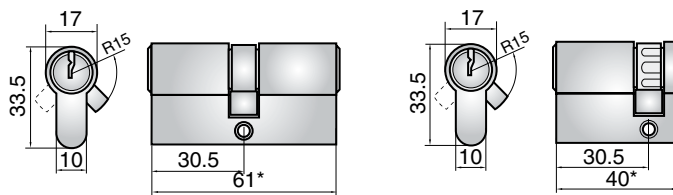
Decorative and security accessories are available: see Door Furniture section.

Optional functions

- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch

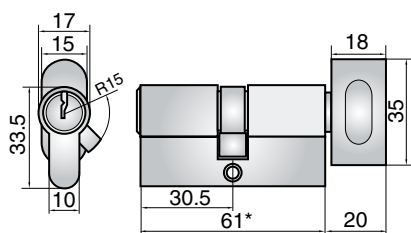
DA1 - Dual action

For further details see information box on page 2:16.

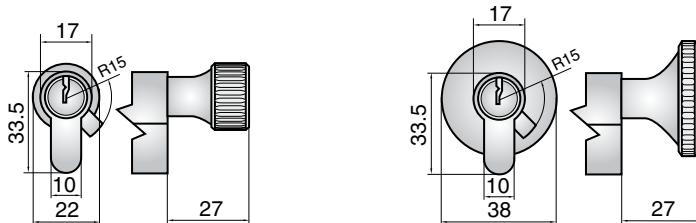


➤ R522
 Double cylinder

➤ R523
 Single cylinder



➤ R527
 Single cylinder
 with Distinction oval turn



➤ R524
 Single cylinder
 with small round turn

➤ R521
 Single cylinder
 with large round turn

Oval profile

For use with locks accepting Oval profile cylinders. Cylinders are supplied with fixing screw.

* Standard lengths are:
 Single 40mm and 45mm
 Double 61mm and 71mm
 W/Turn 61mm and 71mm

Also available in:
 Single 50mm (+10)
 Double 81mm (+10+10)
 W/Turn 81mm (+10+10)

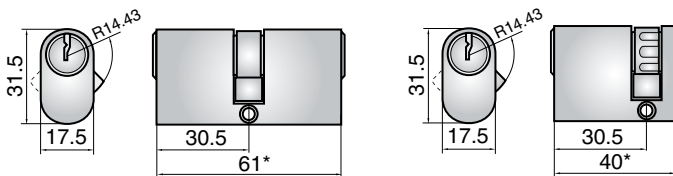
Decorative and security accessories are available: see Door Furniture section.

Optional functions

- A1 - Classroom, clockwise
- B1 - Classroom, anticlockwise
- C1 - Clutch

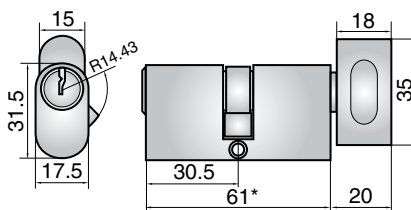
DA1 - Dual action

For further details see information box on page 2:16.

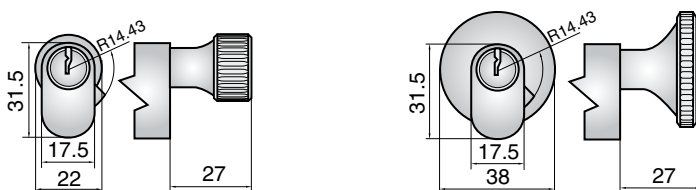


➤ R532
 Double cylinder

➤ R533
 Single cylinder



➤ R537
 Single cylinder
 with Distinction oval turn

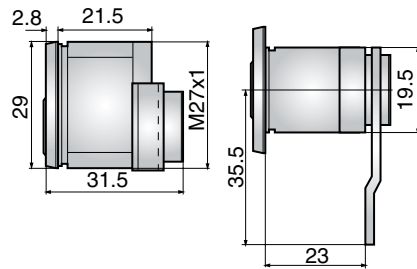


➤ R534
 Single cylinder
 with small round turn

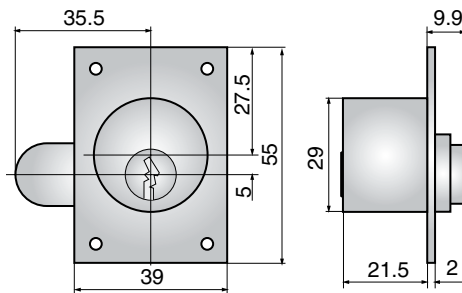
➤ R531
 Single cylinder
 with large round turn

Cam and furniture locks

For use on cabinet doors and similar applications. Can easily be adjusted for door thicknesses up to 23mm. Supplied with integral catch. Standard differ only. Handing must be specified when ordering.



➤ **R5207**
Cam lock



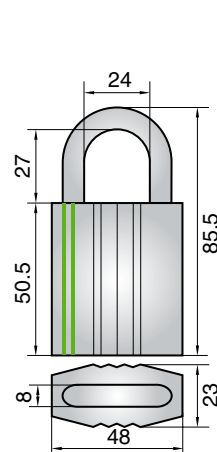
➤ **R5208**
Furniture lock

Padlocks

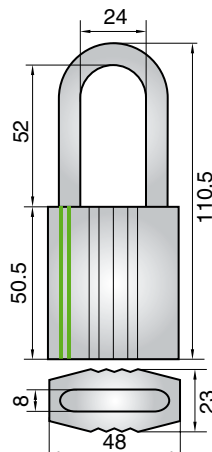
➤ Class 2

Padlock body of extruded brass, black chrome plated. Shackle of rustproofed hardened steel, 8mm diameter. Drainage holes in the padlock body prevent freezing. No external screws or rivets. Tensile strength over 1½ tons. Green stripes indicate Security Grade 3 to BS EN 12320.

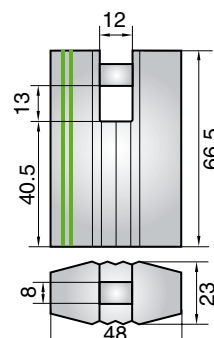
BS EN 12320
SG 3



➤ **R2540**
Snap locking



➤ **R2543**
Key locking
extended shackle



➤ **R2549**
Key locking
close shackle

➤ **R2541**
Key locking

Security & key protection

ASSA cylinders are designed to meet the demands and requirements of the modern age. Their distinctive pin-tumbler mechanism with extremely tight tolerances offers a flexibility in master keying that meets any end-user need, without compromising security. ASSA cylinders offer three complementary types of protection:

Physical Security

Physical security guards against direct attack, whether using brute force or more subtle methods of cylinder manipulation. ASSA cylinders are offered at five different levels of security, from Medium to Extremely High. The following security measures are present on some or all cylinder series:

- Pick-resistant pins: All cylinder series
- Hardened steel drill-resistant inserts: ASSA 4800, Twin Combi 5800, dp4400, CLIQ
- Patented sidebar mechanism to resist picking (Additional blocking element):
 - ASSA 4800: 3 sidepins
 - ASSA Twin Combi 5800: 5 sidepins
 - ASSA dp4400 and dp2400: 10 handed sidepins and force-controlled sidebar
 - ASSA CLIQ: force-controlled sidebar
- Electromechanical blocking element: ASSA CLIQ

The combination of lockcase, cylinder accessories, fixing method and shape of the cylinder also affect the level of physical security. ASSA cylinders are available in a wide variety of shapes ranging from the medium security profile cylinders (Euro and UK Oval) to the extremely high security Scandinavian Round cylinder.

Key Protection

Key protection defends against the more insidious threat of intruders using unauthorised copies of keys to gain access. For ASSA ABLOY Door Solutions the protection and safeguarding of the end user is essential. Our concept of key control is unique and is part of our commitment to our customers and protection of their assets, buildings and staff. Effective security requires effective control and management of keys. This is true both for a single lock on a door and a large and complex master-key system.

If it is possible for anybody to obtain a key, the premises become vulnerable to unauthorised or criminal intruders. On the other hand, if it is too difficult to obtain spare keys, legitimate users will be inconvenienced. To balance this problem, ASSA ABLOY Door Solutions offers five graded levels of key protection. Each step provides a different balance between convenience and security, enabling us to meet the customer's precise requirements.

Patent Protection

Effective key control systems rely on the fact that keys are only available from specific, authorised security centres. Unfortunately, the abolition of copyright protection on keys from August 1999 has made it possible for anybody to produce and sell most types of keys, thus bypassing this protection.

The only exception to this is key systems which are protected by up-to-date patents. Manufacturers are still able to take legal action against unauthorised third parties distributing copies of patented keys without permission. All registered key systems (Steps 2-6) from ASSA ABLOY Door Solutions are protected by new international patents. We are committed to vigorously defending our patents whenever necessary to ensure the continued security of our customers.

Patented cylinder series include ASSA Flexcore Plus, ASSA 4800, ASSA Twin Combi 5800, ASSA dp4400 (and dp2400) and ASSA CLIQ.

Maximum security		ASSA CLIQ
Extremely high security		ASSA dp4400
Very high security		ASSA Twin Combi 5800
High security		ASSA 4800
Medium security		ASSA Flexcore Plus
		ASSA 5-pin

	ASSA 5-pin	ASSA Flexcore Plus	ASSA 4800	ASSA Twin Combi 5800	ASSA dp4400	ASSA CLIQ
ABSOLUTE REGISTRATION Keys are only available from ASSA ABLOY Door Solutions. A strict system of registration is laid down involving authorised signatures and a code-marked keycard.					✓	✓
RESTRICTED REGISTRATION Keys are available from authorised ASSA dp Centres. A registration procedure is agreed between the customer and a specific stockist, setting out the procedure for obtaining extra keys.					✓	
STEP FOUR: STOCKIST REGISTRATION Keys are available from authorised ASSA Centres. A registration procedure is agreed between the customer and a specific stockist, setting out the procedure for obtaining extra keys.		✓		✓		
STEP THREE: IN-HOUSE REGISTRATION Keyblanks are available for sale to recognised end users, such as hotels, colleges, and ships. Cutting is then directly under the control of the customer.		✓	✓	✓		
STEP TWO: LOCAL REGISTRATION Keys can be purchased through authorised retailers. However, a Letter of Authority or official Order Form must be presented.		✓	✓			
STEP ONE: UNREGISTERED Keys can be freely purchased through any retailer, with no restrictions on availability.	✓					



British & European standards

Cylinders

Cylinders are rated according to the British and European standard BS EN 1303, which was revised in 2005. The new version of the standard rates cylinders into six grades of security, of which Grade 6 is the highest. In addition, the standard now includes a separate Attack Resistance classification, which is graded from 0 to 2.

The full CEN classification is a 8-digit code, broken down as shown in the table opposite.

CLASSIFICATION	GRADES							
Category of Use	1	For use by people with a high incentive to exercise care, and with a small chance of misuse.						
Durability	4	25,000 cycles	5	50,000 cycles	6	100,000 cycles		
Door Mass	0	Not applicable						
Fire Resistance	0	Not suitable for fire doors			1	Suitable for fire/smoke resistant doors		
Safety	0	Not applicable						
Corrosion Resistance	0	No requirement	A	High resistance	B	Temperature -20°C to +80°C	C	High resistance & temp -20°-80°
Security	Six grades: see below							
Attack Resistance	Three grades: see below							

SECURITY RATING	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
Minimum number of effective differs	100	300	15,000	30,000	30,000	100,000
Minimum number of movable detainers	2	3	5	5	6	6
Maximum number of identical steps	100	70	60	60	60	50
Direct coding on key	Yes	Yes	No	No	No	No
Operation of security mechanism	1.5	1.5	1.5	1.5	1.5	1.5
Torque resistance of cylinder/plug (Nm)	2.5	5	15	15	15	15

ATTACK RESISTANCE RATING	GRADE 0	GRADE 1	GRADE 2
Drilling attack (minutes)	-	3/5	5/10
Chisel attack (blows)	-	30	40
Twisting attack (twists)	-	20	30
Plug extraction, 15kN (mins)	-	3	3
Torque resistance (Nm)	-	20	30

Padlocks

Padlocks are rated according to the British and European standard BS EN 12320.

The full CEN classification is a 7-digit code, of which the first 5 digits are not applicable. The sixth digit classifies corrosion resistance, which is either 1 (internal applications) or 2 (external applications).

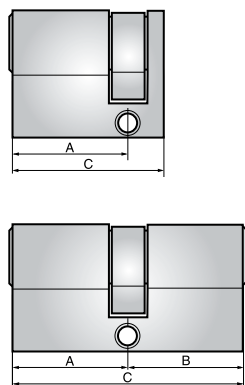
The seventh digit classifies security, and is graded from 1 to 6 as shown in the table opposite.

PADLOCK SECURITY RATING	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
Minimum number of effective key differs	300	1000	2,500	5,000	10,000	20,000
Non-interpassing of keys - 1 interval (Nm)	1	1.5	1.5	1.5	1.5	1.5
Force on cylinder plug (kN)	-	-	4	5	10	15
Torque on cylinder plug (Nm)	-	2.5	5	15	20	30
Pulling of shackle and staple (kN)	3	5	15	30	70	100
Twisting of shackle and staple (Nm)	40	100	200	450	1200	2500
Cutting of shackle and staple (kN)	6	15	25	35	70	100
Impact on padlock body, shackle & staple	-	-	1.25kg 800mm -20°C	3.05kg 1000mm -20°C	6.55kg 1400mm -40°C	7.15kg 1500mm -40°C
Drilling on body, shackle & staple (min)	-	-	-	2	4	8
Sawing on body, shackle & staple (min)	-	-	-	2	4	8

Extended length Euro cylinders

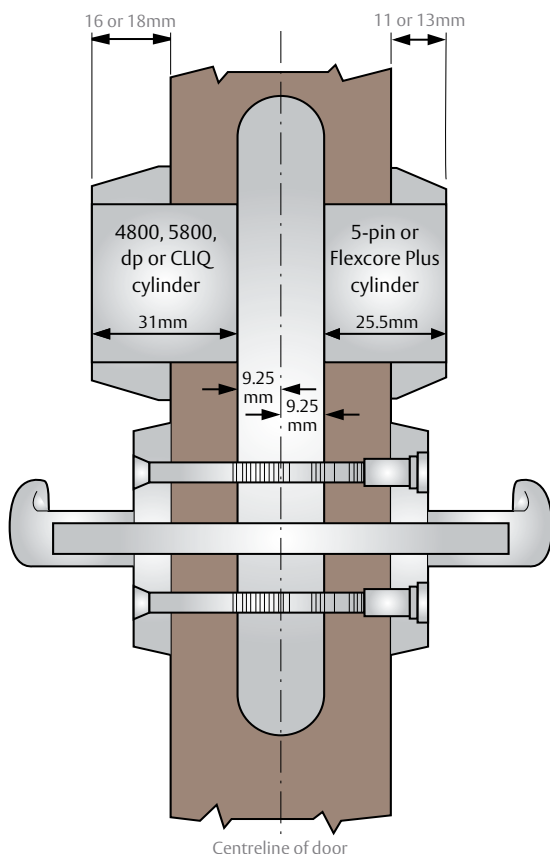
Euro profile cylinders are frequently required in non-standard lengths to suit special locking applications such as extra-thick doors or asymmetrical lock fittings.

For these purposes we can supply cylinders in lengths up to 141mm (80mm on single cylinders), as shown in the chart opposite. These are readily available in all ASSA cylinder series, including 5-pin, Flexcore Plus, 4800, Twin Combi 5800, dp4400 and ASSA CLIQ.



	Single cylinder Total length	Double cylinder / cylinder with turn Length B (internal)									
		30.5	35.5	40.5	45.5	50.5	55.5	60.5	65.5	70.5	
Length A (Extension)	30.5	40	61	66	71	76	81	86	91	96	101
	35.5	45	66	71	76	81	86	91	96	101	106
	40.5	50	71	76	81	86	91	96	101	106	111
	45.5	55	76	81	86	91	96	101	106	111	116
	50.5	60	81	86	91	96	101	106	111	116	121
	55.5	65	86	91	96	101	106	111	116	121	126
	60.5	70	91	96	101	106	111	116	121	126	131
	65.5	75	96	101	106	111	116	121	126	131	136
	70.5	80	101	106	111	116	121	126	131	136	141

Accessory sets



Standard accessory sets for Scandinavian Oval cylinders used with Modular and Connect locks are available in four sizes. These are designed to be fitted to a standard 44mm or 45mm door. For security reasons it is imperative that the cylinder does not protrude more than 2mm from the face of the cylinder ring.

If it is necessary to fit a cylinder to a door of unusual thickness, we can supply different sizes of screws and cylinder rings. Extension pieces, which bring the cylinder further out from the centreline of the door, are also available. Please contact your stockist for further details.

Size	Accessory sets Scandinavian oval cylinders					Door thickness		Cylinder series
	256	6256	18256	2356	2256	44mm	45mm	
11mm	✓	✓	✓	✓	✓	✓	✓	5-pin, Flexcore Plus
13mm	✓	✓	✓	✓	✓			
16mm	✓	✓	✓	✓	✓		✓	4800, Combi, dp, CLIQ
18mm	✓	✓	✓	✓	✓	✓		4800, Combi, dp, CLIQ

Accessory sets for Scandinavian Round cylinders used with Modular and Connect locks are available in two sizes. Combined with extension pieces and longer screws they are suitable for door thicknesses up to 100mm.

Size	Accessory sets Scandinavian round cylinders					Door thickness		Cylinder series
	3212	3212B				44mm	45mm	
8mm	✓	✓				✓	✓	4800, Combi, dp, CLIQ
13mm	✓	✓						

High security cylinder escutcheons for Euro Profile cylinders used with Compact locks are available in two sizes: 6mm and 8mm. As these cylinders can be ordered in size increments of 5mm, the correct size of cylinder should be specified to suit the door thickness and escutcheon size selected. A full range of decorative accessory sets for Euro and UK Oval Profile cylinders is also available.

ASSA accessories are available in a wide variety of designs and finishes to suit different applications. For further information please see the Door Furniture section.

To calculate the correct cylinder ring size for Scandinavian Oval cylinders used on Modular, Connect and Small Case locks: subtract half the door thickness (A) from the cylinder length plus half the lockcase width (34.75mm for 5-pin/Flexcore Plus, 40.25mm for other ranges). Specify an accessory size no more than 2mm smaller than the result.

EXAMPLE: 44mm door/Twin Combi cylinder: subtract half this (22) from 40.25 to give 18.25. Use 18mm cylinder ring. (18 is less than 2mm smaller than 18.25).

Care of ASSA cylinders

ASSA cylinders and padlocks are made to extremely accurate tolerances. Like any mechanical device used on a daily basis, certain preventive maintenance measures are essential to ensure trouble-free operation and longevity of the products.

- 1) At installation and at least every six months thereafter, cylinders and padlocks should be lubricated using ASSA Lockspray. More frequent lubrication may be required on doors in constant use or harsh environmental conditions.
- 2) ASSA Lockspray is specially formulated to avoid clogging or damage to the cylinder mechanism, especially on ASSA CLIQ electronic cylinders. It is therefore recommended instead of conventional lubricant sprays.
- 3) Spray for approximately one second into the cylinder, then insert and turn the key two times. Wipe away any excess lubricant.
- 4) Graphite is not recommended for use with cylinders, and oil should NEVER be used.
- 5) Do not paint cylinders and keep metal filings away from them, as these can both clog the mechanism.
- 6) The use of ASSA Lockspray is also recommended before winter on products fitted in an external environment. This will overcome problems with frost and condensation.
- 7) If a cylinder has become clogged with dirt or has been over-lubricated, the use of ASSA Lock Cleaner is recommended to clean it. Afterwards, re-lubricate the cylinder using ASSA Lockspray.
- 8) If a cylinder is frozen, ASSA Lock Cleaner may be used to de-ice it. Afterwards, re-lubricate the cylinder using ASSA Lockspray.
- 9) Keys, although made of nickel silver, can become worn with very frequent use and should be replaced when necessary.
- 10) To ensure correct tolerances are maintained, only original ASSA keyblanks should be used, and these should be cut by an approved ASSA stockist.
- 11) The functions of ASSA CLIQ electronic cylinders should be tested at least once per year, or in accordance with the building's maintenance schedule.
- 12) The battery level of ASSA CLIQ keys should be checked once per year and new batteries fitted if necessary.



ASSA Lockspray

An efficient and rapid-drying lubricant, now with an improved formula that makes it ideal for both mechanical and electronic cylinders. Regular use improves reliability and prevents wear.

ASSA Lockspray is water-resistant and does not bind salt, thus also protecting against corrosion.

Lubrication instructions

Shake before use. Insert the spray nozzle into the keyway of the cylinder and spray for one second. Insert the key and turn it a couple of times, then wipe off any excess lubricant.

Safety instructions

Pressurised can with highly flammable contents. Avoid inhalation, eye contact or prolonged skin contact. Full materials safety data sheet available on request.

ASSA Lock Cleaner

Used to clean and de-ice cylinders. Rapidly dissolves dirt and particles and melts ice. Contains anti-freeze agent to inhibit further icing of the cylinder. Used together with ASSA Lockspray.

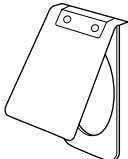
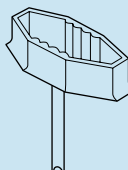
Cleaning instructions



Shake before use. Insert the spray nozzle into the keyway of the cylinder and spray for one second. Insert the key and turn it a couple of times, then wipe off any excess cleaner. Re-lubricate the cylinder using ASSA Lockspray.

De-icing instructions

Shake before use. Insert the spray nozzle into the keyway of the cylinder and spray for one to two seconds. Wait 30 seconds, insert the key and turn it a couple of times, then wipe off any excess cleaner. Repeat if necessary, then re-lubricate the cylinder using ASSA Lockspray.

Accessories

Product	Reference	Description	For use with
	88 02 64 Climate protection cover	Stainless steel with rubber flap	Scandinavian Oval and Round cylinders
	10 28 34 Protective covers for padlocks	Sizes available: Class Two Class Three Class Four/Five	ASSA padlocks

Product	Reference	Description	For use with
	Key identity band 37 40 63 Black 37 40 57 Blue 37 40 58 Green 37 40 62 Red 37 40 59 Yellow	Colours available: Yellow, black, blue, green, red	ASSA Flexcore Plus keys
	80 41 85 Key cassette	Black plastic key grip.	ASSA keys

