

ACCESS SOLUTIONS

TRAINING PRESENTATION



Global Access to Hardware Products

ABOUT ACCCESS SOLUTIONS

MESAN, 38 years of experience in access solutions, became a part of ESSENTRA PLC. in 2013.

- Outstanding manufacturing capabilities
 Manufacturing 50 million high quality parts in a year in our
 35.500 sqm production facility.
- Solution partner for numerous industries
 Working with some of the biggest names in the business, we help them to develop better products, saving time and driving efficiencies.
- Global Presence Local Support
 23 Essentra Sites and 17 exclusive distributors worldwide
- Strong market position in Acess Solutions
 Sustainable and rapid growth globally
 EMEA One of the top three manufacturers
 WORLD Customers from more than 75 countries



Solutions

We know what matters to you, and we deliver: an extensive range of custom and standard solutions, consistent quality, fast lead times, samples and expert technical support.

Our products are at work throughout a variety of industrial applications.

Our solutions include hinges and locks for HVAC applications, heavy duty hinges for generators, and durable locks for outdoor cabinets. Our vital and complementary solutions, and pro-active customer service can give you the edge in producing excellence in your final product, and getting it to market fast.

And if we don't have what you need within our standard range, we'll make it for you.



- Locks Latches
- Hinges
- Gaskets
- Handles Accessories
- Stainless Steel Products
- Electronics



LOCKS / LATCHES

Our locks give you just what you need for nearly every application, from light to heavy duty.

Materials range from durable polyamide and steel cams to corrosion-resistant stainless steel. We can help you with locks for inside or outside, high or light security — even when it's aesthetic appeal you're after.



HINGES

You're spoiled for choice with our range of high-quality hinges. For plain- or flush-mounted doors and cabinets, from concealed hinges to side hinges in materials that offer high security and corrosion resistance, for just about every application.



GASKETS

Prevent liquid or gas leaks between matched machine parts or around pipe joints with our high-performance gasketing & sealing solutions. Easy to apply and available in a range of materials, including PVC, EDPM, a blend of hard and softer rubber, polyurethane foam covered in nickel-copper tape and a blend of neoprene, nitrile and PVC.



ACCESSORIES & HANDLES

Many types of accessories are available, designed for a variety of industries and applications using rubber, plastic and aluminum.

Handles are manufactured with ergonomics and aesthetics in mind, but also utilise reinforced plastics and aluminum to assure an easy fitting.





ELECTRONIC

We've developed an integrated Access Control System called ELS. The system incorporates access control units, electromechanical locks and a monitoring system, complete with system sensors. The sensors can detect operation of the door, allow management of temperature and maintain cabinet security. You can use an RFID card, keypad or remote control unit to open or close door access, and even get a detailed report of cabinet status whenever you need.

Providing innovative solutions 500 products across 17 ranges



Swing Handles



▶ Rod Latch System



► Heavy Duty Locks



► Miscellaneous Products



Cam Locks



Quarter Turn Locks



Furrniture and Steel Cupboard Locks



Cams - Keys - Rods - Rods Guides

Providing innovative solutions 500 products across 17 ranges



Side Hinges



Concealed Hinges



Corner Hinges



▶ Flat Hinges



Handles



Accessories



Stainless Steel Products



Electronics

Custom Solutions

• Tailored solutions designed to meet customers' requirement either it is good pricing or highly differentiated products

• 3D prototypes can be provided to customers in advance to manufacturing for testing and analyzing purposes.

Capabilities

• Design special products • Different colour selection • Customer logo requirements





Production

Our Production has been separeted to two main division as manufacturing and assembly.



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Manufacturing Technology

Our philosophy in production is to increase the efficiency through continuous improvements, eliminate the non-value added operations to deliver the products on time, with sustainable quality and low cost.

With the introduction of CNC-controlled machines and robot technologies, a significant increase in capacity and quality has been achieved.

- Zinc Die Casting
- Plastic Injection Moulding
- Stamping
- Machining
- Powder Coating
- Polyurethane Sealing Foam Technology
- Barrel, Cylinder, Keys Technology
- Tooling
- Custom Machines















Target Markets & Industries

Our expertise ranges across multiple industries, supported by outstanding customer service. We can reduce your lead times and provide custom solutions and specialist advice to help you achieve your business goals.



Indoor & Outdoor Cabinets



IT Cabinets



Transformers



Industrial Machinery



Power Generators



HVAC



Road **Transportation Transportation**



Rail



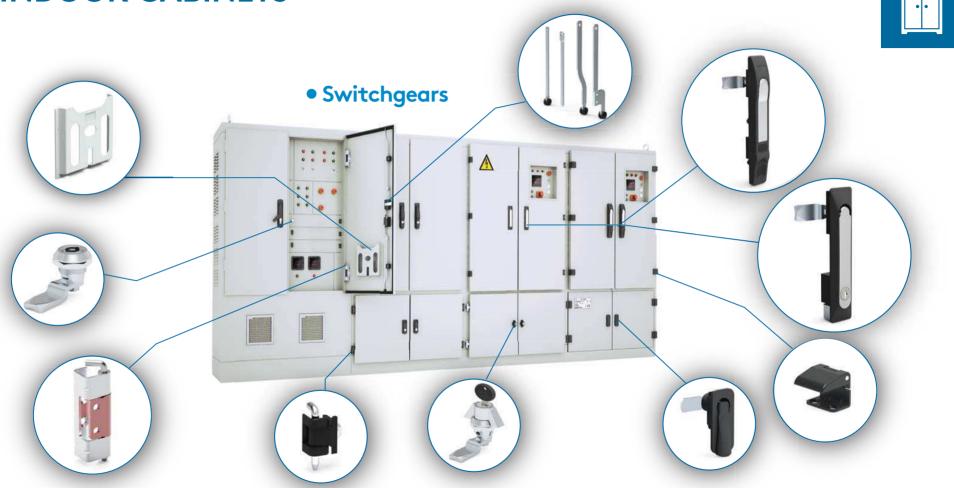
Food Industry



Diversfied Applications



INDOOR CABINETS



INDOOR CABINETS





OUTDOOR CABINETS







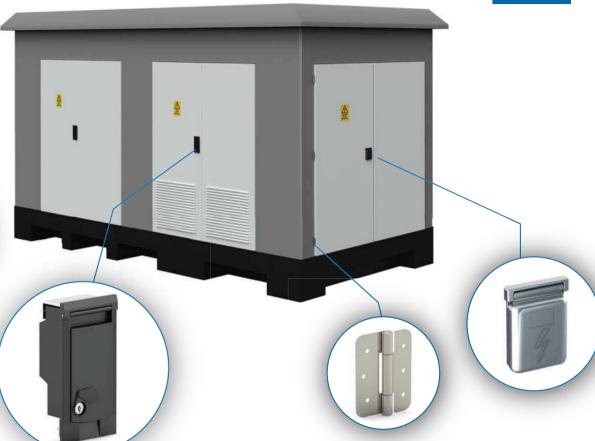
TRANSFORMERS



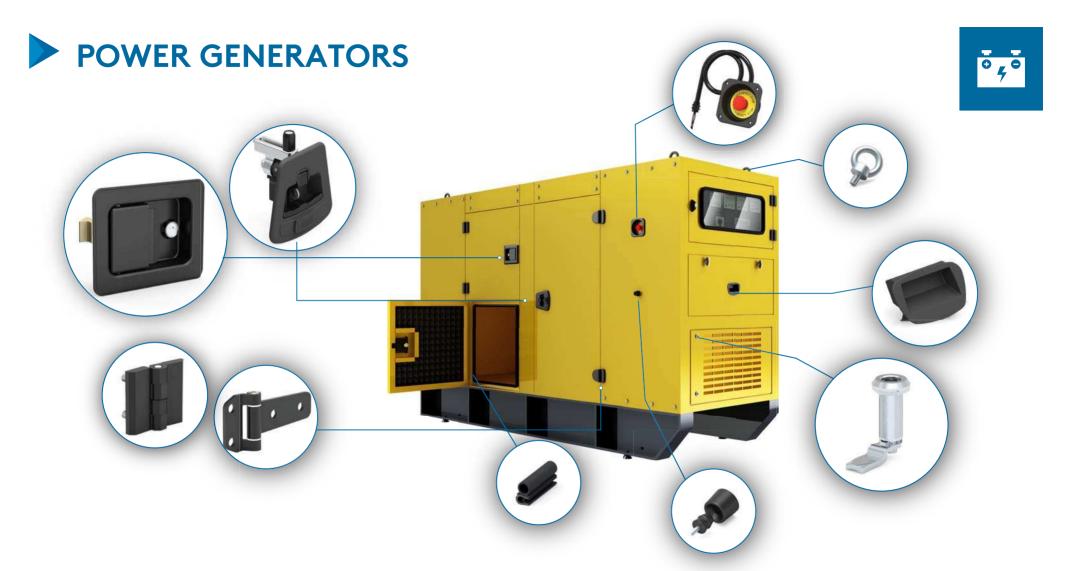
• Transformers Substations







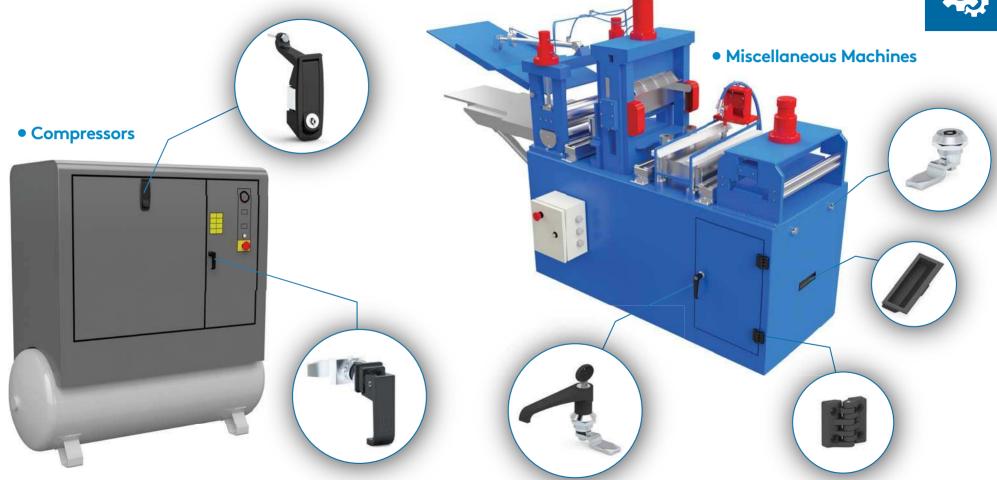


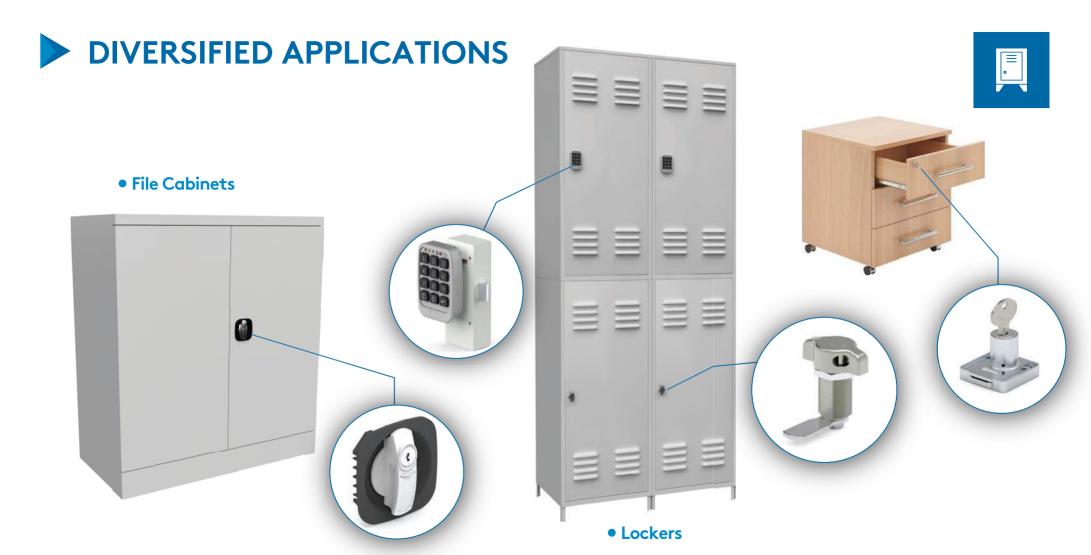




► INDUSTRIAL MACHINERY







DIVERSIFIED APPLICATIONS





DIVERSIFIED APPLICATIONS





ROAD TRANSPORTATION







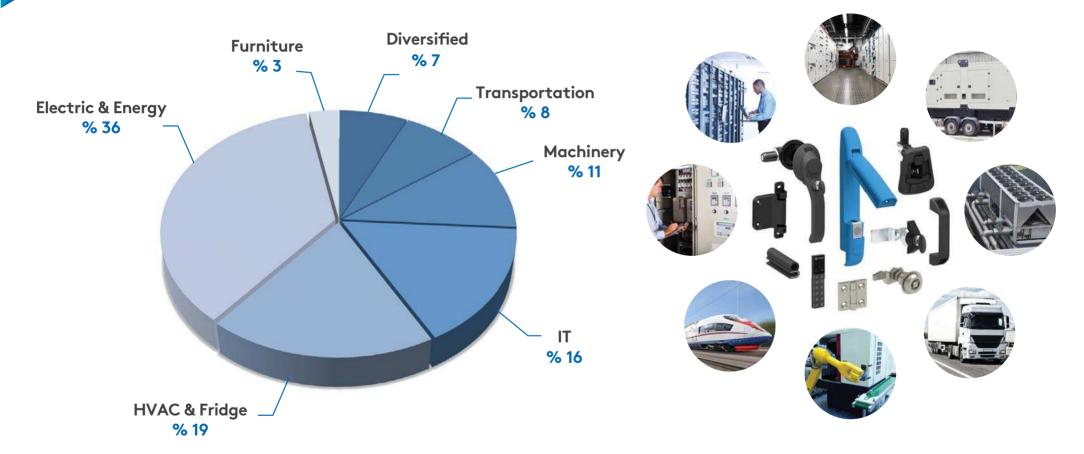


RAIL TRANSPORTATION





Mesan's Industrial Sale Rates



The Best Seller Locks (Qty)











Quarter Turn / Series
6.1 M



Cam Lock / Series 3.25 M



Swinghandle / Series
1.15 M



Furniture Locks / Series 615 K

The Best Seller Hinges (Qty)











Concealed hinges 2.45 M



Flat hinges 2.175 M



Corner hinges 1.620 M



Side hinges 760 K





Customized 3.880 M

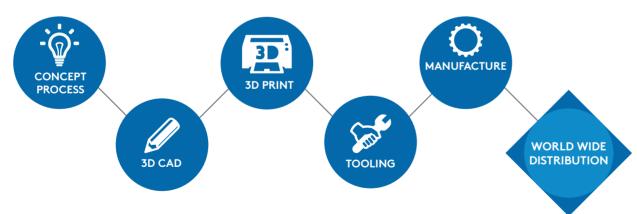
Research & Development

Innovation gives you the competitive advantage.

That's where we come in. With our **R&D** center, we have the design capabilities to offer you new products, and the insight into what they can do for you. We can help you drive innovation from start to finish, so that you can develop and offer your customers better products.

Technical capabilities

- Proven in-house engineering design team All items available in 3D CAD
- Advantage of 3D printing Cross-sector experience



New Product Development System



Quality Systems

We are accredited to highest industry standards.

- Certified by ISO 9001-2015 (Quality management systems)
- Certified by OHSAS 18001:2007 (Health and Safety Management Systems)
- Certified by ISO 50001-2001 (Energy Management Systems)
- Certified by ISO 14001-2015 (Environmental management systems)
- Certified by ISO 27001-2013 (Information security management system)
- Production follows all domestic and international norms & regulations
- RoHS complaint products per EU Directive, 2002/95/EC
 RoHS (Reduction of Hazardous Substances) is a piece of legislation created by the EU to reduce the harmful effects of dangerous substances to people and the environment
- Reach complaint per EU new directive
 REACH is a regulation of the European Union, adopted to improve
 the protection of human health and the environment from the risks that can be
 posed by chemicals, while enhancing the competitiveness of the EU chemicals industry.
 It also promotes alternative methods for the hazard assessment of substances in order to
 reduce the number of tests on animals.
- CE Marking for ELS System (ACU & MCU)

ISO 9001:2015

ISO 50001:2001

ISO 14001:2015 1_{st}

ISO 27001:2013

> OHSAS 18001

Product & Material Testing

- Material Analysis
- IP 65, IP 66 rate test
- RoHS Test
- Cycle Test
- Climate Test
- Corrosion Test
- Salt Spray Test
- Hardness Test
- Tension & Compression Test
- Load Capacity Test



What is our Strengths

We are expert of Zinc Die Cast, Injection Moulding,
 Stamping, Machining, Powder Coating and Assembly.

 Product engineering is very strong and able to design products for customer purpose.

• Able to supply the Prototypes for new design products.



What is our Strengths

- New Tooling Investment is not too high when we compare with European Competitors which is very important for customised/OEM products
- The Lead Time for new tooling is more reasonable betwen 4-6 weeks.
- Very flexible to make tooling modifications by inserts. The lead time to make inserts is max 2 weeks
- Very flexible for manufacturing urgent inquiries.



What is our Strengths

 Now we are Global by Essentra that we can service all arround the worlds to Key Accounts where ever they are located Globally.







Some Referances





TECHNICAL INFORMATIONS

DELIVERED

Material Informations

Zamak



Zamak 5

Polyamide



PA 6 GFR 30 - ABS

Metal Sheet



EKN 6112 -6223

> Stainless Steel



304 -316 Machined and Casted

Brass



MS 63

Aluminium



ENAC 47000









Finish Options



Color options

Different RAL codes

Ral: 7035, 7032, 5023, 5014, 5021















Printed logos

Sticker or Silk screen











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ESSENTIAL SOLUTIONS

DELIVERED

Cylinder - Key Options





Keyed alike





Keyed differ





32421 21342 23141

750 security key differ code

Keyed alike





Euro key (5333)

European most comment key code competition against **Emka Dirak** and the others

Keyed alike





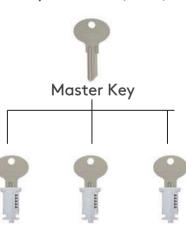
CH 751

American most comment key code competition against **Southco**

Master System



Keyed difffer (1000)



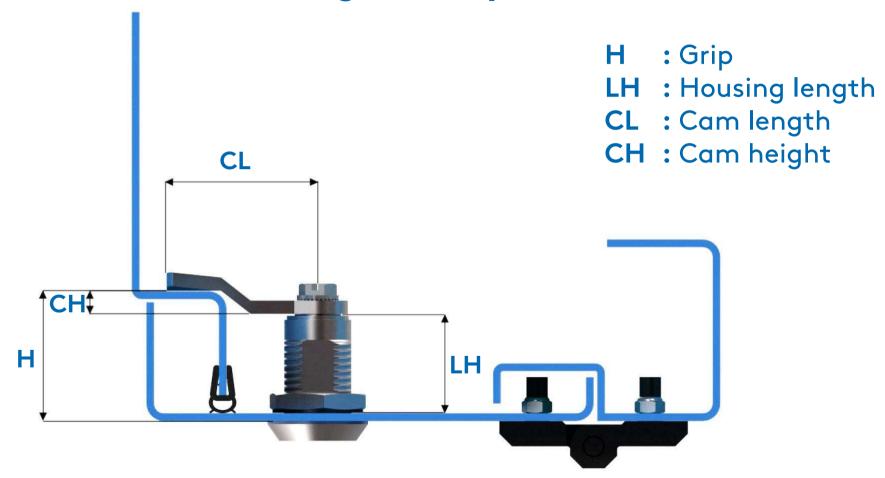
key different cylinders

Door Locking Directions

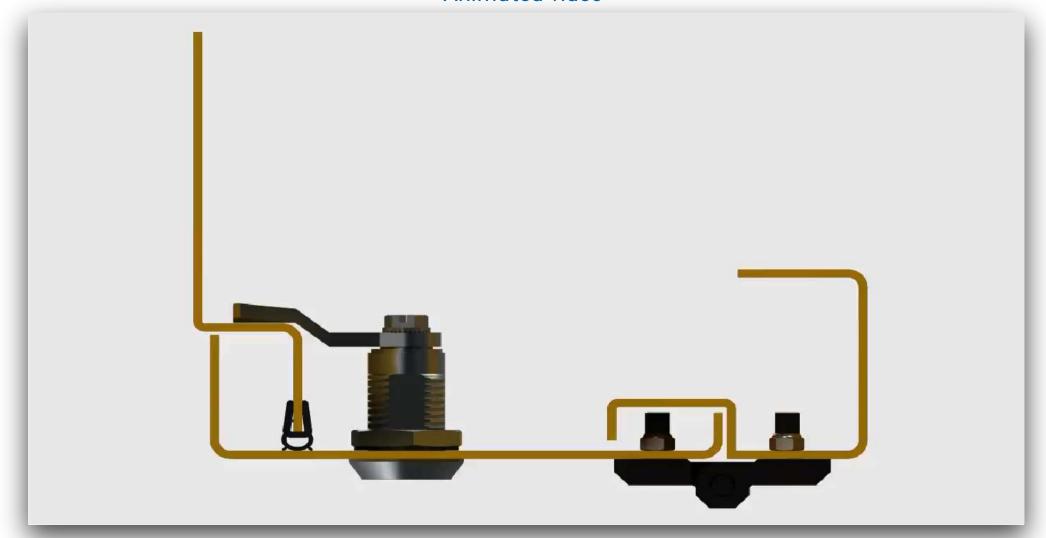


Animated video-Door Locking Directions

Technical Drawing Descriptions



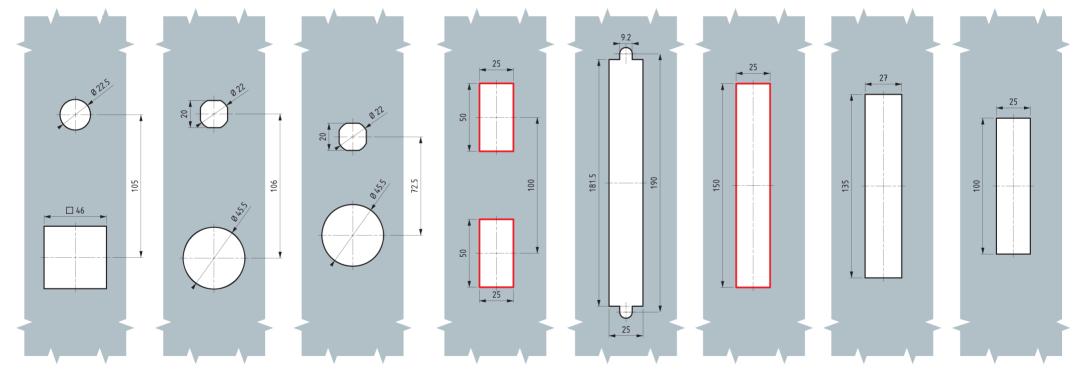
Animated video



Cut Out Dimensions

Swinghandle / Series

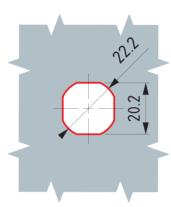


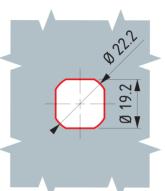


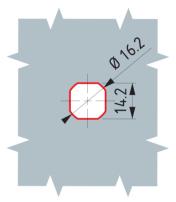
Cut Out Dimensions

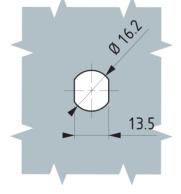
Quarter Turn / Series

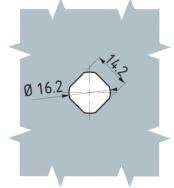


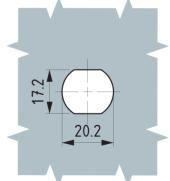


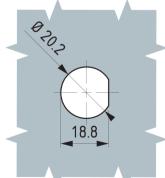












Part Number Descriptions

Group Code	М	F	DD	СС	V	001	002	DT	1	12	1	L	00	Н
	Material	Finish	Driver	Cam	Version	Right Hand	Left Hand	Door Tickness	Padlockable	Padlockable +Dust Cap	IP 65	Lengt	Without	Grip
	1 Zamak	1 Chrome	Driver#	Cam Codes	Versions	Right or Left Hand			For Swinghandles	At 501 Locks, both Padlockable abd dust cap				At 056 Locks refers to the Grip dims.
	2 Polyamide	2 Black.Coa.	1/2 Din Lock #	•	•	•	•	Housing Lenght of 064 Locks			For: 060,063,065 Groups	Handle Lenght		At 593 Hinge refers to the height
	3 Brass	3 Zinc	Cylinder#	•	•	•	•		•	•	•		Without Driver/Barel	•
	4 Inox	0 Raw	•	•	•	•	•	Isolation Ts of Panel for 012 Locks	•	•	•	•	Without Can	•
	5 Aluminium	•	•	•	•	•	•		•	•	•	•	•	•
	6 Steel	•	•	•	•	•	•	•	•	•	•	•	•	•

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Part Number Descriptions

EXAMPLE -1- All in same material and same finish. Part number is determined.

Group Code	М	F	DD	CC
060	1	1	13	36
060 Lock	Zamak	Chrome Plated	3 mm Dbl Bit	H=26 mm (8x45mm)



060-1-1-13-36

EXAMPLE -2- All in same material and same finish. How to find the part number when the description is made

060 Lock	All in Plastic	Raw/ No Finish	8 mm Triangular	H= 18 mm (0x45mm)	
Group Code	М	F	DD	CC	
060	2	0	38	30	



060-2-0-38-30

Part Number Descriptions

EXAMPLE -3 Mixed Assembly;

when the Housing and Driver are from different materials.

Group Code	Hou	sing	Dri	ver	Driver Type	Cam
060	Zamak	Chrome	Plastic	No Finish	Slot (2x4)	H=30 mm
Group Code	М	F	М	F	DD	DD
060	1	1	2	0	42	44



060-11-20-42-44

PRODUCTS OVERVIEW

Swinghandles SELLER SELLER



008 - 108 - 208 / Series

- With cylinder, Without cylinder, All in metal, Handle and body plastic,
- Body plastic, handle metal, Padlockable, IP 65, Spring loaded, With dust cup

Target Markets & Industries







Cabinets

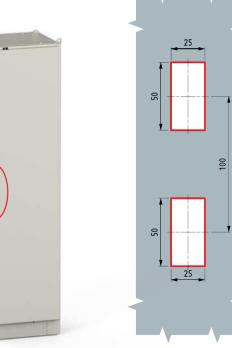
Indoor & Outdoor IT Cabinets

Industrial Machinery

Cut out







Swinghandles - Gear Box

109 - 209 - 219 - 909 / Series

- With cylinder, Without cylinder, All in metal, Handle and body plastic,
- Body plastic, handle metal, Padlockable, IP 65, Spring loaded, With dust cup

Target Markets & Industries



Cabinets

Indoor & Outdoor IT Cabinets

BEST SELLER





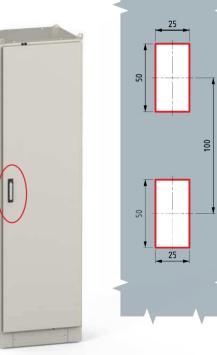


Industrial Machinery

Cut Out







ESSENTIAL SOLUTIONS

Swinghandles - Mini / Series

308 - 318 - 309 - 608 / Series

- With cylinder, Without cylinder, Gearbox,
- Body plastic, handle metal, IP 65, Spring loaded, Button

Target Markets & Industries







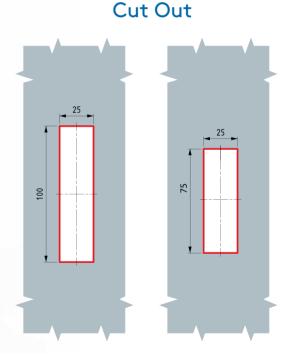
Cabinets

indoor & Outdoor IT Cabinets

Industrial Machinery







Swinghandles - Euro Profile / Series

- With cylinder, Blind cylinder, All in metal, Gearbox
- Handle and body plastic, Padlockable, IP 65, With dust cup

Target Markets & Industries





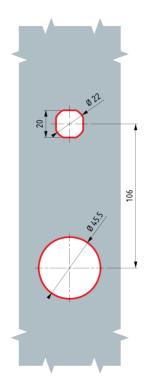


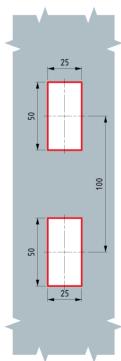
Cabinets

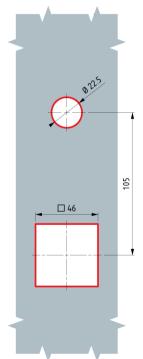
Indoor & Outdoor IT Cabinets

Industrial Machinery









Swinghandles - Sliding Dust Cup / Series

- With cylinder, Blind cylinder, Euro Profile, Handle and body plastic,
- Body plastic, handle metal, Padlockable, IP 65, Spring loaded



Target Markets & Industries



Cabinets



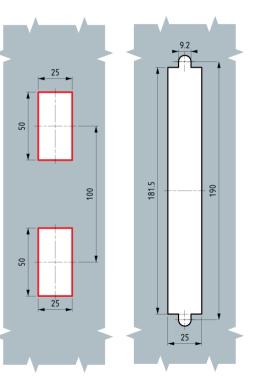




Industrial Machinery



Cut Out



ESSENTIAL SOLUTIONS

Three-Point Locks

103 - 203 Series

• With Driver, • Wing Knob, • T handle, • L handle

Target Markets & Industries





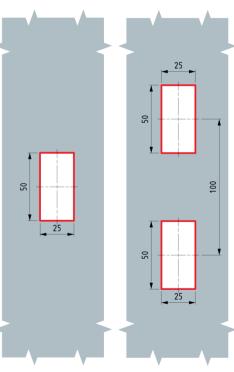


indoor & Outdoor IT Cabinets Cabinets

Industrial Machinery



Cut Out



Swinghandles - WK2

409 - 408 Series

Target Markets & Industries







İndoor & Outdoor IT Cabinets Cabinets

Industrial Machinery









Swinghandles - WK2

409 - 408 Series





High security cylinder

High level security hundreds of thosands differen key codes and special key geometry provides high level security



Improved IP rate

Double o'ring used for handle provides improved IP rate



Sealin inside dust cover



Antivandalism WK2

PIV Certificate 20-15/2011
The swinghandle has successfully passed the test according to DIN V ENV 1630: 1999-04 / WK 2 Thetest was approved by the Test Institute for Locks and Fittings Velbert

Swinghandles - WK2

409 - 408 Series















Access Control and Monitoring Systems



Access Control and Monitoring Systems







Access Control and Monitoring Systems

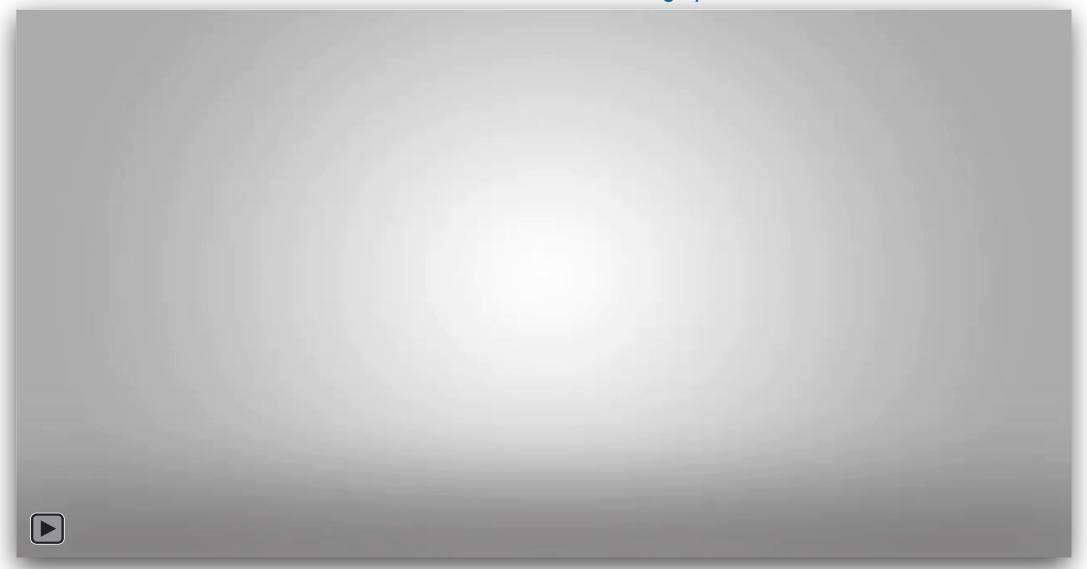






ESSENTIAL SOLUTIONS DELIVERED

Animated video - Electronic Locking System



Cabinet Locks











Other Electronic Locks



Electronic Keeper



Remote Controlled

Electronic Latch

Applications:

Coolers , Fridges Electric panels, Cabinets



Paddle Latches -Plastic series

Target Markets & Industries







Generators Transportation Applications

Diversfied



Type 1 (Large)





Type 2 (Large)

Medium





Small

Paddle Latches -**Metal Series**

Target Markets & Industries



Power



Generators Transportation Applications



Diversfied



Steel (Large)



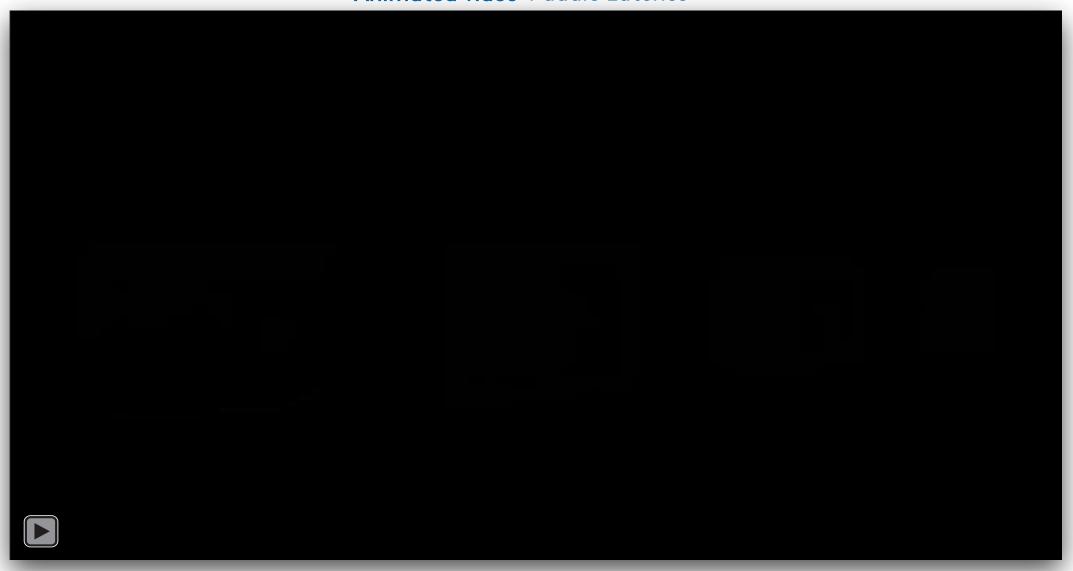
Stainless Steel (Large)





Stainless Steel (Medium)

Animated video-Paddle Latches



T Handle Cabinet Lock -

Plastic Series

Target Markets & Industries



Generators









Industrial Transportation Machinery



Diversfied **Applications**









Fixed cam







Adjustable roller cam

Animated video

T Handle Heavy Duty Lock





Application: Generator, Transportation, Caravan, Tool Boxes

T Handle Heavy-Duty Lock -**Metal Series**

















T Handle Cabinet Lock -**Metal Series**

Target Markets & Industries



Road

Transportation Generators



Power





Industrial Machinery





Vertical





Horizontal



Without cylinder **Padlocable**



With cylinder



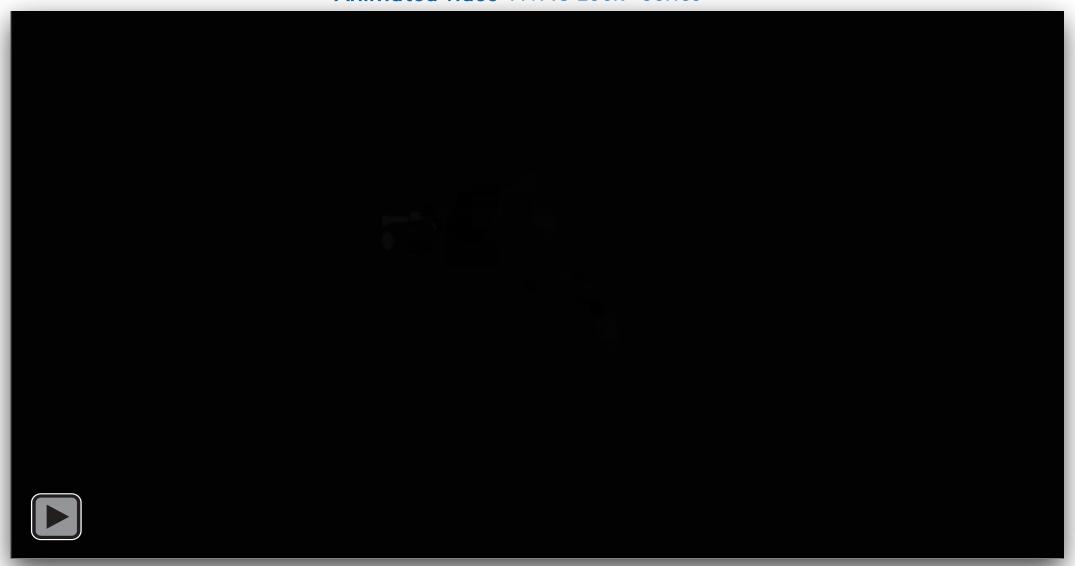
With cylinder **Padlocable**

HVAC Lock -Series



ESSENTIAL SOLUTIONS DELIVERED

Animated video-HVAC Lock -Series



HVAC Lock -Series













Trigger Latches -Series







Road Transportation

Industrial Machinery

Transportation





Without cylinder

With cylinder



Sliding Lock -Series







Industrial Machinery







Type 2



Type 3











Mini Type 1



Mini Type 2

Compression Lock -

Series

Target Markets & Industries







İndoor & Outdoor Industrial Cabinets

Machinery

Transportation

Adjustable cam





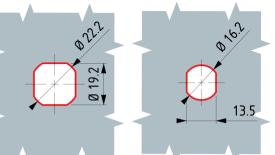








Cut out dimensions



Compression Lock -Stainless Steel Series

Target Markets & Industries



Cabinets



Industrial

Machinery

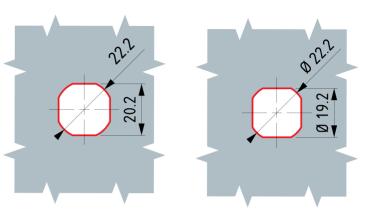




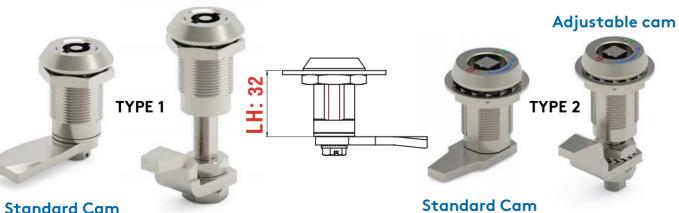
Transportation

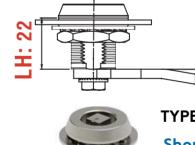














Standard Cam



Quarter Turn Lock / Series

• Specially designed internal spring provides 1.5mm of compression.

Target Markets & Industries



Cabinets







Machinery



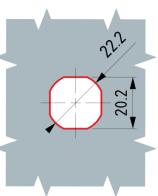




Transformers

Diversfied **Applications**





Standard





Secure







Quarter Turn Lock / Series

• Designed to act as a knob

Target Markets & Industries



Cabinets

Indoor & Outdoor IT Cabinets













Transformers Machinery

Diversfied Applications

Knob

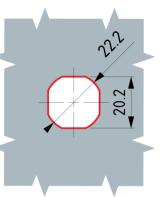












Quarter Turn Lock / Series

• Specially designed internal spring provides 1.5mm of compression.

Target Markets & Industries



Cabinets











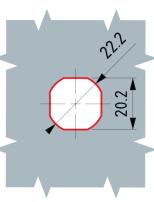
Industrial Machinery

Transformers

Diversfied Applications



Cut Out





Indoor & Outdoor IT Cabinets



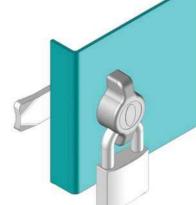
Knob (style 2)

Knob (paco style)









Padlockable

Quarter Turn Lock -Cylinder Series







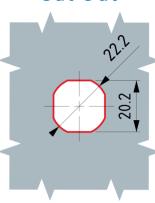








Cut Out



Cabinets

Indoor & Outdoor IT Cabinets

Machinery

Diversfied Applications





Wing knob

Knob - Easy fixing









Quarter Turn Lock -Mini Series

Target Markets & Industries







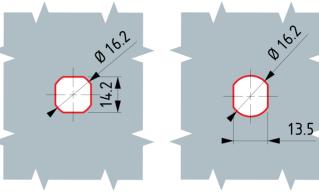


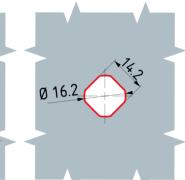






Cut out dimensions





Indoor & Outdoor IT Cabinets Cabinets

Industrial Machinery

Transformers

Diversfied Applications

Wing Knob (with cylinder)

Standard













Easy fixing



Quarter Turn Lock -Stainless Steel Series

Target Markets & Industries

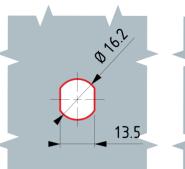




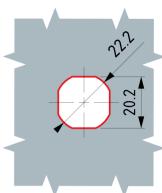








Cut out dimensions



Indoor & Outdoor Cabinets

Industrial Machinery

Applications







Mini



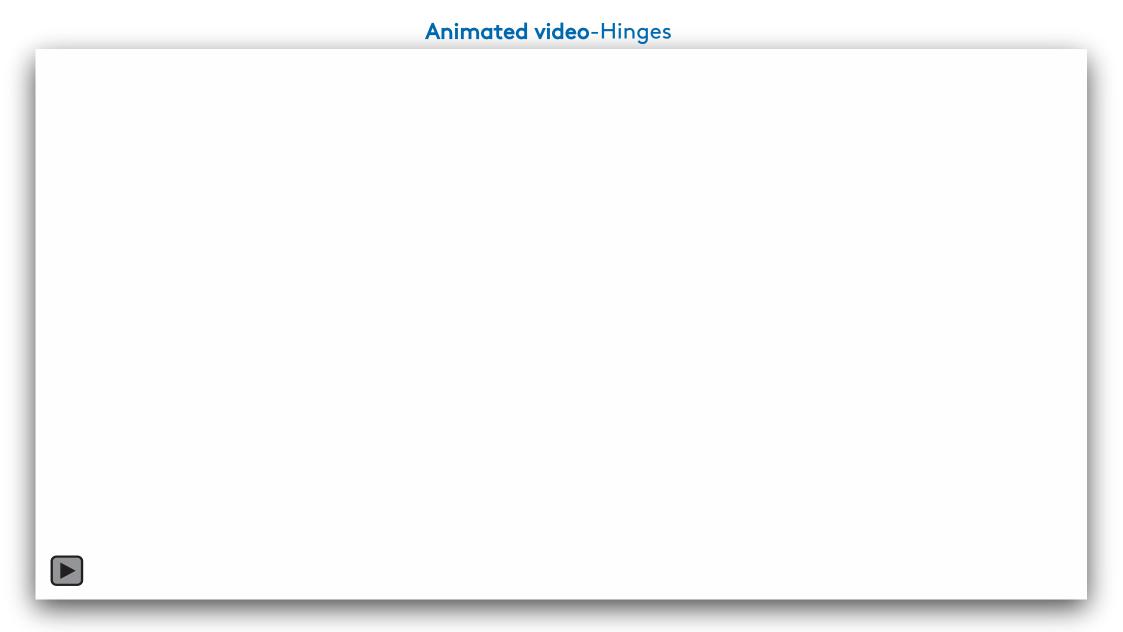
Wing Knob (with cylinder)

Padlockable





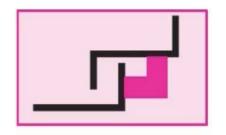




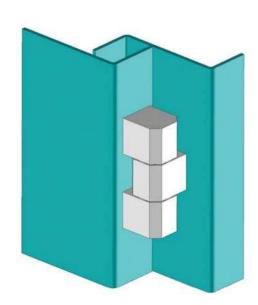
Hinges - Side Hinges

Hinge Rotation Angle: 180 or 90 degress

Material: Brass, Steel, Stainless Steel, Zamak







ESSENTIAL SOLUTIONS DELIVERED

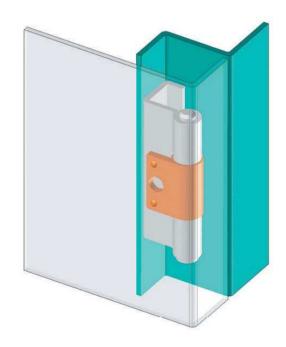
Hinges - Concelaed Hinges

Hinge Rotation Angle: 110,120,133 degress

Material: Steel, Stainless Steel, Zamak, Aluminium



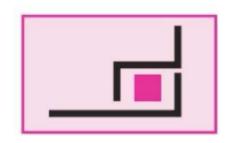




Hinges - Concelaed Hinges Heavy Duty Series

Hinge Rotation Angle: 110,120,133 degress

Material: Steel, Stainless Steel,





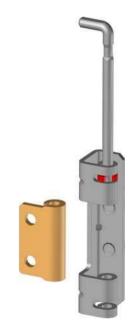












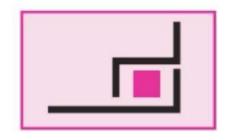
Removable Style

Animated video-Removable Style

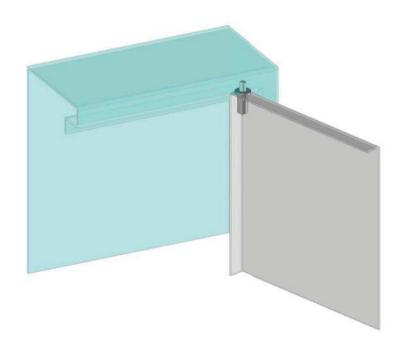
Hinges - Pin Hinges Door Removal Series

Hinge Rotation Angle: 110,120,133 degress

Material: Steel, Stainless Steel,





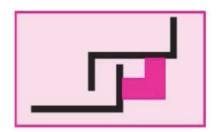


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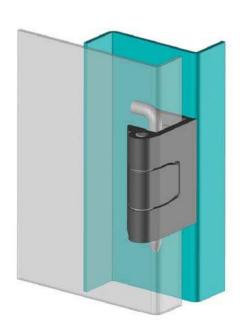
Hinges - Corner Hinges

Hinge Rotation Angle: 180 or 90 degress

Material: Zamak, Steel, Stainless Steel, Plastic







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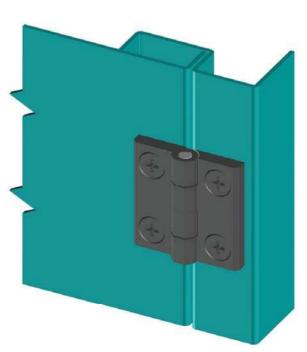
Hinges - Flat Hinges

Hinge Rotation Angle: 270 degress

Material: Zamak, Stainless Steel, Plastic



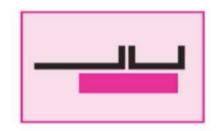




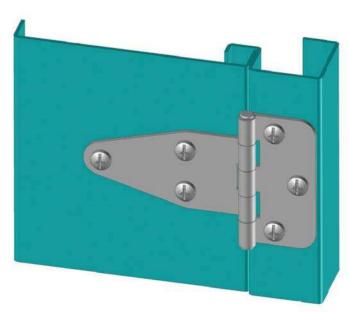
Hinges -Flat Hinges

Hinge Rotation Angle: 180, 270 degress

Material: Steel, Stainless Steel







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Hinges -Flat Hinges Lift-Off Styles

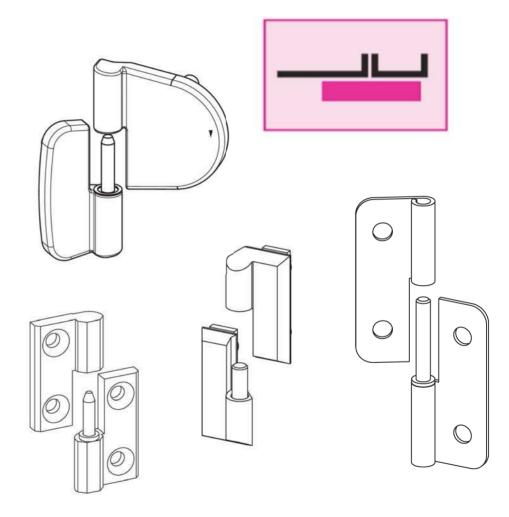
Hinge Rotation Angle: 180, 270 degress Material: Zamak, Steel, Stainless Steel











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Hinges -Flat Hinges Position Controlled

Hinge Rotation Angle: 180

Material: Zamak, Plastic



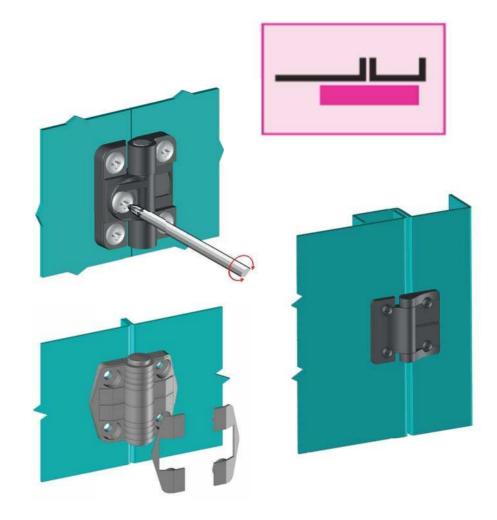
Detent



Adjustable Torque



Constant Torque



Animated video-Constant Torque

Hinges -Flat Hinges HVAC Series

Hinge Rotation Angle: 180

Material: Zamak,

















Gaskets

EPDM & Sealing and Adhesive Gasket, Miscellaneous Gaskets

Ideal for enclosures and electrical cabinets, we have a variety of gaskets. We offer an extensive range of gaskets, including: along with customized gaskets based on a customer's unique application request.

Depending on a customer's requirements, we provide gaskets made of PVC, EPDM, or a combination of foam rubber and PVC.



UL gasket materials provide flame resistance.

Our the some EPDM gaskets adhered to the UL 94 (Underwriters Laboratories) safety standards. This certification constitutes the basis for the final UL approval for the entire enclosure/cabinet



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THANK YOU

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