



**A**  
Type SA Color-Light Dwarf Signals  
With Compound Lenses

## Type SA Color-Light Dwarf Signals With Compound Lenses

**Note:** See foreword and ordering information at the beginning of this part.

Other color combinations than those shown below may be supplied if required.

Lamps are not included with signals complete and must be ordered separately.

Unless otherwise specified, anchor bolts as shown will be furnished with signals complete.

Signals are designed to operate on the following voltages: 4, 7.5-8, 10 and 12 volts d-c., however they may be equipped with an a-c. mechanism to operate on voltages and frequencies as listed on Plate H2663.

Signals are assembled with roundel Fig. 2, having deflecting prisms, set to deflect directly upward for close-up indication. This roundel may be rotated to change this angle as conditions require.

For dwarf signals with stepped lenses see Plate H2611.

See Plate H2616 for dwarf signals arranged for socket mounting and signals mounted on junction box.

Drawing references are shown for convenience in checking shipping lists and invoices.

Fig. No.	Name	Drawing Reference
<b>Order by plate, figure number and name</b>		
A	Type SA Color-Light Dwarf Signal Complete, three indication—red, yellow and green. Signal is equipped with an 8 $\frac{3}{8}$ " dia. compound lens and a 20 degree outer deflecting roundel. (This lens combination deflects a part of the main beam upward through an angle of 20 degrees.)	
<b>Order must specify the following:</b>		
	1—Voltage upon which signal is to operate if d-c. or frequency and both line and local voltages if a-c.	
	2—See Plate H2629 for various methods of bringing wires into signal and specify fittings required.	
	3—If plug coupler is required same must be specified.	53050-7
A1	as above, except two indication—red and yellow.	53050-7
A2	same as Fig. A, except two indication—purple and yellow.	53050-7

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Fig. No.	Name	Drawing Reference
	<b>Order by plate, figure number and name</b>	
B	Type SA Color-Light Dwarf Signal Complete, three indication—red, yellow and green. Signal is equipped with a 25 degree $6\frac{3}{8}$ " dia. inner roundel and $8\frac{3}{8}$ " dia. compound lens. (This lens combination deflects a part of the main beam upward through an angle of 25 degrees).....	
	<b>Order must specify the following:</b>	
	1—Voltage upon which signal is to operate if d-c., or frequency and both line and local voltages if a-c.....	
	2—See Plate H2629 for various methods of bringing wires into signal and specify fittings required.....	
	3—If plug coupler is required same must be specified.....	53050-7
B1	as above, except two indication—red and yellow.....	53050-7
B2	same as Fig. B, except two indication—purple and yellow.....	53050-7
C	D-c. Mechanism Complete, for details and order references see Plates H2649 to H2655.....	
C1	as above, except a-c. mechanism, for details and order references see Plate H2663.....	
D	Slide Complete, for mechanism, includes studs for attaching to case	56421 Gr. 6
1	Screw, No. 10-32 x $\frac{1}{4}$ " rd. hd., for fastening hood to outer ring. . .	2438-9
2	Roundel, with deflecting prisms.....	54264
3	Cover, for hand hole.....	49584-6
4	Screw, $\frac{3}{8}$ "-16 x $1\frac{1}{4}$ " hex. hd., with lock washer, for fastening cover to adapter.....	2472-12 0569
5	Holder, for roundel Fig. 2.....	54248-1
6	Screw, No. 8-32 x $\frac{1}{4}$ " rd. hd., for fastening holder Fig. 5 to adapter	2553-7 43058-1
7	Case, housing for mechanism having slide arrangement Fig. D, includes studs for cams of mechanism.....	53071-16 441-122

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Fig. No.	Name	Drawing Reference
<b>Order by plate, figure number and name</b>		
7a	as above, except for mechanism without slide arrangement Fig. D, includes stud for hasp and studs for cams of mechanism . . . . .	53071 441-121 441-122
8	Pin, $\frac{7}{16}$ " x $1\frac{1}{16}$ ", for fastening case to base . . . . .	730-21
9	Hood, as shown, for signal . . . . .	49127-29
10	Outer Ring, as shown, for $8\frac{3}{8}$ " dia. lens . . . . .	43983-85
11	Screw, $\frac{5}{16}$ "-18 x $1\frac{1}{2}$ " rd. hd., with lock washer, for fastening rings Figs. 10 and 12 to adapter . . . . .	33287-8 0623-1
12	Ring, as shown, for signal . . . . .	43983-46
13	Adapter, as shown, for signal Fig. A . . . . .	54243-3
14	Screw, $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " fl. hd., with lock washer, for fastening adapter to case . . . . .	16398-4 0623-1
15	Hasp, as shown, includes nut with $\frac{1}{2}$ "-13 thread, for case having slide arrangement Fig. D . . . . .	9524 9525-6 7568
15a	as above, except has nut with $\frac{1}{2}$ "-24 thread, for case without slide arrangement Fig. D . . . . .	9524 9525 7568
16	Lock Latch, as shown, threaded $\frac{1}{2}$ "-13 for hasp nut, for case having slide arrangement Fig. D . . . . .	53106-2
16a	as above, except $\frac{1}{2}$ "-13 thread, for case without slide arrangement Fig. D . . . . .	53106-1
16b	same as Fig. 16a, except with $\frac{1}{2}$ "-24 thread . . . . .	53106
17	Deflecting Roundel, $8\frac{3}{8}$ " dia., deflects part of main beam upward through an angle of 20 degrees . . . . .	9238-38
18	Lens, $8\frac{3}{8}$ " dia., $11\frac{1}{2}$ " focus, for signal . . . . .	54249-2
19	Gasket, for use between lens and adapter . . . . .	13014-57
20	Gasket, for cover Fig. 3 . . . . .	43460

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Fig. No.	Name	Drawing Reference
<b>Order by plate, figure number and name</b>		
21	Screw, $\frac{3}{8}$ "-16 x $\frac{5}{8}$ " hex. hd., with lead washer, for case.....	{ 0395-4 19867-2
22	Taper Pin, No. 2 x $1\frac{1}{4}$ " for fastening stud Fig. 23 to case.....	28349
23	Stud, for obtaining vertical adjustment of signal.....	980-10
24	Nut, $\frac{3}{4}$ "-10 hex., for adjusting stud.....	646-3
25	Nut, $\frac{3}{4}$ "-10 hex., for adjusting stud.....	0272-1
26	Anchor Bolt, $\frac{3}{4}$ "-10 x 18", with sq. nut.....	36182
27	Washer, for anchor bolt.....	35703
28	Door Complete, for case with slide arrangement Fig. D, includes gasket, latch, hasp and all riveted parts.....	53057 Gr. 3
28a	as above, except for case without slide arrangement Fig. D, includes gasket, latch, hasp and all riveted parts.....	53057 Gr. 1
29	Pin, $\frac{3}{8}$ " x $1\frac{13}{16}$ ", hinge for door.....	730-33
30	Base, as shown, for mounting case.....	53070-5
31	Screw, $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " rd. hd., with lock washer, for fastening outer ring to adapter.....	{ 33287-6 0623-1
32	Deflecting Roundel, $6\frac{3}{8}$ " dia., deflects part of main beam upward through an angle of 25 degrees.....	9238-60
32a	as above, except 25 degree spreadlite with close-up deflection....	9238-65
33	Adapter, as shown, for use with $8\frac{3}{8}$ " dia. outer lens and $6\frac{3}{8}$ " dia. inner roundel.....	54243-4
34	Gasket, for roundel Fig. 32.....	13014-47
35	Screw, No. 8-32 x $\frac{3}{8}$ " rd. hd., with clip and washers, for fastening roundel Fig. 32 to adapter.....	{ 2553-11 18547-15 43058-1
36	Nut, $\frac{3}{8}$ "-16 x $\frac{3}{8}$ " th. hex., with washer, for slide Fig. D.....	{ 1156-2 19867-2