

DIMMING

Single and multiple lamp magnetic and electronic dimming ballasts are available for many 40wT12, 32wT8, T8 U-lamp, T5 and T5HO applications. These ballasts (and the associated controls) allow the light output to be varied from 100% down to 10%, 5% or even 1%. Differing control schemes are available, so dimming ballast compatibility must be verified from the specific dimming control manufacturer. Dimming of reduced wattage fluorescent lamps (i.e. energy saving lamps) is not recommended.

LOW TEMPERATURE STARTING

Standard and optional starting temperatures for most ballasts are shown on the following page. Please note the following:

- Low temperature (0 F) ballasts are available for most T8 and T12 rapid start and slimline applications.
- Low temperature (-20 F) start ballasts (where available) are standard for T8 and T12 High Output applications.
- Low temperature starting is not available when using reduced wattage (i.e. energy saving) lamps.

Please note that fluorescent lamps are temperature sensitive. The lumen ratings are made at a specific temperature (25 C for T12 and T8, 35°C for linear T5.) If the temperature at the surface of the lamp is higher or lower than the rated temperature, light output decreases. Low temperature lamp/ballast combinations will get the lamp operating, but actual light output may be well below rated lumens.

BALLAST SOUND

Most magnetic ballasts for fluorescent lamps are magnetic devices involving laminated steel cores. The alternating current power produces some sound ("hum".) Each ballast is given a sound rating (A-D, with A being the quietest and D the noisiest.) Use the ballast with the quietest sound rating (typically 30w and 40wT12 types) in applications with lower ambient noise levels. Ballasts that generate more noise (like High Output types) can be used in areas with higher ambient noise levels.

Solid state electronic ballasts operate much quieter (and cooler) than magnetic models. Electronic ballasts for bi-pin (i.e. F32T8) lamps generate much less noise than even "A" rated magnetic products. This extraordinarily quiet performance makes them ideal for use in areas with very low ambient noise levels.

Magnetic slimline and all High Output ballasts generate more noise (B, C or D rated) than bi-pin types. This is typically not a problem due to the noisier industrial-type environments where they are normally used. If the environment is relatively quiet, consider multiple bi-pin lamps in place of a High Output lamp (and electronic ballast) for a solution with lower ballast noise.

RADIO INTERFERENCE

Fluorescent lighting installations can cause interference with radio reception, or with electronic equipment found in health care facilities and certain other installations. The interference from the lamp radiation can be reduced by special prismatic enclosures (i.e. 12RF, 19RF lenses) available for certain Day-Brite products. The interference from line radiation and line feedback can be alleviated by having RFI suppressors wired in the luminaires. Some combinations will meet certain Mil. Std. 461C specification requirements for conducted line interference. Check individual manufacturers for Mil. Std. 461C specification compliance.

Due to the changing nature of lamp and ballast technology, the following information is to serve as a general guideline ONLY. Input power and current vary with ballast type, voltage, lamp combination, etc. For exact information on any particular combination, please refer to lamp and ballast manufacturer's literature or contact your Day-Brite rep.

Nominal length	Ballast type	Number & type of lamps	Day-Brite lamp code	Rated lamp watts	Average rated initial lumens/ lamp	Starting temperature (°F)			
						Magnetic Std.	Opt.	Electronic Std.	Opt.
T12									
1-1/2'	HPF Trigger Start	1 lp F15T12	15	15	750	50	0	-	-
2'	HPF Trigger Start	1 or 2 lp F20T12	20	20	1200	50	0	-	-
3'	Rapid Start	1 or 2 lp F30T12	30	30	2300	50	0	-	-
3'	Rapid Start	1 or 2 lp F30T12ES	30	25	1950	60	-	-	-
4'	Rapid Start	1 or 2 lp F40T12	40	40	3200	50	0	-	-
4'	Rapid Start	1 or 2 lp F40T12ES	40	34	2650	60	-	-	-
4'	Slimline	1 lp F48T12	48	39/40	2900	0	-	0	-
4'	Slimline	2 lp F48T12	48	39/40	2900	50	0	0	-
4'	Slimline	1 or 2 lp F48T12ES	48	30	2400	60	-	60	-
6'	Slimline	1 lp F72T12	72	55/56	4500	0	-	50	0
6'	Slimline	2 lp F72T12	72	55/56	4500	50	0	50	0
8'	Slimline	1 lp F96T12	96	75	6425	0	-	50	0
8'	Slimline	2 lp F96T12	96	75	6425	50	0	50	0
8'	Slimline	1 or 2 lp F96T12ES	96	60	5400	60	-	60	-
4'	High Output	1 lp F48T12HO	48HO	60	4050	-20	-	-	-
4'	High Output	2 lp F48T12HO	48HO	60	4050	-20	-	-20	-
8'	High Output	1 lp F96T12HO	96HO	110	9300	-20	-	-20	-
8'	High Output	2 lp F96T12HO	96HO	110	9300	-20	-	-20	-
8'	High Output	1 or 2 lp F96T12HOES	96HO	95	8000	60	-	60	-
4'	Very High Output	1 lp F48T12VHO	48VH	110/115	6200/7050	-20	-	-	-
4'	Very High Output	2 lp F48T12VHO	48VH	110/115	6200/7050	-20	-	-	-
8'	Very High Output	1 lp F96T12VHO	96VH	215	13,500-15,200	0	-20	-	-
8'	Very High Output	2 lp F96T12VHO	96VH	215	13,500-15,200	-20	-	-	-
8'	Very High Output	1 or 2 lp F96T12VHOES	96VH	185/195	12,500/14,200	60	-	-	-
T8									
2'	Instant start*	1 or 2 lp F17T8	17	17	1325	-	-	0	-
2'	Instant start*	3 or 4 lp F17T8	17	17	1325	-	-	0	-
3'	Instant start*	1 or 2 lp F25T8	25	25	2100	-	-	0	-
3'	Instant start*	3 or 4 lp F25T8	25	25	2100	-	-	0	-
4'	Instant start*	1 or 2 lp F32T8	32	32	2850	-	-	0	-
4'	Instant start*	3 or 4 lp F32T8	32	32	2850	-	-	0	-
2'	Program/rapid start*	1 or 2 lp F17T8	17	17	1325	50	-	50	0
2'	Program/rapid start*	3 or 4 lp F17T8	17	17	1325	-	-	50	0
3'	Program/rapid start*	1 or 2 lp F25T8	25	25	2100	50	-	50	0
3'	Program/rapid start*	3 or 4 lp F25T8	25	25	2100	-	-	50	0
4'	Program/rapid start*	1 or 2 lp F32T8	32	32	2850	50	-	50	0
4'	Program/rapid start*	3 or 4 lp F32T8	32	32	2850	-	-	50	0
8'	Slimline	1 or 2 lp F96T8	59	59	5800	-	-	50	0
8'	High Output	1 lp F96T8HO	86HO	86	8000	-20	-	32	-
8'	High Output	2 lp F96T8HO	86HO	86	8000	-20	-	-20	-
T5									
22"	Program Start	1 or 2 lp F14T5	14	14	1350	-	-	0	-
34"	Program Start	1 or 2 lp F21T5	21	21	2100	-	-	0	-
46"	Program Start	1 or 2 lp F28T5	28	28	2900	-	-	0	-
58"	Program Start	1 or 2 lp F35T5	35	35	3650	-	-	0	-
22"	Program Start	1 or 2 lp F24T5HO	24HO	24	2000	-	-	0	-
34"	Program Start	1 or 2 lp F39T5HO	39HO	39	3500	-	-	0	-
46"	Program Start	1 or 2 lp F54T5HO	54HO	54	5000	-	-	0	-
58"	Program Start	1 lp F80T5HO	80HO	80	7000	-	-	0	-
TT5									
22-1/2"	Rapid Start	1 or 2 lp 40wTT5	CF40	38/40	3200	50	-	50	0
22-1/2"	Rapid Start	1 or 2 lp 50wTT5	CF50	50	4200	-	-	50	0
22-1/2"	Rapid Start	1 or 2 lp 55wTT5	CF55	55	4800	-	-	50	0

*17wT8, 25wT8 and 32wT8 generic electronic (EB) ballasts and EB10I ballasts are instant start. EB10R ballasts are program or rapid start.