

Instructions for Choice and Use of Castors.

Type		CAFF				CAF5				CAF8				CAG1								
																						
Material	Wheel Covering	Urethane(Thermoplastic) Shore D55				Urethane(Thermosetting) Shore A95				Polyamide				Thermoplastic elastomer(anti-trace) Shore A85								
	Wheel Body	Polyamide				Die-cast aluminum								Polypropylene								
	Bearing	Steel (Tube)				Steel (Tube) Steel (Ball bearing)				Steel (Tube)				Steel (Tube)								
Dimension	Bracket	Steel or stainless steel		Steel		Steel				Steel	Steel or stainless steel		Steel	Steel								
	Wheel Dia. (φ mm)	80	100	125	150	80	100	125	150	200	65	80	100	125	150	80	100	125	150			
	Overall Height (mm)	107	128	156	188	194	107	128	156	161	200	250	100	107	128	156	188	194	107	128	156	188
Type	Fixed	 (Available)																				
	Swivel Bracket																					
	Swivel Bracket with Brake																					
	Swivel Bracket with Through Hole																					
	Swivel Bracket with Through Hole and Brake																					
	Swivel Bracket with Stud																					
Swivel Bracket with Stud and Brake	-				-				-				-									
Technical Information	Allowable Carrying Load (N)	1,200	1,700	2,200	3,000	2,000	2,200	3,500	6,000	7,500	1,200	1,800	2,000	2,200	3,000	700	1,000	1,200	1,800			
	Operational Load (N) *	1,200	1,700	2,300	2,800	1,500	2,250	2,800	3,300	3,600	900	1,500	1,750	2,000	2,500	700	1,000	1,200	1,800			
	Floor Type	Tile	Recommended				Recommended				Recommended				Recommended							
		Asphalt																				
		Cement / Resin																				
		Unpaved																				
	Expanded Metal	Tolerated				Tolerated				Not recommended				Not recommended								
With Chips, Obstacles, etc.	Not recommended				Not recommended																	
Aggressive Chemicals **)	Tolerated				Tolerated				Recommended				Recommended									
Recommended Working Temperature(℃) **)	-20 or higher to under 40				-20 or higher to under 40				-20 or higher to under 40				0 or higher to under 40									
Recommended Working Speed(km/h) **)	0 or higher to under 4				0 or higher to under 4				0 or higher to under 4				0 or higher to under 4									
Features :		• Suitable for use in environments where alcohols, glycols, weak organic acids, mineral acids, water or saturated vapor are present. • Excellent smoothness and elasticity • Good wear resistance				• Suitable for use in environments where alcohols or glycols is present. • It is not recommended to use these castors in environments where organic acids, mineral acids, basic solvents or saturated vapor are present. • Excellent smoothness and elasticity • High wear resistance				• Suitable for use in humid environments where aggressive chemicals are present. • It is not recommended to use these castors in environments where strong organic acids or concentrated minerals are present. • Excellent wear resistance				• Suitable for use in humid environments where aggressive chemicals are present. • It is not recommended to use these castors in environments where organic acids, chlorinated solvents, hydrocarbons or mineral oils. • Excellent smoothness and elasticity								

Manual Traction (using 4 castors)

Determine a wheel diameter based on the values calculated by the following formulas.

When $(Pu+Pc)/m \leq Q$, the wheel diameter corresponding to "Q" is one of the options.

When $(Pu+Pc)/4 \leq S$, the wheel diameter corresponding to "S" is one of the options.

When both of these options are identical, this option is the proper wheel diameter.

※ For other cases, see Instructions for Choice and Use of Castors (2)

Q : Allowable Carrying Load (N)

S : Operational Load (N)

Pu : Weight of carried object (N)

Pc : Weight of transport equipment (N)

m : No. of castors in contact with the floor

For transport of solids, $m = 3$ (3 castors are always in contact with the floor)

For transport of liquids, $m = 2$ (2 castors are alternately in contact with the floor)

Type		CAE2							CAE3							CAC7		
																		
Dimension	Material	Nitrile rubber Shore A83							Nitrile rubber (NBR) Shore A83							Vulcanized rubber (anti-trace)		
	Wheel Covering	Polypropylene							Steel							Polyamide		
	Wheel Body	Steel (Tube)							Steel (Tube) Polyamide(dry bearing)							Steel (Tube)		
	Bearing	Steel							Steel							Steel		
Type	Bracket																	
	Wheel Dia. (φ mm)	80	100	125	150	180	200		80	100	125	150	200			50	60	80
Technical Information	Overall Height (mm)	107	128	156	182	214	219	236	240	107	128	156	182	236	240	67	83	104
	Fixed																	
	Swivel Bracket																	
	Swivel Bracket with Brake																	
	Swivel Bracket with Through Hole																	
	Swivel Bracket with Through Hole and Brake																	
	Swivel Bracket with Stud																	
Technical Information	Swivel Bracket with Stud and Brake																	
	Allowable Carrying Load (N)	650	800	1,100	1,300	1,800	2,250		650	800	1,300	1,700	2,300			350	500	550
	Operational Load (N) *	500	750	850	1,000	1,300	1,400		600	750	850	1,000	1,400					
	Tile																	
	Asphalt																	
	Cement / Resin																	
	Unpaved																	
	Expanded Metal																	
	With Chips, Obstacles, etc.																	
	Aggressive Chemicals **)																	
	Recommended Working Temperature(℃) ***)																	
	Recommended Working Speed(km/h) ***)																	
Features :		· Suitable for use in humid environments. · May be mounted on different types of trolleys for light-to-medium loads.							· It is not recommended to use these castors in environments where organic acids, chlorinated solvents, hydrocarbons, or mineral oils.							· Use for general purposes. · Smallest type in size		

*) Max. load for one castor to support under the conditions below

- No. of castors used : 4
- Tractional force = 50N (200N/4 castors)
- *200N is regarded as the max. load that may be towed by the operator for long hours.
- Speed = constant speed lower than 4km/h

**) Aggressive chemicals are weak acids, strong acids, weak alkalis, strong alkalis, chlorinated aromatic solvents, hydrocarbons and alcohol.

***) Use beyond these ranges can be accepted but the allowable carrying load and the operational load will be reduced. For details, see Instructions for Choice and Use of Castors (2)

Installation

- Install properly to avoid the mounting screw from loosening.
- Ensure that there is no clearance between the bracket plate and the transport equipment.
- Ensure that the load is applied perpendicularly.
- For the swivel type, ensure that the mounting axis is perpendicular.
- For the fixed type, ensure that all castors used are parallel to each other in the traveling direction.
- For the Through Hole type, installation after removing the wheel increase operating efficiency.

Brake

- Do not apply the brake during travel.
- Do not run castors with the brake applied or leave them on the slope.

Maintenance

Have a periodic check on the following items and repair or change castors as needed.

- Crack or loose on the wheel axis, bracket, etc.
- Damage or wear on the wheel, brake, etc.