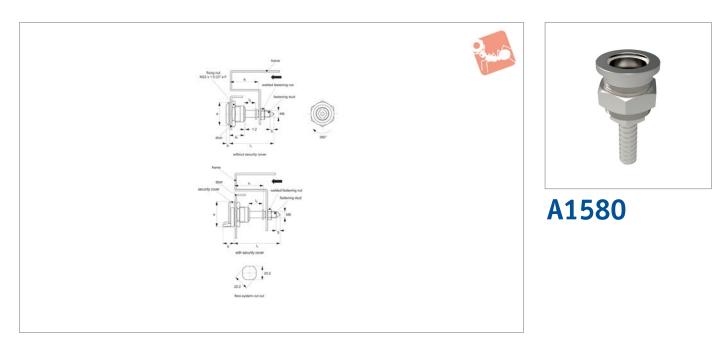


insert driver - fixed grip - zinc

Compression Latches



Material

Body: die cast zinc, bright chrome plated. Insert: steel.

Not supplied: KEY - order separately.

Technical Notes

Order key separately. Keys: see A0102.AW0060.

Insert driver compression latch enabling tight securing of enclosure door. Via welding a fastening nut (M 8) to the enclosure frame the fastening stud can be engaged and turned until the enclosure door is adequately tightened and secured (use triangle 7 key A0102.AW0060 to acti-

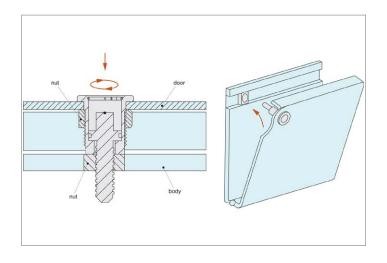
vate driver).

Tips

Security cover type can be secured with wire or cable tie for tamper evident security.

h = grip length.

Order No.	Insert type	Lock type	а	b	lh	I_1	I ₂	h
A1580.AW0023	Triangle 7	W/o Security Cover	28	4	18	40	2.5	23
A1580.AW0028	Triangle 7	W/o Security Cover	28	4	18	46	7.5	28
A1580.AW0034	Triangle 7	W/o Security Cover	28	4	18	54	13.5	34
A1580.AW0223	Triangle 7	With Security Cover	29	13	18	40	2.5	23
A1580.AW0228	Triangle 7	With Security Cover	29	13	18	46	7.5	28
A1580.AW0234	Triangle 7	With Security Cover	29	13	18	54	13.5	34

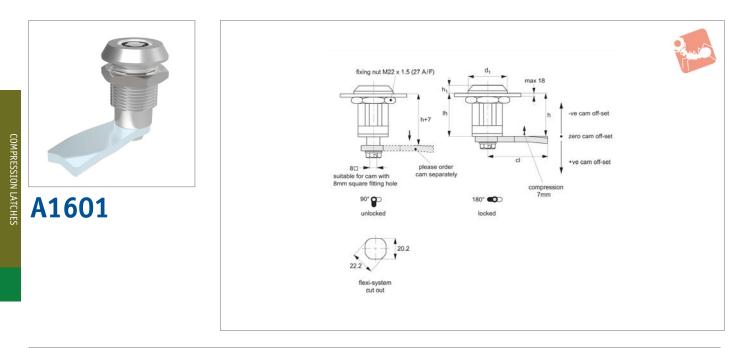




Compression Latches - Flexi-System

insert driver - fixed grip - zinc





Material

Body & insert: die cast zinc, finished in chrome plate or black powder coating. Insert fitted with O'ring to provide IP54 rating.

Handle: polyamide.

Not supplied: CAM nor KEY - order separately.

Technical Notes

Order cam and key separately. **Cams:** see suitable cam A0203 and A0224.

Select "without projection" cam type. Dimensions ch and cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where;

ch = required cam off-set/height. h = grip length (distance between inside of latch face and front of cam). lh = body length of cam latch/lock to be used (see product table below). Keys: see A0102.

Tips

Compression locks provide sealing of enclosures to reduce vibration and to provide noise isolation. **Action:**

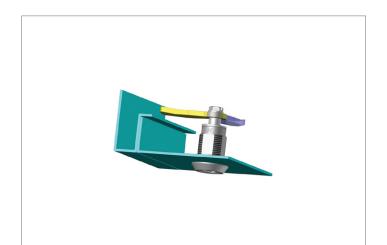
From unlocked position, first 90° turn moves the cam to the locking position. Turn lock 180° to engage compression, cam moves to final fixing position. **Provides a 7mm compression stroke.**

Order No.	Finish	Insert driver	d_1	h ₁	lh
A1601.AW0020	Chrome Plated	Square 8	28	5.5	31
A1601.AW0320	Black Coated	Square 8	28	5.5	31
A1601.AW0040	Chrome Plated	Triangle 7	28	5.5	31
A1601.AW0340	Black Coated	Triangle 7	28	5.5	31
A1601.AW0050	Chrome Plated	Triangle 8	28	5.5	31
A1601.AW0350	Black Coated	Triangle 8	28	5.5	31
A1601.AW0080	Chrome Plated	Slot (2x4)	28	5.5	31
A1601.AW0380	Black Coated	Slot (2x4)	28	5.5	31
A1601.AW0085	Chrome Plated	Hexagon 8	28	5.5	31
A1601.AW0385	Black Coated	Hexagon 8	28	5.5	31







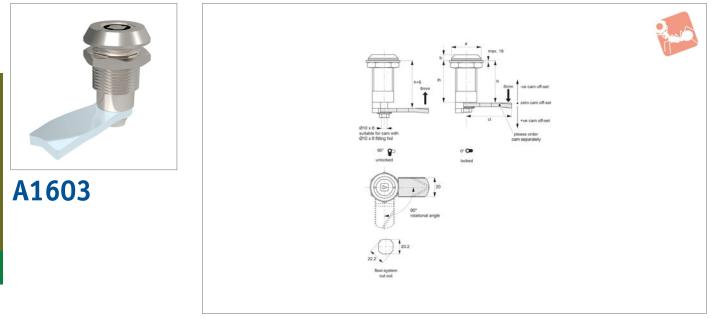




Compression Latches - Flexi-System

insert driver - fixed grip - stainless steel





Body & insert: stainless steel, AISI 304. Insert fitted with O'ring to provide IP54 rating.

Shaft: steel, white zinc plated. **Not supplied:** KEY - order separately.

Technical Notes

Order cam and key separately. **Cams:** see suitable cam A0231 and A0233. Select "without projection" cam type. Dimensions ch and cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where;

ch = required cam off-set/height. h = grip length (distance between inside of latch face and front of cam). lh = body length of cam latch/lock to be

used (see product table below). **Keys:** see A0102.

Tips

Compression locks provide sealing of

enclosures to reduce vibration and to provide noise isolation. **Action:**

From unlocked position, first 90° turn moves the cam to the locking position. Turn lock 180° to engage compression.

Turn lock 180° to engage compression, cam moves to final fixing position. **Provides a 6mm compression stroke.**

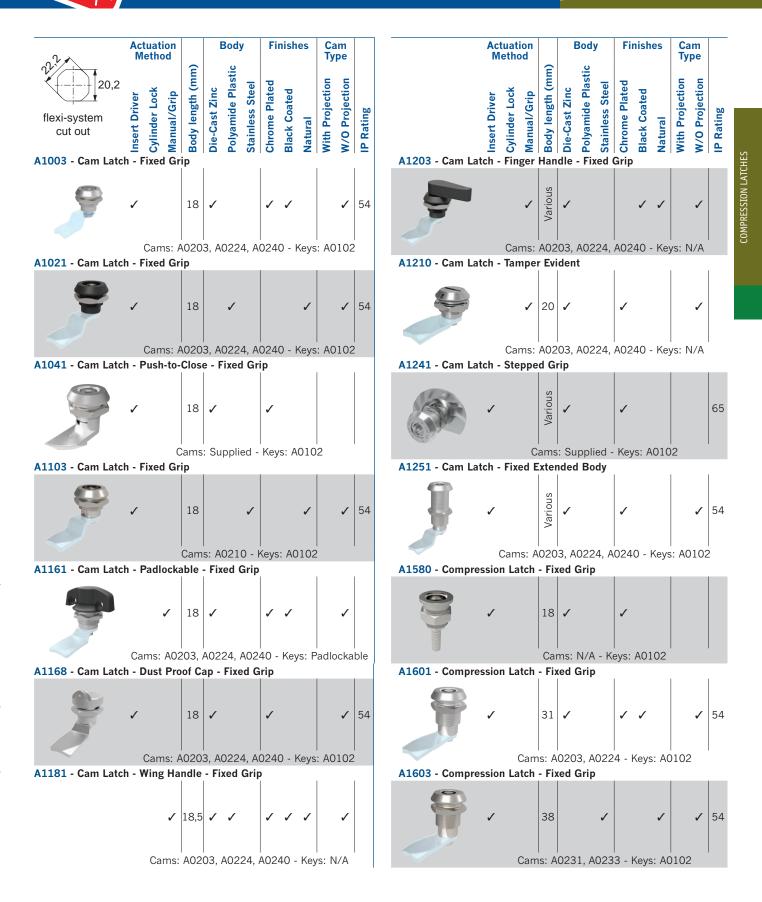
Order No.	Insert driver	Туре	а	b	lh
A1603.AW0020	Square 8	Fixed Grip	28	5	38
A1603.AW0050	Triangle 8	Fixed Grip	28	5	38



Wixroyd Cam and Compression Latches



flexi-system cut out product selection charts

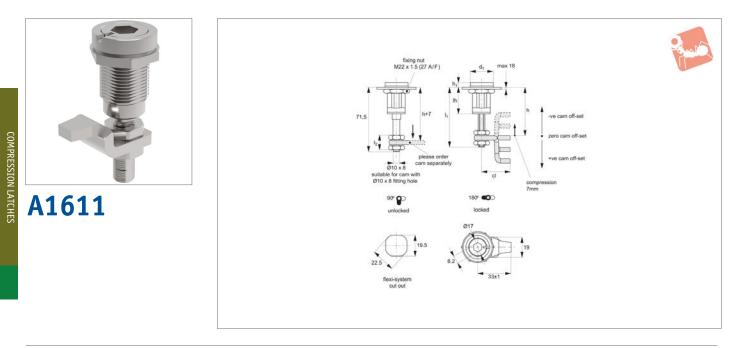




Compression Latches - Flexi-System

insert driver - adjustable grip - zinc





Material

Body & insert: die cast zinc, chrome plate or black coated finish. Insert fitted with O'ring to provide IP54 rating. Handle: polyamide. **Not supplied:** CAM nor KEY - order separately.

Technical Notes

Order cam and key separately. **Cams:** see suitable cam A0231 and A0233. Select "without projection" cam type. Dimensions ch and cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where;

ch = required cam off-set/height. h = grip length (distance between inside of latch face and front of cam). lh = body length of cam latch/lock to be

used (see product table below). **Keys:** see A0102.

Tips

Compression locks provide sealing of enclosures to reduce vibration and to

provide noise isolation. Adjustable grip type has an extended stem which can be cut in length to best suit your application. Action:

From unlocked position, first 90° turn moves the cam to the locking position. Turn lock 180° to engage compression, cam moves to final fixing position. **Provides a 7mm compression stroke.**

Important Notes

Cam: quarter turn to open or close. Locking function.

Order No.	Finish	Insert driver	d_1	h ₁	lh	I_1	l ₂ useful thread
A1611.AW0020	Chrome Plated	Square 8	28	4.5	32	64.5	15
A1611.AW0320	Black Coated	Square 8	28	4.5	32	64.5	15
A1611.AW0040	Chrome Plated	Triangle 7	28	4.5	32	64.5	15
A1611.AW0340	Black Coated	Triangle 7	28	4.5	32	64.5	15
A1611.AW0050	Chrome Plated	Triangle 8	28	4.5	32	64.5	15
A1611.AW0350	Black Coated	Triangle 8	28	4.5	32	64.5	15
A1611.AW0080	Chrome Plated	Slot (2x4)	28	4.5	32	64.5	15
A1611.AW0380	Black Coated	Slot (2x4)	28	4.5	32	64.5	15
A1611.AW0085	Chrome Plated	Hexagon 8	28	4.5	32	64.5	15
A1611.AW0385	Black Coated	Hexagon 8	28	5.5	31	64.5	15





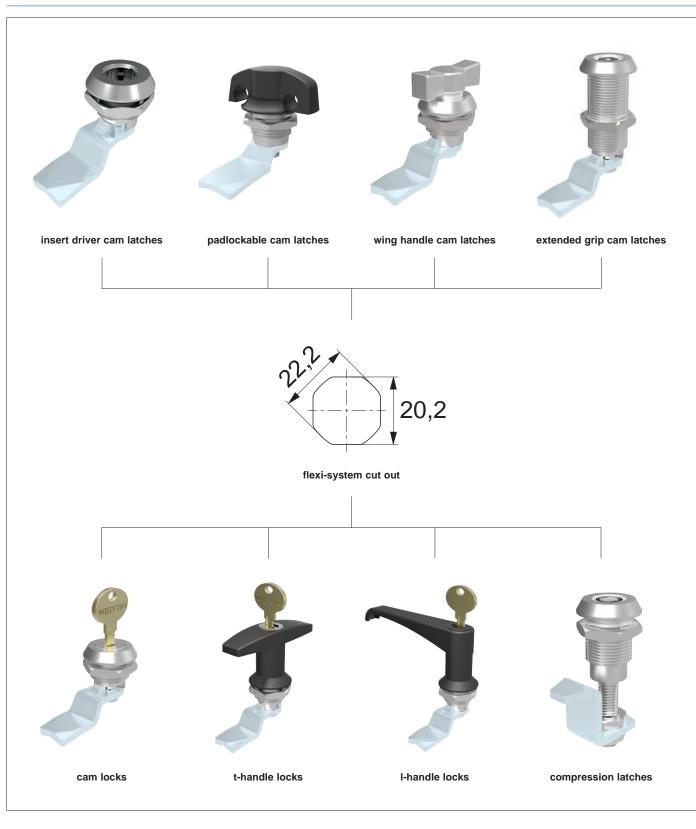


COMPRESSION LATCHES

at the core of all your cam latch requirements

All our cam latches use a standard cut out dimension of 22,2 Ø and 20,2 square which accomodates many industry standards. Flexi-System parts are fully interchangeable, providing a completely flexible hardware system including two or three point latching systems.

Flexi-system



ov-WA1003-A-TCC0400-WA2503-A-TCC2200-flexi-system-cam-latch-requirements-rnh- Updated -26-10-2022

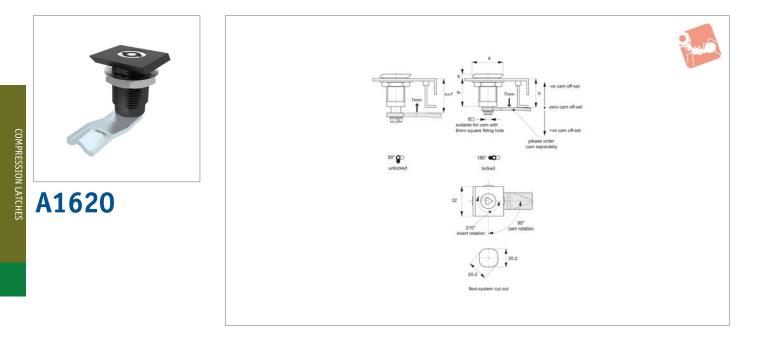


sales@wixroyd.com

Compression Latches - Flexi-System

square face - fixed grip - zinc





Material

Body & insert: die cast zinc, black powder coated. Fitted with O'ring to provide IP54 rating.

Not supplied: CAM nor KEY - order separately.

Technical Notes

Order cam and key separately.

Cams: see suitable cam A0203 and A0224. Select "without projection" cam type. Dimensions ch and cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where; ch = required cam off-set/height. h = grip length (distance between inside of latch face and front of cam).
lh = body length of cam latch/lock to be
used (see product table below).
Keys: see A0102.

Order No.	Insert driver	Туре	а	b	lh
A1620.AW0020	Square 8	Fixed	34	5	32
A1620.AW0040	Triangle 7	Fixed	34	5	32
A1620.AW0050	Triangle 8	Fixed	34	5	32
A1620.AW0080	Slot (2x4)	Fixed	34	5	32
A1620.AW0085	Hexagon 8	Fixed	34	5	32

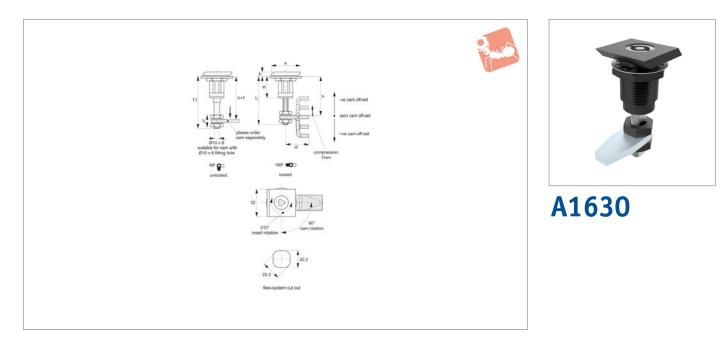




Compression Latches - Flexi-System

square face - adjustable grip - zinc

Compression Latches



Material

Body & insert: die cast zinc, black powder coated. Fitted with O'ring to provide IP54 rating.

Not supplied: CAM nor KEY - order separately.

Technical Notes

Order cam and key separately.

Cams: see suitable cam A0231 and A0233. Select "without projection" cam type. Dimensions ch and cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where; ch = required cam off-set/height. h = grip length (distance between inside of latch face and front of cam).
lh = body length of cam latch/lock to be
used (see product table below).
Keys: see A0102.

Order No.	Insert driver	Туре	а	b	lh	I_1	l ₂ useful thread
A1630.AW0020	Square 8	Adjustable	34	5	64	38	15
A1630.AW0040	Triangle 7	Adjustable	34	5	64	38	15
A1630.AW0050	Triangle 8	Adjustable	34	5	64	38	15
A1630.AW0080	Slot (2x4)	Adjustable	34	5	64	38	15
A1630.AW0085	Hexagon 8	Adjustable	34	5	64	38	15





With or without "Projection"

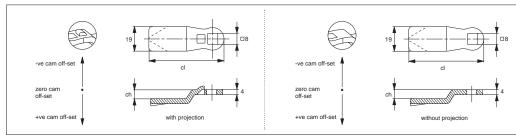
Different cam bodies require cams either with or without projection.

Step 5:

COMPRESSION LATCHES

Which cam type and size?

Wixroyd cams are available in a number of different materials; zinc plated steel, stainless steel (AISI 304) and black plastic.



With projection cams prevent turning of the cam over 45°, but is not suited to all cam bodies. For correct projection type please see individual cam body technical pages.

Number of Latching Points

Single point cams are suitable where just single point latching is required. Multi-point cams are for applications requiring 2 or 3 latching points.

Calculation of correct cam off-set

This is the most important aspect of the selection process.

Cam off-set (dimension ch)

To ensure your cam fully and correctly engages with the frame of your door the correct cam offset must be selected. A cam off-set can be either negative (-ve) or positive (+ve).

Cam length (dimension cl)

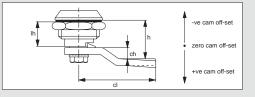
This impacts the reach of the cam to door frame and hence impacts positioning of cam body for installation. Cam length is measured from the centre of the cam fixing hole to the cam's leading edge. Most typically cams are 45 mm in length. Use formula to calculate ch (required cam offset), and refer to the cam selction chart.

ch = h - lh where;

ch

h

- = the required cam off-set/height
- grip length (distance between inside of latch face and front of cam).
- lh = body length of cam latch/lock to be used
 (see example below)



Example of calculation of correct cam off-set

Example one

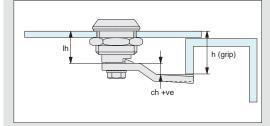
Cam body A1003.AW0010 has been selected for the application. If we refer to the data sheet for this part, suitable cams are parts A0203, A0210 or A0240 - "without projection".

Known application information: h = 26 lh = 18

Therefore; ch = 26 - 18 = +8

Cam off set of +8 is required

Using the data tables for cams A0203, A0210, and A0240 we can select the following cams without projection with an off set of + 8; A0203.AW5408 (steel), A0210.AW0428 (stainless) or A0240.AW0108 (three point cam).



Example two

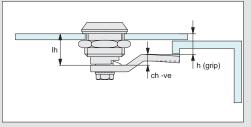
Cam body A1003.AW0010 has been selected for the application. If we refer to the data sheet for this part, suitable cams are parts A0203, A0210 or A0240 - "without projection".

Known application information: h = 14 lh = 18

Therefore; ch = 14 - 18 = -4

The required cam off set is negative, - 4 as the application's door frame is effectively shorter/lower than the length of the cam body

Using the data tables for cams A0203, A0210 and A0240 we can select the following cam without projection with an off set of - 4; A0203. AW6404 (steel).



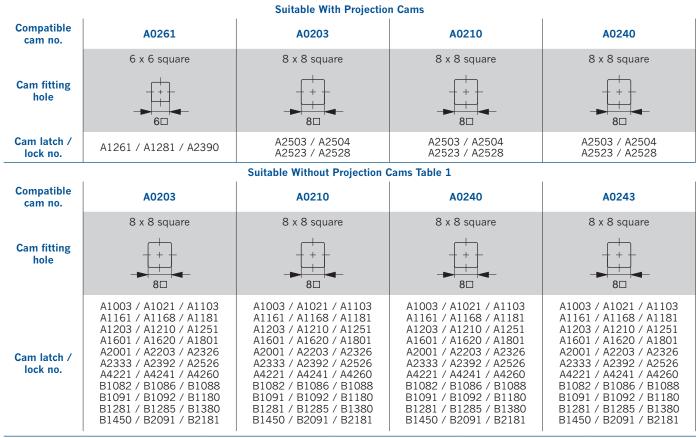


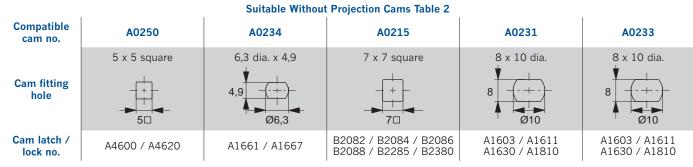


Wixroyd Cam Latches, Locks and Swing Handles

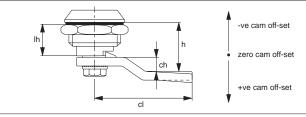
cam selection chart







Calculation of correct cam off-set



Cam off-set Use the formula to calculate your correct cam off-set:

ch = h - lh

h

- = the required cam off-set. ch
 - = distance between inside of lock face and front of cam (also referred to as "grip length").
- Ih = length of cam body to be used (refer to individual cam body data sheets).

Cam Off-Set (dimension ch)

ov-WA0203-A-TCC0020-WA0261-A-TCC0050-cam-latches-locks-swing-handles-selection-chart-rnh- Updated -26-10-2022

To ensure your cam fully and correctly engages with the frame of your door the correct cam off-set must be selected. A cam off-set can be either negative (-ve) or positive (+ve).

Cam Length (dimension cl)

Impacts reach of the cam to door frame and hence impacts positioning of cam body for installation. Cam length or reach is measured from the centre of the cam fixing hole to the cam's leading edge. Refer to individual cam body datasheets.

















Wixroyd Cam Latches

technical specification and advice



RoHS



Materials

Cam Latches

and Locks

Physical and chemical characteristics of polyamide						
Physical condition	solid (at 20°C)					
Density	> 1,0 g/cm3					
Yield Point	220°C					
Smell	No particular smell					
Dissolvability in water	Undissolvable					
Segregation temperature	> 350°C					
Fire Point	>390°C					
Auto ignition temperature	> 400°C					

Zinc

Zinc Alloy is the most fundamental material for the Wixroyd product range. Housings, inserts, handles, spacers, keys, hinges etc, are all die cast products. The zinc used is a zinc alloy with the following contents (except zinc): Al 4,03% Cu 0,83% as well as minor contents of Mg, Fe, Pb, Cd, Sn and Ni.

Plastic - Polyamide

RoHS Compliance

Compliant.

Our Cam Latches are RoHS

Many of our products are made of injection moulded plastic, normally polyamide. When needed, we add fibreglass to the material, in order to optimise

qualities of the product. Examples of products made out of polyamide: handles, housings, rod guides etc.

Degrees of sealing protection

IP ratings

A product classified to an IP rating has either been tested in an independent laboratory, or due to the resemblance of its structure to a tested product, classified as IP.

Important note: We can only guarantee our products correspond to the indicated classification when assembled and used correctly.

IP65 RATED

IP54 RATED **IP 65:** Dust Tight and Jetting Secure. Through the application of an o-ring and a flat gasket, this higher classification can be achieved.

IP 54: Dust and Splash Protected. This is the standard classification for our products. Equivalent to NEMA3.

Flat gaskets/ Sealing Washer

Character	Value	Standard
Density	1,35 g/cm3	DIN 53479
Hardness	65 Shore A	DIN 53505
Breaking Strain	5 N/mm2	DIN 53504
Expansion	200%	DIN 53504
Heat & cold	max. 70°C,	
resistance	min35°C	

Through the application of a flat gasket between the lock and the door, class IP 65 or NEMA 4 is achieved.

Character	Value	Standard
Density	1,240 g/cm3	DIN 53479
Hardness	71 Shore A	DIN 53505
Breaking strain	14 N/mm2	DIN 53504
Expansion	280%	DIN 53504
Recoil elasticity	32%	DIN 53512
Heat & cold	max. 120°C,	
resistance	min40°C	

Pressure deformation test									
Time/temp.	Type of test	Standard	Result						
22h/100°C	DVR	DIN 53517 A	9%						
70h/100°C	DVR	DIN 53517 A	12%						

The flat gasket is made out of a mixture of NBR (Nitrile Rubber) and SBR (Styrolbutadiene Rubber). This gives the gasket a satisfactory chemical resistance and a good constancy to oil.

For all O-rings, an NBR material with the following technical characteristics is used.





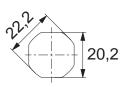
O Rings

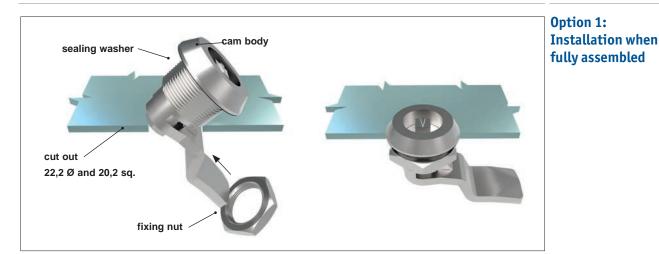




Flexi-system cut out

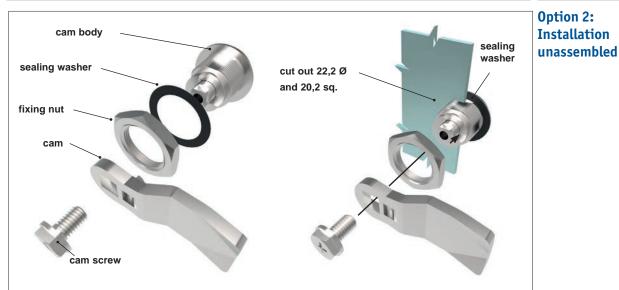
Our flexi-system is based on a standard installation cut out 22,2 \emptyset and 20,2 sq.





When the cam latch grip (h) is 9mm or more this method is possible:-

- 1. With the cam body and cam fully assembled, attach the sealing washer to cam body.
- 2. Tilt the latch 45° and pass it, cam first, through the installation cut out in the panel.
- 3. When in place attach the fixing nut to the cam body to secure. Tighten to 10 Nm max.



When the cam latch grip (h) is less than 9mm this method is suitable:-

- 1. Prior to commencing ensure that the cam body, cam, cam screw, fixing nut and sealing washer are completely unassembled.
- 2. Attach the sealing washer to the cam body and pass through installation cut out in panel.
- 3. Attach the fixing nut to the cam body to secure. Tighten to 10 Nm max.
- 4. Attach the cam to the cam body. Once you have ensured that the cam has the correct orientation toward the panel frame, secure the cam screw and tighten to 4 Nm.



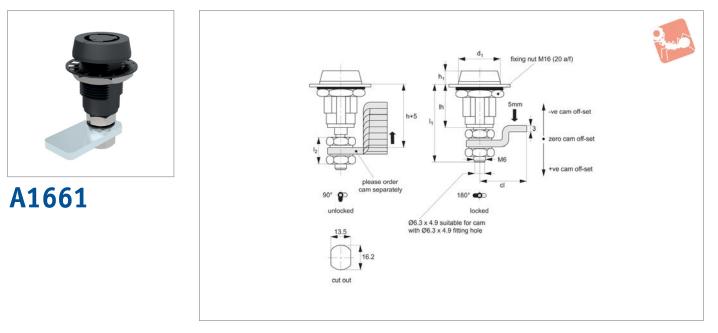


ov-WA1003-A-TCC0400-WA4260-A-T-cam-latch-installation-rnh- Updated -26-10-2022

Mini Compression Latches

insert driver - adjustable grip - zinc





Material

Body & insert: die cast zinc, black paint coated.

Insert fitted with O'ring to provide IP54 rating.

Not supplied: CAM nor KEY: order separately.

Technical Notes

Suitable for material thickness 1-10mm. Order keys separately.

Cam: see suitable cam A0234. Select "without projection" cam type. Dimensions ch & cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where;

ch = required cam off-set/height.

h = grip length (distance between inside of lock face and front of cam).

lh = body length of cam latch/lock to be used.

Keys: see A0102. For part A16661.AW0006 (Square 6) use key A0102.AW0306 only.

Tips

Compression locks provide sealing of enclosures to reduce vibration and to

provide noise isolation. Adjustable grip type has an extended stem which can be cut in length to best suit your application. Action:

From unlocked position, first 90° turn moves the cam to the locking position. Turn lock 210° to engage compression, cam moves to final fixing position. **Provides a 5mm compression stroke.**

Order No.	Insert driver	d ₁	h ₁	lh	I ₁	l ₂ useful thread
A1661.AW0006	Square 6	20.8	6	22.5	38	15
A1661.AW0080	Slotted (2x4)	20.8	6	22.5	38	15

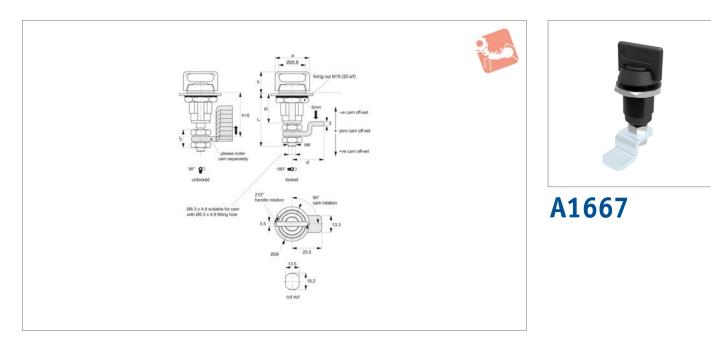




Mini Compression Latches

adjustable grip - wing handle - zinc

Compression Latches



Material

Body & insert: die cast zinc, black paint coated. Fitted with O'ring to provide IP54 rating.

Technical Notes

Suitable for material thickness 1-10mm. **Cam:** see suitable cam A0234. Select "without projection" cam type. Dimensions ch & cl relate to cam. Use formula to calculate ch (required cam offset), and refer to cam selection chart; ch = h - lh where;

ch = required cam off-set/height. h = grip length (distance between inside of lock face and front of cam). lh = body length of cam latch/lock. Keys: see A0102.

Tips

Compression locks provide sealing of enclosures to reduce vibration and to

provide noise isolation. Adjustable grip type has an extended stem which can be cut in length to best suit your application. Action:

From unlocked position, first 90° turn moves the cam to the locking position. Turn lock 210° to engage compression, cam moves to final fixing position. **Provides a 5mm compression stroke.**

Order No.	Туре	Actuation	а	b	lh	I_1	I ₂ useful thread
A1667.AW0010	Fixed	Wing Handle	25.5	12	22.5	38	15



0333 207 4497



Selecting the Correct Cam Latch or Lock



When selecting a Wixroyd Cam Latch for your application, you need to answer these questions:

- 1. Which installation cut out?
- 3. Which locking key?
- 5. Which cam type and size?

2. Which body style?

Cut out

- 4. Which accessories?

20.2

Step 2: Which body style?

Which installation

Step 1:

cut out?

Material and finish

installations.

Select from our variety of die cast zinc, polyamide plastic and stainless versions.

All our Flexi-System cam latches use a standard

maximum flexibility. We also provide a number of alternative cut out dimensions for legacy/historical

installation cut out 22,2 dia, 20,2 square, for



black

Standard insert driver type, cylinder lock or wing



Die-cast zinc chrome plate

handle type.

Insert driver

driver keys

correct keys.

Standard insert

Our range of insert

driver cam latches

require a simple key to

actuate. Refer to part A0102 and A0103 for

Die-cast zinc black coated

Actuation and locking method

Polyamide Stainless steel



Two point

Number of latching points in application

flexi-system

cut out

Typically single point latching is required, but the

Wixroyd Flexi-System also provides multi-point latching (typically 3 point - at lock point, top and



Single point



Multi-point

Cylinder lock

Wing handle



Cylinder locking

Our cam locks with cylinder locks are supplied with two keys per lock. Available as keyed alike or keyed to differ locks.



Step 4: Which accessories?

Which locking key?

Step 3:

- Multi-point latching: use our rod set A0303 to A0325 for suitable rods and rod guides.
- Finger pulls: easily installed with any of our flexi-system cam bodies, finger pull no. A0352 is a simple, cost effective handle for your cabinets.
- Dust Cap: to reduce material ingress.

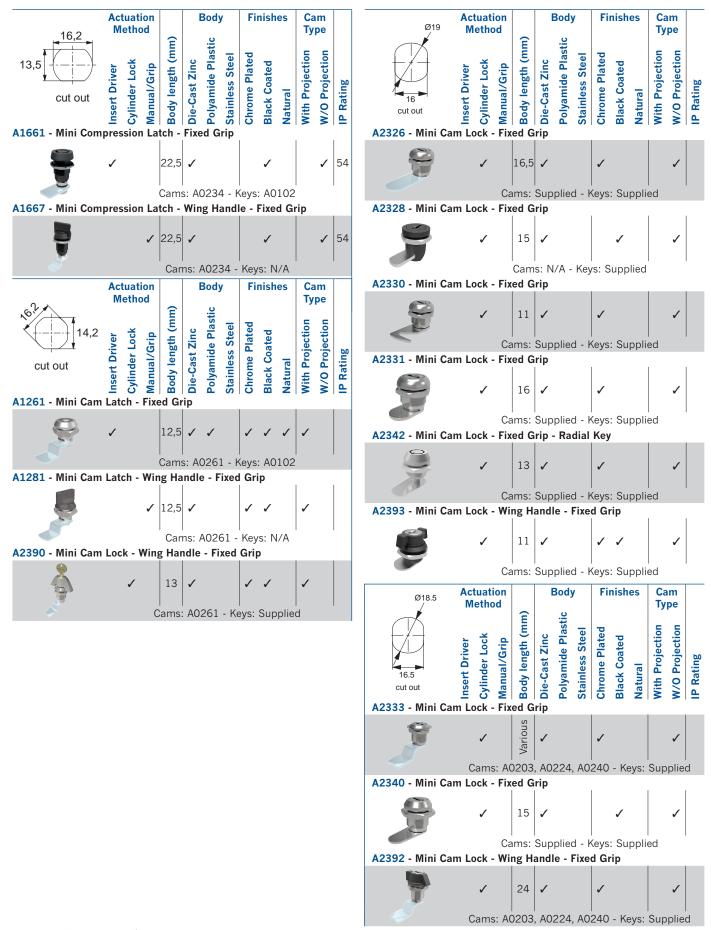


Wixroyd Cam and Compression Latches



COMPRESSION LATCHES

product selection charts





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