



## 5. Cylinders and Keys

### **TrioVing Master Key Systems**

The Marine Division provides customised TrioVing Master Key Systems to all passenger vessels.

VingCard's card operated locks and traditional lock cases and padlocks can be incorporated under the one Master Key System.

The standard profile cylinder is supplied with 6 pins while the system profile cylinder is supplied with 7 pins. TrioVing cylinders can be provided with various security levels which are activated during the various stages of building construction.

## Cylinder 5520 - Oval Cylinder with Front Fastening

### TO ORDER you must specify:

- cylinder number, i.e. 5520, 5520C, 5522, S-5525, S-5525C, S-5527 or S-5527C
- cylinder type, i.e. system profile, standard profile or equally keyed
- master key system number which is engraved on all system keys and cylinders
- finish, i.e. satin chrome, polished chrome, satin brass or polished brass
- A, B and C door measurements for cylinder sets
- door thickness for S-5525, S-5525C, S-5527 and S-5527C
- written authorisation from the vessel's owner/master must accompany the official order for system keys

### Application:

- standard or system profile cylinder suitable for interior and exterior doors
- for use with cylinder lock cases in the 50-, 51- and 53-Series
- the cylinder is fixed to the lock case with front fastening screws
- available for door thickness 36 to 98 mm

### Operation:

- standard profile cylinder delivered with 6 pins
- system profile cylinder delivered with 7 pins

### Materials and Finish:

- satin chrome
- polished chrome
- satin brass
- polished brass

### Delivery:

- standard profile and system keys must be ordered separately
- cylinder 5520 is a single cylinder and cylinder 5520C is a double cylinder
- 5522 includes cylinder 5520 and thumb turn 5541
- cylinder set S-5525 includes cylinder 5520, thumb turn 5541, cylinder roses 5968 and cylinder rose screws and the double cylinder set S-5525C includes 2 cylinders and no thumb turn
- narrow profile cylinder set S-5527 includes cylinder 5520, thumb turn 5541, cylinder roses 5965 and cylinder rose screws and the double cylinder set S-5527C includes 2 cylinders 5520 and no thumb turn
- a blind cylinder is also available

### Weight:

- 5520 = 160 g
- S-5525 = 418 g
- S-5527 = 490 g
- 5541 = 180 g



Cylinder 5520



Cylinder set S-5525



Narrow Profile Cylinder set S-5527

## Cylinder Sets S-5525 and S-5527 - Cylinder Parts

### Cylinder 5520

Supplied in length: 32 mm

### Thumb turn 5541

Supplied in lengths: 24, 32 and 40 mm

### Cylinder extension 5935

Supplied in lengths: 15, 30, 40, 45, 57, 80 and 125 mm  
Standard with set screw

### Cylinder rose 5968 for S-5525 (replaces 5962)

Interior Cylinder rose 5968

Supplied in heights: 6, 9, 12, 15, 18 and 21 mm

Exterior Cylinder rose 5968

Supplied in heights: 6, 9, 12, 15, 18 and 21 mm

### Cylinder rose 5965 for S-5527

Interior Cylinder rose 5965

Supplied in heights: 8 and 14 mm

Exterior Cylinder rose 5965

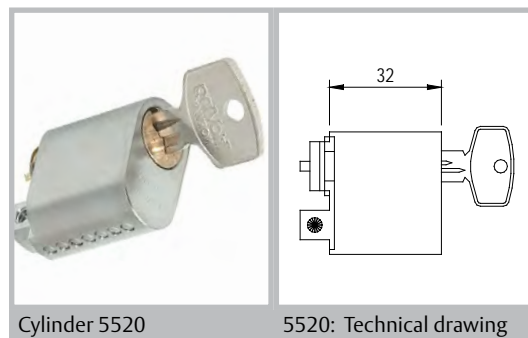
Supplied in heights: 8 and 14 mm

Material: zinc

Finish: satin chrome or polished chrome

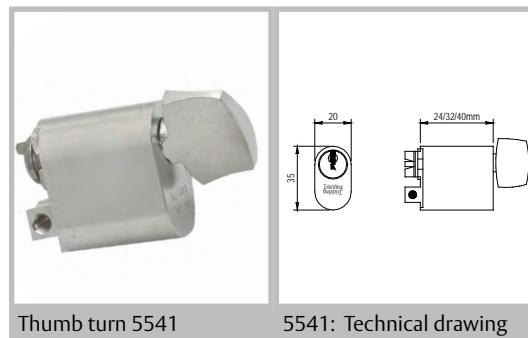
### Cylinder rose screws

Supplied in lengths: 52, 56, 60, 64, 72, 76 and 100 mm  
(200 mm length available on request)



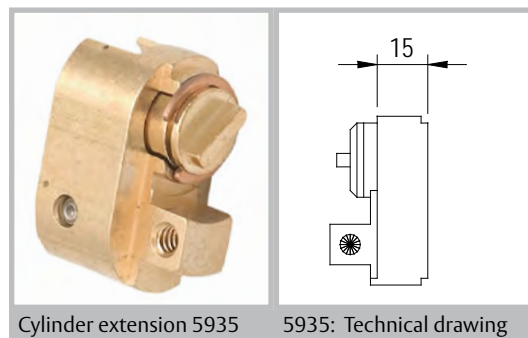
Cylinder 5520

5520: Technical drawing



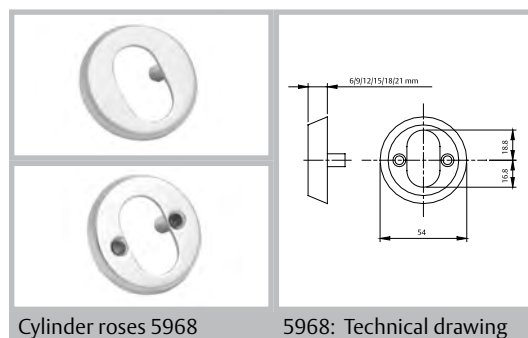
Thumb turn 5541

5541: Technical drawing



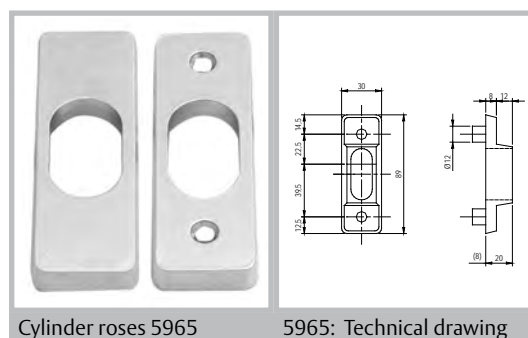
Cylinder extension 5935

5935: Technical drawing



Cylinder roses 5968

5968: Technical drawing



Cylinder roses 5965

5965: Technical drawing

## Cylinder 5537 - Oval Cylinder

### TO ORDER you must specify:

- cylinder number, i.e. 5537, 5537C, S-5545 or S-5545C
- cylinder type, i.e. system profile, standard profile or equally keyed
- finish, i.e. satin chrome, polished chrome, satin brass or polished brass
- A, B and C door measurements for cylinder sets
- door thickness for S-5545 and S-5545C
- written authorisation from the vessel's owner/master must accompany the official order for system keys

### Application:

- a system cylinder that will allow doors with Boda, Abloy, Assa and Ruko lock cases to operate within a TrioVing Master Key System
- applied with motor locks from Abloy and lock cases from Boda, Assa and Ruko
- the cylinder is fixed to the lock case by adjoining screws

### Operation:

- standard profile cylinder delivered with 6 pins
- system profile cylinder delivered with 7 pins

### Materials and Finish:

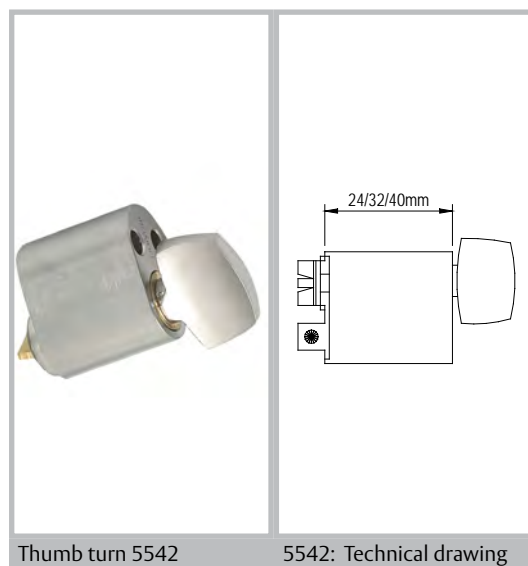
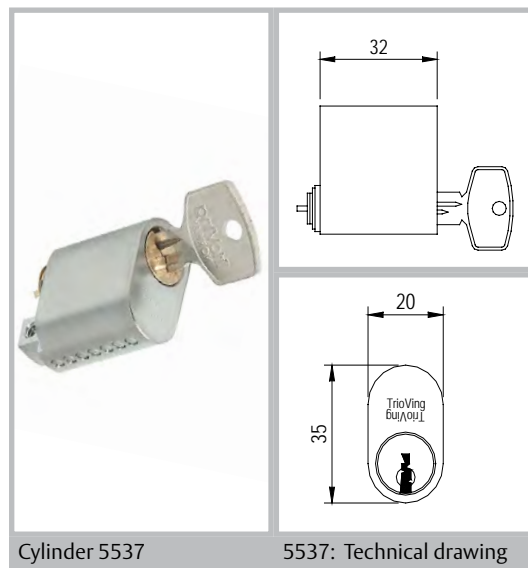
- satin chrome
- polished chrome
- satin brass
- polished brass with clear polyester

### Delivery:

- standard profile and system keys must be ordered separately
- cylinder 5537 is a single cylinder and cylinder 5537C is a double cylinder
- cylinder set S-5545 includes cylinder 5537, thumb turn 5542, cylinder roses 5968 and cylinder rose screws and the double cylinder set S-5545C includes 2 cylinders and no thumb turn
- a blind cylinder is also available
- the cylinder is part of motor locks 5533, 5539, 5552, 5555 and 5560

### Weight:

- 5537 = 170 g
- S-5545 = 500 g
- 5542 = 180 g



## Cylinder 5532 - Oval Cylinder

### TO ORDER you must specify:

- cylinder number
- cylinder type, i.e. system profile, standard profile or equally keyed
- finish, i.e. satin chrome, polished chrome, satin brass or polished brass
- written authorisation from the vessel's owner/master must accompany the official order for system keys

### Application:

- standard profile and system profile cylinder set
- suitable for doors equipped with rim cylinder lock UK1601 and UK2622 (replaces 1183/1186)

### Operation:

- standard profile cylinder delivered with 6 pins
- system profile cylinder delivered with 7 pins

### Materials and Finish:

- satin chrome
- polished chrome
- satin brass
- polished brass with clear polyester

### Delivery:

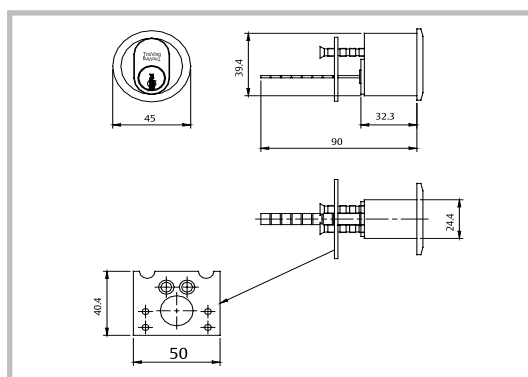
- standard profile and system keys must be ordered separately
- spacer rings for coat to be ordered separately
- specify door thickness when ordering

### Weight:

- 5532 = 254 g



Cylinder 5532



5532: Technical drawing

## Cylinder 5868 - Key Switch

### TO ORDER you must specify:

- cylinder number
- cylinder type, i.e. system profile or standard profile
- written authorisation from the vessel's owner/master must accompany the official order for system keys

### Application:

- key switch to activate/close off a contact

### Operation:

- equipped with 3 alternative micro switches:
  - rocker switch, ON - NON - ON
  - pulse switch, MOM - OFF - MOM
  - pulse switch, ON - NON - MOM
- can be used together with an electric striker plate and latch lock case

### Materials and Finish:

- satin brass

### Delivery:

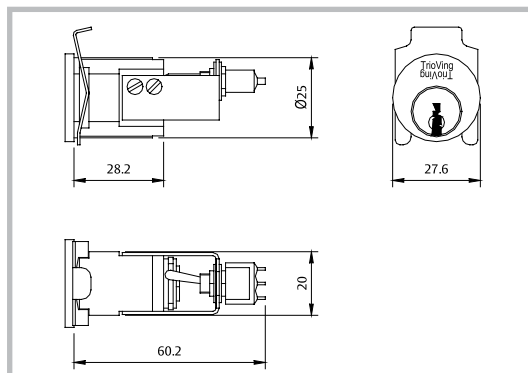
- standard profile and system keys must be ordered separately

### Weight:

- 130 g



Cylinder 5868



5868: Technical drawing

## Cylinder 5536K/5567 - VingCard Emergency Override Cylinder for Card Operated Locks

### TO ORDER you must specify:

- the Master Key System number stamped on the cylinder
- finish, i.e. satin chrome, polished chrome, satin brass or polished brass
- door thickness

### Application:

- U.S. standard cylinder for VingCard locks and lock cases supplied by U.S. manufacturers

### Operation:

- standard profile or within a master key system
- 5 level forward recodeable cylinder
- cylinder is screwed directly into the lock case and fastened with screws from the front of the lock case

### Materials and Finish:

- satin chrome
- polished chrome
- satin brass
- polished brass with clear polyester coating

### Delivery:

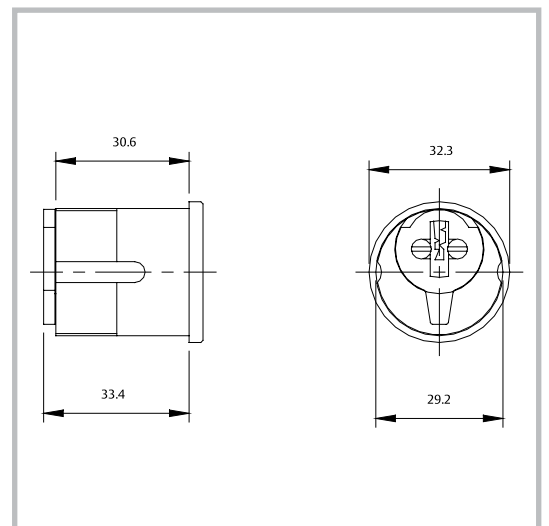
- standard profile and system keys must be ordered separately

### Weight:

- 5536 = 183 g
- 5567 = 183 g



Cylinder 5536K/5567



5536K/5567: Technical drawing

## Cylinder 5506/5511 - Continental Cylinder

### TO ORDER you must specify:

- cylinder number, i.e. 5506, 5511/78 or 5511/special length
- cylinder type, i.e. system profile or standard profile
- finish, i.e. satin chrome, polished chrome, satin brass or polished brass
- length of 5506 and 5511/special length

### Application:

- for lock cases requiring a “continental” cylinder, e.g. DIN standard locks. Allows these type of lock cases to operate within a TrioVing Master Key System.

### Operation:

- standard profile or system cylinder with 7 pins
- installed as a single cylinder, single cylinder with thumb turn or double cylinder
- the cylinders are fixed to the lock case with front fastening screw

### Materials and Finish:

- satin chrome
- polished chrome
- satin brass
- polished brass with clear polyester coating

### Delivery:

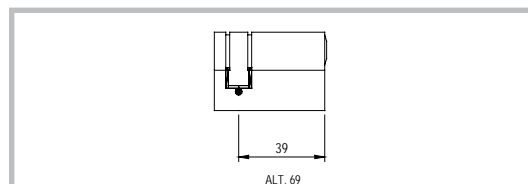
- standard profile and system keys must be ordered separately
- cylinder 5506 length: 39 or 69 mm (other lengths available on request)
- cylinder 5511 and 5511C: 78 mm (39 mm minimum on either side). Lengthened cylinders are available on request.
- 3 different catches are available which may be placed in 8 different positions (see illustration)

### Weight:

- 5506 = 132 g
- 5511/78 = 242 g
- 5511C = 213 g



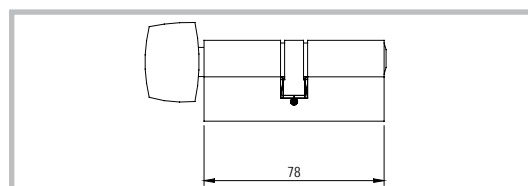
Cylinder 5506



5506: Technical drawing



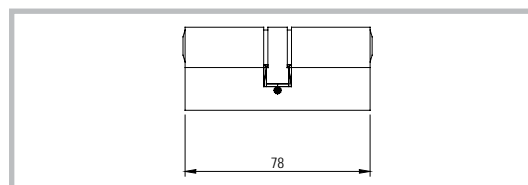
Cylinder 5511



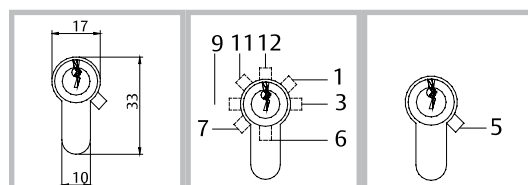
5511: Technical drawing



Cylinder 5511C



5511C: Technical drawing



Catches: Technical drawing

## Cylinder 5866 - Furniture Lock

### TO ORDER you must specify:

- the Master Key System number stamped on the cylinder
- finish, i.e. satin chrome or satin brass
- type of catch

### Application:

- for cupboard doors and drawers

### Operation:

- the catch is operated by a key
- for adaption to different door thicknesses there are 4 different catches available: straight and bent 10, 20 and 24 mm and direction Right and Left
- door thickness and type of catch must be specified. If not specified, then a straight catch, direction R, will be delivered.
- applies for door thicknesses up to 21 mm. A cylinder ring has to be used with door thicknesses from 13 to 19 mm.

### Materials and Finish:

- satin chrome
- polished chrome
- satin brass with clear polyester coating
- polished brass with clear polyester coating

### Delivery:

- the standard profile cylinder is delivered with a set of 3 keys
- system keys must be ordered separately
- the cylinder is delivered with front plate, locking plate, washer A and B and catch. Catch to be specified (see table).

### Weight:

- 5866 = 173 g
- Catch = 24 g

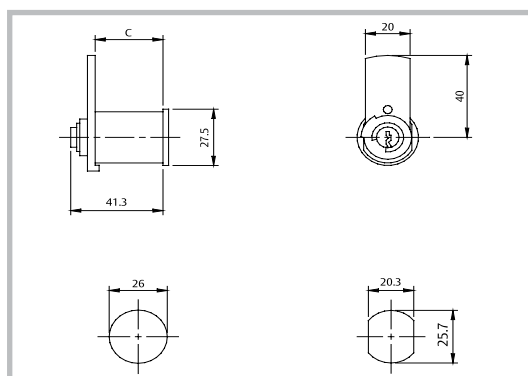
1. Cylinder
2. Cylinder ring (2, 4, 6 and 8 mm)
3. Front ring ( 1 mm)
4. Washer (for wooden doors)
5. Nut
6. Secure ring
- 7.1 Catch arm R (straight, 10, 20 and 24 mm)\*
- 7.2 Catch arm L (straight, 10, 20 and 24 mm)\*
- 8.1 Follower A\*\*
- 8.2 Follower A/L\*\*
- 8.3 Follower B\*\*
- 8.4 Follower B/L\*\*
9. Circlip

\* Direction of opening of catch seen from key side

\*\* Follower A should be used when the key is pulled out in the locked and unlocked positions. A together with R catch, A/L with L catch. Follower B should be used when the key is pulled out in the locked position only.



Cylinder 5866



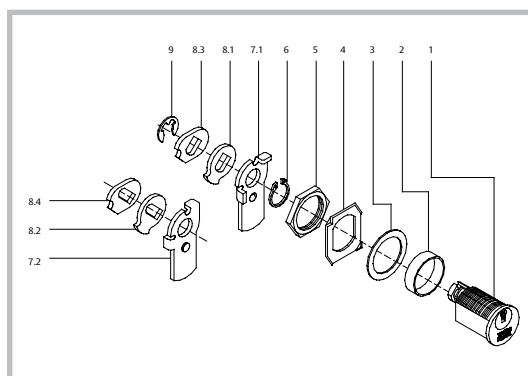
5866: Technical drawing

Ring thickness in mm	Catch straight	Catch bent 10 mm	Catch bent 20 mm	Catch bent 24 mm	Maximum door thickness in mm
0	31.5	21.5	11.5	7.5	21
2	29.5	19.5	9.5	5.5	19
4	27.5	17.5	7.5	3.5	17
6	25.5	15.5	5.5	1.5	15
8	23.5	13.5	3.5		13

Distance C in mm

By use of front plate, distance C is reduced with 1 mm!

Catch table



5866: Technical drawing



## Cylinder Padlock 5652R

### TO ORDER you must specify:

- padlock number
- cylinder type, i.e. system profile or standard profile
- length of shackle, i.e. 25, 50 or 100 mm

### Application:

- the 5652R is delivered with a stainless steel shackle making it particularly suitable for marine applications

### Materials and Finish:

- padlock casing: chrome brass
- padlock shackle: stainless steel

### Delivery:

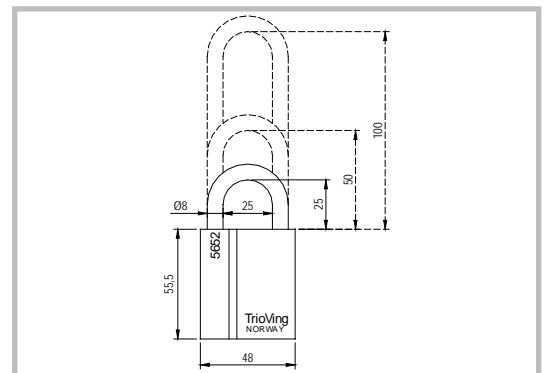
- the standard profile padlock is delivered with a set of 3 keys
- system keys must be ordered separately
- the padlock is available with 3 alternative shackle lengths: 25, 50 or 100 mm.

### Weight:

- 5652R/25 mm = 390 g
- 5652R/50 mm = 410 g
- 5652R/100 mm = 450 g



Padlock 5652R/25/50/100



5652R: Technical drawing

## Weatherproof Padlock HL5652 WP

### TO ORDER you must specify:

- padlock number
- cylinder type, i.e. system profile or standard profile
- length of shackle, i.e. 25, 50 or 100 mm

### Application:

- secure o-rings at the shackle, in the lock and above the keyhole, ensure the weatherproof padlock is waterproof and dustproof protected against particles
- the HL5652 WP meets the demands of the IP-57 system, i.e. tolerates being emerged in water to one metre depth

### Materials and Finish:

- padlock casing: chrome brass
- padlock shackle: stainless steel

### Delivery:

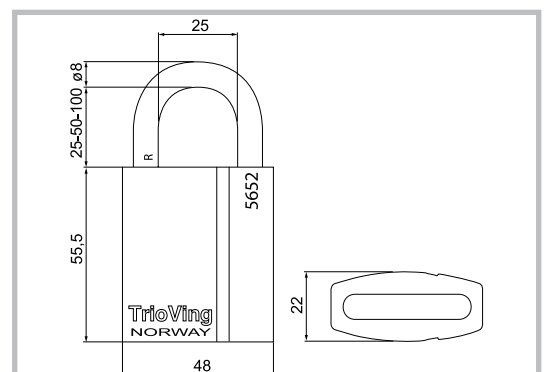
- standard profile and system keys must be ordered separately
- the padlock is available with 3 alternative shackle lengths: 25, 50 or 100 mm.

### Weight:

- HL5652 WP/25 mm = 435 g
- HL5652 WP/50 mm = 472 g
- HL5652 WP/100 mm = 511 g



Padlock HL5652 WP



HL5652 WP: Technical drawing

## Abloy Cylinder Padlock PL320

### TO ORDER you must specify:

- padlock number
- cylinder type, i.e. system profile or standard profile
- length of shackle, i.e. 20 or 50 mm

### Application:

- a multi-purpose padlock suitable for wardrobes, food cupboards, tool boxes, etc.
- the key can only be removed in the locked position

### Materials and Finish:

- padlock casing: chrome brass
- padlock shackle: stainless steel

### Delivery:

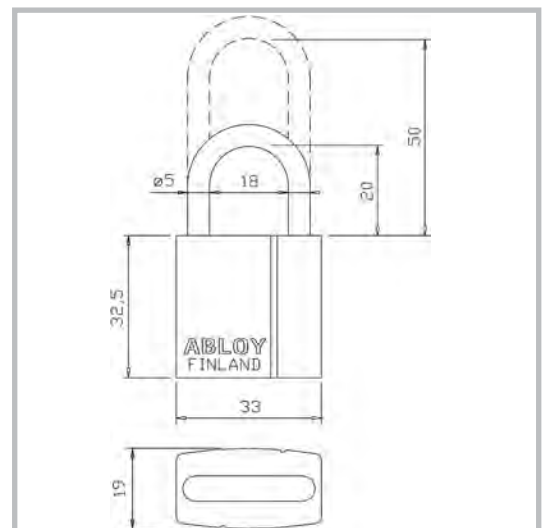
- standard profile and system keys must be ordered separately
- can be delivered in a separate master key system but it is not possible to incorporate in a TrioVing master key system

### Weight:

- PL320 = 150 g



Padlock PL320



PL320: Technical drawing

## TrioVing dp and dp CLIQ

Advanced lock cylinder technology. TrioVing dp's patented technology and the new side code system, further improves security and prevents unwanted copying of keys.

Various doors on board have various requirements for the level of security. With TrioVing dp it is possible to combine different levels of security in the same system without the crew having more than one key.

TrioVing dp can be expanded to dp Cliq, so that you have total flexibility via electronic programming.

The system can be fitted on current TrioVing, VingCard and Assa cylinders, in addition to all European style profile cylinders, padlocks and furniture locks.

### Application:

- TrioVing dp CLIQ technology is used as an effective perimeter protection off-line and for doors requiring registered and controlled security
- the technology provides electronic authorisation of group or individual levels
- master key cylinders with CLIQ function have the same level of security as mechanical TrioVing dp cylinders but with developed electronic flexibility and security

### Operation:

- in addition to the mechanical cylinder pins there are electronics in the cylinder which communicate with the electronics in the key
- the cylinder can only be opened by a key which has both the correct mechanical and electronic code
- CLIQ technology takes care of high mechanical security no matter how many changes or extensions are made to the locking system
- dp CLIQ cylinders have the same measurements as corresponding mechanical cylinders
- electrical supply is not necessary as the battery is in the key head
- inside the key head is a chip with both a microprocessor and a memory

### Delivery:

- User key - consists of mechanical combinations, electronics for ID and battery for power
- Master C key - used to programme keys
- dp CLIQ cylinder is available in the most common cylinder shapes, e.g. oval, continental, furniture, VingCard, key switch and padlocks
- power supply - lithium battery
- terminal - programming unit for keys and cylinders

### Weight:

- dp CLIQ key = 32 g
- dp CLIQ cylinder = 152 g



TrioVing dp key



TrioVing Cliq key



Programming terminal

## Silca Rekord Key Cutting Machine

### TO ORDER you must specify:

- Rekord key cutting machine

### Application:

- key cutting machine for cylinder keys

### Operation:

- duplicates with maximum precision
- optimal working condition for the operator due to high-tech materials and ergonomic shapes

### Technical Features:

- rotating with 4 sides, high precision
- HSS super rapid steel cutter
- controlled pitch grub screw
- ergonomic handles and levers
- led lamp integrated in the cover
- incorporated brush
- chippings tray
- tools compartment
- working tools area (cover)
- one speed single-phase - 230V-50Hz - 120V-60Hz

### Dimensions:

- width: 330 mm (with maximum lever encumbrance: 510 mm)
- depth: 430 mm
- height: 270 mm

### Weight:

- 19 kg



Key Cutting Machine

# Re Ordering Keys and Cylinders

ASSA ABLOY									KEYS																	
Locking Plan :									To be used by																	
System: MV 12345									Master key																	
Name: M/S MARINE TRADER									Sub.Master																	
Address: ANOLTVEIEN 1-3									Group key																	
Contract: N-1400 SKI, NORWAY									Indiv. key																	
LOCKS									Indiv. key																	
ID #	Door name	Door number	Cylinder - Finish	Escutcheon	Qty	Lockcase	Hand R/L	Door Thickn.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	LOCKER	110	5522 SAT.CHR	7715	2	5316/8	L	40/20	X	X	X															
2	DAYROOM	111	5511/39-39 SAT.CHR		2			40/20	X	X	X															
3	GALLEY	112	5506/39 SAT.CHR		1			40/20	X	X	X															
4	GUEST ROOM	113	5536/34 SAT.CHR		1			44/22	X			X														
5	GUEST ROOM	114	5536/34 SAT.CHR		1			44/22	X				X													
6	GUEST ROOM	115	5536/34 SAT.CHR		1			44/22	X					X												
7	GUEST ROOM	116	5536/34 SAT.CHR		1			44/22	X						X											
8	PADLOCK GALLEY	117	5652R/50 POL.CHR		10				X							X										
	B	C	D	F	E	E	G	H	J							I										

- A. Must always be quoted when ordering keys or cylinders. The number is stamped on all keys and cylinders.
- B. This is the individual number stamped on each cylinder in a Master Key System. By following the line to the right hand side of the plan, an "X" indicates that the key in this column will open the cylinder.
- C. The number used by the yard or owner at the time of production of the Master Key System.
- D. Indicates the item number of the cylinder.
- E. Used to indicate the item number for lock case, handles, escutcheon or any other important information.
- F. Normally indicates the finish (colour) of the cylinder. Must always be stated when re ordering (not padlocks).
- G. Indicates the opening direction of the door. Only needed when ordering lock cases.
- H. Indicates the thickness of the door. Important if you order a complete cylinder set (for both sides of the door).
- I. The individual number stamped on each system key. Always needed if you re order keys. Never indicate the door number, in this case, as normally several keys will open each and every door.
- J. By following the column to the top of the locking plan, you will see which key number will open a specific cylinder. Alternatively, by looking down the column you will see which cylinders are opened by a specific key.