

# TWF SERIES

## PLASTIC ENCLOSURE with WALL MOUNTING FLANGE

Multi-purpose flanged enclosure designed for use as a wall-mounted device/terminal.

23 different sizes in 2 colors available.

Recommended to be used as measurement instruments, wireless communication gadgets, controller devices and so on.

## APPLICATION EXAMPLE

### SOLAR POWER SYSTEM REMOTE MONITOR

Product by Wave Energy Inc. (Japan)



### SOLAR PANEL CHARGE CONTROLLER

Product by SunWorks Inc. (UK)



### WIRELESS RFID TAG SEARCH DEVICE

Product by MULTILUX (Slovenia)



### RFID TAG

Utilization of TAKACHI PS-65W portable plastic case.



### CO<sub>2</sub> SENSOR



### TEMPERATURE · HUMIDITY SENSOR



Product by HANERON (Japan)

**REMOTE POWER CONTROL UNIT**



Product by M.C.S (Japan)

**COMMUNICATION CONVERTER**

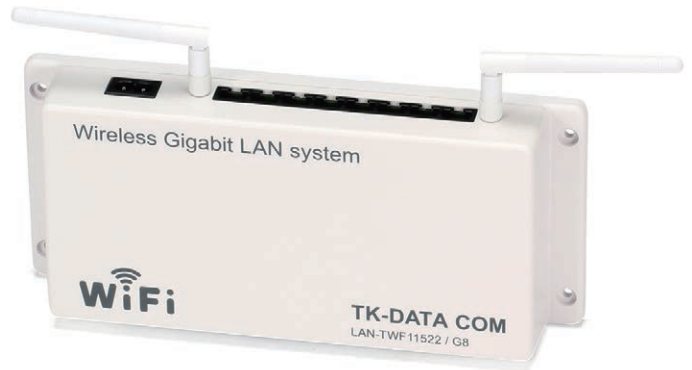


**ROOF SPRINKLER CONTROLLER**

Product by ES-Waternet (Japan)



**WiFi ACCESS POINT**



**ANALOG CAMERA M2M SOLUTION**

Product by ADVALY SYSTEM (Japan)

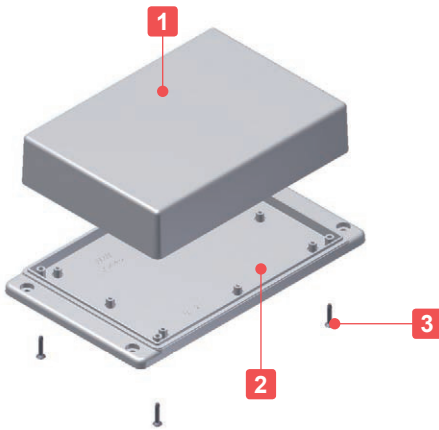


**TWF** SERIES

**PLASTIC ENCLOSURE with WALL MOUNTING FLANGE**



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



- Multi-purpose flanged enclosure designed for use as a wall-mounted device/terminal.
- 23 different sizes in 2 colors. Made of ABS UL94V-0.
- Equipped with screwing bosses for PCB.
- Recommended to be used as measurement instruments, wireless communication gadgets, controller devices and so on.

**Components**

No.	Part name	Pcs	Material	Color / Finish
1	Cover	1	ABS UL94V-0	Off-white • Dark gray
2	Flanged base	1	ABS UL94V-0	Off-white • Dark gray
3	Self tapping screw	2/4	Steel	Nickel plated • Black trivalent chromate

**Accessories (Optional parts)**



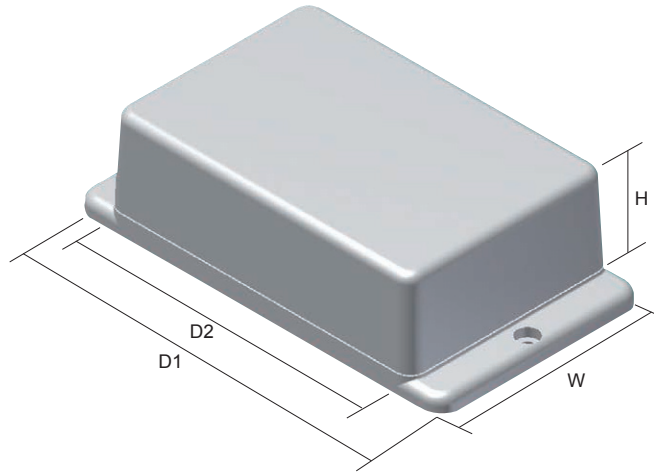
Tapping standoff TPS series  
See page TPS • MT-1



PCB mounting screw EM-2.3  
See page EM • MR-1



TORX screw MR series  
See page EM • MR-1



**Color Type**

Code	Cover	Flanged base	Screw
W	Off-white	Off-white	Nickel plated
D	Dark gray	Dark gray	Black trivalent chromate

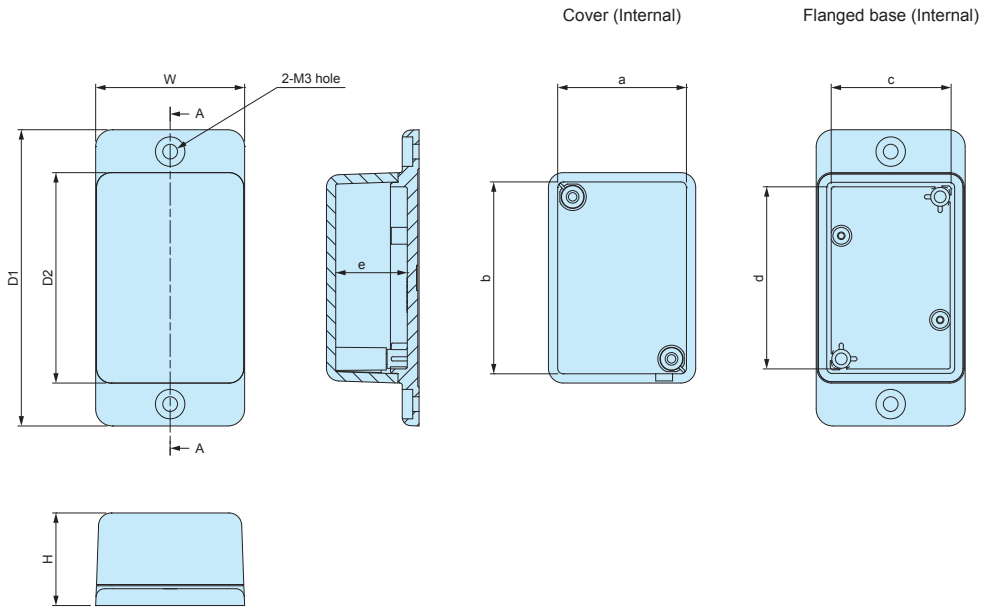
**Product no. / Dimensions**

Product no.		Dimensions				UL class	Screw	Weight (g)
● Off-white	● Dark gray	W	H	D1 (Flanged base)	D2 (Cover)			
TWF 4-2- 5W	TWF 4-2- 5D	35.4	22	70.4	50	UL94V-0	M 2.6×12 2 pcs	19.7
TWF 5-2- 5W	TWF 5-2- 5D	50.4	17	70.4	50	UL94V-0	M 2.6×12 4 pcs	21.5
TWF 5-2- 7W	TWF 5-2- 7D	50.4	17	90.4	70	UL94V-0	M 2.6×12 4 pcs	29
TWF 5-3- 5W	TWF 5-3- 5D	50.4	27	70.4	50	UL94V-0	M 2.6×12 4 pcs	26.5
TWF 5-3- 7W	TWF 5-3- 7D	50.4	29.5	90.4	70	UL94V-0	M 2.6×12 4 pcs	36
TWF 5-3- 9W	TWF 5-3- 9D	45.6	27.5	111	90	UL94V-0	M 2.6×12 4 pcs	43
TWF 5-4- 7W	TWF 5-4- 7D	50.4	42	90.4	70	UL94V-0	M 2.6×12 4 pcs	43.5
TWF 7-2-11W	TWF 7-2-11D	70.6	20.5	127	105	UL94V-0	M 2.6×14 4 pcs	66.5
TWF 7-3-13W	TWF 7-3-13D	65.5	25.5	150	130	UL94V-0	M 3×16 4 pcs	87
TWF 7-4-11W	TWF 7-4-11D	70.6	35.5	127	105	UL94V-0	M 2.6×14 4 pcs	82
TWF 7-5-11W	TWF 7-5-11D	70.6	50.5	127	105	UL94V-0	M 2.6×14 4 pcs	96.5
TWF 7-5-13W	TWF 7-5-13D	65.5	50	150	130	UL94V-0	M 3×16 4 pcs	114
TWF 8-2- 8W	TWF 8-2- 8D	80.6	23.5	100.6	80	UL94V-0	M 2.6×14 4 pcs	62
TWF 8-4- 8W	TWF 8-4- 8D	80.6	43.5	100.6	80	UL94V-0	M 2.6×14 4 pcs	82
TWF 9-4-17W	TWF 9-4-17D	86	35	190	170	UL94V-0	M 3×16 4 pcs	150
TWF 9-6-17W	TWF 9-6-17D	86	60	190	170	UL94V-0	M 3×16 4 pcs	184
TWF11-5-22W	TWF11-5-22D	110.3	45	250.6	220	UL94V-0	M 3×16 4 pcs	250
TWF11-8-22W	TWF11-8-22D	110.3	75	250.6	220	UL94V-0	M 3×16 4 pcs	303
TWF13-3-13W	TWF13-3-13D	125.6	25	155.6	125	UL94V-0	M 3×16 4 pcs	155
TWF13-3-18W	TWF13-3-18D	125.6	25	205.6	175	UL94V-0	M 3×16 4 pcs	199
TWF13-5-13W	TWF13-5-13D	125.6	45	155.6	125	UL94V-0	M 3×16 4 pcs	189
TWF13-5-18W	TWF13-5-18D	125.6	45	205.6	175	UL94V-0	M 3×16 4 pcs	242
TWF13-7-18W	TWF13-7-18D	125.6	65	205.6	175	UL94V-0	M 3×16 4 pcs	281

**TWF dimensions**

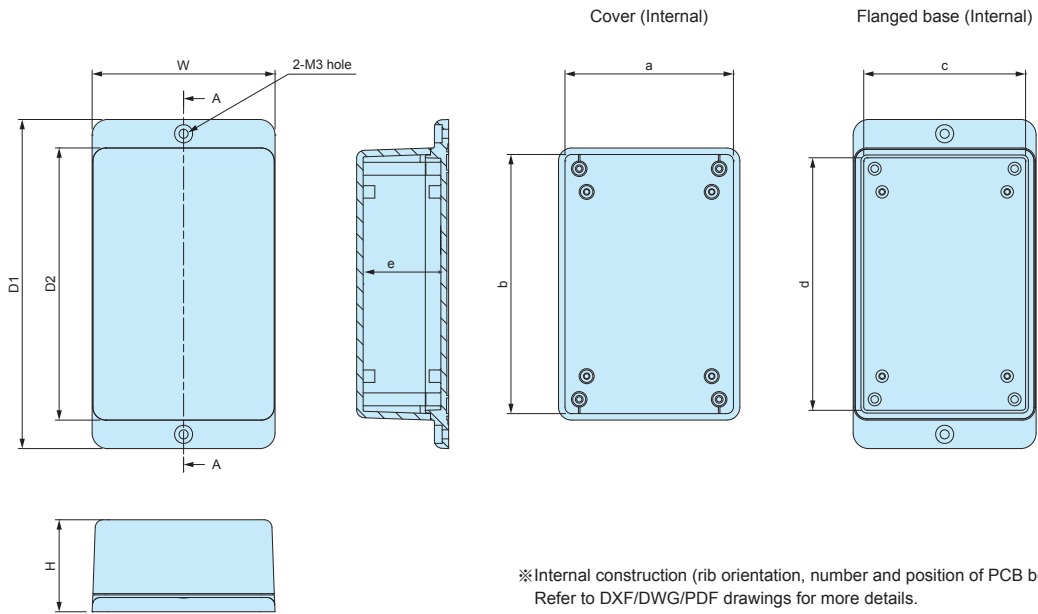
■ Drawings below are reference examples only.  
DXF/DWG/PDF drawings available on our website.

TWF4-2-5



Product no.	W	H	D1	D2	a	b	c	d	e
TWF4-2-5□	35.4	22	70.4	50	28.9	43.9	27.2	42.2	17

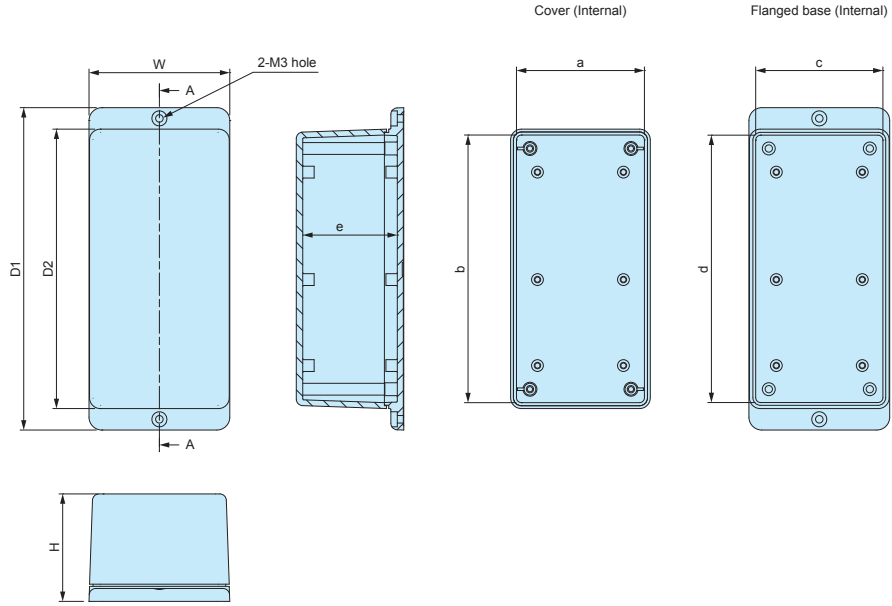
TWF5-2-5 • TWF5-3-5 • TWF5-2-7 • TWF5-3-7 • TWF5-4-7 • TWF5-3-9  
TWF7-2-11 • TWF7-4-11 • TWF7-5-11 • TWF8-2-8 • TWF8-4-8



※ Internal construction (rib orientation, number and position of PCB bosses) vary by model.  
Refer to DXF/DWG/PDF drawings for more details.

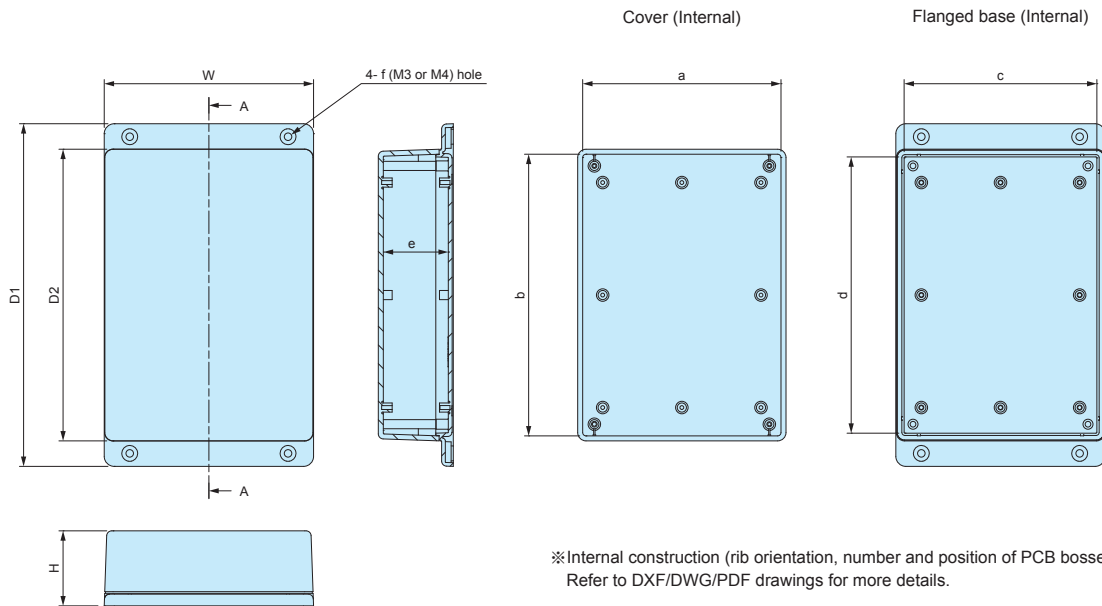
Product no.	W	H	D1	D2	a	b	c	d	e
TWF5-2- 5□	50.4	17	70.4	50	44.3	44.3	42.7	42.7	12
TWF5-3- 5□	50.4	27	70.4	50	43.6	43.6	42.7	42.7	22
TWF5-2- 7□	50.4	17	90.4	70	44.3	64.3	43.1	63.1	12
TWF5-3- 7□	50.4	29.5	90.4	70	43.4	63.4	43.1	63.1	24.5
TWF5-4- 7□	50.4	42	90.4	70	42.5	62.5	43.1	63.1	37
TWF5-3- 9□	45.6	27.5	111	90	37.3	82.3	37.2	82.2	22.5
TWF7-2-11□	70.6	20.5	127	105	63.2	98.2	61.4	96.4	15
TWF7-4-11□	70.6	35.5	127	105	62.2	97.2	61.4	96.4	30
TWF7-5-11□	70.6	50.5	127	105	61.1	96.1	61.4	96.4	45
TWF8-2- 8□	80.6	23.5	100.6	80	73	73	71.5	71.5	18
TWF8-4- 8□	80.6	43.5	100.6	80	71.6	71.6	71.5	71.5	38

TWF7-3-13  
TWF7-5-13



Product no.	W	H	D1	D2	a	b	c	d	e
TWF7-3-13□	65.5	25.5	150	130	57.7	122.7	59.2	124.4	19.5
TWF7-5-13□	65.5	50	150	130	55.9	120.9	59.2	124.4	44

TWF9-4-17 • TWF9-6-17 • TWF11-5-22 • TWF11-8-22  
TWF13-3-13 • TWF13-5-13 • TWF13-3-18 • TWF13-5-18 • TWF13-7-18



※Internal construction (rib orientation, number and position of PCB bosses) vary by model.  
Refer to DXF/DWG/PDF drawings for more details.

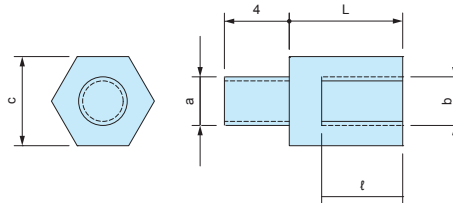
Product no.	W	H	D1	D2	a	b	c	d	e	f
TWF 9-4-17□	86	35	190	170	77.1	162	78.2	162.7	29	M3
TWF 9-6-17□	86	60	190	170	75.7	160.2	78.2	162.7	54	M3
TWF11-5-22□	110.3	45	250.6	220	101.4	211.4	103	213	39	M4
TWF11-8-22□	110.3	75	250.6	220	99.3	209.3	103	213	69	M4
TWF13-3-13□	125.6	25	155.6	125	117.2	117.2	114.5	114.5	19	M4
TWF13-5-13□	125.6	45	155.6	125	115.8	115.8	114.5	114.5	39	M4
TWF13-3-18□	125.6	25	205.6	175	117	167	114.5	164.6	19	M4
TWF13-5-18□	125.6	45	205.6	175	115.6	165.6	114.5	164.6	39	M4
TWF13-7-18□	125.6	65	205.6	175	114.2	164.2	114.5	164.6	59	M4

TPS SERIES

TAPPING STANDOFF



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



Product no. / Dimensions

■ Material / Finish : Brass / Unfinished

Product no.	Screw size (a)	Screw size (b)	c	L	ℓ	Pack of	Recommended enclosure 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		PF • PFF series (M2.6 boss models) WP series (M2.6 boss models)
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	SU • OP series TWS • TW • TWN • TWF series (M3 boss models)	
TPS-M3-4	M3	M3	5.5	4	3	4		
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		



- 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



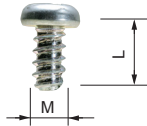
- PCB mounting Screws for TPS tapping standoffs.

Product no. / Dimensions

Product no.	M	L	Head style	Material	Finish	Pack of
<b>NEW</b> MT2.3-4	2.3	4	Pan	Steel	Trivalent chromate	20
<b>NEW</b> MT2.3-6	2.3	6		Steel	Trivalent chromate	20
<b>NEW</b> 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

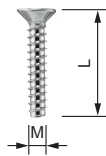
Product no.	M	L	Material	Finish	Suitable enclosures	Pack of
EM-1.6	1.6	4	Steel	Trivalent chromate	WC • CSS • CS • PS (M1.6 size)	50
EM-2	2	5	Steel	Trivalent chromate	PS • TW • TWN • TWF • WP (M2 size)	50
EM-2.3	2.3	6	Steel	Trivalent chromate	WH • LC • LCT • LCS • LCE • PFE WSC (Top cover bosses) PF • PFF (M2.3 size) TW • TWN • TWF (M2.3 size) WP (M2.3 size)	50
<b>NEW</b> 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 size)	50
EM-3	3	5	Steel	Trivalent chromate	SU TWS • TW • TWN • TWF (M3 sizes)	50
EM-3-6	3	6	Steel	Trivalent chromate		50

MR SERIES

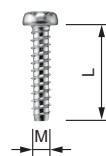
TORX SCREW



Countersunk head



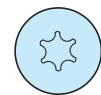
Pan head



With pin



★ Without pin



★ : 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 enclosures	Pack of
MR1.6-6S★	1.6	6	T3	Pan	Steel	Nickel plated	CS • CSS	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	Countersunk	Steel	Nickel plated	TW • TWN (M2.6 models) TWF (M2.6 models)	20
MR2.6-10B★	2.6	10	T8	Countersunk	Steel	Black trivalent chromate	MX • MXA • MXB • MXF (M2.6 models)	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	Countersunk	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	Countersunk	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	Countersunk	Steel	Nickel plated	TW • TWN (M3 models)	20
MR3-14B★	3	14	T10	Countersunk	Steel	Black trivalent chromate	TWF (M3 models) MX • MXA • MXB • MXF (M3 models)	20
MR-1S	3	5	T10	Countersunk	Steel	Nickel plated	UC	20
MR-1B	3	5	T10	Countersunk	Steel	Black trivalent chromate	UC • UCY • US	20
MR-2S	3	10	T10	Countersunk	Steel	Nickel plated	HEN	20