
NEW MECHANISM

ACCUMULATION ROLLER

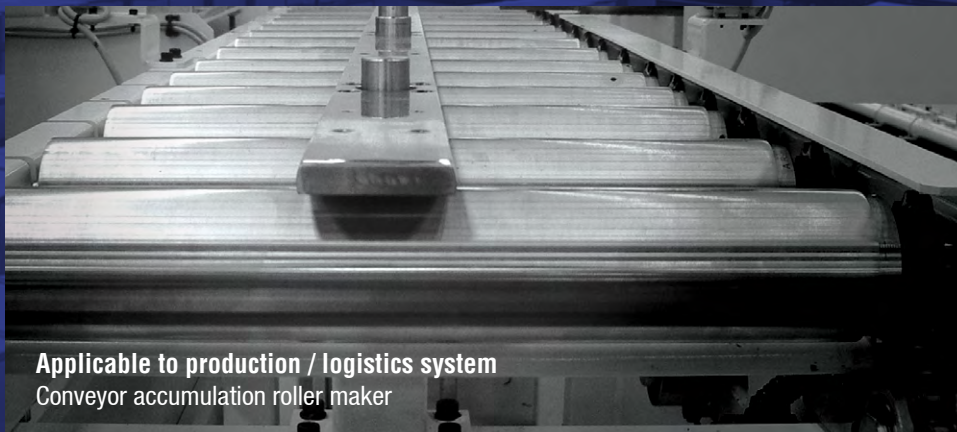


ARIM ROLL MECHA

Advanced Technology

ARIM ROLL MECHA

Leading the new paradigm of production / logistics systems!
Trusted company with high quality products



Applicable to production / logistics system
Conveyor accumulation roller maker



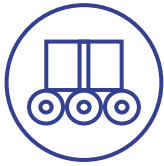
Designing machine
Special purpose machine tools /
Automation machine



Promotes R&D activities to generate customer value

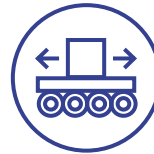
With advanced technology, excellent quality, **Arim Roll Mech** with Performance

01 Scratch and Damage Prevention of Products



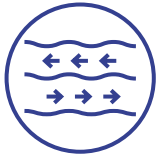
When the items start to accumulate on the Arim's roller, the roller tube will stop itself without any external control. This operation protects items from scratches and damage, safely move the variety of loads being handled.

02 Simple Accumulation Control



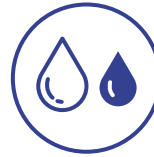
The accumulation is controlled by friction between unit load and roller itself. It is possible to design accumulation roller conveyor without complicated electronic or mechanical controls.

03 Driving Force by Linear Friction



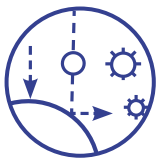
The roller driving force is controlled by compressed spring force and linear friction.

04 Constant Torque



The roller keeps constant-drive-torque even in water or oil. And it easy to handle with large drive torque.

05 Self Protection



The torque control unit is a compact built-in type. It designed to deflect the contaminates away from roller. It guaranteed operation under tough conditions.

06 Korea Patented



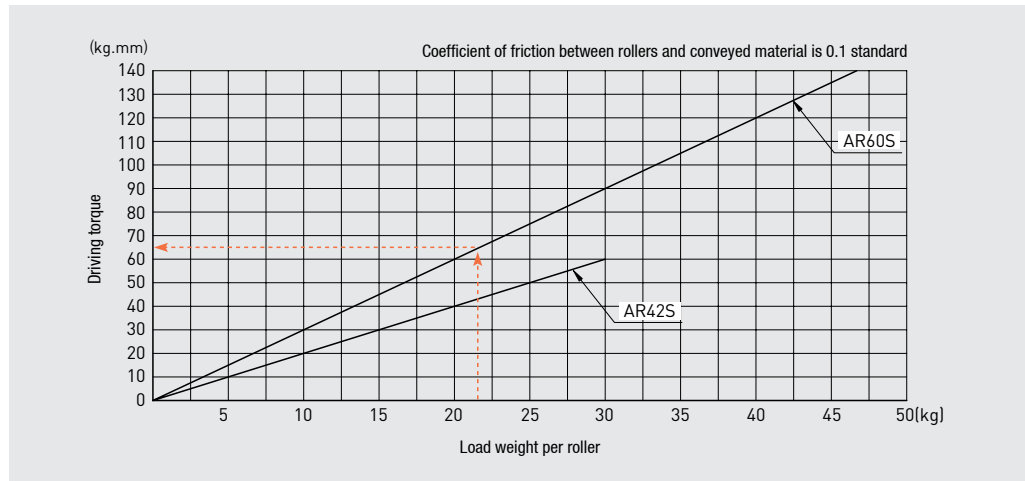
Arim accumulation roller and control system are Korean patented.



AR42S1,2 / AR60S1,2



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Roller Thickness (mm)
AR42S1,2	2~60	1~15	4
AR60S1,2	15~140	5~35	4.7

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

Weight (kg)

Type	Roller length(mm)												
	150	200	250	300	350	400	450	500	600	700	800	900	1000
AR42S1	2.8	3	3.3	3.6	3.9	4.2	4.4	4.7					
AR42S2	1.4	1.6	1.9	2.2	2.5	2.7	3	3.3					
AR60S1	3.9	4.4	4.9	5.4	5.9	6.4	6.9	7.4	8.5	9.5	10.5	11.5	12.5
AR60S2	2.4	2.9	3.4	3.9	4.4	4.9	5.4	5.9	7	8	9	10	11

Order example

AR42S1 - 200 - 30 - SC
① ② ③ ④

① Type

AR42S1 AR42S2
AR60S1 AR60S2

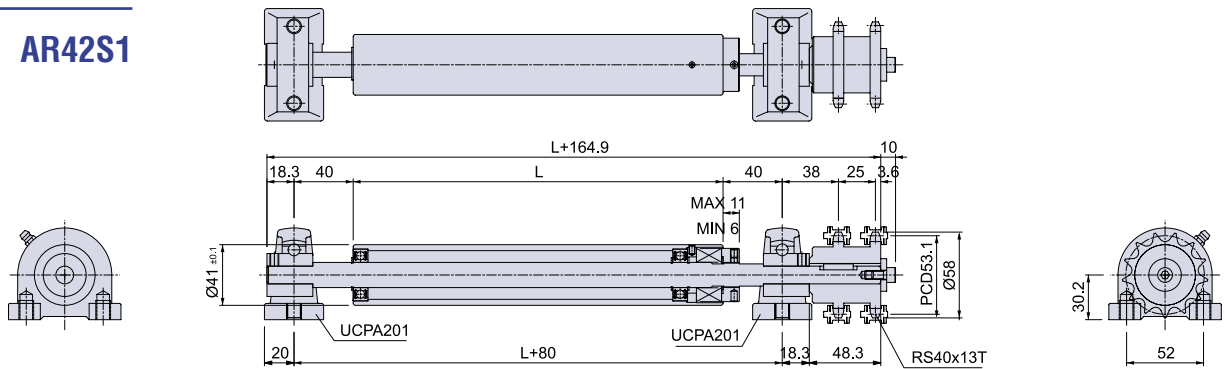
② Roller length(mm)

③ Driving torque (kg.mm)

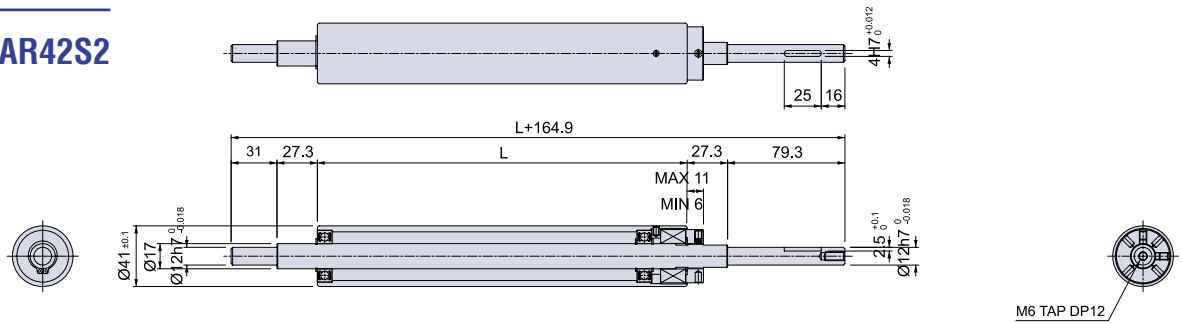
④ Roller material

No symbol : SGP pipe. Grinding. Hard chrome plating.
SC : S45C equivalent. High frequency (HRC35~40), Grinding, Hard chrome plating
SU : Stainless steel pipe. Grinding

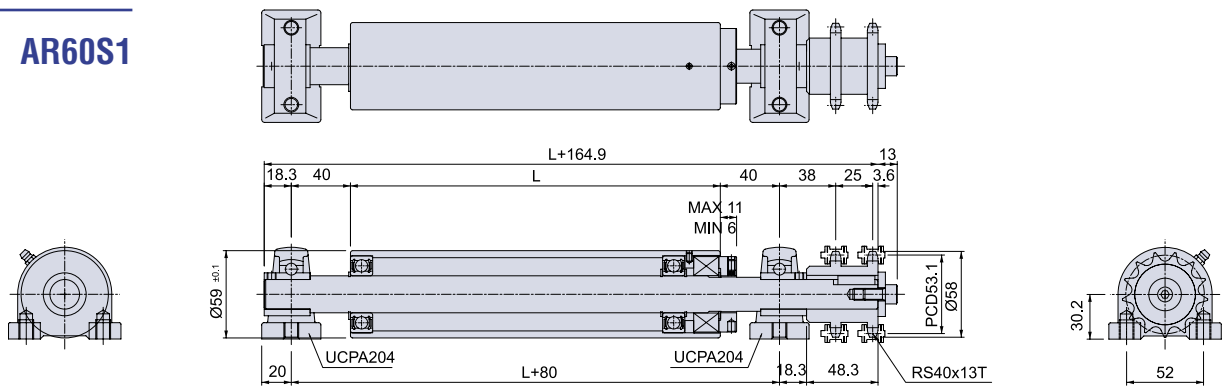
AR42S1



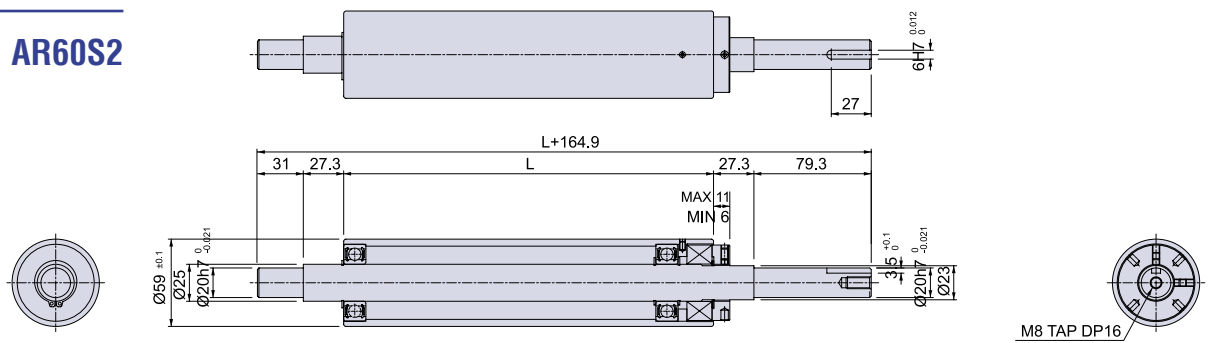
AR42S2



AR60S1



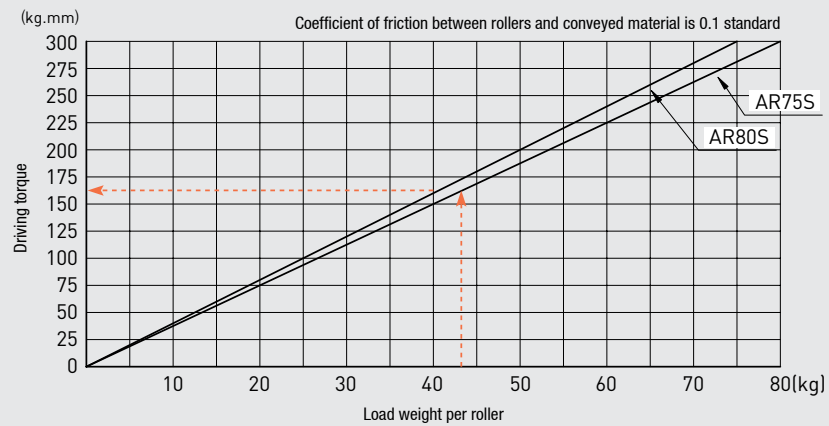
AR60S2



AR75S1,2 / AR80S1,2



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Roller Thickness (mm)
AR75S1,2	20~270	5~60	8.8
AR80S1,2	20~300	5~60	14.7

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

Weight (kg)

Type	Roller length(mm)												
	150	200	250	300	350	400	450	500	600	700	800	900	1000
AR75S1	7.4	8.4	9.4	10.4	11.4	12.4	13.4	14.4	16.4	18.4	20.4	22.4	24.4
AR72S2	5.8	6.8	7.9	8.8	9.8	10.8	11.8	12.8	14.8	16.8	18.8	20.8	22.8
AR80S1	9.5	11	12.6	14.1	15.7	17.3	18.8	20.4	23.5	26.7	29.8	32.9	36
AR80S2	7.9	9.4	11	12.5	14.1	15.7	17.2	18.8	21.9	25.1	28.2	31.3	34.4

Order example

AR75S1 - 300 - 150 - SC
① ② ③ ④

① Type

AR75S1 AR75S2
AR80S1 AR80S2

② Roller length(mm)

③ Driving torque (kg.mm)

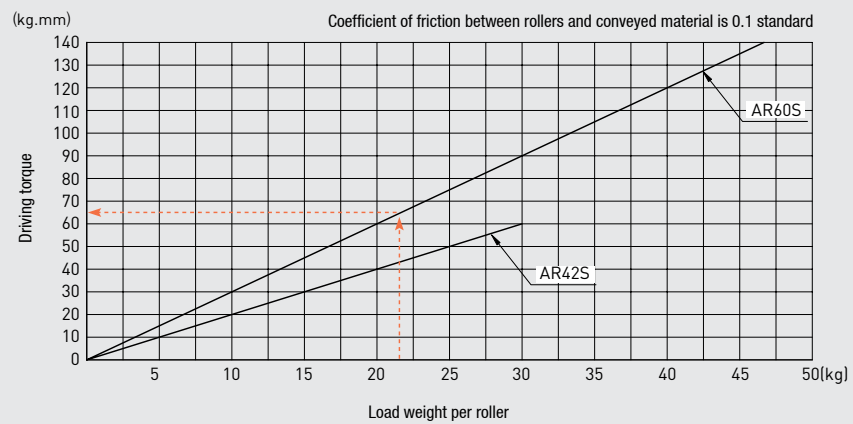
④ Roller material

No symbol : SGP pipe. Grinding. Hard chrome plating.
SC : S45C equivalent. High frequency (HRC35~40), Grinding. Hard chrome plating
SU : Stainless steel pipe. Grinding

AR42S3 / AR60S3



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Roller Thickness (mm)
AR42S3	2~60	1~15	4
AR60S3	15~140	5~35	4.7

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

Weight (kg)

Type	Roller length(mm)													
	150	200	250	300	350	400	450	500	600	700	800	900	1000	
AR42S3	1.2	1.5	1.7	1.9	2.2	2.4	2.6	2.8						
AR60S3	2.4	2.8	3.3	3.7	4.2	4.6	5	5.5	6.4	7.2	8.1	9	9.9	

Order example

AR42S3 - 200 - 30 - SC
① ② ③ ④

① Type

AR42S3
AR60S3

② Roller length(mm)

③ Driving torque (kg.mm)

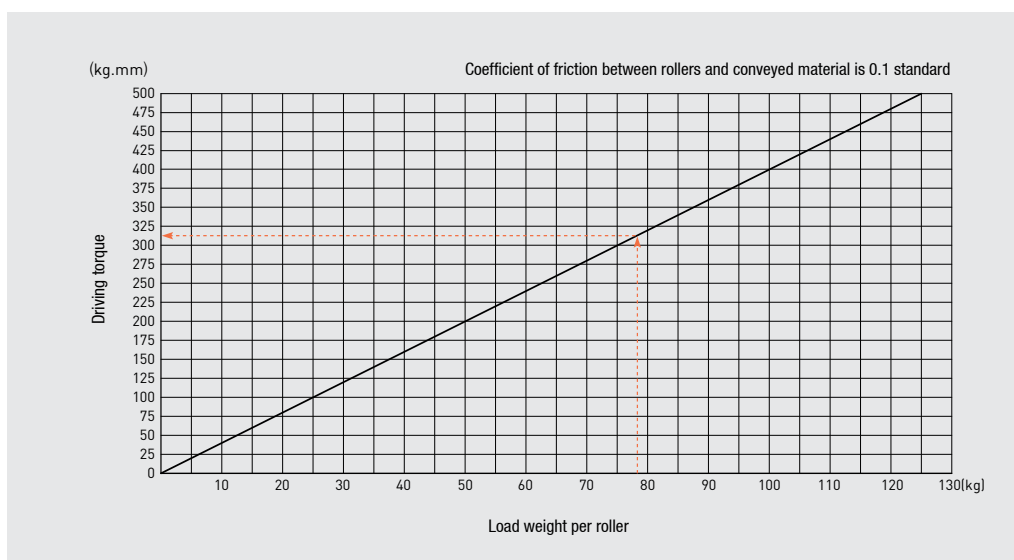
④ Roller material

No symbol : SGP pipe. Grinding. Hard chrome plating.
SC : S45C equivalent. High frequency (HRC35~40), Grinding, Hard chrome plating
SU : Stainless steel pipe. Grinding

AR80S4,5,6



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Roller Thickness (mm)	Weight (Kg)
AR80S4	40~500	10~100	6	2.1
AR80S5	40~500	10~100	6	1.7
AR80S6	40~500	10~100	6	2

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

Order example

AR80S4 - 200 - SC
① ② ③

① Type

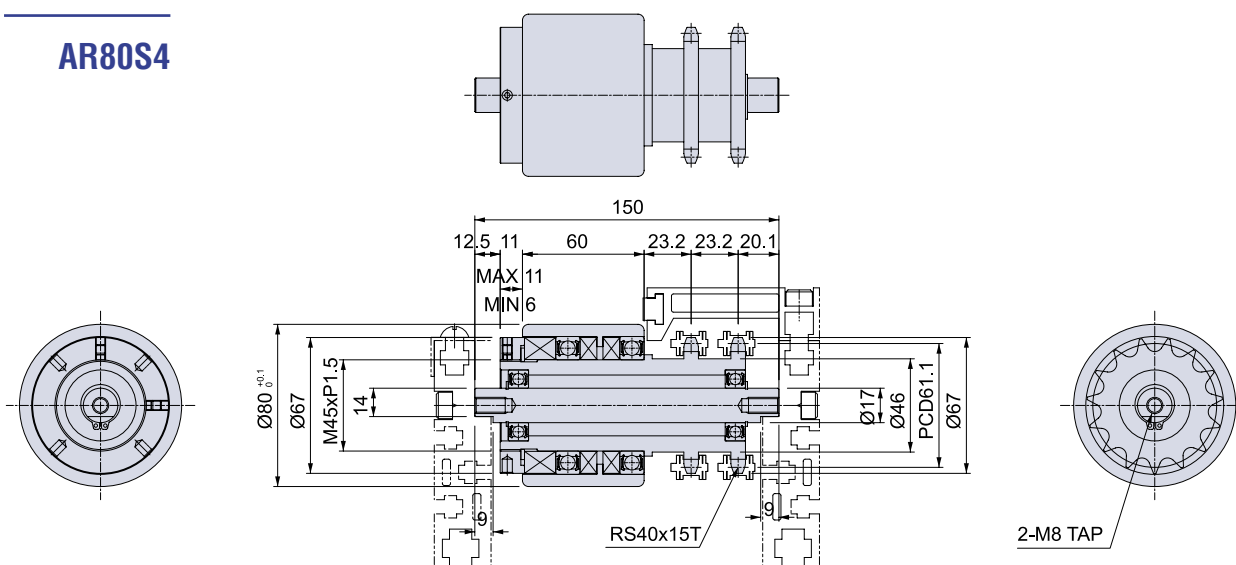
AR80S4 AR80S5
AR80S6

② Driving torque (kg.mm)

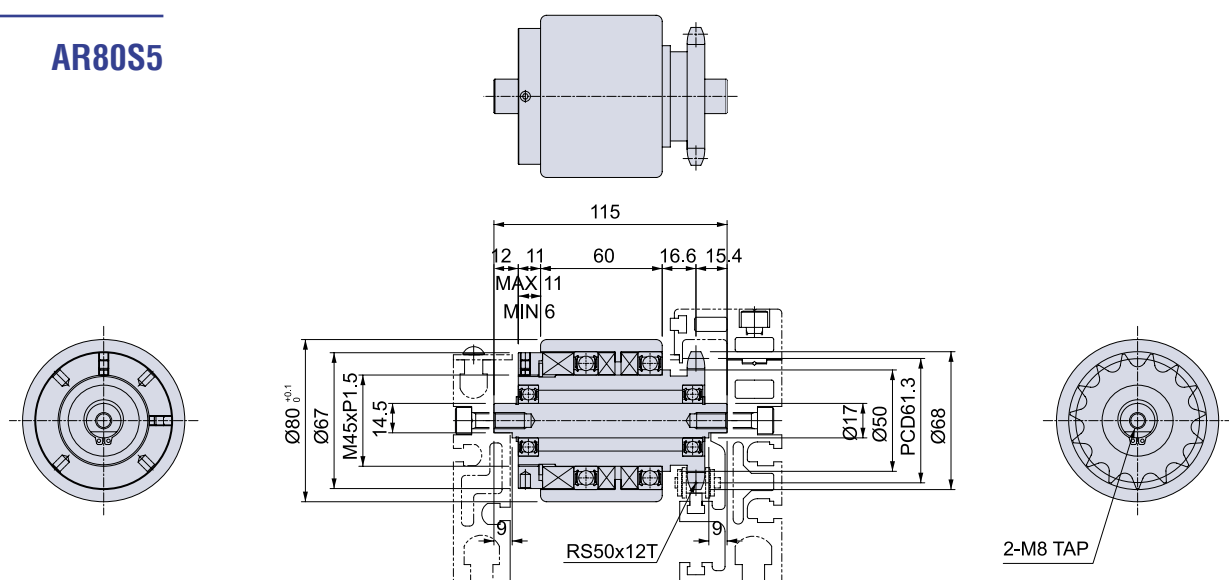
③ Roller material

No symbol : S45C. Grinding. Hard chrome plating.
SC : S45C, High frequency (HRC45~50),
Grinding, Hard chrome plating
SU : Stainless steel pipe. Grinding

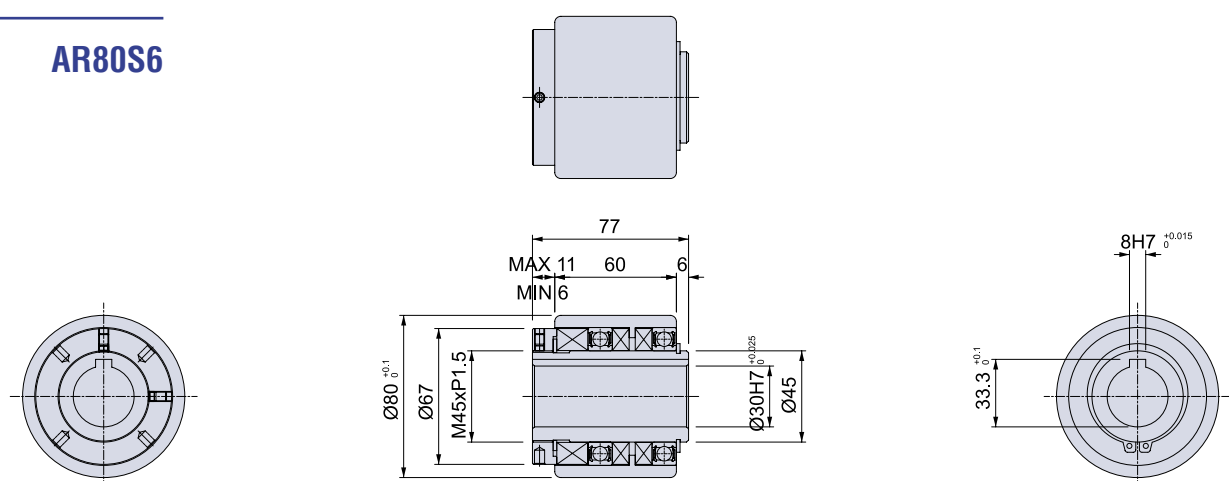
AR80S4



AR80S5



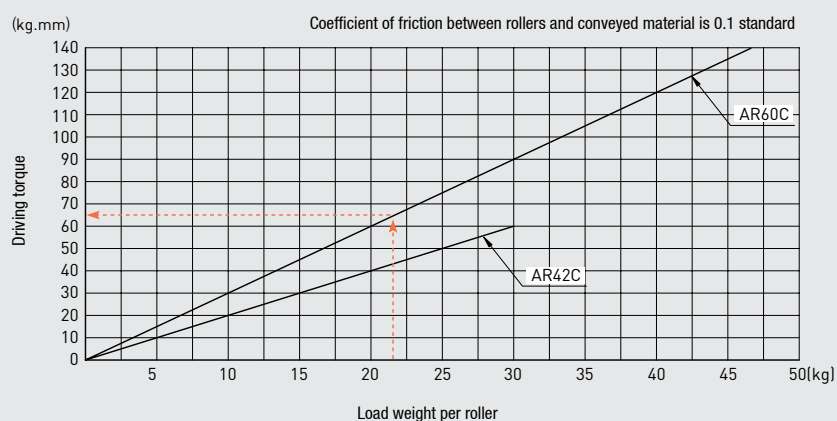
AR80S6



AR42C1,2 / AR60C1,2



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Roller Thickness (mm)
AR42C1,2	2~60	1~15	4
AR60C1,2	15~140	5~35	4.7

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

Weight (kg)

Type	Roller length(mm)								
	48	60	80	100	120	140	160	180	200
AR42C1	1.1	1.2	1.3	1.4	1.5	1.6			
AR42C2	0.7	0.8	0.9	1	1.1	1.2			
AR60C1		1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3
AR60C2		1.4	1.6	1.8	2	2.2	2.4	2.6	2.8

Order example

AR42C1 - 60 - 30 - SC
① ② ③ ④

① Type

AR42C1 AR42C2
AR60C1 AR60C2

② Roller length(mm)

③ Driving torque (kg.mm)

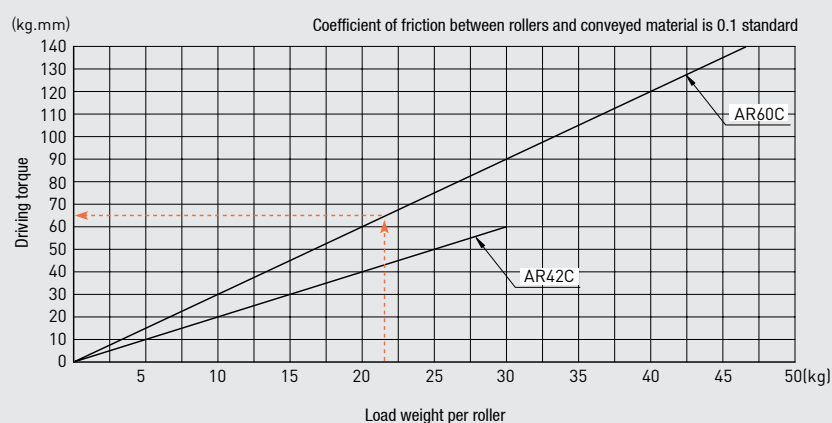
④ Roller material

No symbol : SGP pipe. Grinding. Hard chrome plating.
SC : S45C equivalent. High frequency (HRC35~40), Grinding, Hard chrome plating
SU : Stainless steel pipe. Grinding

AR42C3,4 / AR60C3,4



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Roller Thickness (mm)
AR42C3,4	2~60	1~15	4
AR60C3,4	15~140	5~35	4.7

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

Weight (kg)

Type	Roller length(mm)								
	48	60	80	100	120	140	160	180	200
AR42C3,4	0.8	0.9	1	1.1	1.2	1.3			
AR60C3,4		1.4	1.6	1.8	2	2.2	2.4	2.6	2.8

Order example

AR42C3 - 60 - 30 - SC
① ② ③ ④

① Type

AR42C3 AR42C4
AR60C3 AR60C4

② Roller length(mm)

③ Driving torque (kg.mm)

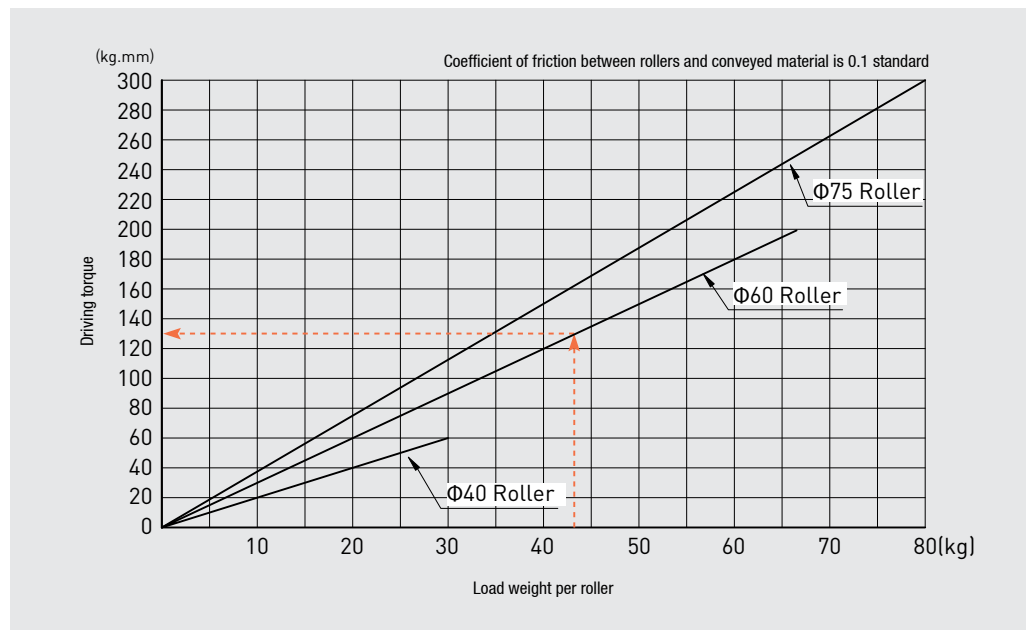
④ Roller material

No symbol : SGP pipe. Grinding. Hard chrome plating.
SC : S45C equivalent. High frequency (HRC35~40), Grinding, Hard chrome plating
SU : Stainless steel pipe. Grinding

AR42P1,2 / AR60P1,2



Driving torque



Specifications

Type	Torque setting range (kg.mm)	Recommended loading weight (kg)/1EA	Recommended roller dia. (mm)	Weight (kg)
AR42P1	10 ~ 60	5~15	φ40	0.7
AR42P2	15~100	5~25	φ60	1
AR60P1	15~200	5~50	φ60	1.4
AR60P2	20~300	5~60	φ75	1.4

Shaft	Nut		Sprocket				Spring		Part
Material	Material	Surface treatment	Material	Heat treatment	Hardness	Surface treatment	Material	Surface treatment	Material
S45C	S45C	Zinc plating	S45C	High-frequency	HRC 40~50	Black oxidizing	SWPA	Hard chrome plating	Steel

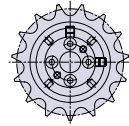
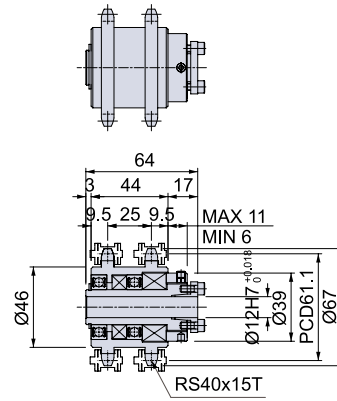
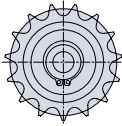
Order example

AR42P2 - 100
① ②

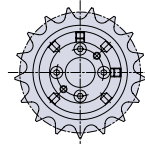
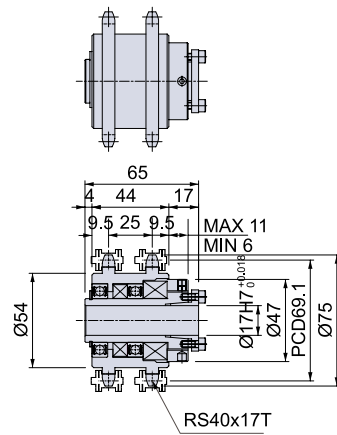
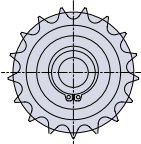
① Type
AR42P1 AR42P2
AR60P1 AR60P2

② Driving torque (kg.mm)

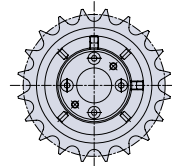
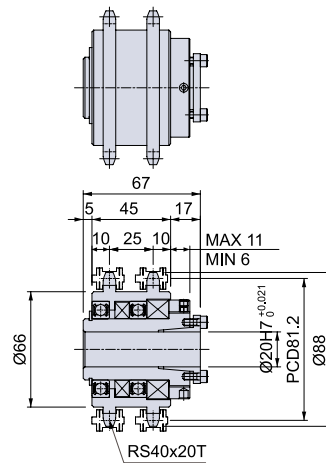
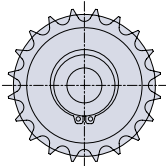
AR42P1



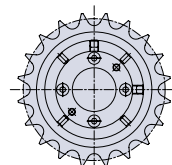
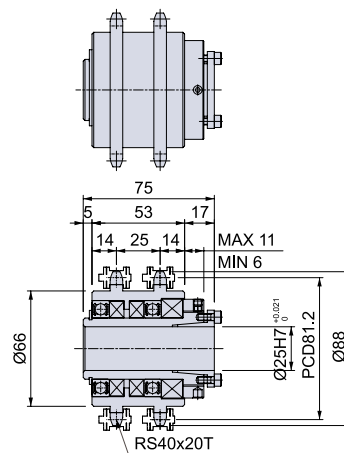
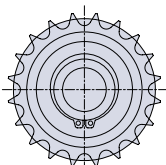
AR42P2



AR60P1

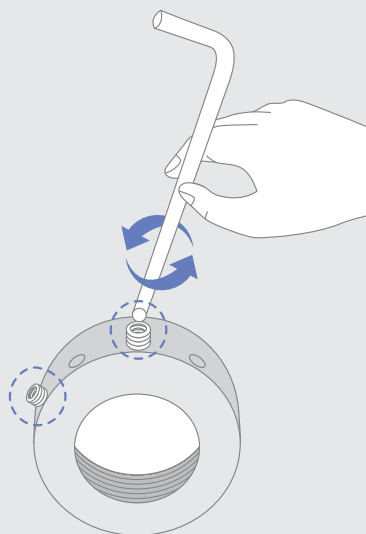


AR60P2



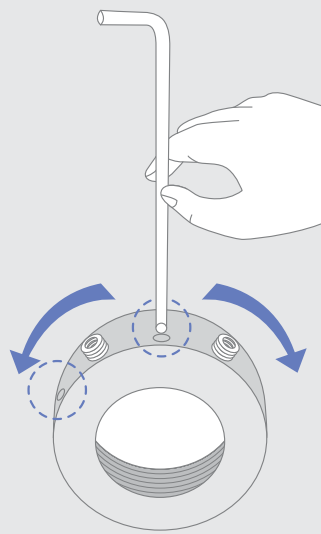
When adjusting drive torque

01



Using a tool, loosen the two set screws by turning them to the left

02



Adjust the torque by rotating the adjustment nut

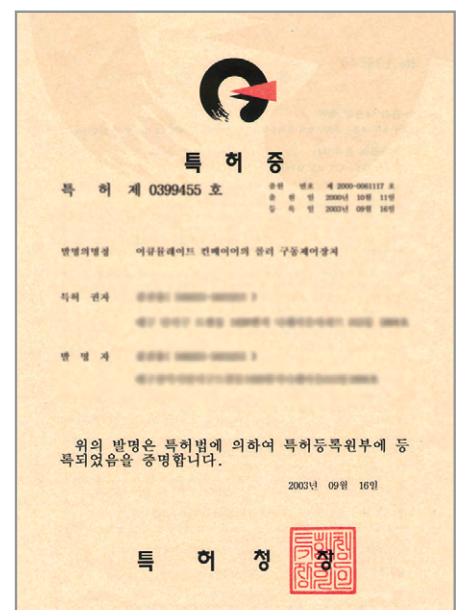
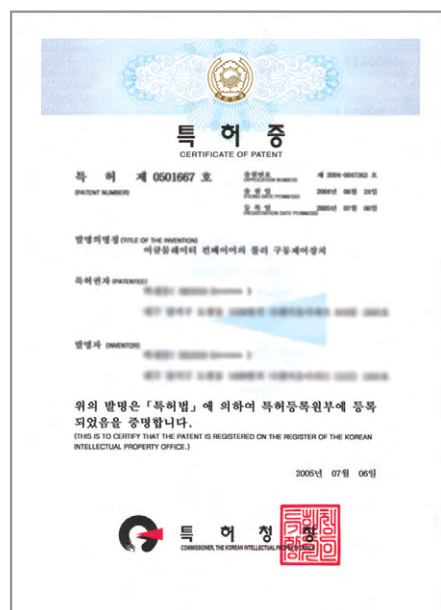
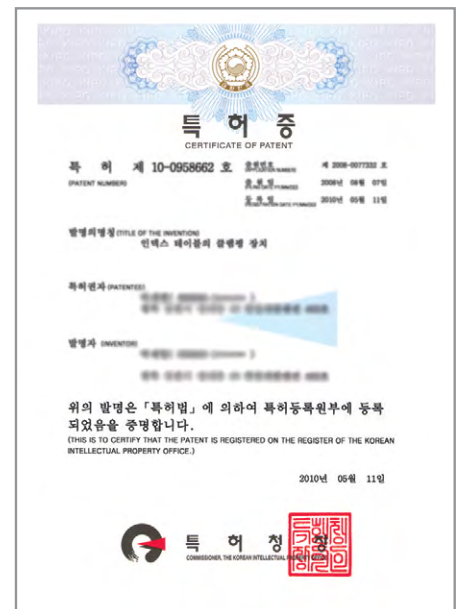
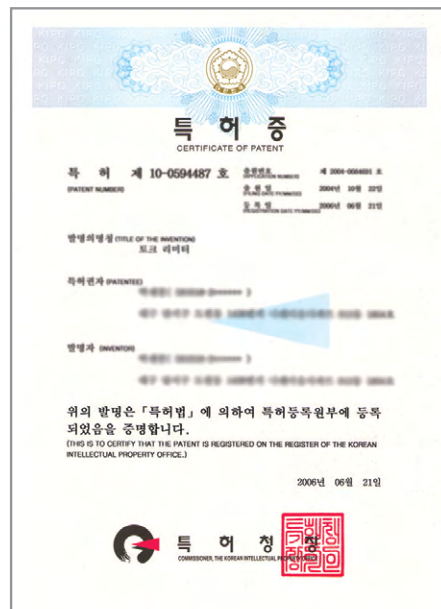
Caution After adjusting torque, tighten adjustment nut again by tightening two set screws

Torque Adjustment Tool

	T-Wrench		Hook Spanner (Pin type)										
Maker			ASAHI (Japan)						WALTER (Germany)				
Model NO.	3	4	FP 3438	FP 4042	FP 4548	FP 5255	FP 5865	FP 6570	4576	4586	4596	4606	4616
AR42C1~4/ AR42S1~3	◎		◎						◎				
AR42P1	◎		◎	◎						◎			
AR42P2		◎			◎						◎		
AR60C1~4/ AR60S1~3		◎			◎	◎					◎	◎	
AR60P1,2		◎				◎						◎	
AR75S1,2/ AR80S1,2		◎					◎						◎
AR80S4~6		◎						◎					◎

Patent Certificate

Arim Roll Mecha
have patented roller design
and technology.



Headquarters / Overseas Sales

Arim Roll Mecha

210, MJ Technopark 20, Dalseo-daero 109gil, Dalseo-gu,
Daegu, KOREA

Tel: +82-53-355-7111 Fax: +82-53-355-7112

Email : sales@arimroll.com <http://www.arimroll.com>

Japan Branch

TOWA ENGINEERING Co.ltd

231-1 Higsahi-aza, Houei-cho, Toyohashi-city
Aichi, JAPAN

Tel: +81-532-65-7005 Fax: +81-532-41-7555

Email: info@towaeng.com [http:// www.towaeng.com](http://www.towaeng.com)