

Body specification

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

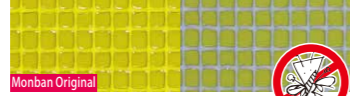
Stainless
(SUS304 Hairline)

Sheet line up



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

compare with conventional clear transparency is developed secure safety 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



※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"
※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.

Switch up down

(Unit : mm)

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

Pull switch
W68×H140×D62

Card & numeric keypad
Number of registration at 100 cases
Pass code: 1 to 8 digits
electric power:DC10~30V
W120×H130×D45

Foot-switch
W82×H58×D176.5

Operating sensor

Type A
Infrared spots : 32
W221×H63×D30

Type B
Infrared spots : 4
W100×H130×D100

Obstacle detect sensor

PHB model embedded type
φ15×D15

B contact type infrared sensor
Infrared spots : 32
W221×H63×D30

Warning indication

Revolving light
AC200V
W116×H220×D152.5

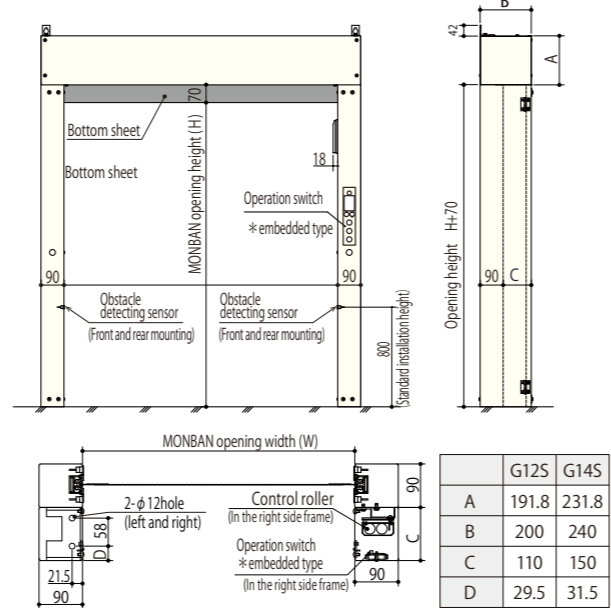
Traffic light
DC24V
W70×H229×D80

Guard-pole

with the base
φ139.8×920
φ114.3×420
base part200×200

embedded type
φ139.8×length 1620
embedded part 500mm
φ114.3×length 720
embedded part 200mm

Fitting simply figure ※※Figure of G12S



[Caution]
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.

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



Create space value

Save power, Save energy, Quality control

happy gate 門番 monban

Incredible effects to the environment and air-conditioning.

Sheet out by collision is automatically return to the rails easily



MONBAN original tube is gently smoothly open and close with high durability

Collision by lift and truck during the operation, the sheet will stop a while and slowly going up (0.5m/s) automatically return into the rails. The structure designed to convenience in case of power failure, woman can also easily get out by simply lifting the sheet.

Dust proof
Insectproof
Independent structure
Silent
Extra high speed
Hi grade airtight

happygatemonban
Product introduction
video



Patent pending

KOMATSU ELECTRIC INDUSTRY CO.,LTD.

independence sheet shutter

indoor pipeless type G12S / 14S

Insect proof, dust proof
Energy saving and air-conditioning
Working efficiency

Width 800~2500
Height 1800~2500 Unit : mm



G12S W1000×H2200



G14S W2500×H2500



G12S W800×H1200



G14S W1800×H2300

Unnecessary foundation • Shortly construction • Reinstall layout is so simple

The independent structure for which unnecessary construction to no ground work place. Less expense and simple installation.



unnecessary foundation shortly construction Unit structure, easy wiring

Independent structure helps to install to the place no ground work, and 2 unit structures of the box and the frame reduce the installation time significantly. Simple installation, in case no ground work, only fix the shutter by the anchor bolt.

Maintenance time also reduced.

Able to change sheet and motor without bring shutter box down



Extra opening speed 3.0m/s Safety closing speed 0.7m/s

the operation of start up sensor or switch will be ran by machine usually driving shorten opening time, efficiency operation is developed concurrently with the improvement of preventing of insect, dust, outside air and energy saving
※Opening and closing speed you can change according to the application. Adjustable speed, please refer to the following specification.

Reverse opening for safety

middle speed 1.5m/sec phototube sensor detecting, scan. going up except the lowest position

low speed 0.5m/sec detect touching or bear while machine is running

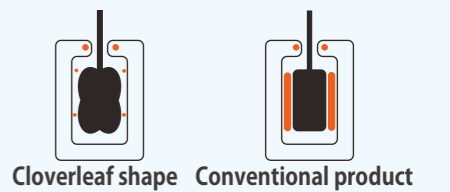


Operating noise reduced 10% compared with conventional

Quietness by MONBAN tube Sheet both sides using MONBAN tube instead of conventional fastener for more silent operation and prevent damage.

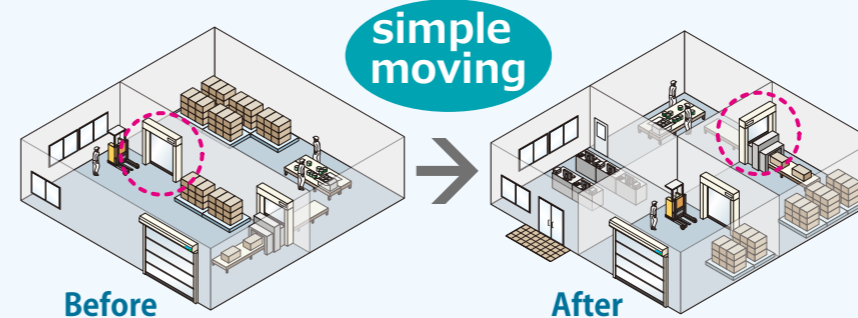
Cross-section drawing

● contact surface



Reinstall layout is so simple

anything you would like to move such as layout it's so easy to do!
No need groundwork, just move only electrical power input



Structure of air tight achieve high grade airtightness (Optional order)

Air tight seal attached to the top frame with high insect and dust proof effect, and ideal for a variety of clean environment.



Positive pressure 5.76m³/h·m²

Negative pressure 8.35m³/h·m²

※circulating air at 10Pa
※Carried out testing at JIS A 1516 indoor airtight examination center
※Our products can be any number of airtight seals.
※Wind pressure performance can be different depending on the size
※Air tight seal attached on the top frame only.

world class super fast transportation shipping within 3 days

size/ option goods(sensor) 3 types of standard products be sent within 3 days

Type S(G12S) W900 × H2000	Type SM(G14S) W1200 × H2000	Type SL(G14S) W1800 × H2000
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color: oyster white
sheet's color: SS clear
Optional parts: 2sets of PHB photocell sensor, 2 units of touchless switch (each on front and back)
※above-mentioned sheet (no window)
※please contact later schedule of set up date,

find out damaged sensor untouched switch

good looking built in design; able to protect any dust goes inside

Multi monitor

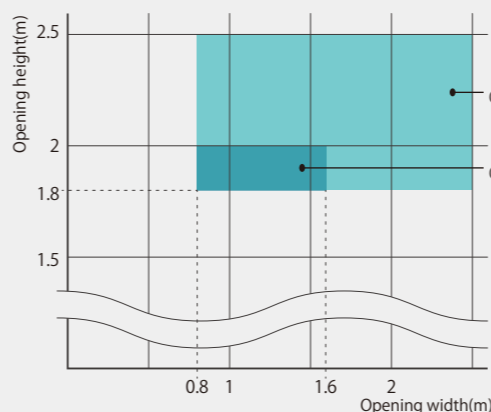
panel and multi are installed inside of countdown monitor.



Find out damage sensor Untouched switch Multi monitor

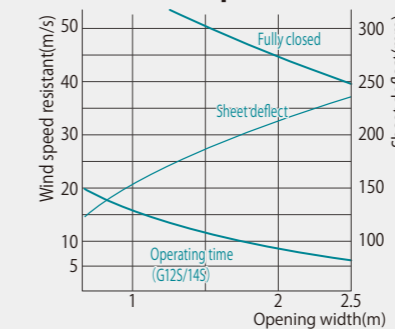
Cleanliness Safety

Installable dimension



※Please use separate controller if install to the location where the influence of water, such as rain or condensation is assumed.

Wind resistant performance



For install in order to adjust the room pressure for hygienic control, please refer to below model guideline.

Room pressure difference Fully closed Within 10 Pa

※Number and pressure resistance performance is varies depend on the room pressure difference.

Specification

Model	G12S	G14S	
Manufacturable Dimension	Opening width (mm)	800 ~ 1600	800 ~ 2500
	Opening height (mm)	1800 ~ 2000	1800 ~ 2500
Opening & closing m/c	Input power source	Single-phase AC200V ~ 230V±10%	
	Output	0.2kW	0.4kW
	Opening Speed (Setting when shipment) (m/s)	3.0 ~ 1.5 [2.0]	3.0 ~ 1.5 [2.0]
	Closing Speed (Setting when shipment) (m/s)	1.5 ~ 0.5 [0.7]	1.5 ~ 0.5 [0.7]
	Reduction Speed Ratio	1/10	1/14
Control roller	Reduction method	Planetary helical gear reduction method	
	Built-in top frame	—	
Side frame	Built-in side frame	●GA(In the right side frame)	
	Separate controller	—	—
Side frame	Aluminum frame	—	—
	Colour · stainless steel	—	●

※Using frequency: 100 times/hr ※Using environment: ambient temperature more than -10℃ less than 40℃ (except frozen state), ambient humidity: RH85% or less.※ G Series is for indoor installation type.※Operation switch is installed at the right frame.※Controller is built-in side frame.