

Flat Belt Conveyor SV Series

Center Drive, 2-Groove Frame (Pulley Dia. 30mm)

Dedicated web site <http://fa.misumi.jp/cvs/>
 Conveyor selecting, component purchases,
 and easy search for maintenance parts are available.



■ **Features:** Streamlined structuring has achieved the low cost. The center drive section is adjustable.

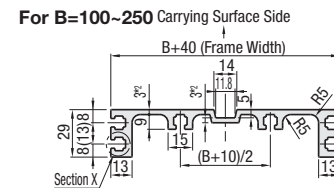
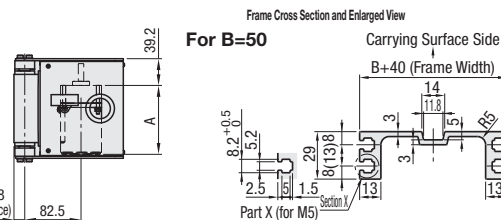
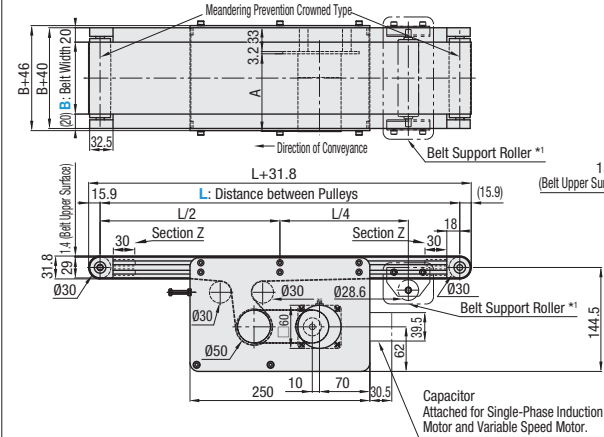


SVKN

*When L≥490, each slot has four (4) nuts inserted. When counterbores for inserting nuts are required, please specify in alterations.
 *1 When L≥2005, belt support rollers are mounted at these positions.
 *The dimensions in the diagram is for Belt Specifications H (0.9mm THK.). Take note that belt thickness varies by Belt Specifications.
 For Belt Specifications, see P.1279-.
 *The Z section of the frame is used for pulley holder mounting. The nuts cannot be moved to this area.

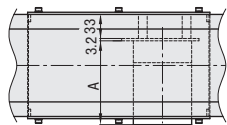
| | Frame | Motor Cover① | Motor Cover② | Pulley Holder |
|----------------------------|---------------|--------------|------------------|---------------|
| M Material | Aluminum | Aluminum | EN 1.0330 Equiv. | Aluminum |
| S Surface Treatment | Clear Anodize | Paint | Paint | Paint |

6W Motor Type

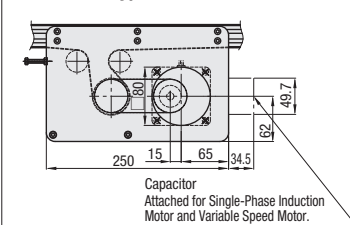


- For B=50, down facing slot is not provided.
- For B=200 and 250, *2 section thickness is 4mm.
- Compatible with JIS standard hex nuts.
- A pre-assembly insertion nut is not included.

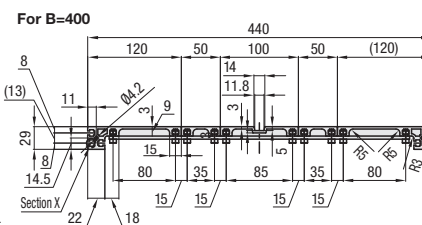
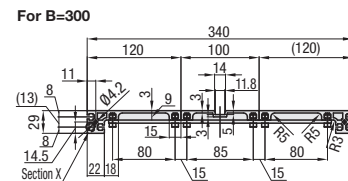
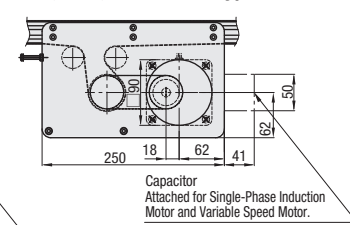
25W, 40W, 60W, 90W Motor Type



25W Motor Type



40W, 60W, 90W Motor Type

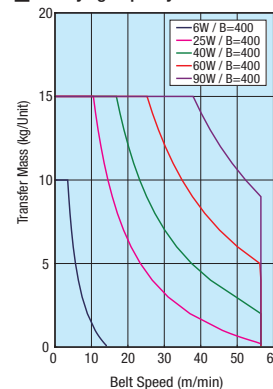


A Dimension Details

| Output (W) | Motor | | Reduction Ratio | A |
|------------|----------------------|--------------|-----------------|-------|
| | Specification | Manufacturer | | |
| 6W | Induction Motor | Panasonic | 5-25 | 101.0 |
| | | | 30-180 | 108.0 |
| | | Oriental | 5-25 | 105.0 |
| | Variable Speed Motor | Panasonic | 30-180 | 115.0 |
| | | | 30-180 | 118.0 |
| | | Oriental | 5-25 | 115.0 |
| 25W | Induction Motor | Panasonic | 5-180 | 125.0 |
| | | | 30-180 | 115.0 |
| | | Oriental | 5-18 | 117.0 |
| | Variable Speed Motor | Panasonic | 25-180 | 127.5 |
| | | | 5-180 | 125.0 |
| | | Oriental | 5-18 | 127.0 |

| Output (W) | Motor | | Reduction Ratio | A |
|------------|----------------------|--------------|-----------------|-------|
| | Specification | Manufacturer | | |
| 40W | Induction Motor | Panasonic | 5-180 | 142.0 |
| | | | 5-18 | 147.0 |
| | | Oriental | 25-180 | 165.0 |
| | Variable Speed Motor | Panasonic | 5-180 | 152.0 |
| | | | 5-18 | 157.0 |
| | | Oriental | 25-180 | 175.0 |
| 60W | Induction Motor | Panasonic | 5-180 | 180.0 |
| | | | 5-180 | 185.0 |
| | | Oriental | 5-180 | 210.0 |
| | Variable Speed Motor | Panasonic | 5-180 | 215.0 |
| | | | 5-180 | 195.0 |
| | | Oriental | 5-180 | 200.0 |
| 90W | Induction Motor | Panasonic | 5-180 | 232.0 |
| | | | 5-180 | 230.0 |
| | | Oriental | 5-180 | 230.0 |

Conveying Capacity



*Reference Value may differ by selected Belt.

Gearhead Reduction Ratio

*Conveyance speeds are reference values based on IM (motor rotational speed 1,500 rpm [50 Hz]/1,800 rpm [60 Hz]).
 *May decrease depending on load condition.

| Gearhead Reduction Ratio | Belt Speed (m/min) | |
|--------------------------|--------------------|------|
| | 50Hz | 60Hz |
| 5 | 47.1 | 56.5 |
| 7.5 | 31.4 | 37.7 |
| 9 | 26.2 | 31.4 |
| 12.5 | 18.8 | 22.6 |
| 15 | 15.7 | 18.8 |
| 18 | 13.1 | 15.7 |
| 25 | 9.4 | 11.3 |
| 30 | 7.9 | 9.4 |
| 36 | 6.5 | 7.9 |
| 50 | 4.7 | 5.7 |
| 60 | 3.9 | 4.7 |
| 75 | 3.1 | 3.8 |
| 90 | 2.6 | 3.1 |
| 100 | 2.4 | 2.8 |
| 120 | 2.0 | 2.4 |
| 150 | 1.6 | 1.9 |
| 180 | 1.3 | 1.6 |

For motor specification SCM, this is adjustable up to (1/15) × (max. speed). The weight that can be conveyed decreases as the speed decreases.

| Part Number | B Selection | L 5mm Increment | Motor | | | | Belt Specification | Motor Manufacturer Selection | | | | |
|-------------|----------------------------------|--|---------------------------|-------------------------|--|--|---|---|----------------|-------------------------|--|----------------------------------|
| | | | Output (W) | Voltage (V) | Specification | Gearhead Reduction Ratio | | | | | | |
| SVKN | 50 100 150 200 250 | 390-3000 *L ≥ 2005 is not selectable for 6W Motor | 6 25 40 60 90 | TA230 (Single-phase) | IM (Induction Motor) SCM (Variable Speed Motor) | 5 7.5 9 12.5 15 18 25 30 36 50 60 75 90 100 120 150 180 | H (General Specifications, Green) W (General Specifications, White) G (For Sliding, Green) S (For Sliding, White) D (For Electronic Parts Transfer) F (For Food Transfer, White) O (Oil Resistant, Navy Blue) N (Non-adhesive, White) J (No Belt) | A (Panasonic Motor) B (Oriental Motor) | | | | |
| | | | | | | | | | 40 60 90 | TA230 (Single-phase) | IM (Induction Motor) SCM (Variable Speed Motor) | *5-9 not applicable for 6W Motor |
| | | | | | | | | | | | | |
| | 50 100 150 200 250 300 400 | | | | | | | | | | | |
| | | | | | | | | | | | | |

- Connect the motor so that the belt rotates in the direction of conveyance. For connection diagram, and details of motor and inverter, see P.1267 onward.
- When "No motor, gearhead" is selected, the motor mounting hole pitch will vary depending on the motor's power rating. Please see Technical Information in our Conveyor Selection web site for the dimension details.
- When "No motor, gearhead" is selected, this unit will be delivered unassembled. The customer is to assemble the unit according to the included assembly instructions. See our Conveyor Selection site for assembly procedures and packaging details.
- It is not recommended to use the conveyor while it is tilted, regardless of the belt specifications.

| Belt Specification | Standard Belt (Body Price Only) | Optional Belt 1 | Optional Belt 2 | No Belt |
|-------------------------------|---------------------------------------|---|---|----------------|
| General Purpose | H (Green), W (White), HG (Green) | - | HY (Yellow Green), HBN (Sky Blue) | J (No Belt) |
| For Sliding | G (Green), S (White) | - | - | |
| For Inclined Transfer | LG (Green), LW (White) | - | - | |
| Grip Type | - | GG (Green), GW (White) | GSN (Green) | |
| Oil Resistant | O (Navy Blue), OH (Green), OG (Green) | OW (White) | ON (White) | |
| Non-adhesive | N (White), NS (White) | NB (Sky Blue), NBG (Lime Green), HH (Green), HW (White) | NWN (White), NSN (Sky Blue), NGN (Lime Green), HBG (Green), HBW (White), BW (White) | |
| For Food Transfer | F (White) | KW (White), KSB (Sky Blue), PHB (Sky Blue) | PHN (Sky Blue), PWN (Sky Blue), KWN (White) | |
| For Electronic Parts Transfer | D (Black), DS (Black) | - | DG (Black) | |

- For flat belt details, see P.1279 onward.
- In case of selecting Optional Belts, please select motor manufacturer A or B (Motor C is applicable for Standard Belt only).
- Select a belt with a thickness of 1.0 mm or less for a motor output of 6 W.

| Part Number | B | Body Price 1 ~ 2 pc(s). | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----|-------------------------|----------|----------|----------|----------|----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--|--|
| | | L390-400 | L405-500 | L505-600 | L605-700 | L705-800 | L805-900 | L905-1000 | L1005-1100 | L1105-1200 | L1205-1300 | L1305-1400 | L1405-1500 | L1505-1600 | L1605-1700 | L1705-1800 | L1805-1900 | L1905-2000 | L2005-2200 | L2205-2400 | L2405-2600 | L2605-2800 | L2805-3000 | | |
| SVKN | 50 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 150 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 200 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 250 | | | | | | | | | | | | | | | | | | | | | | | | |
| | 300 | | | | | | | | | | | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | | | | | | | | | | | | |

For orders larger than indicated quantity, please check with WOS.

| Motor Spec. Price | Motor Output | Specification | A (Panasonic Motor) | B (Oriental Motor) | R (No Motor, Gearhead) |
|-------------------|------------------|---------------|---------------------|--------------------|------------------------|
| | 6W 25W 40W | IM SCM | | | |
| 60W 90W | IM SCM | | | | |

| Belt Spec. Price | Standard Belt | Optional Belt 1 | Optional Belt 2 | No Belt |
|------------------|---------------|-----------------|-----------------|---------|
| | | | | |



Ordering Example: Part Number - B - L - Motor - Output - Voltage - Specification - Gearhead Reduction Ratio - Belt Specification - Motor Manufacturer Selection
 SVKN - 100 - 1000 - 25 - TA230 - IM - 25 - H - A

Ex.) For No Belt: SVKN-100-1000-25-TA230-SCM-25-J-A
 Ex.) For Optional Belt 2: SVKN-100-1000-25-TA230-SCM-25-HY-B
 Ex.) For No Motor, Gearhead: SVKN-100-1000-25-NV-NM-NH-H-R

Body Price + Motor, Belt Spec. Price = Unit Price

Machine Weight (With a Motor Output of 6 W)

*Reference values (may vary depending on motor manufacturer)(kg)

| Belt Width B (mm) | Distance Between Pulleys L (mm) | | | | | |
|-------------------|---------------------------------|------|------|------|------|------|
| | 500 | 1000 | 1500 | 2000 | 2500 | 3000 |
| 50 | 5.4 | 6.5 | 7.5 | 8.6 | 9.6 | 10.6 |
| 100 | 7.2 | 8.7 | 10.3 | 11.8 | 13.4 | 14.9 |
| 150 | 8.7 | 10.5 | 12.3 | 14.1 | 15.9 | 17.7 |
| 200 | 10.4 | 12.7 | 15 | 17.3 | 19.6 | 21.9 |
| 250 | 12 | 14.6 | 17.2 | 19.8 | 22.4 | 25.1 |
| 300 | 14.7 | 17.1 | 19.5 | 21.9 | 24.3 | 26.7 |
| 400 | 16.1 | 20.4 | 24.9 | 29.3 | 33.7 | 37.9 |

*When the motor output is 25 W, add 1.1 kg. *When the motor output is 40 W, add 2.1 kg.
 *When the motor output is 60 W, add 3.1 kg. *When the motor output is 90 W, add 3.6 kg.



Alterations

| Specify Drive Section Position |
|--|
| Additional Counterbores |
| Roller Edge |
| Motor Cover with Window |
| Brackets for Speed Controller Included |
| Post-Assembly Insertion Nuts Included |
| Motors with Electromagnetic Brake |
| Stands (Legs) |

For details of alterations, see P.1264 onward.