

ASSOCIATED PARTS FOR CABLE & CONDUIT SYSTEM

SANPARTS™
サンパーツ

1. Associated parts

- A wide range of parts are available for cable & conduit system

2. LSC WIRING SYSTEM

- The system consists of a modular frame for simple mounting of control components inclusive of wiring
- No wiring ducts are required
- Cost-effectiveness & Space-efficiency

3. JUNCTION BOX & TERMINAL BOX

- Available with Non-metallic and metallic

LOCK NUT

METALLIC LOCK NUT

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS



[CONNECTED TO EXTERNAL THREAD - CTG THREAD]

Delivery	Item no.	Thread JIS B 8305	D	t	Weight (g/pc)	Qty / Package
⊙	RLGS 16	CTG 16	27	3.8	7	50
⊙	RLGS 22	CTG 22	33	3.8	10	50
⊙	RLGS 28	CTG 28	41	4.5	17	50
⊙	RLGS 36	CTG 36	49.5	4.5	22	20
⊙	RLGS 42	CTG 42	61.5	5.0	33	20
⊙	RLGS 54	CTG 54	74	5.0	40	20
⊙	RLGS 70	CTG 70	93	5.0	60	10
⊙	RLGS 82	CTG 82	106	5.0	68	10
⊙	RLGS 92	CTG 92	122	6.0	103	4
⊙	RLGS 104	CTG 104	136	6.0	122	4

[CONNECTED TO EXTERNAL THREAD - NPT THREAD]

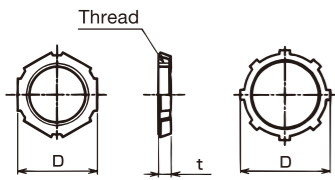
Delivery	Item no.	Thread ANSI 1.20.1	D	t	Weight (g/pc)	Qty / Package
⊙	RLTS 16	NPT1/2	28	4.5	8	50
⊙	RLTS 22	NPT3/4	34	4.5	12	50
⊙	RLTS 28	NPT1	42	5.0	19	50
⊙	RLTS 36	NPT1-1/4	50	5.0	22	20
⊙	RLTS 42	NPT1-1/2	62	5.0	32	20
⊙	RLTS 54	NPT2	74	6.0	45	20
⊙	RLTS 70	NPT2-1/2	89	6.0	61	10
⊙	RLTS 82	NPT3	107	6.0	82	10
⊙	RLTS 92	NPT3-1/2	123	6.0	103	4
⊙	RLTS 104	NPT4	136	6.0	119	4

[CONNECTED TO EXTERNAL THREAD - Pg THREAD]

Delivery	Item no.	Thread DIN 40 430	D	t	Weight (g/pc)	Qty / Package
⊙	RLPgS 09	Pg9	21	3.0	4	50
⊙	RLPgS 11	Pg11	24	3.2	5	50
⊙	RLPgS 13	Pg13.5	27	3.6	7	50
⊙	RLPgS 16	Pg16	29	3.6	8	50
⊙	RLPgS 21	Pg21	35	3.6	11	50
⊙	RLPgS 29	Pg29	45	3.6	17	20
⊙	RLPgS 36	Pg36	61	4.5	34	20
⊙	RLPgS 42	Pg42	68	5.0	36	20

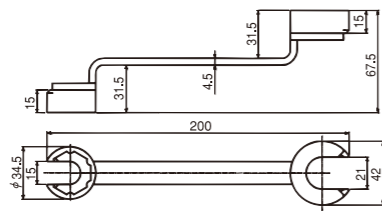
[CONNECTED TO EXTERNAL THREAD - METRIC THREAD]

Delivery	Item no.	Thread JIS B 0207	D	t	Weight (g/pc)	Qty / Package
⊙	RLMS 20	M20	27	3.6	8	50
⊙	RLMS 25	M25	33	3.6	12	50
⊙	RLMS 32	M32	41	4.5	20	50
⊙	RLMS 40	M40	49	4.5	25	20
⊙	RLMS 50	M50	65	5	40	20
⊙	RLMS 63	M63	79	5	49	20



TOOL FOR LOCK NUT

SPANNER FOR RLGS 16,22

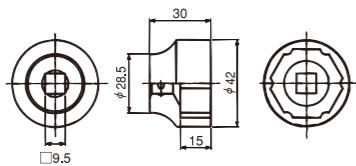


• Spanner to tighten RLGS 16, 22

Delivery	Item no.	Suitable Lock nut	Weight (g/pc)	Qty / Package
⊙	SPTL 255	RLGS 16, 22	186	1

MATERIAL	ENVIRONMENT
Steel	RoHS

9.5mm (3/8") DRIVE SOCKET FOR RATCHET WRENCH FOR RLGS 16, 22



• 9.5mm (3/8") drive socket for a ratchet wrench
 • Designed for RLGS 16, 22
 • Recommended ratchet wrench to fit: 9.5mm drive RH-3S (TOP KOGYO CO.,LTD)

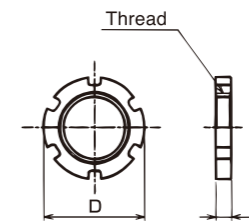
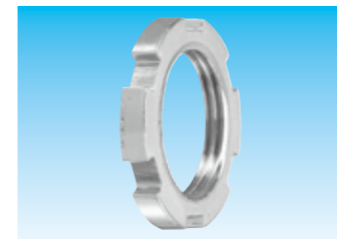
Delivery	Item no.	Suitable Lock nut	φA	L	t	Weight (g/pc)	Qty / Package
⊙	SPTL 256	RLGS 16	34.5	30	9.5	108	1
⊙	SPTL 257	RLGS 22	42	30	9.5	141	1

MATERIAL
Steel

LOCK NUT

METALLIC LOCK NUT

MAIN MATERIAL	SURFACE FINISH	ENVIRONMENT
ZDC2	Electroplated zinc	RoHS

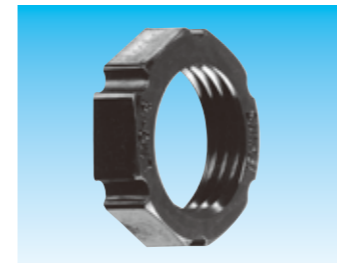


[RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	D	t	Weight (g/pc)	Qty / Package
⊙	RLFG 16	CTG16	31	5	12	20
⊙	RLFG 22	CTG22	37	5	15	20
⊙	RLFG 28	CTG28	45	6	24	10
⊙	RLFG 36	CTG36	56	6	35	10
⊙	RLFG 42	CTG42	63	6	44	10
⊙	RLFG 54	CTG54	76	6	59	10

MAIN MATERIAL	COLOR	ENVIRONMENT	FLAMMABILITY
PA6	Black	RoHS	UL94VO

NON-METALLIC LOCK NUT



[CONNECTED TO EXTERNAL THREAD - RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	D	t	Weight (g/pc)	Qty / Package
⊙	RLGP 12	CTG12	24.4	6	1	20
⊙	RLGP 16	CTG16	28.7	7	2	20
⊙	RLGP 22	CTG22	35.1	8	4	20
⊙	RLGP 28	CTG28	43.6	9	5	10
⊙	RLGP 36	CTG36	54.6	10	9	5
⊙	RLGP 42	CTG42	62.7	10	12	5
⊙	RLGP 54	CTG54	78.6	11	21	2

[CONNECTED TO EXTERNAL THREAD - RIGID STEEL CONDUIT WITH THREAD]

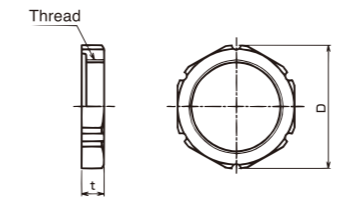
Delivery	Item no.	Thread JIS C 8305	D	t	Weight (g/pc)	Qty / Package
⊙	RLCP 19	CTC19	26.6	7	2	20
⊙	RLCP 25	CTC25	34.0	8	3	20
⊙	RLCP 31	CTC31	42.5	9	5	10
⊙	RLCP 39	CTC39	49.9	10	8	10
⊙	RLCP 51	CTC51	65.9	10	13	2
⊙	RLCP 63	CTC63	79.7	11	19	2

[CONNECTED TO EXTERNAL THREAD - Pg THREAD]

Delivery	Item no.	Thread DIN 40 430	D	t	Weight (g/pc)	Qty / Package
⊙	RLPgP 09	Pg9	23.4	6	2	10
⊙	RLPgP 11	Pg11	25.5	6	2	20
⊙	RLPgP 13	Pg13.5	28.7	7	2	20
⊙	RLPgP 16	Pg16	31.9	7	3	20
⊙	RLPgP 21	Pg21	38.3	8.5	4	10
⊙	RLPgP 29	Pg29	48.9	8.5	6	10
⊙	RLPgP 36	Pg36	63.8	9.5	13	5
⊙	RLPgP 42	Pg42	69.1	9.5	13	5

[CONNECTED TO EXTERNAL THREAD - METRIC THREAD]

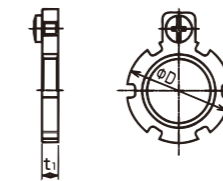
Delivery	Item no.	Thread JIS B 0207	D	t	Weight (g/pc)	Qty / Package
☆	RLMP 20	M20	26.6	7	—	—
☆	RLMP 25	M25	32.4	8	—	—
☆	RLMP 32	M32	41.4	9	—	—
☆	RLMP 40	M40	61.0	10	—	—
☆	RLMP 50	M50	63.8	10	—	—
☆	RLMP 63	M63	79.7	11	—	—



LOCK NUT WITH EARTH TERMINAL

METALLIC

MAIN MATERIAL	SURFACE FINISH	ENVIRONMENT	Earth terminal
ZDC2	Electroplated zinc	RoHS	M4



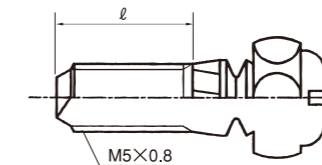
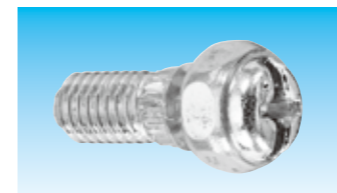
[CONNECTED TO EXTERNAL THREAD - RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
⊙	RLEG 16	CTG16	31.0	5.0	17	20
⊙	RLEG 22	CTG22	37.0	5.0	20	20
⊙	RLEG 28	CTG28	45.0	6.0	29	10
⊙	RLEG 36	CTG36	56.0	6.0	40	10
⊙	RLEG 42	CTG42	63.0	6.0	49	10
⊙	RLEG 54	CTG54	76.0	6.0	64	10

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS

SCREW FOR CONNECTOR / COUPLING

M5×0.8



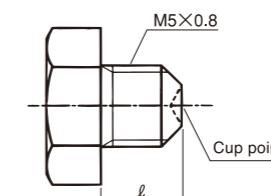
• Screw for connectors/couplings

Delivery	Item no.	Suitable for	Thread JIS B 0205	ℓ	Weight (g/pc)	Qty / Package
⊙	SPPA 409	※	M5×0.8	8	3.2	20

Suitable for our connectors/couplings for non-threadable/non-thread rigid steel conduits, except GEWC and all connectors/couplings for SANPIPE

HEXAGON HEAD BOLT FOR COUPLING

M5×0.8



• Hexagon head bolt for couplings

Delivery	Item no.	Suitable for	Thread JIS B 0205	ℓ	Weight (g/pc)	Qty / Package
⊙	SPPA 417	K2K2E 36~54, K2K2I 36~54, WK2E 38~50, WK2I 38~50,54	M5×0.8	5.5	2.1	10
⊙	SPPA 420	K2K2E 10~28, K2K2I 10~28, WK2E 17~30, WK2I 17~30	M5×0.8	7.0	2.1	10
⊙	SPPA 421	RBUI, RBUE	M5×0.8	7.5	2.3	10

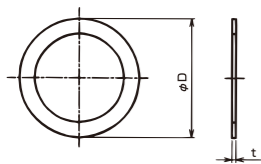
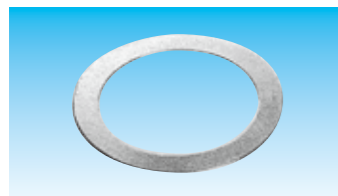
MAIN MATERIAL	ENVIRONMENT
SUS304	RoHS

Contact us for information of product availability and delivery

WASHER

METALLIC

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS



[CONNECTED TO EXTERNAL THREAD -RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
○	RWG 16	CTG16	30.0	0.6	2	20
○	RWG 22	CTG22	36.5	0.6	2	20
○	RWG 28	CTG28	45.0	0.6	3	10
○	RWG 36	CTG36	54.0	0.6	4	10
○	RWG 42	CTG42	62.5	0.8	8	5
○	RWG 54	CTG54	76.5	0.8	11	5
○	RWG 70	CTG70	95.0	1.0	21	2
○	RWG 82	CTG82	109.0	1.0	25	2
⑤	RWG 92	CTG92	123.0	1.2	35	2
○	RWG 104	CTG104	138.0	1.2	45	2
○	RWG 130	G5	169.0	1.6	55	2

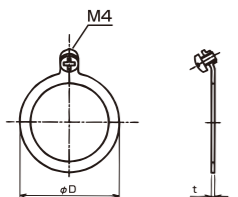
[CONNECTED TO EXTERNAL THREAD -RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
○	RWC 19	CTC19	27.0	0.6	2	20
○	RWC 25	CTC25	35.0	0.6	2	20
○	RWC 31	CTC31	42.0	0.6	3	10
○	RWC 39	CTC39	50.0	0.6	4	10
○	RWC 51	CTC51	67.0	0.8	9	5
○	RWC 63	CTC63	81.0	0.8	12	5
○	RWC 75	CTC75	95.0	1.0	19	2

WASHER WITH EARTH TERMINAL

METALLIC

MAIN MATERIAL	ENVIRONMENT	Earth terminal
Brass	RoHS	M4



[CONNECTED TO EXTERNAL THREAD -RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
○	RWEG 16	CTG16/CTC19	28.0	1.0	4	20
○	RWEG 22	CTG22/CTC25	35.0	1.0	5	20
○	RWEG 28	CTG28/CTC31	43.0	1.2	7	10
○	RWEG 36	CTG36	51.0	1.2	8	10
○	RWEG 42	CTG42	61.0	1.5	16	5
○	RWEG 54	CTG54	74.0	1.5	21	5
○	RWEG 70	CTG70/CTC75	93.0	1.5	30	2
○	RWEG 82	CTG82	106.0	1.5	36	2
○	RWEG 92	CTG92	121.0	1.5	47	2
○	RWEG 104	CTG104	135.0	1.5	55	2

[CONNECTED TO EXTERNAL THREAD -RIGID STEEL CONDUIT WITH THREAD]

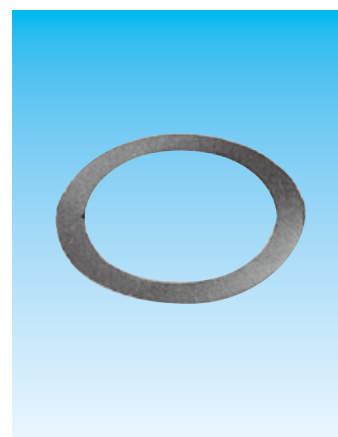
Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
○	RWEC 39	CTC39	49	1.2	9	10
○	RWEC 51	CTC51	65	1.5	18	5
○	RWEC 63	CTC63	79	1.5	24	5

※薄鋼用の 19、25、31、75 は厚鋼用と兼用になります。

SHEET PACKING

NBR/TPE SHEET PACKING

ENVIRONMENT
RoHS



[CONNECTED TO EXTERNAL THREAD -RIGID STEEL CONDUIT WITH THREAD]

Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
○	RSPG 16	CTG16	27.3	1.0	0.3	20
○	RSPG 22	CTG22	33.5	1.0	0.4	20
○	RSPG 28	CTG28	41.2	1.0	0.6	10
○	RSPG 36	CTG36	50.8	1.0	0.9	10
○	RSPG 42	CTG42	57.6	1.0	1.1	5
○	RSPG 54	CTG54	70.0	1.0	1.5	5
○	RSPG 70	CTG70	85.6	1.5	2.6	2
○	RSPG 82	CTG82	100.2	1.5	3.6	2
○	RSPG 92	CTG92	114.9	1.5	4.9	2
○	RSPG 104	CTG104	128.5	1.5	6.0	2
○	RSPG 130	G5	154.9	1.5	8.3	2

[CONNECTED TO EXTERNAL THREAD -RIGID STEEL CONDUIT WITH THREAD]

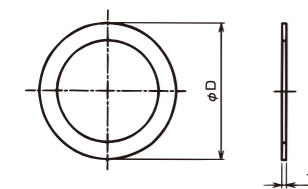
Delivery	Item no.	Thread JIS C 8305	φD	t	Weight (g/pc)	Qty / Package
○	RSPC 19	CTC19	27.3	1.0	0.4	20
○	RSPC 25	CTC25	33.5	1.0	0.5	20
○	RSPC 31	CTC31	41.2	1.0	0.7	10
○	RSPC 39	CTC39	50.8	1.0	1.1	10
○	RSPC 51	CTC51	57.6	1.0	0.8	5
○	RSPC 63	CTC63	70.0	1.0	0.9	5
○	RSPC 75	CTC75	86.6	1.5	2.7	2

[CONNECTED TO EXTERNAL THREAD - Pg THREAD]

Delivery	Item no.	Thread DIN 40 430	φD	t	Weight (g/pc)	Qty / Package
—	RSPPg 09	Pg9				
—	RSPPg 11	Pg11				
—	RSPPg 13	Pg13.5				
—	RSPPg 16	Pg16				
—	RSPPg 21	Pg21				
—	RSPPg 29	Pg29				
—	RSPPg 36	Pg36				
—	RSPPg 42	Pg42				

[CONNECTED TO EXTERNAL THREAD - METRIC THREAD]

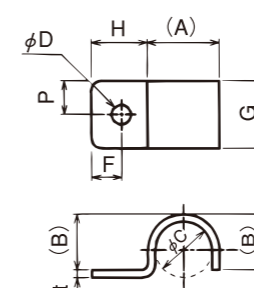
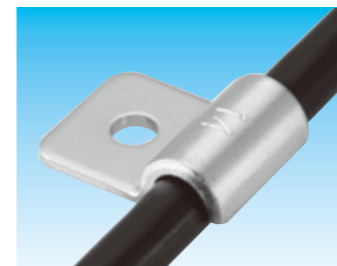
Delivery	Item no.	Thread JIS B 0207	φD	t	Weight (g/pc)	Qty / Package
—	RSPM 16	M16				
○	RSPM 20	M20	26.4	1.0	0.2	20
○	RSPM 25	M25	32.0	1.0	0.4	20
○	RSPM 32	M32	39.6	1.0	0.6	10
○	RSPM 40	M40	48.4	1.0	0.8	10
○	RSPM 50	M50	59.0	1.0	1.1	5
○	RSPM 63	M63	72.4	1.0	1.5	5



SADDLE FOR CABLE

FOR CABLE Type RCS30

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS



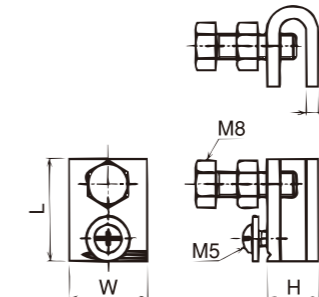
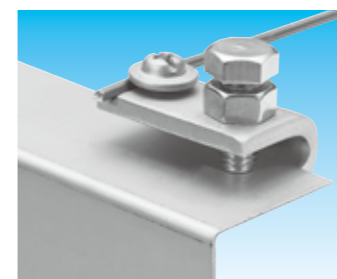
• Saddle for a cable

Delivery	Item no.	Suitable cable max outside dia. mm ²	A	B	φC	φD	G	H	P	F	t	Weight (g/pc)	Qty / Package
○	RCS30 14	14	12.1	7.5	7.5	6	20	17	10	9	2.3	10	50
○	RCS30 22	22	13.6	9.0	9.0	6	20	17	10	9	2.3	13	50
○	RCS30 38	38	15.9	11.3	11.3	6	20	17	10	9	2.3	16	50
☆	RCS30 60	60											
○	RCS30 100	100	21.6	17.0	17.0	6	20	17	10	9	2.3	20	50

EARTH TERMINAL FOR EARTH BONDING

FOR EARTH BONDING Type RE-HG3 Type RE-HG3

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS



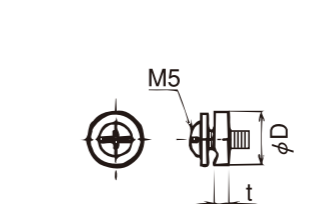
- Earth terminal for earth bonding
- Typical application: Cable tray
- Steel main base
- Steel M5 screw and Stainless steel (SUS304) M8 screw & nut

Delivery	Item no.	Suitable earth bonding line dia.	L	H	w	t	Weight (g/pc)	Qty / Package
○	RE-HG 3	2.0~2.6	38	17	25	4.5	74	20

EARTH TERMINAL FOR EARTH BONDING

FOR EARTH BONDING Type RE-HG4

MAIN MATERIAL	SURFACE FINISH	ENVIRONMENT
ZDC2	Electroplated zinc	RoHS



- Earth terminal for earth bonding
- Typical application: pull box
- M5 threaded hole is required to set

Delivery	Item no.	Suitable earth bonding line dia.	φD	t	Bolt	Weight (g/pc)	Qty / Package
○	RE-HG 4	2.0~2.6	15	5	M5×0.8	11	20

SADDLE

Type LSA/LSAV/ LS2A/LS2AV

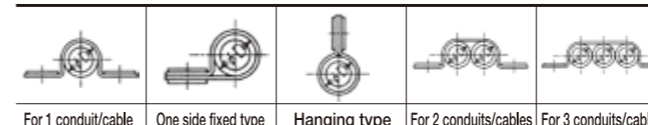
MAIN MATERIAL	ENVIRONMENT
SUS304	RoHS



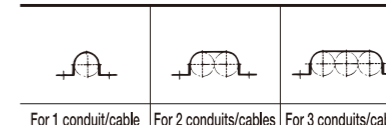
With no cover	With cover
LSA	LSAV



With no cover	With cover
LS2A	LS2AV



For 1 conduit/cable One side fixed type Hanging type For 2 conduits/cables For 3 conduits/cables



For 1 conduit/cable For 2 conduits/cables For 3 conduits/cables

- Saddle for cables / conduits
- Refer to SANPIPE section for more information

- Saddle for cables / conduits
- Edge-bent type
- Refer to SANPIPE section for more information

SADDLE - ONE SIDE FIXED TYPE

METALLIC



Material	Item
Steel	KSO

- Saddle (one side fixed type) can be used for cables
- Refer to KEIFLEX section for more information

PLUG

MAIN MATERIAL	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	IP67	HALOGEN FREE	RoHS	UL94V0	Lowest -20°C ~Highest 90°C

PA / PARALLEL PIPE THREAD - EXTERNAL THREAD



[ROUND TYPE - BLACK / LIGHT GRAY]

Delivery	Item no.		φ D	l ₁	l ₂	Thread JIS B 0202		Weight (g/pc)	Qty / Package
	Black	Light gray				φ S ₁	Nominal size		
○	RPBG 16	RPBG 16 LG	25	13	7	20.9	G1/2	11	20
○	RPBG 22	RPBG 22 LG	32	14	8.5	26.4	G3/4	19	20
○	RPBG 28	RPBG 28 LG	40	15	12	33.2	G1	32	10
○	RPBG 36	RPBG 36 LG	49	16	13	41.9	G1-1/4	43	10
○	RPBG 42	RPBG 42 LG	55	16	14	47.8	G1-1/2	58	5
○	RPBG 54	RPBG 54 LG	73	16	15	59.6	G2	30	5

MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP67	RoHS	Lowest -20°C ~Highest 90°C

ZDC / PARALLEL PIPE THREAD - EXTERNAL THREAD



[HEXAGON/OCTAGON TYPE]

Delivery	Item no.		φ D	l ₁	l ₂	Thread JIS B 0202		Weight (g/pc)	Qty / Package
	Black	Light gray				φ S ₁	Nominal size		
○	RP2BGZ 16		31.9	8	6	20.9	G1/2	38	20
○	RP2BGZ 22		39.6	8	6	26.4	G3/4	50	20
○	RP2BGZ 28		46.2	10	7	33.2	G1	85	10
○	RP2BGZ 36		55.7	10	7	41.9	G1-1/4	116	10
○	RP2BGZ 42		63.0	12	8	47.8	G1-1/2	168	5
○	RP2BGZ 54		75.6	12	8	59.6	G2	235	5

MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	Light gray	IP67	RoHS	UL94V0	Lowest -20°C ~Highest 90°C

PA / METRIC THREAD - EXTERNAL THREAD



[HEXAGON/OCTAGON TYPE - LIGHT GRAY]

Delivery	BM	OM	Item no.		φ D	l ₁	l ₂	Thread JIS C 8463		Weight (g/pc)	Qty / Package
			With lock nut	Without lock nut				φ S ₁	Nominal size		
○	○	○	RP2BM 20 LG	RP2OM 20 LG	27.6	8	6	19.9	M20	14	10
○	○	○	RP2BM 25 LG	RP2OM 25 LG	34.0	8	6	24.9	M25	18	10
○	○	○	RP2BM 32 LG	RP2OM 32 LG	42.5	10	7	31.9	M32	29	10
☆	☆	☆	RP2BM 40 LG	RP2OM 40 LG							
☆	☆	☆	RP2BM 50 LG	RP2OM 50 LG							
☆	☆	☆	RP2BM 63 LG	RP2OM 63 LG							

STAINLESS STEEL

· Refer to the SANPIPE section for information of stainless steel plug

Contact us for information of product availability and delivery
18SANKEL_SP_130201

MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	Light gray	IP67	RoHS	UL94V0	Lowest -20°C ~Highest 90°C

PA / PARALLEL PIPE THREAD - EXTERNAL THREAD

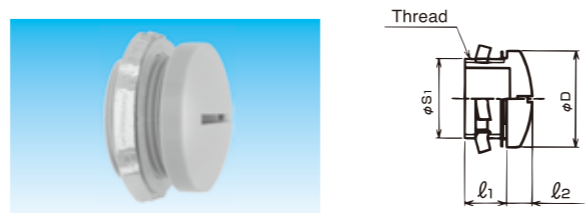


[HEXAGON/OCTAGON TYPE - LIGHT GRAY]

Delivery	Item no.		φ D	l ₁	l ₂	Thread JIS B 0202		Weight (g/pc)	Qty / Package
	Black	Light gray				φ S ₁	Nominal size		
○	RP2BG 12 LG		24.4	8	6	16.6	G3/8	7	20
○	RP2BG 16 LG		27.6	8	6	20.9	G1/2	13	20
○	RP2BG 22 LG		34	8	6	26.4	G3/4	18	20
○	RP2BG 28 LG		42.5	10	7	33.2	G1	34	10
○	RP2BG 36 LG		53.1	14	8	41.9	G1-1/4	49	10
○	RP2BG 42 LG		59.5	15	8	47.8	G1-1/2	65	5
○	RP2BG 54 LG		73.3	16	9	59.6	G2	90	5

MAIN MATERIAL	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	IP67	HALOGEN FREE	RoHS	UL94V0	Lowest -20°C ~Highest 90°C

PA / Pg THREAD - EXTERNAL THREAD



[ROUND TYPE - BLACK / LIGHT GRAY]

Delivery	Item no.		φ D	l ₁	l ₂	Thread DIN 40 430		Weight (g/pc)	Qty / Package
	Black	Light gray				φ S ₁	Nominal size		
○	RPBPg 11	RPBPg 11 LG	23	10.5	7	18.6	Pg11	9	20
○	RPBPg 13	RPBPg 13 LG	25	11.5	7	20.4	Pg13.5	13	20
○	RPBPg 16	RPBPg 16 LG	27	11.5	8	22.5	Pg16	16	10
○	RPBPg 21	RPBPg 21 LG	35	13.0	10	28.3	Pg21	23	10
○	RPBPg 29	RPBPg 29 LG	44	13.0	12	37.0	Pg29	32	5
○	RPBPg 36	RPBPg 36 LG	55	15.0	14	47.0	Pg36	62	5
○	RPBPg 42	RPBPg 42 LG	61	15.0	14	54.0	Pg42	65	5

MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP67	RoHS	Lowest -20°C ~Highest 90°C

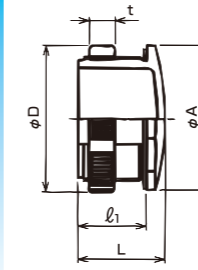
ZDC / METRIC THREAD - EXTERNAL THREAD



[HEXAGON/OCTAGON TYPE]

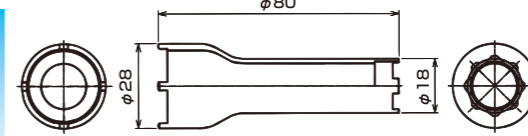
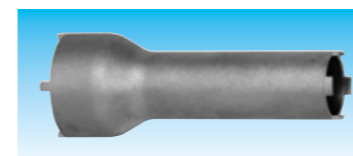
Delivery	BM	OM	Item no.		φ D	l ₁	l ₂	Thread JIS C 8463		Weight (g/pc)	Qty / Package
			With lock nut	Without lock nut				φ S ₁	Nominal size		
○	○	○	RP2BMZ 20	RP2OMZ 20	31.9	8	6	19.9	M20	35	20
○	○	○	RP2BMZ 25	RP2OMZ 25	39.6	8	6	24.9	M25	51	10
○	○	○	RP2BMZ 32	RP2OMZ 32	46.2	10	7	31.9	M32	85	20
☆	☆	☆	RP2BMZ 40	RP2OMZ 40							
☆	☆	☆	RP2BMZ 50	RP2OMZ 50							
☆	☆	☆	RP2BMZ 63	RP2OMZ 63							

PLUG FOR KNOCKOUT



- Plug plating
- Designed for knockout of wiring boxes
- Available with 2 types (Metallic / Non-metallic)
- Surface finish of metallic type: Satin Ni/Cr
- Color of non-metallic type: Gray
- Color of locknut: Black

Delivery	Item no.	Material	Suitable knockout dia.	φ A	φ D	l ₁	L	t	Weight (g/pc)	Qty / Package
○	RP4BM 16	ZDC2	φ 16	18	17.9	12	14.6	5.0	8	10
○	RP4BM 22	(PA lock nut)	φ 22	26	25.1	12	15.3	4.5	14	10
○	HP4BM 16	PA	φ 16	18	17.9	12	14.6	5.0	1	10
○	HP4BM 22		φ 22	26	25.1	12	15.3	4.5	3	10



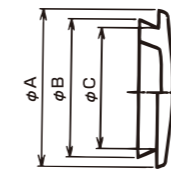
· Tool to tighten up the lock nut of RP4BM16,22

Delivery	Item no.	Suitable for	Weight (g/pc)	Qty / Package
○	SPTL258	RP4BM 16,22 HP4BM 16,22	50	1

MATERIAL	ENVIRONMENT	TEMPERATURE RANGE
TPE	RoHS	Lowest -40°C ~Highest 105°C

COVER FOR KNOCKOUT

FOR KNOCKOUT



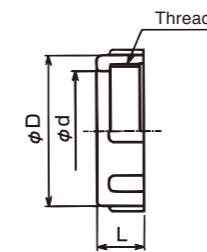
- Non-metallic cover
- Designed for knockout of wiring boxes

[FOR KNOCKOUT]

Delivery	Item no.		Suitable knockout nominal size	φ A	φ B	φ C	Weight (g/pc)	Qty / Package
	Black	Light gray						
○	HVH 16	HVH 16LG	G16/C19	34.0	27.8	22.0	4	10
○	HVH 22	HVH 22LG	G22/C25	43.5	33.9	27.5	6	10
○	HVH 28	HVH 28LG	G28/C31	50.0	40.9	34.0	9	10

BUSHING

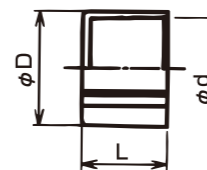
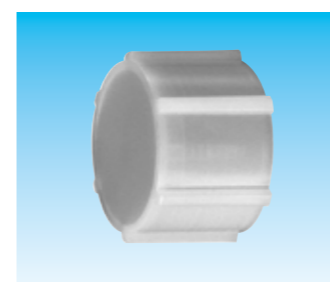
PC / FOR RIGID STEEL CONDUIT WITH THREAD



- Bushing for the end of rigid steel conduit with thread
- Refer to GRIPOK section for more information

NON-ENTRY HOLE END CAP

PE / FOR SANPIPE

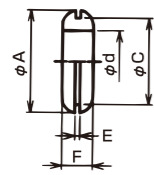
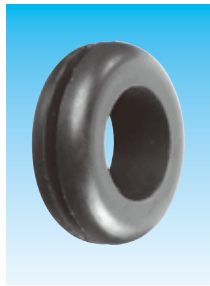


- Cap for SANPIPE (Rigid stainless steel conduit)
- Refer to SANPIPE section for more information

GROMMET

MATERIAL	ENVIRONMENT	TEMPERATURE RANGE
EPDM	RoHS	Lowest -20°C ~Highest 90°C

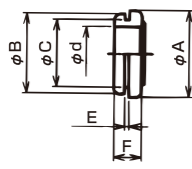
GROMMET / FOR KNOCKOUT



- Cap for SANPIPE (Rigid stainless steel conduit)
- Refer to SANPIPE section for more information

Delivery	Item no.	Suitable for			φA	φC	φd	E	F	Weight (g/pc)	Qty / Package
		Wall thickness	Suitable knockout nominal size	Suitable knockout dia.							
○	HG22RG12	1mm	G12/C15	φ 16~φ 18	23	17.0	11	1.0	8	2.5	10
○	HG22RG16		G16/C19	φ 20~φ 22	28	21.0	13	1.0	10	4.8	10
○	HG22RG22		G22/C25	φ 25.5~φ 27.5	33.5	26.5	17.5	1.0	11	7.1	10
○	HG22RG28	2mm	G28/C31	φ 32.5~φ 34.5	41.5	33.5	23.5	1.0	13	12.2	10
○	HG23RG12		G12/C15	φ 16~φ 18	23	17.0	11	2.0	9	2.7	10
○	HG23RG16		G16/C19	φ 20~φ 22	28	21.0	13	2.0	11	5.0	10
○	HG23RG22	2mm	G22/C25	φ 25.5~φ 27.5	33.5	26.5	17.5	2.0	12	8.0	10
○	HG23RG28		G28/C31	φ 32.5~φ 34.5	41.5	33.5	23.5	2.0	14	12.0	10

GROMMET WITH RUBBER FILM / FOR KNOCKOUT

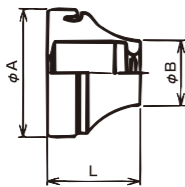


- Rubber grommet
- With a rubber film
- Designed for knockout of wiring boxes
- Protects outer sheath of cables

Delivery	Item no.	Suitable for			φA	φB	φC	φd	E	F	Weight (g/pc)	Qty / Package
		Wall thickness	Suitable knockout nominal size	Suitable knockout dia.								
○	HG34RG12	2.3mm	G12/C15	φ 16~φ 18	24	21	17.0	12	2.3	9.3	2.2	10
○	HG34RG16		G16/C19	φ 20~φ 22	28	25	21.0	16	2.3	10.3	3.1	10
○	HG34RG22		G22/C25	φ 25.5~φ 27.5	35.5	31.5	26.5	19.5	2.3	11.8	6.0	10
○	HG35RG28	3.2mm	G28/C31	φ 32.5~φ 34.5	42.5	38.5	33.5	26.5	3.2	12.7	8.4	10
○	HG35RG36		G36	φ 43~φ 45	54	49	44.0	35	3.2	14.7	15.1	5
○	HG35RC39		C39	φ 39~φ 41	50	45	40.0	32	3.2	14.7	12.8	5
○	HG35RG42	3.2mm	G42	φ 49~φ 51	60	55	50.0	40	3.2	15.2	19.5	5
○	HG35RC51		C51	φ 52~φ 54	63	58	53.0	43	3.2	15.2	21.1	5
○	HG35RG54		G54	φ 59~φ 61	70	65	60.0	50	3.2	13.7	22.2	5
○	HG35RC63		C63	φ 64.5~φ 66.5	75.5	70.5	65.5	55.5	3.2	15.2	26.7	5

MATERIAL	ENVIRONMENT	TEMPERATURE RANGE
NBR	RoHS	Lowest -20°C ~Highest 90°C

RUBBER BUSHING

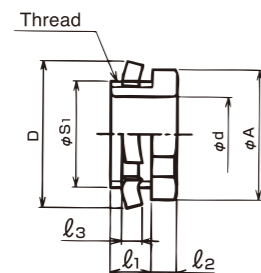
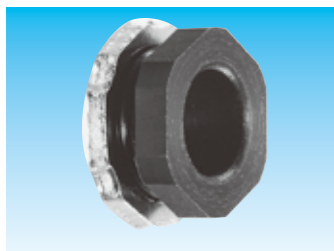


- Rubber bushing
- Designed for knockout of wiring boxes
- Protects outer sheath of cables

Delivery	Item no.	Suitable for			φA	φB	L	Weight (g/pc)	Qty / Package	
		Wall thickness	Suitable knockout nominal size	Suitable knockout dia.						
○	HBHG 16	1.0~3.0	G16	φ 21	7~11	27.6	14.0	20	5	1

MATERIAL	COLOR
PC	Black

FOR KNOCKOUT / PC

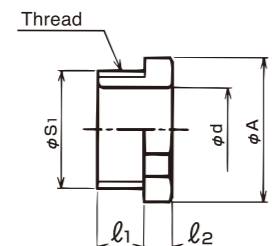
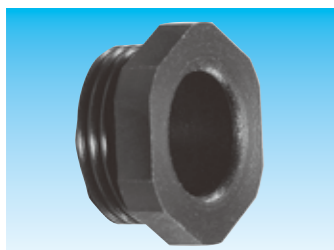


[PARALLEL PIPE THREAD - EXTERNAL THREAD]

Delivery	Item no.	Suitable knockout nominal size	φA	D	φd	l ₁	l ₂	l ₃	Thread JIS B 0202		Weight (g/pc)	Qty / Package
									φS1	Nominal size		
○	HBIHG 16	G16	25.5	29	14.7	8	5	3.8	20.9	G1/2	7	20
○	HBIHG 22	G22	31.9	36	20.2	8	5	3.8	26.4	G3/4	14	20
○	HBIHG 28	G28	40.4	44	26.3	10	6	4.5	33.2	G1	25	10
○	HBIHG 36	G36	49.9	53	34.5	10	7	4.5	41.9	G1-1/4	34	10
○	HBIHG 42	G42	56.3	61	40.2	12	7	5.0	47.8	G1-1/2	47	5
○	HBIHG 54	G54	69.1	74	51.8	12	8	5.0	59.6	G2	60	5

MATERIAL	COLOR
PC	Black

CONNECTED TO INTERNAL THREAD / PC



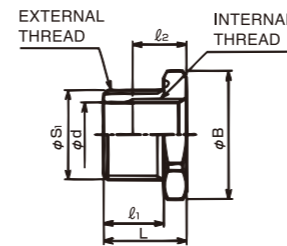
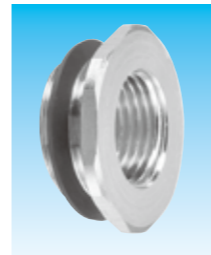
[PARALLEL PIPE THREAD - EXTERNAL THREAD]

Delivery	Item no.	Suitable thread nominal size	φA	φd	l ₁	l ₂	Thread JIS B 0202		Weight (g/pc)	Qty / Package
							φS1	Nominal size		
○	HBIHG 16	G1/2	25.5	14.7	8	5	20.9	G1/2	3	20
○	HBIHG 22	G3/4	31.9	20.2	8	5	26.4	G3/4	4	20
○	HBIHG 28	G1	40.4	26.3	10	6	33.2	G1	7	10
○	HBIHG 36	G1-1/4	49.9	34.5	10	7	41.9	G1-1/4	10	10
○	HBIHG 42	G1-1/2	56.3	40.2	12	7	47.8	G1-1/2	14	5
○	HBIHG 54	G2	69.1	51.8	12	8	59.6	G2	20	5

REDUCER

MAIN MATERIAL	SURFACE FINISH	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	RoHS	Lowest -20°C ~Highest 90°C

METALLIC



- Reducer
- With parallel pipe thread (external and internal thread)
- With a sheet packing on the side of external thread

[PARALLEL PIPE THREAD]

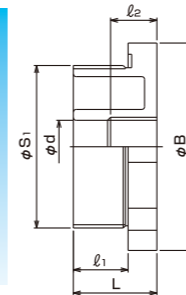
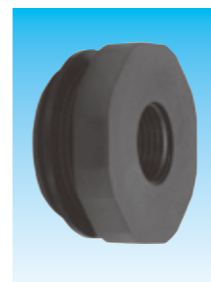
Delivery	Item no.	Internal thread JIS B 0202	φB	φd	l ₁	l ₂	L	External thread JIS C 8463		Weight (g/pc)	Qty / Package
								φS1	Nominal size		
○	RRG 22 16	G1/2	38.2	18.2	16	18	24.0	26.4	G3/4	54	10
○	RRG 28 16	G1/2	46.6	18.2	20	18	29.0	33.2	G1	127	10
○	RRG 28 22	G3/4	46.6	24.4	20	18	29.0	33.2	G1	92	10
○	RRG 36 22	G3/4	56.2	24.4	20	18	29.5	41.9	G1-1/4	196	1
○	RRG 36 28	G1	56.2	30.6	20	20	29.5	41.9	G1-1/4	143	1
○	RRG 42 28	G1	64.7	30.6	20	20	30.0	47.8	G1-1/2	234	1
○	RRG 42 36	G1-1/4	64.7	39.3	20	20	30.0	47.8	G1-1/2	149	1
○	RRG 54 42	G1-1/2	79.5	45.2	20	20	30.5	59.6	G2	298	1
○	RRG 70 54	G2	88.0	57.0	22	20	34.0	75.1	G2-1/2	447	1
○	RRG 82 70	G2-1/2	103.9	72.6	25	22	37.5	87.8	G3	542	1
○	RRG 92 82	G3	117.7	85.3	25	25	38.0	100.3	G3-1/2	632	1
○	RRG 104 92	G3-1/2	131.2	97.7	25	25	38.5	113.0	G4	741	1

[METRIC THREAD]

Delivery	Item no.	Internal thread JIS B 0207	φB	φd	l ₁	l ₂	L	External thread JIS B 0207		Weight (g/pc)	Qty / Package
								φS1	Nominal size		
○	RRM 25 20	M20	34.0	18.2	8	12	16.0	24.9	M25		1
□	RRM 32 25	M25	42.5	24.4	8	14	18.0	31.9	M32		1
□	RRM 40 32	M32	52.0	30.6	8	16	18.5	39.9	M40		1

MAIN MATERIAL	COLOR	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	Black	RoHS	UL94VO	Lowest -20°C ~Highest 90°C

NON-METALLIC



- Rubber reducer
- With parallel pipe thread (external and internal thread)
- With a sheet packing on the side of external thread

[PARALLEL PIPE THREAD]

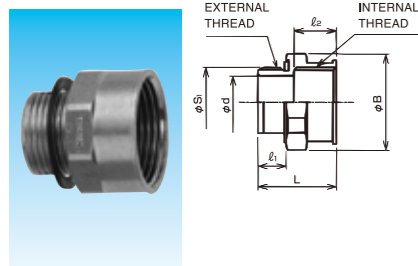
Delivery	Item no.	Internal thread JIS B 0207	φB	φd	l ₁	l ₂	L	External thread JIS B 0207		Weight (g/pc)	Qty / Package
								φS1	Nominal size		
○	HRG 36 16	G1/2	54.6	19.3	16	18	26.5	41.9	G1-1/4	46	20
○	HRG 54 16	G1/2	75.7	19.3	20	18	30.5	59.6	G2	88	10

EXTENSION ACCESSORY

MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP 67 (on External thread)	RoHS	Lowest -20°C ~Highest 90°C

METALLIC

STRAIGHT STYLE

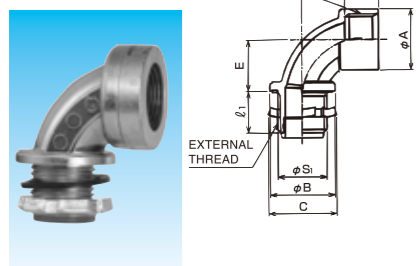


- Extension accessory with the same nominal size of external and internal thread.
- With a sheet packing on the side of external thread
- Available on request: Brass type

[METRIC THREAD]

Delivery	Item no.	INTERNAL THREAD JIS C 8463	φB	φd	l ₁	l ₂	L	EXTERNAL THREAD JIS C 8463		Weight (g/pc)	Qty / Package
								φS ₁	Nominal size		
[5]	RHM 20	M20	27.6	15.1	8	12	22.3	19.9	M20		1
[5]	RHM 25	M25	34.0	19.7	8	14	24.5	24.9	M25		1
[5]	RHM 32	M32	42.5	26.7	8	16	26.5	31.9	M32	96	1
[5]	RHM 40	M40	52.0	34.3	8	16	27.2	39.9	M40		1

90 DEGREE ANGLE STYLE



[PARALLEL PIPE THREAD - EXTERNAL THREAD]

Delivery	Item no.	INTERNAL THREAD JIS B 0202	φA	φB	C	E	F	l ₁	l ₂	EXTERNAL THREAD JIS B 0202		Weight (g/pc)	Qty / Package
										φS ₁	Nominal size		
⊙	RH 90G 16	G1/2	25	29	21	32	17	14	20.9	G1/2	72	10	
☆	RH 90G 22	G3/4											
	RH 90G 28												

ADAPTING FITTING

MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP 67 (on External thread)	RoHS	Lowest -20°C ~Highest 90°C

METALLIC



- Adapting fitting with the bigger nominal size of internal thread and the smaller nominal size of external thread.
- With a sheet packing on the side of external thread
- Available on request: Brass type

[PARALLEL PIPE THREAD]

Delivery	Item no.	INTERNAL THREAD JIS B 0202	φB	φd	l ₁	l ₂	L	EXTERNAL THREAD JIS B 0202		Weight (g/pc)	Qty / Package
								φS ₁	Nominal size		
⊙	RHG 22 16	G3/4	32.2	14.3	16	18	36.8	20.9	G1/2	49	20
⊙	RHG 28 22	G1	39.8	20.2	16	20	39.1	26.4	G3/4	69	20
⊙	RHG 36 28	G1-1/4	49.2	24.8	20	20	43.9	33.2	G1	116	1
⊙	RHG 42 36	G1-1/2	55.5	33.2	20	20	44.8	41.9	G1-1/4	164	1
⊙	RHG 54 42	G2	68.3	38.5	20	20	44.8	47.8	G1-1/2	197	1
⊙	RHG 70 54	G2-1/2	83.1	49.5	20	22	46.8	59.6	G2	297	1
⊙	RHG 82 70	G3	96.4	64.3	22	25	51.4	75.1	G2-1/2	395	1
⊙	RHG 92 82	G3-1/2	109.4	76.6	25	25	54.6	87.8	G3	500	1
⊙	RHG 104 92	G4	122.7	88.5	25	25	54.6	113.0	G3-1/2	587	1

[METRIC THREAD]

Delivery	Item no.	INTERNAL THREAD JIS C 8463	φB	φd	l ₁	l ₂	L	EXTERNAL THREAD JIS C 8463		Weight (g/pc)	Qty / Package
								φS ₁	Nominal size		
⊙	RHM 25 20	M25	30.3	15.1	8	14	24.8	19.9	M20	31	20
[5]	RHM 32 25	M32	38.3	19.7	8	16	26.8	24.9	M25		1
[5]	RHM 40 32	M40	46.8	26.7	8	16	26.8	31.9	M32		1

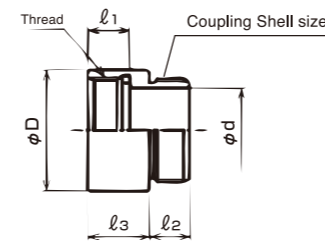
EXTENSION ACCESSORY FOR MS CONNECTOR

MAIN MATERIAL	MAIN MATERIAL	SURFACE FINISH	FEATURE	TEMPERATURE RANGE
ZDC2	Brass	Electroplated zinc	IP67	Lowest -20°C ~Highest 90°C

METALLIC



- Extension accessory
- Designed for a coupling to be connected to MS connector (Backshell assembled type).
- Make it possible for wiring work more efficient
- With packing
- Note: This type does not conform to RoHs requirements. Therefore, should RoHs be concerned, please contact us.

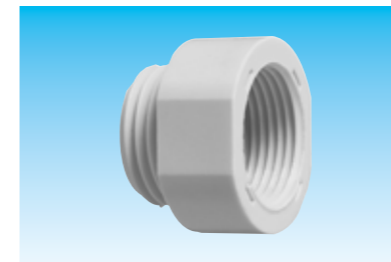


Delivery	Item no.	Coupling shell size	φD	φd	l ₁	l ₂	l ₃	Connectable MS connector		Weight (g/pc)	Qty / Package
								Shell size	Thread ASME B1.1		
[5]	RHU 10	10SL/12S	19.7	12.0	9.5	9.8	15	10SL/12S	5/8-24UNEF-2B		1
[5]	RHU 14	14S	23.4	14.2	9.5	9.8	15	14S	3/4-20UNEF-2B		1
[5]	RHU 16	16/16S	26.6	17.4	9.5	9.8	15	16/16S	7/8-20UNEF-2B		1
[5]	RHU 18	18	30.0	20.4	9.5	9.8	15	18	1-20UNEF-2B	34	1
⊙	RHU 20	20/22	34.7	25.0	9.5	9.8	15	20/22	1-3/16-18UNEF-2B	51	1
⊙	RHU 24	24/28	41.1	31.2	9.5	9.8	15	24/28	1-7/16-18UNEF-2B	62	20
⊙	RHU 32	32	49.2	39.1	11.1	11.4	15	32	1-3/4-18UNS-2B	76	1
⊙	RHU 36	36	55.6	45.5	12.7	13.0	15	36	2-18UNS-2B	89	1

ADAPTING FITTING Pg -> G

MAIN MATERIAL	COLOR	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	Ivory	RoHS	UL94VO	Lowest -20°C ~Highest 100°C

NON-METALLIC



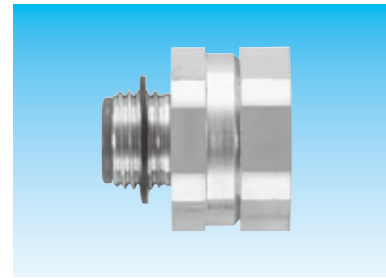
- Adapting fitting - with Pg internal thread and G external thread

Delivery	Item no.	INTERNAL THREAD DIN 40 430	φA	φd	l ₁	l ₂	l ₃	EXTERNAL THREAD JIS B 0202		Weight (g/pc)	Qty / Package
								φS ₁	Nominal size		
⊙	HHPgG 09 12	Pg9	23	11.4	7	11.8	9.5	16.6	G3/8	4	10
⊙	HHPgG 11 16	Pg11	26	14.7	8	12.0	9.5	20.9	G1/2	6	10
⊙	HHPgG 13 16	Pg13.5	28	16.0	8	12.0	9.5	20.9	G1/2	6	10
[5]	HHPgG 13 22	Pg13.5	31	20.0	8	12.0	9.5	26.4	G3/4	7	10
⊙	HHPgG 16 22	Pg16	31	20.0	8	12.5	10.0	26.4	G3/4	8	10
⊙	HHPgG 21 22	Pg21	34	20.0	8	14.0	11.5	26.4	G3/4	8	10
[5]	HHPgG 29 28	Pg29	45	26.3	10	14.5	12.0	33.2	G1	20	5
⊙	HHPgG 29 36	Pg29	45	33.7	12	16.5	12.0	41.9	G1-1/4	30	5
[5]	HHPgG 36 54	Pg36	63	52.2	14	14.0	14.0	59.6	G2	38	5

EXTENSION ROTARY ADAPTOR

MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	IP67	RoHS	Lowest -20°C ~Highest 90°C

METALLIC

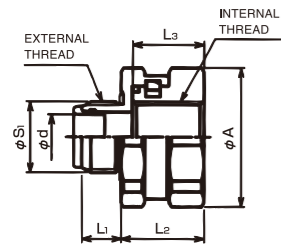


- Metallic extension Rotary adaptor for connectors (e.g. KMBG - straight connector for KEIFLEX)
- With RRH, connectors can be converted into a rotary type connector

· Note: Non-water-resistant on the side of internal thread of RRH. Therefore, choose a water-resistant connector with a rubber packing to be connected to RRH should the water resistance be required. Contact us to choose the right connector to be connected to RRH.

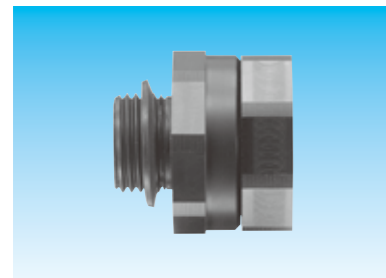
[PARALLEL PIPE THREAD - EXTERNAL THREAD]

Delivery	Item no.	INTERNAL THREAD JIS B 0202	φ A	φ d	L1	L2	L3	EXTERNAL THREAD JIS B 0202		Weight (g/pc)	Qty / Package
								φ S1	Nominal size		
○	RRH 16	G1/2	38.3	14.1	16	24.3	21	20.9	G1/2	114	10
○	RRH 22	G3/4	45.7	20.2	16	24.5	21	26.4	G3/4	155	10
○	RRH 28	G1	57.3	24.8	16	28.2	24	33.2	G1	286	10
○	RRH 36	G1-1/4	63.8	33.2	16	28.4	24	41.9	G1-1/4	300	10
7	RRH 42	G1-1/2	73.5	38.5	16	41.8	24	47.8	G1-1/2		1
☆	RRH 54	G2									



MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
PA66	Black	IP67	RoHS	Lowest -20°C ~Highest 90°C

NON-METALLIC

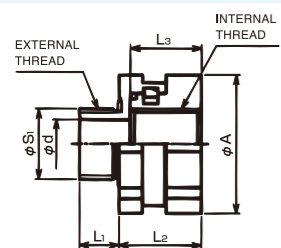


- Non-metallic extension Rotary adaptor for connectors (e.g. N2BG - straight connector for SANFLEKI ROBO)
- With HRH, connectors can be converted into a rotary type connector

· Note: Non-water-resistant on the side of internal thread of HRH. Therefore, choose a water-resistant connector with a rubber packing to be connected to HRH should water resistance be required. Contact us to choose the right connector to be connected to HRH.

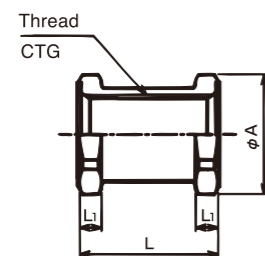
[PARALLEL PIPE THREAD - EXTERNAL THREAD]

Delivery	Item no.	INTERNAL THREAD JIS B 0202	φ A	φ d	L1	L2	L3	EXTERNAL THREAD JIS B 0202		Weight (g/pc)	Qty / Package
								φ S1	Nominal size		
○	HRH 16	G1/2	38.0	14.7	16	24.4	21	20.9	G1/2	22	20
○	HRH 22	G3/4	44.6	19.8	16	24.4	21	26.4	G3/4	29	10
○	HRH 28	G1	56.2	25.9	16	27.4	24	33.2	G1	50	10
7	HRH 36	G1-1/4	61.5	33.9	16	39.8	24	41.9	G1-1/4		1
7	HRH 42	G1-1/2	73.5	40.0	16	41.8	24	47.8	G1-1/2		1
☆	HRH 54	G2									



COUPLING

PARALLEL PIPE THREAD - INTERNAL THREAD



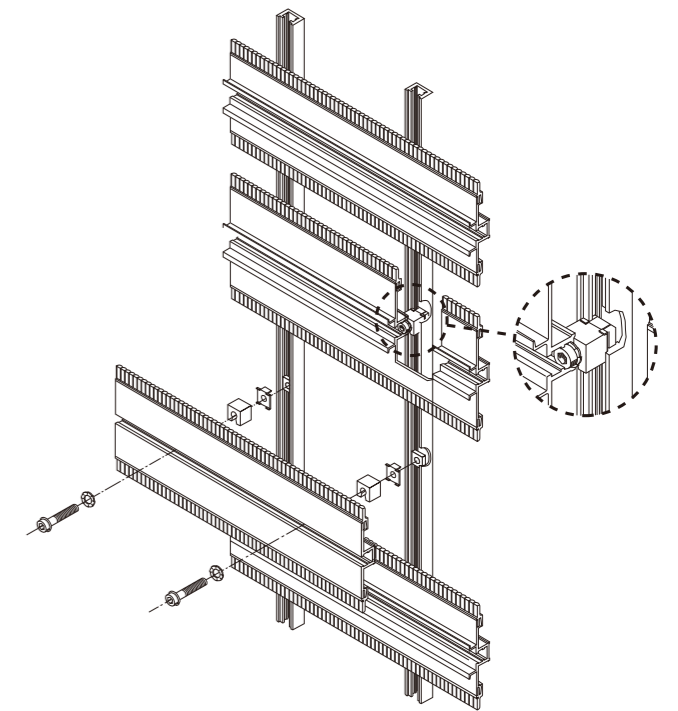
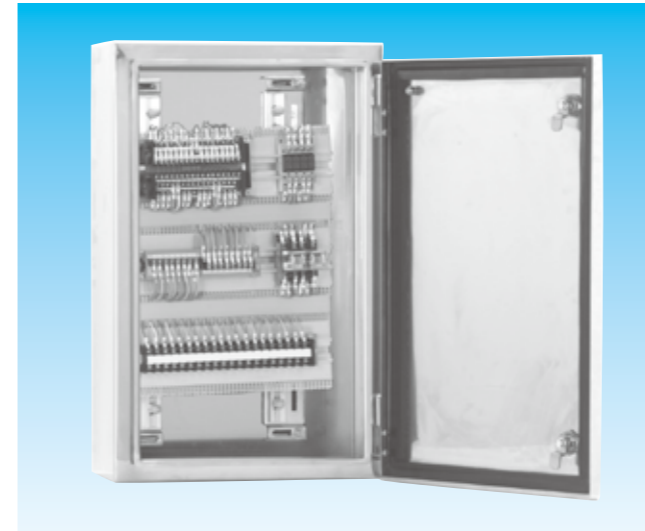
· With sheet packing

Delivery	Item no.	INTERNAL THREAD		φ A	L1	L	Weight (g/pc)	Qty / Package
		CTG	JIS C 8305 (JIS B 0202)					
○	RS2CG 16	CTG16	(G1/2)	31.9	6	37	53	20
○	RS2CG 22	CTG22	(G3/4)	39.6	6	37	73	20
○	RS2CG 28	CTG28	(G1)	46.2	7	39	110	10
○	RS2CG 36	CTG36	(G1 1/4)	56.7	7	43	161	10
○	RS2CG 42	CTG42	(G1 1/2)	63.0	8	43	193	5
○	RS2CG 54	CTG54	(G2)	78.8	8	48	310	5

LSC WIRING SYSTEM

ENVIRONMENT	TEMPERATURE RANGE
RoHS	Lowest 0°C ~Highest 60°C

DUCT-LESS WIRING



- C frame - compact style
- We supply you with LSC basically as a "System". We design the best frame layout suited for each customer's application and quote for complete LSC System
- Available on request: B frame (Large style)

WHAT IS LSC

LSC Wiring System consists of a modular frame for simple mounting of control components inclusive of wiring. Aluminum Mounting rails are used

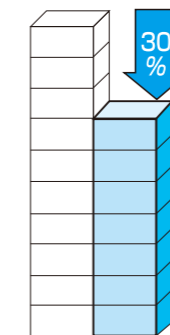
No wiring ducts are required so that LSC system meets your "Non-PVC" requirement

Wiring combs and covers work to put wiring in order

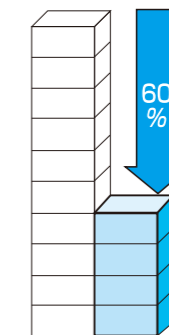
EN60204

Supported by Lutze

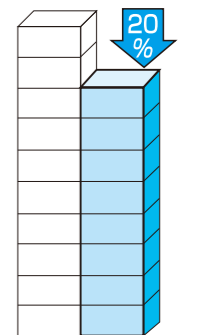
SPACE EFFICIENCY
- Space CUT BY 30%



INSTALLATION EFFICIENCY
- Time CUT BY 60%



COST PERFORMANCE
- Cost CUT BY 20%



Installation space required is to be cut by 30% compared to a back panel style as no wiring ducts are required.

Installation time can be reduced by 60% compared to a back panel style

The total cost inclusive of initial costs and operation costs can be cut by 20% compared to a back panel style

Good air circulation and unrestricted airflow dissipate heat around components.

· A prefabricated frame or a complete assembled frame can be efficiently installed into a control panel cabinet

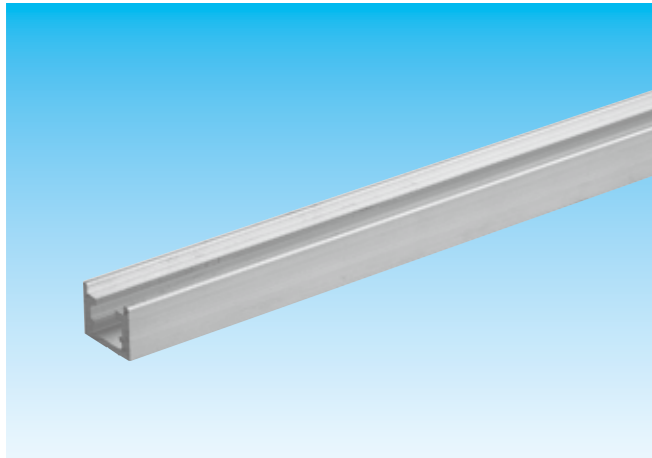
Maybe higher frame costs would be seen, but the increase in the initial cost can be canceled out by deduction of operation costs afterwards

A wide variety of components and optional parts is available

Convenient and fast front wiring. Sagging insulated wires can be put behind a frame

Additional wiring / wiring arrangement modifications can easily be done to adapt to future application changes

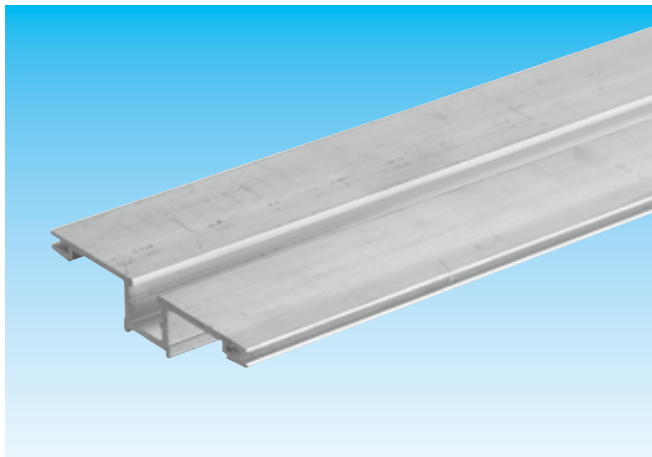
SUPPORT RAIL



- Support rail
- ※※※※ of Item no. shall denotes the length (mm) of a support rail (e.g. QS52M/420 is 420mm long)
- Regular length is shown in the chart below
- Spacer & bolt set (QPA52/QPA53) shall be used to connect support rails to mounting rails

Delivery	Item no.	Suitable LSC frame	Length (mm)	Lutze product no.	Weight (Kg/m)	Qty / Package
5	QS52M/※※※※	C	※※※※	CTE	0.377	2
REGULAR LENGTH (mm)			495/600			

MOUNTING RAIL (QP55M/QP56M)



- Mounting rail CM
- ※※※※ of Item no. shall denotes the length (mm) of a mounting rail (e.g. QP55M40/400 is 400mm long)
- Regular length is shown in the chart below

[FLAT MOUNTING RAIL WITH INTEGRATED CENTER GROOVE FOR GLIDING NUTS]

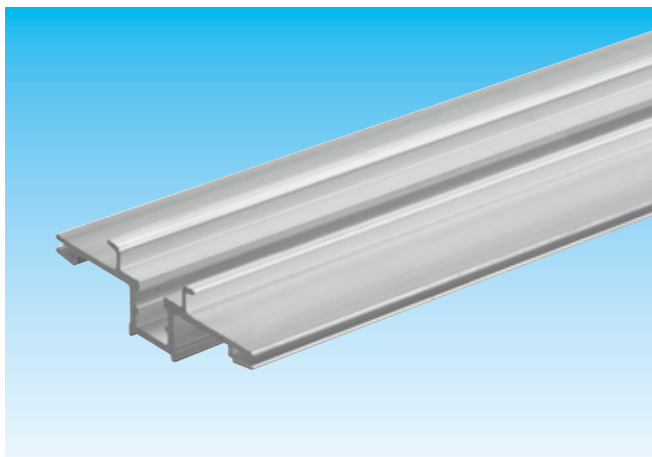
Delivery	Item no.	Suitable LSC frame	Width (mm)	Length (mm)	Lutze product no.	Weight (kg/m)	Qty / Package
5	QP55M40/※※※※	C	40	※※※※	CM40/※※	0.47	1
5	QP55M80/※※※※		80	※※※※	CM80/※※	0.75	1

REGULAR LENGTH (mm) 495/600

[FLAT MOUNTING RAIL WITH DIN AND INTEGRATED CENTER GROOVE FOR GLIDING NUTS]

Delivery	Item no.	Suitable LSC frame	Width (mm)	Length (mm)	Lutze product no.	Weight (kg/m)	Qty / Package
5	QP56M40/※※※※	C	40	※※※※	CS40/※※	0.63	1
5	QP56M60/※※※※		60	※※※※	CS60/※※	0.73	1
5	QP56M80/※※※※		80	※※※※	CS80/※※	0.85	1
5	QP56M100/※※※※		100	※※※※	CS100/※※	0.94	1
5	QP56M120/※※※※		120	※※※※	CS120/※※	1.05	1

REGULAR LENGTH (mm) 495/600

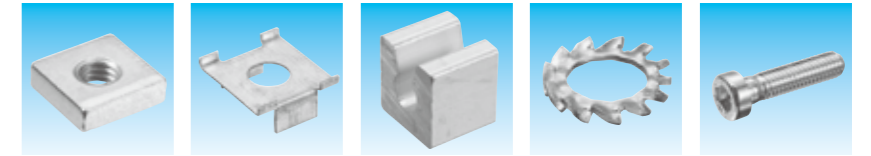


TYPE LSC-C

SPACER & BOLT SET (QPA52/QPA53)

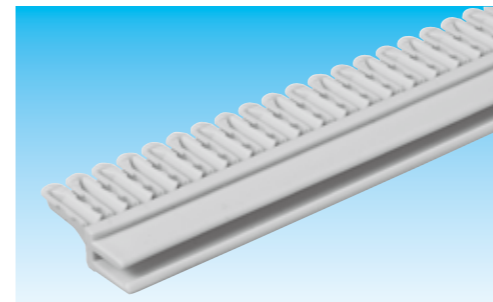


- Spacer & bolt set
- Designed to connect mounting rails to support rails
- Gliding nuts (M6), cage (φ6mm), support spacers (13 or 23mm high), lock washers (φ6mm), bolts



Delivery	Item no.	Suitable LSC frame	Bolt	support spacer height (mm)	Lutze product no.	Weight (g/set)	set / Package
○	QPA52	C	M6	13	CST13	17	6
○	QPA53		M6	23	CST23	23	6

WIRING COMB / COMB COVER (QC52M/QCV52M)



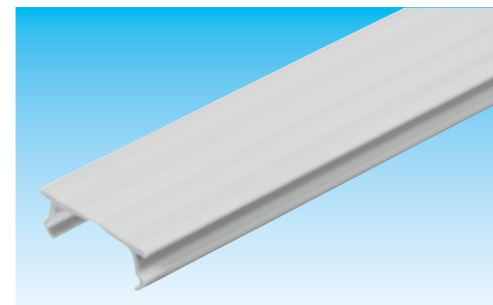
- Wiring comb
- Designed to hold insulated wires with 0.75 ~ 4mm² in dia.

- Designed for 2 applications: Space b/w mounting rails 50 mm or 40 mm (50 mm one is recommended)
- QCV52M20-BL is blue

- Comb cover
- Used as a space cover b/w combs.

[COMB]

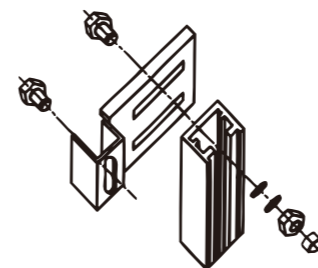
Delivery	Item no.	Suitable LSC frame	Space b/w mounting rails (mm)	Length (mm)	Lutze product no.	Weight (g/pc)	Qty / Package
○	QC52M	C	50 · 40	300	CKP300	16	20
○	QC52M-BL		50 · 40	300	CKP300EX	16	20



[COMB COVER]

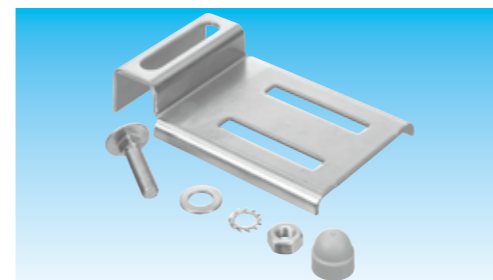
Delivery	Item no.	Suitable LSC frame	Space b/w mounting rails (mm)	Width (mm)	Length (mm)	Lutze product no.	Weight (g/pc)	Qty / Package
○	QCV52M20	C	50	20	2000	KDH50	103	3
○	QCV52M10		40	10	2000	KDH40	60.5	3
○	QCV52M20-BL		50	20	2000	KDH50EX	103	3

Bracket set (QK52M)



- Bracket set
- Designed to connect a frame to control panel cabinet
- Brackets, bolts, 2 types of washers, bolts, PA cap (light gray)

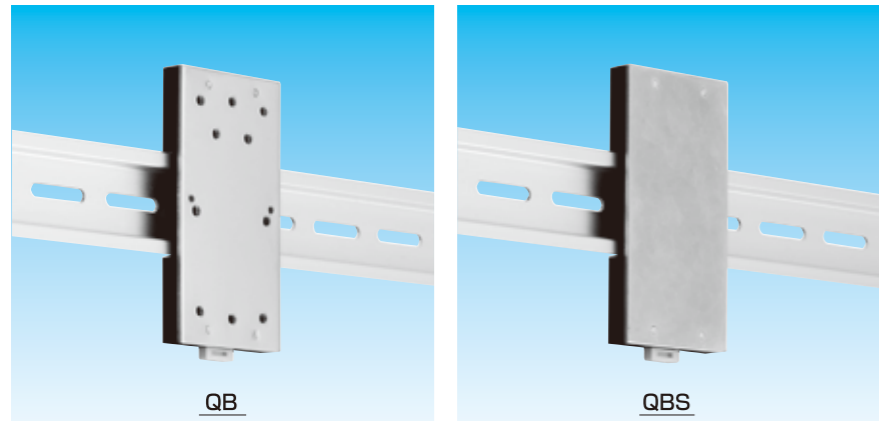
Delivery	Item no.	Suitable LSC frame	Lutze product no.	Weight (g/pc)	Qty / Package
○	QK52M	C	CGE4	100.3	4



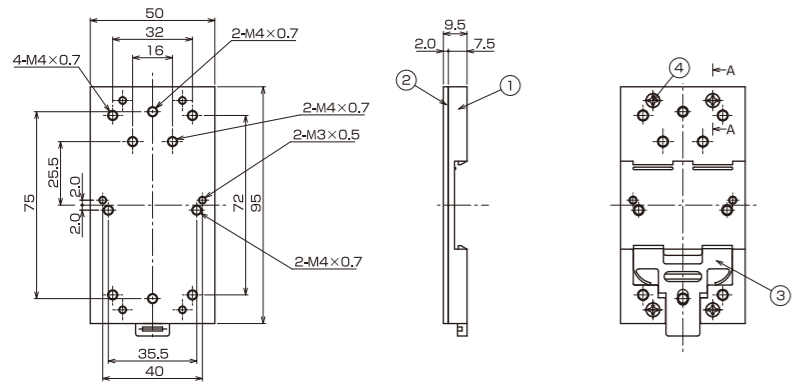
BASE FOR DIN RAIL

ENVIRONMENT USE
RoHS 35mm DIN RAIL

TYPE QB



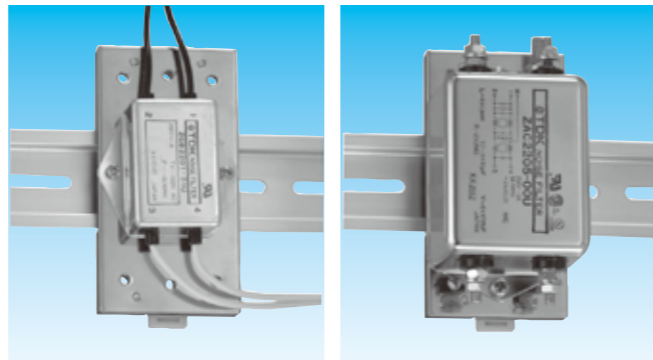
- Base for Power strip / Noise filter
- To be mounted on DIN rail
- Consists of Non-metallic material and metal material
- Designed for power strip (with 1 or 2 outlets) / 2 series of noise filter
- By mounting Base adapter onto this base, a push button / snap switch can be attached.



TYPICAL USE WITH POWER STRIP



TYPICAL USE WITH NOISE FILTER



[PARALLEL PIPE THREAD - EXTERNAL THREAD]

Delivery	Item no.	Material	Connectable device	Weight (g/pc)	Qty / Package
☉	QB	SUS304	Power strip with 1 outlet - Panasonic Electric Works Co.,Ltd. (WK-1012) Power strip with 2 outlets - Panasonic Electric Works Co.,Ltd. (WK-3004) Noise filter - ※	100	5
☉	QBS	SPCC - electroplated zinc	Without holes to fix a device	100	5

Note: ※ denotes the devices indicated in [(1) Connectable device to be positioned vertically] and [(2) Connectable device to be positioned horizontally]

[(1) Connectable device to be positioned vertically]

TDK	TDK-Lambda Corporation	NEC TOKIN Corporation
ZAC2205-00U	MAF-1206-33	GT-210J
ZAC2210-00U	MAF-1210-33	GT-215J
ZAC2215-00U	MAF-1215-33	GT-20301
ZAC2220-00U	MAF-1220-33	GT-20601
ZAG2206-11S	MAS-1206-33	GT-20302
ZAG2210-11S	MAS-1210-33	GT-20501V
ZAG2220-11S	MAS-1215-33	GT-21001V
ZCB2203-11	MAS-1220-33	GT-22001V
ZCB2206-11	MZS-1206-33	
	MZS-1210-33	
	MZS-1215-33	
	MZS-1220-33	

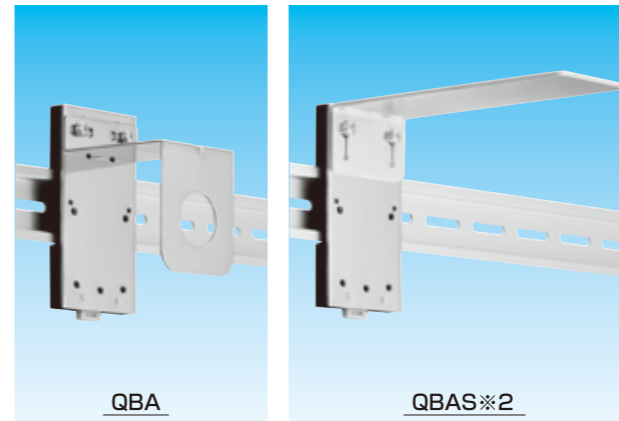
[(2) Connectable device to be positioned horizontally]

TDK	TDK-Lambda Corporation	NEC TOKIN Corporation
ZGB22R5-01U	MBW-12R5-22	MR-2021
ZGB2201-01U	MBW1201-22	MR-2023
ZGB2202-01U	MBW1202-22	MR-2043
ZGB2203-01U	MBW1203-22	MR-2053
ZHC2206-11	PBF-1201-22	MR-2054
ZHC2210-11	PBF-1202-22	MR-2029
ZHG2206-11S	PBF-1203-22	MR-2059
ZHG2210-11S	PBF-1206-22	
ZMB2201-13	PBW-1201-33	
ZMB2203-13	PBW-1202-33	
	PBW-1203-33	
	PBW-1206-33	

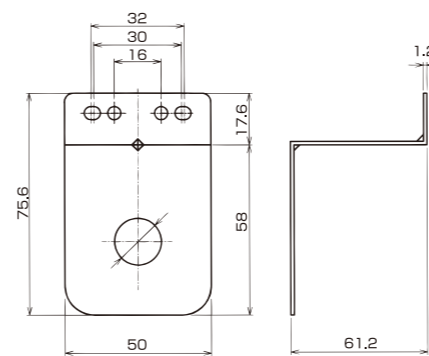
BASE ADAPTER

ENVIRONMENT USE
RoHS

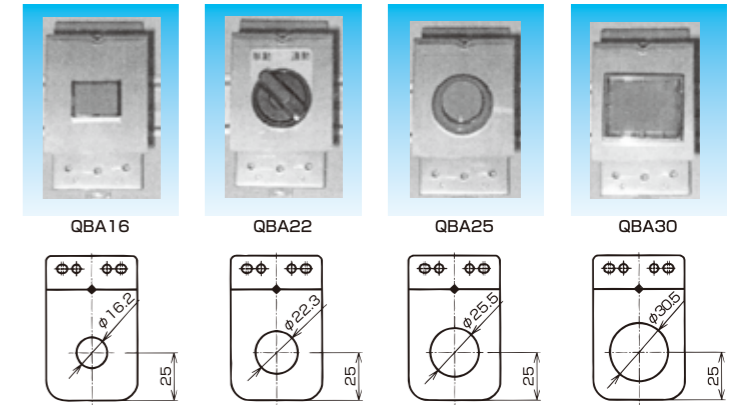
TYPE QBA



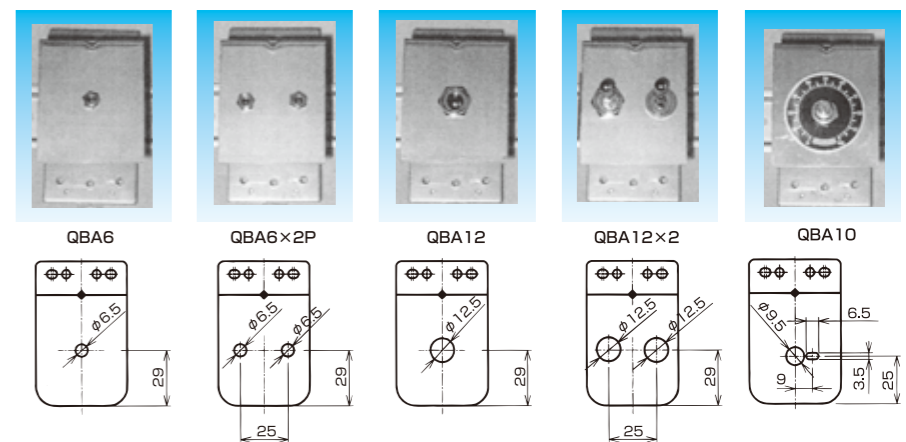
- Base adapter
- To be mounted on Base (type QB) attached to DIN rail
- Designed for Push button / Snap switch
- With M4 screws to fix this base adapter to Base (type QB)



FOR PUSH BUTTON

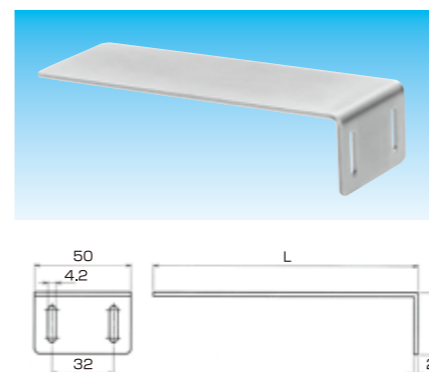


FOR SNAP SWITCH



Delivery	Item no.	Connectable base	Material	Connectable device	Weight (g/pc)	Qty / Package
☉	QBA 16	QB	SUS304	Push button φ 16	58	5
☉	QBA 22			Push button φ 22	57	5
☉	QBA 25			Push button φ 25	56	5
☉	QBA 30			Push button φ 30	53	5
☉	QBA 6			Snap switch φ 6.5	60	5
☉	QBA 6*2P			2 x Snap switch φ 6.5	60	5
☉	QBA 12			Snap switch φ 12.5	60	5
☉	QBA 12*2P			Snap switch φ 12.5	58	5
☉	QBA 10			FOR DIAL φ 9.5	60	5
☉	QBAS			SPCC - electroplated zinc	Without holes to fix a device	80

TYPE QBAS*2



- Base adapter
- To be mounted on Base (type QB) attached to DIN rail
- Designed for device such as a power supply / a controller / etc...
- With M4 screws to fix this base adapter to Base (type QB)

Delivery	Item no.	Connectable base	Material	L	Weight (g/pc)	Qty / Package
☉	QBASS2	QB	SPCC - electroplated zinc	137	130	5
☉	QBASL2			175	160	5

ROTARY FLANGE FOR PROP

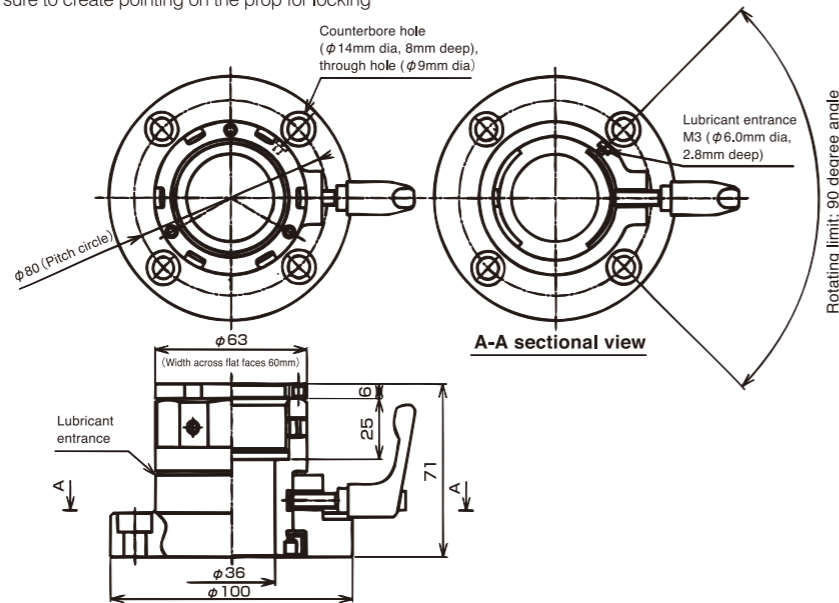
MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	Non-water resistance	RoHS	Lowest -50°C ~Highest 150°C

FOR COMPRESSIVE LOAD USE



- Rotary flange
- Designed for a prop which is to be connected to a controller
- Shall be used for compressive load
- Connectable prop: Rigid steel conduit G42 with thread G1 1/2
- Rotate 90 degree angle
- Load limit: Max.20 kgs
- Unbalanced load shall be avoided
- High speed rotating may cause damage to the product
- The prop is to be fixed by using 3 locking screws.

- screw ends before tightening the locking screws so that they can be prevented from becoming loosened.
- put lubricant into the product from the lubricant entrance in order to improve smoothness of rotating movement
- Moderate transportation packing is required in order to avoid any strain on the product
- Make sure that the clamping lever is off before rotating movement gets underway
- Re-tighten up the 3 locking screws and Lock-nut when unsteady rotating movement is seen.

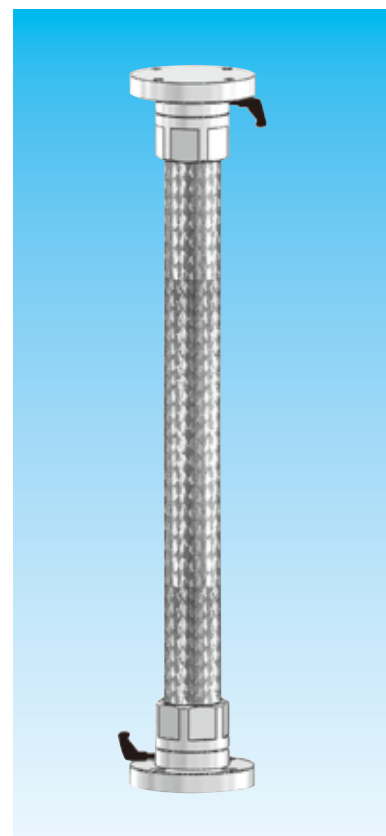


Delivery	Item no.	Connectable prop	Weight (g/pc)	Qty / Package
7	HRTZ 42	G42 Outside dia 47.8	1280	1

ROTARY FLANGE FOR FLEXIBLE CONDUIT

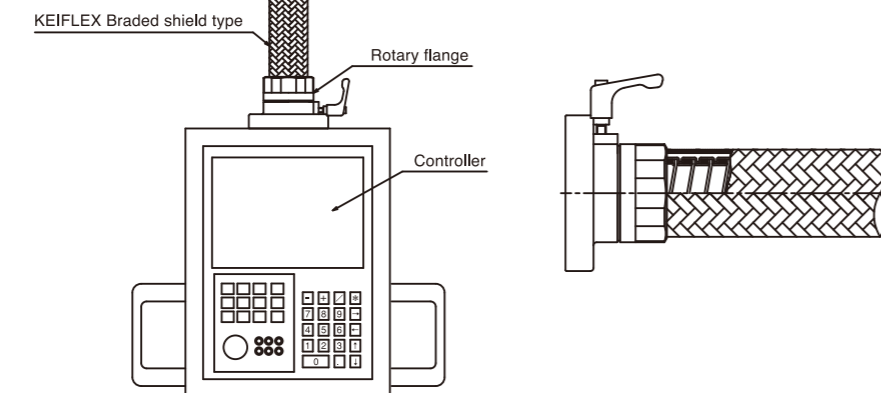
MAIN MATERIAL	SURFACE FINISH	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	Electroplated zinc	Non-water resistance	RoHS	Lowest -50°C ~Highest 150°C

FOR COMPRESSIVE LOAD USE / TENSILE LOAD USE



- Rotary flange
- Designed for a flexible conduit which is to be connected to a controller
- Connectable conduit: flexible metal conduit-Outer Metallic Braided shield type
- Rotating degree: available with 5 types: 90 / 120 / 180 / 270 / 360 degree angle

INSTALLATION EXAMPLE :

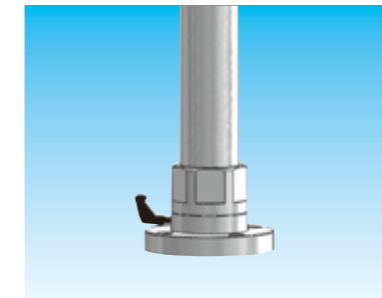


Delivery	Item no.	Connectable prop	Max. vertical load (N)	Unbalanced load (X axis 1m) (N)	Weight (g/pc)	Qty / Package
-	28	G28				
-	36	G36				
-	42	G42				
-	54	G54				
-	70	G70				
-	82	G82				

Contact us for information of product availability and delivery

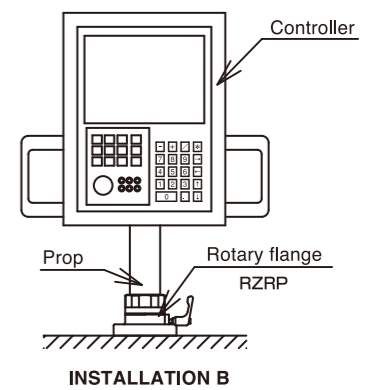
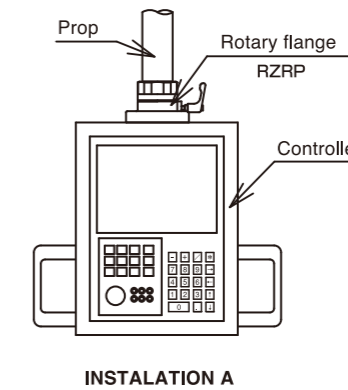
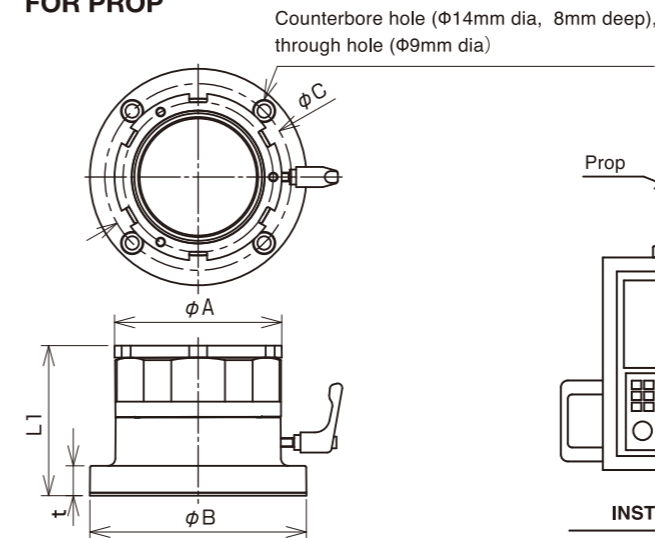
ROTARY FLANGE

FOR COMPRESSIVE LOAD USE / TENSILE LOAD USE

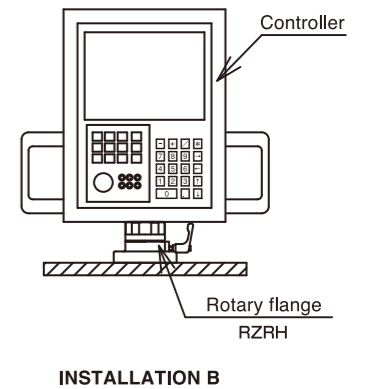
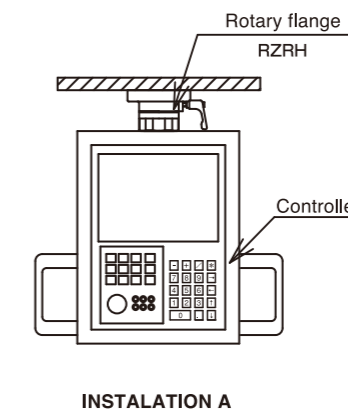
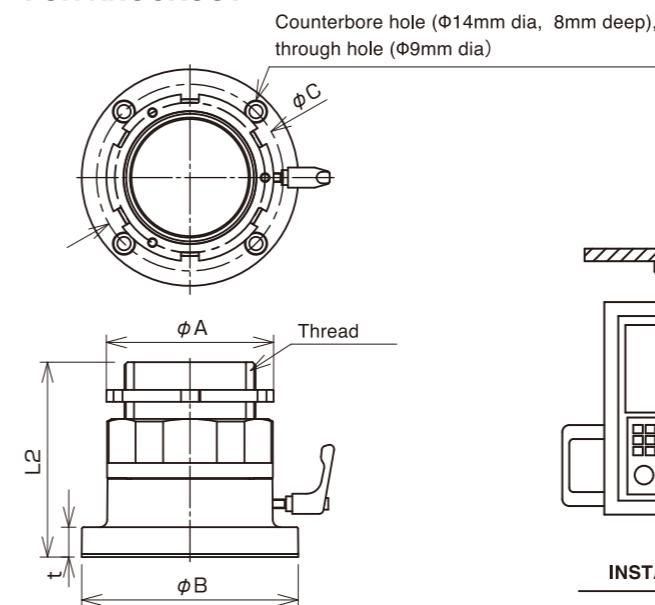


- Rotary flange
- Designed for a prop which is to be connected to a controller
- Designed for knockout
- Connectable prop and knockout size: Refer to the chart below
- For compressive load use / tensile load use
- Rotating degree: available with 5 types: 90 / 120 / 180 / 270 / 360 degree angle

FOR PROP



FOR KNOCKOUT



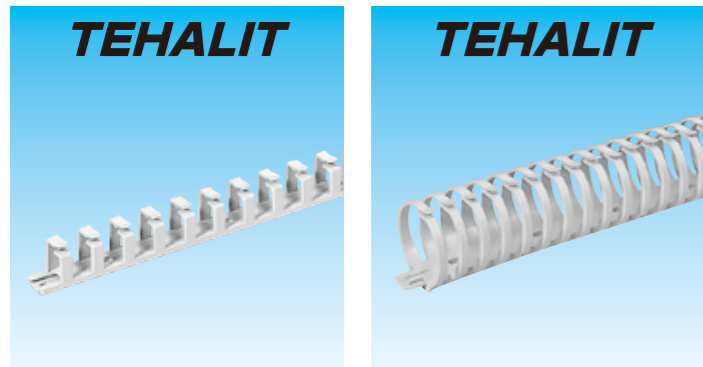
Delivery	Item no.		For prop Connectable conduit nominal size	For knockout Connectable knockout nominal size	φ A	φ B	L1	L2	t	φ C	Weight (g/pc)	Qty / Package
	For prop	For knockout										
-	-	RZRP 28 RZRH 28	G28	34.0								
-	-	RZRP 36 RZRH 36	G36	43.0								
-	-	RZRP 42 RZRH 42	G42	49.0								
-	-	RZRP 54 RZRH 54	G54	61.0								
-	-	RZRP 70 RZRH 70	G70	76.0								
☑	☑	RZRP 82 RZRH 82	G82	88.0	112	145	100.5	130.5	20	125		1

Contact us for information of product availability and delivery

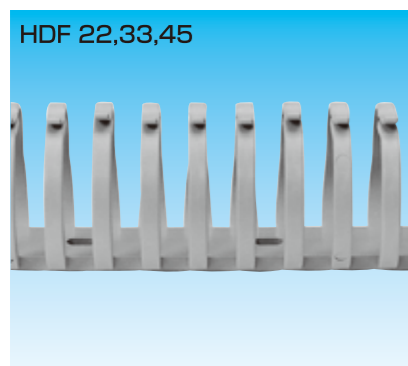
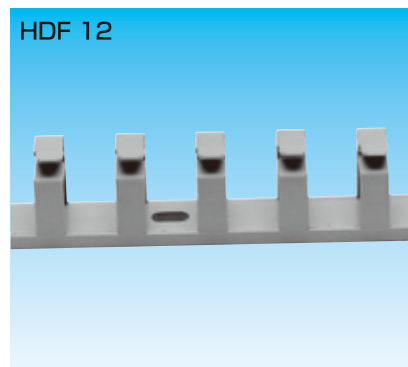
NON-METALLIC KEI-TRA / HALOGEN FREE

MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	Light gray	Oil resistance	HALOGEN FREE	RoHS	UL94V2	Lowest 0°C ~Highest 160°C

Type HDF



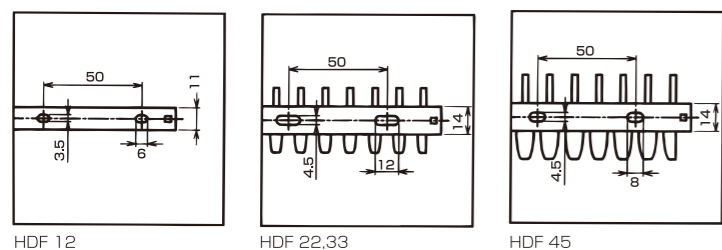
- Flexible band for wiring harnesses
- Can be connected to each other
- Available with 2 types: HDF (Non-adhesive tape type) / HD2F (with adhesive tape)



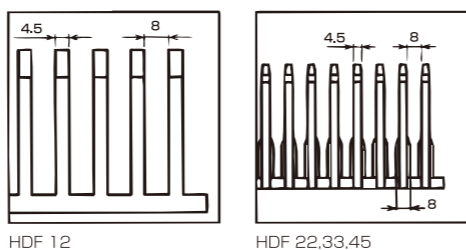
Delivery	Item no.	Width x Height x Length	Max qty's of Insulated wire to be inserted (mm ²)		TEHALIT product no.	Weight		Qty / Package
			1.25	2.0		g/pc	kg/Package	
⊙	HDF 12 (HD2F 12)	11×15×250	4	3	VK flex 10	10	0.20	40
⊙	HDF 22 (HD2F 22)	23×21×500	11	9	VK flex 20	41	0.82	40
⊙	HDF 33 (HD2F 33)	33×31×500	30	25	VK flex 30	64	1.28	40
⊙	HDF 45 (HD2F 45)	43×45×500	61	51	VK flex 40	116	2.32	40

Note: Items in () are with adhesive tape

POSITIONING HOLE PITCH & SIZE



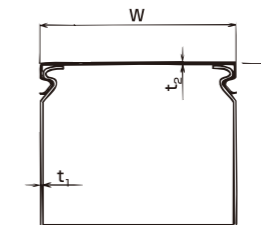
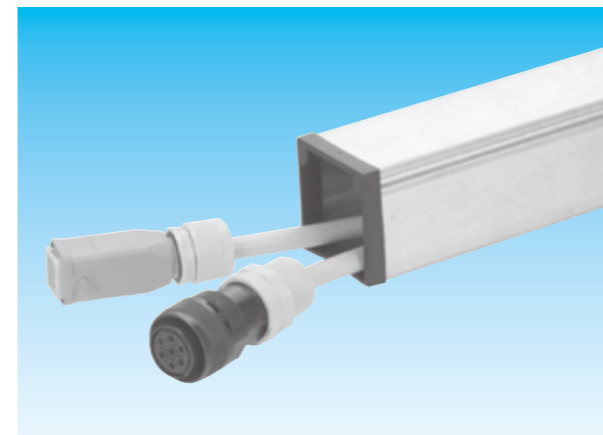
TWIG PITCH & SIZE



TETSU-TRA

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS

HOT DIPPED ZINC COATED STEEL



- STEEL CABLE TRUNKING SYSTEM
- Cable shall be inserted
- Optional parts are available

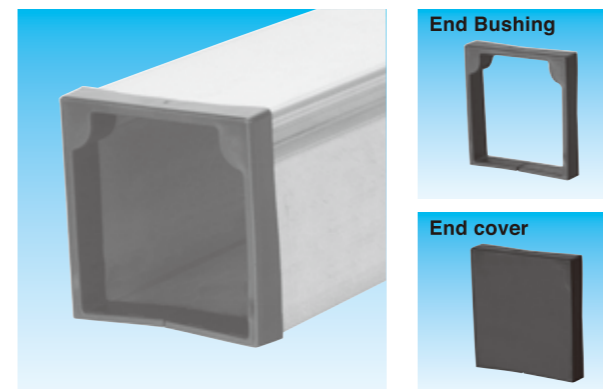
QUALITY STANDARD
IEC 61084

Delivery	Item no.	H Height	W Width	t ₁ Main body wall thickness	t ₂ Cover wall thickness	L Length	Weight (Kg/pc)	Qty / Package
⊙	RDC 33	30	30	0.8	0.8	3000	2.9	1
⊙	RDC 36	30	60	0.8	0.8	3000	4.1	1
⊙	RDC 56	50	60	1.0	0.8	3000	5.5	1
⊙	RDC 58	50	80	1.0	0.8	3000	6.5	1
⊙	RDC 510	50	100	1.0	0.8	3000	7.3	1

OPTIONAL PARTS

ENVIRONMENT
RoHS

END BUSHING / END COVER



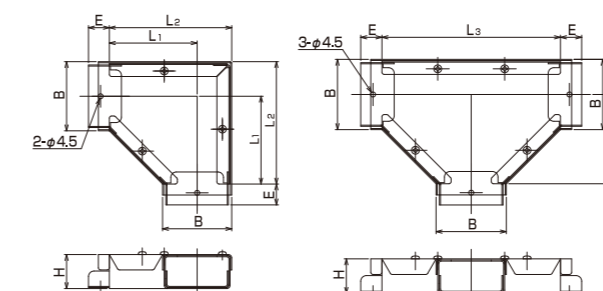
- End Bushing / end cover for a TETSU-TRA duct
- Connectable duct: refer to the chart

MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	FLAMMABILITY	TEMPERATURE RANGE
PA6	Black	Oil resistance	HALOGEN FREE	UL94V0	Lowest -20°C ~Highest 100°C

Delivery	End Bushing	End cover	Item no.		Connectable TETSU-TRA duct	Weight (g/pc)	Qty / Package
			End Bushing	End cover			
⊙	⊙	⊙	RDC BI 33	RDC ED 33	33	4	30
⊙	⊙	⊙	RDC BI 36	RDC ED 36	36	5	30
⊙	⊙	⊙	RDC BI 56	RDC ED 56	RDC 56	7	20
⊙	⊙	⊙	RDC BI 58	RDC ED 58	58	8	20
⊙	⊙	⊙	RDC BI 510	RDC ED 510	510	10	20

90° GUSSET BEND - WITH UPPER COVER

GUSSET TEE - WITH UPPER COVER

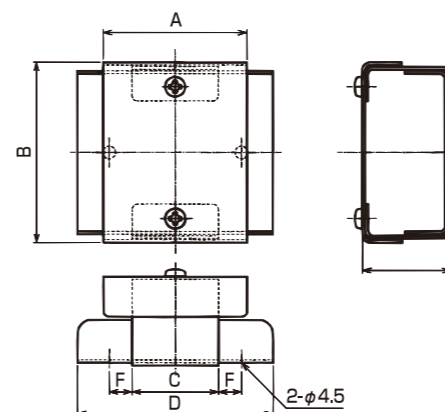


- GUSSET TEE / GUSSET BEND for a TETSU-TRA duct

MATERIAL	SURFACE FINISH
Steel	Hot dipped zinc coating

Delivery	Item no.		H	B	L ₁	L ₂	E	L ₃	Weight (g/pc)		Qty / Package
	90° GUSSET BEND	GUSSET TEE							90° GUSSET BEND	GUSSET TEE	
⊙	RDC90BD 33	RDCTE 33	31	33	65	82	19	130	190	250	1
⊙	RDC90BD 36	RDCTE 36	31	63	80	112	19	160	330	430	1
⊙	RDC90BD 56	RDCTE 56	51	63	80	112	34	160	430	560	1
⊙	RDC90BD 58	RDCTE 58	51	83	90	132	34	180	550	720	1
⊙	RDC90BD 510	RDCTE 510	51	103	100	152	34	200	660	860	1

COUPLING



- Coupling for TETSU-TRA duct

MATERIAL	SURFACE FINISH
Steel	Hot dipped zinc coating

Delivery	Item no.	A	B	C	D	E	F	Weight (g/pc)	Qty / Package
⊙	RDCC 33	50	33	30	68	31	8	75	1
⊙	RDCC 36	50	63	30	68	31	8	110	1
⊙	RDCC 56	50	63	30	98	51	8	170	1
⊙	RDCC 58	50	83	30	98	51	8	195	1
⊙	RDCC 510	50	103	30	98	51	8	225	1

NON-METALLIC JUNCTION BOX

QUALITY STANDARD	MAIN MATERIAL	MAIN BODY COLOR	COVER COLOR	ENVIRONMENT	ENVIRONMENT	FEATURE	FEATURE	FLAMMABILITY
CE	PA6	Light gray	gray/transparent	HALOGEN FREE	RoHS	IP66	Oil resistance	UL94HB

JUNCTION BOX



- Non-metallic Junction box
- With tapping screws to fix a back panel / DIN rail(s) to this junction box
- Covers are available with 2 colors: Light gray / Transparent
- Back panel / DIN rail : Unavailable in our product line

Delivery		Item no.		Size (width x Length x Depth)	Weight (g/pc)	Qty / Package
Light gray color	Trans-parent cover	Light gray color	Transparent cover			
○	○	HJAP 07 11 06	HJAP 07 11 06 T	75×110×66	180	1
○	○	HJAP 07 13 06	HJAP 07 13 06 T	74×135×66	190	1
○	○	HJAP 08 17 06	HJAP 08 17 06 T	80×170×66	285	1
○	○	HJAP 08 23 06	HJAP 08 23 06 T	80×230×66	360	1
○	○	HJAP 10 10 06	HJAP 10 10 06 T	105×105×66	240	1
○	○	HJAP 10 17 08	HJAP 10 17 08 T	105×170×85.5	350	1
○	○	HJAP 13 17 08	HJAP 13 17 08 T	135×170×85.5	470	1
○	○	HJAP 16 22 08	HJAP 16 22 08 T	168×220×85.5	700	1
○	○	HJAP 22 27 10	HJAP 22 27 10 T	220×270×105	1350	1
○	○	HJAP 22 27 17	HJAP 22 27 17 T	220×270×170	1800	1

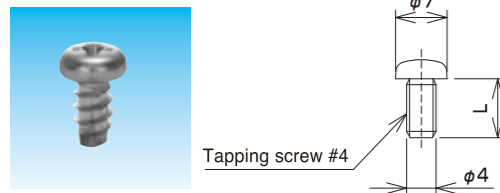
PARTS

Part ref. no.	Parts	material	Qtys	Other features
1	Main body	PA66	1	Light gray
2	Gray cover	PA66	1	
	Transparent cover	PA12	(1)	
3	Bolts for cover	PA66	4	
4	Packing	U	1	
5	Tapping screws	SWHC	2 (4) ※1	Electroplated zinc

※1 HJAP 131708 (T), 162208 (T), 222710 (T), 222717 (T) are with 4 pieces of Tapping screws

MATERIAL	SURFACE FINISH	ENVIRONMENT
Steel	Electroplated zinc	RoHS

TAPPING SCREW

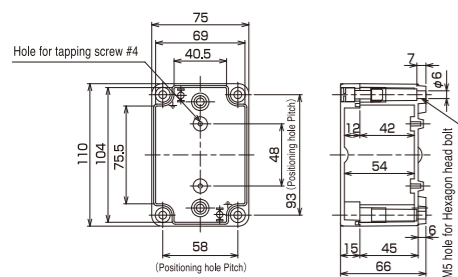


- Tapping screws
- Designed to fix a back panel / DIN rail(s) to a junction box

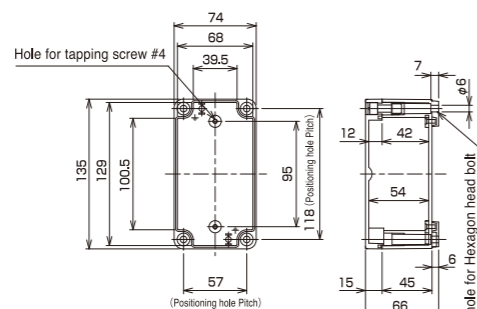
Deliv-ery	Item no.	Suitable Junction box	L	Weight (g/pc)	Qty / Package
○	SPPA 505	HJAP 101006	8	1	10
○	SPPA 520	HJAP 071106,071306,081706,082306, 101708,131708,162208,222710,222717	10	1	10

PITCH & SIZE

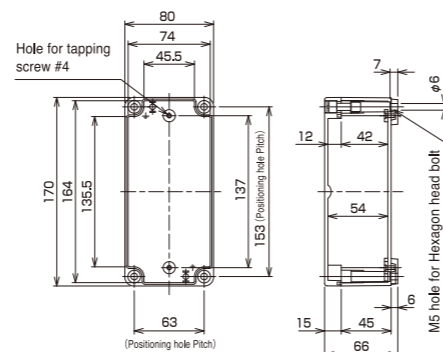
HJAP 071106



HJAP 071306

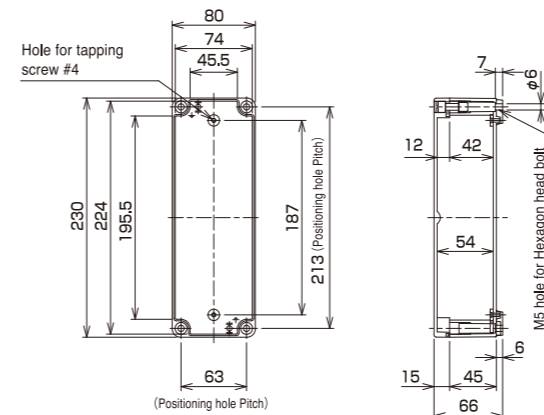


HJAP 081706

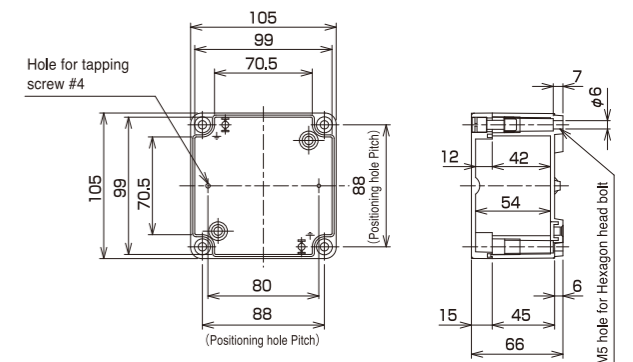


PITCH & SIZE

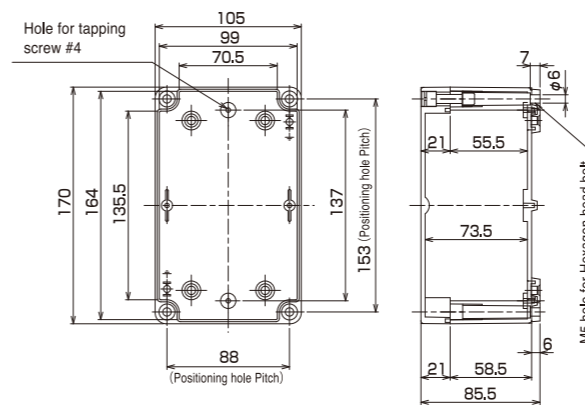
HJAP 082306



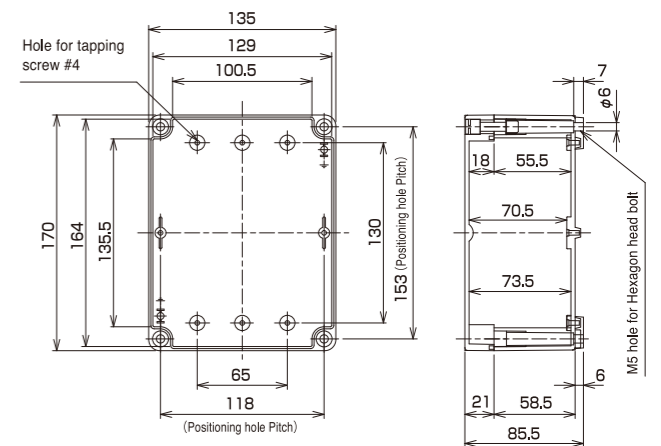
HJAP 101006



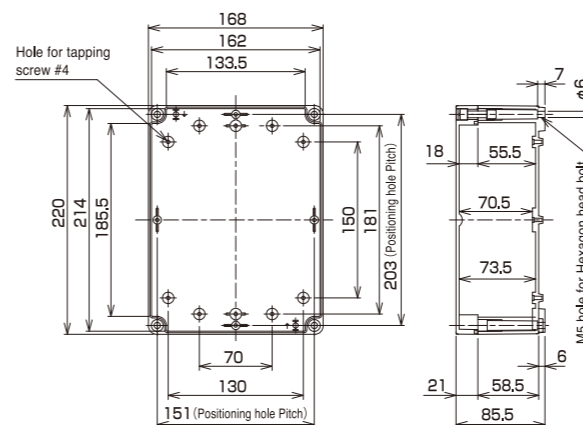
HJAP 101708



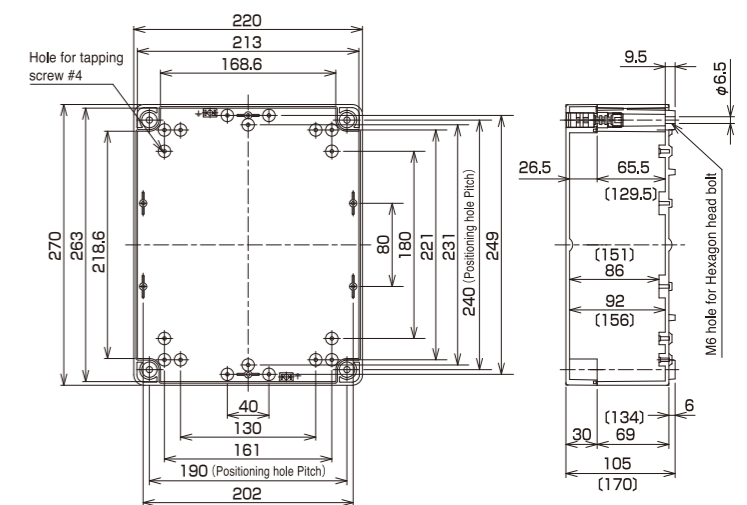
HJAP 131708



HJAP 162208



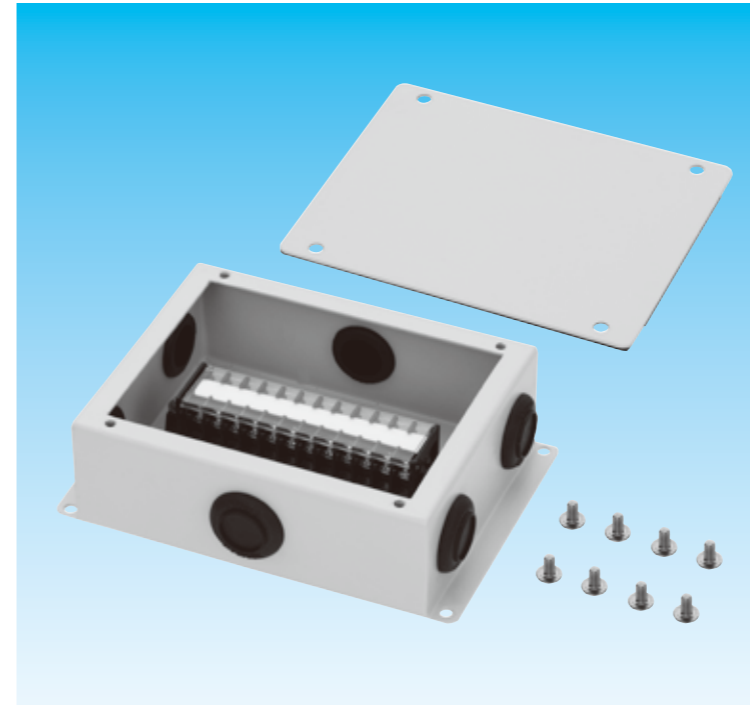
HJAP 222710 / HJAP 222717



[] shows the size for HJAP222717

METALLIC TERMINAL BOX

WITH M3 TERMINAL BLOCK



- Terminal box with a terminal block
- With Knockout on each side
- Rubber grommets (with a rubber film) are positioned on each knockout so that it is not easy for dust to get into the box
- Terminal block: with PC cover and space for a tag

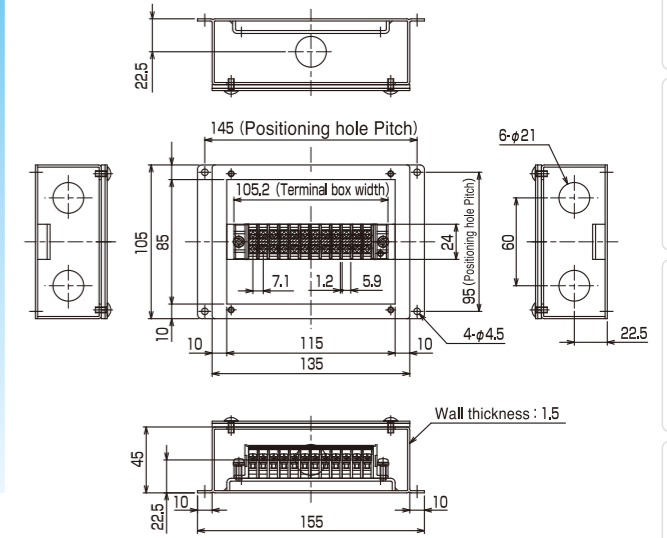
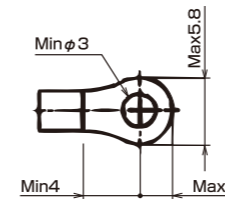


CHART 1: TERMINAL BLOCK DATA

Rated voltage	AC/DC 250V
Rated current	15A
Conductor nominal cross sectional area	Conductor 1.25mm ² or less
Insulation resistance	200MΩ or more (DC500V by ohmmeter)
Dielectric voltage-withstand	2,000V/minute
Screw size of terminal block	M3×8L±
Torque to tighten screws of terminal block	1.2N·m
Corresponds to	JIS C2811

Delivery	Item no.	Terminal qty's (P)	Knockout (knockout dia. x qty's)	Data	Appropriate solderless terminal	Weight (g/pc)	Qty / Package
☑	R5JA-TDSM	12	φ 21×6	Refer to CHART 1	Refer to DRAWING 1	728	1

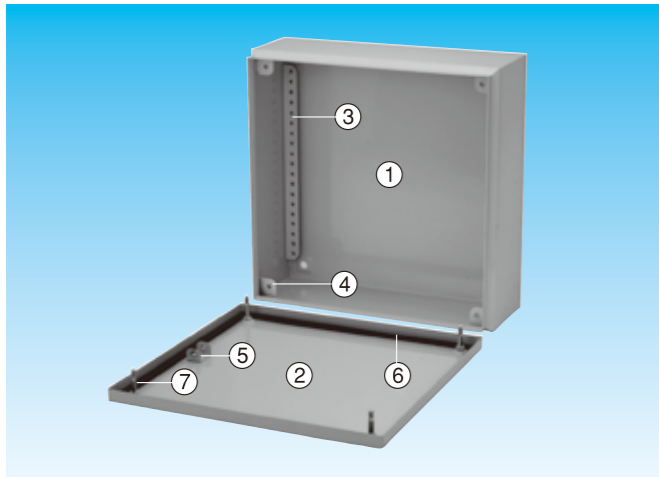
DRAWING 1: APPROPRIATE SOLDERLESS TERMINAL



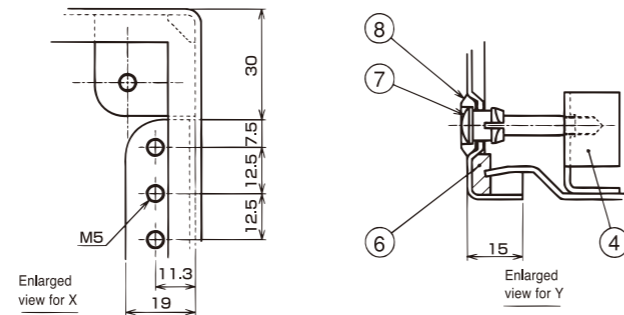
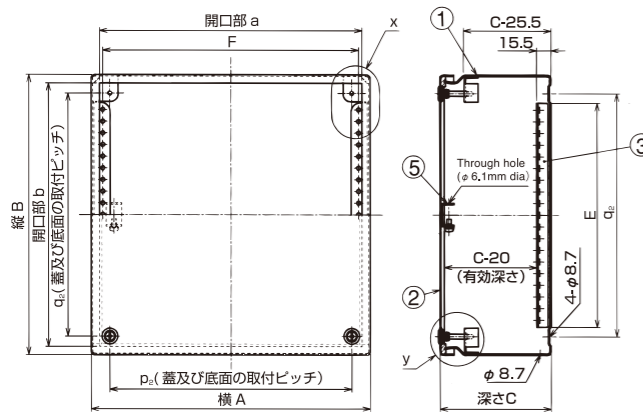
METALLIC JUNCTION BOX

MATERIAL	SURFACE FINISH	COLOR	FEATURE	MATERIAL
Steel	Powder coating	Light gray	IP65	Sheet metal work

JUNCTION BOX



- Junction box
- Cover with earth terminal
- With M5 screws, washer for the earth terminal
- Hole plugs for fixing holes on the bottom and a water-draining hole on the side
- M5 screws to fix back panel / DIN rail onto panel base
- Wall brackets are separately available

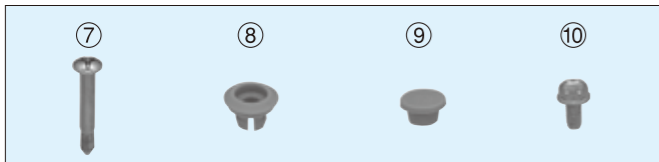


PARTS

Part ref. no.	Parts	material	Wall thickness or size	Qtys	Other features
①	Main body	SPCC	1.2mm	1	
②	Cover	SPCC	1.2mm	1	
③	Panel base	SPCC	1.5mm	2	
④	Cover screw base	SPCC	1.5mm	4(6)	
⑤	Earth terminal	SPCC	1.5mm	1	M5 screws, washer
⑥	Packing	EPT	5mm	1	
⑦	Cover screw	Steel	M5	4(6)	
⑧	Washer	PE	M5	4(6)	
⑨	Hole plug	PE	—	5	
⑩	Screw	Steel	M5×10	4	

COVER SCREW, WASHER, HOLE PLUG, SCREW

· These parts are in a delivery package



Delivery	Item no.	A	B	C	a	b	E	F	P ₂	q ₂	Weight (g/pc)	Qty / Package
○	R4JA 10 10 08	100	100	80	82	82	40	75	60	60	630	1
○	R4JA 15 10 08	150	100	80	132	82	40	125	110	60	810	1
○	R4JA 15 15 08	150	150	80	132	132	90	125	110	110	1060	1
○	R4JA 20 10 08	200	100	80	182	82	40	175	160	60	980	1
○	R4JA 20 15 08	200	150	80	182	132	90	175	160	110	1300	1
○	R4JA 30 15 08	300	150	80	282	132	90	275	260	110	1740	1
○	R4JA 30 20 08	300	200	80	282	182	140	275	260	160	2120	1
○	R4JA 30 30 08	300	300	80	282	282	240	275	260	260	2910	1
○	R4JA 15 15 12	150	150	120	132	132	90	125	110	110	1290	1
○	R4JA 20 20 12	200	200	120	182	182	140	175	160	160	1880	1
○	R4JA 30 20 12	300	200	120	282	182	140	275	260	160	2500	1
○	R4JA 30 30 12	300	300	120	282	282	240	275	260	260	3340	1
○	R4JA 40 20 12	400	200	120	382	182	140	375	360	160	3130	1
○	R4JA 40 30 12	400	300	120	382	282	240	375	360	260	4200	1
○	R4JA 40 40 12	400	400	120	382	382	340	375	360	360	5200	1
○	R4JA 50 30 12	500	300	120	482	282	240	475	460	260	5000	1
○	R4JA 60 30 12	600	300	120	582	282	240	575	560	260	5800	1
○	R4JA 60 40 12	600	400	120	582	382	340	575	560	360	7230	1

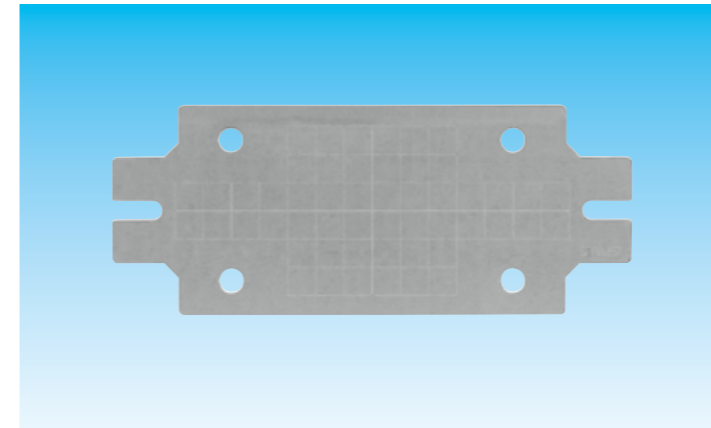
STAINLESS STEEL JUNCTION BOX

· Stainless steel junction box. Refer to SANPIPE section for more information

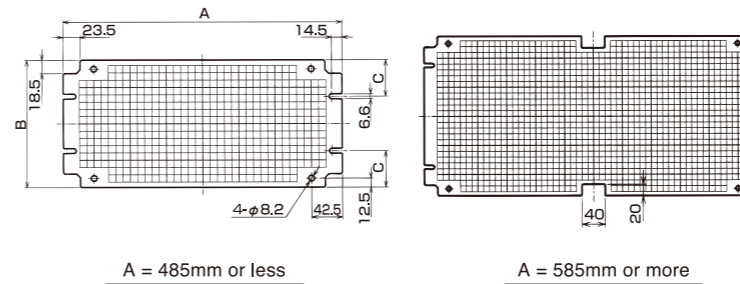
ACCESSORIES FOR METALLIC JUNCTION BOX

MATERIAL	SURFACE FINISH
Steel	Hot dipped zinc coating

BACK PANEL

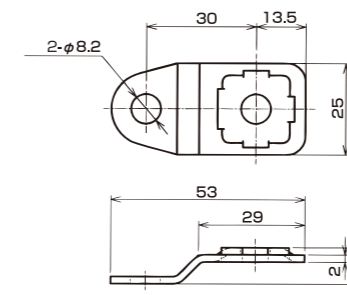
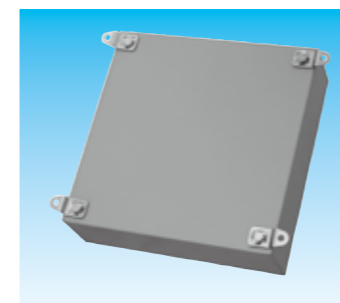


- Back panel for junction box R4JA
- Inscribed with 10mm squares



Delivery	Item no.	Suitable terminal box size	A	B	C	Wall thickness	Weight (Kg/pc)	Qty / Package
○	SPPA 454	10 10 08	85	75	37.5	2.3	0.1	1
○	SPPA 455	15 10 08	135	75			0.15	1
○	SPPA 456	15 15 08 15 15 12	135	125			0.21	1
○	SPPA 457	20 10 08	185	75			0.18	1
○	SPPA 458	20 15 08	185	125			0.29	1
○	SPPA 459	20 20 12	185	175			50	0.41
○	SPPA 460	30 15 08 30 20 12	285	125	37.5	0.45	1	
○	SPPA 461	30 20 08 30 20 12	285	175	50	0.63	1	
○	SPPA 462	30 30 08 30 30 12	285	275	50	0.99	1	
○	SPPA 463	40 20 12	385	175	50	1.22	1	
○	SPPA 464	40 30 12	385	275	50	1.92	1	
○	SPPA 465	40 40 12	385	375	62.5	2.62	1	
○	SPPA 466	50 30 12	485	275	50	2.42	1	
○	SPPA 467	60 30 12	585	275	50	4.07	1	
○	SPPA 468	60 40 12	585	375	62.5	5.55	1	

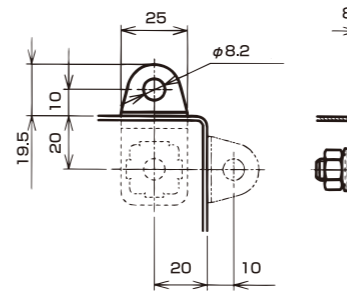
WALL BRACKET



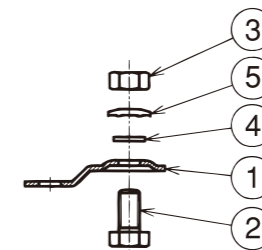
- Wall bracket
- Four (4) sets shall be used for one (1) junction box
- 1 set consists of the parts which are described in the "part list" as below.

PARTS

Part ref. no.	Parts	material	Qtys	Other features
①	Bracket	SPCC 2.0t	1	Electroplated zinc
②	Hexagon head bolt M8×16	Steel	1	Electroplated zinc
③	Hexagon nut	Steel	1	Electroplated zinc
④	Non-metallic washer	PA	1	
⑤	Lock washer	Steel	1	Electroplated zinc



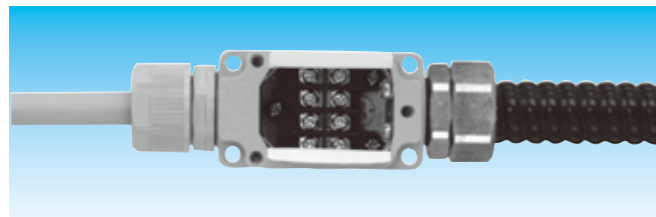
Delivery	Parts	Suitable terminal box	Part ref.no.	set / Package
○	SPPA 471	All types of R4JA	①②③④⑤	4



METALLIC TERMINAL BOX WITH TERMINAL BLOCK

MAIN MATERIAL	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ADC12	IP67	RoHS	Lowest -20°C ~Highest 90°C

HJA2M - WITH 4P-M3 TERMINAL BLOCK



- Terminal box
- Designed for cables, KEIFLEX, SANFLEKIROBO, PLICA TUBE
- With Parallel pipe thread - internal thread G1/2 on each side
- With earth terminals
- Surface finish: Ivory (coating)
- Terminal block: awarded quality approvals by UL

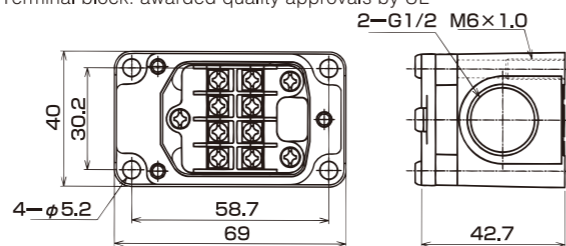
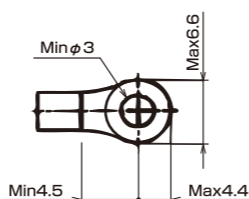


CHART1: TERMINAL BLOCK DATA

Rated voltage	JIS	AC/DC 660V
	UL	AC/DC 300V
Rated current	JIS	15A
	UL	10A
Conductor nominal cross sectional area	JIS	Conductor 1.25mm ² or less
	UL	AWG20~16
Dielectric voltage-withstand		2,500V/minute
Insulation resistance		200MΩ or more
IP		IP67
Screw size of terminal block		M3
Corresponds to		JISC 2811

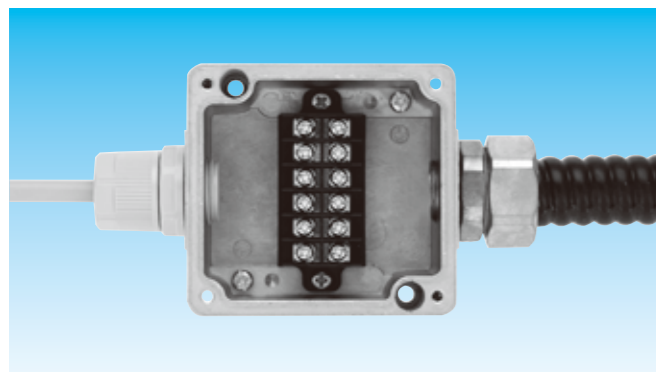
DRAWING 1: APPROPRIATE SOLDERLESS TERMINAL



Delivery	Item no.	Thread	Data	Appropriate solderless terminal	Weight (g/pc)	Qty / Package
☉	HJA2M	G1/2	Refer to CHART 1	Refer to DRAWING 1	130	3

MAIN MATERIAL	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ADC12	IP67	RoHS	Lowest -20°C ~Highest 90°C

DRAWING 1: APPROPRIATE SOLDERLESS TERMINAL



- Terminal box
- Designed for cables, KEIFLEX, SANFLEKIROBO, PLICA TUBE
- With Parallel pipe thread - internal thread G1/2 on each side
- With earth terminals

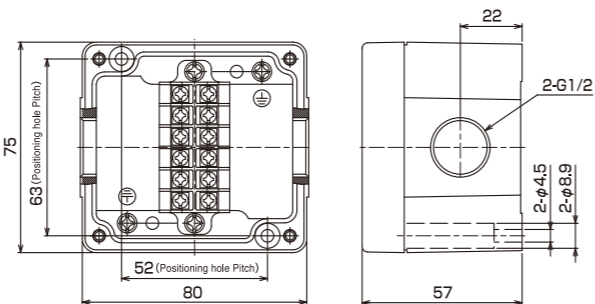
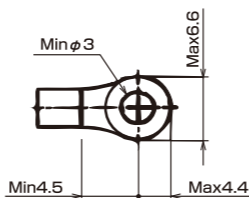


CHART 1: TERMINAL BLOCK DATA

Rated voltage	JIS	AC/DC 660V
	UL	AC/DC 300V
Rated current	JIS	15A
	UL	10A
Conductor nominal cross sectional area	JIS	Conductor 1.25mm ² or less
	UL	AWG20~16
Dielectric voltage-withstand		2,500V/minute
Insulation resistance		200MΩ or more
IP		IP67
Screw size of terminal block		M3
Corresponds to		JISC 2811

DRAWING 1: APPROPRIATE SOLDERLESS TERMINAL

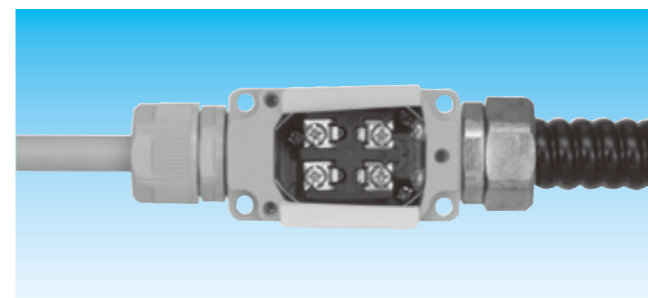


Delivery	Item no.	Thread	Data	Appropriate solderless terminal	Weight (g/pc)	Qty / Package
☉	HJA3M	G1/2	Refer to CHART 1	Refer to DRAWING 1		1

METALLIC TERMINAL BOX WITH TERMINAL BLOCK

MAIN MATERIAL	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
ADC12	IP67	RoHS	Lowest -20°C ~Highest 90°C

HJA2M-2P - WITH 2P-M4 TERMINAL BLOCK



- Terminal box
- Surface finish: Ivory (coating)
- Terminal block: Up-screw type

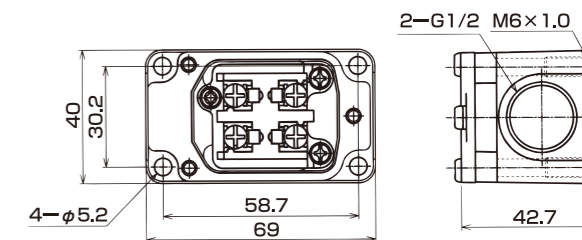
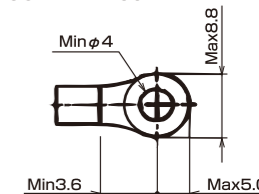


CHART 2: TERMINAL BLOCK DATA

Rated voltage	AC/DC 660V
Rated current	AC/DC 15V
Conductor nominal cross sectional area	Conductor 5.5mm ² or less
Dielectric voltage-withstand	250V/minute
Insulation resistance	200MΩ or more
IP	IP67
Screw size of terminal block	M4
Corresponds to	JISC 2811

DRAWING 2: APPROPRIATE SOLDERLESS TERMINAL

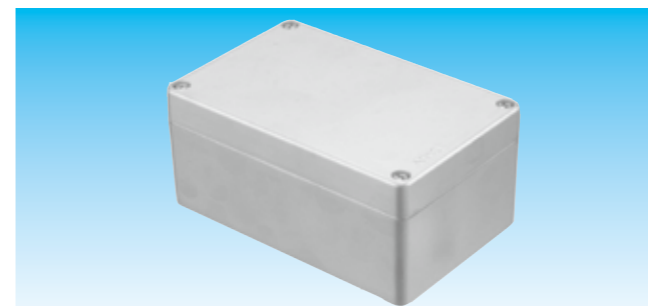


Delivery	Item no.	Thread	Data	Appropriate solderless terminal	Weight (g/pc)	Qty / Package
☉	HJA2M-2P	G1/2	Refer to CHART 2	Refer to DRAWING 2	165	1

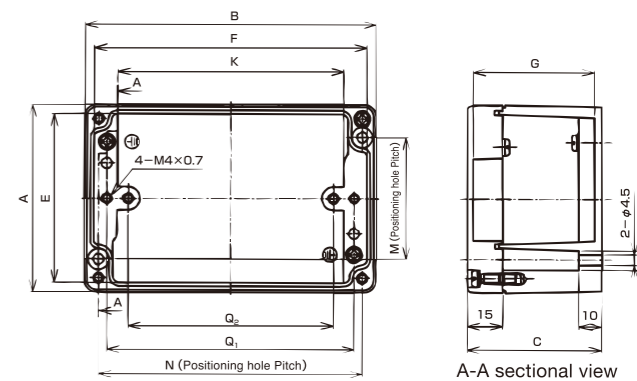
METALLIC TERMINAL BOX

MAIN MATERIAL	ENVIRONMENT	TEMPERATURE RANGE
ADC12	RoHS	Lowest -20°C ~Highest 90°C

Type HJA (WITHOUT TERMINAL BLOCK)



- Terminal box
- Without a terminal block
- Surface finish: Non-coating
- Cover: to be fixed with 4 screws
- With earth terminals
- HJA7, HJA9 : IP65 (The others are of IP67)
- Contact us should IP67 is required.
- Available on request: Type with entry holes

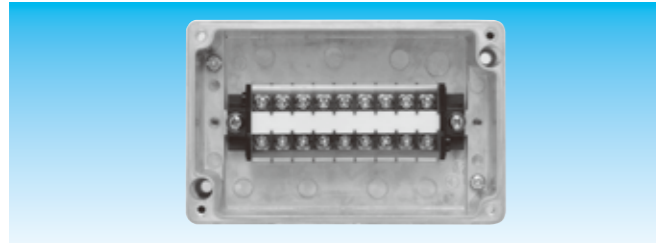


Delivery	Item no.	A	B	C	E	F	G	K	M	N	Q ₁	Q ₂	Cover screw	Weight (g/pc)	Qty / Package
☉	HJA 3	80	75	57	67	62	51	45	52	63	54	—	M4	350	1
☉	HJA 5	80	125	57	69	114	51	97	52	113	106	88.0	M4	430	1
☉	HJA 7	95	175	57	84	164	51	147	64	161	156	138.2	M5	680	2
☉	HJA 9	95	225	57	84	214	51	195	62	210	206	170.6	M5	800	2

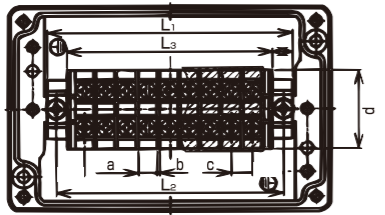
METALLIC TERMINAL BOX WITH TERMINAL BLOCK

MAIN MATERIAL	ENVIRONMENT	TEMPERATURE RANGE
ZDC2	RoHS	Lowest -20°C ~Highest 90°C

Type HJA※TDSL/HJA※TDSM



- Terminal box
- With M3 or M3.5 terminal block
- Qty of terminal: 9
- Dimension of box: the same as type HJA. Refer to HJA section for the information.
- Terminal block of HJA※TDSL: awarded quality approvals by UL / with PC cover and space for a tag
- Avoid dew condensation and the condition of freezing
- Available on request: Type with entry holes. Refer to the section for ENTRY HOLE of terminal box for more information.
- Size: Refer to the page for Type HJA (WITHOUT TERMINAL BLOCK) for the information



WITH M3.5 TERMINAL BLOCK

TERMINAL BLOCK DATA

Rated voltage	JIS	AC/DC 660V
	UL	AC/DC 300V
Rated current	JIS	15A
	UL	15A
Conductor nominal cross sectional area	JIS	Conductor 2mm ² or less
	UL	AWG20~14
Insulation resistance	200MΩ or more (DC500V by ohmmeter)	
Dielectric voltage-withstand	2,500V/minute	
Screw size of terminal block	M3.5×8L±	
Torque to tighten screws of terminal block	1.4N·m	
Corresponds to	JIS C2811	

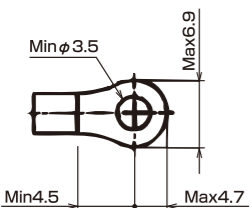
REGULAR TYPE

Delivery	Item no.	Terminal qty (P)	a	b	c	d	e	f	g	L ₁	L ₂	L ₃	Weight (g/pc)	Qty / Package
○	HJA 3TDSL	5	7.1	1.0	8.1	30.5	15.4	31.4	20.1	62.4	54.0	46.0	390	1
○	HJA 5TDSL	9								94.8	88.0	79.4	495	1
○	HJA 7TDSL	15								148.4	138.2	128.0	790	2
○	HJA 9TDSL	19								180.8	170.6	160.4	940	2

WITH OTHER SPECIFICATIONS

Delivery	Item no.	Terminal qty (P)	a	b	c	d	e	f	g	L ₁	L ₂	L ₃	Weight (g/pc)	Qty / Package
○	HJA 5TDSL-10P	10	7.1	1.0	8.1	30.5	15.4	31.4	20.1	102.9	97.0	87.5	500	1
○	HJA 5TDSL-11P	11								111.1	106.0	95.6	505	1
③	HJA 7TDSL-16P	16								156.5	147.1	136.1	795	2
③	HJA 7TDSL-17P	17								164.6	156.0	144.2	800	2
③	HJA 9TDSL-21P	21								197.0	188.3	176.6	950	2
③	HJA 9TDSL-23P	23								213.2	206.0	192.8	970	2

APPROPRIATE SOLDERLESS TERMINAL



WITH M3 TERMINAL BLOCK

TERMINAL BLOCK DATA

Rated voltage	AC/DC 250V	
	15A	
Rated current	15A	
	Conductor 1.25mm ² or less	
Conductor nominal cross sectional area	Conductor 1.25mm ² or less	
Insulation resistance	200MΩ or more (DC500V by ohmmeter)	
Dielectric voltage-withstand	2,000V/minute	
Screw size of terminal block	M3×8L±	
Torque to tighten screws of terminal block	1.2N·m	
Corresponds to	JIS C2811	

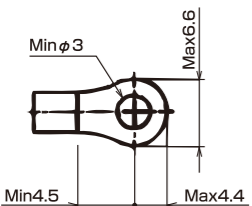
REGULAR TYPE

Delivery	Item no.	Terminal qty (P)	a	b	c	d	e	f	g	L ₁	L ₂	L ₃	Weight (g/pc)	Qty / Package
○	HJA 3TDSM	6	5.8	1.2	7.0	24.0	11.9	29.3	22.2	62.0	54.0	47.0	385	1
○	HJA 5TDSM	11								97.0	88.0	82.0	490	1
○	HJA 7TDSM	18								146.0	138.2	131.0	770	1
○	HJA 9TDSM	22								174.0	170.6	159.0	910	1

WITH OTHER SPECIFICATIONS

Delivery	Item no.	Terminal qty (P)	a	b	c	d	e	f	g	L ₁	L ₂	L ₃	Weight (g/pc)	Qty / Package
○	HJA 5TDSM-12P	12	5.8	1.2	7.0	24.0	11.9	29.3	22.2	104.0	97.0	89.0	495	1
○	HJA 5TDSM-13P	13								111.0	106.0	96.0	500	1
③	HJA 7TDSM-19P	19								153.0	147.1	138.0	775	1
③	HJA 7TDSM-20P	20								160.0	156.0	145.0	780	1
③	HJA 9TDSM-25P	25								195.0	188.3	180.0	920	1
③	HJA 9TDSM-27P	27								209.0	206.0	194.0	930	1

APPROPRIATE SOLDERLESS TERMINAL



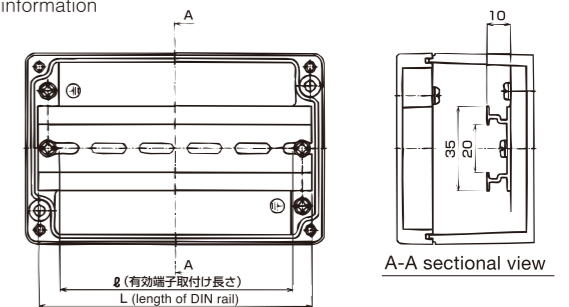
METALLIC TERMINAL BOX

MAIN MATERIAL	ENVIRONMENT	TEMPERATURE RANGE	USE
ZDC2	RoHS	Lowest -20°C ~Highest 90°C	35mm DIN RAIL

HJA※D - WITH DIN RAIL

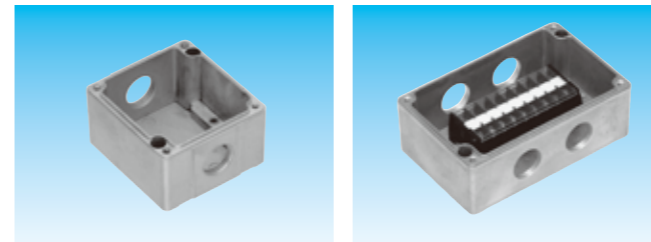


- Terminal box
- With DIN rail (TOYOGIKEN CO.,LTD. DAS4)
- Dimension of box: the same as type HJA. Refer to HJA section for the information
- Available on request: Type with entry holes. Refer to the section for ENTRY HOLE of terminal box for more information.
- Size: Refer to the page for Type HJA (WITHOUT TERMINAL BLOCK) for the information

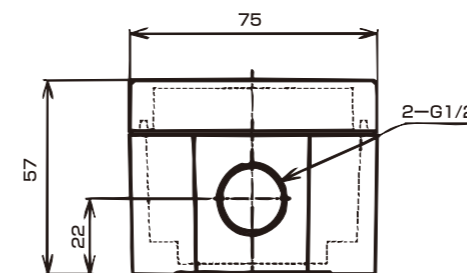
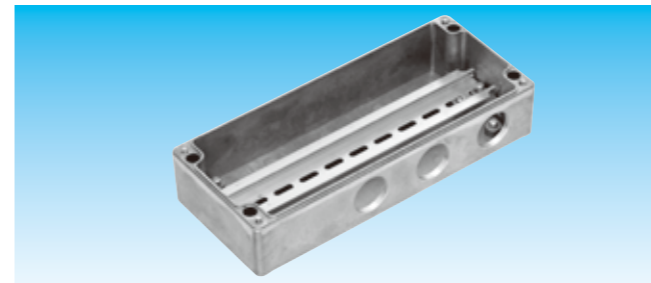


Delivery	Item no.	DIN rail	Entry hole	L	φ	Weight (g/pc)	Qty / Package
○	HJA 3D	With DIN rail	Non	62	52	400	1
○	HJA 5D	With DIN rail	Non	114	104	500	1
○	HJA 7D	With DIN rail	Non	164	154	800	1
③	HJA 9D	With DIN rail	Non	214	204	950	1

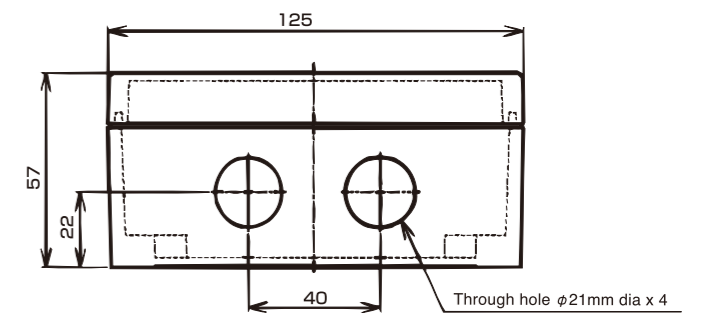
ENTRY HOLE OF TERMINAL BOX



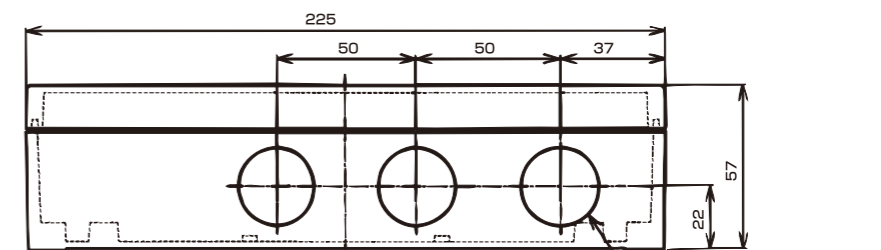
- Terminal box (Type HJA※ / Type HJA※TDSL / Type HJA※D) with entry holes are available on request
- Regular styles of entry holes: Available with 3 styles.
- Add entry hole style no. (e.g. HJA5 - H11) to item no. of a terminal box required.
- Available on request: Terminal boxes with the other entry hole styles



HJA3-G4



HJA5-H11

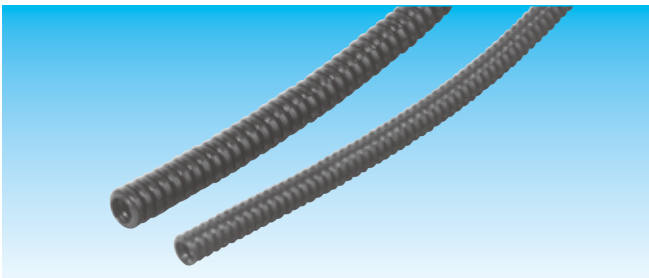


HJA9-H10

SANFLEKIROBO

SMALLER OUTSIDE DIA. (PA/PP)

MAIN MATERIAL	MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
PA6	PP	Black	Oil resistance	RoHS	Lowest -10°C ~Highest 65°C



Smaller outside dia. SANFLEKI ROBO

- Type: NP (PA non-metallic corrugated flexible conduit)
- Type: NQ (PP non-metallic corrugated flexible conduit)
- Refer to SANFLEKI ROBO section for more information

SLIT TYPE (PA/PP)

MAIN MATERIAL	MAIN MATERIAL	COLOR	FEATURE	ENVIRONMENT	TEMPERATURE RANGE
PA6	PP	Black	Oil resistance	RoHS	Lowest -10°C ~Highest 65°C

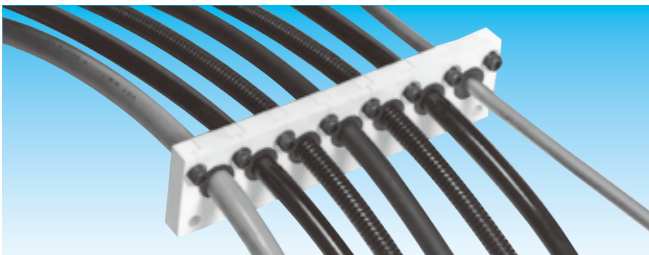


Smaller outside dia. SANFLEKI ROBO slit type

- Type: N2P (PA non-metallic corrugated flexible conduit)
- Type: N2Q (PP non-metallic corrugated flexible conduit)
- Refer to SANFLEKI ROBO section for more information

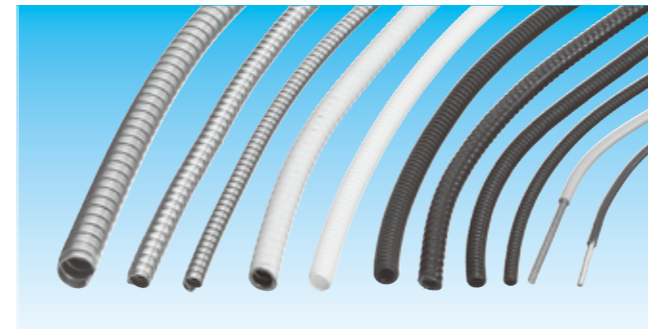
CABLE & FLEXIBLE CONDUIT CLAMPING KIT

Type HM2H



- Non-metallic Multiple cable & flexible conduit clamping kit
- Clamp-able outside dia. of cables & flexible conduits: fm 4mm to 14mm
- The individual clamping system allows cables / flexible conduits to be put in and taken off separately from the others.
- Rubber packing with slit is separately available
- MOQ: 200 pcs or more
- Refer to a data sheet to be available for more information

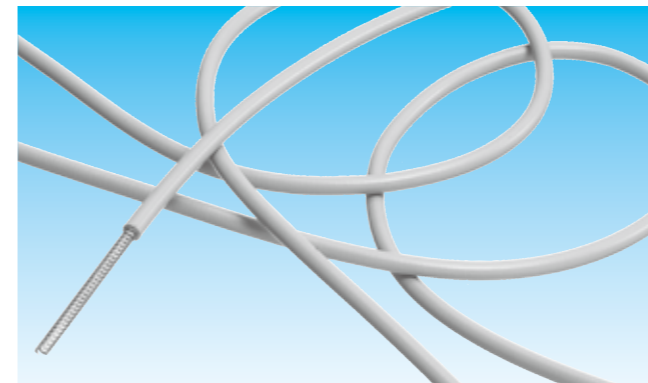
FLEXIBLE CONDUIT FOR OPTICAL FIBER



- Flexible conduit
- Designed for optical fiber
- Available with the following product line
- Custom-made flexible conduits can be available to suit your own requirements. Contact us without any hesitation.

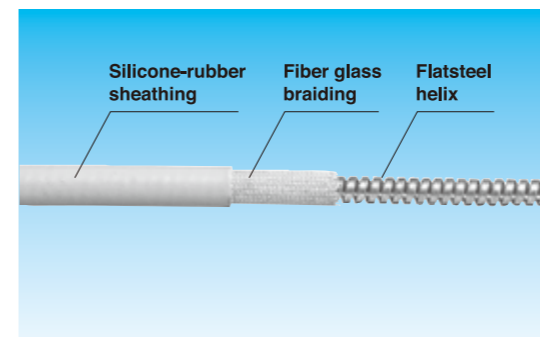
Type	Structure	Look	Material			Outside dia.	Min. inside dia.	Section for more information
			Inner layer	Braded shield	Outer cover / Outer coating			
KM			Hot dipped zinc coated steel	—	—	7.2	5.0	15
KI			Hot dipped zinc coated steel	—	—	8.4	6.0	15
LI			SUS304	—	—	7.4	5.0	267
LL			SUS304	—	—	7.0	5.0	267
KMS			Hot dipped zinc coated steel	—	PVC	8.4	5.0	15
NP/NQ/NE			PA/PP/PE	—	—	5.1	3.0	88
HOKGN			Flatsteel helix - rust prevention	Fiber glass braiding	Silicone-rubber sheathing	4.4	2.5	358

Type HOKGN



- Structure: Flatsteel helix, fiber glass braiding, silicone-rubber sheathing
- Lateral pressure resistant, Stretch resistant, Air-and liquid-tight, Temperature resistant, Low flammability, No appearance of toxic and corrosive fire gases, Widely resistant to solvents and chemicals, Free of halogen and cadmium
- Application: Opto fiber for medical and industrial applications, Endoscopy, Measure and sensor technology
- Length oer coil: 10m
- available on request: 1m long coil to 200m long coil

FEATURE	COLOR	TEMPERATURE RANGE
IP67	Gray	Lowest -60°C ~Highest 260°C



Deliv-ery	Item no.	Outside dia	Inside dia	Min. Bend Radius	Weight (g)		Length per coil
					Per m	Per coil	
○	HOKGN 4	4.4	2.5	10	28	280	10
○	HOKGN 5	5.3	3.0	20	44	440	10
○	HOKGN 6	6.5	4.0	25	65	650	10
○	HOKGN 7	7.5	5.0	25	79	790	10
○	HOKGN 9	8.9	6.0	35	108	1,080	10
○	HOKGN 10	10.1	7.0	45	141	1,410	10
○	HOKGN 11	11.6	8.0	45	191	1,910	10
○	HOKGN 13	13.6	10.0	65	241	2,410	10
○	HOKGN 16	16.2	12.0	75	347	3,470	10

KEIFLEX

SANLEKI
ROBO

KEIGLAND

POWER
GODZILLA

PLICA TUBE

SANPIPE

GRIPLOK

SANPARTS

SANCABLE

SANCUBE