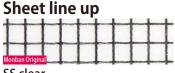
Body specification

Oyster white

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





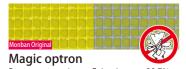
SS clear

Transmittance 68%

Visibility Insect-proof effective * * * * *

Flameproof certified: F-26183 Thickness: 1.0mm

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



Prevent attractive to flying insects 80.7%

Insect-proof effective ★★★★ **** Visibility

Flameproof certified: F-27303

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



Thickness: 0.53mm Certification of incombustible and flamenroof. usable at explosion proof areas

Noncombustible flameproof certified

Antistatic ★★★★

UVprotection ★★★★★

Flameproof certified: F-24171

Noncombustible certified: NM-3553



Varieties of sheet colour available



Orange/ Semitransparent orange

Opacity blue

Opacity orange



Fitting simply figure ***Figure of G12S



Opacity Silver

**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 fine chemical 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.



Embedded type /Outcrop type 1 point, 3 points, non-contact switch

Operating sensor

Infrared spots: 32

Warning indication

Revolving light

W221×H63×D30

W52×H112×D19 3 (Outcrop 1 point 3 pointsswitch)



W68×H140×D62



Card & numeric keypad Number of registration at 100 cases Pass code: 1 to 8 digits



Foot-switch W82×H58×D176.5



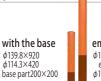
PHR model

Guard-pole

embedded type φ15×D15

B contact type infrared sensor

Infrared spots : 32 W221×H63×D30



embedded type φ139.8×length 1620

MONBAN opening width (W) G12S G14S 191.8 231.8 В 200 240 110 150 29.5 31.5 90

[Caution] Please always attach one set of front and rear obstacle detection sensor. Additionally, please check the optimal position, objects and number of passing

Happygate MONBAN with varies specifications for customers in every environment.

Cold storage and -25 °C ~ 5 °C warehouse refrigerator model entrance or use as partition proof model installed in high explosion proof areas heat-resistant model environment such as 100 °C of drying boo

Infrared spots: 4

Received | 1991: Medium and small business research prize 1991: The highest prize of new business Grand-Prix

1995: Science and technology agency

1993: Regional Companies contributor Award

"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

2016: Global Innovation Company Commendation (KOMATSU KOREA)

KOMATSU ELECTRIC INDUSTRY CO..LTD.

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TEL 82-31-498-6655

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

*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.







happygatemonban

Product introduction

independence indoor pipeless G12S / 14

pipeless type G12S / 14S

Width 800~2500 Height 1800~2500

Insect proof, dust proof **Energy saving** and air-conditioning

Working efficiency









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

m/sec scan. going up except the lowest position detect touching or bear while m/sec machine is running

phototube sensor detecting,



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

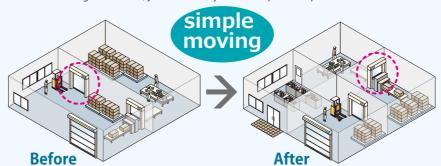




Cloverleaf shape Conventional product

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 5.76 m³/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.

size • standardized goods and option world class super fast transportation

shortly appointment shipping within days (Japan only)

size/option goods(switch 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

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.





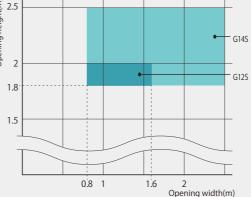




Cleanliness

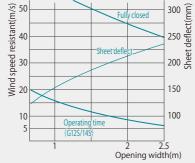
Safety

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.

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

Specification

specification			
Model		G12S	G14S
Manufacturable Dimension	Opening width (mm)	800 ~ 1600	800 ~ 2500
	Opening height (mm)	1800 ~ 2000	1800 ~ 2500
	Input power source	Single-phase AC200V ∼ 230V±10%	
Opening & closing m/c	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
	Reduction method	Planetary helical gear reduction method	
Control roller	Built-in top 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			

***using requency: 100 times/hr ***Using environment: ambient temperature more than -10 °C less than 40 °C (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.