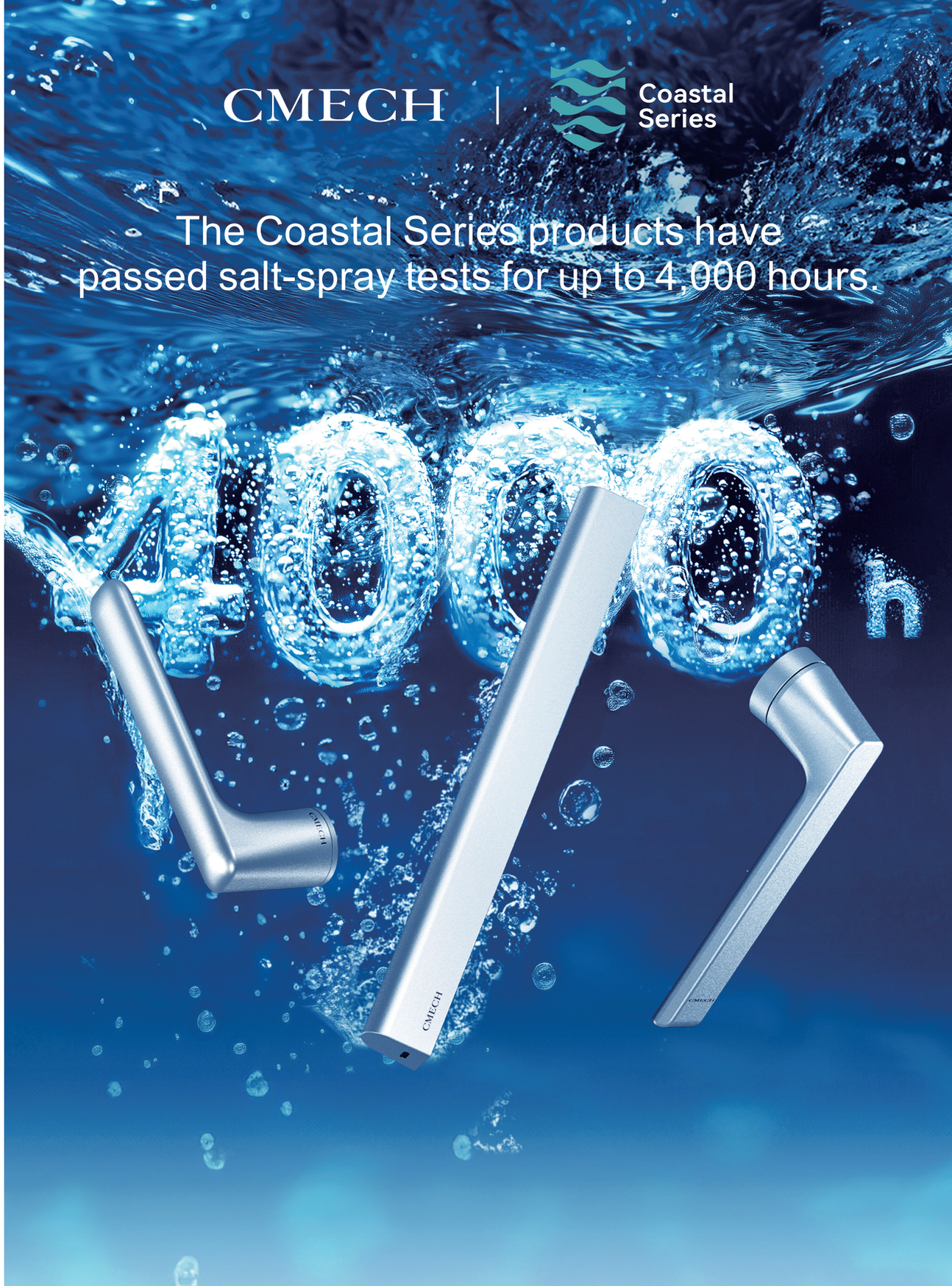
CMECH DOOR & WINDOW HARDWARE CATALOGUE 2025/2026



CMECH

www.cmech.com

CMECH


CMECH
Coastal Series
The Coastal Series products have passed salt-spray tests for up to 4,000 hours.
CMECH
CMECH
CMECH



CMECH

Window & Door Hardware

Established for over 30 years, Cmech is an American-based company specialized in the design and manufacture of door and window hardware.
Cmech's manufacturing plant is located in Guangdong province, southern China and spans 80,000 m^2 with over 1,000 employees. Cmech's stringent quality control and management system has achieved ISO9001 certification and most importantly long term customer satisfaction.

Our primary goal is to understand your needs and provide the ultimate in quality and satisfaction. A flexible, experienced management team and tightly integrated operational structure allows us to anticipate and respond rapidly to customer needs. We deliver innovative products of outstanding quality.

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CMECH bespoke surface treatment engineered for extreme environmental conditions.

1. CMECH owns proprietary surface-treatment technologies such as M treatment, and Nano Blue.

2. CMECH's exclusive M treatment, its Five-layer coating withstands 4,000 hours of salt-spray resistance and outstanding resistance to extreme temperatures, chemicals, and weathering. It is used on visible components such as handles and hinges.

3. M treatment, is available in six standard colors, offering coordinated hardware palettes for residential design.

4. The Nano Blue process is engineered for zinc-alloy structural parts; its four-layer coating withstands 2,000 hours of salt-spray testing and is applied to lock points, keepers, gearbox bases, and similar components.

5. Stainless-steel parts—e.g., hinges, rollers, lock faceplates, and drive rods—are tested to 1,000 hours of salt-spray resistance.

6. Steel bearings in rollers endure 1,000 hours of salt-spray testing, covering sliding-window rollers, sliding-door rollers, lift-and-slide door rollers, and bottom rollers for folding doors.

7. Lock cylinders achieve 200 hours of salt-spray resistance, including cylinders for swing doors, sliding doors, lift-and-slide doors, and folding doors.

Application

CMECH's enhanced-surface hardware is the optimal choice for coastal regions and high-use environments, including public buildings, shopping centers, and hotels.









Maintenance

If dirt appears, do not use any detergents or chemicals. Simply wipe with a slightly damp, soft cloth. No special maintenance is required.

Warranty & After-Sales Service for Visible Components

1. CMECH warrants the surface finish of visible hardware (handles, pulls, hinges) only against defects proven to result from manufacturing or raw-material issues—specifically blistering, spotting, or peeling not caused by misuse.

2. In keeping with our customer-first philosophy, should such surface defects occur, we will replace the affected items within the following periods:

2.1 Coastal areas (within 50 km of the shoreline): 8 years from the manufacturing date of the batch.
2.2 Non-coastal areas (more than 50 km from the shoreline): 10 years from the manufacturing date of the batch.

Warranty Period for Structural Components

From the date of shipment, we provide a quality guarantee to the end-user covering defects in the safety-critical structural hardware components of CMECH-branded window and door fittings.

Exclusions from Warranty

All replaceable parts—such as screws, spindles, and springs—are expressly excluded. The warranty also does not cover damage or loss arising from:

- Improper or incorrect use;
- Mishandling or human negligence;
- Failure to install or maintain according to instructions;
- Modification or repair by the user or any third party;
- Inappropriate surface treatment with chemicals or other substances, including scratches from sharp tools.

Warranty Terms

This warranty is limited, within the warranty period, to free replacement of the handle or free repair, at the sole discretion of CMECH. Costs arising from any claim—such as shipping, postage, packaging, or similar expenses—are not reimbursable. Claims are valid only when accompanied by the original product and proof of purchase, and compensation shall not exceed the original purchase price.

Corrosion-Resistance Testing

The corrosion resistance of our visible components has been tested in CMECH's laboratory in strict accordance with the PRC National Standard GB/T 10125.
Evaluated under GB/T 6461, CMECH visible components achieve a protection rating of 8.
This product has demonstrated exceptional performance by achieving an anti-corrosion rating of 8 or higher after 4,000 hours of ASTM B117 salt spray testing.

Coastal Series

Item code+ "-CS"

M Treatment

Silver 01	Champagne 02	Gold 11	Bronze 12	White C299	Black C285

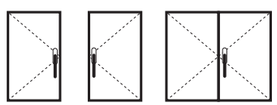
Note: Color is representative only.

USER S MANUAL FOR THE CATALOGUE

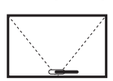
Opening Methods Diagrams

The solid line refers to inswing door
The dotted line refers to outswing door

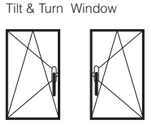
Outswing Casement Window



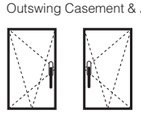
Outswing Awning Window



Tilt & Turn Window



Outswing Casement & Awning Window



Lift & Slide Door



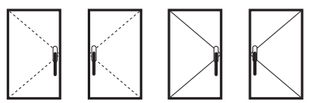
Sliding Window/Door



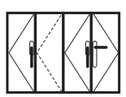
Tightly Sealed Sliding Window



Hinge Door



Bi-Folding Door



Explanation of Part Numbers (P/N)

Our P/Ns consist of letters (A, B, C, D…) and numbers (0, 1, 2, 3…)
For example, A010102 and C010101.

The first letter denotes which hardware series the product belongs to:

A: Outswing Casement Window Hardware Series for C-Groove Profile
B: Inswing Casement Window Hardware Series for C-Groove Profile
C: Tilt & Turn Window Hardware Series for C-Groove Profile
D: Hinged Door Hardware Series for C-Groove Profile
E: Sliding Door Hardware Series
F: Lift & Slide Door Hardware Series
G: Bi-Folding Door Hardware Series
H: Outswing Awning Window for C-Groove Profile
J: Outswing Casement Window for U-Groove Profile
N:Tightly Sealed Sliding Window Hardware Series
P: Sliding Window

For example, A010102 refers to New York Series Fork Drive Handle (Type W) for Outswing Casement Window.

Note: Some parts may appear to be the same hardware components used for both doors and windows.
See the configuration tables for specific information.

Color Selection

Seven standard colors are available.
Each one has a corresponding serial number.
A "-" refers to an available color.
For example, A010102-01 means the color for the Fork Drive Handle (Type W) New York Series outswing casement window is silver.

01 Silver
02 Champagne
11 Gold
12 Bronze
C299 White
C284 Black

Description of Features Graphics



Unit: Measurements are in millimeters (mm) unless otherwise indicated.

Outswing Casement Window Hardware



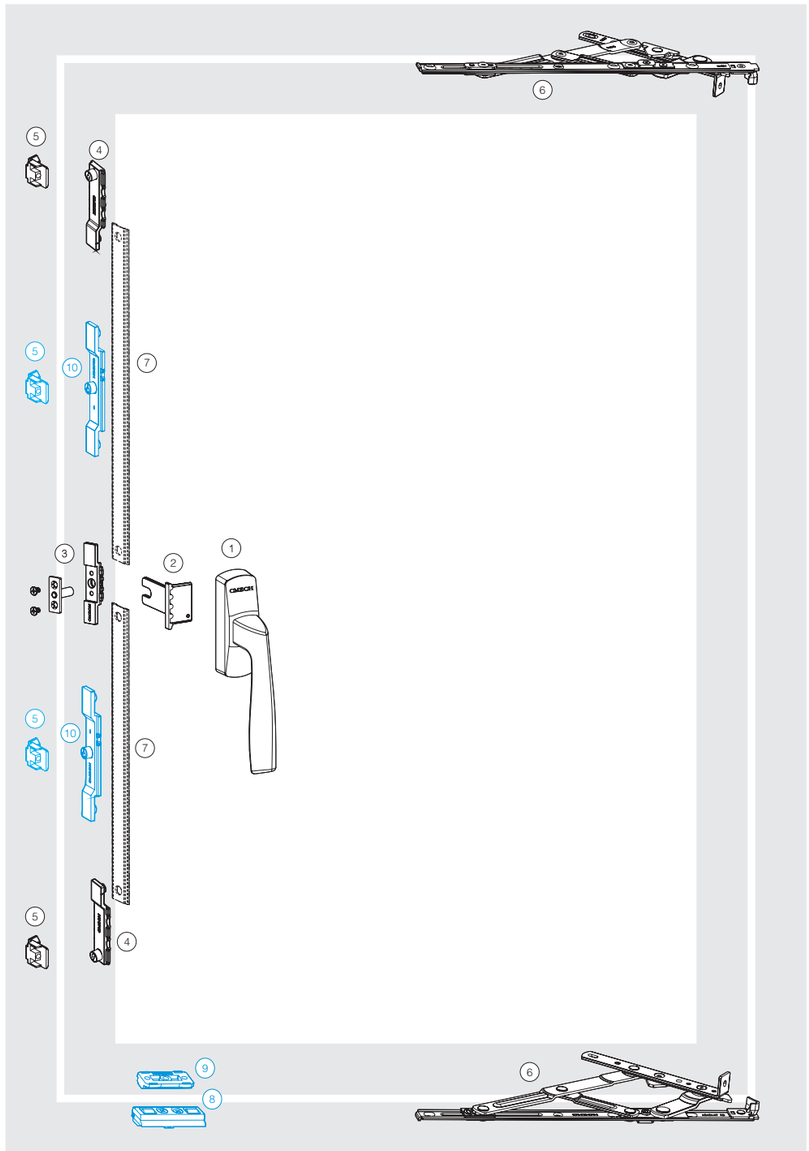


- The handles are available in many styles and colors
- Additional guide wheel support block provides a smoother operation
- Unique friction hinge block provides for easier opening of the window
- Multi-point locks can be specified to enhance water and air tightness and wind pressure resistance

Outswing Casement Window		Applicable Range
Sash Width	(mm)	300-800
Sash Height	(mm)	300-1,800
Load-bearing	(kg)	⩽60
Length of T-Drive	(mm)	17, 20, 24, 28, 32, 36, 40
Center Distance of Spindle Drive Gearbox	(mm)	22, 25, 30, 35

OUTSWING CASEMENT WINDOW HARDWARE SERIES

Fork Drive Handle (Type W) Configuration: C-Groove



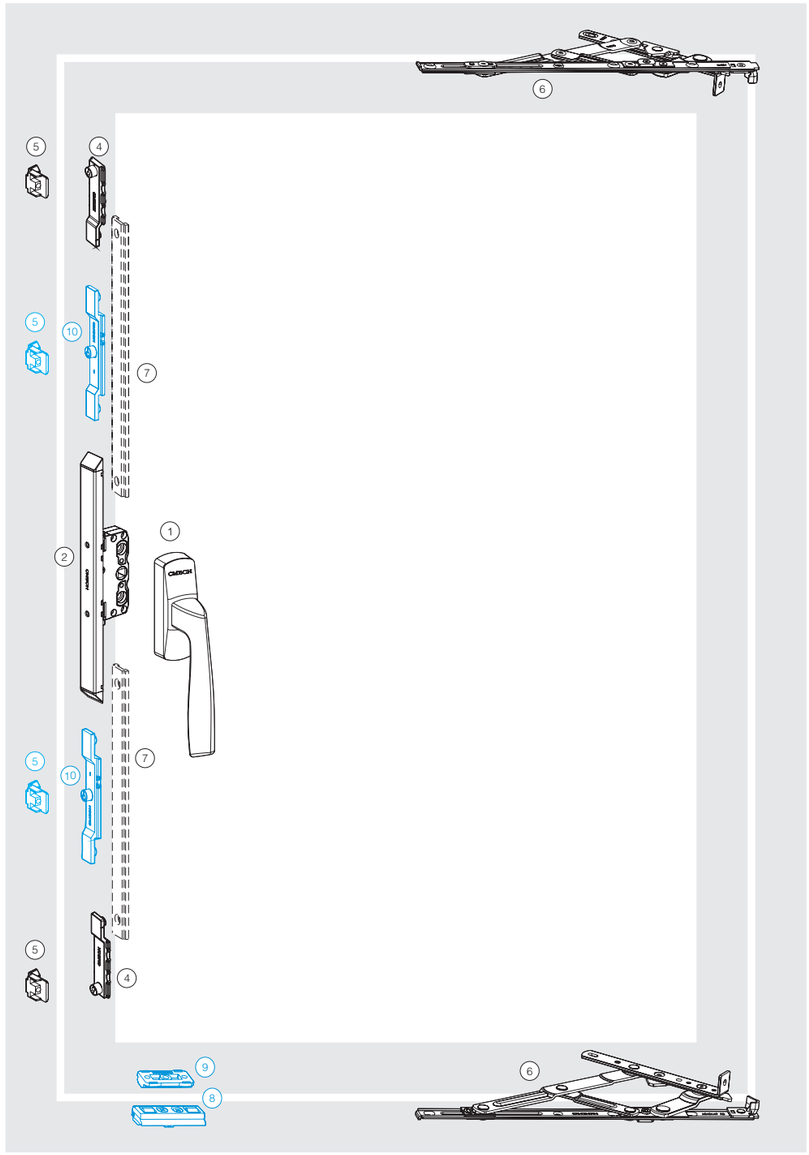
OUTSWING CASEMENT WINDOW HARDWARE SERIES

Configuration Table - Fork Drive Handle (Type W)

No.	Description	P/N	Qty	Note	Ref. Page
1	Spindle and Fork Drive Handle (Type W)	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Fork Drive		1	Offset Fork Drive, Multiple Types Available	P26
3	T-Drive		1		P27
4	Lock Point	A090048 A090008	2	Pry-Resistant Lock Point with Bearing Normal Lock Point Ø9.5x7.0 mm	P29, P30
5	Keeper	A100125 A100127	2~4	Suitable for Pry-Resistant Lock Point with Bearing Suitable for Normal Lock Point Ø9.5x7.0 mm	P31
6	Friction Hinge		1	Multiple Types Available	P32
7	Connecting Strip			Provided by Customer or Cmech	
8	Frame Support Block	A120005	1	With Guide Wheel; Height: 12.6 mm	P39
9	Sash Support Block	A080012	1	Height: 7.5 mm	P39
10	Central Lock Point	A090010 A090033	0~2	Normal Lock Point Ø9.5x7.0 mm Pry-Resistant Lock Point with Bearing	P29, P30

OUTSWING CASEMENT WINDOW HARDWARE SERIES

Spindle Drive Handle (Type W) Configuration:C-Groove



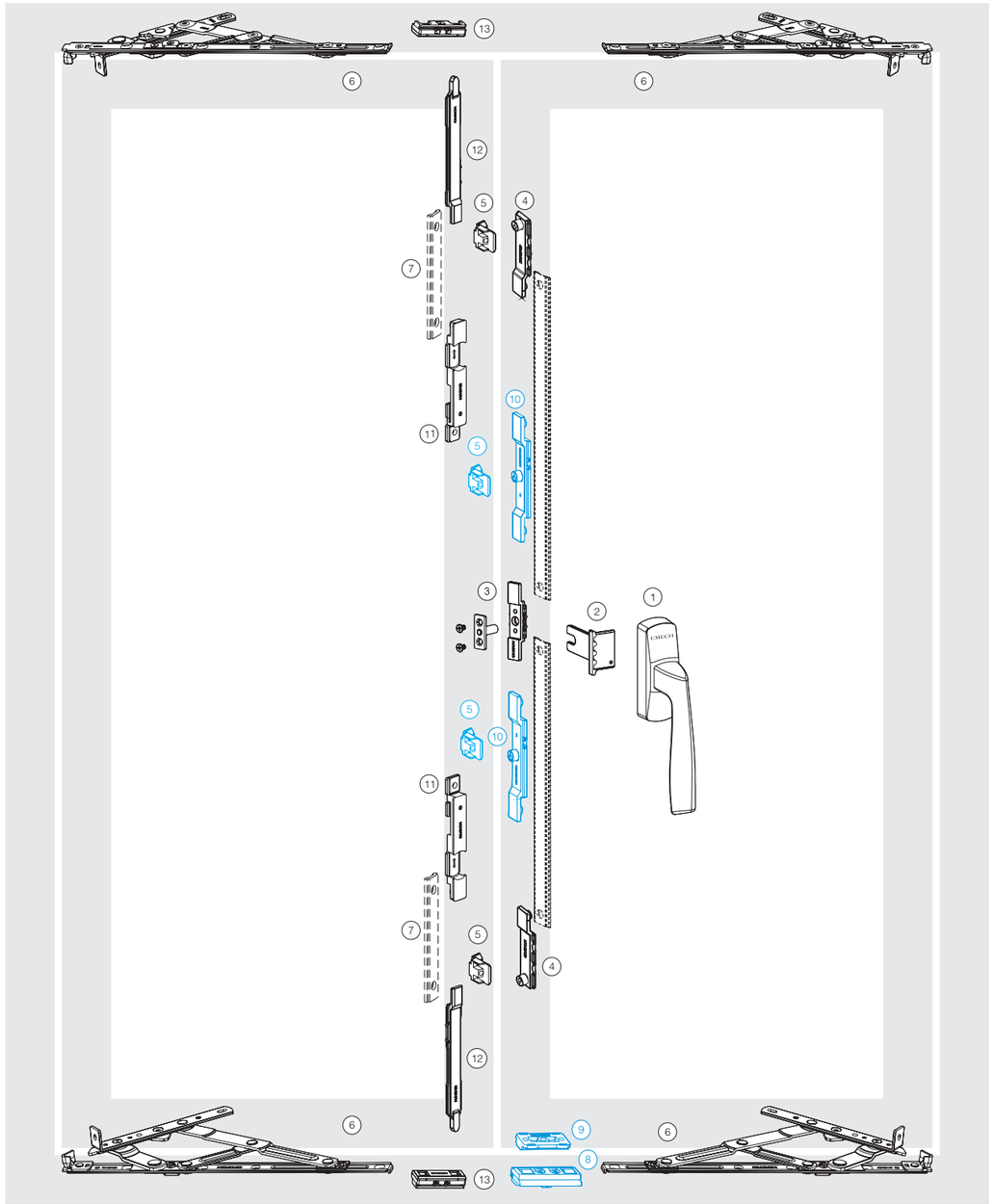
OUTSWING CASEMENT WINDOW HARDWARE SERIES

Configuration Table - Spindle Drive Handle (Type W)

No.	Description	P/N	Qty	Note	Ref. Page
1	Spindle and Fork Drive Handle (Type W)	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Bi-directional Spindle Drive Gearbox	A020146 A020148 A020150 A020152 A020186	1	Hole Center to Attachment Surface: 22 mm Hole Center to Attachment Surface: 25 mm Hole Center to Attachment Surface: 30 mm Hole Center to Attachment Surface: 35 mm Hole Center to Attachment Surface: 28 mm	P28
3	Screw Pack	A110182	1		P21, P22
4	Lock Point	A090048 A090008	2	Pry-Resistant Lock Point with Bearing Normal Lock Point Ø9.5x7.0 mm	P29, P30
5	Keeper	A100125 A100127	2~4	Suitable for Pry-Resistant Lock Point with Bearing Suitable for Normal Lock Point Ø9.5x7.0 mm	P31
6	Friction Hinge		1	Multiple Types Available	P32
7	Connecting Strip			Provided by Customer or Cmech	
8	Frame Support Block	A120005	1	With Guide Wheel; Height: 12.6 mm	P39
9	Sash Support Block	A080012	1	Height: 7.5 mm	P39
10	Central Lock Point	A090010 A090033	0~2	Normal Lock Point Ø9.5x7.0 mm Pry-Resistant Lock Point with Bearing	P29, P30

OUTSWING FRENCH CASEMENT WINDOW HARDWARE SERIES

Fork Drive Handle (Type W) Configuration



OUTSWING FRENCH CASEMENT WINDOW HARDWARE SERIES

Configuration Table - Fork Drive Handle (Type W)

No.	Description	P/N	Qty	Note	Ref. Page
1	Spindle and Fork Drive Handle (Type W)	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
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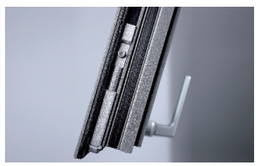
3	T-Drive		1		P27
4	Lock Point	A090048 A090008	2	Pry-Resistant Lock Point with Bearing Normal Lock Point Ø9.5x7.0 mm	P29, P30
5	Keeper	A100125 A100127	2~4	Suitable for Pry-Resistant Lock Point with Bearing Suitable for Normal Lock Point Ø9.5x7.0 mm	P31
6	Friction Hinge		2	Multiple Types Available	P32
7	Connecting Strip			Provided by Customer or Cmech	
8	Frame Support Block	A120005	1	With Guide Wheel; Height: 12.6 mm	P39
9	Sash Support Block	A080012	1	Height: 7.5 mm	P39
10	Central Lock Point	A090010 A090033	0~2	Normal Lock Point Ø9.5x7.0 mm Pry-Resistant Lock Point with Bearing	P29, P30
11	Operating Lever	A020190	2		P37
12	Shootbolt	A070007 A070008	2	19.6mmx90mm 17.6mmx90mm	P37
13	Shootbolt Bracket	A100112	2		P37

Outswing Awning Window Hardware





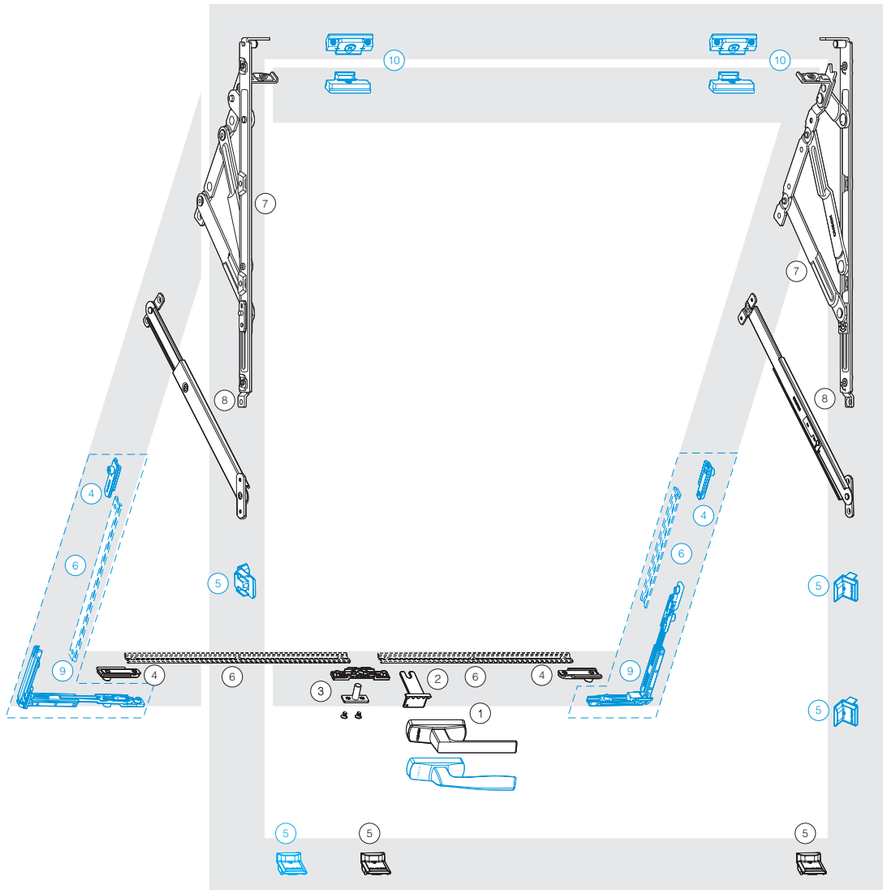


- The handles are available in many styles and colors
- Multiple types of limiting stays are available and suitable for various profiles
- Unique friction hinge block provides for easier opening of the window
- Multi-point locks can be specified to enhance water and air tightness and wind pressure resistance

Outswing Awning Window		Applicable Range
Sash Width	(mm)	400-2,000
Sash Height	(mm)	400-2,000
Load-bearing	(kg)	⩽150
Length of T-Drive	(mm)	17, 20, 24, 28, 32, 36, 40
Center Distance of Spindle Drive Gearbox	(mm)	22, 25, 30, 35

OUTSWING AWNING WINDOW HARDWARE SERIES

Fork Drive Handle (Type W) and Free-Mill Friction Configuration



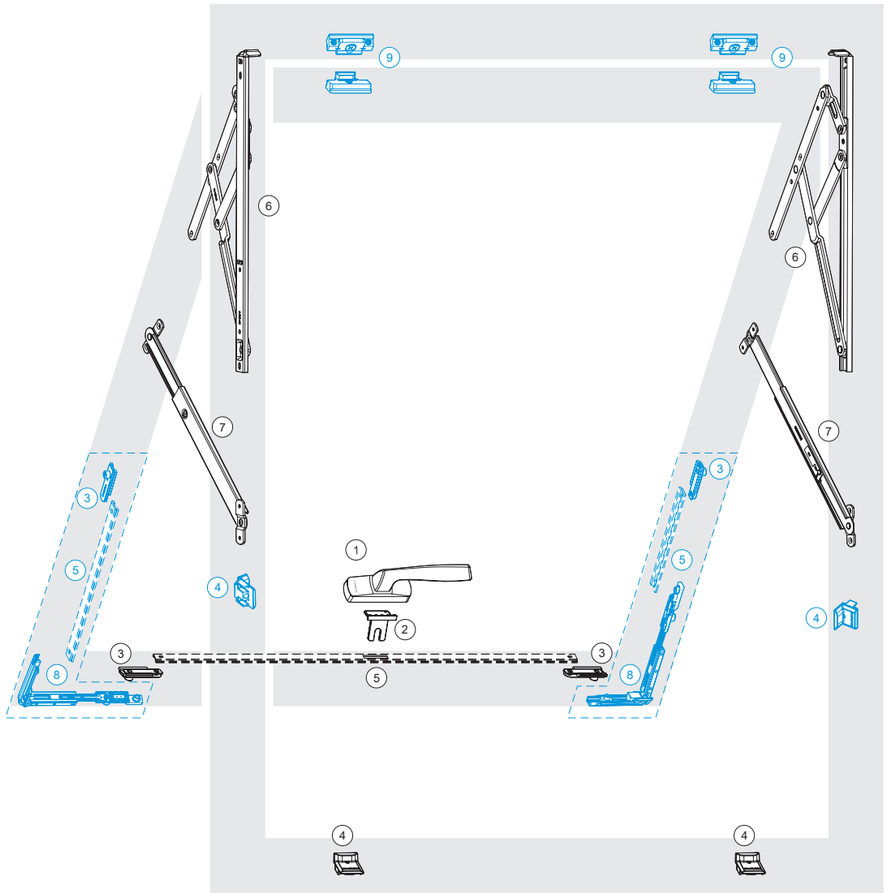
OUTSWING AWNING WINDOW HARDWARE SERIES

Configuration Table - Fork Drive Handle and Free-Mill Friction (Type W)

No.	Description	P/N	Qty	Note	Ref. Page
1	Spindle and Fork Drive Handle (Type W)	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Fork Drive		1	Offset Fork Drive, Multiple Types Available	P26
3	T-Drive		1		P27
4	Lock Point	A090048 A090008	2~4	Pry-Resistant Lock Point with Bearing Normal Lock Point Ø9.5x7.0 mm	P29, P30
5	Keeper	A100125 A100127	2~6	Suitable for Pry-Resistant Lock Point with Bearing Suitable for Normal Lock Point Ø9.5x7.0 mm	P31
6	Connecting Strip			Provided by Customer or Cmech	
7	Friction Hinge		1	Multiple Types Available	P36
8	Limiting Stay		1	Multiple Types Available	P38
9	Corner Drive	C060009	2		P28
10	Hidden Lock	A100104	2	For a Single-Sided C-Groove	P39
11	Limiting Stay Screw Pack	H110003	2		
12	Friction Hinge Screw Pack		2	Determined by Friction Hinge	

OUTSWING AWNING WINDOW (CURTAIN WALL) HARDWARE SERIES

Fork Drive Handle (Type W) Configuration



OUTSWING AWNING WINDOW (CURTAIN WALL) HARDWARE SERIES

Configuration Table - Fork Drive Handle (Type W)

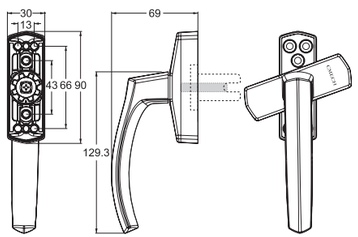
No.	Description	P/N	Qty	Note	Ref. Page
1	Spindle and Fork Drive Handle (Type W)	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Fork Drive		1	Offset Fork Drive, Multiple Types Available	P26
3	Lock Point	A090048 A090008	2~4	Pry-Resistant Lock Point with Bearing Normal Lock Point Ø9.5x7.0 mm	P29, P30
4	Keeper	A100125 A100127	2~6	Suitable for Pry-Resistant Lock Point with Bearing Suitable for Normal Lock Point Ø9.5x7.0 mm	P31
5	Connecting Strip			Provided by Customer or Cmech	
6	Friction Hinge		1	Multiple Types Available	P36
7	Limiting Stay		1	Multiple Types Available	P38
8	Corner Drive	C060009	2		P28
9	Hidden Lock	A100104	2	For a Single-Sided C-Groove	P39
10	Limiting Stay Screw Pack	H110003	2		
11	Friction Hinge Screw Pack		2	Determined by Friction Hinge	

HANDLE SELECTIONS

NEW YORK SERIES



A010107-
Spindle and Fork Drive Handle (Offset Gasket)
Suitable foe Outswing Casement Windows, Inswing Casement Windows

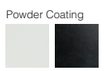


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

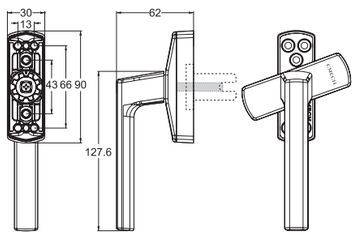


White 09 | Mat Black 17

KOLN SERIES



A010210-
Spindle and Fork Drive Handle (Offset Gasket)
Suitable foe Outswing Casement Windows, Inswing Casement Windows

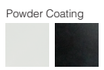


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



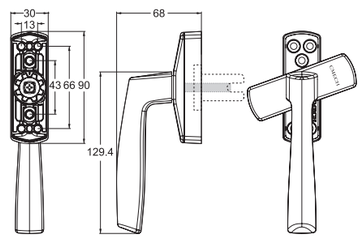
White 09 | Mat Black 17

HANDLE SELECTIONS

BERLIN SERIES



A010406-
Spindle and Fork Drive Handle (Offset Gasket)
Suitable foe Outswing Casement Windows, Inswing Casement Windows

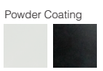


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

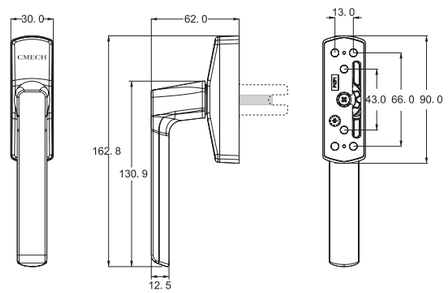


White 09 | Mat Black 17

MILAN SERIES



A010601-
Spindle and Fork Drive Handle (Offset Gasket)
Suitable foe Outswing Casement Windows, Inswing Casement Windows

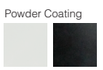


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



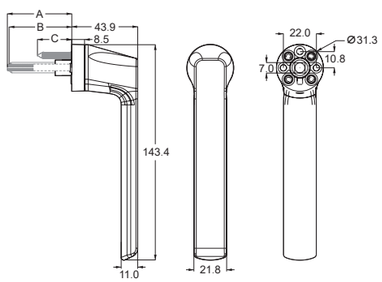
White 09 | Mat Black 17

HANDLE SELECTIONS

MILAN SERIES



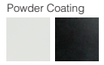
A010603-
L Series Milan Round-Base Handle without Spindle



M Treatment



Powder Coating



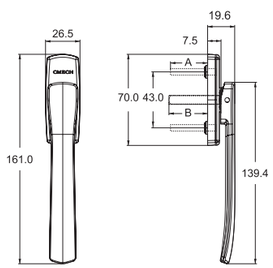
Screw Pack

P/N	A	B	C
A110239	20-5=15	20	ST4.2X14 Self-Tapping Screws
A110219	25-5=20	20	ST4.2X14 Self-Tapping Screws
A110220	30-5=25	25	ST4.2X14 Self-Tapping Screws
A110221	35-5=30	30	ST4.2X14 Self-Tapping Screws
A110222	45-5=40	40	ST4.2X14 Self-Tapping Screws
A110223	55-5=50	50	ST4.2X14 Self-Tapping Screws
A110224	65-5=60	60	ST4.2X14 Self-Tapping Screws
A110225	75-5=70	70	ST4.2X14 Self-Tapping Screws
A110226	85-5=80	80	ST4.2X14 Self-Tapping Screws
A110227	95-5=90	90	ST4.2X14 Self-Tapping Screws
A110240	20-5=15	20	M4X20 Ram Screws
A110228	25-5=20	20	M4X20 Ram Screws
A110229	30-5=25	25	M4X20 Ram Screws
A110230	35-5=30	30	M4X20 Ram Screws
A110231	45-5=40	40	M4X20 Ram Screws
A110232	55-5=50	50	M4X20 Ram Screws
A110233	65-5=60	60	M4X20 Ram Screws
A110234	75-5=70	70	M4X20 Ram Screws
A110235	85-5=80	80	M4X20 Ram Screws
A110236	95-5=90	90	M4X20 Ram Screws
A110249	50-5=45	45	M4X20 Ram Screws
A110258	/	25	/
A110259	/	30	/
A110260	/	50	/
A110261	/	60	/

FLY SCREEN HANDLE



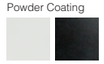
A010004-
Fly Screen Handle
Suitable for: Outswing Casement Windows



M Treatment



Powder Coating



Screw Pack

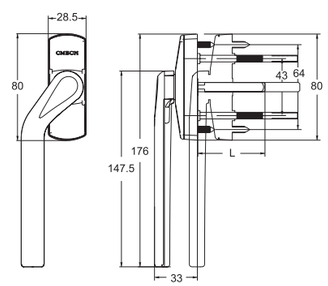
P/N	A	B
A110179	28.8	26.5
A110180	33.8	32.5
A110181	38.8	37.5
A110182	43.8	42.5
A110183	53.8	52.5
A110184	63.8	62.5
A110185	73.8	72.5
A110186	88.8	87.5
A110187	103.8	102.5
A110188	118.8	117.5

HANDLE SELECTIONS

TURN HANDLE



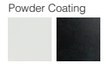
Turn Handle (Left)



M Treatment



Powder Coating

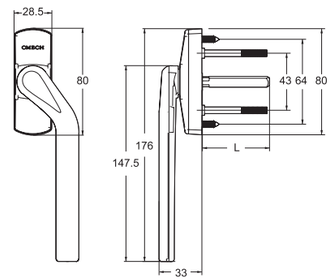


P/N	L	Material	Suitable for
A010408-	20	Zinc Alloy	Outswing Casement Windows Inswing Casement Windows Outswing Awning Windows
A010409-	30		
A010410-	40		
A010411-	50		
A010412-	55		
A010413-	60		
A010414-	65		
A010415-	75		
A010416-	90		
A010417-	105		
A010418-	120		
A010432-	135		

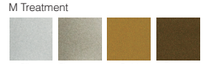
Note: Screw Pack J110001~J110019

Turn Handle (Right)

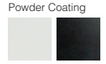




M Treatment



Powder Coating

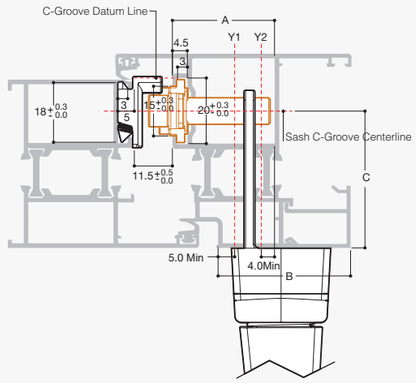


P/N	L	Material	Suitable for
A010419-	20	Zinc Alloy	Outswing Casement Windows Inswing Casement Windows Outswing Awning Windows
A010420-	30		
A010421-	40		
A010422-	50		
A010423-	55		
A010424-	60		
A010425-	65		
A010426-	75		
A010427-	90		
A010428-	105		
A010429-	120		
A010433-	135		

Note: Screw Pack J110001~J110019

HANDLE PROFILE AND DRILLING REQUIREMENTS

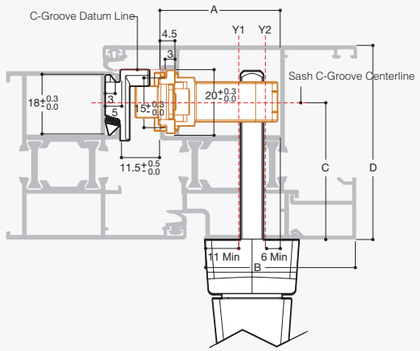
C-Groove Profile Detail Drawing
Fork Drive Handle Configuration (Type W)



Relationship Between Dimensions and Hardware:

A: Determines the maximum length allowable for the T-drive
B: Determines the allowable width of the handle plate. The chosen fork must be between lines Y1 and Y2
C: Determines the length of the fork: the shortest fork length is C+5.0 mm, while the longest length is C+10.0 mm

C-Groove Profile Detail Drawing
Spindle Drive Handle Configuration (Type W)



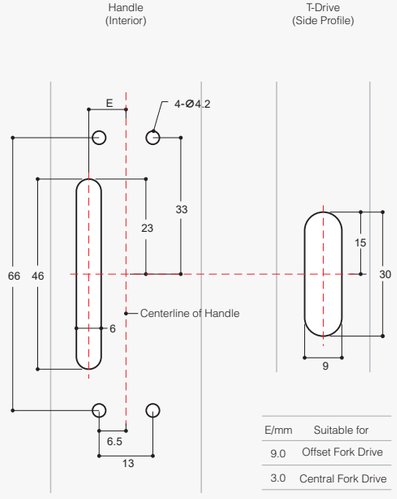
Relationship Between Dimensions and Hardware:

A: Determines the maximum length allowable for the for spindle drive

A & B: Determines the horizontal hole distance and the allowable width of the handle plate. The centerline of the holes in the drive must be between lines Y1 and Y2

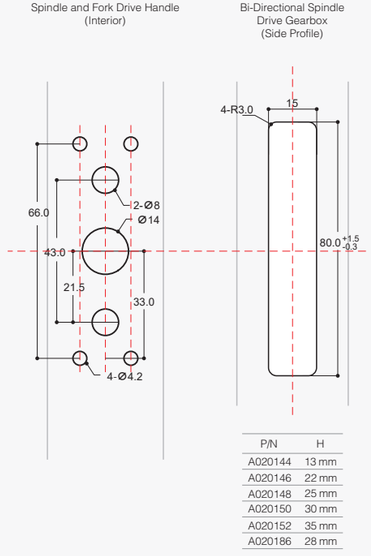
C & D: Determines the length of the spindle: the shortest length is C+6.0 mm, while the longest length is D-profile thickness-2.0 mm

Drill Hole Drawing



E/mm	Suitable for
9.0	Offset Fork Drive
3.0	Central Fork Drive

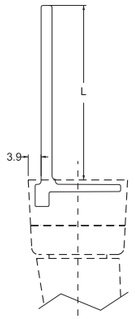
Drill Hole Drawing

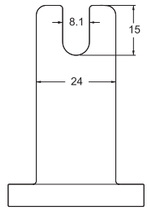


P/N	H
A020144	13 mm
A020146	22 mm
A020148	25 mm
A020150	30 mm
A020152	35 mm
A020186	28 mm

FORK DRIVES

Offset Fork Drive Dimensions and Selections





P/N	L	Specifications
A110097	21	21x3.9
A110098	27	27x3.9
A110099	31	31x3.9
A110100	33	33x3.9
A110101	41	41x3.9
A110102	45	45x3.9
A110103	37	37x3.9
A110104	49	49x3.9
A110105	53	53x3.9
A110106	63	63x3.9

Note: The Offset Fork Drive must be specified with a Type W handle with an offset gasket (included with handle screw pack).

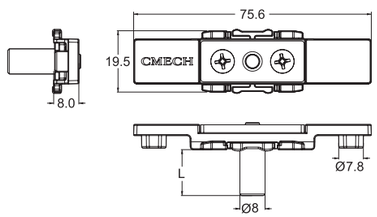


PN	XINGFA		MAXPRO				XF CLASSA	SOCO		PMI
	55	55A	58	65	70	83	65	65	45	55D
A110097										
A110098	○	○								○
A110099										
A110100										
A110101			○			○				
A110102			○			○			○	
A110103										
A110105				○	○		○			
A110106								○		

PN	ROLAN		KOGEN	JMA			ALUK		PMA	
	RC66	R60	60	60C	TAM 60	55	55	65	55	65
A110097										
A110098						○			○	
A110099										
A110100					○					
A110101										
A110102			○							
A110103										
A110105		○		○			○			
A110106	○							○		○

FORK DRIVES

Reinforced T-Drive



P/N	L
A020115	14.5 mm
A020116	18.5 mm
A020117	22.5 mm
A020126	26.5 mm
A020127	30.5 mm
A020128	34.5 mm
A020129	11.5 mm
A020180	20.5 mm

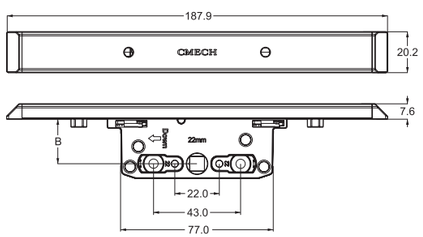


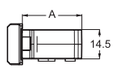
PN	XINGFA	MAXPRO					XF CLASSA	SOCO	PMI		
	55	55	58	65	70	83	65	65	45	55D	56
A020116									○		
A020117	○	○	○			○				○	
A020126				○	○		○	○			○

PN	ROLAN		KOGEN	JMA			ALUK		PMA	
	RC66	R60	60	60C	TAM 60	55	55	65	55	65
A020116										
A020117					○	○			○	
A020126	○	○	○	○			○	○		○

TRANSMISSION MACHANISM

Bi-Directional Spindle Drive Gearbox (L Series)



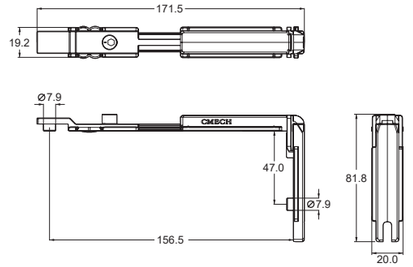


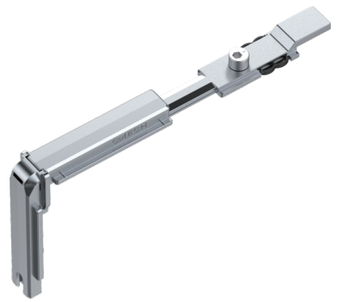


P/N	A	B
A020146	24.7 mm	22 mm
A020148	27.7 mm	25 mm
A020150	32.7 mm	30 mm
A020152	37.7 mm	35 mm
A020186	35.3 mm	28 mm

C060009

Corner Drive

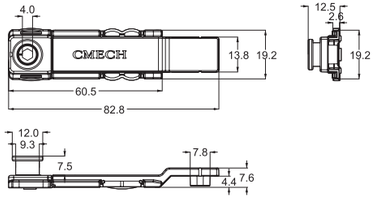




LOCK POINTS

A090048

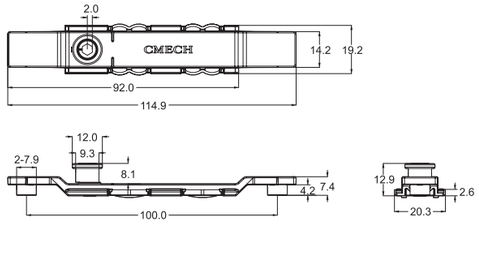
Pry-Resistant End Lock Point (L Series)





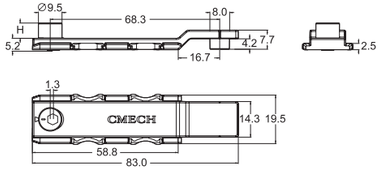
A090034

Pry-Resistant Central Lock Point with Bearing





End Lock Point

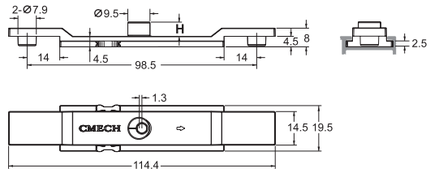


P/N	H
A090007	6.2 mm
A090008	7.2 mm



LOCK POINTS

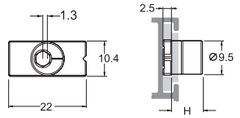
Central Lock Point

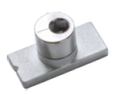




P/N	H
A090009	6.0 mm
A090010	7.0 mm

Single-Stage Active Lock Point

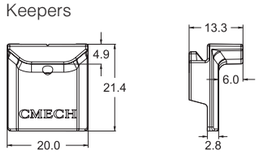




P/N	H
A090011	8.7 mm
A090012	9.7 mm

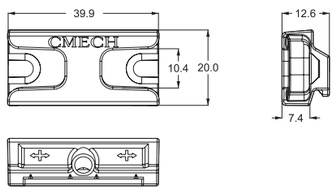
KEEPERS

A100127
Keepers



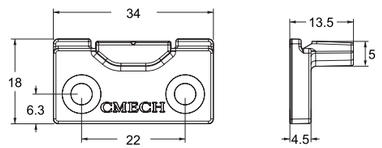


A100125
Pry-Resistant Keepers with Bearing(L Series)



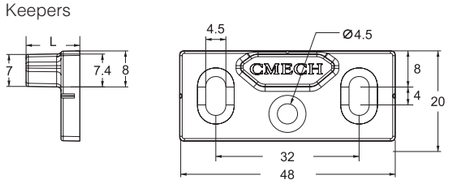


A100111
Keepers





Keepers

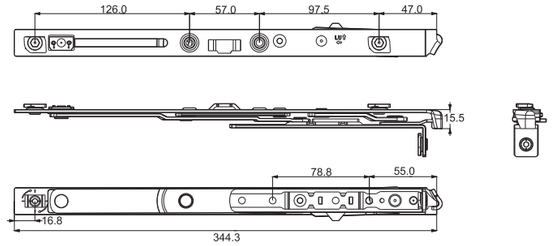




P/N	L
A100114	9.5 mm
A100108	12 mm
A100109	14 mm

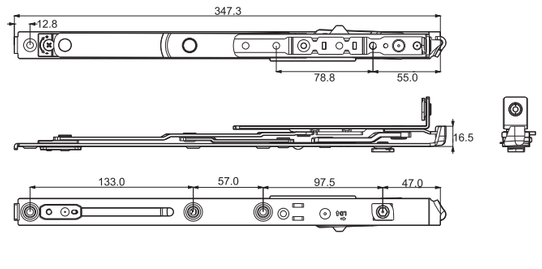
HINGES

A040201
14" Free-Mill Friction Up Hinge Left (L Series) (C-Groove)
Suitable for Sash Width: 400-750 mm

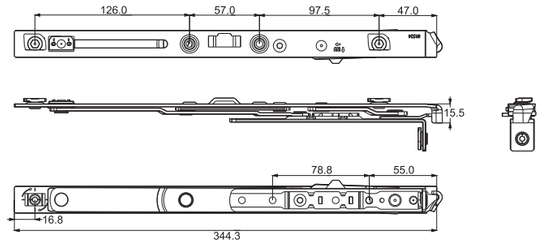




14" Free-Mill Friction Lower Hinge Left (L Series) (C-Groove)
Suitable for Sash Width: 400-750 mm

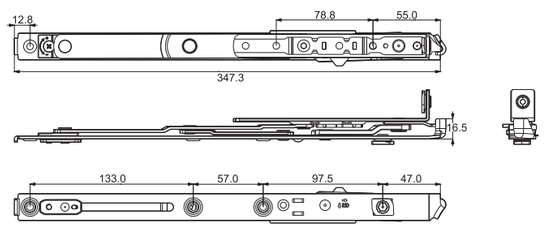


A040202
14" Free-Mill Friction Up Hinge Right (L Series) (C-Groove)
Suitable for Sash Width: 400-750 mm





14" Free-Mill Friction Lower Hinge Right (L Series) (C-Groove)
Suitable for Sash Width: 400-750 mm

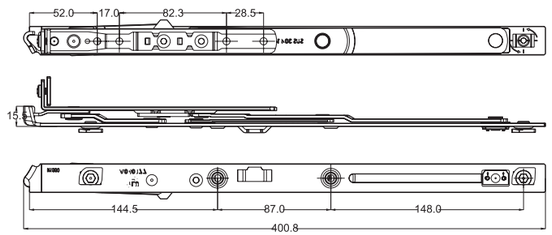


HINGES

A040177

16" Free-Mill Friction Up Hinge Left

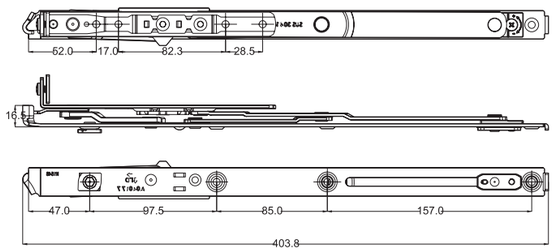
Suitable for Sash Width: 500-800 mm





16" Free-Mill Friction Lower Hinge Left

Suitable for Sash Width: 500-800 mm

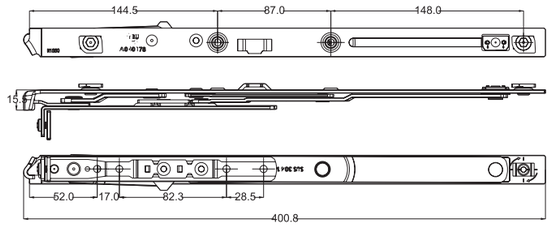




A040178

16" Free-Mill Friction Up Hinge Right

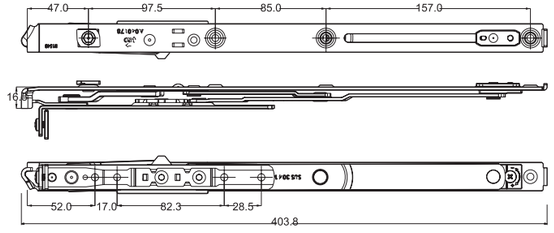
Suitable for Sash Width: 500-800 mm





16" Free-Mill Friction Lower Hinge Right

Suitable for Sash Width: 500-800 mm



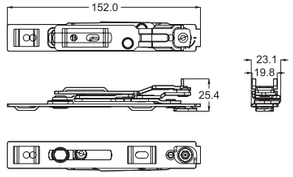


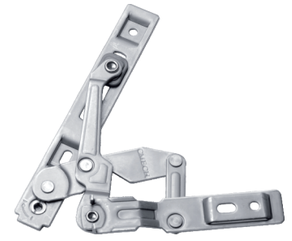
HINGES

B040079

165° Fly Screen Friction Hinge(S Series) (C-Groove)

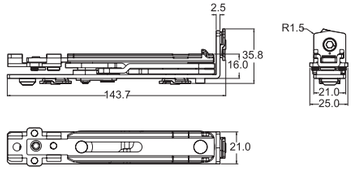
Suitable for Sash Width: 400-750 mm





B040054

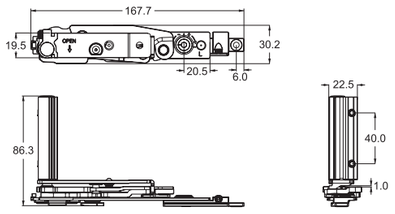
60 kg Concealed Hinge

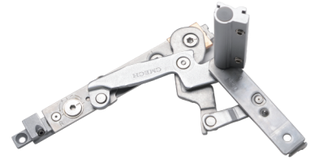




B040073

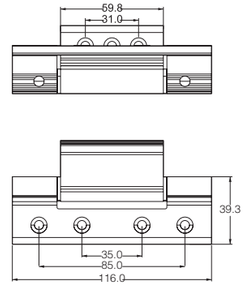
100 kg Hinge





B040059

80 kg Hinge



M Treatment

Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

White 09 | Mat Black 17

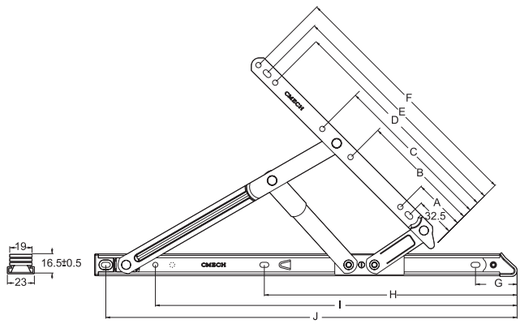


HINGES

Suitable for Outswing Casement Windows

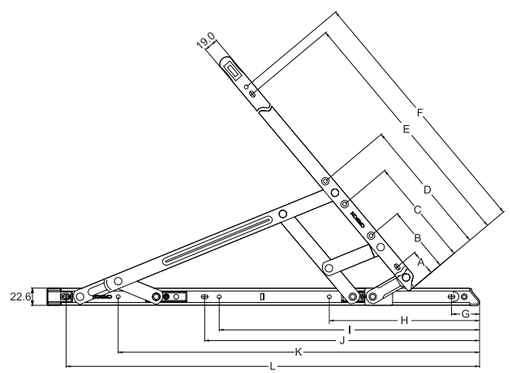
Four-Bar Linkage





Six-Bar Linkage





Technical Parameters

P/N	Direction	Size (in.)	# of Bars	Max. Sash Height mm	Max. Sash Width mm	Max. Sash Weight kg	Opening Angle ±2°	Screw Pack P/N
A040131	Left & Right	10	4	1,600	500	32	80	A110123
A040132	Left & Right	12	4	1,600	600	38	84	A110124
A040133	Left & Right	14	4	1,600	650	40	87	A110124
A040134	Left & Right	16	4	1,800	750	42	79	A110124
A040135	Left & Right	18	4	1,800	800	45	79	H110004
A040136	Left & Right	20	4	1,800	800	48	80	A110130
A040139	Left & Right	22	6	1,800	900	48	80	A110135
A040142	Left & Right	24	6	1,800	1,000	50	25/45/88	A110147

Installation Sizes

P/N	Direction	Size (in.)	Stack Height (mm)	Specifications mm											
				A	B	C	D	E	F	G	H	I	J	K	L
A040131	Left & Right	10	16.5	46	66.5	106.5	-	198	210.5	35.5	213.5	-	255.5	-	-
A040132	Left & Right	12	16.5	46	66.5	126.5	-	223	235	35.5	226.5	252.5	304.5	-	-
A040133	Left & Right	14	16.5	46	97.5	147.5	-	253.5	266	35.5	248.5	302	357	-	-
A040134	Left & Right	16	16.5	46	97.5	137.5	-	274.5	287	35.5	240.5	339.5	406.5	-	-
A040135	Left & Right	18	16.5	46	87.5	127.5	-	287.5	300	35.5	218.5	395	455.5	-	-
A040136	Left & Right	20	16.5	46.5	176.5	218.5	284.5	322	334.5	35.5	392	460	509	-	-
A040139	Left & Right	22	16.5	35	89.5	144.5	184.5	506	518.5	37.5	-	348	367.5	483	552.5
A040142	Left & Right	24	16.5	33.5	111.5	173.5	213.5	578.5	-	32	See Notes	-	405	535	600.5

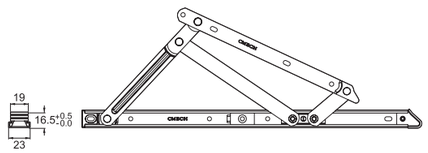
Notes: The H dimension of A040142 limits the maximum opening angle of the friction hinge using different hole locations: 25°
When H=164.5, 45° when H=216.2, and 88° when H=364.5

HINGES

Suitable for Outswing Awning Windows

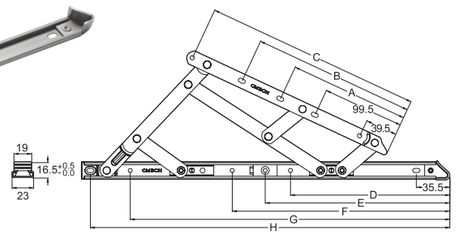
Four-Bar Linkage





Six-Bar Linkage





Technical Parameters

P/N	Direction	Size (in.)	# of Bars	Max. Sash Height (mm)	Max. Sash Width (mm)	Max. Sash Weight (kg)	Opening Angle (±2°)	Screw Pack P/N
H040057	Left & Right	12	4	800	1,200	50	30/35	H110004
H040058	Left & Right	14	4	1,000	1,200	65	30/35	H110004
H040059	Left & Right	16	4	1,200	1,200	82	25/30	H110004
H040060	Left & Right	18	6	1,400	1,500	100	25/30	H110004
H040061	Left & Right	20	6	1,600	1,600	108	20/25	A110129
H040062	Left & Right	22	6	1,800	1,800	110	20/25	A110129
H040063	Left & Right	24	6	1,800	1,800	120	15/20	H110004
H040064	Left & Right	26	6	1,900	2,000	125	15/20	A110129
H040065	Left & Right	28	6	2,000	2,000	130	15/20	A110129

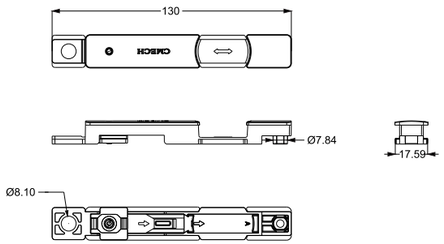
Installation Sizes

P/N	Direction	Size (in.)	Stack Height (mm)	Specifications (mm)							
				A	B	C	D	E	F	G	H
H040057	Left & Right	12	16.5	-	132.5	174.5	167	188	225	259	301.5
H040058	Left & Right	14	16.5	-	158.5	200.5	182	206	247.5	303.5	348.5
H040059	Left & Right	16	16.5	-	200.5	242.5	174.5	207.5	249	365.5	409.5
H040060	Left & Right	18	16.5	-	226.5	268.5	181.5	214.5	256	410.5	454.5
H040061	Left & Right	20	16.5	-	259.5	301.5	163	193	234.5	463.5	508.5
H040062	Left & Right	22	16.5	-	290.5	332.5	166	196.5	238	509.5	554.5
H040063	Left & Right	24	16.5	-	322.5	364.5	170.5	199.5	406	553.5	598.5
H040064	Left & Right	26	16.5	232.5	365.5	407.5	175.5	205.5	455	602.5	654.5
H040065	Left & Right	28	16.5	247.5	396.5	438.5	178.5	210.5	504	651.5	703.5

FRENCH CASEMENT WINDOW ACCESSORIES

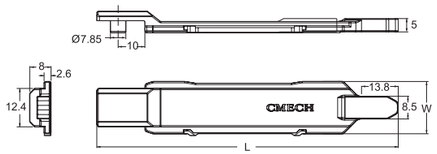
A020190

Operating Lever





Shootbolt

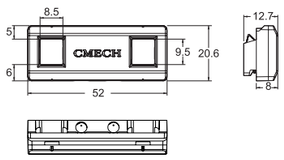


P/N	Size	
	L (mm)	W (mm)
A070005	156	19.6
A070006	156	17.6
A070007	90	19.6
A070008	90	17.6



A100112

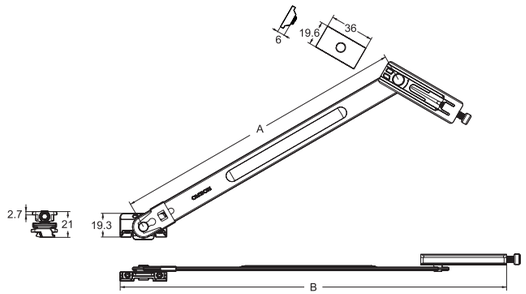
Shootbolt Bracket





OTHER ACCESSORIES

Limiting Stay

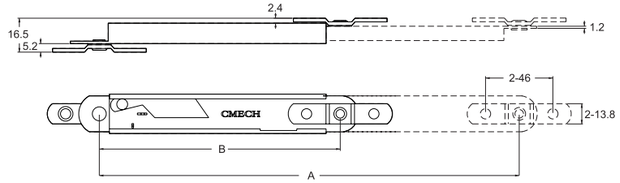




Specifications

P/N	Size/in.	A	B
B040041	10	240 mm	315 mm
B040042	14	347 mm	422 mm

Limiting Stay

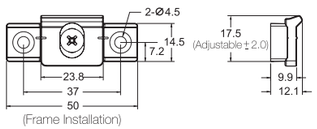


P/N	Direction	Size/in.	A	B
H040066	Left & Right	8	205	155
H040067	Left & Right	10	255	180
H040068	Left & Right	12	305	205
H040069	Left & Right	14	355	230
H040070	Left & Right	16	409	257
H040071	Left & Right	18	461	289
H040072	Left & Right	20	515	310



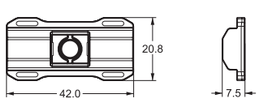
OTHER ACCESSORIES

A100104
Hidden Lock
Suitable for Single-Sided C-Groove



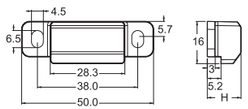


A080012
Sash Support Block





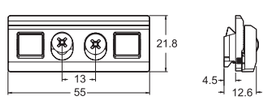
Frame Support Block



P/N	H
A080003	12.8
A080004	8.3

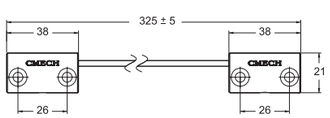


A120005
Frame Support Block with Guide Wheels





A120003
Safety Catch System Hardware





Tilt & Turn Window Hardware







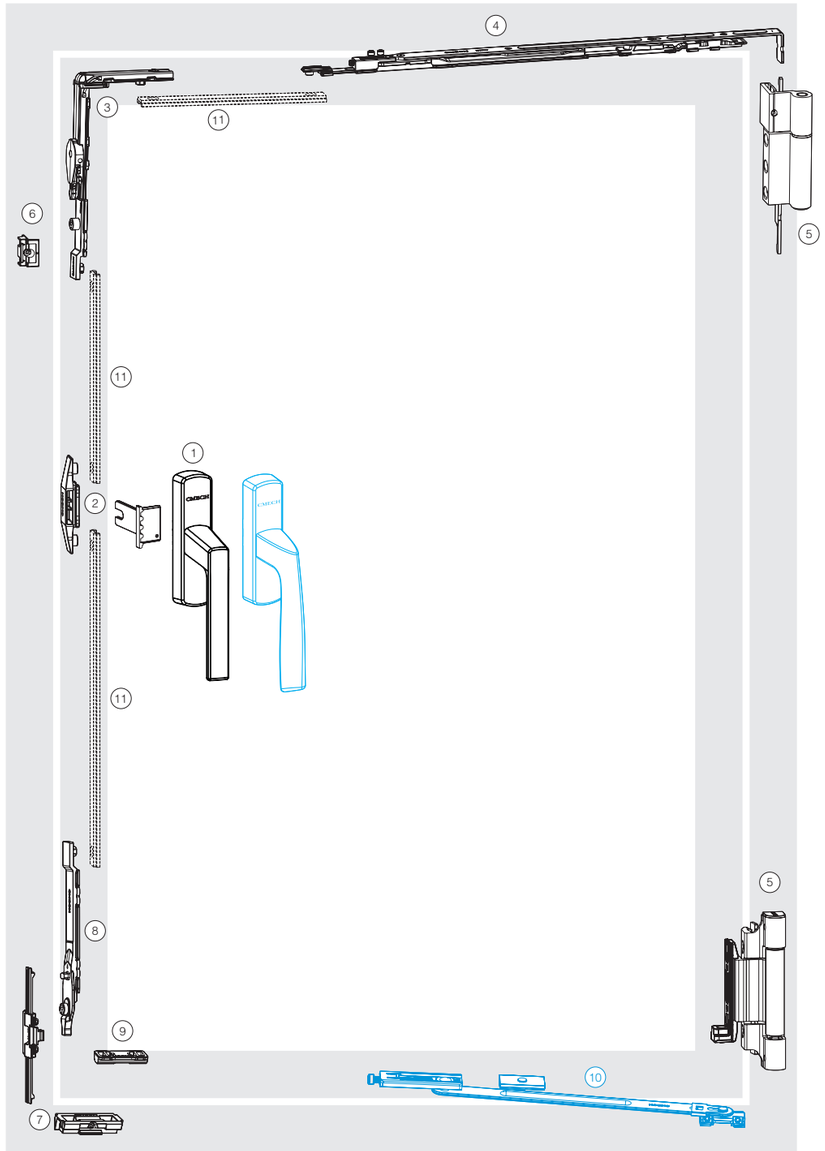
- The handles are available in many styles and colors
- Hinges are easy to adjust and corner drives are quick to install
- Multi-point locks can be specified to enhance water and air tightness and wind pressure resistance

Tilt & Turn Window with Exposed Hinge		Applicable Range
Sash Width	(mm)	390-1,300
Sash Height	(mm)	600-2,400
Load-bearing	(kg)	⩽80

Tilt & Turn Window with Concealed Hinge		Applicable Range
Sash Width	(mm)	490-1,200
Sash Height	(mm)	600-2,400
Load-bearing	(kg)	⩽90

TILT & TURN WINDOW HARDWARE SERIES

Fork Drive Handle with Exposed Hinge (80 kg) Configuration



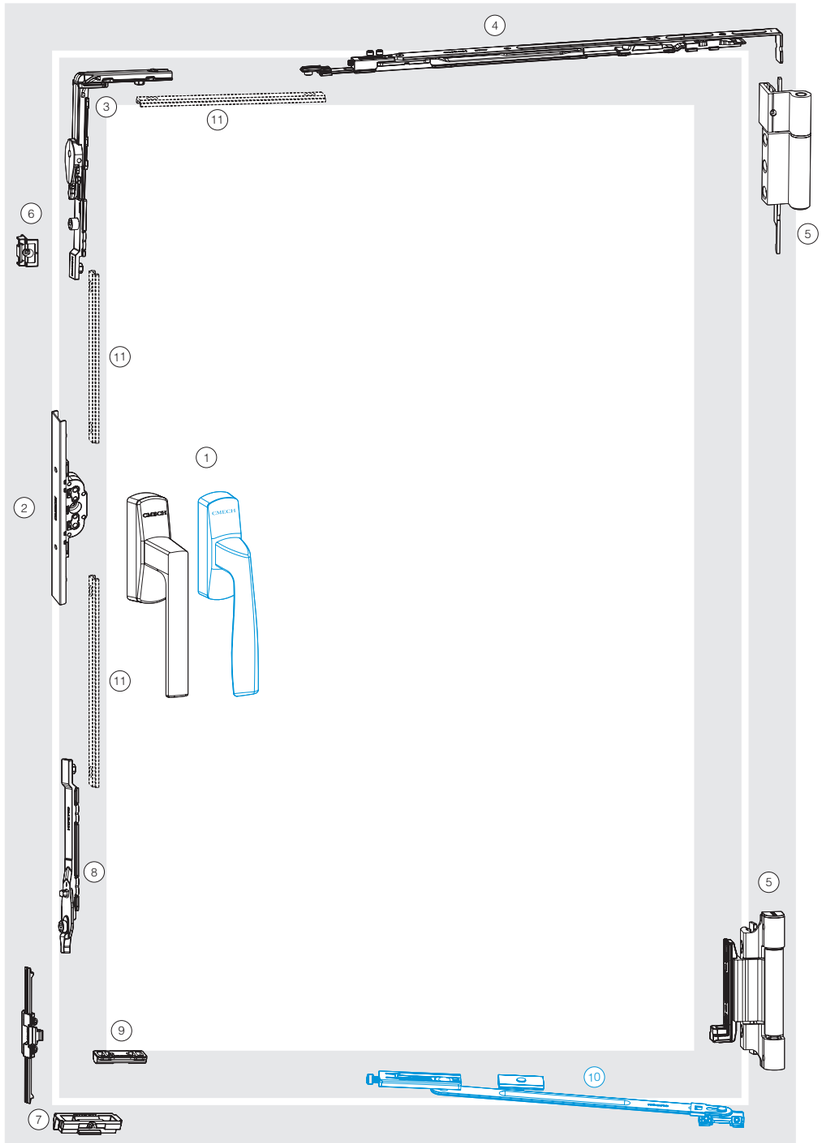
TILT & TURN WINDOW HARDWARE SERIES

Configuration Table - Fork Drive Handle with Exposed Hinge (80 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Fork Drive Handle (Type TT)	C010101 C010201 C010401	1	New York Series Koln Series Berlin Series	P47, P48
2	Fork Drive Connector	B020004	1		P49
3	Fail-Safe Corner Drive	C060010	1	Regular Lock Point	P49
4	Stay	C020008 C020009	1	Sash Width: 450-750 mm Sash Width: 600-1,200 mm	P50
5	Upper and Lower Hinges	C040005	1	80 kg	P52
6	Keeper	A100127	1~2		P31
7	Tilt Strike Pack	C070003	1		P50
8	Tilt Bolt	C070006	1		P50
9	Sash Support Block	A080012	1	Without Bearing	P39
10	Limiting Stay	B040041 B040042	1	10" 14"	P38
11	Connecting Strip		3	Provided by Customer or Cmech	
12	Handle Screw Pack	C110004	1		

TILT & TURN WINDOW HARDWARE SERIES

Spindle Drive Handle with Exposed Hinge (80 kg) Configuration



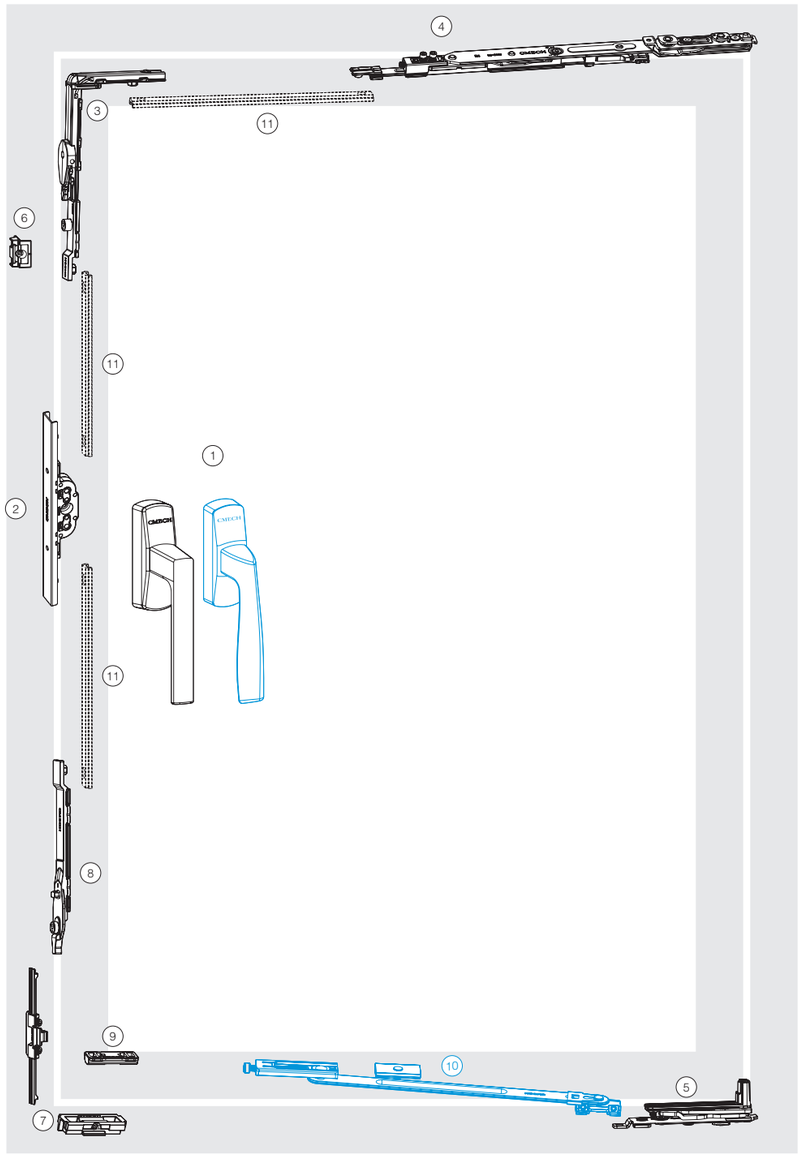
TILT & TURN WINDOW HARDWARE SERIES

Configuration Table - Spindle Drive Handle with Exposed Hinge (80 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Spindle Drive Gearbox	C020020 C020017	1	Hole Center to Attachment Surface: 11.5 mm Hole Center to Attachment Surface: 15 mm	P49
3	Fail-Safe Corner Drive	C060010	1	Regular Lock Point	P49
4	Stay	C020008 C020009	1	Sash Width: 450-750 mm Sash Width: 600-1,200 mm	P50
5	Upper and Lower Hinges	C040005	1	80 kg	P52
6	Keeper	A100127	1~2		P31
7	Tilt Strike Pack	C070003	1		P50
8	Tilt Bolt	C070006	1		P50
9	Sash Support Block	A080012	1	Without Bearing	P39
10	Limiting Stay	B040041 B040042	1	10" 14"	P38
11	Connecting Strip		3	Provided by Customer or Cmech	
12	Handle Screw Pack	C110004	1		

TILT & TURN WINDOW HARDWARE SERIES

Spindle Drive Handle with Concealed Hinge (90 kg) Configuration



TILT & TURN WINDOW HARDWARE SERIES

Configuration Table - Spindle Drive Handle with Concealed Hinge (90 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Spindle Drive Gearbox	C020020 C020017	1	Hole Center to Attachment Surface: 11.5 mm Hole Center to Attachment Surface: 15 mm	P49
3	Fail-Safe Corner Drive	C060010	1	Regular Lock Point	P49
4	490 Upper Hinge Left 490 Upper Hinge Right 650 Upper Hinge Left 650 Upper Hinge Right	C040049 C040050 C040051 C040052	1	Sash Width 490-750 mm, Left-Opening Sash Sash Width 490-750 mm, Right-Opening Sash Sash Width 600~1200mm, Left-Opening Sash Sash Width 600~1200mm, Right-Opening Sash	P51
5	Concealed Lower Hinge Left Concealed Lower Hinge Right	C040045 C040046	1	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P52
6	Keeper	A100127	1~2		P31
7	Tilt Strike Pack	C070003	1		P50
8	Tilt Bolt	C070006	1		P50
9	Sash Support Block	A080012	1	Without Bearing	P39
10	Limiting Stay	B040041 B040042	1	10" 14"	P38
11	Connecting Strip		3	Provided by Customer or Cmech	
12	Handle Screw Pack	C110004	1		

TILT & TURN WINDOW PROFILE

Available profiles

Hardware Type	MAXPRO					XF CLASSA	SOCO	PMI
	55C	58	65	70	83	65	65	56
Exposed Hinge				○	○	○		○
Concealed Hinge	○	○	○	○	○	○	○	○

Available profiles

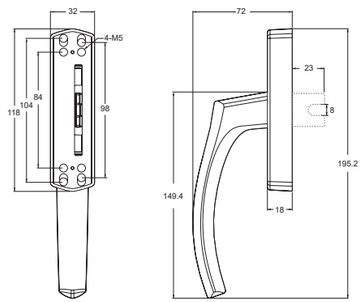
Hardware Type	ROLAN		KOGEN	JMA	ALUK		PMA
	RC66	R60	60	60C	55	65	65
Exposed Hinge	○	○		○	○	○	○
Concealed Hinge	○	○	○	○	○	○	○

HANDLE SELECTIONS

NEW YORK SERIES



Fork Drive Handle (Type TT)



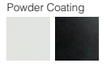
P/N	Material	Suitable for
C010101-	Zinc Alloy	Tilt & Turn Windows Inswing Casement Windows
C010102-	Aluminum Alloy	

M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



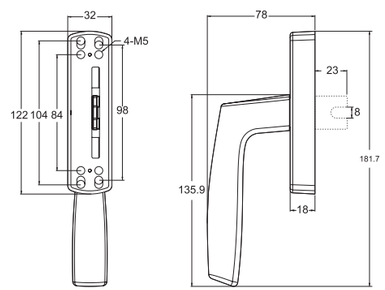
White 09 | Mat Black 17

HANDLE SELECTIONS

BERLIN SERIES



Fork Drive Handle (Type TT)



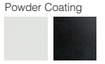
P/N	Material	Suitable for
C010401-	Zinc Alloy	Tilt & Turn Windows Inswing Casement Windows
C010402-	Aluminum Alloy	

M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

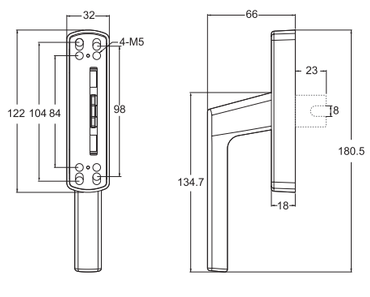


White 09 | Mat Black 17

KOLN SERIES



Fork Drive Handle (Type TT)



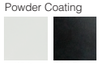
P/N	Material	Suitable for
C010401-	Zinc Alloy	Tilt & Turn Windows Inswing Casement Windows
C010402-	Aluminum Alloy	

M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

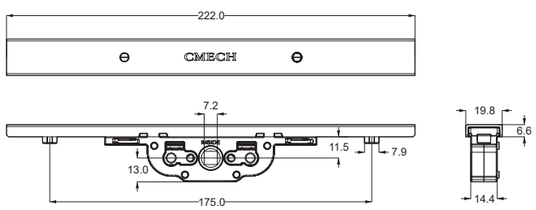
Powder Coating



White 09 | Mat Black 17

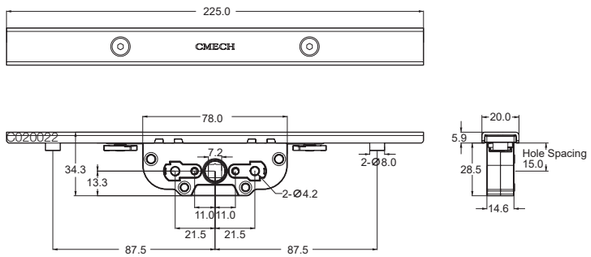
TILT & TURN WINDOW HARDWARE

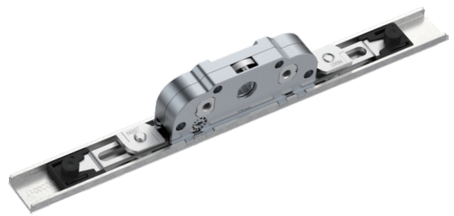
C020020
11.5 mm Spindle Drive Gearbox



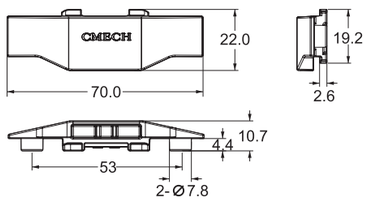


C020017
15 mm Spindle Drive Gearbox



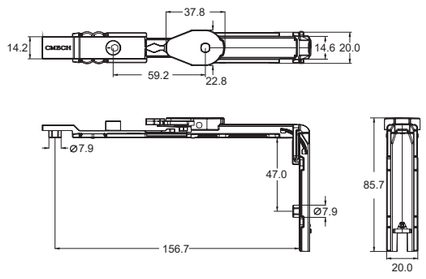


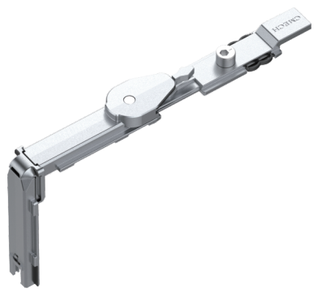
B020004
Fork Drive Connector





C060010
Fail-Safe Corner Drive

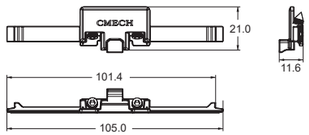




TILT & TURN WINDOW HARDWARE

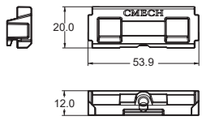
C070003
Tilt Strike Pack

Tilt Striker



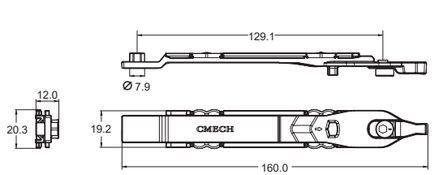


Run Up Block



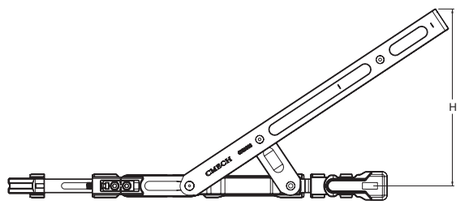


C070006
Tilt Bolt





Stay

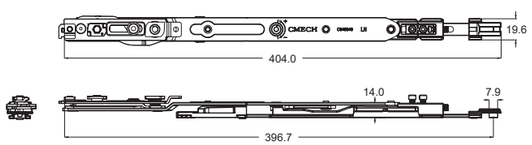


P/N	H	Instructions
C020008	147 mm	Sash Width: 450-750 mm
C020009	158 mm	Sash Width: 600-1,200 mm



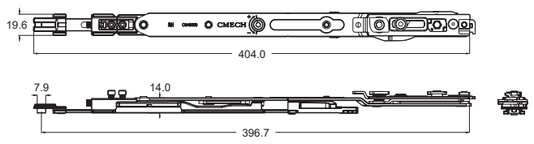
TILT & TURN WINDOW HARDWARE

C040049
490 Upper Hinge Left (90 kg)



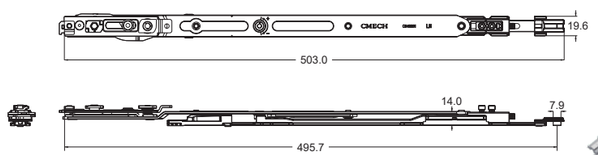


C040050
490 Upper Hinge Right (90 kg)



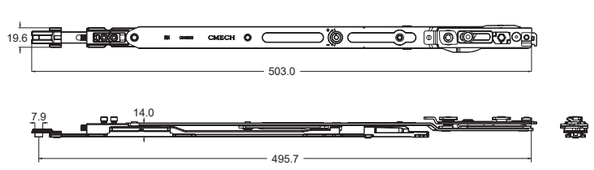


C040051
650 Upper Hinge Left (90 kg)





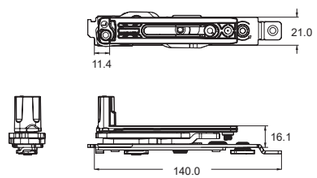
C040052
650 Upper Hinge Right (90 kg)





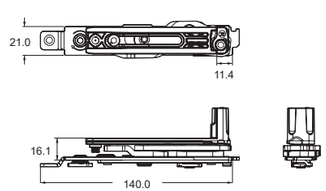
TILT & TURN WINDOW HARDWARE

C040045
Concealed Lower Hinge Left (90 kg)



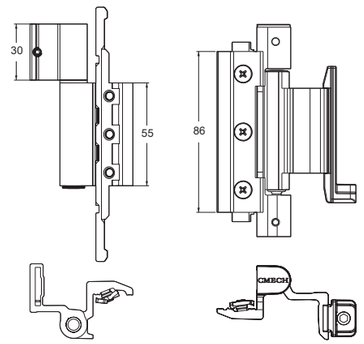


C040046
Concealed Lower Hinge Right (90 kg)





C040005
Upper and Lower Hinges



M Treatment

Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

White 09 | Mat Black 17



TILT & TURN WINDOW PROFILE AND DRILLING REQUIREMENTS

Fork Drive Handle Configuration



C010101
New York Series



C010201
Koln Series



C010401
Berlin Series

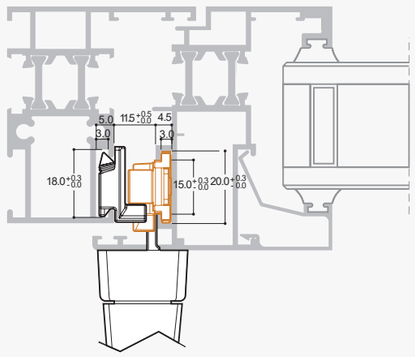


C110004
Fork

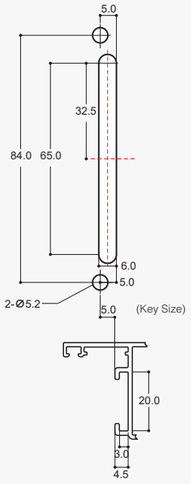


B020004
Fork Drive Connector

Tilt & Turn Window with C-Groove Profile Detail Drawing
Fork Drive Handle



Drill Hole Drawing
Handle



TILT & TURN WINDOW PROFILE AND DRILLING REQUIREMENTS

Spindle Drive Handle Configuration



A010107
New York Series



A010210
Koln Series



A010406
Berlin Series



A010601
Milan Series

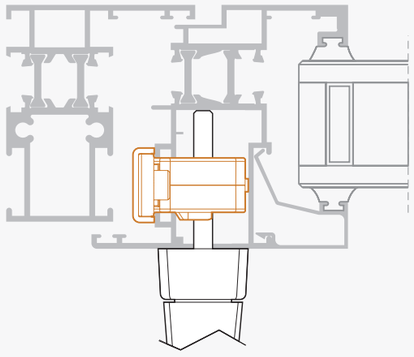


A010606
Milan Series

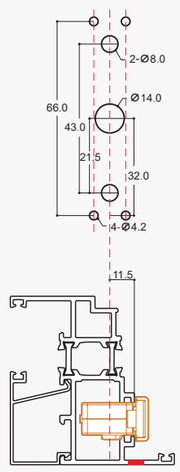


C020020
11.5mm Spindle Drive Gearbox
C020017
15mm Spindle Drive Gearbox

Tilt & Turn Window with C-Groove Profile Detail Drawing
Spindle Drive Handle



Drill Hole Drawing
Handle



Outswing Casement & Awning Window Hardware





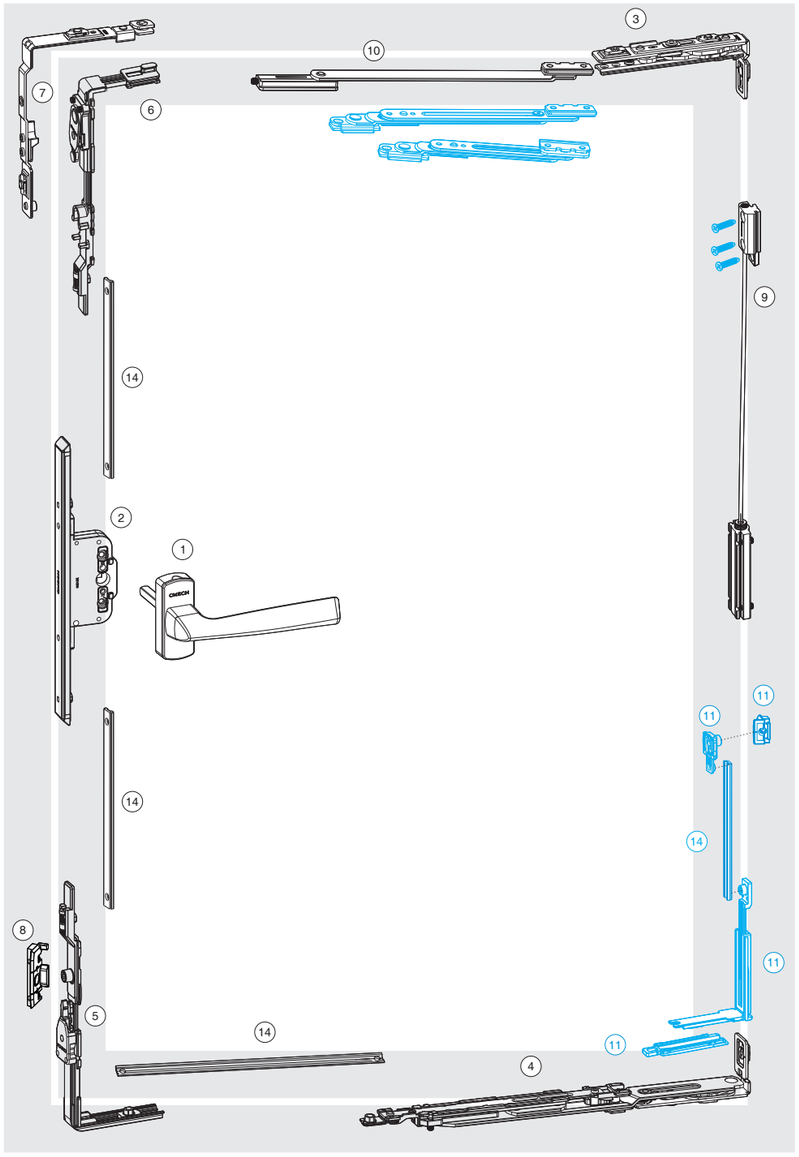


- The handles are available in many styles and colors
- Hinges are easy to adjust and corner drives are quick to install
- Multi-point locks can be specified to enhance water and air tightness and wind pressure resistance

Outswing Casement & Awning Window		Applicable Range
Sash Width	(mm)	425-800
Sash Height	(mm)	760-2,000
Sash Flap Width	(mm)	16.5-18.5
Load-bearing	(kg)	80

OUTSWING CASEMENT & AWNING WINDOW HARDWARE SERIES

Classic Series Spindle Drive Handle with Concealed Hinge (80 kg) Configuration



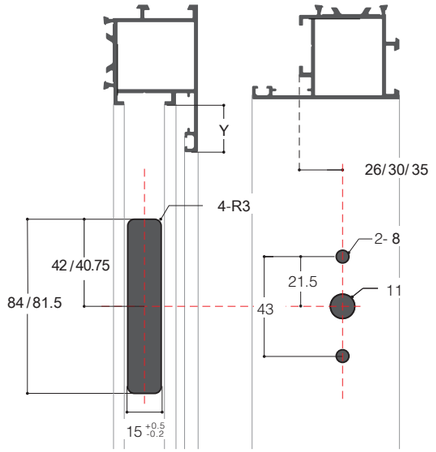
OUTSWING CASEMENT & AWNING WINDOW HARDWARE SERIES

Configuration Table - Classic Series Spindle Drive Handle with Concealed Hinge (80 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle	C010407	1	Berlin Handle, Aluminum Alloy	P59
2	Spindle Drive Gearbox	K020001 K020002 K020003 K020004 K020005 K020006 K020007	1	30 mm Gearbox, Back Dim. 10 mm 26 mm Gearbox, Suitable for 20 mm Handle 26 mm Gearbox, Suitable for 22 mm Handle 30 mm Gearbox, Suitable for 20 mm Handle 30 mm Gearbox, Suitable for 22 mm Handle 35 mm Gearbox, Suitable for 20 mm Handle 35 mm Gearbox, Suitable for 22 mm Handle	P60
3	Upper Hinge	K040001 K040002	1	Sash Left-Opening Sash,80 kg Sash Right-Opening Sash,80 kg	P62
4	Lower Hinge	K040003 K040004	1	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P62
5	Fail-Safe Corner Drive	K060001			P61
6	Suspension Corner Drive	K060003			P61
7	Suspension Support Assembly	K070001	1		P61
8	Fail-Safe Lock Bracket	K100003 K100004	1	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P61
9	Safety Rope Assembly	K120003 K120004	1	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P63
10	Limiting Stay	K040005 K040006 K040007	1	8", Suitable for Sash Weight: 475-550 mm 9", Suitable for Sash Weight: >550 mm 6", Suitable for Sash Weight: <475 mm	P63
11	Back-lock Standard Configuration Set	C800188	1	Equipped with Master Series, Include items: C060019 Small Corner Driver C090011 Back-lock End Lock Point A100127 Keeper C060012 Corner Fitting Piece	
12	Handle Screw Pack		1		
13	Screw Pack	K110001	1		
14	Connecting Strip		3~5	Provided by Customer or Cmech	

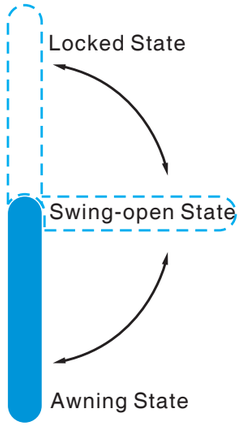
OUTSWING CASEMENT & AWNING WINDOW PROFILE REQUIREMENTS AND DRILLING INSTRUCTIONS

Spindle Drive Handle Configuration



*K020001 compatible drilling dimensions: 81.5×15
K020002~K020007 compatible drilling dimensions: 84×15

Drill Hole Drawing



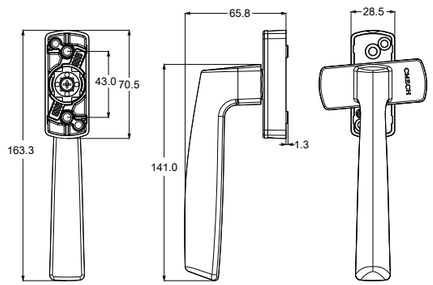
Handle Operation

HANDLE SELECTIONS

BERLIN SERIES



C010407
Spindle Drive Handle
(Tilt & Turn Windows)

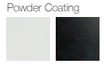


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



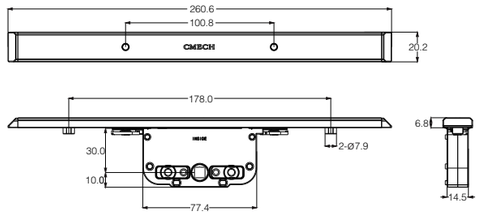
White 09 | Black 17

Screw Pack

P/N	Notes
A110330	25 mm Spindle, M5×35 mm Cross Screws
A110344	30 mm Spindle, M5×35 mm Cross Screws
A110331	40 mm Spindle, M5×35 mm Cross Screws
A110332	45 mm Spindle, M5×35 mm Cross Screws
A110341	50 mm Spindle, M5×35 mm Cross Screws
A110345	55 mm Spindle, M5×35 mm Cross Screws
A110333	60 mm Spindle, M5×35 mm Cross Screws
A110342	70 mm Spindle, M5×35 mm Cross Screws
A110343	80 mm Spindle, M5×35 mm Cross Screws

OUTSWING CASEMENT & AWNING WINDOW HARDWARE

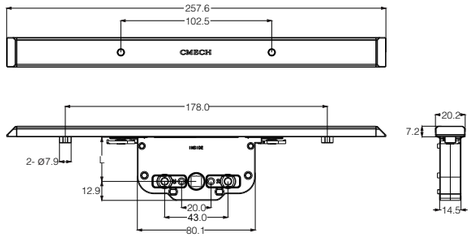
K020001
30mm Spindle Drive Gearbox





Spindle Drive Gearbox

Suitable for Handle with 20mm and 43mm Hole Distance

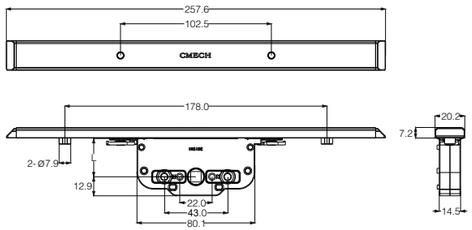


P/N	L
K020002	26 mm
K020004	30 mm
K020006	35 mm



Spindle Drive Gearbox

Suitable for Handle with 22mm and 43mm Hole Distance

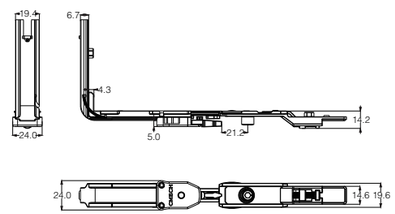


P/N	L
K020003	26 mm
K020005	30 mm
K020007	35 mm



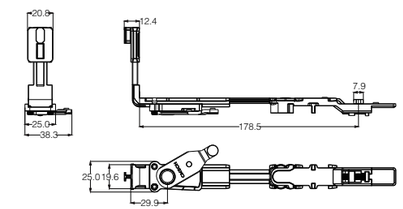
OUTSWING CASEMENT & AWNING WINDOW HARDWARE

K060001
Fail-Safe Corner Drive



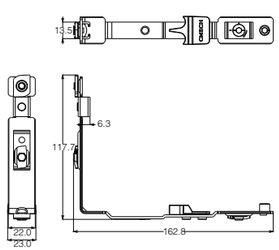


K060003
Suspension Corner Drive



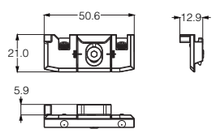


K070001
Suspension Support Assembly





Fail-Safe Lock Bracket

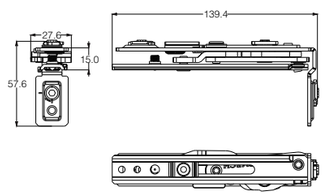


P/N	Direction
K100003	Left
K100004	Right



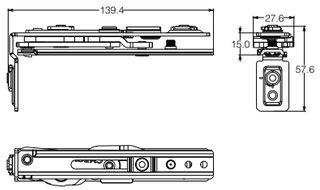
OUTSWING CASEMENT & AWNING WINDOW HARDWARE

K040001
Upper Hinge Left (80 kg)



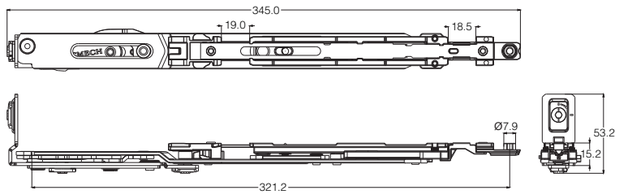


K040002
Upper Hinge Right (80 kg)



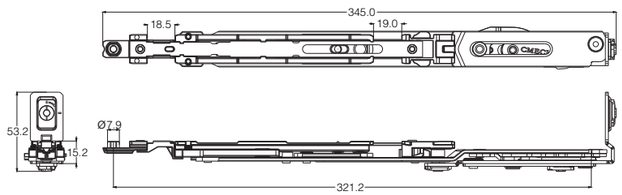


K040003
Lower Hinge Left (80 kg)





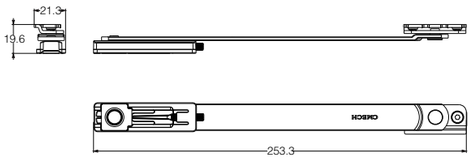
K040004
Lower Hinge Right (80 kg)





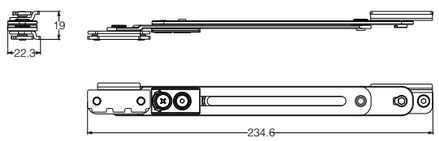
OUTSWING CASEMENT & AWNING WINDOW HARDWARE

K040006
9" Limiting Stay



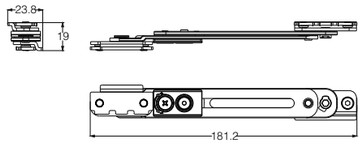


K040005
8" Limiting Stay



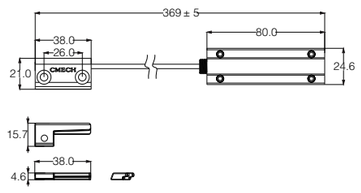


K040007
6" Limiting Stay





Suspension Support Assembly (with Anti-fall Frame Fixing Base)



P/N	Direction
K120003	Left
K120004	Right



Lift & Slide Door Hardware





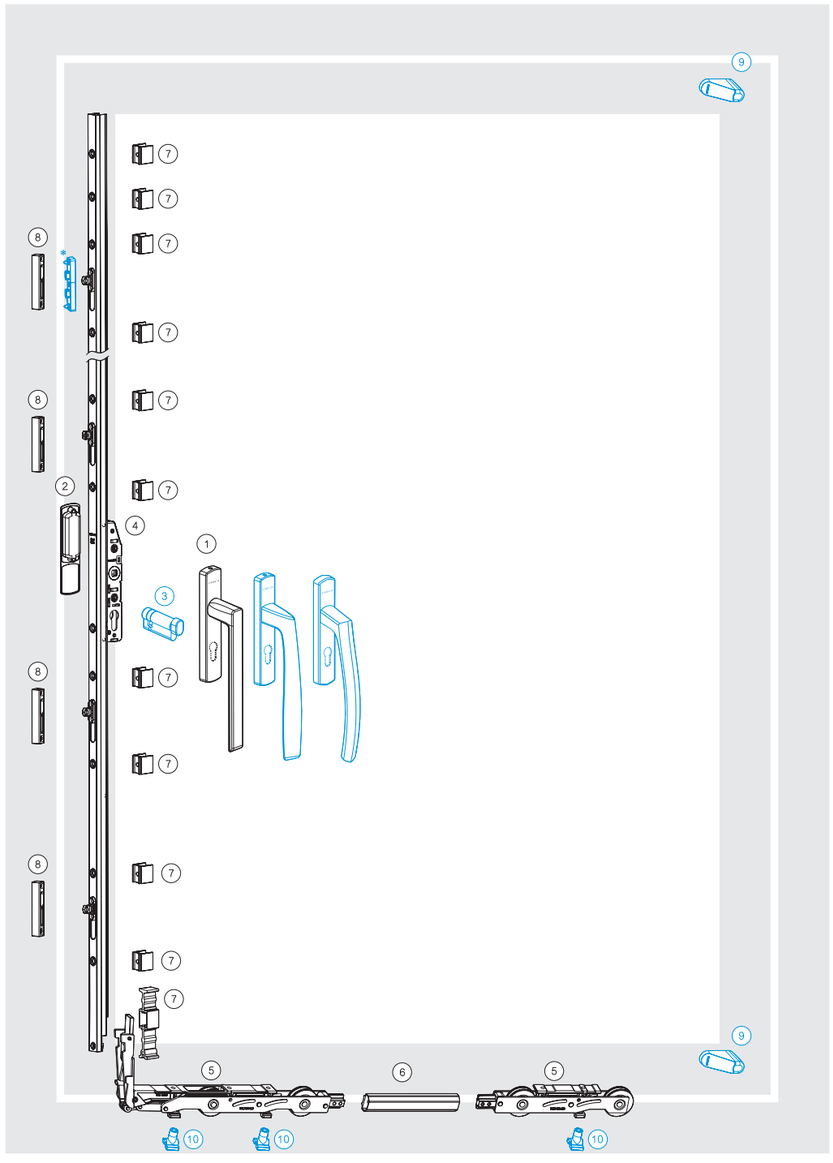


- The handles are available in many styles and colors
- The handle over time will self-adjust to always maintain a tight and wobble-free fit
- Patented lift mechanism with gear design requires the least amount of force to raise door panel
- Patented handle mechanism features speed reduction operation to avoid dangerous rebound

Lift & Slide Door		Applicable Range
Sash Width	(mm)	720-3,300
Sash Height	(mm)	1,800-2,700
Load-bearing	(kg)	220-450
Distance of the Centerline of Handle to the Roller Carriage Attachment Surface	(mm)	955
Distance of the Centerline of Handle to the Espagnolette Surface	(mm)	37.5,27.5

LIFT & SLIDE DOOR HARDWARE SERIES

Spindle Drive Handle (Type LS) Configuration (220 kg)



* Installation tool used to mark strike hole position F120003

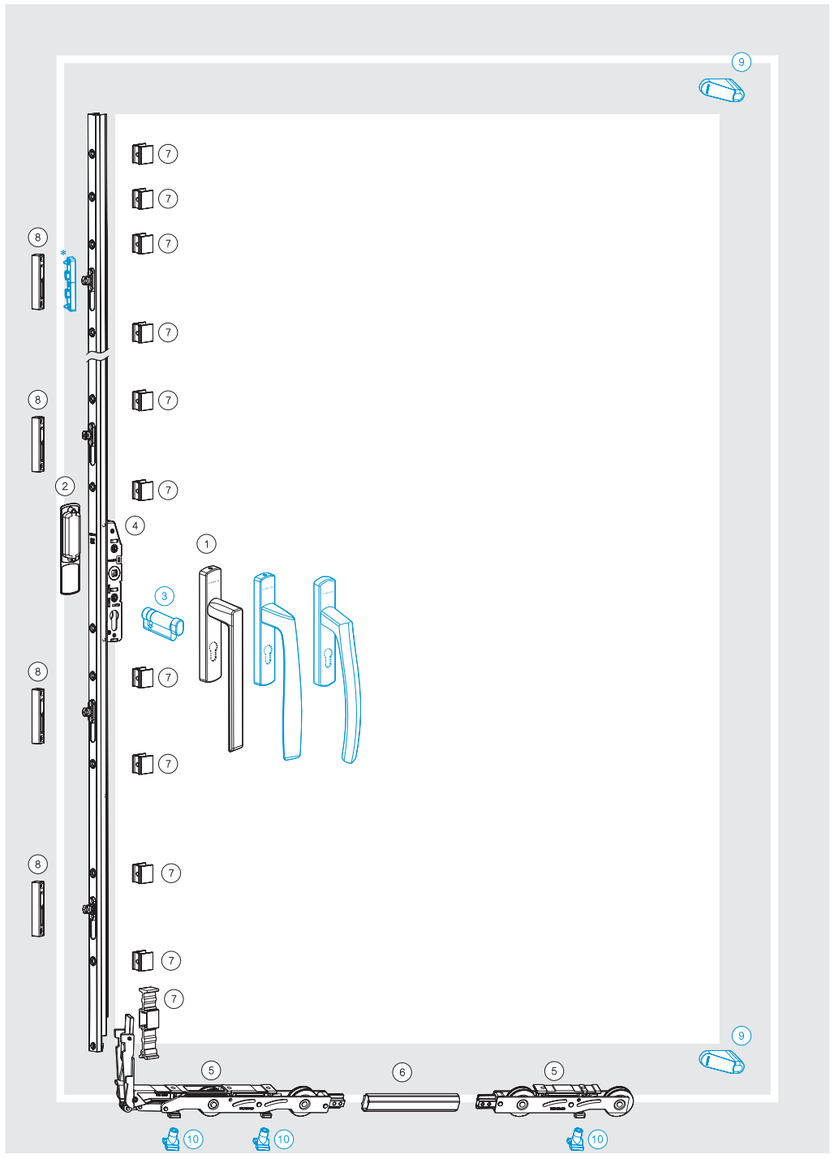
LIFT & SLIDE DOOR HARDWARE SERIES

Configuration Table - Spindle Drive Handle (Type LS) (220 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type LS)	F800031 F800021 F800014 F800018 F800011	1	Multiple Types Available	P73, P74
2	Recessed Handle	F010601 F010602	1	V Series U Series	P74
3	Cylinder		1		P158, P159
4	Espagnolette with Tilt Lock Point	F020008 F020009 F020010	1	2,000 mm, Door Height 1,800-2,100 2,300 mm, Door Height 2,101-2,400 2,600 mm, Door Height 2,401-2,700	P77
5	Front and Rear Rollers	F800016	1	Channel Width 22 mm	P75
6	Connecting Rod	F020004 F020005 F020006 F020007	1	850 mm, Door Width 720-1,500 1,350 mm, Door Width 1,501-2,000 1,850 mm, Door Width 2,001-2,500 2,650 mm, Door Width 2,501-3,300	P76
7	Spacer Pack	F140009 F140003	1	Plastic Spacer Height 12 mm Plastic Spacer Height 17 mm	P78
8	Locking Keeper	F100006 F100008	4		P79
9	Panel Stop	F080001	1	Installation Height: 42 mm	P79
10	Rest Block	F110008	1		P79
11	Screw Pack	F110011	1	12 mm/17 mm Spacer Pack is Suitable	
12	Handle Screw Pack	F110039	1		
13	Spindle Screw Pack	F110030	1		

LIFT & SLIDE DOOR HARDWARE SERIES

Spindle Drive Handle (Type LS) Configuration (220-320 kg)



* Installation tool used to mark strike hole position F120003

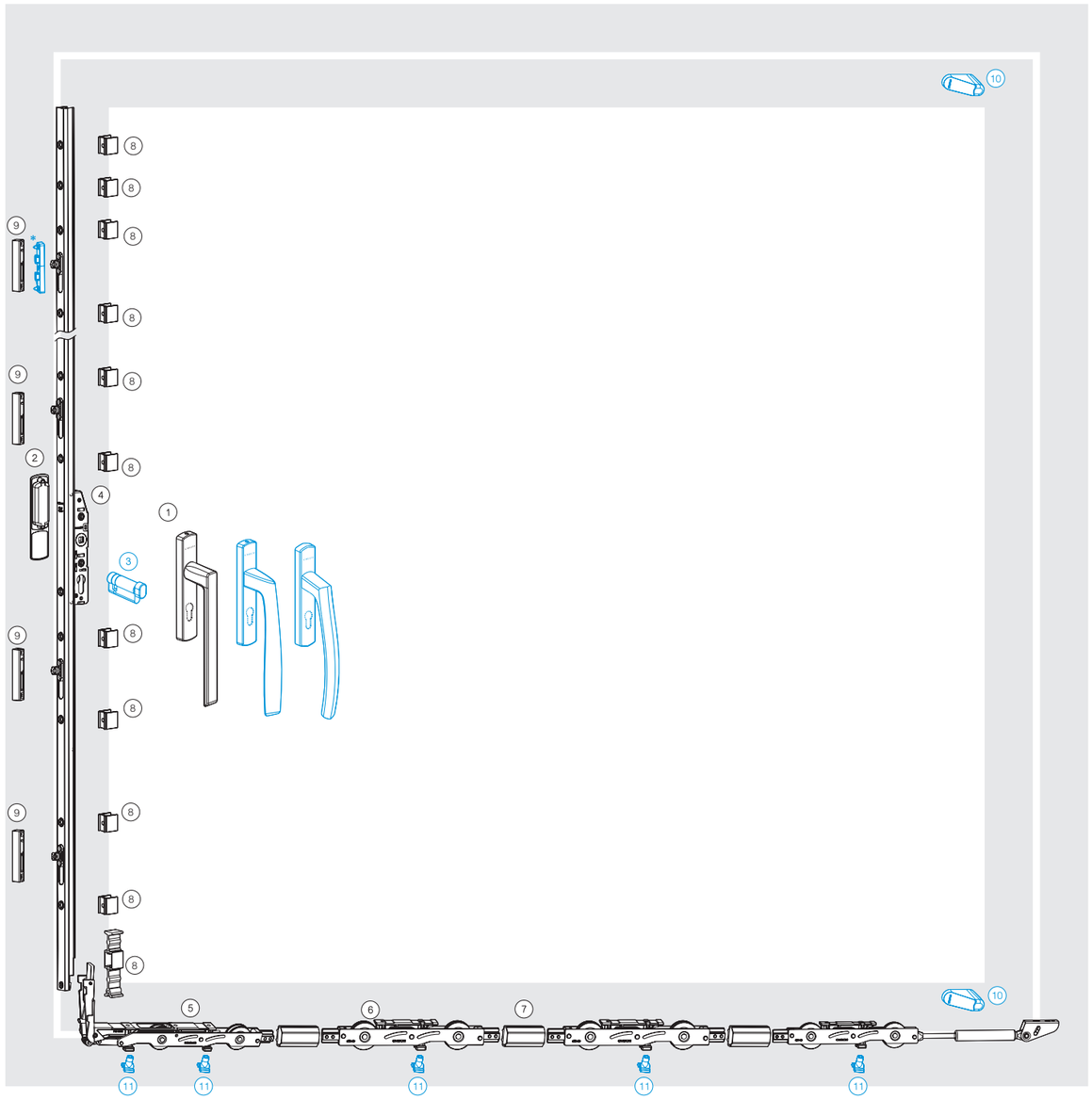
LIFT & SLIDE DOOR HARDWARE SERIES

Configuration Table - Spindle Drive Handle (Type LS) (220-320 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type LS)	F800031 F800021 F800014 F800018 F800011	1	Multiple Types Available	P73, P74
2	Recessed Handle	F010601 F010602	1	V Series U Series	P74
3	Cylinder		1		P158, P159
4	Espagnolette with Tilt Lock Point	F020016 F020017	1	2,300 mm, Door Height 2,101-2,400, Gas Spring 2,600 mm, Door Height 2,401-2,700, Gas Spring	P77
5	Front and Rear Rollers	F800016	1	Channel Width 22 mm	P75
6	Connecting Rod	F020004 F020005 F020006 F020007	1	850 mm, Door Width 720-1,500 1,350 mm, Door Width 1,501-2,000 1,850 mm, Door Width 2,001-2,500 2,650 mm, Door Width 2,501-3,300	P76
7	Spacer Pack	F140009 F140003	1	Plastic Spacer Height 12 mm Plastic Spacer Height 17 mm	P78
8	Locking Keeper	F100006 F100008	4		P79
9	Panel Stop	F080001	1	Installation Height: 42 mm	P79
10	Rest Block	F110008	1		P79
11	Screw Pack	F110011	1	12 mm/17 mm Spacer Pack is Suitable	
12	Handle Screw Pack	F110039	1		
13	Spindle Screw Pack	F110030	1		

LIFT & SLIDE DOOR HARDWARE SERIES

Spindle Drive Handle (Type LS) Configuration (320-450 kg)



∗ Installation tool used to mark strike hole position F120003

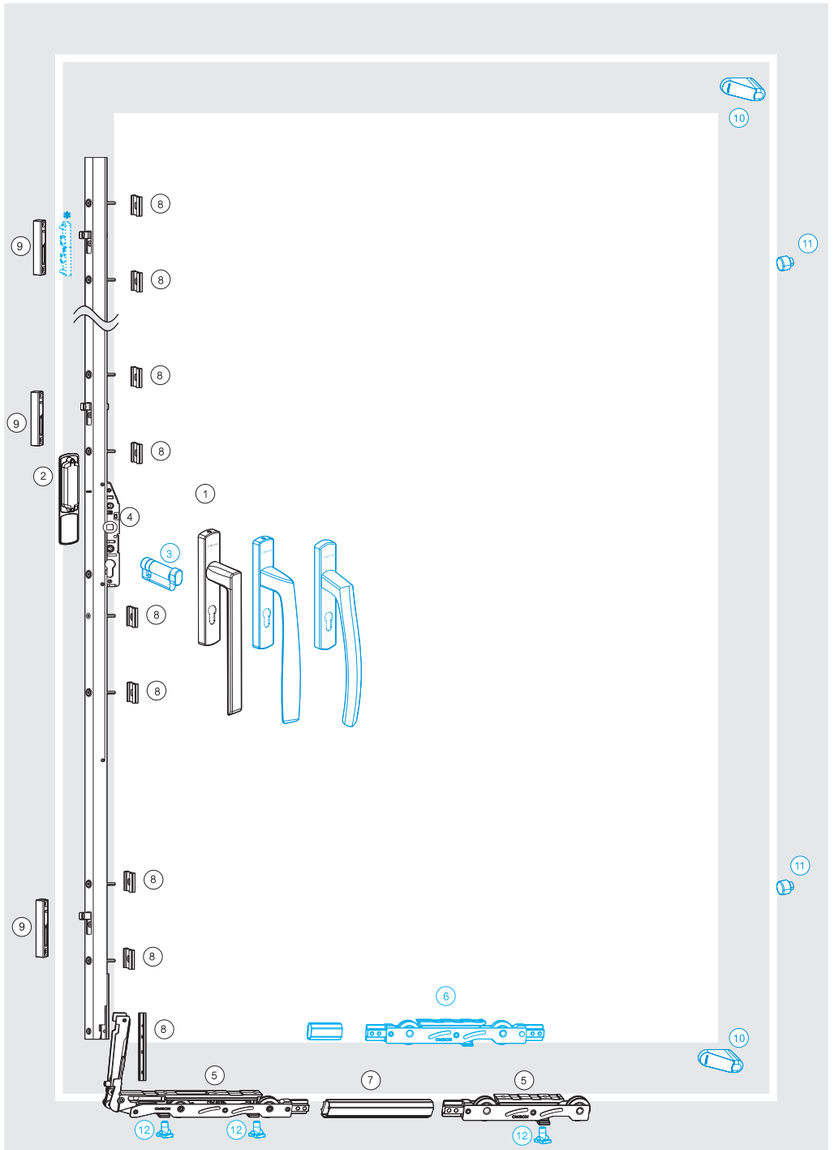
LIFT & SLIDE DOOR HARDWARE SERIES

Configuration Table - Spindle Drive Handle (Type LS) (320-450 kg)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type LS)	F800031 F800021 F800014 F800018 F800011	1	Multiple Types Available	P73, P74
2	Recessed Handle	F010601 F010602	1	V Series U Series	P74
3	Cylinder		1		P158, P159
4	Espagnolette with Tilt Lock Point	F020019 F020020	1	2,300 mm, Door Height 2,101-2,400, Metal Spring + Gas Spring 2,300 mm, Door Height 2,401-2,700, Metal Spring + Gas Spring	P77
5	Front and Rear Rollers	F050004	1	Channel Width 22 mm	P75
6	Auxiliary Rollers	F500003	1	One Additional Roller for Sash Width 1200 mm Two Additional Roller for Sash Width 1200 mm	P76
7	Connecting Rod	F020004 F020005 F020006 F020007	1	850 mm, Door Width 720-1,500 1,350 mm, Door Width 1,501-2,000 1,850 mm, Door Width 2,001-2,500 2,650 mm, Door Width 2,501-3,300	P76
8	Spacer Pack	F140009 F140003	1	Plastic Spacer Height 12 mm Plastic Spacer Height 17 mm	P78
9	Locking Keeper	F100006 F100008	4		P79
10	Panel Stop	F080001	1	Installation Height: 42 mm	P79
11	Rest Block	F110008	1		P79
12	Screw Pack	F110011	1	12 mm/17 mm Spacer Pack is Suitable	
13	Handle Screw Pack		1	Reference P147	
14	Spindle Screw Pack		1	Reference P147	

LIFT & SLIDE DOOR HARDWARE SERIES

Slim Lift & Slide Door Configuration



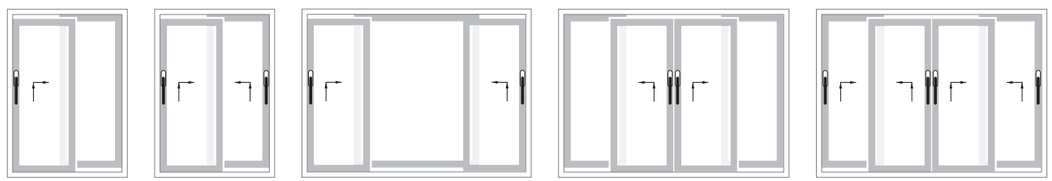
* Installation tool used to mark strike hole position F120003

LIFT & SLIDE DOOR HARDWARE SERIES

Configuration Table - Slim Lift & Slide Door

No.	Description	P/N	Qty A	B	C	D	E	Notes	Ref. Page
1	Spindle Drive Handle (Type LS)	F800033 F800034 F800029 F800014 F800018	1	2	2	2	4	Multiple Types Available	P73, P74
2	Recessed Handle	F010601 F010602	1	2	2	2	4	V Series U Series	P74
3	Cylinder		1	2	2	1	3		P158, P159
4	Espagnolette with Tilt Lock Point	F020021 F020022 F020023 F020024 F020025 F020026	1	2	2	2	4	2,300 mm,200kg 2,600 mm,200kg 2,300 mm,280kg 2,600 mm,280kg 2,300 mm,360kg 2,600 mm,360kg	P77
5	Front and Rear Rollers	F050006	1	2	2	2	4		P75
6	Auxiliary Rollers	F050008	1	2	2	2	4		P76
7	Connecting Rod	F020004 F020005 F020006 F020007	1	2	2	2	4	850 mm, Door Width 720-1,500 1,350 mm, Door Width 1,501-2,000 1,850 mm, Door Width 2,001-2,500 2,650 mm, Door Width 2,501-3,300	P76
8	Spacer Pack	F140018 F140019 F140020	1	2	2	2	4	Plastic Spacer Height 4 mm Plastic Spacer Height 5 mm Plastic Spacer Height 6.5 mm	P78
9	Locking Keeper	F100006 F100008	4	8	8	4	12		P79
10	Panel Stop	F080001	0	1	0	0	2	Installation Height: 42 mm	P79
11	Rubber Stop	F080002	1	0	1	2	0	Hole Size Ø13 mm (2 Pack)	P79
12	Rest Block	F110015	1	2	2	2	4		P79
13	Screw Pack	F110014	1	2	2	2	4	12 mm/17 mm Spacer Pack is Suitable	
14	Handle Screw Pack		1	2	2	2	4	Reference P147	
15	Spindle Screw Pack		1	2	2	2	4	Reference P147	

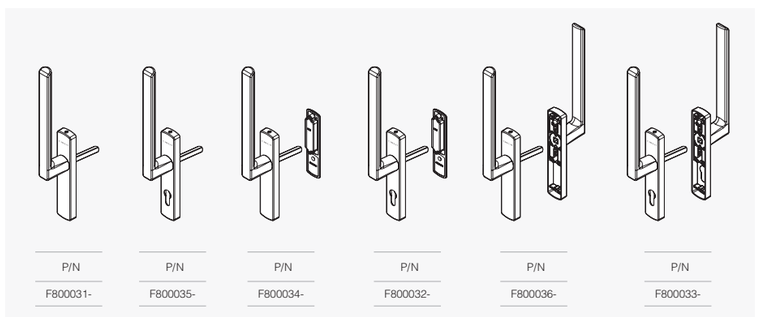
Door Configurations



HANDLE SELECTIONS

MILAN SERIES
Spindle Drive Handle (Type LS)





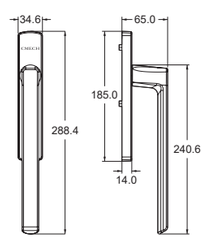
P/N	P/N	P/N	P/N	P/N	P/N
F800031-	F800035-	F800034-	F800032-	F800036-	F800033-

M Treatment

Silver	Champagne	Gold	Bronze
01	02	11	12

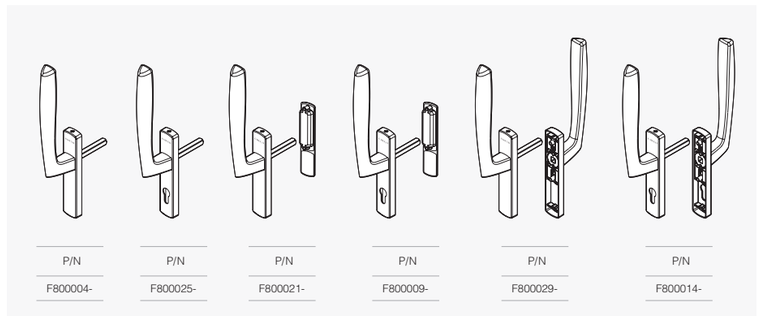
Powder Coating

White	Mat Black
09	17



BERLIN SERIES
Spindle Drive Handle (Type LS)





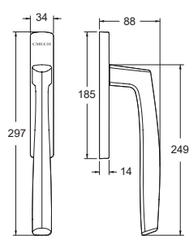
P/N	P/N	P/N	P/N	P/N	P/N
F800004-	F800025-	F800021-	F800009-	F800029-	F800014-

M Treatment

Silver	Champagne	Gold	Bronze
01	02	11	12

Powder Coating

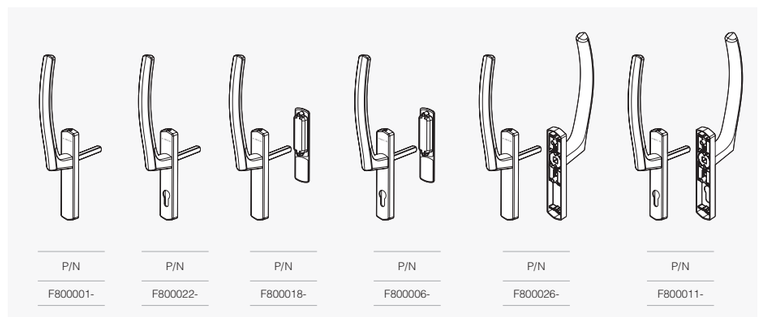
White	Mat Black
09	17



HANDLE SELECTIONS

NEW YORK SERIES
Spindle Drive Handle (Type LS)





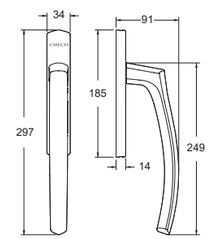
P/N	P/N	P/N	P/N	P/N	P/N
F800001-	F800022-	F800018-	F800006-	F800026-	F800011-

M Treatment

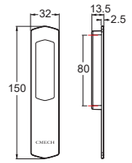
Silver	Champagne	Gold	Bronze
01	02	11	12

Powder Coating

White	Mat Black
09	17



F010601
Recessed Handle (V Series)



M Treatment

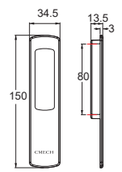
Silver	Champagne	Gold	Bronze
01	02	11	12

Powder Coating

White	Mat Black
09	17



F010602
Recessed Handle (U Series)



M Treatment

Silver	Champagne	Gold	Bronze
01	02	11	12

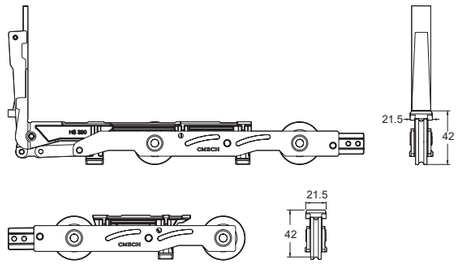
Powder Coating

White	Mat Black
09	17



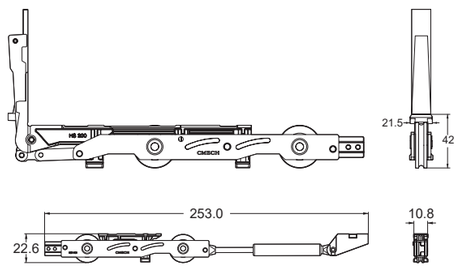
LIFT & SLIDE DOOR HARDWARE

F800016
Front and Rear Rollers



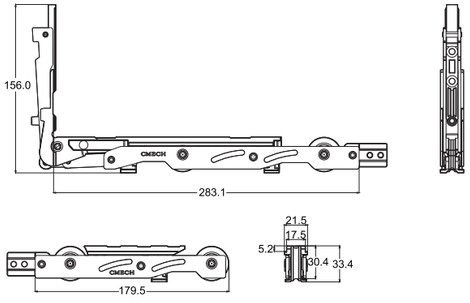


F050004
Front and Rear Rollers





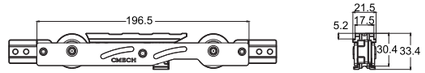
F050006
Front and Rear Rollers





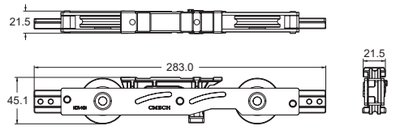
LIFT & SLIDE DOOR HARDWARE

F050008
Auxiliary Roller



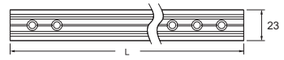


F050003
Auxiliary Roller





Connecting Rod

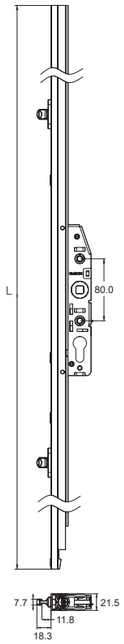


P/N	Door Panel Width Range	Connecting Rod Length (L)
F020004	720 - 1,500 mm	850 mm
F020005	1,501-2,000 mm	1,350 mm
F020006	2,001-2,500 mm	1,850 mm
F020007	2,501-3,300 mm	2,650 mm



LIFT & SLIDE DOOR HARDWARE

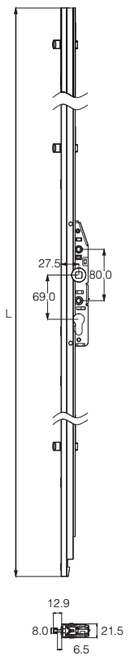
Espagnolette with Tilt Lock Point





P/N	Door Panel Height Range	Espagnolette Length Spec (L)	Door Panel Load-bearing
F020008	1,800-2,100 mm	2,000 mm	300kg
F020009 F020016 F020019	2,101-2,400 mm	2,300 mm	300kg 350kg, with Gas Spring 450kg, with Metal Spring and Gas Spring
F020010 F020017 F020020	2,401-2,700 mm	2,600 mm	300kg 350kg, with Gas Spring 450kg, with Metal Spring and Gas Spring

Espagnolette with Tilt Lock Point



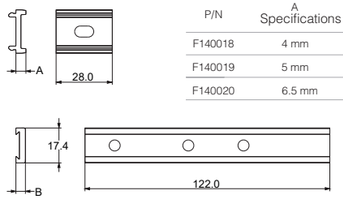


P/N	Door Panel Load-bearing	Espagnolette Length Spec (L)
F020021 F020023 F020025	200kg 280kg 360kg	2,300 mm
F020022 F020024 F020026	200kg 280kg 360kg	2,600 mm

LIFT & SLIDE DOOR HARDWARE

Spacer Pack

1 Long Spacer and 10 Short Spacers Per Pack

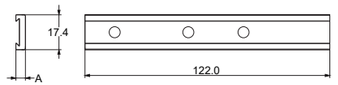


P/N	A Specifications	B Specifications
F140018	4 mm	3.75 mm
F140019	5 mm	4.75 mm
F140020	6.5 mm	6.25 mm



Spacer Pack

1 Long Spacer

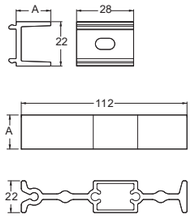


P/N	A Specifications
F140021	3.75 mm
F140022	4.75 mm
F140023	6.25 mm



Spacer Pack

1 Long Spacer and 10 Short Spacers Per Pack

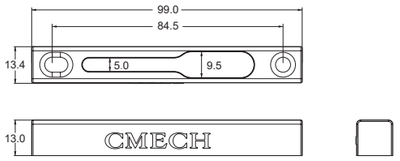


P/N	A Specifications
F140003	17 mm
F140009	12 mm



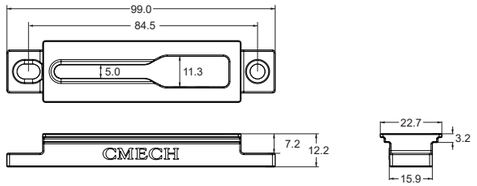
LIFT & SLIDE DOOR HARDWARE

F100006
13 Keeper



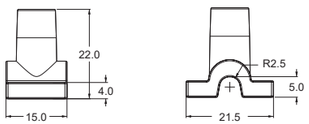


F100008
23 Keeper



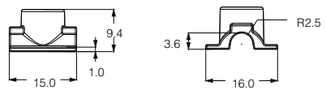


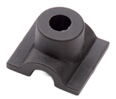
F110008
Rest Block



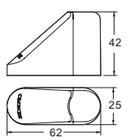


F110015
Rest Block





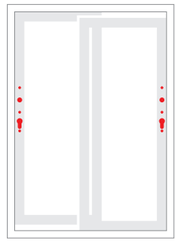
F080001
Panel Stop

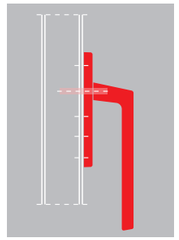


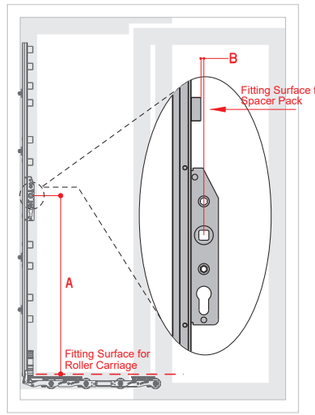


LIFT & SLIDE DOOR PROFILE AND DRILLING REQUIREMENTS

HOLE-DRILLING DRAWING (SINGLE TYPE LS HANDLE CONFIGURATION)







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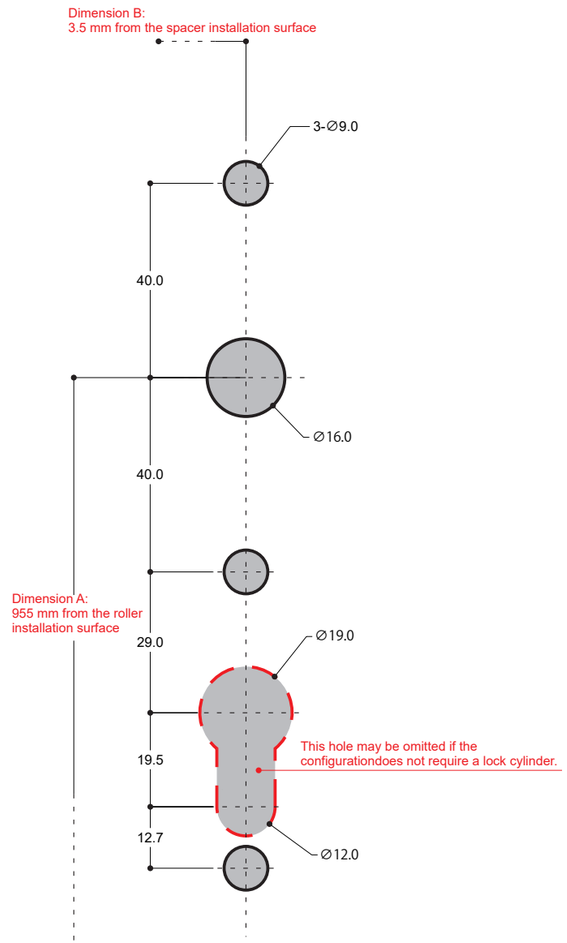
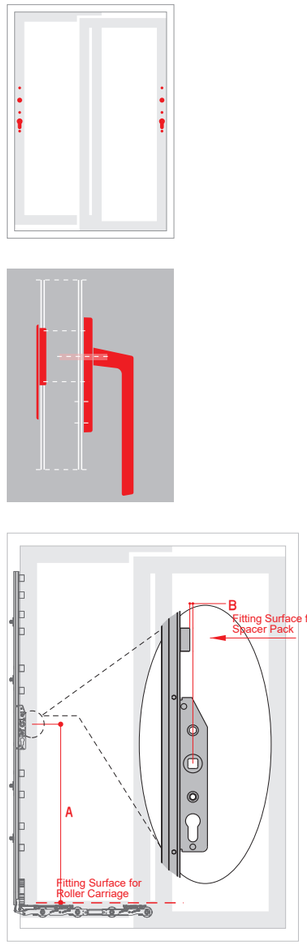


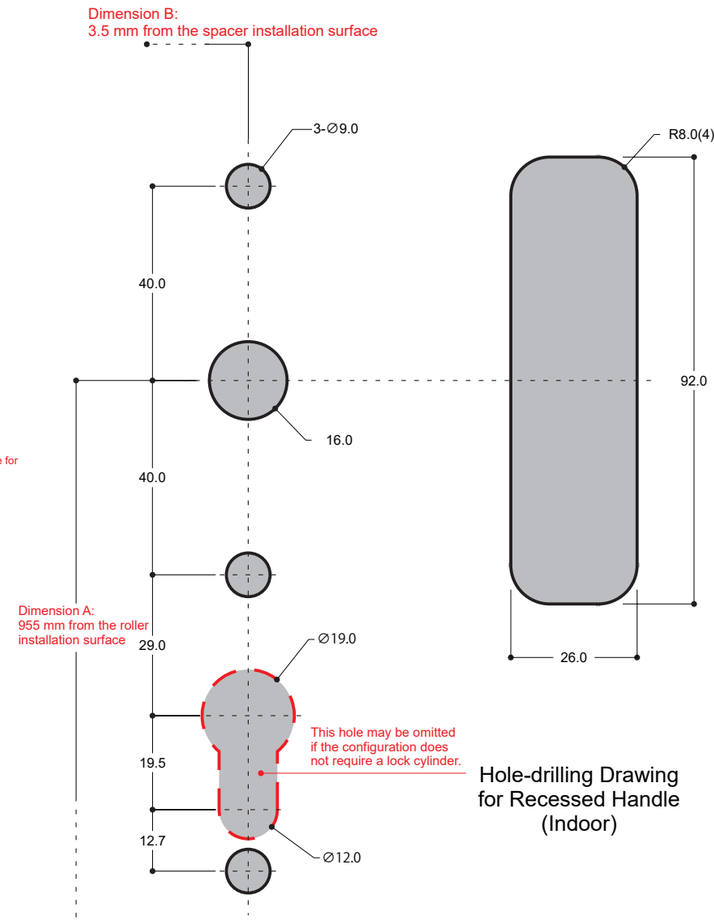
Hole-drilling Drawing for Handle
(Indoor)

LIFT & SLIDE DOOR PROFILE AND DRILLING REQUIREMENTS

HOLE-DRILLING DRAWING (TYPE LS HANDLE + RECESSED HANDLE CONFIGURATION)



(Unit: mm)

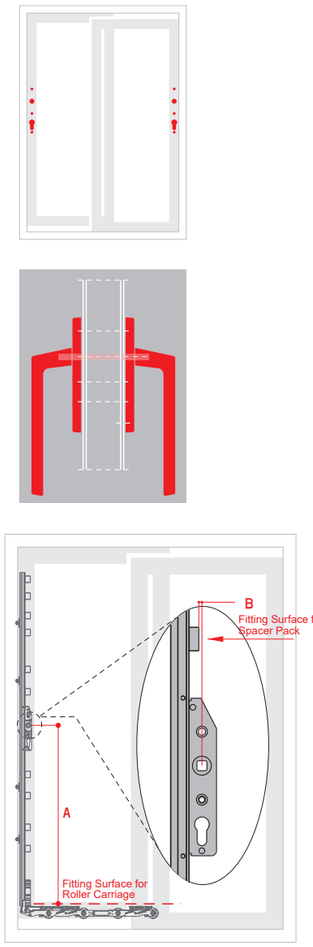


Hole-drilling Drawing for Handle (Indoor)

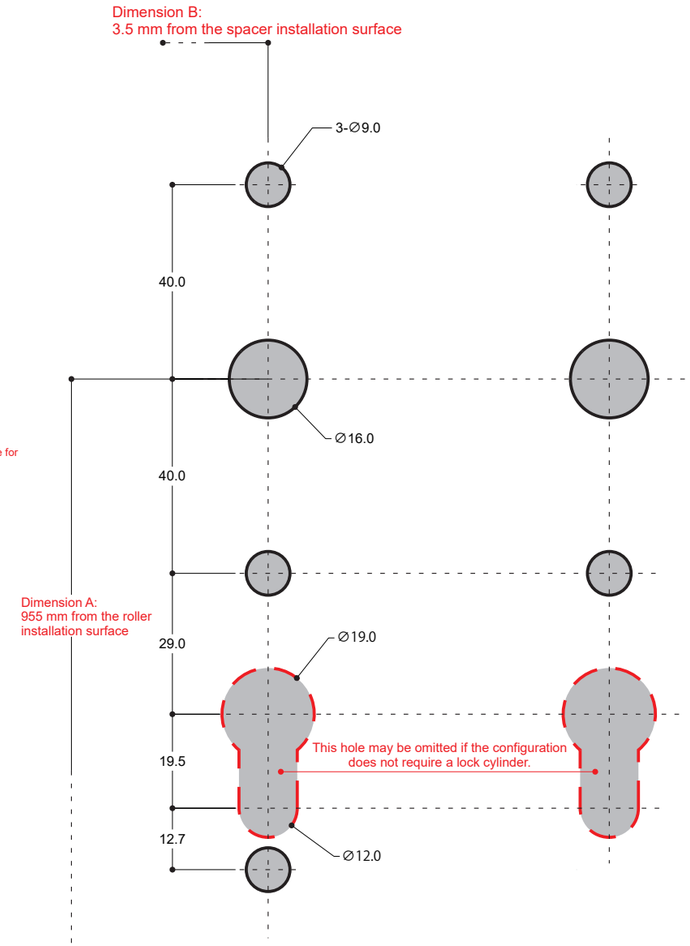
Hole-drilling Drawing for Recessed Handle (Indoor)

LIFT & SLIDE DOOR PROFILE AND DRILLING REQUIREMENTS

HOLE-DRILLING DRAWING (DOUBLE TYPE LS HANDLES CONFIGURATION)



(Unit: mm)

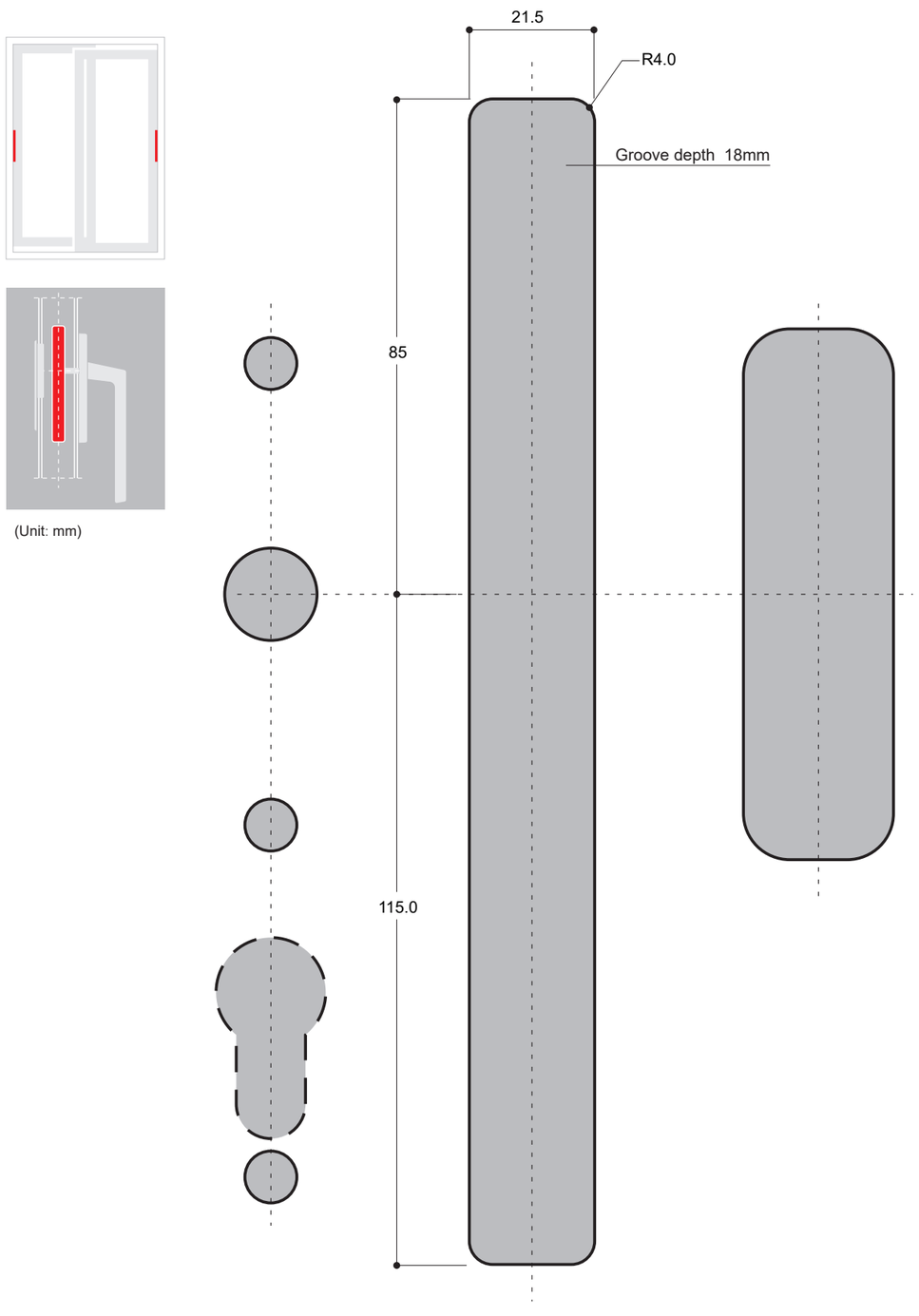


Hole-drilling Drawing for Handle (Indoor)

Hole-drilling Drawing for Handle (Outdoor)

LIFT & SLIDE DOOR PROFILE AND DRILLING REQUIREMENTS

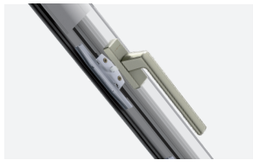
ESPAGNOLETTE INSTALLTION GROOVE



(Unit: mm)

Sliding Door & Window Hardware





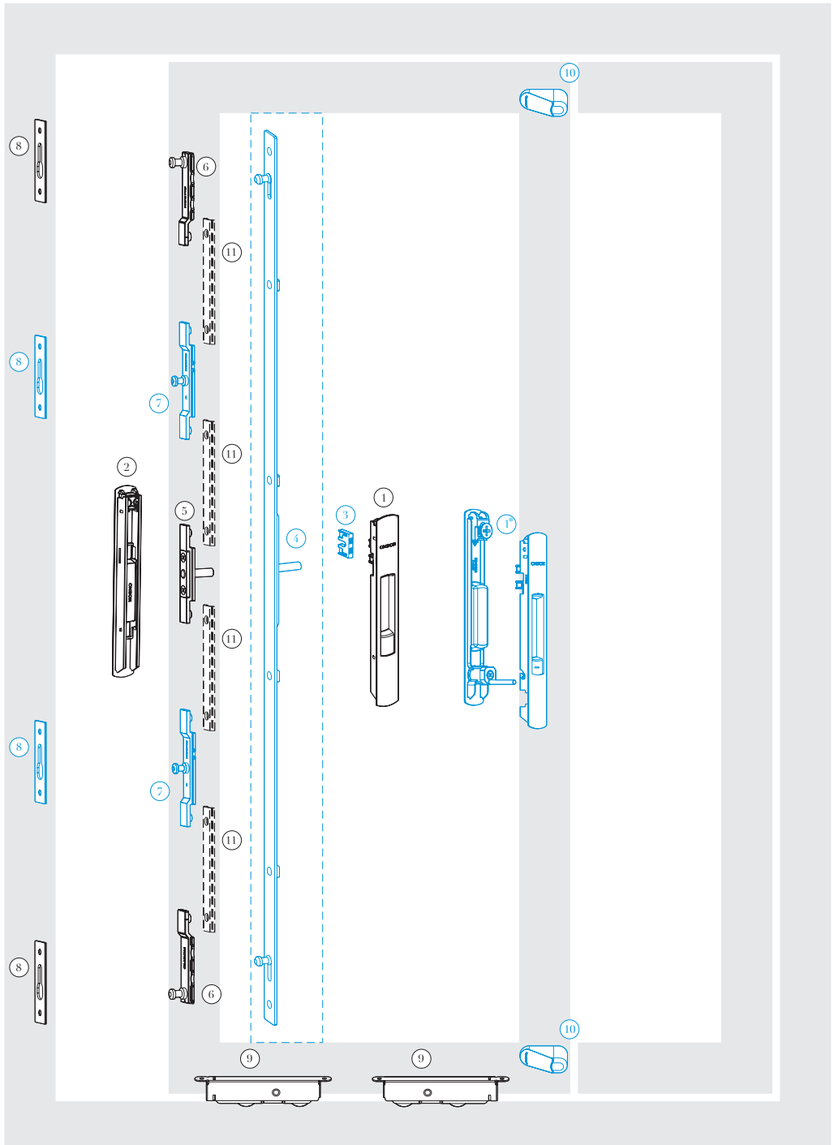


- Various configurations and rollers are available
- Fully concealed screws for a streamline appearance
- Strikes are adjustable and easy to install
- Hook lock design completely seals the door, improving energy efficiency and soundproofing while increasing safety

Sliding Doors		Applicable Range
Sash Width	(mm)	500-1,600
Sash Height	(mm)	1,200-2,700
Load-bearing	(kg)	⩽300

SLIDING DOOR HARDWARE SERIES

Multi-Point Lock Recessed Handle Configuration



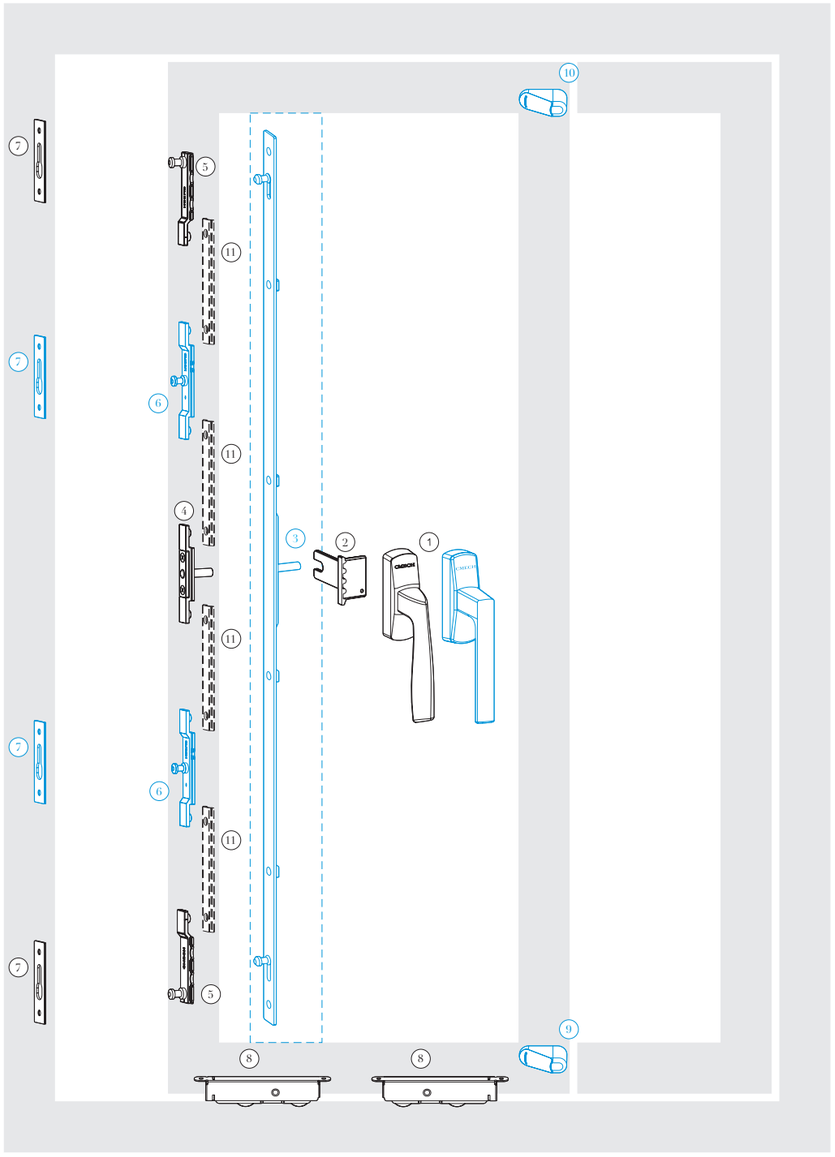
SLIDING DOOR HARDWARE SERIES

Configuration Table - Multi-Point Lock Recessed Handle

No.	Description	P/N	Qty	Notes	Ref. Page
1	Interior Recessed Handle	E010026	1	Recessed Handle without Key	P101
1'	Exterior Recessed Handle	E010024 E010025	1	Interior Keyed Recessed Handle Exterior Keyed Recessed Handle	P101, P102
2	Fixed Recessed Handle	E010019	1		P102
3	Recessed Handle Fork Drive Extender	E120002	1	Lock Recessed Handle	
4	Drive Gear	E030014 E030015	1	Width: 22 mm Width: 16 mm	P107
5	Intermediate Drive	A020115 A020116 A020117 A020126 A020127 A020128 A020129 A020180	1	14.5 mm 18.5 mm 22.5 mm 26.5 mm 30.5 mm 34.5 mm 11.5 mm 20.5 mm	P109
6	End Lock Point	E090003 E090007 E090009	2	End Lock Point Eccentricity Adjustable End Lock Point Height Adjustable End Lock Point	P110
7	Double-Ended Lock Point	E090004 E090008	0~2	Central Lock Point Height Adjustable Central Lock Point	P110
8	Strike	E100001 E100009 E100012 E100014 E100016	2~4		P111
9	Roller		2	Multiple Types Available	P113, P114, P115, P116
10	Panel Stop	F080001	1		P79
11	Connecting Strip		2~4	Provided by Customer or Cmech	

SLIDING DOOR HARDWARE SERIES

Fork Drive Handle Configuration



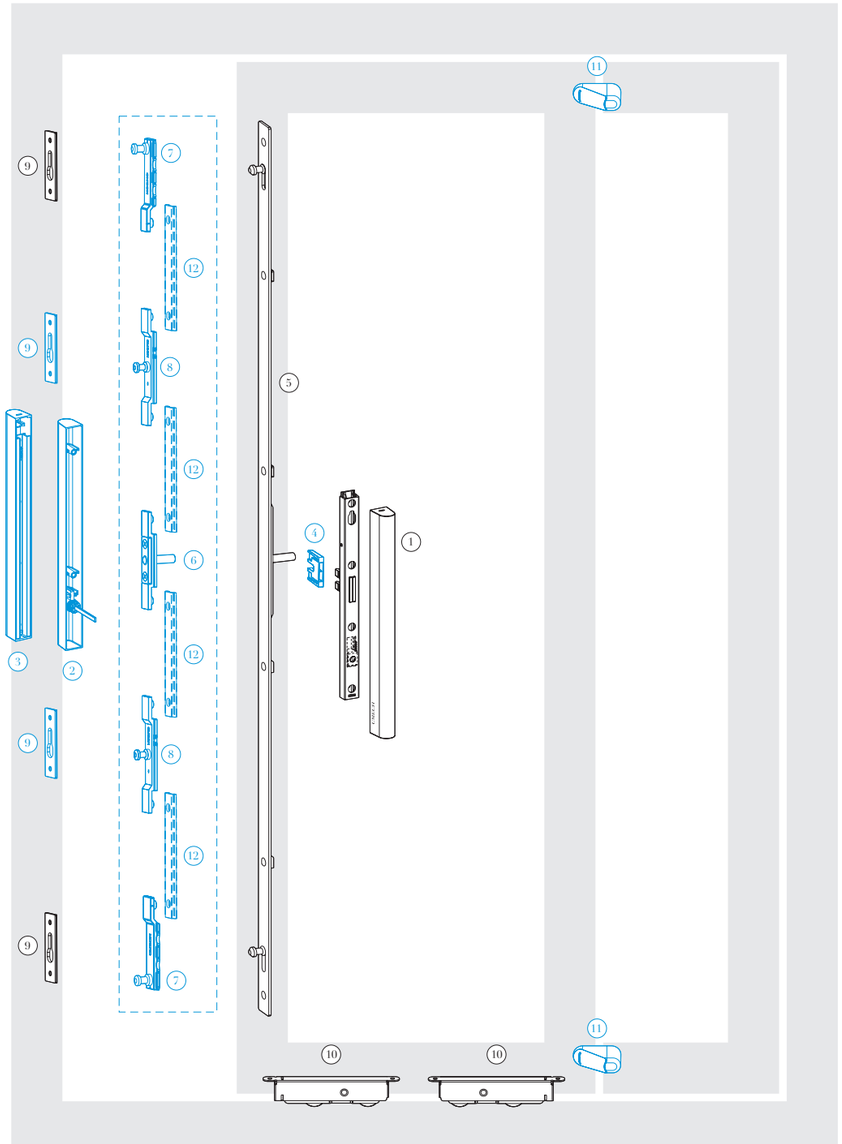
SLIDING DOOR HARDWARE SERIES

Configuration Table - Fork Drive Handle

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle and Fork Drive Handle (Type W)	A010107 A010210 A010406 A010601	1	New York Series Koln Series Berlin Series Milan Series	P21, P22
2	Fork Drive	A110097 A110098 A110100	1	Offset Fork Drive, 21mm Offset Fork Drive, 27mm Offset Fork Drive, 33mm	P27
3	Drive Gear	E030014 E030015	1	Width: 22 mm Width: 16 mm	P107
4	Intermediate Drive	A020115 A020116 A020117 A020126 A020127 A020128 A020129 A020180	1	14.5 mm 18.5 mm 22.5 mm 26.5 mm 30.5 mm 34.5 mm 11.5 mm 20.5 mm	P109
5	End Lock Point	E090003 E090007 E090009	2	End Lock Point Eccentricity Adjustable End Lock Point Height Adjustable End Lock Point	P110
6	Double-Ended Lock Point	E090004 E090008	0~2	Central Lock Point Height Adjustable Central Lock Point	P110
7	Strike	E100001 E100009 E100012 E100014 E100016	2~4		P111
8	Roller		2	Multiple Types Available	P113, P114, P115, P116
9	Panel Stop	F080001	1		P79
10	Connecting Strip		2~4	Provided by Customer or Cmech	

SLIDING DOOR HARDWARE SERIES

Spindle Drive Handle Configuration



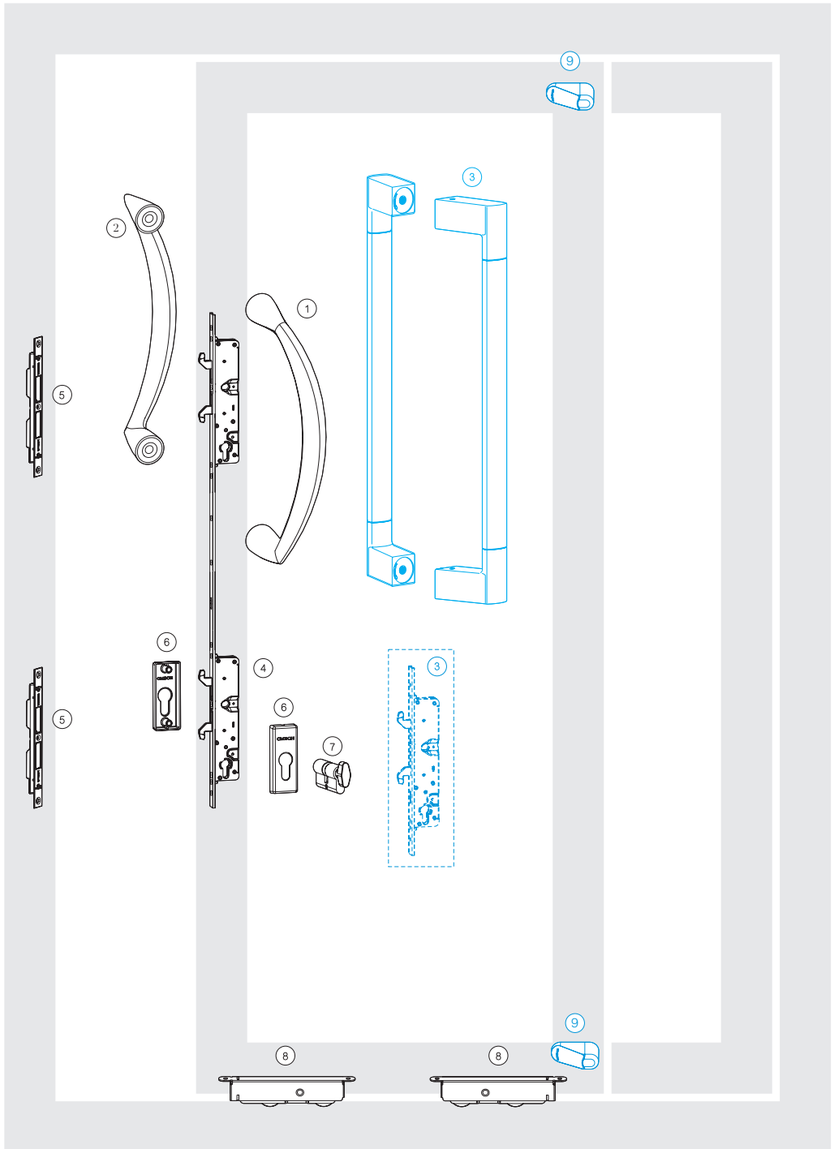
SLIDING DOOR HARDWARE SERIES

Configuration Table - Metro Handle

No.	Description	P/N	Qty	Notes	Ref. Page
1	Metro Handle Plus (MP)	E010036	1	Height: 30 mm	P103
2	Metro Handle Plus (MP, one side with key)	E010037	1	Height: 30 mm	P103
3	Fixed Metro Handle Plus	E010004	1		P103
4	Recessed Handle Fork Drive Extender	E120002	1	Lock Recessed Handle	
5	Drive Gear	E030014 E030015	1	Width: 22 mm Width: 16 mm	P107
6	Intermediate Drive	A020115 A020116 A020117 A020126 A020127 A020128 A020129 A020180	1	14.5 mm 18.5 mm 22.5 mm 26.5 mm 30.5 mm 34.5 mm 11.5 mm 20.5 mm	P109
7	End Lock Point	E090003 E090007 E090009	2	End Lock Point Eccentricity Adjustable End Lock Point Height Adjustable End Lock Point	P110
8	Double-Ended Lock Point	E090004 E090008	0~2	Central Lock Point Height Adjustable Central Lock Point	P110
9	Strike	E100001 E100009 E100012 E100014 E100016	2~4		P111
10	Roller		2	Multiple Types Available	P113, P114, P115, P116
11	Panel Stop	F080001	1		P79
12	Connecting Strip		2~4	Provided by Customer or Cmech	

SLIDING DOOR HARDWARE SERIES

Multi-Point Hook Lock Configuration



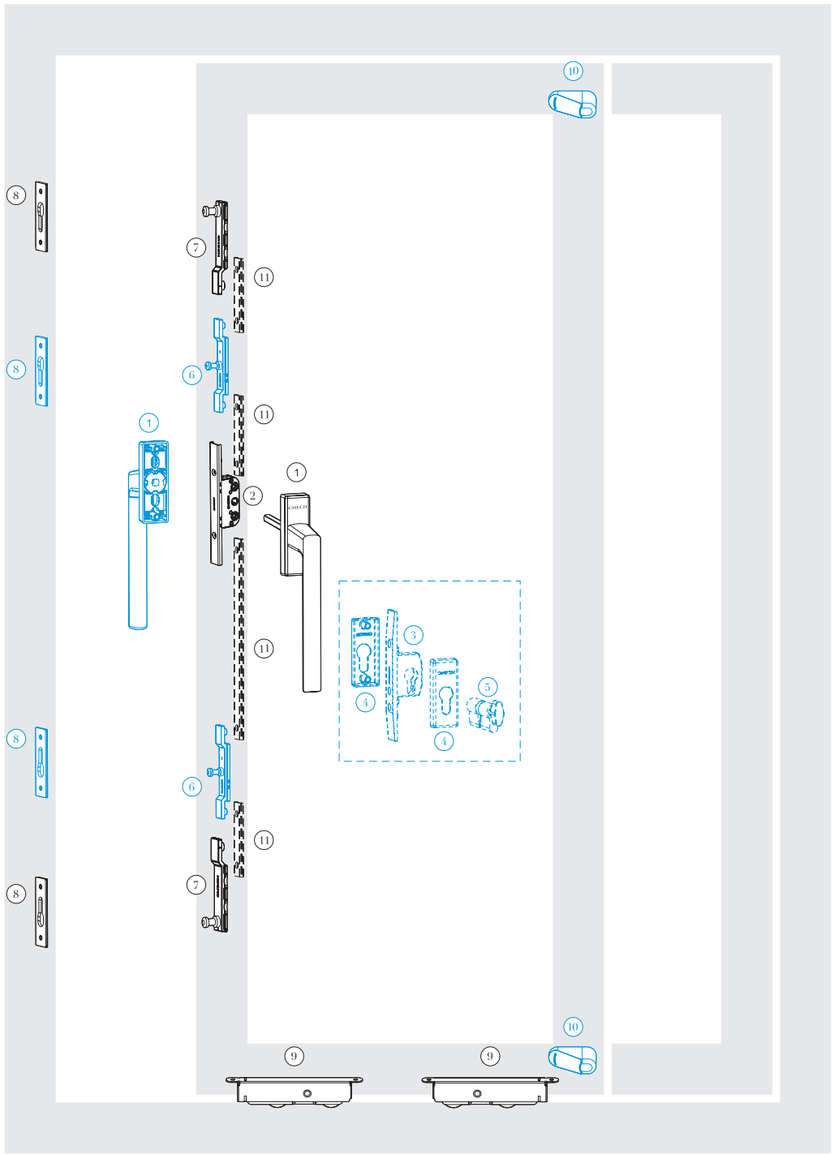
SLIDING DOOR HARDWARE SERIES

Configuration Table - Multi-Point Hook Lock

No.	Description	P/N	Qty	Notes	Ref. Page
1	Interior Handle	E010106	1	London Series; Hole Center to Attachment Surface: 260 mm;	P99, P100
2	Exterior Handle	E010101	1	London Series; Hole Center to Attachment Surface: 260 mm;	P99, P100
3	Handle Set	E010101 E010602	1	London Series; Hole Center to Attachment Surface: 260 mm; Milan Series; Hole Center to Attachment Surface: 400 mm	P99, P100
4	Multi-Point Hook Lock	E030017 E030016	1	Single Lock Body Double Lock Body	P107
5	Multi-Point Hook Lock Bracket	E100018	1 2	Single Lock Body Double Lock Body	P107
6	Cylinder Cover	E140001 E140002	1	Set Single	P100
7	Cylinder				P158, P159
8	Roller		2	Multiple Types Available	P113, P114, P115, P116
9	Panel Stop	F080001	1		P79
10	Screw Pack				

SLIDING DOOR HARDWARE SERIES

Spindle Drive Handle Configuration



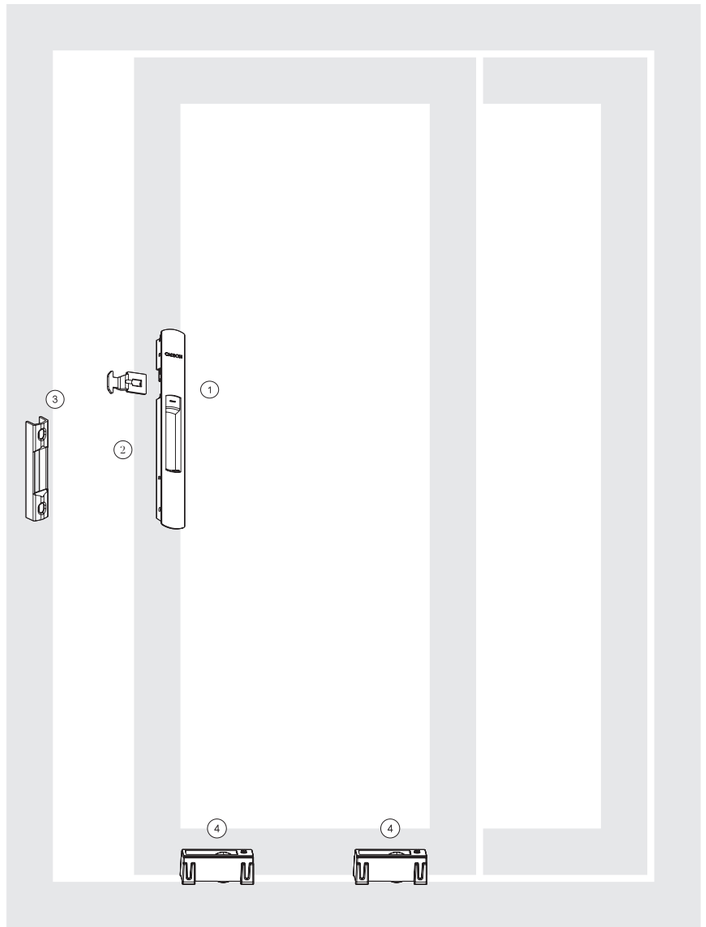
SLIDING DOOR HARDWARE SERIES

Configuration Table - Spindle Drive Handle

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type SD)	E010201 E010202 E010604 E010605	1	Koln Single Handle Series; Width: 32 mm Koln Handle Series Set ; Width: 32 mm Milan Single Handle Series ; Width: 32 mm Milan Handle Series Set; Width: 32 mm	P104
2	Bi-Directional Spindle Drive Gearbox	A020101 A020103	1	Hole Center to Attachment Surface: 25 mm Hole Center to Attachment Surface: 30 mm	P108
3	Locking Gearbox Housing (Only match with Bi-Directional Spindle Drive Gearbox)	E030008 E030009	1	Hole Center to Attachment Surface: 25 mm Hole Center to Attachment Surface: 30 mm	P108
4	Cylinder Cover	E140001 E140002	1	Set Single	P100
5	Cylinder		1	Suitable for Locking Gearbox Housing	P158, P159
6	Double-Ended Lock Point	E090004 E090008	0~2	Central Lock Point Height Adjustable Central Lock Point	P110
7	End Lock Point	E090003 E090007 E090009	2	End Lock Point Eccentricity Adjustable End Lock Point Height Adjustable End Lock Point	P110
8	Strike	E100001 E100009 E100012 E100014 E100016	2~4		P111
9	Roller		2	Multiple Types Available	P113, P114, P115, P116
10	Panel Stop	F080001	1		P79
11	Connecting Strip			Provided by Customer or Cmech	
12	Screw Pack	E110011			

SLIDING WINDOW HARDWARE SERIES

Bump Lock Recessed Pull Handle Configuration

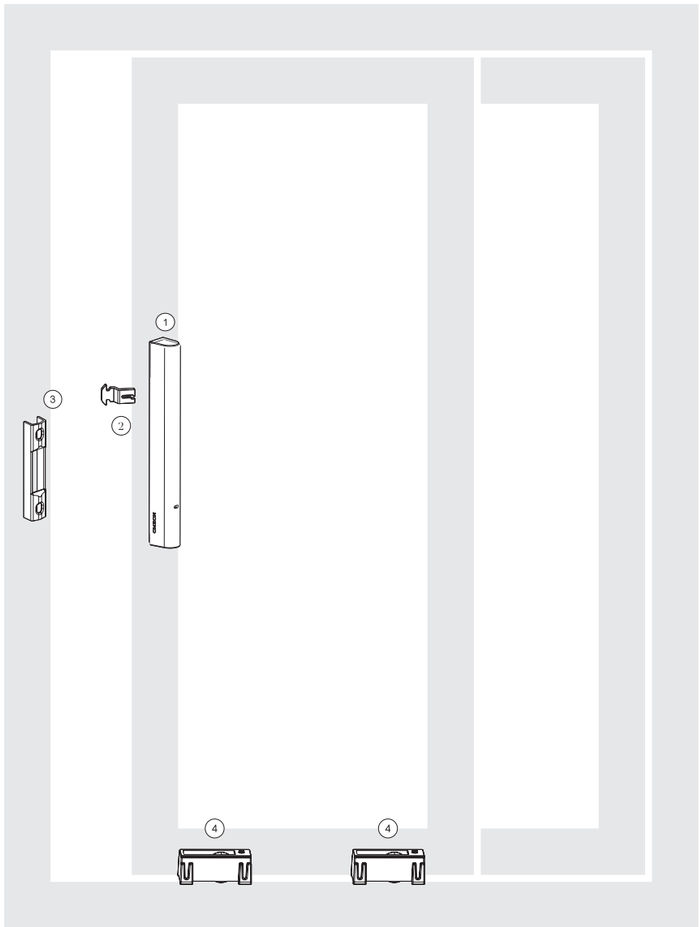


Configuration Table - Bump Lock Recessed Pull Handle Configuration

No.	Description	P/N	Qty	Notes	Ref. Page
1	Bump Lock Recessed Pull Handle	P010026	1		P105
2	Hook Lock	P110002 P110003 P110004 P110007	1	Multiple Types Available	P105
3	Locking Bracket	P100001 P100007 P100008	1	Bracket 16V Bracket 16 Flat Bracket	P111
4	Roller		2		P113, P114, P115, P116

SLIDING WINDOW HARDWARE SERIES

Bump Lock Recessed Pull Handle Configuration

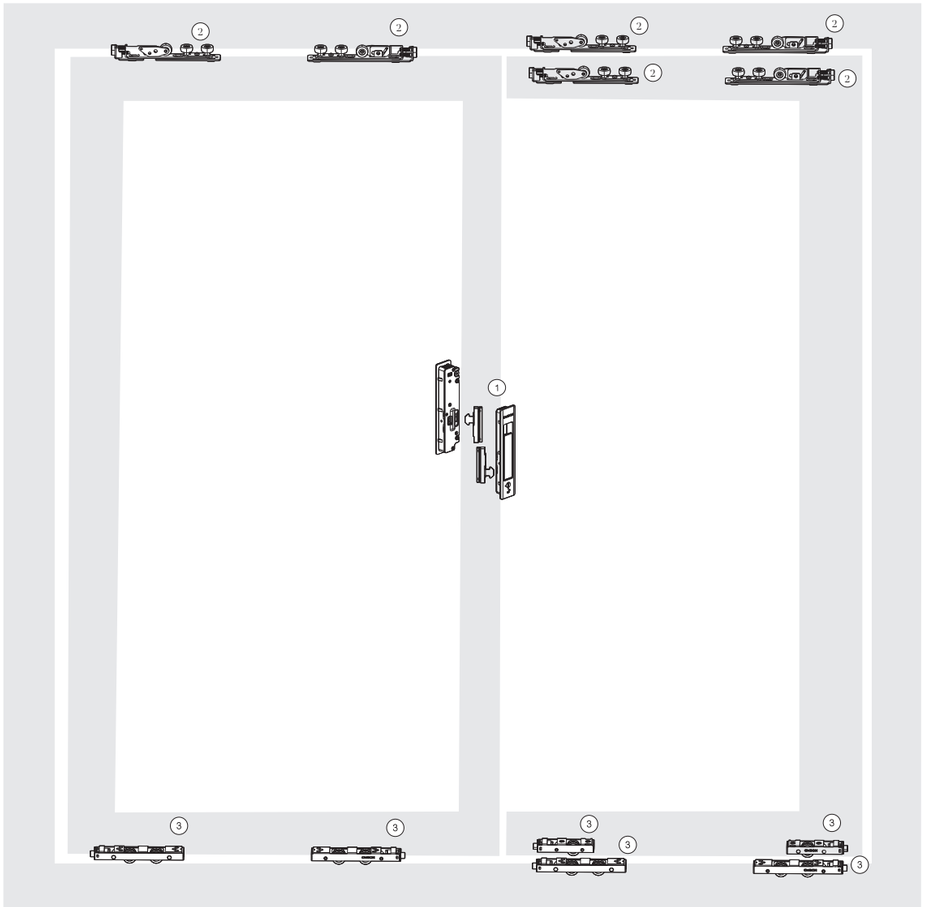


Configuration Table - Bump Lock Metro Handle Configuration

No.	Description	P/N	Qty	Notes	Ref. Page
1	Metro Handle S (SP)	P010032	1	Bump Lock Handle	P105
1*	Metro Handle S (SP)	P010033	1	Manual Lock Handle	P105
2	Hook Lock	P110016 P110017	1		
3	Locking Bracket	P100001 P100007 P100008	1	Bracket 16V Bracket 16 Flat Bracket	P111
4	Roller		2		P113, P114, P115, P116

SLIDING WINDOW HARDWARE SERIES

Six-track Sliding Window Configuration

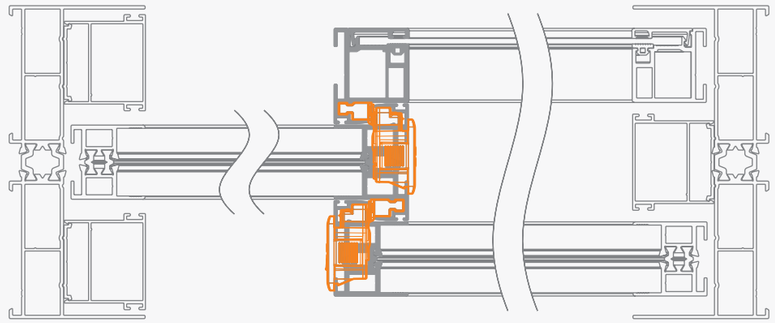


Configuration Table - Six-track Sliding Window

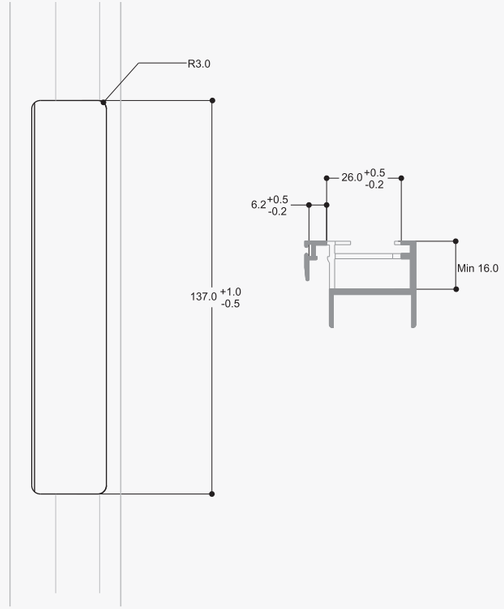
No.	Description	P/N	Qty	Notes	Ref. Page
1	Slimline Bump Lock Recessed Pull Handle	P010028 P010029	2	Right Opening , Equipped with Keeper Left Opening , Equipped with Keeper	P106
2	Upper Balance Wheel	P050006	6	15158-1825-2235 Balance wheel	P112
3	Double Track Lower Roller	P050003 P050004 P050005	6	2413-1921-R2.5-25kg Roller 2413-1921-R2.5-75kg Roller 2413-1921-R2.5-150kg Roller	P112
4	Screw Pack				

SLIDING WINDOW HARDWARE SERIES

Six-track Sliding Window Configuration



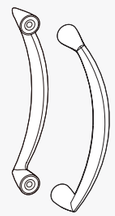
Drill Hole Drawing



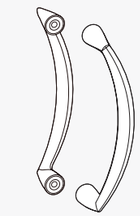
HANDLE SELECTIONS

LONDON HANDLE



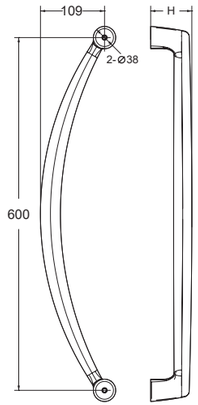


P/N	Height
E010115-	70 (Exterior)
E010114-	70 (Interior)



P/N	Height
E010117-	70 (Interior+Exterior)

*Includes Screw Pack; The Outer Handle Cannot be Installed Separately

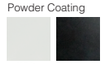


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

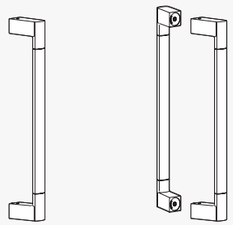


White 09 | Mat Black 17

HANDLE SELECTIONS

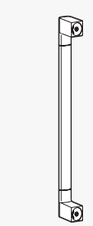
MILAN SERIES
400 Handle





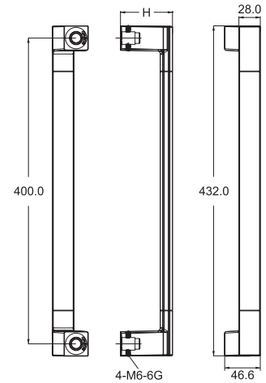
P/N	Height
E010601-	68 (Interior)

P/N	Height
E010602-	68 (Interior+Exterior)



P/N	Height
E010603-	68 (Exterior)

*Includes Screw Pack

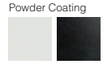


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



White 09 | Mat Black 17

LONDON HANDLE





P/N	Height
E010101-	70 (Exterior)
E010106-	70 (Interior)



P/N	Height
E010112-	50 (Interior)

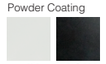
*Screw Pack Options P139; The Outer Handle Cannot be Installed Separately

M Treatment

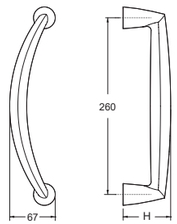


Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

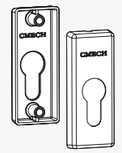


White 09 | Mat Black 17

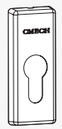


CYLINDER COVER





P/N
E140001-



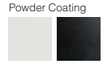
P/N
E140002-

M Treatment

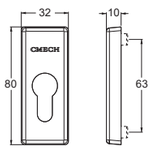


Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



White 09 | Mat Black 17



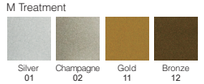
HANDLE SELECTIONS

MULTI-POINT LOCK RECESSED HANDLE



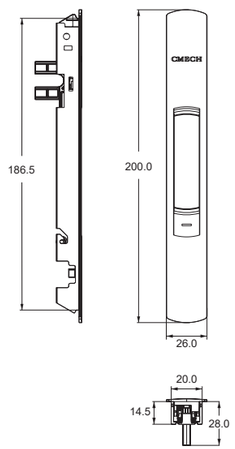
P/N
E010026-

M Treatment



Powder Coating



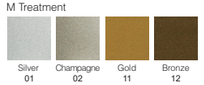


MULTI-POINT LOCK RECESSED HANDLE



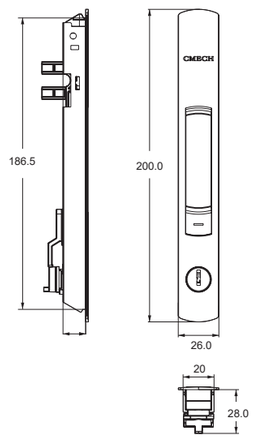
P/N	Description
E010024-	With Cylinders (Interior)

M Treatment



Powder Coating





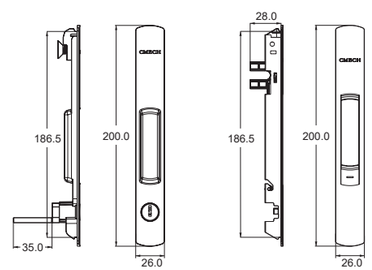
HANDLE SELECTIONS

MULTI-POINT LOCK RECESSED HANDLE



E010025

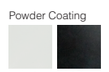
Multi-Point Lock Recessed Handle - Exterior with Key



M Treatment



Powder Coating

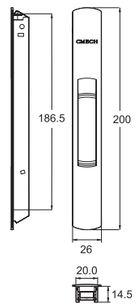


FIXED RECESSED HANDLE

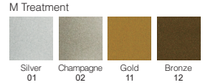


E010019

Fixed Recessed Handle



M Treatment



Powder Coating



HANDLE SELECTIONS

METRO HANDLE



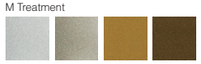


P/N	Description
E010036-	Metro Handle Plus (MP)

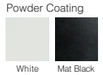


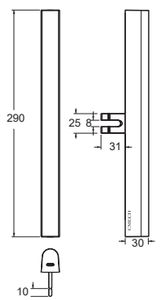
P/N	Description
E010004-	Fixed Metro Handle Plus

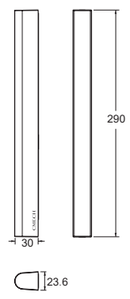
M Treatment



Powder Coating

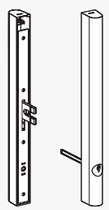






METRO HANDLE SET WITH CYLINDER



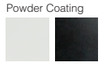


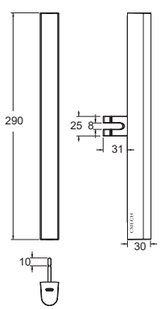
P/N	L
E010037-	53.8
E010038-	79.3

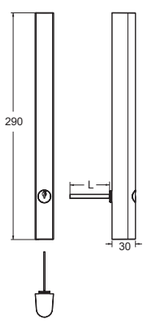
M Treatment



Powder Coating





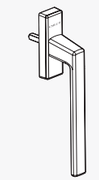


HANDLE SELECTIONS

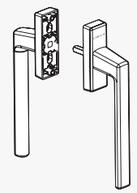
MILAN SERIES

Spindle Drive Handle (Type SD)



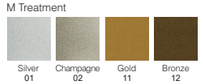


P/N	(WxH)
E010604-	32x63



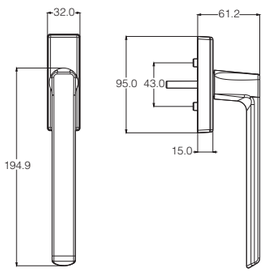
P/N	(WxH)
E010605-	32x63

M Treatment



Powder Coating

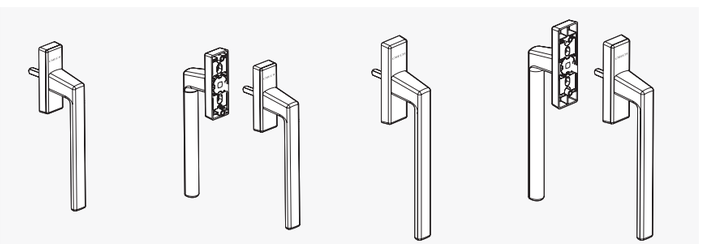




KOLN SERIES

Spindle Drive Handle (Type SD)





P/N	W x H
E010201-	32 x 63

P/N	W x H
E010202-	32 x 63

P/N	W x H
E010203-	37 x 69

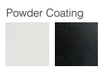
P/N	W x H
E010204-	37 x 69

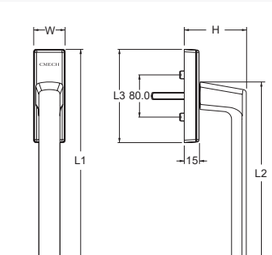
P/N	L1(mm)	L2(mm)	L3(mm)
E010201	226.8	193.2	95.0
E010202	226.8	193.2	95.0
E010203	279.4	234.4	120.0
E010204	279.4	234.4	120.0

M Treatment



Powder Coating



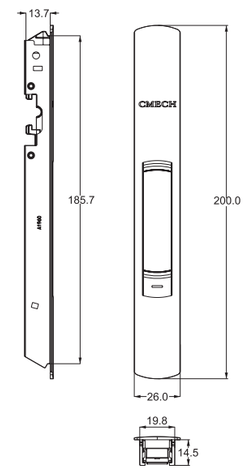


TILT & TURN WINDOW HARDWARE

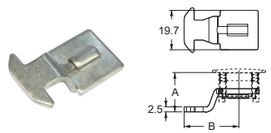
P010026

Bump Lock Recessed Pull Handle



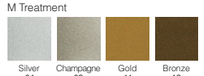


Hook Lock



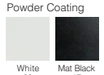
P/N	Specifications	
	A	B
P110002	19.5 mm	27.1 mm
P110003	17.5 mm	29.1 mm
P110004	15.5 mm	31.1 mm
P110005	22.5 mm	24.1 mm
P110006	14.5 mm	31.1 mm
P110007	19.5 mm	35.1 mm
P110008	14.5 mm	23.1 mm

M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

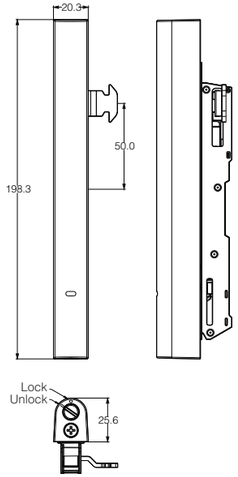


White 09 | Mat Black 17

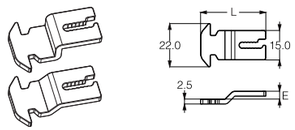
P010032

METRO HANDLE S (SP)





Hook Lock



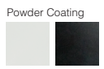
P/N	Specifications	
	L	E
P110016	33.2 mm	4 mm
P110017	33.2 mm	7 mm

M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



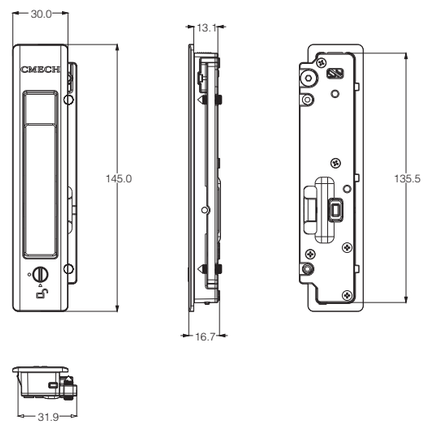
White 09 | Mat Black 17

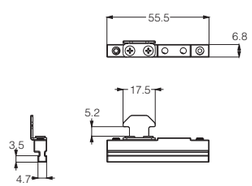
TILT & TURN WINDOW HARDWARE

P010028

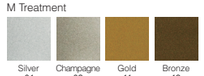
Slimline Bump Lock Recessed Pull Handle (Right)







M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

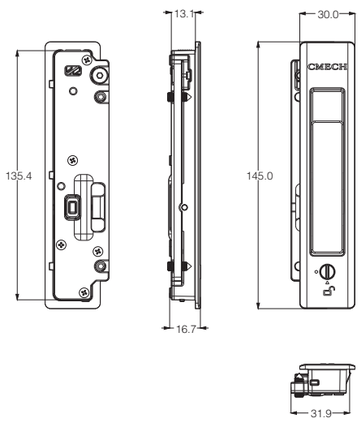


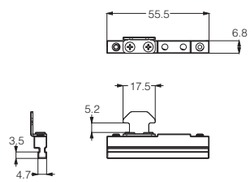
White 09 | Mat Black 17

P010029

Slimline Bump Lock Recessed Pull Handle (Right)





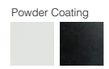


M Treatment



Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

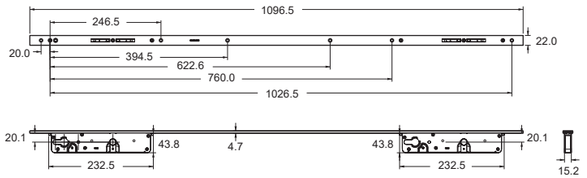


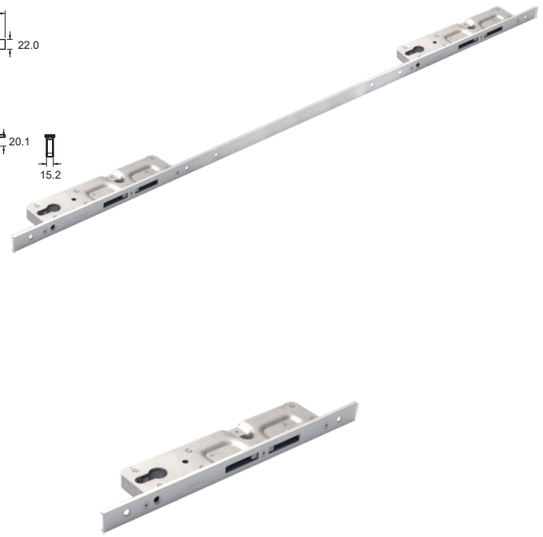
White 09 | Mat Black 17

LOCKING HARDWARE

E030016

Multi-Point Hook Lock - Double Lock Body



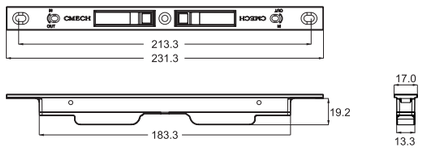


E030017

Multi-Point Hook Lock - Single Lock Body

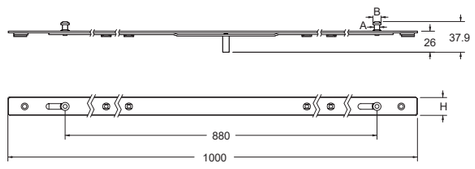
E100018

Multi-Point Hook Lock Bracket





Drive Gear

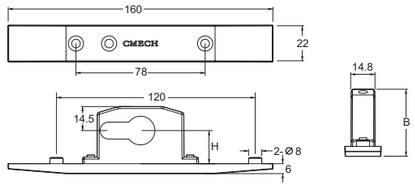


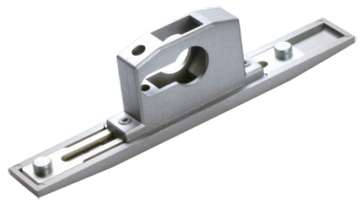
P/N	Height	Specifications	
		A	B
E030014	22 mm	∅4.0	∅7.8
E030015	16 mm	∅4.0	∅7.8



GEARBOXES

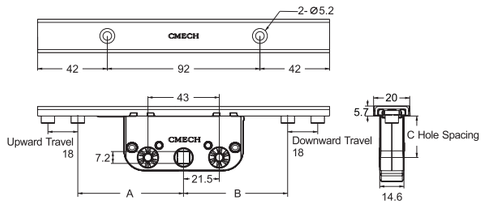
Locking Gearbox Housing





P/N	H	B
E030008	25 mm	45.5 mm
E030009	30 mm	50.5 mm

Bi-Directional Spindle Drive Gearbox

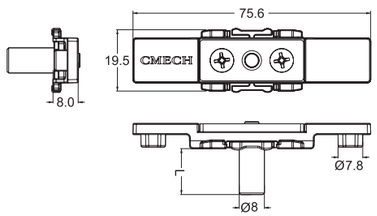




P/N	A	B	C
A020101	62.7 mm	63.7 mm	25 mm
A020103	62.7 mm	62.7 mm	30 mm

FORK DRIVES

Reinforced T-Drive



P/N	L
A020115	14.5 mm
A020116	18.5 mm
A020117	22.5 mm
A020126	26.5 mm
A020127	30.5 mm
A020128	34.5 mm
A020129	11.5 mm
A020180	20.5 mm



Hardware Type	MAXPRO						XF CLASSA		SOCO	
	SW65	SW83	SD83	SD115	SW55	SD100	72	115	94	120
A020116							○			
A020117			○							
A020126	○	○		○	○			○	○	○
A020127						○				

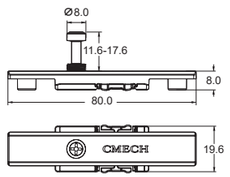
Hardware Type	ROLAN				KOGEN		JMA		ALUK	
	RT80	RT100	RT120	RT134	115	93	80	120	94	120
A020116										
A020117										
A020126	○	○	○	○	○	○	○	○	○	○
A020127										

Hardware Type	PMI			PMA	
	92	100F	70	95	120
A020116					
A020117			○		
A020126	○	○		○	○
A020127					

LOCK POINTS

E090008

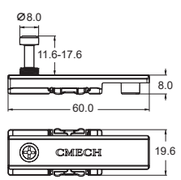
Height Adjustable Central Lock Point





E090009

Height Adjustable End Lock Point





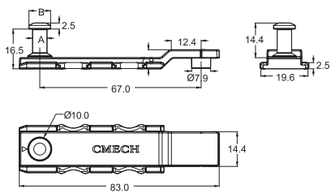
E090007

Offset Adjustable End Lock Point

Offset 1 mm, Adjustable Offset 2 mm



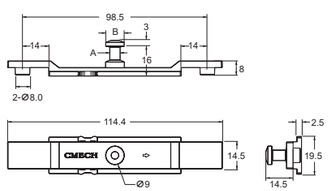
End Lock Point



P/N	Specifications	
	A	B
E090001	Ø6.0	Ø9.0
E090003	Ø4.0	Ø8.0



Double-Ended Lock Point



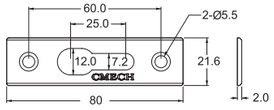
P/N	Specifications	
	A	B
E090002	Ø6.0	Ø9.0
E090004	Ø4.0	Ø8.0



STRIKES AND BRACKETS

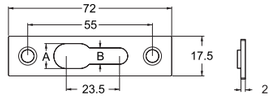
E100001

Strike





Strike

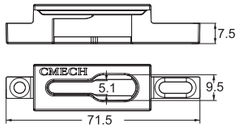




P/N	A	B
E100006	11 mm	7.2 mm
E100009	9.25 mm	5.5 mm

E100016

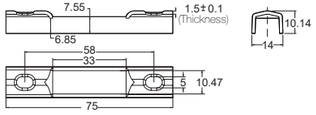
After-Assembly Keeper





P100001

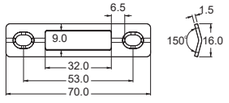
Locking Bracket





P100007

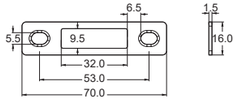
16V Bracket





P100008

16 Flat Bracket

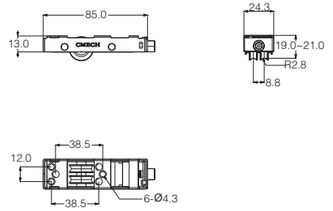




ROLLER CARRIAGES

P050003

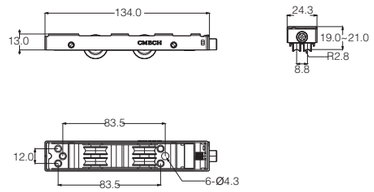
Double Track Lower Roller-2413-1921-R2.5-25KG





P050004

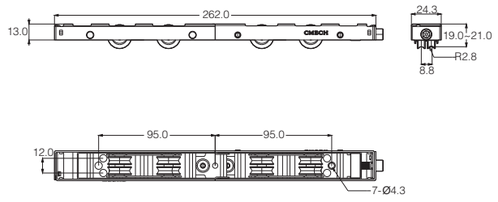
Double Track Lower Roller-2413-1921-R2.5-75KG





P050005

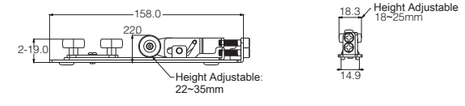
Double Track Lower Roller-2413-1921-R2.5-150KG

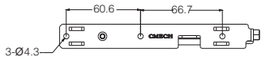




P050006

Upper Balance Wheel-15158-1825-2235



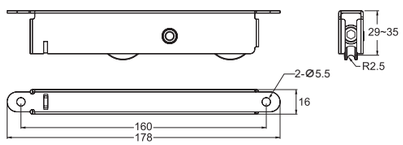




ROLLER CARRIAGES

E050001

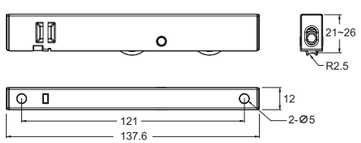
Roller (Type R)-1628-2934-R2.5-150kg





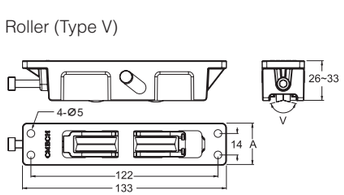
E050002

Roller (Type R)-1220-2127-R2.5-120 kg





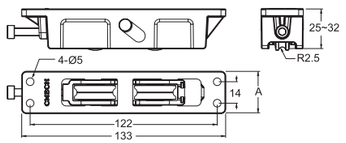
Roller (Type V)





P/N	Description	A	Max. Load	Material	V-Angle
E050005	2426-2633-V150-80 kg	24 mm	80 kg	Nylon	150°
E050006	2426-2633-V150-120 kg	24 mm	120 kg	Zinc Alloy	150°
E050009	2826-2633-V150-80 kg	28 mm	80 kg	Nylon	150°
E050010	2826-2633-V150-120 kg	28 mm	120 kg	Zinc Alloy	150°
E050005-V135	2426-2633-V135-80 kg	24 mm	80 kg	Nylon	135°
E050006-V135	2426-2633-V135-120 kg	24 mm	120 kg	Zinc Alloy	135°

Roller (Type R)



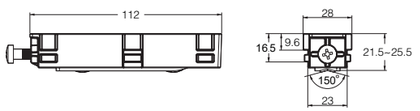


P/N	Description	A	Max. Load	Material
E050003	2426-2532-R2.5-80 kg	24 mm	80 kg	Nylon
E050004	2426-2532-R2.5-120 kg	24 mm	120 kg	Zinc Alloy
E050007	2826-2532-R2.5-80 kg	28 mm	80 kg	Nylon
E050008	2826-2532-R2.5-120 kg	28 mm	120 kg	Zinc Alloy

ROLLER CARRIAGES

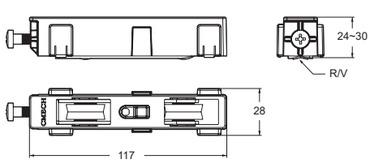
E050012

Roller (Type V)-2920-2225-V150-120 kg





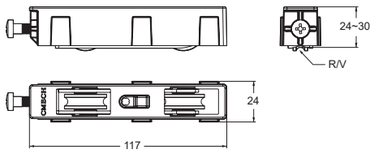
Roller-120 kg





P/N	Description	Max. Load	Material	R/V-Angle
E050011	2824-2430-R2.5-120 kg	120 kg	Nylon	R2.5
E050014	2824-2430-V160-120 kg	120 kg	Nylon	160°

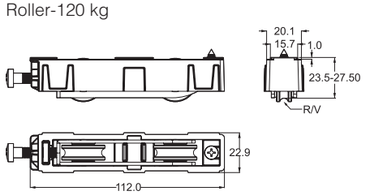
Roller-120 kg





P/N	Description	Max. Load	Material	R/V-Angle
E050013	2423-2430-R2.5-120 kg	120 kg	Nylon	R2.5
E050015	2423-2430-V160-120 kg	120 kg	Nylon	160°

Roller-120 kg



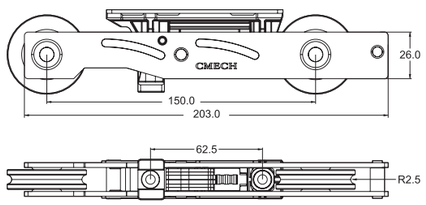


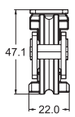
P/N	Description	Max. Load	Material	R/V-Angle
E050020	2323-2226-R2.5-120 kg	120 kg	Nylon	R2.5
E050018	2323-2226-V150-120 kg	120 kg	Nylon	150°

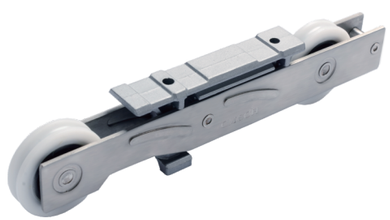
ROLLER CARRIAGES

E050022

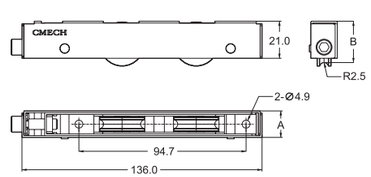
Roller (Type R)-2226-45-R2.5-300 kg







Roller (Type R)

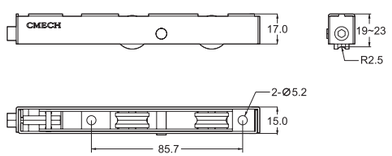




P/N	Description	A	B	Max. Load	Material
E050024	1521-2027-R2.5-120 kg	15 mm	23–31	120 kg	Stainless Steel
E050025	1621-2028-R2.5-120 kg	16 mm	23–31	120 kg	Stainless Steel

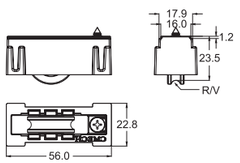
E050026

Roller (Type R)-1517-1923-R2.5-120 kg





Single Roller - 60 kg



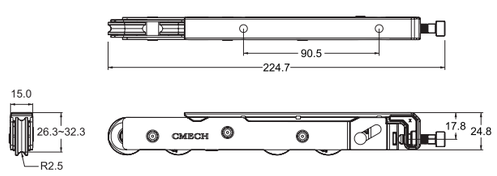


P/N	Description	Max. Load	Material	R/V-Angle
E050021	2323-23-R2.5-60 kg	60 kg	Nylon	R2.5
E050017	2323-23-V150-60 kg	60 kg	Nylon	150°

ROLLER CARRIAGES

E050027

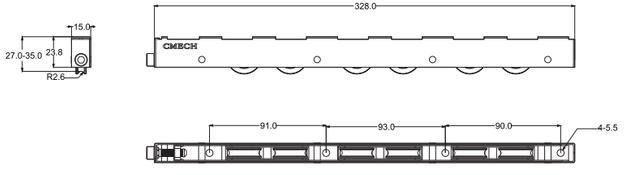
Roller -1525-2632-R2.5-200 kg





E050028

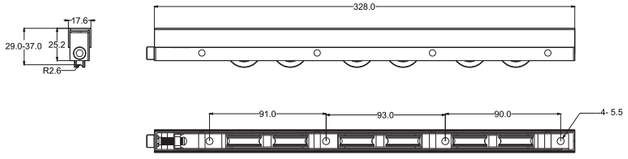
Roller -1524-2735-R2.6-300 kg





E120005

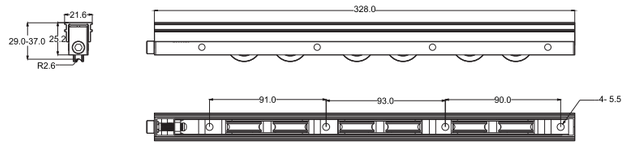
17.6×15 Roller Assist





E120006

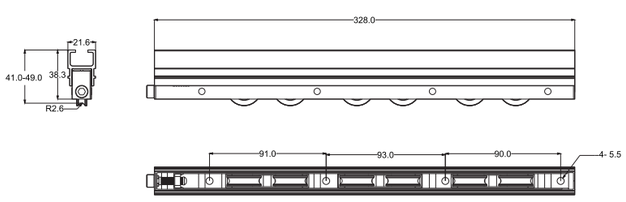
21.6×15 Roller Assist





E120007

21.6×28 Roller Assist





SLIDING DOOR & WINDOW PROFILE

Available profiles

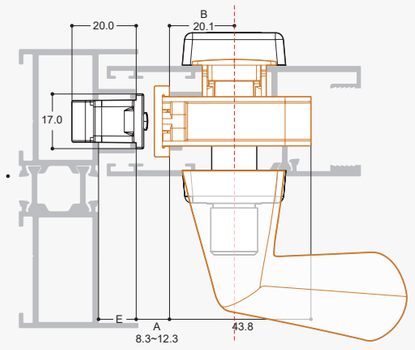
Hardware Type	MAXPRO							XF CLASSA		SOCO		PMI		
	SW65	SW83	SD83	SD115	SW55	SD93	SD100	72	115	94	120	92	100	100F
E050015-A													○	
E050021	○	○			○		○							
E050013	○	○			○		○							
E050025			○	○		○			○					○
E050026								○		○	○	○		
E050027			○	○		○			○	○	○	○		○
E050028			○	○		○			○					○

Available profiles

Hardware Type	ROLAN				KOGEN		JMA		ALUK		PMA		XINGFA
	RT80	RT100	RT120	RT134	115	93	80	120	94	120	95	120	93
E050017-A													○
E050021													
E050013													
E050025			○	○	○	○	○	○		○			
E050026	○	○							○		○	○	
E050027	○	○	○	○	○	○	○	○	○	○	○	○	
E050028			○	○	○	○	○	○		○			

SLIDING DOOR PROFILE AND DRILLING REQUIREMENTS

- Single London Handle
- Multi-Point Hook Lock (Single Lock Body)

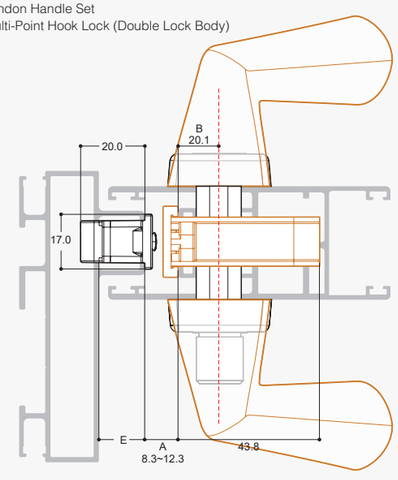


A: The gap between the surface of the locking bracket and the mounting surface of the lock body

B: The distance between the lock body mounting surface and the centerline

E: Distance between installed surface of lock base and bottom of profile groove

- London Handle Set
- Multi-Point Hook Lock (Double Lock Body)

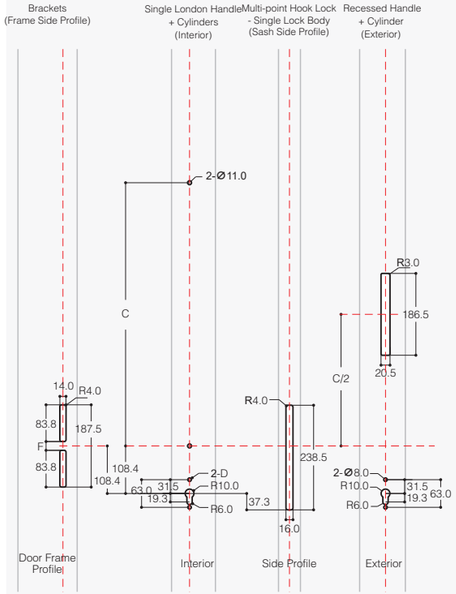


A: The gap between the surface of the locking bracket and the mounting surface of the lock body

B: The distance between lock body mounting surface and the centerline

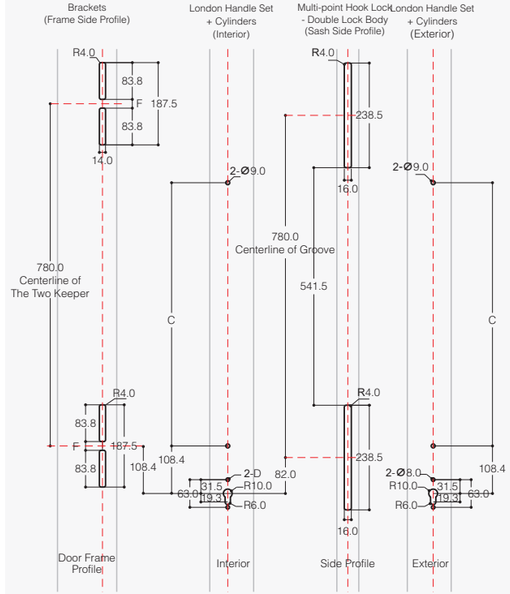
E: Distance between installed surface of lock base and bottom of profile groove

Drill Hole Drawing



C: Small London handle screw hole distance 260 mm, large London handle screw hole distance 600 mm
D: Single sided - Interior: 4.0, Exterior: no holes
Dual sided - Interior: 6.0, Exterior: 8.0
F: If E 12.5mm, F=20 mm
If E<12.5mm, F=0

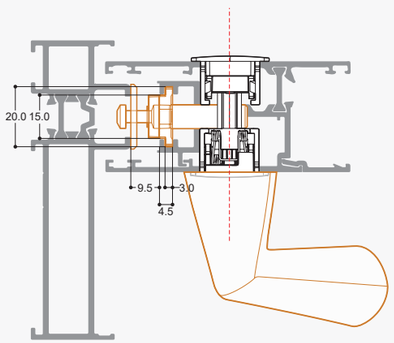
Drill Hole Drawing



C: Small London handle screw hole distance 260 mm, large London handle screw hole distance 600 mm
D: Single sided - Interior: 4.0, Exterior: no holes
Dual sided - Interior: 6.0, Exterior: 8.0
F: If E 12.5mm, F=20 mm
If E<12.5mm, F=0

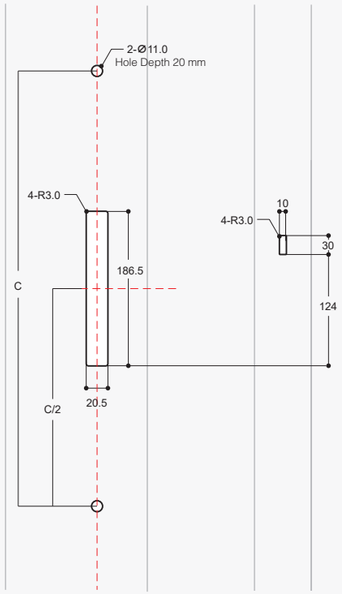
SLIDING DOOR PROFILE AND DRILLING REQUIREMENTS

- Single London Handle+Multi-Point Lock Recessed Handle
- Fixed Recessed Handle

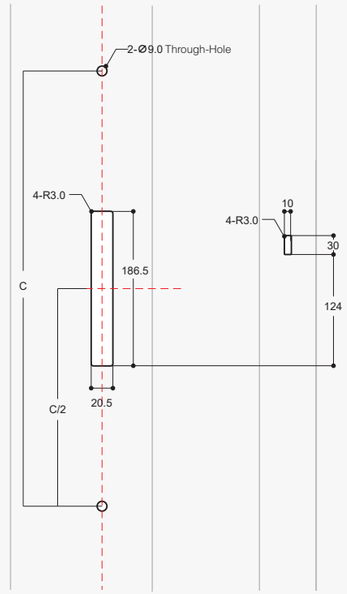


Drill Hole Drawing

Multi-Point Lock Recessed Handle +London Handle

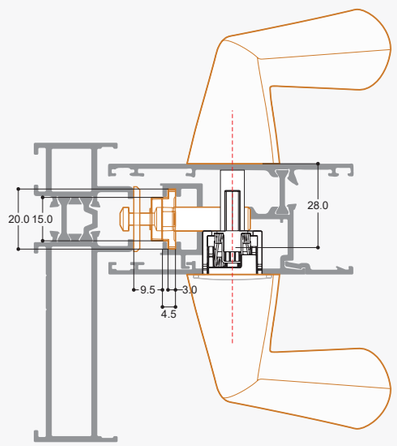


Multi-Point Lock Recessed Handle (Side Profile)



C: Small London handle screw hole distance 260 mm, large London handle screw hole distance 600 mm

- London Handle Set+Multi-Point Lock Recessed Handle



Drill Hole Drawing

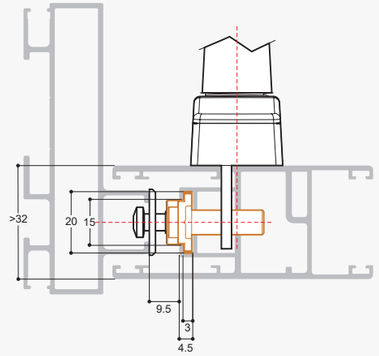
Multi-Point Lock Recessed Handle +London Handle

Multi-Point Lock Recessed Handle (Side Profile)

C: Small London handle screw hole distance 260 mm, large London handle screw hole distance 600 mm

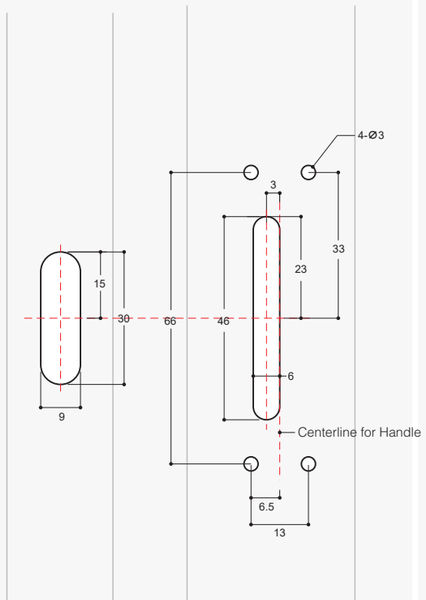
SLIDING DOOR PROFILE AND DRILLING REQUIREMENTS

- Fork Drive Handle+T-Drive

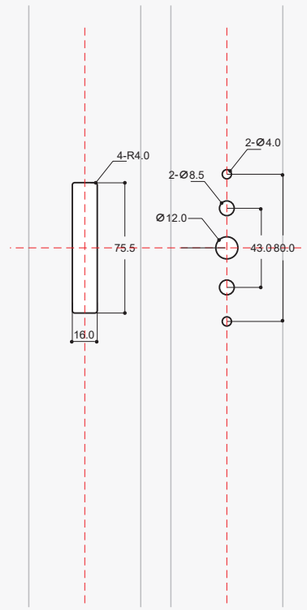


Drill Hole Drawing

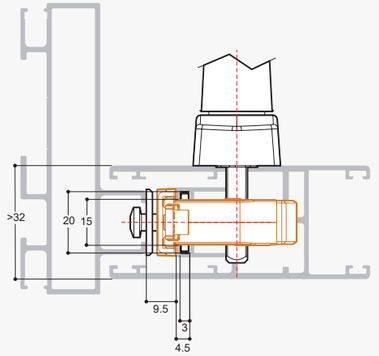
T-Drive (Side Profile)



Fork Drive Handle (Type W) (Interior)



- Spindle Drive Handle+Spindle Drive Gearbox



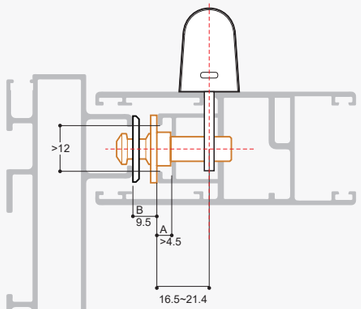
Drill Hole Drawing: Suitable for E010201

Side Profile

Interior

SLIDING DOOR PROFILE AND DRILLING REQUIREMENTS

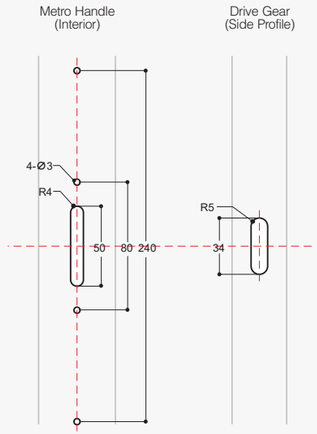
Single Metro Handle + Drive Gear (Width: 22 mm)



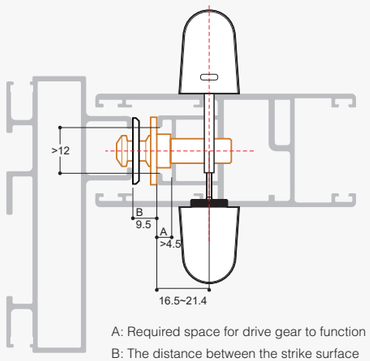
A: Required space for drive gear to function

B: The distance between the strike surface and the drive gear mount surface

Drill Hole Drawing



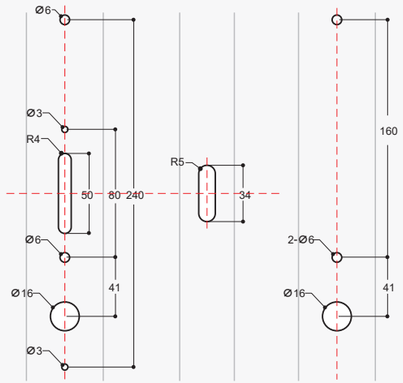
Metro Handle Set + Drive Gear (Width: 22 mm)



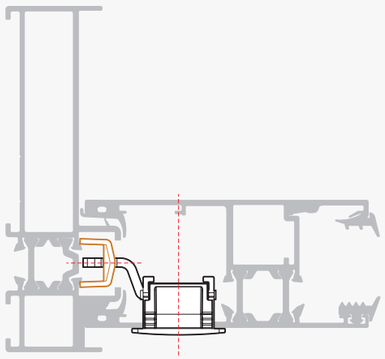
A: Required space for drive gear to function

B: The distance between the strike surface and the drive gear mount surface

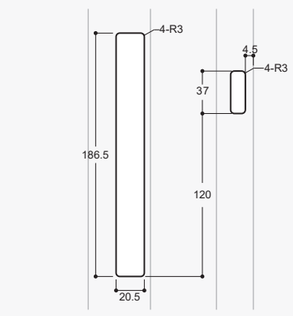
Drill Hole Drawing



Single-Point Lock Recessed Handle

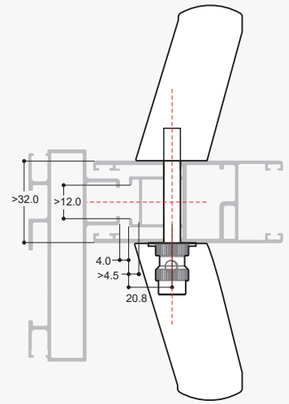


Drill Hole Drawing

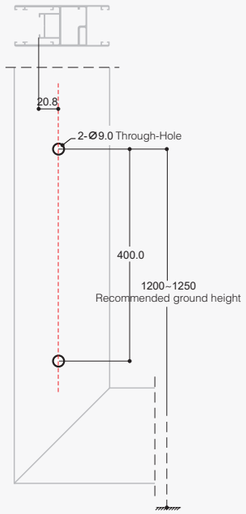


SLIDING DOOR PROFILE AND DRILLING REQUIREMENTS

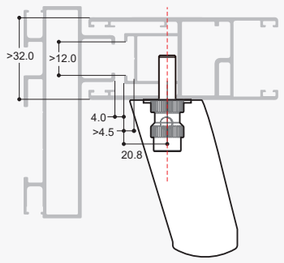
400 Milan Handle Set



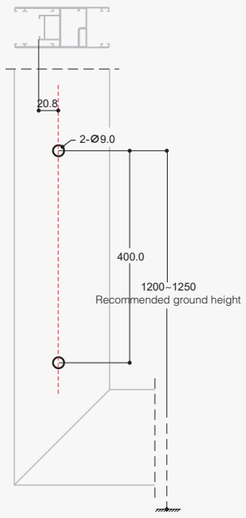
Drill Hole Drawing



400 Single Milan Handle



Drill Hole Drawing



SLIDING DOOR & WINDOW SCREW PACK SELECTION TABLE

Screw Pack Selections

P/N / Product	E110001	E110005	E110006	E110009	E110010	E110011	E110012	E110014	E110017	E110020	E110024	A110078	E110028
300 London Handle Set	1												
Single London Handle										1			
Fork Drive Handle (Type W)												1	
Spindle Drive Handle (Interior)							1						
Spindle Drive Handle (Interior + Exterior)						2							
Metro Handle Plus (MP)				1									
Metro Handle Plus (SP)				1									
Metro Handle Plus + Recessed Handle								1					
Fixed Metro Handle Plus + Recessed Handle									1				
Cylinder Cover (Interior)					1								
Cylinder Cover (Interior + Exterior)						1							
Multi-Point Hook Lock (Single Lock Body) + Keeper		3											
Multi-Point Hook Lock (Double Lock Body) + Keeper		6											
Drive Gear		3											
Strike		1											
Roller (Type R)-1628R			1										
Roller (Type R)-1220R				1/2									
Roller (Type R)-2826R				1									
Roller (Type R)-2426R				1									
Roller (Type V)-2826V				1									
Roller (Type V)-2426V				1									
Roller (Type R)-1521R				1/2									
Roller (Type R)-1621R				1/2									
Roller (Type R)-1517R				1/2									
Roller (Type R)-1215R				1/2									
Roller (Type R)-2226R											1		
200 kg Roller-1525													1
300 kg Roller-1524													1

*The Roller Qty is 2pcs Except for E110009, Which is 1pc.

Tightly Sealed Sliding Window Hardware





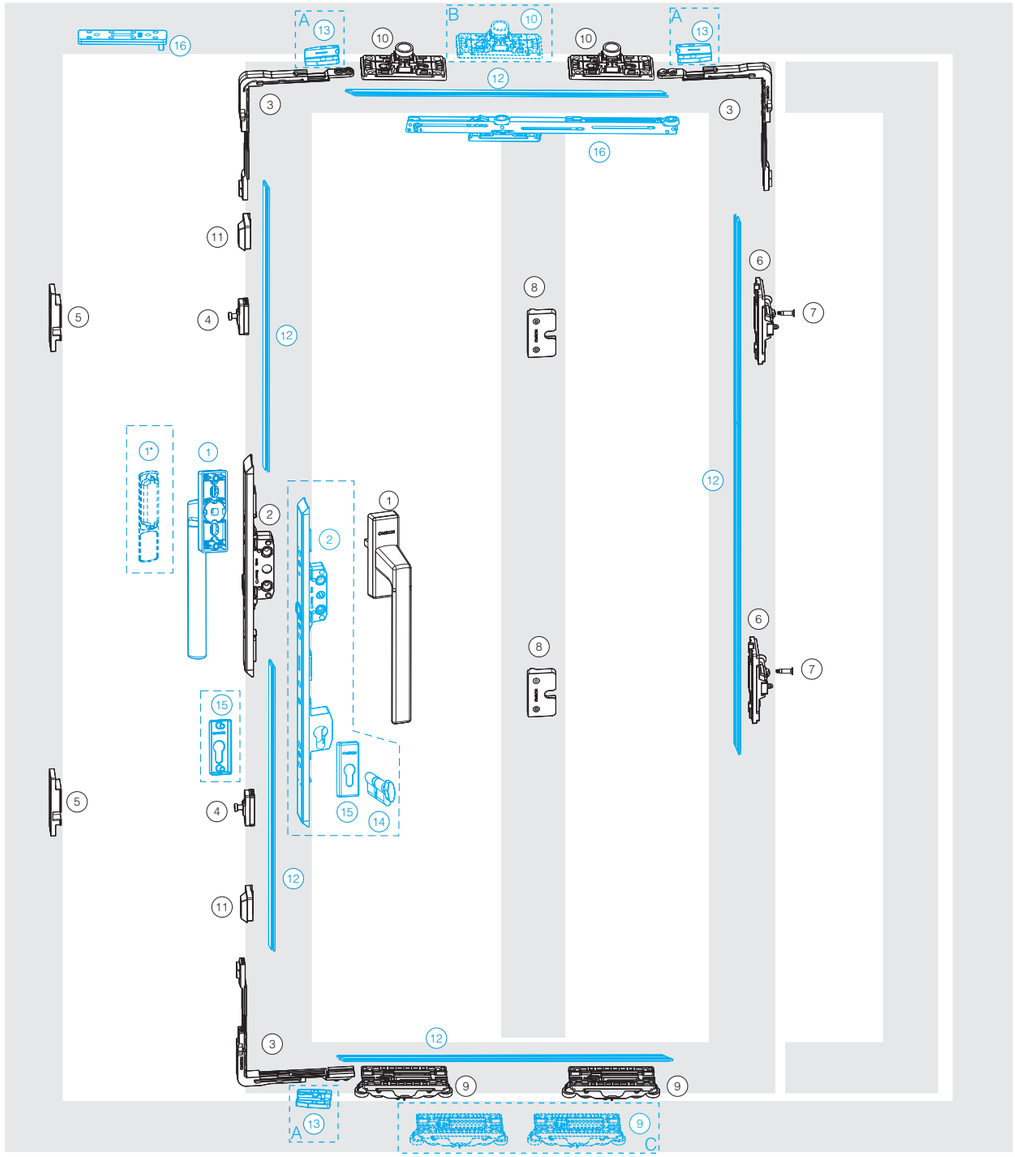


- Innovative structure and easy operation
- Excellent wind resistance and efficient sealing
- Adjustable lock point height, easy and convenient installation
- Double roller configuration, 150kg high load-bearing capacity

Tightly Sealed Sliding Window		Applicable Range
Sash Width	(mm)	610-2,800
Sash Height	(mm)	990-2,800
Load-bearing	(kg)	150,240
Aspect ratio (sash height/sash width)		3

TIGHTLY SEALED SLIDING WINDOW HARDWARE SYSTEM

Spindle Drive Handle Configuration



Note: 1. If any looseness is found after installing the corner drive, or if the door sash weight is 150 kg, a corner drive,reinforcement block must be installed.

2.With the 150 kg configuration, adding optional components A + B + C increases the load capacity to 240 kg. Part numbers for the options are shown in the table below:

Configuration	P/N	Description
A+B+C	N800005	Left-Hand Opening 240kg Hardware
A+B+C	N800006	Right-Hand Opening 240kg Hardware

TIGHTLY SEALED SLIDING WINDOW HARDWARE SYSTEM

Configuration Table - Spindle Drive Handle Configuration

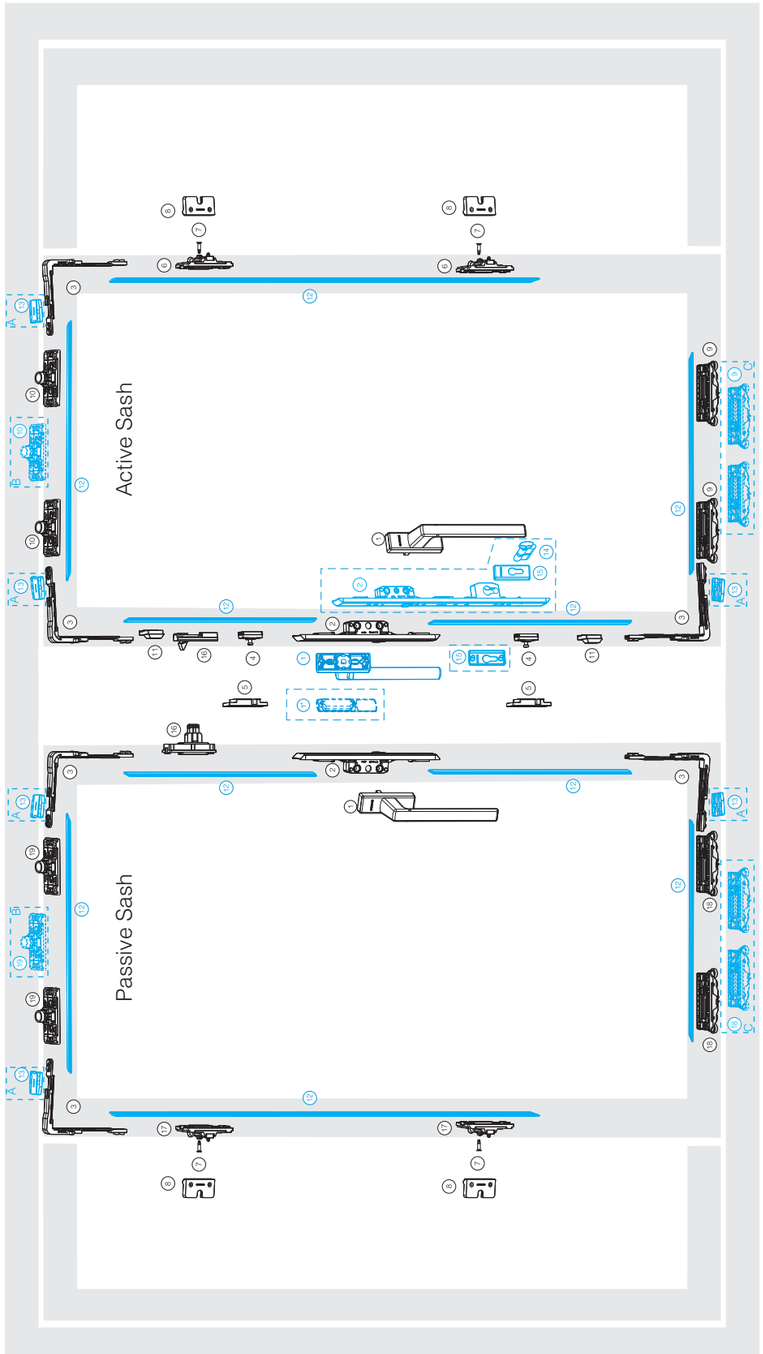
No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle	E010604 E010605 E010606 E010607	1	Milan Handle; Zinc Alloy Base Milan Handle Set; Zinc Alloy Base Milan Handle; Aluminum Alloy Base Milan Handle Set; Aluminum Alloy Base	P104
1*	Recessed Handle	F010602	1	U Series	P74
2	Side Compress Drive Gearbox	N020001 N020003	1	Hole distance 15 mm Hole distance 15 mm ,with cylinder	P131
3	Fail-Safe Corner Drive	N060001	3		P131
4	Operable Sash Lock Point	N090005	Refer to the table below	Height Adjustable	P132
5	Operable Sash Keeper	N100001 N100002	Refer to the table below	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P133
6	Lock Point Seat	N090001 N090002	Refer to the table below	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P132
7	Hook Operated Sash Lock Point	N090003 N090004 N090006	Refer to the table below	55 Thickness 60 Thickness 65 Thickness	P132
8	Hook Operated Sash Keeper	N100003	Refer to the table below		P132
9	Lower Roller	N050001 N050002	Refer to the table below	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P134
10	Upper Roller	N050003 N050004	Refer to the table below	Suitable for Left-Opening Sash Suitable for Right-Opening Sash	P134
11	Rubber Stop	N080002	2		P134
12	Fail-Safe Connecting Strip	N020002		Provided by Customer or Cmech	
13	Corner Drive Reinforcing Gasket	N120001	3		P133
14	Cylinder		1		P158, P159
15	Lock Cylinder Cover	E140001 E140002	1	Double-Sided Lock Cylinder Cover Single-Sided Inner Lock Cylinder Cover	P100
16	Buffer	N050005 N050006 N050007 N050008	1	Left Sash Front Buffer Rightt Sash Front Buffer Left Sash Front and Rear Double Buffers Right Sash Front and Rear Double Buffers	P135
17	Screw Pack	N110001 N110002	1	Installation Aid Screws Hardware Connecting Screws	
18	Spindle Screw Pack	N110013 N110004 N110003	1	For Double-Sided Spindle Drive Handle For Single-Sided Spindle Drive Handle +Recessed Handle For Single-Sided Spindle Drive Handle	
19	Screw Pack	E110011 E110010	1	For Double-Sided Cylinder Cover For Single-Sided Cylinder Cover(Interior)	

Recommendation on the Number of Locking Points and Lock Seats Weight of Door sash 150kg			
Sash height	2000 mm	2000~2400 mm	2400~2800 mm
Lock Point/Keeper	2	3	4

Recommended Number of Upper/Lower Roller Weight of Door sash 150kg		
Sash width	1800 mm	1800~2800 mm
Upper Roller	2	3
Lower Roller	2	3

TIGHTLY SEALED SLIDING WINDOW HARDWARE SYSTEM

Double-Panel with Spindle Drive Handle Configuration



Description	Left-Hand Opening 240kg Hardware	Right-Hand Opening 240kg Hardware
P/N	N800005	N800006
Configuration	A+B+C	A+B+C

Note:
1. If any looseness is found after installing the corner drive, or if the door sash weight is 150 kg, a corner drive, reinforcement block must be installed.
2. With the 150 kg configuration, adding optional components A + B + C increases the load capacity to 240 kg. Part numbers for the options are shown in the table below:

TIGHTLY SEALED SLIDING WINDOW HARDWARE SYSTEM

Configuration Table - Double-Panel with Spindle Drive Handle Configuration (Active Sash)

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle	E010604 E010605 E010606 E010607	1	Milan Handle; Zinc Alloy Base Milan Handle Set; Zinc Alloy Base Milan Handle; Aluminum Alloy Base Milan Handle Set; Aluminum Alloy Base	P104
1*	Recessed Handle	F010602	1	U Series	P74
2	Side Compress Drive Gearbox	N020001 N020003	1	Hole Distance 15 mm Hole Distance 15 mm ,with cylinder	P131
3	Fail-Safe Corner Drive	N060001	3		P131
4	Operable Sash Lock Point	N090005	Refer to the table below	Height Adjustable	P132
6	Lock Point Seat	N090001	Refer to the table below	Suitable for Left-Opening Sash	P133
7	Hook Operated Sash Lock Point	N090003 N090004 N090006	Refer to the table below	55 Thickness 60 Thickness 65 Thickness	P132
8	Hook Operated Sash Keeper	N100003	Refer to the table below		P132
9	Lower Roller	N050001	Refer to the table below	Suitable for Left-Opening Sash	P134
10	Upper Roller	N050003	Refer to the table below	Suitable for Left-Opening Sash	P134
11	Rubber Stop	N800002	2		P134
12	Fail-Safe Connecting Strip	N020002		Provided by Customer or Cmech	
13	Corner Drive Reinforcing Gasket	N120001	3		P133
14	Cylinder		1		P158, P159
15	Lock Cylinder Cover	E140001 E140002	1	Double-Sided Lock Cylinder Cover Single-Sided Inner Lock Cylinder Cover	P100
16	Fail-safe Operation Device	N080003	1		P135
20	Screw Pack	N110001 N110002	1	Installation Aid Screws Hardware Connecting Screws	
21	Spindle Screw Pack	N110013 N110004 N110003	1	For Double-Sided Spindle Drive Handle For Single-Sided Spindle Drive Handle +Recessed Handle For Single-Sided Spindle Drive Handle	
22	Screw Pack	E110011 E110010	1	For Double-Sided Cylinder Cover For Single-Sided Cylinder Cover(Interior)	

Recommendation on the Number of Locking Points and Lock Seats Weight of Door sash 150kg			
Sash height	2000 mm	2000~2400 mm	2400~2800 mm
Lock Point/Keeper	2	3	4

Recommended Number of Upper/Lower Roller Weight of Door sash 150kg		
Sash width	1800 mm	1800~2800 mm
Upper Roller	2	3
Lower Roller	2	3

TIGHTLY SEALED SLIDING WINDOW HARDWARE SYSTEM

Configuration Table - Double-Panel with Spindle Drive Handle Configuration (Possive Sash)

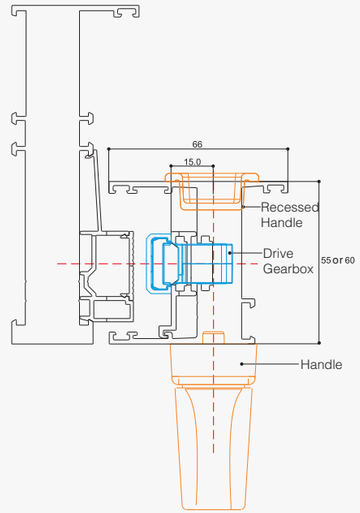
No.	Description	P/N	Qt	Notes	Ref. Page
1	Spindle Drive Handle	E010604 E010605 E010606 E010607	1	Milan Handle; Zinc Alloy Base Milan Handle Set; Zinc Alloy Base Milan Handle; Aluminum Alloy Base Milan Handle Set; Aluminum Alloy Base	P104
1*	Recessed Handle	F010602	1	U Series	P74
2	Side Compress Drive Gearbox	N020001	1	Hole distance 15 mm	P131
3	Fail-Safe Corner Drive	N060001	3		P131
5	Operable Sash Keeper	N100004	Refer to the table below	Suitable for Double-Panel	P133
7	Hook Operated Sash Lock Point	N090003 N090004 N090006	Refer to the table below	55 Thickness 60 Thickness 65 Thickness	P132
8	Hook Operated Sash Keeper	N100003	Refer to the table below		P132
12	Fail-Safe Connecting Strip	N020002		Provided by Customer or Cmech	
13	Corner Drive Reinforcing Gasket	N120001	3		P132
17	Lock Point Seat	N090002	Refer to the table below	Suitable for Right-Opening Sash	P132
18	Lower Roller	N050002	Refer to the table below	Suitable for Right-Opening Sash	P134
19	Upper Roller	N050004	Refer to the table below	Suitable for Right-Opening Sash	P134
20	Screw Pack	N110001 N110002	1	Installation Aid Screws Hardware Connecting Screws	
21	Spindle Screw Pack	N110013 N110004 N110003	1	For Double-Sided Spindle Drive Handle For Single-Sided Spindle Drive Handle +Recessed Handle For Single-Sided Spindle Drive Handle	
22	Screw Pack	E110011 E110010	1	For Double-Sided Cylinder Cover For Single-Sided Cylinder Cover(Interior)	

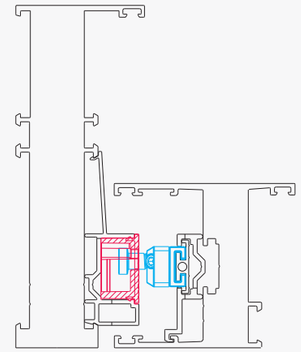
Recommendation on the Number of Locking Points and Lock Seats Weight of Door sash 150kg			
Sash height	2000 mm	2000~2400 mm	2400~2800 mm
Lock Point/Keeper	2	3	4

Recommended Number of Upper/Lower Roller Weight of Door sash 150kg		
Sash width	1800 mm	1800~2800 mm
Upper Roller	2	3
Lower Roller	2	3

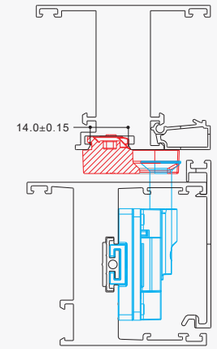
TIGHTLY SEALED SLIDING WINDOW PROFILE REQUIREMENTS AND DRILLING INSTRUCTIONS

Spindle Drive Handle Configuration



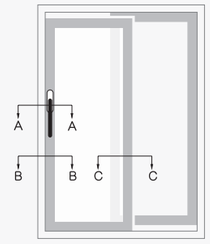


B—B

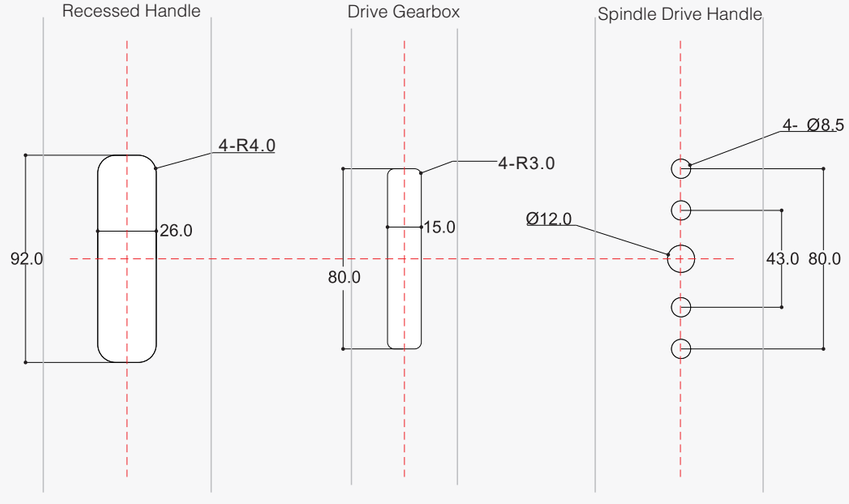


C—C

A– A



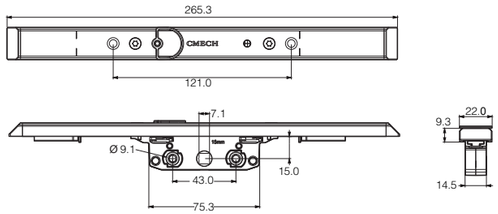
Hole Chart



TIGHTLY SEALED SLIDING WINDOW HARDWARE

N020001

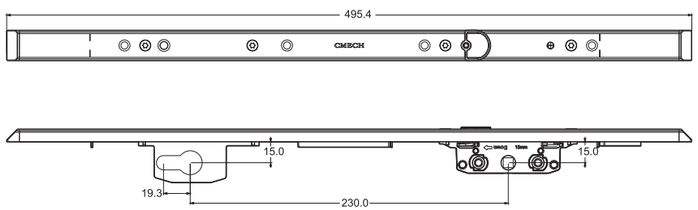
15 mm Side Compress Drive Gearbox





N020003

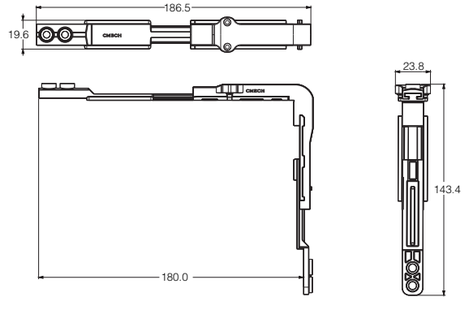
15 mm Side Compress Drive Gearbox with Cylinder Hole





N060001

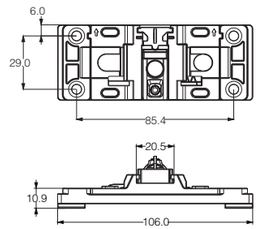
Side Compress Corner Drive



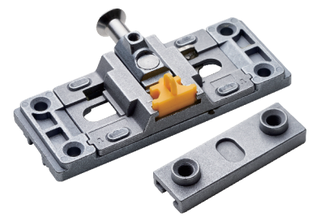


TIGHTLY SEALED SLIDING WINDOW HARDWARE

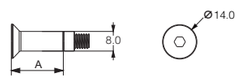
Hook Operated Sash Lock Point Seat



P/N	A
N090001	Suitable for Left-Opening Sash
N090002	Suitable for Right-Opening Sash



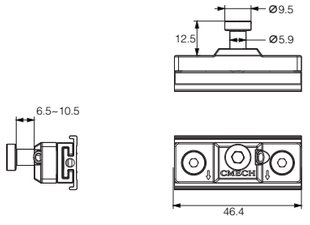
Hook Operated Sash Lock Point



P/N 货号	A 尺寸A
N090003	16.3mm
N090004	21.3mm
N090006	26.8mm

N090005

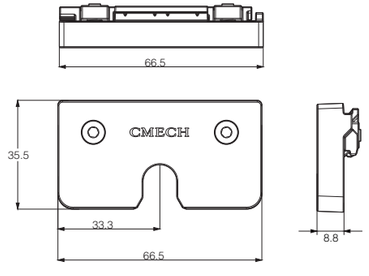
Operable Sash Adjustable Lock Point





N100003

Hook Operated Sash Keeper

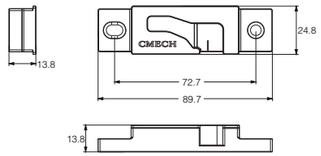




TIGHTLY SEALED SLIDING WINDOW HARDWARE

N100001

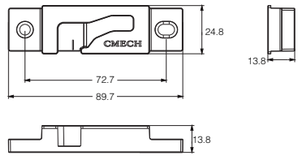
Operable Sash Keeper (Left)





N100002

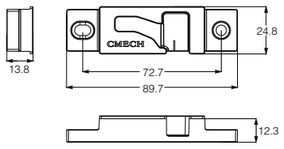
Operable Sash Keeper (Right)





N100004

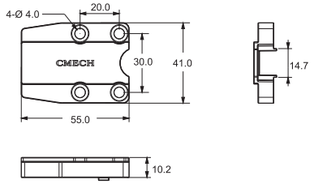
Operable Sash Keeper (Double-Panel)





N120001

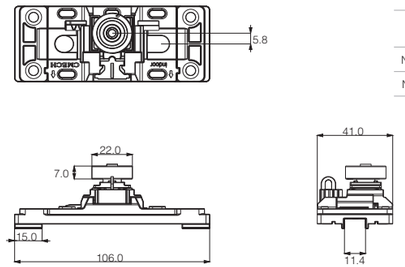
Corner Drive Reinforcing Gasket



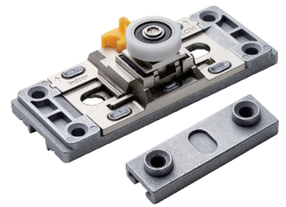


TIGHTLY SEALED SLIDING WINDOW HARDWARE

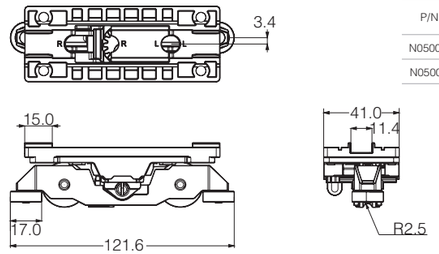
Side Compress Upper Roller



P/N	Description
N050003	Guide Roller (Left)
N050004	Guide Roller (Right)



Side Compress Lower Roller

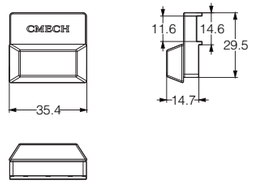


P/N	Description
N050001	Bearing Roller (Left)
N050002	Bearing Roller (Right)



N080002

Rubber Stop

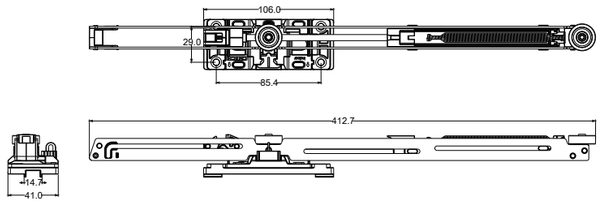




TIGHTLY SEALED SLIDING WINDOW HARDWARE

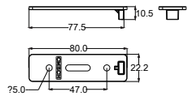
Tight Sealed Window Buffer

Buffer



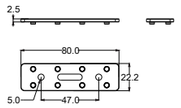


Buffer Baffle



P/N	Description
N050005	Left Sash Front Buffer
N050006	Right Sash Front Buffer
N050007	Left Sash Front and Rear Double Buffers
N050008	Right Sash Front and Rear Double Buffers

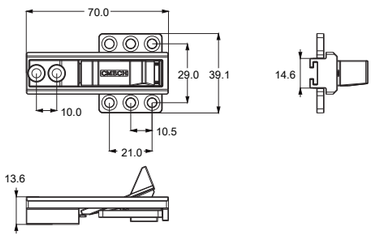
Shim Block

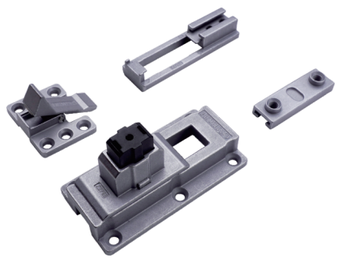


N080003

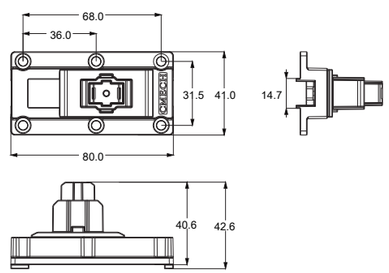
Fail-safe Operation Device

Active Sash Part





Possive Sash Part



Hinged Door Hardware





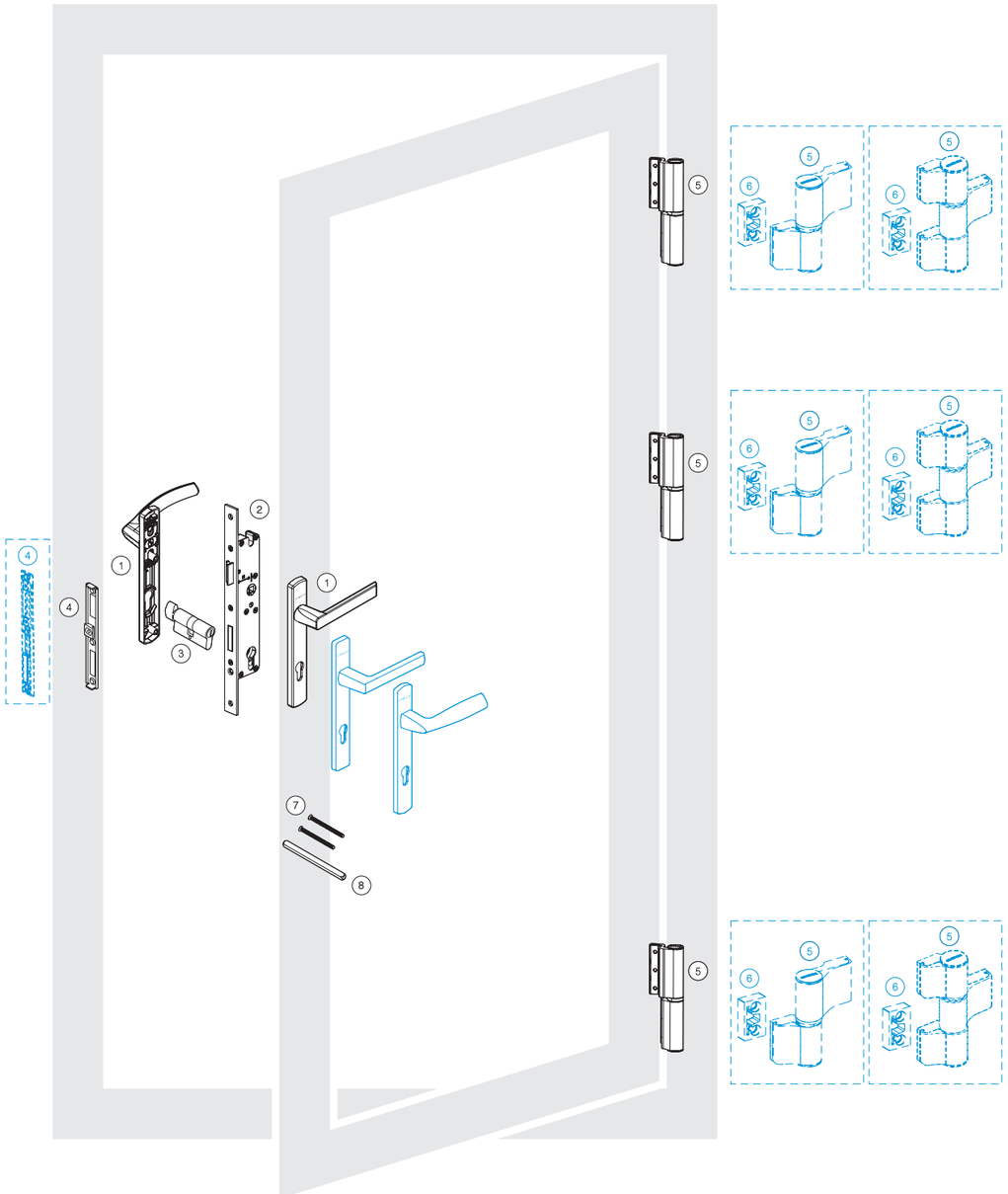


- The handles are available in many styles and colors
- Three axis adjustable hinges
- No tools are required to change the orientation of the lock, making it quick and convenient

Hinged Door		Applicable Range
Sash Width (max)	(mm)	500-1,200
Sash Height (max)	(mm)	1,920-3,000
Weight	(kg)	120, 140, 180
Lock Body Centerline	(mm)	28, 33, 38

HINGED DOOR HARDWARE SERIES

Single-Panel with Single-Point Lock Configuration



HINGED DOOR HARDWARE SERIES

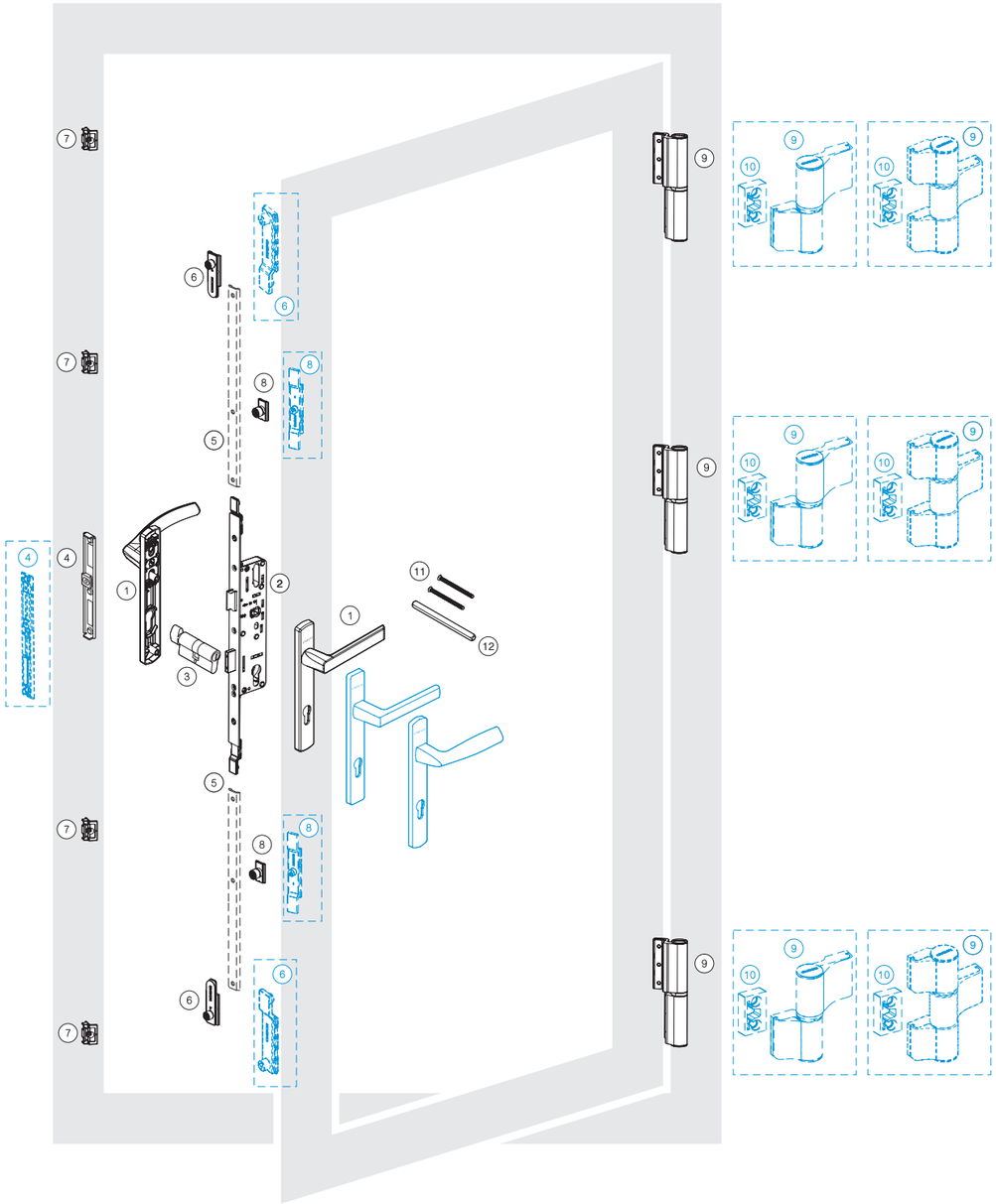
Configuration Table - Single-Panel with Single-Point Lock

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type D)	D010601 D010433 D010233 D010133	1	Milan Handle with Cylinder Berlin Handle with Cylinder Koln Handle with Cylinder New York Handle with Cylinder	P143, P144
2	Lock Body	D030040 D030041	1	Lock Distance: 28 mm, Plate: 22x300 mm Lock Distance: 33 mm, Plate: 22x300 mm	P145
3	Cylinder		1		P158, P159
4	Adjustable Strike	D100012 G100001	1		P146
5	120 kg Flush-Fit Hinge 120 kg Flush-Fit Hinge 140 kg Flush-Fit Hinge 140 kg Flush-Fit Hinge 180 kg Flush-Fit Hinge 180 kg Flush-Fit Hinge 120 kg Flush-Fit Hinge	D040019 D040020 D040003 D040013 D040014 D040015 D040034	2~3	Load-bearing:120 kg (Left) Load-bearing:120 kg (Right) 20.5x41x40 mm, Load-bearing:140 kg 49x41x40 mm, Load-bearing:140 kg 20.5x41x40 mm, Load-bearing:180 kg 49x41x40 mm, Load-bearing:180 kg Triple Wing Type, Load-bearing:120 kg	P149, P150, P151, P152, P153, P154, P155, P156
6	Flush-Fit Hinge Gasket	D140001 D140002 D140003 D140004 D140005	2~3	7x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 8x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 8.5x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 10x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 11x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge	P148
7	Handle Screw Pack		1		
8	Spindle Screw Pack		1		

*Flat Handle is Available

HINGED DOOR HARDWARE SERIES

Single-Panel with Multi-Point Lock + Connecting Strip Configuration



HINGED DOOR HARDWARE SERIES

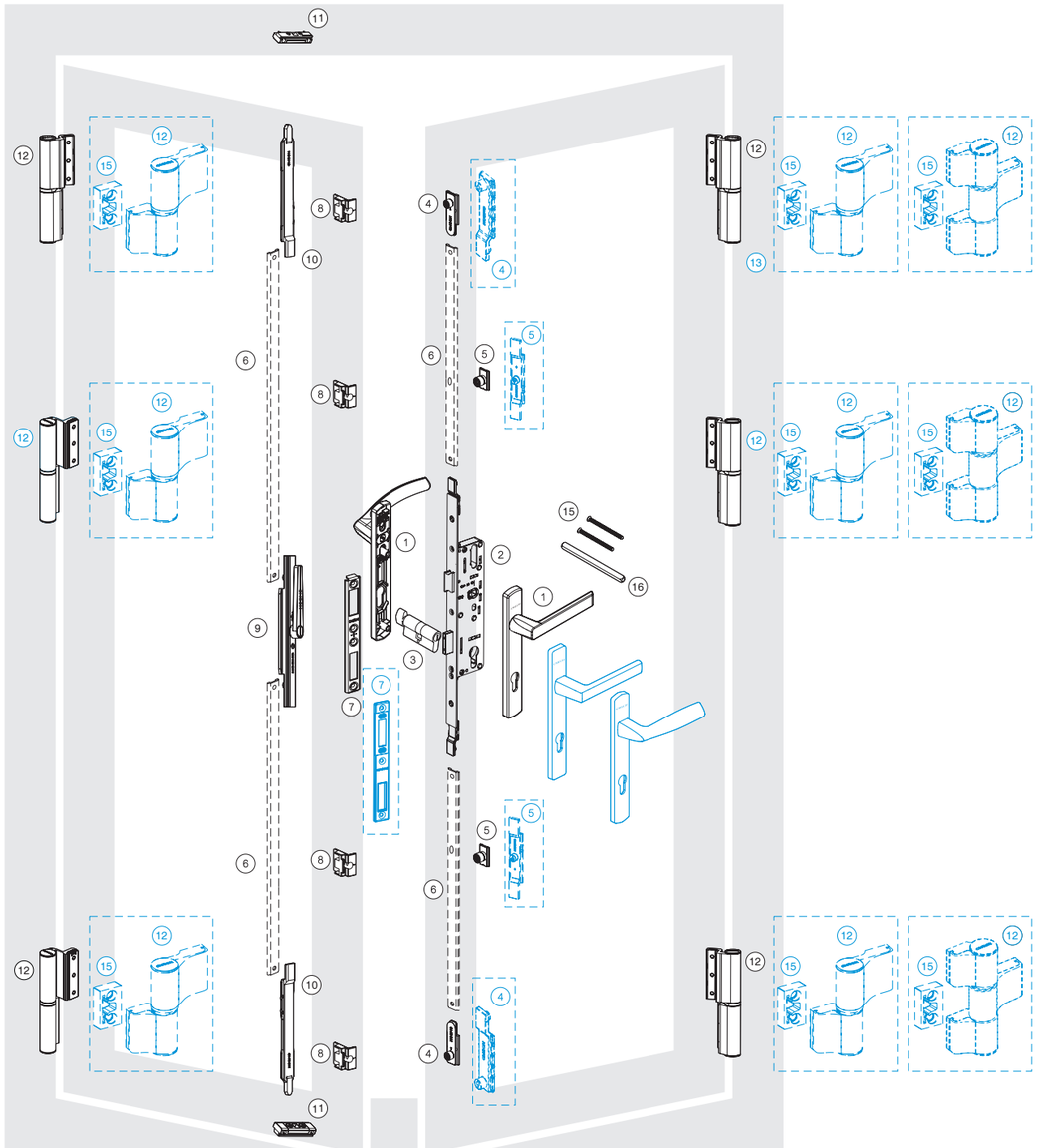
Configuration Table - Single-Panel with Multi-Point Lock + Connecting Strip

No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type D)	D010601 D010433 D010233 D010133	1	Milan Handle with Cylinder Berlin Handle with Cylinder Koln Handle with Cylinder New York Handle with Cylinder	P143, P144
2	Lock Body	D030038 D030039 D030042	1	Lock Distance: 28 mm, Plate: 22x395 mm Lock Distance: 33 mm, Plate: 22x395 mm Lock Distance: 38 mm, Plate: 22x395 mm	P145
3	Cylinder		1		P158, P159
4	Adjustable Strike	D100012 G100001	1		P146
5	Connecting Strip			Provided by Customer or Cmech	
6	Lock Point	A090005 A090008 A090048	2	Ø9.5x7.0 mm End Lock Point Ø9.5x7.0 mm Pry-resistant Central Lock Point	P29, P30
7	Keeper	A100127 A100125	2~4	Pry-resistant Keeper	P31
8	Central Lock Point	A090012 A090034	2	Central Lock Point Ø9.5x9.7 mm Pry-resistant Central Lock Point	P29, P30
9	120 kg Flush-Fit Hinge 120 kg Flush-Fit Hinge 140 kg Flush-Fit Hinge 140 kg Flush-Fit Hinge 180 kg Flush-Fit Hinge 180 kg Flush-Fit Hinge 120 kg Flush-Fit Hinge	D040019 D040020 D040003 D040013 D040014 D040015 D040034	2~3	Load-bearing:120 kg (Left) Load-bearing:120 kg (Right) 20.5x41x40 mm, Load-bearing:140 kg 49x41x40 mm, Load-bearing:140 kg 20.5x41x40 mm, Load-bearing:180 kg 49x41x40 mm, Load-bearing:180 kg Triple Wing Type, Load-bearing:120 kg	P149, P150, P151, P152, P153, P154, P155, P156
10	Flush-Fit Hinge Gasket	D140001 D140002 D140003 D140004 D140005	2~3	7x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 8x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 8.5x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 10x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 11x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge	P148
11	Handle Screw Pack		1		
12	Spindle Screw Pack		1		

*Flat Handle is Available

HINGED DOOR HARDWARE SERIES

Double-Panel with Multi-Point Lock + Connecting Strip Configuration



HINGED DOOR HARDWARE SERIES

Configuration Table - Double-Panel with Multi-Point Lock + Connecting Strip

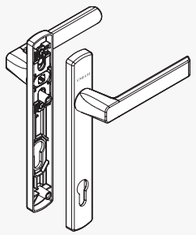
No.	Description	P/N	Qty	Notes	Ref. Page
1	Spindle Drive Handle (Type D)	D010601 D010433 D010233 D010133	1	Milan Handle with Cylinder Berlin Handle with Cylinder Koln Handle with Cylinder New York Handle with Cylinder	P143, P144
2	Lock Body	D030038 D030039 D030042	1	Lock Distance: 28 mm, Plate: 22x395 mm Lock Distance: 33 mm, Plate: 22x395 mm Lock Distance: 38 mm, Plate: 22x395 mm	P145
3	Cylinder		1		P158, P159
4	Lock Point	A090005 A090008 A090048	2	Ø9.5x7.0 mm End Lock Point Ø9.5x7.0 mm Pry-resistant End Lock Point	P29, P30
5	Central Lock Point	A090012 A090034	2	Central Lock Point Ø9.5x9.7 mm Pry-resistant Central Lock Point	P29, P30
6	Connecting Strip			Provided by Customer or Cmech	
7	Adjustable Strike	D100012 G100001	1		P146
8	Keeper	A100127 A100125	2~4	Keeper Pry-Resistant Keeper with Bearing	P31
9	Bi Directional Shootbolt Connector	D070015 D070016 D070014	1		P146, P147
10	Shootbolt	A070007 A070008	2	19.6 mmx90 mm 17.5 mmx90 mm	P37
11	Shootbolt Bracket	D070003 D070007	2	For a C-Groove Pitch of 6.0 mm For a Grooveless Frame Profile	P148
12	120 kg Flush-Fit Hinge 120 kg Flush-Fit Hinge 140 kg Flush-Fit Hinge 140 kg Flush-Fit Hinge 180 kg Flush-Fit Hinge 180 kg Flush-Fit Hinge 120 kg Flush-Fit Hinge	D040019 D040020 D040003 D040013 D040014 D040015 D040034	2~3	Load-bearing:120 kg (Left) Load-bearing:120 kg (Right) 20.5x41x40 mm, Load-bearing:140 kg 49x41x40 mm, Load-bearing:140 kg 20.5x41x40 mm, Load-bearing:180 kg 49x41x40 mm, Load-bearing:180 kg Triple Wing Type, Load-bearing:120 kg	P149, P150, P151, P152, P153, P154, P155, P156
13	Flush-Fit Hinge Gasket	D140001 D140002 D140003 D140004 D140005	2~3	7x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 8x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 8.5x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 10x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge 11x40 mm Gasket, Suitable for 140 kg, 180 kg Hinge	P148
14	Handle Screw Pack		1		
15	Spindle Screw Pack		1		

*Flat Handle is Available

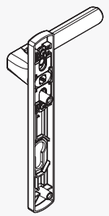
HANDLE SELECTIONS

MILAN SERIES
Spindle Drive Handle (Type D)

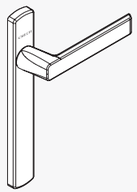




P/N	Description
D010601-	Double Side Handle with Cylinder

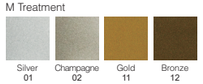


P/N	Description
D010603-	Single Side Handle (Interior) with Cylinder



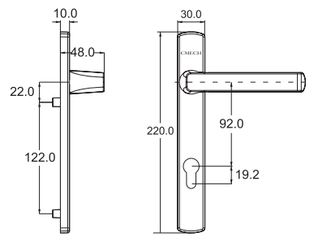
P/N	Description
D010606-	Single Side Handle (Exterior) without Cylinder

M Treatment



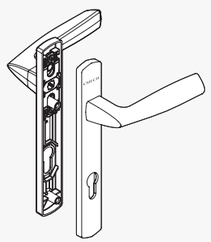
Powder Coating



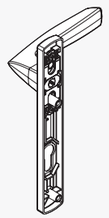


BERLIN SERIES
Spindle Drive Handle (Type D)

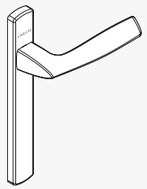




P/N	Description
D010433-	Double Side Handle with Cylinder

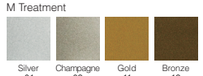


P/N	Description
D010435-	Single Side Handle (Interior) with Cylinder

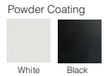


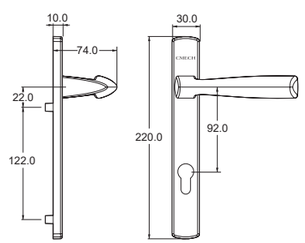
P/N	Description
D010438-	Single Side Handle (Exterior) without Cylinder

M Treatment



Powder Coating

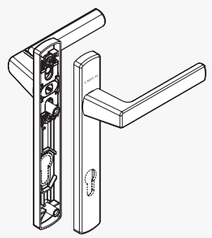




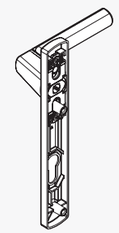
HANDLE SELECTIONS

KOLN SERIES
Spindle Drive Handle (Type D)

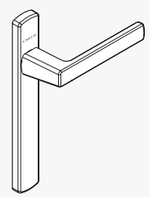




P/N	Description
D010233-	Double Side Handle with Cylinder

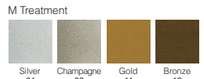


P/N	Description
D010235-	Single Side Handle (Interior) with Cylinder

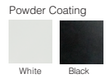


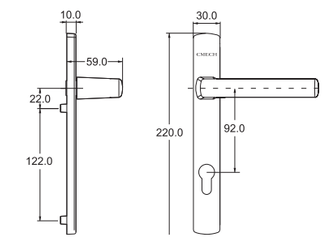
P/N	Description
D010238-	Single Side Handle (Exterior) without Cylinder

M Treatment



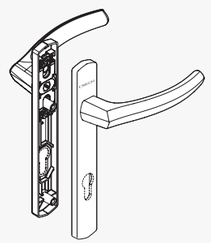
Powder Coating



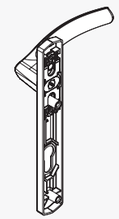


NEW YORK SERIES
Spindle Drive Handle (Type D)

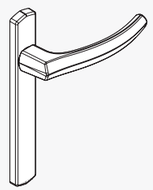




P/N	Description
D010133-	Double Side Handle with Cylinder

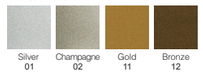


P/N	Description
D010135-	Single Side Handle (Interior) with Cylinder

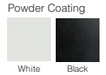


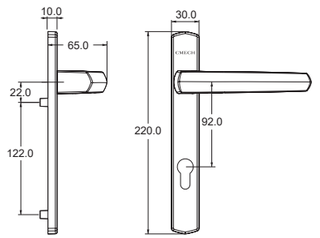
P/N	Description
D010138-	Single Side Handle (Exterior) without Cylinder

M Treatment



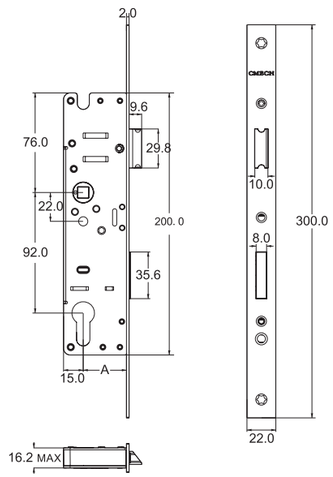
Powder Coating





LOCK BODIES

22x300 Active Single-Point Lock Body



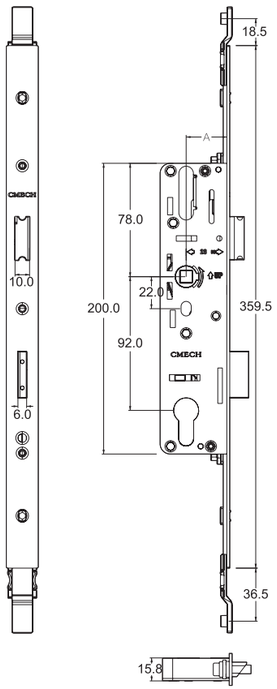


Installation & Optional Sizes are Available

P/N	A	Descriptions
D030040	28	Active Single-Point Lock Body 28 mm
D030041	33	Active Single-Point Lock Body 33 mm

22x360 Active Multi-Point Lock Body

Used with an Aluminum Connecting Strip





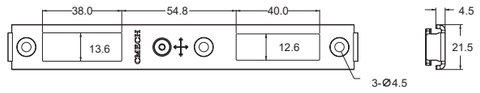
Installation & Optional Sizes are Available

P/N	A	Descriptions
D030038	28	Active Multi-Point Lock Body 28 mm
D030039	33	Active Multi-Point Lock Body 33 mm
D030042	38	Active Multi-Point Lock Body 38 mm

HINGED DOOR HARDWARE

D100012

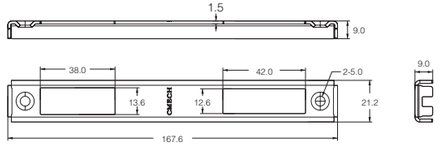
Adjustable Strike





D100020

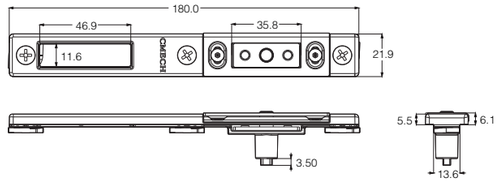
Bracket





D100024

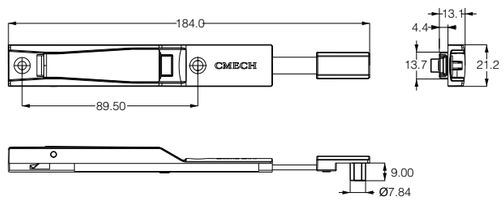
Adjustable Strike





D070014

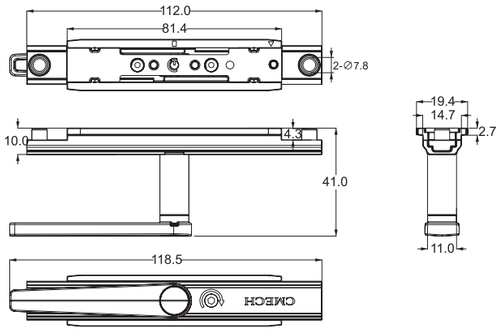
Bolt Actuating Lever

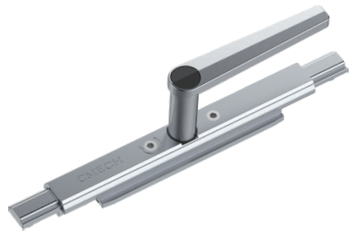




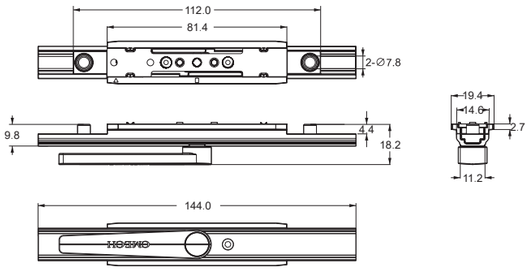
HINGED DOOR HARDWARE

D070015
Bi Directional Shootbolt Connector





D070016
Bi Directional Shootbolt Connector



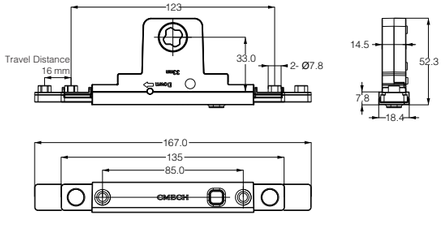


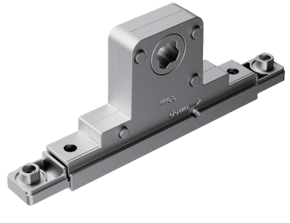
D070009-A
Bi-Directional Shootbolt





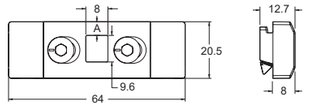
D020028
Bi-directional Spindle Drive Gearbox





HINGED DOOR HARDWARE

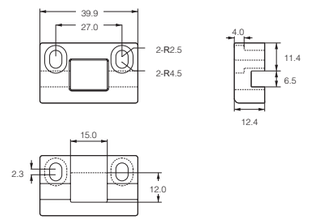
Adjustable Shootbolt Bracket (C-Groove)



P/N	A
D070003	6 mm
D070004	5 mm

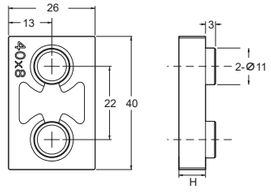


D100021
Shootbolt bracket

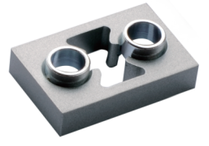




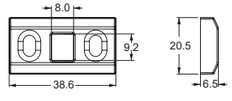
Flush-Fit Hinge Gasket



P/N	H	Descriptions
D140001	7	7x40
D140002	8	8x40
D140003	8.5	8.5x40
D140004	10	10x40
D140005	11	11x40



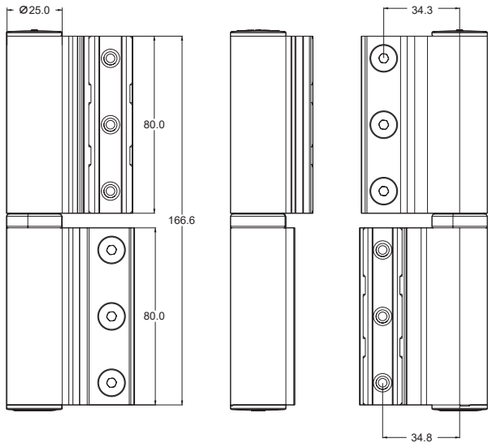
D070007
Shootbolt Bracket (Grooveless)



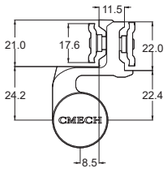


HINGES

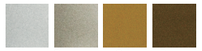
120 kg Reinforced Hinge



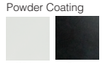




M Treatment



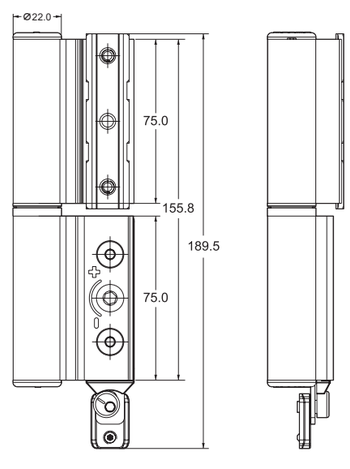
Powder Coating



P/N	Descriptions
D040017-	Left
D040018-	Right

HINGES

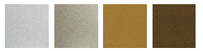
120 kg Flush-Fit Hinge



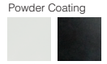


P/N	Descriptions
D040019-	Left
D040020-	Right

M Treatment

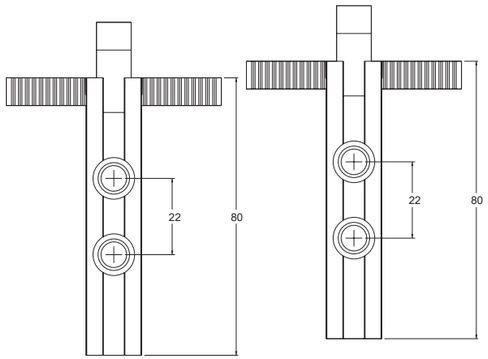


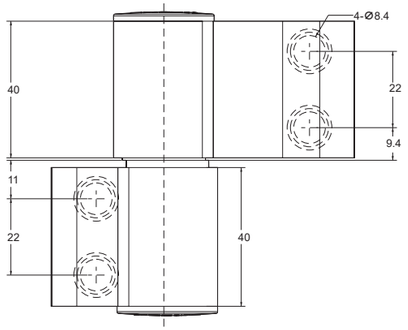
Powder Coating



HINGES

140 kg Flush-Fit Hinge

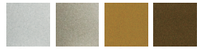






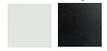
P/N	Descriptions
D040003-	140 kg Flush-Fit Hinge (2 Sections / Centreline Distance 61.5 mm)

M Treatment

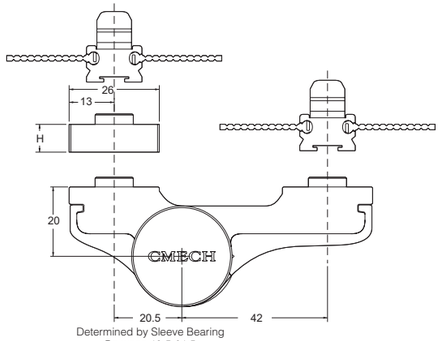


Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating



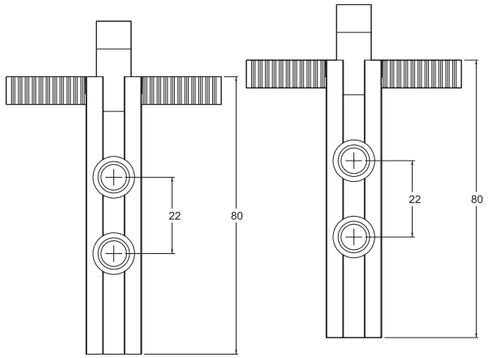
White 09 | Black 17

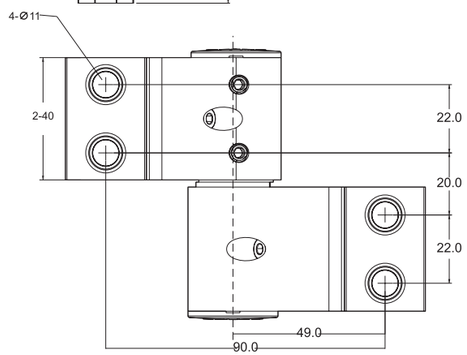


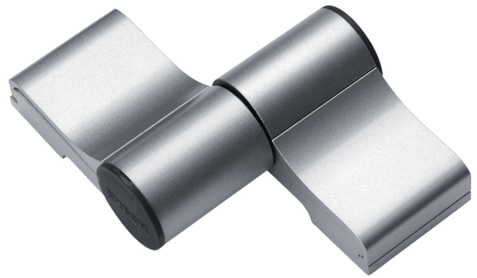
Determined by Sleeve Bearing
Between 19.5-21.5

HINGES

140 kg Flush-Fit Hinge







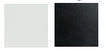
P/N	Descriptions
D040013-	140 kg Flush-Fit Hinge (2 Sections / Centreline Distance 90 mm)

M Treatment

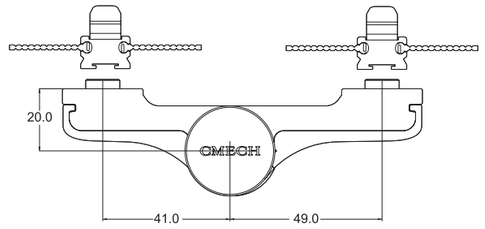


Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

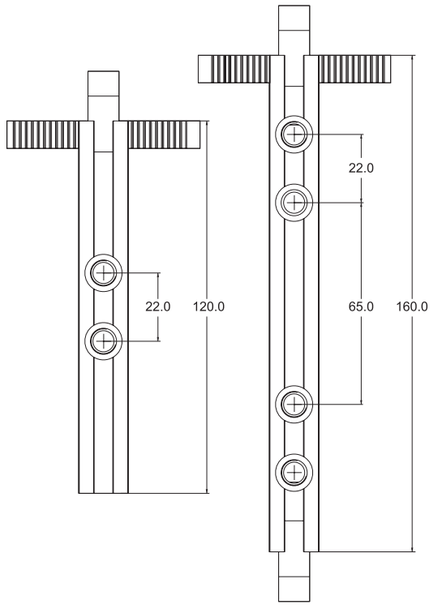


White 09 | Black 17



HINGES

180 kg Flush-Fit Hinge





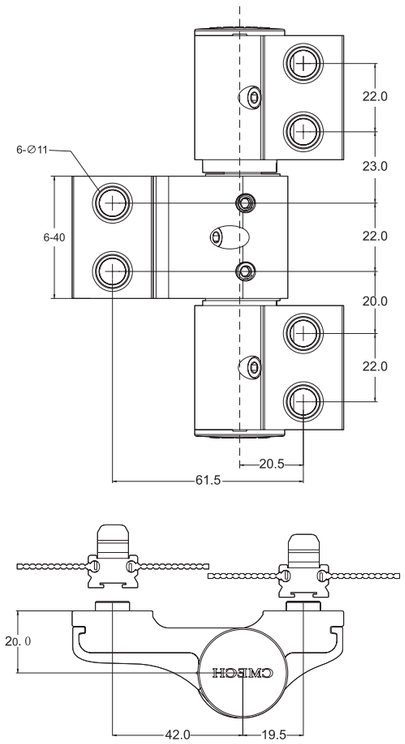
P/N	Description
D040014-	180 kg Flush-Fit Hinge (3 Sections / Centreline Distance 61.5 mm)

M Treatment

Silver 01 | Champagne 02 | Gold 11 | Bronze 12

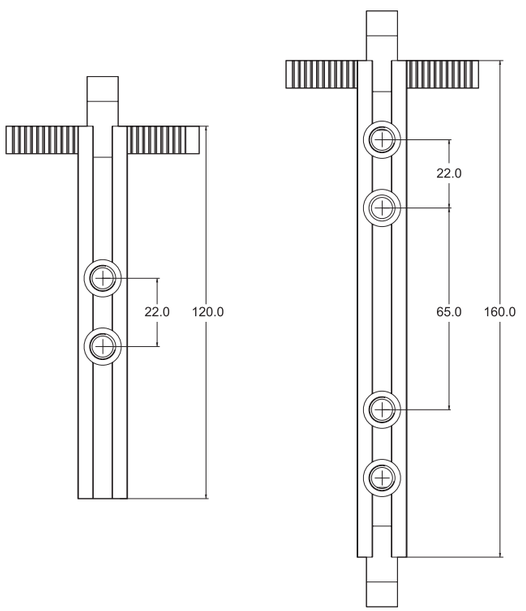
Powder Coating

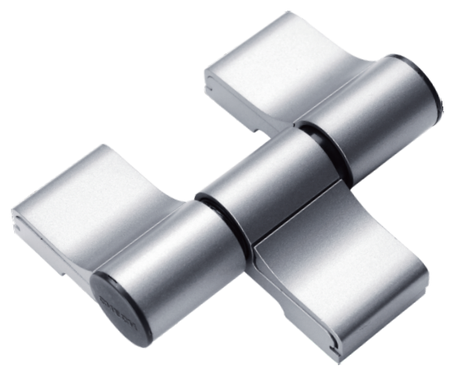
White 09 | Black 17



HINGES

180 kg Flush-Fit Hinge





P/N	Descriptions
D040015-	180 kg Flush-Fit Hinge (3 Sections / Centreline Distance 90 mm)

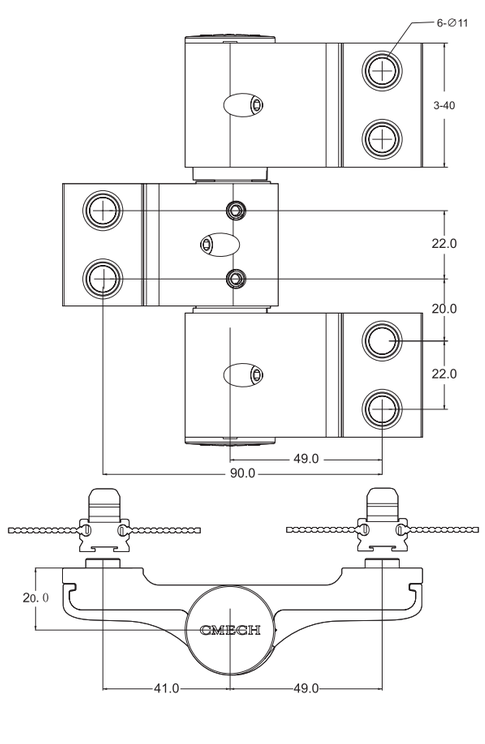
M Treatment

Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

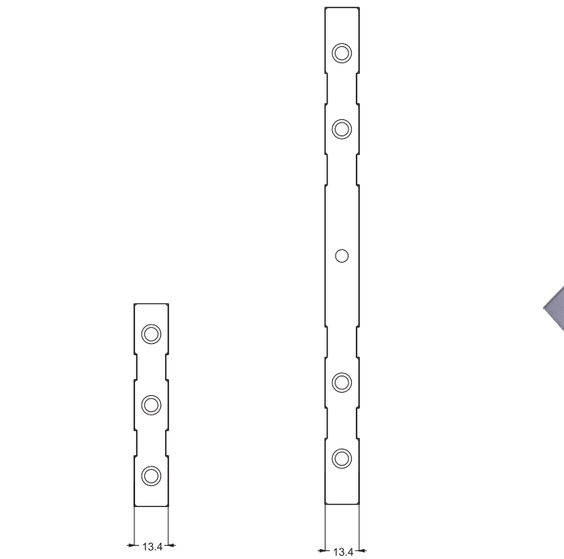


White 09 | Black 17



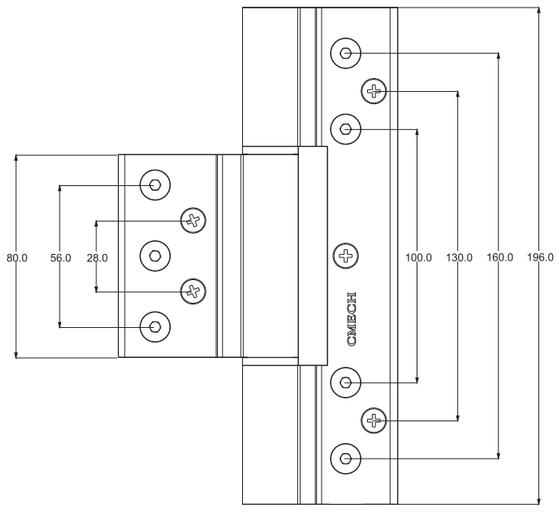
HINGES

120 kg Flush-fit Hinge (Triple Wing Type)

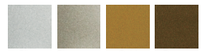




P/N	Description
D040034-	120 kg Flush-fit Hinge(Triple Wing Type)

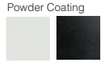


M Treatment

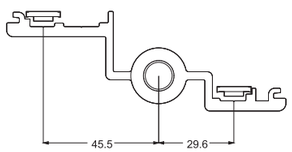


Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

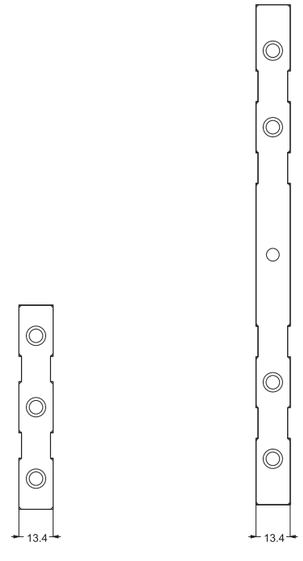


White 09 | Black 17



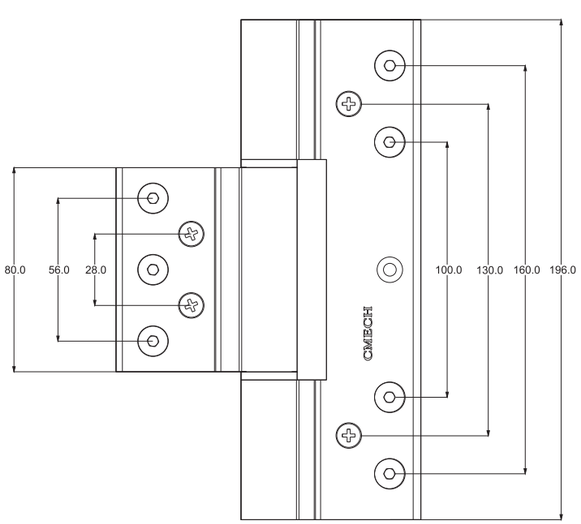
HINGES

120 kg Flush-fit Center Hinge (Triple Wing Type)

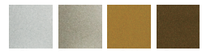




P/N	Description
D040035-	120 kg Flush-fit Center Hinge(Triple Wing Type)

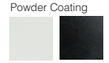


M Treatment

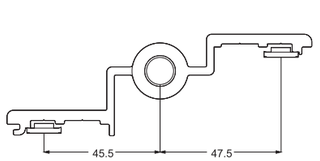


Silver 01 | Champagne 02 | Gold 11 | Bronze 12

Powder Coating

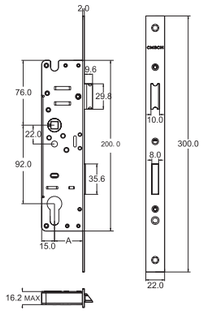


White 09 | Black 17



HINGED DOOR PROFILE AND DRILLING REQUIREMENTS

22x300 Active Single-Point Lock Body

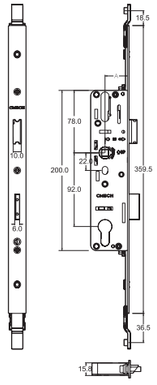




Installation & Optional Sizes are Available

P/N	A	Descriptions
D030040	28	Active Single-Point Lock Body 28 mm
D030041	33	Active Single-Point Lock Body 33 mm

22x360 Active Multi-Point Lock Body
Used with an Aluminum Connecting Strip

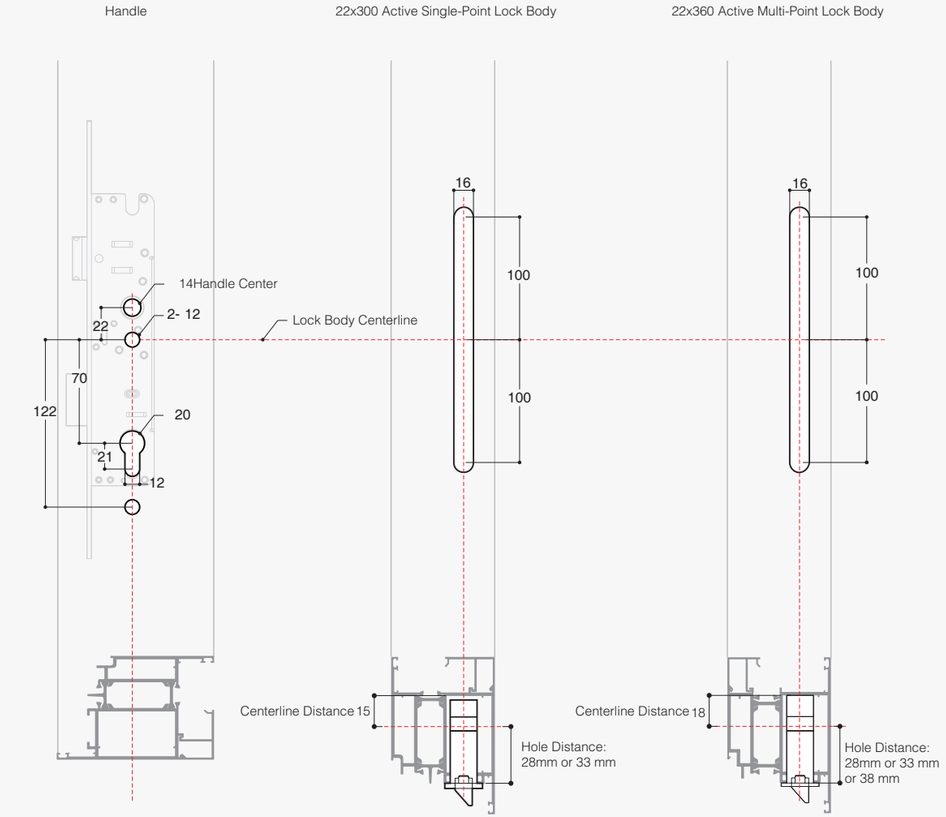




Installation & Optional Sizes are Available

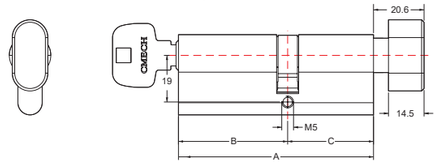
P/N	A	Descriptions
D030038	28	Active Multi-Point Lock Body 28 mm
D030039	33	Active Multi-Point Lock Body 33 mm
D030042	38	Active Multi-Point Lock Body 38 mm

Drill Hole Drawing



CYLINDERS

Oval Thumb Turn Brass Cylinder

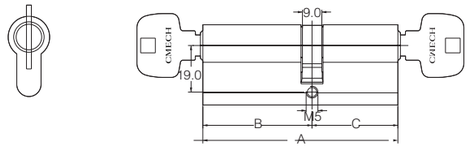




P/N	Description	Specifications		
		A	B	C
D130101	R50 x 30 mm	80	30	50
D130102	R30 x 50 mm	80	50	30
D130103	R45 x 35 mm	80	35	45
D130104	R35 x 45 mm	80	45	35
D130105	R60 x 30 mm	90	30	60
D130106	R30 x 60 mm	90	60	30
D130109	R30 x 55 mm	85	55	30
D130110	R55 x 30 mm	85	30	55
D130111	R35.5 x 35.5 mm	71	35.5	35.5
D130133	R35 x 30 mm	65	30	35
D130134	R30 x 35 mm	65	35	30
F130103	R35 x 50 mm	85	50	35
F130105	R30 x 30 mm	60	30	30
F130106	R50 x 45 mm	95	45	50
F130108	R45 x 50 mm	95	50	45
E130102	R40 x 40 mm	80	40	40
E130103	R45 x 40 mm	85	40	45
D130114	R70 x 30 mm	100	30	70
D130116	R30 x 65 mm	95	65	30
D130119	R65 x 30 mm	95	30	65
D130121	R45 x 45 mm	90	45	45
D130123	R30 x 45 mm	75	45	30
D130124	R45 x 30 mm	75	30	45
D130125	R30 x 70 mm	100	70	30
D130141	R35 x 60 mm	95	60	35
D130142	R60 x 35 mm	95	35	60
D130143	R65 x 35 mm	100	35	65
D130145	R70 x 35 mm	105	35	70
D130152	R60 x 40 mm	100	40	60
D130166	R25×35mm	60	35	25
D130167	R50×40mm	90	40	50
D130168	R90×30mm	120	30	90
D130169	R30×90mm	120	90	30
D130170	R85×35mm	120	35	85
D130171	R35×85mm	120	85	35
D130172	R95×30mm	125	30	95
D130173	R30×95mm	125	95	30
D130174	R90×35mm	125	35	90
D130175	R35×90mm	125	90	35
D130113	R30.5 x 40.5 mm	71	40.5	30.5
D130127	R75 x 30 mm	105	30	75
D130137	R40 x 35 mm	75	35	40
D130138	R50 x 35 mm	85	35	50
D130139	R35 x 55 mm	90	55	35
D130140	R55 x 35 mm	90	35	55
D130151	R40 x 60 mm	100	60	40
D130153	R65×40 mm	105	40	65
D130154	R45×55 mm	100	55	45
D130155	R55×45 mm	100	45	55
D130159	R25×30 mm	55	30	25
D130160	R30×25 mm	55	25	30
D130179	R40×70 mm	110	70	40
D130180	R38×70.5 mm	108.5	70.5	38

CYLINDERS

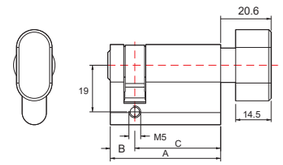
Double-Sided Keyed Brass Cylinder





P/N	Description	Specifications		
		A	B	C
D130402	R35.5 x 35.5 mm	71	35.5	35.5
D130409	R30 x 50 mm	80	50	30
D130412	R30 x 55 mm	85	55	30
D130415	R30 x 60 mm	90	60	30
D130418	R45 x 45 mm	90	45	45
D130419	R30 x 65 mm	95	65	30
D130420	R30 x 70 mm	100	70	30
E130403	R40 x 40 mm	80	40	40
F130405	R45 x 35 mm	80	35	45
F130406	R54 x 35 mm	89	35	54
F130407	R45 x 50 mm	95	50	45

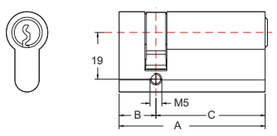
Keyless Oval Thumb Turn Brass Cylinder





P/N	Description	A	B	C
D130115	R50x10 mm	60	10	50
F130113	R30x10 mm	40	10	30
F130102	R35x10 mm	45	10	35
F130107	R40x10 mm	50	10	40
F130110	R45x10 mm	55	10	45
F130114	R55x10 mm	65	10	55
F130115	R60x10 mm	70	10	60
F130115	R85x10 mm	95	10	85

Single-Sided Keyed Brass Cylinder





P/N	Description	A	B	C
E130401	R30x10 mm	40	10	30
F130411	R35x10 mm	45	10	35
F130412	R40x10 mm	50	10	40
F130413	R45x10 mm	55	10	45
F130414	R50x10 mm	60	10	50
F130415	R55x10 mm	65	10	55
F130416	R60x10 mm	70	10	60

CYLINDERS

PN	XINGFA	MAXPRO						XF CLASS	SOCO	PMI		
	55	55	55C	58	65	70	83	65	65	45	55D	56
D130407 Double-Sided Keyed	○	○	○							○	○	
D130123	○	○	○							○	○	
D130124	○	○	○							○	○	
D130409 Double-Sided Keyed				○			○					
D130101				○			○					
D130102				○			○					
D130415 Double-Sided Keyed					○	○						
D130105					○	○						
D130106					○	○						
D130412 Double-Sided Keyed								○				○
D130109								○				○
D130110								○				○
D130419 Double-Sided Keyed									○			
D130116									○			
D130119									○			

PN	ROLAN		KOGEN	JMA			ALUK		PMA	
	R56	R60	60	60C	TAM 60	55	55	65	55	65
D130407 Double-Sided Keyed						○			○	
D130123						○			○	
D130124						○			○	
D130409 Double-Sided Keyed	○		○							
D130101	○		○							
D130102	○		○							
D130415 Double-Sided Keyed		○		○						
D130105		○		○						
D130106		○		○						
D130412 Double-Sided Keyed							○			
D130109							○			
D130110							○			
D130419 Double-Sided Keyed								○		○
D130116								○		○
D130119								○		○
F130405 Double-Sided Keyed					○					
D130104					○					
D130103					○					

Bi-Folding Door Hardware





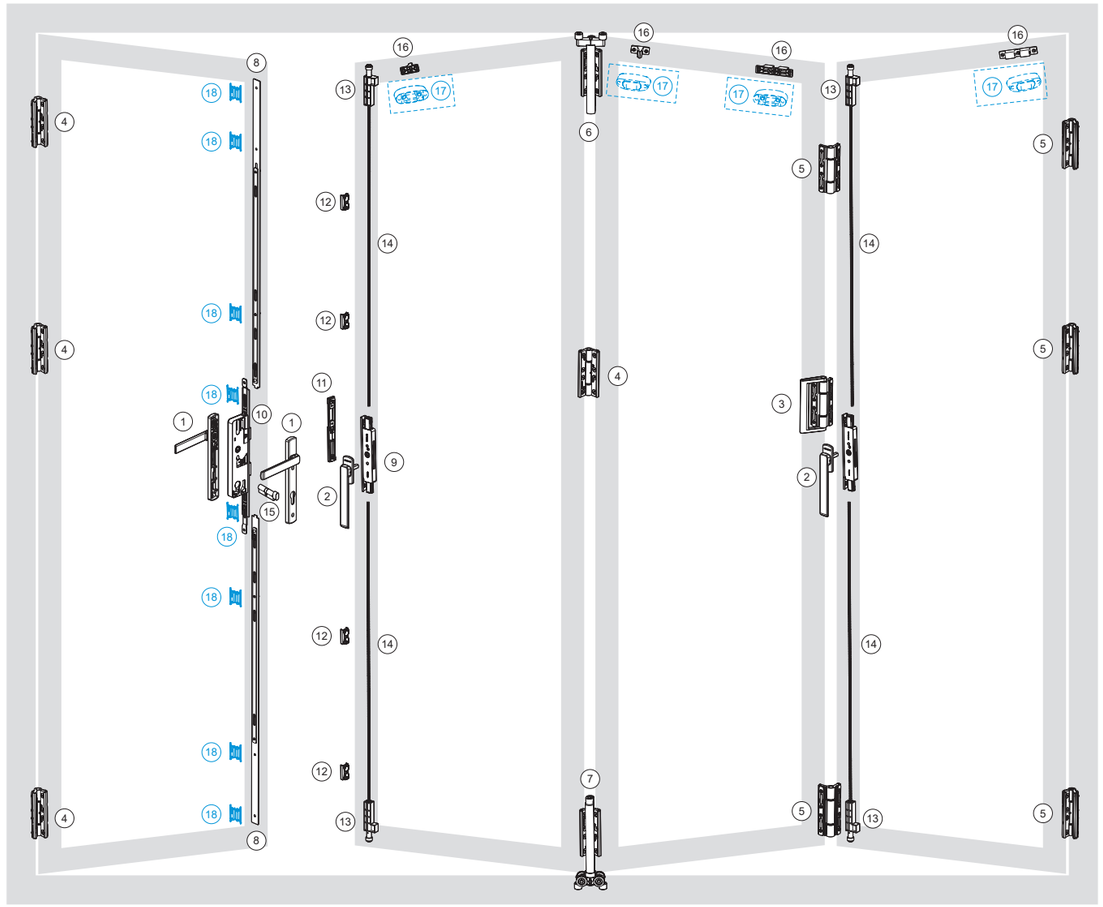


- The rollers are made of high quality stainless steel and special wear-resisting material, with high load-bearing, anti-fracture, longevity and light moving operation force
- Hinge has double anti-burglar function (metal end cover and internal anti-burglar pin) with adjustable and fixed series, which solves the problem of over-adjustment in the installation process and droop in the sash. A small sealing strip is designed on the end side, which is closely combined with the sash sealing strip for better tightness
- Multi-point lock body and shootbolt configuration

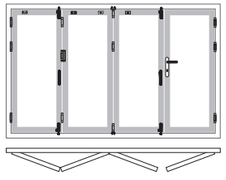
Bi-Folding Door		Applicable Range
Sash Width (Single)	(mm)	500-900
Sash Height (Single)	(mm)	1,900-3,500
Load-bearing	(kg)	⩽150

BI-FOLDING DOOR HARDWARE SERIES

431 Configuration



Door Configurations



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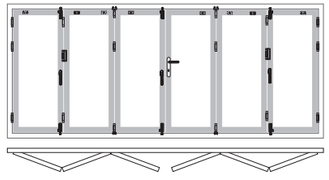
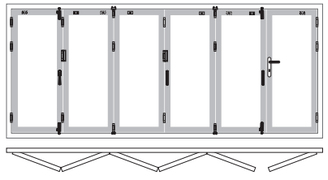
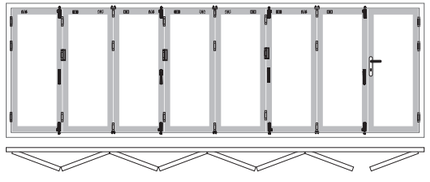


633



651



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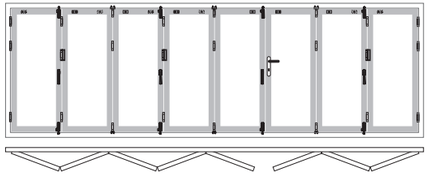


853

BI-FODING DOOR HARDWARE SERIES

Configuration Table

No.	Description	P/N	Qty					Notes	Ref. Page
			431	633	651	871	853		
1	Flat Handle Set (with Cylinder)	G010011 G010005	1	1	1	1	1	Casement Sash	P171, P172
2	Flat Handle	G010006 G010007 G010008 G010009 G010010	2	3	3	4	4	Bi-Folding Sash, Exposed Spindle Length 32 mm Bi-Folding Sash, Exposed Spindle Length 37 mm Bi-Folding Sash, Exposed Spindle Length 42 mm Bi-Folding Sash, Exposed Spindle Length 47 mm Bi-Folding Sash, Exposed Spindle Length 60 mm	P172
3A	Adjustable Hinge with Handle	G040006	1 0	2 0	2 0	3 0	3 0	Qty for Inner Folding Door Sash	P176
3B	Fixed Hinge with Handle	G040002	1 0	2 0	2 0	3 0	3 0	Qty for Inner Folding Door Sash	
3C	Fixed Hinge with Handle	G040007	2	4	4	6	6	Oty for Inner Folding Door Sash	
4	Adjustable Hinge	G040001	4	2	4	4	2		P177
5	Fixed Hinge	G040003	5 1	10 12	8 10	11 14	13 16	Qty for Inner Folding Door Sash	P177
6	Guide Roller	G050002	1	2	2	3	3	Left-Right Adjustable, Up-Rown Adjustment Available with Part No.7	P174
7	Weight Bearing Roller	G050001	1	2	2	3	3	Left-Right Adjustable, Up-Rown Adjustable;	P175
8	Pry-Resistant Espagnolette Bolt with Bearing	G020004 G020002 G020003 G020009	2	2	2	2	2	1,200 mm 960 mm 1,080 mm 1,965 mm	P179
9	Spindle Drive Gearbox	G020001	2	3	3	4	4		P173
10	Multi-Point Lock Body	D030037 D030036	1	1	1	1	1	22×330×33 Multi-Point Lock Body (V2.0, Used with a Steel Transmission Rod) 22×330×28 Multi-Point Lock Body (V2.0, Used with a Steel Transmission Rod)	
11	Adjustable Main Strike	G100003 G100004	1	1	1	1	1	Suitable for Thermal Aluminum Profiles Suitable for Non-Thermal Aluminum Profiles	P178
12	Pry-Resistant Keepers	A100116	4	4	4	4	4		P179
13	Shootbolt	G070001 G070005	4	6	6	8	8	Suitable for Regular Profiles Suitable for Slim Profiles	P178
14	Shootbolt Connecting Rod	G020005 G020007 G020008	4	6	6	8	8	L=1500 mm L=2000 mm L=2500 mm	P178
15	Cylinder		1	1	1	1	1		P158, P159
16	Adjustable Panel Stop	G080002	2	4	4	6	6		P180
17	Magnetic Panel Stop	G080001	2	4	4	6	6		P180
18	Espagnolette Bolt Back Plate	G120001	2~16	2~16	2~16	2~16	2~16	Suitable for the Lock Body and Transmission Rod Installation on Thermal Aluminum Profiles	P181
19	Transmission Rod Screw Pack	G110001	14	14	14	14	14	Suitable for G020002, G020003, G020004, D030037 ST4.2x25 Cross Countersunk Head Self-Tapping Screws	
20	Handle Screw Pack	G110004 G110002 G110003 G110005 G110008	4	6	6	8	8	Suitable for G010008 Suitable for G010006 Suitable for G010007 Suitable for G010009 Suitable for G010010	
21	Handle Screw Pack	D000082	1	1	1	1	1	Suitable for G010005	
22	Handle Spindle Screw Pack	D000062	1	1	1	1	1	Suitable for G010005	

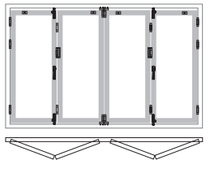
Tip:If you need other special configurations, please contact the relevant technical staff.

BI-FOLDING DOOR HARDWARE SERIES

422 Configuration



Door Configurations



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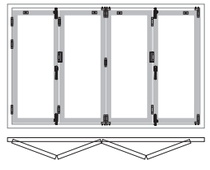

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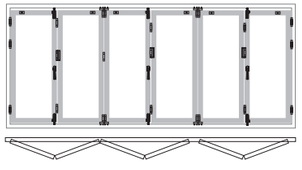

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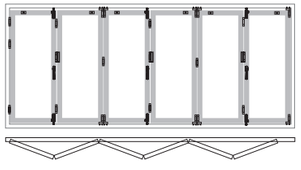

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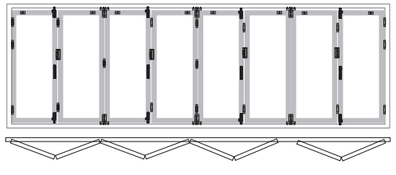

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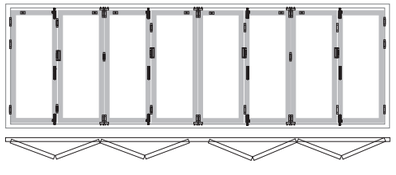

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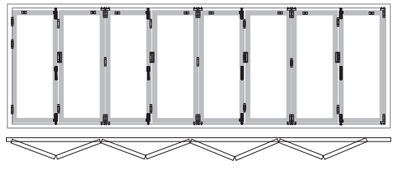


880

BI-FODING DOOR HARDWARE SERIES

Configuration Table

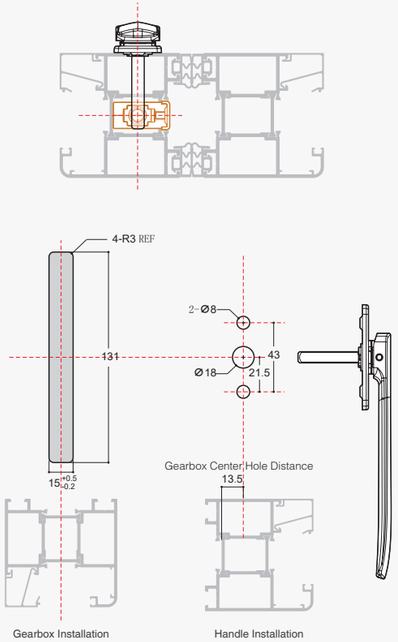
No.	Description	P/N	Qty							Notes	Ref. Page
			440	422	660	642	880	862	844		
1	Flat Handle Set	G010017	1	1	1	1	1	1	1	Casement Sash	P171, P172
2	Flat Handle	G010006 G010007 G010008 G010009 G010010	1	1	2	2	3	3	3	Bi-Folding Sash, Exposed Spindle Length 32 mm Bi-Folding Sash, Exposed Spindle Length 37 mm Bi-Folding Sash, Exposed Spindle Length 42 mm Bi-Folding Sash, Exposed Spindle Length 47 mm Bi-Folding Sash, Exposed Spindle Length 60 mm	P172
3a	Adjustable Hinge with Handle	G040006	1 0	2 0	1 0	2 0	1 0	2 0	2 0	Suitable for The Last Sash Qty for Inner Folding Door Sash	P176
3b	Fixed Hinge with Handle	G040002	1 0	0 0	2 0	1 0	3 0	2 0	2 0	Qty for Inner Folding Door Sash	
3c	Fixed Hinge with Handle	G040007	2	2	3	3	4	4	4	Qty for Inner Folding Door Sash	
4	Adjustable Hinge	G040001	2 3	4 6	2 3	4 6	2 3	4 6	4 6	Suitable for The Last Sash Qty for Inner Folding Door Sash	P177
5	Fixed Hinge	G040003	6 7	6 6	9 11	9 10	12 15	12 14	12 14	Qty for Inner Folding Door Sash	P177
6	Guide Roller	G050002	1	0	2	1	3	2	2		P174
7	Weight Bearing Roller	G050001	1	0	2	1	3	2	2		P174
8A	Single Guide Roller Left	G050011	0	1	0	1	0	1	1		P175
8B	Single Guide Roller Left	G050010	0	1	0	1	0	1	1		
9A	Single Weight Bearing Roller Left	G050013	0	1	0	1	0	1	1		P175
9B	Single Weight Bearing Roller Left	G050012	0	1	0	1	0	1	1		
10A	Spindle Drive Gearbox (with Cylinder)	G020010	1	1	1	1	1	1	1	Suitable for No.1	P173
10B	Spindle Drive Gearbox	G020001	1	1	2	2	3	3	3	Suitable for No.2	
11	Shootbolt	G070001 G070005	4	4	6	6	8	8	8	Suitable for Regular Profiles Suitable for Slim Profiles	P178
12	Shootbolt Connecting Rod	G020005 G020007 G020008	4	4	6	6	8	8	8	L=1500 mm L=2000 mm L=2500 mm	P179
13	Cylinder		1	1	1	1	1	1	1	Suitable for No.10a	P158, P159
14	Adjustable Panel Stop	G080002	2	2	3	3	4	4	4		P180
15	Magnetic Panel Stop	G080001	2	2	3	3	4	4	4		P180
16	Cylinder Cover	G140001	1	1	1	1	1	1	1	Suitable for No.10a	P172
17	Handle Screw Pack		2	2	2	2	2	2	2		
18	Spindle Pack		1	1	1	1	1	1	1		
19	Handle Screw Pack	G110004 G110002 G110003 G110005 G110008	2	2	4	4	6	6	6	Suitable for G010008 Suitable for G010006 Suitable for G010007 Suitable for G010009 Suitable for G010010	

Tip:If you need other special configurations, please contact the relevant technical staff.

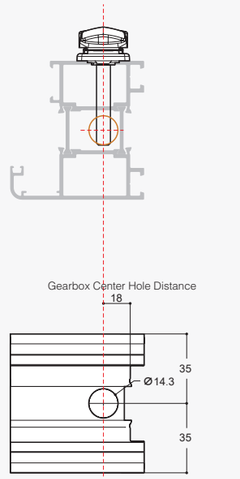
PROFILE AND DRILLING REQUIREMENTS

Flat Handle, Bi-Directional Gearbox Drill Hole Drawing

Flat Handle+Spindle Drive Gearbox

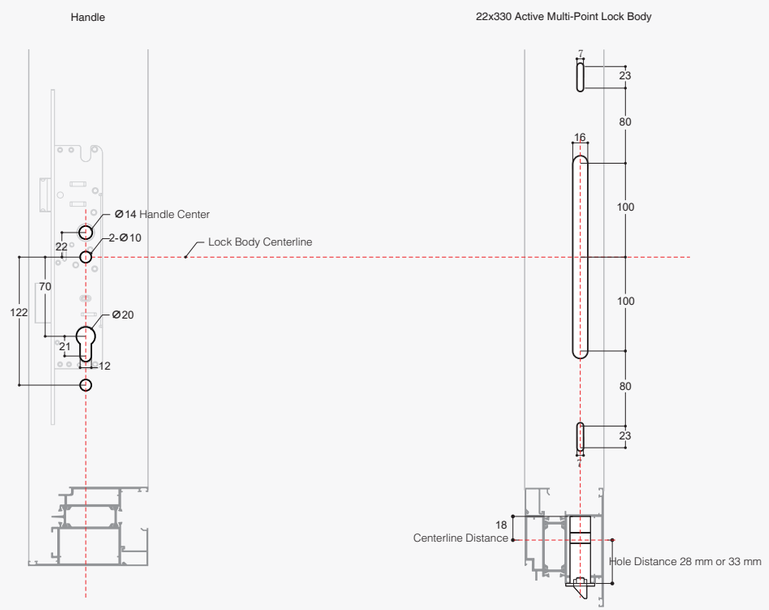


Shootbolt Drill Hole Drawing



Upper and lower sash drill holes for Shootbolt installation on handle side.
The Shootbolt Strike shall be pre-assembled in the sash.

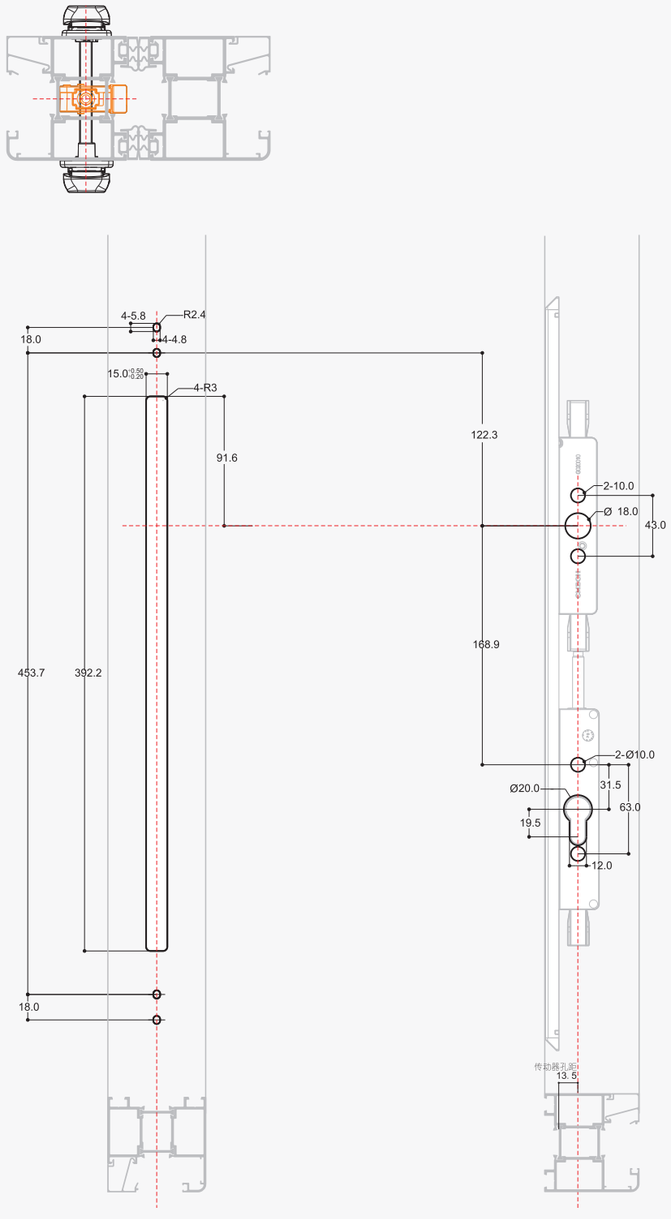
Drill Hole Drawing



PROFILE AND DRILLING REQUIREMENTS

Flat Handle Set, Bi-Directional Gearbox Drill Hole Drawing

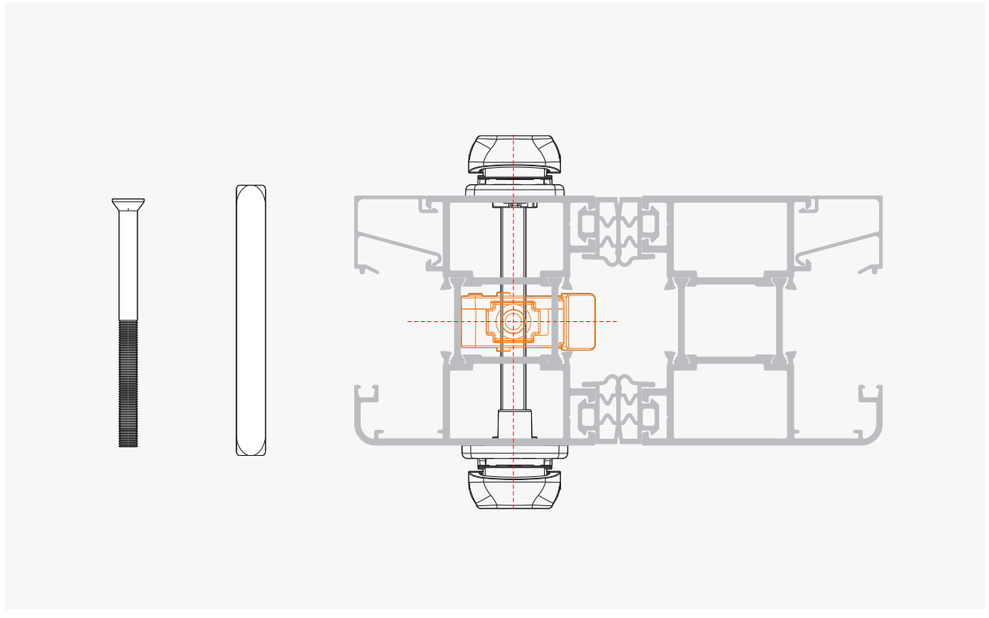
Flat Handle Set+Spindle Drive Gearbox (with Cylinder)



SPINDLE & SCREW PACK SELECTIONS

(For Flat Handle Set)

Spindle Pack				Handle Screw Pack			
P/N	Description	Sash Width	Qty	P/N	Description	Sash Width	Qty
G110009	7×7×77 Spindle	65	1	G110021	M5×65 Countersunk Cross Screw	65	2
G110010	7×7×82 Spindle	70	1	G110022	M5×70 Countersunk Cross Screw	70	2
G110011	7×7×84 Spindle	72	1	G110023	M5×72 Countersunk Cross Screw	72	2
G110012	7×7×87 Spindle	75	1	G110024	M5×75 Countersunk Cross Screw	75	2
G110013	7×7×92 Spindle	80	1	G110025	M5×80 Countersunk Cross Screw	80	2
G110014	7×7×97 Spindle	85	1	G110026	M5×85 Countersunk Cross Screw	85	2
G110015	7×7×100 Spindle	88	1	G110027	M5×88 Countersunk Cross Screw	88	2
G110016	7×7×102 Spindle	90	1	G110028	M5×90 Countersunk Cross Screw	90	2
G110017	7×7×107 Spindle	95	1	G110029	M5×95 Countersunk Cross Screw	95	2
G110018	7×7×112 Spindle	100	1	G110030	M5×100 Countersunk Cross Screw	100	2
G110019	7×7×117 Spindle	105	1	G110031	M5×105 Countersunk Cross Screw	105	2
G110020	7×7×122 Spindle	110	1	G110032	M5×110 Countersunk Cross Screw	110	2



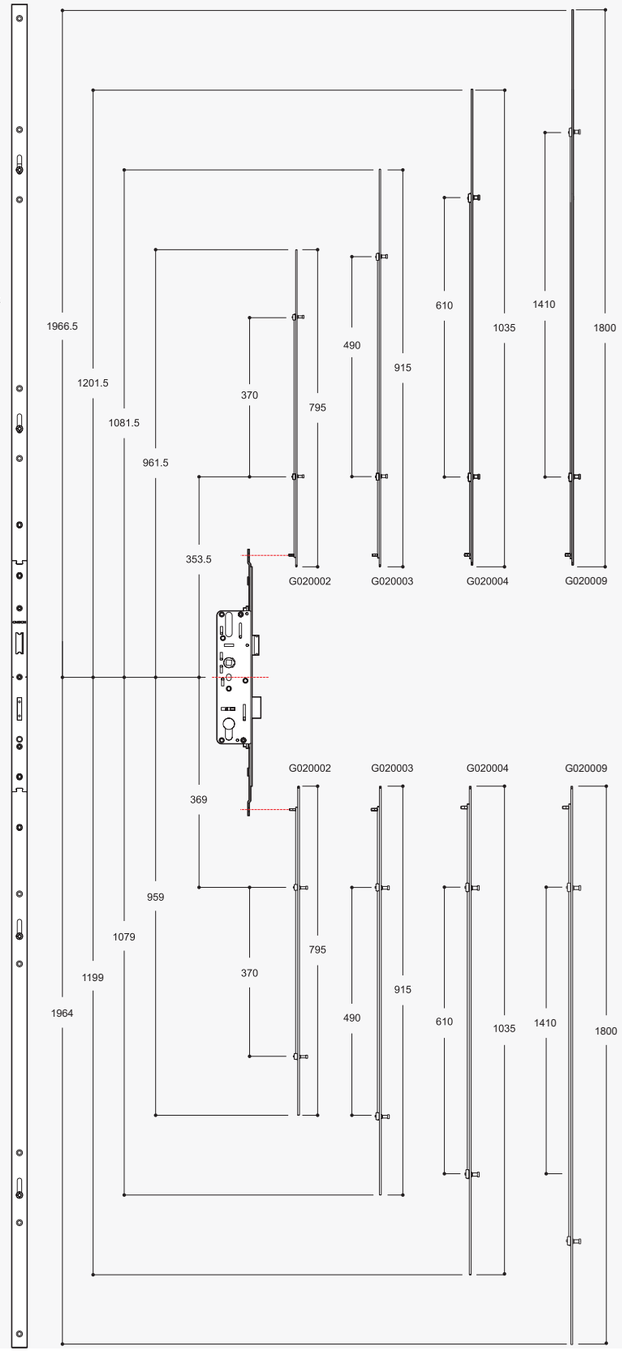
ESPAGNOLETTE BOLT SELECTION

(For a 22x330 Active Multi-Point Lock Body)

Espagnolette Bolt Measurements

P/N	Specifications	Description
G020002	22x960 mm	Lock Point with Bearing
G020003	22x1,080 mm	Lock Point with Bearing
G020004	22x1,200 mm	Lock Point with Bearing
G020009	22x1,965 mm	Lock Point with Bearing

Note:
1. The lock body is a 22x300 Active Multi-Point Lock Body.
2. The dimensions are given in the locked position.
3. The end of the transmission rod can be trimmed based on the actual height of the door.

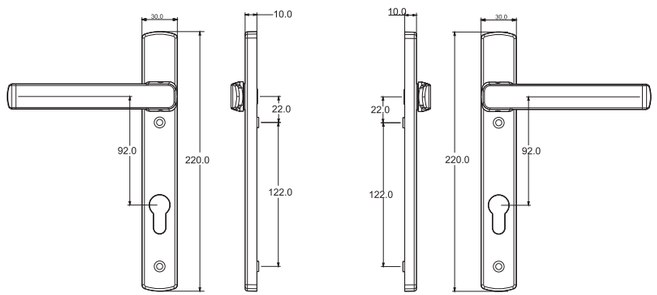


HANDLE SELECTIONS

FLAT HANDLE SET

G010011
Use on Odd-numbered Slash

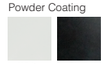




M Treatment

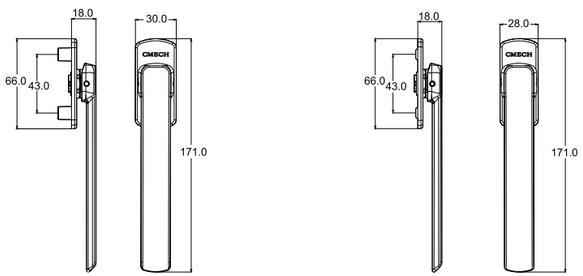


Powder Coating



G010017
Use on Even-numbered Slash or Casement Slash

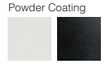




M Treatment



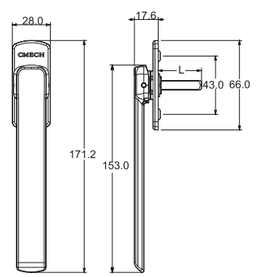
Powder Coating



HANDLE SELECTIONS

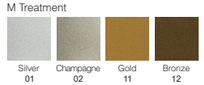
FLAT HANDLE





P/N	L
G010012-	32
G010013-	37
G010014-	42
G010015-	47
G010016-	60

M Treatment



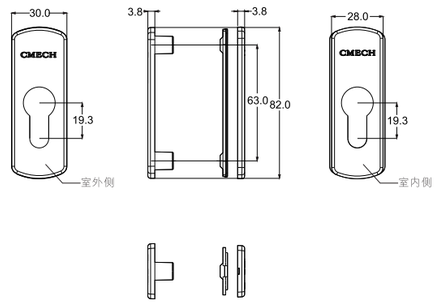
Powder Coating



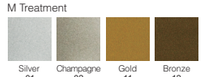
CYLINDER COVER

G140001
Cylinder Cover (Suitable for Spindle Drive Gearbox(with Cylinder)

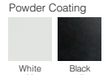




M Treatment



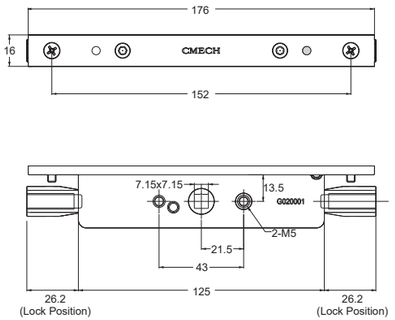
Powder Coating

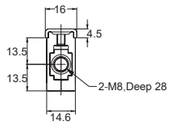


HINGES

G020001

Spindle Drive Gearbox

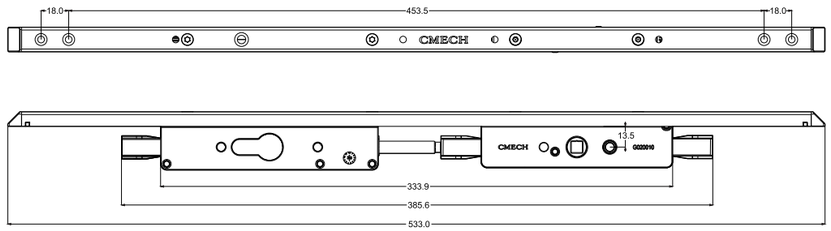


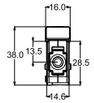


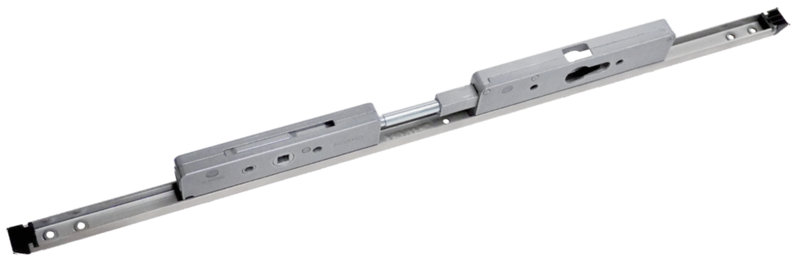


G020010

Spindle Drive Gearbox(with Cylinder)



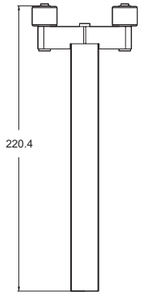


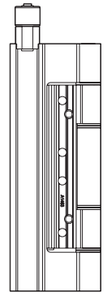


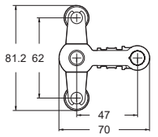
HINGES

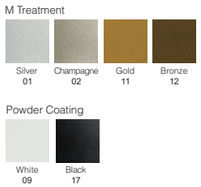
G050002

Guide Roller (Odd-numbered Slash)





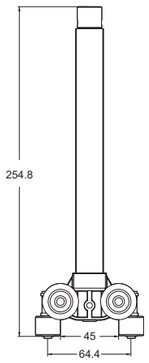


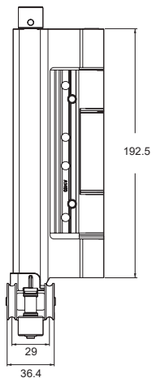


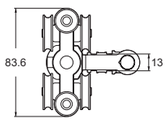


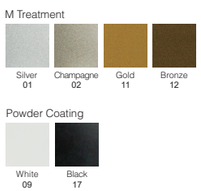
G050001

Weight Bearing Roller (Odd-numbered Slash)





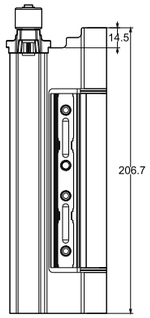


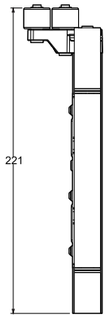


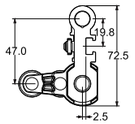


HINGES

Guide Roller (Even-numbered Slash)







P/N	Description
G050010	Guide Roller (Right)
G050011	Guide Roller (Left)

M Treatment

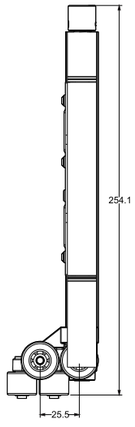
Silver	Champagne	Gold	Bronze
01	02	11	12

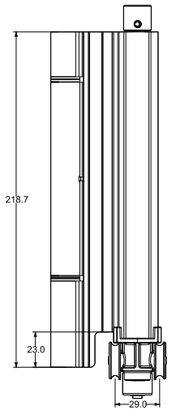
Powder Coating

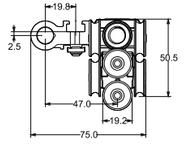
White	Black
09	17



Weight Bearing Roller (Even-numbered Slash)







P/N	Description
G050012	Weight Bearing Roller (Right)
G050013	Weight Bearing Roller (Left)

M Treatment

Silver	Champagne	Gold	Bronze
01	02	11	12

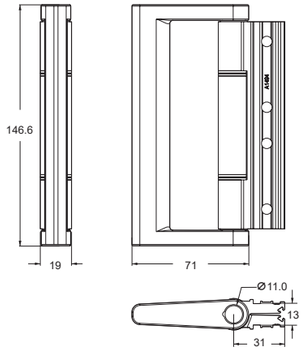
Powder Coating

White	Black
09	17



HINGES

G040002
Fixed Hinge with Handle



M Treatment

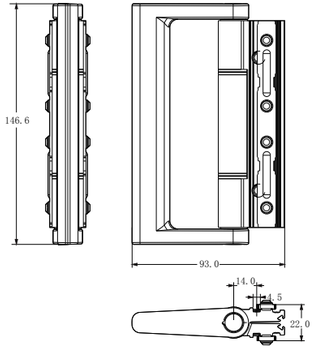
Silver	Champagne	Gold	Bronze
01	02	11	12

Powder Coating

White	Black
09	17



G040006
Adjustable Hinge with Handle



M Treatment

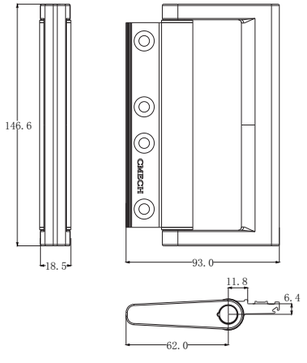
Silver	Champagne	Gold	Bronze
01	02	11	12

Powder Coating

White	Black
09	17



G040007
Fixed Hinge with Handle



M Treatment

Silver	Champagne	Gold	Bronze
01	02	11	12

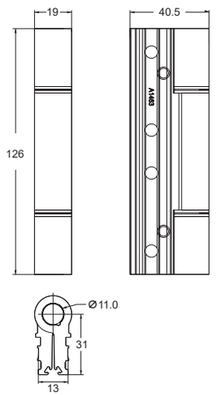
Powder Coating

White	Black
09	17



HINGES

G040001
Adjustable Hinge



M Treatment

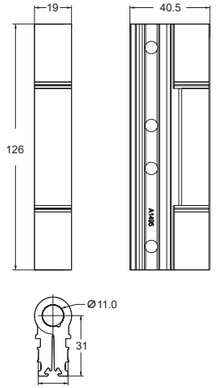
Silver	Champagne	Gold	Bronze
01	02	11	12

Powder Coating

White	Black
09	17



G040003
Fixed Hinge



M Treatment

Silver	Champagne	Gold	Bronze
01	02	11	12

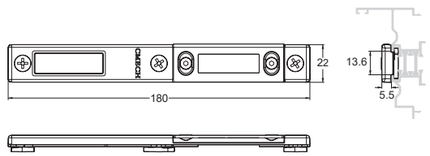
Powder Coating

White	Black
09	17



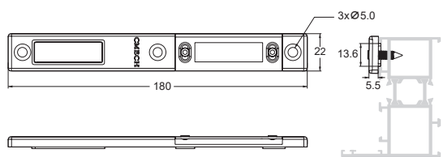
LOCKING HARDWARE

G100003
Adjustable Main Strike
(Suitable for Thermal Aluminum Profiles, **Supplied Screw Pack**)



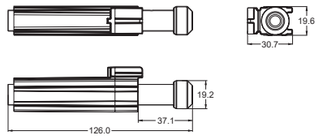


G100004
Adjustable Main Strike
(Suitable for Non-Thermal Aluminum Profiles, Supplied Screw Pack)



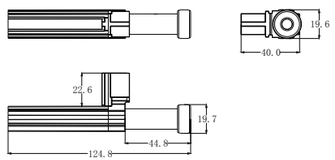


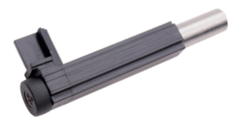
G070001
Shootbolt



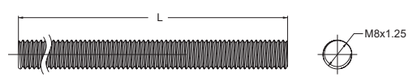


G070005
Shootbolt





Shootbolt Connecting Rod

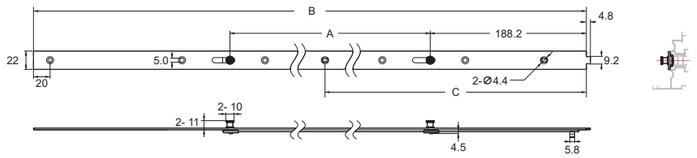


P/N	L	Instructions
G020005	1500 mm	Standard Configuration
G020007	2000 mm	Optional
G020008	2500 mm	Optional
-	Others	Customization



LOCKING HARDWARE

Pry-Resistant Espagnolette Bolt with Bearing

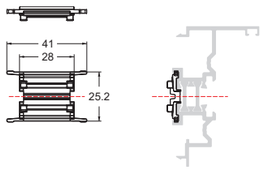




P/N	Specifications			Instructions
	A	B	C	
G020002	370 mm	795 mm	-	304SS
G020003	490 mm	915 mm	441 mm	304SS
G020004	610 mm	1,035 mm	501 mm	304SS
G020009	1410 mm	1,800 mm	1000 mm	304SS

G120001

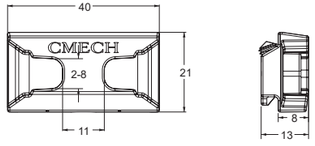
Espagnolette Bolt Back Plate





A100116

Pry-Resistant Keepers

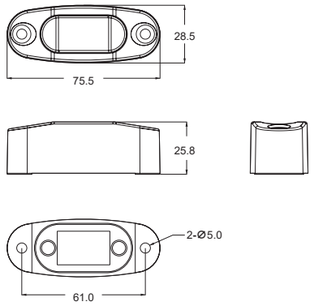




PANEL STOP

G080001

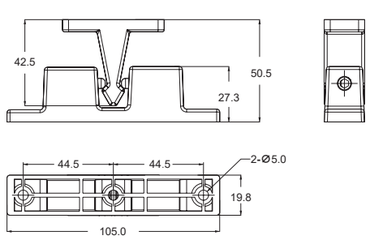
Magnetic Panel Stop





G080002

Adjustable Panel Stop





General Maintenance Information

Warnings

- Incorrect maintenance can result in injury!
- Before starting work, ensure sufficient working space is available.
- Keep the installation area clean and orderly.
- Adjustment and replacement of hardware may only be carried out by qualified professionals from specialized companies.
- Secure the sash to prevent accidental opening or closing. Do not remove the sash during maintenance.

Important Note

- Incorrect or improper inspection can lead to property damage!
- Hardware must be inspected in the installed state by qualified professionals.
- For fault diagnosis and repair, removal or re-installation of the window/door must be performed by
- qualified professionals.
- Manufacturers must ensure end-users and owners are made aware of these maintenance instructions.
- Cmech window manufacturers shall enter into a maintenance agreement with the end-user.

Responsibility Matrix

Maintenance Activity	Responsible Party
Maintenance Intervals	Installer or End-User
Hardware Cleaning	
Lubrication of Moving Parts	
Lubrication of Wear-Prone Areas	
Check Hardware for Secure Installation	
Check Hardware for Wear	
Check Function of Moving Parts	
Check Function of Wear-Prone Areas	
Check Operational Smoothness	Installer Only
Tightening of Screws	
Replacement of Damaged Parts	

Maintenance Schedule

Warranty Period

This warranty is valid from the date of product shipment for a maximum of 10 years, subject to compliance with the maintenance and cleaning schedule.
Product warranty periods are specified in the table below.

Cleaning Frequency Guide

The required frequency depends on the building's environment. More frequent intervention is necessary in coastal, industrial, and heavily polluted areas.

External Environment	Cleaning Frequency	External Environment	Maintenance Frequency
Rural, Low Pollution	Every 6 Months	Rural, Low Pollution	Every 3 Years
Normal Urban / Industrial	Quarterly	Normal Urban / Industrial	Every 3 Years
High Urban / Industrial Pollution	Monthly	High Urban / Industrial Pollution	Every 2 Years
1 – 20 km from Coastline	Monthly	1 – 20 km from Coastline	Annually
0 – 1 km from Coastline	Weekly	0 – 1 km from Coastline	Quarterly

Functional Warranty Period (Years)

Rural / Normal Urban & Industrial	Severe Urban & Industrial	1-20 km from Coast	0-1 km from Coast
10	9	7	5

Corrosion Warranty Period (Years)

Product Type	Surface Finish	Rural/Normal Urban & Industrial	Severe Urban & Industrial	1-20 km from Coast	0-1 km from Coast
Interior-Exposed	Painted / Anodized	10	7	5	3
	Plated	7	7	5	3
Concealed Internal		10	7	5	3

Fittings

Environmental Class De nitions

Cleaning

Important Note

- Incorrect cleaners and sealants can cause property damage!
- Do not use corrosive, flammable, acidic, or abrasive cleaners.
- Use only mild, pH-neutral cleaners in diluted form.
- A thin protective film (e.g., applied with an oil-impregnated cloth) may be used after cleaning.
- Avoid exposing the window/door area to corrosive vapors (e.g., from formic acid, acetic acid, ammonia, amines, aldehydes, phenols, chlorine, tannic acid).
- Do not use acetic acid or acid-curing sealants, as direct contact or vapors may cause surface corrosion.

Cleaning Hardware

- Remove dust and dirt from hardware using a soft cloth.
- Lubricate moving parts and wear-prone areas after cleaning (see Section 12.4).
- A thin protective film (e.g., with an oil-impregnated cloth) may be applied to the hardware.

Maintenance Requirements

Important Note

- Incorrect lubricants can cause property damage!
- Use high-quality lubricants that are free of resins and acids.
- Under high climatic stress, select appropriate lubricants per the manufacturer's specifications.

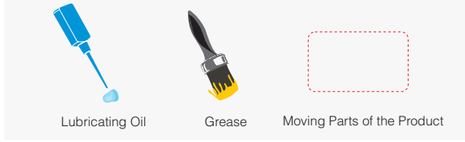
Environmental Considerations

- Cleaners and lubricants can pollute the environment!
- Spills and excess material must be removed promptly.
- Dispose of cleaners and lubricants as professional waste, in accordance with applicable regulations and local laws.

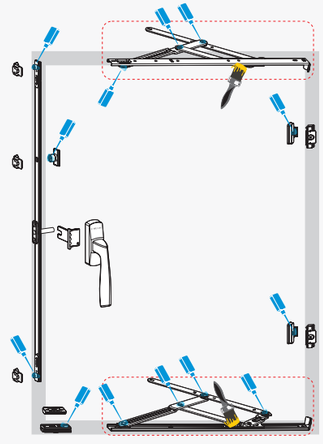
Maintenance Procedure

- Smooth operation can be maintained or restored through lubrication or adjustment. All functional hardware components require regular lubrication.
- Recommended Lubricant: WD-40 Specialist® Penetrant or equivalent.
- Note: Lubrication point diagrams are for reference only. Actual points may vary based on component size and specification.

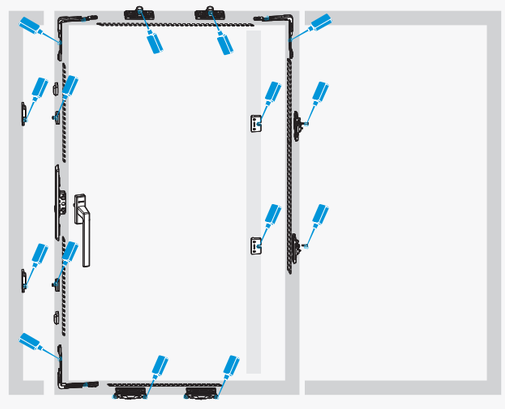
- Please read and follow the instruction manual carefully during installation.
- Please be sure to check the product is working properly once installation is complete.
- Please prepare the appropriate tools and protective gear to facilitate a fast, proper installation and to guarantee safety.
- Add lubricating oil and grease to moving parts, locking brackets and adjustable parts to extend product life.
- The moving parts must be checked to see if they are loose or damaged in order to guarantee safety.
- Carry out maintenance at least once annually.



Outswing Casement Window Hardware

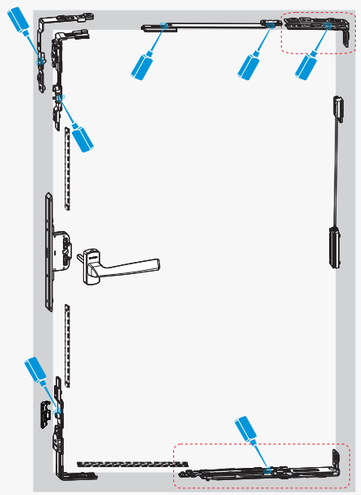


Tightly Sealed Sliding Window Hardware

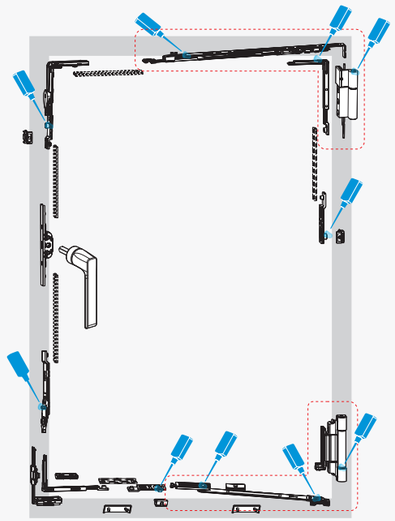


MAINTENANCE

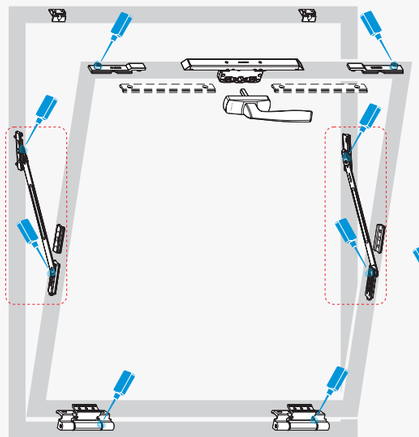
Outswing Casement & Awning Window Hardware



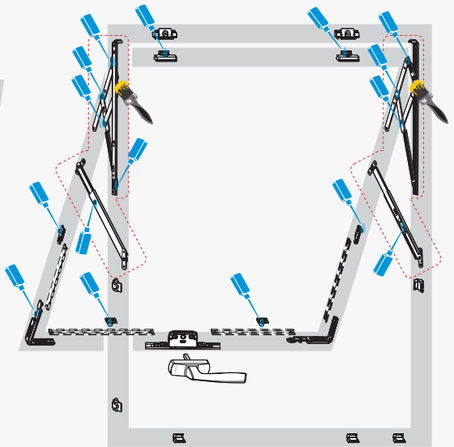
Tilt & Turn Window Hardware



Hopper Window Hardware

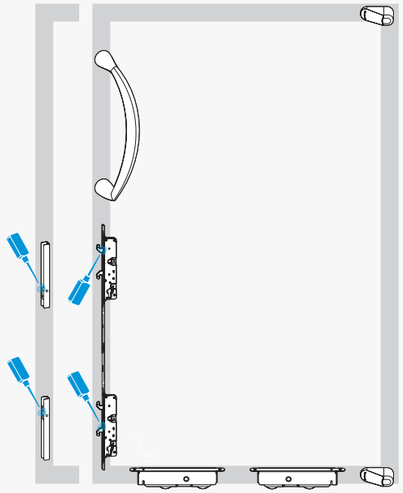


Outswing Awning Window Hardware

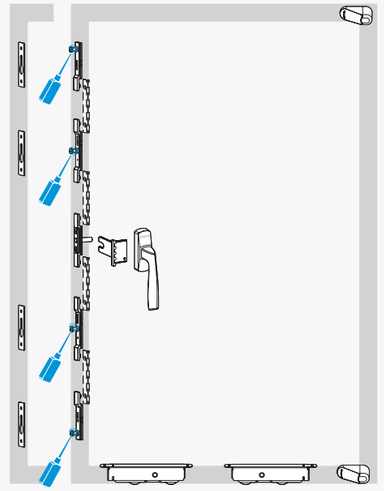


MAINTENANCE

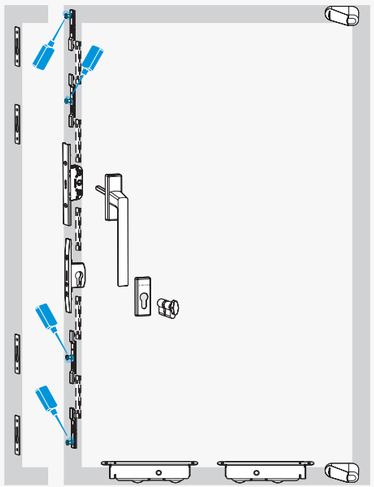
Gliding Door Hardware
London Handle + Hook Lock Configuration



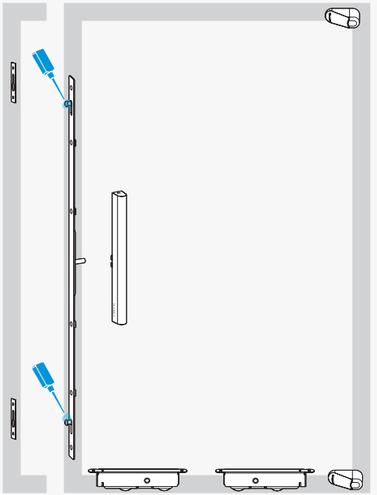
Gliding Door Hardware
T-Drive Configuration



Gliding Door Hardware
Spindle Drive Configuration

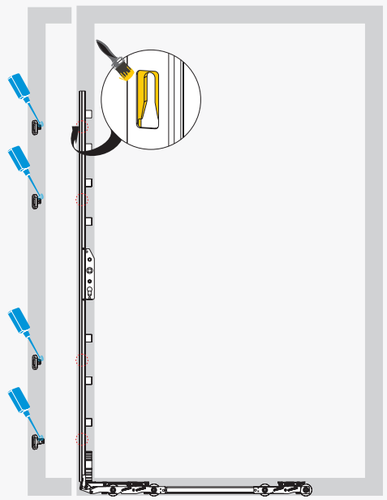


Gliding Door Hardware
Drive Gear Configuration

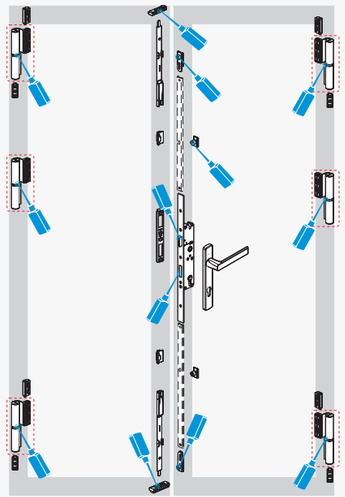


MAINTENANCE

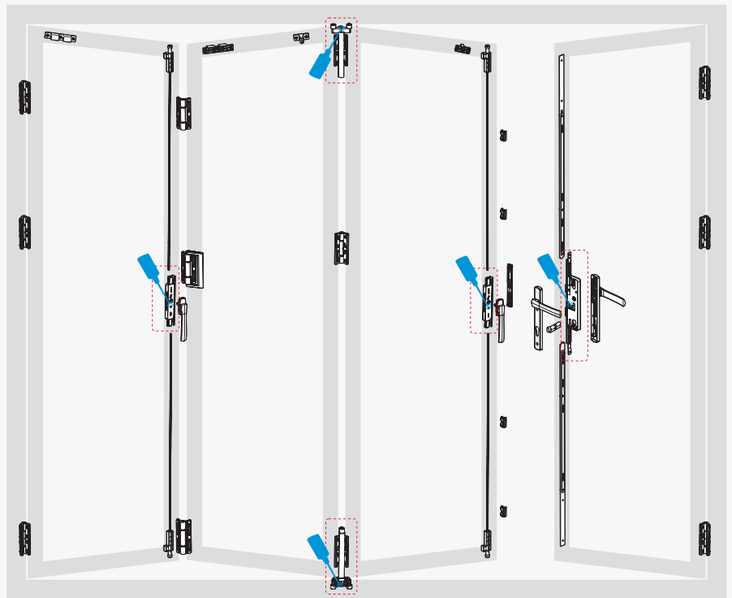
Lift & Slide Door Hardware



Hinged Door Hardware



Bi-Folding Door Hardware



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