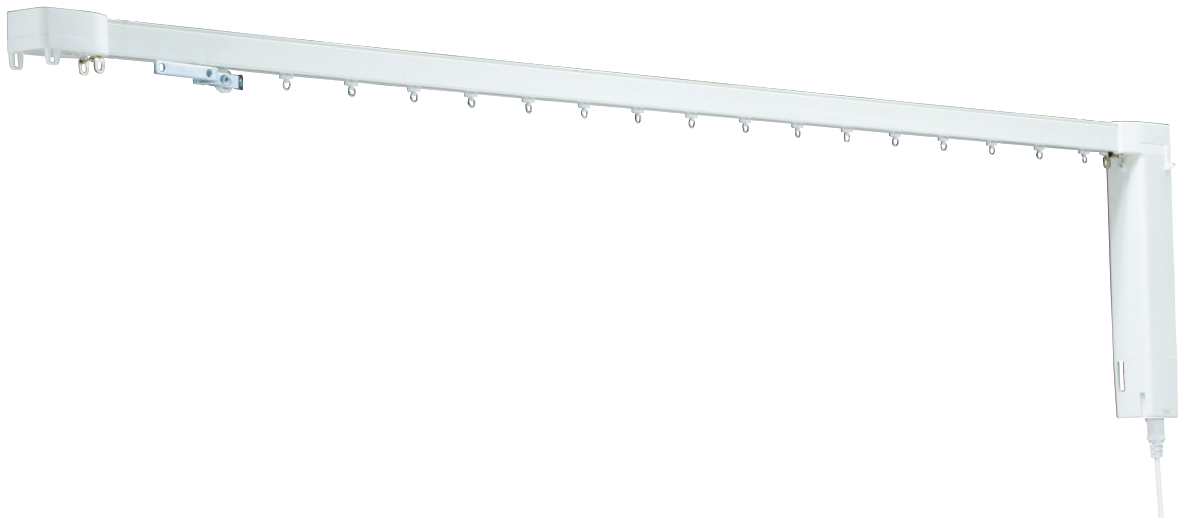


Motorized Curtain Track

Progress 25/50/80

Made in JAPAN



- Motorized curtain track with ultra-quiet operation. (Less than 35 dB)
- Smooth manual-override (by hand-draw operation).
- Automatically identifies and set Open and Stop operation limits.
- EMC Design and Certification.
- Wave Style is available.
- Enables opening/closing of curtains without using any switch operations. (Touch Motion)
- Intermediate limits can be set for both the opening and closing directions.

Progress 25/50/80

Progress25/50/80's Unique Features

1. Quiet motor, durability belt and silent rollers

The new motor and rollers provide ultra-quiet operation.

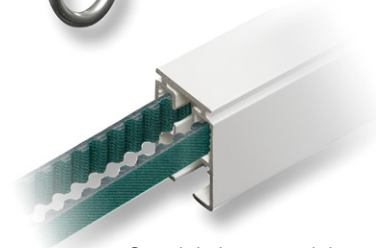


For your comfortable life, Progress System runs with less than 35 dB with a motor, belt and special silent rollers.

*At a speed setting of 0 (9.5 sec./m) only.



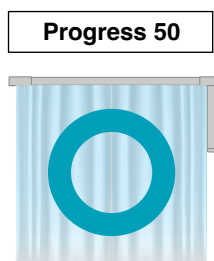
Silent Roller



Special shape track keeps belt without damage.

2. EMC Design and Certification

Electromagnetic compatibility (EMC) means that a device is compatible with (i.e., no interference is caused by) its electromagnetic (EM) environment and it does not emit levels of EM energy that cause electromagnetic interference (EMI) in other devices in the vicinity.



Not affected

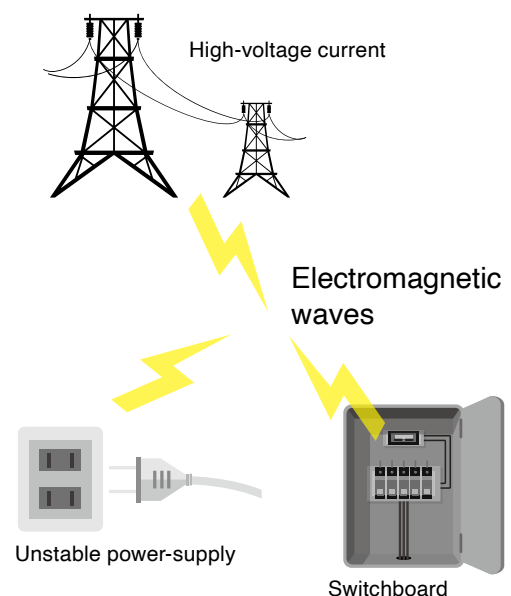
- ☐ No malfunction
- ☐ Properly stops
- ☐ Never Freezes



Affected

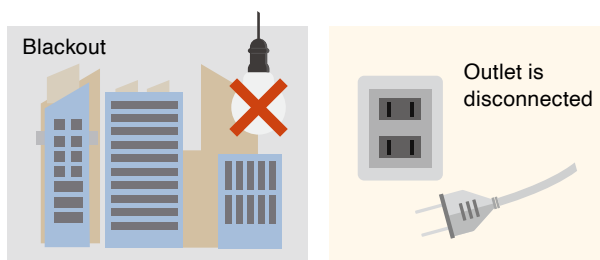
- ☐ Malfunction
- ☐ Fails to properly stop
- ☐ System freezes

Electromagnetic Compatibility (EMC) for stress-free operation

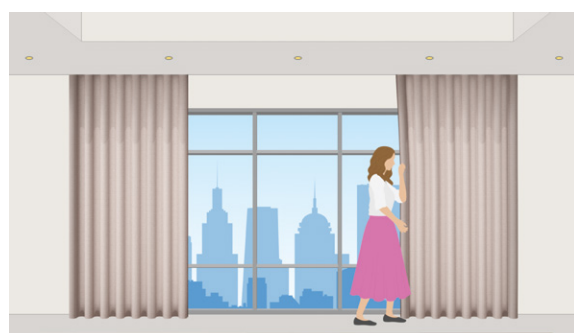
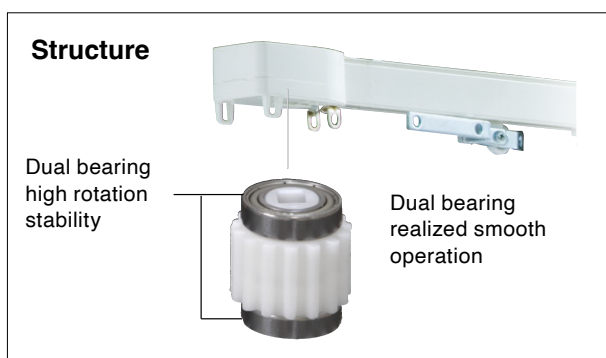


3. Smooth hand-draw operation

Though the Progress is a motorized curtain rail, it can be pulled by hand smoothly in the same way of manual hand-draw tracks without any stress by the built-in electromagnetic clutch.



Even without power supply, such as a blackout happens or the outlet is disconnected, the Progress can be pulled by hand smoothly.



A built-in electromagnetic clutch allows the drapery to be drawn by hand.

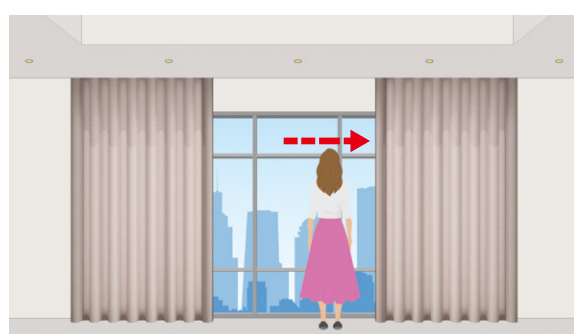
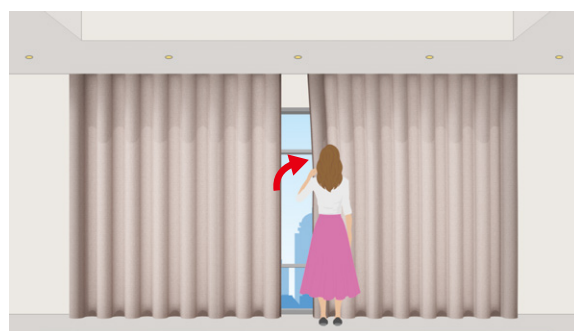
Watch the smooth hand-draw motion for hotel use.



4. Touch motion function

The touch motion function can perform opening/closing of curtains without using any switch.

When curtain is drawn, it will begin to move in the direction itself, and will stop at the place on limit setup.



Wave Style's Unique Features for Progress25/50/80

Smart Design and Adaptability

Smart Wave Curtain System is the ideal curtain rail system for creating elegant wave curtains.

It allows for the creation of beautiful wave patterns without exposing any pitch-keeper tape, preserving the design's integrity. No special materials or sewing techniques are required. Its unique wheeled rollers ensure a consistently smooth hand-drawing experience.

The innovative magnetic curtain stopper maximizes window opening while enabling intuitive hand-drawing operations.



Watch the Smart Wave Curtain System in action.



Invisible, Tangle-free Cord

Typical Curtain Rails



- ✗ The cord comes out from the rail.
- ✗ The cord gets tangled in the roller and hook.

Smart Wave Curtain System

PAT.P

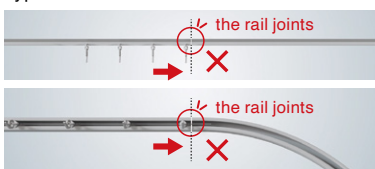


- Neatly folded tape remains within the rail, "tangle-free".

- This achieves the supreme design and functionality of wave curtains. Even when the curtain is fully opened or fully closed, the Pitch Keep mechanism is not exposed, realizing a flawless wave curtain.
- The Pitch Keep tape does not entangle with the carriage rollers, minimizing the curtain folds.

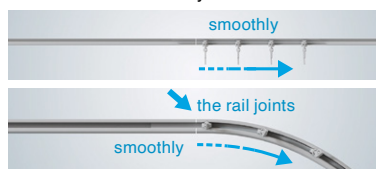
Seamless Hand-draw at Joints

Typical Curtain Rails



- ✗ The slider tends to get stuck at the rail joint.

Smart Wave Curtain System



- The roller runs smoothly over the joint sections.

- Our unique roller with wheel ensures a comfortable feeling in the opening and closing of curtains semi-permanently.
- The curtains can smoothly pass through the rail joints even when they are used joined, accommodating the growing market needs for wide windows and curved rails.
- By supporting the jointing of short-length rails, it contributes to solving logistical issues, including reducing shipping costs.

Smart Blackout

TOSO Smart Wave Overlap (Wave Master Roller Arm) not only prevents light leakage from the center of wave curtains, which was a concern, but also pays attention to the design at the central part, allowing the wave to be beautifully expressed across the entire window.



Watch the Wave Overlap
in action.

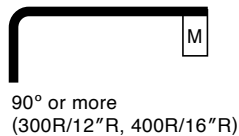


Progress 25/50/80's the Other Useful Functions

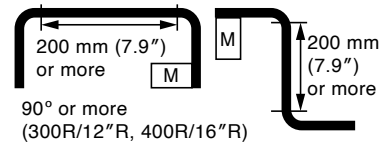
Function 1: Can be curved into a variety of shapes

L-shaped, U-shaped, S-shaped and gradual curves.

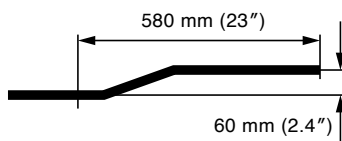
Single Curve



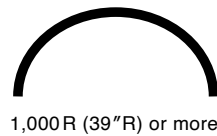
Two Curves
(U-shaped or S-shaped)



Overlap Track



Overall Curve Half



Function 2: "Slow start" and "Slow stop" functions

These functions enable the smooth start and stop of drapery operation.

Function 3: Adjustable curtain open/close speed

The speed of operation is adjustable in 10 stages (from 4.5 to 11.0 seconds per meter). This allows you to select the speed that best matches each window.

Function 4: Intermediate Limit function

The Intermediate Limit function stops the curtain at the desired position.

Function 5: Acceleration Mode is available

The industry's first "acceleration feature" is installed as a function of the Motorized Curtain Track. Press and hold the button for about 3 seconds to maximize speed.

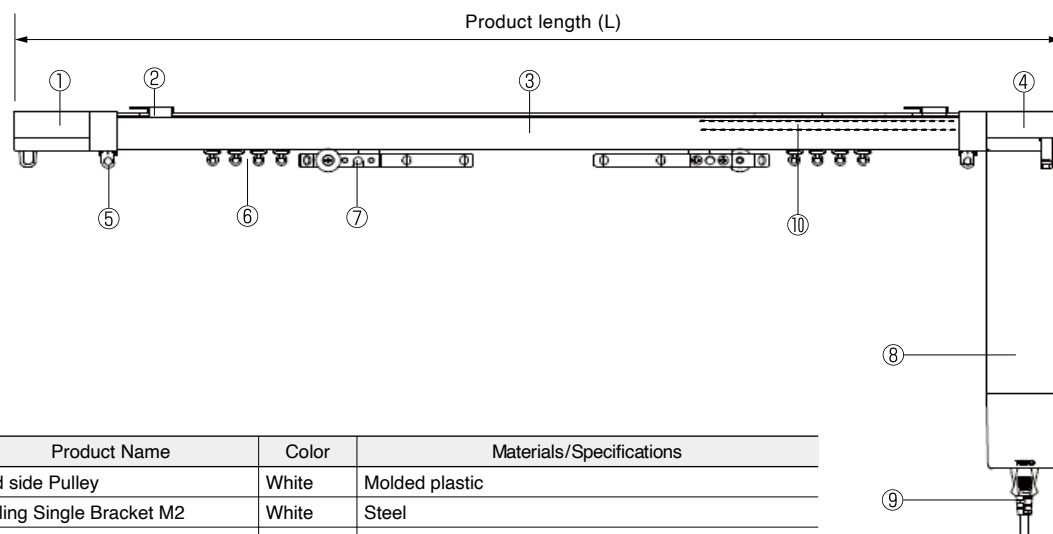
Function 6: Rotation Direction Selecting

This function enables switching of motor rotation direction without reassembling the Rail Set. Use this if the Rail Set has been accidentally assembled in the reverse orientation.

Function 7: Reduce of standby power

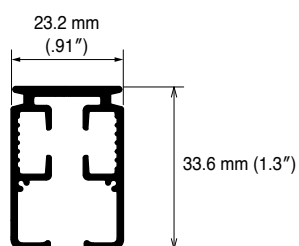
Standby power 0.5 W due to improved motor control board.

Product Overall View and Names of Parts

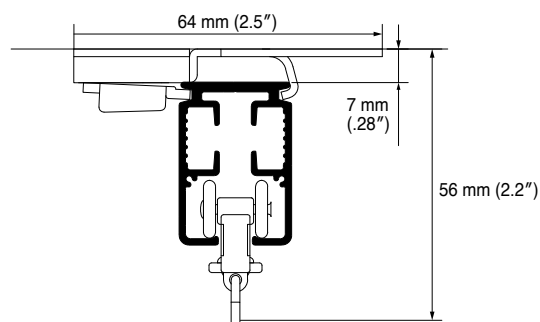


No.	Product Name	Color	Materials/Specifications
①	End side Pulley	White	Molded plastic
②	Ceiling Single Bracket M2	White	Steel
③	Track	White	Aluminum
④	Motor side Pulley	White	Molded plastic
⑤	Stop	Metallic	Steel
⑥	Noiseless Roller	Natural	Molded plastic
	New Delac Roller	Natural	Molded plastic
⑦	Pilot Roller Set	Metallic	Steel, Molded plastic
⑧	Motor	White	Aluminum, molded plastic (case)
⑨	Power Cord	White	Wire with plug (1 m/39")
⑩	Drive Belt	Green	3-layer structure of steel wires, plastic and fiber

Track Cross Section



Installation Dimensions



Motor Specifications

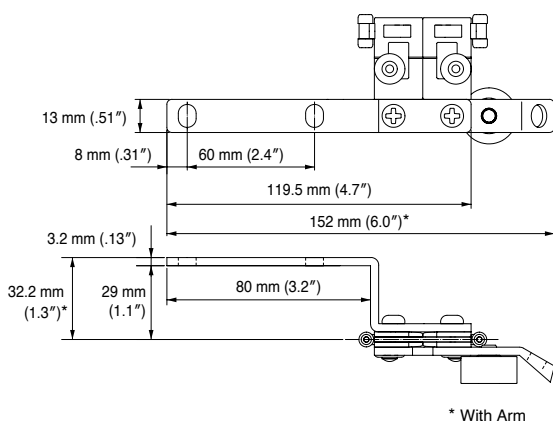
	Progress 25	Progress 50/80
Rated power voltage	AC 100 to 240 V	
Rated power frequency	50/60 Hz	
Power consumption	During stand by: 0.5 W or lower Max. load operation: 86 W	
Operating voltage	DC 24 V	
Operating current	3 mA	
Power rating	0.86 A (AC 100 V), 0.48 A (AC 240 V)	
Operating speed	5 to 11.5 sec./m (variable in 10 stages)	4.5 to 11.0 sec./m (variable in 10 stages)
Rated current	0.59 N.m	0.98 N.m
Ambient temperature	0 to 50°C (non-condensing)	
Time rating	8 min. (continuous operation)	
Noise level	Less than 35 dB (in 9.5 sec./m)	



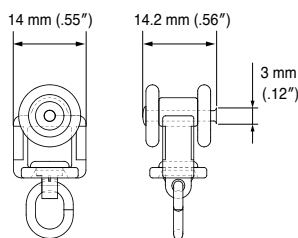
*CE certification is only applied for the Progress 50/80 motor.

Product Size (Pilot Roller with Arm)

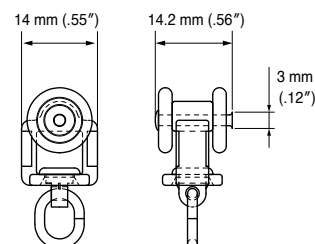
Pilot Roller with Arm



Noiseless Roller

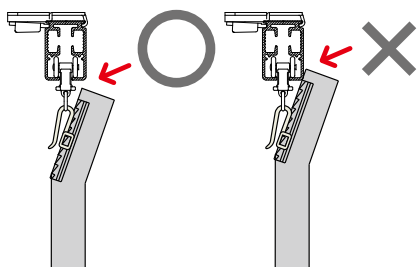


New Delac Roller

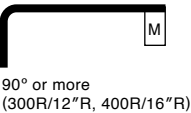
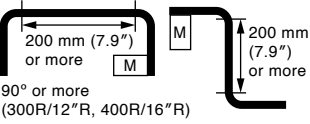
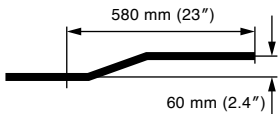


⚠ Caution

Do not put the load on the Roller, install so the curtain does not touch the Rail for prevent the occurrence of additional friction.



Applicable Range

Specifications		Progress 25				Progress 50				Progress 80 ^{*5}	
		Standard		Smart Wave Style		Standard		Smart Wave Style		Standard	
		Curtain Weight ^{*4} Unit: kg (lb)	Product Length Unit: mm (")	Curtain Weight ^{*4} Unit: kg (lb)	Product Length Unit: mm (")	Curtain Weight ^{*4} Unit: kg (lb)	Product Length Unit: mm (")	Curtain Weight ^{*4} Unit: kg (lb)	Product Length Unit: mm (")	Curtain Weight ^{*4} Unit: kg (lb)	Product Length Unit: mm (")
Straight 	One-way Draw	25 (55)	1,000 (39) to 10,000 (394)	25 (55)	1,000 (39) to 9,000 (354)	50 (110)	1,000 (39) to 15,000 (591)	50 (110)	1,000 (39) to 9,000 (354)	80 (176)	1,000 (39) to 15,000 (591)
	Two-way Draw	One-way Draw: 12 (26)		One-way Draw: 12 (26)		One-way Draw: 25 (55)		One-way Draw: 25 (55)		One-way Draw: 40 (88)	
Single Curve ^{*1} 	One-way Draw	15 (33)	1,200 (47) to 10,000 (394)	15 (33)	1,000 (39) to 9,000 (354)	35 (77)	1,200 (47) to 10,000 (394)	35 (77)	1,000 (39) to 9,000 (354)	50 (110)	1,200 (47) to 10,000 (394)
	Two-way Draw	One-way Draw: 7 (15)		One-way Draw: 7 (15)		One-way Draw: 17 (37)		One-way Draw: 17 (37)		One-way Draw: 25 (55)	
Two Curves ^{*1} (U-shaped or S-shaped) 	One-way Draw	15 (33)	1,500 (59) to 6,000 (236)	15 (33)	1,000 (39) to 9,000 (354)	25 (55)	1,500 (59) to 10,000 (394)	25 (55)	1,000 (39) to 9,000 (354)	35 (77)	1,500 (59) to 10,000 (394)
	Two-way Draw	One-way Draw: 7 (15)		One-way Draw: 7 (15)		One-way Draw: 12 (26)		One-way Draw: 12 (26)		One-way Draw: 17 (37)	
Overlap Track 	One-way Draw	15 (33)	1,000 (39) to 10,000 (394)	—	—	35 (77)	1,000 (39) to 10,000 (394)	—	—	50 (110)	1,000 (39) to 10,000 (394)
Overall Curve Half ^{*2} 	One-way Draw	15 (33)	1,000 (39) to 6,000 (236)	15 (33)	1,000 (39) to 6,000 (236)	25 (55)	1,000 (39) to 7,000 (276)	25 (55)	1,000 (39) to 6,000 (236)	35 (77)	1,000 (39) to 7,000 (276)
	Two-way Draw	One-way Draw: 7 (15)		One-way Draw: 7 (15)		One-way Draw: 12 (26)		One-way Draw: 12 (26)		One-way Draw: 17 (37)	

^{*1} With regular curve radius of 300R (11.8"R) or 400R (16"R), curve bending is available in the range of 90° to 179°.

^{*2} Overall curve half is available with a curve radius of 1,000R (39"R) or more. The number of splice is one piece only, and two tracks need to be spliced in the center.

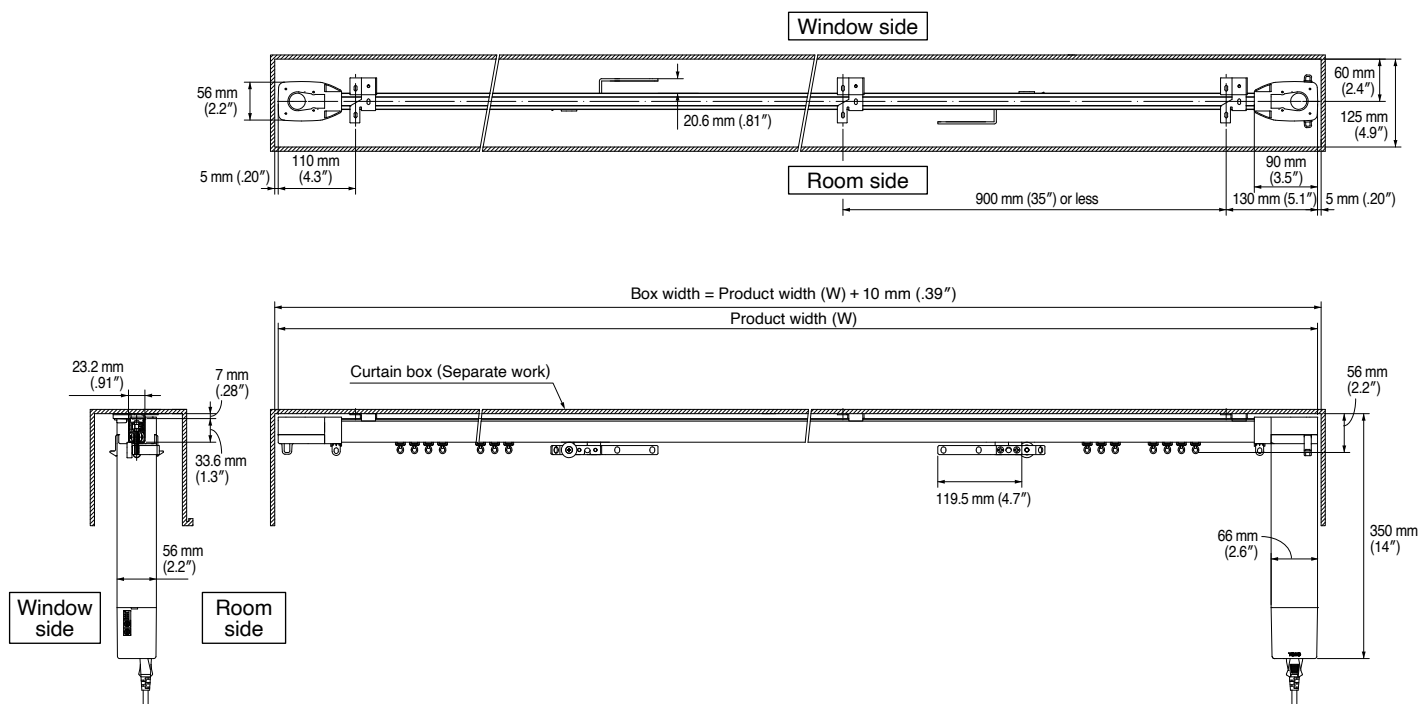
^{*3} A splice between two curves requires at least 400 mm (16") of a straight portion, and a non-splice between two curves requires at least 200 mm (7.9") of a straight portion.

^{*4} An allowable curtain load per roller is 1.5 kg (3.3 lb) or less.

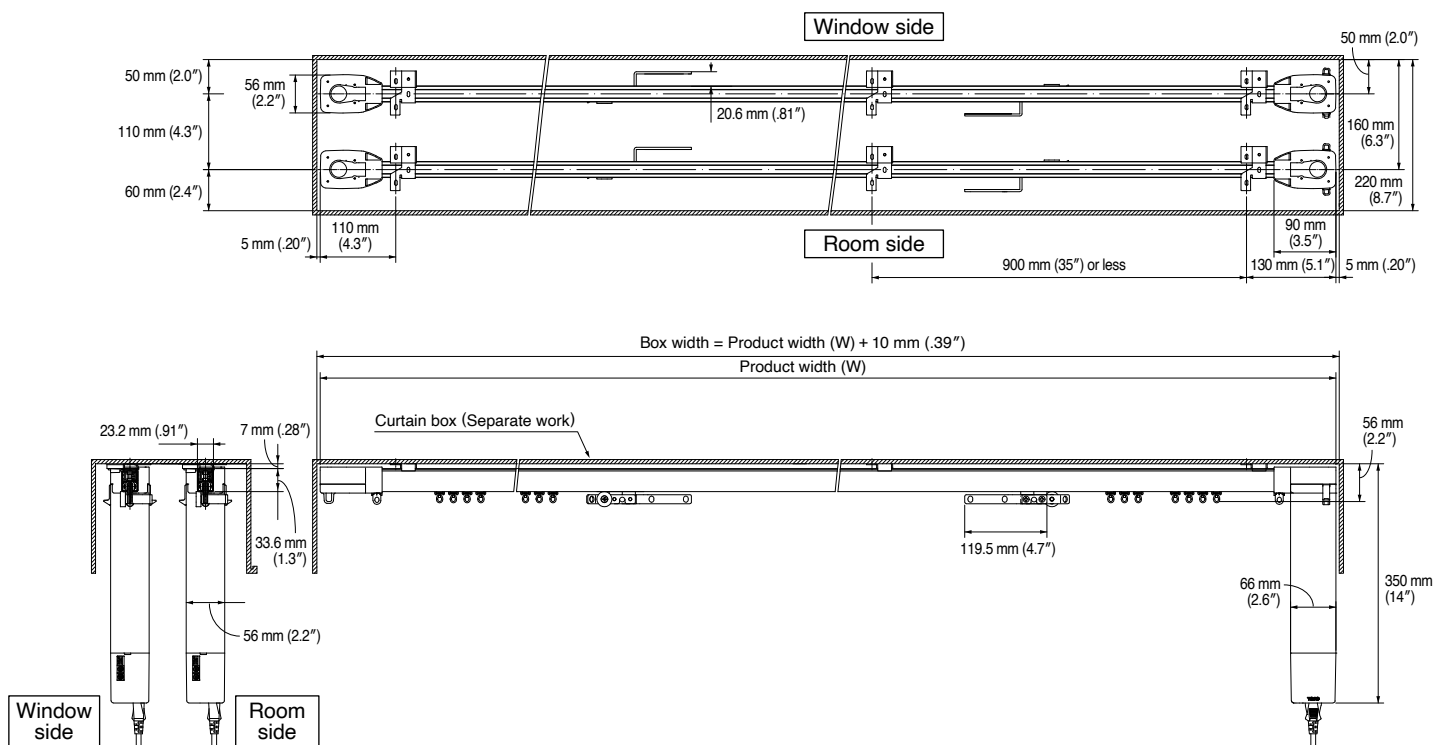
^{*5} Progress 50/80 motor is the same one. Please use New Delac Roller over 50 kg (110 lb).

Installation Dimensions and Diagram

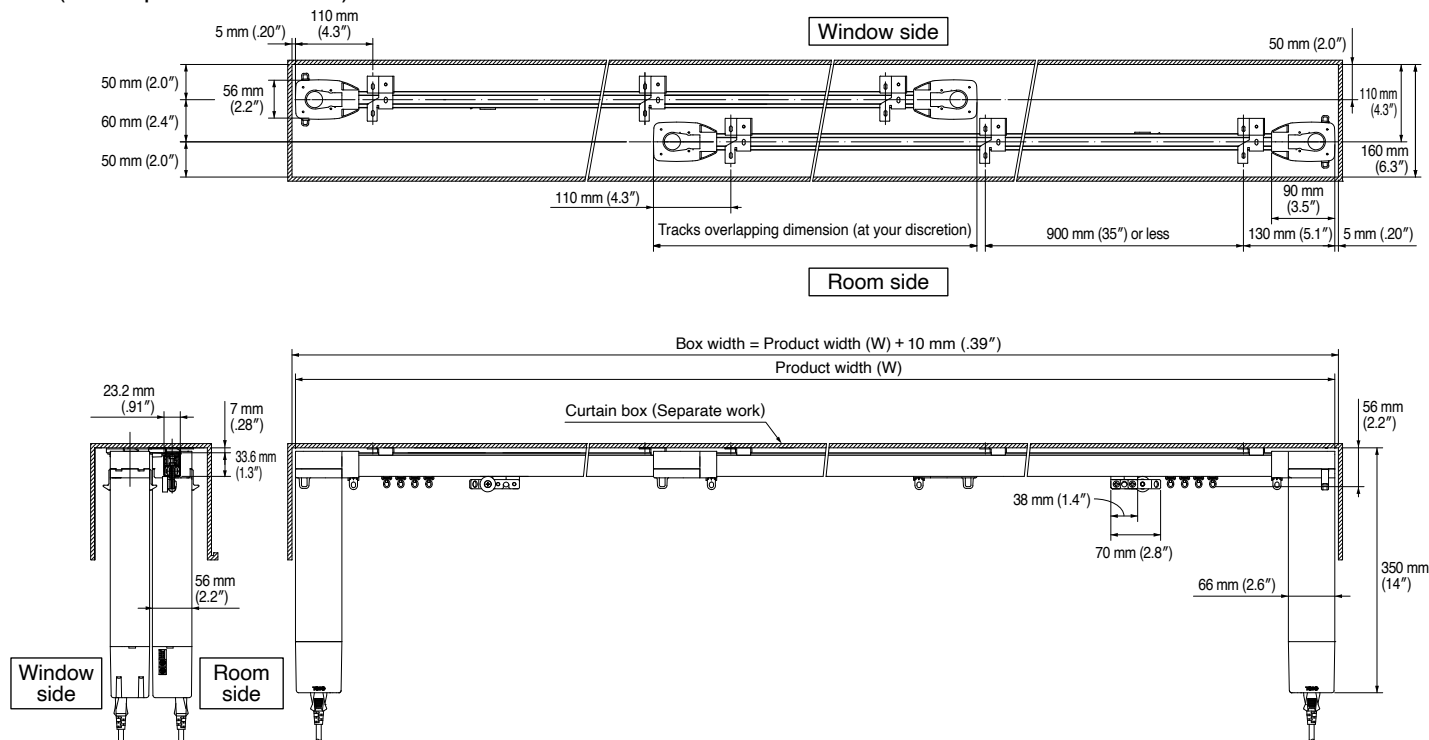
Two-way draw: ceiling single attachment



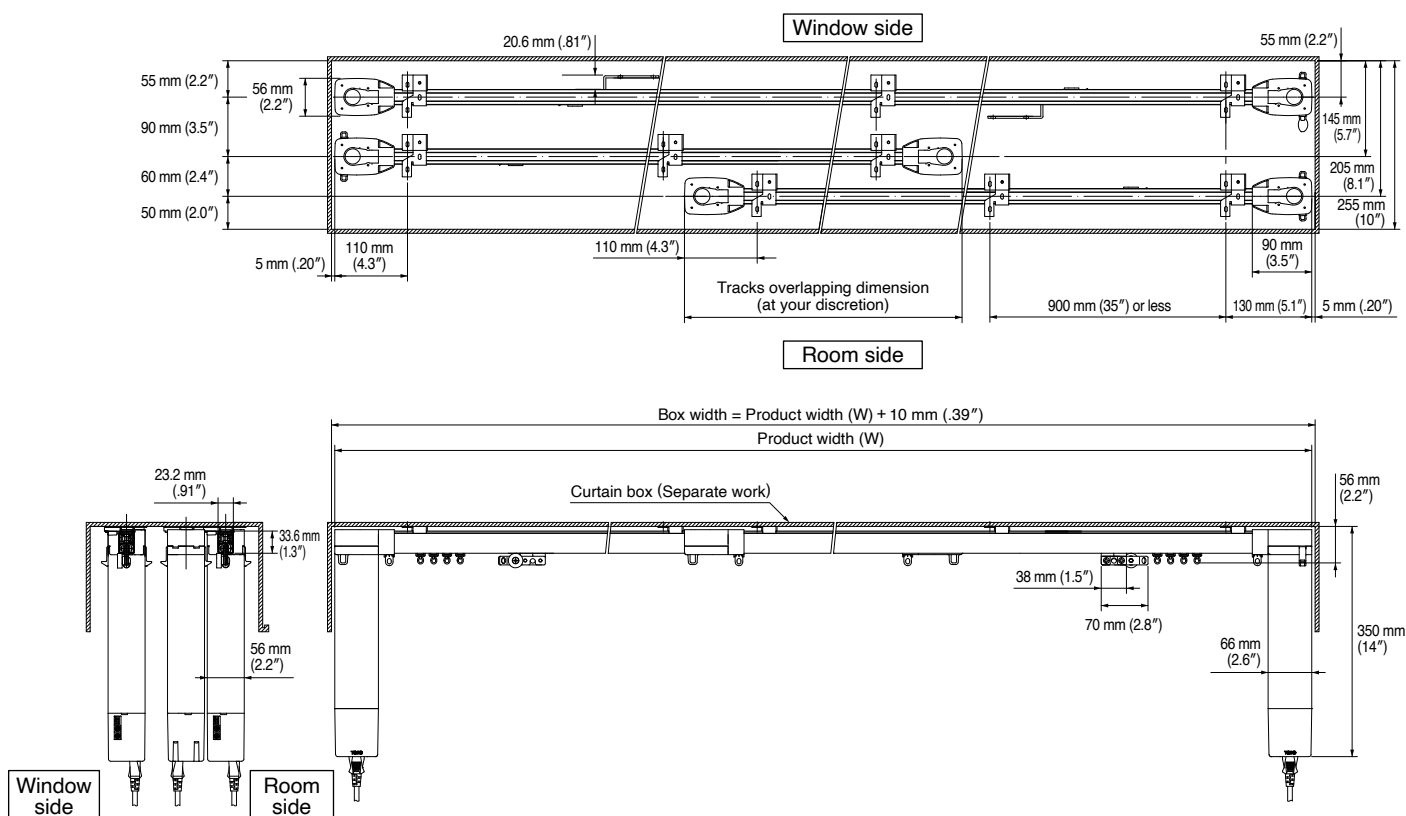
Two-way draw: ceiling double attachment



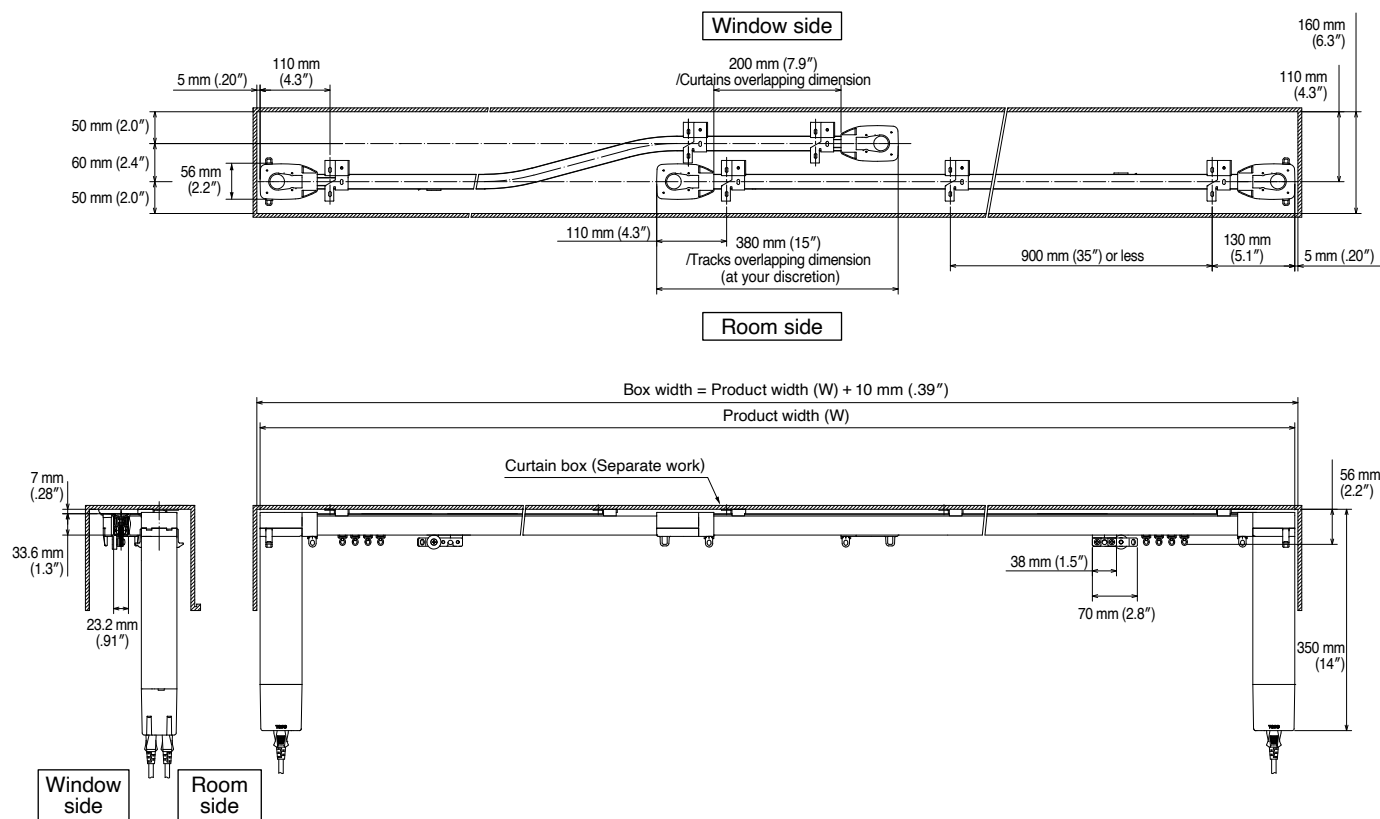
Two-way draw: ceiling single attachment (Overlap with two tracks)



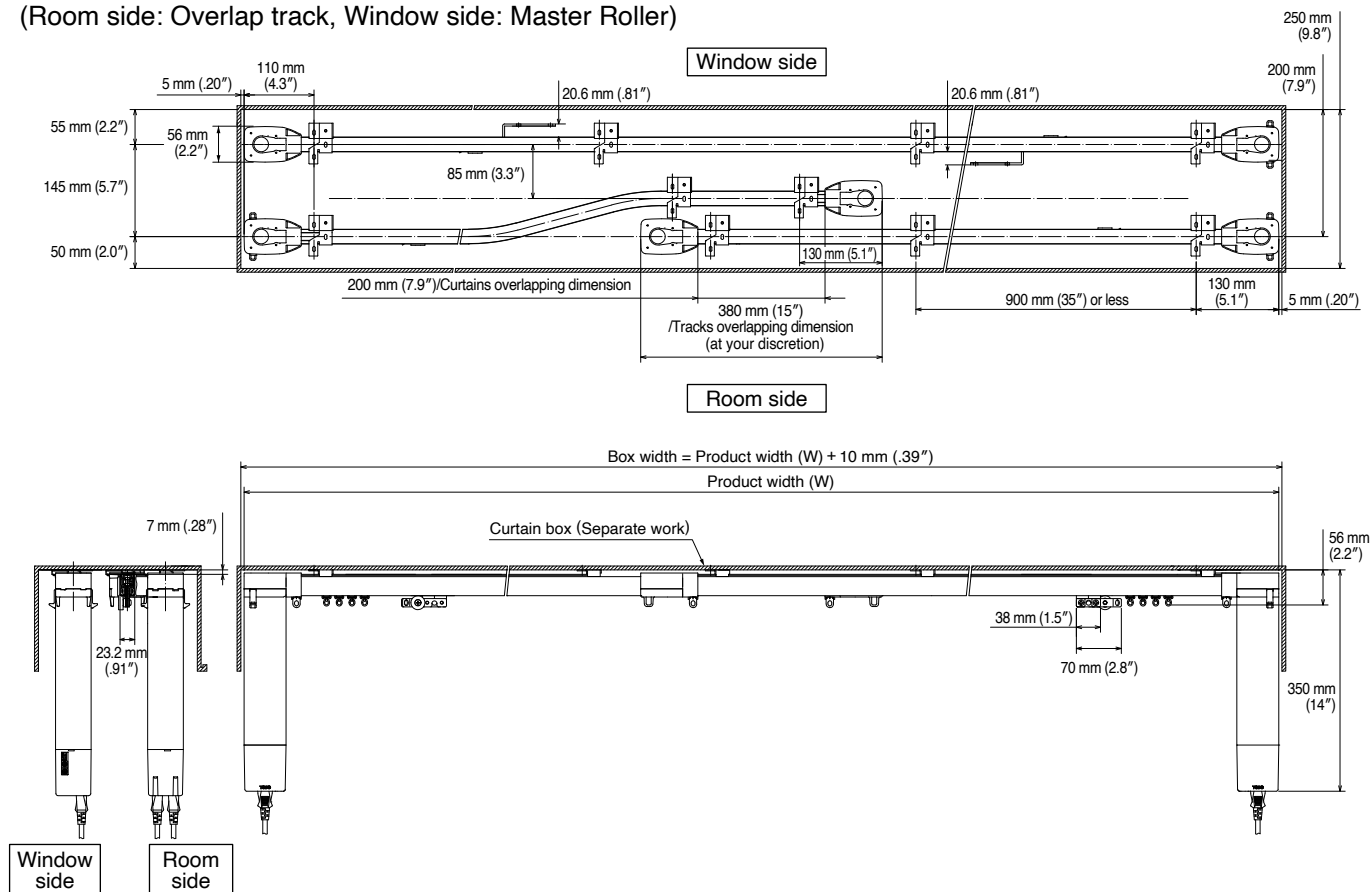
Two-way draw: ceiling double attachment (Room side: Overlap with two tracks, Window side: Master Roller)



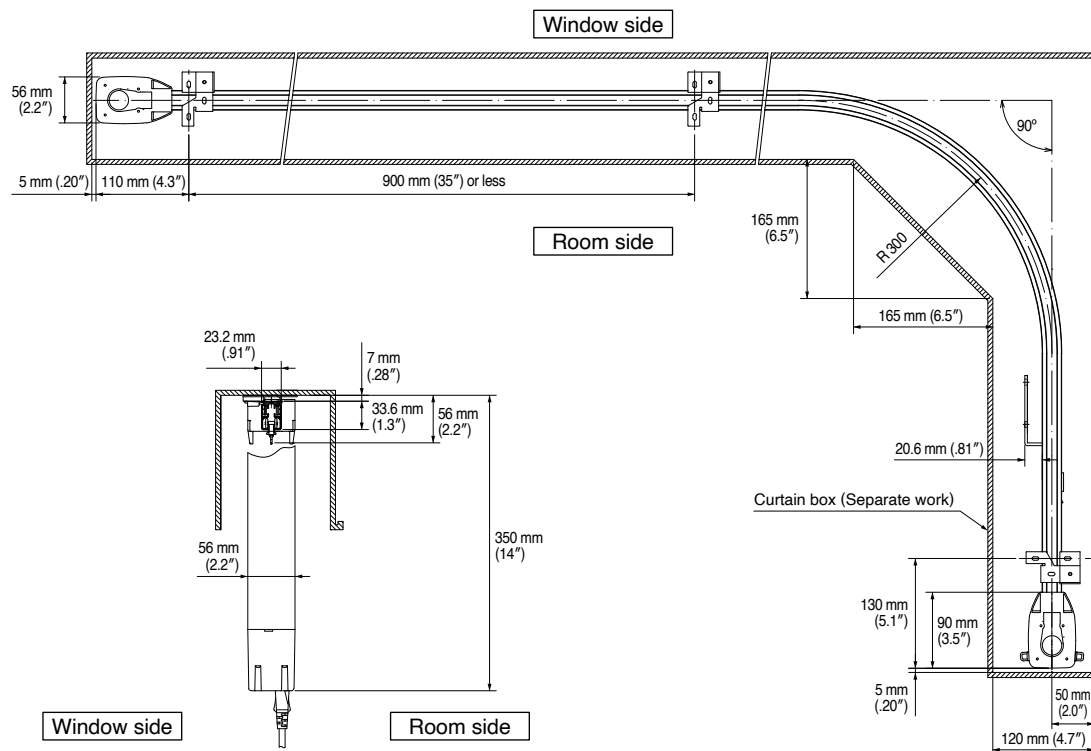
Two-way draw: ceiling single attachment
(Overlap track)



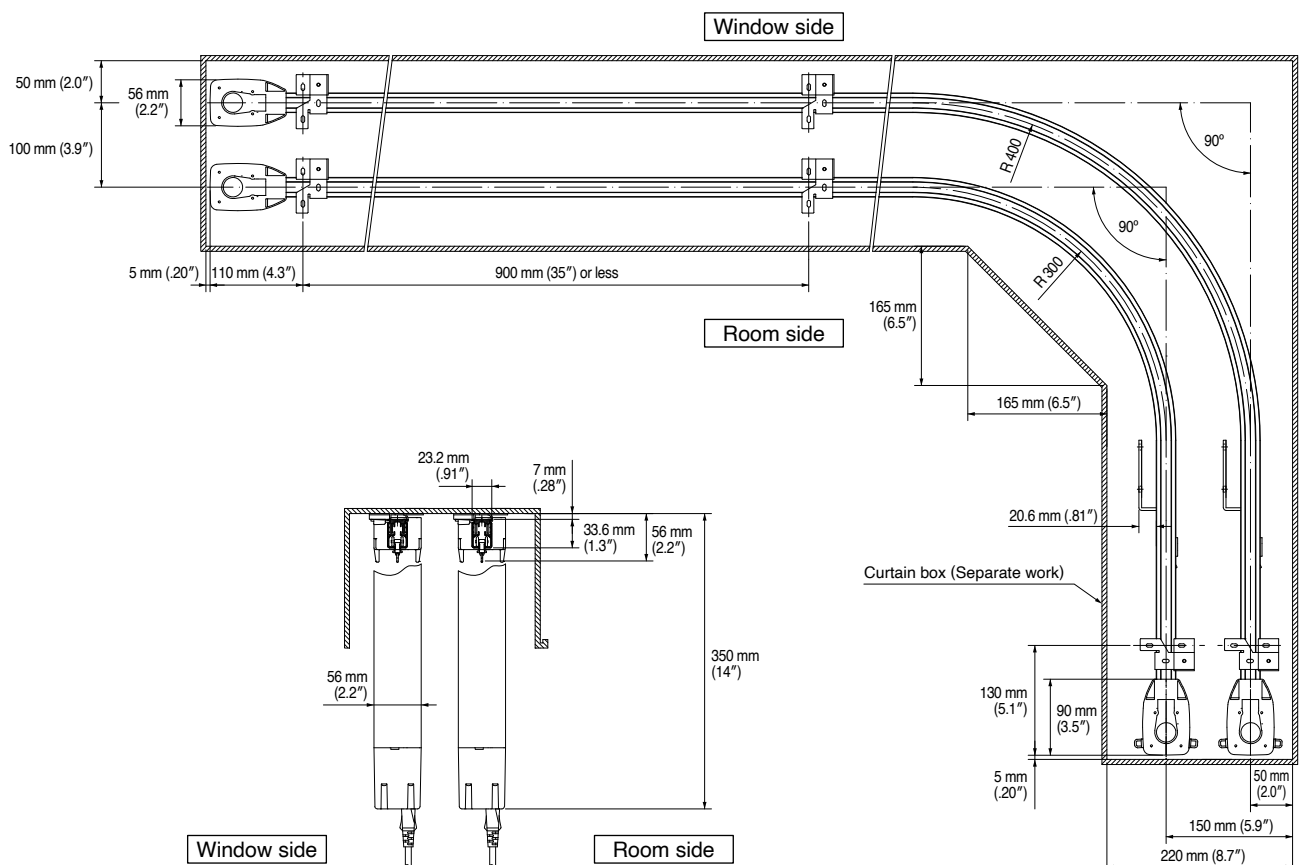
Two-way draw: ceiling double attachment
(Room side: Overlap track, Window side: Master Roller)



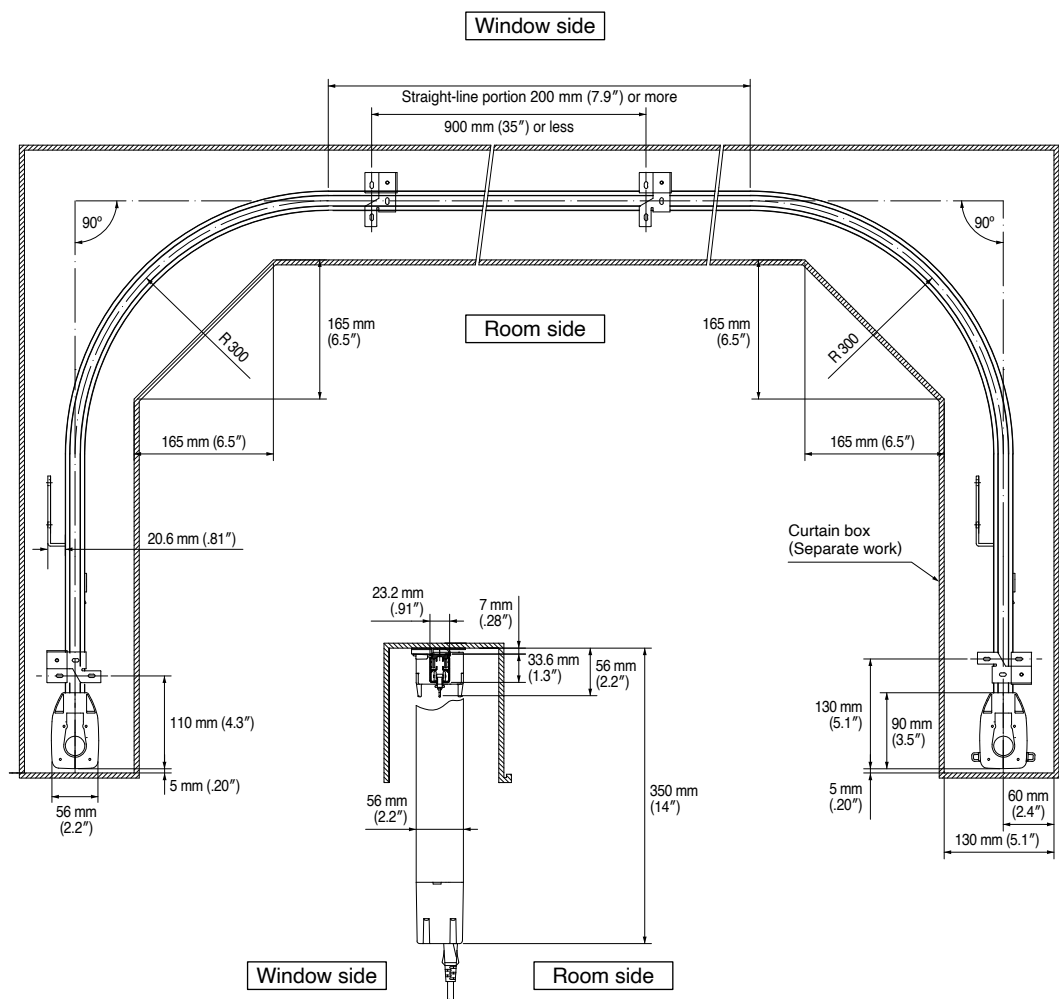
Single curve: ceiling single attachment



Single curve: ceiling double attachment

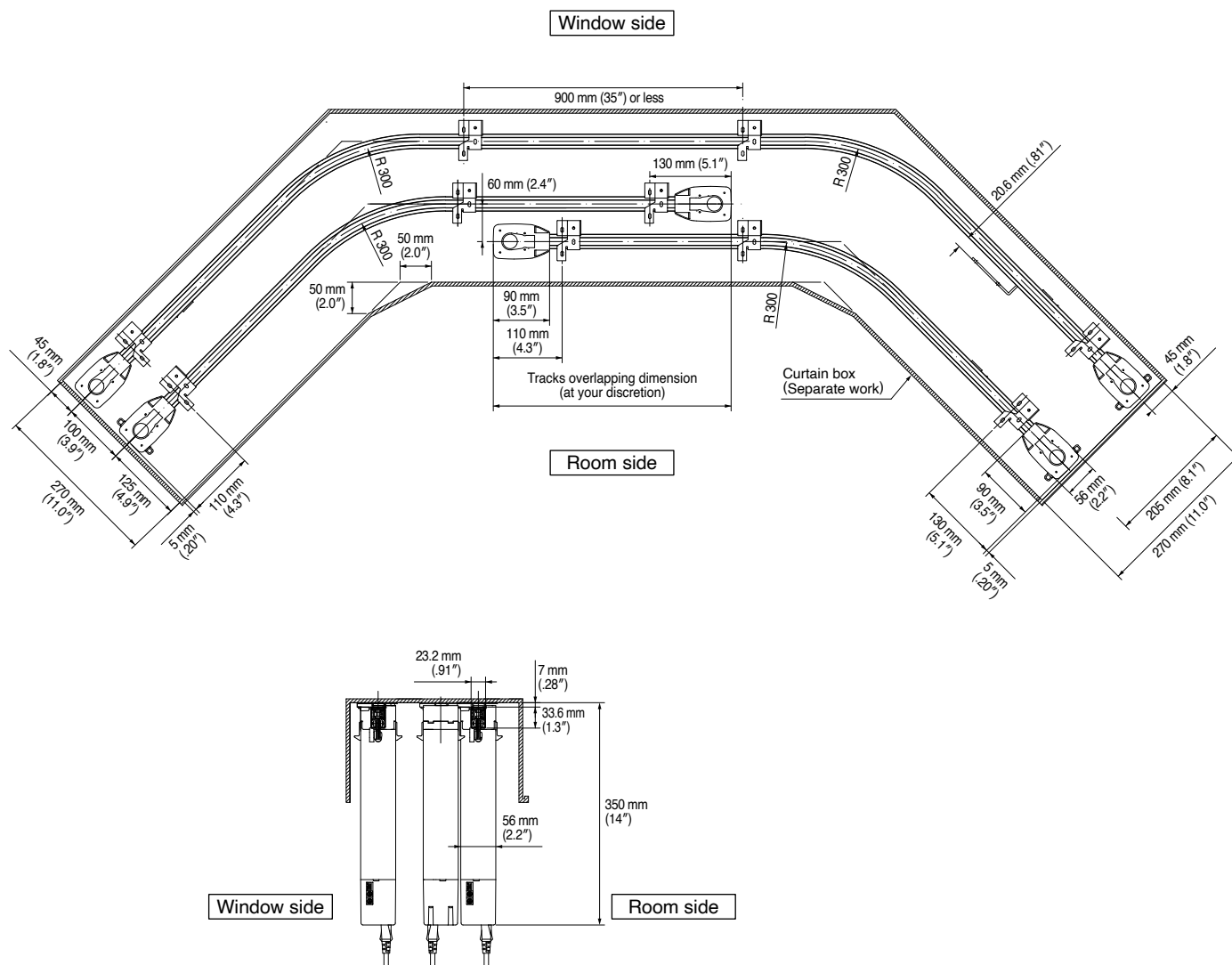


Two curves: ceiling single attachment

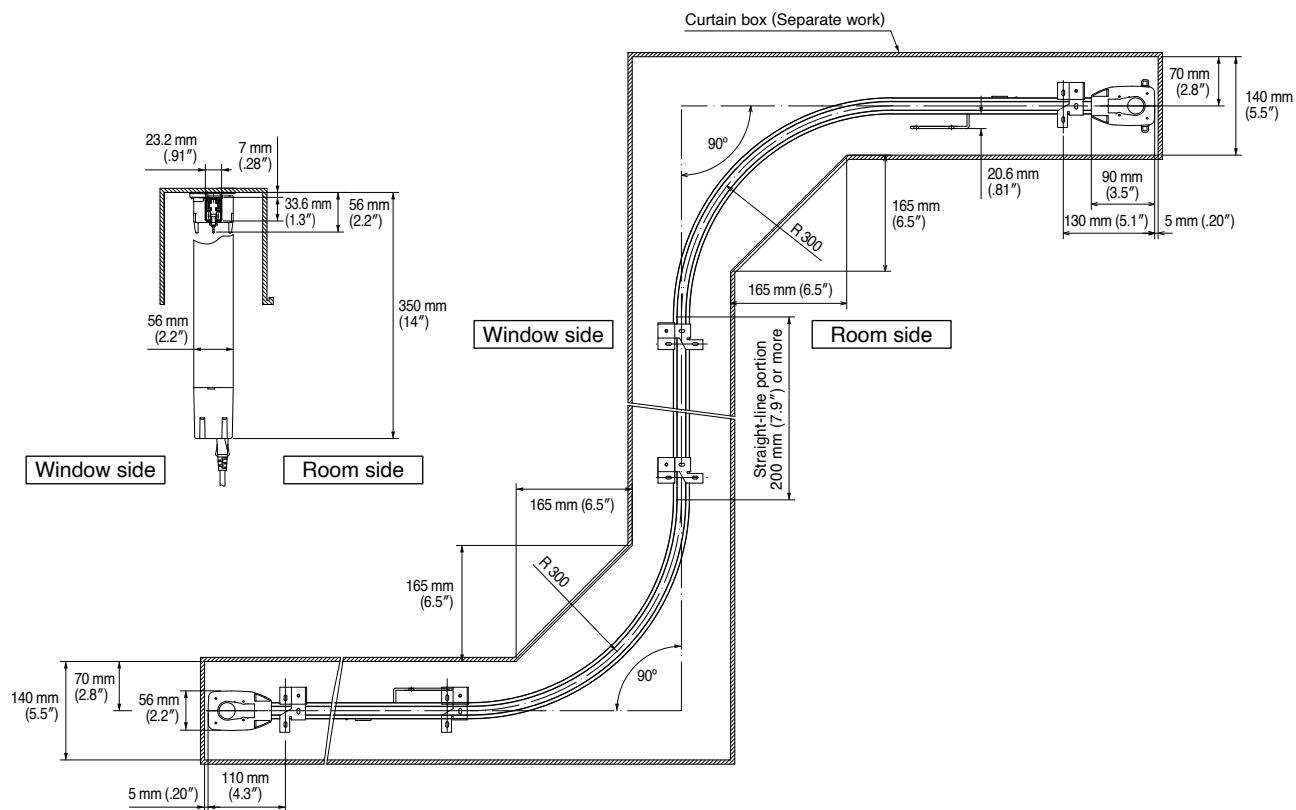


Two curves: ceiling single attachment

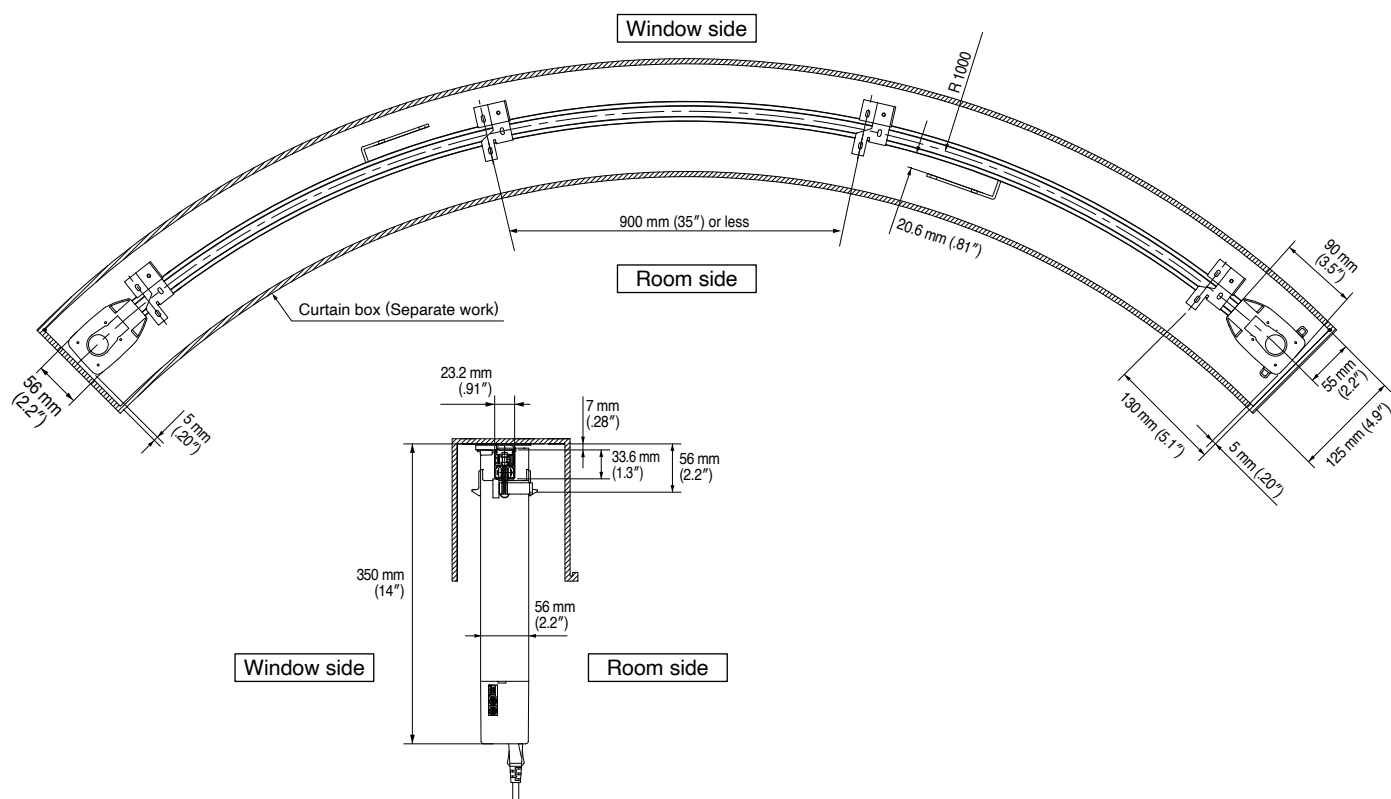
(Room side: Overlap with two tracks, Window side: Master roller)



Two curves (S-shaped): ceiling single attachment

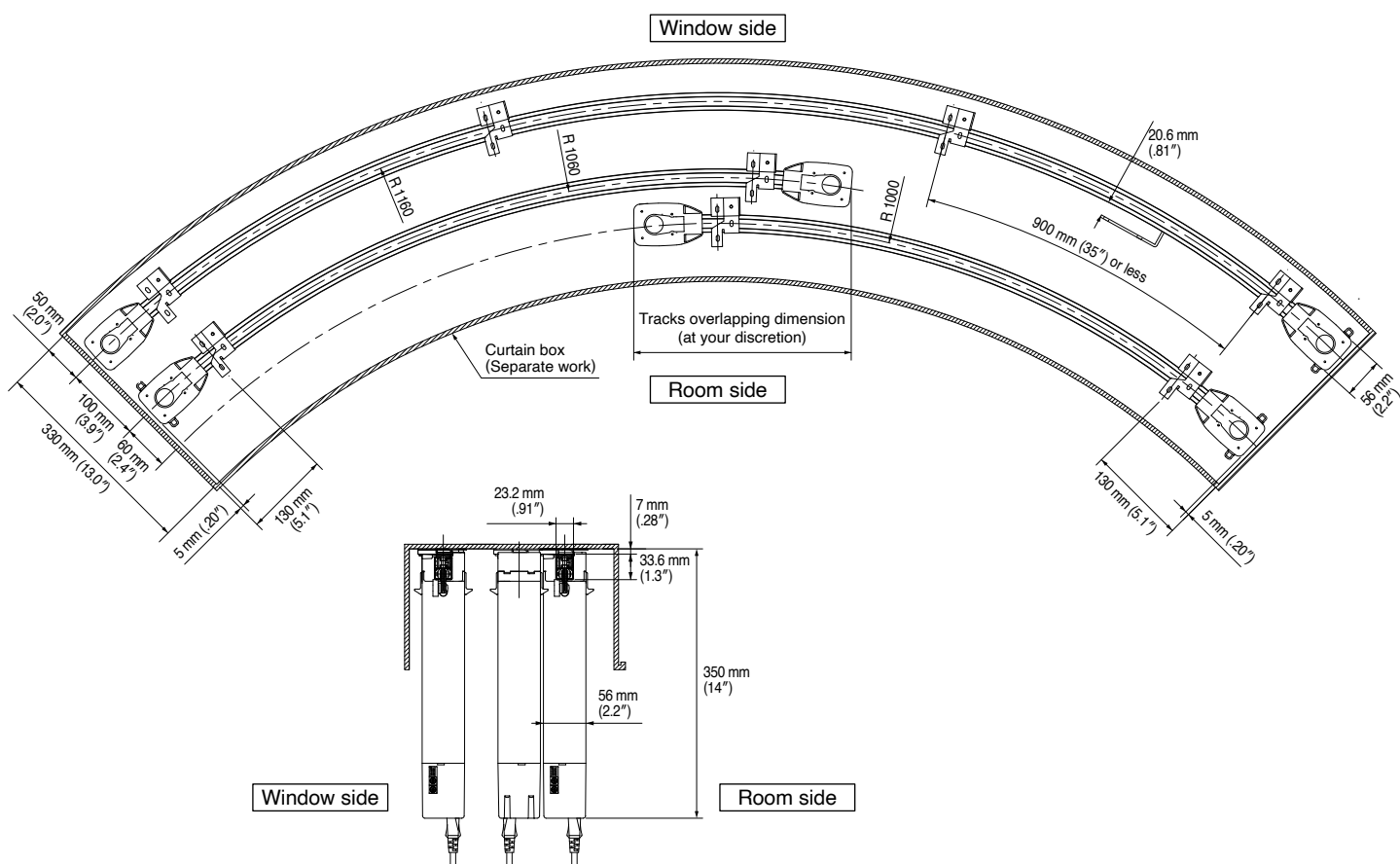


Overall curve: ceiling single attachment



Overall curve half: ceiling double attachment

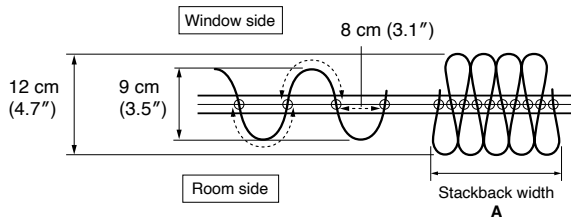
(Room side: Overlap with two tracks, Window side: Master roller)



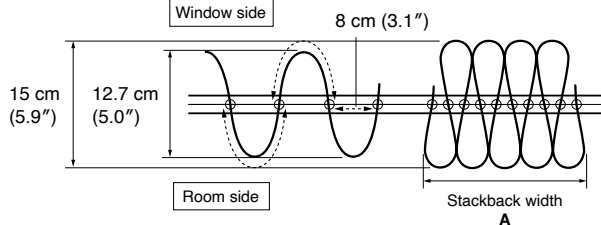
Required Components and Installation Dimensions

When using the 8 cm (3.1") pitch for Two-way Operation

Wave Style Composition of 1.5 Times Fullness



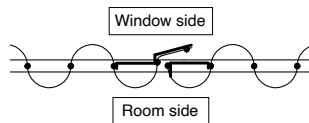
Wave Style Composition of 1.875 Times Fullness



Number of the Gather Hook / Finished curtain width / Stackback width



Smart Wave Master Roller for black-out



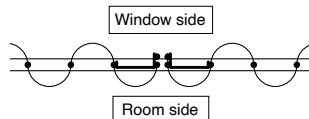
Curtain rail length	200 cm		300 cm		400 cm		500 cm		600 cm		700 cm		800 cm		900 cm	
	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side
Number of the Gather Hook	17 pcs.	16 pcs.	23 pcs.	22 pcs.	29 pcs.	28 pcs.	35 pcs.	34 pcs.	43 pcs.	42 pcs.	49 pcs.	48 pcs.	55 pcs.	54 pcs.	61 pcs.	60 pcs.
Finished curtain width / magnification : 1.5x	193 cm (76")	172 cm (67.7")	265 cm (104.3")	244 cm (96.1")	337 cm (132.7")	316 cm (124.4")	409 cm (161")	388 cm (152.8")	505 cm (198.8")	484 cm (190.6")	577 cm (227.2")	556 cm (218.9")	649 cm (255.5")	628 cm (247.2")	721 cm (283.9")	700 cm (275.6")
Finished curtain width / magnification : 1.875x	229 cm (90.2")	208 cm (81.9")	319 cm (125.6")	298 cm (117.3")	409 cm (161")	388 cm (152.8")	499 cm (196.5")	478 cm (188.2")	619 cm (243.7")	598 cm (235.4")	709 cm (279.1")	688 cm (270.9")	799 cm (314.6")	778 cm (306.3")	889 cm (350")	868 cm (347.1")
Stackback width A	43 cm (16.9")	35 cm (13.9")	51 cm (20.2")	44 cm (17.2")	60 cm (23.5")	52 cm (20.6")	68 cm (26.8")	61 cm (23.9")	79 cm (31.2")	72 cm (28.3")	88 cm (34.5")	80 cm (31.6")	96 cm (37.8")	89 cm (34.9")	105 cm (41.1")	97 cm (38.2")

*Required number of the roller (left side): number of the Gather Hook – 6 pcs.

*Required number of the roller (right side): number of the Gather Hook – 5 pcs.



Smart Wave Short Arm Roller for Sheer

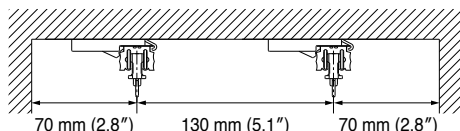


Curtain rail length	200 cm		300 cm		400 cm		500 cm		600 cm		700 cm		800 cm		900 cm	
	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side
Number of the Gather Hook	16 pcs.	16 pcs.	22 pcs.	22 pcs.	28 pcs.	28 pcs.	34 pcs.	34 pcs.	42 pcs.	42 pcs.	48 pcs.	48 pcs.	54 pcs.	54 pcs.	60 pcs.	60 pcs.
Finished curtain width / magnification : 1.5x	172 cm (67.7")	172 cm (67.7")	244 cm (96.1")	244 cm (96.1")	316 cm (124.4")	316 cm (124.4")	388 cm (152.8")	388 cm (152.8")	484 cm (190.6")	484 cm (190.6")	556 cm (218.9")	556 cm (218.9")	628 cm (247.2")	628 cm (247.2")	700 cm (275.6")	700 cm (275.6")
Finished curtain width / magnification : 1.875x	208 cm (81.9")	208 cm (81.9")	298 cm (117.3")	298 cm (117.3")	388 cm (152.8")	388 cm (152.8")	478 cm (188.2")	478 cm (188.2")	598 cm (235.4")	598 cm (235.4")	688 cm (270.9")	688 cm (270.9")	778 cm (306.3")	778 cm (306.3")	868 cm (347.1")	868 cm (347.1")
Stackback width A	35 cm (13.9")	35 cm (13.9")	44 cm (17.2")	44 cm (17.2")	52 cm (20.6")	52 cm (20.6")	61 cm (23.9")	61 cm (23.9")	72 cm (28.3")	72 cm (28.3")	80 cm (31.6")	80 cm (31.6")	89 cm (34.9")	89 cm (34.9")	97 cm (38.2")	97 cm (38.2")

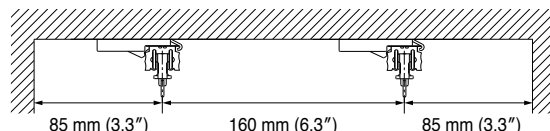
*Required number of the roller (left side): number of the Gather Hook – 5 pcs.

*Required number of the roller (right side): number of the Gather Hook – 5 pcs.

Installation Dimension of 1.5 Times Fullness

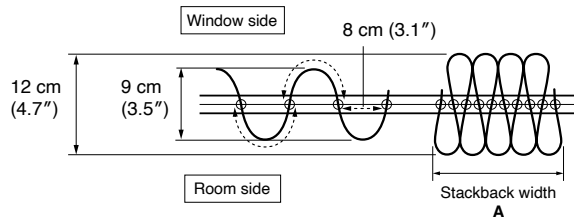


Installation Dimension of 1.875 Times Fullness

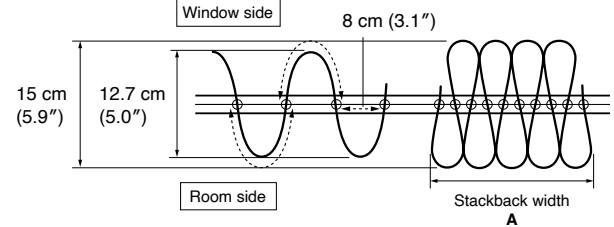


When using the 8 cm (3.1") pitch for One-way Operation

Wave Style Composition of 1.5 Times Fullness



Wave Style Composition of 1.875 Times Fullness

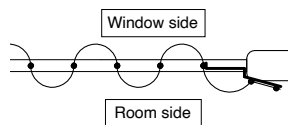


Number of the Gather Hook / Finished curtain width / Stackback width



Smart Wave Master Roller for black-out

One-way operation



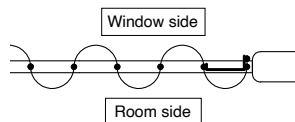
Curtain rail length	200 cm	300 cm	400 cm	500 cm	600 cm	700 cm	800 cm	900 cm
Number of the Gather Hook	29 pcs.	43 pcs.	55 pcs.	67 pcs.	79 pcs.	93 pcs.	105 pcs.	117 pcs.
Finished curtain width / magnification : 1.5x	337 cm (132.7")	505 cm (198.8")	649 cm (255.5")	793 cm (312.2")	937 cm (368.9")	1,105 cm (435")	1,249 cm (491.7")	1,393 cm (548.4")
Finished curtain width / magnification : 1.875x	409 cm (161")	619 cm (243.7")	799 cm (314.6")	979 cm (385.4")	1,159 cm (456.3")	1,369 cm (539")	1,549 cm (609.8")	1,729 cm (680.7")
Stackback width A	60 cm (23.5")	79 cm (31.2")	96 cm (37.8")	113 cm (44.4")	130 cm (51.1")	149 cm (58.8")	166 cm (65.4")	183 cm (72")

*Required number of the roller: number of the Gather Hook – 6 pcs.



Smart Wave Short Arm Roller

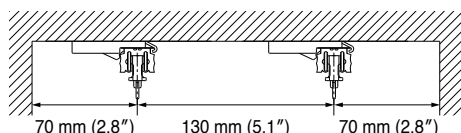
One-way operation



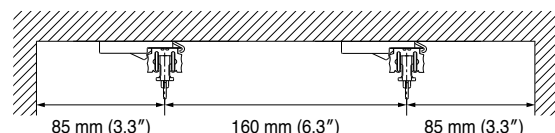
Curtain rail length	200 cm	300 cm	400 cm	500 cm	600 cm	700 cm	800 cm	900 cm
Number of the Gather Hook	28 pcs.	42 pcs.	54 pcs.	66 pcs.	78 pcs.	92 pcs.	104 pcs.	116 pcs.
Finished curtain width / magnification : 1.5x	316 cm (124.4")	484 cm (190.6")	628 cm (247.2")	772 cm (303.9")	916 cm (360.6")	1,084 cm (426.8")	1,228 cm (483.5")	1,372 cm (540.2")
Finished curtain width / magnification : 1.875x	388 cm (152.8")	598 cm (235.4")	778 cm (306.3")	958 cm (377.2")	1,138 cm (448")	1,348 cm (530.7")	1,528 cm (601.6")	1,708 cm (672.4")
Stackback width A	52 cm (20.6")	72 cm (28.3")	89 cm (34.9")	105 cm (41.5")	122 cm (48.1")	142 cm (55.8")	159 cm (62.4")	175 cm (69.1")

*Required number of the roller: number of the Gather Hook – 5 pcs.

Installation Dimension of 1.5 Times Fullness

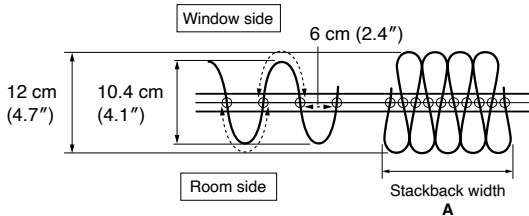


Installation Dimension of 1.875 Times Fullness

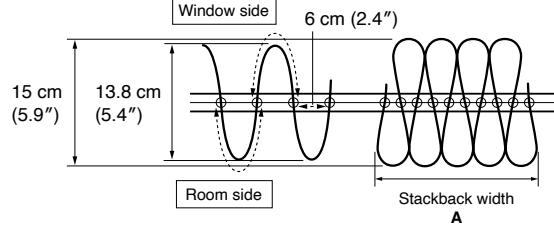


When using the 6 cm (2.4") pitch for Two-way Operation

Wave Style Composition of 2.0 Times Fullness



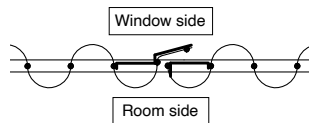
Wave Style Composition of 2.5 Times Fullness



Number of the Gather Hook / Finished curtain width / Stackback width



Smart Wave Master Roller for black-out



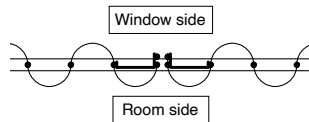
Curtain rail length	200 cm		300 cm		400 cm		500 cm		600 cm		700 cm		800 cm		900 cm	
	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side
Number of the Gather Hook	21 pcs.	20 pcs.	29 pcs.	28 pcs.	37 pcs.	36 pcs.	45 pcs.	44 pcs.	55 pcs.	54 pcs.	63 pcs.	62 pcs.	71 pcs.	70 pcs.	79 pcs.	78 pcs.
Finished curtain width / magnification : 2.0x	241 cm (94.9")	220 cm (86.6")	337 cm (132.7")	316 cm (124.4")	433 cm (170.5")	412 cm (162.2")	529 cm (208.3")	508 cm (200")	649 cm (255.5")	628 cm (247.2")	745 cm (293.3")	724 cm (285")	841 cm (331.1")	820 cm (322.8")	937 cm (368.9")	916 cm (360.6")
Finished curtain width / magnification : 2.5x	289 cm (113.8")	268 cm (105.5")	409 cm (161")	388 cm (152.8")	529 cm (208.3")	508 cm (200")	649 cm (255.5")	628 cm (247.2")	799 cm (314.6")	778 cm (306.3")	919 cm (361.8")	898 cm (353.5")	1,039 cm (409.1")	1,018 cm (400.8")	1,159 cm (456.3")	1,138 cm (448")
Stackback width A	49 cm (19.1")	41 cm (16.1")	60 cm (23.5")	52 cm (20.9")	71 cm (27.9")	63 cm (25")	82 cm (32.3")	75 cm (29.4")	96 cm (37.8")	89 cm (34.9")	107 cm (42.2")	100 cm (39.3")	119 cm (46.7")	111 cm (43.7")	130 cm (51.1")	122 cm (48.1")

*Required number of the roller (left side): number of the Gather Hook – 6 pcs.

*Required number of the roller (right side): number of the Gather Hook – 5 pcs.



Smart Wave Short Arm Roller for Sheer

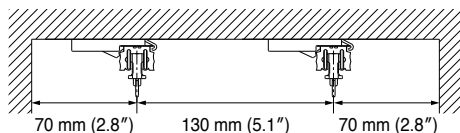


Curtain rail length	200 cm		300 cm		400 cm		500 cm		600 cm		700 cm		800 cm		900 cm	
	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side	Left side	Right side
Number of the Gather Hook	20 pcs.	20 pcs.	28 pcs.	28 pcs.	36 pcs.	36 pcs.	44 pcs.	44 pcs.	54 pcs.	54 pcs.	62 pcs.	62 pcs.	70 pcs.	70 pcs.	78 pcs.	78 pcs.
Finished curtain width / magnification : 2.0x	220 cm (86.6")	220 cm (86.6")	316 cm (124.4")	316 cm (124.4")	412 cm (162.2")	412 cm (162.2")	508 cm (200")	508 cm (200")	628 cm (247.2")	628 cm (247.2")	724 cm (285")	724 cm (285")	820 cm (322.8")	820 cm (322.8")	916 cm (360.6")	916 cm (360.6")
Finished curtain width / magnification : 2.5x	268 cm (105.5")	268 cm (105.5")	388 cm (152.8")	388 cm (152.8")	508 cm (200")	508 cm (200")	628 cm (247.2")	628 cm (247.2")	778 cm (306.3")	778 cm (306.3")	898 cm (353.5")	898 cm (353.5")	1,018 cm (400.8")	1,018 cm (400.8")	1,138 cm (448")	1,138 cm (448")
Stackback width A	41 cm (16.1")	41 cm (16.1")	52 cm (20.6")	52 cm (20.6")	63 cm (25")	63 cm (25")	75 cm (29.4")	75 cm (29.4")	89 cm (34.9")	89 cm (34.9")	100 cm (39.3")	100 cm (39.3")	111 cm (43.7")	111 cm (43.7")	122 cm (48.1")	122 cm (48.1")

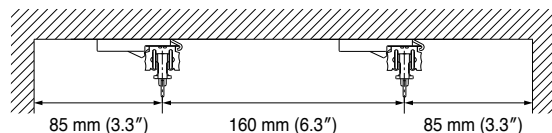
*Required number of the roller (left side): number of the Gather Hook – 5 pcs.

*Required number of the roller (right side): number of the Gather Hook – 5 pcs.

Installation Dimension of 2.0 Times Fullness

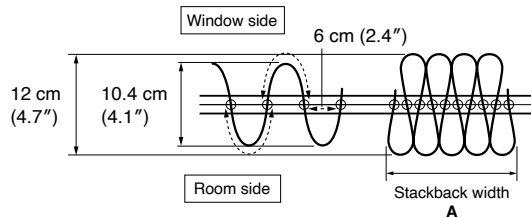


Installation Dimension of 2.5 Times Fullness

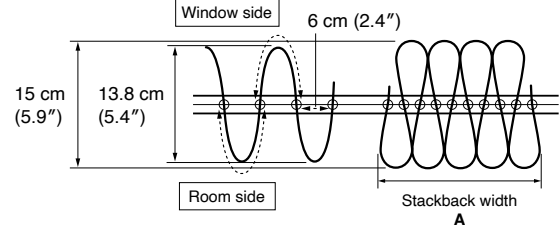


When using the 6 cm (2.4") pitch for One-way Operation

Wave Style Composition of 2.0 Times Fullness



Wave Style Composition of 2.5 Times Fullness

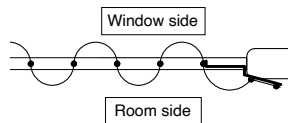


Number of the Gather Hook / Finished curtain width / Stackback width



Smart Wave Master Roller for black-out

One-way operation



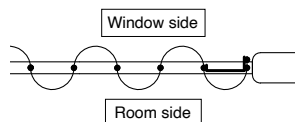
Curtain rail length	200 cm	300 cm	400 cm	500 cm	600 cm	700 cm	800 cm	900 cm
Number of the Gather Hook	37 pcs.	55 pcs.	71 pcs.	87 pcs.	105 pcs.	121 pcs.	137 pcs.	155 pcs.
Finished curtain width / magnification : 2.0x	433 cm (170.5")	649 cm (255.5")	841 cm (331.1")	1,033 cm (406.7")	1,249 cm (491.7")	1,441 cm (567.3")	1,633 cm (642.9")	1,849 cm (728")
Finished curtain width / magnification : 2.5x	529 cm (208.3")	799 cm (314.6")	1,039 cm (409.1")	1,279 cm (503.5")	1,549 cm (609.8")	1,789 cm (704.3")	2,029 cm (798.8")	2,299 cm (905.1")
Stackback width A	71 cm (27.9")	96 cm (37.8")	119 cm (46.7")	141 cm (55.5")	166 cm (65.4")	189 cm (74.2")	211 cm (83")	236 cm (93")

*Required number of the roller: number of the Gather Hook – 6 pcs.



Smart Wave Short Arm Roller

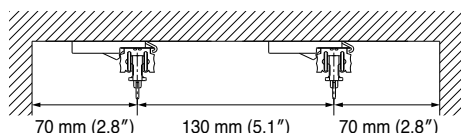
One-way operation



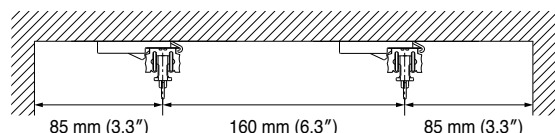
Curtain rail length	200 cm	300 cm	400 cm	500 cm	600 cm	700 cm	800 cm	900 cm
Number of the Gather Hook	36 pcs.	54 pcs.	80 pcs.	86 pcs.	104 pcs.	120 pcs.	136 pcs.	154 pcs.
Finished curtain width / magnification : 2.0x	412 cm (162.2")	628 cm (247.2")	820 cm (322.8")	1,012 cm (398.4")	1,228 cm (483.5")	1,420 cm (559.1")	1,612 cm (634.6")	1,828 cm (719.7")
Finished curtain width / magnification : 2.5x	508 cm (200")	778 cm (306.3")	1,018 cm (400.8")	1,258 cm (495.3")	1,528 cm (601.6")	1,768 cm (696.1")	2,008 cm (790.6")	2,278 cm (896.9")
Stackback width A	63 cm (25")	89 cm (34.9")	111 cm (43.7")	133 cm (52.5")	159 cm (62.4")	181 cm (71.3")	203cm (80.1")	229 cm (90")

*Required number of the roller: number of the Gather Hook – 5 pcs.

Installation Dimension of 2.0 Times Fullness



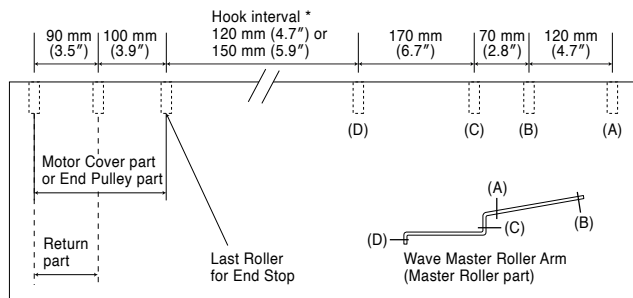
Installation Dimension of 2.5 Times Fullness



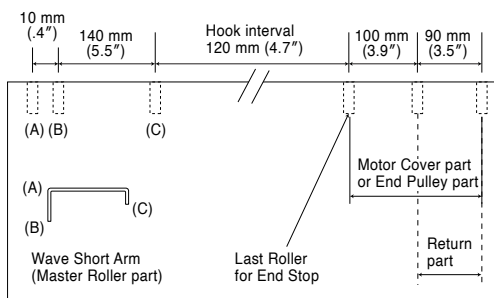
Sewing Instruction

Smart Wave Overlap / Center Open Overlap

Curtain with Overlap Arm



Curtain with Wave Short Arm



Motor Cover part / End Pulley part



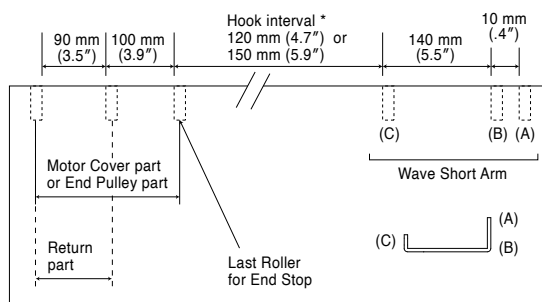
Center part (Overlap Roller part)



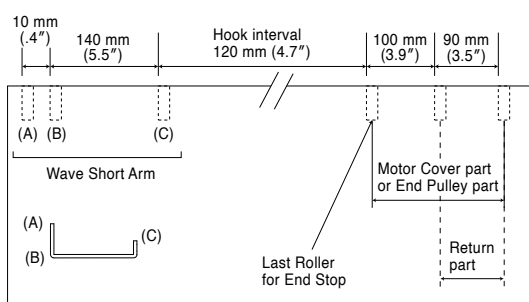
*Hook Interval
 •Based on using TOSO Wave Tapell. (Refer P.18-21)
 •Depending on the curtain Fullness.

Smart Wave / Center Open

Left-aligned curtains



Right-aligned curtains



Motor Cover part / End Pulley part



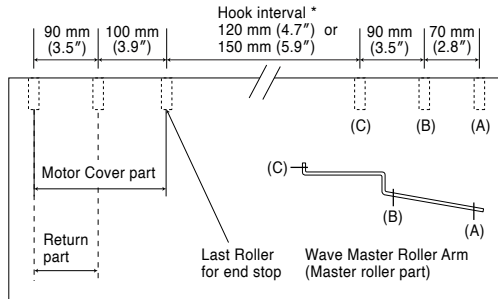
Center part (Short Arm Roller part)



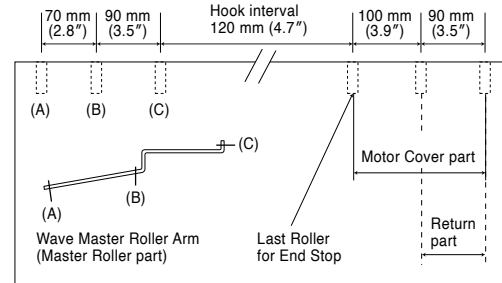
*Hook Interval
 •Based on using TOSO Wave Tapell. (Refer P.18-21)
 •Depending on the curtain Fullness.

Smart Wave / One-way Open / *Wave Master Roller Arm

Left-aligned Curtains



Right-aligned Curtains



Motor Cover part



Overlap Roller part

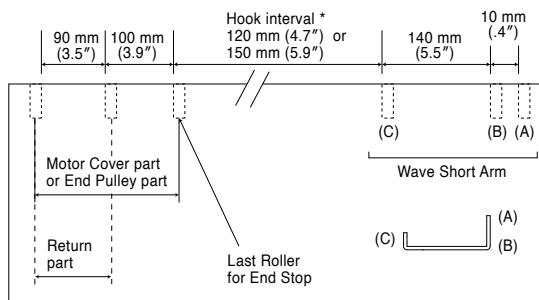


*Hook Interval

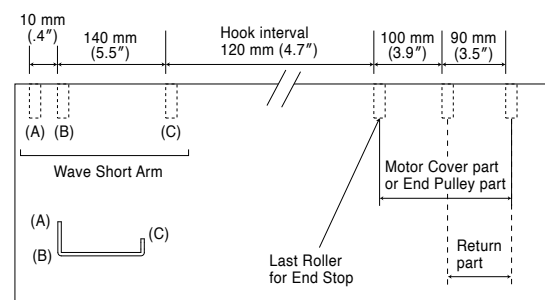
- Based on using TOSO Wave Tapell. (Refer P.18-21)
- Depending on the curtain Fullness.

Smart Wave / One-way Open / *Wave Short Arm

Left-aligned curtains



Right-aligned curtains



Motor Cover part



Short Arm Roller part



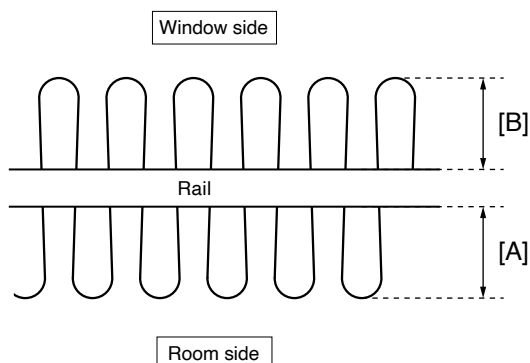
*Hook Interval

- Based on using TOSO Wave Tapell. (Refer P.18-21)
- Depending on the curtain Fullness.

- Neat appearance with wave curtain.
- To completely cover the window, please install a side wall about 150 mm (5.9") or more from the window on the master roller part.

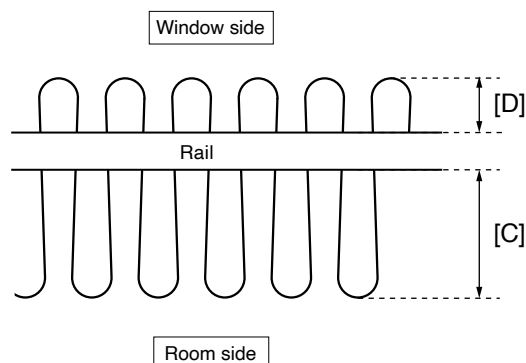
Customize the Wave Depth to Your Preference

Fig. 1 Equal Pleat Size



- Ideal for partitions use
- Both the inside and outside look beautiful

Fig. 2 Unequal Pleat Size



- The design minimizes interference between curtains while beautifully showcasing a deep wave.

Our Wave Tape II allows you to change the hook position in 1 cm increments, enabling you to adjust the depth of drape and sheer pleats to meet your specific needs.

If you would like to reduce a feeling of heaviness or when facing the issue of a narrow curtain box width, our Wave Tape II addresses these problems effectively.

When using the 8 cm (3.1") pitch

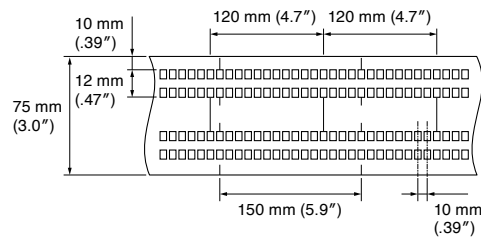
Fullness 1:1.5 Depth of pleat in 12 cm (4.7")	Equal	Room side: [A] (see Fig. 1)	6 cm (2.3")
		Window side: [B] (see Fig. 1)	6 cm (2.3")
	Unequal	Room side: [C] (see Fig. 2)	8 cm (3.1")
		Window side: [D] (see Fig. 2)	4 cm (1.5")
Fullness 1:1.875 Depth of pleat in 15 cm (5.9")	Equal	Room side: [A] (see Fig. 1)	7.5 cm (2.9")
		Window side: [B] (see Fig. 1)	7.5 cm (2.9")
	Unequal	Room side: [C] (see Fig. 2)	9.5 cm (3.7")
		Window side: [D] (see Fig. 2)	5.5 cm (2.1")

When using the 6 cm (2.4") pitch

Fullness 1:2.0 Depth of pleat in 12 cm (4.7")	Equal	Room side: [A] (see Fig. 1)	6 cm (2.3")
		Window side: [B] (see Fig. 1)	6 cm (2.3")
	Unequal	Room side: [C] (see Fig. 2)	8 cm (3.1")
		Window side: [D] (see Fig. 2)	4 cm (1.5")
Fullness 1:2.5 Depth of pleat in 15 cm (5.9")	Equal	Room side: [A] (see Fig. 1)	7.5 cm (2.9")
		Window side: [B] (see Fig. 1)	7.5 cm (2.9")
	Unequal	Room side: [C] (see Fig. 2)	9.5 cm (3.7")
		Window side: [D] (see Fig. 2)	5.5 cm (2.1")

Sewing components to enhance the Smart Wave style

Wave Tape II



Wave Tape II is a tape designed to enhance the suspension of wave curtains, providing a balanced tension and softness. It allows hook insertion at 1 cm intervals, with markers for hook placement at 12 cm and 15 cm intervals. Feel free to use it at your preferred fullness.

Tape Width	Material	Invisible Pitch Keeper Tape	Fullness	Using Hooks	Measurement from Tape End to Grommet Bottom
75 mm	Polyester 100%	8 cm (3.1") pitch	1.5 times fullness (with a 12 cm interval)	Gather hook NN-10	8 mm
			1.875 times fullness (with a 15 cm interval)		
		6 cm (2.4") pitch	2.0 times fullness (with a 12 cm interval)		
			2.5 times fullness (with a 12 cm interval)		



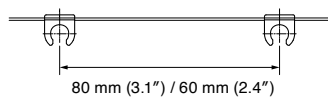
Wave Tape II + Flat Curtain



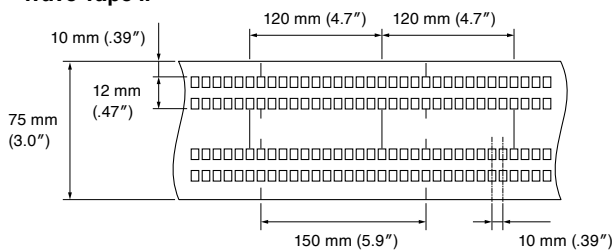
Flat Tape + Flat Curtain

Dimension of Components for Smart Wave Style

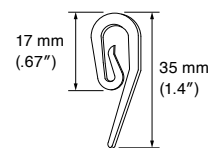
• Invisible Pitch Keeper Tape 80/60



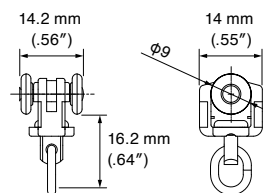
• Wave Tape II



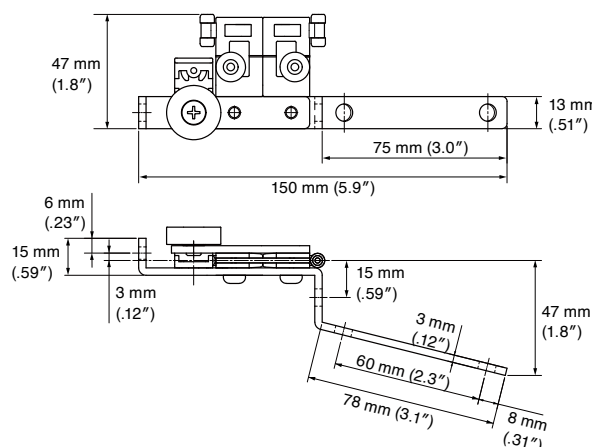
• Gather Hook NN-10



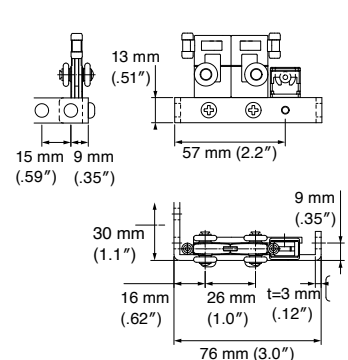
• Smart Wave Roller



• Smart Wave Overlap Roller



• Smart Wave Short Arm Roller



How to Choose Wave Style Curtains

Choose a fabric that creates beautiful waves.



Fabric assessment chart for expressing beautiful waves

	○ Suitable for wave curtain	✗ Not Suitable for wave curtain
Composition and processing	Sheer with drapability ▶ georgette fabric ▶ vertical stripe pattern	Biased sheer with stiffness/softness ▶ embroidery ▶ opal fabric
	Loosely woven/knit fabric ▶ casement ▶ mesh	Tensioned or uneven weft yarns ▶ organdy ▶ shantung
	Smooth surface fabric ▶ satin	Diagonal weave ▶ herringbone fabric
	Heavy-weighted fabric at the hem ▶ hem embroidery fabric	Fabric with pronounced surface texture ▶ jacquard fabric

Sawing Specifications for Wave Style Hem

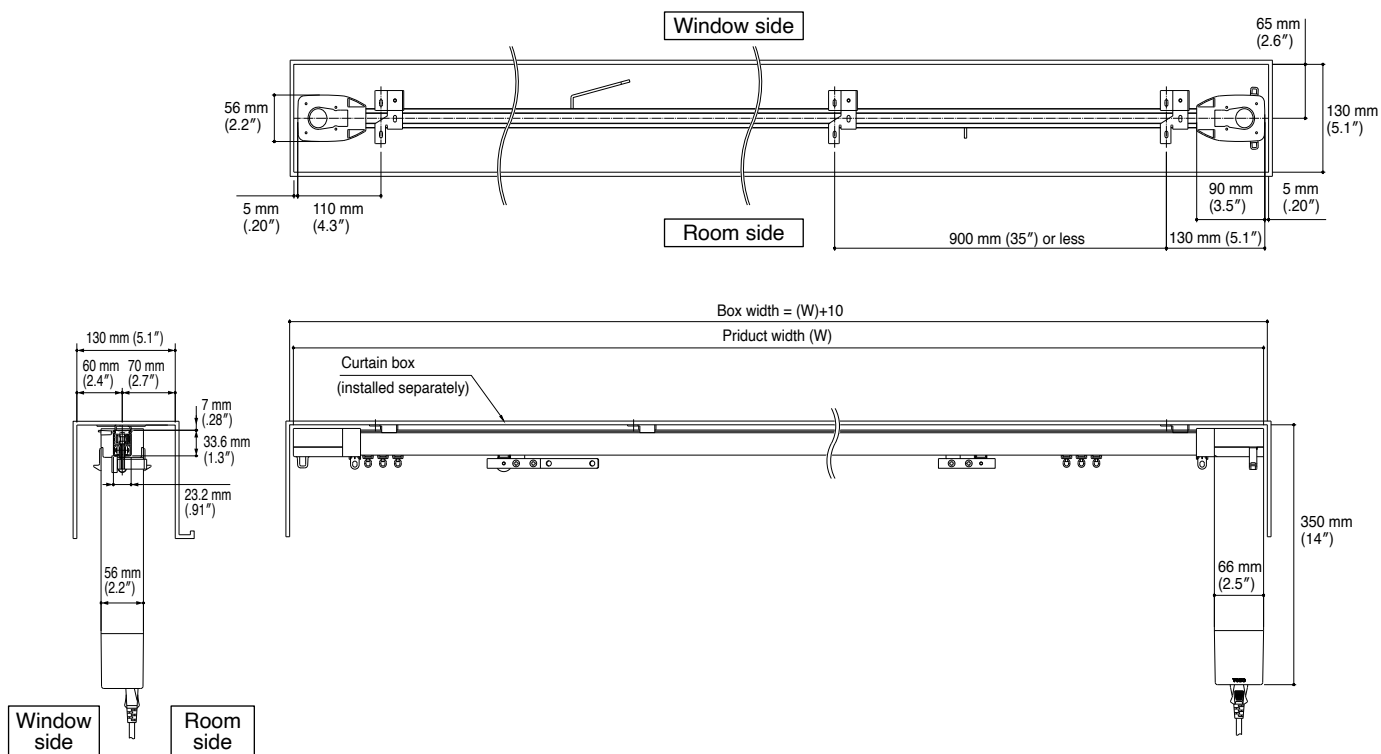
	10 cm triple fold	10 cm double fold	Short hem	Weight tape	Woolly lock
Drape	○	⊙ Recommendation	—	—	⊙ Recommendation
Horizontal lace usage	○	—	⊙ Recommendation	△ Opens with resistance	⊙ Recommendation
Vertical lace usage	○	—	⊙ Recommendation	△ Opens with resistance	⊙ Recommendation

* The use of weight tape and woolly lock processing may vary depending on the fabric

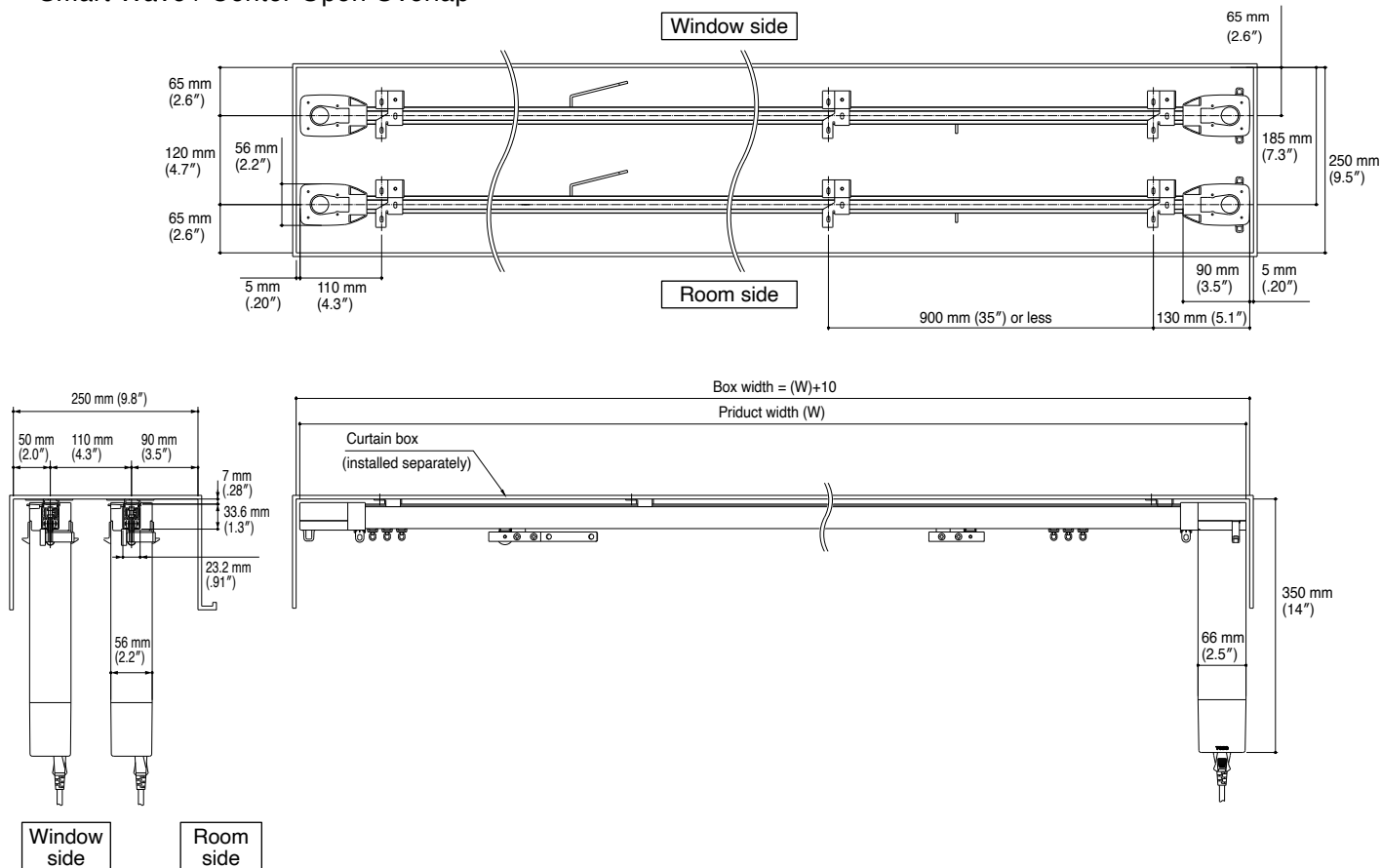


Installation Dimensions and Diagram for Smart Wave Style

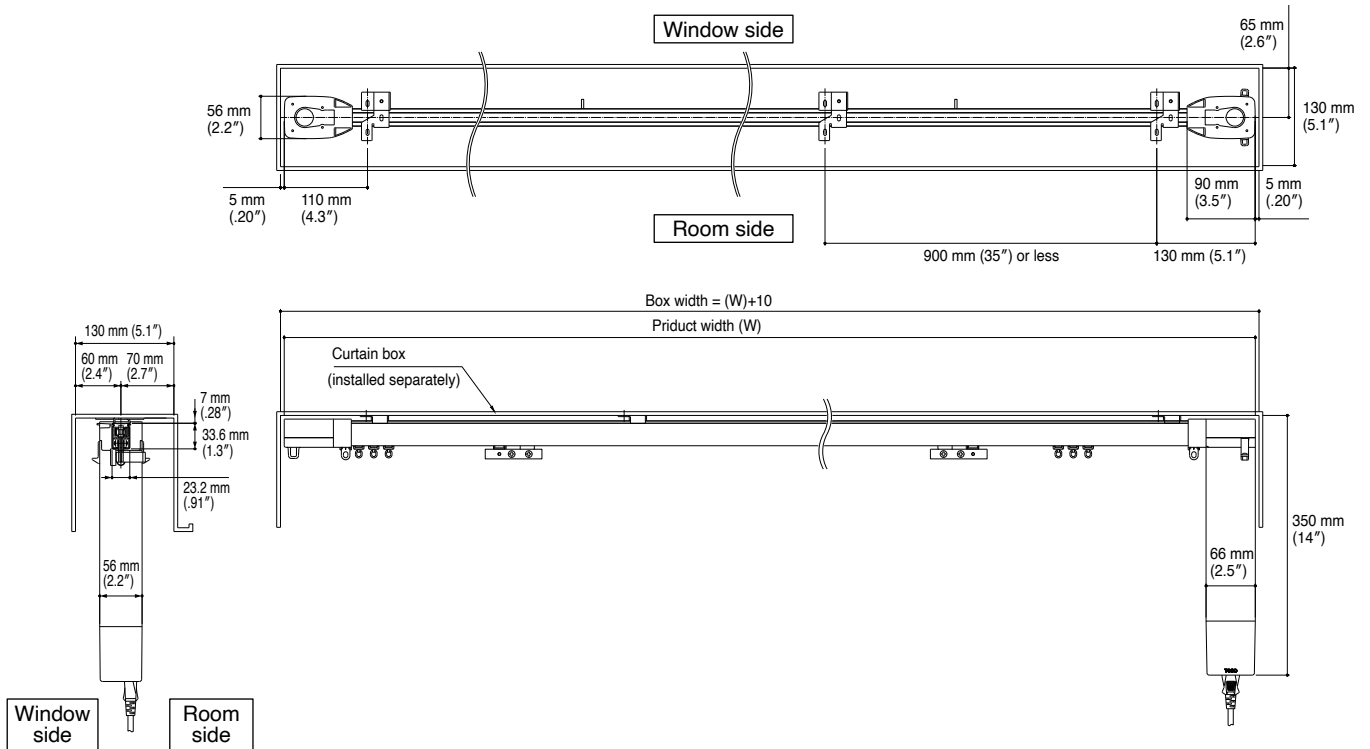
Two-way draw: ceiling single attachment Smart Wave / Center Open Overlap



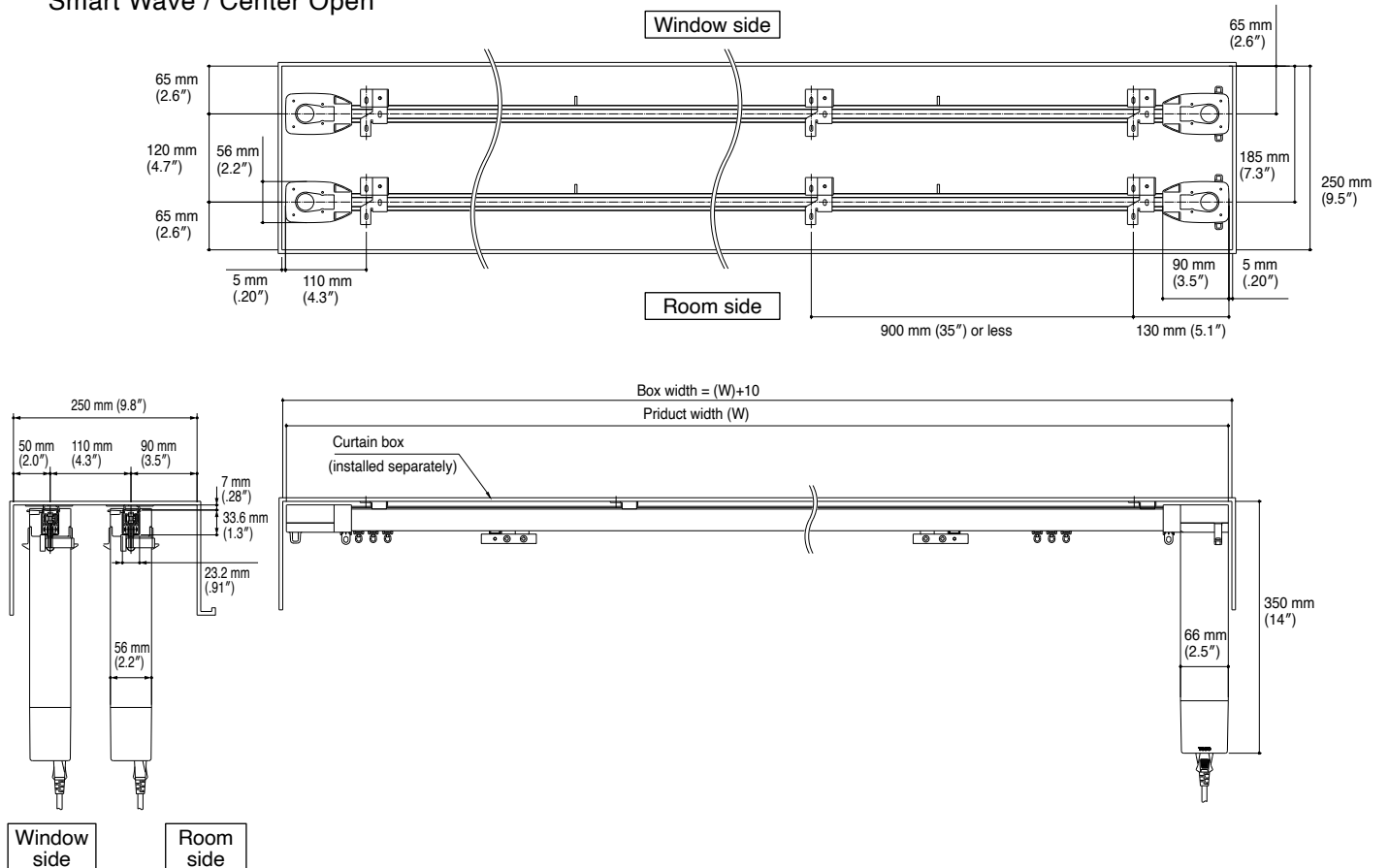
Two-way draw: ceiling double attachment Smart Wave / Center Open Overlap



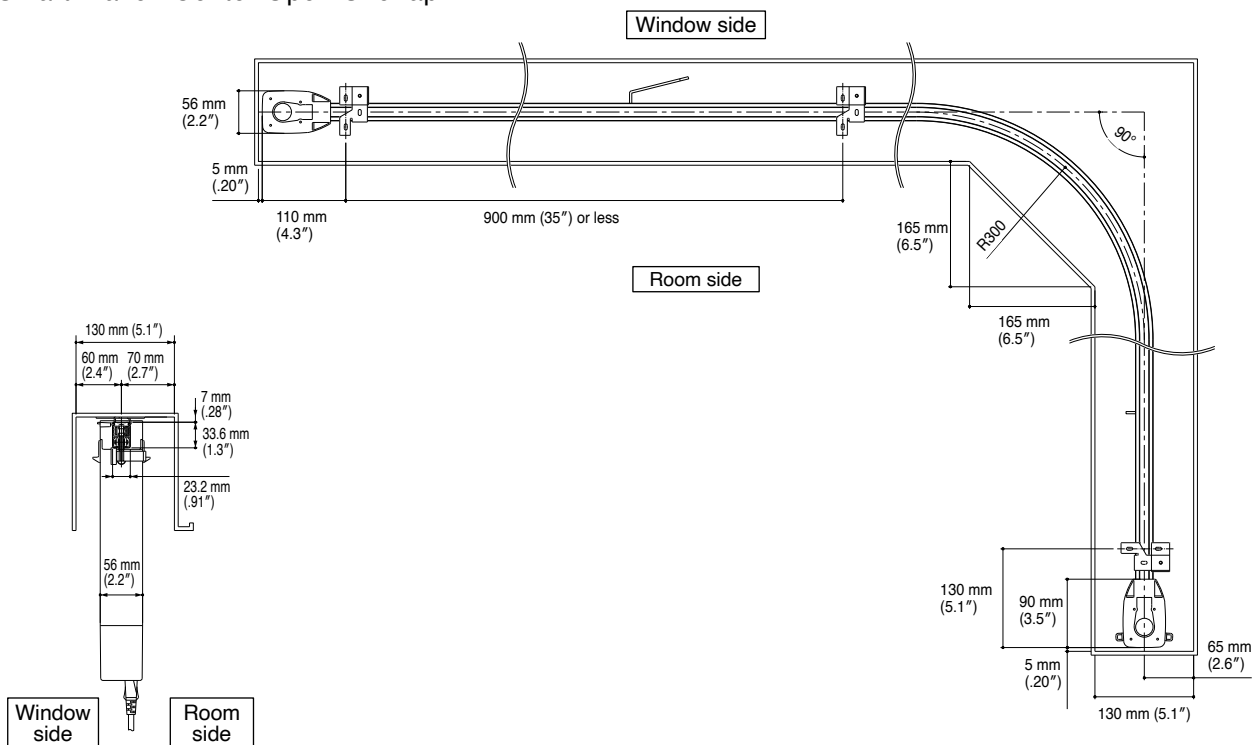
Two-way draw: ceiling single attachment
Smart Wave / Center Open



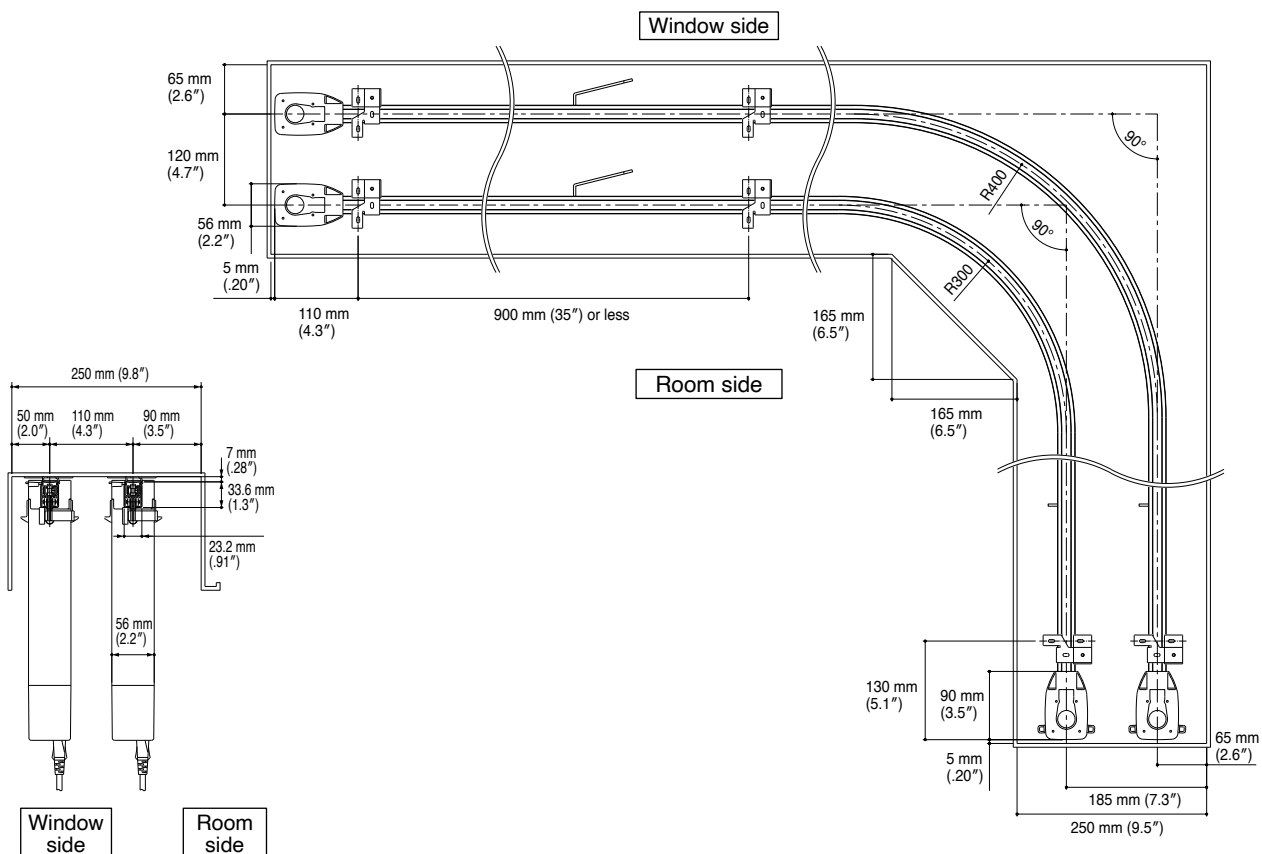
Two-way draw: ceiling double attachment
Smart Wave / Center Open



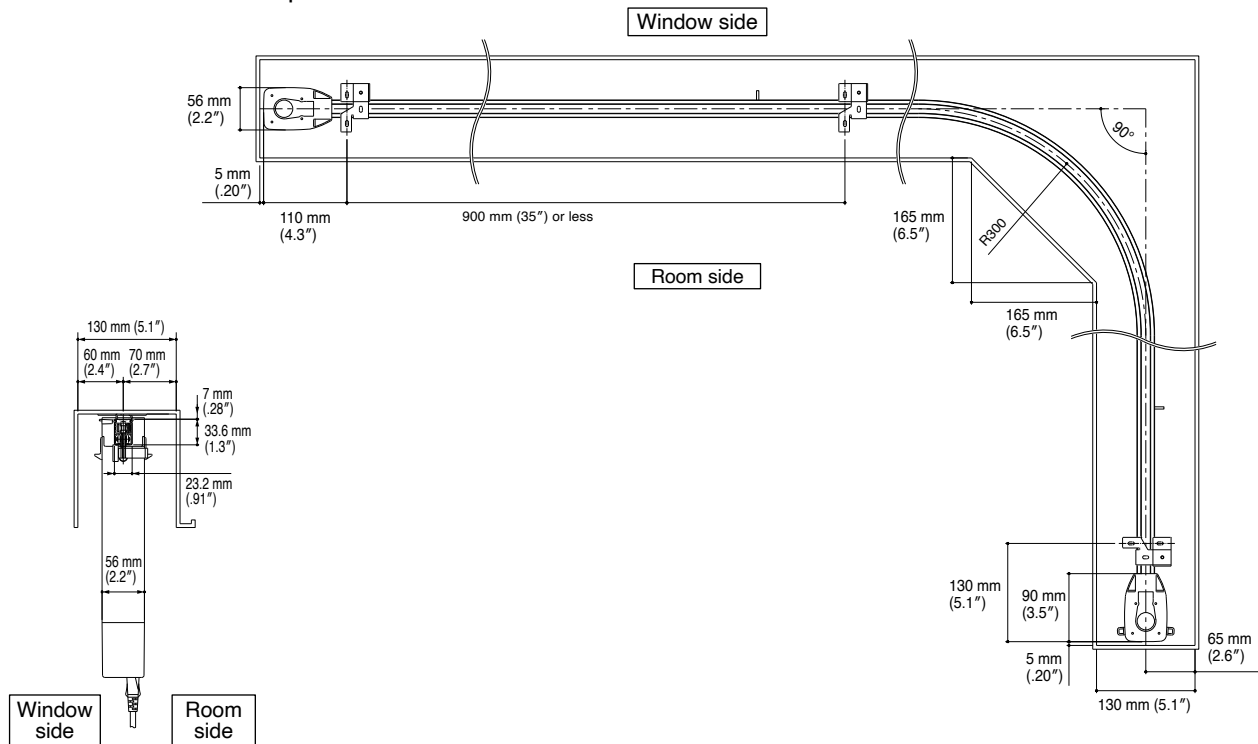
Single curve: ceiling single attachment
Smart Wave / Center Open Overlap



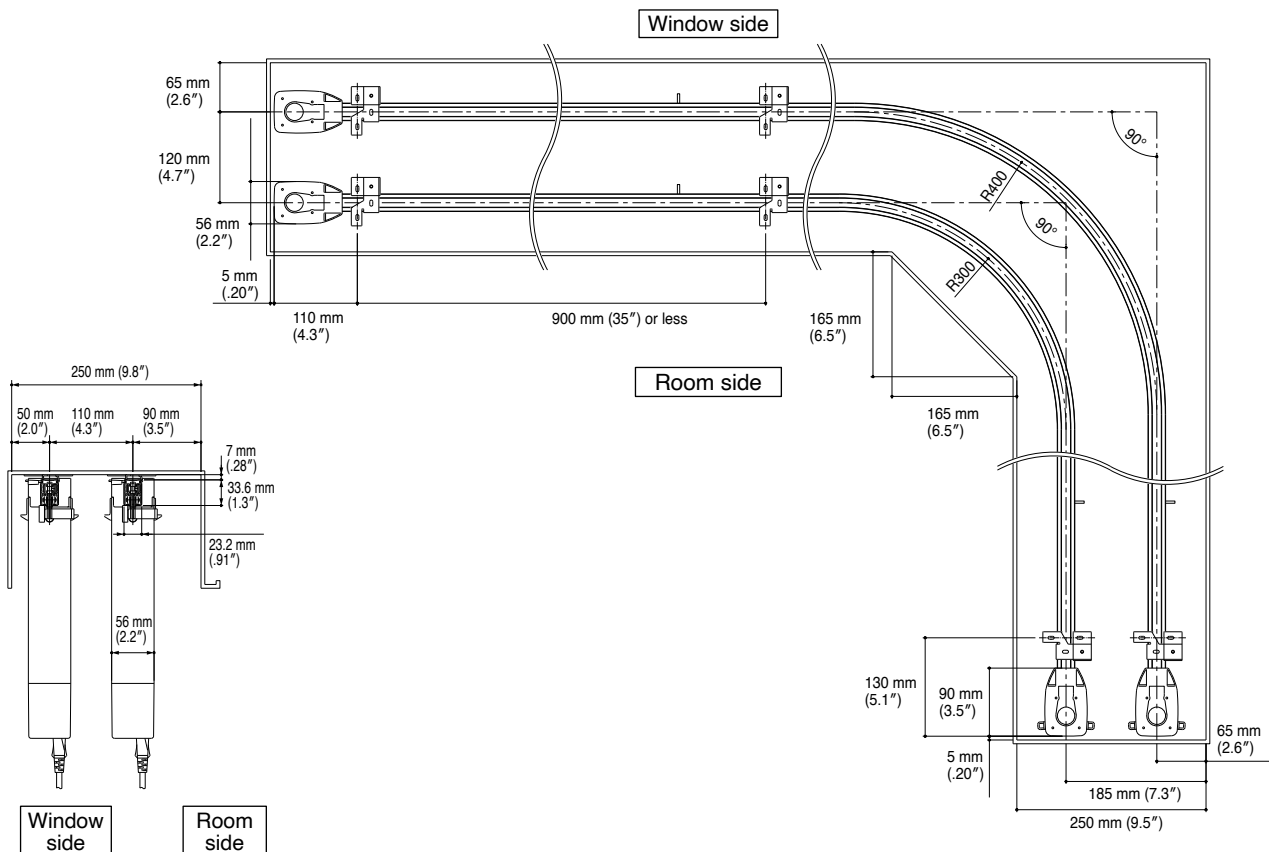
Single curve: ceiling double attachment
Smart Wave / Center Open Overlap



Single curve: ceiling single attachment
Smart Wave / Center Open



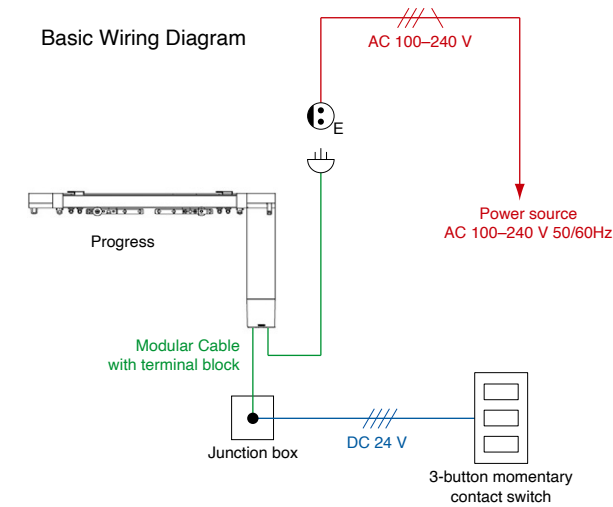
Single curve: ceiling double attachment
Smart Wave / Center Open



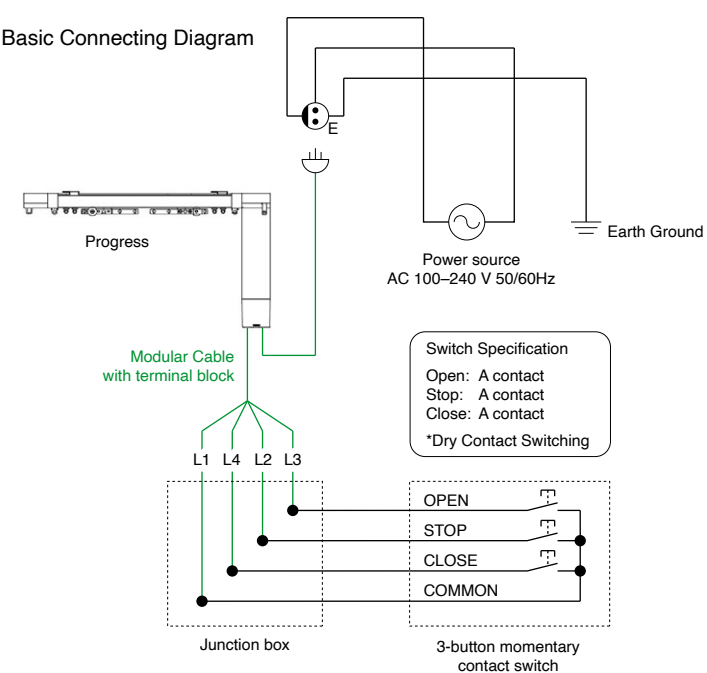
Basic Wiring and Connecting Diagram

Single Operation

Basic Wiring Diagram

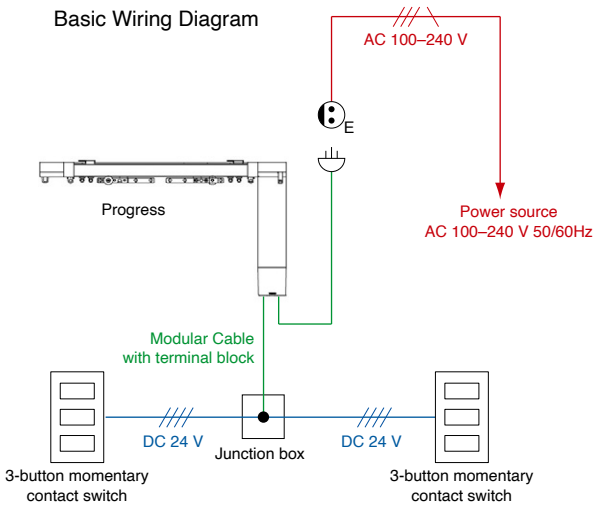


Basic Connecting Diagram

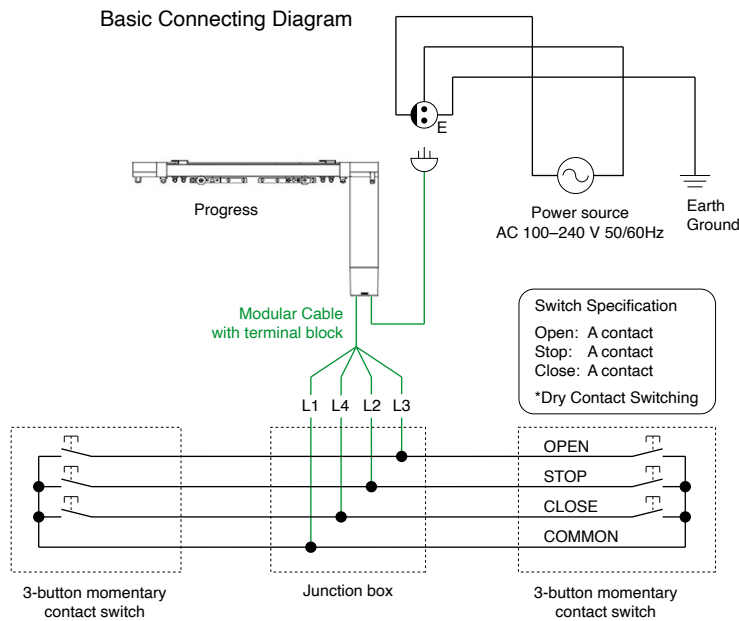


Operation from Two Locations

Basic Wiring Diagram



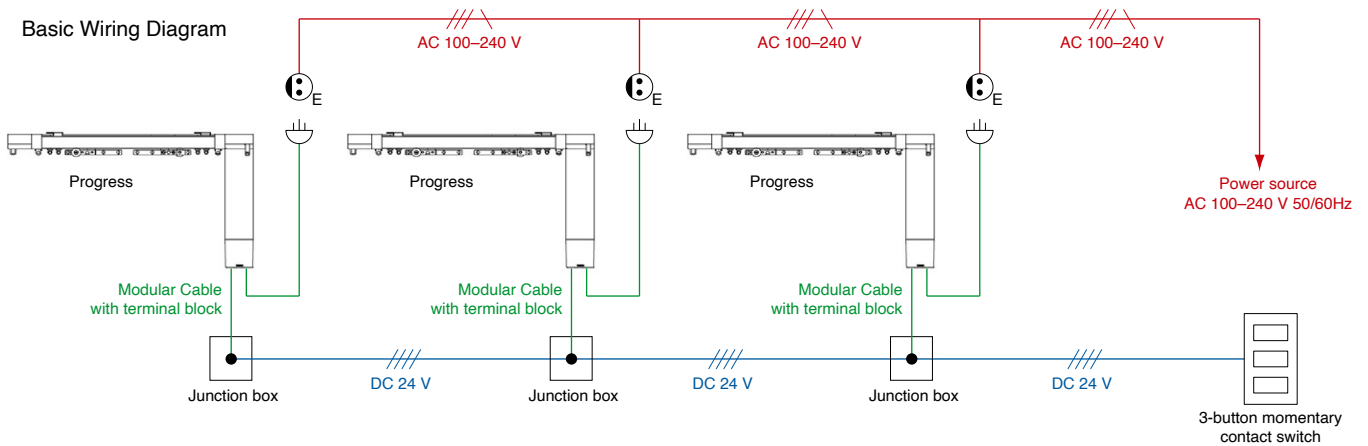
Basic Connecting Diagram



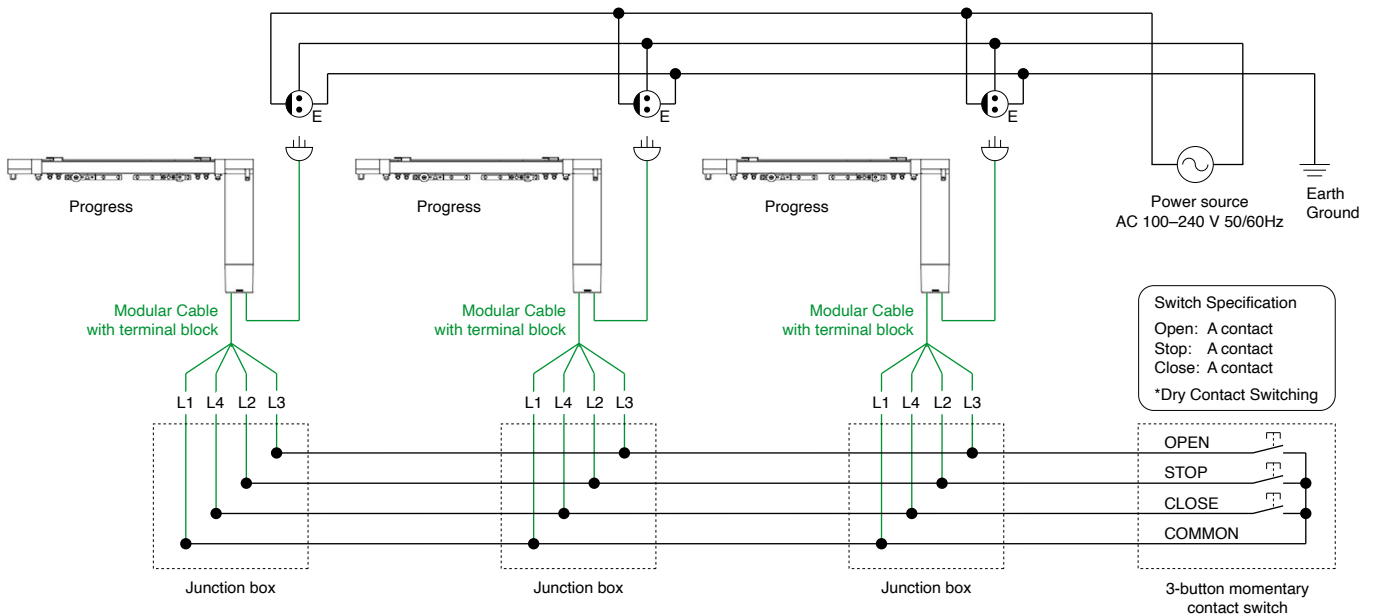
Explanatory notes: — Power supply, — Low voltage control line, — Main body attachment or TOSO standard

Simultaneous Operation

Basic Wiring Diagram



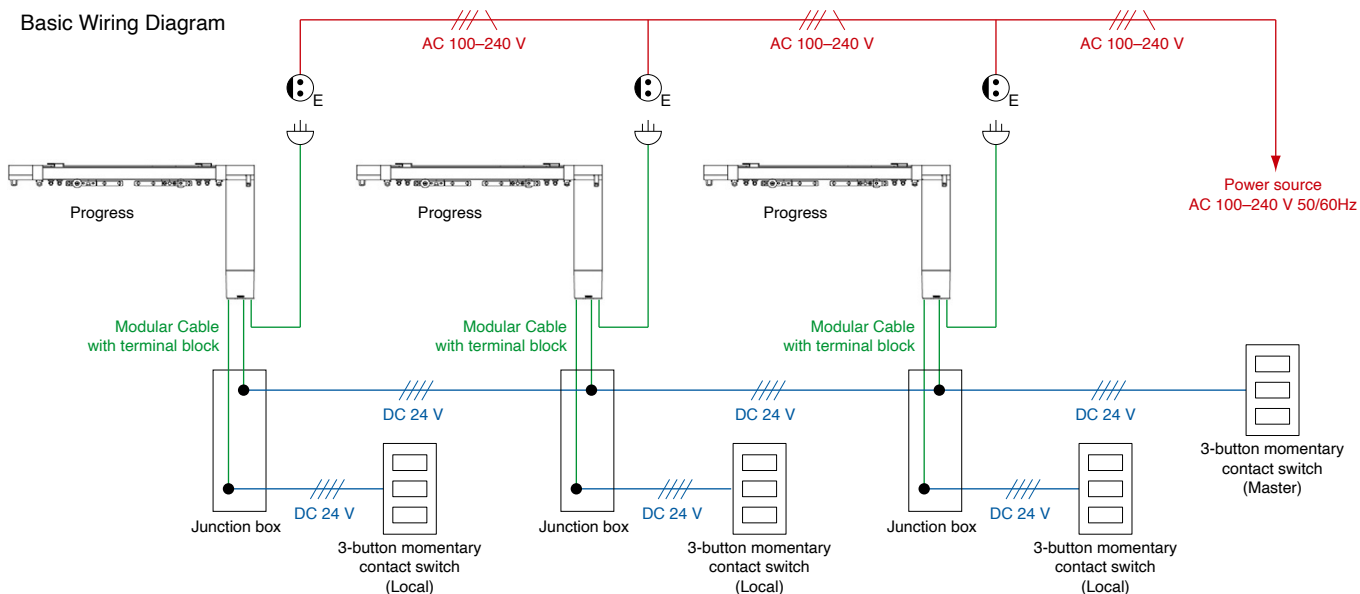
Basic Connecting Diagram



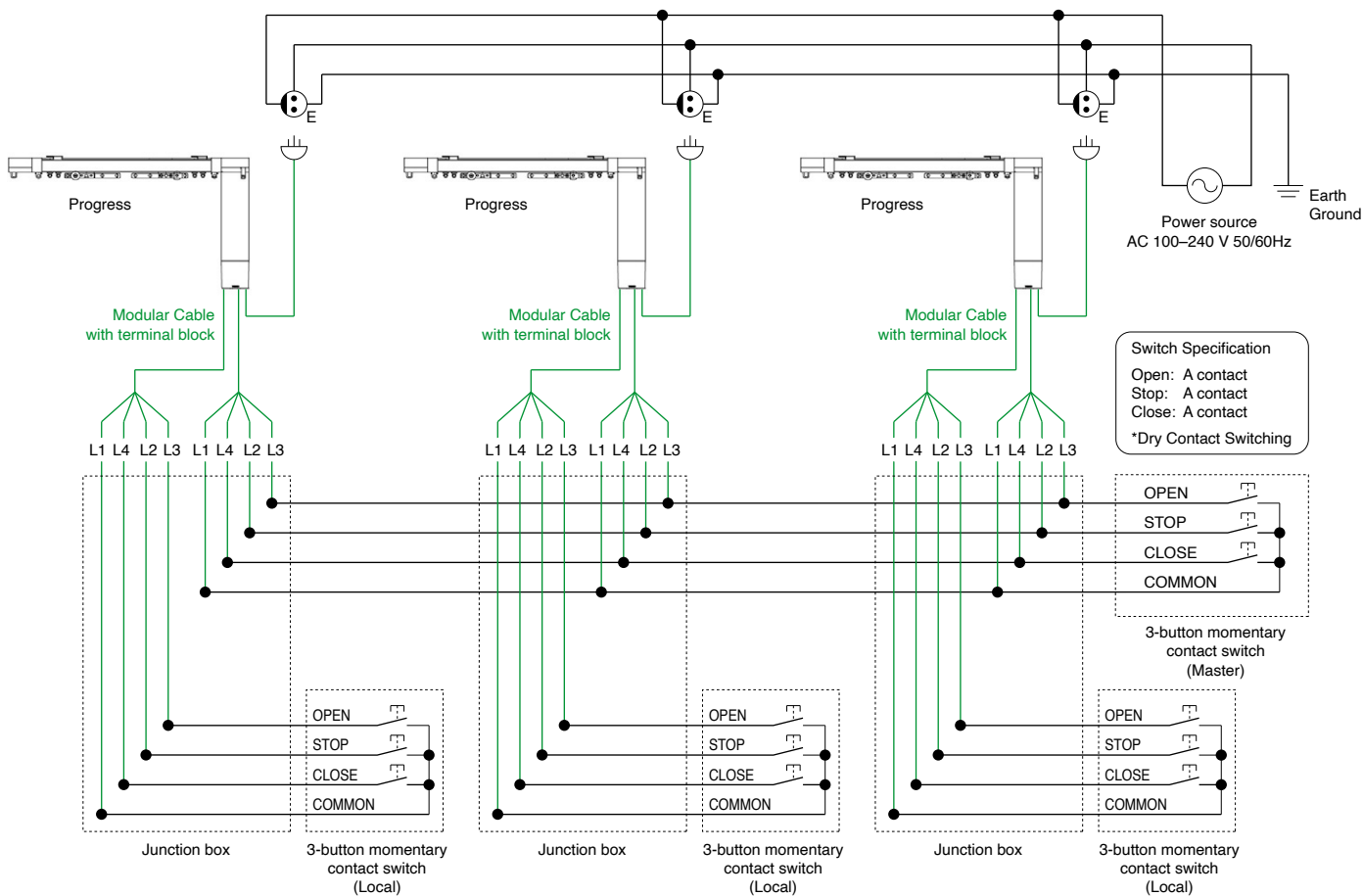
Explanatory notes: — Power supply, — Low voltage control line, — Main body attachment or TOSO standard

Simultaneous Operation for Select

Basic Wiring Diagram



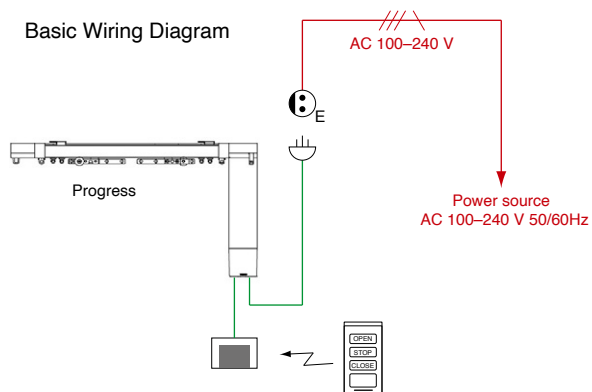
Basic Connecting Diagram



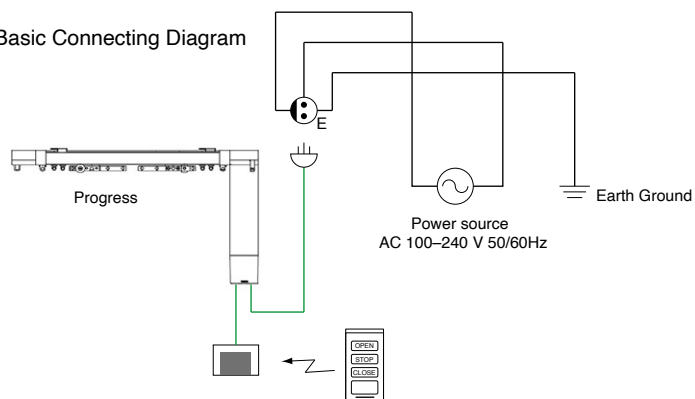
Explanatory notes: — Power supply, — Low voltage control line, — Main body attachment or TOSO standard

Infra-red Operations

Basic Wiring Diagram

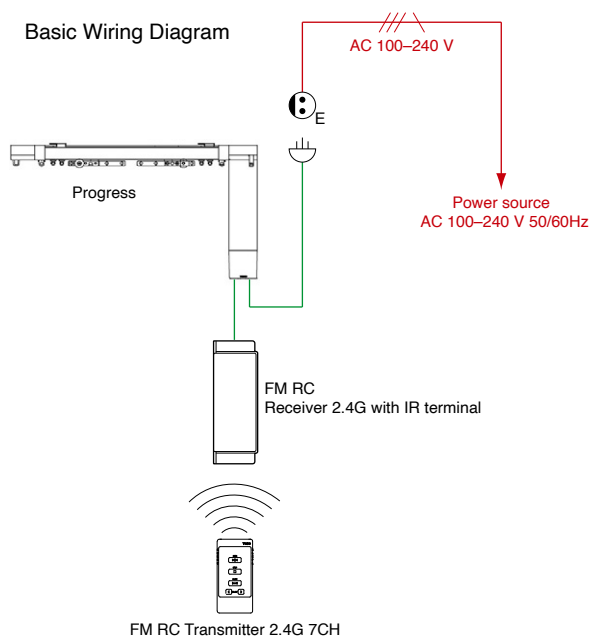


Basic Connecting Diagram

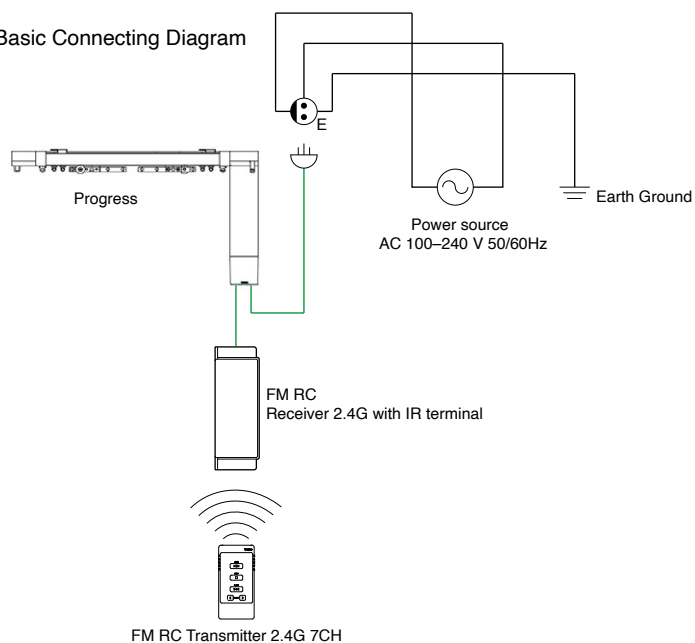


FM Remote-Control Receiver 2.4G with IR Terminal

Basic Wiring Diagram



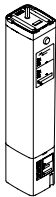
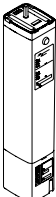
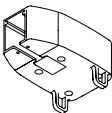
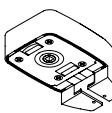
Basic Connecting Diagram



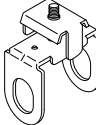
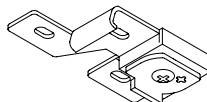
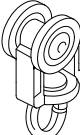
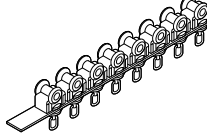
Progress 25/50/80 Track

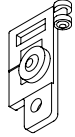
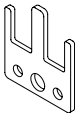
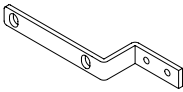
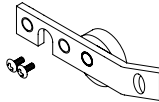
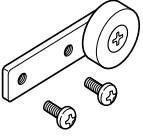
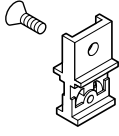
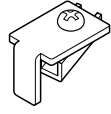
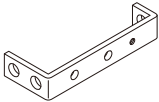
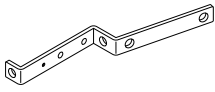
Size	Product Code
5.00m (197")	White 04990014
	Black 30019886

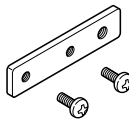
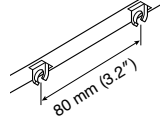
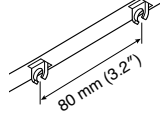
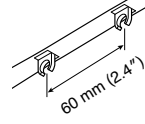
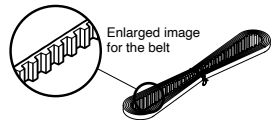
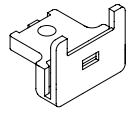
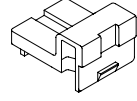
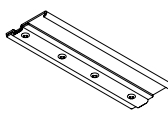
Progress 25/50/80 Parts

Product Name	General Style	Wave Style	Product Code
Progress 50 Motor Set * 			30015972
Progress 25 Motor Set 			30015975
End Side Pulley 	White		04990015
	Black		30019882
Motor Side Pulley 	White		04990016
	Black		30019883

* Progress 50/80 motor is the same one.
Please use New Delac Roller over 50 kg (110 lb).

Product Name	General Style	Wave Style	Product Code
Progress 50 Stop 			04990022
Ceiling Single Bracket M2 	White		30007811
	Black		30019885
Noiseless Roller 			04990006
New Delac Roller (8 pieces per strip) 	Natural		00210027
	Black		30020023

Product Name	General Style	Wave Style	Product Code
Pilot Roller 	○	○	04990007
Joint Plate 	○	○	04990011
Master Roller Arm 	○	—	04990012
Pilot Roller Plate with Wheel 	○	—	04990013
Smart Wave Roller (8 pieces per strip) 	Natural	○	30018621
	Black		30020020
Wave Support Wheel 	—	○	30019153
Wave Pitch Keep Tape Connector 	—	○	30019154
Intermediated Stop for Smart Wave 	—	○	30019805
Wave Short Arm 	—	○	30019150
Wave Master Roller Arm 	—	○	30019151

Product Name	General Style	Wave Style	Product Code
Wave Plate 	—	○	30019152
Invisible Pitch Keeper Tape 80 (15 m) 	—	○	30018624
Invisible Pitch Keeper Tape 80 (50 m) 	—	○	30018625
Invisible Pitch Keeper Tape 60 (50 m) 	—	○	30019302
Drive Belt (100 m) 	○	○	30006883
Belt Joint 	○	○	04990009
Belt Joint Cover 	○	○	04990010
OT Splice 	White	○	04990020
	Black		30019884
Splice Pin 	○	○	30009334

Projects

TOSO offers a full lineup of functional, decorative products, providing plans for the creation of pleasant windows in the architectural spaces of a new age.

Project Name	Ctiy	Country
Okura Prestige Tower Tokyo	Tokyo	Japan
JANU, AMAN Tokyo	Tokyo	Japan
Peninsula Shanghai	Shanghai	China
Ritz Carlton Hong Kong	Hong Kong	Hong Kong
Andaz Seoul	Seoul	South Korea
Marriott Kochi	Kochi	India
Double Tree By Hilton Taipei	Taipei	Taiwan
Jumeirah Bali	Bali	Indonesia
Edition Singapore	Singapore	Singapore
Park Hyatt Bangkok	Bangkok	Thailand
Hyatt Regency Paris Etoile	Paris	France
The Ritz Paris	Paris	France
Jumeirah Frankfurt	Frankfurt	Germany
Royal Mansour Casablanca	Casablanca	Morocco
Raffles Dubai	Dubai	United Arab Emirates



