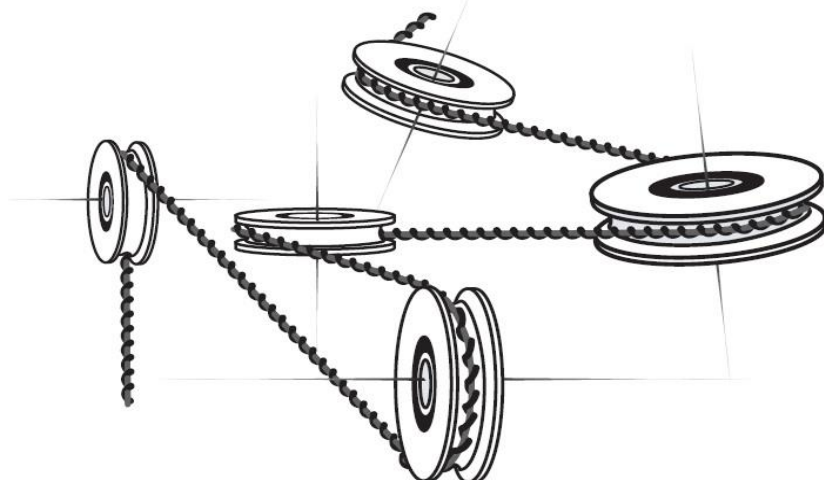


Synchronous Round Belt



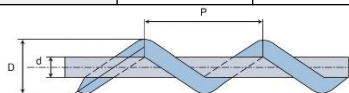
Actual Product image



Synchronous round belt (Product name: Synchromesh wire rope) incorporates two core technology - coating and wire twisting. Its round design allows the wire rope to draw in 3-dimensional, makes it easy to design a linear-motion system instead of Belt drive or Rack and pinion, especially in limited space application. The helical construction contributes to excellent low noise operation works with the exclusive

Specifications

Model		AWS40	AWS60	AWS80	AWS100	AWS120	
O.D.	(D: see the figure below)	1.10	1.60	2.20	2.80	3.40	(mm)
Tangential Force	Max.	17.7	27.5	51.0	72.6	101.0	(N)
	Avg.	3.9	9.8	17.7	25.5	36.3	
	number to inter-meshed teeth	10	8	8	7	7	
Min. bend radius		4.3	7.0	7.0	9.0	11.5	(mm)
Min. pulley diameter		12.3	18.0	18.0	23.0	28.0	(mm)
Pitch	(P: see below)	2.03	2.82 - 3.05	3.53 - 3.81	4.23 - 5.08	6.35	(mm)
Core diameter	(d: see below)	0.45	0.60	0.80	1.00	1.20	(mm)
Breaking load		107.3	169.0	329.2	529.4	782.9	(N)



Applications

Home appliance, Office Printer, Automotive

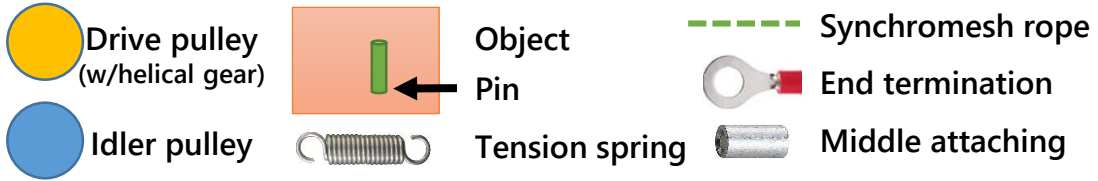
Actual example

Air conditioner with self cleaning function

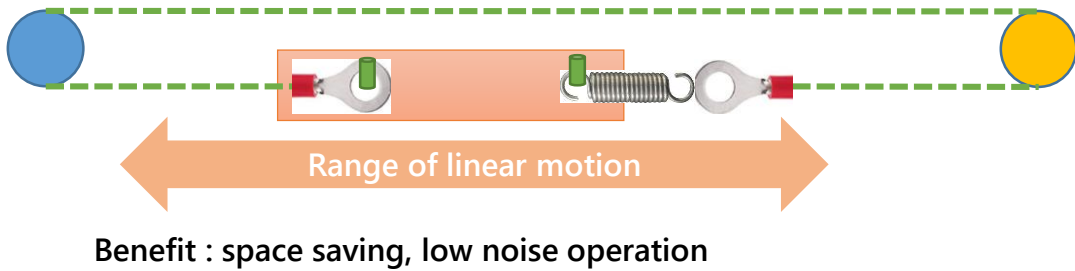


Example of linear motion system

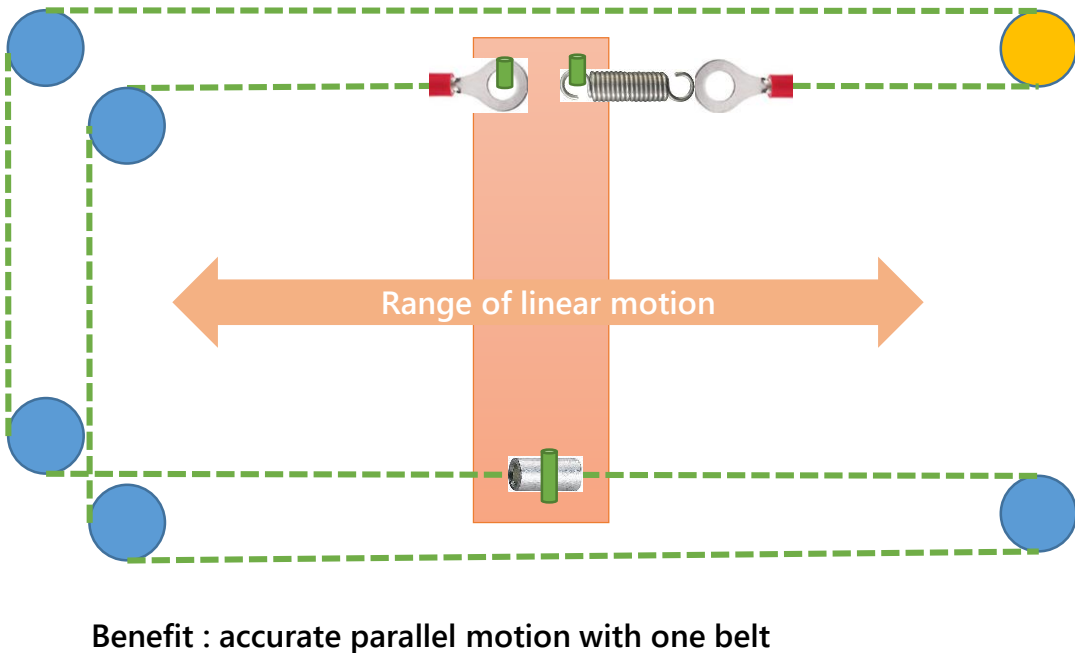
Components need for motion system



Case 1 : simple linear motion

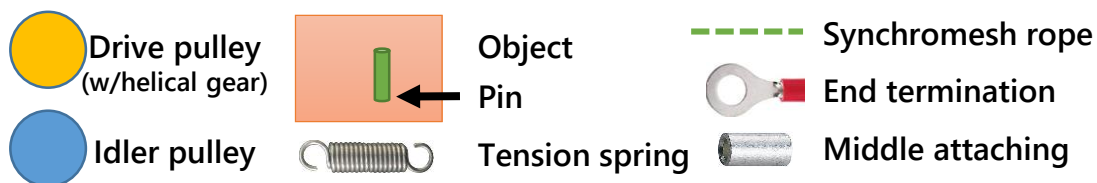


Case 2 : parallel linear motion

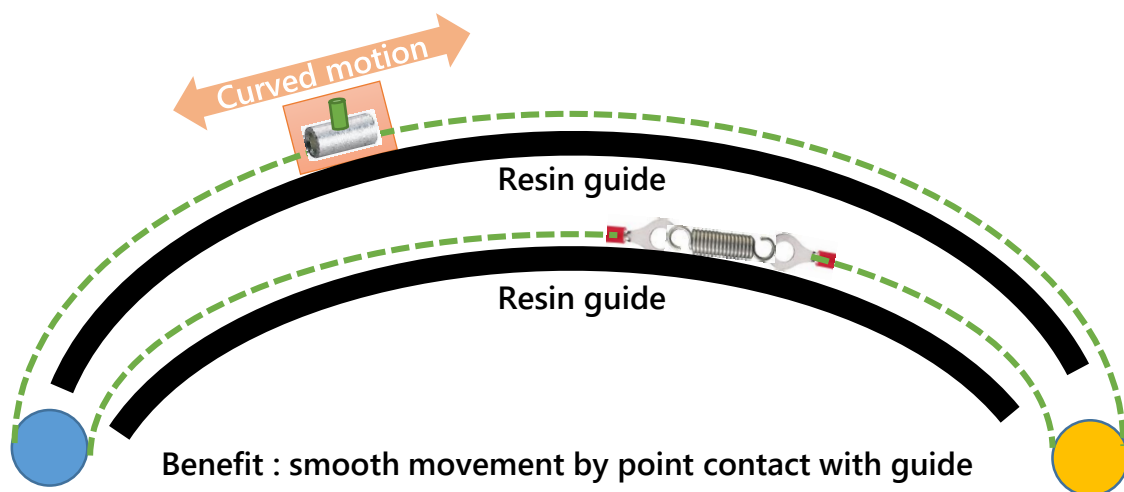


Example of linear motion system

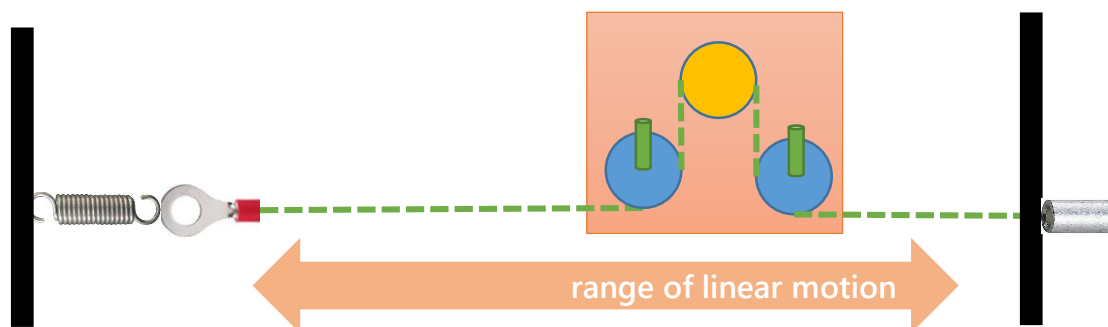
Components need for motion system



Case 3 : Curved motion



Case 4 : Linear motion between fixed point



FAQ

Q1 : Endless rope available?

A : No. Synchmesh rope is for linear motion only, not for rotational motion.

Q2 : Can we use a general pulley?

A : Yes, for idler pulley. But special one needs for drive pulley.

Q3 : How to make specific synchmesh rope?

A : Provided with specific length and end terminated, designed for your application.

Q4 : Durability of wire rope?

A : In case of Avg. tangential force, it will be around up to 25k times of reciprocation.

End termination

Eyelets, threaded screws, or balls may be crimped, laser welded, soldered, pressed, caulked, or swaged onto the ends of stainless steel cables to optimize mechanical performance and comply with space requirements. Asahi Intecc engineers carefully review both initial tension and initial cable elongation, and wire rope elongation after bending several cycles as well as the break load to help clients select the correct terminal and stainless cable configuration.

Eye end



Mainly used in connection to a pin or a screw.

Wire rope stake eyes can be bent to any specified angle.



Caulking is possible without removing the coating, even with coated wire rope.

Loop end



Mainly used in connection to a pin.

Used for many applications as loop can be sized to suit specific need.



*With a thimble

Used in cables with loops when wear is a concern. Provides wear resistance, greater strength and keeps shape of loop open.

Ball end



Ball can be swaged on in either the end or the middle of an assembly. Mainly used in connection to a slit.

Threaded Studs end



Used in application which need to make fine adjustment to the length.

Flat end



Flat can be swaged on in the middle of an assembly. Mainly used for intermediate attaching.

Stop end



Stop can be swaged on in either the end or the middle of an assembly. Mainly used in application which permit rotation.