

09 CAM LOCKS

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09 CAM LOCKS



CAM LOCKS & QUARTER TURNS

OVERVIEW

UNDERSTANDING THE DIFFERENCE BETWEEN CAM LOCKS AND QUARTER TURNS

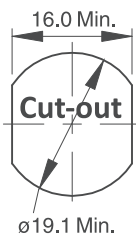
Cam Locks and Quarter Turns consist of a threaded housing which is secured in the door panel by a hex lock nut.

The latching mechanism is usually either a rotating cam (metal tongue) fixed to the back of the housing or a spring loaded slam snib (like the snib on a standard house door). There are options for the cam to be replaced with a multi-point cam which can actuate rods or cables to latch the door in multiple points for extra security or to create a better seal against the elements (dust/rain).

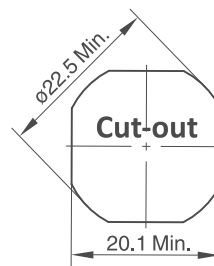
The user operation is often just by way of a standard blade type key, but can be a wingknob with key, or an insert type drive (e.g. square / triangle / double bit) with matching drive type key, or it can be non-locking with a simple wing knob to unlatch the door. In the case of Quarter Turns larger handle options are available such as T Handles and L Handles enabling more force to be used to close the door.

Cam Locks and Quarter Turns are different in physical size and cut-out shape:

Camlock:



Quarter Turn:



However there are also non-standard product with variations of these two cut-outs.

While their basic functionality may appear the same, Quarter Turn's are larger, more robust and are specially designed for a wider range of applications:

Cam Locks can be:

- Non-locking (e.g. wing knob or push knob) to latch a door closed.
- Cylinder locks (key locking) to both latch and lock the door for security.
- Keyed electrical switches whereby the turning of the key can close / open an electrical circuit.

Quarter Turns can be:

- Non-locking (e.g. wing handle) to latch a door closed.
- Key Locking (cylinder lock, keyed wing handle) to both latch and lock the door for security.
- Insert type (e.g. square drive, triangle drive, double-bit drive, etc) for industrial use where a flush, robust, semi-secure lock is required with sufficient key strength to cope with sealing rubber back force.
- Multiple point latching (throw rods or pull cables to actuate top and bottom door latching points).
- IP65 rating for use in dusty / wet applications.
- Stainless steel options for use in more corrosive environments.
- Many other handle options will fit the standard Quarter Turn cut-out such as T Handles, L Handles, Combination Locks, etc.

CAM LOCKS & QUARTER TURNS

OVERVIEW

SELECTING THE RIGHT PRODUCT

Terminology:

- **Latching** is when the cam rotates into position to hold the door closed.
- **Locking** is when a key disables free rotation of the handle / unlatching of the cam.

Important Note:

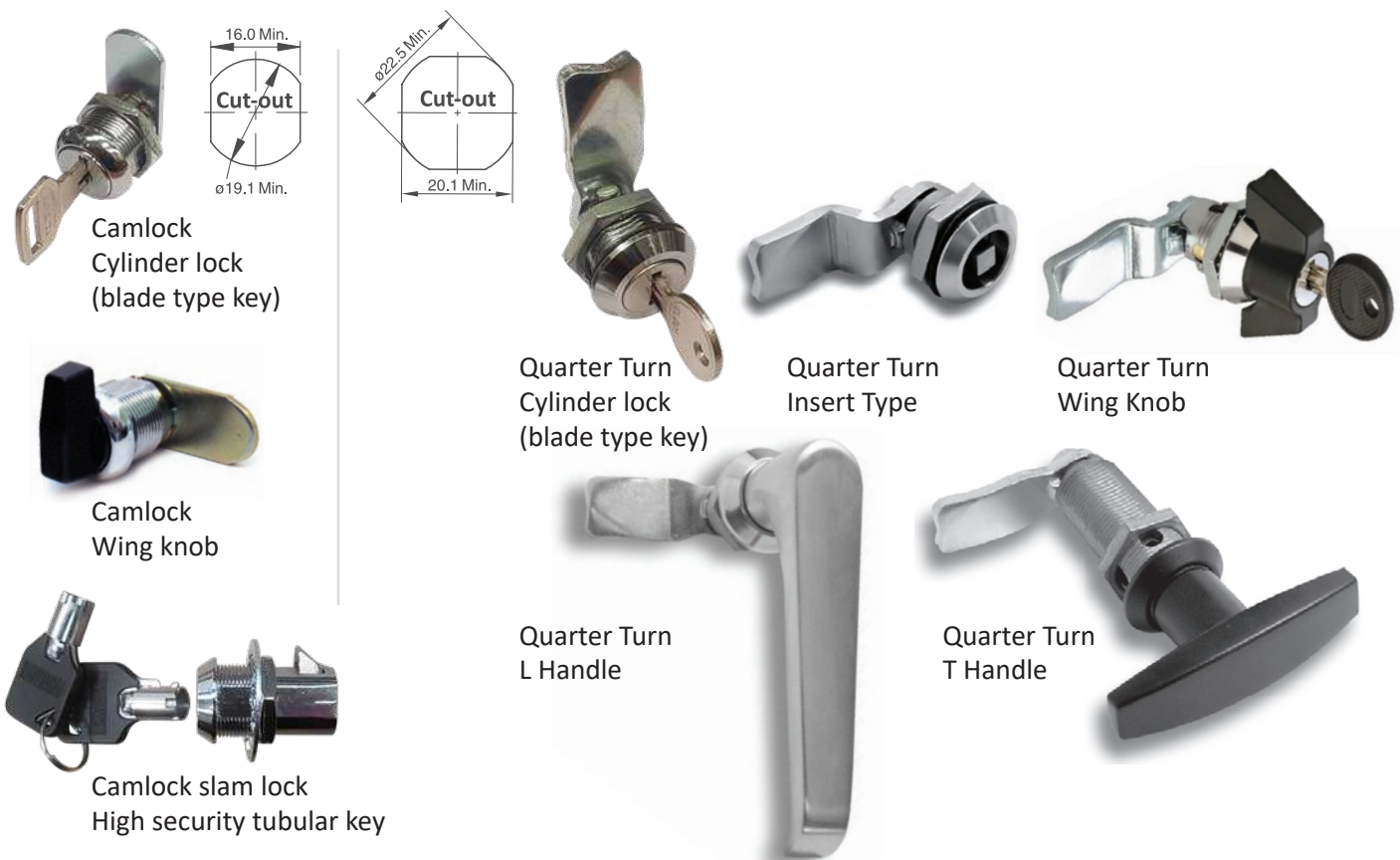
A cylinder lock (standard blade type key) must not be used to latch/unlatch a cam if there is friction on the cam because the key could break off in the barrel. Consequently, **if you have seal back force creating friction when the cam latches, you cannot use a standard keyed Camlock, or a cylinder lock quarter turn.** Instead use either an Insert Type Quarter Turn, or a Wing handle, L-Handle or T-Handle so that the handle manages the force of latching and the key spins freely to lock the handle.

See selection table:

Application:	Camlock:	Quarter Turn:
Door is lightweight and easy to close	Yes	Yes
Door not easy to close (e.g. seal back force)	Do not use *	Wing handle, L or T Handle, or Insert Type
Multiple point latching required	Do not use	Wing handle, L or T Handle, or Insert Type
Door is heavy / rough handling / could slam in wind	Do not use **	Yes
Vertical door panel with water / dust present	M-350 only	Yes
Horizontal (lid) panel, water / dust present	Do not use	Yes - use Wing, L or T Handle
Corrosive elements present	Do not use	Yes - use 316 Stainless Steel models

* Camlock cams are flat without caulking  (no curved edges) so cannot pull up against door seal back force.

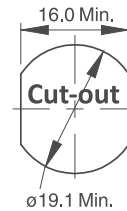
** 264-9103 Slam Camlock with tubular key may be suitable for some installations.



CAM LOCKS

INFORMATION FOR ORDERING

When ordering please advise us of the following:

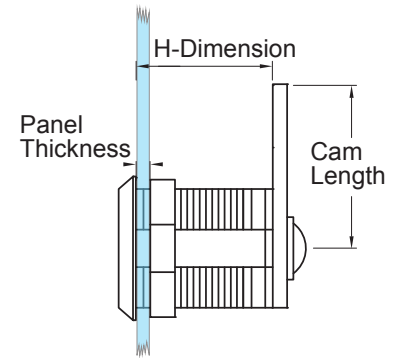


1. PANEL THICKNESS:

How thick is your door panel? This will determine the housing length required.

2. H-DIMENSION:

What is the H-Dimension of your installation? This is the distance from the front of the door panel back to where the cam latches. This will be a factor of both housing length and a step (bend) in the cam (tongue).



3. CAM LENGTH:

How long does your cam need to be from centre of housing out to the end to securely latch?

4. KEY:

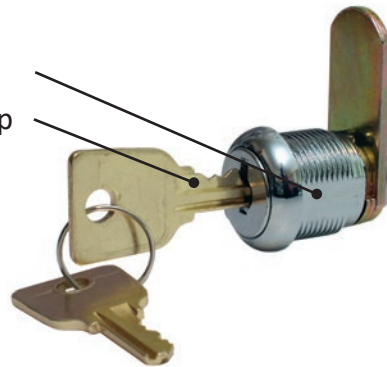
Do you require a particular key number? Do you require multiple cam locks keyed the same "Keyed Alike", or would you like them all with different keys "Keyed to Differ"?

5. CAM ANGLE OF ROTATION AND DIRECTION:

Do you require 90° or 180° rotation of the cam?

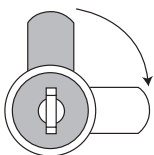
Holding the two flat sides of the housing in vertical orientation as shown below and referencing the hour numbers on a clock - what locked and open positions do you require for the cam (tongue)?

Hold Camlock with housing flats vertical and key separations (cut edge) pointing up

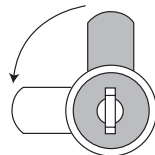


Examples:

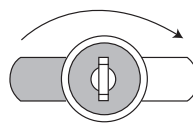
90°, 12 open, 3 locked



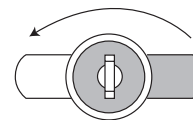
90°, 12 open, 9 locked



180°, 9 open, 3 locked



180°, 3 open, 9 locked



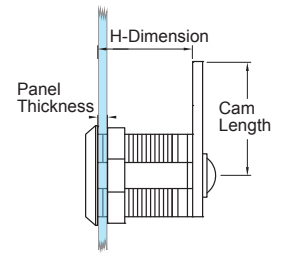
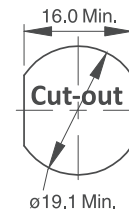
For our range of "ALR CAM LOCKS" - in the event we do not have a preset (pre-assembled) Camlock with the correct cam angle / rotation, you can simply remove the screw retaining the cam and adjust the kidney (washer) orientation on the rear of the lock to achieve the desired cam functionality.

CAM LOCKS

ALR CAM LOCKS

KEY LOCKING

ZINC CHROME



- Cylinder lock
- Single sided serrated blade type key

Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Master Key	Cam: Rotation and Preset (Open to Closed Position)
ALR302LT3605B11		3	6	36	92268	N/A	180° 12 ↻ 6, 12 ↻ 6
ALR314LS19Z11		3	11	19	009	N/A	180° 12 ↻ 6, 12 ↻ 6
ALR511LS20Z16		7	16	20	144	N/A	90° 12 ↻ 3
ALR511LS28Z16B		7	16	28	144	N/A	90° 12 ↻ 9
ALR411LS28Z16		7	16	28	144	N/A	90° 12 ↻ 3
ALR3M5LS28Z16		7	16	28	Mixed	Yes	180° 12 ↻ 6, 12 ↻ 6
ALR10MLS30Z16		7	16	30	Mixed	Yes	90° 12 ↻ 3
ALR3020S30B16		7	16	30	92268	N/A	180° 12 ↻ 6, 12 ↻ 6
ALR410LS30Z16		7	16	30	CH510	N/A	90° 12 ↻ 3
ALR461LS30Z16		7	16	30	CH502	N/A	90° 12 ↻ 3
ALR501LS30Z16		7	16	30	CL001	N/A	90° 12 ↻ 9
ALR507LS30Z16SC		7	16	30	CL003	N/A	90° 12 ↻ 9
ALR307LS30Z16		7	16	30	CL003	N/A	180° 12 ↻ 6, 12 ↻ 6
ALR509LS30Z16		7	16	30	550	N/A	90° 12 ↻ 9
ALR511LS30Z16		7	16	30	144	N/A	90° 12 ↻ 9

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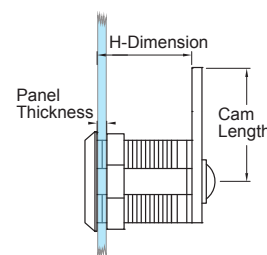
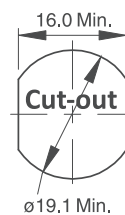
- Preset cam position / rotation can be changed by removing the cam and adjusting the kidney (notched washer) orientation on the rear of the lock to achieve the desired functionality.
- * Key can be removed in open and locked positions for all the above, except ALR2M1LA3012B16.

CAM LOCKS

ALR CAM LOCKS

KEY LOCKING

ZINC CHROME



- Cylinder lock
- Single sided serrated blade type key

Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Master Key	Cam: Rotation and Preset (Open to Closed Position)
Continued from previous page							
ALR2M1LA3012B16		7	28	30	Mixed	Yes	90° * 12 ↻ 9
ALR511LS30Z19		10	19	30	144	N/A	12 ↻ 9
ALR40MLH40B20		11	20	40	Mixed	No	12 ↻ 3
ALR302LA3206B22		13	16	32	92268	N/A	12 ↻ 6, 12 ↻ 6
ALR402LS30Z30		20	30	30	92268	N/A	12 ↻ 3

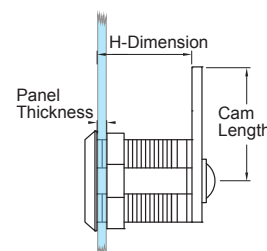
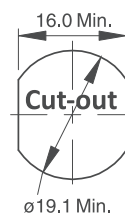
- Preset cam position / rotation can be changed by removing the cam and adjusting the kidney (washer) orientation on the rear of the lock to achieve the desired functionality.
- Key can be removed in open and locked positions for all the above, except ALR2M1LA3012B16.

ALR CAM LOCKS

WING KNOB

NON LOCKING

ZINC BLACK / CHROME



- Non locking wing knob

Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Master Key	Cam: Rotation and Preset (Open to Closed Position)
ALR5WKOS30Z16		7	19	30	Non Locking	N/A	6 ↻ 9, 3 ↻ 12

Note:

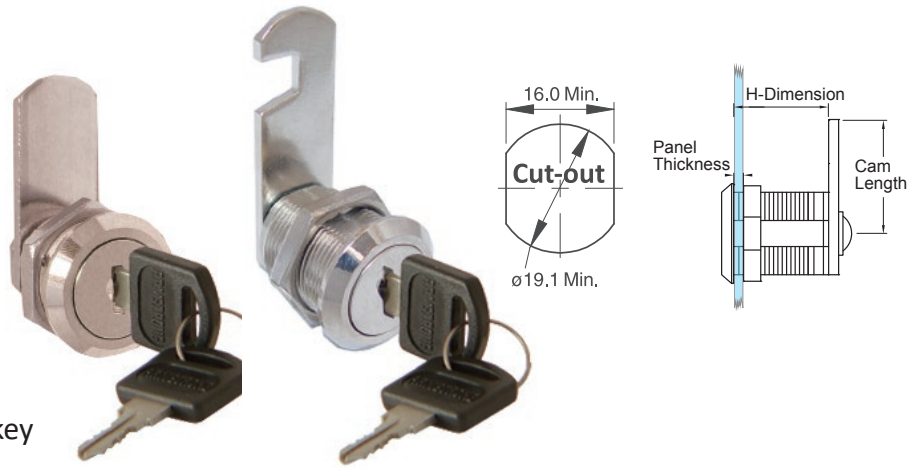
- The preset cam position / rotation can be changed by removing the cam and adjusting the kidney (washer) orientation on the rear of the lock to achieve the desired functionality.

CAM LOCKS

505 CAM LOCKS

KEY LOCKING

ZINC CHROME



- Cylinder lock
- Double sided serrated blade type key

Code	(mm)	Max Panel Thickness	H- Dimension	Cam Length	Key Number	Master Key	Cam: Rotation and Preset (Open to Closed Position)
C505-16-KA135		9	17	28	135	N/A	90° 12 9, 6 3
N505-16-KA120		9	17	28	120	N/A	90° 12 3, 6 9
N505-16-KD		9	17	28	Mixed	Yes	90° Not Assembled
N505-16-KD/180		9	17	28	Mixed	Yes	180° 12 6, 12 6
N505-20-KA120		13	20	28	120 Hinged	N/A	90° Not Assembled
N505-23-KA120		15	22	28 Hooked	120 Hinged	N/A	90° Not Assembled
N505-26-KA120		19	26	38	120 Hinged	N/A	90° Not Assembled
N505-30-KA120/180		23	29	48	120	N/A	180° 12 6, 12 6

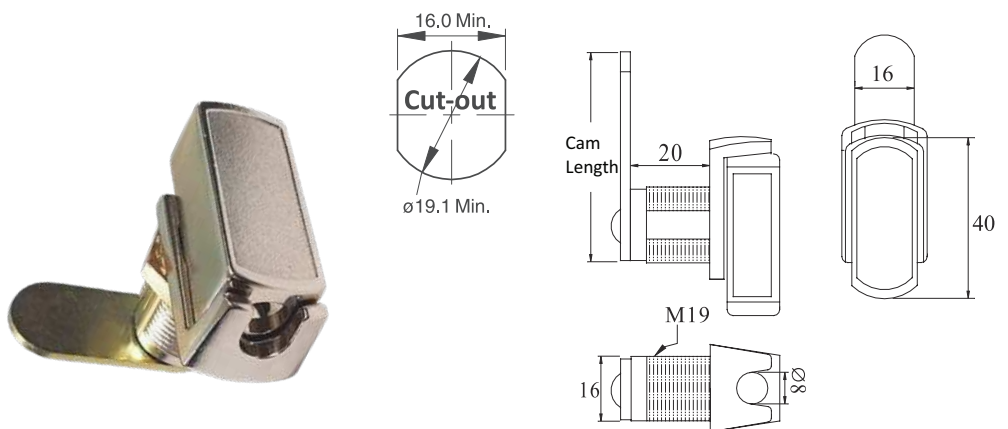
- Key can be removed in open and locked positions for all of the above.

WING KNOB CAM LOCK

PADLOCKABLE

ZINC CHROME


- Padlockable wing knob

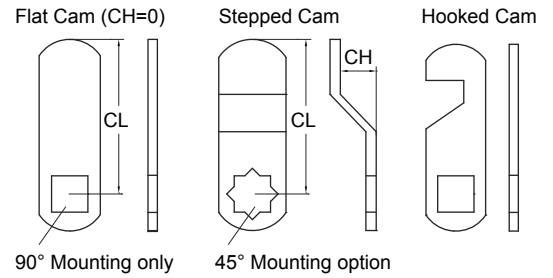


Code	(mm)	Max Panel Thickness	H- Dimension	Cam Length	Key Number	Master Key	Cam: Rotation and Preset (Open to Closed Position)
LM0661.20.F.06.FL		13	20	30	Padlockable	N/A	180° 9 3

CAM LOCKS


ALR CAM LOCKS - CAM ONLY STEEL ZINC

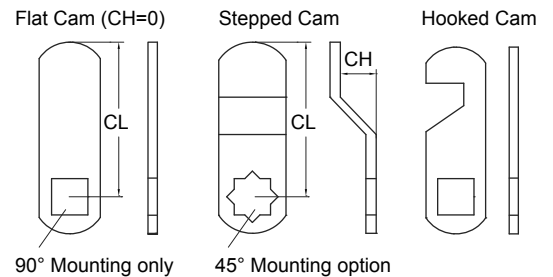
ALR Cam Lock cams do not have caulking  (no curved edges). Consequently, cams with a step (bend) can be used to either step in towards door (smaller H-Dimension), or reversed to step out away from the door (larger H-Dimension)



Code	Cam Height (Change To Camlock H-Dimension) (mm)	Cam Length (mm)	Cam Features	Compatible Camlock Codes
CAM20	0 (flat)	19	Plain, 45° option	ALR...
CAM28	0 (flat)	28	Plain, 45° option	ALR...
CAM28-8-18	-12 or +12	30	Plain, 45° option	ALR...
CAM-28-8SQ	0 (flat)	28	Plain, 90° only	ALR...
CAM36-8SQ	0 (flat)	36	Plain, 90° only	ALR...
CAM45	-10 or +10	46	Plain, 45° option	ALR...
CAM55	-6 or +6	32	Plain, 45° option	ALR...
CAM30	0 (flat)	28	Plain, 45° option	ALR...
S-CM-C010	0 (flat)	32	Plain, 90° only	ALR...
S-CM-C014	0 (flat)	45	Plain, 90° only	ALR...

505 CAM LOCK - CAM ONLY STEEL ZINC

505 Cam Lock cams do not have caulking  (no curved edges). Consequently, cams with a step (bend) can be used to either step in towards door (smaller H-Dimension), or reversed to step out away from the door (larger H-Dimension)



Code	Cam Height (Change To Camlock H-Dimension) (mm)	Cam Length (mm)	Cam Features	Compatible Camlock Codes
LCAM02	0 (flat)	40	Plain, 45° option	#505...
LCAM03	0 (flat)	25	Plain, 45° option	#505...
LCAM05	0 (flat)	45	Plain, 45° option	#505...
LCAM-06-28	-4 or +4	28	Plain, 45° option	#505...
LCAM10	-7 or +7	40	Hooked, 45° option	#505...
LCAM11	-4 or +4	40	Plain, 45° option	#505...
LCAM28.5	-3.5 or + 3.5	28.5	Plain, 45° option	#505...
CMK55	0 (flat)	40	Plain, 45° option	#505...

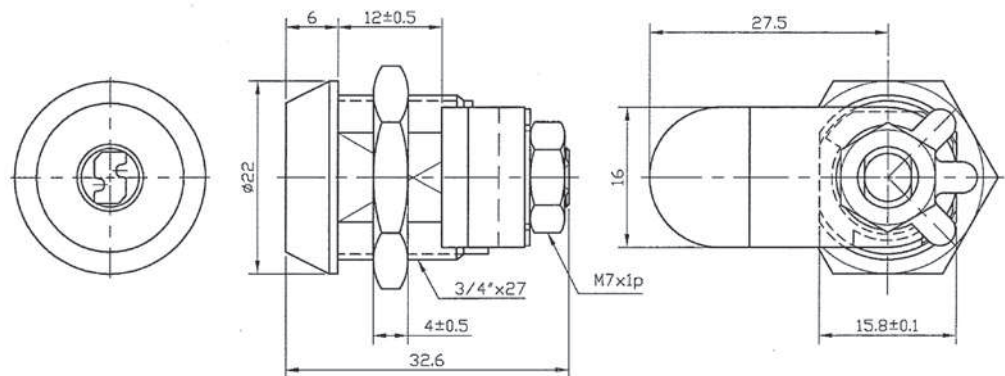
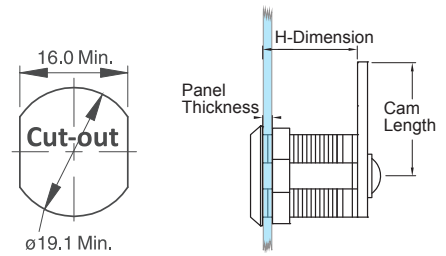
CAM LOCKS



HIGH SECURITY CAMLOCK

FINLAND KEY

ZINC CHROME

- Very high security cylinder lock
- Finland type key



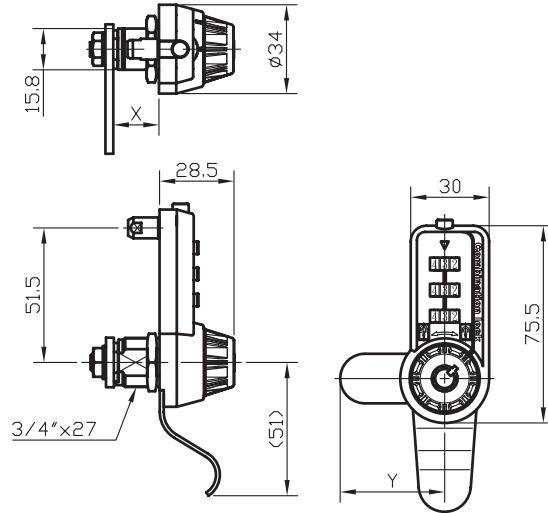
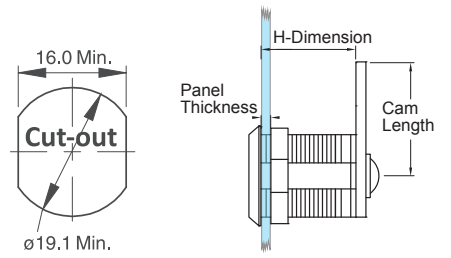
Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Master Key	Cam: Rotation and Preset (Open to Closed Position)
8418-KA			12	28	418	N/A	90° 6  , 12 

- Key rotates 180°
- Key can only be removed in locked position.
- Preset cam position / rotation can be changed by removing the cam and adjusting the kidney (washer) orientation on the rear of the lock to achieve the desired functionality.


CAM LOCKS

COMBINATION CAMLOCK WITH KEY OVERRIDE ZINC CHROME

- Combination lock with high security tubular override key



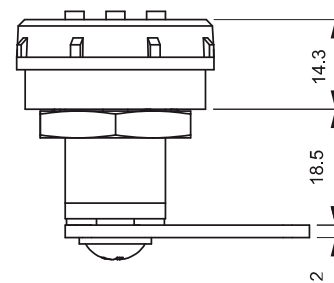
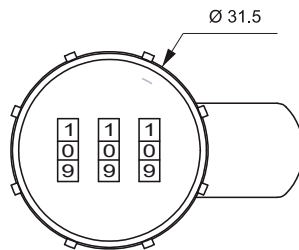
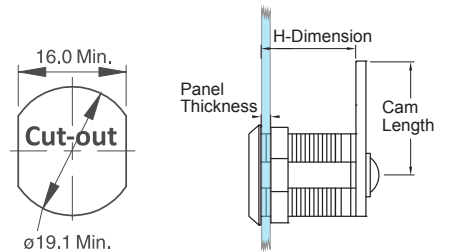
7440-S-KA

Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Cam: Rotation and Preset (Open to Closed Position)
7440-S-KA		8	17.5	38.5	440	90° 6  9


- Preset cam position can be changed.

- Mixed key available on request

COMBINATION CAMLOCK ZINC CHROME



M-4150

Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Cam: Rotation and Preset (Open to Closed Position)
M-4150		10	18.5	30	N/A	90° 6  3

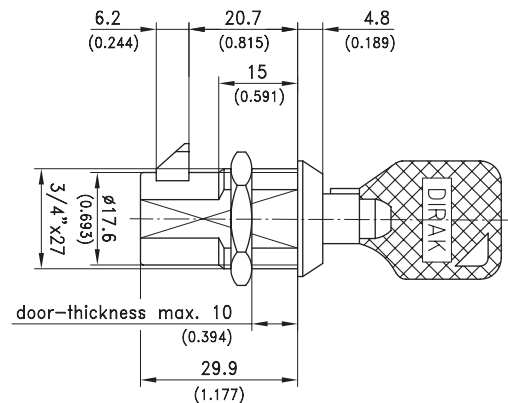
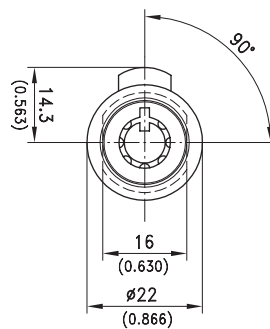
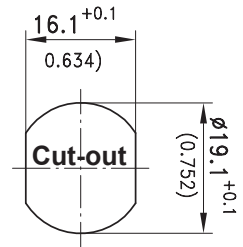
- Preset cam position / rotation can be changed by removing the cam and adjusting the kidney

CAM LOCKS

SPRING LOADED SLAM LOCKS

ZINC CHROME

- Spring loaded slam cam
- High security tubular key, mixed or keyed alike



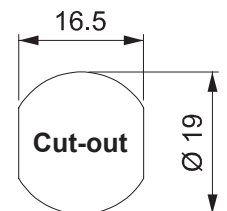
Code	(mm)	Max Panel Thickness	H-Dimension	Cam Length	Key Number	Master Key
264-9103-01		9	20	5	21301	N/A
264-9103-MK		9	20	5	Mixed	Yes

MINI QUARTER TURNS

INSERT TYPE

ZINC CHROME

See Section 10: 30 for Mini-Quarter turns with similar size cut-out to Cam Locks



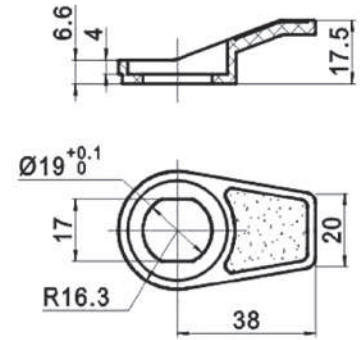
Code	Insert (Drive / Key Type)	Cam H Dimension
M-350-1-1-13-6X32	3mm Double Bit	14mm or 26mm
M-350-1-1-27-6X32	7mm Square	14mm or 26mm
M-350-1-1-37-6X32	7mm Triangular	14mm or 26mm
M-350-1-1-42-6X32	Slotted	14mm or 26mm

CAM LOCKS

ACCESSORIES

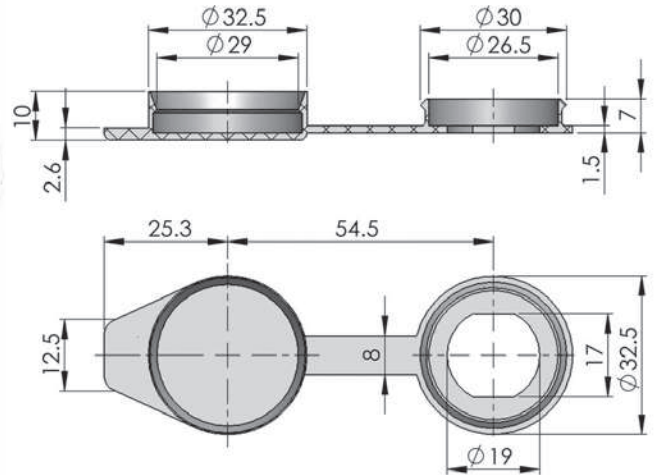
HP003 Finger pull

Note: Mounting flange is 2mm thick, so reduces maximum panel thickness and H-Dimension of Camlock by 2mm



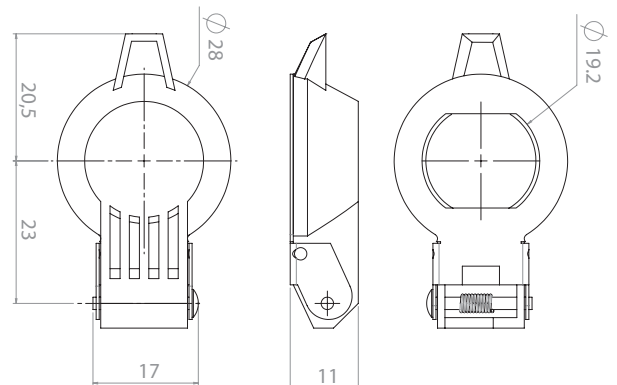
WP003 Dust Cap

Note: Mounting flange is 1.6mm thick, so reduces maximum panel thickness and H-Dimension of Camlock by 1.6mm



10502-CAP Dust Cap

Note: Mounting flange is 0.5mm thick, so reduces maximum panel thickness and H-Dimension of Camlock by 0.5mm



FACEPLATE SS

Stainless cam lock cut-out plate
31 x 42mm with 4mm fold over
Note: Plate is 0.8mm thick, so reduces maximum panel thickness of Camlock by 0.8mm



A0065 Timber Spur Washer

32OD x 1.0mm
Enables easy installation into timber: drill round hole and use spur washer to bite into wood to hold Camlock in correct orientation.
Note: Washer is 1.0mm thick, so reduces maximum panel thickness of Camlock by 1.0mm



Note: Specifications can change from time to time without notice.
Cut-outs & construction should only be done with the products onsite.