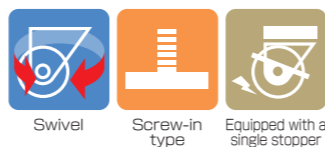


P-S TYPE



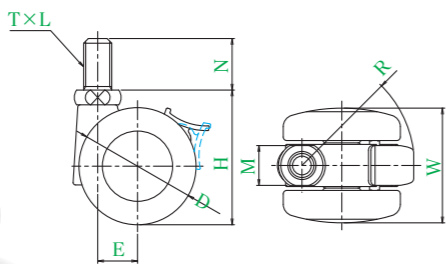
* Excluding PT



• Equipped with a single stopper



P-50TS, M12×22 P-60TS, M12 x 22



● Description of product number

P - 60 T S, M12 X 22

Body type
Wheel diameter
Screw
Equipped with stopper
T : Screw-in type
N : Insertion type
Length

Specifications of screw-in type (equipped with stopper)

Body, wheel = Nylon

Product number	Wheel diameter	Wheel width	Mounting height	Screw	Pitch	Length	Opposite side	Eccentricity	Turning radius	Allowance load	Wheel weight
	D(mm)	W(mm)	H(mm)	T	L	N(mm)	M(mm)	E(mm)	R(mm)	daN(kgf)	(g)
P-50TS	50	49	57.5	M12	1.75	22	17	17	48	60(61.2)	130
P-50HTS	50	49	57.5						48	100(102.0)	130
P-60TS	60	55	73						67	100(102.0)	170

● These casters are used for only locking rotation of the wheel.
★ Refer to P7 for the mounting method.



P-40TS, W3/8×15

Specifications of screw-in type (equipped with stopper)

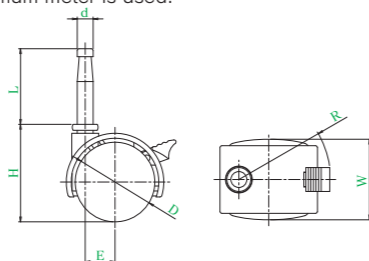
Body, wheel = Nylon

Product number	Wheel diameter	Wheel width	Mounting height	Screw	Pitch and threads per inch	Length	Opposite side	Eccentricity	Turning radius	Allowance load	Wheel weight
	D(mm)	W(mm)	H(mm)	T	L	N(mm)	M(mm)	E(mm)	R(mm)	daN(kgf)	(g)
PT-40TS	40	40.5	M8 = 50 M12 = 52 W3/8 = 50	M8	1.25	15	12.7	15	47	20(20.4)	65
PT-50TS	50	45	M8 = 60 M12 = 62 W3/8 = 60	M12	1.25	14	19	18	57	30(30.6)	105
				W3/8	16 threads	15	12.7				

● These casters are used for only locking rotation of the wheel.
● Wheel weight indicates weight of a caster when a screw with the minimum meter is used.
★ Refer to P7 for the mounting method.



PT-40NS



Specifications of insertion type (equipped with stopper)

Body, wheel = Nylon

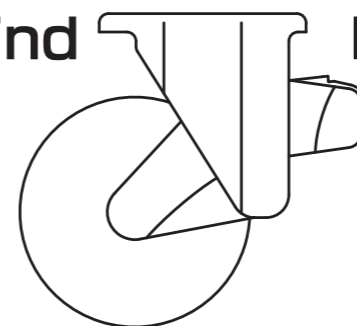
Product number	Wheel diameter	Wheel width	Mounting height	Axis diameter	Axis length	Eccentricity	Turning radius	Allowance load	Wheel weight
	D(mm)	W(mm)	H(mm)	d(mm)	L(mm)	E(mm)	R(mm)	daN(kgf)	(g)
PT-40NS	40	40.5	49	8	38	15	47	20(20.4)	70
PT-50NS	50	45	60			18	57	30(30.6)	105

● These casters are used for only locking rotation of the wheel.

Front and behind the fixed wheel of SKY caster (φ 200)



Behind Front



Correct traveling direction

*If the traveling direction of the fixed wheel of a SKY caster is wrong, the caster may be damaged.

Precautions for using SKY caster φ200

1. Precautions for selecting casters

• Please calculate total load to be applied (truck and load) when using four casters with the following formula.

Total load to be applied = Standard load × 4 pieces × Safety factor

* Safety factor shall be appropriately set according to working conditions and operating speed.

Example: Safety factor is approximately 0.8 to 1.0 when manually operating casters

Example: Safety factor is approximately 0.5 to 1.0 when using casters for towing with power

• Please contact us if loading balance is bad, loading is made at high center of gravity, or casters are used under severe condition, such as climbing a hill or road having many curves.

2. Precautions for using casters

• Do not use casters while load exceeds the loading limit (total load to be applied) and standard load for one foot.

• Apply load to each caster equally. Otherwise, the truck may lose its balance.

• Start pushing the truck slowly. Otherwise, the truck may lose its balance.

• This caster is not suitable for transferring high load and load having high center of gravity.

• This caster is not suitable for transferring imbalanced load or de-centered load.

• Do not forcibly move the casters while the stopper is applied. Also, do not leave the casters on a slope.

• Do not move the fixed casters to the opposite direction of the traveling direction (back or side, etc.). Otherwise, fixed casters may break.

• Do not apply impact, such as collision and drop.

• Do not leave casters for a long time while load is applied.

(* If it is necessary to leave casters for a long time while load is applied, the load shall be as low as possible.)

• Do not apply load exceeding standard load on casters.
• Travel casters at slower than 10km/h when towing.

3. Cautions regarding operating environment

• Casters shall be used in a plant under normal condition.

• Casters shall not be affected by special temperature, chemical substances, extreme water or oil, salt, organic solvent, strong acid and strong alkali, etc.

4. Storage method

• Please store casters indoors.

• Do not leave or store casters at a place exposed to water or rain, or at humid place.

• Do not leave or store casters at a place exposed to direct sunlight or radiant heat from a heater, etc.

5. Precautions when mounting

• Mount revolving casters in such a manner that the revolving axis is vertical.

• For fixed casters, mount casters in such a manner that casters are straight against the traveling direction and casters are parallel respectively. Do not mount casters in the opposite direction of the traveling direction so as not to damage casters.

• Tighten the mounting screw using appropriate tool after checking appropriate torque based on size and intensity.

• Mount the casters in which whole surface of the mounting base contacts the whole surface of the mounting surface.

• Do not insert anything between the mounting surface and the mounting base.

• Do not mix casters having different height and series.

6. Periodic check, maintenance, replacement and periodic inspection

Please carry out periodic check, maintenance, replacement and periodic inspection in order to prevent accident and use casters for a long period of time.

• Check YUEI damper (check with touching and visual check using a mirror, etc.) before using casters and replace the damper if there is a fault.

• Please clean foreign substances (dust, etc.) attached on YUEI damper with air after using casters.

• Check the presence of looseness of the fastening portion at the mounting portion, spindle portion, stopper, bolts and nuts. If there is abnormality, stop using the caster and then replace the caster with a new one.

• If a wheel is worn, replace the wheel with a new one (same type) as appropriate.

• If you find any abnormality, please contact a dealer quickly.

• If there is breakage or rattling on a bracket, please stop using the caster and contact us.

• Do not disassemble any parts other than the wheel portion.

[Recommended timing of periodic inspection]

- (1) Every year after purchase date
- (2) Every 1,200km of traveling distance after beginning of use

However, if significant amount of foreign substances are attached, loading balance is bad, loading is made at high center of gravity, or casters are used under severe condition, such as climbing a hill or road having many curves, we recommend performing the periodic inspection at a timing earlier than above timings.

* This product may be changed for improvement without any prior notice.

SKY caster φ200

Excellent shock absorbing performance

Quiet traveling sound

Suitable for towing

By including the YUEI dumper in which materials based on newly-developed special viscoelastic material, vibration acceleration is reduced to approximately 1/5 (compared to our products). Therefore, load can be gently transferred.

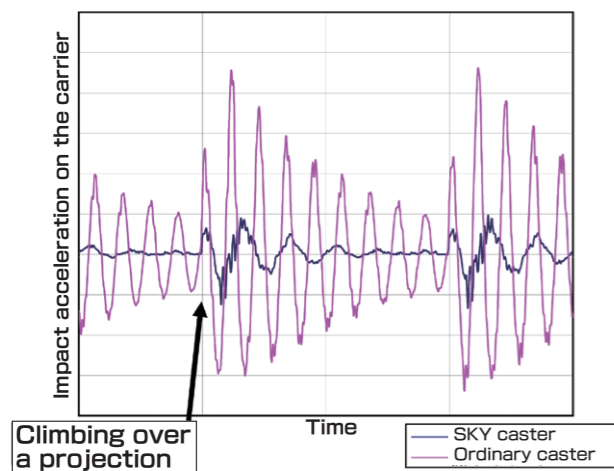
Since the mechanism of the revolving portion was changed from the mechanism in which a steel ball is used to the mechanism in which a ball bearing having a deep groove, and a ball bearing having a deep groove is used for the wheel bearing portion, smooth and quiet rotation becomes possible. In addition, YUEI dumper significantly reduced vibration; therefore traveling sound is very quiet.

Since a ball bearing having a deep groove is used in the revolving portion and the wheel bearing portion, this caster is suitable for high speed rotation. YUEI dumper significantly improved shock absorbing performance and durability (compared to our products); therefore this caster provides long life.

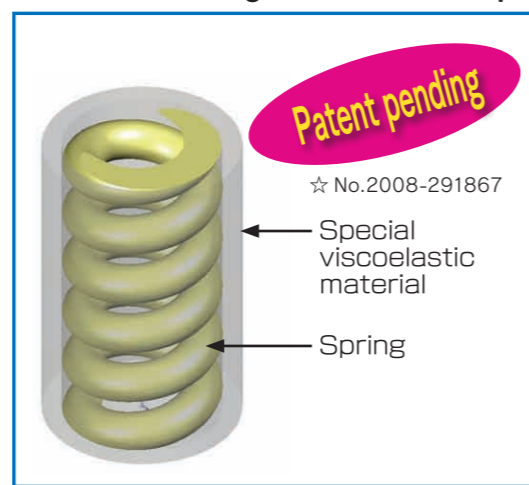
* When towing with a motor, consider the safety factor according to speed.
* Travel casters at slower than 10km/h when towing.

☆ Patent Pending No.2010-064650 Patent Pending No.2008-265478

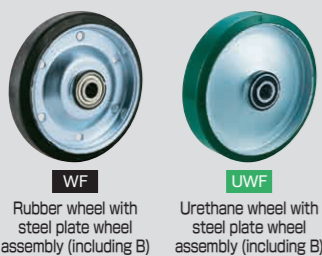
Comparison of impact acceleration



Schematic diagram of YUEI dumper



Wheel in use Refer to P165 for detailed specifications.



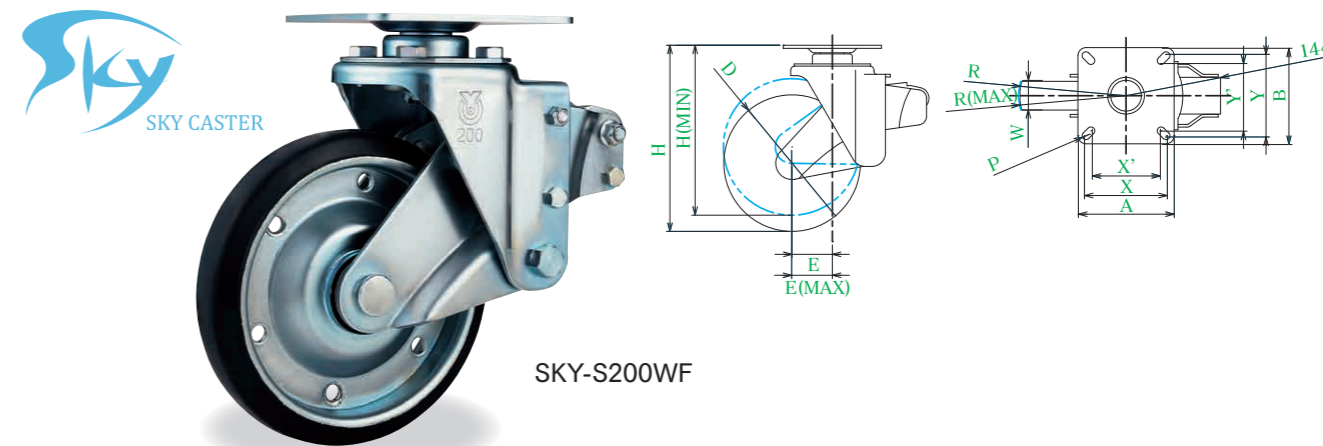
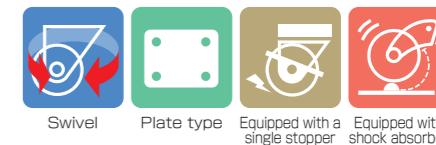
Description of product number

SKY - * * *

- Indicating SKY casters**
- Bracket type**: S: Swivel plate type, R: Fixed plate type
- Wheel diameter**: 200: 200mm
- Wheel type**: WF: Rubber wheel with steel plate wheel assembly (including B), UWF: Urethane wheel with steel plate wheel assembly (including B)

● The standard load display on casters with shock absorber does not indicate allowable load. This display shows the load range in which shock absorbing effect is high.
● Mounting height and eccentricity vary depending on expansion and contraction of YUEI dumper.

SKY-S_{TYPE}



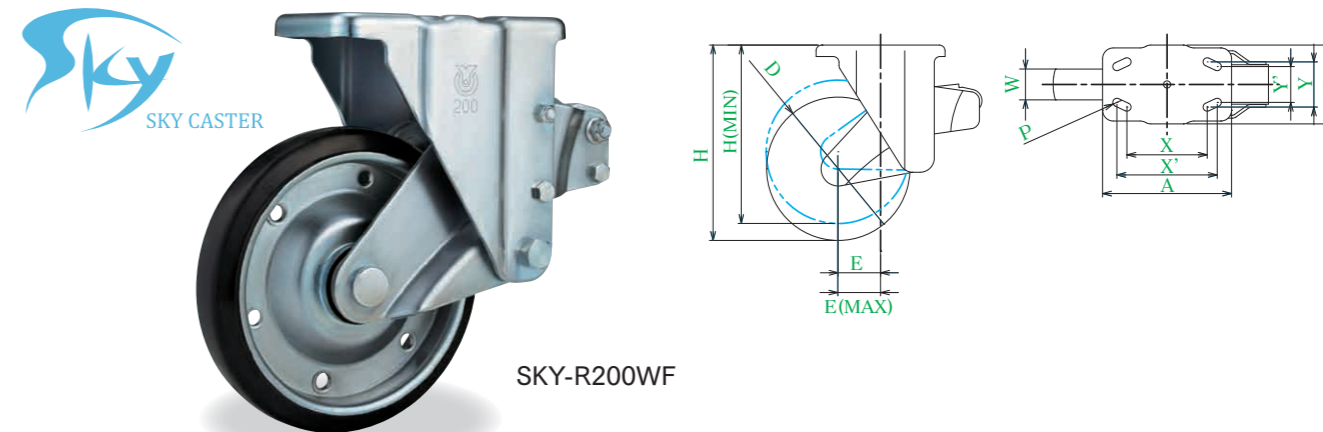
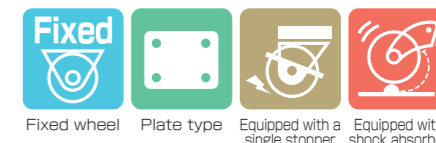
SKY-S200WF

Bracket = Trivalent unichrome coating

Product number	Wheels	Wheel diameter	Wheel width	Mounting base	Mounting dimensions	Hole diameter	Turning radius	Mounting height	Eccentricity	Standard load	Wheel weight
		D(mm)	W(mm)	A × B(mm)	X × Y(X' × Y')(mm)	P(mm)	R(mm)	H(mm)	E(mm)	daN(kgf)	(g)
SKY-S200	WF	200	43	144 × 144 t=4.5	120 × 120 (105 × 105)	11.5	159 to 160	273 to 249	59 to 60	100(102.0) to 200(204.0)	6870
	UWF										7100

● There is a type equipped with a stopper. (This is a caster used for only locking rotation of the wheel.)
● For turning radius, mounting height and eccentricity, values indicate when the YUEI damper with the maximum stroke instead of when the standard load is applied.

SKY-R_{TYPE}



SKY-R200WF

Bracket = Trivalent unichrome coating

Product number	Wheels	Wheel diameter	Wheel width	Mounting base	Mounting dimensions	Hole diameter	Mounting height	Eccentricity	Standard load	Wheel weight
		D(mm)	W(mm)	A × B(mm)	X × Y(X' × Y')(mm)	P(mm)	H(mm)	E(mm)	daN(kgf)	(g)
SKY-R200	WF	200	43	180 × 110 t=4.0	112 × 63 (140 × 50)	11.5	273 to 249	59 to 60	100(102.0) to 200(204.0)	5780
	UWF									6000

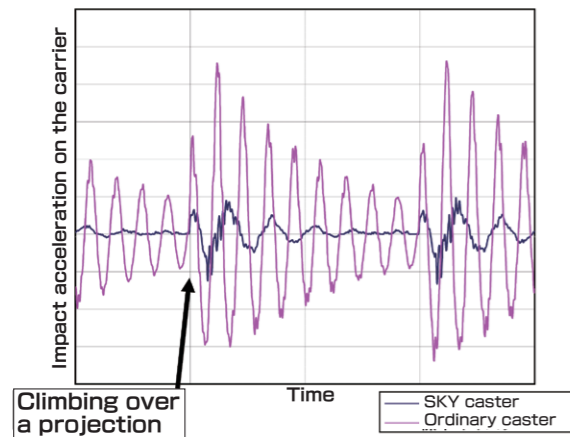
● There is a type equipped with a stopper. (This is a caster used for only locking rotation of the wheel.)
● For mounting height and eccentricity, values indicate when the YUEI damper with the maximum stroke instead of when the standard load is applied.

SKY caster (φ100 and φ125)

These casters are suitable for transporting precision equipment and parts!

Shock and vibration are absorbed by the built-in YUEI damper!
Also, vibration and noise during traveling are prevented!

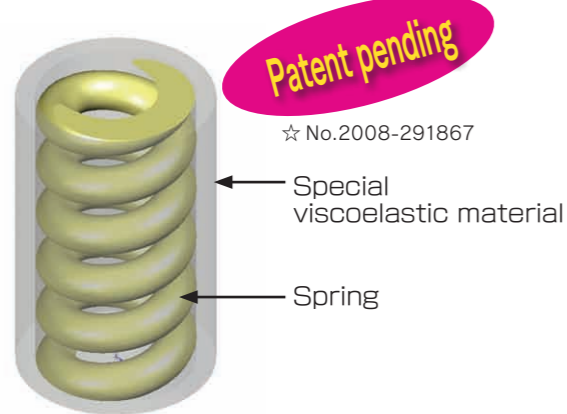
Comparison of vibration acceleration



The mechanism in which the ball bearing with a deep groove is used for the revolving portion. Therefore, these casters travel smoothly and quietly.



Schematic diagram of YUEI damper



Patent pending

☆ No.2008-291867

Special viscoelastic material

Spring

1. YUEI damper in which special viscoelastic material is used is adopted.
2. Damper does not need to be replaced.

Table for selecting standard load

(Note) This table is based on the calculation on the assumption that 4 pieces of casters are used.

Total load Type	20daN (20.4kgf)	30daN (30.6kgf)	40daN (40.8kgf)	50daN (51.0kgf)	60daN (61.2kgf)	70daN (71.4kgf)	80daN (81.6kgf)	90daN (91.8kgf)	100daN (102.0kgf)	110daN (112.2kgf)	120daN (122.4kgf)
SKY * - * - 1 Standard load: 10daN (10.2kgf)	Applicable load										
SKY * - * - 2 Standard load: 20daN (20.4kgf)				Applicable load							
SKY * - * - 3 Standard load: 30daN (30.6kgf)							Applicable load				

Precautions for using

1. Precautions when selecting

- Select the standard load within the range of load to be applied according to total load (truck and load).

In case of using 4 pieces of casters:

Load to be applied - Standard load x 4 pieces x Safety factor (0.5 to 1.0)

- If loading balance is bad, loading is made at high center of gravity, or casters are used under severe condition, such as climbing a hill or road having many curves, consider suitable safety factor and type having high standard load (range indicated by the white arrow in the applied load).

2. Precautions for using

- Do not use casters while load exceeds the loading limit (load to be applied) and standard load for one foot.
- Put load on a carrier in such a manner that load is applied to each caster equally. Otherwise, the truck may lose its balance.
- Do not move the fixed casters to the opposite direction of the traveling direction (back or side, etc.). Otherwise, fixed casters may break.
- Do not forcibly move the casters while the stopper is applied. Also, do not leave the casters on a slope.
- Do not apply harmful impact, such as collision and drop.

3. Using speed

- Use this caster for intermittent manual towing. Do not use this caster for towing with a motor.
- Within 4km/h for manual towing**
- Start pushing the carrier slowly. Otherwise, the carrier may lose its balance.

4. Operating environment

- This caster shall be used in a plant at room temperature and this caster shall not be affected by special temperature, chemical, extreme oil, water and salt.
- Operating temperature: 10°C to 30°C**

5. Precautions when mounting

- Mount revolving casters in such a manner that the rotation axis is vertical.
- Mount fixed casters in such a manner that casters become parallel each other. Also, do not mount a cater in the opposite direction of the traveling direction.
- For mounting screw, tighten the hexagonal portion using an appropriate wrench after checking appropriate torque based on size and intensity.

6. Periodic check, maintenance and replacement

Please carry out periodic check, maintenance, replacement and periodic inspection in order to prevent accident and use casters for a long period of time.

- Check YUEI damper (check with touching and visual check using a mirror, etc.) before using casters and replace the damper if there is a fault.
- Please clean foreign substances (dust, etc.) attached on YUEI damper with air after using casters.
- Check the presence of looseness of the fastening portion at the mounting portion, spindle portion, stopper, bolts and nuts. If there is abnormality, stop using the caster and then replace the caster with a new one.
- If you find any abnormality, please contact a dealer quickly.
- If there is breakage or rattling on a bracket, please stop using the caster and contact us.
- Do not disassemble any parts other than the wheel portion.

[Recommended timing of inspection and replacement]

- (1) Every year after purchase date
- (2) Every 1,200km of traveling distance after beginning of use

However, if significant amount of foreign substances are attached, loading balance is bad, loading is made at high center of gravity, or casters are used under severe condition, such as climbing a hill or road having many curves, we recommend performing the periodic inspection at a timing earlier than above timings.

7. Storage method

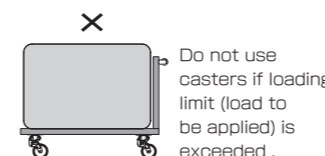
Please store casters in doors within the operating temperature limit.

- Do not leave or store casters at a place exposed to water or rain, or at humid place.
- Do not leave or store casters at a place exposed to direct sunlight or radiant heat from a heater, etc.

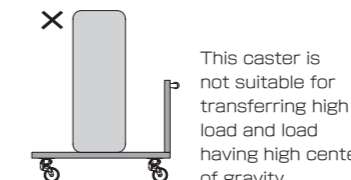
* This product may be changed for improvement without any prior notice.



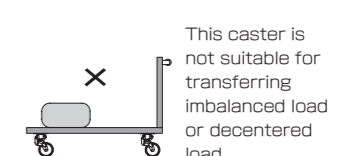
If a caster is wrongly mounted, hazardous situation that may cause a slight injury, middle-level injury, or physical damage may occur.



Do not use casters if loading limit (load to be applied) is exceeded.



This caster is not suitable for transferring high load and load having high center of gravity.

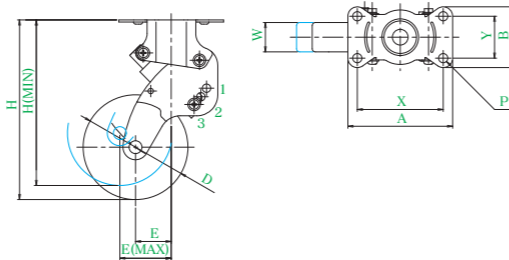
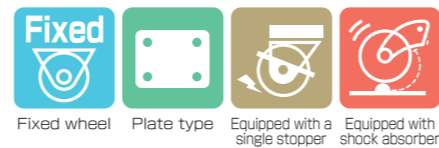
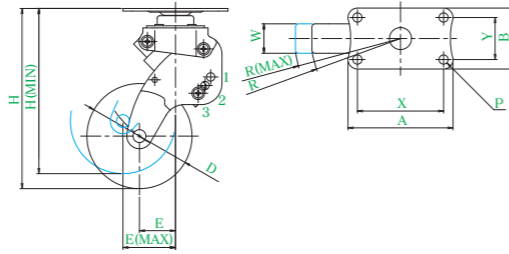
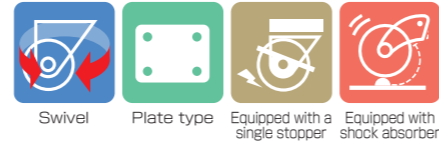


This caster is not suitable for transferring imbalanced load or decentered load.

SKY-S_{TYPE}



SKY-S100SUE-1



SKY-R_{TYPE}



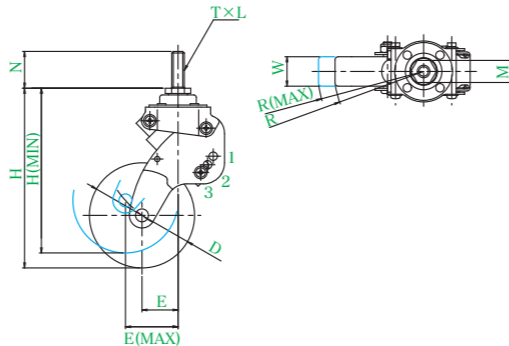
SKY-R100SUE-2



SKY-T_{TYPE}



SKY-T100SUE-3, M16×40



Wheel in use Refer to P165 for detailed specifications.



SUE
Urethane (including B) wheel with antistatic nylon wheel

Bracket = Stainless steel

Product number	Wheels	Wheel diameter	Wheel width	Mounting base	Mounting dimensions	Hole diameter	Turning radius		Mounting height	Eccentricity	Standard load	Wheel weight	
		D (mm)	W (mm)	A × B (mm)	X × Y (mm)	P (mm)	Equipped with stopper	Stopper wheel	H (mm)	E (mm)	daN (kgf)	Equipped with stopper	Stopper wheel
SKY-S100	SUE	100	28	100 × 58	82 × 40	8.8	110 to 112	84 to 107	171 to 148	34 to 57	10(10.2)		
							110 to 113	84 to 103	171 to 154	34 to 53	20(20.4)		
							110 to 113	84 to 100	171 to 158	34 to 50	30(30.6)		
SKY-S125	SUE	125	32	100 × 58	82 × 40	8.8	116 to 129	104 to 129	193 to 167	41 to 66	10(10.2)		
							116 to 124	104 to 124	193 to 173	41 to 61	20(20.4)		
							116 to 121	104 to 121	193 to 177	41 to 58	30(30.6)		

- All casters have types equipped with a stopper. (This is a caster used for only locking rotation of the wheel.)
- For turning radius, mounting height and eccentricity, values indicate when the YUEI damper with the maximum stroke instead of when the standard load is applied.

Bracket = Stainless steel

Product number	Wheels	Wheel diameter	Wheel width	Mounting base	Mounting dimensions	Hole diameter	Mounting height	Eccentricity	Standard load	Wheel weight	
		D(mm)	W(mm)	A × B(mm)	X × Y(mm)	P(mm)	H(mm)	E(mm)	daN(kgf)	Equipped with stopper	Stopper wheel
SKY-R100	SUE	100	28	100 × 58	82 × 40	8.8	171 to 148	34 to 57	10(10.2)		
							171 to 154	34 to 52	20(20.4)		
							171 to 158	34 to 49	30(30.6)		
SKY-R125	SUE	125	32	100 × 58	82 × 40	8.8	193 to 167	41 to 66	10(10.2)		
							193 to 173	41 to 61	20(20.4)		
							193 to 177	41 to 58	30(30.6)		

- All casters have types equipped with a stopper. (This is a caster used for only locking rotation of the wheel.)
- For turning radius, mounting height and eccentricity, values indicate when the YUEI damper with the maximum stroke instead of when the standard load is applied.

Bracket = Stainless steel

Product number	Wheels	Wheel diameter	Wheel width	Screw type	Pitch	Opposite side	Turning radius		Mounting height	Eccentricity	Standard load	Wheel weight	
		D (mm)	W (mm)	T (Nominal x length)	L (mm)	M (mm)	Equipped with stopper	Stopper wheel	H (mm)	E (mm)	daN (kgf)	Equipped with stopper	Stopper wheel
SKY-T100	SUE	100	28	M12 × 35	1.75	21	110 to 112	84 to 107	171 to 148	34 to 59	10(10.2)		
				M16 × 40	2	23	110 to 113	84 to 103	171 to 154	34 to 53	20(20.4)		
							110 to 113	84 to 103	171 to 157	34 to 50	30(30.6)		
SKY-T125	SUE	125	32	M12 × 35	1.75	21	116 to 129	104 to 129	192 to 166	41 to 66	10(10.2)		
				M16 × 40	2	23	116 to 124	104 to 124	192 to 173	41 to 61	20(20.4)		
							116 to 121	104 to 121	192 to 177	41 to 58	30(30.6)		

- All casters have types equipped with a stopper. (This is a caster used for only locking rotation of the wheel.)
- For turning radius, mounting height and eccentricity, values indicate when the YUEI damper with the maximum stroke instead of when the standard load is applied.
- Allowable load is the standard load when the stem is screwed in to the end.
- ★ Refer to P7 for the mounting method.

● Description of product number

SKY * - * SUE * - * *

Equipped with shock absorber Caster indicating SKY	Bracket type S: Swivel plate type R: Fixed plate type T: Swivel screw-in type	Wheel diameter 100: 100mm 125: 125mm	Wheel type SUE: Urethane wheel with antistatic nylon wheel assembly (including B)	Availability of a stopper S: Equipped with stopper No symbol: No stopper	Standard load 1: 10daN 2: 20daN 3: 30daN	Screw type
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● The standard load display on casters with shock absorber does not indicate allowable load. This display shows the load in which shock absorbing effect is high.

● Mounting height and eccentricity vary depending on expansion and contraction of YUEI damper.