

Multi Display Lights AP30F and AP40F General information

Multi display lights F series

■ Description

Provide a bright, colorful display surface.
More user-friendly with easy wiring and windows in a wide variety of sizes.

■ Features

Lightweight (LED display, 100V or 200V AC)

Only one-third the weight of FUJI conventional models.

Wide window size selection

A wide selection, including half-size windows.

AP30F: 30 x 30mm, 30 x 60mm, 15 x 30mm

AP40F: 40 x 40mm, 40 x 80mm, 20 x 40mm

Easy color and voltage changes

LEDs (with voltage-dividing resistors or voltage-dividing capacitors and resistors) are easily replaced from the panel surface.

Save energy

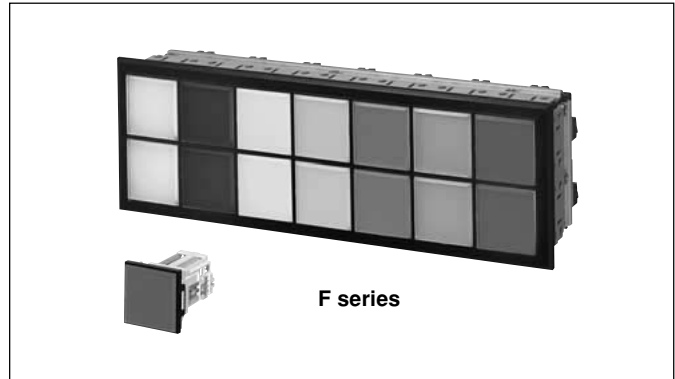
A sharp reduction in power consumption.

High brightness for more vivid colors

LEDs with two to eight times the brightness of those on FUJI conventional models. Newly added blue and pure white LEDs improve visibility.

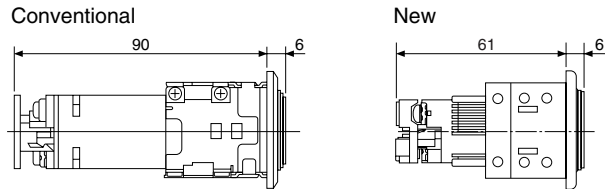
Charged-section cover

A cover for the charged section is provided as a standard accessory.



Reduced depth (AP30 series, 100V or 200V AC)

Two-thirds the depth of FUJI conventional models. And, the AP30F and AF40F feature the same depth.



■ Configuration of AP30F/AP40F

Lens case

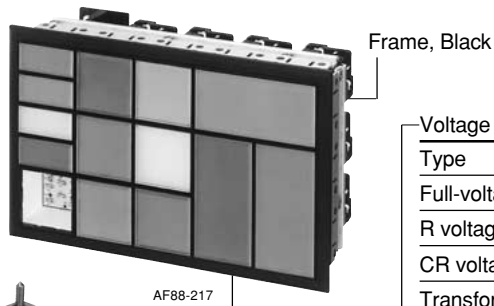
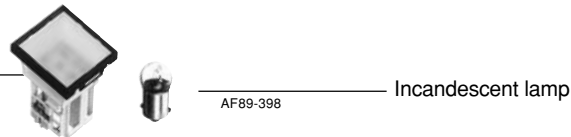
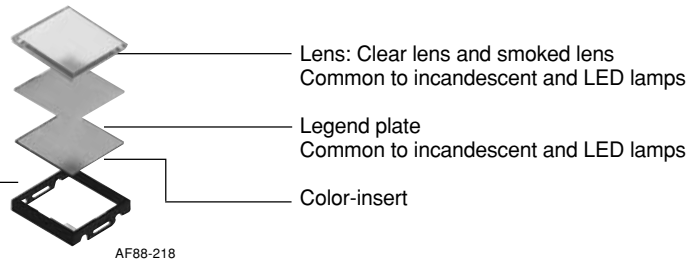
Lens case	AP30F	AP40F
Standard	○	○
Inclined	-	○

LED unit

Combination of LED luminous colors and color-inserts

LED luminous color	Color-insert	Illumination
Red	Red	Red
Green	Green	Green
Yellow	Yellow	Yellow
Amber	Orange	Orange
Orange	Clear	White
Red/green	Clear	Red/green
Blue	Blue	Blue
Pure-white	White	Pure-white

Bracket
(Standard accessories)



Voltage units

Type	LED	Incandescent
Full-voltage type	○	○
R voltage dividing	○	-
CR voltage dividing	○	-
Transformer unit	○	○
Resistor unit	-	○
Flicker unit	○	-
Voltage stabilizer unit	○	-

○ : Available
- : Not available

■ Type number nomenclature

AP30F- 04 05 □ E3-S 4 -SR (20)

① ② ③ ④ ⑤ ⑥ ⑦

① Basic type

AP30F: 30 × 30, 30 × 60, 60 × 30, 15 × 30mm (Window size)
AP40F: 40 × 40, 40 × 80, 80 × 40, 20 × 40mm

② Number of windows
(=Row × Column)

	Row	Column	
AP30F	01,02,03,04,05,06,07,08,09,10 11,12,13,14,15,16,17,18,19,20	01,02,03,04,05,06,07,08,09,10 11,12,13,14,15,16,17,18,19,20	Max. 400
AP40F	01,02,03,04,05,06,07	01,02,03,04,05,06,07,08,09,10, 11,12,13,14,15	Max. 105

- Convert one rectangular window to two square windows.
- The number of windows is limited to 80 when transformer units are mounted.

③ Check terminal

C: with
Blank: without

④ Voltage unit and input voltage

AP30F series

	Incandescent	LED unit
Full-voltage type	A: 5.5V AC/DC C: 15.5V AC/DC D: 20V AC/DC E: 24V AC/DC	A3: 6V DC B3: 12V AC/DC C3: 15V AC/DC E3: 24V AC/DC ES: 24V AC/DC * F3: 48V AC/DC H3: 100-110V AC/DC L3: 115-127V AC/DC M3: 200-220V AC
Transformer unit	H: 100-110V AC L: 115-127V AC M: 200-220V AC Q: 230-254V AC S: 350-380V AC T: 400-440V AC V: 480V AC	Q3: 230-254V AC S3: 350-380V AC T3: 400-440V AC V3: 480V AC
Resistor unit	H6: 110V DC L6: 125V DC (Electric bulb 48V 1W)	—
Mixed type	X: Combination of the above three	X3: Combination of the above three types plus flicker and voltage stabilizer unit

* Short body type

AP40F series

	Incandescent	LED unit
Full-voltage type	C: 15.5V AC/DC D: 20V AC/DC E: 24V AC/DC	A3: 6V DC B3: 12V AC/DC C3: 15V AC/DC E3: 24V AC/DC ES: 24V AC/DC * F3: 48V AC/DC H3: 100-110V AC/DC L3: 115-127V AC/DC M3: 200-220V AC
Transformer unit	H: 100-110V AC L: 115-127V AC M: 200-220V AC Q: 230-254V AC S: 350-380V AC T: 400-440V AC V: 480V AC	Q3: 230-254V AC S3: 350-380V AC T3: 400-440V AC V3: 480V AC
Resistor unit	H6: 110V DC L6: 127V DC (Electric bulb 48V 2W)	—
Mixed type	X: Combination of the above three	X3: Combination of the above three types plus flicker and voltage stabilizer unit

* Short body type

Notes:

The combination of LED units and voltage units is limited as follows:

Code	Voltage unit	LED unit
E3FA	Flicker unit	24V (short body type)
E3FD	For 24V DC	
E3C	Voltage stabilizer unit 27-35V AC/DC	24V (short body type)

- Two-color illumination face is only available for 24V AC/DC type.
- The flicker unit is available in square design only (S-type).

⑤ Shape of illuminated face

AP30F series

S: Square (30 × 30)
T: Rectangular, horizontally long (30 × 60)
V: Rectangular, vertically long (60 × 30)
H: Half-size (15 × 30) × 2
X: Mixture of S, T, and V

AP40F series

S: Square (40 × 40)
T: Rectangular, horizontally long (40 × 80)
V: Rectangular, vertically long (80 × 40)
H: Half-size (20 × 40) × 2
X: Mixture of S, T, and V

⑥ Illumination method

Blank: Single color, entire surface illumination
4: 2-color, entire surface illumination (for 24V AC/DC LEDs only)
2: 2-way rectangular-split illumination

⑦ Illuminated color

Using clear lens	Color plate (White)	Using smoked lens
R: Red	CR: Red	SR: Red
G: Green	CG: Green	SG: Green
Y: Yellow	CY: Yellow	SY: Yellow
O: Orange	CO: Orange	SO: Orange
W: White	CS: Blue	SW: White
S: Blue	RG: Red/green	SS: Blue
P: Pure-white*		

- Specify the number of windows in ().
- If two or more colors are specified using LED unit, the illuminated color ⑦ here should be blank.
- * Not available for incandescent lamp

Using window layout sheet

Use the copies of the window layout sheet (See page 04/206) and specify for each of the window when ordering the following types.

- Types with letters on legend plate
- Types with symbol X for ④ voltage unit and input voltage
- Types with symbol X for ⑤ shape of illuminated face
- When two or more illuminated colors are specified for LED unit in ⑦.

■ Ordering information

Specify the following:

1. Type number

Multi Display Lights AP30F and AP40F Specifications and performance

■ Specifications

Type		AP30F		AP40F	
Light source		Incandescent	LED	Incandescent	LED
Size of illuminated face					
Illuminated color (types of color-insert)	Red	●	●	●	●
	Green	●	●	●	●
	Yellow	●	●	●	●
	Orange	●	●	●	●
	White	●	●	●	●
	Blue	●	●	●	●
	Pure-white	—	●	—	●
Input voltage	Full voltage	5.5, 15.5, 20 24V AC/DC	6V DC 12, 15, 24, 48, 110, 127V AC/DC 220V AC	15.5, 20 24V AC/DC	6V DC 12, 15, 24, 48, 110, 127V AC/DC 220V AC
	With transformer unit	110, 127, 220, 254, 380, 440, 480V AC 50/60Hz	254, 380, 440, 480V AC 50/60Hz	110, 127, 220, 254, 380, 440, 480V AC 50/60Hz	254, 380, 440, 480V AC 50/60Hz
	With resistor unit	110V DC 125V DC	—	110V DC 125V DC	—
	With flicker unit	—	24V DC 24V AC	—	24V DC 24V AC
	With voltage stabilizer unit	—	27 to 35V AC/DC	—	27 to 35V AC/DC
	Mixture	Combination of the above input voltages for different windows.			
Terminal	M3.5 screw with washer (self-lifting)				
No. of windows	1 to 400 *1		1 to 105 *1		
	1 to 80 *2		1 to 80 *2		
Panel thickness	1 to 6mm				

●: Available —: Not available

*1 : Without transformer unit

*2 : With transformer unit

■ Performance

Rated insulation voltage	250V AC/DC: Full voltage type, with resistor unit, with voltage stabilizer unit, R/CR dividing, with flicker unit, with transformer unit (AP30F incandescent 100 to 200V) 600V AC/DC: With transformer unit (AP30F 230 to 480V)
Dielectric strength (between unit and ground)	2000V AC 1-minute: Full voltage type, with resistor unit, with voltage stabilizer unit, R/CR dividing, with flicker unit, with transformer unit (AP30F incandescent 100 to 200V) 2500V AC 1-minute: With transformer unit (AP30F 230 to 480V)
Operating ambient temperature	−20°C to 40°C
Humidity	45 to 85%RH
Insulation resistance	100MΩ or more (500V DC megger)

Multi Display Lights AP30F and AP40F Specifications and performance

■ Power consumption

Light source	Operating voltage		AP30F square	AP40F square			AP30F, AP40F half size
			R, G, Y, O, W, S, P	R, Y, O, W	G, S	P	R, G, Y, O, W, S, P
LED	Full voltage	6V DC	0.26W	0.33W	0.40W	0.53W	–
		12V AC/DC	0.53W 0.56VA	0.66W 0.70VA	0.79W 0.82VA	1.06W 1.30VA	0.14W 0.16VA
		15V AC/DC	0.66W 0.69VA	0.83W 0.87VA	0.99W 1.02VA	1.32W 1.62VA	0.17W 0.18VA
		24V AC/DC	0.26W 0.34VA	0.53W 0.58VA	0.53W 0.58VA	0.53W 0.65VA	0.26W 0.29VA
		48V AC/DC	0.53W 0.67VA	0.53W 0.67VA			–
	R voltage dividing type	100-110V AC/DC 115-127V AC/DC	1.21W 1.54VA 1.40W 1.78VA	1.21W 1.54VA 1.40W 1.78VA			
CR voltage dividing type	200-220V AC	3.3VA	3.3VA				
With transformer unit	230-254V AC 350-380V AC 400-440V AC 480V AC	2.4VA	2.4VA				
With flicker unit	24V AC 24V DC	1.0VA 0.48W	1.0VA 0.48W				
Incandescent	Full voltage	5.5V AC/DC	1.0W	–			
		15.5V AC/DC	1.0W	2.0W			
		20V AC/DC 24V AC/DC					
	With transformer unit	100-110V AC 115-127V AC 200-220V AC 230-254V AC 350-380V AC 400-440V AC 480V AC	3.0VA	3.0VA			
With resistor unit	110V DC	2.0W	3.0W				

Notes: • Maximum power consumption per one square window, except for half-size window.
• Maximum power consumption for rectangular type is twice value indicated in the table.

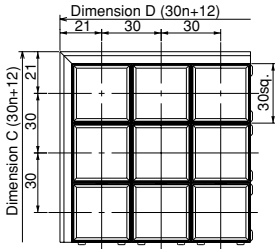
Multi Display Lights AP30F Dimensions

AP30F

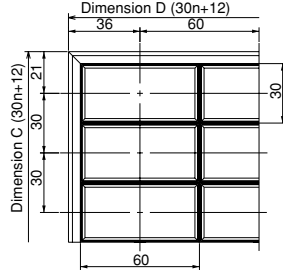
■ Dimensions, mm

Front view

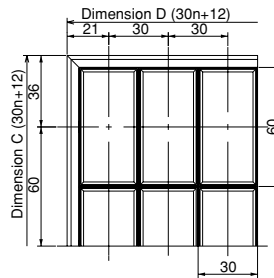
● S-type



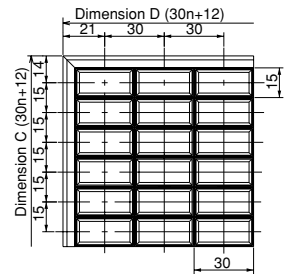
● T-type



● V-type

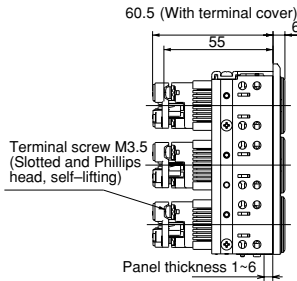
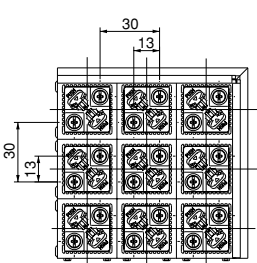


● H-type

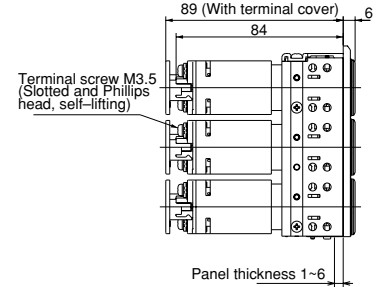
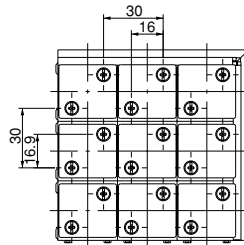


Back view

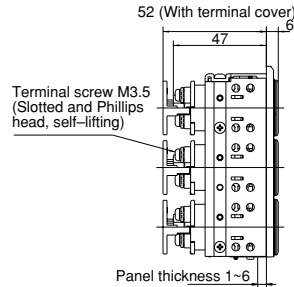
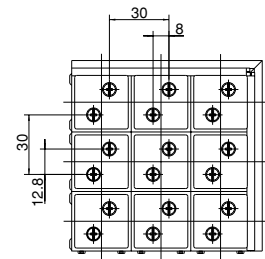
● Full-voltage type (LED)



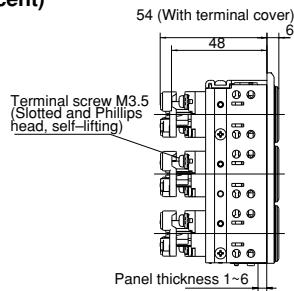
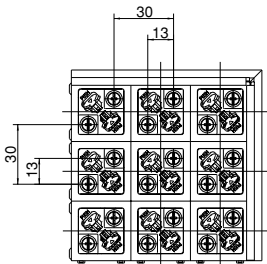
● With transformer unit (230V to 480V LED and incandescent) With resistor unit, with flicker unit, with voltage stabilizer unit



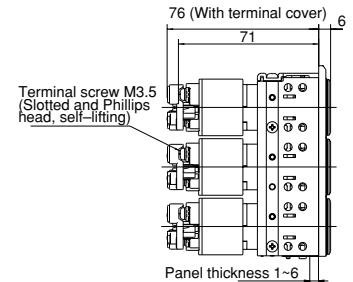
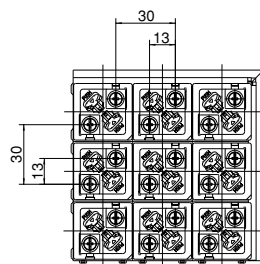
● Full-voltage type (LED, short body type)



● Full-voltage type (Incandescent)



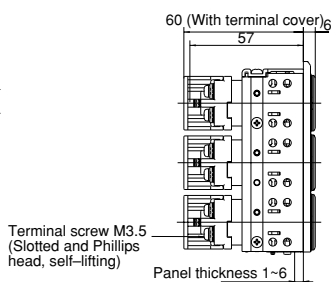
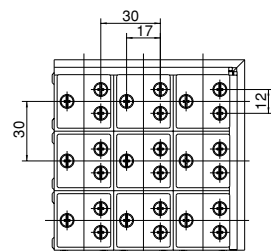
● With transformer (Incandescent, 100V to 220V)



Half size (Illuminated face)

With check terminal

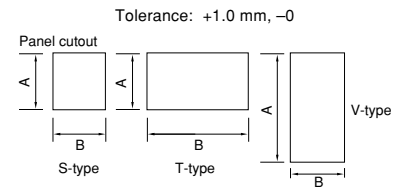
● Full-voltage type



Multi Display Lights AP30F Dimensions

AP30F

■ Panel cutout and overall dimensions



● S, H-type

Number of windows		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Panel cutout	A	35	65	95	125	155	185	215	245	275	305	336	366	396	426	456	486	516	546	576	606
	B	35	65	95	125	155	185	215	245	275	305	335	365	395	425	455	485	515	545	575	605
Overall	C	42	72	102	132	162	192	222	252	282	312	342	372	402	432	462	492	522	552	582	612
	D	42	72	102	132	162	192	222	252	282	312	342	372	402	432	462	492	522	552	582	612

● T-type

Number of windows		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Panel cutout	A	35	65	95	125	155	366	426	486	546	606	336	366	396	426	456	486	516	546	576	606
	B*	65	125	185	145	305	365	425	485	545	605	-	-	-	-	-	-	-	-	-	-
Overall	C	42	72	102	132	162	192	222	252	282	312	342	372	402	432	462	492	522	552	582	612
	D*	72	132	192	252	312	372	432	492	552	612	-	-	-	-	-	-	-	-	-	-

● V-type

Number of windows		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Panel cutout	A*	65	125	185	245	305	366	426	486	546	606	-	-	-	-	-	-	-	-	-	-
	B	35	65	95	125	155	185	215	245	275	305	335	365	395	425	455	485	515	545	575	605
Overall	C*	72	132	192	252	312	372	432	492	552	612	-	-	-	-	-	-	-	-	-	-
	D	42	72	102	132	166	192	222	252	282	312	342	372	402	432	462	492	522	552	582	612

Note: * Indicates dimensions for rectangular windows.

■ Total numbers of windows

		Number of windows (Column)																				
		1	2	3	4	5	6	7	8	9	10	-	-	-	-	-	-	-	-	-	-	
V type	T type	1	2	3	4	5	6	7	8	9	10	-	-	-	-	-	-	-	-	-	-	
	S.V type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
S.T type		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Number of windows (Row)	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
	3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	
	4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	
	5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
	6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	
	7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	
	8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160	
	9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	
	10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
	11	-	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187	198	209	220
	12	-	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
	13	-	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260
	14	-	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238	252	266	280
	15	-	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300
	16	-	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320
	17	-	17	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289	306	323	340
	18	-	18	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	360
	19	-	19	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380
	20	-	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400

Note: For H type, count two windows as one S type window.

Examples: 1. S-type Row: 6 Column: 14 Total: 84
2. T-type Row: 8 Column: 8 Total: 64
3. V-type Row: 5 Column: 18 Total: 90

H type (Half size)

S type (Square type)



Multi Display Lights

AP40F

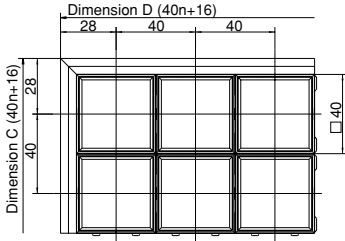
Dimensions

AP40F

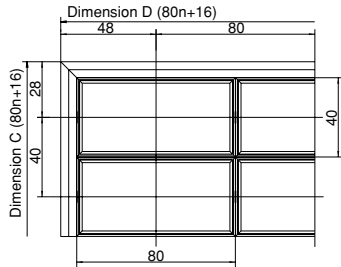
■ Dimensions, mm

Front view

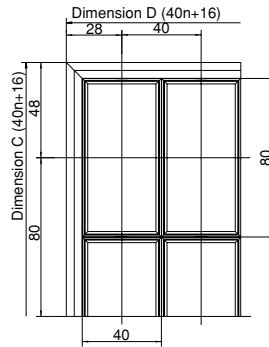
● S-type



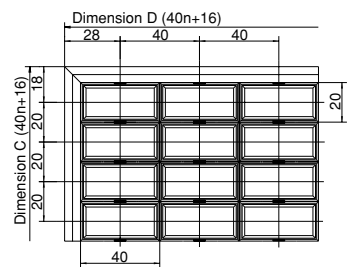
● T-type



● V-type

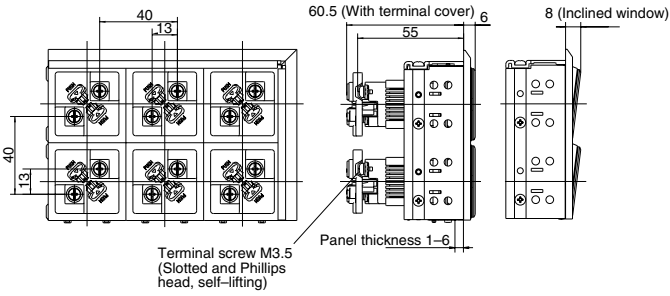


● H-type

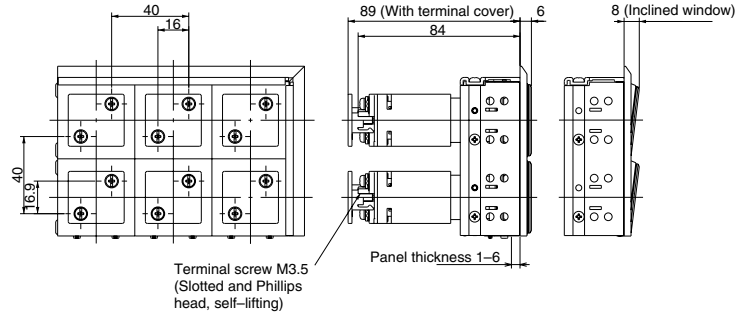


Back view

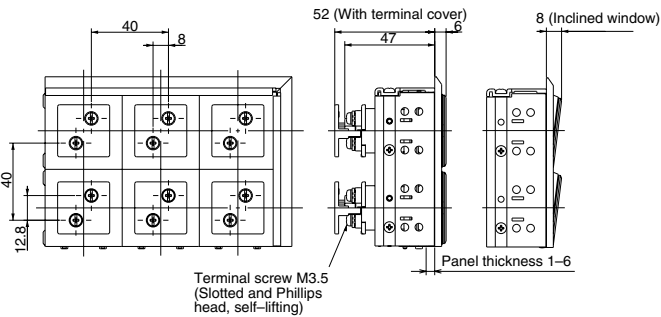
● Full-voltage type (LED)



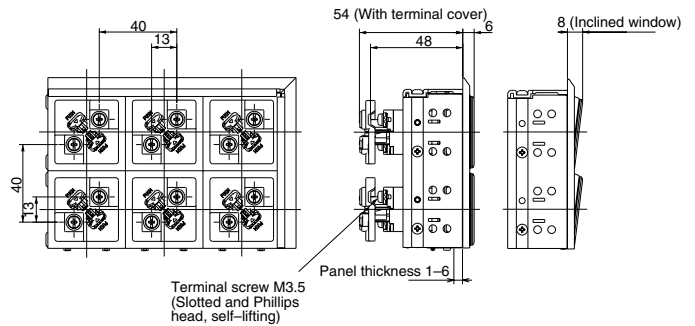
● With transformer unit, with resistor unit, with flicker unit, with voltage stabilizer unit



● Full-voltage type (LED, short body type)



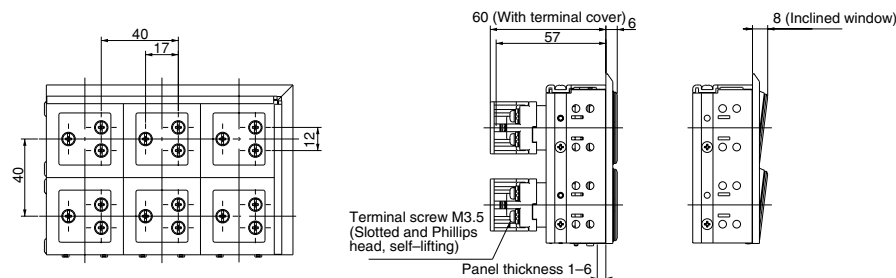
● Full-voltage type (Incandescent)



Half size (Illuminated face)

With check terminal

● Full-voltage type



AP40F

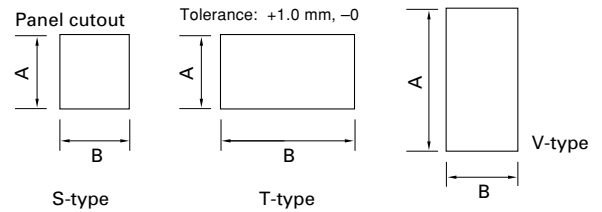
■ Panel cutout and overall dimensions

● S, H-type

Number of windows		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Panel cutout	A	45	85	125	165	205	245	285	–	–	–	–	–	–	–	–
	B	45	85	125	165	205	245	285	325	365	405	445	485	525	565	605
Overall	C	56	96	136	176	216	256	296	–	–	–	–	–	–	–	–
	D	56	96	136	176	216	256	296	336	376	416	456	496	536	576	616

● T-type

Number of windows		1	2	3	4	5	6	7
Panel cutout	A	45	85	125	165	205	245	285
	B*	85	165	245	325	405	485	565
Overall	C	56	96	136	176	216	256	296
	D*	96	176	256	336	416	496	576



● V-type

Number of windows		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Panel cutout	A*	85	165	245	–	–	–	–	–	–	–	–	–	–	–	–
	B	45	85	125	165	205	245	285	325	365	405	445	485	525	565	605
Overall	C*	96	176	256	–	–	–	–	–	–	–	–	–	–	–	–
	D	56	96	136	176	216	256	296	336	376	416	456	496	536	576	616

Note: * Indicates dimensions for rectangular windows.

■ Total numbers of windows

		S, V type		Number of windows (Column)																
		V type	T type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
S, T type				1	2	3	4	5	6	7	–									
Number of windows (Row)	1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
	2	2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30			
	3	3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45			
	4		4	8	12	16	20	24	28	32	36	40	44	48	52	56	60			
	5		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75			
	6	–	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90			
	7		7	14	21	28	35	42	49	56	63	70	77	84	91	98	105			

Note: For H Type, count two-windows as one S-type window.

H type (Half size) S type (Square type)



Multi Display Lights AP30F and AP40F Notes on use

■ Installation

Mounting panel

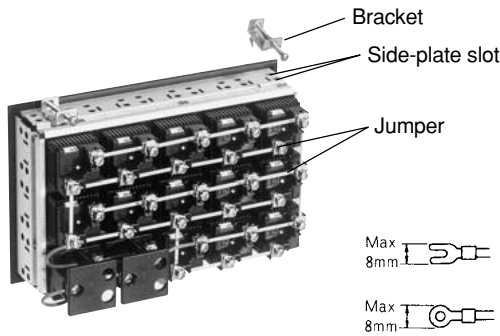
- Panel thickness: 1 to 6mm
- The panel thickness must be able to support the weight of the products and wiring cables. Take particular care in deciding the panel thickness when the products are heavy.

Panel cutout

Cut the mounting panel according to the numbers of rows and columns of windows. (See the dimensions on page 04/190 and 192.)

How to install

- Insert the product into the panel cutout from the front of the mounting panel. Make sure the product top and bottom are correctly oriented. The product nameplate is stuck to the top of the product.
- Fix the brackets into the side-plate slots at the back of the panel, as shown in the figure below, and clamp the product with the bracket screws. (Tightening torque : 0.4 to 0.6N•m)



■ Wiring

Terminal size

The M3.5 terminal screw is suitable for both phillips and slotted screwdrivers. The terminal washers are the self-lifting type. Use crimp terminals. (Tightening torque : 0.8 to 1.0N•m). Double crimp terminals can be connected.

Staggered terminals

Because the terminals are staggered, jumper connection is simple. Jumpers are supplied with products as standard. Rated current of jumper : 3A

■ Mass (g)

Mass of multi display light = [Voltage unit] × (rows × columns) + [Side plate] × (rows + columns)

AP30F

Description			Mass (g)
Voltage unit	Incandescent	Full-voltage type	29
		With transformer (short)	79
		With transformer	107
		With resistor unit	52
	LED	Full-voltage type	29
		With transformer	109
		Short body type	33
		With R/CR voltage dividing type	32
		2-color all surface illumination with check terminal half size	38
		With flicker unit	54
		With voltage stabilizer unit	54
		Side plate	27

The number of brackets required depends on the type as follows

Full-voltage type and transformer type with 1 to 20 lamps

Column	AP30F	01~02	03~08	09~15	16~20
Row	AP40F	01~02	03~06	07~11	12~15
AP30F	AP40F				
01~02	01~02				
03~06	03~04				
07~10	05~07				
11~15	-				
16~20	-				

Transformer type with 21 to 50 lamps

Rows or columns	1-2	3-4	5	6-8	9	10-12	13	14-16	17	18-20
Brackets required	1	2	3	4	5	6	7	8	9	10

The transformer type with over 20 lamps is very heavy and extra brackets are required. Fit brackets at equal intervals.

Transformer type with 51 to 80 lamps

Fit brackets in all slots.

AP40F

Description			Mass (g)	
Voltage unit	Incandescent	Full-voltage type	32	
		With transformer	110	
		With resistor unit	64	
		LED	Full-voltage type	38
			With transformer	121
			Short body type	33
	With R/CR voltage dividing type		32	
	2-color all surface illumination with check terminal half size		38	
	With flicker unit		67	
	With voltage stabilizer unit	67		
	Side plate		28	

■ **Replacing parts**

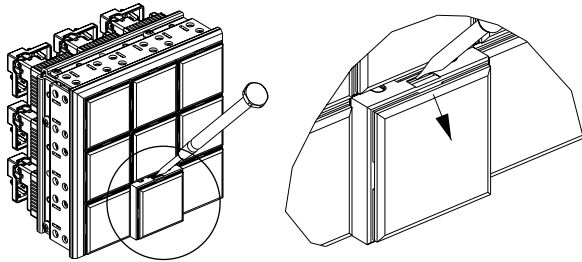
Detaching lens case

To remove a lamp, place the tip of a flat-blade screwdriver in the groove at the edge of the lens case and press it in the direction of the arrow. The tip of the screwdriver should be 4.5mm or less wide and 0.6mm or less thick.

To remove both the LED unit and lens case, place the tip of flat-blade screwdriver in one of the indents on the edges of the lens case and press it in the direction of the arrow.

When installing an LED unit, press it into the frame so that the LED unit side with the arrow faces the top side of the frame (i.e., the side with the unit type nameplate). The LED unit must be in the correct orientation when installing it.

After installing the lens case and lens, use your finger to press the lens part firmly until it stops in place. To prevent defective lighting or other problems caused by static electricity, do not press directly on the LED chip surface with your finger.



Using the specially-designed suction cup removal tool DN7Y020, replace a color insert and legend plate by applying the suction cup as shown in the diagram below.

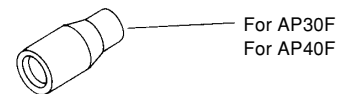


Do not touch the chip when the color insert is removed from the LED unit and the LED chip is exposed. Defective lighting or other problems may be caused by static electricity. Install a color insert and legend plate by inserting their rough surfaces so that they face the lamp.

04

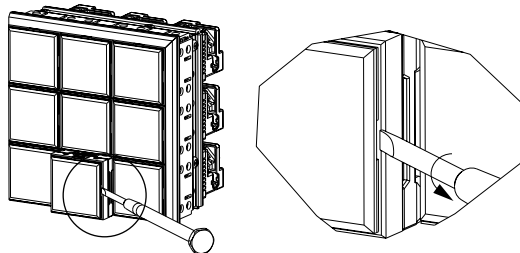
Replacing incandescent lamps

Insert and remove lamps using the hollow end of the lamp changer type AHX029.



■ **Replacing color inserts and legend plates**

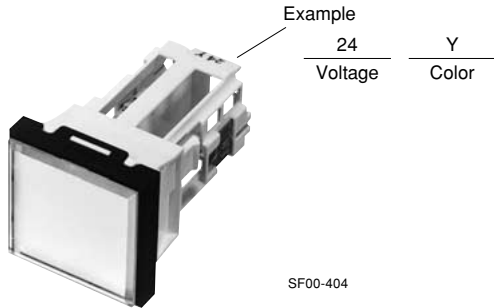
To replace a color insert and legend plate, insert a flat-blade screwdriver and press it to remove the lens.



Multi Display Lights AP30F and AP40F Notes on use

■ LED unit color display

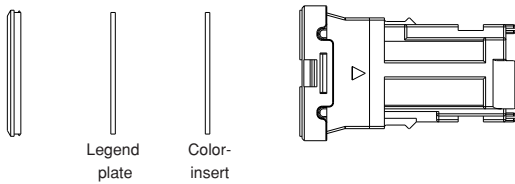
The operating voltage and lamp color are printed on the LED unit lamp using codes.



Color code Rated voltage code	Color code							
	R	A	W	Y	G	S	P	F
M	220R	220A	220W	220Y	220G	220S	220P	
L	127R	127A	127W	127Y	127G	127S	127P	
H	110R	110A	110W	110Y	110G	110S	110P	
F	48R	48A	48W	48Y	48G	48S	48P	
E	24R	24A	24W	24Y	24G	24S	24P	24F
C	15R	15A	15W	15Y	15G	15S	15P	
B	12R	12A	12W	12Y	12G	12S	12P	
6	6R	6A	6W	6Y	6G	6S	6P	
E (With check terminal)	24-RC	24-AC	24-WC	24-YC	24-GC	24-SC	24-PC	

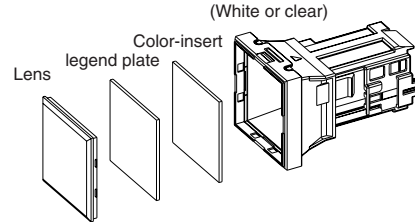
■ Installing color inserts and legend plate

Inserting a color insert and legend plate

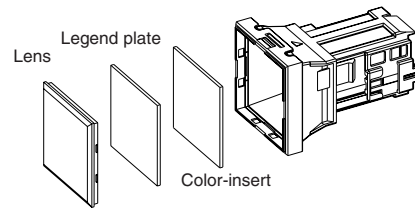


- For a color display when the lamp is OFF, insert first a color insert and then an opaque white legend plate into the lens case.
- For an opaque white display when the lamp is OFF, insert first a transparent color insert and then an opaque white legend plate into the lens case (only with LEDs).
- For smoked lenses, insert first a color insert and then an opaque white legend plate into the lens case.
- The legend plate and color inserts can be engraved.
- Do not touch the chip when the color insert is removed from the LED unit and the LED chip is exposed. Defective lighting or other problems may be caused by static electricity.

Opaque white display with the lamp off

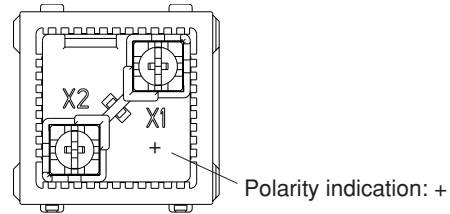


Color display with the lamp off



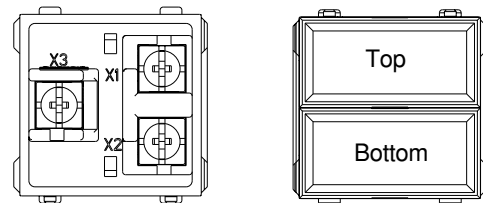
■ LED polarity

The terminals of all 6V DC voltage products and DC flicker units have polarity, so care is needed when installing them. X1 is the positive terminal.



■ Connecting color lamps and half-size lamp windows

Terminals	Light color from two-color lamp	Half-size lamp window
X1 to X3	Green	Top
X1 to X2	Red	Bottom



Assembling lens and lens case

Assemble the lens with lens case by mating lens projections with lens case indents.

■ **Other precautions**

1. Transformer units

- A maximum of 80 windows can function for a unit with transformers when the windows are square.
- Transformers are designed for a load of one incandescent lamp and one LED unit. It is not possible to connect additional loads.

2. Operating voltage and the rated voltage of incandescent lamp

- Incandescent lamps can be used within the lamp's rated voltage. If you need 5,000 to 10,000 hours of service life for incandescent lamp (at AC circuit), use the lamp within the standard operating voltage. Using incandescent lamps in DC circuit greatly reduces the lamp service life due to notching phenomenon. Use LED units in DC circuit instead.

Lamp rated voltage (V AC)	Standard operating voltage (V AC)
6.3	4 to 5.5
18	12 to 15
24	16 to 20
30	20 to 24

3. Flicker units

- When two or more flicker units are used in a Multi Display Light, they may not illuminate simultaneously because of variations in flicker unit circuits.
- Flicker units can be used only with square Multi Display Lights. They cannot be used with rectangular lights.

4. Continuous lighting

- For continuous light, the duty cycle should be 50% or less. If densely packed LEDs are lit continuously with a high duty cycle, LED life will be reduced.
- With 2-color lighting on the entire surface, do not use continuous lighting when lighting 2 colors simultaneously.

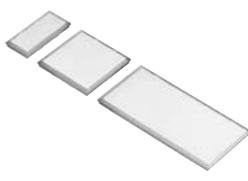

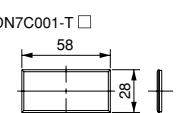
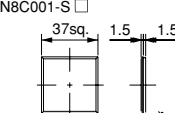
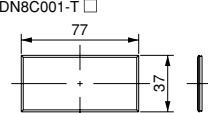
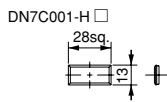
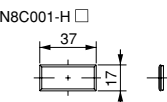
5. Store and operate these units within the temperature and humidity specifications on *page 04/188*.

6. Do not use these units at outdoor.

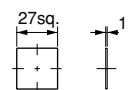
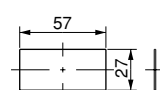
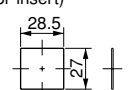
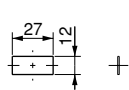
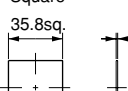
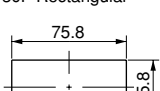
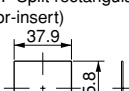
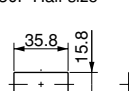
7. Do not use these units in places where dust or cuttings will accumulate. The lights may not turn ON if dust or cuttings penetrate into the units.

Multi Display Lights AP30F and AP40F Accessories


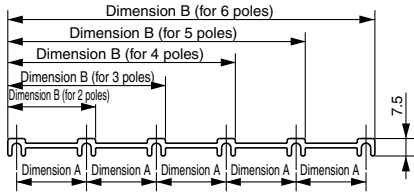

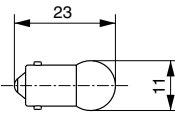
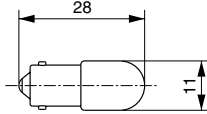

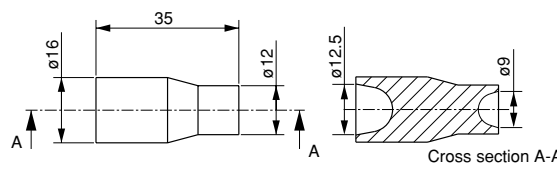

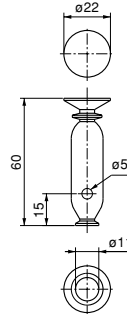
■ Accessory

Description	Type and dimensions, mm				
Lens 	Used with		Type		
			Square(S)	Rectangular(T,V)	Half size(H)
AF00-379	AP30F	Clear	DN7C001-SC	DN7C001-TC	DN7C001-HC
		Smoked	DN7C001-SS	DN7C001-TS	DN7C001-HS
	AP40F	Clear	DN8C001-SC	DN8C001-TC	DN8C001-HC
		Smoked	DN8C001-SS	DN8C001-TS	DN8C001-HS
		   			
		 			



Color-insert and legend plate	Color-insert							
	Used with	Code		Color	Type			
		LED	Incandescent		Square (S)	Rectangular (T, V)	2-way split rectangular	Half size (H)
AP30F	R	R		Red	APCX016-SR	APCX016-TR	APCX058-R	DN7P002-R
	O	O		Orange	APCX016-SO	APCX016-TO	APCX058-O	DN7P002-A
	P	W		White	APCX012-LW	APCX014-LW	APCX058-W	DN7P002-W
	G	—		Green (LED)	APCX016-SLG	APCX016-TLG	APCX058-LG	DN7P002-G
	—	G		Green (incandescent)	DN7P004-G	DN7P005-G	DN7P006-G	—
	Y	Y		Yellow	APCX016-SLY	APCX016-TLY	APCX058-LY	DN7P002-Y
	S	S		Blue	APCX016-SS	APCX016-TS	APCX058-S	DN7P002-S
	W, RG, C	—		Clear	APCX012-C	APCX014-C	APCX058-C	—
	W, C	—		Clear	—	—	—	DN7P002-C
	AP40F	R	R		Red	DN8P004-R	DN8P005-R	DN8P006-R
O		O		Orange	DN8P004-A	DN8P005-A	DN8P006-A	DN8P002-A
W, RG, C		W		White	APCX013-LW	APCX015-LW	APCX059-W	DN8P002-W
G		—		Green (LED)	APCX077-SG	APCX077-TG	APCX079-G	DN8P002-G
—		G		Green (incandescent)	DN8P004-G	DN8P005-G	DN8P006-G	—
Y		Y		Yellow	DN8P004-Y	DN8P005-Y	DN8P006-Y	DN8P002-Y
S		S		Blue	APCX017-SS	APCX017-TS	APCX059-S	DN8P002-S
P		—		White (LED)	APCX077-SW	APCX077-TW	APCX079-W	—
P		—		White	—	—	—	DN8P002-W
W, C		—		Clear	—	—	—	DN8P002-C

Legend plate				
Used with		Type		
		Square (S)	Rectangular (T, V)	Half size (H)
AP30F	Clear	APCX012-LW	APCX014-LW	DN7P002-W
	Smoked	APCX012-LWS	APCX014-LWS	DN7P002-WS
AP40F	Clear	APCX013-LW	APCX015-LW	DN8P002-W
	Smoked	APCX013-LWS	APCX015-LWS	DN8P002-WS
AP30F Square	AP30F Rectangular	AP30F Split rectangular (Color-insert)	AP30F Half size	
				
AP30F Square	AP30F Rectangular	AP30F Split rectangular (Color-insert)	AP30F Half size	
				

AF00-379

Description	Type and dimensions, mm					
Jumper 	Used with	Type				
		2 poles	3 poles	4 poles	5 poles	6 poles
	AP30F	APCX029	DN7Y001-03	DN7Y001-04	DN7Y001-05	DN7Y001-06
	AP40F	APCX030	DN8Y001-03	DN8Y001-04	DN8Y001-05	DN8Y001-06
	Jumper dimensions					
Used with	Dimension A	Dimension B				
		2 poles	3 poles	4 poles	5 poles	6 poles
AP30F series	30	37.6	67.6	97.6	127.6	157.6
AP40F series	40	47.6	87.6	127.6	167.6	207.6
						
AF00-379						
Incandescent lamp 	Used with	Socket type	Voltage/capacity	Type	Remarks	
	AP30F	BA9s/13 bayonet type	6.3V 1W	AHX135	Lamp with built-in transformer	
			18V 1W	AHX279	-	
			24V 1W	AHX144	-	
			30V 1W	AHX129	-	
			48V 1W	AHX407	Lamp with built-in resistor unit	
	AP40F		18V 2W	AHX141	Lamp with built-in transformer	
			24V 2W	AHX142	-	
			30V 2W	AHX143	-	
			48V 2W	DN7H001	Lamp with built-in resistor unit	
		For AP30F (except 48V 1W)	For AP40F, AP30F (48V 1W)			
						
AF00-383						
Lamp changer 	Used with	Type				
	AP30F, AP40F For incandescent lamp	AHX029				
T-1990						
Color-insert and legend plate changer 	Type	DN7Y020				
						
AF00-380						

Multi Display Lights AP30F and AP40F Accessories

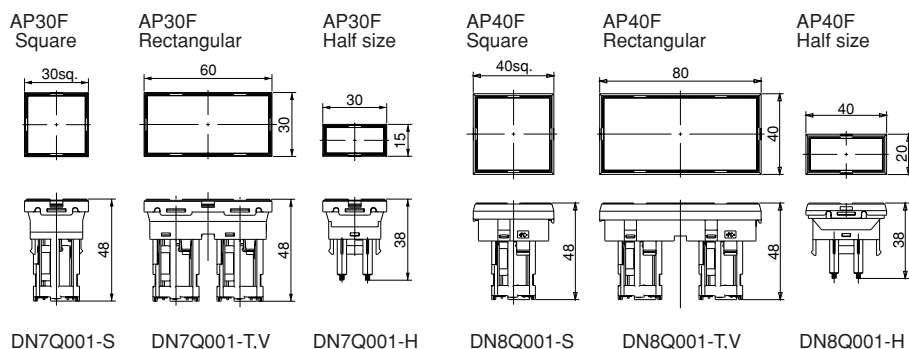
Description	Type and dimensions, mm								
LED unit	Used with	Emitted color	Color-insert specification	Type					
				Square(S)	Horizontal rectangular (T)	Vertical rectangular (V)	Half size(H)		
 AF00-374	AP30F Single color	Red	Color-insert (color when light turned OFF)	DN7Q001-S1□R	DN7Q001-T1□R	DN7Q001-V1□R	DN7Q001-H1□R		
		Orange		DN7Q001-S1□A	DN7Q001-T1□A	DN7Q001-V1□A	DN7Q001-H1□A		
		White		DN7Q001-S1□W	DN7Q001-T1□W	DN7Q001-V1□W	DN7Q001-H1□W		
		Green		DN7Q001-S1□G	DN7Q001-T1□G	DN7Q001-V1□G	DN7Q001-H1□G		
		Yellow		DN7Q001-S1□Y	DN7Q001-T1□Y	DN7Q001-V1□Y	DN7Q001-H1□Y		
		Blue		DN7Q001-S1□S	DN7Q001-T1□S	DN7Q001-V1□S	DN7Q001-H1□S		
	All surface illumination	Pure-white	DN7Q001-S1□P	DN7Q001-T1□P	DN7Q001-V1□P	DN7Q001-H1□P			
		Red	Color (transparent) -insert (white when light turned OFF)	DN7Q001-S3□R	DN7Q001-T3□R	DN7Q001-V3□R	DN7Q001-H3□R		
		Orange		DN7Q001-S3□A	DN7Q001-T3□A	DN7Q001-V3□A	DN7Q001-H3□A		
		Green		DN7Q001-S3□G	DN7Q001-T3□G	DN7Q001-V3□G	DN7Q001-H3□G		
		Yellow		DN7Q001-S3□Y	DN7Q001-T3□Y	DN7Q001-V3□Y	DN7Q001-H3□Y		
		Blue		DN7Q001-S3□S	DN7Q001-T3□S	DN7Q001-V3□S	DN7Q001-H3□S		
		 AF00-373	AP40F Single color	Red	Color-insert (color when light turned OFF)	DN8Q001-S1□R	DN8Q001-T1□R	DN8Q001-V1□R	DN8Q001-H1□R
				Orange		DN8Q001-S1□A	DN8Q001-T1□A	DN8Q001-V1□A	DN8Q001-H1□A
White	DN8Q001-S1□W			DN8Q001-T1□W		DN8Q001-V1□W	DN8Q001-H1□W		
Green	DN8Q001-S1□G			DN8Q001-T1□G		DN8Q001-V1□G	DN8Q001-H1□G		
Yellow	DN8Q001-S1□Y			DN8Q001-T1□Y		DN8Q001-V1□Y	DN8Q001-H1□Y		
Blue	DN8Q001-S1□S			DN8Q001-T1□S		DN8Q001-V1□S	DN8Q001-H1□S		
All surface illumination	Pure-white		DN8Q001-S1□P	DN8Q001-T1□P	DN8Q001-V1□P	DN8Q001-H1□P			
	Red		Color (transparent) -insert (white when light turned OFF)	DN8Q001-S3□R	DN8Q001-T3□R	DN8Q001-V3□R	DN8Q001-H3□R		
	Orange			DN8Q001-S3□A	DN8Q001-T3□A	DN8Q001-V3□A	DN8Q001-H3□A		
	Green			DN8Q001-S3□G	DN8Q001-T3□G	DN8Q001-V3□G	DN8Q001-H3□G		
	Yellow			DN8Q001-S3□Y	DN8Q001-T3□Y	DN8Q001-V3□Y	DN8Q001-H3□Y		
	Blue			DN8Q001-S3□S	DN8Q001-T3□S	DN8Q001-V3□S	DN8Q001-H3□S		

Notes: The LED unit is provided with a lens case and a color-insert.

Replace the □ in the type number with one of the following voltage code.



Voltage	Code	Square, horizontal/ vertical rectangular	Half size
6V DC	6	○	—
12V AC/DC	B	○	○
15V AC/DC	C	○	○
24V AC/DC	E	○	○
48V AC/DC	F	○	—
110V AC/DC	H	○	—
127V AC/DC	L	○	—
220V AC	M	○	—

○: Available —:Not available



Multi Display Lights AP30F and AP40F Accessories

04

Description	Type and dimensions, mm								
LED unit	Used with	Emitted color	Color-insert specification	Type					
				Square(S)	Horizontal rectangular (T)	Vertical rectangular (V)			
 <p>AF00-376</p>	AP30F LED transformer units	Red	Color-insert (color when light turned OFF)	DN7Q004-S1ER	DN7Q004-T1ER	DN7Q004-V1ER			
		Orange		DN7Q004-S1EA	DN7Q004-T1EA	DN7Q004-V1EA			
		White		DN7Q004-S1EW	DN7Q004-T1EW	DN7Q004-V1EW			
		Green		DN7Q004-S1EG	DN7Q004-T1EG	DN7Q004-V1EG			
		Yellow		DN7Q004-S1EY	DN7Q004-T1EY	DN7Q004-V1EY			
		Blue		DN7Q004-S1ES	DN7Q004-T1ES	DN7Q004-V1ES			
	LED short body type	Pure-white	DN7Q004-S1EP	DN7Q004-T1EP	DN7Q004-V1EP				
		Red	Color (transparent) -insert (white when light turned OFF)	DN7Q004-S3ER	DN7Q004-T3ER	DN7Q004-V3ER			
		Orange		DN7Q004-S3EA	DN7Q004-T3EA	DN7Q004-V3EA			
		Green		DN7Q004-S3EG	DN7Q004-T3EG	DN7Q004-V3EG			
		Yellow		DN7Q004-S3EY	DN7Q004-T3EY	DN7Q004-V3EY			
		Blue		DN7Q004-S3ES	DN7Q004-T3ES	DN7Q004-V3ES			
		 <p>AF00-375</p>		AP40F LED transformer units	Red	Color-insert (color when light turned OFF)	DN8Q004-S1ER	DN8Q004-T1ER	DN8Q004-V1ER
					Orange		DN8Q004-S1EA	DN8Q004-T1EA	DN8Q004-V1EA
White	DN8Q004-S1EW				DN8Q004-T1EW		DN8Q004-V1EW		
Green	DN8Q004-S1EG		DN8Q004-T1EG		DN8Q004-V1EG				
Yellow	DN8Q004-S1EY		DN8Q004-T1EY		DN8Q004-V1EY				
Blue	DN8Q004-S1ES		DN8Q004-T1ES		DN8Q004-V1ES				
LED short body type	Pure-white		DN8Q004-S1EP	DN8Q004-T1EP	DN8Q004-V1EP				
	Red		Color (transparent) -insert (white when light turned OFF)	DN8Q004-S3ER	DN8Q004-T3ER	DN8Q004-V3ER			
	Orange			DN8Q004-S3EA	DN8Q004-T3EA	DN8Q004-V3EA			
	Green			DN8Q004-S3EG	DN8Q004-T3EG	DN8Q004-V3EG			
	Yellow			DN8Q004-S3EY	DN8Q004-T3EY	DN8Q004-V3EY			
	Blue			DN8Q004-S3ES	DN8Q004-T3ES	DN8Q004-V3ES			

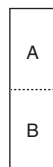
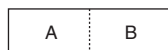
Note: The LED unit is provided with a lens case and a color-insert.

Used with	Horizontal rectangular	Vertical rectangular	Remarks
AP30F	DN7Q001-T- <input type="checkbox"/> AB	DN7Q001-V- <input type="checkbox"/> AB	Full-voltage type (R/CR voltage dividing)*
2-way split illumination	DN7Q004-T- <input type="checkbox"/> EAB	DN7Q004-V- <input type="checkbox"/> EAB	Short body type for transformer unit
AP40F	DN8Q001-T- <input type="checkbox"/> AB	DN8Q001-V- <input type="checkbox"/> AB	Full-voltage type (R/CR voltage dividing)*
2-way split illumination	DN8Q004-T- <input type="checkbox"/> EAB	DN7Q008-V- <input type="checkbox"/> EAB	Short body type for transformer unit

: Color-insert specification codes: Colored = 2, Transparent or white: 4
: Specify the voltage codes. See page 04/200.
: Specifying colors for 2-way split illumination.

* For dimensions, See page 04/200.

Horizontal rectangular (T) 2-way split illumination Vertical rectangular (V) 2-way split illumination



Specify the colors by replacing "A" and "B" with the corresponding symbols.
 Red: R, Green: G, Orange: A, White: W, Yellow: Y, Blue: S, Pure white: P

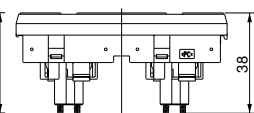
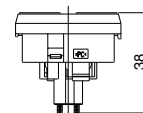
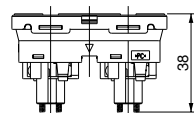
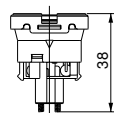
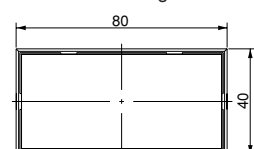
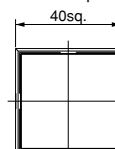
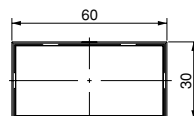
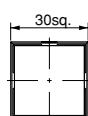
Example
 DN7Q001-T2ERG: AP30F horizontal rectangular type with 2-way split illumination with red on the left and green on the right.

AP30F Square

AP30F Rectangular

AP40F Square

AP40F Rectangular





DN7Q004-S

DN7Q004-T,V

DN8Q004-S

DN8Q004-T,V

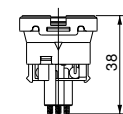
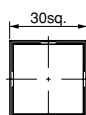
Multi Display Lights AP30F and AP40F Accessories

Description	Type and dimensions, mm								
LED unit	Used with	Emitted color	Color-insert specification	Type					
				Square(S)	Horizontal rectangular (T)	Vertical rectangular (V)	Half size(H)		
 <p>AF00-376</p>	AP30F Single color All surface illumination with a check terminal (full voltage only 24V type)	Red	Color-insert (color when light turned OFF)	DN7Q003-S1ER	DN7Q003-T1ER	DN7Q003-V1ER	–		
		Orange		DN7Q003-S1EA	DN7Q003-T1EA	DN7Q003-V1EA	–		
		White		DN7Q003-S1EW	DN7Q003-T1EW	DN7Q003-V1EW	–		
		Green		DN7Q003-S1EG	DN7Q003-T1EG	DN7Q003-V1EG	–		
		Yellow		DN7Q003-S1EY	DN7Q003-T1EY	DN7Q003-V1EY	–		
		Blue		DN7Q003-S1ES	DN7Q003-T1ES	DN7Q003-V1ES	–		
		Pure-white		DN7Q003-S1EP	DN7Q003-T1EP	DN7Q003-V1EP	–		
		Red	Color (transparent)-insert (white when light turned OFF)	DN7Q003-S3ER	DN7Q003-T3ER	DN7Q003-V3ER	–		
		Orange		DN7Q003-S3EA	DN7Q003-T3EA	DN7Q003-V3EA	–		
		Green		DN7Q003-S3EG	DN7Q003-T3EG	DN7Q003-V3EG	–		
		Yellow		DN7Q003-S3EY	DN7Q003-T3EY	DN7Q003-V3EY	–		
		Blue		DN7Q003-S3ES	DN7Q003-T3ES	DN7Q003-V3ES	–		
		AP40F Single color All surface illumination with a check terminal (full voltage only 24V type)							
		 <p>AF00-375</p>		Red	Color-insert (color when light turned OFF)	DN8Q003-S1ER	DN8Q003-T1ER	DN8Q003-V1ER	–
Orange	DN8Q003-S1EA		DN8Q003-T1EA	DN8Q003-V1EA		–			
White	DN8Q004-S1EW		DN8Q003-T1EW	DN8Q003-V1EW		–			
Green	DN8Q003-S1EG		DN8Q003-T1EG	DN8Q003-V1EG		–			
Yellow	DN8Q003-S1EY		DN8Q003-T1EY	DN8Q003-V1EY		–			
Blue	DN8Q003-S1ES		DN8Q003-T1ES	DN8Q003-V1ES		–			
Pure-white	DN8Q003-S1EP		DN8Q003-T1EP	DN8Q003-V1EP		–			
Red	Color (transparent)-insert (white when light turned OFF)		DN8Q003-S3ER	DN8Q003-T3ER	DN8Q003-V3ER	–			
Orange			DN8Q003-S3EA	DN8Q003-T3EA	DN8Q003-V3EA	–			
Green			DN8Q003-S3EG	DN8Q003-T3EG	DN8Q003-V3EG	–			
Yellow			DN8Q003-S3EY	DN8Q003-T3EY	DN8Q003-V3EY	–			
Blue			DN8Q003-S3ES	DN8Q003-T3ES	DN8Q003-V3ES	–			

Note: The LED unit is provided with a lens case and a color-insert.

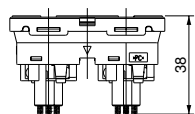
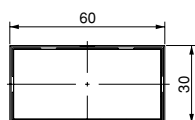
Used with	Emitted color	Type		
		Square(S)	Horizontal rectangular (T)	Vertical rectangular (V)
AP30F 2-color illumination	Red and green	DN7Q002-S3EF	DN7Q002-T3EF	DN7Q003-V3EF
AP40F 2-color illumination	Red and green	DN8Q002-S3EF	DN8Q002-T3EF	DN8Q003-V3EF

AP30F Square



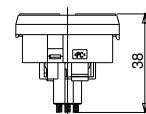
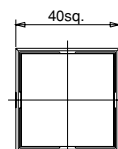
DN7Q002-S
DN7Q003-S

AP30F Rectangular



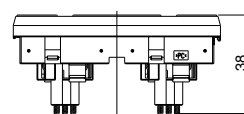
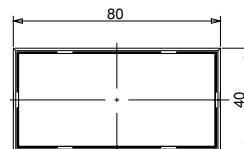
DN7Q002-T,V
DN7Q003-T,V

AP40F Square


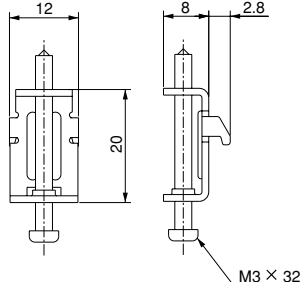

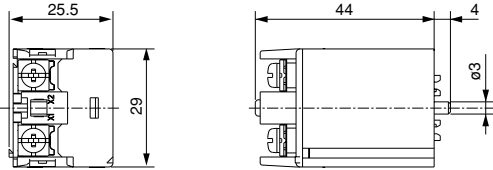

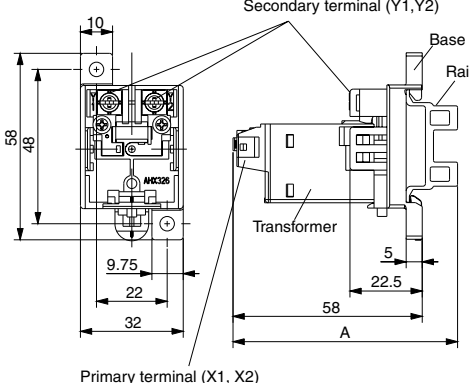


DN8Q002-S
DN8Q003-S

AP40F Rectangular



DN8Q002-T,V
DN8Q003-T,V

Description	Type and dimensions, mm																						
<p>Mounting bracket</p>  <p>AF00-384</p>	<p>Type</p> <p>APX111</p>																						
<p>Transformer unit</p>  <p>SF-1111</p>	<p>Type</p> <p>AX511-□ AX503-□ AX544-□</p>		<p>Note: Replace the □ mark in the type number with the voltage code.</p> 																				
<table border="1"> <tr> <td>Voltage</td> <td>100 to 110V</td> <td>115 to 127V</td> <td>200 to 220V</td> <td>230 to 254V</td> <td>350 to 380V</td> <td>400 to 440V</td> <td>480</td> </tr> <tr> <td>Code</td> <td>H</td> <td>L</td> <td>M</td> <td>Q</td> <td>S</td> <td>T</td> <td>V</td> </tr> </table>								Voltage	100 to 110V	115 to 127V	200 to 220V	230 to 254V	350 to 380V	400 to 440V	480	Code	H	L	M	Q	S	T	V
Voltage	100 to 110V	115 to 127V	200 to 220V	230 to 254V	350 to 380V	400 to 440V	480																
Code	H	L	M	Q	S	T	V																
<p>Base unit for separate mounting transformer</p>  <p>AF89-824</p>	<p>Type</p> <p>AHX326</p>		<p>Remarks</p> <ul style="list-style-type: none"> If the power supply voltage is 100V AC or over (or more than 220V for R or CR voltage-dividing types) and the panel has limited depth or there are weight limitations, a full-voltage type can be used with a separate mounted transformer, as shown in the following table below. A base unit is required when combining with a transformer unit. Mounting is possible using screws or rail. <table border="1"> <tr> <td>Rail type</td> <td>A (mm)</td> </tr> <tr> <td>TH35-15AL</td> <td>68</td> </tr> <tr> <td>TH35-7.5, AH35-7.5AL</td> <td>60.5</td> </tr> </table> 					Rail type	A (mm)	TH35-15AL	68	TH35-7.5, AH35-7.5AL	60.5										
Rail type	A (mm)																						
TH35-15AL	68																						
TH35-7.5, AH35-7.5AL	60.5																						

■ Separate mounted transformer application table




Used with	LED specification				Incandescent specification			
	Applicable light type	Built-in unit	Transformer unit	Separate base	Applicable light type	Built-in light bulb	Transformer unit	Separate base
AP30F	AP30F-◇◆E3-● AP30F-◇◆ES-●	DN7Q001-□□□□ DN7Q004-□□□□	AHX544-□× No. of windows	AHX326× No. of windows	AP30F-◇◆A-● AP30F-◇◆C-●	AHX135 (6.3 V 1W bulb)	AHX511-□× No. of windows	AHX326× No. of windows
AP40F	AP40F-◇◆E3-● AP40F-◇◆ES-●	DN8Q001-□□□□ DN8Q004-□□□□				AHX141 (18 V 2W bulb)	AHX503-□× No. of windows	

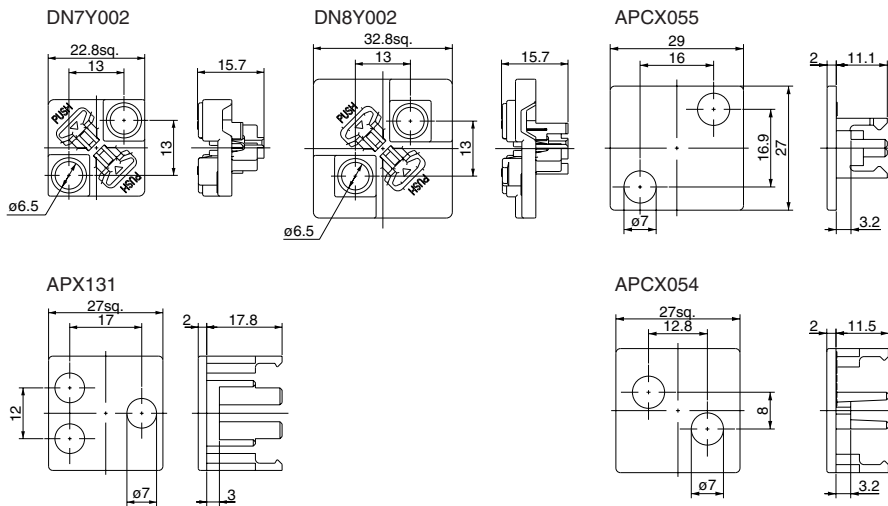
- Notes:
1. Replace ◇◆ mark by the number of basic windows. ◇◆ = vertical x horizontal
 2. Replace ● mark by the code indicating the shape of illuminated face (S, T, or V, do not specify H).
 3. The following depths are available. AP30F-◇◆E3: 60.5mm AP30F-◇◆ES: 52mm AP30F-◇◆A: 54mm
AP40F-◇◆E3: 60.5mm AP40F-◇◆ES: 52mm AP40F-◇◆C: 54mm
 4. Refer to pages 04/200 and 04/201 for built-in unit types with LED specifications.

Multi Display Lights

AP30F and AP40F

Accessories

Description	Type and dimensions, mm						
Terminal cover	Series	Description	DN7Y002	APCX054	APX131	DN8Y002	APCX055
 AF00-389	AP30F	LED single-color, full-surface illumination	Full-voltage type R, CR voltage dividing type	○			
		Transformer type					○
		Half-size, 2-color illumination	Full-voltage type		○		
		LED short body type	Full-voltage type	○			
 AF00-388		Incandescent lamp	Full-voltage type	○			
	Transformer type 110V, 220V		○				
	Transformer type over than 220V						○
	AP40F	LED single-color, full-surface illumination	Full-voltage type R, CR voltage dividing type			○	
		Transformer type					○
 AF00-387		Half-size, 2-color illumination	Full-voltage type		○		
		LED short body type	Full-voltage type	○			
		Incandescent lamp	Full-voltage type			○	
	Transformer type						○



■ **Window layout ordering sheet**

When ordering Multi Display Lights, fill in the necessary items in this ordering sheet on Page 04/206. (It is also recommended that you make copies of the sheet for future use.)

Cases in which you should order with the ordering sheet

- When ordering a mixture of LED luminous colors
- When ordering a mixture of window sizes in the illumination face
- When ordering a mixture of two-color illumination faces
- When ordering a mixture of input voltages
- When requesting embossed characters

Filling in the ordering sheet

1. Use lines to designate the borders of the illumination face.
2. Write the color code (G, R, W, Y, O, S) for each window into the bottom row of the window. For T and V types, write the code in only one place.
3. If you are requesting embossed characters, write the characters into the table.
4. For windows requiring more than 7 (vertical) or 15 (horizontal) spaces, continue writing on a separate ordering sheet.
5. Write in two places for a two-split illumination type.
6. When using a flicker unit or a voltage stabilizer unit, write the unit code into the bottom row of the window.

Specification example

		Horizontally(Column)														
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Vertically(Row)	01	RUN R	STOP G													
	02	FWD W	REV E3FD	R G	Y O											
	03	MONIT-1		MONIT-2												
	04	↑ Designate the borders of the illumination face with lines.														
	05															
	06															
	07															

Example of flicker unit voltage.

Multi Display Lights AP30F and AP40F Window layout sheet

■ Window layout ordering sheet

		Horizontally(Column)														
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Vertically(Row)	01															
	02															
	03															
	04															
	05															
	06															
	07															