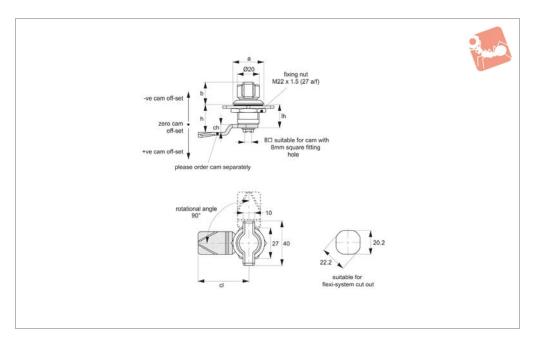


Cam Latches - Flexi-System fixed grip - wing handle - ergonomic







A1181

Material

Body: die cast zinc.

Handle: black plastic (PA6).

Not supplied: CAM - order separately.

Technical Notes

Order cam separately.

Cams: see suitable cam A0203, A0224 and A0240. 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).

Rods & Guides: to achieve 3-point latching - A0303, A0321, A0325.

Tips

Wing actuates lock, and also acts as a knob/handle. Quarter-turn opening or closing.

Important Notes

Sold subject to pack quantity.

Order No.	Body finish	Handle	а	b	lh
A1181.AW0110	Chrome Plated	Black Plastic	28	20	18
A1181.AW0210	Black Coated	Black Plastic	28	20	18
A1181.AW0510	Black Plastic	Black Plastic	28	20	18



Cam Latches

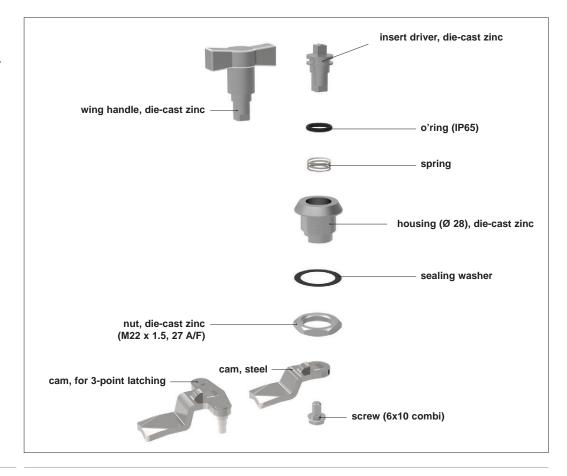
Wixroyd Cam Latches

exploded view and assembly



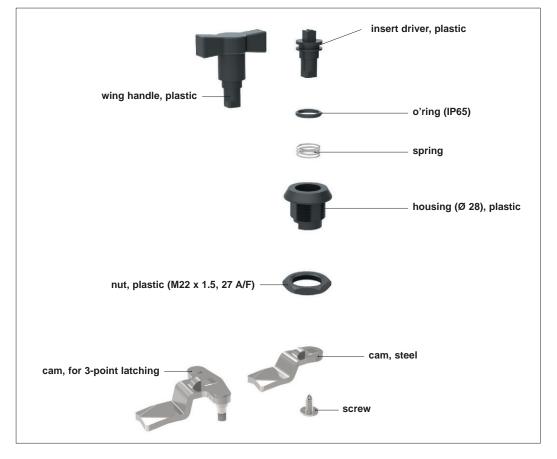
Die-cast Zinc: A1003, A1181

(also A1103 in stainless steel).



Plastic: A1021, A1181

2

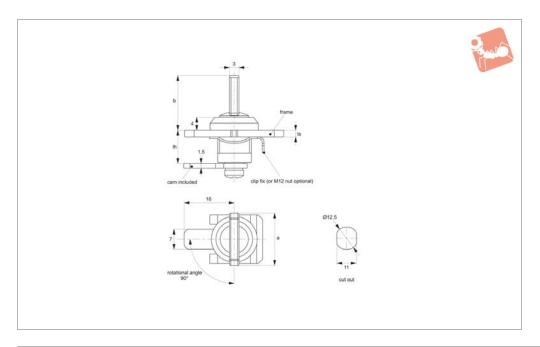






Mini Cam Latches - Wing Handle fixed grip - zinc







A1192

Material

Body & Handle: die cast zinc, bright chrome plated.

Supplied with: Cam.

Technical Notes

Suitable for max. panel thickness 1-2mm.

Can be fixed to panel either via spring clip fix, or M12 nut.

Tips

Quarter-turn opening or closing. Wing actuates lock and also acts as knob/handle.

Order No.	Type	а	b	lh	ts
A1192.AW0175	Clip Fixing	17.5	16.5	10	1-2mm
A1192.AW1175	Nut Fixing	17.5	16.5	10	1-2mm





Wixroyd Cam and Compression Latches

product selection charts

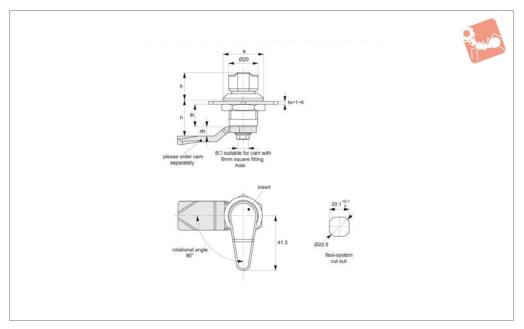


- ut		tuati etho			ı	Body	/	Fi	nish	es	Ca Ty		
Miecella Reoute Cut out MA 241 - Cam Latch	Insert Driver	में Cylinder Lock	o Manual/Grip	Sody length (mm)	Die-Cast Zinc	Polyamide Plastic	e Stainless Steel	Chrome Plated	a Black Coated	Natural	With Projection	W/O Projection	IP Rating
†													
1	1					1				1		1	40
		Carr	ns: A	020	3, A	022	4, A()240) - K	eys:	A01	102	1
A4260 - Cam Lock	- wi	th R	od (Cont	rol -	Wir	ıg H	andl	e - E	xte	nde	d Co	ove
		1				✓				✓		1	54
[Carr	ns: A	020	3, A	022	4, A()240) - K	eys:	A01	102	ı
A4221 - Cam Latch	1 - W	ith I	Rod	Con	trol	- wi	th C	over					
	1			Various		✓				1		1	
à:			Carr	ns: A	020	3, A	0224	1 - K	leys:	A01	102		



Cam Latches - Flexi-System fixed grip - finger handle







A1203

Material

Type one: Body: die cast zinc, black powder coated.

Handle: polyamide, black.

Type two: Body & handle: polyamide, black.

Technical Notes

Order cam separately.

Cams: see suitable cam A0203, A0224 and A0240. 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).

Rods & Guides: to achieve 3-point latching - A0303, A0321, A0325.

Tins

Finger knob actuates lock, and also acts as a handle.

Important Notes

Sold subject to pack quantity.

Order No.	Туре	а	b	lh
A1203.AW0318	One Zinc	28	18	18
A1203.AW0328	One Zinc	28	18	28
A1203.AW0362	One Zinc	28	18	62
A1203.AW0518	Two Polyamide	28	18	18
A1203.AW0536	Two Polyamide	28	18	36



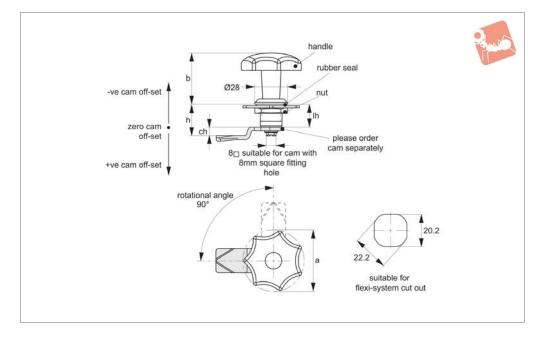
Cam Latches - Flexi-System grip handle - zinc and polyamide



CAM LATCH



A1205



Material

Body: black powder coated zinc or polyamide.

Handle: polyamide, black.

Fitted with sealing gasket to achieve IP54 rating.

Sealing washer: rubber.

Not supplied: CAM nor KEY - order separately

Technical Notes

Order cam and key separately.

Cams: see suitable cam A0203 (steel), A0210 (stainless). Select "without projection" cam type.

Dimensions ch and cl relate to cam. Use formula to calculate ch (required cam off-

set), 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).Suitable for panel thickness 1-6mm.

Order No.	Material	а	b	lh
A1205.AW0018	Zinc Body, PA Handle	27	18	18
A1205.AW0028	Zinc Body, PA Handle	27	28	18
A1205.AW0036	Zinc Body, PA Handle	27	36	18
A1205.AW0062	Zinc Body, PA Handle	27	62	18
A1205.AW1018	PA Body & Handle	27	18	18
A1205.AW1028	PA Body & Handle	27	28	18

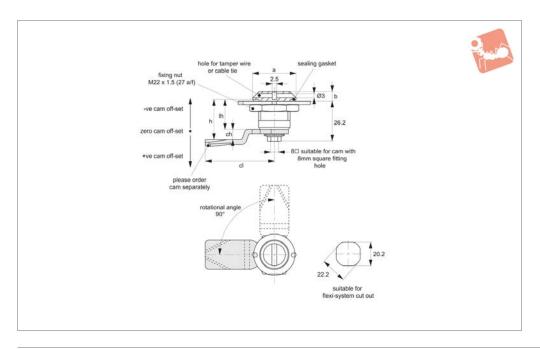




Cam Latches - Flexi-System

tamper evident - for wire or cable tie - zinc







A1210

Material

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

Supplied With: Nut: steel.

Not supplied: CAM - order separately.

Technical Notes

Order cam and key separately.

Cams: see suitable cam A0203, A0224 and

A0240. Select "without projection" cam

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.

Rods & Guides: to achieve 3-point latching

- A0303, A0321, A0325.

Tips

Quarter-turn opening or closing.

 Order No.
 a
 b
 lh

 A1210.AW0028
 28
 6.5
 20



Selecting the Correct Cam Latch or Lock



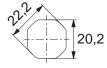
When selecting a Wixroyd Cam Latch for your application, you need to answer these questions:

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

- 2. Which body style?
- 4. Which accessories?

Step 1: Which installation cut out?

All our Flexi-System cam latches use a standard installation cut out 22,2 dia, 20,2 square, for maximum flexibility. We also provide a number of alternative cut out dimensions for legacy/historical installations.



flexi-system cut out

Step 2: Which body style?

Material and finish

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



zinc chrome

plate



Die-cast

zinc black coated





Polyamide



Stainless

Number of latching points in application

Typically single point latching is required, but the Wixroyd Flexi-System also provides multi-point latching (typically 3 point - at lock point, top and bottom of cabinet).







Actuation and locking method

Standard insert driver type, cylinder lock or wing handle type.



Insert driver

Cylinder lock



Wing handle

Single point Two point

Multi-point

Step 3: Which locking key?

Standard insert driver keys

Our range of insert driver cam latches require a simple key to actuate. Refer to part A0102 and A0103 for correct keys.





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?

- 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.







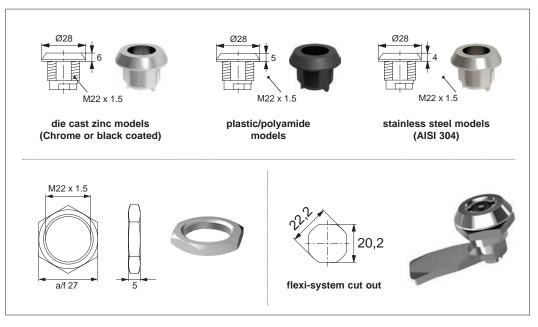




Wixroyd Cam Latches

general information

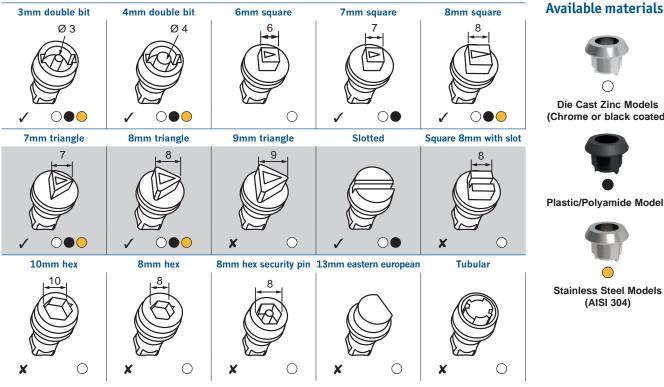




Dimensions of our cam latch housings

Dimensions apply to our standard range of flexi-system cam latches.

Available insert drivers for flexi-system latches







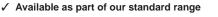
Die Cast Zinc Models (Chrome or black coated)



Plastic/Polyamide Models



Stainless Steel Models (AISI 304)



Available subject to a minimum order quantity



Flexi-System

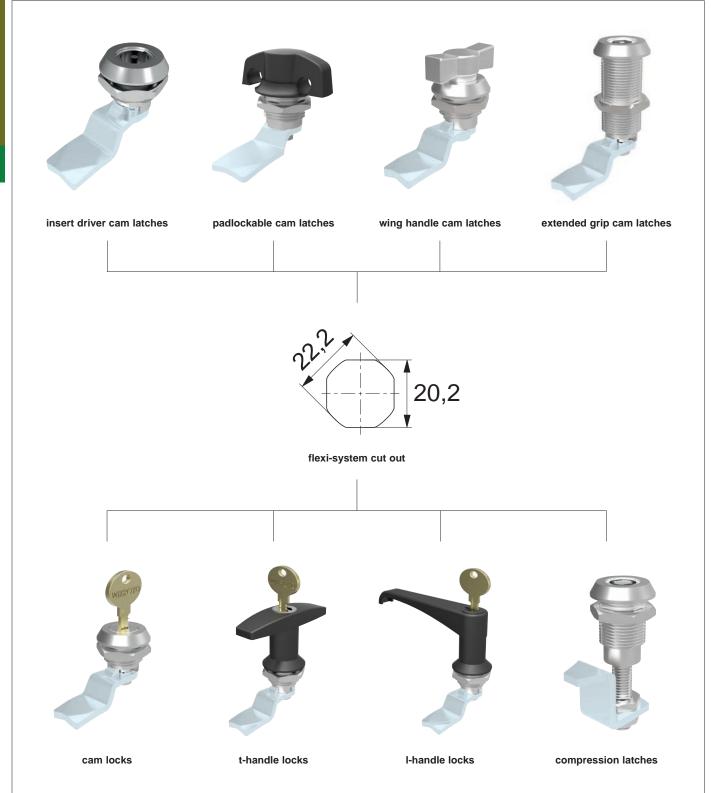
at the core of all your cam latch requirements



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

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

Flexi-system

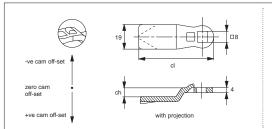


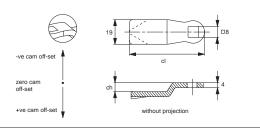
Selecting the Correct Cam Latch or Lock



With or without "Projection"

Different cam bodies require cams either with or without projection.





Step 5: 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.

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)

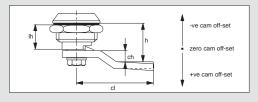
This impacts the reach of the cam to door frame and hence impacts positioning of cam body for installation. Cam length is measured from the centre of the cam fixing hole to the cam's leading edge. Most typically cams are 45 mm in length.

Use formula to calculate ch (required cam offset), and refer to the cam selction chart.

ch = h - lh where:

ch = the required cam off-set/height

n = grip length (distance between inside of latch face and front of cam).



Calculation of correct cam off-set

This is the most important aspect of the selection process.

Example one

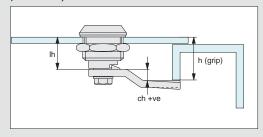
Cam body A1003.AW0010 has been selected for the application. If we refer to the data sheet for this part, suitable cams are parts A0203, A0210 or A0240 - "without projection".

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

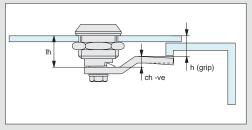
Cam body A1003.AW0010 has been selected for the application. If we refer to the data sheet for this part, suitable cams are parts A0203, A0210 or A0240 - "without projection".

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).



Example of calculation of correct cam off-set





Wixroyd Cam Latches, Locks and Swing Handles

cam selection chart



Suitable With Projection Cams Compatible A0261 A0203 A0210 A0240 cam no. 6 x 6 square 8 x 8 square 8 x 8 square 8 x 8 square **Cam fitting** hole A2503 / A2504 A2523 / A2528 A2503 / A2504 A2523 / A2528 Cam latch / A2503 / A2504 A1261 / A1281 / A2390 A2523 / A2528 lock no.

Suitable Without Projection Cams Table 1

		•		
Compatible cam no.	A0203	A0210	A0240	A0243
	8 x 8 square			
Cam fitting hole	80	80	80	80
Cam latch / lock no.	A1003 / A1021 / A1103 A1161 / A1168 / A1181 A1203 / A1210 / A1251 A1601 / A1620 / A1801 A2001 / A2203 / A2326 A2333 / A2392 / A2526 A4221 / A4241 / A4260 B1082 / B1086 / B1088 B1091 / B1092 / B1180 B1281 / B1285 / B1380 B1450 / B2091 / B2181	A1003 / A1021 / A1103 A1161 / A1168 / A1181 A1203 / A1210 / A1251 A1601 / A1620 / A1801 A2001 / A2203 / A2326 A2333 / A2392 / A2526 A4221 / A4241 / A4260 B1082 / B1086 / B1088 B1091 / B1092 / B1180 B1281 / B1285 / B1380 B1450 / B2091 / B2181	A1003 / A1021 / A1103 A1161 / A1168 / A1181 A1203 / A1210 / A1251 A1601 / A1620 / A1801 A2001 / A2203 / A2326 A2333 / A2392 / A2526 A4221 / A4241 / A4260 B1082 / B1086 / B1088 B1091 / B1092 / B1180 B1281 / B1285 / B1380 B1450 / B2091 / B2181	A1003 / A1021 / A1103 A1161 / A1168 / A1181 A1203 / A1210 / A1251 A1601 / A1620 / A1801 A2001 / A2203 / A2326 A2333 / A2392 / A2526 A4221 / A4241 / A4260 B1082 / B1086 / B1088 B1091 / B1092 / B1180 B1281 / B1285 / B1380 B1450 / B2091 / B2181

Suitable Without Projection Cams Table 2

Compatible cam no.	A0250	A0234	A0215	A0231	A0233
Cam fitting	5 x 5 square	6,3 dia. x 4,9	7 x 7 square	8 x 10 dia.	8 x 10 dia.
hole	50	4,9 	70	8 Ø10	8 Ø10
Cam latch / lock no.	A4600 / A4620	A1661 / A1667	B2082 / B2084 / B2086 B2088 / B2285 / B2380	A1603 / A1611 A1630 / A1810	A1603 / A1611 A1630 / A1810

Calculation of correct cam off-set

Cam off-set

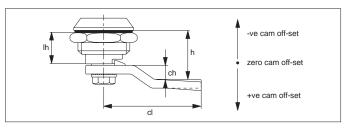
Use the formula to calculate your correct cam off-set:

ch = h - lh

ch = the required cam off-set.

h = 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)

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.



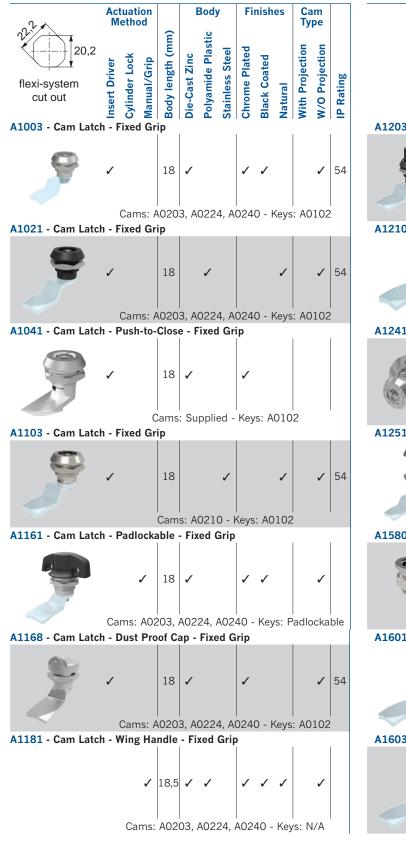
12



Wixroyd Cam and Compression Latches

flexi-system cut out product selection charts





	Ac M	tuat etho	ion od		I	Body	,	Fi	nish	es		m pe	
A1203 - Cam La	y - Insert Driver -	g Cylinder Lock	a Manual/Grip	Body length (mm	a Die-Cast Zinc	नुः Polyamide Plastic	Stainless Steel	E. Chrome Plated	Black Coated	Natural	With Projection	W/O Projection	IP Rating
			✓	Various	1				✓	✓		1	
				A02			24,	A02	40 -	- Ke	ı ys: N	I/A	
A1210 - Cam La	tch -	Tan	npe	r Evi 	den	t							
			✓	20	1			1				✓	
A1041 Com Lo	4.1.			A02		A02	24,	A02	40 -	- Ke	ys: N	I/A	ı
A1241 - Cam La	tcn -	Ste	ppe		rip								
CITA	1			Various	1			1					65
A1251 - Cam La	tch -	Fix		ams :xter				Key	rs: A	(O1C)2		
	1			Various	1			/				✓	54
A1580 - Compre				020				024	0 - 1	Keys	: AC	102	2
A1300 - Compre	3510	ıı Lä	ιcπ	- [1)	eu (апр							
	1			18				1					
A1601 - Compre	ecio	n I a	tch					eys:	A01	.02			
ATOOT - Comple	.3310	ıı La	COII		iou (anp							
	1			31	1			1	/			1	54
				ı ıs: A				4 - 1	Keys	s: AC)102	2	ļ
A1603 - Compre	ssio	n La	tch	- Fix	ed (Grip							
	1			38			1			1		1	54



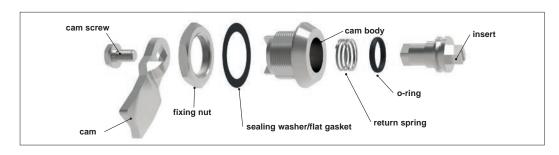
Cams: A0231, A0233 - Keys: A0102

Cam Latches and Locks

Wixroyd Cam Latches

technical specification and advice





Materials

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.

RoHS Compliance

Our Cam Latches are RoHS Compliant.



Plastic - Polyamide

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.



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.



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.

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.

O Rings

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	

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

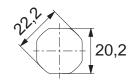


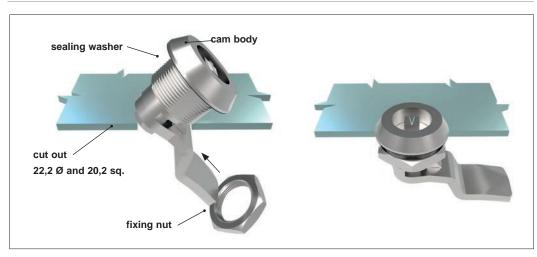




Flexi-system cut out

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

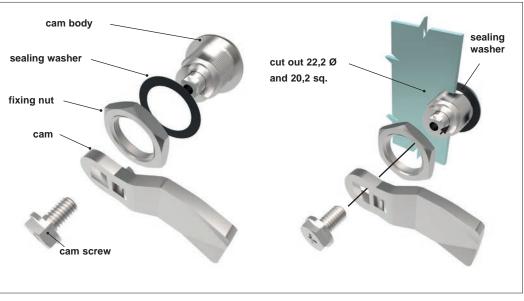




Option 1: Installation when fully assembled

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.



Option 2: Installation unassembled

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