

mijin system

Spring Balancer

TIGON





Mijin system is a manufacturer of industrial tools.
We are doing our best to meet our customers' expectation
with best price and perfect qualities Since 1976

TIGON BALANCER

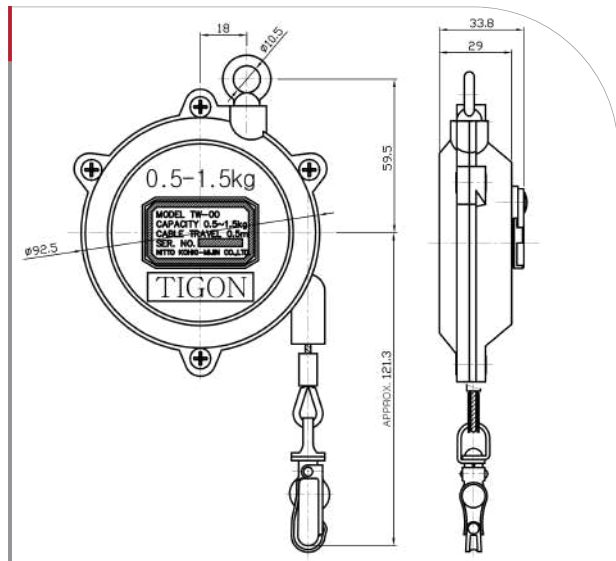
Featuring the Tool Balancer

Zero Gravity Spring Balancer

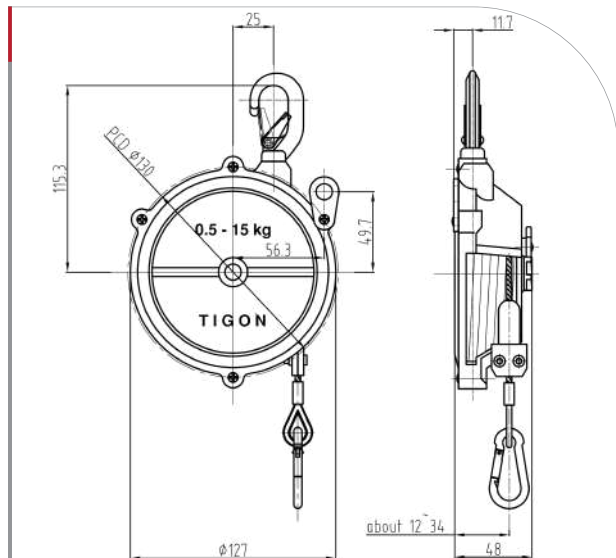
MIJIN SYSTEM Inc.'s TIGON Spring Balancers improve working efficiency and diminish worker fatigue and make the position of a tool stable and contribute to accurate work. So the balancers are available for keeping a tool not damaged. Any electric or pneumatic power is not required and safe working is achieved. TIGON Spring Balancer provides by the Company improves work safety and efficiency capacities ranging from 0.2 ~120 Kg (1.1~264lbs)



TW - 00



TW - 0



Light Weight
Suitable for the
light weight tool



Efficiency
Improve work
efficiency

• Specification

Clasify	TW - 00	TW - 0
Capacity (Kg / lb)	0.5~1.5 / 1.1~3.3	0.5~1.5 / 1.1~3.3
Stroke (m/ ft)	0.5 / 1.64	1 / 3.28
Wire diameter (mm)	2	3.18
Weight (Kg / lb)	0.2 / 0.44	0.5 / 1.1

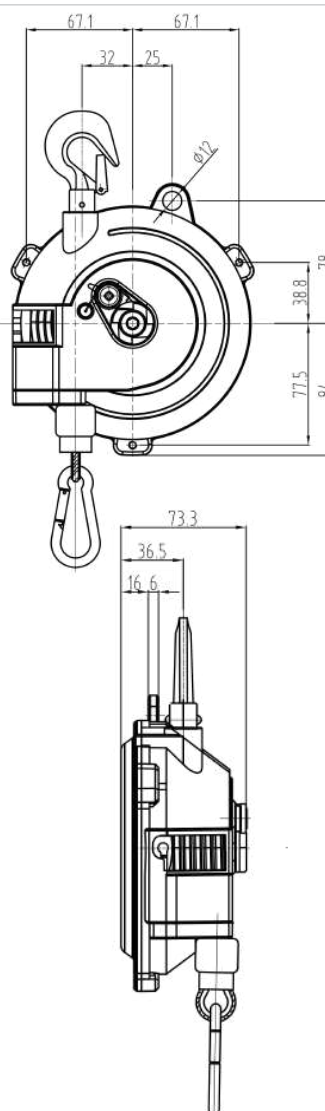
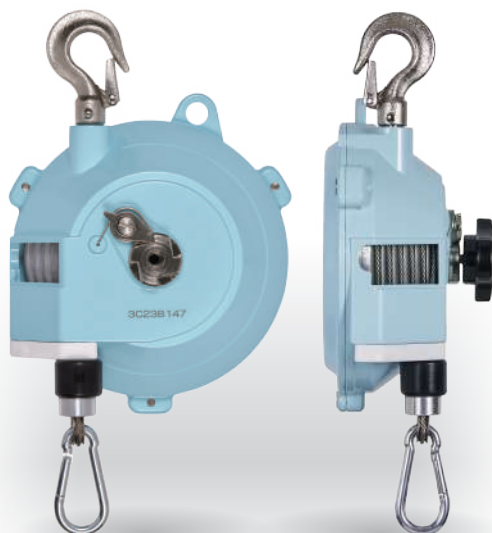


TIGON

Spring Balancer

TW-3C, 5C, 6.5C

TW - 3C



Safety
minimize the
open part



Working range
longer stroke for
working range



Easy to use
combined use for
Knob & L wrench



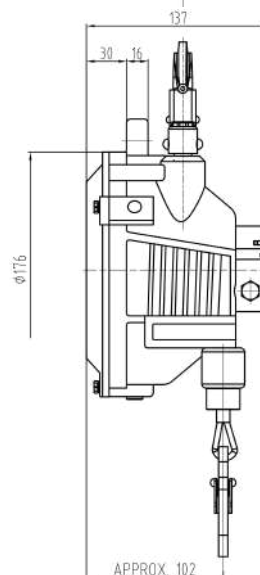
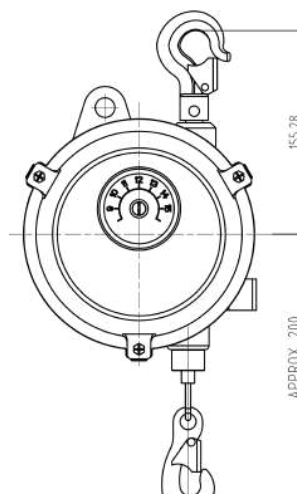
Durability
cable insert guide for case
& wire Stainless plating for
corrosion resistance

• Specification

Clasify	TW-3C	TW-5C	TW-6.5C
Capacity (Kg / lb)	1.0~3.0 / 2.2~6.6	2.5~5.0 / 5.5~11.0	4.0~6.5 / 8.8~14.3
Stroke (m/ ft)	1.7 (5.57ft)	1.7 (5.57ft)	1.7 (5.57ft)
Wire diameter (mm)	2.38	2.38	2.38
Weight (Kg / lb)	1.7 / 3.74	1.8 / 3.96	1.9 / 4.18



TW - 9



Popularity
Popular Middle
Weight



Safety
double safety feature
for workers safety

• Specification

Clasify	TW - 9	TW - 15
Capacity (Kg / lb)	4.5~9.0 / 9.92~19.84	9.0~15.0 / 19.84~33.06
Stroke (m/ ft)	1.3 / 4.27	1.3 / 4.27
Wire diameter (mm)	4	4
Weight (Kg / lb)	3.4 / 7.49	3.8 / 8.37

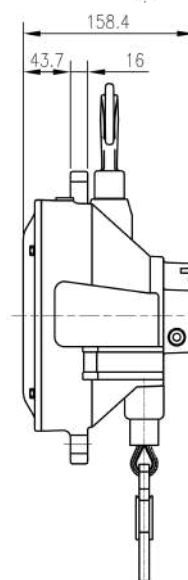
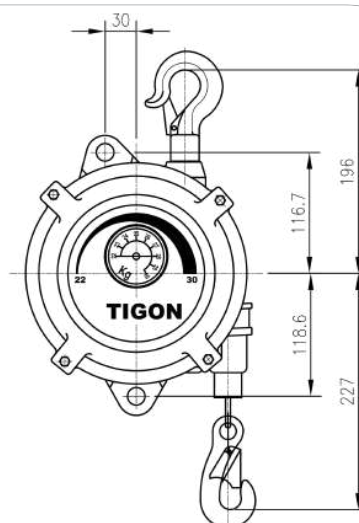


TIGON

Spring Balancer

TW-22 / TW - 30 / TWL-22 / TWL -30

TW - 22



Safety

double safety feature
for workers safety



Popularity

Popular Middle
Weight



Stroke Option

2 stroke types for
working environment

• Specification

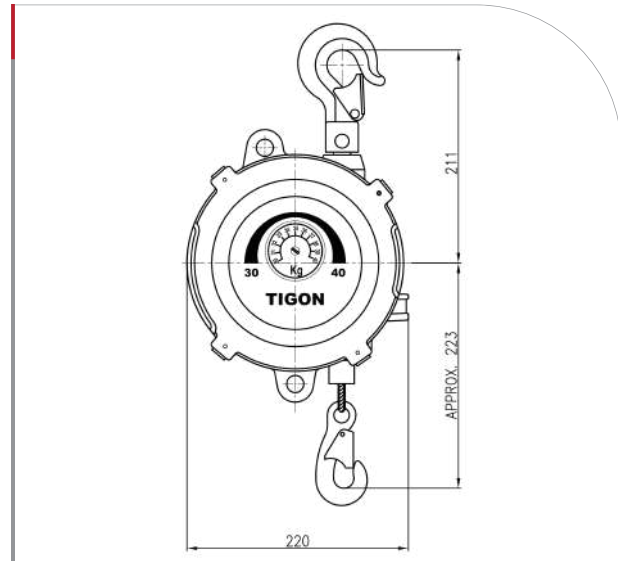
Clasify	TW-22 TWL-22	TW-30 TWL-30
Capacity (Kg / lb)	15~22.0 / 33.06~48.50	22.0~30.0 / 48.50~66.13
Stroke (m/ ft)	1.5 / 4.92	1.5 / 4.92
	2.1 / 6.89	2.1 / 6.89
Wire diameter (mm)	4.76	4.76
Weight (Kg / lb)	7.2 / 15.87	7.6 / 16.75

Spring Balancer

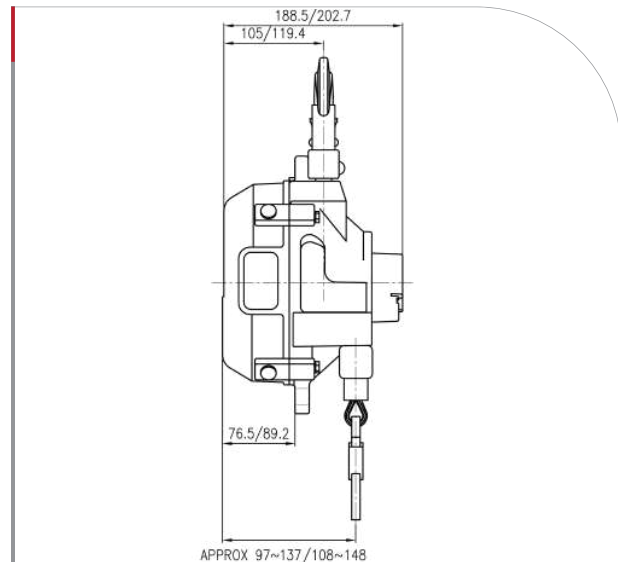
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TW-40/ 50, TW-60/70/80, TWL-40/50 / TWL-60/70/80

TW - 50



TW - 60



Safety
double safety feature
for workers safety



Popularity
Popular Middle
Weight



Stroke Option
2 stroke types for
working environment

• Specification

Clasify	TW-40 TWL-40	TW-50 TWL-50	TW-60 TWL-60	TW-70 TWL-70	TW-80 TWL-80
Capacity (Kg / lb)	30.0~40.0 / 66.13~88.18	40.0~50.0 / 88.18~110.23	50.0~60.0 / 110.23~132.27	60.0~70.0 / 132.27~154.32	70.0~80.0 / 154.32~176.37
Stroke (m/ ft)	1.5 / 4.92	1.5 / 4.92	1.5 / 4.92	1.5 / 4.92	1.5 / 4.92
	2.1 / 6.89	2.1 / 6.89	2.1 / 6.89	2.1 / 6.89	2.1 / 6.89
Wire diameter (mm)	4.76	4.76	4.76	4.76	4.76
Weight (Kg / lb)	9.8 / 21.60	10.4 / 22.92	11.6 / 25.57	11.8 / 26.01	12 / 26.45

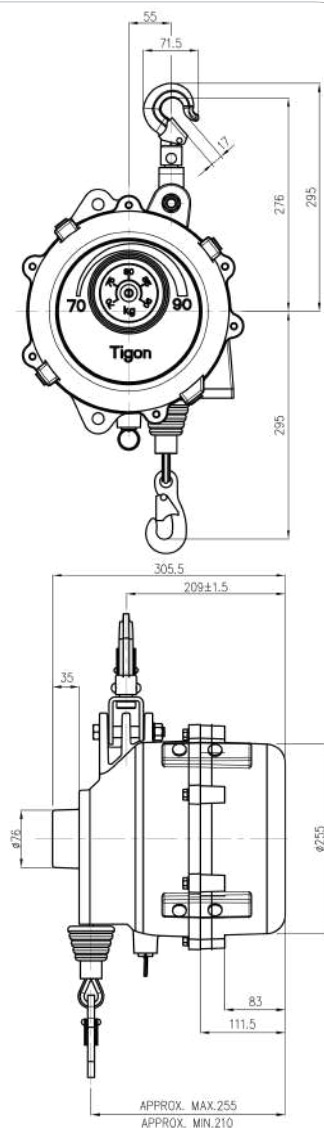


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Spring Balancer

TW-90/105/120

TW - 90



Heavy Weight

Suitable for the heavy weight tool



Efficiency

Improve work efficiency

• Specification

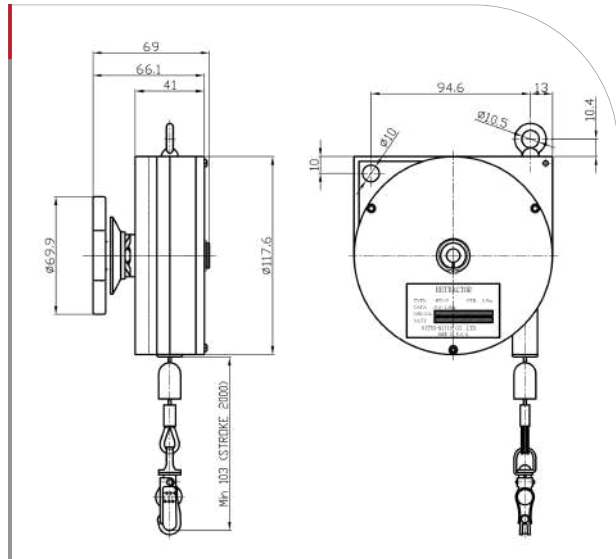
Clasify	TW-90	TW-105	TW-120
Capacity (Kg / lb)	70-90 / 158.73~198.41	85-105 / 187.39~231.48	100-120 / 220.46~264.55
Stroke (m/ ft)	2.1 / 6.89	2.1 / 6.89	2.1 / 6.89
Wire diameter (mm)	4.76	4.76	4.76
Weight (Kg / lb)	27 / 59.52	29 / 63.93	30 / 66.13

Retractor

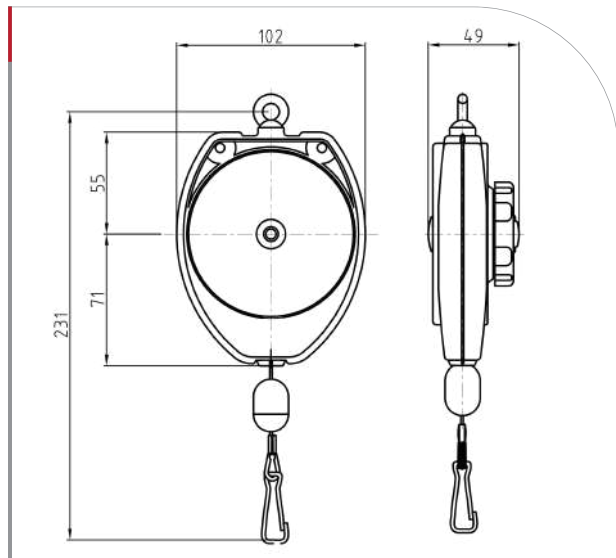
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RW-0/3/5 , TW-06R/1R/2R

RW - 0



TW - 06R/1R/2R



Light Weight
Suitable for the
light weight tool



Efficiency
Improve work
efficiency



Easy to use
Using Knob for
tension adjustment

• Specification

Clasify	RW-0	RW-3	RW-5	TW-06R	TW-1R	TW-2R
Capacity (Kg / lb)	0.5-1.5 / 1.10~3.30	1.0-3.0 / 2.20~6.60	2.5-5.0 / 5.51~11.02	0.2-0.6 / 0.44~1.32	0.5-1.5 / 1.10~3.30	1.0-2.0 / 2.20~4.40
Stroke (m/ ft)	2 / 6.56	2 / 6.56	2 / 6.56	1.5 / 4.92	1.5 / 4.92	1.5 / 4.92
Weight (Kg / lb)	0.5 / 1.10	0.7 / 1.54	0.9 / 1.98	0.3 / 0.66	0.3 / 0.66	0.3 / 0.66

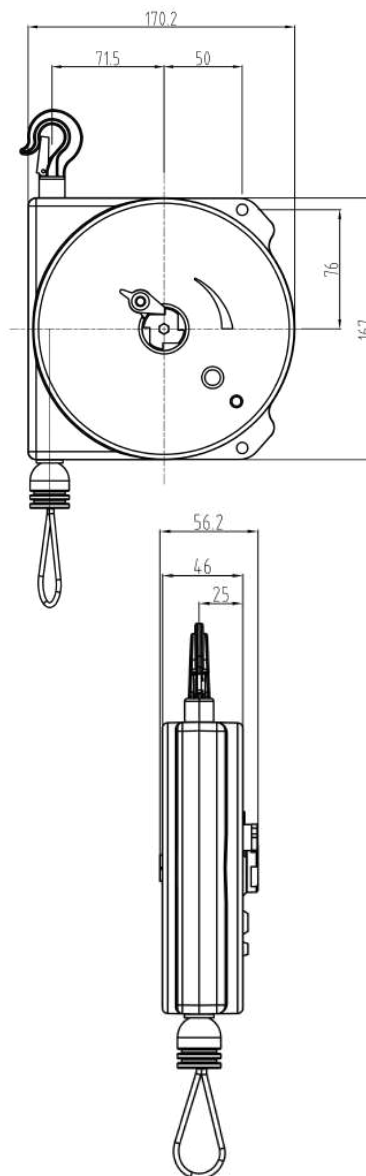


TIGON

Retractor(Torque reel)

TR series

TR - 3



Easy to use
Ratche stopper



Durability
Aluminum body and coated stainless wire



Working range
longer stroke for working range (5m)



Various Application
simple structure can be used in various ways



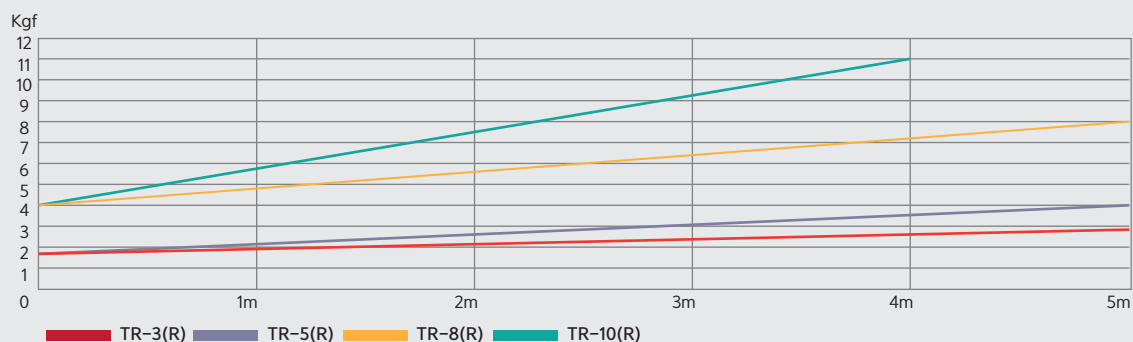
Torque Reel Specification

Model	Initial Force		Maximum Force		Cable length m	Ratchet
	Kgf	N	Kgf	N		
TR-3	1.8	17	2.8	27	5	N
TR-3R	1.8	17	2.8	27	5	Y
TR-4	1.8	17	4.0	39	5	N
TR-4R	1.8	17	4.0	39	5	Y
TR-8	4.0	39	8.0	78	5	N
TR-8R	4.0	39	8.0	78	5	Y
TR-10	4.0	39	11.0	108	4	N
TR-10R	4.0	39	11.0	108	4	Y

Retractor Specification

Model	Initial Force		Maximum Force		Cable length m	Ratchet
	Kgf	N	Kgf	N		
RW-7	4	39	7	68	5	N
RW-7R	4	39	7	68	5	Y
RW-10	7	68	10	98	5	N
RW-10R	7	68	10	98	5	Y
RW-12	10	98	12	118	4	N
RW-12R	10	98	12	118	4	Y

Stroke – Tension Graph



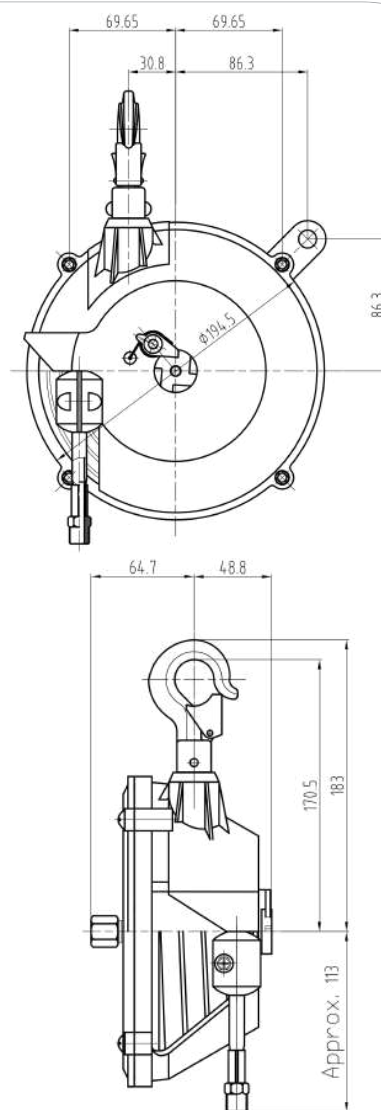


TIGON

Hose Reel Balancer

HW-0/3/5

HW - 0



Optimization
Optimized
for Air tools



Efficiency
Improve work
efficiency

• Specification

Clasify	HW-0	HW-3	HW-5
Capacity (Kg / lb)	0.5-1.5 / 1.10~3.30	1.5-3.0 / 3.30~6.60	3.0-5.0 / 6.60~11.02
Stroke (m/ ft)	1.3 / 4.26	1.3 / 4.26	1.3 / 4.26
Hose diameter (Ømm)	Ø6.5	Ø6.5	Ø6.5
Weight (Kg / lb)	1.6 / 3.52	1.7 / 3.74	1.8 / 3.96



Air Reel



• Specification

Hose Material : Poly-Urethane/ Poly-Propylene
 Max Pressure: 15kgf/cm²
 Max Temperature: 50°C
 Available Hose: ID Ø6 ~ Ø11
 Application
 Air Service & Tools
 Assembly Operations
 Manufacturing Plants & Facilities
 Maintenance, Repair & Operations
 Automotive & Fleet Service Centers
 Painting : Power Coating

Water Reel



• Specification

Hose Material : PVC Synthetics
 Max Pressure : 10kgf/cm²
 Max Temperature: 70°C
 Design & Structure
 Reels are all stainless steel construction with strong corrosion resistance
 Dual frame, guide plate & ball bearing support
 Special heat-treatment spring & non-corrosive ratchet
 Wide usage with 120 degree swing
 Inlet & outlet connection threads are female NPT

High Pressure Reel



• Specification

Available Hose: 1/4 inch~1 inch
 Hose capacity : 165FT / 50 MR
 Max Pressure: 2900psi/200bar
 Max Temperature : 212°F (100°C)
 Hose
 Low pressure hose reels are furnished standard with PVC
 Medium pressure hose reels are furnished standard with S.A.E 100R1 type at wire braid hose
 High pressure hose reels are furnished standard S.A.E 100R2 type at two wire braid hose
 other specifications are available



Special order

custom-made product for various working environment



Easy to use

custom-made product for Easy-to-use

• Custom made available





3mm Micro Grinder

MGM-103S

MGM - 103S



Optimized products for various types of precision grinding

Small and lightweight designed product considering long-time machining work as much as possible

Products capable of stepless speed change function (0~65,000 Rpm)

• Specification

Model	Air Pressure	Air Consumption	No-load Speed	Collet Size	Air Supply Screw	Weight
Unit	kgf/cm ²	m ³ /min	min ⁻¹	mm		Kg
MGM-103S	6	0.2	60,000	3	PT1/4	0.13

• Packing detail

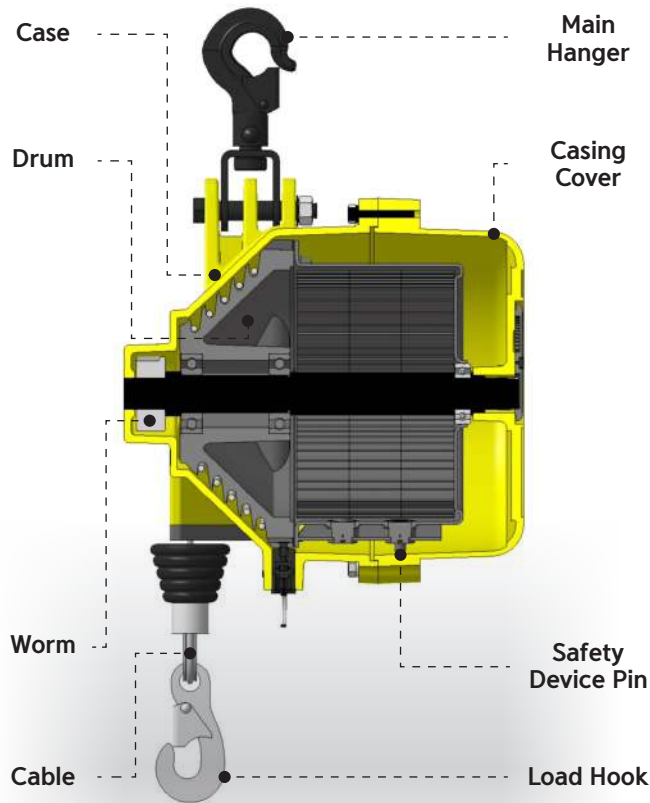
Model	Main Body	Standard Accessories
MGM-103S	1 EA	Air Hose : 1SET , DUST FILTER : 2EA , HOSE BAND : 2EA , HOSE JOINT : 1EA , SET PIN : 1EA , SPANNER : 1EA

• Spring Balancer Used in Various industrial field





Basic structure and Features



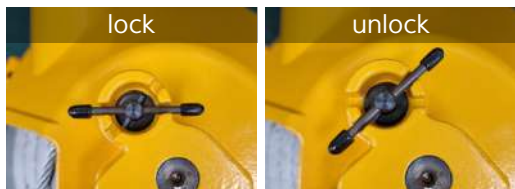
Fall arrest device

When spring is broken, safety pin pops out and collides with pin fixed or case to prevent the suspended tools from falling



Drum lock device

You can lock the drum easily and safely when you need to change the tools or wire rope



Secondary support hanger

The secondary support hanger is available on every model



Gauge

The Gauge indication contributes to worker recognition on tension adjustment



Adjusting Spring tension



Quality Control and Special order product response



TIGON Mijin Spring Balancer improves Work safety & Efficiency

■ Oversea market

| Europe

RUSSIA
UKRAINE
SWEDEN
GERMANY
NETHERLAND
FRANCE
U.K
PORTUGAL
SPAIN
ITALY
POLAND

| Africa

S.AFRICA

| Middle East

ISRAEL
KUWAIT
U.A.E
IRAN

| Oceania

AUSTRLIA

| Americas

U.S.A
BRAZIL
ARGENTINA

| Asia

HONG KONG
TAIWAN
PHILIPPINES
MALAYSIA
VIETNAM
INDONESIA
SINGAPOLE
THAILAND
CHINA
UZBEKISTAN
PAKISTAN

Mijin system www.mijinsys.co.kr

Head Office

6,Jungbu-daero 2565beon-gil, Yangji-myeon, Cheoin-gu Yongin-si, Gyeonggi-do, 17162, Korea
Tel: +82-31-335-8787 Fax: +82-31-336-0821 E-mail: overseas@mijinsys.co.kr



미진시스템 홈페이지
www.mijinsys.co.kr



미진시스템 쇼룸
www.mijin-mall.co.kr



CE mark
ISO 9001