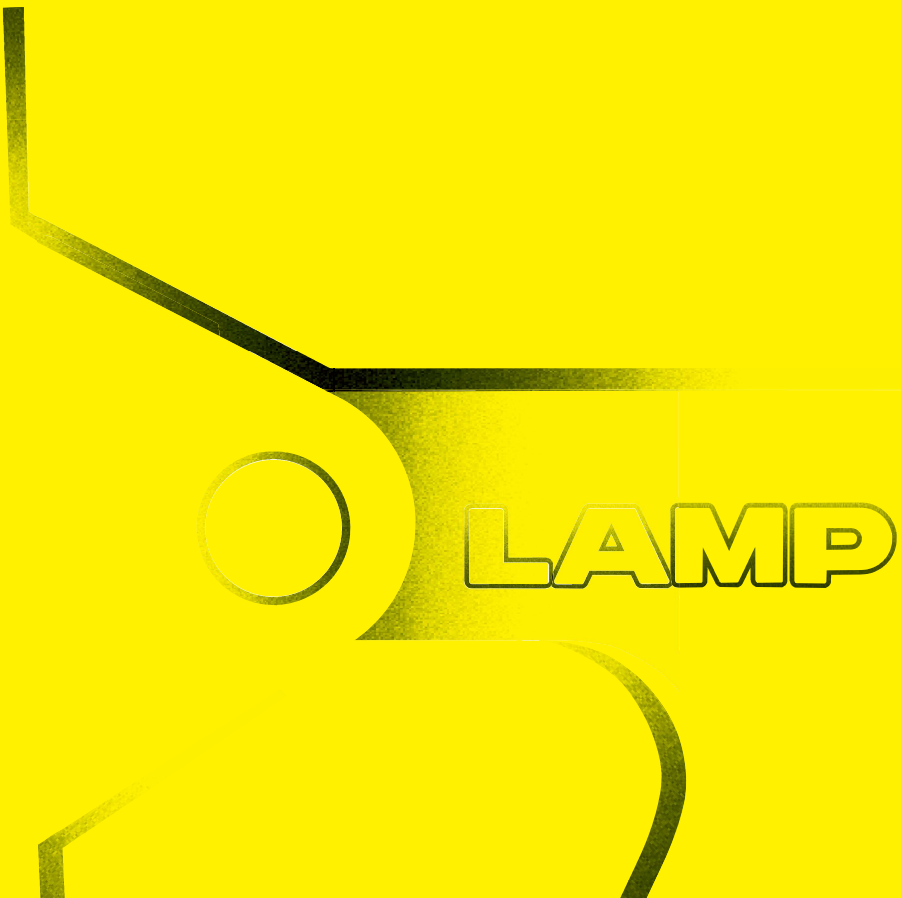
SUGATSUNE

Industrial Component Hardware



June 2022

No.400

INDEX

HINGES
LID SUPPORTS
CATCHES, LATCHES & FASTENERS
DRAWER SLIDES
HANDLES, PULLS & KNOBS
HOOKS & BRACKETS
MONITOR MOUNTS
CABINET DOOR HARDWARE & SHUTTER DOORS
LOCKS
CASTERS
LEVELLING GLIDES & BASE
MISCELLANEOUS

Motion Design Tec

LAMP®

MISCELLANEOUS

Sugatsune offers a variety of products from bearings, shelf standards and other general-purpose items to belt reel partition, glass point fix and multi-purpose lids, etc.

SUGATSUNE

June 2022

INDEX

AS Series Corner Caps

P.1003



- "AS series" is an innovative system used for installing various functional parts such as hinges, catchs and door hardware to aluminium frame.



- Parts for connecting aluminium frames also available.
  For details on aluminium frame support system AS series, refer to P.20.

Bearings

P.966~

- Numerous types are available, such as non-magnetic stainless steel bearings, anti-rust resin bearings, standard plastic bearings, ect.



Non-magnetic Stainless Steel Bearing
P.966



Medium Duty Anti-rust Resin Bearing KSUS
P.968



Anti-rust Resin Bearing CD, MCD, RCD
P.968~P.969



Steel Bearing Heavy Duty Type
P.970



Medium Duty Bearing DT Steel Insert Type
P.971



Medium Duty Bearing IDS Steel Insert Type
P.972



Plastic Bearing
P.973~



Plastic Roller
P.978

Swivels

P.979



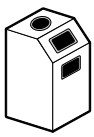
- Ideal for rotary workbench.

Multi-purpose Lids

P.980~

- Total 50 types. A wide variety of types are available, such as those with/without Door, and those with top mount / side mount / inclined mount, etc. All types are made of stainless steel with a sense of quality.
- There is also a product list by size (P.980)

Without Lid





Ring Cover For Refuse Box
AN-DH
AN-LH
P.982



Square Cover For Refuse Box
AN-KH
P.983

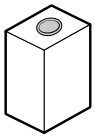


Multi-Purpose Grommet Slim Type
AN-SH026-HL
P.990



Square Cover For Refuse Box
AZ-ND
P.989

With Lid & Top Mount





Multi-purpose Lid (W/Damper)
AD-GD
Soft Close
P.981



Multi-purpose Lid
AD-DH015-HL
P.981

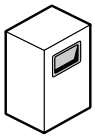


Multi-purpose Lid (W/Damper)
AD-KH
Soft Close
P.983

Multi-purpose Lids

P.980~

With Lid & Side Mount





Touchless Multi-purpose Lid (W/Lid)
AZ-AT
Soft Close
P.984



Multi-purpose Lid (W/Damper) With Lid / key
AZ-GD230L-HL
Soft Close
P.985



Multi-purpose Lid (W/Damper)
AZ-GD
Soft Close
P.986



Multi-purpose Lid (W/Damper) Back Mount Type
AZ-GD231-HL
Soft Close
P.987

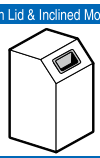


Multi-purpose Lid (W/Handle)
AZ-HD
P.988



Multi-purpose Lid (Double Door)
AZ-DD310-HL
P.989

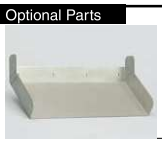
With Lid & Inclined Mount





Multi-purpose Lid (W/Damper) Inclined Mount Type
AZ-GD232-HL
Soft Close
P.987

Optional Parts





Guide for Multi-purpose Lid
AZ-SLP
P.988

Funnels

P.990~P.991



Stainless Steel Funnel
AE-DH
P.990



Hose for AE-DH
AE-DH4540-1
P.991



Strainer for AE-DH
AE-DH020K-45
P.991

●For throwing away leftovers like drinks.

Ventilators

P.992~

Oval Type

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	APD-KH66	610	66×28	62.5×24.6	P.992
	APD-KH170	1690	176×41	167.5×35	
	APD-KH260	3150	260×70	250×60	

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	SA-D150	≒1880	150×40	143.5×34	P.996
	SA-D200	≒3800	200.5×50	194×44	

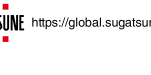
Round Type

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	SA-M37	≒ 290	ϕ36	ϕ31.5	P.996
	SA-M45	≒ 570	ϕ46	ϕ41.5	
	SA-M60	≒1000	ϕ60	ϕ53.5	
	SA-M85	≒2150	ϕ85	ϕ77.8	
	SA-M120	≒4480	ϕ120	ϕ110.5	
	ASM-37	≒ 65	ϕ36	ϕ30.5	P.997
	ASM-45	≒ 104	ϕ46	ϕ40.5	
	ASM-60	≒ 224	ϕ60	ϕ52.5	
	ASM-85	≒ 478	ϕ85	ϕ77	

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	AST-45	≒ 65	ϕ45	–	P.997
	AST-55	≒ 104	ϕ55	–	
	AST-70	≒ 224	ϕ70	–	
	AST-100	≒ 478	ϕ100	–	
	481311	≒1835	ϕ102	ϕ77~80	P.999
	481312	≒2860	ϕ127	ϕ95~100	
	481440	≒ 750	ϕ102	ϕ77~80	P.999
	481430	≒1250	ϕ127	ϕ95~100	
	487220	≒3055	ϕ200	ϕ100	P.1000
	487200	≒5032	ϕ200	ϕ100	P.1000

Square Type

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	APK-K160A	859	160×36	150×30.5	P.993
	APK-K210A	1145	212×36	200×30.5	
	APK-K400A	3958	400×60	390×50	
	APK-K400AW	5938	400×80	390×70	
	APK-KHA152P	700	152×42	146×36	P.994
	APK-KHW226P	1343	226×42	220×36	
	APK-KHA226P	1050	226×42	220×36	
	APK-K70P	350	70×36	64×30	P.995
	APK-KH70P	643	70×36	64×30	

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	48079	1276	85×85	ϕ76	P.998
	48176				
	48081	2136	125×125	ϕ101	P.998
	48282				
	48080	3700	200×100	–	P.998
	480970	1600	82×82	ϕ75	P.1000

Ventilators

P.992~

Square Type

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	G58-3020	55000	340×240	305×200	P.1001
	G57-1707AA	8300	210×106	173×73	P.1001
	G57-2208AA	12000	260×116	223×83	P.1001
	1-2222	7500	215×215	–	P.1001

Picture	Item Name	Max. Exhaust Area mm²	External Dimensions	Cut Out Dimensions	Page
	1-1122	3700	105×215	–	P.1002
	1-2211	3700	215×105	–	P.1002
	1-1212	1900	115×115	–	P.1002

Multi-purpose Caps

P.1003~

●Used for blocking off unused holes, etc.



Multi-purpose Cap
KD
Mounting Hole Dia. 6.4~51
Total 19 Sizes
P.1003



Multi-purpose Cap
KD-772-65
Mounting Hole Dia.10
P.1004



Multi-purpose Cap
KD-771-6
Mounting Hole Dia.5
P.1004



Multi-purpose Cap
KD-772-3
Mounting Hole Dia.10
P.1004



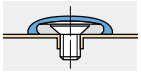
Multi-purpose Cap
KD-771-65
Mounting Hole Dia.8
P.1004



Multi-purpose Cap
KD-773W
Mounting Hole Dia.8.6
P.1004

Washers, Caps for Washer

P.1005



●Washer for using countersunk head screw without countersinking and cover for hiding the washer.



Stainless Steel Countersunk Washer SETUP
For M3, M4, M5, M6
P.1005



Cap for SETUP
CS-492
For M3, M4, M5, M6
P.1005

Cable Grommets

P.1009~

For Control Board

P.1010~P.1011

Wire Manager for Cable Grommet WSM-150



●Prevents oil mist intrusion, suitable for the control board of processing machine.
●Can pass through multiple cables of different sizes. Up to 3 pcs of cables with up to ϕ30 can be passed through.
P.1010

Cable Clamp for Cable Grommet WSD



●For simply preventing dust intrusion.
●Nitrile rubber gasket and pile improve sealability and can block gaps caused by size differences or multiple cables.
P.1011

Round Type

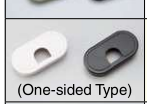
P.1012~P.1015

Picture	Item Name	Cut Out Dimensions	Page
	S70	ϕ60	P.1012
	S91	ϕ80	
	S445	ϕ39	P.1013
	S51	ϕ45	
	S60	ϕ49	
	S76	ϕ65	
	S89	ϕ77	
	ST70	ϕ60	P.1013
	ST88	ϕ80	

Picture	Item Name	Cut Out Dimensions	Page
 (One-sided Type)	LS43S	ϕ35	P.1014
	LS50S	ϕ40	
	LSU60S/LS60S	ϕ48	
	LS76S	ϕ64	
 (Double Sided Type)	LS43	ϕ35	P.1014
	LS50	ϕ40	
	LSU60/LS60	ϕ48	
	LS76	ϕ64	
 (Sheet Metal / One-touch Installation)	LS50F	ϕ45	P.1015
	LS60F	ϕ55	

Oval Type

P.1016~P.1018

Picture	Item Name	External Dimensions	Cut Out Dimensions	Page
	S165-76	166.5×75	156.5×65.5	P.1016
 (One-sided Type)	LN72S	72×37	67×32	P.1017
 (Double Sided Type)	LN72	72×37	67×32	P.1017

Picture	Item Name	External Dimensions	Cut Out Dimensions	Page
	LN72SF	72×37	67×32	P.1018
	LN72P	72×37	67×32	P.1016

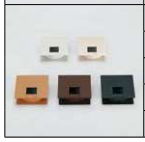
Cable Grommets

P.1009~

Square Type

P.1019~P.1022

Picture	Item Name	External Dimensions	Cut Out Dimensions	Page
	ART973	108.2×56.4	97.8×46.5 (Mounting Hole on Sheet Metal)	P.1019
	S1015-51	104×52	97.5×45.5	P.1020
	S100-50	101.5×51	95.5×45	P.1020

Picture	Item Name	External Dimensions	Cut Out Dimensions	Page
	LSU60KS	60×60	ϕ48	P.1021
	LS43KS	43×43	ϕ35	
	LS50KS	50×50	ϕ40	
	LS60KS	60×60	ϕ48	
	LS76KS	76×76	ϕ64	
	LSU60K	60×60	ϕ48	P.1022
	LS43K	43×43	ϕ35	
	LS50K	50×50	ϕ40	
	LS60K	60×60	ϕ48	
	LS76K	76×76	ϕ64	

Cautions for Cable Grommet Installation [Applicable Products] P.1012~P.1022

●Please install by pushing from above. ●When installing to sheet metal, please use glue.

Gaskets

P.1023~

Rubber Gaskets for Aluminium Frame

P.1023



Rubber Gasket
AS-PAA

●Can be easily installed to the groove of the aluminium frame without using glue.

P.1023

CR Gaskets

P.1024



CR Gaskets

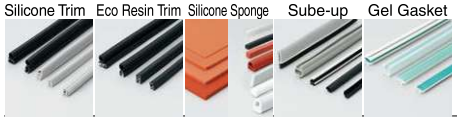
●A variety of sizes and cross-sectional shapes are available for purpose of use.

P.1024

Silicone Trims

P.1025

Silicone Trim | Eco Resin Trim | Silicone Sponge | Sube-up | Gel Gasket



P.1025

Belt Reel Partition

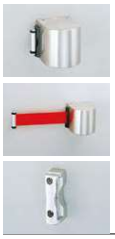
P.1026~



Wall Mount Belt Partition
AP-BR351
●Belt Colour: Red, Blue

SUS

P.1026



Wall Mount Belt Partition
AP-BR057
●Belt Colour: Red

SUS

P.1027



Belt Partition
AP-BR06
Mortise Mount Type
●Belt Colour: Red

SUS

P.1027

Glass Point Fix

P.1028~

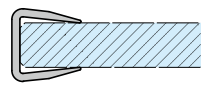
Point Fix



●Point fix is a part for fixing glass to structure or frame when using glass as a wall or panel.

P.1028~

Glass Edge Protectors



●Seal material for protecting the edge of glass.

P.1031

Others

P.1032~

Plastic Sockets



●Ideal for holding pipes (ϕ25) in wardrobes.

P.1032

Snap-on Windows



●One-touch installation.

P.1032

LED Lights

P.1033~



LED Tough Light
SL-TGH

P.1033



Angle Adjustable Mounting Bracket for Tough Light
SL-WPG-Z
for SL-TGH

P.1034

NON-MAGNETIC STAINLESS STEEL BEARING

SUS

- Excellent resistance against corrosion, rust and heat.
- Made of non-magnetic stainless steel: suitable for conveyance parts of medical equipment such as MRI and semiconductor manufacturing equipment, etc.
- Supplied with screw loosening prevention agent.
- Stainless steel rollers make it excellent in weather resistance and suitable for outdoor applications. (Depending on the environment of use, rust and dust adhesion may occur and affect the movemont of bearing.
- Made to order (grease designation, without grease, different size, etc.) is available.

[Applications]

- Suitable for conveyance parts of commercial kitchen equipment, MRI, medical equipment and semiconductor manufacturing equipment, commercial refrigerator, water exposure environment (rather than purposes involving personal safety like passenger equipment)

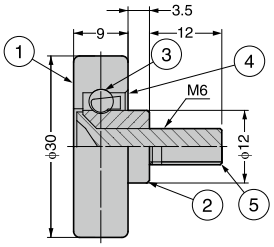
[Use Conditions]

- Operating temperature: -40℃~+110℃
- Limit load and rotational speed: 392 N×1000 r.p.m
- Friction coefficient: 0.005
- Clearance: Radial clearance 0.1~0.3mm

NON-MAGNETIC STAINLESS STEEL BEARING FSUS309/S3.5 Flat Outer Periphery Type

SUS





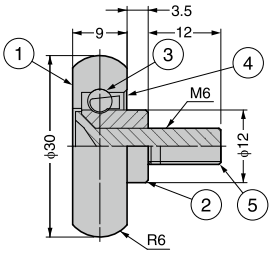
No.	Part Name	Material	Finish / Colour
①	Outer Ring	Stainless Steel (SUS303)	Plain
②	Inner Ring		
③	Balls	Stainless Steel (SUS304)	
④	Retainer	PA	Black
⑤	Shaft	Stainless Steel (SUS304)	Plain

RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-850	FSUS309/S3.5	294	30	46.35	200	–

NON-MAGNETIC STAINLESS STEEL BEARING MSUS309/S3.5 Convex Outer Periphery Type

SUS



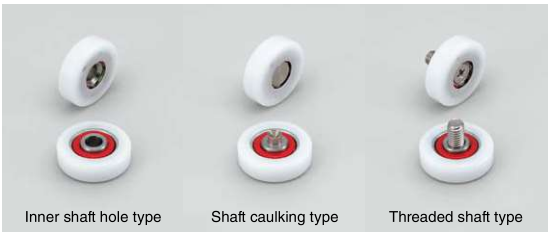


No.	Part Name	Material	Finish / Colour
①	Outer Ring	Stainless Steel (SUS303)	Plain
②	Inner Ring		
③	Balls	Stainless Steel (SUS304)	
④	Retainer	PA	Black
⑤	Shaft	Stainless Steel (SUS304)	Plain

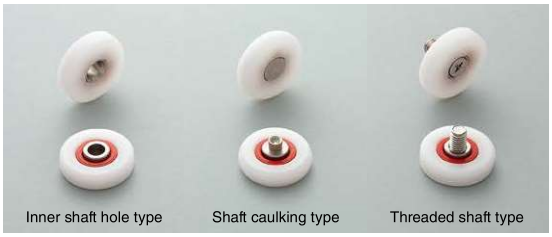
RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-849	MSUS309/S3.5	294	30	43.10	200	–

ANTI-RUST RESIN BEARING

[KSUS]



[CD, MCD, RCD]



- Stainless steel inner ring, ball and shaft with excellent rust resistance.
- Made of non-magnetic stainless steel: Suitable for conveyance parts of medical equipment such as MRI and semiconductor manufacturing equipment, etc.
- Customised versions (grease designation, without grease, different size, etc.) are available.

[Applications]

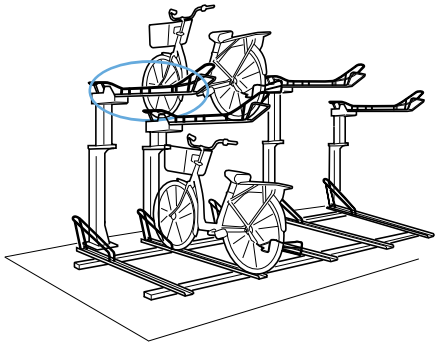
- Suitable for conveyance parts of commercial kitchen equipment, MRI, semiconductor manufacturing equipment, outdoors or water exposure environment, ect.

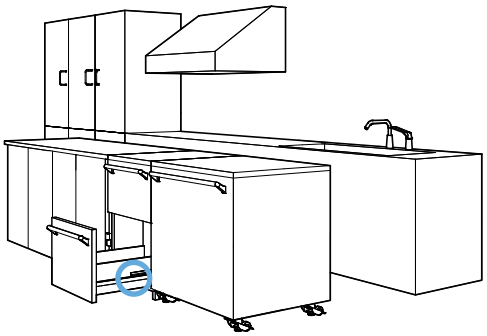
[Use Conditions]

- Operating temperature: 0℃~+60℃
- Limit load and rotational speed: 40 kg×1000 r.p.m for CD, MCD and RCD, 60 kg×1000 r.p.m for KSUS
- Friction coefficient: 0.005
- Clearance: Radial clearance 0.1~0.3mm

[Remarks]

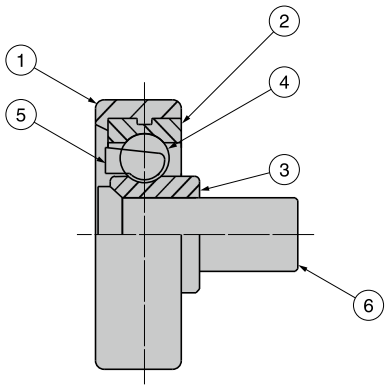
- Do not use for purposes involving personal safety like passenger equipment.





[KSUS] 1

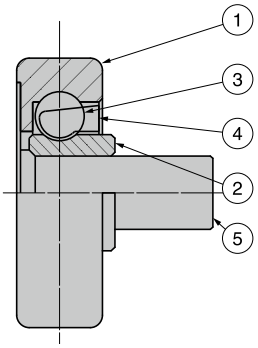
Compared with conventional CD, MCD and RCD 2, load capacity is improved by inserting stainless steel ring (② in the figure below) between the outer tyre and the inner ring.



No.	Part Name	Material	Finish / Colour
①	Outer Tyre	POM	Natural
②	Outer Ring	Stainless Steel (SUS304)	Plain
③	Inner Ring		
④	Balls		
⑤	Retainer	POM	Red
⑥	Shaft	※1	Plain

※1 Shaft caulking type: stainless steel (SUS304)
Threaded shaft type: stainless steel

[CD, MCD, RCD] 2



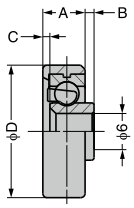
No.	Part Name	Material	Finish / Colour
①	Outer Ring	POM	Natural
②	Inner Ring	Stainless Steel (SUS303)	Plain
③	Balls	Stainless Steel (SUS304)	
④	Retainer	POM	Red
⑤	Shaft	※2	Plain

※2 Shaft caulking type: stainless steel (SUS303)
Threaded shaft type: stainless steel

Refer to 1 : P.968, 2 : P.968~P.969

MEDIUM DUTY ANTI-RUST RESIN BEARING KSUS Flat Outer Periphery Type

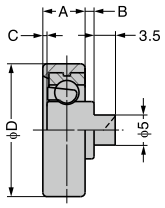

KSUS-268/68SUS



[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	ϕD	A	B	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
G	3D	210-024-097	KSUS-227/68SUS	22	7	1.5	1.2	392	40	9.0	200	200
G	3D	210-024-098	KSUS-268/68SUS	26	8	0.5	1.2			11.1	200	200
G	3D	210-024-099	KSUS-309/68SUS	30	9	–	1.7			13.4	200	200

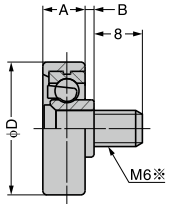

KSUS-268/P5SUS



[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	ϕD	A	B	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
G	3D	210-024-100	KSUS-227/P5SUS	22	7	1.5	0.7	392	40	11.5	200	200
G	3D	210-024-101	KSUS-268/P5SUS	26	8	0.5				13.6	200	200
G	3D	210-024-102	KSUS-309/P5SUS	30	9	–	1.2			15.9	200	200


KSUS-268/S1SUS



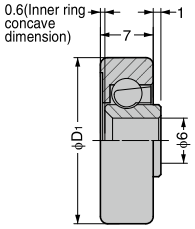
※Body and threaded shaft are separate parts.

[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	ϕD	A	B	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
G	3D	210-024-103	KSUS-227/S1SUS	22	7	1.5	392	40	11.8	200	200
G	3D	210-024-104	KSUS-268/S1SUS	26	8	0.5			13.9	200	200
G	3D	210-024-105	KSUS-309/S1SUS	30	9	–			16.2	200	200

ANTI-RUST RESIN BEARING CD Flat Outer Periphery Type

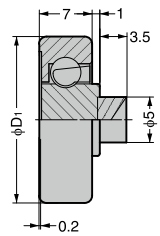




[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D1	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
G	3D	210-140-801	CD-227/68SUS	22	196	20	5.75	200	200
G	3D	210-140-802	CD-247/68SUS	24			6.40	200	200
G	3D	210-140-803	CD-267/68SUS	26			7.15	200	200
G	3D	210-140-804	CD-287/68SUS	28			7.80	200	200
G	3D	210-140-805	CD-307/68SUS	30			8.60	200	200
G	3D	210-140-806	CD-357/68SUS	35			11.05	200	200

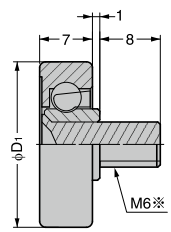




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D1	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
G	3D	210-140-807	CD-227/P5SUS	22	196	20	8.20	200	200
G	3D	210-140-808	CD-247/P5SUS	24			8.85	200	200
G	3D	210-140-809	CD-267/P5SUS	26			9.60	200	200
G	3D	210-140-810	CD-287/P5SUS	28			10.30	200	200
G	3D	210-140-811	CD-307/P5SUS	30			11.05	200	200
G	3D	210-140-812	CD-357/P5SUS	35			13.50	200	200





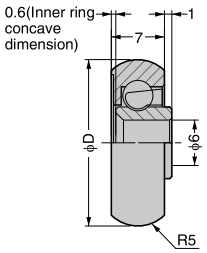
※Body and threaded shaft are separate parts.

[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D1	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
G	3D	210-140-813	CD-227/S-1SUS	22	196	20	8.55	200	200
G	3D	210-140-814	CD-247/S-1SUS	24			9.20	200	200
G	3D	210-140-815	CD-267/S-1SUS	26			9.95	200	200
G	3D	210-140-816	CD-287/S-1SUS	28			10.65	200	200
G	3D	210-140-817	CD-307/S-1SUS	30			11.45	200	200
G	3D	210-140-818	CD-357/S-1SUS	35			13.85	200	200

ANTI-RUST RESIN BEARING MCD Convex Outer Periphery Type

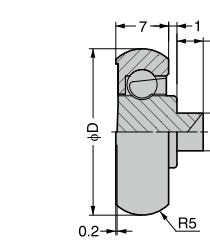




[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
	3D	210-140-819	MCD-227/68SUS	22	196	20	5.55	200	200
	3D	210-140-820	MCD-247/68SUS	24			6.1	200	200
	3D	210-140-821	MCD-267/68SUS	26			6.85	200	200
	3D	210-140-822	MCD-287/68SUS	28			7.55	200	200
	3D	210-140-823	MCD-307/68SUS	30			8.3	200	200
	3D	210-140-824	MCD-357/68SUS	35			10.75	200	200

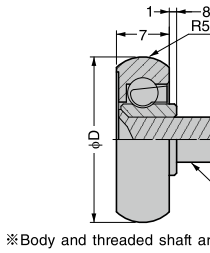




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
	3D	210-140-825	MCD-227/P5SUS	22	196	20	8	200	200
	3D	210-140-826	MCD-247/P5SUS	24			8.6	200	200
	3D	210-140-827	MCD-267/P5SUS	26			9.3	200	200
	3D	210-140-828	MCD-287/P5SUS	28			10.05	200	200
	3D	210-140-829	MCD-307/P5SUS	30			10.8	200	200
	3D	210-140-830	MCD-357/P5SUS	35			13.2	200	200





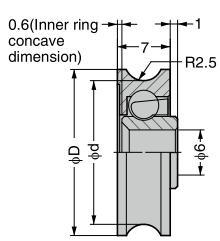
※Body and threaded shaft are separate parts.

[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
	3D	210-140-831	MCD-227/S-1SUS	22	196	20	8.35	200	200
	3D	210-140-832	MCD-247/S-1SUS	24			8.9	200	200
	3D	210-140-833	MCD-267/S-1SUS	26			9.65	200	200
	3D	210-140-834	MCD-287/S-1SUS	28			10.4	200	200
	3D	210-140-835	MCD-307/S-1SUS	30			11.15	200	200
	3D	210-140-836	MCD-357/S-1SUS	35			13.55	200	200

ANTI-RUST RESIN BEARING RCD Grooved Outer PeripheryType

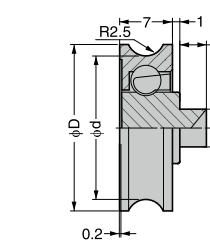




[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	d	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
	3D	210-140-837	RCD-227/68SUS	22	19	156.8	16	5.4	200	200
	3D	210-140-838	RCD-247/68SUS	24	21			6	200	200
	3D	210-140-839	RCD-267/68SUS	26	23			6.55	200	200
	3D	210-140-840	RCD-287/68SUS	28	25			7.35	200	200
	3D	210-140-841	RCD-307/68SUS	30	27			8.05	200	200
	3D	210-140-842	RCD-247T/68SUS	24	20			5.65	200	200

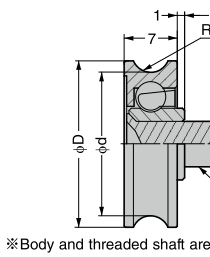




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	d	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
	3D	210-140-851	RCD-227/P5SUS	22	19	156.8	16	7.85	200	200
	3D	210-140-852	RCD-247/P5SUS	24	21			8.45	200	200
	3D	210-140-853	RCD-267/P5SUS	26	23			9	200	200
	3D	210-140-854	RCD-287/P5SUS	28	25			9.8	200	200
	3D	210-140-855	RCD-307/P5SUS	30	27			10.5	200	200
	3D	210-140-856	RCD-247T/P5SUS	24	20			8.1	200	200





※Body and threaded shaft are separate parts.

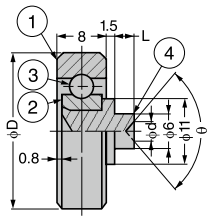
[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	d	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Bag (pcs)
	3D	210-140-843	RCD-227/S-1SUS	22	19	156.8	16	8.2	200	200
	3D	210-140-844	RCD-247/S-1SUS	24	21			8.8	200	200
	3D	210-140-845	RCD-267/S-1SUS	26	23			9.35	200	200
	3D	210-140-846	RCD-287/S-1SUS	28	25			10.15	200	200
	3D	210-140-847	RCD-307/S-1SUS	30	27			10.85	200	200
	3D	210-140-848	RCD-247T/S-1SUS	24	20			8.45	200	200

STEEL BEARING Heavy Duty & Flat Outer Periphery Type

●Made to order (different size, etc.) is available.





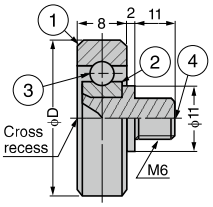
[Shaft Caulking/Full Ball Type]

This type does not use a retainer.

No.	Part Name	Material	Finish / Colour
①	Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
②	Inner Ring	Steel (SWCH)	
③	Balls		Plain
④	Shaft		Clear Zinc Chromate (Trivalent)

RoHS	CAD	Item Code	Item Name	D	(d×θ)	L	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-211	AS-22-A1.5-5.5	22	5×110°	5.5	686	70	19.7	1000	–
G	3D	210-140-214	AS-26-A1.5	26	5.5×90°	3.5			28.2	800	–





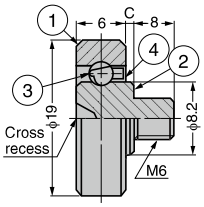
[Threaded Shaft/Full Ball Type]

This type does not use a retainer.

No.	Part Name	Material	Finish / Colour
①	Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
②	Inner Ring	Steel (SWCH)	
③	Balls		Plain
④	Shaft		Clear Zinc Chromate (Trivalent)

RoHS	CAD	Item Code	Item Name	D	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-212	AS-22-B2-11	22	686	70	20.9	1000	–
G	3D	210-140-215	AS-26-B2-11	26			29.7	500	–



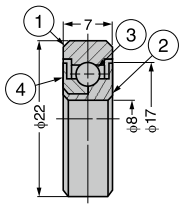


[Threaded Shaft Type]

No.	Part Name	Material	Finish / Colour
①	Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
②	Inner Ring	Steel (SWCH)	
③	Balls		Plain
④	Retainer	PP	Natural

RoHS	CAD	Item Code	Item Name	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Remarks	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-209	A-19-B1	1	490	50	With Locking Ring	12.0	1000	–
G	3D	210-140-210	A-19-B2	2				12.1	1000	–





[Inner Shaft Hole/Full Ball Type]

This type does not use a retainer.

No.	Part Name	Material	Finish / Colour
①	Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
②	Inner Ring A	Steel (SUM)	
③	Balls	Steel (SWCH)	Plain
④	Inner Ring B	Steel (SUM)	Alkaline Blackening

RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-137-037	※AS-608ZZ-2	294	30	14.8	1000	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.

MEDIUM DUTY BEARING Steel Insert Type

- Steel bearing part provides higher load capacity than plastic bearing 1.
- Customised versions (different size, etc.) are available.

[Applications]

- Transportation machinery (material handling equipment, conveyors, elevators, various doors)
- Industrial machinery (various labor-saving machines, various automatic machines)
- Medical and laboratory equipment (medical equipment, various measuring instrument, development processing equipment)
- Electrical equipment (stereos, vending machines, exhaust equipment)
- Construction (door rollers, rain shutter doors, shutters)
- Office equipment (electronic printers, desks, cabinets, registers, copying machines)
- Household and leisure equipment (fishing reels, toys, bicycles)

[Use Conditions]

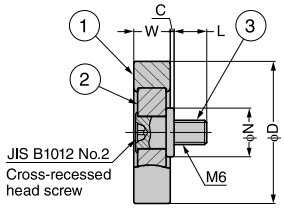
- Operating temperature: 0℃~40℃
- Rotational speed: 300 r.p.m

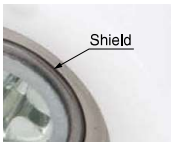
Refer to 1 : P.973

MEDIUM DUTY BEARING DT Steel Insert Type

- JIS-compliant steel bearing.
- With shield to prevent dust from invading compared with IDS 1.


DT-18-BH1-L1260ZZ





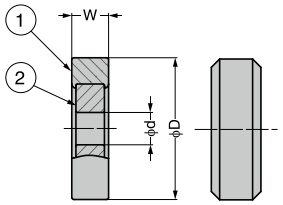
No.	Part Name	Material	Finish / Colour
①	Outer Ring	POM	Natural
②	Inner Ring	Steel	Plain
③	Screw	Steel (SWCH)	Clear Zinc Chromate (Trivalent)

[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	W	C	L	N	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-034-419	DT-18-BH1-L1260ZZ	18	6	1	8	9	392	40	5.9	1	–
G	3D	210-034-420	DT-19-BH1-L1260ZZ	19							6.1	1	–
G	3D	210-034-421	DT-20-BH1-L1260ZZ	20							6.4	1	–
G	3D	210-034-422	DT-22-BH1-688ZZ	22	7			12	441	45	10.6	1	–
G	3D	210-034-423	DT-24-BH1-626ZZ	24	8			9	490	50	13.4	1	–
G	3D	210-034-424	DT-26-BH1-626ZZ	26							14.3	1	–
G	3D	210-034-425	DT-30-BH1-608ZZ	30	9			12	686	70	21.8	1	–
G	3D	210-034-426	DT-35-BH1-608ZZ-9	35					784	80	24.8	1	–
G	3D	210-034-427	DT-26-BH0.5-626ZZ	26	8	0.5		10	490	50	14.3	1	–
G	3D	210-034-428	DT-26-BH2-9.5-626ZZ			2	9.5				15.4	1	–
G	3D	210-034-429	DT-26-BH4-626ZZ			4	8				16.3	1	–
G	3D	210-034-430	DT-26-BH6-14-626ZZ			6	14				18.7	1	–


DT-17-604ZZ-CB


DT-18-L1260ZZ



DT-17-604ZZ-CB
※DT-17-604ZZ-CB has different outer ring shape.

No.	Part Name	Material	Finish / Colour
①	Outer Ring	POM	Natural, Black (DT-17-604ZZ-CB)
②	Inner Ring	Steel	Plain

[Inner Shaft Hole Type]

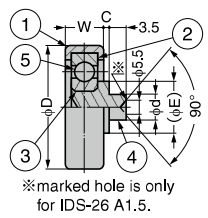
RoHS	CAD	Item Code	Item Name	D	d	W	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-034-410	DT-17-604ZZ-CB	17	4	6	98	10	3.1	1	–
G	3D	210-034-411	DT-18-L1260ZZ	18	6		392	40	2.9	1	–
G	3D	210-034-412	DT-19-L1260ZZ	19					3.1	1	–
G	3D	210-034-413	DT-20-L1260ZZ	20					3.4	1	–
G	3D	210-034-414	DT-22-688ZZ	22	8	7	441	45	5.7	1	–
G	3D	210-034-415	DT-24-H6-626ZZ	24	6	8	490	50	9.9	1	–
G	3D	210-034-416	DT-26-H6-626ZZ	26					10.8	1	–
G	3D	210-034-417	DT-30-608ZZ	30	8	9	686	70	16.1	1	–
G	3D	210-034-418	DT-35-608ZZ	35			784	80	19.1	1	–

Refer to 1 : P.972

MEDIUM DUTY BEARING IDS Steel Insert & Flat Outer Periphery Type

●Made to order (different size, etc.) is available.





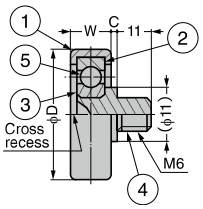
※marked hole is only for IDS-26 A1.5.

No.	Part Name	Material	Finish / Colour
①	Outer Ring	POM	Natural
②	Steel Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
③	Inner Ring	Steel (SWCH)	
④	Shaft		
⑤	Balls		–

[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	E	d	W	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-216	IDS-22-A2.5	22	9	5	7	2.5	392	40	13.2	1000	–
G	3D	210-140-218	IDS-26-A1.5	26	11	6	8	1.5	588	60	18.1	800	–



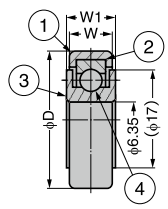


No.	Part Name	Material	Finish / Colour
①	Outer Ring	POM	Natural
②	Steel Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
③	Inner Ring	Steel (SWCH)	
④	Shaft		
⑤	Balls		–

[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	W	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-217	IDS-22-B1.5-11	22	7	1.5	392	40	14.5	1000	–
G	3D	210-140-219	IDS-26-B2-11	26	8	2	588	60	20.0	500	–





No.	Part Name	Material	Finish / Colour
①	Outer Ring	POM	Natural
②	Steel Outer Ring	Steel (STKM)	Clear Zinc Chromate (Trivalent)
③	Inner Ring	Steel (SWCH)	
④	Balls		–

[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	W	W_1	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-220	IDS-26-H6.35W0.8	26	8	9.6	294	30	19.5	800	–
G	3D	210-140-221	IDS-35-H6.35W0.26	35	9	9.52			25.2	500	–

PLASTIC BEARING

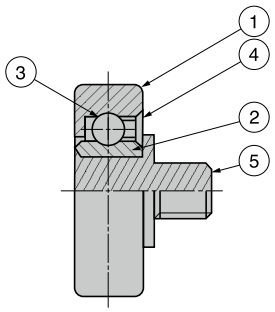
- Polyacetal bearing provides excellent wear resistance and low friction coefficient.
- Excellent resistance against corrosion, chemicals and weather.
- Low cost thanks to injection moulding process.
- Customised versions (different size, etc.) are available.

[Applications]

- Office equipment (electronic printers, desks, cabinets, registers, copying machines)
- Transportation machinery (conveyors, elevators, various doors)
- Electrical equipment (stereos, vending machines, exhaust equipment)
- Industrial machinery (various labor-saving machines, various automatic machines)
- Medical and laboratory equipment (medical equipment, various measuring instrument, development processing equipment)
- Household and leisure equipment (fishing reels, toys, bicycles)
- Construction (door rollers, rain shutter doors, shutters)

[Use Conditions]

- Operating temperature: 0℃~+40℃
- Rotational speed: 300 r.p.m

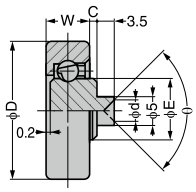


[Plastic Bearing Parts Structure]

No.	Part Name	Material
①	Outer Ring	POM
②	Inner Ring	Steel
③	Balls	Steel
④	Retainer	PP
⑤	Shaft	Steel
–	Lubricant	Grease

PLASTIC BEARING Flat Outer Periphery Type

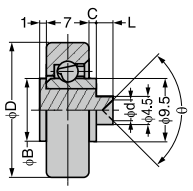




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	E	(d×θ)	W	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-040	DR-19-A0.5	19	8.2	4×120°	6	0.5	29.4	3	5.0	2000	–
G	3D	210-140-041	DR-22-A1	22	9.5	4.4×90°	7	1	78.4	8	8.2	1000	–

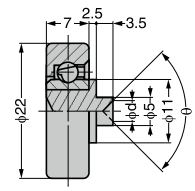




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	(d×θ)	C	L	B	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-107	DR-22-AH(1)3.5-8019	22	–	0	3.5	10	196	20	8.2	1000	–
G	3D	210-140-108	DR-26-AH	26							9.5	1000	–
G	3D	210-140-133	DR-22-AH2.5-3.65	22	2.5×100°	2.5	3.65	9.5			9.4	1000	–

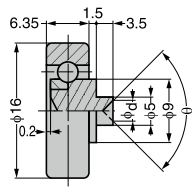




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	(d×θ)	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-134	DR-22-AH2.5	4×110°	196	20	9.4	1000	–





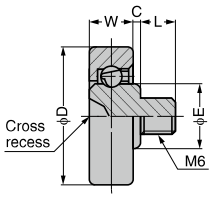
[Shaft Caulking/Full Ball Type]

This type does not use a retainer.

RoHS	CAD	Item Code	Item Name	(d×θ)	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-130	DRS-16-A1.5	4.5×90°	19.6	2	5.6	2500	–

PLASTIC BEARING Flat Outer Periphery Type



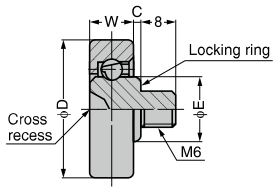


[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	E	W	C	L	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-050	DR-19-B0.5	19	8.2	6	0.5	8	49	5	5.8	2000	–
G	3D	210-140-051	DR-22-B0.5	22	9.5	7			196	20	8.7	1000	–
G	3D	210-140-052	DR-24-B0.5	24							9.4	1000	–
G	3D	210-140-053	DR-26-B0.5	26							10.1	1000	–
G	3D	210-140-152	DR-22-B3-10.5	22			3	10.5			10.4	1000	–
G	3D	210-140-153	DR-26-B3-10.5	26							11.8	800	–
G	3D	210-140-156	※DR-26-B3.6-12.4				3.6	12.4			12.5	800	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.



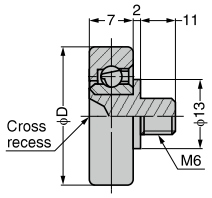


[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	E	W	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-135	DR-19-B1	19	8.2	6	1	49	5	6	2000	–
G	3D	210-140-587	DR-19-B2				2			6.4	2000	–
G	3D	210-140-137	DR-22-B2	22	9.5	7		196	20	9.6	1000	–
G	3D	210-931-985	DR-22-B3				3			10	1000	–
G	3D	210-140-139	DR-22-B4				4			10.7	1000	–
G	3D	210-140-140	DR-22-B5				5			11.2	1000	–
G	3D	210-140-141	DR-22-B6				6			11.7	1000	–
G	3D	210-140-142	DR-24-B2	24			2			10.2	1000	–
G	3D	210-140-143	※DR-24-B3				3			11.4	1000	–
G	3D	210-140-144	※DR-24-B4				4			11.7	1000	–
G	3D	210-140-106	※DR-24-B5				5			12.2	1000	–
G	3D	210-140-146	※DR-24-B6				6			12.7	1000	–
G	3D	210-140-147	DR-26-B2	26			2			11	800	–
G	3D	210-935-645	DR-26-B3				3			11.4	800	–
G	3D	210-140-149	DR-26-B4				4			12.1	800	–
G	3D	210-140-151	DR-26-B6				6			13.1	800	–
G	3D	210-140-157	DR-28-B2	28			2			11.8	500	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.





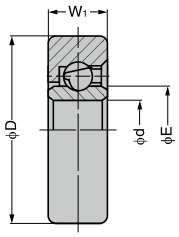
[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-154	※DR-22-BH2-11	22	196	20	10.9	1000	–
G	3D	210-140-155	※DR-26-BH2-11	26			12.3	800	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.

PLASTIC BEARING Flat Outer Periphery Type



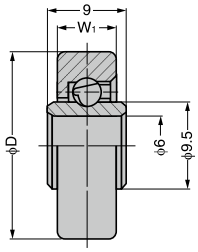


[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	d	E	W1	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	JIS Equivalent Number	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-159	※DR-18-H6	18	6	8.2	6	49	5	–	2.9	2500	–
–	3D	–	※DR-18-H8		8	11	5				2.8	3000	–
G	3D	210-140-045	DR-19-H5	19	5	8.2	6			635	3.5	2500	–
G	3D	210-140-161	DR-20-H8	20	8	11		29.4	3	–	4	1500	–
G	3D	210-140-046	DR-22-H6	22	6	9.5	7	196	20	636	5.7	1500	–
G	3D	210-140-162	DR-24-H6	24						–	6.4	1000	–
G	3D	210-140-047	DR-26-H6	26							7.2	1000	–
G	3D	210-140-163	DR-28-H6	28							8.8	500	–
G	3D	210-140-164	※DR-22-H8	22	8	11		49	5	608	5	1500	–
–	3D	–	※DR-24-H10.5	24	10.5	13				–	5.8	–	–
G	3D	210-140-168	DR-30-H10-8	30	10	14.5	8	245	25		12	500	–
G	3D	210-140-171	DR-30-H10-9				9			6200	13.3	500	–
G	3D	210-140-172	DR-32-H12	32	12	17	10	294	30	6201	17.5	500	–
G	3D	210-140-173	DR-35-H15	35	15	21	11			6202	25	400	–
G	3D	210-140-174	DR-40-H17	40	17		12			6203	26.8	250	–
G	3D	210-140-175	DR-47-H20	47	20	27	14	343	35	6204	50.1	150	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.

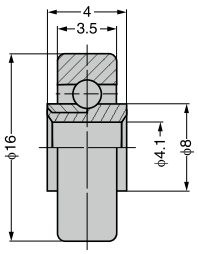




[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	W1	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-165	DR-22-H6W1	22	7	196	20	6.4	1000	–
G	3D	210-140-166	DR-26-H6W1	26				7.7	1000	–
G	3D	210-140-169	DR-35-H6W1	35				10.1	500	–
G	3D	210-140-170	DR-40-H6W0.5	40	8			13.3	400	–





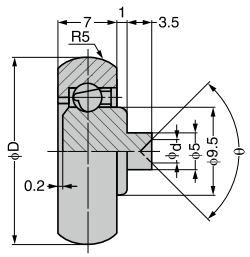
[Inner Shaft Hole/Full Ball Type]

This type does not use a retainer.

RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-158	DRS-16-H4.1-W0.25	49	5	2.1	5000	–

PLASTIC BEARING Convex Outer Periphery Type

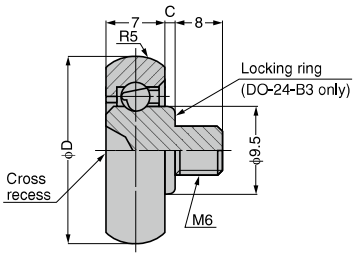




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	(d×θ)	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-183	DO-22-A1	22	4.4×90°	78.4	8	7.8	1000	–
G	3D	210-140-184	DO-24-A1	24				8.5	1000	–
G	3D	210-140-185	DO-26-A1	26				9.2	1000	–

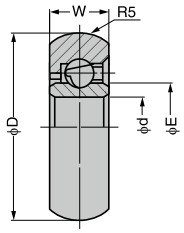




[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	C	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-177	DO-22-B0.5	22	0.5	196	20	8.6	1000	–
G	3D	210-140-178	DO-24-B0.5	24				9.3	1000	–
G	3D	210-140-179	DO-26-B0.5	26				9.8	1000	–
G	3D	210-140-186	DO-24-B3	24	3			10.4	1000	–

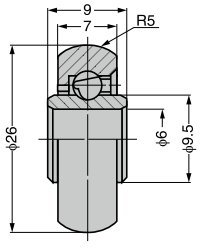




[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	E	d	W	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-176	DO-19-H5	19	8.2	5	6	49	5	3.3	2500	–
G	3D	210-140-180	DO-22-H6	22	9.5	6	7	196	20	5.3	1500	–
G	3D	210-140-181	DO-24-H6	24						6.1	1000	–
G	3D	210-140-182	DO-26-H6	26						6.7	1000	–



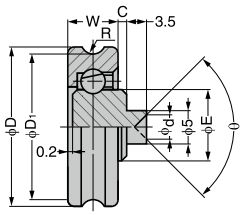


[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-188	DO-26-H6W1	196	20	7.4	1000	–

PLASTIC BEARING Grooved Outer Periphery Type

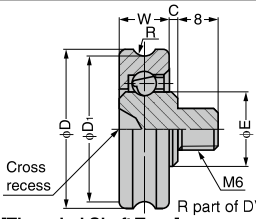




[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	D1	E	(d×θ)	W	C	R	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G'	3D	210-140-189	DU-19-A0.5	19	17	8.2	4×120°	6	0.5	1.75	29.4	3	5.1	2000	–
G'	3D	210-140-190	DU-22-A1	22	19.2								7.7	1000	–
G'	3D	210-140-191	DU-24-A1	24	21.2	9.5	4.4×90°	7	1	2.5	58.8	6	8.4	1000	–
G'	3D	210-140-192	DU-26-A1	26	23.2								9	1000	–



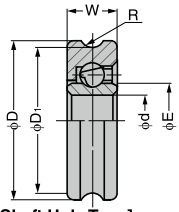


[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	D1	E	W	C	R	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G'	3D	210-140-193	DU-19-B0.5	19	17	8.2	6		1.75	39.2	4	6.2	2000	–
G'	3D	210-140-194	DU-22-B0.5	22	19.2							8.3	1000	–
G'	3D	210-140-195	DU-24-B0.5	24	21.2	9.5	7	0.5	2.5	156.8	16	8.9	1000	–
G'	3D	210-140-196	DU-26-B0.5	26	23.2							9.6	1000	–
G'	3D	210-140-202	※DV-32.5-B1.5-2R	32.5	20.5		9.5	1.5	2R×15°	–	–	10.4	400	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.



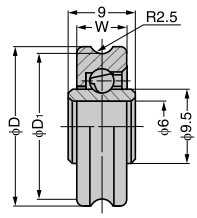


[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	D1	E	d	W	R	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G'	3D	210-140-197	DU-19-H5	19	17	8.2	5	6	1.75	39.2	4	3.2	2500	–
G'	3D	210-140-198	DU-22-H6	22	19.2							5.3	1500	–
G'	3D	210-140-199	DU-24-H6	24	21.2	9.5	6	7	2.5	156.8	16	5.9	1000	–
G'	3D	210-140-200	DU-26-H6	26	23.2							6.5	1000	–
G'	3D	210-140-201	※DU-30-H6-M	30	25.7							6.7	500	–

※Made to order (production lead time: about 60 days). MOQ is 100 pieces.



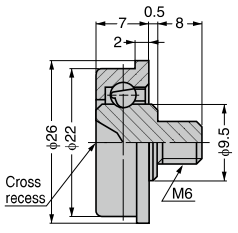


[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	D	D1	W	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G'	3D	210-140-203	DU-35-H6W1	35	31	7	156.8	16	9.2	500	–
G'	3D	210-140-204	DU-40-H6W0.5	40	36	8			11.9	400	–

PLASTIC BEARING Flanged Outer PeripheryType

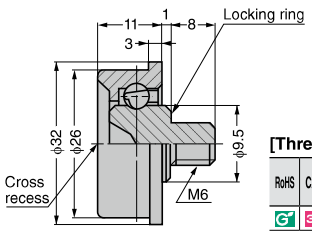




[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-206	DF-22-B0.5	196	20	9.2	1000	–

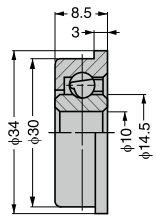




[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	Load Capacity N/300r.p.m	Load Capacity kgf/300r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-207	DF-26-B1	196	20	13.4	400	–



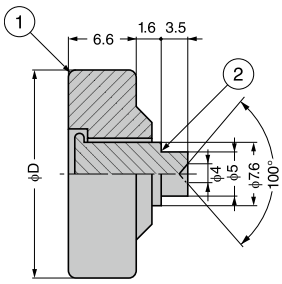


[Inner Shaft Hole Type]

RoHS	CAD	Item Code	Item Name	Outer Roller Load Capacity N/300 r.p.m	Outer Roller Load Capacity kgf/300 r.p.m	Inner Shaft Load Capacity N/300 r.p.m	Inner Shaft Load Capacity kgf/300 r.p.m	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-208	DF-30-H10-3	245	25	58.8	6	13.4	500	–

Plastic Roller Flat Outer Periphery Type



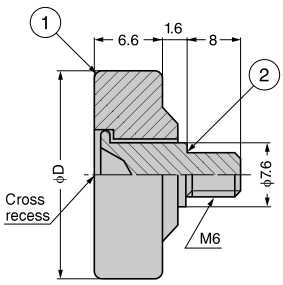


No.	Part Name	Material	Finish
①	Outer Ring	POM	Natural
②	Inner Ring	Steel (SWCH)	Clear Zinc Chromate (Trivalent)

[Shaft Caulking Type]

RoHS	CAD	Item Code	Item Name	D	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-222	DL-19-A1.6	19	5.0	2000	–
G	3D	210-140-223	DL-22-A1.6	22	6.1	1000	–
G	3D	210-140-224	DL-26-A1.6	26	8.4	1000	–





No.	Part Name	Material	Finish
①	Outer Ring	POM	Natural
②	Inner Ring	Steel (SWCH)	Clear Zinc Chromate (Trivalent)

[Threaded Shaft Type]

RoHS	CAD	Item Code	Item Name	D	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-140-225	DL-19-B1.6	19	5.9	1500	–
G	3D	210-140-226	DL-22-B1.6	22	6.8	1000	–
G	3D	210-140-227	DL-26-B1.6	26	8.0	1000	–

SWIVEL HF

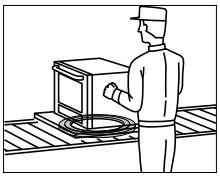


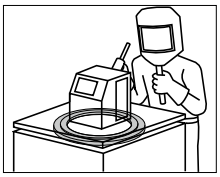
●Rubber stoppers prevent from slipping.

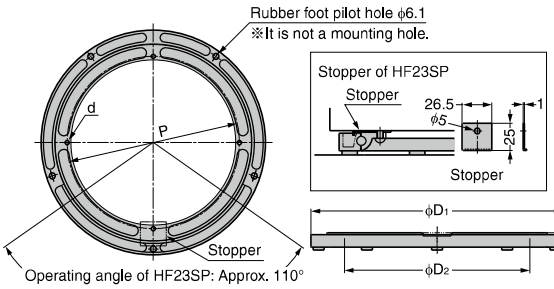
[Applications]
●Workbenches
●For TV monitors, etc.

[Remarks]
●Picture on the left shows HF23SP, HF30, HF45 and HF60 from inside.
●Drawing below is HF23SP (with stopper). (No stopper for other sizes.)
●Mounting hole pitch may vary. Please check with the actual item.

[Application Example]





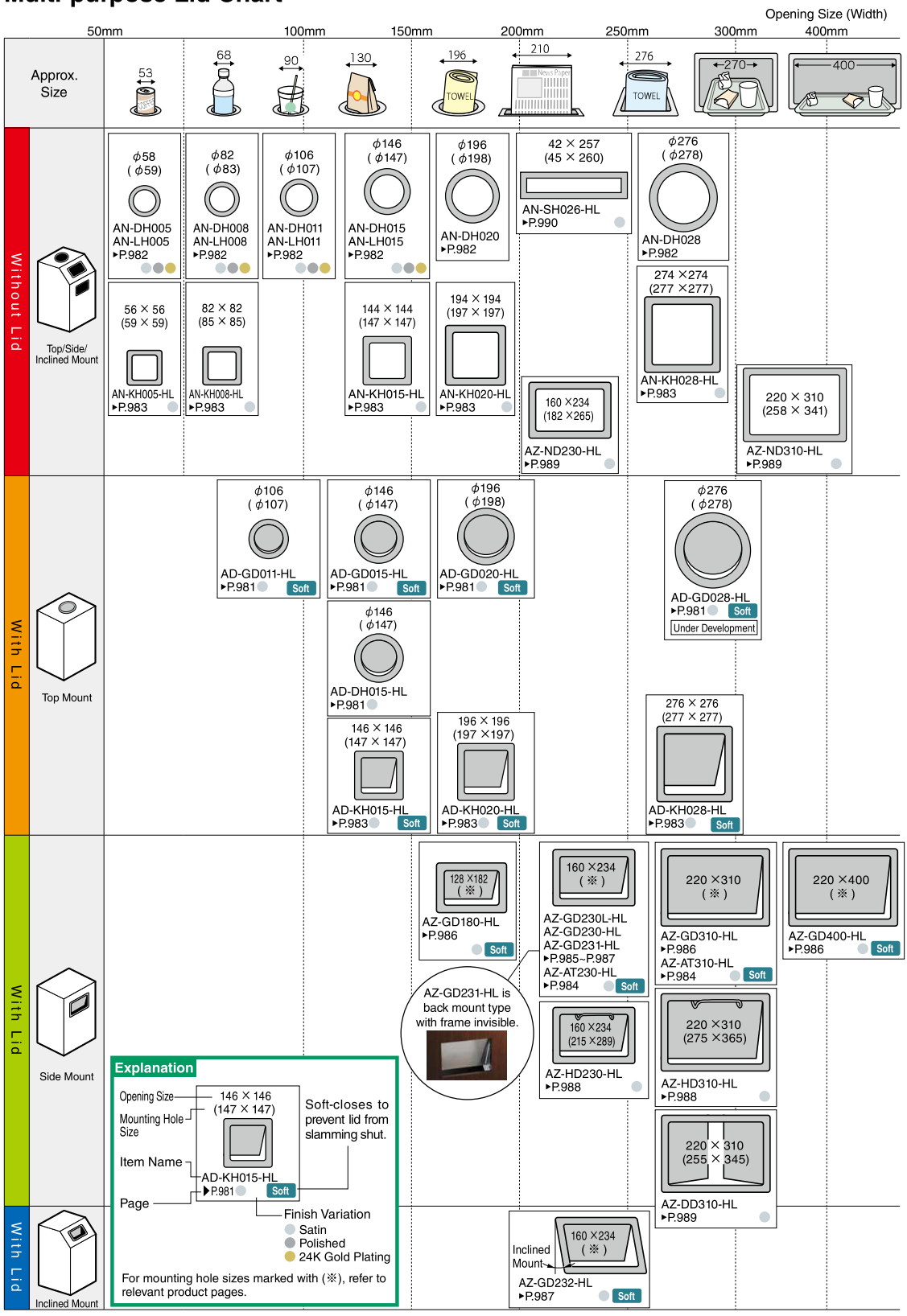


HF23SP (with stopper) shown.

No.	Part Name	Material	Finish / Colour
①	Top Plate	Aluminium Alloy	As below
②	Balls	Steel	–
③	Base plate	Aluminium Alloy	As below
④	Leg	Rubber	White

RoHS	CAD	Item Code	Item Name	Stopper	Finish / Colour	D1	D2	P	H	h	d	Holes	Load Capacity N/pc	Load Capacity kgf/pc	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-035-222	HF23SP	With	Barrel Polished	230	166	176	16	15	ϕ4.8	4	392	40	370	40	–
G	3D	210-035-220	HF30	Without		327	265	275.5				6	588	60	550	20	–
G	3D	210-035-221	HF45			441	380	392	22	16.5	ϕ4.8 ϕ10		980	100	1600	10	100
G	3D	210-035-226	HF60		Silver Enamel Finish	600	520	538	24	18.5	ϕ4.8 ϕ12	4	1960	200	3200	5	–

Multi-purpose Lid Chart



Guide (P.988) and funnel (P.990, P.991) also available.

MULTI-PURPOSE LID AD-GD With Damper

SUS



[Installation]



- With damper to keep lid from slamming shut.
- Corrosion resistant.
- Small type AD-GD011-HL is newly launched.
- Wide opening.
- Balance weight restores lid to horizontal position.
- AD-GD011-HL is not for plastic bottles, suitable for separation.

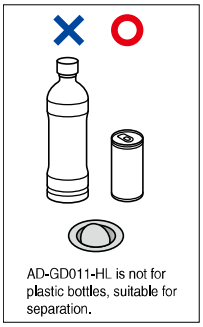
Video Link

[Specifications]

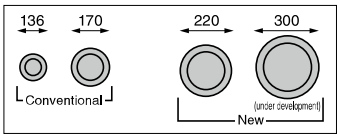
- Operating temperature: 0℃~40℃

[Remarks]

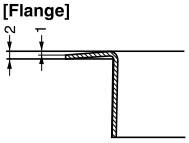
- Indoor use only.
- The closing speed varies depending on the operating temperature. For product stored below the freezing point, leave it indoor above 0℃ for several hours before use.

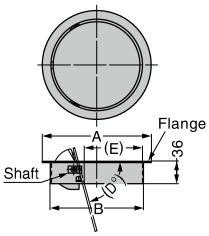


AD-GD011-HL is not for plastic bottles, suitable for separation.

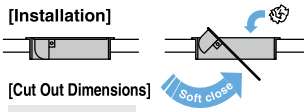


[Flange]

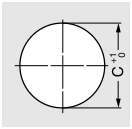




[Installation]



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	C	D	E	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-029-219	AD-GD011-HL	Stainless Steel (SUS304)	Satin	136	106	107	87	62	460	1	10
G	3D	210-022-107	AD-GD015-HL			170	146	147	75	90	1000	1	10
G	3D	210-041-472	AD-GD020-HL			220	196	198	80	128	1060	1	6
G	3D	210-041-473	AD-GD028-HL			300	276	278	77	186	1840	1	4

MULTI-PURPOSE LID AD-DH015-HL

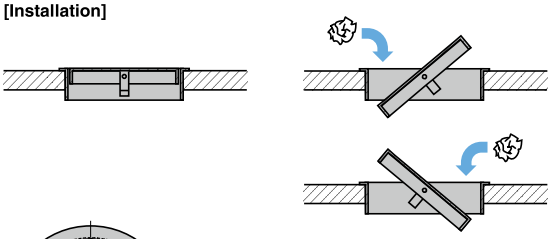
SUS



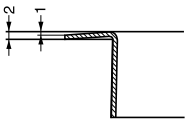


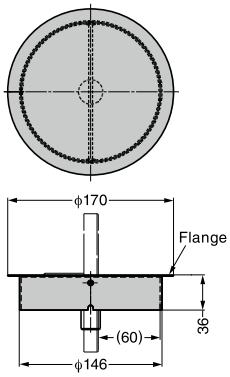
- 360° rotation.
- Corrosion resistant.
- Balance weight restores lid to horizontal position.

[Installation]

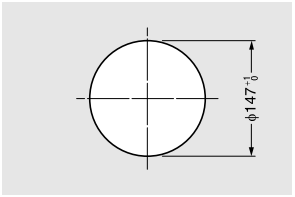


[Flange]





[Cut Out Dimensions]



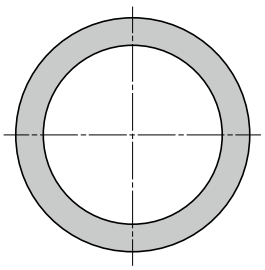
RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-170-079	AD-DH015-HL	Stainless Steel (SUS304)	Satin	560	1	10

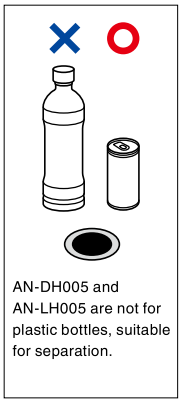
RING COVER FOR REFUSE BOX AN-DH, AN-LH

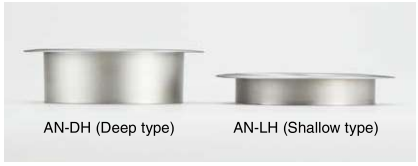
SUS



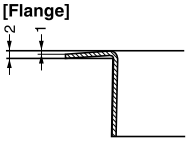
- Corrosion resistant.
- Wide variations (Size/Depth/Finish).
- AN-DH005 and AN-LH005 are not for plastic bottles, suitable for separation.

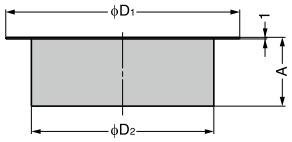




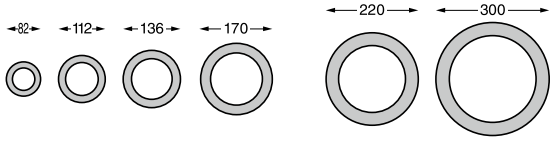


[Flange]





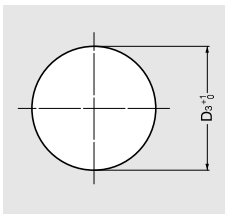
[Size Variation]



[Installation]



[Cut Out Dimensions]



[AN-DH (Deep Type)]

RoHS	CAD	Item Code	Item Name	A	D1	D2	D3	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-779	AN-DH005-GP	36	82	58	59	Stainless Steel (SUS304)	24K Gold Plating+Clear	66	1	50
G	3D	210-032-780	AN-DH005-MR						Polished		1	100
G	3D	210-032-781	AN-DH005-HL						Satin		1	100
G	3D	210-022-094	AN-DH008-GP		112	82	83		24K Gold Plating+Clear	107	1	10
G	3D	210-022-095	AN-DH008-MR						Polished		1	10
G	3D	210-022-096	AN-DH008-HL						Satin		1	10
G	3D	210-170-078	AN-DH011-GP	40	136	106	107		24K Gold Plating+Clear	137	1	10
G	3D	210-170-076	AN-DH011-MR						Polished		1	10
G	3D	210-170-077	AN-DH011-HL						Satin		1	10
G	3D	210-172-533	AN-DH015-GP	36	170	146	147		24K Gold Plating+Clear	182	1	10
G	3D	210-172-532	AN-DH015-MR						Polished		1	10
G	3D	210-172-531	AN-DH015-HL						Satin		1	10
G	3D	210-044-812	AN-DH020-HL		220	196	198			230	1	6
–	3D	210-044-813	AN-DH028-HL		300	276	278			290	1	4

[AN-LH (Shallow Type)]

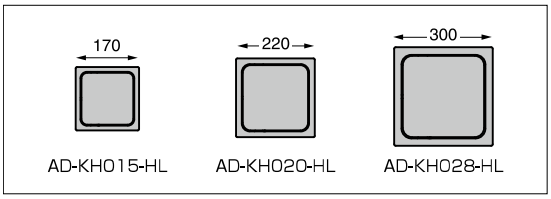
RoHS	CAD	Item Code	Item Name	A	D1	D2	D3	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-782	AN-LH005-GP	22	82	58	59	Stainless Steel (SUS304)	24K Gold Plating+Clear	50	1	50
G	3D	210-032-783	AN-LH005-MR						Polished		1	100
G	3D	210-032-784	AN-LH005-HL						Satin		1	100
G	3D	210-022-097	AN-LH008-GP		112	82	83		24K Gold Plating+Clear	77	1	10
G	3D	210-022-098	AN-LH008-MR						Polished		1	10
G	3D	210-022-099	AN-LH008-HL						Satin		1	10
G	3D	210-022-100	AN-LH011-GP		136	106	107		24K Gold Plating+Clear	92	1	10
G	3D	210-022-101	AN-LH011-MR						Polished		1	10
G	3D	210-022-102	AN-LH011-HL						Satin		1	10
G	3D	210-022-103	AN-LH015-GP		170	146	147		24K Gold Plating+Clear	122	1	10
G	3D	210-022-104	AN-LH015-MR						Polished		1	10
G	3D	210-022-105	AN-LH015-HL						Satin		1	10

MULTI-PURPOSE LID (W/DAMPER) AD-KH With Lid

SUS







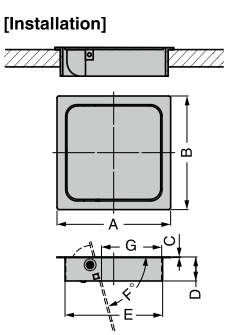
- With damper to keep lid from slamming shut.
- New types are now available. (AD-KH020-HL and AD-KH028-HL)
- Made of stainless steel for corrosion resistance. Available in areas exposed to water.
- Wide opening.
- Balance weight restores lid to horizontal position.

Video Link

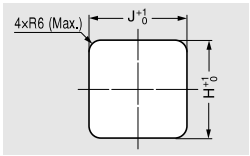
[Specifications]
- Operating temperature: 0℃~40℃

[Remarks]
- Indoor use only.
- The closing speed varies depending on the operating temperature. For product stored below the freezing point, leave it indoor above 0℃ for several hours before use.

[Installation]



[Cut Out Dimensions]

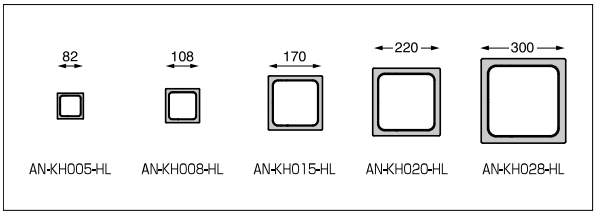


RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	C	D	E	F	G	H	J	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-022-108	AD-KH015-HL	Stainless Steel (SUS304)	Satin	170	170	1.2	36	146	80	93	147	147	970	1	10
G	3D	210-037-893	AD-KH020-HL			220	220		50	196	77	127	197	197	1400	1	6
G	3D	210-037-894	AD-KH028-HL			300	300		72	276	80	191	277	277	2700	1	4

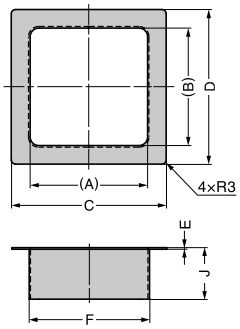
SQUARE COVER FOR REFUSE BOX AN-KH

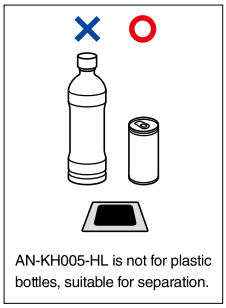
SUS



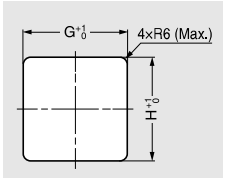


- Corrosion resistant.
- Small type AN-KH005-HL and AN-KH008-HL are newly launched.
- AN-KH005-HL is not for plastic bottles, suitable for separation.





[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	C	D	E	F	G	H	J	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-785	AN-KH005-HL	Stainless Steel (SUS304)	Satin	56	56	82	82	1.2	58	59	59		87	1	150
G	3D	210-028-436	AN-KH008-HL			82	82	108	108		84	85	85	36	126	1	10
G	3D	210-022-109	AN-KH015-HL			144	144	170	170		146	147	147		217	1	10
G	3D	210-037-895	AN-KH020-HL			194	194	220	220		196	197	197	50	388	1	6
G	3D	210-037-896	AN-KH028-HL			274	274	300	300		276	277	277	72	733	1	6

TOUCHLESS MULTI-PURPOSE LID AZ-AT With Lid

INSTRUCTION SUS





Winner of the 2021 interzum High Product Quality Award.

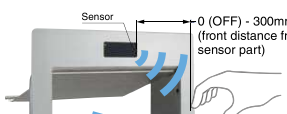
- The lid opens automatically when the sensor detects a hand. Touchless opening and closing is hygienic (green light in sensor part normally lit).
- Sensing distance can be adjusted up to 300mm with dial on back. Turn the sensor off to disable automatic opening/closing.
- With soft-closing function.
- Plates on both sides of the opening offer protection against hand pinching.
- Can be opened and closed manually in the case of a power failure.

[Specifications]
- Operating temperature: 0˚ C~40˚ C
- Passed 150,000 private cycle open/close tests.

[Remarks]
- For vertical use only.
- Indoor use only.
- The closing speed varies depending on the operating temperature. For products stored below the freezing point, leave indoors above 0˚ C for several hours before use.
- Do not put anything in front of the sensor. Due to the characteristics of the sensor, the sensing distance varies depending on the object.
- Do not touch the lid while it is opening or closing.
- When using around water, protect the AC adapter on the back and the drive unit thoroughly to prevent them from getting wet.

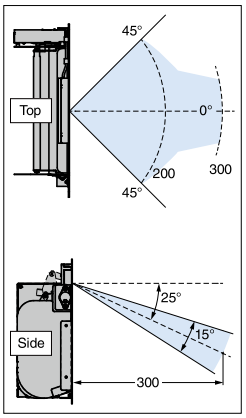
[Sold Separately]
- AC adapter

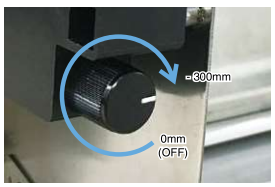
[Recommended Screws]
- Pan head tapping screw (nominal 3) or pan head machine screw M3



The lid opens automatically when the sensor detects a hand.

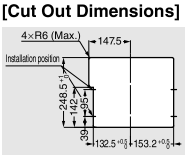
[Sensing Distance Image]



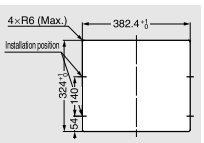


Sensing distance can be adjusted from 0 (OFF) to 300mm with dial on bottom back.

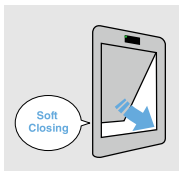
[Cut Out Dimensions]



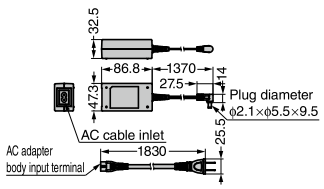
AZ-AT230-HL



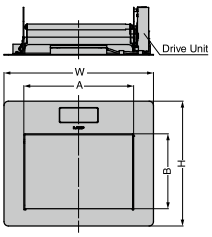
AZ-AT310-HL



With soft-closing for safety.



AC Adapter (Sold Separately)



Body

[Body]

RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	W	H	C	P	Weight (g)
G	3D	210-048-695	AZ-AT230-HL	Stainless Steel (SUS304)	Satin	234	160	319	266.5	49	95	3000
G	3D	210-048-696	AZ-AT310-HL			310	220	395	340	64	140	4500

[AC Adapter] (Sold Separately)

RoHS	CAD	Item Code	Item Name	Input Voltage	Output Voltage	Rated Current	Max. Output Capacity	Plug Diameter	Wire Length
G	–	210-048-699	SYS1544-2415-T2	100 - 240VAC	15VDC	1.6A	24W	ϕ2.1×ϕ5.5×9.5	Primary side 1830; secondary side 1370

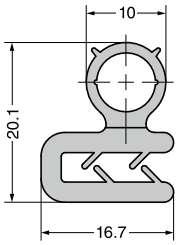
LID HOLDER AZ-ST



[Installation]



Two pieces are used in the photo.



Left/right installation is recommended; purchase two pieces.

- Simple holder which keeps multi-purpose lids open.
- Retrofitting and removal are also easy, as adhesive is not required.
- Highly resistant to climate and chemicals.

[Specifications]
- Operating temperature: -60˚ C - 100˚ C

[Remarks]
- Do not apply excess force to the opening stay.

[Compatible Parts]
- Stainless Steel Multi-Purpose Lid with Damper AZ-GD232-HL 1
- Stainless Steel Multi-Purpose Lid with Damper AZ-GD 2
- Stainless Steel Multi-Purpose Lid with Damper AZ-GD231-HL 3
- Multi-Purpose Lid with Damper AZ-GD230L-HL 4

RoHS	CAD	Item Code	Item Name	Material	Colour	Length	Weight (g)
G	3D	210-049-775	AZ-ST	Olefin-based Elastomer/ Polypropylene (PP)	Black	100	13.5

Refer to 1: P.987, 2: P.986, 3: P.987, 4: P.985

MULTI-PURPOSE LID (W/DAMPER) AZ-GD With Lid / Key

SUS





- Soft-closes to prevent lid from slamming shut. Reduces noise and impact when lid closes.
- Integrated anti-pinching plates.
- For vertical use.
- Corrosion resistant.
- Possible to prohibit the use of lid by using key. Also suitable for transportation vehicles, etc. (Rattling may occur depending on vibration conditions.
- With tamper-proof lock

[Specifications]

- Operating temperature: 0℃~40℃

[Remarks]

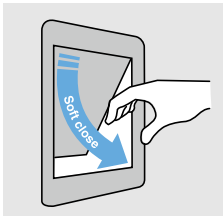
- Indoor use only.
- The closing speed varies depending on the operating temperature. For damper stored below the freezing point, leave it indoor above 0℃ for several hours before use.
- Please contact a local representative when ordering additional keys.

[Sold Separately]

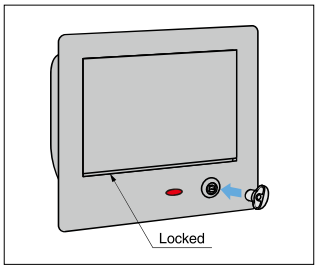
- Guide AZ-SLP 1

[Recommended Screws]

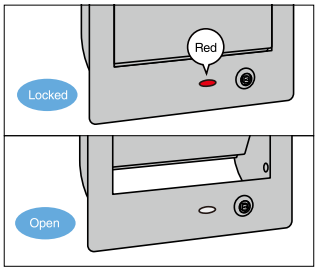
- Pan head tapping screw 3 x 4
- Pan head screw 3 x 4



Video Link



Can be locked which prevents flap from opening.

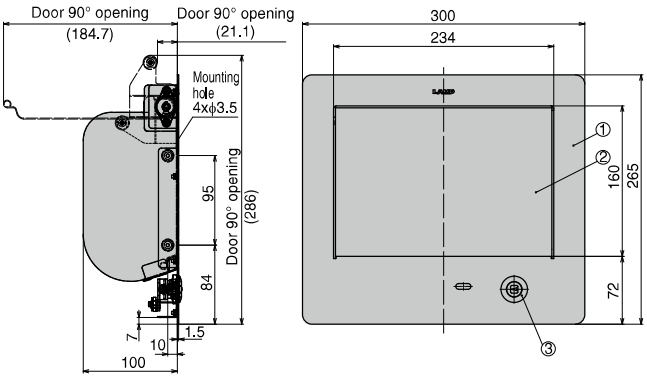


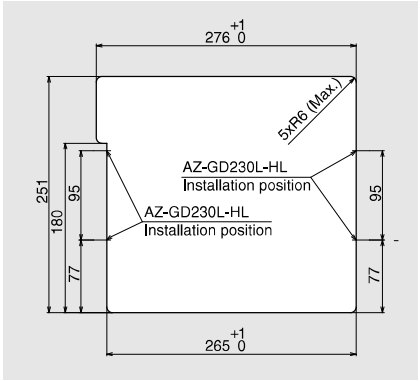
Indicator shows red when locked.



Recommended for use in public transportation like trains.

[Cut Out Dimensions]





RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-037-892	AZ-GD230L-HL	Stainless Steel (SUS304)	Satin	1950	1	6

Refer to 1: P.988

MULTI-PURPOSE LID AZ-GD With Damper

INSTRUCTION SUS





AZ-GD180-HL AZ-GD230-HL AZ-GD310-HL AZ-GD400-HL (Slim Frame Type)

- With damper to keep lid from slamming shut.
- Integrated anti-pinching plates.
- For vertical use only.
- Corrosion resistant.
- Back mount type 1 and inclined mount type 2 of the same shape also available.
- Guide (sold separately) 3 for guiding rubbish into waste box inside also available.

Video Link

[Specifications]

- Operating temperature: 0℃~40℃

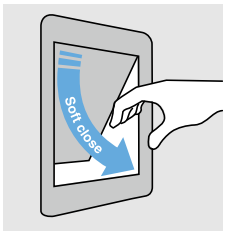
[Remarks]

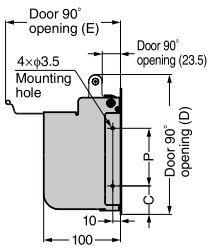
- Indoor use only.
- The closing speed varies depending on the operating temperature.For product stored below the freezing point, leave it indoor above 0℃ for several hours before use.

[Sold Separately]

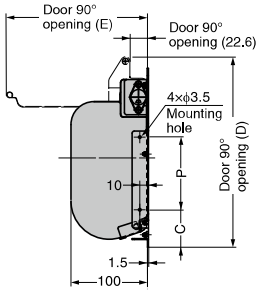
- Guide AZ-SLP 3



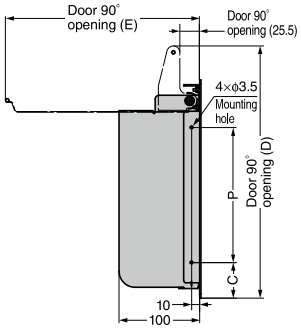




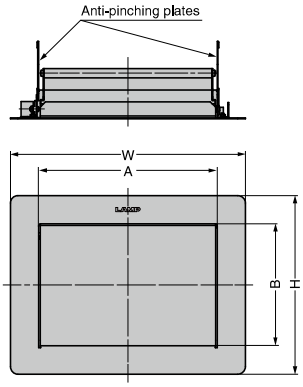
AZ-GD180-HL



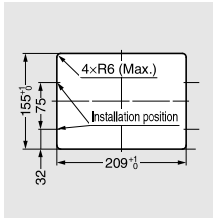
AZ-GD230-HL
AZ-GD310-HL



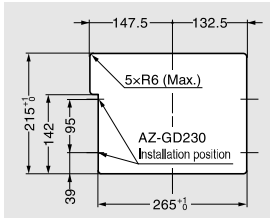
AZ-GD400-HL



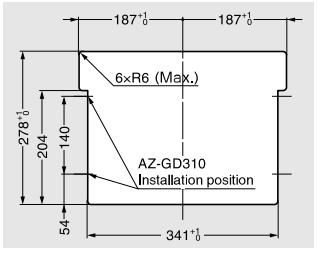
[Cut Out Dimensions]



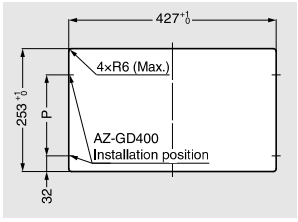
AZ-GD180-HL



AZ-GD230-HL



AZ-GD310-HL



AZ-GD400-HL

RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	W	H	C	D	E	P	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-033-487	AZ-GD180-HL	Stainless Steel (SUS304)	Satin	182	128	218	164	37	182	149.5	75	1042	1	10
G	3D	210-017-089	AZ-GD230-HL			234	160	308	234	49	249	184.7	95	1486	1	10
G	3D	210-022-110	AZ-GD310-HL			310	220	384	294	64	310	252.7	140	2236	1	6
G	3D	210-041-314	AZ-GD400-HL			400	220	450	270	44	312	240.5	167	2236	1	4

Refer to 1 2 : P.987, 3 : P.988

MULTI-PURPOSE LID (W/DAMPER) AZ-GD231-HL With Lid Back Mount Type

INSTRUCTION SUS



- Installed from inside the waste box for clean appearance.
- With damper to keep lid from slamming shut.
- Integrated anti-pinching plates.
- Corrosion resistant.
- Guide (sold separately) 1 for guiding rubbish into waste box inside also available.

[Specifications]
- Operating temperature: 0℃~40℃

[Remarks]
- Indoor use only.
- The closing speed varies depending on the operating temperature.For product stored below the freezing point, leave it indoor above 0℃ for several hours before use.

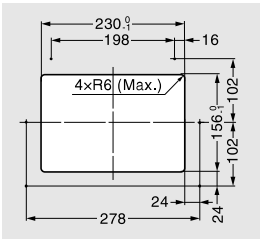
[Sold Separately]
- Guide AZ-SLP 1

[Application Example]





[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-027-508	AZ-GD231-HL	Stainless Steel (SUS304)	Satin	1486	1	10

Refer to 1 : P.988

MULTI-PURPOSE LID (W/DAMPER) AZ-GD232-HL With Lid / Inclined Mount Type

INSTRUCTION SUS



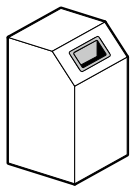
- Able to install the lid up to 45° .
- Inclined mount allows putting into rubbish easily.
- Easy to adjust angle just by changing weight position.
- With damper to keep lid from slamming shut.
- Integrated anti-pinching plates.
- Corrosion resistant.
- Guide (sold separately) 1 for guiding rubbish into waste box inside also available.

[Specifications]
- Operating temperature: 0℃~40℃

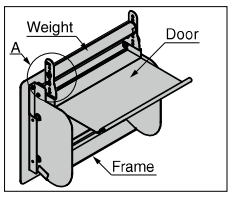
[Remarks]
- Indoor use only.
- The closing speed varies depending on the operating temperature. For product stored below the freezing point, leave it indoor above 0℃ for several hours before use.

[Sold Separately]
- Guide AZ-SLP 1

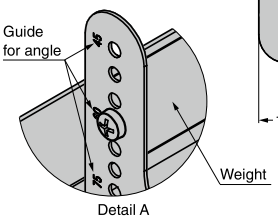
[Installation]

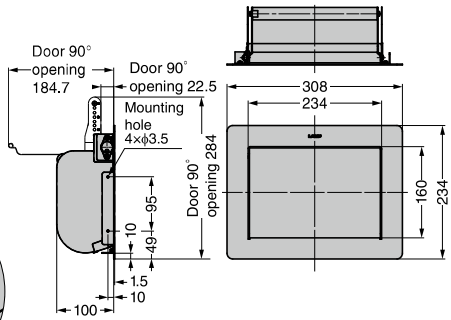


[How to Adjust Angle]

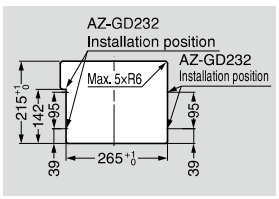








[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-975	AZ-GD232-HL	Stainless Steel (SUS304)	Satin	2200	1	10

Refer to 1 : P.988

GUIDE FOR MULTI-PURPOSE LID AZ-SLP

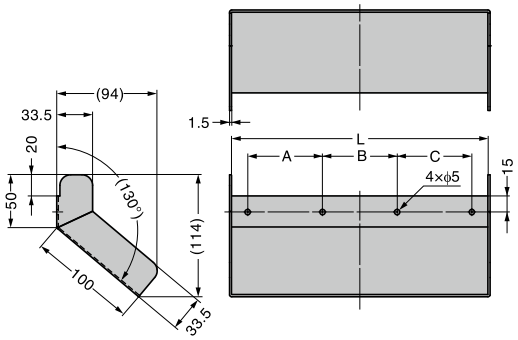
SUS



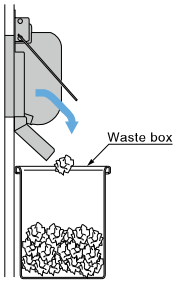
- Guides garbage into waste box inside.

[Application Example]





[Installation]



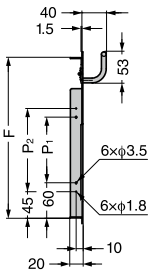
RoHS	CAD	Item Code	Item Name	Compatible Items	Material	Finish	L	A	B	C	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-026-554	AZ-SLP230	AZ-GD230, AZ-GD231, AZ-HD230, AZ-ND230	Stainless Steel (SUS304)	Plain	241	70	70	70	450	20	–
G	3D	210-026-555	AZ-SLP310	AZ-GD310, AZ-HD310, AZ-ND310			317	80	80	80	570	20	–

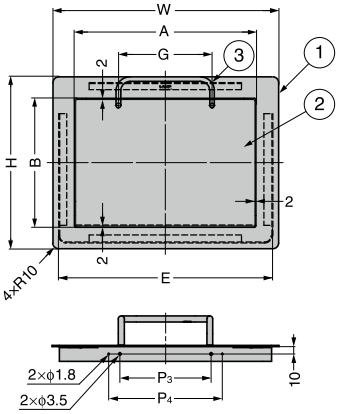
MULTI-PURPOSE LID (W/HANDLE) AZ-HD

INSTRUCTION SUS



- Pushing down the handle to open.
- Corrosion resistant.

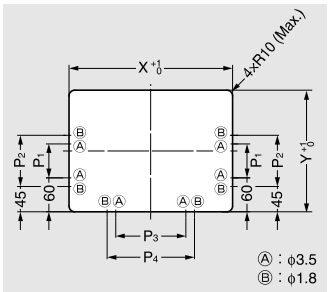






Easy to open/close with handle.

[Cut Out Dimensions]



No.	Part Name	Material	Finish
①	Front Plate	Stainless Steel (SUS304)	Satin
②	Door		
③	Handle		Satin

RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	W	H	E	F	G	P1	P2	P3	P4	X	Y	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	210-180-601	AZ-HD230-HL	Stainless Steel (SUS304)	Satin	234	160	308	234	288	214	120	60	90	124	154	289	215	540	1	10
–	3D	210-180-602	AZ-HD310-HL			310	220	384	294	364	274	160	112	142	200	230	365	275	2200	5	10

MULTI-PURPOSE LID (DOUBLE DOOR) AZ-DD310-HL

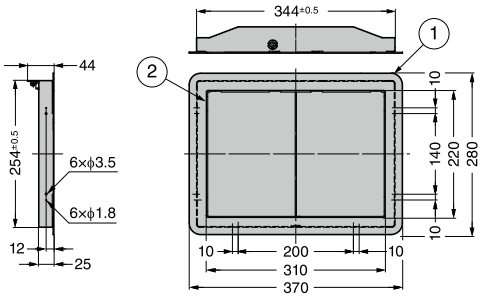
INSTRUCTION SUS



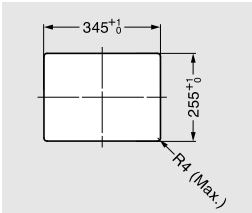


Synchronised doors.

- Synchronised doors allow easy opening.
- Doors open to the left and right, improving operability.
- Corrosion resistant.



[Cut Out Dimensions]



No.	Part Name	Material	Finish
①	Panel	Stainless Steel (SUS304)	Satin
②	Door		

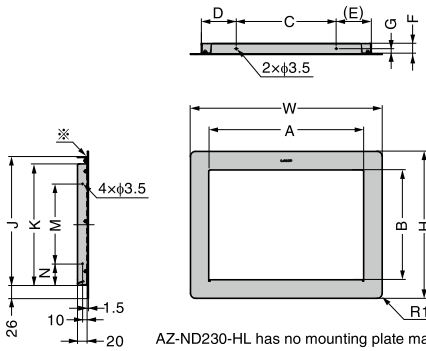
RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	210-180-600	AZ-DD310-HL	Stainless Steel (SUS304)	Satin	2000	1	10

SQUARE COVER FOR REFUSE BOX AZ-ND

INSTRUCTION SUS

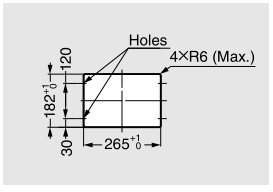


- Corrosion resistant.
- Large type AZ-ND310-HL is newly launched.

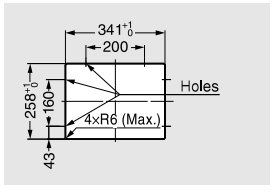


AZ-ND230-HL has no mounting plate marked with ※.

[Cut Out Dimensions]



AZ-ND230-HL



AZ-ND310-HL

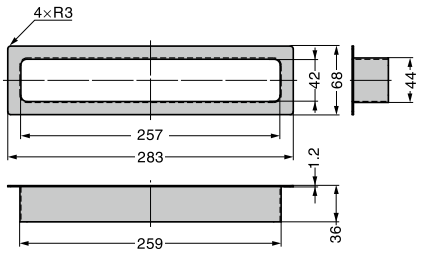
RoHS	CAD	Item Code	Item Name	Material	Finish	A	B	W	H	C	D	E	F	G	J	K	M	N	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-017-986	AZ-ND230-HL	Stainless Steel (SUS304)	Satin	234	160	308	234	–	–	–	–	–	–	170	120	30	720	1	10
G	3D	210-026-553	AZ-ND310-HL			310	220	384	294	200	70	70	20	10	257	243	160	43	1050	1	10

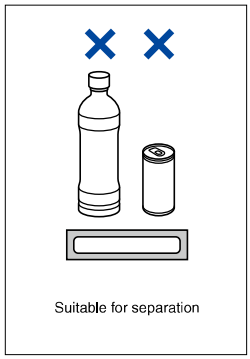
MULTI-PURPOSE GROMMET AN-SH026-HL Slim Type

SUS



- Corrosion resistant.
- Ideal for magazine/newspaper waste box.

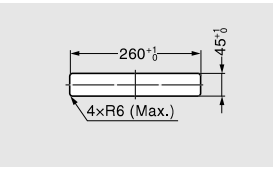




[Installation]



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-437	AN-SH026-HL	Stainless Steel (SUS304)	Satin	290	1	10

Refer to 1 : P.982, 2 : P.989

FUNNEL AE-DH

SUS

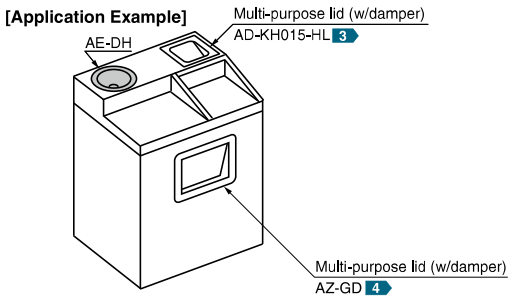


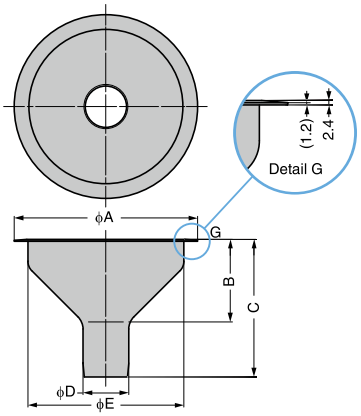
- For throwing away leftovers like drinks.
- Corrosion resistant.
- Small type AE-DH015 is newly launched.
- Hose 1, strainer 2 are sold separately.

[Sold Separately]

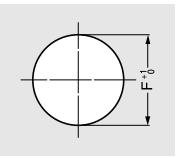
- Hose AE-DH4540-1 1
- Strainer AE-DH020K-45 2

[Application Example]

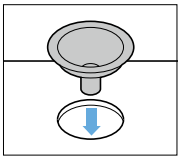




[Cut Out Dimensions]



[Easy Installation]



RoHS	CAD	Item Code	Item Name	A	B	C	D	E	F	Material	Finish	Hose Diameter	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-026-556	AE-DH015-MR	150	55	95	38	120	121	Stainless Steel (SUS304)	Polished	38	270	1	12
G	3D	210-026-557	AE-DH015-HL								Satin			1	12
G	3D	210-022-106	AE-DH020-MR	200	90	150	50	170	171		Polished	50	490	1	12
G	3D	210-023-509	AE-DH020-HL								Satin			1	12

Refer to 1 2 : P.991, 3 : P.983, 4 : P.985

HOSE FOR AE-DH AE-DH4540-1 For AE-DH

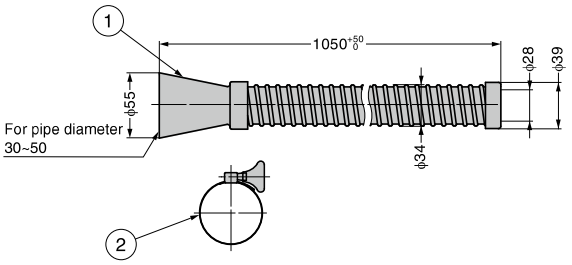
INSTRUCTION



- For AE-DH 1.
- Fixed with fastener for preventing water leakage.

[Specifications]

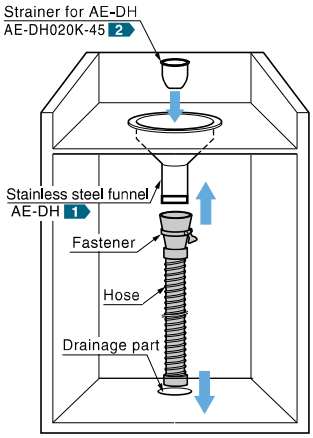
- Operating temperature: 1℃~60℃



[Application Example]



[Application Example]



No.	Part Name	Material	Finish / Colour
①	Hose	PVC	Grey
②	Fastener	Stainless Steel	Plain

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	–	210-026-942	AE-DH4540-1	170	10	50

Refer to 1 : P.990, 2 : P.991

STRAINER FOR AE-DH AE-DH020K-45 For AE-DH020

SUS



- Installed from the top of funnel to prevent solids from flowing into.
- Optional part for AE-DH020 1.

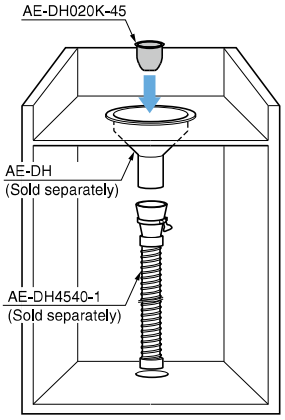
[Remarks]

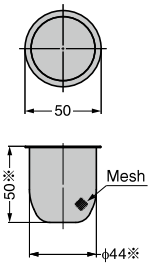
- Sold per 2 pieces.
- For AE-DH020-MR, AE-DH020-HL 1.

[Application Example]



[Installation]





※Approx. dimension of mesh part.

RoHS	CAD	Item Code	Item Name	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-187	AE-DH020K-45	Stainless Steel (SUS304)	Barrel Polished	8	10	60

Refer to 1 : P.990

VENTILATOR APD-KH Oval Type with Cable Grommet



- Ventilator and cable grommet in one unit.
- 3 sizes (small, medium, large) and 5 colours available. (3 colours for APD-KH260.)

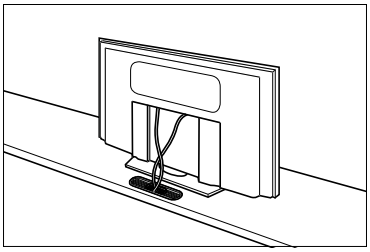
[Remarks]

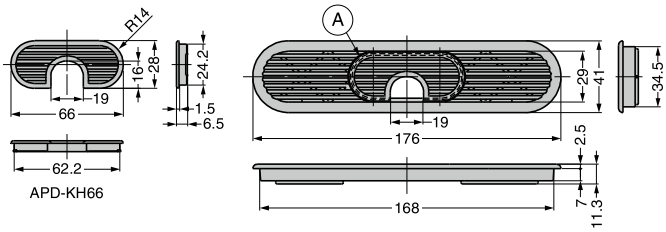
- For APD-KH170 and APD-KH260, please use glue for installation.
- Max. exhaust area of the lower cover is the value with no cable passing through.
- Please use glue when installing to sheet metal.

[Colour Variation]

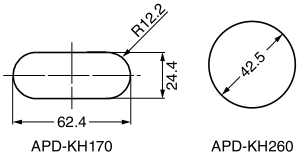


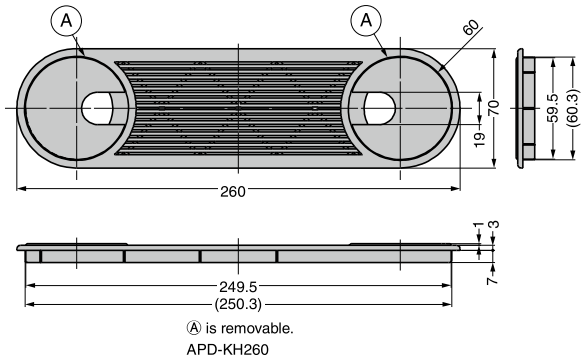
[Application Example]



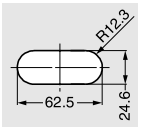


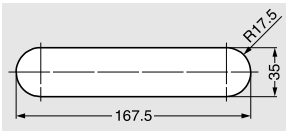
[Hole Size (With Ⓐ Removed)]

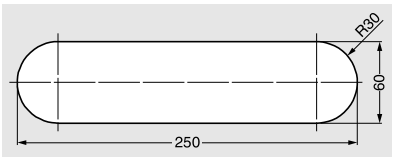




[Cut Out Dimensions]

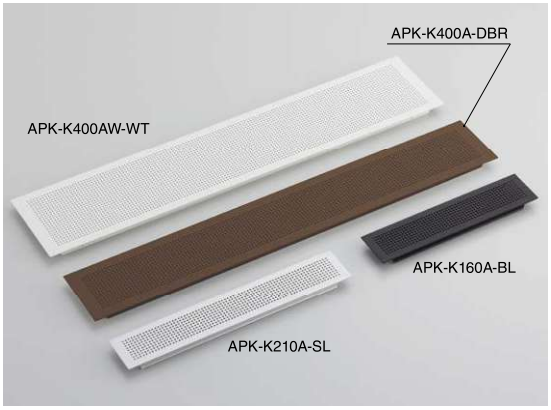






RoHS	CAD	Item Code	Item Name	Finish / Colour	Material	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-020-910	APD-KH66-CR	Chrome	ABS	610	3.7	100	500
G	3D	210-020-912	APD-KH66-IV	Ivory			3	100	500
G	3D	210-020-914	APD-KH66-BL	Black				100	500
G	3D	210-020-911	APD-KH66-BR	Brown				100	500
G	3D	210-020-913	APD-KH66-WT	White				100	500
G	3D	210-020-564	APD-KH170-CR	Chrome		1690	24	40	320
G	3D	210-020-566	APD-KH170-IV	Ivory			20	40	320
G	3D	210-020-568	APD-KH170-BL	Black				40	320
G	3D	210-020-565	APD-KH170-BR	Brown				40	320
G	3D	210-020-567	APD-KH170-WT	White				40	320
G	3D	210-020-570	APD-KH260-IV	Ivory		3150	55	10	80
G	3D	210-020-571	APD-KH260-BL	Black				10	80
G	3D	210-020-569	APD-KH260-BR	Brown				10	80

ALUMINIUM VENTILATOR APK-K





Made of aluminium alloy.

- Smart and simple design.
- Small holes (ϕ1.5 mm) prevents insects from entering.
- APK-K160 and APK-K210: When used with optional frame 1, ventilator can be removed for cleaning.

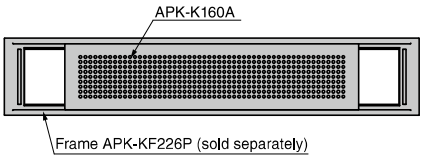
[Remarks]

- Please use glue for installation.

[Sold Separately]

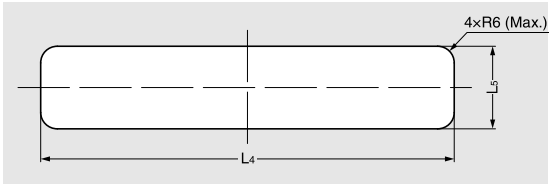
- Frame APK-KF226P 1

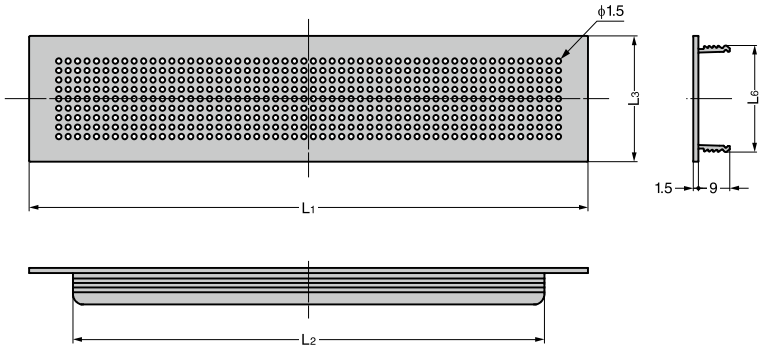
[Application Example]



Can be used as cable grommet by combining APK-K160A with frame APK-KF226P (sold separately).

[Cut Out Dimensions]





RoHS	CAD	Item Code	Item Name	Colour	Material	Max. Exhaust Area mm²	L1	L2	L3	L4	L5	L6	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-545	APK-K160A-SL	Anodised Silver	Aluminium Alloy	859	160	135	36	150	30.5	30.5	27	30	180
G	3D	210-032-544	APK-K160A-BL	Black Anodised										30	180
G	3D	210-032-547	APK-K210A-SL	Anodised Silver		1145	212	187		200			37	30	180
G	3D	210-032-546	APK-K210A-BL	Black Anodised										30	180
G	3D	210-034-399	APK-K400A-SL	Anodised Silver		3958	400	375	60	390	$50^{+0.5}_{-0}$	50	95	20	80
G	3D	210-034-400	APK-K400A-BL	Black Anodised										20	80
G	3D	210-034-401	APK-K400A-DBR	Dark Brown Anodised										20	80
G	3D	210-034-402	APK-K400A-WT	White Electrodeposition										20	80
G	3D	210-034-403	APK-K400AW-SL	Anodised Silver		5938			80		$70^{+0.5}_{-0}$	70	130	20	80
G	3D	210-034-404	APK-K400AW-BL	Black Anodised										20	80
G	3D	210-034-405	APK-K400AW-DBR	Dark Brown Anodised										20	80
G	3D	210-034-406	APK-K400AW-WT	White Electrodeposition										20	80

Refer to 1 : P.995

VENTILATOR APK-K With Cable Grommet



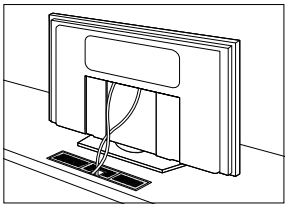
Picture above is a combination example of ventilator/cable grommet and frame.

- Combination of ventilator/cable grommet and frame can be customised.
- Small holes (ϕ1.5mm) prevents insects from entering.
- When used with frame, ventilator and cable grommet can be removed for cleaning.
- Sold in a set or separately (Frame, ventilator and cable grommet).

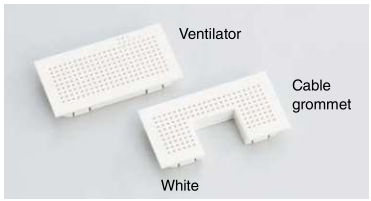
[Remarks]

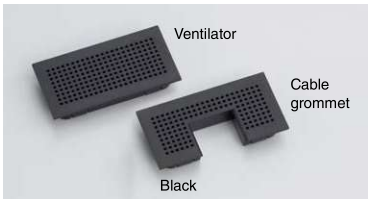
- Please use glue for installation.

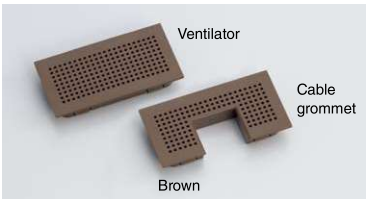
[Application Example]

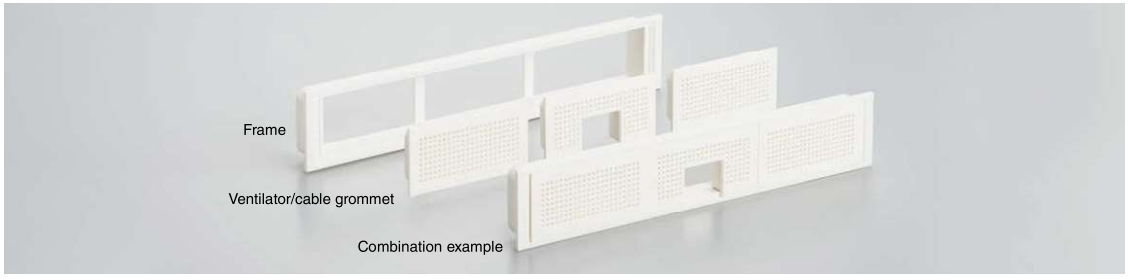


[Colour Variation]



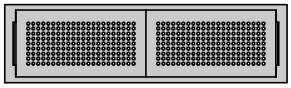




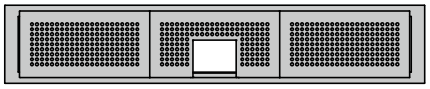


Set Overview

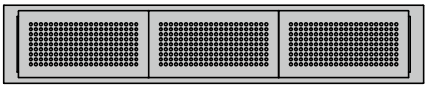
Below shows combinations of frame and ventilator/cable grommet. 3 combination patterns available.



Ⓐ APK-KHA152P



Ⓑ APK-KHW226P



Ⓒ APK-KHA226P

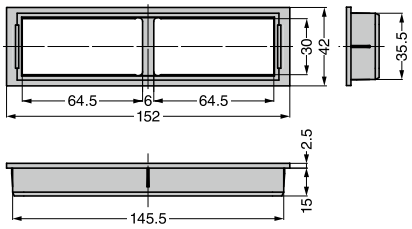
[Ventilator/Cable Grommet + Frame Set]

RoHS	CAD	Item Code	Item Name	No.	Colour	Material	Max. Exhaust Area mm²	Weight (g)	Combination	Box (pcs)	Carton (pcs)
G	3D	210-033-477	APK-KHA152P-WT	Ⓐ	White	ABS	700	39	Cable Grommet Frame×1 Ventilator×2	20	200
G	3D	210-033-478	APK-KHA152P-BL		Black					20	200
G	3D	210-033-479	APK-KHA152P-BR		Brown					20	200
G	3D	210-032-578	APK-KHW226P-WT	Ⓑ	White		1343	46	Cable Grommet Frame×1 Ventilator with Cable Grommet×1 Ventilator×2	20	200
G	3D	210-032-579	APK-KHW226P-BL		Black					20	200
G	3D	210-032-580	APK-KHW226P-BR		Brown					20	200
G	3D	210-032-575	APK-KHA226P-WT	Ⓒ	White		1050		Cable Grommet Frame×1 Ventilator×3	20	200
G	3D	210-032-576	APK-KHA226P-BL		Black					20	200
G	3D	210-032-577	APK-KHA226P-BR		Brown					20	200

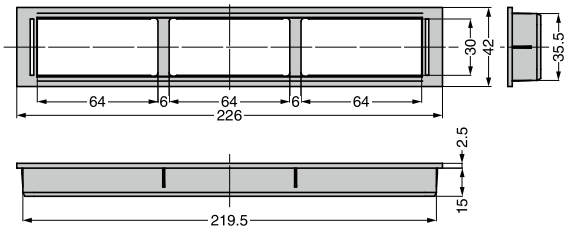
Individual Parts

Frame and ventilator/cable grommet can be select freely for various applications.

[Frame]

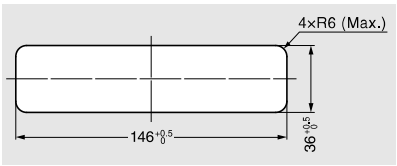


APK-KF152P

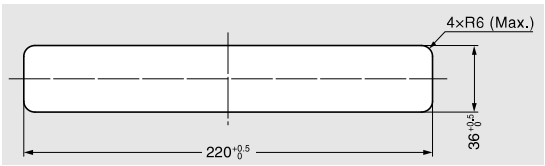


APK-KF226P

[Cut Out Dimensions]



APK-KF152P

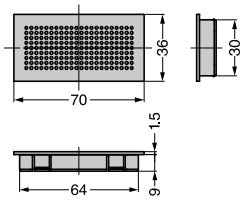


APK-KF226P

[Frame]

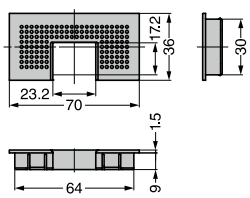
RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-807	APK-KF152P-WT	White	ABS	18	25	250
G	3D	210-032-808	APK-KF152P-BL	Black			25	250
G	3D	210-032-809	APK-KF152P-BR	Brown			25	250
G	3D	210-032-548	APK-KF226P-WT	White		25	25	250
G	3D	210-032-549	APK-KF226P-BL	Black			25	250
G	3D	210-032-550	APK-KF226P-BR	Brown			25	250

[Ventilator]



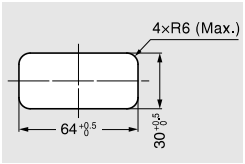
APK-K70P

[Cable Grommet]



APK-KH70P

[Cut Out Dimensions]



APK-K70P, APK-KH70P

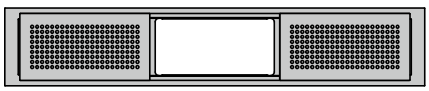
[Ventilator] Can be used separately.

RoHS	CAD	Item Code	Item Name	Colour	Material	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-538	APK-K70P-WT	White	ABS	350	7	50	500
G	3D	210-032-539	APK-K70P-BL	Black				50	500
G	3D	210-032-540	APK-K70P-BR	Brown				50	500

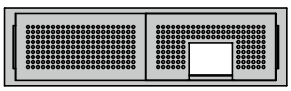
[Cable Grommet] Can be used separately.

RoHS	CAD	Item Code	Item Name	Colour	Material	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-032-541	APK-KH70P-WT	White	ABS	643	7	50	500
G	3D	210-032-542	APK-KH70P-BL	Black				50	500
G	3D	210-032-543	APK-KH70P-BR	Brown				50	500

[Combination Example] Individual parts above can be combined as follows.



Frame APK-KF226P : 1 pc
Ventilator APK-K70P : 2 pcs



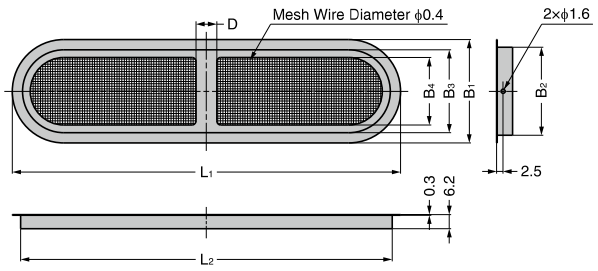
Frame APK-KF152P : 1 pc
Ventilator APK-K70P : 1 pc, Cable grommet APK-KH70P : 1 pc

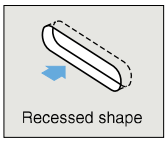
STAINLESS STEEL VENTILATOR SAD Mesh Type



[Parts Included]

- Round head nail 1.2×10 (SUS)

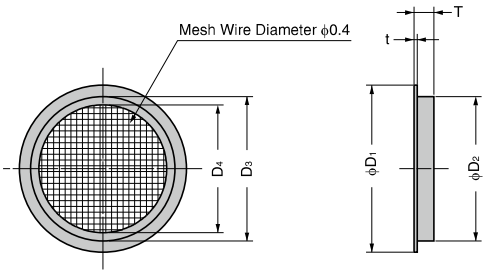


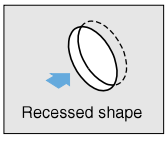


RoHS	CAD	Item Code	Item Name	Material	Finish	L_1	L_2	B_1	B_2	B_3	B_4	D	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-030-169	SA-D150	Stainless Steel (SUS304)	Satin	150	143.5	40	34	32	26	8	1880	18.5	30	600
G	3D	210-030-170	SA-D200			200.5	194	50	44	42	35	10	3800	30	30	300

STAINLESS STEEL VENTILATOR SAM Mesh Type







RoHS	CAD	Item Code	Item Name	Material	Finish	D_1	D_2	D_3	D_4	T	t	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-030-164	SA-M37	Stainless Steel (SUS304)	Satin	36	31.5	30	25	5.2	0.3	290	4.5	70	1400
G	3D	210-030-165	SA-M45			46	41.5	40	35			570	6	60	1200
G	3D	210-030-166	SA-M60			60	53.5	52	46	6.5		1000	9.5	50	1000
G	3D	210-030-167	SA-M85			85	77.8	76.5	68	7.0		2150	16.5	30	600
G	3D	210-030-168	SA-M120			120	110.5	108	99	7.2	0.5	4480	46.5	20	200

STAINLESS STEEL VENTILATOR ASM

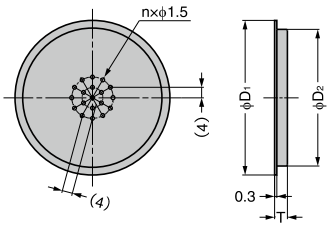
SUS

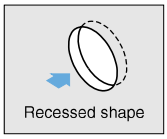


●Small holes (ϕ1.5mm) prevents insects from entering.

[Remarks]

●Finish in the table below is only for recessed part surface.





RoHS	CAD	Item Code	Item Name	Material	Finish	D_1	D_2	T	n	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-030-010	ASM-37	Stainless Steel (SUS304)	Satin	36	30.5	4.5	37	65	3	100	3600
G	3D	210-030-011	ASM-45			46	40.5		59	104	5	100	3600
G	3D	210-030-012	ASM-60			60	52.5	5	127	224	8	100	2400
G	3D	210-030-013	ASM-85			85	77		271	478	13.5	50	1000

STAINLESS STEEL VENTILATOR AST Nailing Installation

SUS



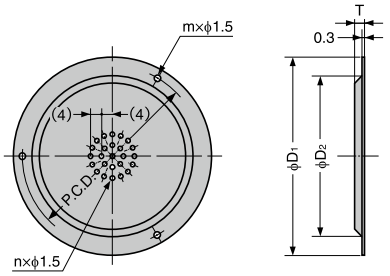
●Small holes (ϕ1.5mm) prevents insects from entering.

[Remarks]

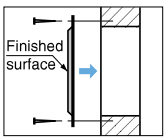
●In case of surface mount, use the convex surfce as the front.

[Parts Included]

●Round head nail 1.2×10 (SUS)



[Installation]

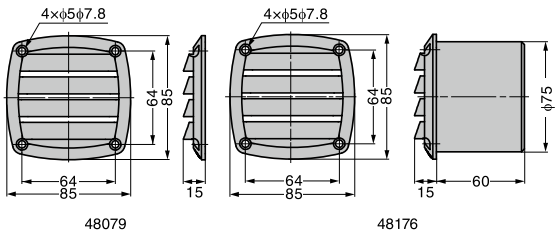


RoHS	CAD	Item Code	Item Name	Material	Finish	D_1	D_2	T	P.C.D.	m	n	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-030-044	AST-45	Stainless Steel (SUS304)	Satin	45	34	3	ϕ40	3	37	65	4	100	3600
G	3D	210-030-045	AST-55			55	44		ϕ50		59	104	5	100	3600
G	3D	210-030-046	AST-70			70	55		ϕ64		127	224	9	100	2400
G	3D	210-030-047	AST-100			100	81	4	ϕ91	4	271	478	19	50	500

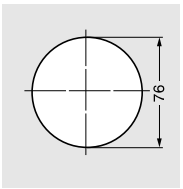
VENTILATOR 48079, 48176



- Standard type (surface mount) and flange type (recessed mount) are available.
- Suitable for various applications such as marine, etc.



[Cut Out Dimensions]
(48176)



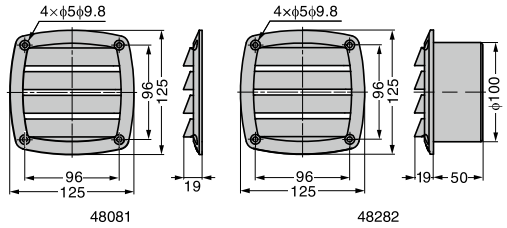
RoHS	CAD	Item Code	Item Name	Type	Material	Colour	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-872	480794	Standard (Surface Mount)	PA	White	1276	30	500	–
G	3D	210-028-871	480792			Black			500	–
G	3D	210-028-874	481764	Flange (Recessed Mount)		White		85	100	–
G	3D	210-028-873	481762			Black			100	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

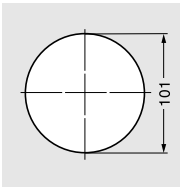
VENTILATOR 48081, 48282



- Standard type (surface mount) and flange type (recessed mount) are available.
- Suitable for various applications such as marine, etc.



[Cut Out Dimensions]
(48282)



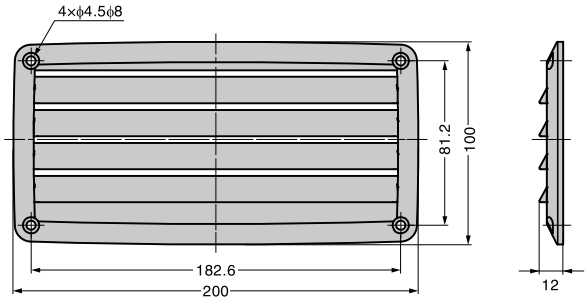
RoHS	CAD	Item Code	Item Name	Type	Material	Colour	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-868	480814	Standard (Surface Mount)	PA	White	2136	68	200	–
G	3D	210-028-867	480812			Black			200	–
G	3D	210-028-870	482824	Flange (Recessed Mount)		White		128	100	–
G	3D	210-028-869	482822			Black			100	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

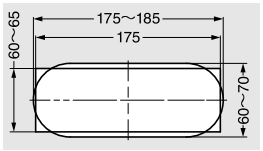
VENTILATOR 48080



- Surface mount type.
- Suitable for various applications such as marine, etc.



【Cut Out Dimensions】



Please process it into a rectangular shape or an oval shape

RoHS	CAD	Item Code	Item Name	Material	Colour	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-876	480804	PA	White	3700	86	200	–
G	3D	210-028-875	480802		Black			200	–

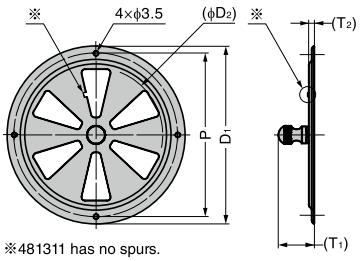
Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

STAINLESS STEEL ADJUSTABLE VENTILATOR 4813

SUS

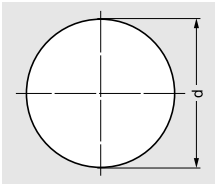


- Air flow is adjustable by turning the knob.
- The knob is tight for anti-vibration.
- Suitable for various applications such as marine and housing, etc.



※481311 has no spurs.

[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	D1	D2	P	T1	T2	d	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-882	481311	Stainless Steel (SUS304)	Polished	102	77	92	24.4	2.7	77~80	1835	61	300	–
G	3D	210-028-881	481312			127	95	117	25.6	3.9	95~100	2860	86	200	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

STAINLESS STEEL VENTILATOR 4814

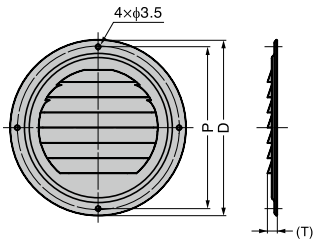
SUS



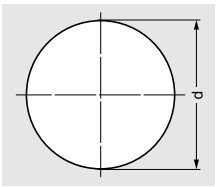
- Ventilator cover (sold separately) for preventing influx of rainwater.
- Suitable for various applications such as marine and housing, etc.

[Optional Parts]

- Stainless steel ventilator cover 4818 1



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	D	P	T	d	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-880	481440	Stainless Steel (SUS304)	Polished	102	92	5	77~80	750	38	500	–
G	3D	210-028-879	481430			127	117	7	95~100	1250	59	300	–

Refer to 1 : P.999

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

STAINLESS STEEL VENTILATOR COVER 4818 For 4814

SUS

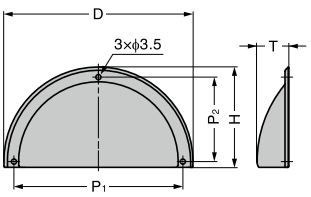


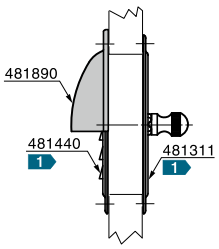


- For 4814 ventilator 1, prevents influx of rainwater.
- Suitable for various applications such as marine and housing, etc.

[Application Example]

For exterior use: Ventilator 4814 1 with cover 4818,
For interior use: Ventilator 4813 1.





RoHS	CAD	Item Code	Item Name	Use With	Material	Finish	D	H	P1	P2	T	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-884	481890	481440	Stainless Steel (SUS304)	Polished	107	57	92	46	20	40	300	–
G	3D	210-028-883	481850	481430			131	69	117	58.5	22	60	300	–

Refer to 1 : P.999

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

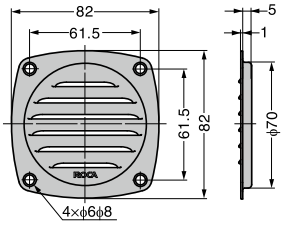
STAINLESS STEEL VENTILATOR 480970

SUS316

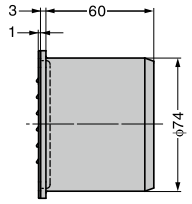




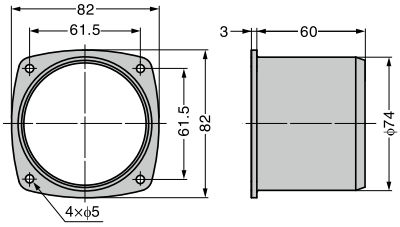
- Can be used with adaptor (sold separately).
- Suitable for various applications such as marine and housing, etc.



Ventilator body

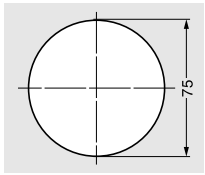


With adaptor (sold separately)



Adaptor (sold separately)

[Cut Out Dimensions]



[Ventilator Body]

RoHS	CAD	Item Code	Item Name	Material	Finish	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-877	480970	Stainless Steel (SUS316)	Polished	1600	49	300	–

[Adaptor] Sold Separately

RoHS	CAD	Item Code	Item Name	Material	Colour	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-878	480966	PA	White	51	100	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

VENTILATOR 4872 With Rainproof Function



When ventilating



Push the knob (※4 in the figure below).

When un-ventilating



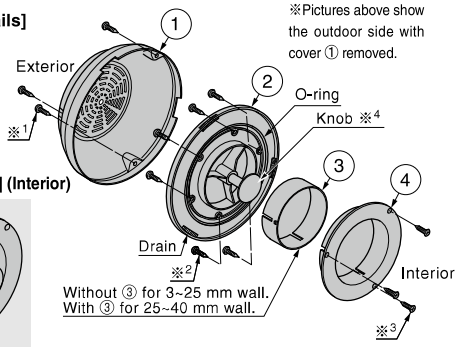
Pull the knob (※4 in the figure below).
※Pictures above show the outdoor side with cover ① removed.

- Can be used for the exterior due to the rainproof function.
- Can be used both for wooden wall and sheet metal wall. Please arrange the bolts and nuts when using with sheet metal.
- Suitable for specially-equipped vehicles like campers, etc.

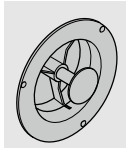
[Parts Included]

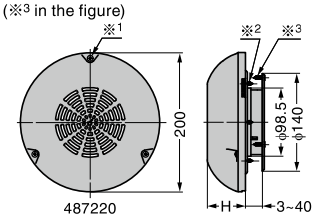
- Pan head tapping screw 4×12 (3 pcs) / for Cover ① on Base ② (※1 in the figure)
- Pan head tapping screw 4×18 (6 pcs) / for Base ② on the wall (※2 in the figure)
- Countersunk head tapping screw 4×16 (3 pcs) / for Flange ④ on the wall (※3 in the figure)

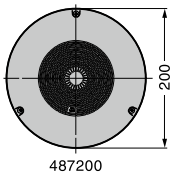
[Parts Details]



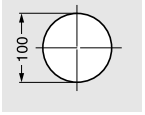
[Installation] (Interior)

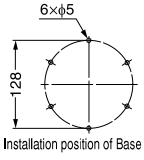






[Cut Out Dimensions]





Installation position of Base ②

RoHS	CAD	Item Code	Item Name	Cover Material	Cover Finish/ Colour	H	Wall Thickness	≒Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-886	487220	Stainless Steel (SUS304)	Polished	55	3~40	3055	394	1	30
G	3D	210-028-885	487200	PP	Off-white	62		5032	328	1	30

No.	Part Name	Material	Colour
①	Cover	See the left table	See the left table
②	Base	PP	Off-white
③	Adaptor		
④	Flange		

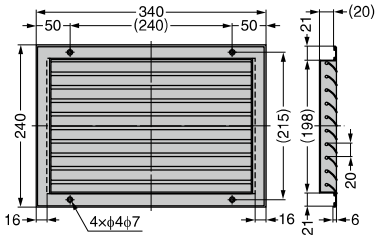
Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

ALUMINIUM VENTILATOR G58-3020

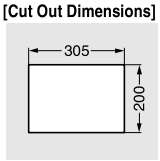


[Remarks]
- Dimensions may vary. Please check with actual item.
- The edge-finishing may vary. Please be careful with the edge during installation.

[Parts Included]
- Raised countersunk head tapping screw 3.5×32
- Plug



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	210-031-730	G58-3020	Aluminium Alloy	Anodised Silver	55000	578	7	–

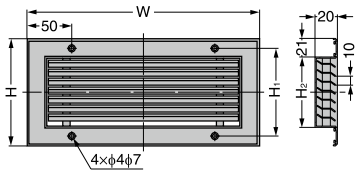
Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

ALUMINIUM VENTILATOR G57

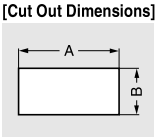


[Remarks]
- Dimensions may vary. Please check with actual item. Also, edge treatment may vary with each product.

[Parts Included]
- Raised countersunk head tapping screw 3.5×32
- Plug



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Material	Finish	W	H	H_1	H_2	A	B	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	210-031-731	G57-1707AA	Aluminium	Anodised	210	106	85	68	173	73	8300	208	6	–
–	3D	210-031-732	G57-2208AA	Alloy	Silver	260	116	95	78	223	83	12000	250	4	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

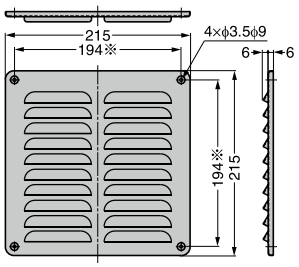
STAINLESS STEEL VENTILATOR 1-2222

SUS316



- Screw fixing type.

[Remarks]
- Mounting hole pitch※ may vary.Please check with actual item.
- Noted that the direction of satin finish is not uniform.
- Do not place your fingers in the exhaust part.Or the edge of opening may cause injuries.



RoHS	CAD	Item Code	Item Name	Material	Finish	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-172-014	1-2222	Stainless Steel (SUS316)	Satin	7500	308	10	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

STAINLESS STEEL VENTILATOR 1-1122

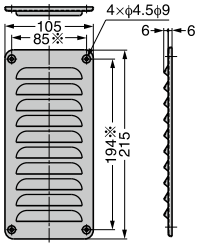
SUS316



- Screw fixing type.

[Remarks]

- Mounting hole pitch※ may vary. Please check with actual item.
- Do not place your fingers in the exhaust part. Or the edge of opening may cause injuries.
- Noted that the direction of satin finish is not uniform.



RoHS	CAD	Item Code	Item Name	Material	Finish	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
—	3D	210-172-011	1-1122	Stainless Steel (SUS316)	Satin	3700	156	20	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

STAINLESS STEEL VENTILATOR 1-2211

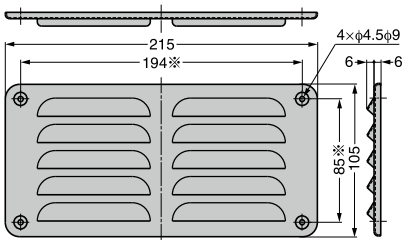
SUS316



- Screw fixing type.

[Remarks]

- Mounting hole pitch※ may vary. Please check with actual item.
- Noted that the direction of satin finish is not uniform.
- Do not place your fingers in the exhaust part. Or the edge of opening may cause injuries.



RoHS	CAD	Item Code	Item Name	Material	Finish	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
—	3D	210-172-013	1-2211	Stainless Steel (SUS316)	Satin	3700	154	20	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

STAINLESS STEEL VENTILATOR 1-1212

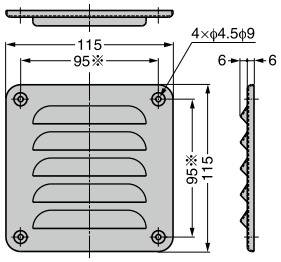
SUS316



- Screw fixing type.

[Remarks]

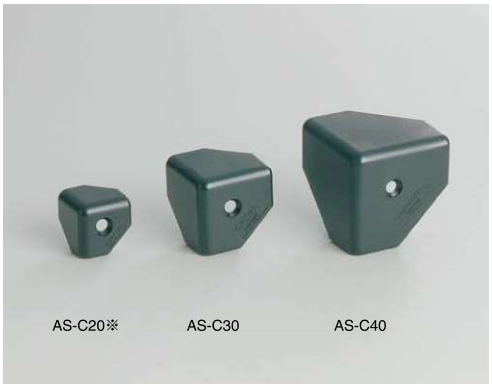
- Mounting hole pitch※ may vary. Please check with actual item.
- Noted that the direction of satin finish is not uniform.
- Do not place your fingers in the exhaust part. Or the edge of opening may cause injuries.



RoHS	CAD	Item Code	Item Name	Material	Finish	Max. Exhaust Area mm²	Weight (g)	Box (pcs)	Carton (pcs)
—	3D	210-172-012	1-1212	Stainless Steel (SUS316)	Satin	1900	89	20	–

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

CORNER CAP AS-C For Single-groove

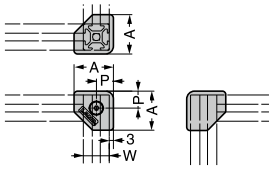


- Rounded plastic corner cap prevents from injurying or scratching and beautifies the corner of aluminium frame.
- Easy to install with only one position to be tightened with screw.
- Glue or double-sided tape can also be used for fixation.

[Remarks]
- Do not use on corners of a door.

[Application Example]



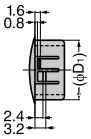
[Corner Cap AS-C]

RoHS	CAD	Item Code	Item Name	Aluminium Frame	A	P	W	Material	Colour	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-040-680	AS-C20	20×20 Groove Width 6 mm	30	13	20	PA	Black	6	200	1600
G	3D	210-040-681	AS-C30	30×30 Groove Width 8 mm	43	18	30			14	50	400
G	3D	210-040-682	AS-C40	40×40 Groove Width 8 mm, 40×40 Groove Width 10 mm	58	23	40			29	25	200

MULTI-PURPOSE CAP KD

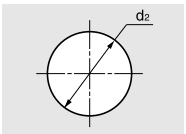


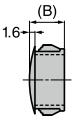
- One-touch installation.
- Can be used on sheet metal and wooden board, ideal for cable grommet.
- KD-380-350B can also be used for holes of concealed hinge.



[Specifications]
- Flam retardant material (UL94V-2).

[Cut Out Dimensions]





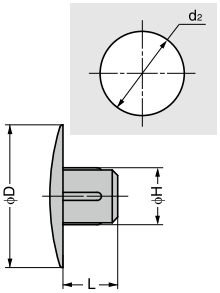
RoHS	CAD	Item Code	Item Name	Material	Colour	A	B	D1	d2	Board Thickness	Pack(pcs)	Box (pack)	Carton (pcs)
G	3D	120-038-140	KD-80-64B-P20	PA	Black	8	8	6.1	6.4	1.6	20	5	–
G	3D	120-038-141	KD-95-80B-P20			9.5		7.7	8		20	5	–
G	3D	120-038-124	KD-120-95B-P20			12	10.3	9.3	9.5	0.8~3.2	20	5	–
G	3D	120-038-125	KD-135-110B-P20			13.5		10.9	11		20	5	–
G	3D	120-038-126	KD-146-127B-P20			14.6		12.5	12.7		20	5	–
G	3D	120-038-127	KD-167-143B-P20			16.7		14.1	14.3		20	5	–
G	3D	120-038-128	KD-182-159B-P20			18.2		15.8	15.9		20	5	–
G	3D	120-038-129	KD-200-175B-P20			20		17.3	17.5		20	5	–
G	3D	120-038-131	KD-232-190B-P20			23.2		18.9	19		20	5	–
G	3D	120-038-130	KD-226-206B-P20			22.6		20.4	20.6		20	5	–
G	3D	120-038-132	KD-258-222B-P20			25.8	11.5	22	22.2		20	5	–
G	3D	120-038-133	KD-305-255B-P20			30.5		25.3	25.5		20	5	–
G	3D	120-038-134	KD-310-280B-P20			31		27.6	28		20	5	–
G	3D	120-038-135	KD-333-301B-P20			33.3		30	30.1		20	5	–
G	3D	120-038-136	KD-349-320B-P20			34.9		31.8	32		20	5	–
G	3D	120-038-137	KD-380-350B-P20			38		34.9	35		20	5	–
G	3D	120-038-138	KD-427-380B-P20			42.7		37.9	38		20	5	–
G	3D	120-038-139	KD-484-450B-P20			48.4		44.6	45		20	5	–
G	3D	120-038-142	KD-550-510B-P20			55		50.6	51		20	5	–

MULTI-PURPOSE CAP KD-771, KD-772, KD-773W

[KD-771-6] (Mounting hole: ϕ5) **[KD-771-65]** (Mounting hole: ϕ8) **[KD-772-65]** (Mounting hole: ϕ10)



[Cut Out Dimensions]



[Remarks]

●Please check with actual item for fitting with the mounting hole.

RoHS	CAD	Item Code	Item Name	Type	Material	Colour	H	D	L	d2	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-041-050	KD-771-6W	A	PP	White	5.2	13	5	5	0.13	2500	25000
G	3D	120-041-054	KD-771-6I	B		Ivory						2500	25000
G	3D	120-049-037	KD-771-6SGR	I		Grey						2500	25000

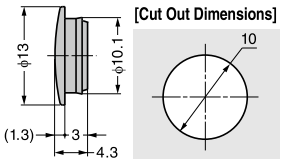
RoHS	CAD	Item Code	Item Name	Type	Material	Colour	H	D	L	d2	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-041-060	KD-771-65W	A	PP	White	8.1	12	6.5	8	0.19	2000	20000
G	3D	120-041-065	KD-771-65I	B		Ivory						2000	20000
G	3D	120-041-066	KD-771-65GR	C		Grey						2000	20000
G	3D	120-041-063	KD-771-65RBR	E		Camel						2000	20000
G	3D	120-041-062	KD-771-65DBR	F		Dark Brown						2000	20000
G	3D	120-041-061	KD-771-65BR	G		Brown						2000	20000
G	3D	120-041-064	KD-771-65B	H		Black						2000	20000

RoHS	CAD	Item Code	Item Name	Type	Material	Colour	H	D	L	d2	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-041-070	KD-772-65W	A	PP	White	10.3	13	7	10	0.29	1500	15000
G	3D	120-041-075	KD-772-65I	B		Ivory						1500	15000
G	3D	120-049-216	KD-772-65GR	C		Grey						1500	15000
G	3D	120-049-257	KD-772-65MN	D		Maple						1500	15000
G	3D	120-041-073	KD-772-65RBR	E		Camel						1500	15000
G	3D	120-041-072	KD-772-65DBR	F		Dark Brown						1500	15000
G	3D	120-041-071	KD-772-65BR	G		Brown						1500	15000
G	3D	120-041-074	KD-772-65B	H		Black						1500	15000

[KD-772-3] (Mounting hole: ϕ10)



[Cut Out Dimensions]

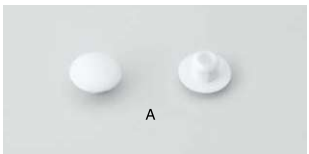


[Remarks]

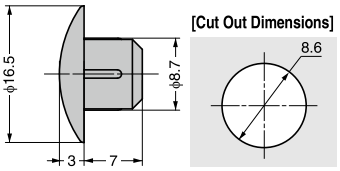
●Please check with actual item for fitting with the mounting hole.

RoHS	CAD	Item Code	Item Name	Type	Material	Colour	Hole Dia.	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-041-080	KD-772-3W	A	PP	White	10	0.22	2000	20000
G	3D	120-041-083	KD-772-3I	B		Ivory			2000	20000
G	3D	120-041-081	KD-772-3BR	G		Brown			2000	20000
G	3D	120-041-084	KD-772-3B	H		Black			2000	20000

[KD-773W] (Mounting hole: ϕ8.6)



[Cut Out Dimensions]



[Remarks]

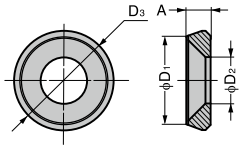
●Please check with actual item for fitting with the mounting hole.

RoHS	CAD	Item Code	Item Name	Type	Material	Colour	Hole Dia.	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-041-003	KD-773W	A	PE	White	8.6	0.5	1000	10000

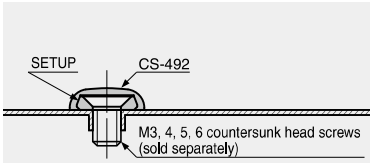
STAINLESS STEEL COUNTERSUNK WASHER SETUP For M3, M4, M5, M6



- For surface mount of M3, M4, M5 and M6 countersunk head screw.
- Conceals screw head when used with cap CS-492.
- Washers for M3, M5 and M6 are newly launched.



[Installation]

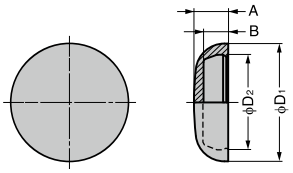


RoHS	CAD	Item Code	Item Name	Type	Material	Finish	A	D1	D2	D3	Weight(g/pack)	Pack(pcs)	Box(pack)
G	3D	120-038-172	SETUP-SUS-M3-P100	M3	Stainless Steel (SUS303)	Plain	1.9	6.5	4	9	60	100	10
G	3D	120-038-171	SETUP-M4-P100	M4	Brass			8	5	13	150	100	20
G	3D	120-038-173	SETUP-SUS-M4-P100		Stainless Steel (SUS303)							100	10
G	3D	120-038-174	SETUP-SUS-M5-P100	M5			3	10.6	6	14	202	100	5
G	3D	120-037-149	SETUP-SUS-M6-P100	M6			3.7	12.8	7	15	266	100	5

CAP FOR SETUP CS-492 For M3, M4, M5, M6

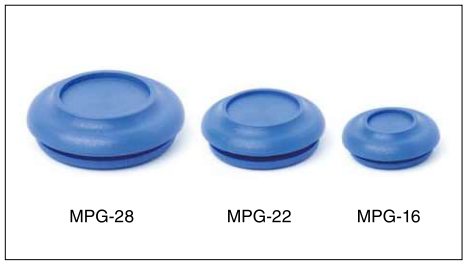


- Conceals screw head when used with countersunk washer SETUP for M3, M4, M5 and M6.
- Caps for M3, M5 and M6 are newly launched.



RoHS	CAD	Item Code	Item Name	Type	Material	Colour	A	B	D1	D2	Weight (g/pack)	Pack (pcs)	Box (packs)	Carton (packs)
G	3D	120-038-067	CS-492-M3-IV-P100	M3	PE	Ivory	3.1	2.1	12.5	9	16	100	20	200
G	3D	120-038-069	CS-492-M3-WT-P100			White						100	20	200
G	3D	120-038-068	CS-492-M3-LGR-P100			Light Grey						100	20	200
G	3D	120-038-066	CS-492-M3-DGR-P100			Dark Grey						100	20	200
G	3D	120-038-073	CS-492-M4-IV-P100	M4		Ivory	3.9	2.4	16.5	12.4	23	100	20	200
G	3D	120-038-076	CS-492-M4-WT-P100			White						100	20	200
–	3D	120-038-071	CS-492-M4-BR-P100			Brown						100	20	200
G	3D	120-038-070	CS-492-M4-BL-P100			Black						100	20	200
–	3D	120-038-075	CS-492-M4-SGR-P100			Grey						100	20	200
–	3D	120-038-074	CS-492-M4-LGR-P100			Light Grey						100	20	200
–	3D	120-038-072	CS-492-M4-DGR-P100			Dark Grey						100	20	200
G	3D	120-038-078	CS-492-M5-IV-P100	M5		Ivory	4.4	3.2	17.5	14	35	100	10	100
G	3D	120-038-080	CS-492-M5-WT-P100			White						100	10	100
G	3D	120-038-079	CS-492-M5-LGR-P100			Light Grey						100	10	100
G	3D	120-038-077	CS-492-M5-DGR-P100			Dark Grey						100	10	100
G	3D	120-038-082	CS-492-M6-IV-P100	M6		Ivory	5.4	3.9	18.5	15	47	100	5	50
G	3D	120-038-084	CS-492-M6-WT-P100			White						100	5	50
G	3D	120-038-083	CS-492-M6-LGR-P100			Light Grey						100	5	50
G	3D	120-038-081	CS-492-M6-DGR-P100			Dark Grey						100	5	50

METAL-DETECTABLE GLOMMET MPG Food Sanitation Act Compliant Material



MPG-28 MPG-22 MPG-16

- Contains metal powder, allowing for detection by metal detectors.
- Coloured in blue for simple visual verification.
- Made of silicone rubber for better heat and cold resistance.
- Compliant with the Food Sanitation Act.

[Specifications]

- Operating temperature: -10˚C – 110˚C

[Applications]

- Food machinery and food packaging machines

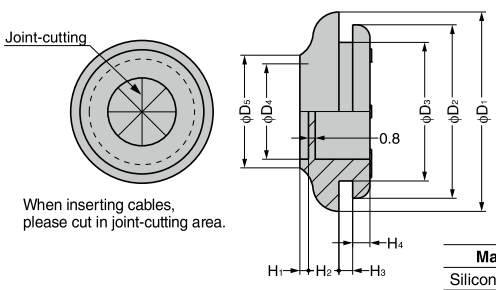
[Remarks]

- Detectable size of the contaminant depends on the settings and performance of the metal detector.

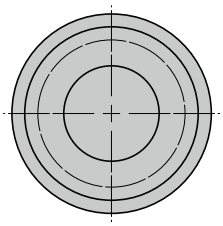
[Includes Metal Powder]



The silicone rubber itself contains metal powder.

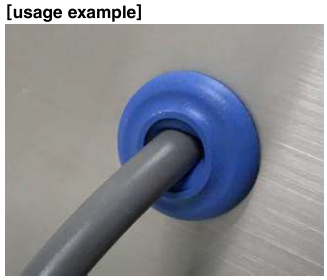


When inserting cables, please cut in joint-cutting area.



Material	Hardness	Colour
Silicone Rubber	50˚ ±5˚	Blue

[usage example]



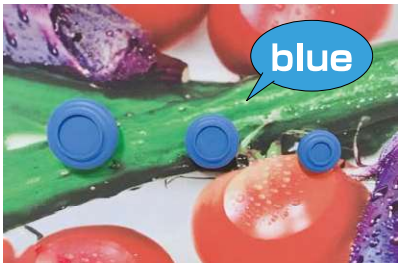
[Can be detected by metal detectors]



You can watch the video of the detection.

Video Link

[Easy visual detection]



The blue colour is a rarely occurring natural characteristic and therefore stands out if accidently mixed during food processing.

[Silicone rubber]

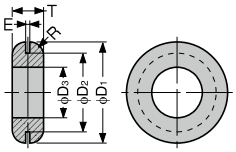
Safe
Material used is compliant with Food Sanitation Law.

Heat & Cold resistant
Operation Temperature
110 ˚C ～ -10 ˚C

RoHS	CAD	Item Code	Item Name	D_1	D_2	D_3	D_4	D_5	H_1	H_2	H_3	H_4	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-044-044	MPG-16	23	20	16	11	13	1	3.5	1.6	2	2	200	800
G	3D	210-044-045	MPG-22	29	26	22	17	19		4	2.3	2.5	3	120	480
G	3D	210-044-046	MPG-28	37	33	28	21	24	1.5	5		3	6	50	200

GROMMET BW





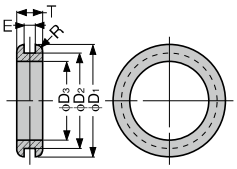
●Flam retardant material (UL94V-0) available by made to order.

Material	Hardness	Colour
EPDM	50°±5°	Black

RoHS	CAD	Item Code	Item Name	D1	D2	D3	E	T	R	Weight (g)	Pack (pcs)	Box (packs)	Carton (pcs)
G	3D	210-038-040	BW-188-P100	18	12	6	1	7	3	2.5	100	1	5
G	3D	210-038-041	BW-189-P100				2	8			100	1	5
G	3D	210-038-042	BW-208-P100	20	14	8	1	7			100	1	5
G	3D	210-038-043	BW-209-P100				2	8			100	1	5
G	3D	210-038-044	BW-228-P100	22	16	10	1			3.5	100	1	5
G	3D	210-038-045	BW-229-P100				2	9			100	1	5
G	3D	210-038-046	BW-2610-P100	26	19	12	1	10	4	5	100	1	5
G	3D	210-038-047	BW-2611-P100				2	11		6	100	1	5
G	3D	210-038-048	BW-2910-P100	29	22	14	1	10			100	1	5
G	3D	210-038-049	BW-2911-P100				2	11		7	100	1	5
G	3D	210-038-050	BW-3210-P100	32	25	16	1	10		8	100	1	5
G	3D	210-038-051	BW-3211-P100				2	11		8.5	100	1	5
G	3D	210-038-052	BW-3512-P100	35	28	19	1	12	5	9.5	100	1	5
G	3D	210-038-053	BW-3513-P100				2	13		10	100	1	5
G	3D	210-038-054	BW-4012-P100	40	32	22	1	12		15	100	1	5
G	3D	210-038-055	BW-4013-P100				2	13			100	1	5
G	3D	210-038-056	BW-4414-P50	44	36	25	1	14	6	20	50	1	2
G	3D	210-038-057	BW-4415-P50				2	15			50	1	2
G	3D	210-038-058	BW-4814-P50	48	40	28	1	14		25	50	1	2
G	3D	210-038-059	BW-4815-P50				2	15			50	1	2
G	3D	210-038-060	BW-5218-P50	52	44	32	1	18	8	30	50	1	2
G	3D	210-038-061	BW-5219-P50				2	19			50	1	2
G	3D	210-038-062	BW-5618-P50	56	48	36	1	18		35	50	1	2
G	3D	210-038-063	BW-5619-P50				2	19			50	1	2

GROMMET NG





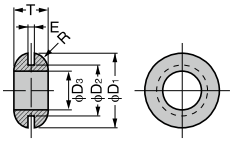
●Flam retardant material (UL94V-0) available by made to order.

Material	Hardness	Colour
EPDM	50°±5°	Black

RoHS	CAD	Item Code	Item Name	D1	D2	D3	E	T	R	Weight (g)	Pack (pcs)	Box (pack)	Carton (pack)
G	3D	210-038-167	NG-937-P100	9	6	3.5	1.2	3.7	0.6	0.5	100	1	5
G	3D	210-038-149	NG-1145-P100	11	8	5	1.5	4.5			100	1	5
G	3D	210-038-150	NG-1160-P100				3	6		0.7	100	1	5
G	3D	210-038-151	NG-1345-P100	13	10	7	1.5	4.5		0.5	100	1	5
G	3D	210-038-152	NG-1360-P100				3	6		1	100	1	5
G	3D	210-038-153	NG-1545-P100	15	12	9	1.5	4.5			100	1	5
G	3D	210-038-154	NG-1560-P100				3	6			100	1	5
G	3D	210-038-155	NG-1955-P100	19	15	11	1.5	5.5	1	1.5	100	1	5
G	3D	210-038-156	NG-1970-P100				3	7			100	1	5
G	3D	210-038-157	NG-2155-P100	21	17	13	1.5	5.5		1.7	100	1	5
G	3D	210-038-158	NG-2170-P100				3	7		2	100	1	5
G	3D	210-038-159	NG-2355-P100	23	19	15	1.5	5.5		1.7	100	1	5
G	3D	210-038-160	NG-2370-P100				3	7		2.5	100	1	5
G	3D	210-038-161	NG-3065-P100	30	25	20	1.5	6.7	1.2	3	100	1	5
G	3D	210-038-162	NG-3080-P100				3	8		3.5	100	1	5
G	3D	210-038-163	NG-3565-P100	35	30	25	1.5	6.7		4	100	1	5
G	3D	210-038-164	NG-3580-P100				3	8		5	100	2	5
G	3D	210-038-165	NG-4275-P50	42	36	30	1.5	7.5		7	50	1	2
G	3D	210-038-166	NG-4290-P50				3	9		8	50	1	2

GROMMET KG





●Flam retardant material (UL94V-0) available by made to order.

Material	Hardness	Colour
EPDM	50°±5°	Black

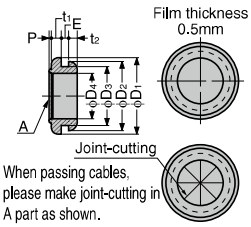
RoHS	CAD	Item Code	Item Name	D1	D2	D3	E	T	R	Weight (g)	Pack (pcs)	Box (pack)	Carton (pack)
G	3D	210-038-147	KG-74-P100	7	5	3	1	4	1	0.5	100	1	5
G	3D	210-038-148	KG-95-P100	9	7		0.8	5.5	1.5		100	1	5
G	3D	210-038-143	KG-115-P100	11	8	5	1	5			100	1	5
G	3D	210-038-144	KG-135-P100	13		5.5				1	100	1	5
G	3D	210-038-145	KG-146-P100	14	10	8		6	3	0.7	100	1	5
G	3D	210-038-146	KG-178-P100	17	12	9	1.2	8	4	1.5	100	1	5

GROMMET SG

Material	Hardness	Colour
EPDM	50°±5°	Black

●Flam retardant material (UL94V-0) available by made to order.



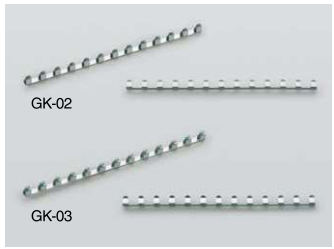


When passing cables, please make joint-cutting in A part as shown.

RoHS	CAD	Item Code	Item Name	D1	D2	D3	D4	t2	t1	E	P	Weight (g)	Pack (pcs)	Box (pack)	Carton (pack)
G	3D	210-038-175	SG-23-P100	23	20	15	11	2	3.5	1.6	1	2.5	100	1	5
G	3D	210-038-176	SG-25-P100	25	22	18	12			2.3		3	100	1	5
G	3D	210-038-177	SG-27-P100	27	24	20	15	2.5	4	1.6		3.5	100	1	5
G	3D	210-038-178	SG-29-P100	29	26	22	17			2.3		4.5	100	1	5
G	3D	210-038-179	SG-31-P100	31	28	24	19	3	5			5	100	1	5
G	3D	210-038-180	SG-35-P100	35	31	26				3.2			100	1	5
G	3D	210-038-181	SG-37-P100	37	33	28	21			2.3	1.5		100	1	5
G	3D	210-038-182	SG-39-P100	39	35	30	23			3.2		7.5	100	1	5
G	3D	210-038-183	SG-41-P100	41	37	32	25			2.3			100	1	5
G	3D	210-038-184	SG-43-P100	43	39	34	27			3.2		10	100	1	5
G	3D	210-038-185	SG-45-P50	45	42	36	28	4	6	2.3		12	50	1	2
G	3D	210-038-186	SG-46-P50	48	44	38	30			3.2		15	50	1	2

CENTIPEDE GROMMET GK

SUS

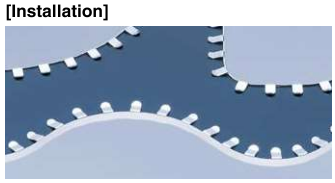


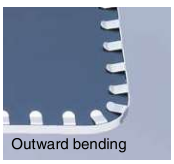
●Easy to install in a short time without using glue. Sorting and disposal is also easy.
●Made of all stainless steel with conductivity and excellent thermal durability.
●Can be post-installed or on-site handled for edge processing of finished equipment.
●Inward or outward bending available with bending radius more than 10mm.
●Can be easily cut with pliers.

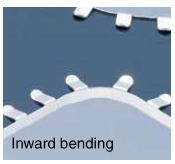
[Remarks]

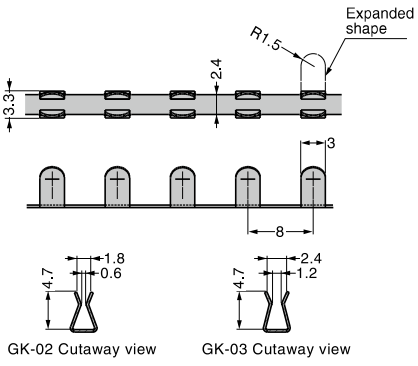
●Please cut at the edge of foot and do not leave the dorsal part. (Refer to the following figure: How to cut the grommet) .
●Please do not reuse. Otherwise, the catch force of the grommet weakens and may not be fixed securely.
●Please use a grommet suitable for board thickness. Do not use for applications other than adaptable board thickness, as it may not be securely fixed.

[Installation]





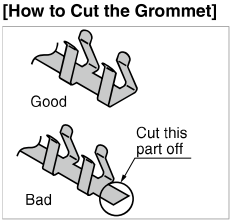


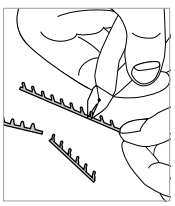


[How to Install]



[How to Cut the Grommet]





Can be easily cut with pliers.

RoHS	CAD	Item Code	Item Name	Board Thickness	Material	Finish	Length m/Roll	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-030-016	GK-02	0.8~1.2	Stainless Steel (SUS304)	Plain	10	15.5	10	100
G	3D	210-030-017	GK-03	1.5~2.0				16.5	10	100

※Sold in metric units (including the fee for one cutting). Cutting to lengths other than metric units or multiple cutting not available.
※Limited stock available. Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

WIRE MANAGER

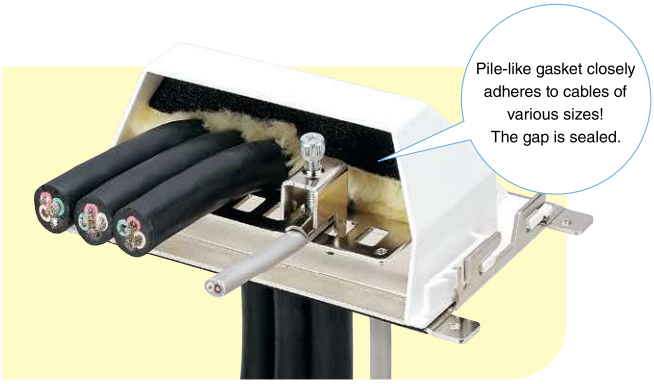
Wire Manager is compliant with IP54F.

Dust Proof Type
Although the intrusion of dust can be completely prevented, it does not interfere with the normal operation and safety of the electrical equipment.

Protects against splashing water
Splashing water from all directions will not have adverse effect.

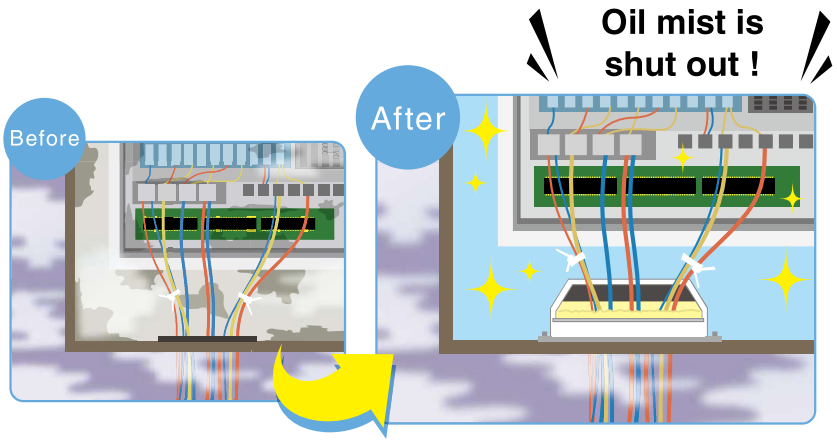
Oilproof Type
Oil drop or oil foam from all directions will not have adverse effect.

※When using in an environment beyond the protection range of IP54F, please check with actual item and make trial manufacture.

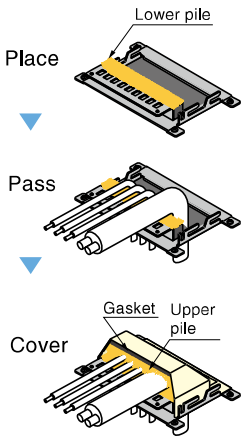


Cable installation example

Oil mist may enter the control boards of processing machines and machine tools, causing troubles or failures of the electrical system.
Wire Manager can block the entry route (gap between the cables) of oil mist and dust, reducing unnecessary maintenance cost.

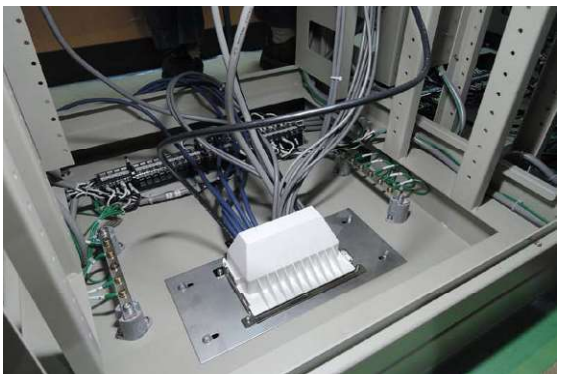


[How to Install]



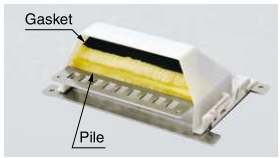
[Application Example]





WIRE MANAGER WSM-150





- Prevents oil mist intrusion, suitable for the control board of processing machine.
- IP54F oilproof, waterproof (splashing water) and dustproof. Only for the case where the opening is downward as shown in the figure below.
- Can pass through multiple cables of different sizes. Up to 3 pcs of cables with up to ϕ30 can be passed through.
- Gasket tightening force is adjustable in two steps (see the gasket tightening force adjustment in the figure below).
- Cables can be easily replaced without using tools during maintenance.
- Grounding can be connected from the grommet body fixing screw.

[Applications]

- Processing machines, machine tools, etc.

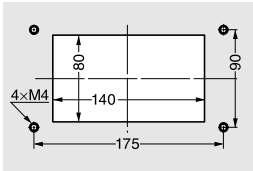
[Remarks]

- When using in an environment beyond the protection range of IP54F, please check with actual item and make trial manufacture and verification by customer.

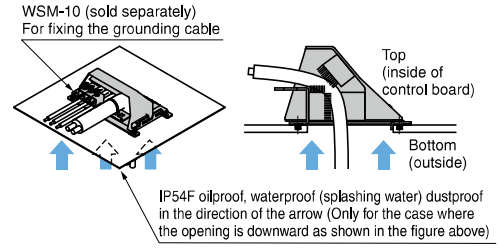
[Sold Separately]

- Wire bracket (for grounding) 1.

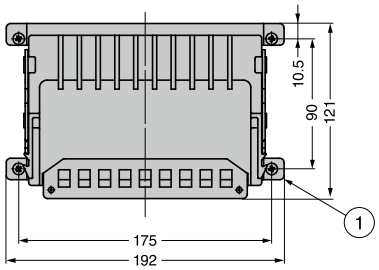
[Cut Out Dimensions]

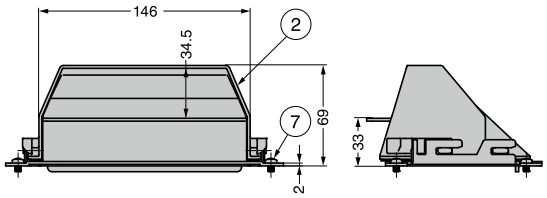


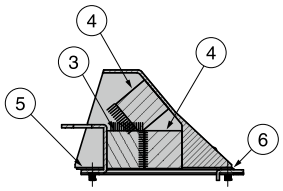
[Installation]



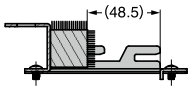
[Body]





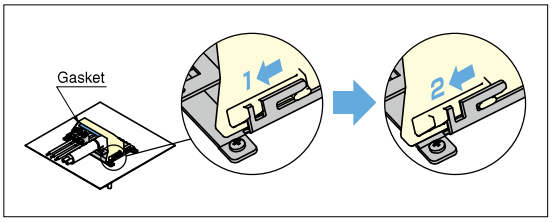


Cutaway view in sealed state



Cutaway view without cover

[Gasket Tightening Force Adjustment]



Adjustable in two steps, gasket firmly presses cables and prevents oil mist from entering.

No.	Part Name	Material	Finish / Colour
①	Body	Steel (SPCC)	Nickel
②	Cover	ABS	White
③	Gasket A	Nitrile Rubber (NBR), Pile	Black (Pile: Beige)
④	Gasket B		
⑤	Gasket C	Nitrile Rubber (NBR)	
⑥	Gasket D		
⑦	Pan Head Screw M4×6	Stainless Steel	Plain

[Body]

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-024-553	WSM-150	438	1	20

Refer to 1 : P.1012

WIRE MANAGER WSD Dustproof Type





- For simply preventing dust intrusion.
- Nitrile rubber gasket and pile improve sealability and can block gaps caused by size differences or multiple cables.
- Parts replacement or grommet addition can be performed without inserting and removing cables.
- Cables can be easily replaced without using tools during maintenance.
- Can pass through multiple cables of different sizes up to ϕ20. For ϕ20, up to 3 pcs (WSD-70), 6 pcs (WSD-140) and 12 pcs (WSD-280) can be passed through.
- Gasket tightening force is adjustable in two steps.
- Grounding can be connected from the grommet body fixing screw.

[Applications]

- Control boards, switch boards of processing machines and machine tools, etc.

[Remarks]

- This product is not waterproof and oilproof.

[Sold Separately]

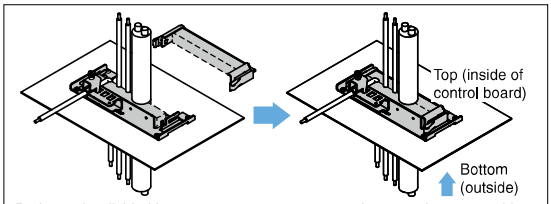
- Cable fastening bracket 1
  (WSD-70: 1 pc, WSD-140: up to 2 pcs, WSD-280: up to 4 pcs)
- Wire bracket (for grounding) 1

[Recommended Screws]

- Cross-recessed head screw M4

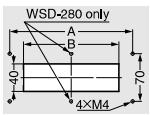
Video Link

[Post-Installation]

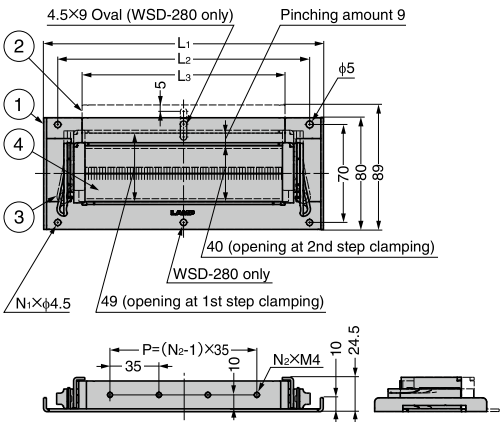


Body can be divided into two parts, unnecessary to insert and remove cables.

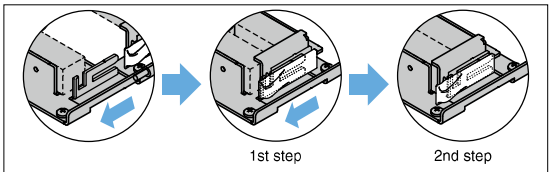
[Cut Out Dimensions]



[Body]



[Gasket Tightening Force Adjustment]



Adjustable in two steps, gasket firmly presses cables and prevents dust from entering.

No.	Part Name	Material	Finish / Colour
①	Base Plate	Steel (SPCC)	Nickel
②	Guide Plate		
③	Joint	POM	White
④	Gasket	Nitrile Rubber (NBR), Pile	Black

[Body]

RoHS	CAD	Item Code	Item Name	L_1	L_2	L_3	P	N_1	N_2	A	B	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-034-656	WSD-70	130	110	75	35	3	2	110	70	298	1	40
G	3D	210-034-657	WSD-140	200	180	145	105		4	180	140	433	1	30
G	3D	210-034-658	WSD-280	340	320	285	245	4	8	320	280	793	1	20

Refer to 1 : P.1012

BRACKET WSM-10, WSD-B-S, WSD-B For WSM-150, WSD

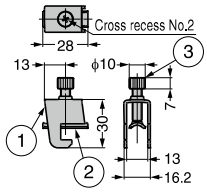
[Wire Bracket] For WSM-150 1 , WSD 2



WSM-10



※ For Max. ϕ12



No.	Part Name	Material	Finish
①	Body	Steel (SPCC)	Nickel
②	Wire Presser		
③	Wire Clamping Bolt	Steel (SWRM)	Coloured Zinc Chromate

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-024-554	WSM-10	23	50	500

[Remarks]

- WSM-10 cannot be used with WSD-B-S.

[Cable Fastening Bracket] For WSD 2



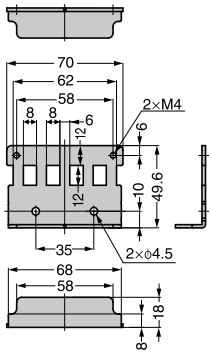
WSD-B-S (Straight Type)



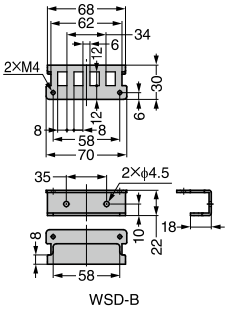


WSD-B (90° Fastening)





WSD-B-S



WSD-B

Part Name	Material	Finish
Body	Steel (SPCC)	Nickel

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-037-855	WSD-B-S	61	60	180
G	3D	210-034-659	WSD-B		60	180

[Remarks]

- WSD-70: 1 pc, WSD-140: up to 2 pcs, WSD-280: up to 4 pcs

[Parts Included]

- Pan head screw M4×4 (SUS) 2 pcs

Refer to 1 : P.1010, 2 : P.1011

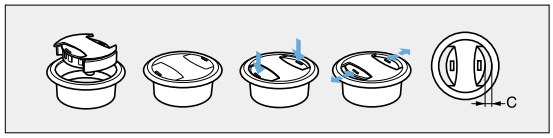
CABLE GROMMET S70, S91

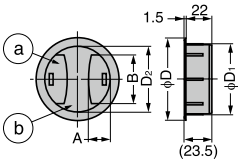


- For thin cables, slide the part ⓐ.
- When taking out cables at both sides, slide part ⓐ on the left and right sides.
- Cap ⓑ is removable for wide opening.

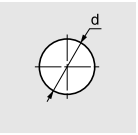
[Remarks]

- Be sure to read the "Cautions" 1.
- Since a spring is incorporated in the cap part, the parts may be disassembled. Please be careful when attaching/detaching the cap.





[Cut Out Dimensions]



[Application Example]



RoHS	CAD	Item Code	Item Name	Colour	Material	D	D1	D2	A	B	C	d	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-028-542	S70W	White	ABS	70.5	60	56	19	41.5	7	60	29	15	150
G	3D	210-028-543	S70CM	Ivory										15	150
G	3D	210-028-544	S70G	Grey										15	150
G	3D	210-028-545	S70BR	Brown										15	150
G	3D	210-028-546	S70B	Black										15	150
G	3D	210-028-547	S91W	White		91	80	76	25	55	10	80	39	10	90
G	3D	210-028-548	S91CM	Ivory										10	90
G	3D	210-028-549	S91G	Grey										10	90
G	3D	210-028-550	S91BR	Brown										10	90
G	3D	210-028-551	S91B	Black										10	90

Refer to 1 : P.965

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

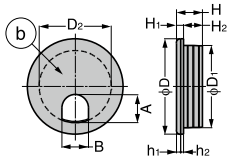
CABLE GROMMET S445, S51, S60, S76, S89



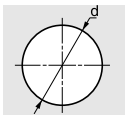
- Cap ⓑ is removable for wide opening.
- Made of resin material compliant with UL94-HB standard for flame retardance.

[Remarks]

- Be sure to read the "Cautions" 1.



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Colour	Material	D	D1	D2	H	H1	H2	h1	h2	A	B	d	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-031-830	S445CM	Ivory	ABS	45	38.8	34	19.7	3.3	16.4	2	1.3	16.7	12.5	39	9	50	450
G	3D	210-031-831	S445W	White													9	50	450
G	3D	210-031-829	S445G	Grey													9	50	450
G	3D	210-031-828	S445B	Black													9	50	450
G	3D	210-031-834	S51CM	Ivory		51	44.8	39.7	19.9	3.6	16.3		1.6	19	15.5	45	11	30	300
G	3D	210-031-835	S51W	White													11	30	300
G	3D	210-031-833	S51G	Grey													11	30	300
G	3D	210-031-832	S51B	Black													11	30	300
G	3D	210-031-838	S60CM	Ivory		60.5	48.8	44	19.8		16.2			20.8	19	49	14	25	250
G	3D	210-031-839	S60W	White													14	25	250
G	3D	210-031-837	S60G	Grey													14	25	250
G	3D	210-031-836	S60B	Black													14	25	250
G	3D	210-031-814	S76CM	Ivory		76.5	64.8	59	20.3	4.2	16.1	2.6		21.5	21.5	65	22	15	150
G	3D	210-031-815	S76W	White													22	15	150
G	3D	210-031-813	S76G	Grey													22	15	150
G	3D	210-031-812	S76B	Black													22	15	150
G	3D	210-031-818	S89CM	Ivory		89.4	76.8	71.4	20.6	4.1	16.5		1.5	25	22	77	30	10	90
G	3D	210-031-819	S89W	White													30	10	90
G	3D	210-031-817	S89G	Grey													30	10	90
G	3D	210-031-816	S89B	Black													30	10	90

Refer to 1 : P.965

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

CABLE GROMMET ST70, ST88

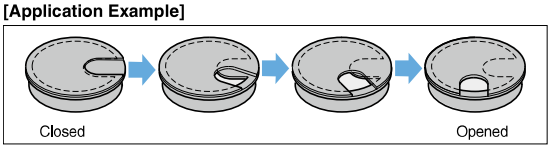


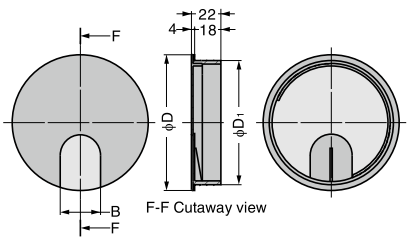
- Cover rotates for opening and closing.
- Cover can be closed when no cable passes through.

[Remarks]

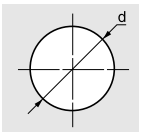
- Be sure to read the "Cautions" 1.

[Application Example]





[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Colour	Material	D	D1	B	d	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-031-802	ST70W	White	ABS	70	60	22	60	13.7	15	150
G	3D	210-031-803	ST70CM	Ivory							15	150
G	3D	210-031-804	ST70SL	Silver							15	150
G	3D	210-031-805	ST70G	Grey							15	150
G	3D	210-031-806	ST70B	Black							15	150
G	3D	210-031-807	ST88W	White		88	80	26	80	13.2	10	80
G	3D	210-031-808	ST88CM	Ivory							10	80
G	3D	210-031-809	ST88SL	Silver							10	80
G	3D	210-031-810	ST88G	Grey							10	80
G	3D	210-031-811	ST88B	Black							10	80

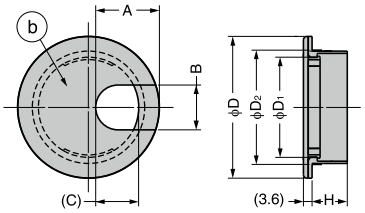
Refer to 1 : P.965

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

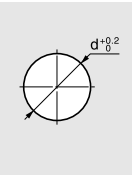
CABLE GROMMET LSU-S, LS-S Round / One-sided



- One-sided cable grommet.
- Cap ⓑ is removable for wide opening.



[Cut Out Dimensions]

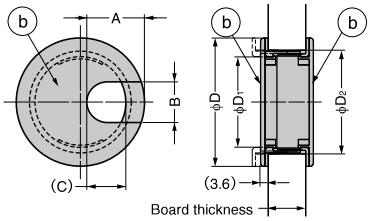


RoHS	CAD	Item Code	Item Name	Colour	Material	D	D1	D2	H	A	B	C	d	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-040-938	LS43S-WT	White	ABS	43	29.5	35.5	15	-	14	14.5	35	5.5	20	160
G	3D	210-040-939	LS43S-BE	Beige											20	160
G	3D	210-040-940	LS43S-LBR	Light Brown											20	160
G	3D	210-040-941	LS43S-DBR	Dark Brown											20	160
G	3D	210-040-942	LS43S-BL	Black											20	160
G	3D	210-040-943	LS50S-WT	White		50	34.5	40.5			17	17	40	7.5	20	160
G	3D	210-040-944	LS50S-BE	Beige											20	160
G	3D	210-040-945	LS50S-LBR	Light Brown											20	160
G	3D	210-040-946	LS50S-DBR	Dark Brown											20	160
G	3D	210-040-947	LS50S-BL	Black											20	160
G	3D	210-029-540	LSU60S-WT	White		60	42.5	48.5	11.5	27	19	18	48	10	20	160
G	3D	210-029-541	LSU60S-BE	Beige											20	160
G	3D	210-029-542	LSU60S-LBR	Light Brown											20	160
G	3D	210-029-543	LSU60S-DBR	Dark Brown											20	160
G	3D	210-029-544	LSU60S-BL	Black											20	160
G	3D	210-029-545	LS60S-WT	White					15					11	20	160
G	3D	210-029-546	LS60S-BE	Beige											20	160
G	3D	210-029-547	LS60S-LBR	Light Brown											20	160
G	3D	210-029-548	LS60S-DBR	Dark Brown											20	160
G	3D	210-029-549	LS60S-BL	Black											20	160
G	3D	210-029-550	LS76S-WT	White		76	58.2	64.2	23.5	34	22	25.1	64	18	12	96
G	3D	210-029-551	LS76S-BE	Beige											12	96
G	3D	210-029-552	LS76S-LBR	Light Brown											12	96
G	3D	210-029-553	LS76S-DBR	Dark Brown											12	96
G	3D	210-029-554	LS76S-BL	Black											12	96

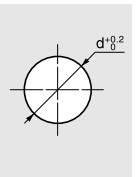
CABLE GROMMET LSU, LS Round / Double-sided



- Double sided cable grommet.
- Cap ⓑ on both sides is removable for wide opening.

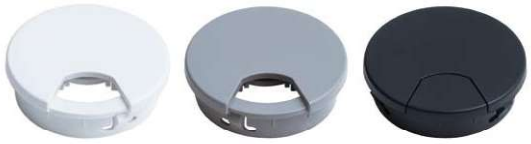


[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Colour	Material	D	D1	D2	A	B	C	Board Thickness	d	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-040-948	LS43WT	White	ABS	43	29.5	35.5	-	14	14.5	16 - 26	35	10.3	20	160
G	3D	210-040-949	LS43BE	Beige											20	160
G	3D	210-040-950	LS43LBR	Light Brown											20	160
G	3D	210-040-951	LS43DBR	Dark Brown											20	160
G	3D	210-040-952	LS43BL	Black											20	160
G	3D	210-040-953	LS50WT	White		50	34.5	40.5		17	17		40	13.5	20	160
G	3D	210-040-954	LS50BE	Beige											20	160
G	3D	210-040-955	LS50LBR	Light Brown											20	160
G	3D	210-040-956	LS50DBR	Dark Brown											20	160
G	3D	210-040-957	LS50BL	Black											20	160
G	3D	210-017-353	LSU60WT	White		60	42.5	48.5	27	19	18	12 - 18	48	19	20	160
G	3D	210-029-534	LSU60BE	Beige											20	160
G	3D	210-029-533	LSU60LBR	Light Brown											20	160
G	3D	210-029-532	LSU60DBR	Dark Brown											20	160
G	3D	210-017-354	LSU60BL	Black											20	160
G	3D	210-035-071	LS60WT	White								18 - 24		20	20	160
G	3D	210-029-126	LS60BE	Beige											20	160
G	3D	210-029-535	LS60LBR	Light Brown											20	160
G	3D	210-029-536	LS60DBR	Dark Brown											20	160
G	3D	210-035-070	LS60BL	Black											20	160
G	3D	210-031-304	LS76WT	White		76	58.2	64.2	34	22	25.1	25 - 40	64	25	12	96
G	3D	210-029-537	LS76BE	Beige											12	96
G	3D	210-029-538	LS76LBR	Light Brown											12	96
G	3D	210-029-539	LS76DBR	Dark Brown											12	96
G	3D	210-031-305	LS76BL	Black											12	96

CABLE GROMMET LS50F, LS60F Sheet Metal / One-touch Installation



- One-touch easy installation on sheet metal.
- Folding flap can close the opening when not in use.
- Can be used for thickness from 0.8 to 2.0 mm.
- Compliant with flame retardancy standard UL94 V-0.

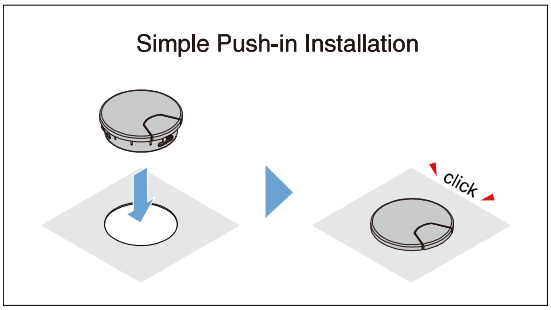
[Application]

- Operation consoles, steel cabinets , self-checkout

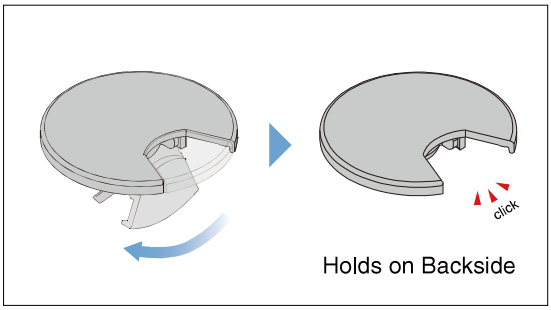
[Remarks]

- Cannot be installed on wood boards.

[Quick Installation to Sheet Metal]

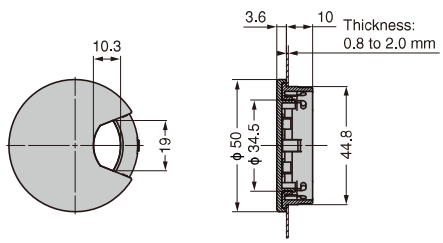


[Flap Cover]

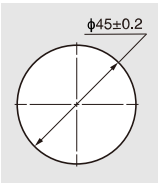


The cover can be folded and held on backside to prevent misplacement.
The whole cap is removable for a wider opening.

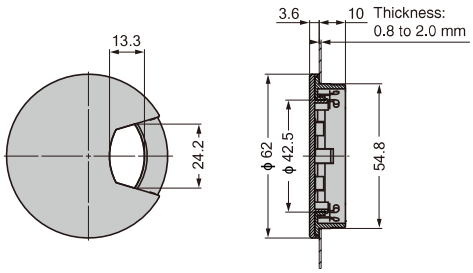
[LS50F]



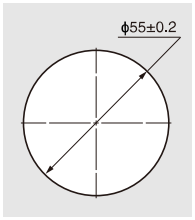
Cut Out Dimension



[LS60F]



Cut Out Dimension



Video Link

[LS50F] Hole diameter: 45 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	Available Thickness	Weight (g)
G	3D	210-045-891	LS50F-WT	White	ABS	0.8 to 2.0	9.8
G	3D	210-045-892	LS50F-GR	Grey			
G	3D	210-045-893	LS50F-BL	Black			

[LS60F] Hole diameter: 55 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	Available Thickness	Weight (g)
G	3D	210-045-894	LS60F-WT	White	ABS	0.8 to 2.0	15.3
G	3D	210-045-895	LS60F-GR	Grey			
G	3D	210-045-896	LS60F-BL	Black			

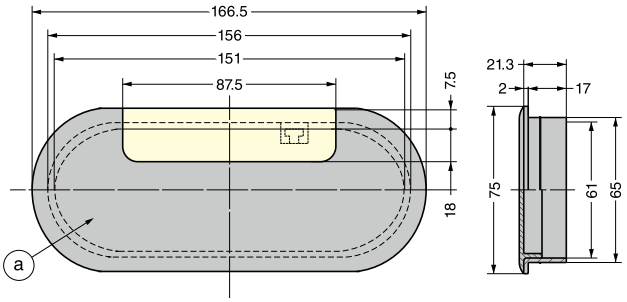
CABLE GROMMET S165-76



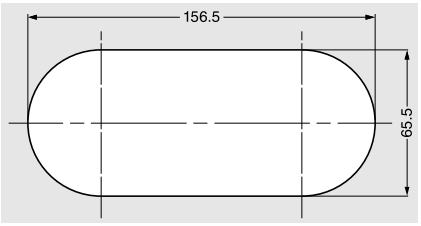
- Please push ☐ part into back when using thin cables.
- Cap ⓐ is removable for wide opening.

[Remarks]

- Be sure to read the "Cautions" 1.



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-031-827	S165-76CM	Ivory	ABS	48	5	50
G	3D	210-031-826	S165-76W	White		48	5	50
G	3D	210-031-825	S165-76G	Grey		48	5	50
G	3D	210-031-824	S165-76B	Black		48	5	50

Refer to 1 : P.965

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

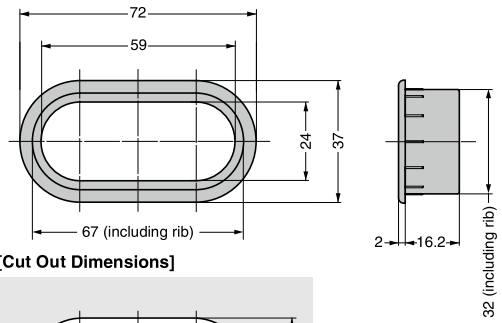
CABLE GROMMET LN72P



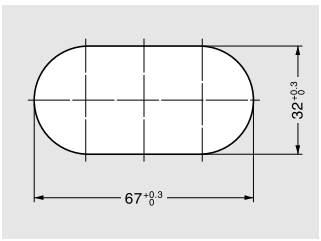
- Without cap version of LN72S 1.
- Plating finish provides a sense of quality.

[Remarks]

- Be sure to read the "Cautions" 2.



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Finish	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-024-225	LN72P-CR	Chrome	ABS	8	40	320
G	3D	210-026-235	LN72P-DC	Dull Chrome		8	40	320
G	3D	210-024-226	LN72P-GC	Gold		8	40	320

Refer to 1 : P.1017, 2 : P.965

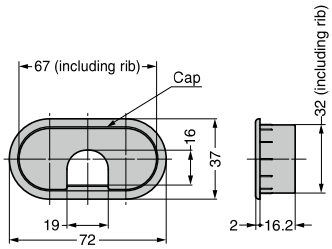
CABLE GROMMET LN72S



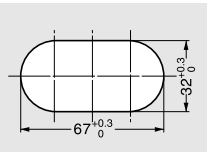
- Cap is removable for wide opening.

[Remarks]

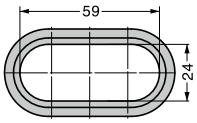
- Be sure to read the "Cautions" 1.



[Cut Out Dimensions]



[Opening Size Without Cap]



RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-021-706	LN72S-WT	White	ABS	9	40	320
G	3D	210-021-707	LN72S-BL	Black		9	40	320

Refer to 1 : P.965

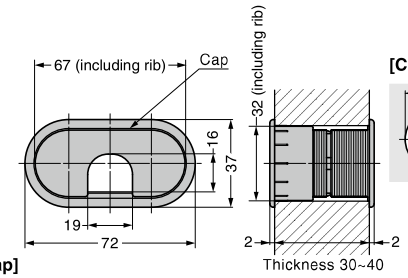
CABLE GROMMET LN72 Double Sided Type



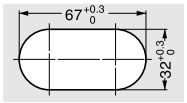
- Double sided cable grommet.
- Applicable board thickness: 30 mm~40 mm. Also available for 18 mm~30 mm thickness board by cutting the slit on body.
- Cap is removable for wide opening.

[Remarks]

- After cutting the slit, ensure that the cut edge is free from burrs.

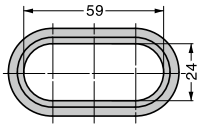


[Cut Out Dimensions]

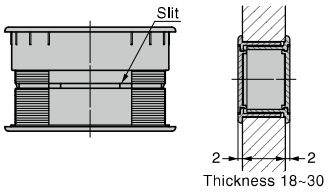




[Opening Size Without Cap]



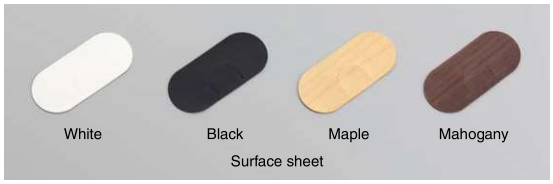
[After Cutting Slit]



RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-020-562	LN72-WT	White	ABS	19	40	320
G	3D	210-020-563	LN72-BL	Black		19	40	320

CABLE GROMMET LN72SF





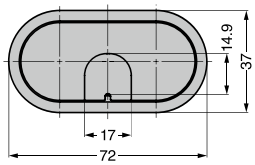
- 4 surface sheets (with double-sided tape) available for matching the finishes of desks or tables.
- When used as cable grommet, plate can be stored on the back side of cap (see the figure below).
- Cap is removable for wide opening.

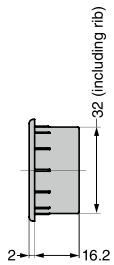
[Remarks]

- Be sure to read the “Cautions” 1.
- Surface sheet is sold separately in pieces. Please order with the main body.

[Sold Separately]

- Surface sheet LN72SF-ST



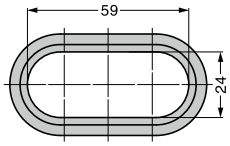


[Combination Example]

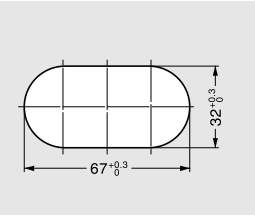
Main bodies and surface sheets can be combined in total 8 patterns.



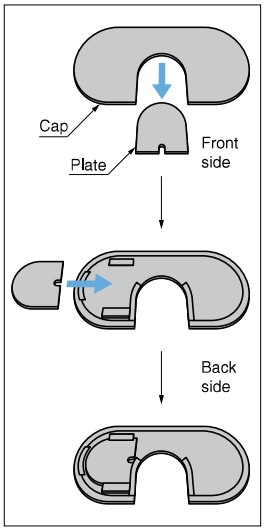
[Opening Size Without Cap]



[Cut Out Dimensions]



[How to Store Plate]



[Main Body]

RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-024-223	LN72SF-WT	White	ABS	9.0	40	320
G	3D	210-024-224	LN72SF-BL	Black		9.0	40	320

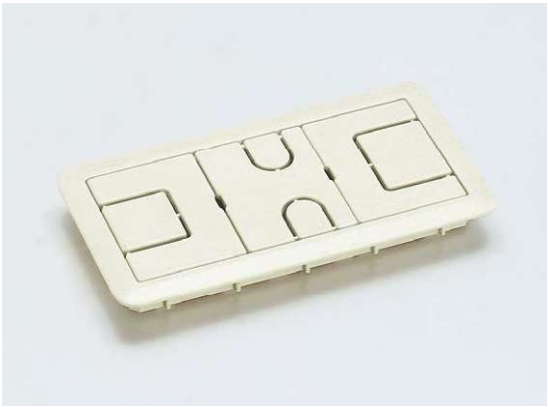
[Surface Sheet] Sold Separately

RoHS	CAD	Item Code	Item Name	Colour	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-025-807	LN72SF-ST-WT	White: HWS5414 (AICA)	0.9	1500	–
G	3D	210-025-808	LN72SF-ST-BL	Black: HWS7101S (AICA)	0.9	1500	–
G	3D	210-026-450	LN72SF-STMAP	Maple: JWS1550V (AICA)	0.8	800	–
G	3D	210-026-449	※LN72SF-STMAO	Mahogany: AWS2021G (AICA)	0.8	800	–

※The finish of the item will be "mahogany: JWS2021V (AICA)" when the current stock is run out.

Refer to 1 : P.965

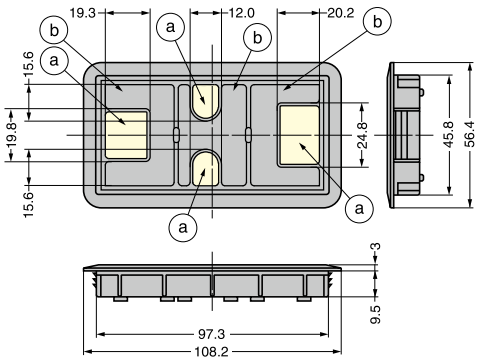
CABLE GROMMET ART973



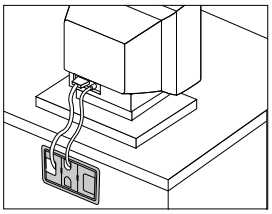
- In case of using with thin small cables, please remove the ⓐ parts.
- The ⓑ parts are also removable for wider opening.

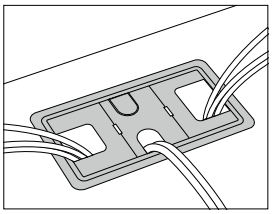
[Remarks]

- Be sure to read the “Cautions” 1.

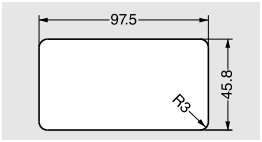


[Application Example]

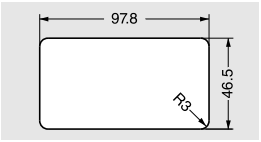




[Cutout for Wood]



[Cutout for Sheet Metal]

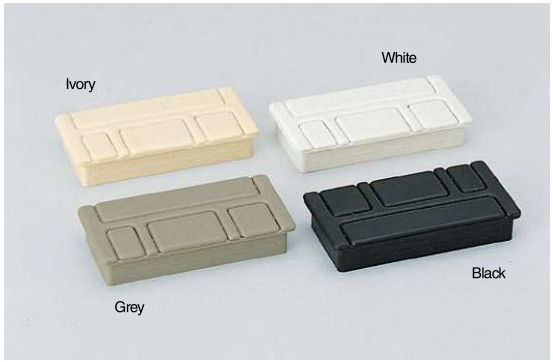


Thickness: 0.8 - 1 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-035-132	ART973	White	ABS	17	1	140

Refer to 1 : P.965

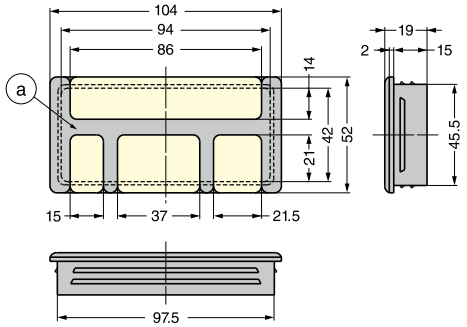
CABLE GROMMET S1015-51



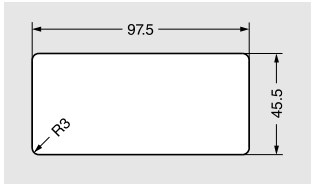
- Please fold and remove ▭ part according to the size of cables and location.
- Cap ⓐ is removable for wide opening.

[Remarks]

- Be sure to read the “Cautions” 1.



[Cut Out Dimensions]

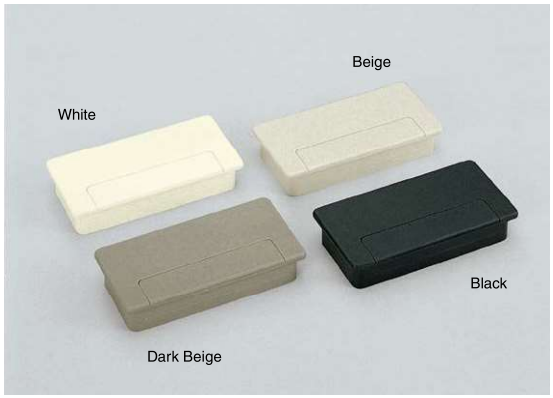


RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-031-822	S1015-51CM	Ivory	ABS	22	15	150
G	3D	210-031-823	S1015-51W	White		21	15	150
G	3D	210-031-821	S1015-51G	Grey		21	15	150
G	3D	210-031-820	S1015-51B	Black		22	15	150

Refer to 1 : P.965

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

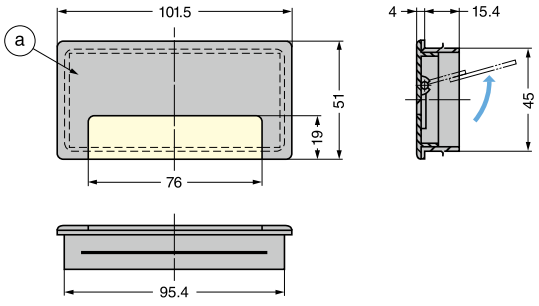
CABLE GROMMET S100-50



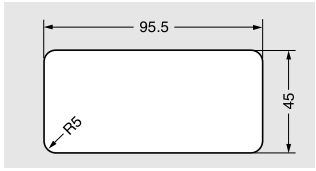
- Please push ▭ part into back when using thin cables.
- Cap ⓐ is removable for wide opening.

[Remarks]

- Be sure to read the “Cautions” 1.



[Cut Out Dimensions]



RoHS	CAD	Item Code	Item Name	Colour	Material	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-031-800	S100-50W	White	ABS	24	15	150
G	3D	210-031-801	S100-50BE	Beige			15	150
G	3D	210-031-840	S100-50DBE	Dark Beige			15	150
G	3D	210-031-841	S100-50BL	Black			15	150

Refer to 1 :P.965

Please contact your local agent or your nearest Sugatsune subsidiary for detail/availability.

CABLE GROMMET LSUKS/LSKS Square/One-sided

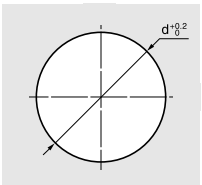


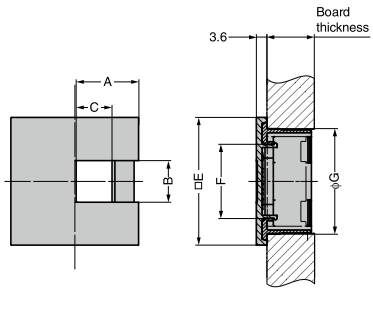
- The cap is removable for wide opening.
- Body can be fixed with nails to prevent rotation. When installing, please use nails to pierce into the 2 thin-walled locations on the backside of the body.
- Recommended nail: Pan head nail 1.2×10
  - Head diameter : 4mm or less
  - Shank diameter: 1.9mm or less

[Remarks]

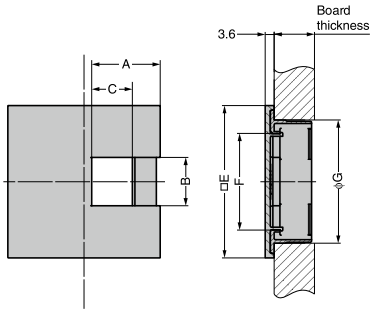
- Please install by pushing into place.
- Please use an adhesive when installing on a metal sheet.

[Cut Out Dimensions]



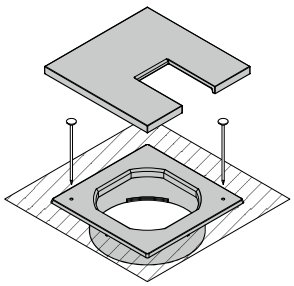


LS43KS/LS50KS



LSU60KS/LS60KS/LS76KS

[Components]



[LS43KS] Size: 43 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
	3D	210-043-445	LS43KS-WT	White	ABS	21	14	12	43	25	35.5	35	Min. 16	7	20	160
	3D	210-043-446	LS43KS-BE	Beige											20	160
	3D	210-043-447	LS43KS-LBR	Light Brown											20	160
	3D	210-043-448	LS43KS-DBR	Dark Brown											20	160
	3D	210-043-449	LS43KS-BL	Black											20	160

[LS50KS] Size: 50 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
	3D	210-043-450	LS50KS-WT	White	ABS	25	17	15	50	30	40.5	40	Min. 16	9.2	20	160
	3D	210-043-451	LS50KS-BE	Beige											20	160
	3D	210-043-452	LS50KS-LBR	Light Brown											20	160
	3D	210-043-453	LS50KS-DBR	Dark Brown											20	160
	3D	210-043-454	LS50KS-BL	Black											20	160

[LSU60KS] Size: 60 mm / Low-profile type

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
	3D	210-035-866	LSU60KS-WT	White	ABS	27	19	16.1	60	38	48.5	48	Min. 12	12	20	160
	3D	210-035-867	LSU60KS-BE	Beige											20	160
	3D	210-035-868	LSU60KS-LBR	Light Brown											20	160
	3D	210-035-869	LSU60KS-DBR	Dark Brown											20	160
	3D	210-035-870	LSU60KS-BL	Black											20	160

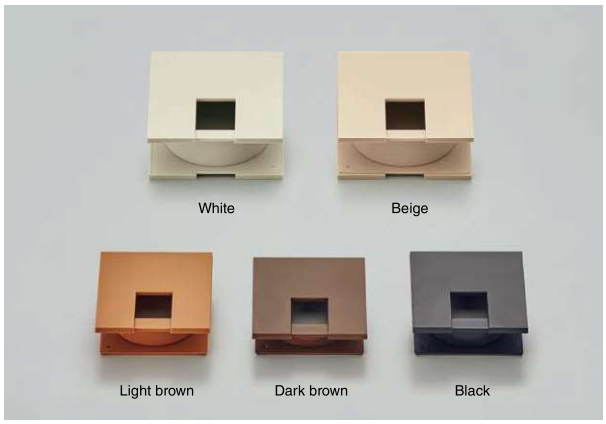
[LS60KS] Size: 60 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
	3D	210-035-871	LS60KS-WT	White	ABS	27	19	16.1	60	38	48.5	48	Min. 16	13	20	160
	3D	210-035-872	LS60KS-BE	Beige											20	160
	3D	210-035-873	LS60KS-LBR	Light Brown											20	160
	3D	210-035-874	LS60KS-DBR	Dark Brown											20	160
	3D	210-035-875	LS60KS-BL	Black											20	160

[LS76KS] Size: 76 mm

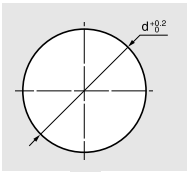
RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
	3D	210-035-876	LS76KS-WT	White	ABS	34	22	22.8	76	53.5	64.5	64	Min. 25	22	12	160
	3D	210-035-877	LS76KS-BE	Beige											12	160
	3D	210-035-878	LS76KS-LBR	Light Brown											12	160
	3D	210-035-879	LS76KS-DBR	Dark Brown											12	160
	3D	210-035-880	LS76KS-BL	Black											12	160

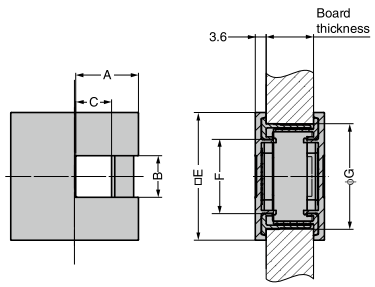
CABLE GROMMET LSUK/LSK Square/Double-sided



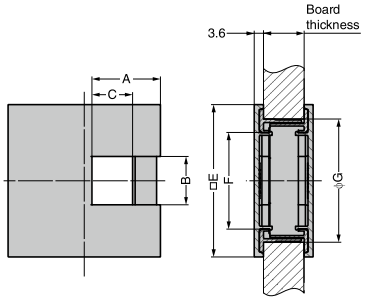
- Double-sided model which is suitable for vertical use.
- Applicable board thickness: 12-18mm, 16-26mm, 25-40mm.
- The cap is removable for wide opening.
- Square/one-sided model 1 is also available.
- Round/double-sided 2 and oval/double-sided 3 models are also available.
- The body can be fixed with nails to prevent rotation. When installing, please use nails to pierce into the 2 thin-walled locations on the backside of the body.
- Recommended nail: Pan head nail 1.2×10
  - Head diameter : 4mm or less
  - Shank diameter: 1.9mm or less

[Cut Out Dimensions]



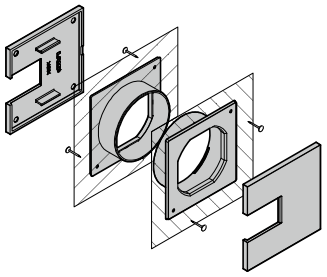


LS43K/LS50K



LSU60K/LS60K/LS76K

[Components]



[LS43K] Size: 43 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-043-455	LS43K-WT	White	ABS	21	14	12	43	25	35.5	35	16-26	13.7	20	160
G	3D	210-043-456	LS43K-BE	Beige											20	160
G	3D	210-043-457	LS43K-LBR	Light Brown											20	160
G	3D	210-043-458	LS43K-DBR	Dark Brown											20	160
G	3D	210-043-459	LS43K-BL	Black											20	160

[LS50K] Size: 50 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-043-460	LS50K-WT	White	ABS	25	17	15	50	30	40.5	40	16-26	18	20	160
G	3D	210-043-461	LS50K-BE	Beige											20	160
G	3D	210-043-462	LS50K-LBR	Light Brown											20	160
G	3D	210-043-463	LS50K-DBR	Dark Brown											20	160
G	3D	210-043-464	LS50K-BL	Black											20	160

[LSU60K] Size: 60 mm / Low-profile type

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-035-851	LSU60K-WT	White	ABS	27	19	16.1	60	38	48.5	48	12-18	24	20	160
G	3D	210-035-852	LSU60K-BE	Beige											20	160
G	3D	210-035-853	LSU60K-LBR	Light Brown											20	160
G	3D	210-035-854	LSU60K-DBR	Dark Brown											20	160
G	3D	210-035-855	LSU60K-BL	Black											20	160

[LS60K] Size: 60 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-035-856	LS60K-WT	White	ABS	27	19	16.1	60	38	48.5	48	16-26	25	20	160
G	3D	210-035-857	LS60K-BE	Beige											20	160
G	3D	210-035-858	LS60K-LBR	Light Brown											20	160
G	3D	210-035-859	LS60K-DBR	Dark Brown											20	160
G	3D	210-035-860	LS60K-BL	Black											20	160

[LS76K] Size: 76 mm

RoHS	CAD	Item Code	Item Name	Colour	Material	A	B	C	E	F	G	d	Board Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	210-035-861	LS76K-WT	White	ABS	34	22	22.8	76	53.5	64.5	64	25-40	42	12	160
G	3D	210-035-862	LS76K-BE	Beige											12	160
G	3D	210-035-863	LS76K-LBR	Light Brown											12	160
G	3D	210-035-864	LS76K-DBR	Dark Brown											12	160
G	3D	210-035-865	LS76K-BL	Black											12	160

Refer to 1 : P.1021, 2 :P.1014, 3 :P.1017

GASKET AS-PAA For Aluminium Frame

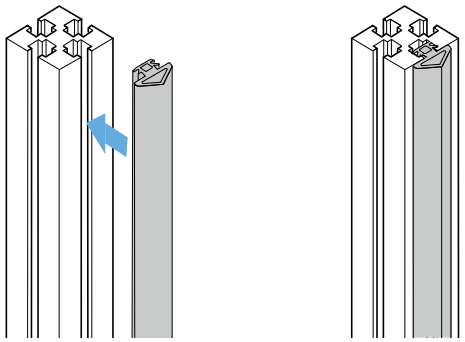


- Can be easily installed to aluminium frame groove without using glue. When installed to sliding door, it reduces the noise when closing the door and prevents scratches on the frame.
- 2 types for 6mm and 8 & 10mm width groove are available.
- Made of PVC with excellent resistance against weather, water, acid and alkali.
- Suitable for aluminium frames from various manufacturers.

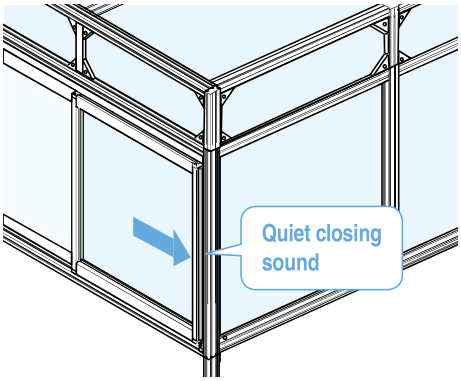
[Remarks]

- For details such as applicable aluminium frames, please contact local representatives.

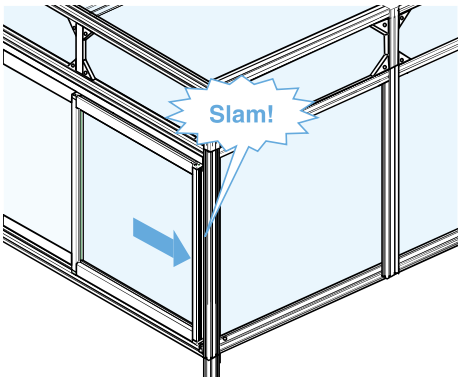
[Installation]

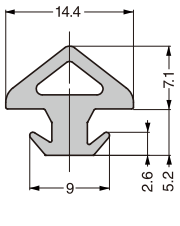


[With Gasket]

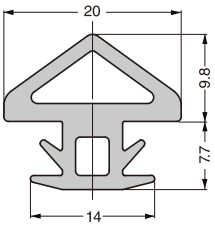


[Without Gasket]





AS-PAA-6



AS-PAA-810

Sold in metres.

RoHS	CAD	Item Code	Item Name	Material	Colour	Groove Width	Length m/Roll	Weight (g)	Box (m)	Carton (m)
–	3D	210-010-503	AS-PAA-6	PVC	Grey	6	50	99	50	100
–	3D	210-010-504	AS-PAA-810			8, 10		160	50	100

GASKET CR



- A variety of materials, sizes and cross-sectional shapes available for different purposes.

[Applications]

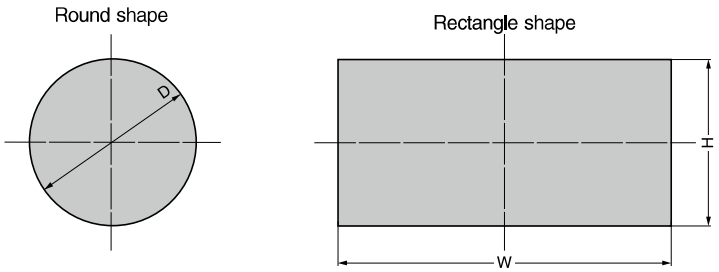
- Instrument, control boards, machine tools, home appliances, medical equipment, furniture, and office equipment, etc.

[Remarks]

- Sold in metres. Specified length and multiple cutting can be made to order.

[Property of Chloroprene Gasket]

Material		CR
Colour		Black
Apparent Density (g/cm^3)		0.40
Hardness		20 (Durometer: type E)
Tensile Strength (MPa)		1.5
M100 (100% Modulus) (MPa)		0.3
Elongation (%)		300
Coefficient of Water Absorption (wt%)		Max. 5
Compressive Stress (gf/cm^2)		400
Ozone Resistance		48hr Non-crack
Operating Temperature (℃)		–25~100
Heat Aging Resistance	Hardness	22
	Elongation (%)	250



[Round Shape]

RoHS	CAD	Item Code	Item Name	D	Length m/Roll	Weight (g)	Box (m)	Carton (m)
G	3D	210-049-535	CR-M4	4	300	7.0	1	–
G	3D	210-049-536	CR-M5	5		14.2	1	–

[Rectangle Shape]

RoHS	CAD	Item Code	Item Name	W	H	Length m/Roll	Weight (g)	Box (m)	Carton (m)
G	3D	210-039-799	CR-1003	10	3	200	30.5	200	–
G	3D	210-039-017	CR-2003	20			26.3	200	–
G	3D	210-039-984	CR-3003	30		100	39.5	100	–
G	3D	210-039-411	CR-1505	15	5		32.0	100	–
G	3D	210-039-642	CR-2505	25			41.3	100	–
G	3D	210-039-924	CR-2006	20	6		48	100	–
G	3D	210-039-090	CR-1508	15	8		70.0	100	–
G	3D	210-039-931	CR-2010	20	10		107.6	100	–
G	3D	210-039-976	CR-2510	25			90.6	100	–
G	3D	210-030-851	CR-2515		15		150	100	–
G	3D	210-039-978	CR-2518		18		180	100	–
G	3D	210-039-998	CR-4025	40	25	25	400	50	–

Gaskets, Resin Protective Materials & Cushions

Made to Order

Protective material and cushion material series with excellent heat resistance and high slidability, etc.

For sizes and minimum order, please contact local representatives.



Silicone Trim

- Silicone rubber edge protective material with excellent heat resistance, high chemical resistance and long service life.
- Can be easily installed to sheet metal without using glue.
- Conductive type of different shapes and colours also available.



Eco-resin Trim

- Edge protective material with built-in hard resin frame.
- Can be easily installed to sheet metal without using glue.
- Made entirely from resin to prevent core material from rusting.
- Can be welded (endless processing, etc.) including frame.



Silicone Sponge Sheet & Silicone Rubber Extruded Material

- Excellent heat resistance and durability.
- Can be used as cushion materials for various purposes.
- Sponge sheet can be sliced to the desired size from 1 to 20mm thick, suitable for thin applications.



Sube-up

- Coated with special activated resin, it has excellent slidability and wear resistance, providing superior functionality as sealing material and gasket.
- Can be used for preventing fixation and improving slidability.



Gel Gasket

- Composite extruded gasket used for improving usability by moulding vibration damping and water tightness gel simultaneously with elastomer.
- Ideal for vibration damping material of motors and pumps, etc.

BELT PARTITION SERIES

●Suitable for simple partitions at the station's platforms and factories.
●Long type with belt length 7m and stacking type available.

[Wall Mount Type] P.1026~P.1027

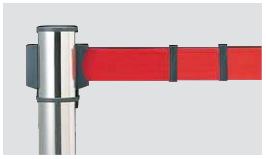


[Self-standing Type]



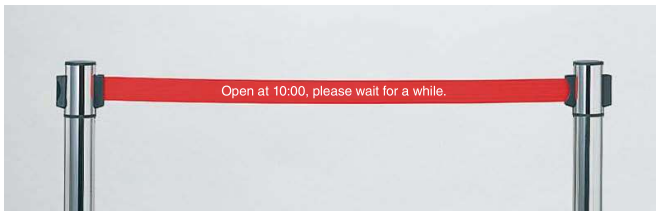
RD (red)	BU (blue)	YE (yellow)
GN (green)	BR (brown)	GR (grey)
BL (black)		







■Letters and symbols can be optionally printed on the belt.





WALL MOUNT BELT PARTITION AP-BR351

SUS


AP-BR351 (MR)

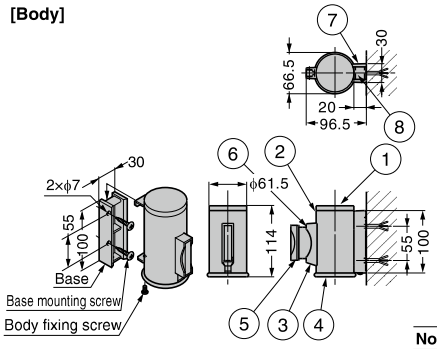

AP-BR351 (SL)


Hook catch (sold separately)

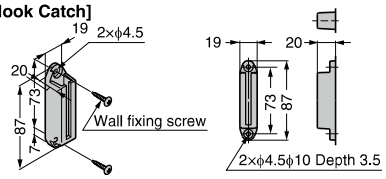
[Application Example]



[Body]



[Hook Catch]



●Use hook catch (included) to fix the pulled out belt.

[Remarks]

●Hook catch is supplied with the body. Please order separately if additional hook catches are required.
●Please install the body and hook catch as shown in the application example. If the belt is twisted with respect to the body and hook catch, the twisted part may rub and cause fraying or wearing out.

[Parts Included]

●Hook catch

No.	Part Name	Material	Finish / Colour
①	Head	ABS	Dark Grey
②	Slit Pipe (MR)	Stainless Steel	Polished
	Slit Pipe (SL)	Steel	Powder Coating/Silver
③	Hook Catch A	ABS	Dark Grey
④	Wall Mount Type Resin Sleeve		
⑤	Hook		
⑥	Belt	Polyester	–
⑦	Base	ABS	Dark Grey
⑧	Hook Bracket	Stainless Steel (SUS304)	Powder Coating/Dark Grey

[Body]

RoHS	CAD	Item Code	Item Name	Belt Colour	Belt Length m	Weight (kg)	Box (pcs)	Carton (pcs)
–	3D	290-893-247	AP-BR351 (MR)RD	Red	2	0.5	1	40
–	3D	290-893-306	AP-BR351 (MR)BU	Blue			1	40
–	–	290-893-246	AP-BR351 (SL)RD	Red			1	40
–	–	290-893-301	AP-BR351 (SL)BU	Blue			1	40

[Hook Catch] Sold Separately

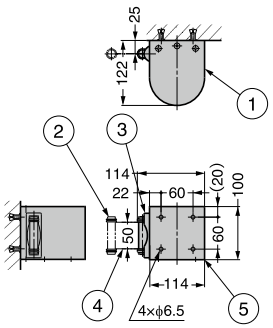
RoHS	CAD	Item Code	Item Name	Material	Colour	Size	Weight (g)	Box (pcs)	Carton (pcs)
–	–	290-885-590	AP-BR349M (GR)	ABS	Dark Grey	W19×D20×H87	19	200	–

WALL MOUNT BELT PARTITION AP-BR057

SUS







Right-handed type shown. Left-handed type is symmetrical.

- Long type with belt length 7m.
- Use hook catch (sold separately) to fix the pulled out belt.

[Remarks]

- Belt part may collapse due to product characteristics.
- Hook catch is not supplied with the body.Please order separately.
- Please install the body and hook catch as shown in the application example. If the belt is twisted with respect to the body and hook catch, the twisted part may rub and cause fraying or wearing out.

[Sold Separately]

- Hook catch

[Body]

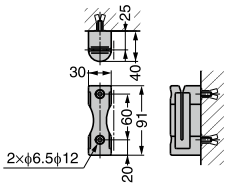
RoHS	CAD	Item Code	Item Name	Type	Belt Length m	Weight (kg)	Box (pcs)	Carton (pcs)
–	3D	290-885-004	AP-BR057R(SH)	Right-handed	7	1.46	1	–
–	3D	290-885-005	AP-BR057L(SH)	Left-handed			1	–

No.	Part Name	Material	Finish / Colour
①	Body	Stainless Steel (SUS304)	Satin
②	Hook	Aluminium Alloy	–
③	Belt Pull-out Opening	ABS	Black
④	Belt (7m)	Polyester	Red
⑤	Bracket	Stainless Steel (SUS304)	–

[Application Example]







[Hook Catch] Sold Separately

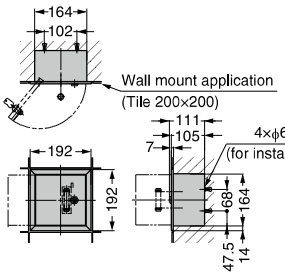
RoHS	CAD	Item Code	Item Name	Material	Finish / Colour	Size	Weight (g)	Box (pcs)	Carton (pcs)
–	–	290-885-006	AP-BR050(AS)	Aluminium Alloy	Anodised Silver	W30×D40×H91	223.5	50	–

BELT PARTITION AP-BR06 Mortise Mount Type

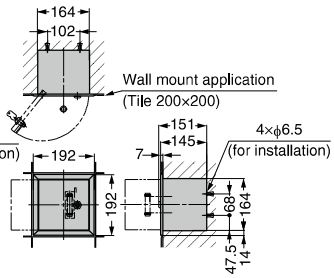
SUS







AP-BR063 (belt length 3.5 m)



AP-BR065 (belt length 5 m)

- Can be recessed inside of the wall.
- Types with belt length 3.5m and 5m available.
- Door with lock to prevent mischief.
- Use hook catch (sold separately) to fix the pulled out belt.
- Surface mount type and mortise mount type available for optional hook catches.Like the partition, the mortise mount type has a lock on the door.
- Silk printing on belt available by made to order.

[Body]

RoHS	CAD	Item Code	Item Name	Material	Finish	Belt Colour	Belt Length m	Weight (g)	Box (pcs)	Carton (pcs)
–	–	290-885-007	AP-BR063(SH)	Stainless Steel	Satin	Red	3.5	2510.0	1	–
–	–	290-885-008	AP-BR065(SH)	(SUS304)			5	3595.0	1	–

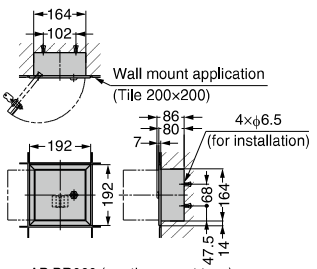
[Remarks]

- Belt part may collapse due to product characteristics.
- Silk printing on belt available at surcharge.
- Please install the body and hook catch as shown in the picture.If the belt is twisted with respect to the body and hook catch, the twisted part may rub and cause fraying or wearing out.

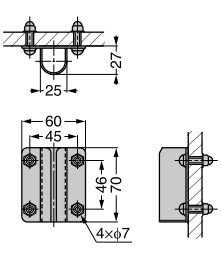
[Sold Separately]

- Hook catch





AP-BR060 (mortise mount type)



AP-BR061 (surface mount type)

[Hook Catch] Sold Separately

RoHS	CAD	Item Code	Item Name	Type	Material	Finish	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	290-885-009	AP-BR060(SH)	Mortise Mount	Stainless Steel	Satin	1460	1	–
G	3D	290-885-010	AP-BR061(SH)	Surface Mount	(SUS304)		1680	1	–



POINT FIX



Point fix is a part for fixing glass to structure or frame when using glass as a wall or panel.



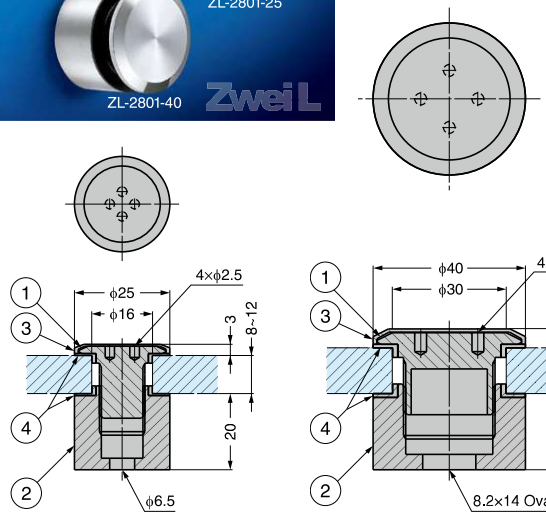




Zwei L STAINLESS STEEL POINT FIX ZL-2801

SUS316 TEMPERED GLASS





ZL-2801-25 ZL-2801-40

- Superior “Zwei L Finish”.
  Zwei L represents the very pinnacle of ultra-premium Japanese hardware design. Contrasting bands of mirror finish and lustrous satin on a faceted profile give jewel like highlights which flatter any architectural space.

[Remarks]

- Special tool (sold separately) is required for installation.

[Sold Separately]

- Special tool Z059, Z058





No.	Part Name	Material	Finish / Colour
①	Pin	Stainless Steel (SUS316)	Plain
②	Clamp		Polished (Partially)
③	Cover		Zwei L Finish
④	Spacer	POM	Black

[Body]

RoHS	CAD	Item Code	Item Name	Glass Thickness	Special Tool	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-040-674	ZL-2801-25	8~12	Z059	115.2	2	–
–	3D	120-040-675	ZL-2801-40		Z058	260.0	1	–

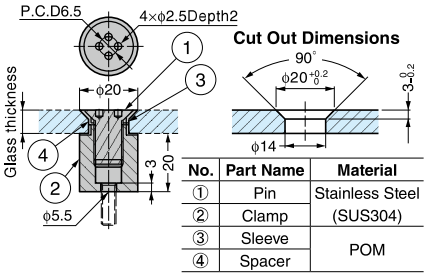
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Length	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-388	Z059	115	38	20	–
–	3D	270-180-387	Z058	160	111	20	–

POINT FIX PE-20SR

TEMPERED GLASS





No.	Part Name	Material
①	Pin	Stainless Steel
②	Clamp	(SUS304)
③	Sleeve	POM
④	Spacer	

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-180-982	PE-20SR	8~12	51.7	50	200

Refer to 1 : P.1031

Special tool Z059



T-shaped holder PTH-5 1



[Remarks]
- Special tool Z059 is required for installation.

[Sold Separately]
- Special tool Z059
- T-shaped holder PTH-5 1 for point fix.

[Recommended Screws]
- Hexagon socket head cap screw M5

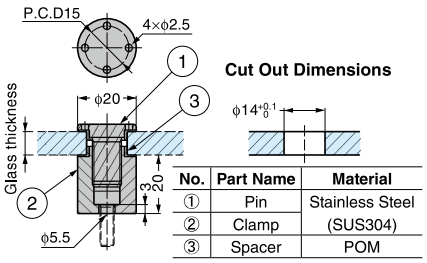
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-388	Z059	38	20	–

POINT FIX PE-20ST

TEMPERED GLASS





No.	Part Name	Material
①	Pin	Stainless Steel
②	Clamp	(SUS304)
③	Spacer	POM

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-180-981	PE-20ST	8~12	56	50	200

Refer to 1 : P.1031

Special tool Z059



T-shaped holder PTH-5 1



[Remarks]
- Special tool Z059 is required for installation.

[Sold Separately]
- Special tool Z059
- T-shaped holder PTH-5 1 for point fix.

[Recommended Screws]
- Hexagon socket head cap screw M5

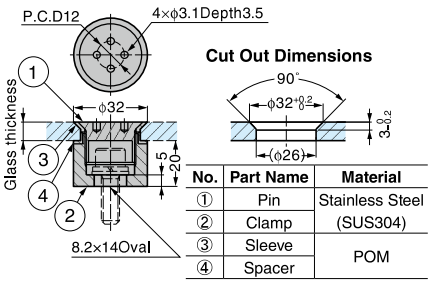
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-388	Z059	38	20	–

POINT FIX PE-32SR

TEMPERED GLASS





No.	Part Name	Material
①	Pin	Stainless Steel
②	Clamp	(SUS304)
③	Sleeve	POM
④	Spacer	

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-180-592	PE-32SR	8~12	112	10	80

Refer to 1 : P.1031

Special tool Z058



T-shaped holder PTH-8 1



[Remarks]
- Special tool Z058 is required for installation.

[Sold Separately]
- Special tool Z058
- T-shaped holder PTH-8 1 for point fix.

[Recommended Screws]
- Hexagon socket head cap screw M8

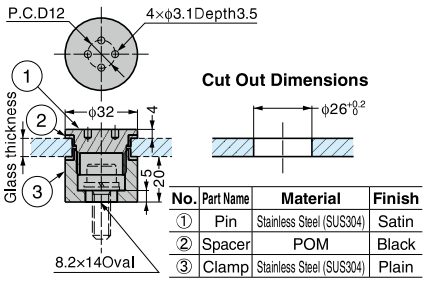
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-387	Z058	111	20	–

POINT FIX PE-32ST

TEMPERED GLASS





No.	Part Name	Material	Finish
①	Pin	Stainless Steel (SUS304)	Satin
②	Spacer	POM	Black
③	Clamp	Stainless Steel (SUS304)	Plain

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-022-236	PE-32ST	8~12	140	10	80

Refer to 1 : P.1031

Special tool Z058



T-shaped holder PTH-8 1



[Remarks]
- Special tool Z058 is required for installation.

[Sold Separately]
- Special tool Z058
- T-shaped holder PTH-8 1 for point fix.

[Recommended Screws]
- Hexagon socket head cap screw M8

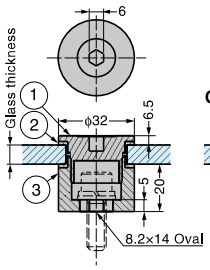
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-387	Z058	111	20	–

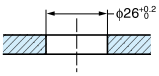
POINT FIX PE-32HT

TEMPERED GLASS





Cut Out Dimensions



No.	Part Name	Material	Finish
①	Pin	Stainless Steel (SUS304)	Satin
②	Spacer	POM	Black
③	Clamp	Stainless Steel (SUS304)	Plain

T-shaped holder PTH-8 1



[Remarks]
- Hex key (nominal 6) is required for installation.

[Sold Separately]
- T-shaped holder PTH-8 1 for point fix

[Recommended Screws]
- Hexagon socket head cap screw M8

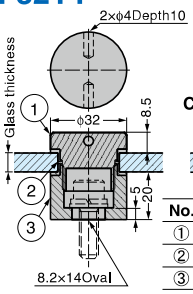
RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-022-238	PE-32HT	8~12	140	10	80

Refer to 1 : P.1031

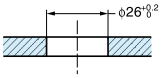
POINT FIX PE-32YT

TEMPERED GLASS





Cut Out Dimensions



No.	Part Name	Material	Finish
①	Pin	Stainless Steel (SUS304)	Satin
②	Spacer	POM	Black
③	Clamp	Stainless Steel (SUS304)	Plain

Special tool Z060



T-shaped holder PTH-8 1



[Remarks]
- Special tool Z060 is required for installation.

[Sold Separately]
- Special tool Z060
- T-shaped holder PTH-8 1 for point fix

[Recommended Screws]
- Hexagon socket head cap screw M8

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-022-237	PE-32YT	8~12	140	10	80

Refer to 1 : P.1031

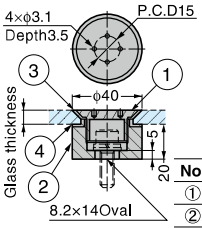
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-181-398	Z060	112	30	–

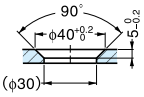
POINT FIX PE-40SR

TEMPERED GLASS





Cut Out Dimensions



No.	Part Name	Material
①	Pin	Stainless Steel (SUS304)
②	Clamp	
③	Sleeve	POM
④	Spacer	

Special tool Z058



T-shaped holder PTH-8 1



[Remarks]
- Special tool Z058 is required for installation.

[Sold Separately]
- Special tool Z058
- T-shaped holder PTH-8 1 for point fix

[Recommended Screws]
- Hexagon socket head cap screw M8

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-180-980	PE-40SR	8~12	182	10	80

Refer to 1 : P.1031

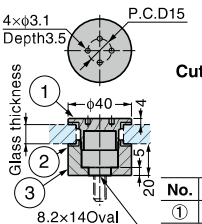
[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-387	Z058	111	20	–

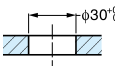
POINT FIX PE-40ST

TEMPERED GLASS





Cut Out Dimensions



No.	Part Name	Material	Finish
①	Pin	Stainless Steel (SUS304)	Satin
②	Spacer	POM	Black
③	Clamp	Stainless Steel (SUS304)	Plain

Special tool Z058



T-shaped holder PTH-8 1



[Remarks]
- Special tool Z058 is required for installation.

[Sold Separately]
- Special tool Z058
- T-shaped holder PTH-8 1 for point fix

[Recommended Screws]
- Hexagon socket head cap screw M8

RoHS	CAD	Item Code	Item Name	Glass Thickness	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	120-022-235	PE-40ST	8~12	196	10	60

Refer to 1 : P.1031

[Special Tool] Sold Separately

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-387	Z058	111	20	–

T-SHAPED HOLDER FOR POINT FIX PTH

L=R TEMPERED GLASS



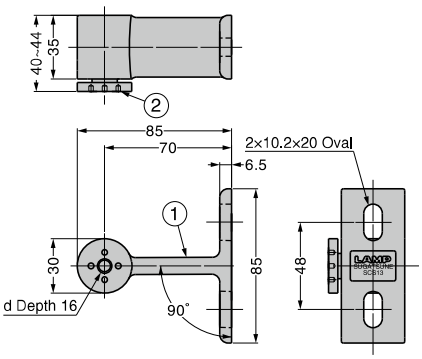
- For point fix (sold separately).
- Used for installing glass to the handrail post with point fix. Please use with point fix recommended in the table below.
- M5 screw type (PTH-5) and M8 screw type (PTH-8) available.
- Non-Handed. Can be installed on left or right side.
- Adjustment range: vertical ±5mm, depth 4mm. Horizontal adjustment is possible by using point fix (PTH-8 only).
- Ideal for exterior application. Acceptable glass weight: 36kg (4 pcs, vertical mounting).

[Remarks]

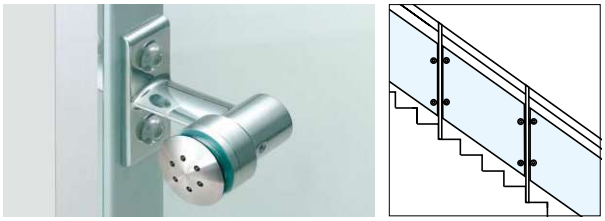
- When installing the recommended point fix to the glass, either special tool Z058, Z059, Z060 (sold separately) or hex key (nominal 6) is required. Special tools vary depending on the point fix used. Please confirm with the table below.
- When adjusting the depth adjustment screw and body of PTH-5 or PTH-8, special tool Z058 or Z059 is required.

[Recommended Screws]

- Hexagon socket button head screw M10
- Recommended tightening torque: 44 N·m (443 kgf·cm)



[Application Example]



No.	Part Name	Material	Finish
①	Body	SCS13	Polished
②	Depth Adjustment Screw	Stainless Steel (SUS304)	Satin

※SCS13 is equivalent to SUS304.

[Body]

RoHS	CAD	Item Code	Item Name	d	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-014-673	PTH-5	M5	419	2	24
G	3D	120-014-672	PTH-8	M8	413	2	24

[Special Tool] Sold Separately



Z059 Z058 Z060

RoHS	CAD	Item Code	Item Name	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	270-180-388	Z059	38	20	–
–	3D	270-180-387	Z058	111	20	–
–	3D	270-181-398	Z060	112	30	–

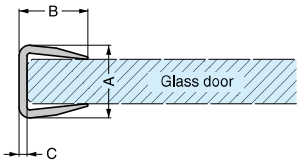
Refer to 1 : P.1029, 2 : P.1030

[Recommended Point Fix] Sold Separately

RoHS	CAD	Item Code	Item Name	Page	Horizontal Adjustment	T-shaped Holder	Special Tool	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	120-180-982	PE-20SR	1	–	PTH-5	Z059	51.7	50	200
–	3D	120-180-981	PE-20ST					56.0	50	200
–	3D	120-180-592	PE-32SR		±3	PTH-8	Z058	112.0	10	80
G	3D	120-022-236	PE-32ST					140.0	10	80
G	3D	120-022-238	PE-32HT	2			Hex Key 6	140.0	10	80
G	3D	120-022-237	PE-32YT				Z060	140.0	10	80
–	3D	120-180-980	PE-40SR				Z058	182.0	10	80
G	3D	120-022-235	PE-40ST					196.0	10	60

GLASS EDGE PROTECTOR GP

TEMPERED GLASS



- Sealing materail for protecting the edge of glass door.
- One-touch installation.
- Highly transparent.

[Remarks]

- Please choose according to the glass thickness.
- Sold at 3000mm. Can be cut to a required length by customers.

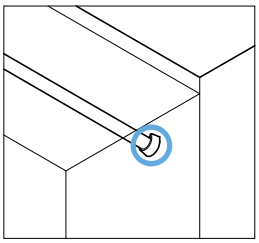
RoHS	CAD	Item Code	Item Name	Material	Colour	A	B	C	Length	Glass Thickness	Weight (kg)	Box (pcs)	Carton (pcs)
G	3D	270-021-586	GP-06	PC	Clear	8.8	10	1.2	3000	6	104	35	–
G	3D	270-021-587	GP-08			11.5	12	1.4		8	144	27	–
G	3D	270-021-588	GP-10			13.7	13	1.5		10	240	25	–
G	3D	270-021-589	GP-12			16.3	14	1.7		12	220	22	–
G	3D	270-021-590	GP-15			19.5	15	1.8		15	250	20	–

PLASTIC SOCKET PS-37

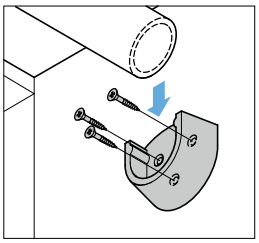


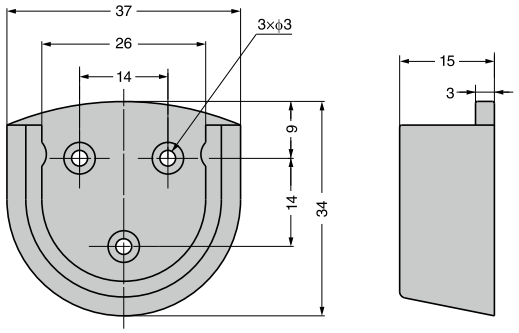
●Ideal for holding pipes (ϕ 25mm) in wardrobes.

[Installation]



[Cut Out Dimensions]





RoHS	CAD	Item Code	Item Name	Material	Colour	Load Capacity N/2 pcs	Load Capacity kgf/2 pcs	Weight (g)	Box (pcs)	Carton (pcs)
–	3D	110-030-118	PS-37	Polystyrene	White	196	20	8	100	900

SNAP-ON WINDOW WD

WD-85

WD-120



WD-180



WD-230

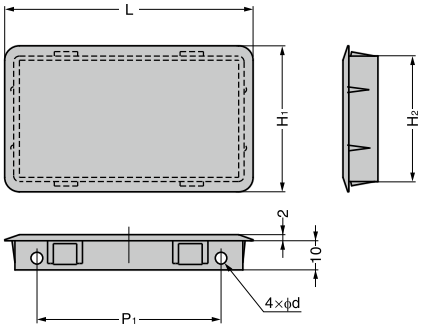


WD-250

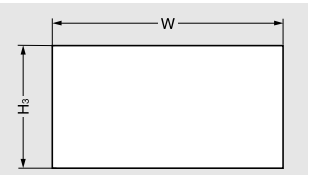


●One-touch installation.

●Crack resistant.



[Cut Out Dimensions]



Item Name	H3			W
	Board Thickness0.8	Board Thickness1.0	Board Thickness1.2	
WD-85	43.3		43.5	79
WD-120	94		94.2	113.6
WD-180	78.4		78.7	173.5
WD-230	43.3		43.5	224
WD-250	110.4	110.8	111.2	244.2

※Noted that dimensions vary depending on board thickness.

RoHS	CAD	Item Code	Item Name	Material	Finish / Colour	L	P1	ϕd	H1	H2	Board Thickness	Weight (g)	Box (pcs)
G	3D	210-012-214	WD-85	PC	Clear	85	63	4	50	43	0.8, 1.0, 1.2	14.2	500
G	3D	210-012-215	WD-120			120	54	2.5	100	94		36.6	250
G	3D	210-012-216	WD-180			180	88	4	85	78		44	140
G	3D	210-012-217	WD-230			230	138		50	43		36	250
G	3D	210-050-347	WD-250			250		2.5	116	110		95	60

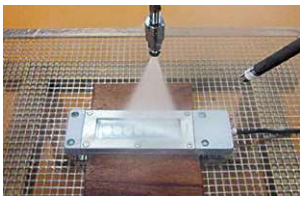
LED TOUGH LIGHT SL-TGH

INSTRUCTION





From above to below
SL-TGH1 (Wide flood type)
SL-TGH2 (Medium flood type)
SL-TGH3 (Narrow spot type)



Can withstand high pressure and high temperature water.

- Conforms to IP69K (high temperature and high pressure water resistant) and IP67F (oilproof, waterproof and dustproof) standards.
- Special fluoro rubber allows direct contact with oil and water.
- Stainless steel body cover and tempered cover glass provide anti-rust and scratch proof properties.
- 3 types (wide flood type, medium flood type and narrow spot type) available depending on the light quantity required and the illumination range.
- Bracket 1 used for adjusting the illumination direction also available.

[Application]

- Lighting of machinery and equipment, spotlights for stores, for exterior use (street lights, porch lights, sign lights, etc.)

[Remarks]

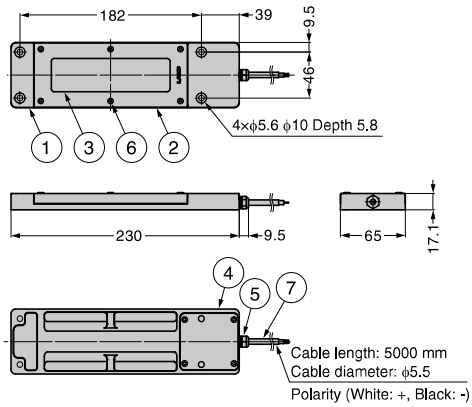
- To ensure heat dissipation, be sure to install the light by pressing the back tightly against the metal surface (steel: above 60,000mm^2). Besides, please reserve a clearance of 10mm or more around.
- Luminescent colour and brightness vary due to the characteristics of LED.
- Do not use in the following environment where the aluminium alloy may corrode.
  - Places where the body in contact with metal may be subject to electrolyte splash.
  - Acid and alkaline environment

[Sold Separately]

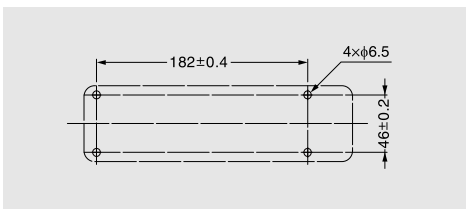
- AC adaptor STD-24010T
- AC adaptor ATS050-A240
- DC connector DC-CNT

[Optional Parts]

- Angle adjustable mounting bracket for tough light SL-WPG-Z 1

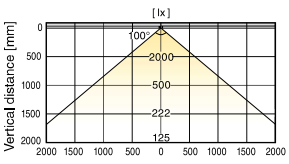


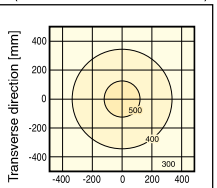
[Cut Out Dimensions] (Common to 3 Types)



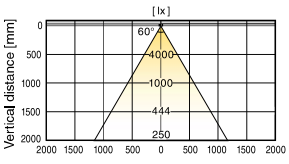
[Illumination Image] Luminous intensity distribution characteristics / Horizontal illuminance (illumination distance 1 m)

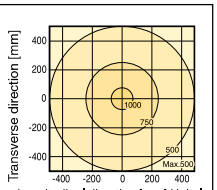
Ⓐ
〈Applicable model〉
SL-TGH1
Wide flood type
DC24V
Neutral white
12.5W



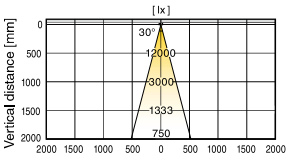


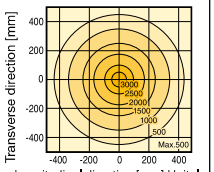
Ⓑ
〈Applicable model〉
SL-TGH2
Medium flood type
DC24V
Neutral white
12.5W





Ⓒ
〈Applicable model〉
SL-TGH3
Narrow spot type
DC24V
Neutral white
12.5W



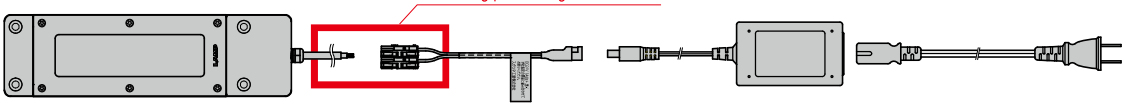


No.	Part Name	Material	Finish/Colour
①	Body	Aluminium Alloy	Silver Enamel Finish
②	Cover	Stainless Steel (SUS304)	Plain
③	Cover Glass	Tempered Glass	Clear
④	Back Cover	Stainless Steel (SUS304)	Plain
⑤	Cable Gland	Brass	Nickel
⑥	Fixing Screw	Stainless Steel (SUS304)	Plain
⑦	Cable	Heat Resistant & Oil Resistant PVC	–

Refer to 1 : P.1034

[Wiring Drawing]

●1 light



LED tough light SL-TGH

DC connector DC-CNT
(Sold separately)

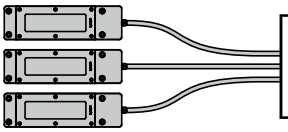
AC adaptor STD-24010T
(Sold separately)

Wiring part enlarged view



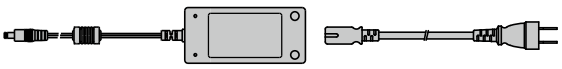
※When connecting to DC connector, please connect white to white and black to black. (Polarity. White: +, Black: -)

●3 lights



When connecting more than 2 lights, customer should perform wiring without using DC connector.

LED tough light SL-TGH



AC adaptor ATS050-A240 high power type
(Sold separately)

RoHS	CAD	Item Code	Item Name	Type	Illumination Image	Illuminance lx※1	Rated Input Voltage	Rated Power Consumption	Colour Temperature K	Luminescent Colour	Illumination Angle	Luminous Flux lm	Weight (g)※2	Box (pcs)	Carton (pcs)
G	3D	220-026-705	SL-TGH1-24-WNSL	Wide Flood Type	Ⓐ	500	DC24V	12.5W	5000	Neutral White	100°	1000	450	1	10
G	3D	220-026-706	SL-TGH2-24-WNSL	Medium Flood Type	Ⓑ	1000					60°	1100		1	10
G	3D	220-026-707	SL-TGH3-24-WNSL	Narrow Spot Type	Ⓒ	3000					30°			1	10

※1 Illuminance at the place 1000mm away from the light. ※2 Excluding cable part.

ANGLE ADJUSTABLE MOUNTING BRACKET FOR TOUGH LIGHT SL-WPG-Z For SL-TGH





●For adjusting the illumination direction of tough light SL-TGH 1.

[Remarks]

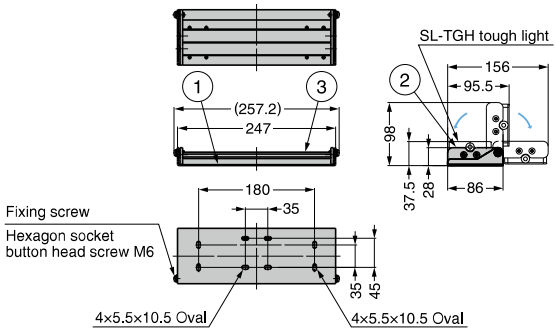
●When installing the bracket to wall or installing tough light to the bracket, please secure with screws.

●Loose the fixing screws before adjusting the angle. Please make sure the fixing screws is tightended when fixing the angle. Do not apply excessive force after fixing.

●Specifications are subject to change without prior notice.

[Parts Included]

●Hexagon socket head cap screw M5×20 (Each 4 pcs for bracket and tough light installation)



No.	Part Name	Material	Finish
①	Base Plate	Stainless Steel (SUS304)	Plain
②	Side Plate		Barrel Polished
③	Flat Frame	Aluminium Alloy	Anodised

RoHS	CAD	Item Code	Item Name	Installation Type	Weight (g)	Box (pcs)	Carton (pcs)
G	3D	220-021-892	SL-WPG-Z	Screw Fixing	560	1	10

Refer to 1 : P.1033