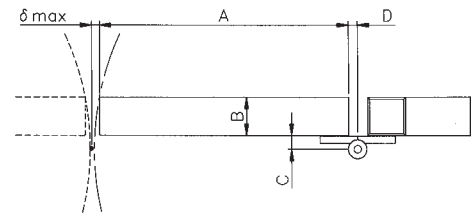


Hinges

Creating cabinets/doors, safety enclosure, pivoting arms, or workstations Industrial Profile Systems stocks the right hinge. We carry various hinges for multiple profiles and applications for your specific needs. Our hinges are made out of the following materials: glass-filled nylon, acetal, die cast zinc, and steel for your different load, projection, and regulation requirements.



Clearance dimensions for swinging door

$$\delta \max = \sqrt{(A + D)^2 + (B+C)^2} - (A+D)$$

Plastic Hinges



23-020 20 Series



23-018 (R) 28 Series
23-019 (L)



23-021 (R) 40 Series
23-023 (L)



23-027 40 Series



23-530L 23-530R Removable
23-535L 23-535R
23-545L 23-545R



23-535 Non-Removable
23-545



23-220 (small) Adjustable
23-222 (large)



23-224 (85°) Positioning
23-226 (120°)
23-288 (155°)

Metal Hinges



23-016 Multi-Series



23-242 30/28 Series



23-025 40 Series



23-011 40 Series
23-011B



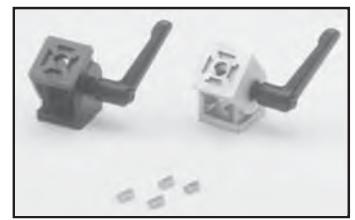
23-010 40 Series
23-010B



23-014 40 Series
23-014B



23-013 28 Series
23-013B



23-015 28 Series
23-015B

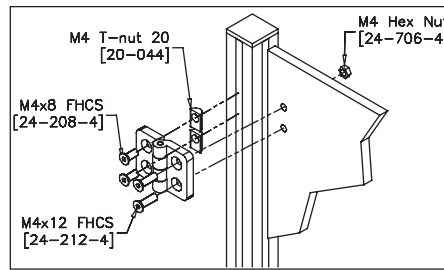
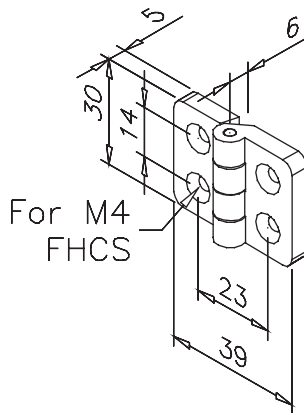


23-440L Lift-Off
23-440R

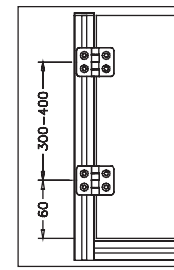


23-218 (Left) Lift-Off (offset)
23-219 (Right)

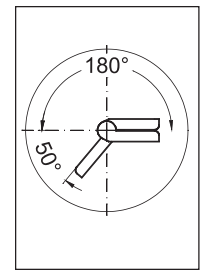
Hinge PA 20



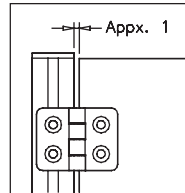
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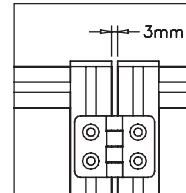
2



5



3



4

- 1 Assembly of Hinge PA 20 on panel
- 2 Hinge positions
- 3-4 Clearance dimensions
- 5 Range of swing

Application

For light doors and lids constructed of 20 series profiles.

Technical Data

glass-filled nylon, black
Max. load 40 Nm (30 ft-lbs)

Order all hardware separately.

One M4x8 FHCS (24-208-4) and one M4 T-nut 20 (20-044) for each hole for profile mounting.

Description

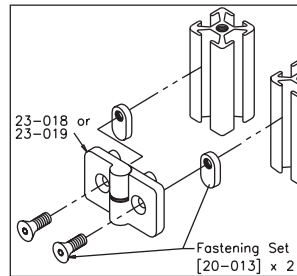
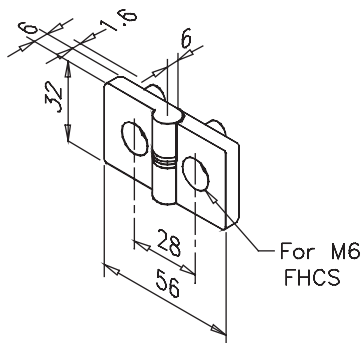
Hinge PA 20

Unit
1 pc

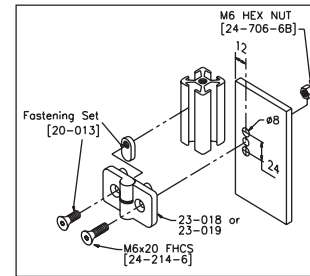
Weight
7 g

Part #
23-020

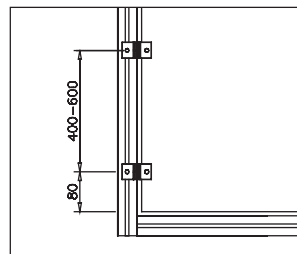
Light Duty Hinge 28



1



2



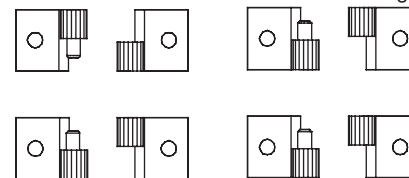
3

1-2 Attaching Light Duty Hinges 28 to 28 Series profiles and panels

3 Placement of hinges on panels

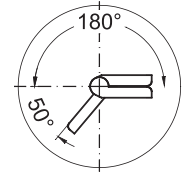
4 Non lift-off doors require one right hand and one left hand Hinge

5 Lift-off doors require either right or left hand Hinges



4

5



Application

For light doors and lids of acrylic glass, plastic or compound material.

Technical Data

glass-filled nylon, black
Max. load 100 N (22 lbs)

Order all hardware separately:

Fastening Set 28 (20-013): One M6x14 FHCS and one M6 Drop-in Economy T-slot nut 28

Description

Light Duty Hinge 28, Right

Light Duty Hinge 28, Left

Fastening Set for Light Duty Hinge 28

Unit

1 pc

Weight

17 g

Part #

23-018

1 pc

17 g

23-019

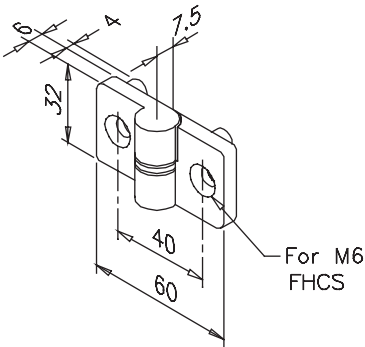
1 pc

6 g

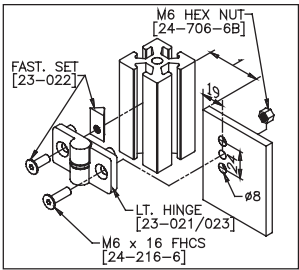
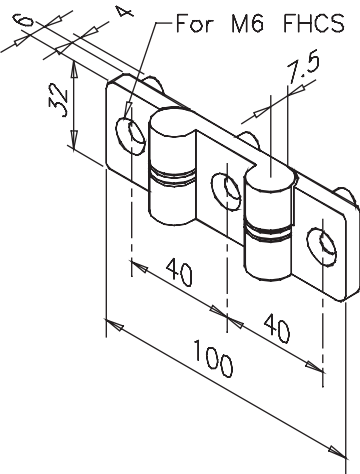
20-013

Light Duty Hinge 40

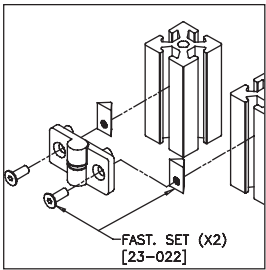
23-021
23-023



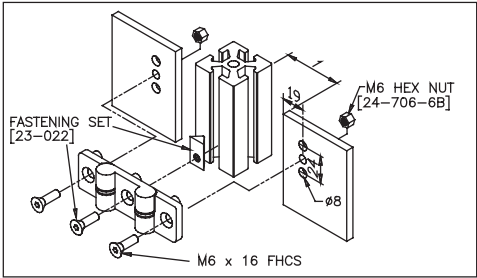
23-027



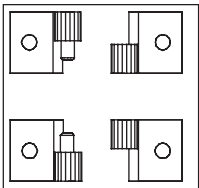
1



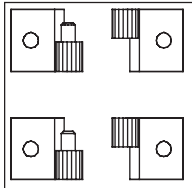
2



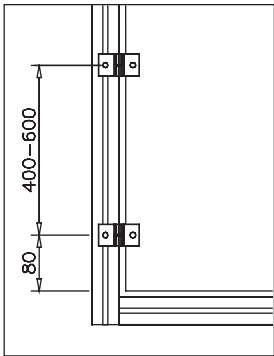
4



5

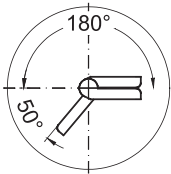


6



3

- 1,2,4 Attaching Light Duty Hinges 40 to 40 Series profiles and panels
- 3 Placement of hinges on panels
- 5 Non lift-off doors require one right hand and one left hand Hinge
- 6 Lift-off doors require either right or left hand Hinges



Application
For light doors and lids of acrylic glass, plastic or compound material.

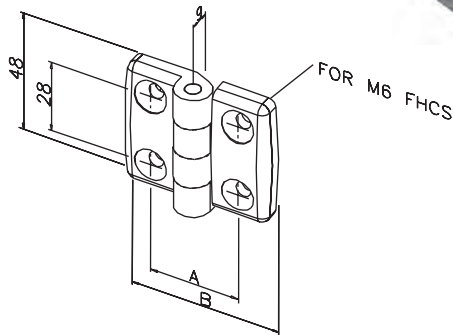
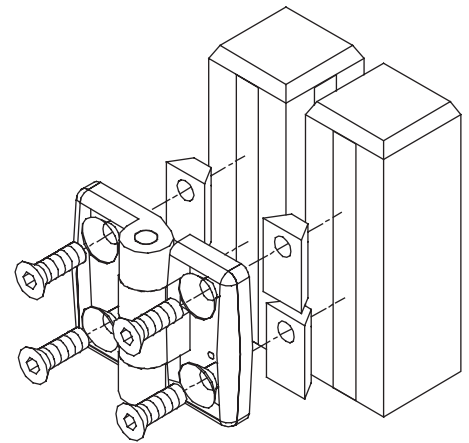
Technical Data
glass-filled nylon, black
Max. load 100 N (22 lbs)

Order all hardware separately:
Fastening Set 40 (23-022): One M6x16 FHCS and one M6 T-slot nut, 40

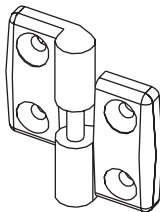
Description
Light Duty Hinge 40, Right
Light Duty Hinge 40, Left
Double Hinge 40
Fastening Set, Light Hinge 40

Unit	Weight	Part #
1 pc	21 g	23-021
1 pc	21 g	23-023
1 pc	38 g	23-027
1 set	13 g	23-022

Medium Duty Plastic Hinge



Non-Removable



Removable

Application

High quality plastic hinges for constructing medium duty guard/enclosure doors for profile sizes 28, 30, 40, 45. Hinges are offered in two types: *removable* (for left and right side mount) and *non-removable*. Alignment pins for 8mm T-slot can be removed allowing hinge to mount to a flat surface such as panel.

Technical Data

glass-filled nylon, black with stainless steel pin
Max. torque - 100 Nm (74 ft-lbs)

Order mounting hardware separately:

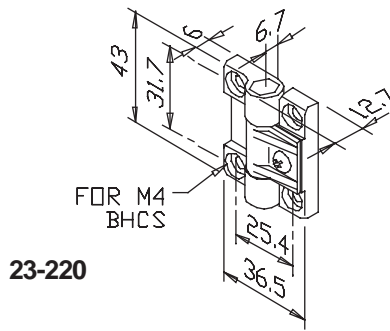
Profile 28: M6x14 FHCS (24-214-6) and M6 T-slot nut 28 (20-055 or 20-090)
Profile 30: M6x14 FHCS (24-214-6) and M6 T-slot nut 30 (20-056 or 20-090)
Profile 40: M6x16 FHCS (24-216-6) and M6 T-slot nut 40 (20-056 or 20-080)
Profile 45: M6x16 FHCS (24-216-6) and M6 T-slot nut 45 (17-046)
Profile 50: M6x16 FHCS (24-216-6) and M6 T-slot nut 40 (20-056 or 20-080)
Panel (6mm and 8mm): M6x20 FHCS (24-220-6) and M6 locknut (24-716-6)



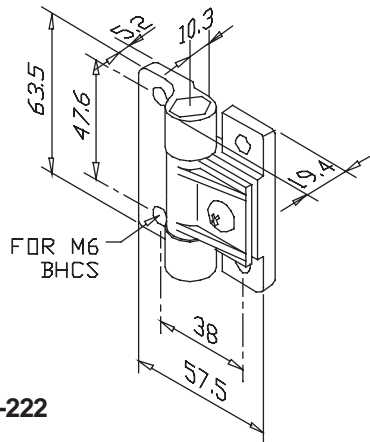
Dimensions (mm)		Weight (g)	Mount to Profile	Hinge Type	Part #
A	B				
30	49	28	28/28 (2mm gap)	Left Side Mount	23-530L
			28/28 (1mm gap)		
			30/30 (0mm gap)	Right Side Mount	23-530R
			28,30 to Panel		
35	59	35	28/40 (1mm gap)	Non-Removable	23-535
		33	30/40 (0mm gap)	Left Side Mount	23-535L
			28,40 to Panel		
				Right Side Mount	23-535R
45	77	43	40/40 (5mm gap)	Non-Removable	23-545
		41	40/50 (0mm gap)	Left Side Mount	23-545L
			45/45 (0mm gap)		
			40,45,50 to Panel	Right Side Mount	23-545R

Note: Hinge halves from different size removable hinges can be combined to achieve various center to center distance

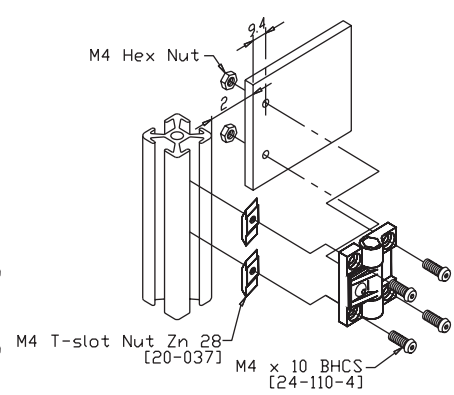
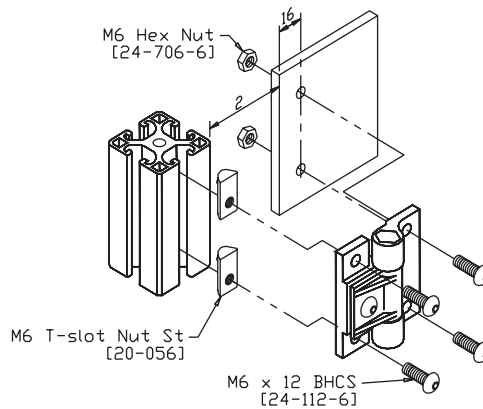
Adjustable Hinge



23-220



23-222



Application

Adjustable tension hinge for swinging doors. Tensions can hold doors open, closed, partially open and adjust speed of opening/closing door.

Technical Data

Acetal, black
Adjusting screw-SS
Polycarbonate hinge pin
Max. torque
23-220: 80 N·cm (7 in lbs)
23-221: 400 N·cm (35 in lbs)

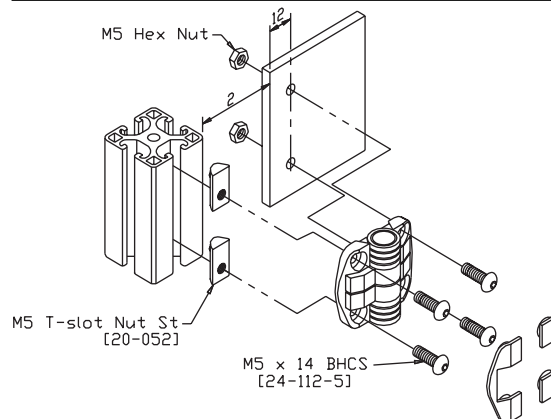
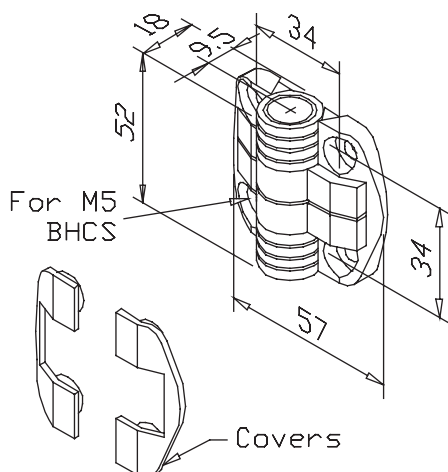
Order all hardware separately

Description

Adjustable Hinge 1
Adjustable Hinge 2

Unit	Weight	Part #
1 pc	42 g	23-220
1 pc	42 g	23-222

Positioning Hinge



Application

Multiple position hinge for swinging doors. Three models with preset angles at 85°, 120° and 155°, as well as completely open at 180°. Two covers hide mounting hardware.

Technical Data

Acetal, black
Positioning Torque: 1.1 Nm (10 in-lbs)
Maximum load
Radial 450 N (100 lbs)
Axial 450 N (100 lbs)

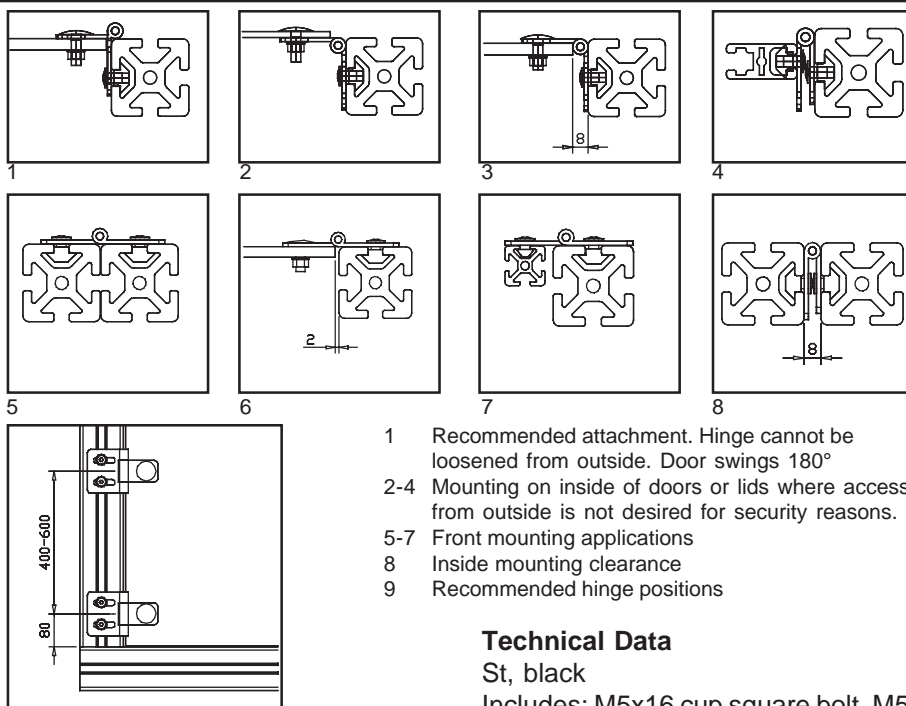
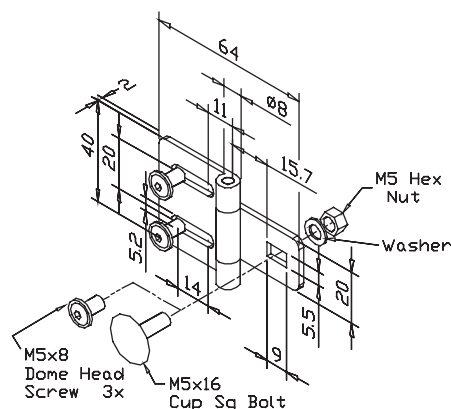
Order all hardware separately

Description

Positioning Hinge 85°
Positioning Hinge 120°
Positioning Hinge 155°

Unit	Weight	Part #
1 set	37 g	23-224
1 set	38 g	23-226
1 set	39 g	23-228

Multi-Series Hinge



- 1 Recommended attachment. Hinge cannot be loosened from outside. Door swings 180°
- 2-4 Mounting on inside of doors or lids where access from outside is not desired for security reasons.
- 5-7 Front mounting applications
- 8 Inside mounting clearance
- 9 Recommended hinge positions

Technical Data

St. black

Includes: M5x16 cup square bolt, M5 hex nut, M5 washer, three M5x8 dome head screws.

Order M5 T-slot nuts separately (see page 64-65).

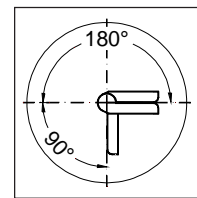
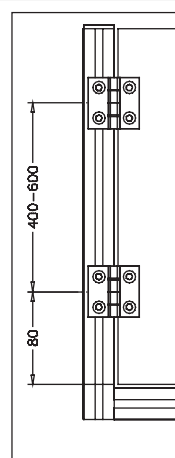
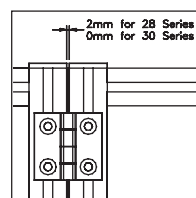
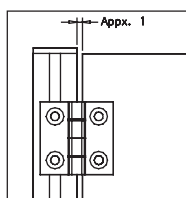
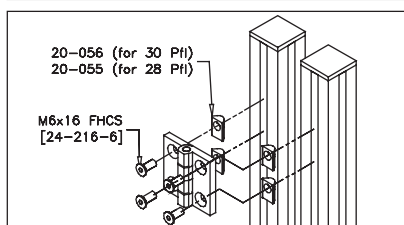
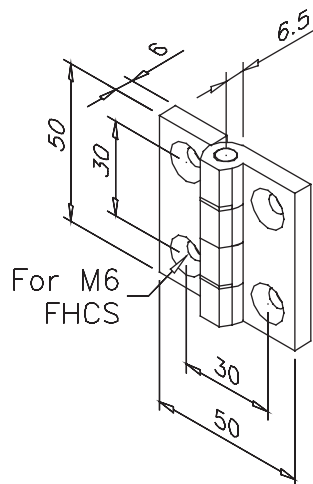
Max. load 250 N (56 lbs)

Description

Multi-Series Hinge

Unit	Weight	Part #
1 set	51 g	23-016

Medium Hinge 30/28



- 1 Assembly of Medium Hinge 30/28 on profiles
- 2 Hinge positions
- 3-4 Clearance dimensions
- 5 Range of swing

Application

Suitable for medium loads such as machine and guard doors. Can be used with 30 or 28 series profiles.

Technical Data

Zn cast, black powder coated
Pin: SS

Max. load - 400 Nm (295 ft - lbs)

Order all hardware separately.

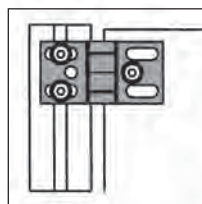
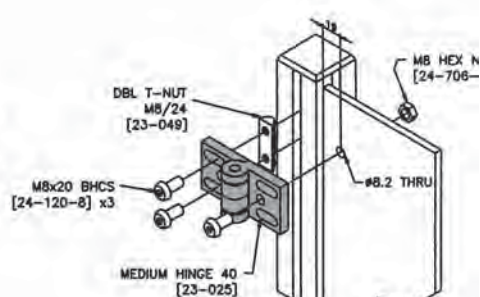
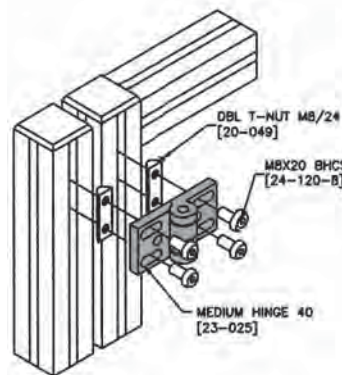
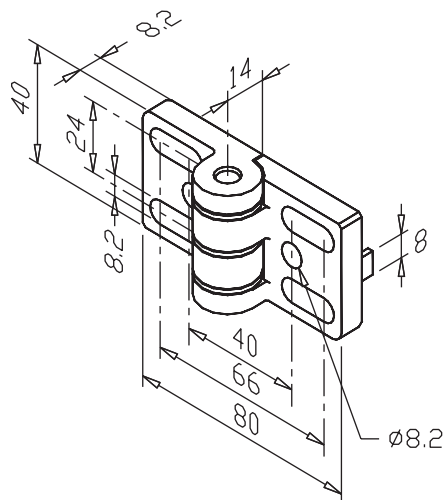
One M6x14 FHCS (24-214-6) and one M6 T-slot nut (20-056, for 30 profile or 20-055, for 28 profile) for each hole.

Unit	Weight	Part #
1 pc	86 g	23-242

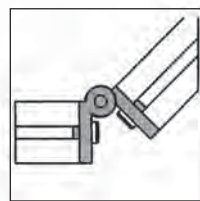
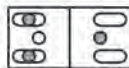
Description

Medium Hinge 30/28

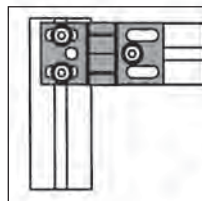
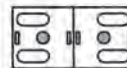
Medium Hinge 40



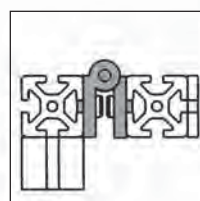
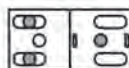
1 Fastening to vertical profile and panel element (all anti-torsion pins removed).



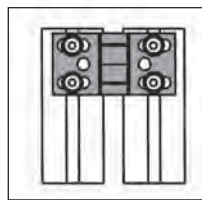
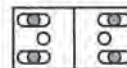
4 End face fastening of two profiles (with torsion pins).



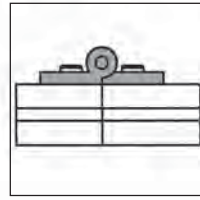
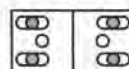
2 Fastening to vertical and horizontal profiles (2 anti-torsion pins removed).



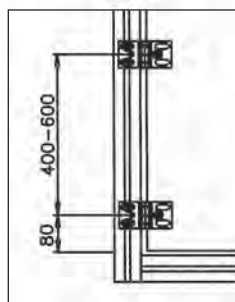
5 Connection of two horizontal profiles (all anti-torsion pins removed).



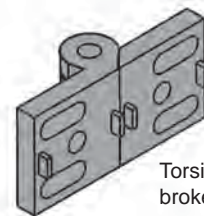
3 Fastening to vertical profiles (all anti-torsion pins removed).



6 Connection of two horizontal profiles (with anti-torsion pins)



Positioning of hinges on a panel



Torsion pins can be broken off with a screwdriver

Application

Suitable for medium loads such as machine and guard/enclosure doors, and as an angle connecting element for profiles. Fasteners to T-slot or profile face with integral torsion pins for squaring.

Technical Data

Zn cast, galvanized, black
Max. load 500 N (112 lbs)

Order all hardware separately:

M8x20 BHCS (24-120-8) and
Double T-slot nut M8/24 (20-049)
Quantities vary per application

Description

Medium Hinge 40

Unit
1 pc

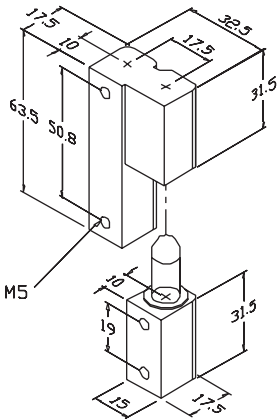
Weight
.18 kg

Part #
23-025

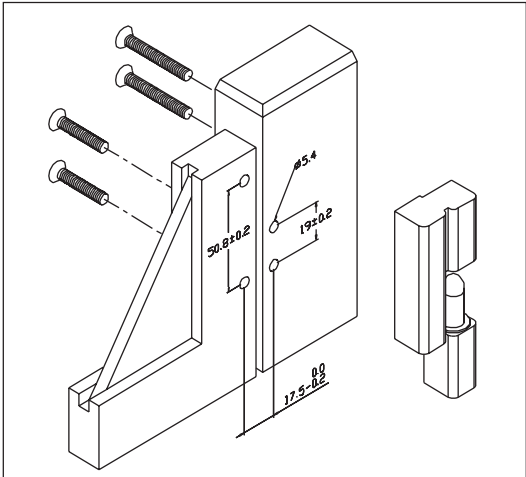
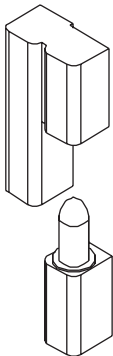
Offset Lift-Off Hinge

2

23-218



23-219



Mounting dimensions
Maximum screw length = Door (or frame) thickness + 10mm

To insure lift off capability, the lower knuckle must be installed on the frame, the upper knuckle on the door.

Application

Medium duty hinge for applications that allow the door to be removed from the hinge side. All mounting hardware is concealed

Technical Data

Die cast zinc, black power coated
Washer: Black nylon
Swing angle: 190°
Maximum working load:
Radial - 1300N (300lb)
Axial - 2200N (500lb)

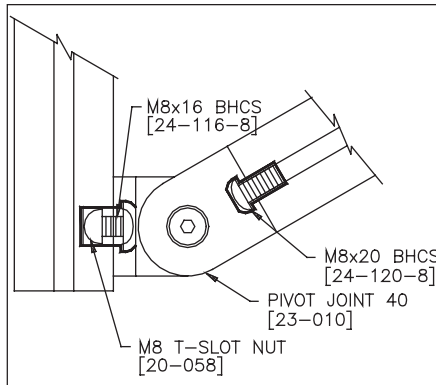
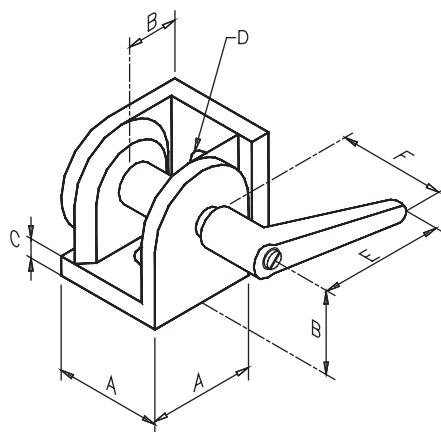
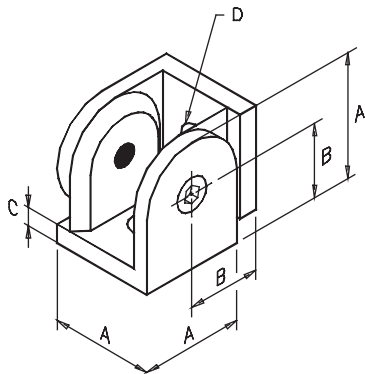
Order all hardware (M5 screws) separately

Description

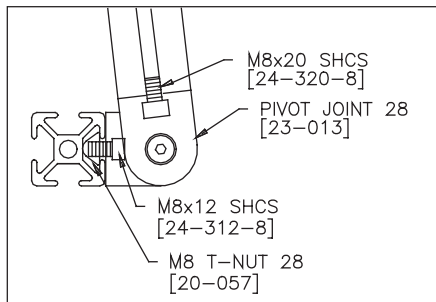
Offset Lift-Off Hinge Left
Offset Lift-Off Hinge Right

Unit	Weight	Part#
1set	153g	23-218
1set	153g	23-219

Pivot Joint



Attaching Pivot Joint 40
to 40 series profiles



Attaching Pivot Joint 28
to 28 series profiles

23-010: Pivot Joint 40

Load	F ₁ (N)	F ₂ (N)
Fixed connection	5000	2500
Movable connection	750	750

23-013: Pivot Joint 28

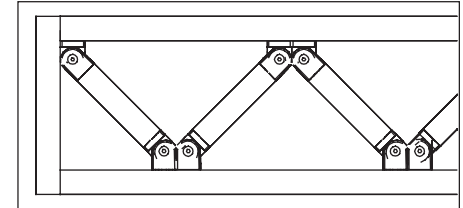
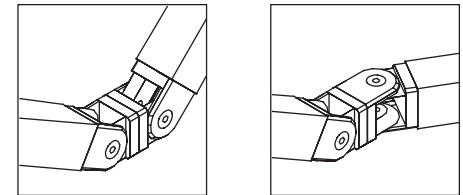
Fixed connection	1600	800
Movable connection	250	250

Application

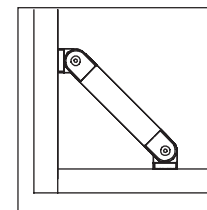
For connecting profiles at various angles from 0 to 180°, eliminating the need for a miter cut. The Locking Pivot Joint can be locked into place using clamp lever. Pivot Joints 28 can also be used on 30 series profiles.

Technical Data

Zn cast, galvanized, brushed chrome or black. Bushings, space collar: St, black galvanized. Clamp Lever: Zinc die cast with steel components. Adjustment range ±90° infinitely. Complete with four alignment pins. **Order all hardware separately.**



1

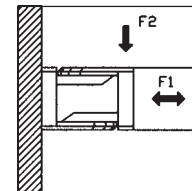


2



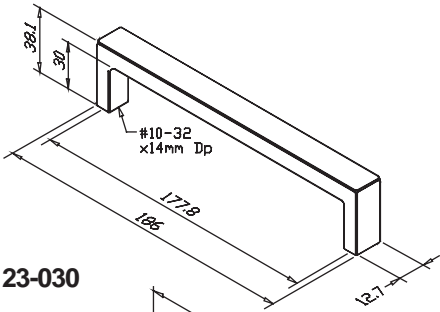
3

- 1-2 Pivot Joint as a gusset (remove two convex washers)
- 3 For permanent use as swinging joint 40 with M8x16 FHCS and M8 thin hex nut
For 28 series use M6x10 FHCS and M6 thin hex nut

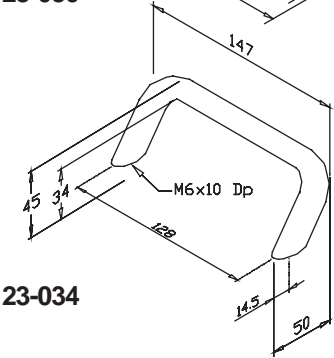


Profile Series	Dimensions (mm)						Clamp Lever	Max. Holding Torque	Weight (kg)	Color	Part #
	A	B	C	D	E	F					
40	40	30	9	Dia 8.5 Hex 14x4 DP	-	-	No	N/A	.32	clear	23-010
					63	45	Yes	20 Nm (15 ft - lbs)	.41	black	23-010B
28	28	20	5	Dia 8.5	-	-	No	N/A	.11	clear	23-013
					45	35	Yes	10 Nm (7 ft - lbs)	.18	black	23-013B
										clear	23-015
										black	23-015B

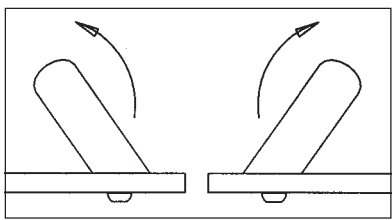
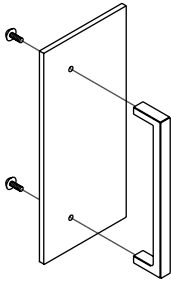
Aluminum Handle



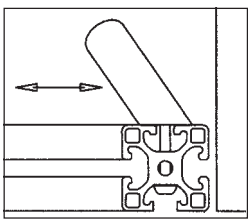
23-030



23-034



1 Swinging Doors



2 Sliding Door



Application

Suitable handle for light doors and electronic units with maximum panel thickness of 8mm (5/16"). Ergonomic 35° tilt of Angled Handle allows easy access, even in corners.

Technical Data

23-030: Al, clear anodized, includes two #10-32 x 5/8" BHCS

23-034: Al, black plastic coated

Description

Light Duty Handle
Angled Handle

Unit

1 set
1 pc

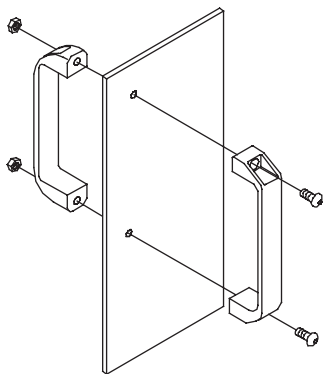
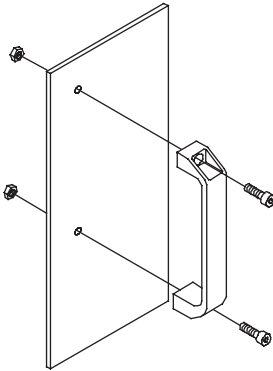
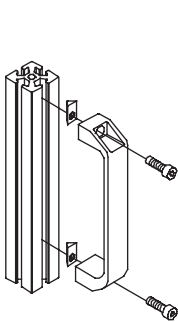
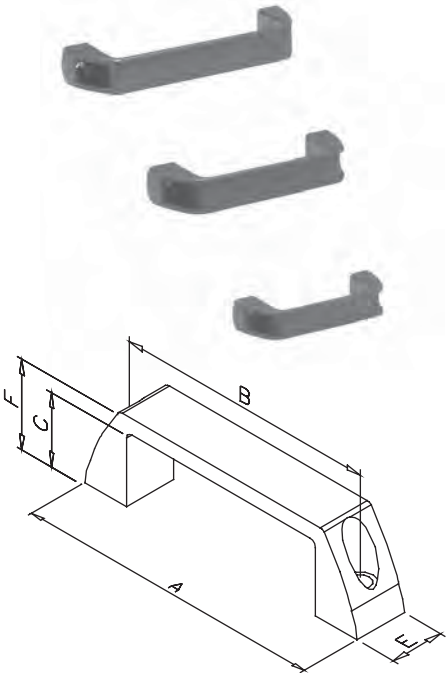
Weight

85 g
11 g

Part #

23-030
23-034

Plastic Handle



Application

Multipurpose ergonomic work duty handle for mounting onto panels or profiles.

Technical Data

glass-filled nylon, black

Order all hardware separately

For 23-033, 23-031: M6 SHCS

For 23-032 M8 SHCS

Screw length and nuts are determined by application.

Dimensions (mm)								Weight (g)	Part #
A	B	C	d	D	E	F	G		
112	93.5	30	6.5	10.5	21	36	6	33	23-033
156	132	37	6.5	10.5	27	45	9	11	23-031
204	179	42	8.5	13	28	50	8	71	23-032Z1

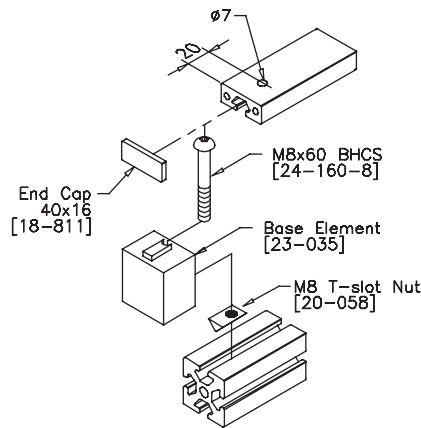
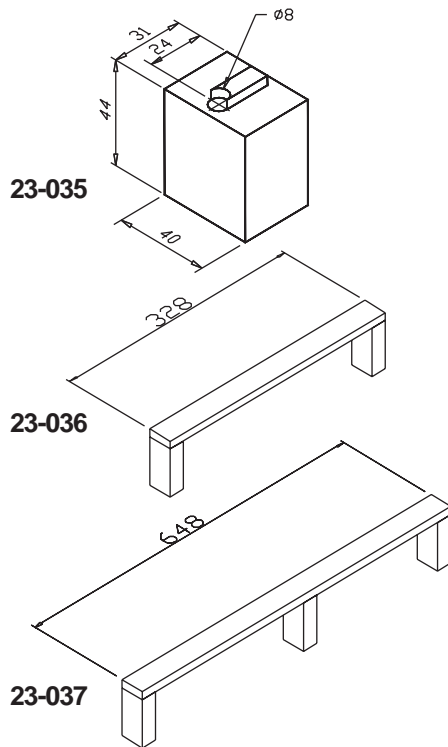
Handle PA 179 w/Hardware
(includes two M8x20 SHCS
and two M8 T-slot nuts 40)

1 set

80 g

23-032

Base Element for Heavy Duty Handles



Application

Suitable for construction of heavy duty handles with 16x40 profile. Profile is available in black or clear finish. Handle also serves as stiffener.

Technical Data

glass-filled nylon, black
Fastening hardware not included with single base element.

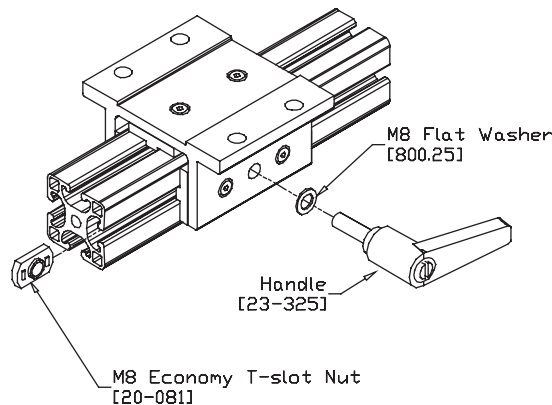
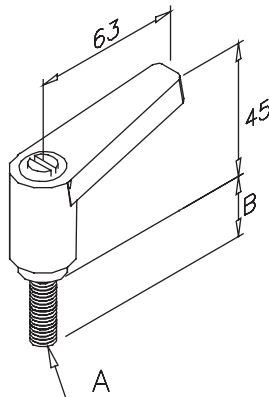
Handles (40x16 clear profile) include all necessary assembly hardware shown.

Description

Base Element
Heavy Duty Handle 328 mm
Heavy Duty Handle 648 mm

Unit	Weight	Part #
1 pc	26 g	23-035
1 set	.50 kg	23-036
1 set	.94 kg	23-037

Ratchet Lever



Assembly of the Ratchet Lever on Profile Slide Block 40 (30-410)

Application

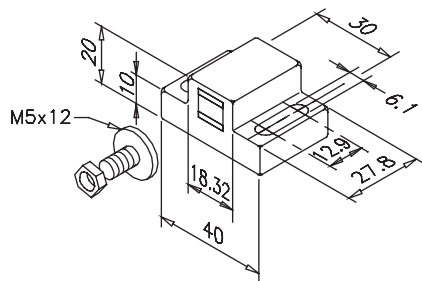
For use on applications where a locking handle is desired, particularly on Profile Slide Blocks. Serrations in interior of lever allow for various locking positions. Slide blocks must be serviced - drill 9 mm hole through one wall and delrin pad.

Technical Data

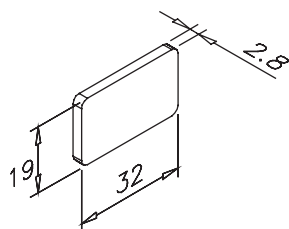
Fiber reinforced technopolymer plastic with metal insert

Description	Size (A x B)	Unit	Weight	Part #
Ratchet Lever	M8 x 16	1 pc	87 g	23-316
	M8 x 20	1 pc	43 g	23-320
	M8 x 25	1 pc	45 g	23-325
	M8 x 40	1 pc	50 g	23-340
	M8 x 50	1 pc	53 g	23-350
	M8 x 63	1 pc	57 g	23-363

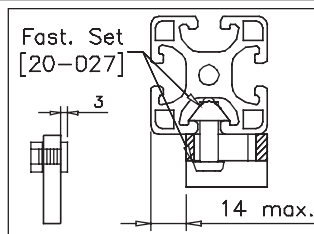
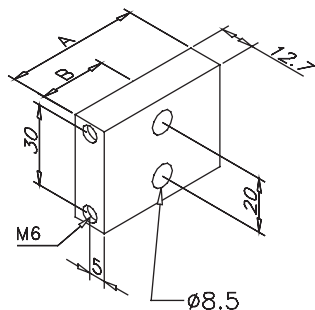
Magnetic Catch



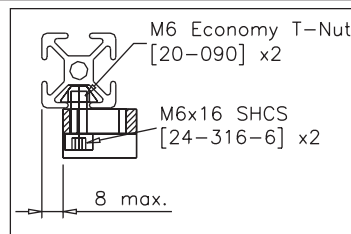
23-046



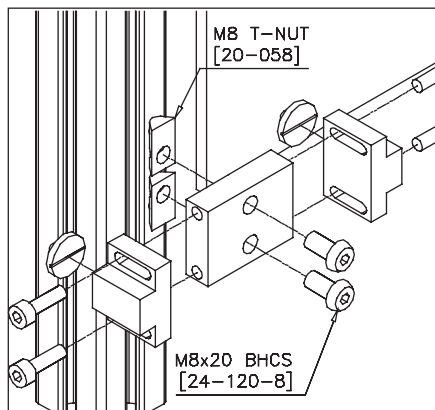
23-051



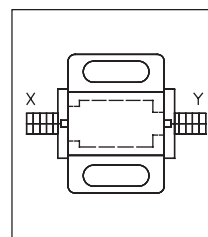
1



2



3



4

Holding Force	
X	20 N (4.5 lb)
Y	10 N (2.25 lb)

- 1 Mounting on 40 series profile
- 2 Mounting on 28 series profile
- 3 Assembly of the Double Bracket 40 on 40 series profile
- 4 Holding force of Magnetic Catch

Application

Quick catch for swinging or sliding doors. For different holding strengths rotate catch 180°. Adjust position using slotted mounting holes. Complete with pan head screw. Can be used on 40, 30 and 28 series profiles.

Technical Data

glass-filled nylon, black, with M5x10 pan head screw and hexagon nut.

Strike Plate: St, zinc plated
Pressure sensitive adhesive: Neoprene foam with acrylic adhesive.
Designed to function under intermittent break away load.

Mounting Brackets: Al, anodized

Order all hardware separately.

Fastening Set 40 (20-027): two M6x20 BHCS and two M6 T-slot nut

For attachment to 28 series profiles: two M6x16 SHCS (24-316-6) and two M6 Economy T-slot nuts 28 (20-090).

Mounting Bracket	Dims (mm)		No. of Taps
	A	B	
23-146	50	30	2
23-147	60	30	4
23-148	32	18	2
23-149	36	18	4

Description

Magnetic Catch
Fastening Set, Catch 40

Strike Plate

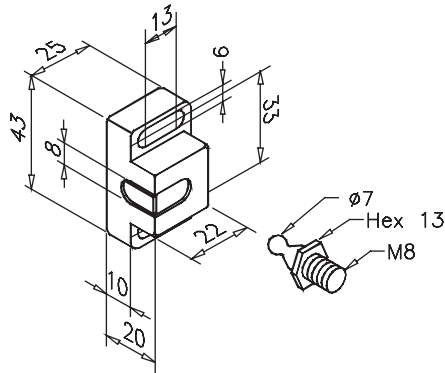
Single Bracket 40
Double Bracket 40
Single Bracket 28
Double Bracket 28

Unit	Weight	Part #
1 pc	38 g	23-046
1 set	29 g	20-027

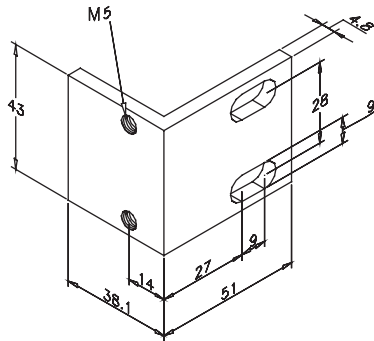
1 pc	8 g	23-051
------	-----	--------

1 pc	60 g	23-146
1 pc	70 g	23-147
1 pc	40 g	23-148
1 pc	40 g	23-149

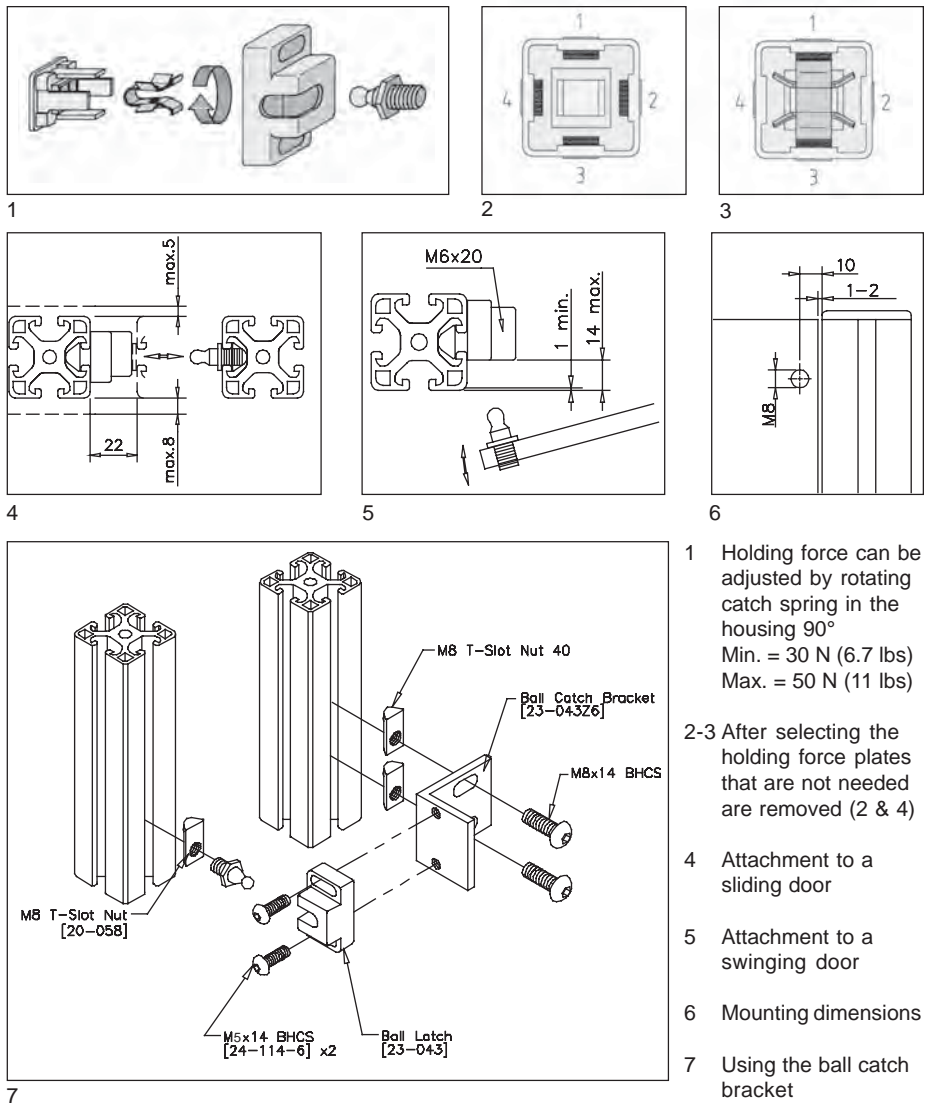
Ball Catch PA



23-043



23-043Z6



- 1 Holding force can be adjusted by rotating catch spring in the housing 90°
Min. = 30 N (6.7 lbs)
Max. = 50 N (11 lbs)
- 2-3 After selecting the holding force plates that are not needed are removed (2 & 4)
- 4 Attachment to a sliding door
- 5 Attachment to a swinging door
- 6 Mounting dimensions
- 7 Using the ball catch bracket

Application

Catch for swinging and sliding doors. Holding force is adjustable by turning the snap spring by 90° in the housing. Slots in housing permits positioning for panel thickness. Can also be used as a door stop.

Technical Data

Housing: glass-filled nylon, black
Snap Spring: St
Ball Screw: St, zinc plated
Bracket (23-043Z6): Al, anodized

Order all hardware separately

20-027:
two M5x20 BHCS and two M5 T-slot Nut

23-043Z5:

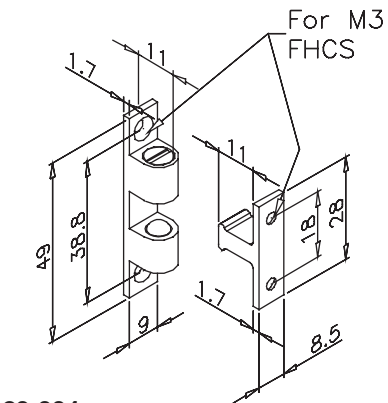
Bracket, two M5x14 BHCS, two M8x14 BHCS and three M8 T-slot nuts St 40

Description

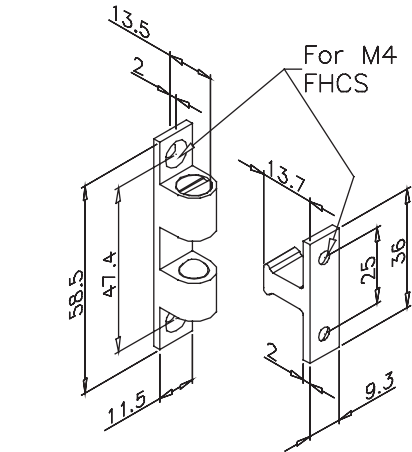
Ball Catch, PA
Fastening Set, Catch 40
Ball Catch Bracket with hardware
Ball Catch Bracket

Unit	Weight	Part #
1 pc	23 g	23-043
1 set	29 g	20-027
1 set	98 g	23-043Z5
1 pc	43 g	23-043Z6

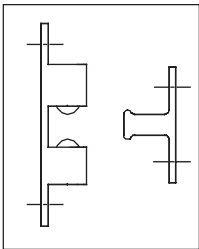
3-Way Ball Catch



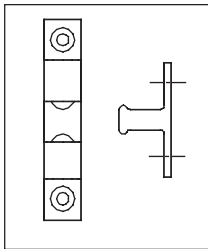
23-004



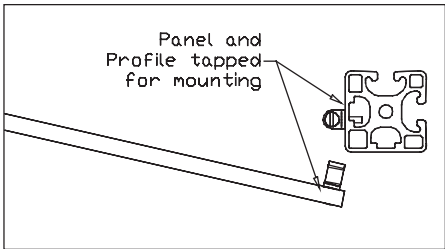
23-012



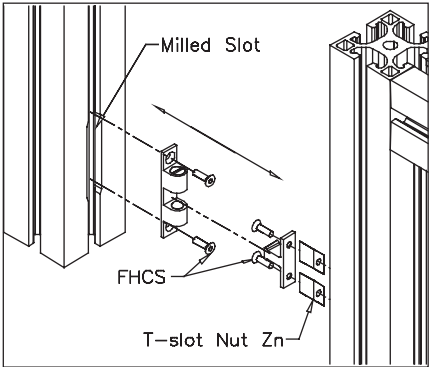
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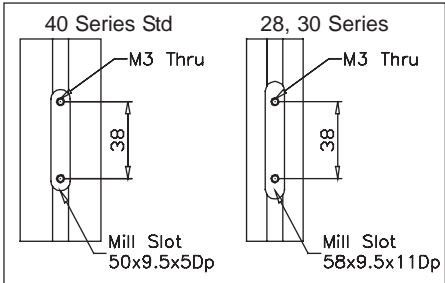
2



3



4



5

- 1-2 Strike can enter from front or either side
- 3 3-Way Ball Catch on swinging door
- 4 3-Way Ball Catch on sliding door
- 5 Servicing of the slot for 23-004 on 40 Std or 28/30 series profiles for sliding doors. For 40 series Heavy or Light profiles mill slot 58x9.5x12.3 Dp.

Application

Universal door catch for swinging and sliding doors in small and medium load ranges. Can be mounted in serviced slot for flush closing.

Technical Data

Brass, chrome finish with two steel balls for adjustable spring tension

Order all hardware separately

Description

- 3-Way Ball Catch, Small
- 3-Way Ball Catch, Medium

Unit

- 1 set
- 1 set

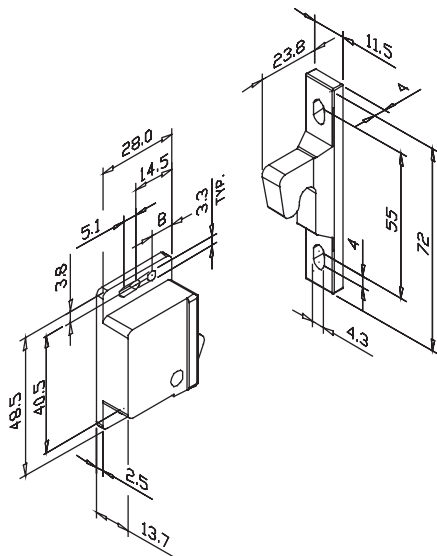
Weight

- 26 g
- 40 g

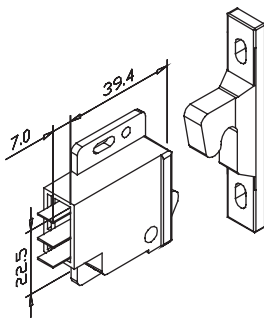
Part #

- 23-004
- 23-012

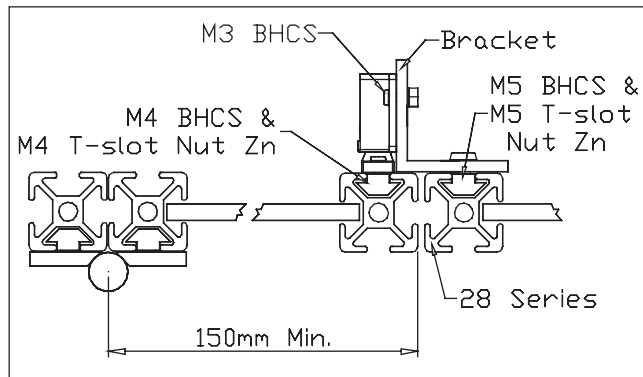
Grabber™ Door Catch



23-210

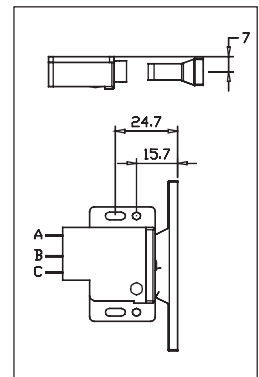


23-211



1

- 1 Grabber Door Catch on 28 series profile swinging door, shown mounted with a custom bracket
 - 2 Mounting dimensions and micro-switch contacts
- A - Common
B - Connection is live when latch is closed
C - Connection is live when latch is open



Application

Push to close, pull to open door catch for mounting inside of enclosures. Catch with micro-switch is designed to operate a warning system and is not to be used as a safety switch.

Technical Data

Nylon, black
Approximate pull-up force:
23-210: 44 N (10 lbs)
23-211: 22 N (5 lbs)

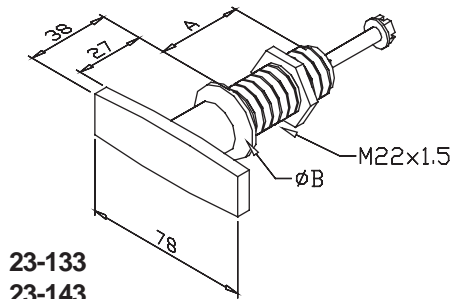
Order all hardware separately

Description

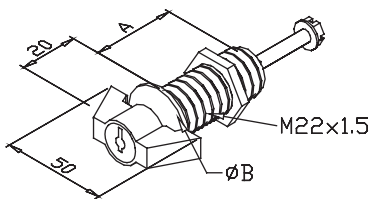
Grabber Door Catch
Grabber Catch w/ Micro-Switch

Unit	Weight	Part #
1 set	17 g	23-210
1 set	21 g	23-211

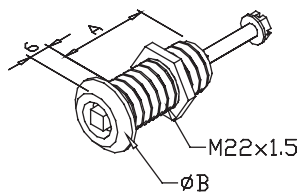
Quarter Turn Latch



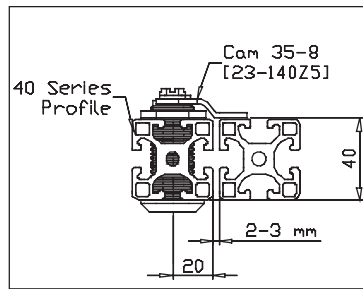
23-133
23-143



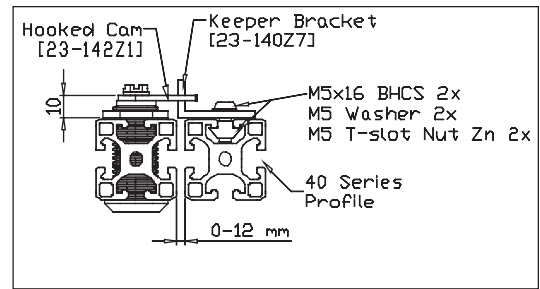
23-134
23-144



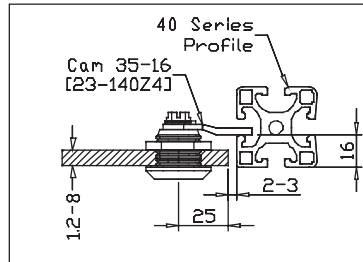
23-135
23-145



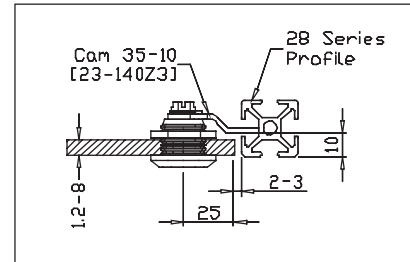
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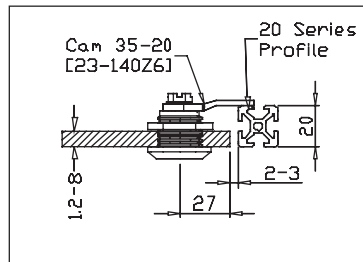
2



3



4

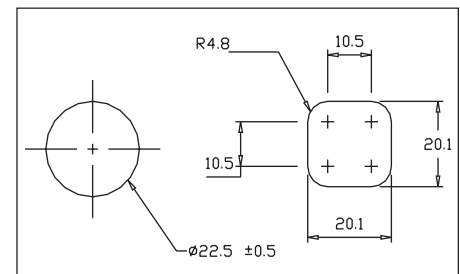


5

- 1 Assembly of Quarter Turn Latch on 40 series profile for swinging doors
- 2 Quarter Turn Latch mounted in 40 series profile for sliding or bi-fold doors
- 3-5 Quarter Turn Latch mounted on panel for swinging door on 40, 28 or 20 series profile
- 6 Dimensions for round or square mounting hole in 40x40 profile or panel.

Application

40 series latch profiles for swinging, sliding or bi-fold door applications. When installed into swinging door panel, latch can be used with 40, 30, 28 and 20 series profiles. T-handle and wing knob styles eliminate the need for a door handle.

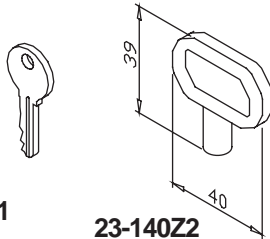


6

NOTE: All Cams must be ordered separately

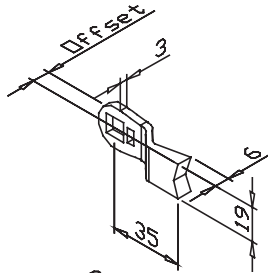
Style	Application	Dims (mm)		Material	Weight (g)	Part #
T-Handle Non-Locking	profile 40 mount fig 1, 2	A	B	Handle: Polyamide Housing: Zinc die, black powder coated	200	23-133
	panel mount fig 3, 4, 5	18	28		135	23-143
Wing Knob Keyed Alike (one key included)	profile 40 mount fig 1, 2	50	32	Handle: Polyamide Housing: Zinc die, black powder coated Cylinder: Zinc die, chrome plated	160	23-134
	panel mount fig 3, 4, 5	18	28		90	23-144
Square 7mm Insert (order key separately)	profile 40 mount fig 1, 2	50	32	Housing/insert: Zinc die, black powder coated	111	23-135
	panel mount fig 3, 4, 5	18	28		50	23-145

Accessories for Quarter Turn Latch



23-140Z1

23-140Z2

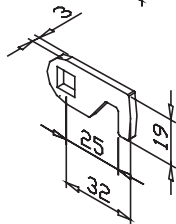


23-140Z3

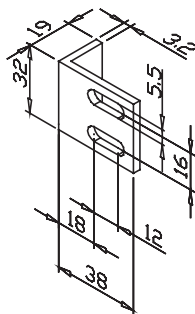
23-140Z4

23-140Z5

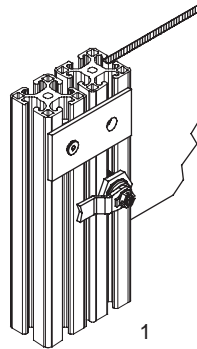
23-140Z6



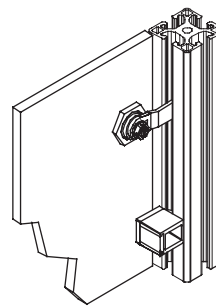
23-142Z1



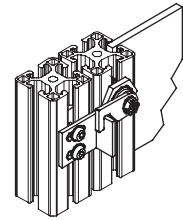
23-140Z7



1



2



3



- 1-2 Additional hardware can be used for swing door stops such as a Connection Element (22-140 or 22-145) or Multiblock PA (22-100 or 22-103)
- 3 Keeper bracket (23-140Z7) used with the hooked cam (23-142Z1) for sliding or bi-fold doors

Application

Various accessories for Quarter Turn Latches.

Description

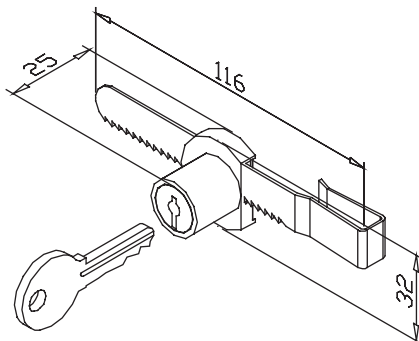
Spare Key for 23-134/23-144	1 pc	5 g	23-140Z1
Key for 7mm Square for 23-135/23-145	1 pc	8 g	23-140Z2
Cam 35-10 (offset 8)	1 pc	22 g	23-140Z3
Cam 35-16 (offset 2)	1 pc	20 g	23-140Z4
Cam 35-8 (offset 10)	1 pc	22 g	23-140Z5
Cam 35-20 (offset -2)	1 pc	20 g	23-140Z6
Hooked Cam	1 pc	13 g	23-142Z1
Keeper Bracket	1 pc	13 g	23-140Z7

Unit

Weight

Part

Ratchet Lock



Application

Used to lock overlapping sliding panels up to 1/4" thick. Particularly suitable for display cases when used with sliding door guide profiles.

Technical Data

St, nickel finish
Includes 2 keys

Minimal panel overlap - 25mm

Description

Ratchet Lock

Unit

1 set

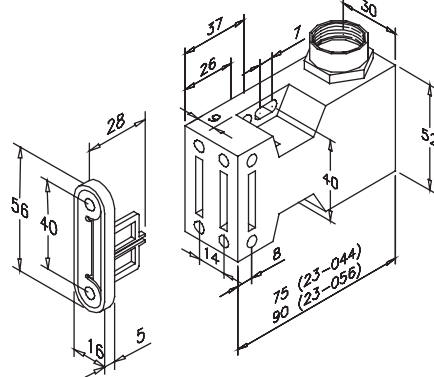
Weight

90 g

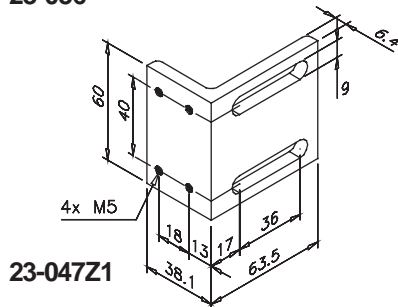
Part

23-130

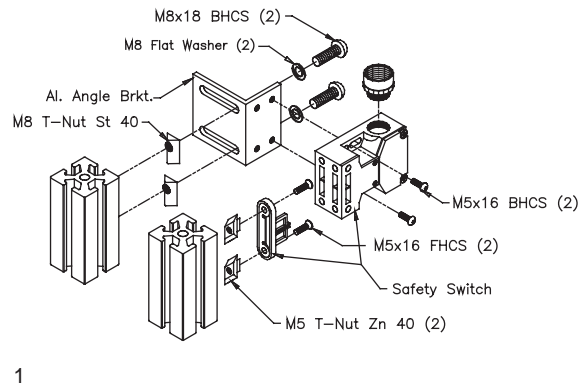
Safety Switch



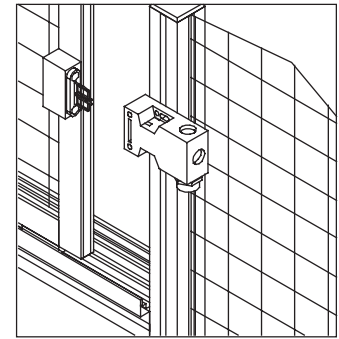
23-044
23-056



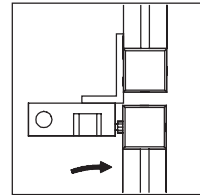
23-047Z1



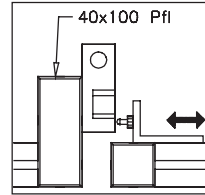
1



2



3



4

- 1 Mounting Bracket w/hardware 40 for Safety Switch
- 2 Safety Switch on rolling door
- 3 Safety Switch on a swinging door
- 4 Safety Switch on a sliding door

Application

Safety switches for use with machine guards, covers and doors which must be closed for operational safety. Comply with regulations for position switches having positive break N.C. (normally closed) contact for operator safety. Switches may not be used for an end stop. One plastic 1/2" NPT adaptor supplied. Switches have no return force. See page 117 for cable holders.

Technical Data

Conformity to standards: UL, CSA, IEC 947, VDE 0660, GS-ET-15
Degree of Protection: IP67, meets NEMA-3, 4, 12 & 13 requirements
Housing and actuator flange: Glass-fiber, reinforced self-extinguishing thermoplastic with stainless steel actuator.
Connections: screw terminals for up to 13 AWG wire (2.5mm²)
Contacts: fine silver, positive double break bridge type
Contact rating: 4 A / 230 VAC
Short circuit protection: 10A time delay fuse, 16A non-delay
Operating Temperature: -30°C to +80°C (-22°F to +176°F)
Mechanical Life: >10 million operations

Mounting Bracket: Al, black powder coated

Order all hardware separately.

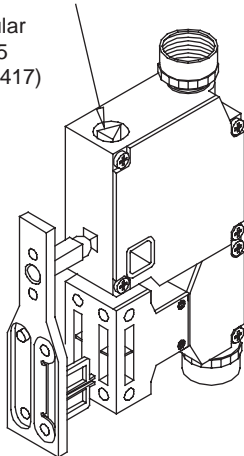
Fastening Set 23-047 includes one mtg. bracket and two each of: M5x16 FHCS, M5 T-nut Zn 40, M5x16 BHCS, M8x18 BHCS, M8 flat washer, M8 T-nut St 40.

Fastening Set 23-049 includes one mtg. bracket and two each of: M5x12 FHCS, M5 T-nut Zn 28, M5x16 BHCS, M8x14 BHCS, M8 flat washer, M8 T-nut St 28.

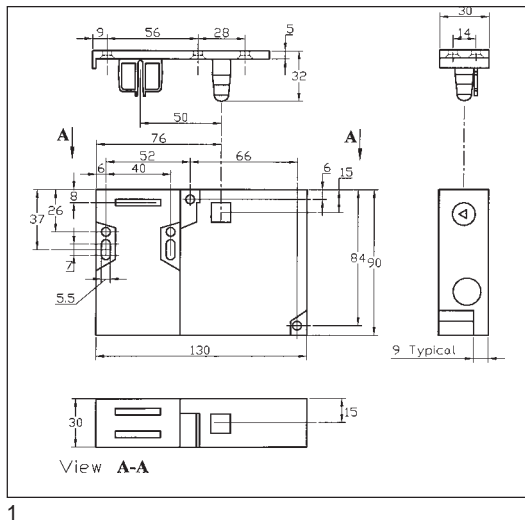
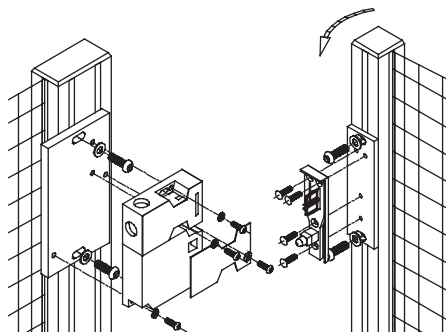
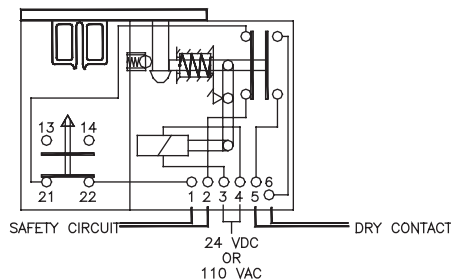
Description/Contacts	Unit	Weight	Part #
Safety Switch, 1 NC	1 pc	.13 kg	23-044
Safety Switch, 1NO, 1NC	1 pc	.15 kg	23-056
Mounting Bracket w/hardware 40	1 set	.14 kg	23-047
Mounting Bracket w/hardware 30/28	1 set	.14 kg	23-049
Mounting Bracket	1 pc	87 g	23-047Z1
Spare Key for 23-044/23-056	1 pc	10 g	23-008
Liquid Tight Fitting PG-11 (optional)	1 pc	11 g	800.15

Solenoid-Locking Safety Switch

Auxiliary
unlocking
mechanism
(for
triangular
Key M5
DIN 22417)

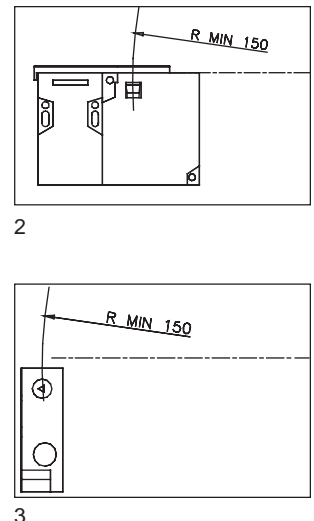


Wiring Diagram for 23-006/23-007



1 Dimensions for Locking Safety Switches

2-3 Minimum radius for swinging doors



Application

Locking Safety Switches for use with machine guards, covers and doors which must be closed for operational safety. Two independent sets of contacts in two housings signal and monitor the position of both the key interlock and the locking pin. Provides higher degree of safety than regular switch. Can also be used as simple and adjustable door latch (adjust holding force by turning the pin at the ball). Auxiliary unlocking mechanism provided as mounting aid and in case of power failure. Switches may not be used as an end stop. Supplied with two plastic 1/2" NPT adaptors. Key return force 3N.

Technical Data

Conformity to standards: UL, CSA, IEC 947, VDE 0660, GS-ET-19

Degree of Protection: IP65, meets NEMA-3, 12 & 13 requirements

Housing and actuator flange: Glass-fiber, reinforced self-extinguishing thermoplastic with stainless steel actuator and locking pin.

Connections: screw terminals for up to 13 AWG wire (2.5mm²)

Contacts: fine silver, positive double break bridge type

Contact rating: 2 A / 230 VAC

Short circuit protection: fuse 6 A (time-delay)

Power Consumption: 10 W (max)

Locking Force: 2000 N (450 lbs)

Holding Force of Ball Catch: adjustable 0...150 N (0...34 lbs)

Operating Temperature: -25°C to +40°C (-13°F to +104°F)

Mechanical Life: 1 million operations

Weight: 0.52 kg

Contacts*		Solenoid Supply Voltage	Locking Mechanism	Part #
1	3	24 VDC	**Locked by Solenoid	23-003
2	2	24 VAC/ 50 Hz	Unlocked by Spring	23-005
2	2	24 VDC	Locked by Spring	23-006
2	2	110 VAC/ 60 Hz	Unlocked by Solenoid	23-007

* Contacts established with key inserted

**In case of power failure the locking device is ineffective

Order all hardware separately

Description	Unit	Weight	Part #
Spare Key for Locking Switches	1 pc	36 g	23-009
Liquid Tight Fitting PG-11 (optional)	1 pc	11 g	800.15