Body specification

Oyster white
(CGCC colour steel plate)
JPMA No. H27-85B correspondent
(Japan Paint Manufacturers 2015 H-edition)

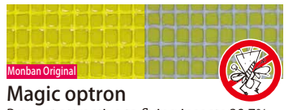
Aluminium
(Anodizing)
※ Aluminium frame only
※Except RF50

Stainless
(SUS304 Hairline)
※ Only frame for RF50 Model

Sheet line up

SS clear
Transmittance 68%
Visibility ★★★★★
Insect-proof effective ★★★☆☆
Flameproof certified：F-26183
Thickness：1.0mm

compare with conventional clear transparency is developedsecure safty when pass through and keep room brightness by contribute energy saving.



Magic optron
Prevent attractive to flying insects 80.7%
Insect-proof effective ★★★★★
Visibility ★★★☆☆
Flameproof certified：F-26240
Thickness：0.78mm

Green outside for prevent invaded by outside insects. Yellow inside make inside factory brighter and guide invaded insect to outside.

Electrification-proof nonflammable sheet
Noncombustible flameproof certified
Antistatic ★★★★★
UVprotection ★★★★★
Noncombustible certified：NM-3553
Flameproof certified：F-24171
Thickness：0.53mm

Certification of incombustible and flameproof, usable at explosion proof areas.

Rat-protection bottom sheet blended
with high concentration capsaicin
Flameproof certified：F-25041
Thickness：0.53mm

New develop from the voice of customer such as food factory, rats biting the sheet and enter inside problem.

Varieties of sheet colour available

Clear

Orange/
Semitransparent orange

Opacity blue

Opacity orange

Opacity black

Opacity Silver

Mesh
※except
RF50/RF30W/R40W

※This photo is only image, colour may different from actual product. Product appearance and specification can change without notice.
※Flame proof product number "N-0793"
※SS clear, Opacity blue, orange, silver may not be produced. Depends on door size. Please ask for more information show order specification
※Magic Optron is a joint development products of Ikari Co.,Ltd and Taisei E & L. Co.,Ltd

Option equipment can be chosen according to the application and size

Please specify the option equipment which suit to your usage of the sheetshutter when order.

Operating sensor

(Unit : mm)

Type B
Infrared spots :4
W100×H130×D100

Type C
Infrared spots：60
W265×H61×D37.5
※Obstacle detection settable

Type D
Infrared spots：60
W267×H61×D45
※Obstacle detection settable

Type E
Infrared spots：60
W321×H102×D91

Obstacle detect sensor

PHA model
embedded type
W14.5×H33.4×D35

PHB model
embedded type
ϕ15×D15

Warning indication

Revolving light
AC200V
W116×H220×D152.5

Traffic light
DC24V
W70×H229×D80

Switch up down

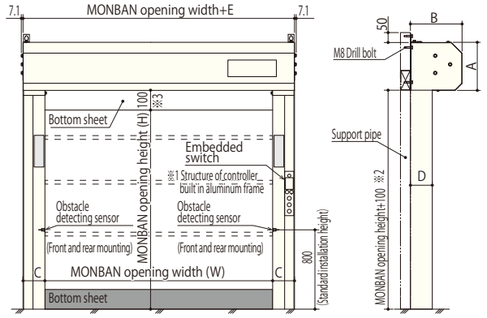
Embedded type /Outcrop type
1 point, 3 points, non-contact switch
W52×H112×D19.3 (Outcrop 1 point, 3 pointsswitch)
W52×H112×D19.3 (Outcrop non-contact switchDC5V)
W52×H112×D23.5(Outcrop non-contact switchDC24V)

Rain proof model
1 point, 3 points switch
W60×H120×D67(1 point)
W49×H152.5×D34(3 points)

Pull switch
W68×H140×D62

Remote control
W52×H85×D8.7
(Transmitter)

Fitting simply figure ※Figure of R054



	R054	R109	R209	R309	R409	RF50	R30W	R40W	R30T	R40T
A	240	280	320	380	405	500	380	405	380	405
B	260	300	330	380	420	485	380	420	380	420
C	110	110	110	125	125	138	125	125	125	125
D	110	110	110	125	125	135	125	125	125	125
E	220	220	220	250	250	286	250	250	250	250

【Caution】 (Unit : mm)
Please always attach one set of front and rear obstacle detection sensor.
Additionally, please check the optimal position, objects and number of passing in advance.

※1 In case of using separated controller, cannot use panel built-in frame.
※2 RF50 model is opening height +200, and also depends also the foundation construction method. Please contact us for more information.
※3 RF50 model the bottom sheet height is 200.

Happygate MONBAN with varies specifications for customers in every environment.

Cold storage and refrigerator model -25 ℃ ~ 5 ℃ warehouse entrance or use as partition
Explosion proof model The air drive + air control system installed in high explosion proof areas
High temperature heat-resistant model 1In the entrance of a high-temperature environment such as 100 ℃ of drying booth

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https://www.komatsuelec.co.jp/monban/

Received award
1991：Medium and small business research prize
1991：The highest prize of new business Grand-Prix
1993：Regional Companies contributor Award
1995：Science and technology agency
"The selection as remarkable invention"
2007：Minister of land, Infrastructure and Transport prize
2012：The Japanese Grand-prix prize for an excellent work
2012：Japanese Grand-prix Prize for an excellent work. Creation of new industries

※1.Please install at place that the product will not directly to the rain and water. ※2.Please refrain from using at place such as coastal areas, various types of metal powder, chemicals for use in corrosive atmosphere or places of environmental conditions such as condensation and freezing and poisonous gas. ※3.The production of the body (W / H) will be 100mm unit. ※4.Please contact us for size out of standard production range. Please note that It may not be able to manufacture. ※5.Appearance and specification of product may be change for improvement the quality without prior notice. ※6.Please use read the instruction manual correctly and carefully for using. ※7.Please use read the instruction manual correctly and carefully for using.

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Create space value

Save power , Save energy, Quality control

happy gate monban 門番®

Incredible effects to the quality and air-conditioning.

Dust proof , Insect proof

Wind proof, cold proof

Hi speed opening and closing

Hi grade air tight

Wind resistant, pressure resistant

Maximum width 10m
Install large opening width

Shorten the opening time, improves working efficiency, and contribute to energy saving and quality surplus by the change of indoor environment due to the outside air, insects and dust.

happygatemonban
Product introduction video

Patent pending

KOMATSU ELECTRIC INDUSTRY CO.,LTD.

R Series outdoor・pipe type

R054 / 109 / 209 / 309 / 409 / RF50 / R30W / 40W / R30T / 40T

Width 800~10000

Height 1000~6000 Unit：mm

Wind proof , Cold proof

Insect proof, dust proof

Working efficiency

※R054 / 109 indoor specification

RF50 W10000×H5000

R209 W2900×H3000

R309 W4500×H5000

R209 W2900×H3000

Structure of pipe-type model with strong wind and pressure resistant is suitable for insect proof, dust proof, wind proof and cold proof.

Pipe-type with high grade airtight and high speed up fit to all small to large opening size

High grade airtight

Pipe type with wind and air pressure strong resistant Wind pressure resistant specification product

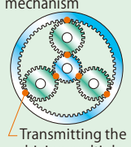
Tightly sealed to prevent a gap that can be from the bulge of the sheet by the wind and pressure difference. High grade airtight structure in the top frame and side frame.

High speed

New engine model Opening high speed 2.0m/s

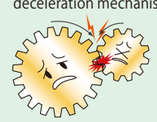
High-speed opening and closing 2.0m / sec by the new engine. Shorten the opening time at the entrance and contributing to improve working environment enhances the air conditioning effectiveness, insect proof and dustproof effect.

MONBAN deceleration mechanism



Transmitting the driving multiple meshing

Other companies deceleration mechanism



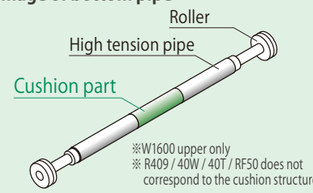
Accident and damage occur at high traffic loading,

Safety

Bottom pipe cushion with strong structure

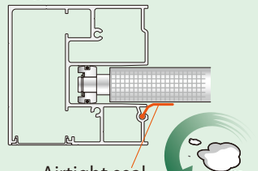
Less maintenance costs, soften the impact of the collision by the bottom pipe with cushion structure.

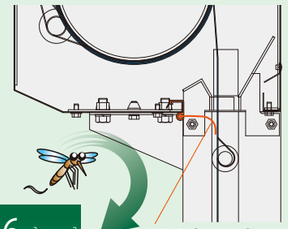
Image of bottom pipe



※W1600 upper only
※ R409 / 40W / 40T / RF50 does not correspond to the cushion structure.

High effectiveness of insectproof and dustproof





Positive pressure 10.21m³/h·m²

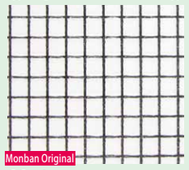
Negative pressure 6.16m³/h·m²

Further improved air-tightness in combination with an air tight seal. Possible to prevent the fully closed of insects and dust intrusion, and achieve a higher quality control and clean working environment.

※circulating air at 10Pa using JISS fore testing inside co.
※our product attach airtight seal;shown by numerically
※Wind pressure performance can be different depending on the size

Effective of high visibility with high power saving

※Photos are an example of the G series



Monban Original

SS clear

Transmittance 68%

Visibility ★★★★★

Insect-proof effective ★★★☆☆

compare with conventional clear transparency is developed secure safty when pass through and keep room brightness by contribute energy saving.

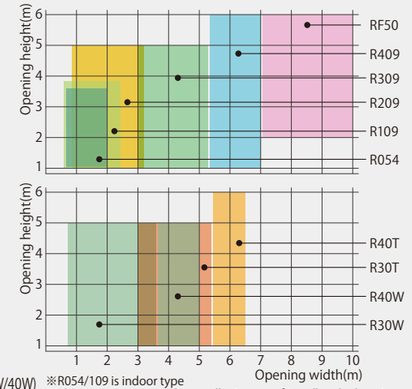
Separate controller

Worry of condensation caused by rain and fog also resolved.Able to use together with separate countdown monitor for more safety.

GA controller
W170×H630×D80
(For R054)

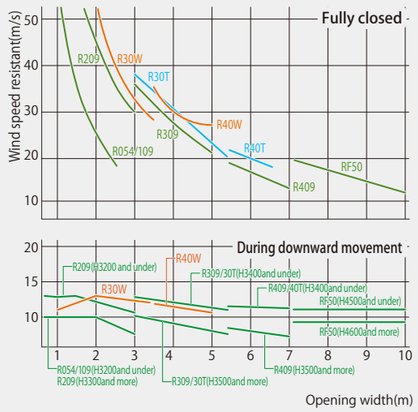
KVA controller
W242×H400×D105(For R109/209)
W242×H450×D105(For R309/409/R30W/40W)
W242×H850×D105(For RF50)

Installable dimension



※R054/109 is indoor type
※Please use a separated controller in case of install at the location where the influence of water, such as rain or condensation is assumed

Wind resistant performance



Specification

Type		Indoor type		Indoor/outdoor combined type				High pressure high wind resistant type		Three-phase 200V power supply type	
Model		R054	R109	R209	R309	R409	RF50	R30W	R40W	R30T	R40T
Manufacturable Dimension	Opening width (mm)	600 ～ 2000	600 ～ 2500	800 ～ 3200	3000 ～ 5300	5400 ～ 7000	7100 ～ 10000	800 ～ 3500	3600 ～ 5000	3000 ～ 5300	5400 ～ 6500
	Opening height (mm)	1000 ～ 3600	1000 ～ 3800	1000 ～ 5000		1000 ～ 6000	2000 ～ 6000	1000 ～ 5000	1000 ～ 5000	1000 ～ 5000	1000 ～ 6000
Opening & closing m/c	Input power source	Single-phase AC200V ～ 230V±10%								3 phase AC200V±10%	
	Output	0.4kW	0.95kW							0.75kW	
	Opening Speed (Setting when shipment) (m/s)	2.0 ～ 1.2【1.2】	2.0 ～ 1.6【1.6】	1.5 ～ 0.7【1.0】	1.0 ～ 0.7【1.0】	0.7 ～ 0.55【0.55】	0.55【0.55】	0.75～0.55【0.7】	0.45 ～ 0.3【0.4】	1.0 ～ 0.7【1.0】	0.51 ～ 0.4【0.48】
	Closing Speed (Setting when shipment) (m/s)	1.5 ～ 0.5【0.7】	1.5 ～ 0.5【0.7】	1.5 ～ 0.5【0.7】	1.0 ～ 0.5【0.7】	0.7 ～ 0.55【0.55】	0.55【0.55】	0.6 ～ 0.4【0.55】	0.45 ～ 0.3【0.4】	1.0 ～ 0.5【0.7】	0.51 ～ 0.4【0.48】
	Reduction Speed Ratio	1/14	1/10	1/23	1/50	1/74	1/74 × 2	1/74	1/74	1/25	1/43
	Reduction method	Planetary helical gear reduction method								Cyclo Engine Drives	
Sheet core material	Middle pipe	Φ15.9×t1.2		Φ27.2×t1.2	Φ38.1×t1.2		Φ48.6×t1.8	Φ27.2×t1.2	Φ38.1×t1.2	Φ38.1×t1.2	
	Bottom pipe	Φ27.2×t1.2+VE28(VP,VU pipe)		Φ38.1×t1.2+VP40(VP,VU pipe)		Φ38.1×t1.2(With sponge)	Φ48.6×t1.8(With sponge)	Φ38.1×t1.2+VP40(VP,VU pipe)	Φ38.1×t1.2(With sponge)	Φ38.1×t1.2+VP40(VP,VU pipe)	Φ38.1×t1.2(With sponge)
Control roller	Built-in side frame	●GA	●GA	●GA	●GA	—	—	—	—	—	—
	Separate controller	●GA	●KVA	●KVA	●KVA	●KVA/B	●For RF50	●KVA	●KVA	●SVA	●SVA
Side frame	Aluminum frame	●	●	●	●	●	—	●	●	—	—

※※ Using frequency: 100 times / hr (R054 / 109/209), 60 times / hr (R309 / 409 / RF50 / R30W / 40W / R30T / 40T) ※Using environment: ambient temperature more than -10 ℃ ～ less than 40 ℃ (except frozen state), ambient humidity: RH85% or less.※When order R054/109/209/309 please select built-in controller and placing separately. ※Please use controller placing separately type when install in the place which may be impact from water such as rain or condensation. ※Controller which placing R054 separately has difference spec from R109/209/309. ※Use gate width less than W5400 ～ 6100mm, Gate high more than H5000mm for R409 type and for gate width W6200 ～ 7000mm, Gate high H4200mm please use KVB(Large-capacity type). ※RF50/R30T/40T has only color steel plate/stainless steel plate flame.