

GREEGOO **ELECTRIC**

The Power Management Leader

Operator Interface Components
Introduction





Company Profile

GREEGOO Electric Co., Ltd, located in Wenzhou, the electric capital of China, is specialized in developing, manufacturing and distributing operator interface components, such as pilot lights, push buttons, selector switches, control stations, based LED bulbs, LED display, LED sign tower, motor siren, buzzer and cabinet lock etc. along with about 10,000 components.

Owning skilled workers, advanced equipment and strict quality control process, GREEGOO has passed ISO9001:2000 and obtained CE and ROHS approval. Our products are enjoying high popularity in Russia, France, Italy, Spain, Australia, India, Singapore, Thailand, Korea, Iran, Saudi, South Africa and Brazil etc. Especially, our push button and pilot lights have been cooperating well with GE in USA, CPT in Korea and Hitech in Singapore, Zimpex in Thailand and win good reputation from the buying public.

GREEGOO in Chinese means "Honest, Prosperous and Fortunate". While retrospecting to its origin, GREEGOO pronounces similar to the Chinese name of SILICON VALLEY in USA and is a symbol of high technology & excellent quality. Based on it, GREEGOO will march forward steadily in international market with customers all over the world hand by hand!

**Push buttons, selector switches and pilot lights**

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Application range

GB series push button, pilot light, selector switch and control station are used in industrial controlling circuits of AC50Hz or 60Hz with rated working voltage up to 380V and rated DC working current up to 220V, to act as the controller of magnetic controllers, contactors, relays and other electrical circuits. Buttons with pilot light can also be used under the condition of light signal indicating. The products conform to IEC60947-5-1 standards.

Normal working conditions

- Conform to standards: IEC60947-5-1, GB/T 14048.5-93
- Ambient temperature: -5°C ~ +40°C, the average temperature during 24 hours couldn't exceed +35°C
- Altitude: Altitude of installation couldn't exceed 2000m
- Atmosphere condition: Relative humidity of the atmosphere couldn't exceed 50%, when the highest temperature is +40°C; much higher relative humidity is allowable under the condition of lower temperature, for example, when the temperature reaches +20°C, the relative humidity is up to 90%. As for dews, which contingently appear due to change of temperature, special steps should be taken.
- Pollution grade: Grade III
- Installation class: Class I

Type and meanings

GB	2	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	

- 1: Company code
- 2: Design sequence number
- 3: Structure classes:
GB2-B/GB4: Metal head
GB2-E/GB5: Plastic head
- 4: Derivative type
- 5: Specification code

Main technical parameters

Rated insulation voltage Ui		250V					
Conventional heating current Ith		10A					
Rated working voltage		380V	220V	110V	48V	24V	
Rated working current Ie	AC-15	2.5A	4.5A	6A	8A	-	
	DC-13	-	0.3A	0.6A	1.3A	2.5A	

Rated voltage	Direct type							Resistant type	Transformer type
	6	12	24	48	110	220	380		
Lamp-house	6	12	24	48	110	220	380	220	220 380
LED light	✓	✓	✓	-	-	-	-	-	✓
	-	-	-	-	✓	✓	✓	✓	-
Neon light	-	-	-	-	✓	✓	✓	✓	-
Incandescence light	✓	✓	✓	✓	✓	✓	✓	-	✓

- Industrial frequency voltage withstands: 2500V AC, one minute
- Contactor resistance: $\leq 50\text{m}\Omega$ (Initiative value)
- Mechanical durability: Flush head style, mushroom head style 1,000,000 times, style with light 300,000 times, others 100,000times
- Electric durability: Flush head style, mushroom head style, and double heads style AC500,000 times, DC 200,000 times, others 100,000 times
- Protection grade: IP40

Derivative type and specification code

Derivative type	Specification code		
A: Flush push button L: Extended push button P: Booted push button C: φ 40 mushroom push button R: φ 60 mushroom push button	1: W ○ 2: B ● 3: G ● 4: R ● 5: Y ● 6: S ●	1: NO 2: NC 3: 2NO 4: 2NC 5: NO+NC	-
S: Mushroom push and turn to release	4: φ 30 5: φ 40 6: φ 60	4: ● (Red)	2: NC
D: Selector switch (standard handle) J: Selector switch (long handle) G: Key switch	2: 2 position lock up 3: 3 position lock up 4: 2 position spring return 5: 3 position spring return	1: NO 2: NC 3: 2NO 4: 2NC 5: NO+NC	-
L8: Button with double heads	3: Flush button 4: Flush button+ Extended button	4: ● R+ ● G	5: NO+NC
W3: Button with light	1: W ○ 3: G ● 4: R ● 5: Y ● 6: S ●	4: 220V transformer type 5: 380V transformer type 6: Direct type 7: Resistant type	1: NO 2: NC 3: 2NO 4: 2NC 5: NO+NC
W8: Button with double heads and light	4: Flush button + Extended button	4: 220V transformer type 5: 380V transformer type 6: Direct type 7: Resistant type	5: NO+NC
V: Pilot light	4: 220V transformer type 5: 380V transformer type 6: Direct type 7: Resistant type	1: W ○ 3: G ● 4: R ● 5: Y ● 5: S ●	-
V1: Economic pilot light	6: Direct type	1: W ○ 3: G ● 4: R ● 5: Y ● 5: S ●	-
CA: Contact block	101: NO contact group 102: NC contact group	-	-

Structure and performance

- Adopting anti-moving operation head, the button can't be dismounted from the front side of metal button
- All contacts can play the dual funtions of circuits switching and self-cleaning, this under the condition of low voltage and small current flow(5V, 5mA), application for the products ensures reliabilty of contacting.
- NO and NC contactor groups are independent to each other, and they can be freely combined with each other according to customers' demands. It features for easy replacement.
- Concealed terminals make its operation much safer and more reliable. Adopting Zinc and aluminum alloymetal on its metal head style acting head and its foundation, the pushbutton switch features for elegant appearance and firmness.
- Button with light, signal light universally adopt BA9S light-socket, customers can choose various bulbs according to their demands.

Push buttons with marking

Shape of head	Description	Contact			Marking Text (colour)	Colour	Sold in lots of	Model	Weight (kg)
		↓ N/O	↑ N/C	↔ C/O					

Spring return push buttons



	Flush	1	-	-	START (white)	Green	10	GB7 EA3133P	0.020
	Flush	-	1	-	STOP (white)	Red	10	GB7 EA4234P	0.020
		-	-	-					
	Flush	1	-	-	↑ (black)	White	10	GB7 EA11341P	0.020
		-	-	1			10	GB7 EA15341P	0.020
	Flush	1	-	-	↓ (white)	Black	10	GB7 EA21341P	0.020
		-	-	1			10	GB7 EA25341P	0.020
	Flush	1	-	-	I(white)	Green	10	GB7 EA3131P	0.020
		2	-	-			10	GB7 EA3331P	0.020
	Flush	1	-	-	II(white)	Green	10	GB7 EA3136P	0.020
		2	-	-			10	GB7 EA3336P	0.020
	Projecting	-	1	-	O(white)	Red	10	GB7 EL4232P	0.020
		-	-	1			10	GB7 EL4532P	0.020

Push buttons without marking

Shape of head	Description	Contact			Colour	Sold in lots of	Model	Weight (kg)
		↓ N/O	↑ N/C	↔ C/O				

Spring return push buttons



	Flush	1	-	-	Black	10	GB7 EA21P(1)	0.020
		Green	10		GB7 EA31P(1)			0.020
		Yellow	10		GB7 EA51P(1)			0.020
		-	1	-	Red	10	GB7 EA42P(1)	0.020
		-	-	1	Black	10	GB7 EA25P	0.020
					Green	10	GB7 EA35P	0.020
					Red	10	GB7 EA45P	0.020
		2	-	-	Black	10	GB7 EA23P	0.020
					Green	10	GB7 EA33P	0.020

Push and push-to release buttons

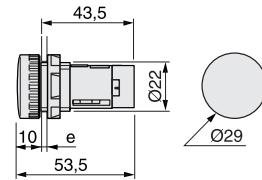
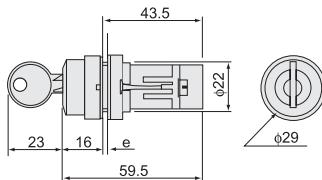
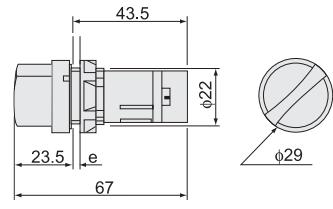
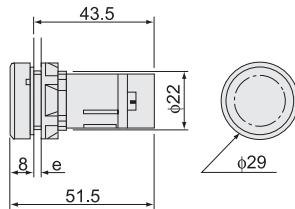
	Flush	1	-	-	Black	10	GB7 EH21P	0.020
		Green	10		GB7 EH31P			0.020
		-	-	1	Black	10	GB7 EH25P	0.020
					Green	10	GB7 EH35P	0.020

(1) For fasten connection version (1 x 6.35 mm and 2 x 2.8 mm), add the number "3" to the end of the reference. Example: GB7 EA21P3.



Pilot lights with BA9S base fitting

Shape of head	Supply	Description	Supply voltage	Colour	Sold in lots of	Model	Weight (kg)
	Direct(2)	For incandescent bulb not included(2) BA9S base fitting	< 250V	White	10	GB7 EV61P(1)	0.018
				Green	10	GB7 EV63P(1)	0.018
				Red	10	GB7 EV64P(1)	0.018
				Yellow	10	GB7 EV65P(1)	0.018
				Blue	10	GB7 EV66P(1)	0.018
				Clear	10	GB7 EV67P(1)	0.018
				Orange	10	GB7 EV68P(1)	0.018
	Direct, through resistor	With incandescent bulb 130V-2.6W included BA9S base fitting	~230 50/60Hz	White	10	GB7 EV71P(1)	0.020
				Green	10	GB7 EV73P(1)	0.020
				Red	10	GB7 EV74P(1)	0.020
				Yellow	10	GB7 EV75P(1)	0.020
				Blue	10	GB7 EV76P(1)	0.020
				Clear	10	GB7 EV77P(1)	0.020
				Orange	10	GB7 EV78P(1)	0.020
		Bulb, 130V-2.6W not included BA9S base fitting	~230 50/60Hz	White	10	GB7 EV710P	0.020
				Green	10	GB7 EV730P	0.020
				Red	10	GB7 EV740P	0.020
				Yellow	10	GB7 EV750P	0.020
				Blue	10	GB7 EV760P	0.020
				Clear	10	GB7 EV770P	0.020

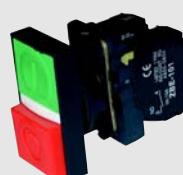


Operator Interface Components

GB5 series push button, selector switch, pilot light

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Non-illuminated Push buttons, Momentary (screw clamp terminal connections)

Description	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Flush	1		● B	GB5-AA21	0.065	<p>Technical drawing showing front view dimensions: height 51, width 23.6, depth 30. Side view dimensions: height 41.5, width 30.</p>
	1		● G	GB5-AA31	0.065	
	1		● Y	GB5-AA51	0.065	
	1		● S	GB5-AA61	0.065	
	1	1	● R	GB5-AA42	0.065	
	1	1	● G	GB5-AA35	0.080	
Flush logo	1		● G	GB5-AA3311	0.065	<p>Technical drawing showing front view dimensions: height 51, width 23.6, depth 30. Side view dimensions: height 41.5, width 30.</p>
	1		● G	GB5-AA3361	0.065	
	1		↑ W	GB5-AA3341	0.065	
	1		↓ B	GB5-AA3351	0.065	
	1	1	○ R	GB5-AA4322	0.065	
	1	1	STOP R	GB5-AA4342	0.065	
Flush with clear silica gel	1		● B	GB5-AP21	0.067	<p>Technical drawing showing front view dimensions: height 60, width 30. Side view dimensions: height 17.5, width 41.5.</p>
	1		● G	GB5-AP31	0.067	
	1		● Y	GB5-AP51	0.067	
	1		● S	GB5-AP61	0.067	
	1		● R	GB5-AP42	0.067	
	1	1	● Y	GB5-AP55	0.082	
	2		○ W	GB5-AP13	0.082	
	2		● B	GB5-AP24	0.082	
Extended	1		● B	GB5-AL21	0.066	<p>Technical drawing showing front view dimensions: height 56, width 30. Side view dimensions: height 13.5, width 41.5.</p>
	1		● G	GB5-AL31	0.066	
	1		● Y	GB5-AL51	0.066	
	1		● S	GB5-AL61	0.066	
	1	1	● R	GB5-AL42	0.066	
	1	1	● Y	GB5-AL55	0.081	
	2		○ W	GB5-AL13	0.081	
	2		● B	GB5-AL24	0.081	
Mushroom φ 40mm	1		● B	GB5-AC21	0.107	<p>Technical drawing showing front view dimensions: height 80.5, width 38.5. Side view dimensions: height 40, width 47.</p>
	1		● G	GB5-AC31	0.107	
	1		● R	GB5-AC42	0.107	

Two Button Push buttons, Momentary (screw clamp terminal connections)

Description	Contact		Scheme	Degree of protection	Model	Weight (kg)	Dimension
	N/O	N/C					
One flush green push (marked "I") One extended red push (marked "O")	1	1	○ -	IP40	GB5-AL845	0.091	<p>Technical drawing showing front view dimensions: height 56, width 30. Side view dimensions: height 13.5, width 47.</p>
	1	1	○ -	IP66	GB5-AL945	0.096	

Non-illuminated Emergency Stop Mushroom Head Push buttons (Red)


Description	Contact		Dia	Model	Weight (kg)	Dimension
	N/O	N/C				
Push-pull		1	φ 40	GB5-AT42	0.110	
Trigger action push-pull	1	1	φ 40	GB5-AT845	0.110	
	1	1	φ 60	GB5-AX42	0.110	
Turn to release						
		1	φ 30	GB5-AS442	0.103	
		1	φ 40	GB5-AS542	0.103	
Trigger action turn to release		1	φ 60	GB5-AS642	0.103	
		1	φ 40	GB5-AS8445	0.115	
Key release (No.455)		1	φ 30	GB5-AS742	0.103	
		1	φ 40	GB5-AS142	0.117	
		1	φ 60	GB5-AS242	0.103	
Trigger action key release (No.455)		1	φ 40	GB5-AS9445	0.155	


Non-illuminated Selector Switches (screw clamp terminal connections)
Standard handle (black)


Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB5-AD21	0.080	
	1	1		GB5-AD25	0.105	
	1			GB5-AD41	0.080	
	1	1		GB5-AD45	0.105	
3 position	2			GB5-AD33	0.105	
	2			GB5-AD53	0.105	
	2			GB5-AD73	0.105	
	2			GB5-AD83	0.105	


Long handle (black)

2 position	1			GB5-AJ21	0.081	
	1	1		GB5-AJ25	0.090	
	1			GB5-AJ41	0.081	
	1	1		GB5-AJ45	0.090	
3 position	2			GB5-AJ33	0.090	
	2			GB5-AJ53	0.090	
	2			GB5-AJ73	0.090	
	2			GB5-AJ83	0.090	

Explain: :Lock up :1 spring return from right to left :2 spring return to centre

Operator Interface Components

GB5 series push button, selector switch, pilot light

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Non-illuminated Key Switches (screw clamp terminal connections)

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB5-AG21	0.102	
	1	1		GB5-AG25	0.112	
	1			GB5-AG41	0.102	
	1	1		GB5-AG45	0.112	
	1			GB5-AG61	0.102	
	1	1		GB5-AG65	0.112	
3 position	2			GB5-AG33	0.112	
	2			GB5-AG53	0.112	
	2			GB5-AG03	0.112	
	2			GB5-AG73	0.112	
	2			GB5-AG83	0.112	

Explain: :Lock up :1 spring return from right to left :Key withdrawal position(s)



Illuminated Push buttons, Momentary, Flush (screw clamp terminal connections)

Power voltage	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Protected LED 24Vac/Vdc	1	1		GB5-AW31B5	0.082	
	1	1		GB5-AW33B5	0.082	
	1	1		GB5-AW34B5	0.082	
	1	1		GB5-AW35B5	0.082	
	1	1		GB5-AW36B5	0.082	
Protected LED 110~120Vac	1	1		GB5-AW31G5	0.082	
	1	1		GB5-AW33G5	0.082	
	1	1		GB5-AW34G5	0.082	
	1	1		GB5-AW35G5	0.082	
	1	1		GB5-AW36G5	0.082	
Protected LED 220~240Vac/Vdc	1	1		GB5-AW31M5	0.082	
	1	1		GB5-AW33M5	0.082	
	1	1		GB5-AW34M5	0.082	
	1	1		GB5-AW35M5	0.082	
	1	1		GB5-AW36M5	0.082	


Double-headed push buttons, spring return (screw clamp terminal connections)

Description	Scheme	Contact		Degree of protection	Model	Dimension
	Power voltage	N/O	N/C			
With pilot light 1 flush green 2 pilot light with yellow lens 2 extended red	24			IP40	GB5-AW84B5	
	~48…120			IP40	GB5-AW84G5	
	~220…240			IP40	GB5-AW84M5	


Pilot lights for BA9s bulb (screw clamp terminal connections)

Description	Colour	Supply voltage	Scheme	Model	Dimension
Direct supply, for BA 9s (LED, neon) U < 250V, 2.4W bulb (bulb not included)		< 250Vac/Vdc	x1	GB5-AV61	
				GB5-AV63	
			x2	GB5-AV64	
				GB5-AV65	
Transformer type with 1.2VA 6V BA9s incandescent bulb included		110~120V 50/60Hz	x1	GB5-AV31	
				GB5-AV33	
			x2	GB5-AV34	
				GB5-AV35	


Pilot lights with protected LED (screw clamp terminal connections)

Supply voltage	Colour	Model	Weight (kg)	Dimension
24Vac/Vdc		GB5-AVB1	0.065	
		GB5-AVB3	0.065	
		GB5-AVB4	0.065	
		GB5-AVB5	0.065	
		GB5-AVB6	0.065	
110~120Vac		GB5-AVG1	0.065	
		GB5-AVG3	0.065	
		GB5-AVG4	0.065	
		GB5-AVG5	0.065	
		GB5-AVG6	0.065	
220~240Vac		GB5-AVM1	0.065	
		GB5-AVM3	0.065	
		GB5-AVM4	0.065	
		GB5-AVM5	0.065	
		GB5-AVM6	0.065	

Operator Interface Components

GB4 series push button, selector switch, pilot light

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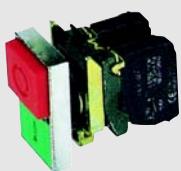


Non-illuminated Push buttons, Momentary (screw clamp terminal connections)

Description	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Flush	1		● B	GB4-BA21	0.080	
	1		● G	GB4-BA31	0.080	
	1		● Y	GB4-BA51	0.080	
	1		● S	GB4-BA61	0.080	
	1	1	● R	GB4-BA42	0.080	
	1		● Y	GB4-BA55	0.080	
	2		○ W	GB4-BA13	0.095	
	2		● B	GB4-BA24	0.095	
Flush logo	1		● G	GB4-BA3311	0.080	
	1		● G	GB4-BA3361	0.080	
	1		● W	GB4-BA3341	0.080	
	1		● B	GB4-BA3351	0.080	
	1	1	● R	GB4-BA4322	0.080	
Flush with clear silica gel (color of pusher unobscured)	1		● B	GB4-BP21	0.082	
	1		● G	GB4-BP31	0.082	
	1		● Y	GB4-BP51	0.082	
	1		● S	GB4-BP61	0.082	
	1	1	● R	GB4-BP42	0.082	
	1	1	● Y	GB4-BP55	0.097	
	2		○ W	GB4-BP13	0.097	
	2		● B	GB4-BP24	0.097	
Extended	1		● B	GB4-BL21	0.081	
	1		● G	GB4-BL31	0.081	
	1		● Y	GB4-BL51	0.081	
	1		● S	GB4-BL61	0.081	
	1	1	● R	GB4-BL42	0.081	
	1	1	● Y	GB4-BL55	0.096	
	2		○ W	GB4-BL13	0.096	
	2		● B	GB4-BL24	0.096	
Mushroom φ 40mm	1		● B	GB4-BC21	0.122	
	1		● G	GB4-BC31	0.122	
	1		● R	GB4-BC42	0.122	

Two Button Push buttons, Momentary (screw clamp terminal connections)

Description	Contact		Degree of protection	Scheme	Model	Weight (kg)	Dimension
	N/O	N/C					
One flush green push (marked "I")One extended red push (marked "O")	1	1	IP40	○ ■	GB4-BL845	0.106	
	1	1	IP66	○ ■	GB4-BL945	0.111	



Non-illuminated Emergency Stop Mushroom Head Push buttons (Red)

Description	Contact		Dia	Model	Weight (kg)	Dimension
	N/O	N/C				
Push-pull	1	1	φ 40	GB4-BT42	0.125	
Trigger action push-pull	1	1	φ 40	GB4-BT845	0.125	
Turn to release	1	1	φ 40	GB4-BS542	0.118	
Trigger action turn to release	1	1	φ 40	GB4-BS8445	0.130	
Key release (No.455)	1	1	φ 40	GB4-BS142	0.133	
Trigger action key release (No.455)	1	1	φ 40	GB4-BS9445	0.170	

Non-illuminated Selector Switches (screw clamp terminal connections)
Standard handle (black)

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB4-BD21	0.095	
	1	1		GB4-BD25	0.105	
	1			GB4-BD41	0.095	
	1	1		GB4-BD45	0.105	
3 position	2			GB4-BD33	0.105	
	2			GB4-BD53	0.105	
	2					
	2					

Long handle (black)

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB4-BJ21	0.096	
	1	1		GB4-BJ25	0.105	
	1			GB4-BJ41	0.096	
	1	1		GB4-BJ45	0.105	
3 position	2			GB4-BJ33	0.105	
	2			GB4-BJ53	0.105	
	2					
	2					

Explain: :Lock up :1 spring return from right to left :2 spring return to centre

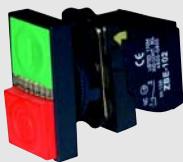
Non-illuminated Key Switches (screw clamp terminal connections)
Key lock switches

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB4-BG21	0.117	
	1	1		GB4-BG25	0.127	
	1			GB4-BG41	0.117	
	1	1		GB4-BG45	0.127	
	1			GB4-BG61	0.117	
	1	1		GB4-BG65	0.127	
3 position	2			GB4-BG33	0.127	
	2			GB4-BG53	0.127	
	2			GB4-BG03	0.127	

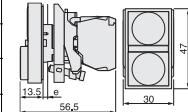
Explain: :Lock up :1 spring return from right to left :Key withdrawal position(s)

Illuminated Push buttons, Momentary, Flush(screw clamp terminal connections)

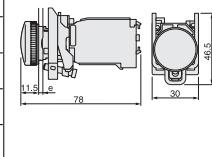
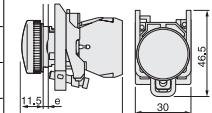
Power voltage	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Protected LED 24Vac/Vdc	1	1	○ W	GB4-BW31B5	0.097	
	1	1	● G	GB4-BW33B5	0.097	
	1	1	● R	GB4-BW34B5	0.097	
	1	1	● Y	GB4-BW35B5	0.097	
	1	1	● S	GB4-BW36B5	0.097	
Protected LED 110~120Vac	1	1	○ W	GB4-BW31G5	0.097	
	1	1	● G	GB4-BW33G5	0.097	
	1	1	● R	GB4-BW34G5	0.097	
	1	1	● Y	GB4-BW35G5	0.097	
	1	1	● S	GB4-BW36G5	0.097	
Protected LED 110~120Vac	1	1	○ W	GB4-BW31M5	0.097	
	1	1	● G	GB4-BW33M5	0.097	
	1	1	● R	GB4-BW34M5	0.097	
	1	1	● Y	GB4-BW35M5	0.097	
	1	1	● S	GB4-BW36M5	0.097	

Double-headed push buttons, Spring return (screw clamp terminal connections)


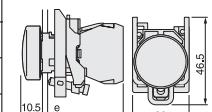
Description	Scheme	Contact		Degree of protection	Model	Dimension
	Power voltage	N/O	N/C			
With pilot light 1 flush green 2 pilot light with yellow lens 2 extended red	24			1	IP40	GB4-BW84B5
	~48…120			1	IP40	GB4-BW84G5
	~230…240			1	IP40	GB4-BW84M5


Pilot light for BA9s bulb (screw clamp terminal connections)


Description	Colour	Supply voltage	Scheme	Model	Dimension
Direct bulb included BA9s base fitting		130V 220/240V 50/60Hz	x1	GB4-BV61	
				GB4-BV63	
				GB4-BV64	
			x2	GB4-BV65	
			x2	GB4-BV66	
Through transformer 1.2VA BA9s, 6V bulb supplied		~220~240V 50Hz	x1	GB4-BV41	
				GB4-BV43	
				GB4-BV44	
			x2	GB4-BV45	
			x2	GB4-BV46	


Pilot light with Protected LED (screw clamp terminal connections)


Supply voltage	Colour	Model	Weight (kg)	Dimension
24Vac/Vdc		GB4-BVB1	0.080	
		GB4-BVB3	0.080	
		GB4-BVB4	0.080	
		GB4-BVB5	0.080	
		GB4-BVB6	0.080	
110~120Vac		GB4-BVG1	0.080	
		GB4-BVG3	0.080	
		GB4-BVG4	0.080	
		GB4-BVG5	0.080	
		GB4-BVG6	0.080	
220~240Vac		GB4-BVM1	0.080	
		GB4-BVM3	0.080	
		GB4-BVM4	0.080	
		GB4-BVM5	0.080	
		GB4-BVM6	0.080	





Spring return push buttons

Description	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Flush	1		○ W	GB2-BA11	0.70	
	1		● B	GB2-BA21	0.70	
	1		● G	GB2-BA31	0.70	
	1		● Y	GB2-BA51	0.70	
	1		● S	GB2-BA61	0.70	
		1	● B	GB2-BA22	0.70	
		1	● R	GB2-BA42	0.70	
Flush logo	1		○ R	GB2-BA311	0.70	
	1		↑ W	GB2-BA341	0.70	
	1		↑ B	GB2-BA351	0.70	
	1		● G	GB2-BA4322	0.70	
	1		STOP R	GB2-BA4342	0.70	
Extended	1		● B	GB2-BL21	0.70	
	1		● G	GB2-BL31	0.70	
	1		● Y	GB2-BL51	0.70	
	1		● S	GB2-BL61	0.70	
		1	● B	GB2-BL22	0.70	
Extended logo	1		● R	GB2-BL42	0.70	
	1		○ R	GB2-BL4322	0.70	
	1		STOP R	GB2-BL4342	0.70	
Booted	1		● B	GB2-BP21	0.70	
	1		● G	GB2-BP31	0.70	
	1		● Y	GB2-BP51	0.70	
	1		● S	GB2-BP61	0.70	
		1	● R	GB2-BP42	0.70	

Mushroom head push buttons

Description	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Mushroom φ 40mm	1		● B	GB2-BC21	0.90	
	1		● G	GB2-BC31	0.90	
	1		● Y	GB2-BC51	0.90	
	1		● S	GB2-BC61	0.90	
		1	● R	GB2-BC42	0.90	
Mushroom φ 60mm	1		● B	GB2-BR21	0.95	
	1		● G	GB2-BR31	0.95	
	1		● Y	GB2-BR51	0.95	
	1		● S	GB2-BR61	0.95	
		1	● R	GB2-BR42	0.95	


Emergency stop push buttons
Latching mushroom head "Emergency Stop" push buttons(colour red)

Description	Contact		Dia	Model	Weight (kg)	Dimension
	N/O	N/C				
Push-pull	1	1	φ 40	GB2-BT42	0.115	<p>Φ40 31 24 43 40x30</p>
	1	1	φ 60	GB2-BX42	0.120	
Push and turn to release	1	1	φ 30	GB2-BS442	0.085	<p>Φ40 32 24 43 40x30</p>
	1	1	φ 40	GB2-BS542	0.095	
	1	1	φ 60	GB2-BS642	0.105	
Key release (Ronis n° 455)	1	1	φ 30	GB2-BS742	0.130	<p>Φ60 24 32 24 43 40x30</p>
	1	1	φ 40	GB2-BS142	0.140	
	1	1	φ 60	GB2-BS242	0.160	

Selector switches
Standard handle

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB2-BD21	0.085	<p>Φ29 27 24 43 40x30</p>
	1	1		GB2-BD25	0.100	
	1			GB2-BD41	0.085	
	1	1		GB2-BD45	0.100	
3 position	2			GB2-BD33	0.100	
	2			GB2-BD53	0.100	
	2			GB2-BD73	0.100	
	2					

Long handle

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N / O	N/C				
2 position	1			GB2-BJ21	0.085	<p>39 24 24 27 43 40x30</p>
	1	1		GB2-BJ25	0.100	
	1			GB2-BJ41	0.085	
	1	1		GB2-BJ45	0.100	
3 position	2			GB2-BJ33	0.100	
	2			GB2-BJ53	0.100	
	2			GB2-BJ73	0.100	
	2					

Explain: :Lock up :1 spring return from right to left :2 spring return to centre


Key switches (Ronis n° 455)
Key lock switches

Description	Contact		Locality	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB2-BG21	0.110	
	1	1		GB2-BG25	0.125	
	1			GB2-BG41	0.110	
	1	1		GB2-BG45	0.125	
	1			GB2-BG61	0.110	
	1	1		GB2-BG65	0.125	
3 position	2			GB2-BG33	0.125	
	2			GB2-BG53	0.125	
	2			GB2-BG03	0.125	
	2			GB2-BG73	0.125	

Explain: :Lock up :1 spring return from right to left :Key withdrawal position(s)


Pushbutton with lamp
Butch haircut push button with light (spring return)

Power voltage	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Directness 6.3V~220V With neon light	1			GB2-BW3161	0.120	
	1			GB2-BW3361	0.120	
	1			GB2-BW3462	0.120	
	1			GB2-BW3561	0.120	
	1			GB2-BW3661	0.120	
	1	1		GB2-BW3365	0.135	
AC/DC 24V With LED light	1			GB2-BW31B1	0.120	
	1			GB2-BW33B1	0.120	
	1			GB2-BW34B1	0.120	
	1			GB2-BW35B1	0.120	
	1			GB2-BW36B1	0.120	
AC/DC 220V With LED light	1			GB2-BW31M1	0.120	
	1			GB2-BW33M1	0.120	
	1			GB2-BW34M1	0.120	
	1			GB2-BW35M1	0.120	
	1			GB2-BW36M1	0.120	
Resistance 6.3V~220V With neon light	1			GB2-BW3171	0.105	
	1			GB2-BW3371	0.105	
	1			GB2-BW3472	0.105	
	1			GB2-BW3571	0.105	
	1			GB2-BW3671	0.105	
Transformer 220V	1	1		GB2-BW3375	0.105	
	1			GB2-BW3141	0.105	
	1			GB2-BW3341	0.105	
	1			GB2-BW3442	0.105	
	1			GB2-BW3541	0.105	
	1			GB2-BW3641	0.105	
	1	1		GB2-BW3345	0.135	



Double-headed push buttons, spring return

Two push buttons

Description	Contact		Scheme	Degree of protection	Model	Dimension
	N/O	N/C				
Without pilot light 1 flush green 2 extended red	1	1		IP40	GB2-BL8325	
	1	1		IP65	GB2-BL9325	
	1	1		IP40	GB2-BL8425	
	1	1		IP65	GB2-BL9425	
1 flush green 2 pilot light with yellow lens (Direct supply ≤ 380V) 3 extended red	1	1		IP40	GB2-BW8365	
	1	1		IP40	GB2-BW8465	
	1	1		IP40	GB2-BW8375	
	1	1		IP40	GB2-BW8475	
1 flush green 2 pilot light with yellow lens (220/250V supply) 3 extended red	1	1		IP40	GB2-BW8345	
	1	1		IP40	GB2-BW8445	
	1	1		IP40	GB2-BW8355	
	1	1		IP40	GB2-BW8455	

Pilot light

Description	Colour	Supply voltage	Scheme	Model	Dimension
Direct BA9S with neon light		< 380V	x 1	GB2-BV61	
				GB2-BV63	
			x 2	GB2-BV64	
			x 1	GB2-BV65	
				GB2-BV66	
			x 2	GB2-BV71	
Direct through resistor BA9S, 130V with neon light		220/250V	x 1	GB2-BV73	
				GB2-BV74	
			x 2	GB2-BV75	
			x 1	GB2-BV76	
				GB2-BV41	
			x 2	GB2-BV43	
Through transformer 12VA BA9S, 6V with neon light		220-240V/50Hz	x 1	GB2-BV44	
				GB2-BV45	
			x 2	GB2-BV46	
			x 1	GB2-BV41	
				GB2-BV43	

Operator Interface Components

GB2 series push button, selector switch, pilot light

1


Push buttons spring return

Description	Contact		Colour	Model	Weight (kg)	Dimension
	\ N/O	\/ N/C				
Flush	1		○ W	GB2-EA11	0.045	
	1		● B	GB2-EA21	0.045	
	1		● G	GB2-EA31	0.045	
	1		● Y	GB2-EA51	0.045	
	1		● S	GB2-EA61	0.045	
	1	1	● G	GB2-EA35	0.060	
	1		● R	GB2-EA42	0.045	
Flush logo	1		● I G	GB2-EA3311	0.045	
	1		● II G	GB2-EA3361	0.045	
	1		↑ W	GB2-EA3341	0.045	
	1		↑ B	GB2-EA3351	0.045	
	1		● O R	GB2-EA4322	0.045	
	1		STOP R	GB2-EA4342	0.045	
	1		● B	GB2-EL21	0.045	
Extended	1		● G	GB2-EL31	0.045	
	1		● Y	GB2-EL51	0.045	
	1		● S	GB2-EL61	0.045	
	1	1	● G	GB2-EL35	0.060	
	1		● R	GB2-EL42	0.045	
	1		● II G	GB2-EL3361	0.045	
	1		↑ W	GB2-EL3341	0.045	
Extended logo	1		↑ B	GB2-EL3351	0.045	
	1		● O R	GB2-EL4322	0.045	
	1		STOP R	GB2-EL4342	0.045	
	1		○ W	GB2-EP11	0.045	
	1		● B	GB2-EP21	0.045	
	1		● G	GB2-EP31	0.045	
	1		● Y	GB2-EP51	0.045	
Flush with clear silica gel	1		● S	GB2-EP61	0.045	
	1	1	● G	GB2-EP35	0.045	
	1		● R	GB2-EP42	0.045	
	1		● II G	GB2-EP3361	0.045	
	1		↑ W	GB2-EP3341	0.045	
	1		↑ B	GB2-EP3351	0.045	
	1		● O R	GB2-EP4322	0.045	
	1		STOP R	GB2-EP4342	0.045	

Mushroom head push buttons

Description	Contact		Colour	Model	Weight (kg)	Dimension
	\ N/O	\/ N/C				
Mushroom φ 40mm	1		● B	GB2-EC21	0.065	
	1		● G	GB2-EC31	0.065	
	1		● Y	GB2-EC51	0.065	
	1		● S	GB2-EC61	0.065	
	1	1	● R	GB2-EC42	0.065	
Mushroom φ 60mm	1		● B	GB2-ER21	0.070	
	1		● G	GB2-ER31	0.070	
	1		● Y	GB2-ER51	0.070	
	1		● S	GB2-ER61	0.070	
	1	1	● R	GB2-ER42	0.070	

Emergency stop push buttons**Latching mushroom head "Emergency stop" push buttons (colour red)**

Description	Contact		Dia.	Model	Weight (kg)	Dimension
	\ N/O	\ N/C				
Push-pull	1		φ 40	GB2-ET21	0.090	
	1		φ 40	GB2-ET31	0.090	
		1	φ 40	GB2-ET42	0.085	
	1	1	φ 40	GB2-ET45	0.100	
Push and turn to release						
		1	φ 30	GB2-ES442	0.060	
		1	φ 40	GB2-ES542	0.070	
		1	φ 60	GB2-ES642	0.080	
Key release (Ronis n° 455)						
		1	φ 40	GB2-ES142	0.115	
	1	1	φ 40	GB2-ES145	0.125	

**Selector switches****Standard handle**

Description	Contact		Locality	Model	Weight (kg)	Dimension
	\ N/O	\ N/C				
2 position	1		↙	GB2-ED21	0.040	
	1	1	↙	GB2-ED25	0.055	
			↔	GB2-ED41	0.040	
	1	1	↔	GB2-ED45	0.055	
3 position	2		↓	GB2-ED33	0.055	
	2		↔	GB2-ED53	0.055	

**Long handle**

Description	Contact		Locality	Model	Weight (kg)	Dimension
	\ N/O	\ N/C				
2 position	1		↙	GB2-EJ21	0.040	
	1	1	↙	GB2-EJ25	0.055	
			↔	GB2-EJ41	0.040	
	1	1	↔	GB2-EJ45	0.055	
3 position	2		↓	GB2-EJ33	0.055	
	2		↔	GB2-EJ53	0.055	

Operator Interface Components

GB2 series push button, selector switch, pilot light

Keylock switches (Key-return n°455)

Keylock switches

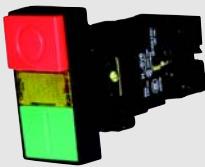
Description	Contact		Dia.	Model	Weight (kg)	Dimension
	N/O	N/C				
2 position	1			GB2-EG21	0.065	
	1	1		GB2-EG25	0.080	
	1			GB2-EG41	0.065	
	1	1		GB2-EG45	0.080	
	1			GB2-EG61	0.065	
	1	1		GB2-EG65	0.080	
3 position	2			GB2-EG33	0.080	
	2			GB2-EG53	0.080	
	2			GB2-EG03	0.080	
	2			GB2-EG73	0.080	

Explain: :Lock up :spring return from right to left :Key withdrawal position(s)

Push button with light

Butch haircut push button with light (spring return)

Description	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Directness 6.3V~220V With neon light	1		○ W	GB2-EW3161	0.105	
	1		● G	GB2-EW3361	0.105	
		1	● R	GB2-EW3462	0.105	
	1		● Y	GB2-EW3561	0.105	
	1		● B	GB2-EW3661	0.105	
	1	1	● G	GB2-EW3365	0.120	
Resistance 6.3V~220V With neon light	1		○ W	GB2-EW3171	0.090	
	1		● G	GB2-EW3371	0.090	
		1	● R	GB2-EW3472	0.090	
	1		● Y	GB2-EW3571	0.090	
	1		● B	GB2-EW3671	0.090	
	1	1	● G	GB2-EW3375	0.105	
Through transformer 220V With neon light	1		○ W	GB2-EW3141	0.105	
	1		● G	GB2-EW3341	0.105	
		1	● R	GB2-EW3442	0.105	
	1		● Y	GB2-EW3541	0.105	
	1		● B	GB2-EW3641	0.105	
	1	1	● G	GB2-EW3345	0.120	
Through transformer 380V With neon light	1		○ W	GB2-EW3151	0.105	
	1		● G	GB2-EW3351	0.105	
		1	● R	GB2-EW3452	0.105	
	1		● Y	GB2-EW3551	0.105	
	1		● B	GB2-EW3651	0.105	
	1	1	● G	GB2-EW3355	0.120	


Double-headed push buttons, spring return

Description	Contact		Colour	Degree of protection	Model	Dimension
	N/O	N/C				
Without pilot light 1 flush green 2 extended red	1	1	■ ■	IP40	GB2-EL8325	
	1	1	○ □	IP40	GB2-EL8425	
1 flush green 2 pilot light with yellow lens (220/380V 50Hz supply is through transformer) 3 extended red	1	1	■ ■	IP40	GB2-EW8345	
	1	1	○ □	IP40	GB2-EW8445	
	1	1	■ ■	IP40	GB2-EW8355	
	1	1	○ □	IP40	GB2-EW8455	

Pilot light

Description	Scheme	Supply voltage	Colour	Model	Dimension
Direct BA9S with neon light		≤ 380V	○ W	GB2-EV61	
			● G	GB2-EV63	
			● R	GB2-EV64	
			● Y	GB2-EV65	
			● S	GB2-EV66	
Direct through resistor BA9S, 130V with neon light		220/250V	○ W	GB2-EV71	
			● G	GB2-EV73	
			● R	GB2-EV74	
			● Y	GB2-EV75	
			● S	GB2-EV76	
Through transformer 12V BA9S 6V with neon light		220~240V/50Hz	○ W	GB2-EV41	
			● G	GB2-EV43	
			● R	GB2-EV44	
			● Y	GB2-EV45	
			● S	GB2-EV46	

Economic push button

Description	Contact		Colour	Model	Weight (kg)	Dimension
	N/O	N/C				
Pushbuttons spring return	1		● B	GB2-EA121	0.020	
	1		● G	GB2-EA131	0.020	
		1	● R	GB2-EA142	0.020	
	1	1	● B	GB2-EA125	0.020	
	1	1	● G	GB2-EA135	0.020	
	1	1	● R	GB2-EA145	0.020	

Economic pilot light

Description	Supply power	Colour	Model	Weight (kg)	Dimension
With LED light (ex bulb) not provide ≤ 250V	Direct BA9S lamp	● G	GB2-EV163	0.015	
		● R	GB2-EV164	0.015	
		● Y	GB2-EV165	0.015	
		● S	GB2-EV166	0.015	

Description	Model	Description	Model
N/C N/O LED: 6.3V~380V AC.DC Waterproof	GB2F-01DM GB2F-10DM	Two position stay put N/C N/O Lamp voltage LED:6.3V~380V AC.DC	GB2F-01DM GB2F-10DM
Two position stay put N/O+N/C There position stay put N/O+N/O	GB2F-11X/2 GB2F-20X/3	N/C N/O Lamp voltage LED: 6.3V~380V AC.DC Waterproof	GB2F-11X/2 GB2F-20X/3
Lamp voltage LED: 6.3V~380V AC.DC	GB2F-D/S	Automatic replacement according to lock and clockwise running N/O+N/C	GB2F-D/S
Instant motion N/O+N/C	GB2F-11M	Instant motion N/O+N/C Waterproof	GB2F-11M



	Description	Model
Flush	○ White	GB2-EA1
	● Black	GB2-EA2
	● Green	GB2-EA3
	● Red	GB2-EA4
	● Yellow	GB2-EA5
	● Blue	GB2-EA6
Sign even button	○ Green I	GB2-EA331
	● Green II	GB2-EA336
	● White →	GB2-EA334
	● Black ↓	GB2-EA335
	● Red ○	GB2-EA432
	● Red stop	GB2-EA434
Sign	○ White	GB2-EV01
	● Green	GB2-EV03
	● Red	GB2-EV04
	● Yellow	GB2-EV05
	● Blue	GB2-EV06
	● Green	GB2-EW13
Button with lamp	● Red	GB2-EW14
	● Yellow	GB2-EW15
	● Green	GB2-EW33
	● Red	GB2-EW34
	● Yellow	GB2-EW35
	● Blue	GB2-EW36
Even button preventing from pollution	● Black	GB2-ED2
	● Black	GB2-ED3
	● Black	GB2-ED4
	● Black	GB2-ED5
	● Black	GB2-EJ2
	● Black	GB2-EJ3
Selector switch 2-positions 3-positions Return to centre	● Black	GB2-EJ4
	● Black	GB2-EJ5
	● Black	



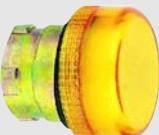
	Description	Model
Flush	● Black	GB2-EL2
	● Green	GB2-EL3
	● Red	GB2-EL4
	● Yellow	GB2-EL5
	● Blue	GB2-EL6
	Key switch 3-position Return to centre	GB2-EG2 GB2-EG3 GB2-EG4 GB2-EG5
Mushroom Head Pushbutton	● Black φ 30	GB2-EC24
	● Green φ 30	GB2-EC34
	● Red φ 30	GB2-EC44
	● Black φ 40	GB2-EC2
	● Green φ 40	GB2-EC3
	● Red φ 40	GB2-EC4
Push-locked Mushroom Pushbutton	● Red φ 30	GB2-ES44
	● Red φ 40	GB2-ES54
	● Green I	
	● Red O	GB2-EL84
	□ White O	GB2-EL94
	● Green	
Double-head button Even button+convex button	● Red	GB2-EW83
	● Red	GB2-EW84
	● Green	
	● Red	
	● Green	
	● Red	

Operator Interface Components

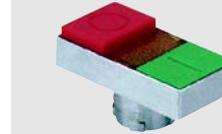
Accessories of push button, selector switch, pilot light

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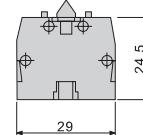
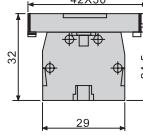
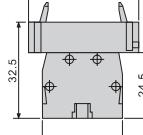
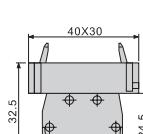
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Description	Model
Flush	○ White GB2-BA1
	● Black GB2-BA2
	● Green GB2-BA3
	● Red GB2-BA4
	● Yellow GB2-BA5
	● Blue GB2-BA6
Sign even button	○ Green I GB2-BA331
	● Green II GB2-BA336
	● White → GB2-BA334
	● Black ↓ GB2-BA335
	● Red ○ GB2-BA432
	● Red stop GB2-BA434
Head of indicator Smooth lens Attach diffusion function	○ White GB2-BV01
	● Green GB2-BV03
	● Red GB2-BV04
	● Yellow GB2-BV05
	● Blue GB2-BV06
Button with lamp Smooth convex type	● Green GB2-BW13
	● Red GB2-BW14
	● Yellow GB2-BW15
	● Green GB2-BW33
	● Red GB2-BW34
	● Yellow GB2-BW35
Even button preventing from pollution	● Blue
Selector switch 2-positions 3-positions Return to centre	● Black GB2-BD2
	● Black GB2-BD3
	● Black GB2-BD4
	● Black GB2-BD5



Description	Model
Flush	GB2-BG2
	GB2-BG3
	GB2-BG4
	GB2-BG5
Key Mushroom Pushbutton	● Red φ 40 GB2-BS14
Mushroom Head Pushbutton	● Black φ 30 GB2-BC24
	● Green φ 30 GB2-BC34
	● Red φ 30 GB2-BC44
Push-locked Mushroom Pushbutton	● Black φ 40 GB2-BC2
	● Green φ 40 GB2-BC3
	● Red φ 40 GB2-BC4
Double-head button Even button+convex button	● Red φ 30 GB2-BS44
	● Red φ 40 GB2-BS54
Double-head with lamp button Two even buttons	● Green I
	● Red O GB2-BL84
	● White Red O GB2-BL94
Double-head with lamp button Two even buttons	● Green
	● Red GB2-BW83
	● Green
	● Red GB2-BW84

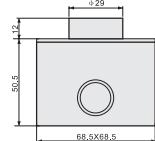
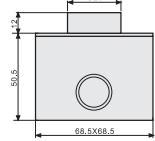
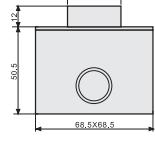
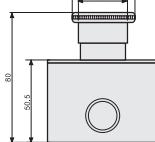
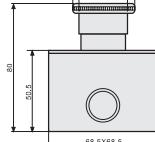
Description	Contact		Colour	Model	Dimension
	N/O	N/C			
     	1		Green	GB2-BE101	
				ZBE101	
	1		Red	GB2-BE102	
				ZBE102	
	1		Green	GB2-EZ101	
	2		Green	GB2-EZ103	
	1	1	Green, Red	GB2-EZ105	
	1		Red	GB2-EZ102	
	2		Red	GB2-EZ104	
 	1		Green	GB2-BZ101	
	2		Green	GB2-BZ103	
	1	1	Green, Red	GB2-BZ105	
	1		Red	GB2-BZ102	
	2		Red	GB2-BZ104	
					

Operator Interface Components

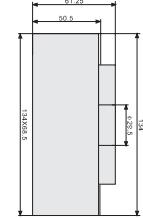
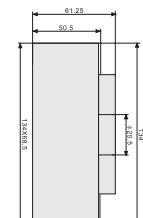
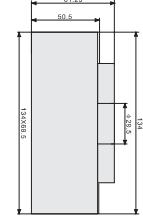
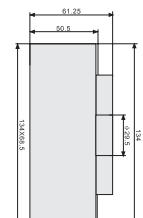
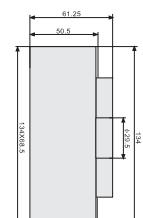
Accessories of push button, selector switch, pilot light

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Description	Model	Description	Model
 Bottom seat of button with lamp Direct Type	GB2-EB063 GB2-EB064 GB2-EB065	 Bottom seat of button with lamp Direct Type	GB2-BV063 GB2-BV064 GB2-BV065
 Bottom seat of button with lamp Direct Type	GB2-EW061 GB2-EW062 GB2-EW063 GB2-EW064 GB2-EW065	 Bottom seat of button with lamp Direct Type	GB2-BW061 GB2-BW062 GB2-BW063 GB2-BW064 GB2-BW065
 Button with lamp install base BA 9s Resistance ≤ 250V	GB2-EW071 GB2-EW072 GB2-EW073 GB2-EW074 GB2-EW075	 Button with lamp install base BA 9s Resistance ≤ 250V	GB2-BW071 GB2-BW072 GB2-BW073 GB2-BW074 GB2-BW075
 Button with lamp install base BA 9s Resistance ≤ 250V	GB2-EV4 GB2-EW041 GB2-EW042 GB2-EW043 GB2-EW044 GB2-EW045	 Button with lamp install base BA 9s Resistance ≤ 130V	GB2-BV4 GB2-BW041 GB2-BW042 GB2-BW043 GB2-BW044 GB2-BW045
 Button with lamp install base BA 9s Resistance ≤ 380V	GB2-EW051 GB2-EW052 GB2-EW053 GB2-EW054 GB2-EW055	 Button with lamp install base BA 9s Resistance ≤ 250V	GB2-BW051 GB2-BW052 GB2-BW053 GB2-BW054 GB2-BW055

Description	Scheme	Marking on legend	Marking on push button	Model	Dimension
1 green flush pushbutton spring return	N/O [13] [14]	Start	—	GB2-B101H29	
		—		GB2-B102	
		—	Start	GB2-B103	
		—	—	GB2-B101	
1 red flush pushbutton spring return	N/C [21] [22]	Stop	—	GB2-B111H29	
		—	Stop	GB2-B114	
		—	O	GB2-B112	
1 red projectint pushbutton spring return	N/C [21] [22]	—	O	GB2-B112	
1 red mushroom head pushbutton φ 40mm, spring return	N/C [21] [22]	Emergency stop	—	GB2-B164H29	
		—	—	GB2-B164	
1 red mushroom head pushbutton, φ 40mm, latching Turn to release	N/C [21] [22]		Red	GB2-J174	
			Red	GB2-J174H29	

Description	Scheme	Marking on legend	Marking on push button	Model	Dimension
1 red mushroom head pushbutton, ϕ 40mm, latching Key release (Key n° 455)	N/O 21 22		Red	GB2-J184	
			Red	GB2-J188H29	
1 selector switch 2-position stay put standard black handle	N/C 13 11 14	Stop Start	—	GB2-B132H29	
		○	—	GB2-B134H29	
1 selector switch key operated (Ronis Key n° 455) 2-position stay put Key withdraw from left position	N/C 13 11 14	Stop Start	—	GB2-B142H29	
		○	—	GB2-B144H29	
2 spring return push button 1 flush green 1 flush red	N/O 13 14 + NC 21 22	Open close	—	GB2-B241H29	
		Stop start	—	GB2-B211H29	
		— ○	—	GB2-B213	
2 spring return pushbutton 1 flush black (white arrow)	N/O 13 14 + NC 21 22	— Stop Start	—	GB2-B215	
		— ↓ ↑	—	GB2-B222	
		— ⇄	—	GB2-B223	

Description	Scheme	Marking on legend	Marking on push button	Model	Dimension
1 red pilot light, Direct supplied ≤ 130V Bulb not supplied+ 2 spring return pushbuttons 1 flush green 1 flush red	X1 ⊗ X2 N/O + NC	Stop Start — — — Stop Start	— ○ — —	GB2-B361H29 GB2-B363 GB2-B366	
1 red pilot light, 220/250V Supply direct through resistor BA9S-130V bulb supplied 2 spring return pushbuttons 1 flush red 1 flush green	X1 ⊗ X2 N/O + NC	Stop Start — — — Stop Start	— ○ — —	GB2-B371H29 GB2-B373 GB2-B376	
3 spring return pushbuttons 1 flush green 1 flush red 1 flush green	N/O + NC + N/O	Open Stop Close Forward Stop Reverse Right Stop Left	— — — — — — — — —	GB2-B341H29 GB2-B311H29 GB2-B331H29	
3 spring return pushbuttons 1 flush green (black arrow) 1 flush red 1 flush black (white arrow)	N/O + NC + N/O	— — — — —	↑ ○ ↓ ↑ ○ ↑ — — —	GB2-B324 GB2-B334	
3 spring return pushbuttons 1 flush green 1 flush red 1 flush green	N/O + NC + N/O	— — — Up Stop Down	— — — — —	GB2-B339 GB2-B321H29	


Start or Stop Function (light grey base, RAL 7035; dark grey lid, RAL 7016)

Description	Type of push	Type of contact		Legend marking	Catalog number
		N/O	N/C		
<u>Marking on Legend Holder</u>					
1 momentary push button	Flush black	1	-	Start	GB5D101
	Flush red	-	1	Stop	GB5D111

Marking on Legend Holder

1 mushroom head push button φ 40 mm, momentary	Red	-	1	Emergency stop	GB5D164

Emergency Stop Function (light grey base, RAL 7035; yellow lid, RAL 1012)

Description	Type	Type of contact		Catalog number
		N/O	N/C	
<u>1 Mushroom head push button φ 40mm, red Turn to release</u>				
1 Mushroom head push button φ 40mm, red Turn to release (Key No. 455)	Standard	-	1	GB5K174
	Trigger action	-	1	GB5K178
<u>1 Mushroom head push button φ 40mm, red Key release (Key No. 455)</u>				
1 Mushroom head push button φ 40mm, red Push-pull	Standard	-	1	GB5K184
	Trigger action	-	1	GB5K188
1 Mushroom head push button φ 40mm, red Push-pull	Standard	-	1	GB5K194



Start-Stop Function (light grey base, RAL 7035; dark grey lid, RAL 7016)

Description	Type of push	Type of contact		Legend text	Catalog number
		N/O	N/C		
Text on legend plate					
2 Momentary push buttons	1 flush black	1	-	Start	GB5D211
	1 flush red	-	1	Stop	
	1 flush black	1	-	Forward	GB5D221
	1 flush black	1	-	Reverse	

Three Function (light grey base, RAL 7035; dark grey lid, RAL 7016)

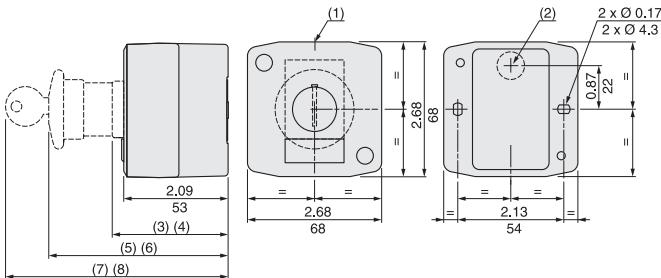
Description	Type of push	Type of contact		Legend text	Catalog number
		N/O	N/C		
Text on legend plates					
3 Momentary push buttons	1 flush black	1	-	Open	GB5D341
	1 flush red	-	1	Stop	
	1 flush black	1	-	Close	
	1	-	1	Forward	
	-	1	-	Stop	GB5D311
	1	-	-	Reverse	
	1	-	-	Up	GB5D321
	-	1	-	Stop	
	1	-	-	Down	

Empty Enclosures

Description	Number of holes	Catalog number
For normal environments, CSA+ UL approvals (with stainless steel lid mounting screws)		
Light grey base "RAL 7035"	1	GB5D01
Dark grey lid "RAL 7016"	2	GB5D02
	3	GB5D03
	4	GB5D04
	5	GB5D05
Light grey base "RAL 7035" Yellow lid "RAL 1012"	1	GB5K01



Single-way control stations GB5-D1, K1, D01

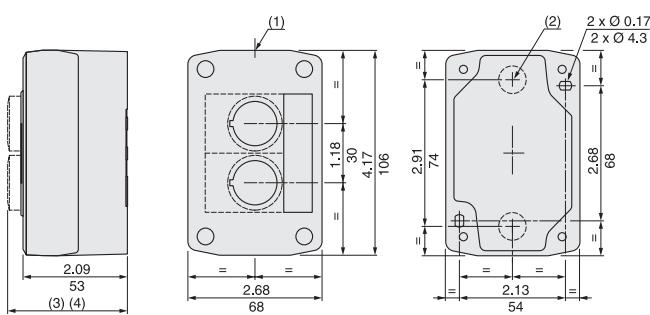


- (1) 2 knock-outs for PG 13.5 cable glands, maximum capacity 0.47 in (12 mm).
- (2) Knock-out for cable entry, maximum capacity 0.55 in (14 mm).

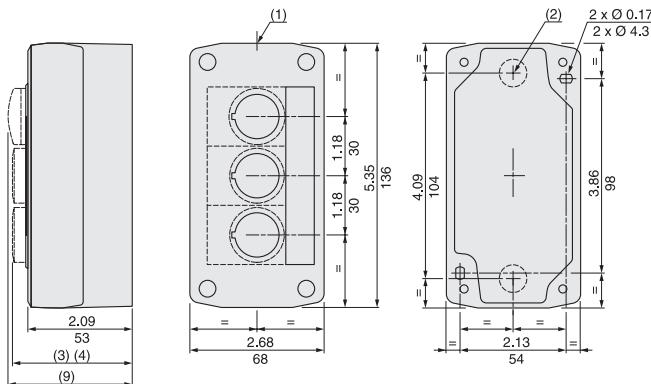
Examples:

- (3) 2.44 in (62 mm) for flush push buttons.
- (4) 2.59 in (66 mm) for projecting push buttons.
- (5) 3.58 in (91 mm) for latching mushroom head push buttons.
- (6) 2.91 in (74 mm) for key switches.
- (7) 4.45 in (113 mm) for latching mushroom head push buttons with key release.
- (8) 3.78 in (96 mm) for key switches with key.
- (9) 2.52 in (64 mm) for pilot lights.

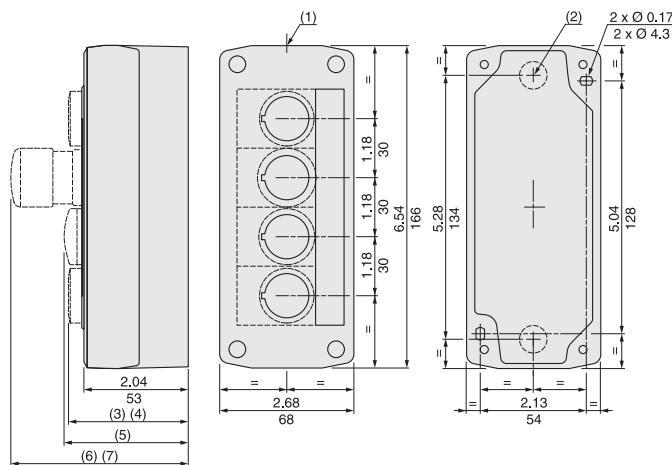
Two-way control stations GB5-D2, K2, D 02



Three-way control stations GB5-D3, K3, D03

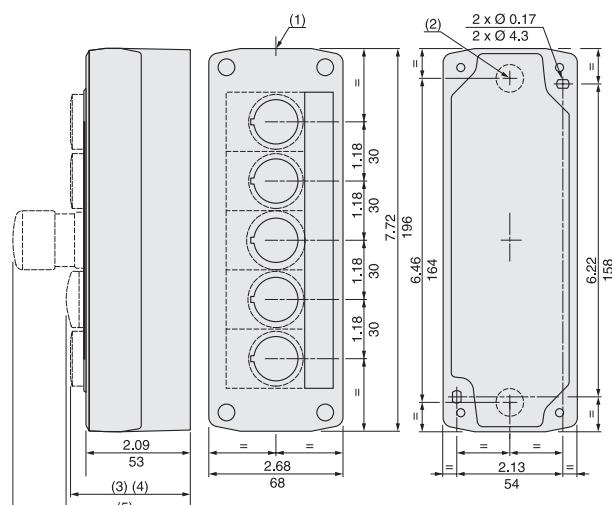


Four-way control stations GB5-D4, K4, D04



- (1) 2 knock-outs for PG 13.5 cable glands, maximum capacity 0.47 in (12 mm).
- (2) Knock-out for cable entry, maximum capacity 0.55 in (14 mm).

Five-way control stations GB5-D5, K5, D05



Examples:

- (3) 2.44 in (62 mm) for flush push buttons.
- (4) 2.59 in (66 mm) for projecting push buttons.
- (5) 2.52 in (64 mm) for pilot lights.
- (6) 3.43 in (87 mm) for mushroom head push buttons.
- (7) 3.07 in (78 mm) for selector switches.

Dual Dimensions inches
 mm



Model	Description	Colour	Voltage	Dimension
AD26B-16D	φ 16 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC220V AC380V	
AD26B-16D/S	φ 16 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V	
AD26B-16C	φ 16 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC220V AC380V	
AD26B-22A	φ 22 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC220V AC380V	
AD26B-22/25B	φ 22/25 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V FD380V FD500V	
AD26B-22/25B/S	φ 22/25 Super-short type pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V	

Operator Interface Components

AD26B series pilot light



Model	Description	Colour	Voltage	Dimension
AD26B-22/25C	φ 22/25 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V FD380V FD500V	
AD26B-22/25C/S	φ 22/25 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V	
AD26B-22/25D	φ 22/25 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V FD380V FD500V	
AD26B-22/25D/S	φ 22/25 Super-short type pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V	
AD26B-22/25E	φ 22/25 pilot light	R G Y B W	AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V FD380V FD500V	
AD26B-22/25E/S	φ 22/25 Super-short type pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V	



Reference	Description	Colour	Voltage	Dimension
AD26B-22H	φ 22/25 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V FD380V FD500V	
AD26B-22H/S	φ 22/25 pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25	φ 22/25 Round double-color light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25B/HL	φ 22/25 Flashing pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25C/HL	φ 22/25 Flashing pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	

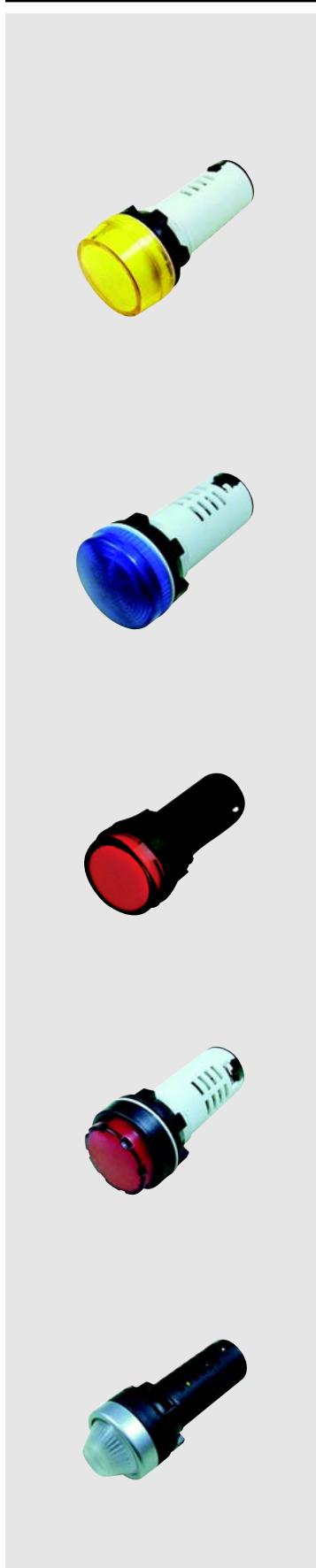
Operator Interface Components

AD26B series pilot light

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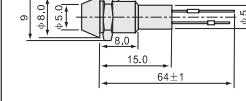
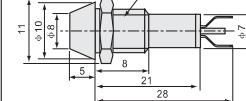
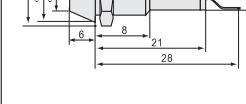
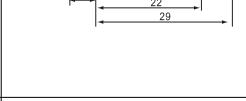
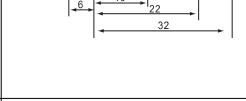
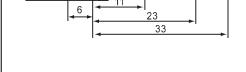


Reference	Description	Colour	Voltage	Dimension
AD26B-22/25D/HL	φ 22/25 Flashing pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25E/HL	φ 22/25 Flashing pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22H/HL	φ 22/25 Flashing pilot light	R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC110V AC220V AC380V FD380V FD500V	
AD26B-22/25MC	φ 22/25 Longtime buzzer	R G Y B W	AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25MJ	φ 22/25 Intermittent buzzer	R G Y B W	AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	



Reference	Description	Colour	Voltage	Dimension
AD26B-22B/K	φ 22/25 Interference resistant pilot light	R G Y B W	AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25C/K	φ 22/25 Interference resistant pilot light	R G Y B W	AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25D/K	φ 22/25 Intermittent buzzer pilot light	R G Y B W	AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25E/K	φ 22/25 Intermittent buzzer pilot light	R G Y B W	AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	
AD26B-22/25H/K	φ 22/25 Intermittent buzzer pilot light	R G Y B W	AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V AC110V AC220V AC380V	



Reference	Description	Colour	Voltage	Dimension
AD26C-6		R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V	
AD26C-8		R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V	
AD26C-10		R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V	
AD26C-12		R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V	
AD26C-14		R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V	
AD26C-16		R G Y B W	AC/DC6V AC/DC12V AC/DC24V AC/DC36V AC/DC48V AC/DC110V AC/DC220V	


Type and meanings

BA9S - □ □ □ □
1 2 3 4 5

1: Code No.

2: Type: P-general,

PSG-general type with flash

3: Rated Voltage(AC/DC): 6-6V, 12-12V,
24-24V, 110-110V, 220-220V

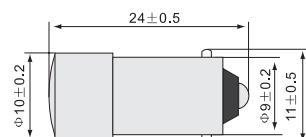
4: Color: red, yellow, green, blue, white

5: Auxi function:anti-surge-L,
anti-interference: ≥ 6V ,

k10: ≥ 10V

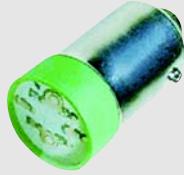
Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m²)	Working current (mA)			
6	6	R	620	2080	≤ 20	6	6~8	
		Y	585	2800	≤ 20			
		G	525	1700	≤ 20			
		B	470	900	≤ 20			
		W	X=0.31 Y=0.32	2500	≤ 20			
12	12	R	620	2000	≤ 20	12	12~13.2	
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
BA9S-P	24	R	620	2000	≤ 20	24	24~26.4	-20~50
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
BA9S-PSG	110	R	620	600	≤ 5	110	110~130	
		Y	585	950	≤ 5			
		G	525	900	≤ 5			
		B	470	500	≤ 5			
		W	X=0.31 Y=0.32	2300	≤ 5			
	220	R	620	460	≤ 3	220	220~240	
		Y	585	550	≤ 3			
		G	525	850	≤ 3			
		B	470	330	≤ 3			
		W	X=0.31 Y=0.32	1200	≤ 3			

Dimension


Operator Interface Components

BA9S series based LED bulb



3

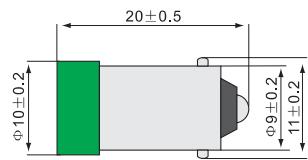
Type and meanings

BA9S - /
 1 2 3 4 5 6

- 1: Code No.
- 2: Type: P-general,
PSG-general type with flash
- 3: Design: S-short
- 4: Rated Voltage(AC/DC): 6-6V,12-12V,
24-24V, 110-110V, 220-220V
- 5: Color: red, yellow, green, blue, white
- 6: Auxi function:anti-surge-L,
anti-interference: ≥ 6V,
k10: ≥ 10V

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
BA9S-P/S	6	R	620	2080	≤ 20	6	6-8	-20~50	
		Y	585	2800	≤ 20				
		G	525	1700	≤ 20				
		B	470	900	≤ 20				
		W	X=0.31 Y=0.32	2500	≤ 20				
	12	R	620	2000	≤ 20	12	12~13.2		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
BA9S-PSG/S	24	R	620	2000	≤ 20	24	24~26.4	-20~50	
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	110	R	620	600	≤ 5	110	110~130		
		Y	585	950	≤ 5				
		G	525	900	≤ 5				
		B	470	500	≤ 5				
		W	X=0.31 Y=0.32	2300	≤ 5				
	220	R	620	460	≤ 3	220	220~240		
		Y	585	550	≤ 3				
		G	525	850	≤ 3				
		B	470	330	≤ 3				
		W	X=0.31 Y=0.32	1200	≤ 3				

Dimension

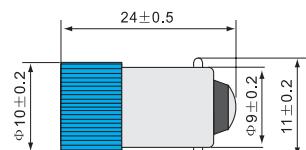

Type and meanings

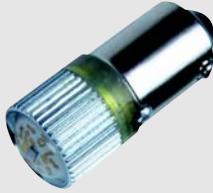
BA9S - □ □ □ □
1 2 3 4 5

- 1: Code No.
- 2: Type: X-New type,
XSG-New type flashing model
- 3: Rated Voltage(AC/DC): 6-6V,12-12V,
24-24V, 110-110V, 220-220V
- 4: Color: red, yellow, green, blue, white
- 5: Auxi function:anti-surge-L,
anti-interference: ≥ 6V ,
k10: ≥ 10V

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m²)	Working current (mA)			
6	6	R	620	2080	≤ 20	6	6~8	
		Y	585	2800	≤ 20			
		G	525	1700	≤ 20			
		B	470	900	≤ 20			
		W	X=0.31 Y=0.32	2500	≤ 20			
12	12	R	620	2000	≤ 20	12	12~13.2	
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
BA9S-X	24	R	620	2000	≤ 20	24	24~26.4	-20~50
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
110	110	R	620	600	≤ 5	110	110~130	
		Y	585	950	≤ 5			
		G	525	900	≤ 5			
		B	470	500	≤ 5			
		W	X=0.31 Y=0.32	2300	≤ 5			
220	220	R	620	460	≤ 3	220	220~240	
		Y	585	550	≤ 3			
		G	525	850	≤ 3			
		B	470	330	≤ 3			
		W	X=0.31 Y=0.32	1200	≤ 3			

Dimension



Type and meanings

BA9S -

1: Code No.

2: Type: CH-High copper case on the head

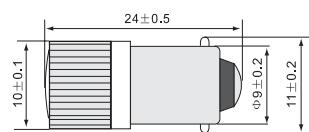
3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 110-110V, 220-220V

4: Color: red, yellow, green, blue, white

5: Auxi function:anti-surge-L, anti-interference: ≥ 6V, k10: ≥ 10V

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
BA9S-CH	6	R	620	2080	≤ 20	6	6~8	-20~50	
		Y	585	2800	≤ 20				
		G	525	1700	≤ 20				
		B	470	900	≤ 20				
		W	X=0.31 Y=0.32	2500	≤ 20				
	12	R	620	2000	≤ 20	12	12~13.2		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	24	R	620	2000	≤ 20	24	24~26.4		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	110	R	620	600	≤ 5	110	110~130		
		Y	585	950	≤ 5				
		G	525	900	≤ 5				
		B	470	500	≤ 5				
		W	X=0.31 Y=0.32	2300	≤ 5				
	220	R	620	460	≤ 3	220	220~240		
		Y	585	550	≤ 3				
		G	525	850	≤ 3				
		B	470	330	≤ 3				
		W	X=0.31 Y=0.32	1200	≤ 3				

Dimension



Type and meanings

BA9S - 1 2 3 4

1: Code No.

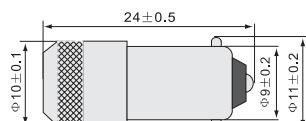
2: Type: CL-High copper case on the head, LED lamp

3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 110-110V, 220-220V

4: Color: red, yellow, green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m²)	Working current (mA)			
BA9S-CL	6	R	620	1547	≤ 20	6	6~8	-20~50
		Y	585	2570	≤ 20			
		G	525	4850	≤ 20			
		B	470	1150	≤ 20			
		W	X=0.31 Y=0.32	4750	≤ 20			
	12	R	620	1525	≤ 20	12	12~13.2	-20~50
		Y	585	2515	≤ 20			
		G	525	3570	≤ 20			
		B	470	1020	≤ 20			
		W	X=0.31 Y=0.32	4560	≤ 20			
	24	R	620	1500	≤ 20	24	24~26.4	-20~50
		Y	585	2500	≤ 20			
		G	525	3500	≤ 20			
		B	470	985	≤ 20			
		W	X=0.31 Y=0.32	4000	≤ 20			
	110	R	620	1250	≤ 5	110	110~130	-20~50
		Y	585	2490	≤ 5			
		G	525	3050	≤ 5			
		B	470	1000	≤ 5			
		W	X=0.31 Y=0.32	3950	≤ 5			
	220	R	620	1050	≤ 3	220	220~240	-20~50
		Y	585	2320	≤ 3			
		G	525	3000	≤ 3			
		B	470	858	≤ 3			
		W	X=0.31 Y=0.32	3850	≤ 3			

Dimension




3

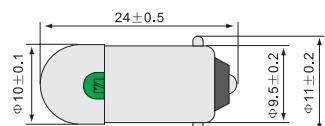
Type and meanings

BA9S - 1 2 3 4

- 1: Code No.
- 2: Type: L-LED lamp
- 3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 110-110V, 220-220V
- 4: Color: red, yellow, green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
BA9S-L	6	R	620	880	≤ 20	6	6~8	-20~50	
		Y	585	1050	≤ 20				
		G	525	3450	≤ 20				
		B	470	650	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	12	R	620	850	≤ 20	12	12~13.2		
		Y	585	1010	≤ 20				
		G	525	3250	≤ 20				
		B	470	630	≤ 20				
		W	X=0.31 Y=0.32	2370	≤ 20				
	24	R	620	845	≤ 20	24	24~26.4		
		Y	585	1000	≤ 20				
		G	525	3100	≤ 20				
		B	470	620	≤ 20				
		W	X=0.31 Y=0.32	2300	≤ 20				
	48	R	620	800	≤ 20	48	48~52.8		
		Y	585	990	≤ 20				
		G	525	3000	≤ 20				
		B	470	600	≤ 20				
		W	X=0.31 Y=0.32	2200	≤ 20				

Dimension



Type and meanings

E10 - □ □ □ □ □
1 2 3 4 5

1: Code No.

2: Type: P-general,
PSG-general type with flash

3: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 110-110V, 220-220V

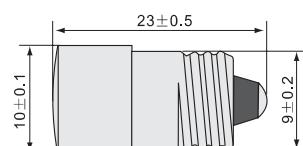
4: Color: red, yellow, green, blue,white

5: Auxi function:anti-surge-L,
anti-interference: ≥ 6V,

k10: ≥ 10V

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
E10-P	6	R	620	2080	≤ 20	6	6~8	-20~50	
		Y	585	2800	≤ 20				
		G	525	1700	≤ 20				
		B	470	900	≤ 20				
		W	X=0.31 Y=0.32	2500	≤ 20				
	12	R	620	2000	≤ 20	12	12-13.2		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
E10-PSG	24	R	620	2000	≤ 20	24	24-26.4	-20~50	
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	110	R	620	600	≤ 5	110	110~130		
		Y	585	950	≤ 5				
		G	525	900	≤ 5				
		B	470	500	≤ 5				
		W	X=0.31 Y=0.32	2300	≤ 5				
	220	R	620	460	≤ 3	220	220~240		
		Y	585	550	≤ 3				
		G	525	850	≤ 3				
		B	470	330	≤ 3				
		W	X=0.31 Y=0.32	1200	≤ 3				

Dimension


Operator Interface Components

E10 series based LED bulb



3

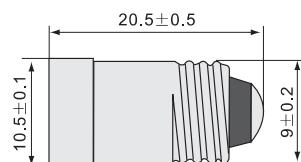
Type and meanings

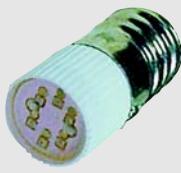
E10 - /
1 2 3 4 5 6

- 1: Code No.
- 2: Type: P-general,
PSG-general type with flash
- 3: Design: S-short
- 4: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 110-110V, 220-220V
- 5: Color: red, yellow, green, blue, white
- 6: Auxi function:anti-surge-L,
anti-interference: $\geq 6V$,
k10: $\geq 10V$

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
E10-P/S E10-PSG/S	6	R	620	2080	≤ 20	6	6~8	-20~50	
		Y	585	2800	≤ 20				
		G	525	1700	≤ 20				
		B	470	900	≤ 20				
		W	X=0.31 Y=0.32	2500	≤ 20				
	12	R	620	2000	≤ 20	12	12~13.2		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	24	R	620	2000	≤ 20	24	24~26.4		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	110	R	620	600	≤ 5	110	110~130		
		Y	585	950	≤ 5				
		G	525	900	≤ 5				
		B	470	500	≤ 5				
		W	X=0.31 Y=0.32	2300	≤ 5				
	220	R	620	460	≤ 3	220	220~240		
		Y	585	550	≤ 3				
		G	525	850	≤ 3				
		B	470	330	≤ 3				
		W	X=0.31 Y=0.32	1200	≤ 3				

Dimension


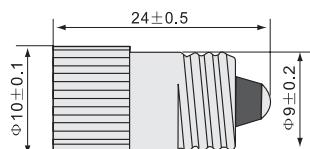

Type and meanings

E10 -
1 2 3 4 5

- 1: Code No.
- 2: Type:X-type ,
XSG-New type flashing model
- 3: Rated Voltage(AC/DC): 6-6V,
12-12V、24-24V, 110-110V, 220-220V
- 4: Color: red, yellow, green, blue,white
- 5: Auxi function:anti-surge-L,
anti-interference: ≥ 6V,
k10: ≥ 10V

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m ²)	Working current (mA)				
E10-X E10-XSG	6	R	620	2080	≤ 20	6	6-8	-20~50	
		Y	585	2800	≤ 20				
		G	525	1700	≤ 20				
		B	470	900	≤ 20				
		W	X=0.31 Y=0.32	2500	≤ 20				
	12	R	620	2000	≤ 20	12	12~13.2		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	24	R	620	2000	≤ 20	24	24~26.4		
		Y	585	2700	≤ 20				
		G	525	1500	≤ 20				
		B	470	850	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	110	R	620	600	≤ 5	110	110~130		
		Y	585	950	≤ 5				
		G	525	900	≤ 5				
		B	470	500	≤ 5				
		W	X=0.31 Y=0.32	2300	≤ 5				
	220	R	620	460	≤ 3	220	220~240		
		Y	585	550	≤ 3				
		G	525	850	≤ 3				
		B	470	330	≤ 3				
		W	X=0.31 Y=0.32	1200	≤ 3				

Dimension




3

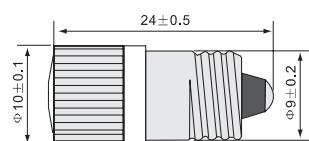
Type and meanings

E10 -
1 2 3 4 5

- 1: Code No.
- 2: Type: CH-High copper case on the head
- 3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 110-110V, 220-220V
- 4: Color: red, yellow, green, blue, white
- 5: Auxi function:anti-surge-L, anti-interference: $\geq 6V$, k10: $\geq 10V$

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m²)	Working current (mA)			
E10-CH	6	R	620	2080	≤ 20	6	6~8	-20~50
		Y	585	2800	≤ 20			
		G	525	1700	≤ 20			
		B	470	900	≤ 20			
		W	X=0.31 Y=0.32	2500	≤ 20			
E10-CH	12	R	620	2000	≤ 20	12	12~13.2	-20~50
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
E10-CH	24	R	620	2000	≤ 20	24	24~26.4	-20~50
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
E10-CH	110	R	620	600	≤ 5	110	110~130	-20~50
		Y	585	950	≤ 5			
		G	525	900	≤ 5			
		B	470	500	≤ 5			
		W	X=0.31 Y=0.32	2300	≤ 5			
E10-CH	220	R	620	460	≤ 3	220	220~240	-20~50
		Y	585	550	≤ 3			
		G	525	850	≤ 3			
		B	470	330	≤ 3			
		W	X=0.31 Y=0.32	1200	≤ 3			

Dimension


E10 series based LED bulb



Type and meanings

E10 -
1 2 3 4 5

5: Code No.

4: Type:CL-High copper case on the head, LED lamp

3: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 110-110V, 220-220V

2: Color: red, yellow, green, blue, white

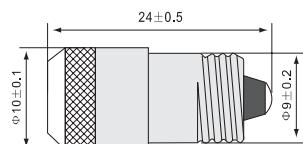
1: Auxi function:anti-surge-L,
anti-interference: ≥ 6V,

k10: ≥ 10V

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m²)	Working current (mA)			
E10-CL	6	R	620	1547	≤ 20	6	6~8	
		Y	585	2570	≤ 20			
		G	525	4850	≤ 20			
		B	470	1150	≤ 20			
		W	X=0.31 Y=0.32	4750	≤ 20			
E10-CL	12	R	620	1525	≤ 20	12	12~13.2	
		Y	585	2515	≤ 20			
		G	525	3570	≤ 20			
		B	470	1020	≤ 20			
		W	X=0.31 Y=0.32	4560	≤ 20			
E10-CL	24	R	620	1500	≤ 20	24	24~26.4	-20~50
		Y	585	2500	≤ 20			
		G	525	3500	≤ 20			
		B	470	985	≤ 20			
		W	X=0.31 Y=0.32	4000	≤ 20			
E10-CL	110	R	620	1250	≤ 5	110	110~130	
		Y	585	2490	≤ 5			
		G	525	3050	≤ 5			
		B	470	1000	≤ 5			
		W	X=0.31 Y=0.32	3950	≤ 5			
E10-CL	220	R	620	1050	≤ 3	220	220~240	
		Y	585	2320	≤ 3			
		G	525	3000	≤ 3			
		B	470	858	≤ 3			
		W	X=0.31 Y=0.32	3850	≤ 3			

Dimension



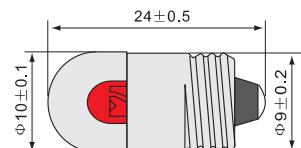

Type and meanings

E10 -
1 2 3 4

- 1: Code No.
- 2: Type: L-LED lamp
- 3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 48-48V
- 4: Color: red, yellow, green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m ²)	Working current (mA)				
E10-L	6	R	620	880	≤ 20	6	6~8	-20~50	
		Y	585	1050	≤ 20				
		G	525	3450	≤ 20				
		B	470	650	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	12	R	620	850	≤ 20	12	12~13.2		
		Y	585	1010	≤ 20				
		G	525	3250	≤ 20				
		B	470	630	≤ 20				
		W	X=0.31 Y=0.32	2370	≤ 20				
	24	R	620	845	≤ 20	24	24~26.4		
		Y	585	1000	≤ 20				
		G	525	3100	≤ 20				
		B	470	620	≤ 20				
		W	X=0.31 Y=0.32	2300	≤ 20				
	48	R	620	800	≤ 20	48	48~52.8		
		Y	585	990	≤ 20				
		G	525	3000	≤ 20				
		B	470	600	≤ 20				
		W	X=0.31 Y=0.32	2200	≤ 20				

Dimension


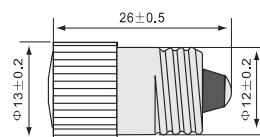

Type and meanings

E12 -
1 2 3 4 5

- 1: Code No.
- 2: Type: X-New type,
XSG-New type flashing model
- 3: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 110-110V, 220-220V
- 4: Color: red, yellow, green, blue, white
- 5: Auxi function:anti-surge-L,
anti-interference: $\geq 6V$,
k10: $\geq 10V$

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m²)	Working current (mA)			
E12	6	R	620	2080	≤ 20	6	6~8	
		Y	585	2800	≤ 20			
		G	525	1700	≤ 20			
		B	470	900	≤ 20			
		W	X=0.31 Y=0.32	2500	≤ 20			
E12-X	12	R	620	2000	≤ 20	12	12~13.2	
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
E12-XSG	24	R	620	2000	≤ 20	24	24~26.4	-20~50
		Y	585	2700	≤ 20			
		G	525	1500	≤ 20			
		B	470	850	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
110	110	R	620	600	≤ 5	110	110~130	
		Y	585	950	≤ 5			
		G	525	900	≤ 5			
		B	470	500	≤ 5			
		W	X=0.31 Y=0.32	2300	≤ 5			
220	220	R	620	460	≤ 3	220	220~240	
		Y	585	550	≤ 3			
		G	525	850	≤ 3			
		B	470	330	≤ 3			
		W	X=0.31 Y=0.32	1200	≤ 3			

Dimension




3

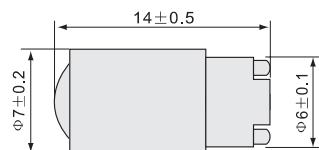
Type and meanings

BA7S -
 1 2 3 4

- 1: Code No.
- 2: Type: SP-Plastic body case 1
- 3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 48-48V
- 4: Color: red, yellow, green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m ²)	Working current (mA)			
BA7S-SP	6	R	620	880	≤ 20	6	6~8	-20~50
		Y	585	1050	≤ 20			
		G	525	3450	≤ 20			
		B	470	650	≤ 20			
		W	X=0.31 Y=0.32	2450	≤ 20			
	12	R	620	850	≤ 20	12	12~13.2	-20~50
		Y	585	1010	≤ 20			
		G	525	3250	≤ 20			
		B	470	630	≤ 20			
		W	X=0.31 Y=0.32	2370	≤ 20			
	24	R	620	845	≤ 20	24	24~26.4	-20~50
		Y	585	1000	≤ 20			
		G	525	3100	≤ 20			
		B	470	620	≤ 20			
		W	X=0.31 Y=0.32	2300	≤ 20			
	48	R	620	800	≤ 20	48	48~52.8	-20~50
		Y	585	990	≤ 20			
		G	525	3000	≤ 20			
		B	470	600	≤ 20			
		W	X=0.31 Y=0.32	2200	≤ 20			

Dimension


**Type and meanings**

BA7S -
1 2 3 4

1: Code No.

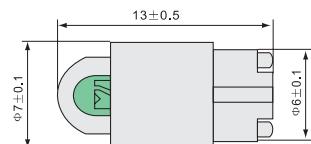
2: Type: SL-Plastic body case 2

3: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 48-48V

4: Color: red, yellow, green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
BA7S-SL	6	R	620	880	≤ 20	6	6~8	-20~50	
		Y	585	1050	≤ 20				
		G	525	3450	≤ 20				
		B	470	650	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	12	R	620	850	≤ 20	12	12~13.2		
		Y	585	1010	≤ 20				
		G	525	3250	≤ 20				
		B	470	630	≤ 20				
		W	X=0.31 Y=0.32	2370	≤ 20				
	24	R	620	845	≤ 20	24	24~26.4		
		Y	585	1000	≤ 20				
		G	525	3100	≤ 20				
		B	470	620	≤ 20				
		W	X=0.31 Y=0.32	2300	≤ 20				
	48	R	620	800	≤ 20	48	48~52.8		
		Y	585	990	≤ 20				
		G	525	3000	≤ 20				
		B	470	600	≤ 20				
		W	X=0.31 Y=0.32	2200	≤ 20				

Dimension



3

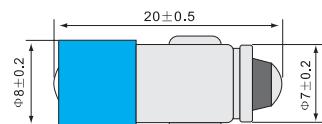
Type and meanings

BA7S -
1 2 3 4

- 1: Code No.
- 2: Type: T type
- 3: Rated Voltage(AC/DC): 6-6V, 12-12V, 24-24V, 48-48V
- 4: Color: red, yellow, green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
BA7S-T	6	R	620	880	≤ 20	6	6~8	-20~50	
		Y	585	1050	≤ 20				
		G	525	3450	≤ 20				
		B	470	650	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	12	R	620	850	≤ 20	12	12~13.2		
		Y	585	1010	≤ 20				
		G	525	3250	≤ 20				
		B	470	630	≤ 20				
		W	X=0.31 Y=0.32	2370	≤ 20				
	24	R	620	845	≤ 20	24	24~26.4		
		Y	585	1000	≤ 20				
		G	525	3100	≤ 20				
		B	470	620	≤ 20				
		W	X=0.31 Y=0.32	2300	≤ 20				
	48	R	620	800	≤ 20	48	48~52.8		
		Y	585	990	≤ 20				
		G	525	3000	≤ 20				
		B	470	600	≤ 20				
		W	X=0.31 Y=0.32	2200	≤ 20				

Dimension


**Type and meanings**BA6S -
1 2 3 4

1: Code No.

2: Type: A type

3: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 48-48V

4: Color: red, yellow green, blue, white

**Design**BA6S -
1 2 3 4

1: Code No.

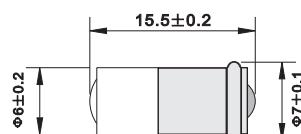
2: Type: B type

3: Rated Voltage(AC/DC): 6-6V,
12-12V, 24-24V, 48-48V

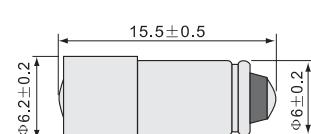
4: Color: red, yellow green, blue, white

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)	
				Luminance (cd/m²)	Working current (mA)				
BA6S-A	6	R	620	880	≤ 20	6	6-8	-20-50	
		Y	585	1050	≤ 20				
		G	525	3450	≤ 20				
		B	470	650	≤ 20				
		W	X=0.31 Y=0.32	2450	≤ 20				
	12	R	620	850	≤ 20	12	12-13.2		
		Y	585	1010	≤ 20				
		G	525	3250	≤ 20				
		B	470	630	≤ 20				
		W	X=0.31 Y=0.32	2370	≤ 20				
BA6S-B	24	R	620	845	≤ 20	24	24-26.4	-20-50	
		Y	585	1000	≤ 20				
		G	525	3100	≤ 20				
		B	470	620	≤ 20				
		W	X=0.31 Y=0.32	2300	≤ 20				
	48	R	620	800	≤ 20	48	48-52.8		
		Y	585	990	≤ 20				
		G	525	3000	≤ 20				
		B	470	600	≤ 20				
		W	X=0.31 Y=0.32	2200	≤ 20				

Dimension

BA6S-A type



BA6S-B type



3

Type and meanings

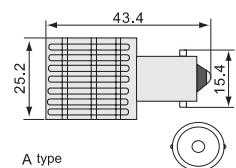
BA15(T15) - /

1	2	3	4
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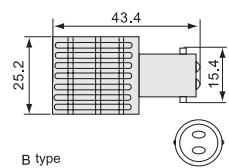
- 1: Code No.
- 2: Rated Voltage(AC/DC): 6-230V
- 3: Color: red, yellow green, blue, white
- 4: Type: A, B type

Specification

Model	Rated voltage (VAC)	Emitting color	Wave length (mm)	Parameters		Testing voltage (VAC/DC)	Working voltage range (VAC/DC)	Operating temperature (°C)
				Luminance (cd/m ²)	Working current (mA)			
BA15(T15)	24	R	620	860	≤ 100	AC/DC24	24~26.4	-20~50
		Y	585	510	≤ 100			
		G	525	1260	≤ 100			
		B	470	530	≤ 100			
		W	X=0.31 Y=0.32	2000	≤ 100			
	26	R	620	860	≤ 100	AC/DC36	36~39.6	
		Y	585	510	≤ 100			
		G	525	1260	≤ 100			
		B	470	530	≤ 100			
		W	X=0.31 Y=0.32	2000	≤ 100			
	48	R	620	860	≤ 100	AC/DC48	48~52.8	
		Y	585	510	≤ 100			
		G	525	1260	≤ 100			
		B	470	530	≤ 100			
		W	X=0.31 Y=0.32	2000	≤ 100			
	110	R	620	850	≤ 20	AC110	110~130	
		Y	585	499	≤ 20			
		G	525	1250	≤ 20			
		B	470	525	≤ 20			
		W	X=0.31 Y=0.32	2050	≤ 20			
	220	R	620	850	≤ 20	AC220	220~240	
		Y	585	499	≤ 20			
		G	525	1250	≤ 20			
		B	470	525	≤ 20			
		W	X=0.31 Y=0.32	2050	≤ 20			

Dimension


A type

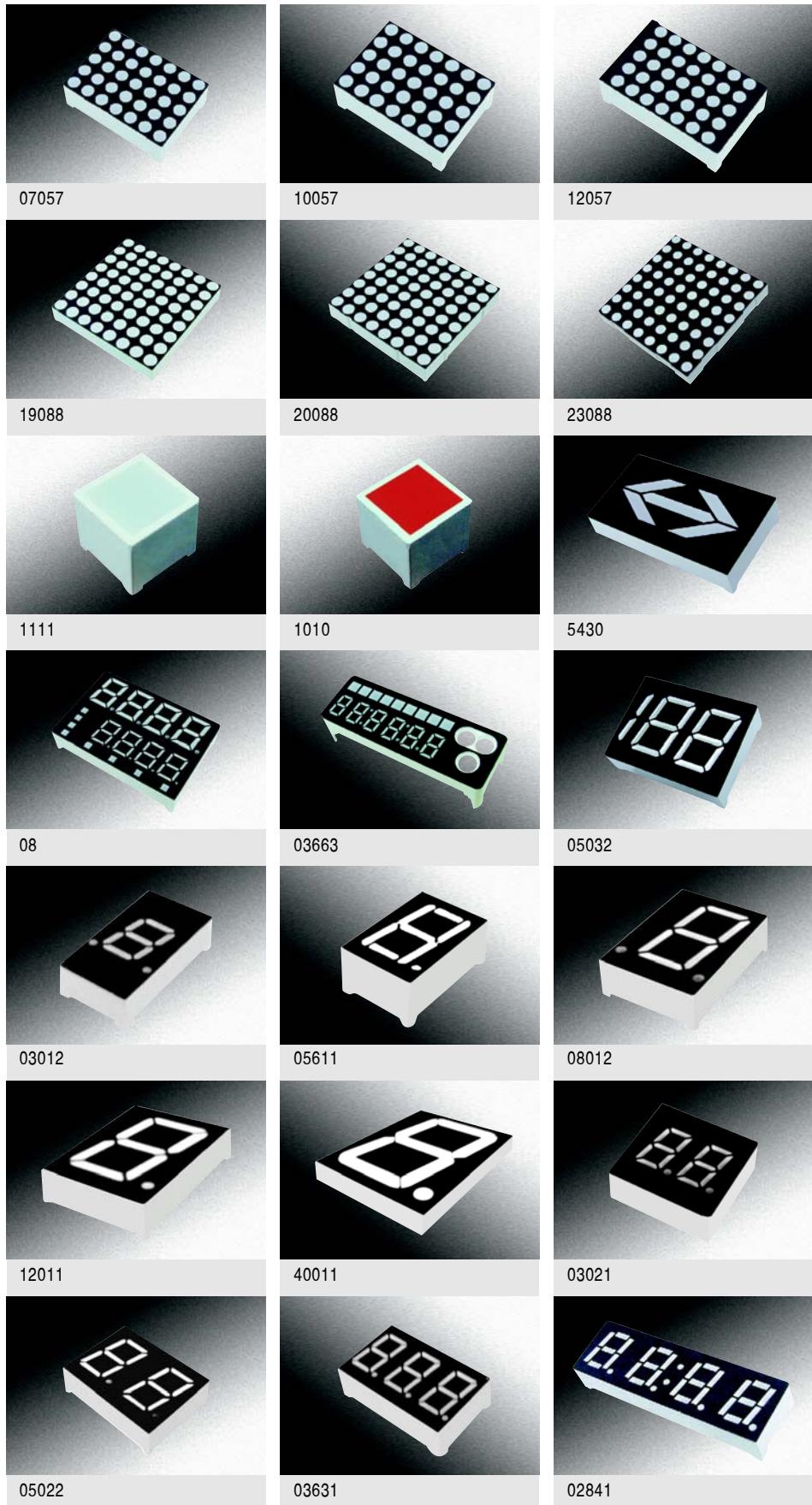


B type

Type and meanings

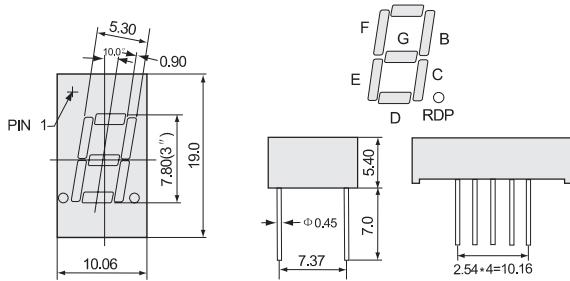
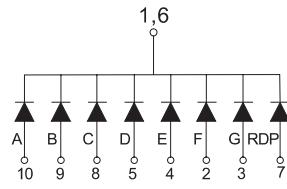
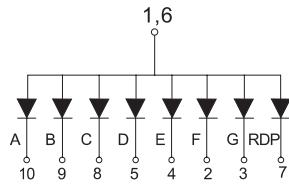
GS- □□□ □ □ □ □ - □
 1 2 3 4 5 6 7

- 1: Code NO.
- 2: Lattice windows height
- 3: Number of rows
- 4: Number of columns
- 5: Polarity: common cathode A, C, E
common anode B, D, F
- 6: Flashing color and brightness:
R-common red
G-yellowish green
Y-yellow
O-orange
S-high bright red
BN-blue
GP-pure green
WN-white
- 7: X-other signs

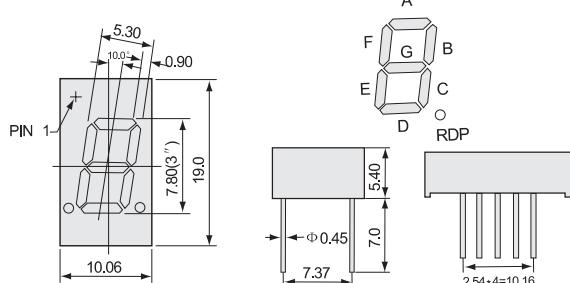
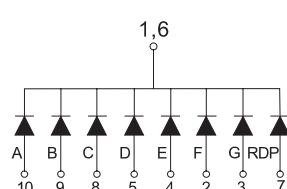
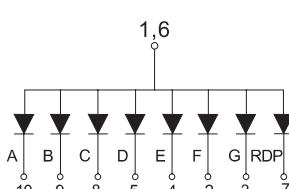


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G03012AX/BX	0.3"	Bit		G08021AX/BX	0.8"	Pibit	
G03014AX/BX	0.3"	Bit		G03132AX/BX	0.31"	Tribit	
G03611AX/BX	0.36"	Bit		G03631AX/BX	0.36"	Tribit	
G03911AX/BX	0.39"	Bit		G04031AX/BX	0.4"	Tribit	4-10
G03911CX/DX	0.39"	Bit		G05231AX/BX	0.52"	Tribit	
G04012AX/BX	0.4"	Bit	4 - 4	G05631AX/BX	0.56"	Tribit	4-11
G04012CX/DX	0.4"	Bit		G02541AX/BX	0.25"	Quabit	
G04313AX/BX	0.43"	Bit		G02841AX/BX	0.28"	Quabit	
G05011AX/BX	0.5"	Bit		G03141AX/BX	0.31"	Quabit	
G05011AEG	0.5"	Bit		G03041AX/BX	0.3"	Quabit	
G05211AX/BX	0.52"	Bit		G03641AX/BX	0.36"	Quabit	
G05613AX/BX	0.56"	Bit	4 - 5	G03941GX/HX	0.39"	Quabit	4-12
G05611BEG	0.56"	Bit		G04041AX/BX	0.4"	Quabit	
G05611AX/BX	0.56"	Bit		G05241AX/BX	0.52"	Quabit	
G05015AX/BX	0.5"	Bit		G05641AX/BX	0.56"	Quabit	
G06011AX/BX	0.6"	Bit		G027057AX/BX	Φ 1.90	5x7	4-13
G08011AX/BX	0.8"	Bit		G07088AXX/BXX	Φ 1.90	8x8	
G08012AX/BX	0.8"	Bit	4 - 6	G07088AX/BX	Φ 1.90	8x8	4-14
G10016AX/BX	1.0"	Bit		G10057AX/BX	Φ 3.0	5x7	
G10012AX/BX	1.0"	Bit		G12057AX/BX	Φ 3.0	5x7	
G10011AX/BX	1.0"	Bit		G12088AX/BX	Φ 3.0	8x8	
G12011AX/BX	1.2"	Bit		G15088AEG/BEG	Φ 3.7	8x8	
G12011CX/DX	1.2"	Bit		G19088AEG/BEG	Φ 4.8	8x8	
G15011AX/BX	1.5"	Bit	4 - 7	G20088AX/BX	Φ 5.0	8x8	4-15
G18011AX/BX	1.8"	Bit		G2308AX/BX	Φ 5.0	8x8	
G18011CX/DX	1.8"	Bit		G2308AXX/BXX	Φ 5.0	8x8	
G23011AX/BX	2.3"	Bit		G23087CXX/DXX	Φ 5.0	8x8	
G30012CX/DX	3.0"	Bit		G1111X LED digit tube			
G40011AX/BX	4.0"	Bit	4 - 8	G1010X LED digit tube			4-16
G03021AX/BX	0.3"	Dibit		G108X LED digit tube			
G03622AX/BX	0.36"	Dibit		G2217X Special purpose LED display			4-17
G04021AX/BX	0.4"	Dibit		G5430XX Special purpose LED display			
G05022AX/BX	0.5"	Dibit		G5441XX Special purpose LED display			
G05221AX/BX	0.52	Dibit	4 - 9				

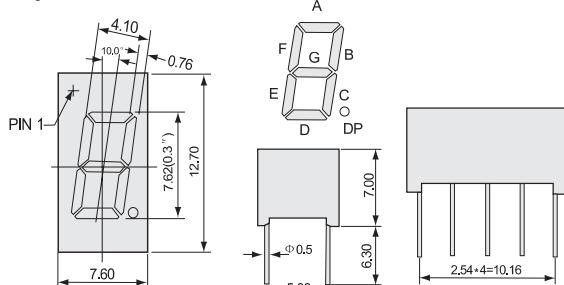
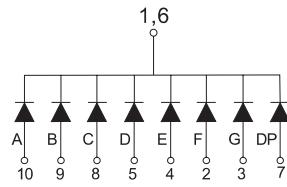
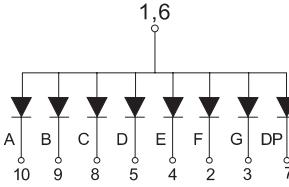
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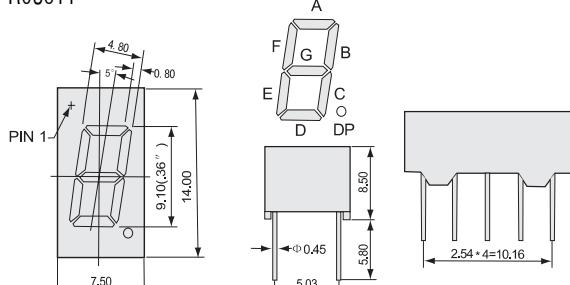
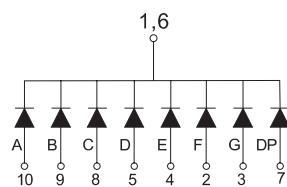
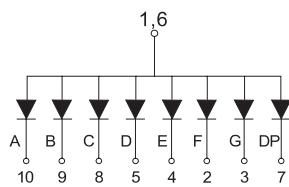
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GS03012AX
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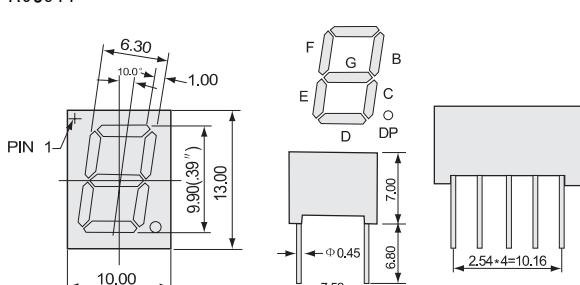
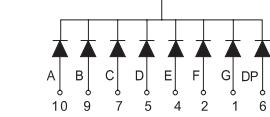
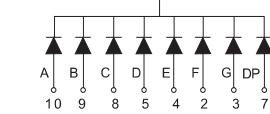
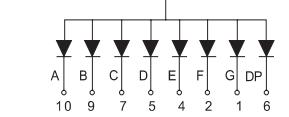
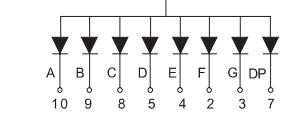
R03014

GS03014AX
PCB:D3014AGS03014BX
PCB:D3014B

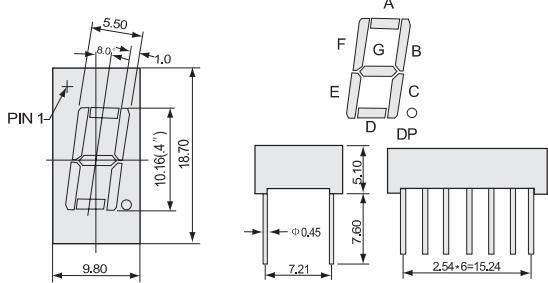
R03611

GS03611AX
PCB:D3611AGS03611BX
PCB:D3611B

R03911

GS03911AX
PCB:D3911AGS03911CX
PCB:D39011CGS03911BX
PCB:D3911BGS03911DX
PCB:D3911D

R04012



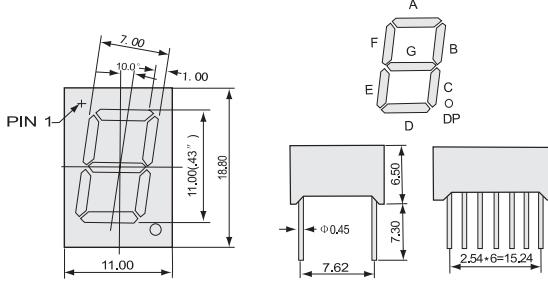
GS04012AX
PCB:D4012A/B 3,14
4,5,6&12NO PIN

GS04012CX
PCB:D4012C/D 4,12
3,5,10&11NO PIN

GS04012BX
PCB:D4012A/B 3,14
4,5,6&12NO PIN

GS04012DX
PCB:D4012C/D 4,12
3,5,10&11NO PIN

R04313



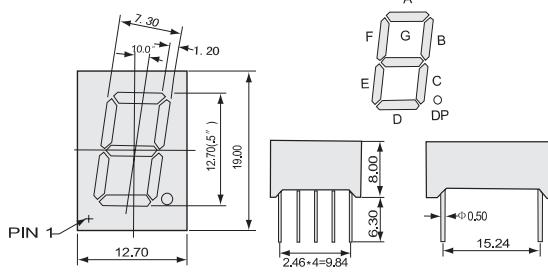
GS04313AX
PCB:D4313A/B 3,14

5,6,&12NO PIN

GS04313BX
PCB:D4313A/B 3,14

5,6,&12NO PIN

R05011



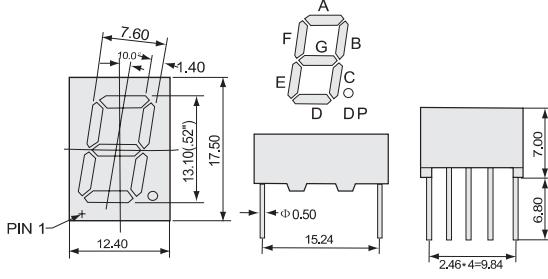
GS05011AX
PCB:D5011A/B 3,8

GS05011AEG
PCB:D5011A/EG

GS05011BX
PCB:D5011A/B 3,8

1 5
A B C D E F G DP
7 6 4 2 1 9 10 5
— = RED — = GREEN

R05212



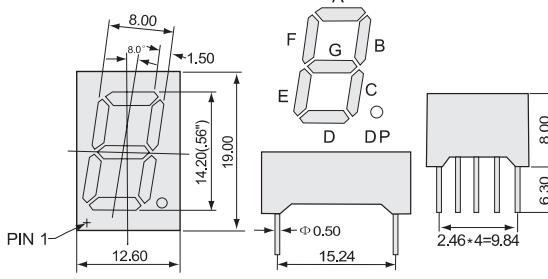
GS05212AX
PCB:D5212A/B 3,8

A B C D E F G DP
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GS05212BX
PCB:D5212A/B 3,8

A B C D E F G DP
7 6 4 2 1 9 10 5

R05613



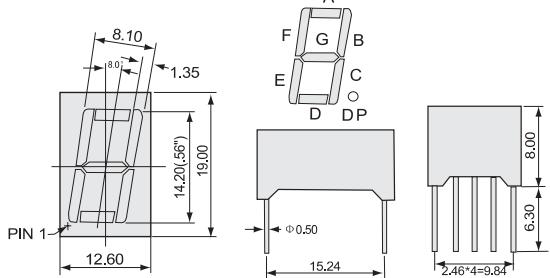
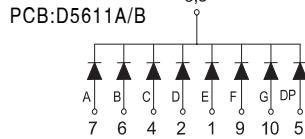
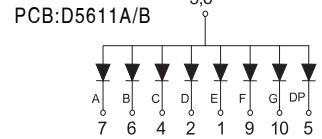
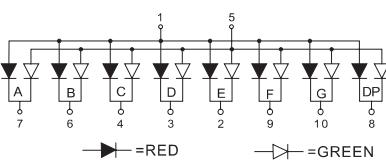
GS05613AX
PCB:D5611A/B 3,8

A B C D E F G DP
7 6 4 2 1 9 10 5

GS05613BX
PCB:D5611A/B 3,8

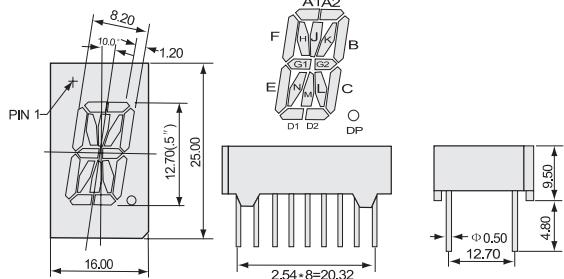
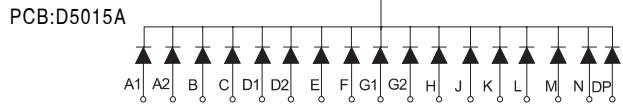
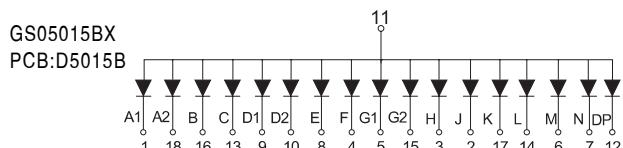
A B C D E F G DP
7 6 4 2 1 9 10 5

R05611

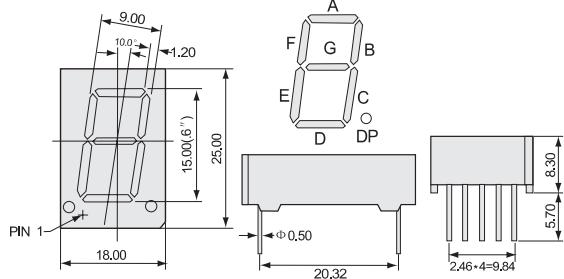
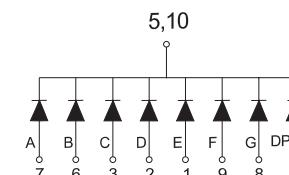
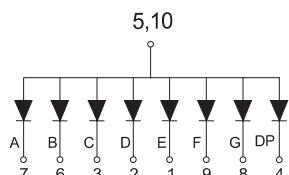
GS05611AX
PCB:D5611A/BGS05611BX
PCB:D5611B/BGS05611BEG
PCB:D5611B/EG

4

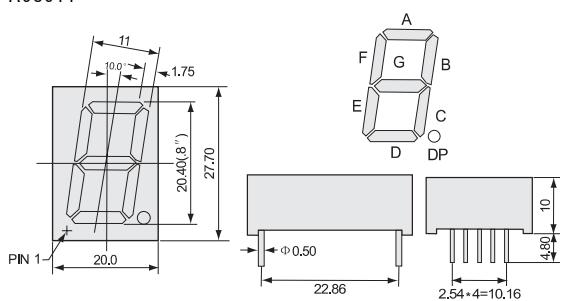
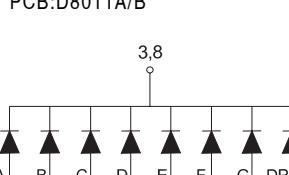
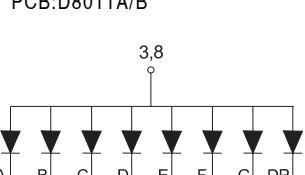
R05015

GS05015AX
PCB:D5015AGS05015BX
PCB:D5015B

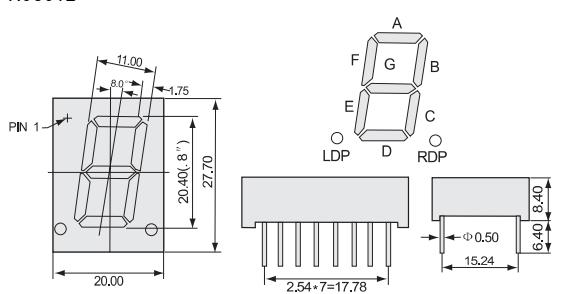
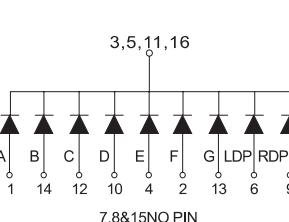
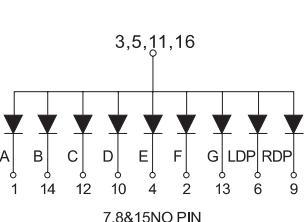
R06011

GS06011AX
PCB:D6011A/BGS06011BX
PCB:D6011A/B

R08011

GS08011AX
PCB:D8011A/BGS08011BX
PCB:D8011A/B

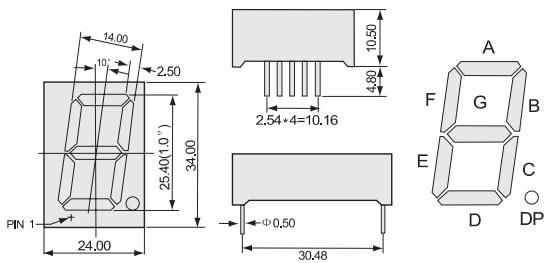
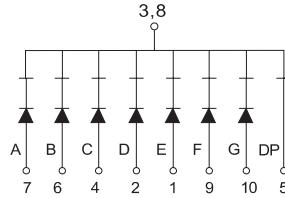
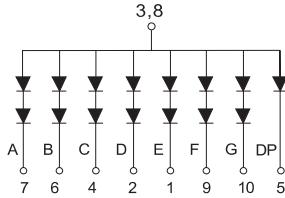
R08012

GS08012AX
PCB:D8012AGS03911BX
PCB:D8012B

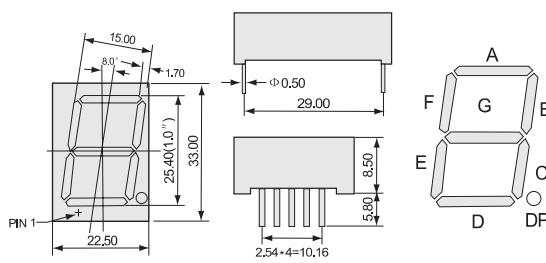
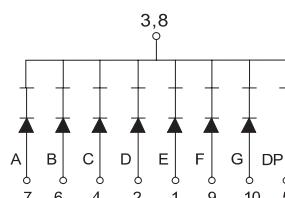
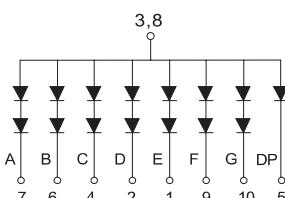
Operator Interface Components

Numeric display(digital display)

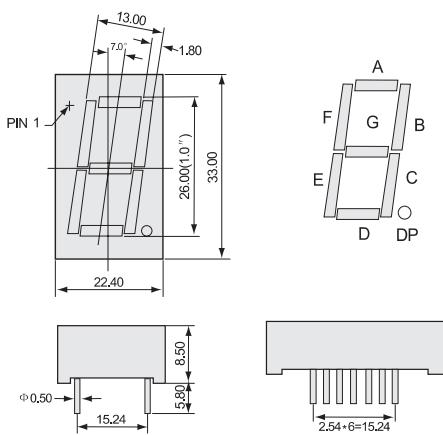
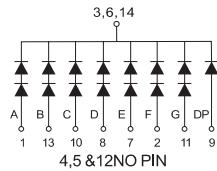
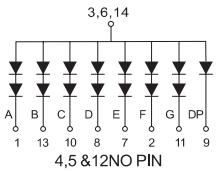
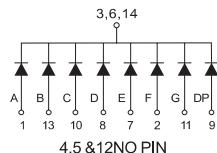
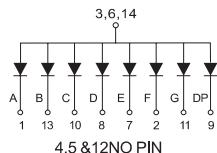
R10016

GS10016AX
PCB:D10016A/B/C/DGS10016BX
PCB:D10016A/B/C/D

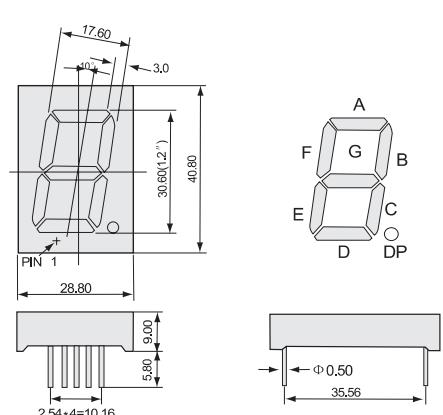
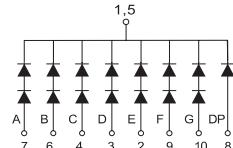
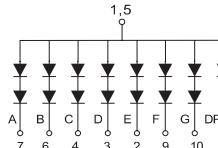
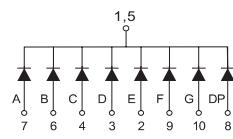
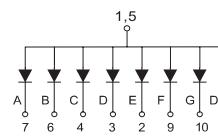
R10012

GS10012AX
PCB:D10012A/BGS10012BX
PCB:D10012A/B

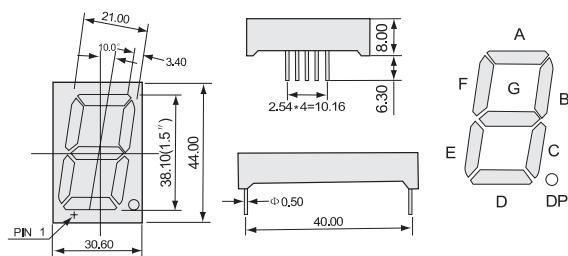
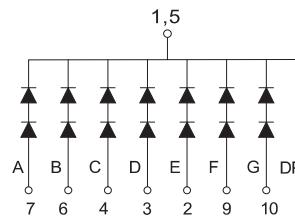
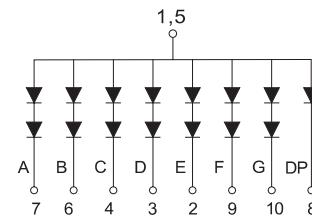
R10011

GS10011AX
PCB:D10011A/B/C/DGS10011BX
PCB:D10011A/B/C/DGS10011CX
PCB:D10011A/B/C/DGS10011DX
PCB:D10011A/B/C/D

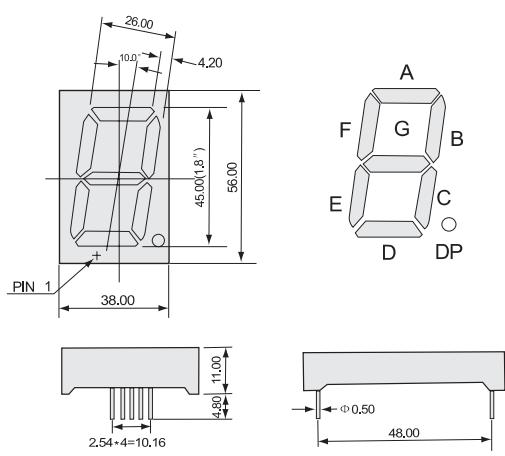
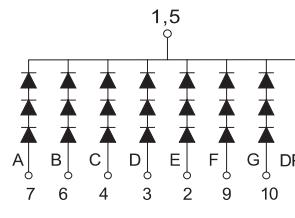
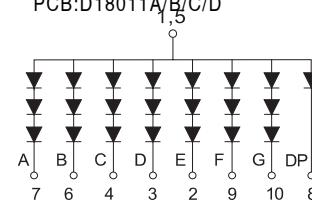
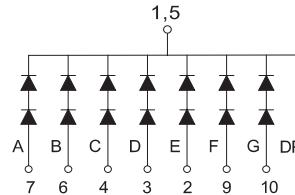
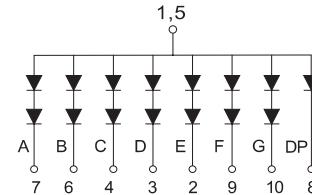
R12011

GS12011AX
PCB:D12011A/B/C/DGS12011DX
PCB:D12011A/B/C/DGS12011CX
PCB:D12011A/B/C/DGS12011DX
PCB:D12011A/B/C/D

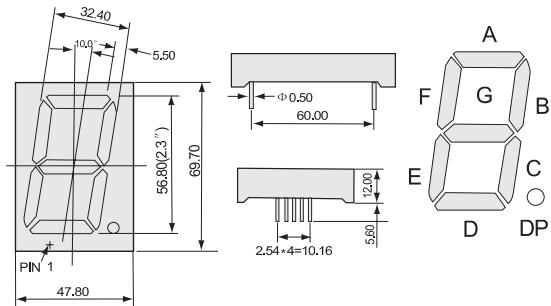
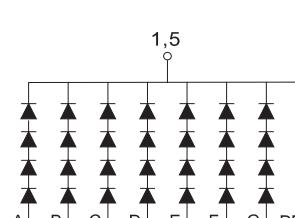
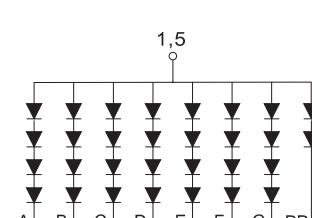
R15011

GS15011AX
PCB:D15011A/BGS15011BX
PCB:D15011A/B

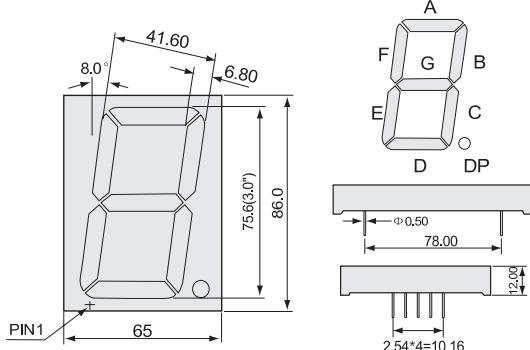
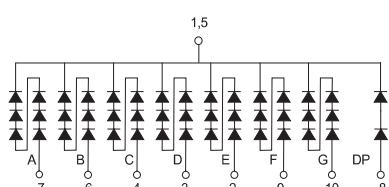
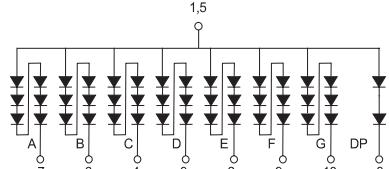
R18011

GS18011AX
PCB:D18011A/B/C/DGS18011BX
PCB:D18011A/B/C/DGS18011CX
PCB:D18011A/B/C/DGS18011DX
PCB:D18011A/B/C/D

R23011

GS23011AX
PCB:D23011A/BGS23011BX
PCB:D23011A/B

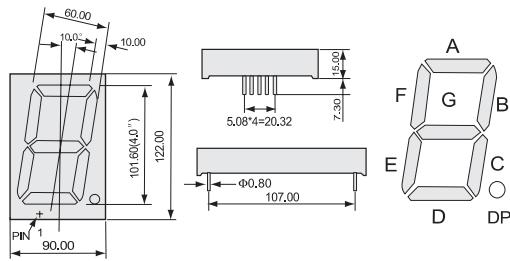
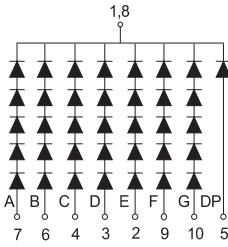
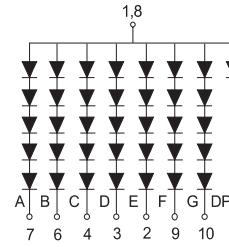
R30012

GS30012CX
PCB:CD-30102AGS30012DX
PCB:CD-30102B

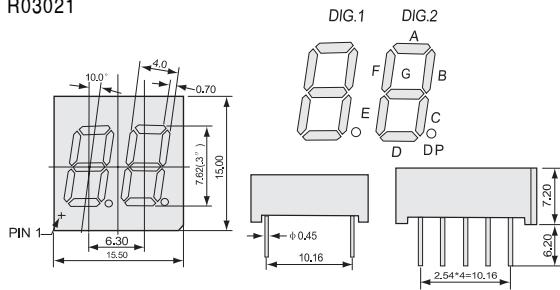
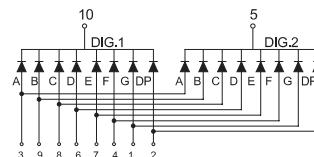
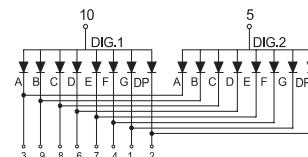
Operator Interface Components

Numeric display(digital display)

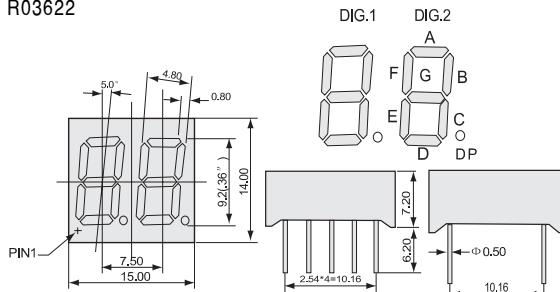
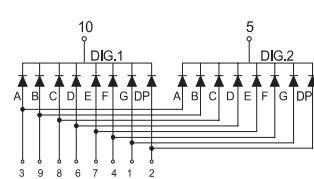
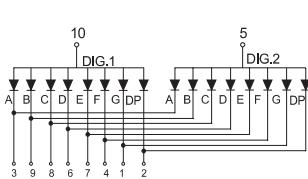
R40011

GS40011AX
PCB:D40011A/BGS40011BX
PCB:D40011A/B

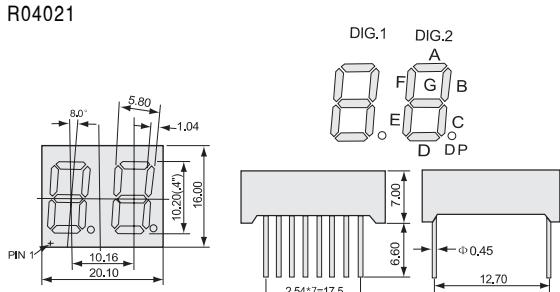
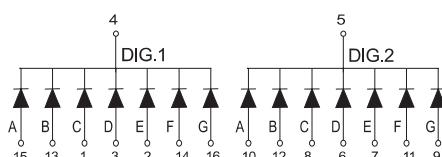
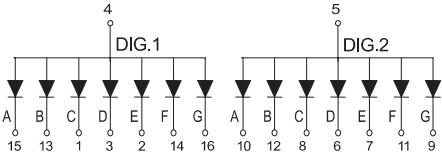
R03021

GS03021AX
PCB:D3021A/BGS03021BX
PCB:D3021A/B

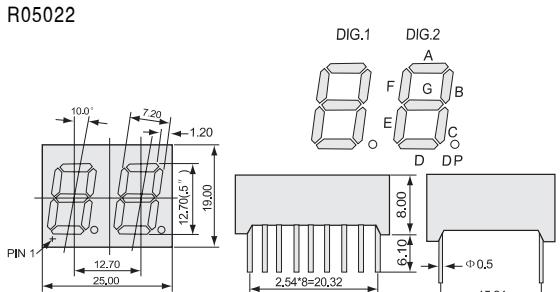
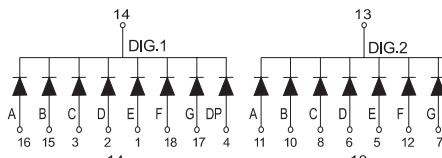
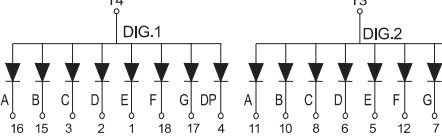
R03622

GS03622AX
PCB:D3622A/BGS03622BX
PCB:D3622A/B

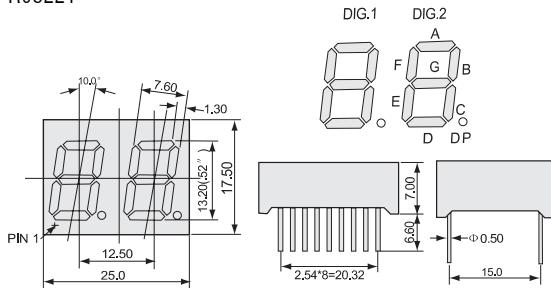
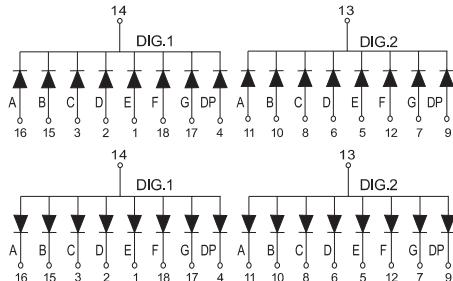
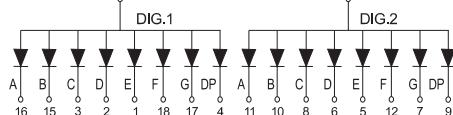
R04021

GS04021AX
PCB:D4021A/BGS04021BX
PCB:D4021A/B

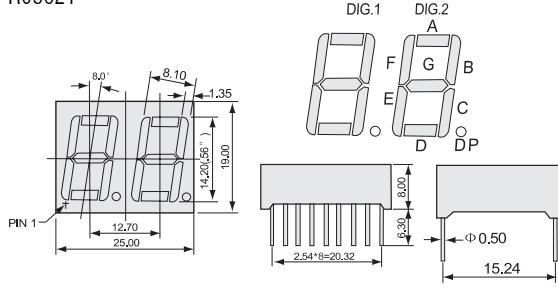
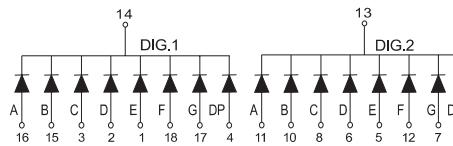
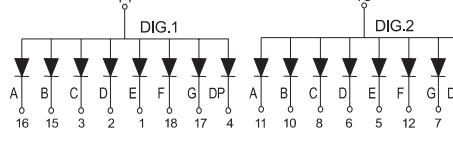
R05022

GS05022AX
PCB:D5022A/BGS05022BX
PCB:D5022A/B

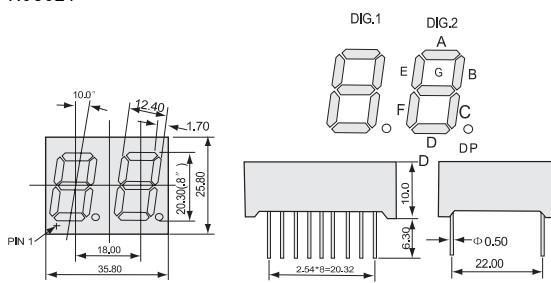
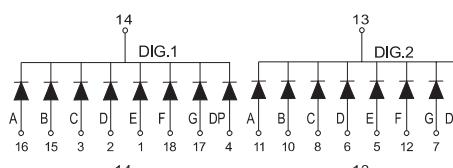
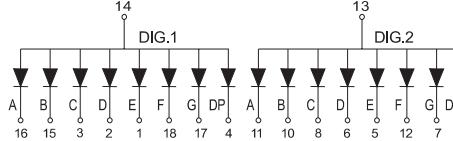
R05221

GS05221AX
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PCB:CD-5221B

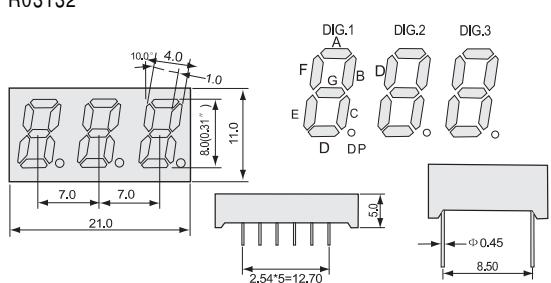
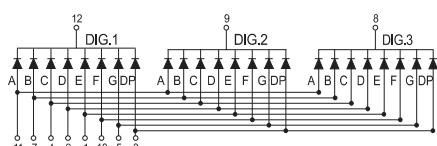
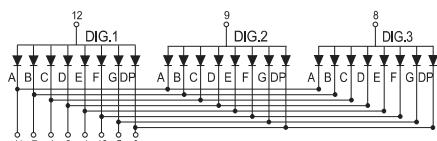
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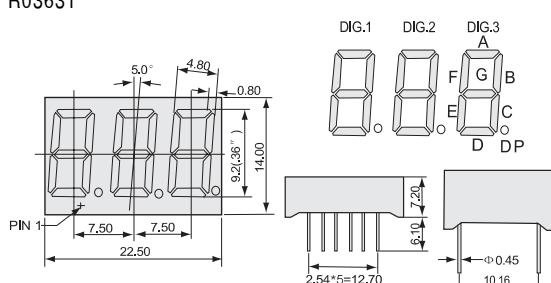
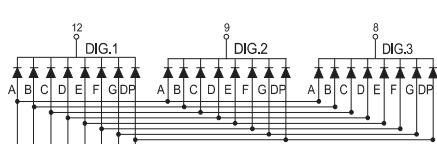
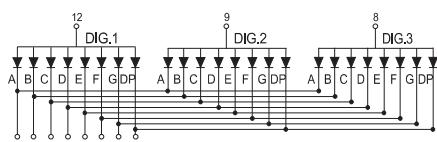
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PCB:D8021A/B

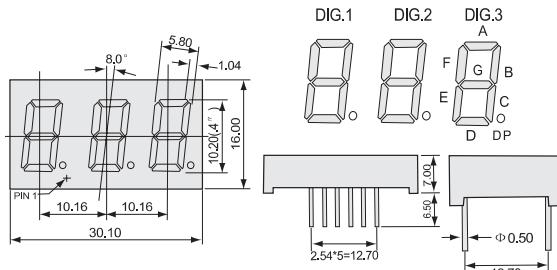
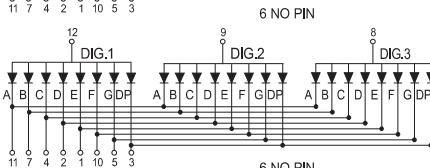
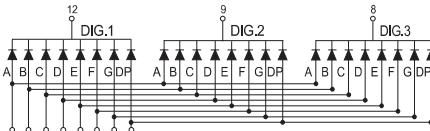
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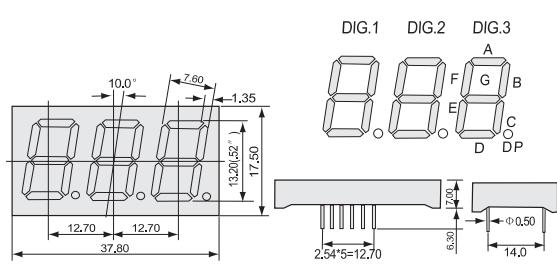
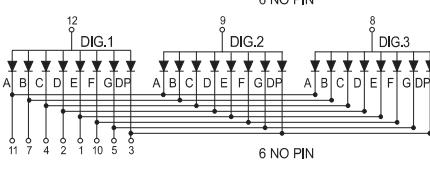
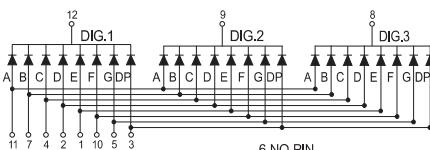
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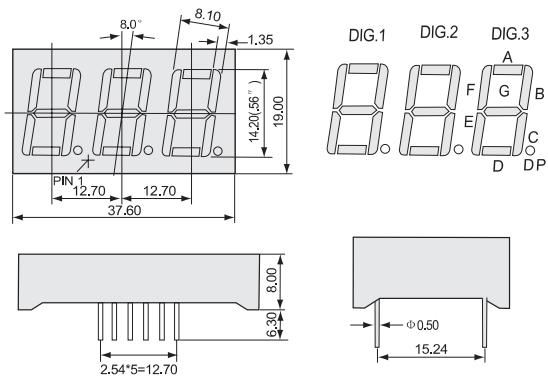
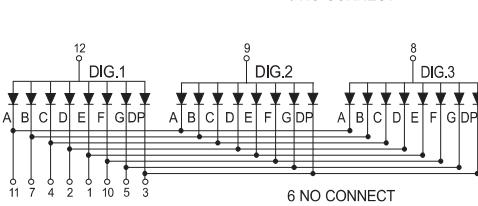
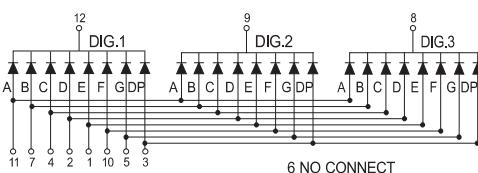
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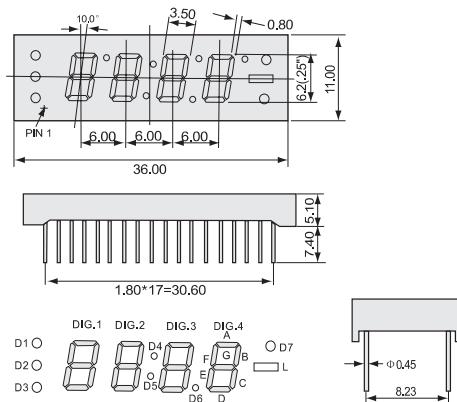
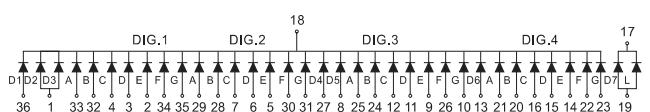
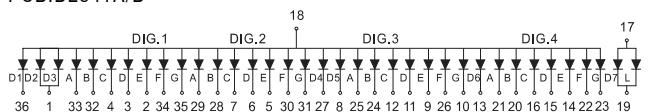
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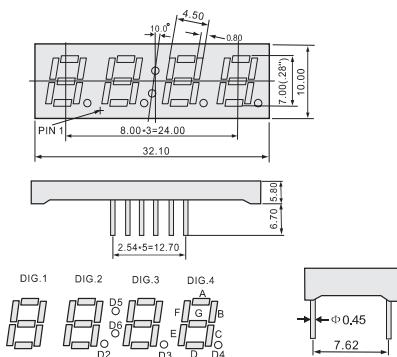
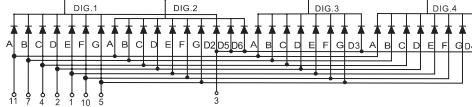
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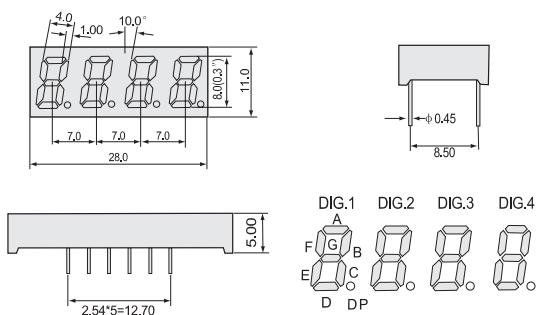
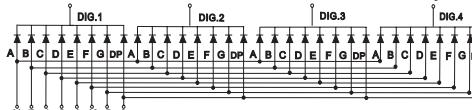
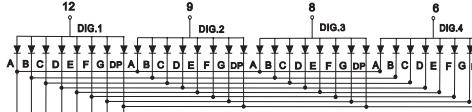
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GS02541AX
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GS02541BX
PCB:D2541A/B


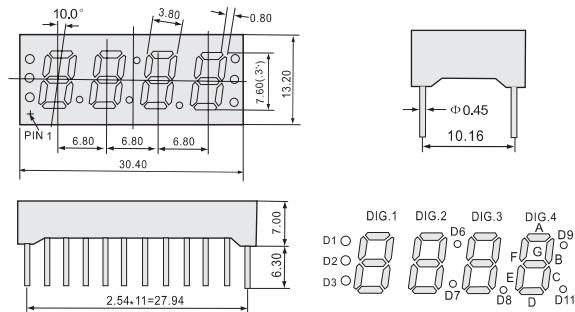
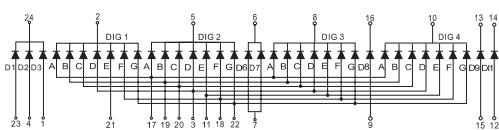
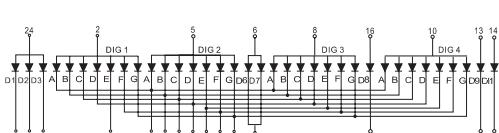
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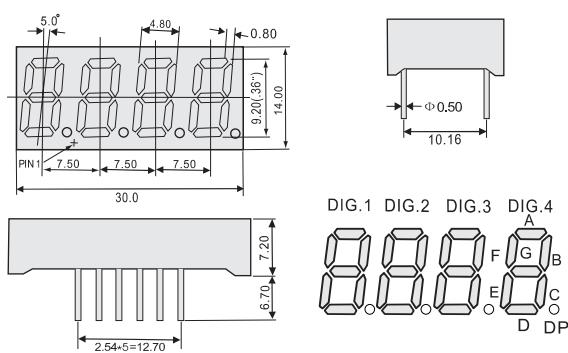
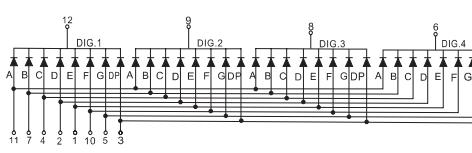
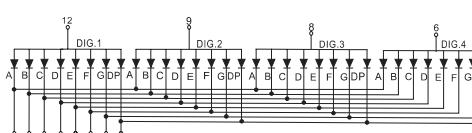
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PCB:CD-3412B

R03041

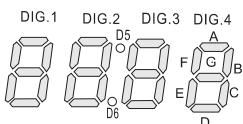
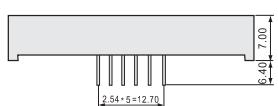
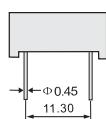
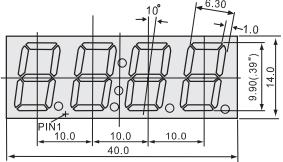
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PCB:D3041A/B

R03641

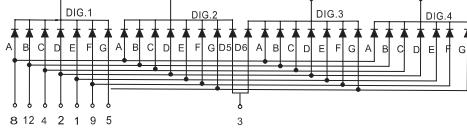
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Operator Interface Components

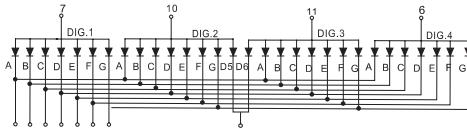
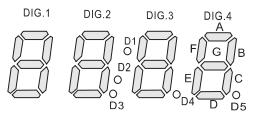
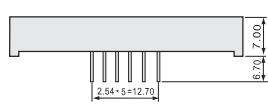
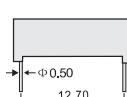
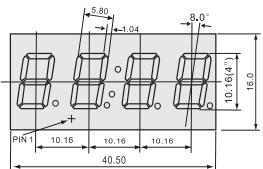
Numeric display(digital display)

R03941**GS03941GX**

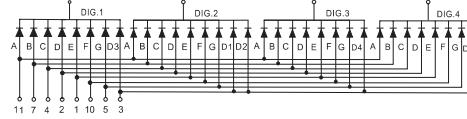
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**GS03941HX**

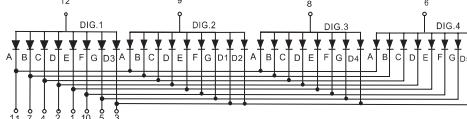
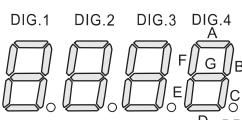
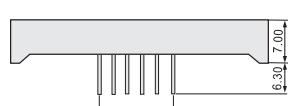
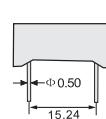
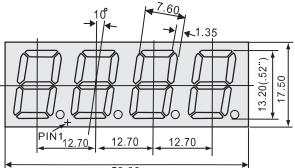
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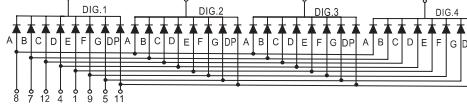
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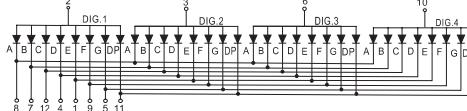
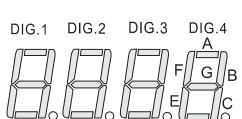
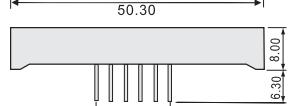
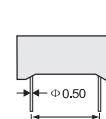
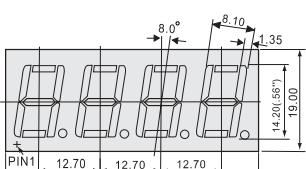
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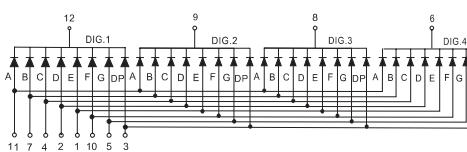
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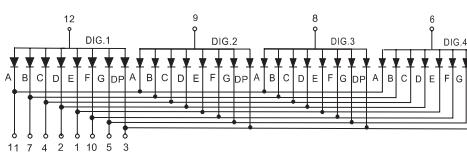
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**R05641****GS05641AX**

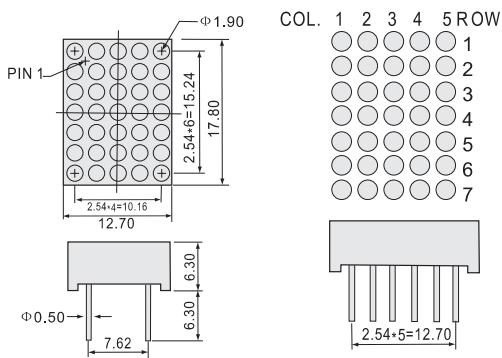
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**GS05641BX**

PCB:D5641A/B

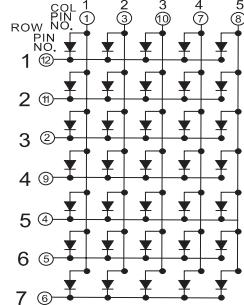


R07057



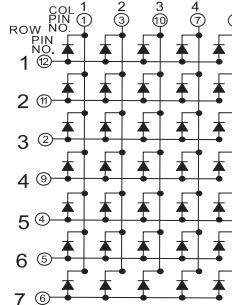
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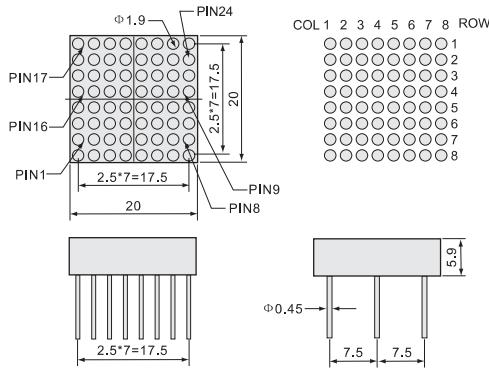


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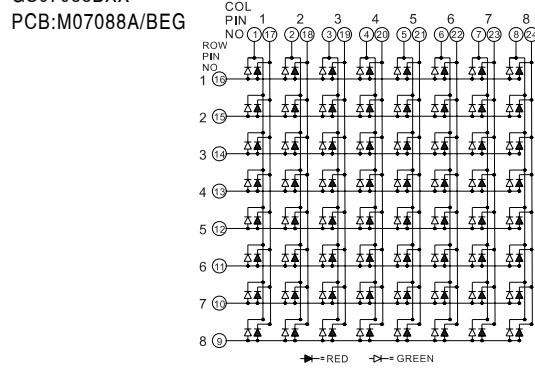


R07088

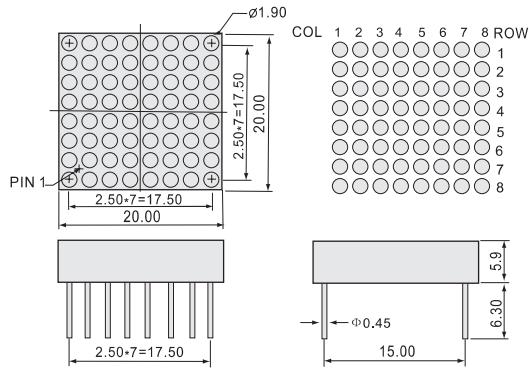


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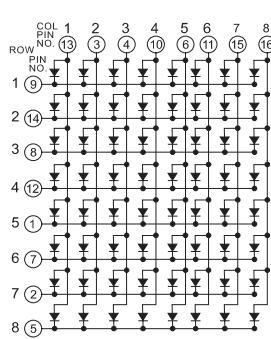


R07088



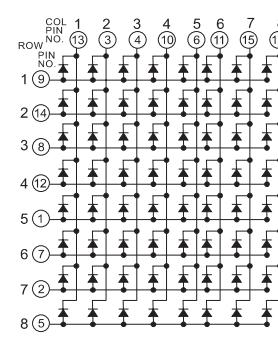
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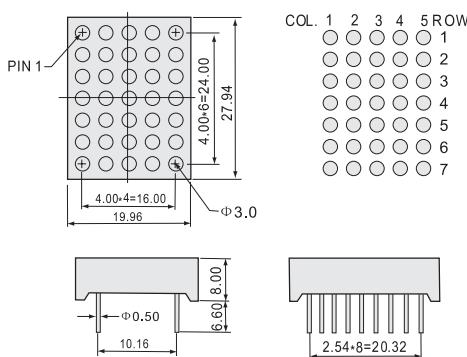


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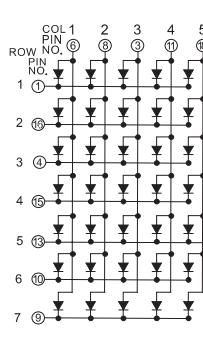


R10057



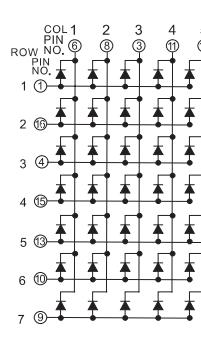
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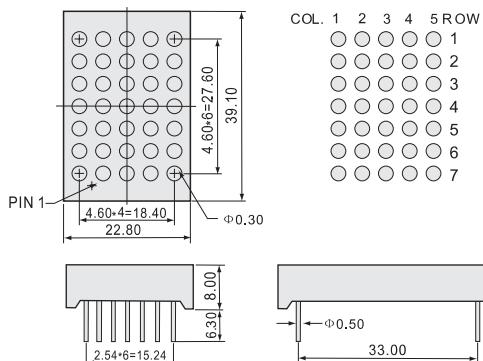
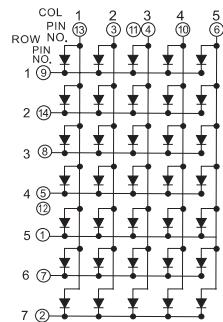
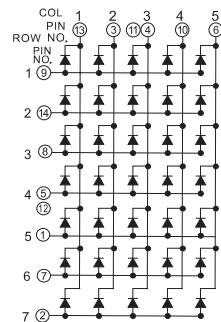
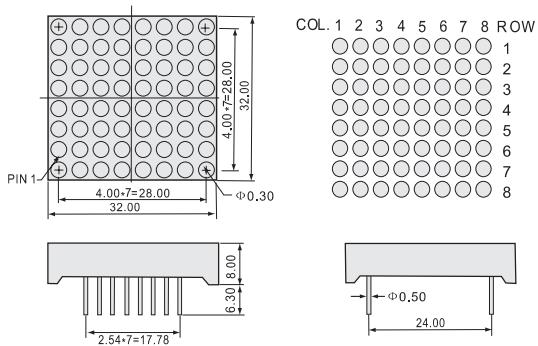
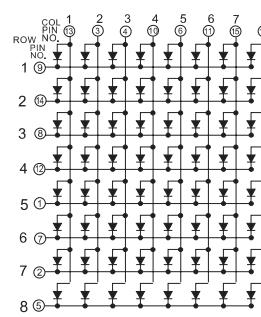
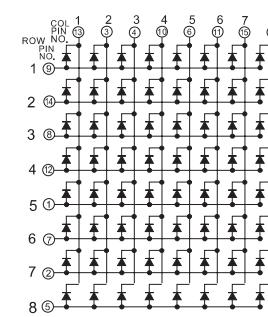
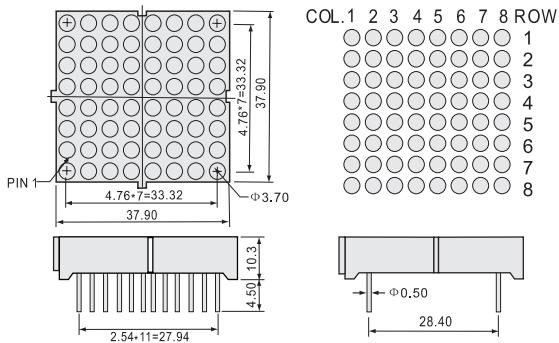
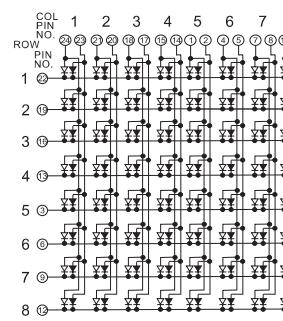
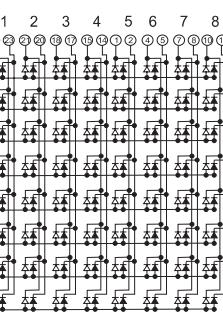
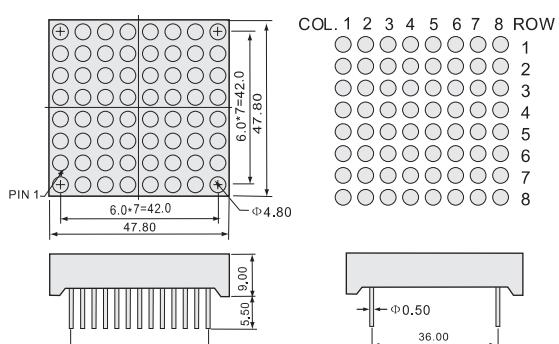
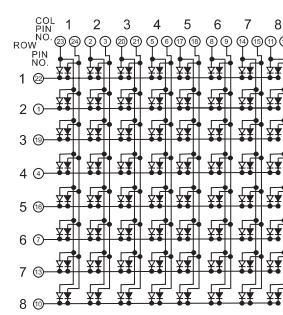
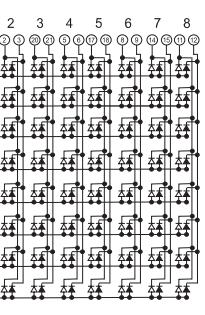
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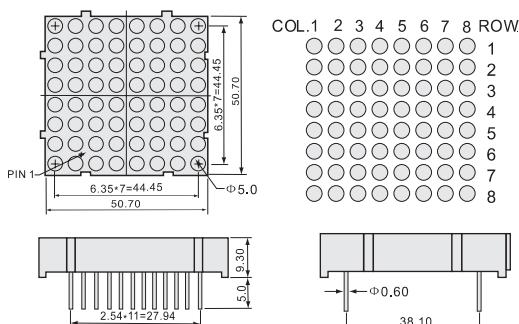
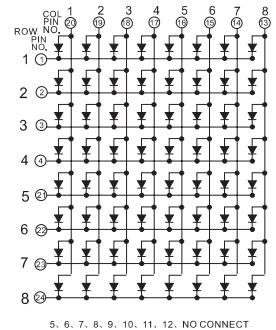
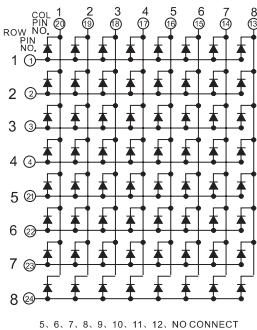
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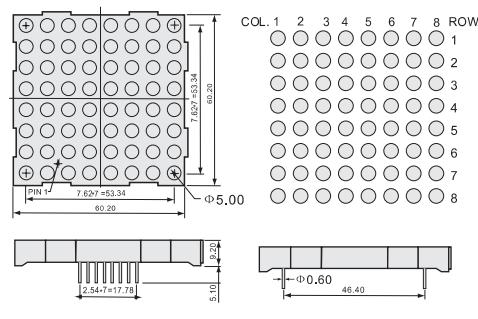
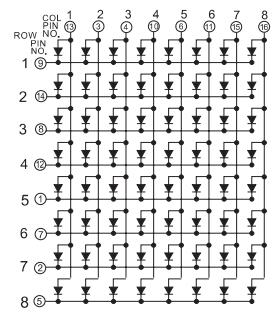
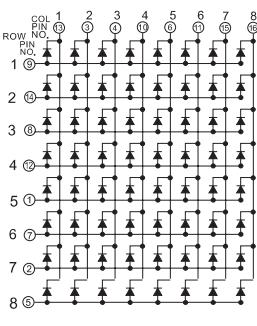


R12057**GS12057AX**
PCB:M12057A/B**GS12057BX**
PCB:M12057A/B**R12088****GS12088AX**
PCB:M12088A/B**GS12088BX**
PCB:M12088A/B**R15088****GS15088AEG**
PCB:M15088A/BEG**GS15088BEG**
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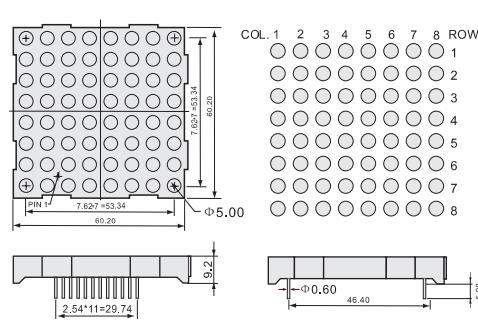
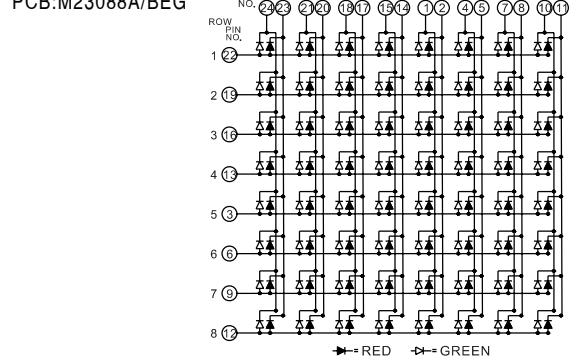
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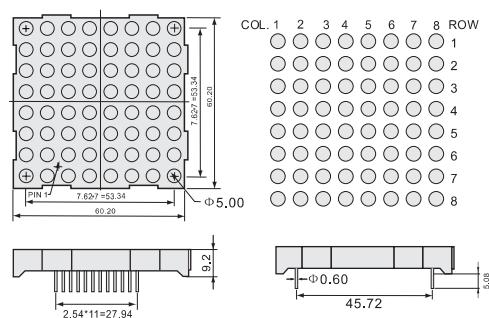
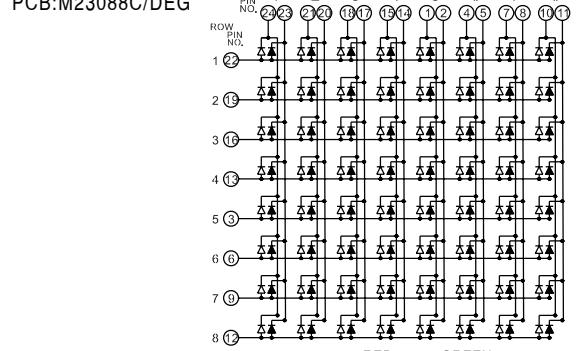
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PCB:M23088A/B

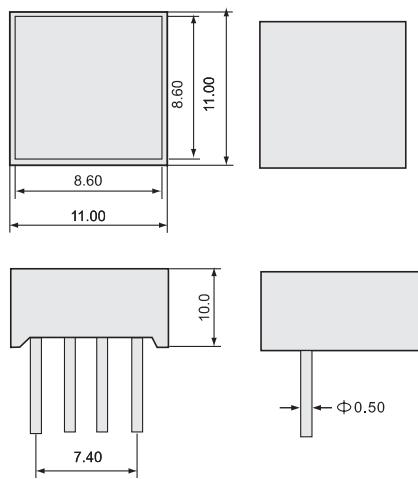
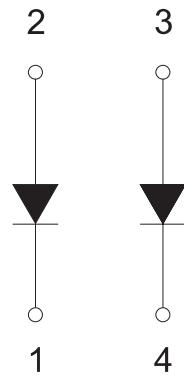
R23088

GS23088BXX
PCB:M23088A/BEG

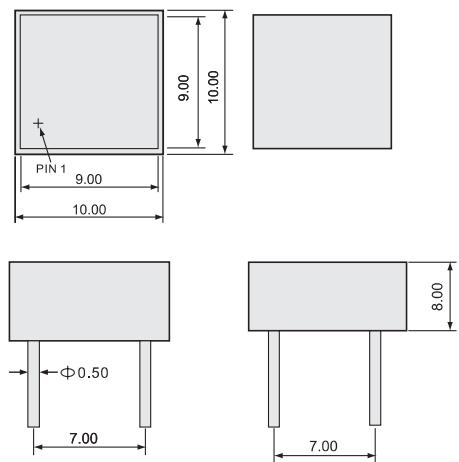
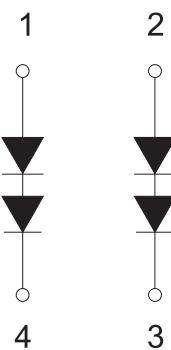
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GS23088DXX
PCB:M23088C/DEG

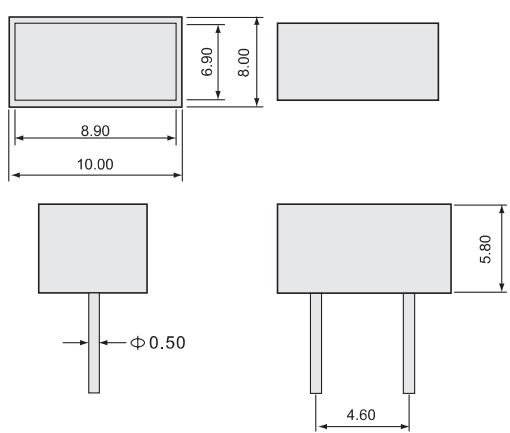
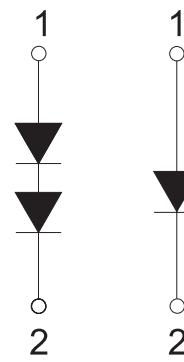
R1111

GS1111X
PCB:1111

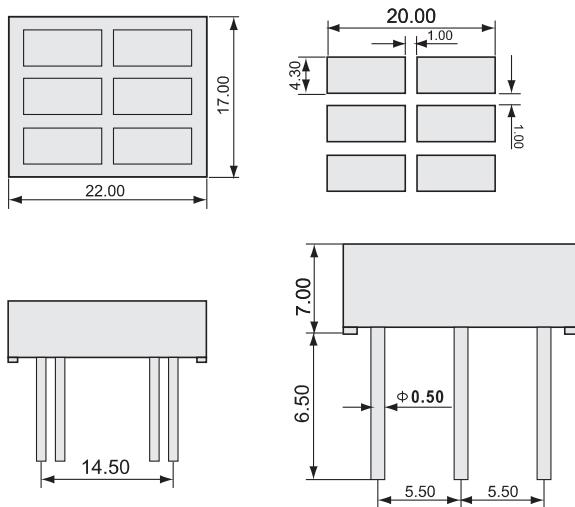
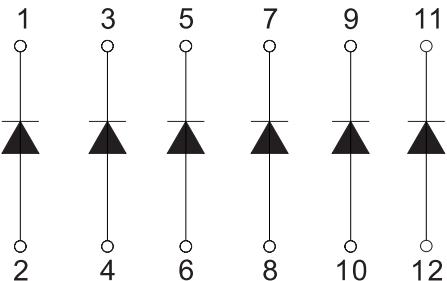
R1010

GS1010X
PCB:1010

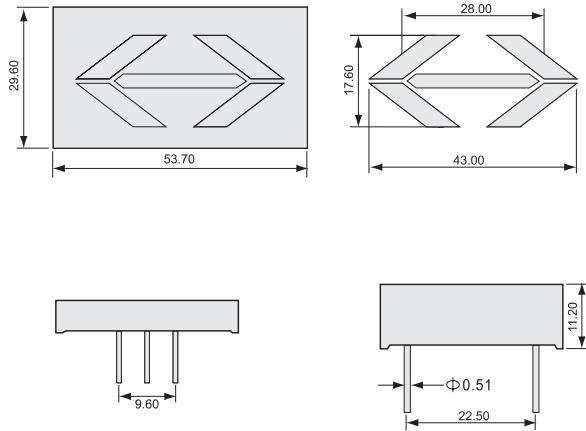
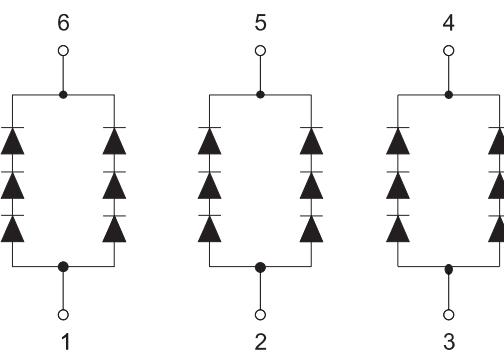
R1008

GS1008X
PCB:1008

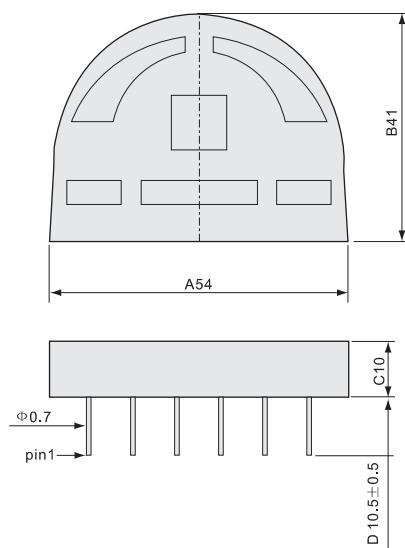
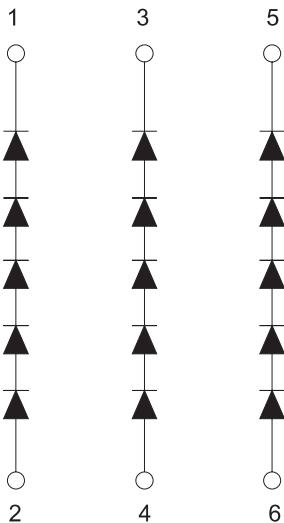
R2217

GS2217XX
PCB:2217A/B

R5430

GS5430XX
PCB:18021

R5441

GS5441XX
PCB:5441A/B



LTE5103



LTE5104



LTE5121



LTE5161



LTE5181

Features

LED Light Series is the most popular light source at present applying in alarm lamps. It adopts import high-luminance LED, and environmental luminescence design to avoid over heating. High photo-electric transfer rate, strong directivity, and long service life (the effective service life can up to 100,000 hours). Low power consumption, reasonable optical distribution curves, can effectively improve optic efficiency. Modules adopt integrated construction, which make the performance more reliable.

Product features and applications

- Our LED alternative to the classic rotating light, offer versatility
- Microprocessor controlled with the ability to easily select different eye-catching flash patterns
- 360° viewing angle
- Tolerant of high vibration environment due to no moving parts
- Virtually maintenance free-no bulbs to replace, lasting work for more than 100,000 hours
- Highly efficient, light weight, silent, low RFI interference
- Tough-corrosion and weather resistant
- Various mounting options including permanent mount (standard), and magnetic mount (need to specify pattern)
- Suitable for garbage trucks, snow plows, emergency vehicles, highway maintenance vehicles, two trucks; transport trucks, etc.

Model	Voltage	Colour	Outline
LTE5103	DC12/24 AC110/220	R Y G B	
LTE5104	DC12/24 AC110/220	R Y G B	
LTE5121	DC12/24 AC110/220	R Y G B	
LTE5161	DC12/24 AC110/220	R Y G B	
LTE5181	DC12/24 AC110/220	R Y G B	



LED



Model	Voltage	Function	Colour	Outline
LTA505-1 LTA505-2 LTA505-3 LTA505-4	DC12/24V AC110/220V	T-Steady W-Flash J-With buzzer	R Y G B	<p>Technical drawing of LTA505 series LED tower light showing dimensions: height 238mm, base width 42mm, body diameter 32mm, and mounting holes at 16mm from the base.</p>
LTD5072 (LTD2072)	DC6V		R Y	<p>Technical drawing of LTD5072 series LED light showing dimensions: height 90mm, base width 73mm, and mounting holes at 55mm from the base.</p>
LTE514 LTE511	DC12V		R B	<p>Technical drawing of LTE514/LTE511 series LED bar light showing dimensions: height 65mm, base width 100mm, and mounting holes at 35mm from the base.</p>
LTD5088	DC6V		R Y	<p>Technical drawing of LTD5088 series LED light showing dimensions: height 140mm, base diameter 86mm, and mounting holes at 42mm from the base.</p>
LTE5071 LTD5071	DC12V/24V		R Y G B	<p>Technical drawing of LTE5071/LTD5071 series LED light showing dimensions: height 62mm, base diameter 72mm, and mounting holes at 42mm from the base.</p>

Operator Interface Components

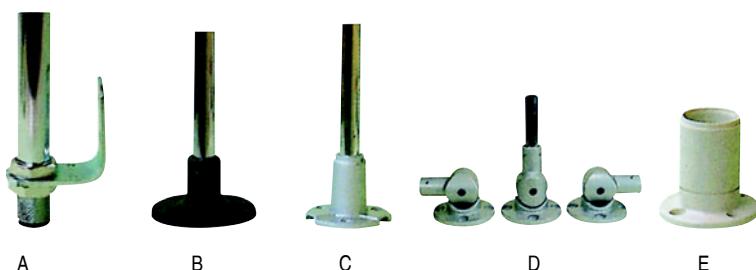
Signal tower (stack light) with BA9S bulb



Model	Voltage	Function	Colour	Outline
LTA204-1 LTA204-2 LTA204-3 LTA204-4	DC12 24V 5W	T-Steady W-Flash	R Y G B	
LTA205-1 LTA205-2 LTA205-3 LTA205-4 LTA205-5	DC12 24V AC110 220V 5W	T-Steady W-Flash J-With buzzer	R Y G B	
LTG217-1 LTG217-2 LTG217-3 LTG217-4 LTG217-5	DC12 24V AC220V 5W	By using multi-layers and multi-angles light refracting principles, lens of tower light projects brighter and clearer illuminant providing better warning effect and increasing practical & artistic functions Led bulbs possess stable illuminant effect and also durable service life over 50,000 hours. Interior buzzer increases better warning effect.	R Y G B	
LTA218-1 LTA218-2 LTA218-3 LTA218-4 LTA218-5	DC12 24V AC110 220V 10W	Double sounds tower light can select separate sound and pass on different function message by way of different lenses colors that allows the worker to know view of the work site well and to have a prompt disposal by way of listening to sound.	R Y G B	



Model	Voltage	Function	Colour	Outline
LTG116-1 LTG116-2 LTG116-3	DC12 24V AC110 220V 5W		R Y G B	
LTG120-1 LTG120-2 LTG120-3	DC12 24V AC110 220V 5W	Mechanistic and specific warning light, provided with warning & sound effect Multi-layers design, provided with distinctively warning effect Specific design by four angles lamp shade, provided with wide spread of pervious to light and luminosity	R Y G B	
LTG120-1 LTG120-2 LTG120-3	DC12 24V AC110 220V 5W		R Y G B	



Operator Interface Components

Buzzer & Motor siren

GREEGOO



Model	Voltage	Mounting method	Note	Outline
MS-190	DC12 24V AC110 220V	Bolt		
MS-290	DC12 24V AC110 220V	Bolt		
MS-390	DC12 24V AC110 220V	Bolt		
MS-490	AC110 220V	Bolt		
HRB-PS30 Buzzer	DC12 24V AC110 220V	Implant	90-100dB	
HRB-N80 Buzzer	DC12 24V AC110 220V	Bolt	90-100dB	
HRB-P80 Buzzer	DC12 24V AC110 220V	Implant	90-100dB	



AB102



AB301



AB401



AB402



AB403



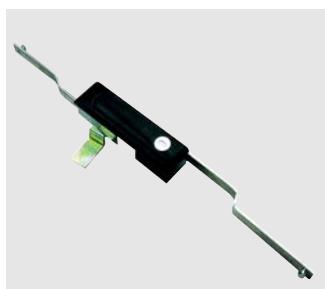
AB701



MS103



MS101-1-1



MS103-3-1



MS103C-1



MS103D-1



MS104



MS104B



MS104C



MS301



MS302



MS305



MS306



MS308



MS308-2A



MS402



MS403



MS407



MS408



MS409



MS410



MS416



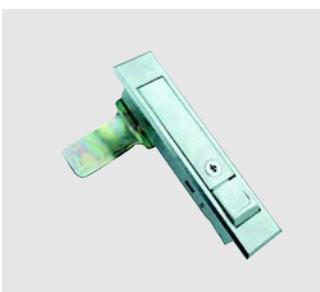
MS419



MS460



MS480



MS502-1-1



MS502-2



MS504



MS505



MS603



MS606



MS607



MS611



MS705



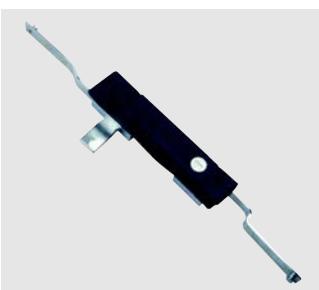
MS709



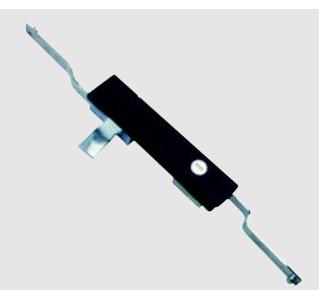
MS718



MS732



MS741



MS742



MS751



MS820



MS822



MS823



MS824



MS825



MS-A-172-1



MS238



GCS



GGD



A19



A45



A2055



A99



DKS



ABB100-3



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