LEONARDO (multi-power)

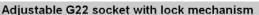
Fresnel SPOTLIGHT For Tungsten Halogen lamps 0,65 / 1 / 1,2 / 2 / 2,5 kW – G22

DATA SHEET 9/10/2008



FEATURES

- The Leonardo MULTI-POWER is a compact, highly efficient 250 mm. diameter Fresnel lens spotlight capable of accepting several powers of tungsten-quartzhalogen filament lamps having G22 socket, L.C.L. of either 63,5 mm. or 90 mm. and a max. 2,5 kW power (at 230 and 240V are available lamps of 650W, 1kW, 1,2kW, 2kW and 2,5 kW that can be used with this products).
- Versatility to choose the lamp wattage on the bases of the application, always utilizing the same lighting fixture.
- 250 mm. diameter high quality, shock resistant Borosilicate glass Fresnel lens on spring supports.
- Rugged and Lightweight Carbon Steel housing with low glare black epoxy powder coating, with internal double walls and reinforces.
- High efficiency convection cooling.
- Positive locking G22 lamp holder having a unique adjustable height mechanism that allows the use of tungsten halogen lamps with L.C.L. of either 63,5 mm. or 90 mm. Lever activation and special contacts for homogeneous current distribution over lamp's pins.
- Special bimetallic clad aluminum reflector for high degree of reflectivity and thermal resistance for long life.
- Stainless steel cable driven focus mechanism which guides Teflon bushings supported lamp carriage along 2 stainless steel rails. This ensures smooth operation, and restricts bouncing or chattering of the lamp carriage during focusing, in any tilting position of the fixture, avoiding lamp failures during operation. The Teflon bushings also provide a wiping action, which cleans the stainless steel guide rails during focus. The focusing mechanism can be activated from both front and rear of the fixture and the whole spot to flood action is accomplished with 1 and half turn of the focusing knob.
- The unit is equipped with a hinged lens door with wire-guard for easy access to the lamp, it includes accessory holding brackets, which can be positioned in two different arrangements (vertical-horizontal or diagonal). One of the 4 brackets has a locking knob and is spring loaded, it can be locked to either safely hold barndoor, color frame and scrims or to be rotated 90° and locked in an open position for fast accessories changes. A double safety accessory bracket with spring loaded catch is available on request to be assembled opposite to the locking knob.
- The accessories are secure regardless of the orientation of the fixture. Accessories have been designed for one hand installation.
- Available with either positive lock manual yokes for comfort and ease of handling, or pole operated yokes which can be used via the lighting pole for Panning and Tilting the lights as well as manually, since the mechanical activators are equipped with clutches. It is possible the conversion between the two types.







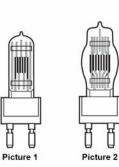
CHARACTERISTICS & PERFORMANCE DATA

	DESCRIPTION VALUE		ALUE	Dimensions in mm.
0	Max. Amperage	At 230 V 10,9 A (2500 W)	At 240 V 10,42 A (2.500 W)	
Ð	Power supply	230 V / 24	40V 0-60 Hz	
0	Switch on the fixture	Toggle 20A		D C C
0	Lamp Holder	G22 Lever TypeLower: 90 mm. LCL2 positionsHigher: 63,5 mm. LCL		LEONARDO Multi Power M.O. (Manual Operated)
n	Power Cable		<u>irope (190°C ()</u> H07RN-F 90°C	585
0	rotection Class	Class 1- ground	connection required	
0	Protection Type	IF	² 22	E 420
0	Max. Housing Surface Temperature	22	20° C	
e	Weight of Fixture	М.О.	P.O.	
•	Weight of Fixture	12 kg.	13,3 kg.	
e	Weight of Barndoor	4 leaf	8 leaf	F 555 LEONARDO Multi Power
-	The gin of Damager	1,4 kg.	1,65 kg.	P.O. (Pole Operated)
0	Size of Barndoor ring	Seat Diameter	Ring Diameter	G O H
		314 mm.	313 mm.(≅12" _{1/4})	390
0	Weight of color frame	0,28 kg.		
O	Size of scrims &	Seat Diameter	Accessory Diameter	
	color frame	306 mm.	305 mm (12")	
O	Lens diameter	250) mm.	

USABLE LAMPS (MEDIUM BIPOST – G22 SOCKET)

This luminaire is equipped with a positive locking G22 lamp holder having a unique adjustable height mechanism that allows the use of the following lamps:

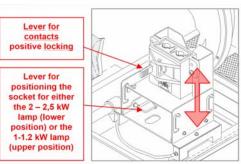
WATT	VOLT	ANSI code	LIF code	Initial LUMEN	CCT °K Correlated Color Temperature	Filament Type (*)	Filament H x W in mm.	L.C.L in mm.	Average Lifetime (Hours)	Picture N°
500	120	EGN	-	13000	3200	MP	12x11.5	63.5	150	1
650	230	FKH	CP39	16900	3200	MP	12x14.5	63.5	100	1
650	240	FKH	CP39	16900	3200	MP	12x14.5	63.5	100	1
1000	120	EGT	-	28500	3200	MP	14.5x14	63.5	250	1
1000	230	FKJ	CP40	26000	3200	MP	18.5x17.5	63.5	200	1
1000	240	FKJ	CP40	26000	3200	MP	18.5x17.5	63.5	200	1
1200	240	-	CP93	33000	3200	BP	16x12	63.5	200	2
2000	120	-	CP92	55000	3200	BP	18x17	90	400	3
2000	230	_	CP92	52000	3200	BP	18.5x17	90	400	3
2000	240	-	CP92	52000	3200	BP	18.5x17	90	400	3
2500	230	-	CP91	67500	3200	BP	24x18	90	400	3
2500	240	-	CP91	67500	3200	BP	24x18	90	400	3





(*)Filament Types: MP - Monoplane Grid - Equivalent ANSI C13 BP - Biplane Grid - Equivalent ANSI C13D

The method to set up the socket for the difference in the LCL of the 2 & 2,5 kW lamps from the other types is rather simple and it requires no-tools: as shown in the following illustration, it is available at the bottom support of the socket a locking lever that requires an horizontal push in order to release, at this point the full support of the socket is free to slide into the required position (upper position for the smaller 63,5 mm. LCL lamps and lower position for the 2 and 2,5 kW lamps that have the bigger 90 mm. LCL).



WORKING CONDITIONS

•	Working Position	Lighting fixtu	Lighting fixture: Max. Tilting ±90° from horizontal					
0	Ambient Temperature, ta	+45° C Max						
•	Minimum distances from inflammable surfaces	Top 0,3 m.	Back 0,2 m.	Sides 0,2 m.	Front 3 m.			

PHOTOMETRIC DATA

		PHOTOMET		ATA LE	ONARE	00 mu	lti-powe	er		
	Values measu	red with PHILIPS LA	MP: 6975Z (2 kW) and 6	995Z (1 kW)) Lamp - 23	30 V, 250 mm	. Φ Fresnel	Lens	
			FEET			METERS				
	TYP	ICAL DISTANCES	10'	20'	30'	80'	3 mt	6 mt	9 mt	12 mt
LIGHT CENTER	R VALUES	Candle Power		40				LUX	K	
SPOT	1 kW	154.620	1.546	387	172	24	17.180	4.295	1.909	1.074
	2 kW	270.360	2.704	676	300	42	30.040	7.510	3.338	1.878
FLOOD	1 kW	14.706	147	37	16	2	1.634	409	182	102
	2 kW	29.538	295	74	33	5	3.282	821	365	205
				F.C. AT ANY DI dle Power : [Di		2	_	.UX AT ANY D le Power : [Di		·.)] ²
BEAM ANGLE (50% of center value):			BEAM DIAMETER in feet BEAM DIAMETER in me					ER in meter	rs	
SPOT		9,0°	1,6'	3,1'	4,7'	12,6'	0,5 mt	0,9 mt	1,4 mt	1,9 mt
FLOOD		58,0°	11,1'	22,2'	33,3'	88,7'	3,3 mt	6,7 mt	10,0 mt	13,3 mt
FIELD ANGLE	(10% of center value):		В	EAM DIAMET	ER in feet		BEA		ER in mete	rs
SPOT		18,0°	3,2'	6,3'	9,5'	25,3'	1,0 mt	1,9 mt	2,9 mt	3,8 mt
FLOOD		68,0°	13,5'	27,0'	40,5'	107,9'	4,0 mt	8,1 mt	12,1 mt	16,2 mt

LEONARDO 0,65/1/1,2/2/2,5 KW: PRODUCTS MODEL NUMBERS

MOD. DESCRIPTION

320.700	LEONARDO 0,65 / 1 / 1,2 / 2 / 2,5 kW (multi-power), M.O., Fresnel Spotlight including:						
	- Lens door with diagonally mounted ears,						
	- 250 mm. Fresnel lens						
	- 5 mt. power cable						
	- 20A toggle switch						
	- Adjustable 2 positions G22 lamp holder lever type, for L.C.L. 90 mm. and 63,5 mm. (for 650W, 1 kW,						
	1.2kW, 2kW & 2,5 kW lamps)						
	- wire guard Mod. 325.300						
	- 4 leaf barndoor Mod. 326.110						
	- colour frame Mod. 327.100						
	- M.O. stirrup Mod. 320.110.40 BS SPIGOT with end reduction to 22 mm. for C Clamp						
	NOTE: if DIN SPIGOT is required the model N° of the whole unit changes to 320.730						
321.700	LEONARDO 0,65 / 1 / 1,2 / 2 / 2,5 kW (multi-power), P.O., Fresnel Spotlight including:						
	- Lens door with diagonally mounted ears,						
	- 250 mm. Fresnel lens						
	- 5 mt. power cable						
	- 20A toggle switch						
	- Adjustable 2 positions G22 lamp holder lever type, for L.C.L. 90 mm. and 63,5 mm. (for 650W, 1 kW,						
	1.2kW, 2kW & 2,5 kW lamps)						
	- wire guard Mod. 325.300						
	- 4 leaf barndoor Mod. 326.110						
	- colour frame - Mod. 327.100						
	- P.O. stirrup Mod. 321.110.40 BS SPIGOT with end reduction to 22 mm. for C Clamp						
	NOTE: if DIN SPIGOT is required the model N° of the whole unit changes to 321.730						

LEONARDO 0,65/1/1,2/2/2,5 KW ACCESSORIES TYPES & MODEL NUMBERS

MOD.	OPTIONAL & ACCESSORIES
320.110.40	Steel tube (M.O.) stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.
320.300.40	Steel tube (M.O.) stirrup with 28,00 mm. spigot (D.I.N)
320.610.40	Flat steel (M.O.) stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.
320.620.40	Flat steel (M.O.) stirrup with 13,5 mm. Hole, without spigot
320.630.40	Flat steel (M.O.) stirrup with 28,00 mm. spigot (D.I.N)
321.110.40	Pole operated stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.
321.300.40	Pole operated stirrup with 28,00 mm. spigot (D.I.N.)
325.300	Stainless Steel wire guard
326.100	Four leaf rotating barndoor (Large)
326.110	Four leaf rotating barndoor (Medium)
326.200	Eight way rotating barndoor (Large)
326.210	Eight way rotating barndoor (Medium)
327.100	Colour frame
327.200	Outrigger colour frame
327.210	Outrigger colour frame mounting kit
328.100	Cone with two discs (front aperture diam.: 190 mm. 150 mm. 110 mm.).
329.100	Set of scrims - Stainless steel
329.101	Full single scrim - Stainless steel
329.102	Full double scrim - Stainless steel
329.103	1/2 single scrim - Stainless steel
329.104	1/2 double scrim - Stainless steel
329.250	180° Bottom Light spill protection
91.200	Solid brass "C" clamp to hang fixtures overhead and for mounting on pipe with diameters up to 52 mm. (2"), with safety pin (no adapters)
20.100	Safety cable 800 mm. long with 4 mm. diameter steel rope and safety catch.
DGP-A110	Combo stand with lazy leg with 29 mm. Socket (1 1/8") and 16 mm. Spigot (5/8")
DGP-A9000	Caster set diam. 100 mm. braked

