

PORTEE series

NPG MODEL

swivel (double bearing) mounting plate style

NPR MODEL

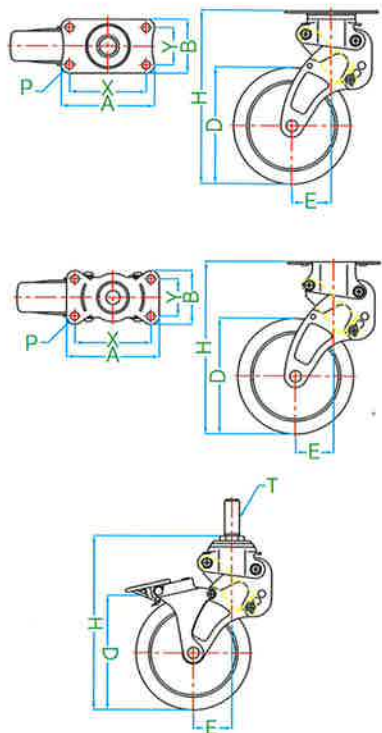
fixed bearing mounting plate style

NPT MODEL

swivel (double bearing) mounting plate style



NPG-125SUE-1 NPT-125SUES-2, M16 x 40 NPR-125SUE-3



Netal fastening = Stainless steel
※ (B) shows that a bearing is contained into a wheel.

NPG&NPR MODEL SPEC

MODEL NO.	WHEEL TYPE	WHEEL DIA D (mm)	RIM WIDTH (mm)	TOP PLATE SIZE AxB (mm)	BOLT HOLE SPACING XXX (X'Y')(mm)	HOLE DIA P (mm)	CENTER		CASTER HEIGHT H (mm)	REVOLUTION RADIUS (mm)	LOAD CAP		WEIGHT (g)	
							with stopper	without stopper			(daN)	(kgf)	with stopper	without stopper
NPG-100 NPR-100	SUE -1 -2 -3	100	28	100x58	82x40	8.8	111~115	85~110	165~140	35~59	10	10.2	NPG model 935	NPG model 860
							111~115	85~105	165~147	35~54	20	20.4	NPR model 795	NPR model 720
							111~115	85~102	165~150	35~51	30	30.6		
NPG-125 NPR-125	SUE -1 -2 -3	125	32	100x58	82x40	8.8	117~131	105~131	186~159	42~68	10	10.2	NPG model 1065	NPG model 920
							117~126	105~126	186~166	42~63	20	20.4	NPR model 905	NPR model 760
							117~123	105~123	186~170	42~59	30	30.6		

• All models will be available with stoppers • NPR models'offset is 1mm less
• The swivel radius, overall height, and offset values are measured during damper's maximum stroke, not during load capacity

Netal fastening = Stainless steel
※ (B) shows that a bearing is contained into a wheel.

NPT MODEL SPEC

MODEL NO.	WHEEL TYPE	WHEEL DIA D (mm)	RIM WIDTH (mm)	TOP PLATE SIZE AxB (mm)	BOLT HOLE SPACING XXX (X'Y')(mm)	HOLE DIA P (mm)	CENTER		CASTER HEIGHT H (mm)	REVOLUTION RADIUS (mm)	LOAD CAP		WEIGHT (g)	
							with stopper	without stopper			(daN)	(kgf)	with stopper	without stopper
NPT-100	SUE -1 -2 -3	100	28	M12x35 M16x40	1.75 2	21 23	111~115	85~110	169~144	35~59	10	10.2	M12x35 940	M12x35 885
							111~115	85~105	169~151	35~54	20	20.4	M16x40 970	M16x40 895
							111~115	85~102	169~154	35~51	30	30.6		
NPT-125	SUE -1 -2 -3	125	32	M12x35 M16x40	1.75 2	21 23	117~131	105~131	190~163	42~68	10	10.2	M12x35 1050	M12x35 905
							117~126	105~126	190~170	42~63	20	20.4	M16x40 1060	M16x40 935
							117~123	105~123	190~174	42~59	30	30.6		

• All models will be available with stoppers • The swivel radius, overall height, and offset values are measured during damper's maximum stroke, not during load capacity

Product symbol meanings



- G: swivel mounting plate style
- R: fixed bearing mounting plate style
- T: swivel double bearing screw mount style
- 100 : 100mm
- 125 : 125mm
- SUE: anti-static urethane (B) wheel
- S: has stopper
- No symbol: does NOT have stopper
- 1 : 10daN
- 2 : 20daN
- 3 : 30daN
- "Standard load" of shock-absorbing casters does not indicate the admissible load; it indicates the load which provides the most effective shock absorption.
- Overall height and offset values will change due to expanding/contracting of shock absorber

PORTEE series

Standard load selection chart

(figures in this table were calculated based on use of 4 casters)

type	total load	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)
NP*-*-1 standard load 10daN (10.2kgf)		optimal load										
NP*-*-2 standard load 20daN (20.4kgf)			optimal load									
NP*-*-3 standard load 30daN (30.6kgf)				optimal load								

Usage note

1. Precautions for selection of casters

- When selecting "standard load" of caster, ensure that the total weight to be carried (i.e. cart + cargo) is within the optimal load range
- When using 4 casters:

$$\text{Optimal load} = \text{standard load} \times 4 (\text{casters}) \times \text{Safety rating} (0.5-1.0)$$

- In case of extreme usage conditions (e.g. cargo load is unbalanced, center of gravity is high, etc.), consider a corresponding safety rating, or use casters with a higher standard load value (i.e. white area of optimal load range arrow)

2. Precautions for use

- Do not exceed load limit (optimal load) or standard load per caster
- Cart may tip over. Load cargo so that weight is distributed evenly over each caster.
- Do not push in a direction that opposes the direction of fixed casters (e.g. backwards, sideways, etc.); it could cause damage.
- Do not push with the stopper activated, or leave on inclined ground.
- Avoid collisions or damaging impact from a fall.

3. Speed when using

- To be used intermittently by human power. Not to be pulled or towed by motor power. Walking speed within 4 km/h

4. Environment appropriate for use

- Cart may tip over. Do not begin pushing suddenly.
- To be used in room temperature environments. Avoid abnormal temperatures, chemical materials, extreme oil, water, salt, etc.
- Temperature appropriate for use: 10°C ~ 30°C

5. Precautions for assembly

- In the case of swivel casters, ensure the kingpin is perpendicular.
- In the case of fixed casters, ensure the casters are parallel to each other. Do not attach the casters in a direction which opposes the intended running direction.
- Tighten mounting screws by first confirming size and appropriate amount of torque and then

using the appropriate sized hexagon wrench.

6. Periodic inspection, maintenance, replacement

- To prevent accidents and facilitate long usage, inspect, maintain, and replace casters periodically.
- Before use, confirm the damper is not leaking oil (by feeling with your hand, or using a mirror and looking). If abnormal, replace immediately.
- After use, blow air to remove any foreign substances (dust, etc.) stuck to the damper.
- Ensure that the horn, wheel axle, and stopper are attached and have not come loose. If abnormal, reattach or replace.
- If the wheel, fastening, etc., has broken or worn down, replace as necessary.
- If you notice any malfunctions, please contact your dealer immediately.
- [Recommended inspection, period of use before considering replacement]
- Inspect casters when whichever event below comes first. If there are any abnormalities, (e.g. is the wheel or metal fastening broken or worn down? is oil leaking? etc.), replacement is recommended.

1. one year after purchase

2. pushed 200 km since start of use

3. crossed uneven surface level (3mm or less) 200,000 times since start of use

This is an approximate guide to length of period of use before inspection is recommended. However, if standard load exceeds 30daN, optimal load exceeds 103daN, or speed exceeds 3km/h often, or abnormal objects are often attached, inspection or consideration of replacement is recommended at a correspondingly earlier time.

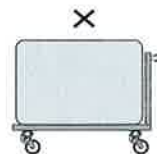
7. Storage method

- Store indoors, at a temperature within the range appropriate for use
- Do not leave or store in a place where casters will contact rain or water, or in damp places.
- Do not leave or store in a place where casters will receive heat from direct sunlight, stoves, etc.
- If left for a long time in temperatures below -10°C, oil may leak. Pay attention to storage methods in cold places.

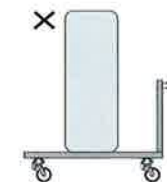
* Due to product improvement, specifications are subject to change without prior notice.



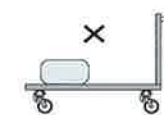
Improper usage may result in injury or moderate physical damage



Do not exceed load capacity limit (optimal load)

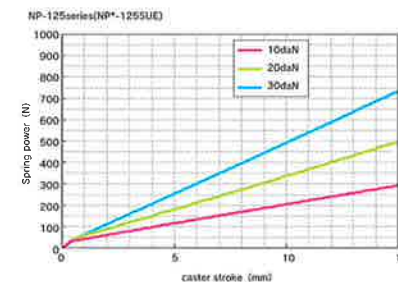
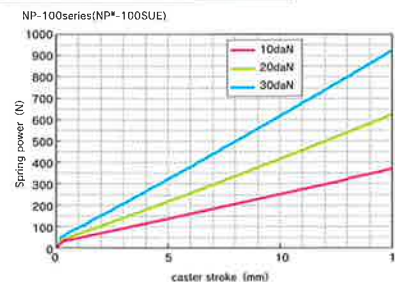


Not to be used to carry tall objects with a high center of gravity



Not to be used to carry objects that are unevenly placed, or with an unbalanced center of gravity

Spring power features



Comparison of vibration acceleration

