

LCT•LCS•LC•LCE HAND-HELD PLASTIC CASE

Hand-held case suitable for industrial measuring equipment, wireless communication devices and medical equipment.

9 different sizes with 8 different battery compartment types line-up available.

Consisting of a line-up of 4 different series: LC - plastic case, LCT - case with shockproof silicone cover, LCS - case with silicone cover, and LCE - EMC shielded plastic case.

LCT Plastic Case with Shockproof Silicone Cover - 4 Rugged Shockproof Silicone Cover Colors



LCS Plastic Case with Silicone Cover - 5 Silicone Cover Colors



CUSTOMIZATION



Machining



Custom cut on silicone cover



Custom color, custom shaped silicone cover



Digital printed overlay



APPLICATION EXAMPLE

Metal Coating Thickness Gauge



Solar Panel Trouble Checker



Solar Cell Connection Checker



Digital Pressure Gauge Setter



Fluorescent Portable Dissolved Oxygen Meter



Distribution Transformer Tester



Network Partial Discharge Checker



Radiation Survey Meter



Mini Radiation Survey Meter



Wireless Voltage Probe



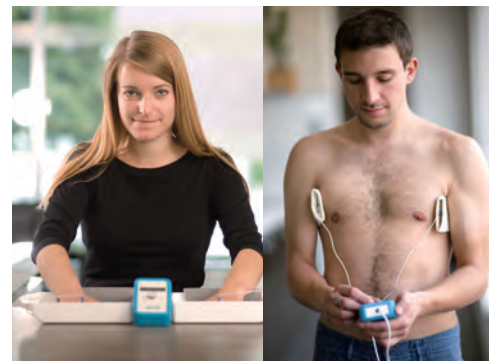
Portable Anemometer



Ultrasonic Thickness Gauge



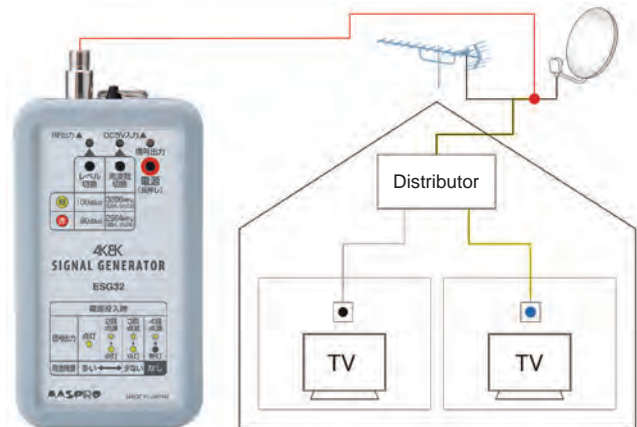
Hyperhidrosis Treatment Device



RF Scope



Satellite Broadcasting Signal Generator



Onboard Programmer



Code Debugger



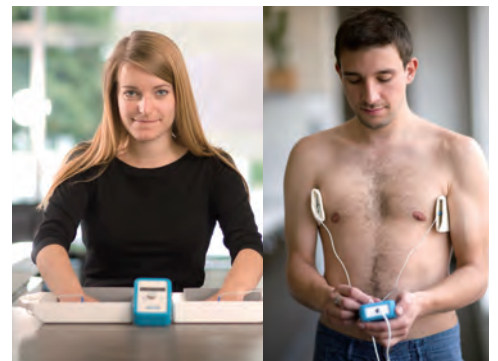
Ultrasonic Thickness Gauge

Product by DEMAQ (Argentina)



Hyperhidrosis Treatment Device

Product by Merebit (Czech Republic)



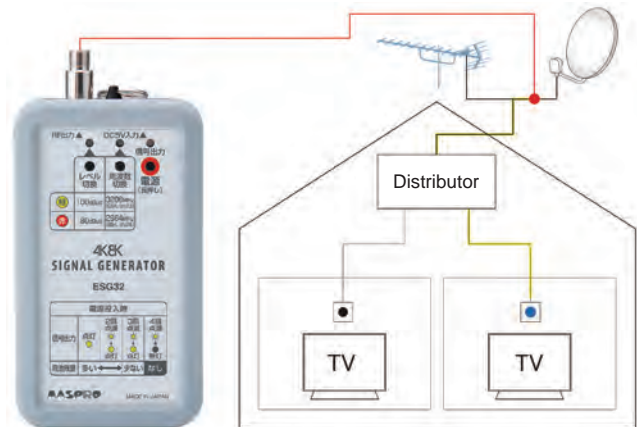
RF Scope

Product by Arrow7 Corporation (Japan)



Satellite Broadcasting Signal Generator

Product by MASPRO (Japan)



Onboard Programmer

Product by Hokuto Electronic (Japan)



Code Debugger

Product by BITRAN (Japan)





Technical Data
Protection class: IP40
Operating temperature: -10°C ~ +60°C

- Plastic case with silicone cover providing not only comfortable and anti-slip grip, but also protection from drop impact.
- Manufactured with flame-resistant ABS UL94V-0. Several battery compartment types are available.
- Positive (+) / negative (-) pole mark are incused on the inside of the battery compartments.
- Suitable for measuring instruments, test devices, wireless communication devices, medical devices and so on.

Battery compartment type

No battery compartment type



Components

No.	Part name	Pcs	Material	Color / Finish
1	Top cover	1	ABS UL94V-0	Off-white • Dark gray
2	Bottom cover	1	ABS UL94V-0	Off-white • Dark gray
3	Panel	1	ABS UL94V-0	Off-white • Dark gray
4	Self-tapping screw	4	Steel M2.6	Nickel plated • Black trivalent chromate
5	Battery cover	1	ABS UL94V-0	Off-white • Dark gray
6	Battery contact • Battery snap	1 set	Brass • Brass : PVC	Nickel plated • Nickel plated : Black
7	Silicone cover	1	Silicone	Red • Green • Blue • Light gray • Dark gray

Accessories (Optional parts)



Tapping standoff TPS series
See page 122



PCB mounting screw EM-2.3
See page 123



TORX screw MR series
See page 123



Key ring CR-20
See page 96



Strap STP series
See page 96

Battery Compartment Type

Type	N None	F2 AAA x 2	F3 AAA x 3	F4 AAA x 4	F6 AAA x 6	M2 AA x 2	M3 AA x 3	M4 AA x 4	9V 9V x 1
Battery compartment									

Color Type

Code	Dark gray / Red	Dark gray / Green	Dark gray / Blue	Dark gray / Dark gray	Dark gray / Light gray
Color					
Code	Off-white / Red	Off-white / Green	Off-white / Blue	Off-white / Dark gray	Off-white / Light gray
Color					

Product no. / Dimensions

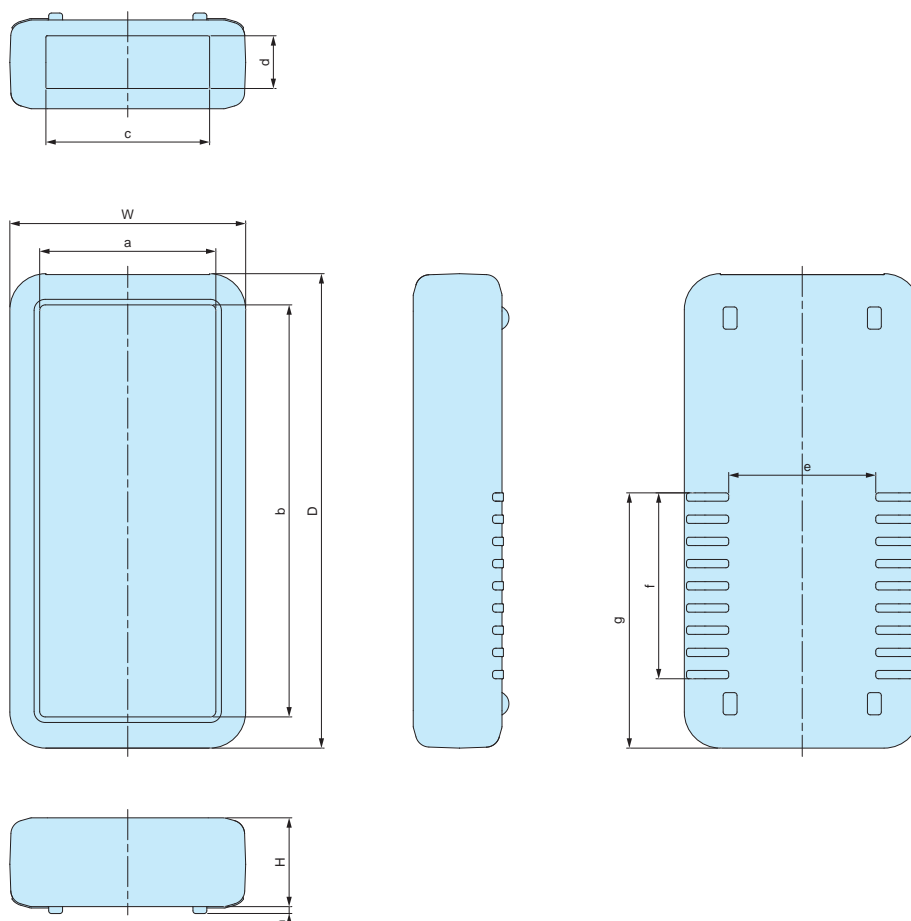
■ Please suffix color code at the end of the product number.

Product no.	W	H	D	Battery compartment	Weight (g)
LCS115 -N -□□	74(69)	24(19.5)	120(115)	None	113
LCS115 -F2 -□□	74(69)	24(19.5)	120(115)	AAA x 2	117.5
LCS115 -F3 -□□	74(69)	24(19.5)	120(115)	AAA x 3	119.5
LCS115H -N -□□	74(69)	32.5(28)	120(115)	None	130
LCS115H -F2 -□□	74(69)	32.5(28)	120(115)	AAA x 2	134.5
LCS115H -F3 -□□	74(69)	32.5(28)	120(115)	AAA x 3	136
LCS115H -M2 -□□	74(69)	32.5(28)	120(115)	AA x 2	138.5
LCS115H -9V -□□	74(69)	32.5(28)	120(115)	9V x 1	138
LCS135 -N -□□	81(76)	32(27)	141(135)	None	165
LCS135 -F4 -□□	81(76)	32(27)	141(135)	AAA x 4	180
LCS135 -M2 -□□	81(76)	32(27)	141(135)	AA x 2	178
LCS135 -M3 -□□	81(76)	32(27)	141(135)	AA x 3	183.5
LCS135 -9V -□□	81(76)	32(27)	141(135)	9V x 1	181.5
LCS135H -N -□□	81(76)	40(35)	141(135)	None	183
LCS135H -F4 -□□	81(76)	40(35)	141(135)	AAA x 4	197.5
LCS135H -M2 -□□	81(76)	40(35)	141(135)	AA x 2	196.5
LCS135H -M3 -□□	81(76)	40(35)	141(135)	AA x 3	201.5
LCS135H -9V -□□	81(76)	40(35)	141(135)	9V x 1	199
LCS145 -N -□□	101(96)	32(27)	151(145)	None	202
LCS145 -F6 -□□	101(96)	32(27)	151(145)	AAA x 6	222
LCS145 -M2 -□□	101(96)	32(27)	151(145)	AA x 2	216
LCS145 -M4 -□□	101(96)	32(27)	151(145)	AA x 4	223
LCS145H -N -□□	101(96)	40(35)	151(145)	None	224
LCS145H -F6 -□□	101(96)	40(35)	151(145)	AAA x 6	244.5
LCS145H -M2 -□□	101(96)	40(35)	151(145)	AA x 2	238
LCS145H -M4 -□□	101(96)	40(35)	151(145)	AA x 4	245
LCS165 -N -□□	85(80)	32(27)	171(165)	None	203
LCS165 -M4 -□□	85(80)	32(27)	171(165)	AA x 4	222.5
LCS165H -N -□□	85(80)	40(35)	171(165)	None	220.5
LCS165H -M4 -□□	85(80)	40(35)	171(165)	AA x 4	239.5

■ () value = enclosure dimension.

Silicone cover dimensions

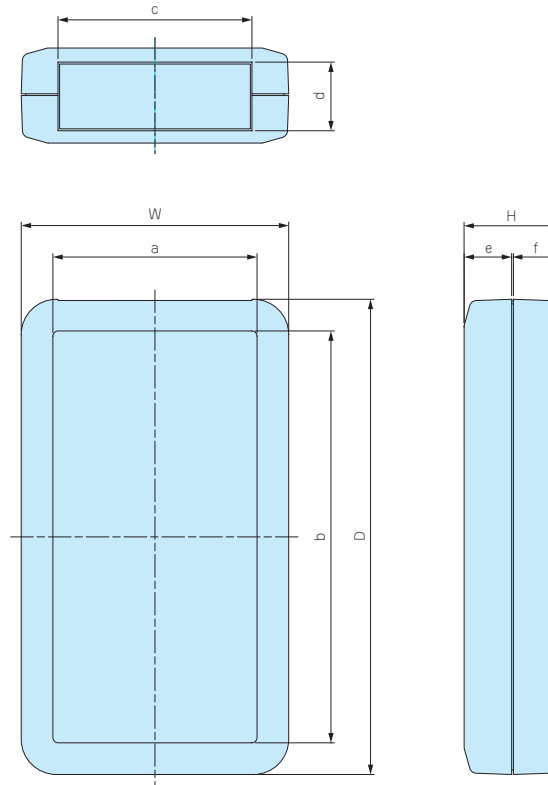
■ DXF/DWG/PDF drawings available on our website.



Product no.	W	H	D	a	b	c	d	e	f	g	h
LCS115 -N -□□	74	24	120	55.5	101.5	48.3	12	46	44.5	60.5	2
LCS115 -F2 -□□	74	24	120	55.5	101.5	48.3	12	46	44.5	60.5	2
LCS115 -F3 -□□	74	24	120	55.5	101.5	48.3	12	46	44.5	60.5	2
LCS115H -N -□□	74	32.5	120	55.5	101.5	48.3	20.5	46	44.5	60.5	2
LCS115H -F2 -□□	74	32.5	120	55.5	101.5	48.3	20.5	46	44.5	60.5	2
LCS115H -F3 -□□	74	32.5	120	55.5	101.5	48.3	20.5	46	44.5	60.5	2
LCS115H -M2 -□□	74	32.5	120	55.5	101.5	48.3	20.5	46	44.5	60.5	2
LCS115H -9V -□□	74	32.5	120	55.5	101.5	48.3	20.5	46	44.5	60.5	2
LCS135 -N -□□	81	32	141	59.5	118.5	55	19	53	59	79	2.5
LCS135 -F4 -□□	81	32	141	59.5	118.5	55	19	53	59	79	2.5
LCS135 -M2 -□□	81	32	141	59.5	118.5	55	19	53	59	79	2.5
LCS135 -M3 -□□	81	32	141	59.5	118.5	55	19	53	59	79	2.5
LCS135 -9V -□□	81	32	141	59.5	118.5	55	19	53	59	79	2.5
LCS135H -N -□□	81	40	141	59.5	118.5	55	27	53	59	79	2.5
LCS135H -F4 -□□	81	40	141	59.5	118.5	55	27	53	59	79	2.5
LCS135H -M2 -□□	81	40	141	59.5	118.5	55	27	53	59	79	2.5
LCS135H -M3 -□□	81	40	141	59.5	118.5	55	27	53	59	79	2.5
LCS135H -9V -□□	81	40	141	59.5	118.5	55	27	53	59	79	2.5
LCS145 -N -□□	101	32	151	76.5	125.5	71	19	71	59	81	2.5
LCS145 -F6 -□□	101	32	151	76.5	125.5	71	19	71	59	81	2.5
LCS145 -M2 -□□	101	32	151	76.5	125.5	71	19	71	59	81	2.5
LCS145 -M4 -□□	101	32	151	76.5	125.5	71	19	71	59	81	2.5
LCS145H -N -□□	101	40	151	76.5	125.5	71	27	71	59	81	2.5
LCS145H -F6 -□□	101	40	151	76.5	125.5	71	27	71	59	81	2.5
LCS145H -M2 -□□	101	40	151	76.5	125.5	71	27	71	59	81	2.5
LCS145H -M4 -□□	101	40	151	76.5	125.5	71	27	71	59	81	2.5
LCS165 -N -□□	85	32	171	63.5	148.5	59	19	53	67	92	2.5
LCS165 -M4 -□□	85	32	171	63.5	148.5	59	19	53	67	92	2.5
LCS165H -N -□□	85	40	171	63.5	148.5	59	27	53	67	92	2.5
LCS165H -M4 -□□	85	40	171	63.5	148.5	59	27	53	67	92	2.5

Enclosure dimensions

■ DXF/DWG/PDF/STP drawings available on our website.



■ Please suffix color code at the end of the product number.

Product no.	W	H	D	a	b	c	d	e	f	Battery compartment
LCS115 -N -□□	69	19.5	115	54	100	48.1	12	10	9	None
LCS115 -F2 -□□	69	19.5	115	54	100	48.1	12	10	9	AAA x 2
LCS115 -F3 -□□	69	19.5	115	54	100	48.1	12	10	9	AAA x 3
LCS115H -N -□□	69	28	115	54	100	48.1	20.5	18.5	9	None
LCS115H -F2 -□□	69	28	115	54	100	48.1	20.5	18.5	9	AAA x 2
LCS115H -F3 -□□	69	28	115	54	100	48.1	20.5	18.5	9	AAA x 3
LCS115H -M2 -□□	69	28	115	54	100	48.1	20.5	18.5	9	AA x 2
LCS115H -9V -□□	69	28	115	54	100	48.1	20.5	18.5	9	9V x 1
LCS135 -N -□□	76	27	135	58	117	55.1	19.5	13.5	13	None
LCS135 -F4 -□□	76	27	135	58	117	55.1	19.5	13.5	13	AAA x 4
LCS135 -M2 -□□	76	27	135	58	117	55.1	19.5	13.5	13	AA x 2
LCS135 -M3 -□□	76	27	135	58	117	55.1	19.5	13.5	13	AA x 3
LCS135 -9V -□□	76	27	135	58	117	55.1	19.5	13.5	13	9V x 1
LCS135H -N -□□	76	35	135	58	117	55.1	27.5	21.5	13	None
LCS135H -F4 -□□	76	35	135	58	117	55.1	27.5	21.5	13	AAA x 4
LCS135H -M2 -□□	76	35	135	58	117	55.1	27.5	21.5	13	AA x 2
LCS135H -M3 -□□	76	35	135	58	117	55.1	27.5	21.5	13	AA x 3
LCS135H -9V -□□	76	35	135	58	117	55.1	27.5	21.5	13	9V x 1
LCS145 -N -□□	96	27	145	75	124	71.1	19.5	14.5	12	None
LCS145 -F6 -□□	96	27	145	75	124	71.1	19.5	14.5	12	AAA x 6
LCS145 -M2 -□□	96	27	145	75	124	71.1	19.5	14.5	12	AA x 2
LCS145 -M4 -□□	96	27	145	75	124	71.1	19.5	14.5	12	AA x 4
LCS145H -N -□□	96	35	145	75	124	71.1	27.5	22.5	12	None
LCS145H -F6 -□□	96	35	145	75	124	71.1	27.5	22.5	12	AAA x 6
LCS145H -M2 -□□	96	35	145	75	124	71.1	27.5	22.5	12	AA x 2
LCS145H -M4 -□□	96	35	145	75	124	71.1	27.5	22.5	12	AA x 4
LCS165 -N -□□	80	27	165	62	147	59.1	19.5	13.5	13	None
LCS165 -M4 -□□	80	27	165	62	147	59.1	19.5	13.5	13	AA x 4
LCS165H -N -□□	80	35	165	62	147	59.1	27.5	21.5	13	None
LCS165H -M4 -□□	80	35	165	62	147	59.1	27.5	21.5	13	AA x 4

LCSC series

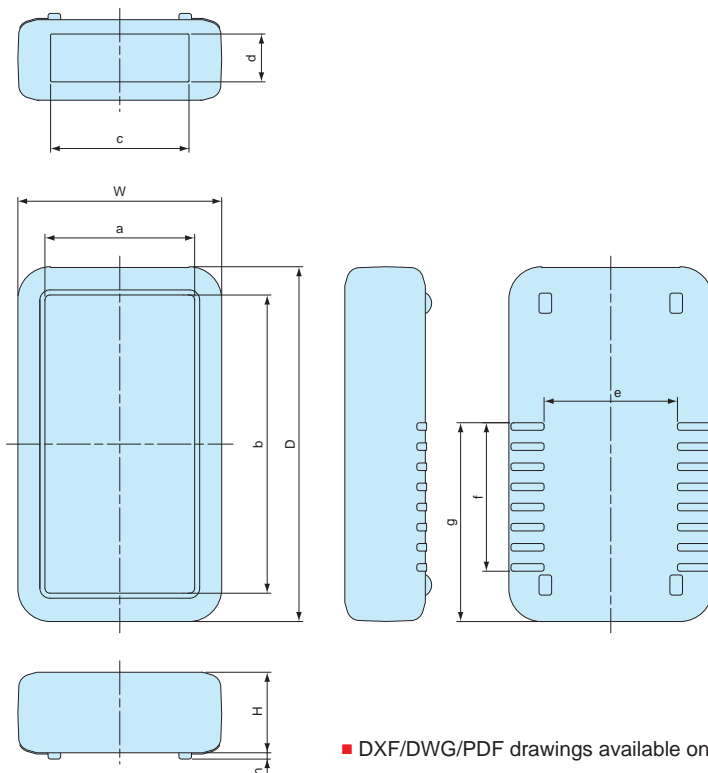
SILICONE COVER for LC • LCE

Color Type



- Silicone cover for LC and LCE series.
- Custom color is available from just 1 pc. For 500pcs or more, manufacture costs will be similar to a standard color. Please inquire for more details. For custom color order, please specify **PANTONE®** color code.

LCSC dimensions



■ DXF/DWG/PDF drawings available on our website.

APPLICATION EXAMPLE

Temperature Surveillance Sensor



Components

Part name	Material	Color
Silicone cover	Silicone	Red • Green • Blue • Light gray • Dark gray

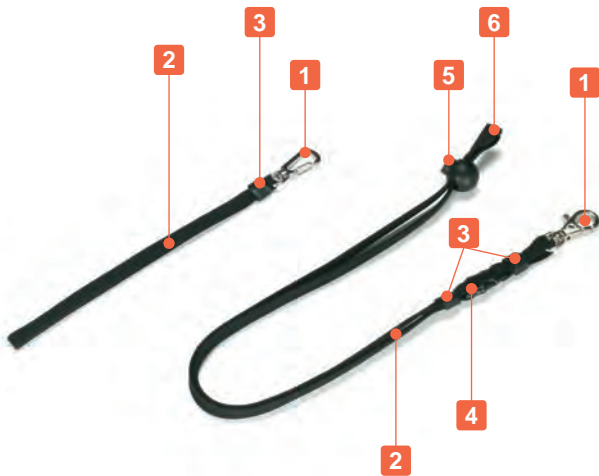
Product no. / Dimensions

■ Please suffix color code at the end of the product number.

Product no.	W	H	D	a	b	c	d	e	f	g	h	Suitable models	Weight (g)
LCSC115 -□	74	24	120	55.5	101.5	48.3	12	46	44.5	60.5	2	LC • LCE115	43
LCSC115H-□	74	32.5	120	55.5	101.5	48.3	20.5	46	44.5	60.5	2	LC • LCE115H	50
LCSC135 -□	81	32	141	59.5	118.5	55	19	53	59	79	2.5	LC • LCE135	70
LCSC135H-□	81	40	141	59.5	118.5	55	27	53	59	79	2.5	LC135H	75.5
LCSC145 -□	101	32	151	76.5	125.5	71	19	71	59	81	2.5	LC145	81
LCSC145H-□	101	40	151	76.5	125.5	71	27	71	59	81	2.5	LC • LCE145H	89
LCSC165 -□	85	32	171	63.5	148.5	59	19	53	67	92	2.5	LC165	82.5
LCSC165H-□	85	40	171	63.5	148.5	59	27	53	67	92	2.5	LC • LCE165H	86

STP series

STRAP

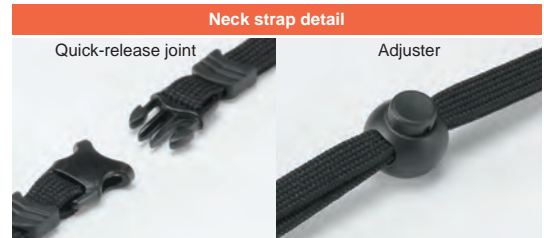


Wrist strap (STP-200)

Neck strap (STP-450)



- Strap with a metal hook
- Recommended to be used with CR key ring.



■ Only the neck strap has a joint and an adjuster.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Metal hook	1	Diecast zinc & steel	Nickel plated
2	Strap	1	Nylon / Polyester	Black
3	Cap	1 / 2	Polyurethane / Elastomer	Black
4	Joint (Neck strap only)	1	Polyacetal	Black
5	Adjuster (Neck strap only)	1	Nylon	Black
6	Clamp (Neck strap only)	1	PE	Black

Product no. / Dimensions

Product no.	Strap width	Strap length	Strap material	Cap material
STP-200	8	200	Nylon	Polyurethane x 1
STP-450	10	450	Polyester	Elastomer x 2

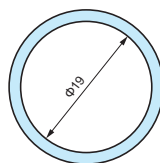
CR-20

KEY RING

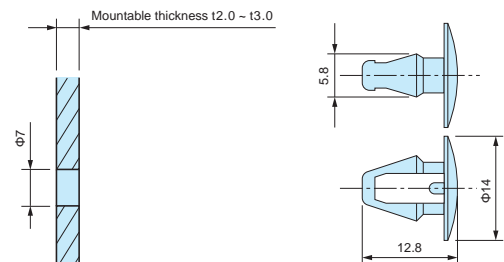


- Hole milling is required for case installation.

CR-20 dimensions



- DXF/DWG/PDF drawings available on our website.



Components

Part name	Material	Color / Finish
Ring	SWRM 6 Steel	Nickel plated
Insert clip	Nylon	Black

Product no. / Dimensions

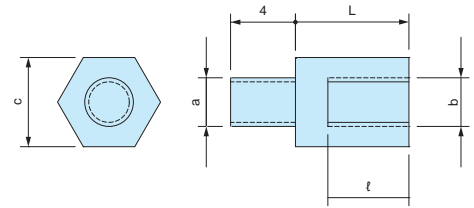
Product no.	Ring Φ	Installation hole	Mounting thickness
CR-20	Φ19	Φ7	t2.0 ~ t3.0

TPS series

TAPPING STANDOFF



TPS dimensions



■ DXF/DWG/PDF drawings available on our website.

- Tapping screw head allows for easy installation onto existing enclosure boss mount.
- 4 different sizes available : M2.3, M2.6, M3 and M4 size.

Product no. / Dimensions

■ Material / Finish : Brass / Unfinished

Product no.	Screw size (a)	Screw size (b)	c	L	ℓ	Pack of	Suitable models
TPS-M2.3-4	M2.3	M2.3	5	4	3	4	WH series • PFE series LC • LCE • LCS • LCT series PF • PFF series (M2.3 boss models) TW • TWN • TWF series (M2.3 boss models) WP series (M2.3 boss models)
TPS-M2.3-5	M2.3	M2.3	5	5	3	4	
TPS-M2.3-6	M2.3	M2.3	5	6	4	4	
TPS-M2.3-7	M2.3	M2.3	5	7	5	4	
TPS-M2.3-8	M2.3	M2.3	5	8	6	4	
TPS-M2.3-10	M2.3	M2.3	5	10	6	4	
TPS-M2.3-12	M2.3	M2.3	5	12	6	4	
TPS-M2.6-4	M2.6	M2.6	5	4	3	4	
TPS-M2.6-5	M2.6	M2.6	5	5	3	4	
TPS-M2.6-7	M2.6	M2.6	5	7	5	4	
TPS-M2.6-10	M2.6	M2.6	5	10	6	4	
TPS-M2.6-12	M2.6	M2.6	5	12	6	4	
TPS-M3-4	M3	M3	5.5	4	3	4	TWS • TW • TWN • TWF series (M3 boss models)
TPS-M3-5	M3	M3	5.5	5	3	4	
TPS-M3-6	M3	M3	5.5	6	4	4	
TPS-M3-7	M3	M3	5.5	7	5	4	
TPS-M3-8	M3	M3	5.5	8	5	4	
TPS-M3-10	M3	M3	5.5	10	6	4	
TPS-M3-12	M3	M3	5.5	12	6	4	
NEW TPS-M4-6	M4	M4	7	6	4	4	BCAP • BCPC • BCPK • BCAR • BCPR series (M4 boss models)
NEW TPS-M4-10	M4	M4	7	10	6	4	
NEW TPS-M4-15	M4	M4	7	15	8	4	
NEW TPS-M4-20	M4	M4	7	20	10	4	



■ Please use a suitable sized socket driver to both secure and loosen the tapping standoff.



How to tighten

MT series

PCB MOUNTING SCREWS for TPS



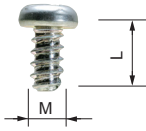
■ PCB mounting Screws for TPS tapping standoffs

Product no. / Dimensions

Product no.	M	L	Head style	Material	Finish	Pack of
MT2.3-4	2.3	4	Pan	Steel	Trivalent chromate	20
MT2.3-6	2.3	6		Steel	Trivalent chromate	20
MT2.6-4	2.6	4		Steel	Trivalent chromate	20
MT3-4	3	4		Steel	Trivalent chromate	20

EM series

PCB MOUNTING SCREW



- Self-tapping screws for mounting PCB on bosses or standoffs.
- EM-3-6 self-tapping screws are suitable for mounting 1.6mm or thicker PCB.

Product no. / Dimensions

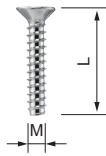
Product no.	M	L	Material	Finish	Suitable models	Pack of
EM-1.6	1.6	4	Steel	Trivalent chromate	CSS • CS WC • PS (M1.6 boss models)	50
EM-2	2	5	Steel	Trivalent chromate	SIC • SIM • WC • PS • TW • TWN • TWF PF • WC • WP (M2 boss models)	50
EM-2.3	2.3	6	Steel	Trivalent chromate	WH • LC • LCT • LCS • LCE • PFE WSC (Top cover bosses) PF • PFF (M2.3 boss models) TW • TWN • TWF (M2.3 boss models) WP (M2.3 boss models)	50
EM-2.3-8	2.3	8	Steel	Trivalent chromate	WSC (Bottom base bosses)	50
EM-2.6	2.6	6	Steel	Trivalent chromate	PF • PFF • WP (M2.6 boss models)	50
EM-3	3	5	Steel	Trivalent chromate	TWS • TW • TWN • TWF (M3 boss models)	50
EM-3-6	3	6	Steel	Trivalent chromate		50

MR series

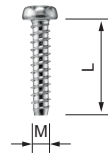
TORX SCREW



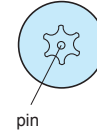
Flat head



Pan head

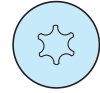


With pin



pin

★ Without pin



- Self-tapping torx screws for securing of the enclosure.

★ : MR1.6-6S, MR-2S, MR2.6-10□, and MR3-14□ are without pin.

Product no. / Dimensions

★ Mark = Without pin

Product no.	M	L	head no.	Head style	Material	Finish	Suitable models	Pack of
MR1.6-6S★	1.6	6	T3	Pan	Steel	Nickel plated	CSS • CS	20
MR2.5-8PS	2.5	8	T8	Pan	Steel	Nickel plated	PF • PFE • PFF (M2.5 size)	20
MR2.6-10S★	2.6	10	T8	Flat	Steel	Nickel plated	TW • TWN (M2.6 size)	20
MR2.6-10B★	2.6	10	T8	Flat	Steel	Black trivalent chromate	TWF (M2.6 size) MX • MXA • MXB • MXF (M2.6 size)	20
MR2.6-12PS	2.6	12	T8	Pan	Steel	Nickel plated	LCT • LCS • LC115-F2 / F3 LCT • LCS • LC145S-F6	20
MR2.6-14PS	2.6	14	T8	Pan	Steel	Nickel plated	LCT • LCS • LC115H-F2 / F3 / M2 / 9V LCT • LCS • LC135-F4 / M2 / M3 / 9V LCT • LCS • LC135H-F4 / M2 / M3 / 9V LCT • LCS • LC145-F6 / M2 / M4 LCT • LCS • LC145H-F6 / M2 / M4 LCT • LCS • LC165-M4 LCT • LCS • LC165H-M4	20
MR2.6-14S	2.6	14	T8	Flat	Steel	Nickel plated	LCT • LCS • LC115-N / F2 / F3 LCT • LCS • LC145S-F6 / 145S-N LCE115-N TW • TWN7-2-11 / 7-4-11 / 7-5-11 TWF7-2-11 / 7-4-11 / 7-5-11 / 8-2-8 / 8-4-8	20
MR2.6-18S	2.6	18	T8	Flat	Steel	Nickel plated	LCT • LCS • LC115H-N / F2 / F3 / M2 / 9V LCT • LCS • LC135-N / F4 / M2 / M3 / 9V LCT • LCS • LC135H-N / F4 / M2 / M3 / 9V LCT • LCS • LC145-N / F6 / M2 / M4 LCT • LCS • LC145H-N / F6 / M2 / M4 LCT • LCS • LC165-N / M4 LCT • LCS • LC165H-N / M4 LCE115H-N • LCE135-N • LCE145H-N • LCE165H-N	20
MR3-8PS	3	8	T10	Pan	Steel	Nickel plated	PF • PFE • PFF (M3 size)	20
MR3-14S★	3	14	T10	Flat	Steel	Nickel plated	TW • TWN (M3 size)	20
MR3-14B★	3	14	T10	Flat	Steel	Black trivalent chromate	TWF (M3 size) MX • MXA • MXB • MXF (M3 size)	20
MR-1S	3	5	T10	Flat	Steel	Nickel plated	UC	20
MR-1B	3	5	T10	Flat	Steel	Black trivalent chromate		20