SILL® PR020 Cardanic Systems



							
		Project: Type:			0	ety:	
	-	– PRO	20C ture Beam La	amp Type/ Lamp Finish Wattage Color		 Lens Accessories	
	NOTE: To combine fixture any configuration	types and/or	orientations in	For Pole Mount Systems only	Pole Series Height	Finish	Options
	Configuration	Series	Beam Pattern	Lamp Type / Wattage	Lamp Color	Finish	Lens Accessories
actually actually actually actually	C4I 4 Fixture Cross - Indirect C4D 4 Fixture Cross - Direct	PR020C PR020 Projector	SN Narrow Spot SM Medium Spot FN Narrow Flood FM Medium Flood HN Horizontal Narrow HM Horizontal Medium VN Vertical Narrow VM Vertical Medium	Ceramic Metal Halide (Includes electronic ballast) H035T6 35W T6 G12 H070T6 70W T6 G12 Quartz Halogen (Includes electronic ballast) Q035 35W QT GY6.35 12V Q050 50W QT GY6.35 12V Q075 70W QT GY6.35 12V Q090 90W QT GY6.35 12V	830 3000°K NOL Lamp not included Lamp Color not applicable for Halogen lamps. (Leave this space blank to include specified lamps with fixture) NOL Lamp not included	WH White BK Black BZ Bronze SV Silver SP Specify RAL#	FG Flush Glass LR Colored Red LG Colored Blue LY Colored Yellow RL Ring Louver Internal DF Dichroic Filter (consult factory for details)
and and	S5I 5 Fixture Square - Indirect	mounting frames)		<u>Halogen</u>		Voltage	Options
0.00	R2I 2 Fixture Rectangle - Ind.		SP 10° Spot WS 12° Spot FL 25° Spot WF 60° Wide Flood	060PAR38 ¹ 60W PAR38 080PAR38 ¹ 80W PAR38		12V ² 120 277	RLX Ring Louver ⁴ External S18 Snoot 180° ⁴
cobago o los actais	R2D 2 Fixture Rectangle - Dir.		SP 15° Spot FL 25° Spot WF 60° Wide Flood	Ceramic Metal Halide (Includes electronic ballast) 070PAR38 70W PAR38 100PAR38 100W PAR38	830 3000°K NOL Lamp not included	347³	S36 Snoot 360°4 WG Wire Guard ⁴ SLR Field Rotatable Spread Lens
rage / lot details	P2D 2 Fixture Pole Mount- Dir. P2I 2 Fixture Pole Mount- Ind.						

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P3D 3 Fixture Pole Mount- Dir.

P3I 3 Fixture Pole Mount- Ind.



²Quartz Halogen only

1120V only

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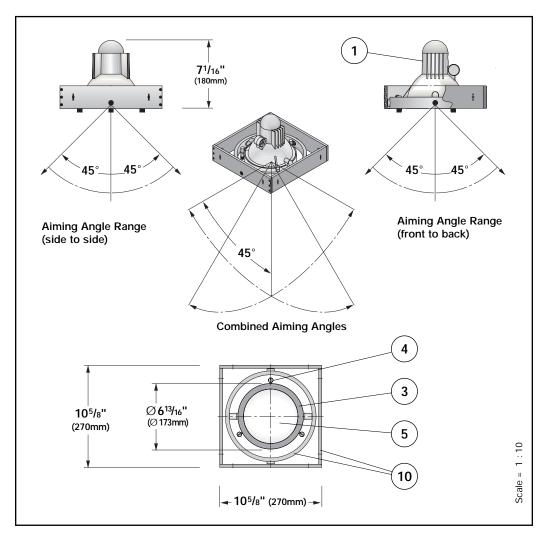
³RLX, S18, S36 and WG cannot be combined. Snoots will affect rotation range. Consult factory for details.

IP 65 Certified

⁴All lamp types not available with 347V, consult factory for specific availability.



PR020C - Fixture Module Specifications



- 1. Housing Pressure die cast, specially formulated high purity aluminum GD-ALSi12 housing with heat dissipating fins.
 Secures and provides sealed optic chamber for reflector and lamp.
- 2. Gasketing (not shown)
 Die-cut high strength silicone
 gasket between ballast housing
 and cover, and continous silicone
 gasket between fixture housing
 and lens base provide weatherproofing, dust and insect control.
- 3. Door Frame Pressure die cast, specially formulated high purity aluminum GD-ALSi12 frame.
- 4. Door Fasteners Three captive stainless steel knurled thumb screws fasten to stainless steel threaded inserts.
- 5. Lens Tempered glass lens supplied in clear, spread or sand etched according to specified beam spread. Optional clear flush lens can be combined with any other lens to prevent dirt and water build up on lens/door
- assembly with indirect applications. Rotatable spread lens, color filter glass and dichroic filters optionally available.
- 6. Reflector Precision formed, high performance reflector, in highly specular and diffuse finishes. Constructed of high purity aluminum with chemically brightened and anodized finish to produce optimum reflectivity for specified distributions.
- 7. Lamp (not shown) As indicated. Refer to lamp table on p.12 for complete lamp data.

- 8. Socket (not shown) High quality sockets, located to precisely locate and secure lamps in optimum position. Refer to lamp table on page 12 for specific socket types for each lamp type.
- 9. Ballasting (not shown)
 Electronic, low THD, high power
 factor ballasts for wattages up to
 100W. Secured within corrosion
 resistant, high strength aluminum
 ballast housing integrated within
 Ballast Module or Pole Mast
 System cardanic frame.
- **10. Cardanic Frame w/Circular Gimbal** Constructed of high quality 3/8" aluminum.
- 11. Certifications Fixtures are supplied standard with UL and CUL for wet locations. Cardanic Systems are are IP 65 certified. CIE listing is also available (for applications outside of North America, please consult factory for details).

Exterior Luminaire Finish SELUX utilizes a high quality
Polyester Powder Coating.
All SELUX luminaires and poles
undergo a five stage intensive
pretreatment process where
product is thoroughly cleaned,
phosphated and sealed. SELUX
powder coated products provide
excellent salt and humidity
resistance as well as ultra violet
resistance for color retention.
All products are tested in accordance with test specifications for
coatings from ASTM and PCI.

Standard exterior colors are White (WH), Black (BK), Bronze (BZ), and Silver (SV). RAL colors (SP) are available, please specify RAL#.

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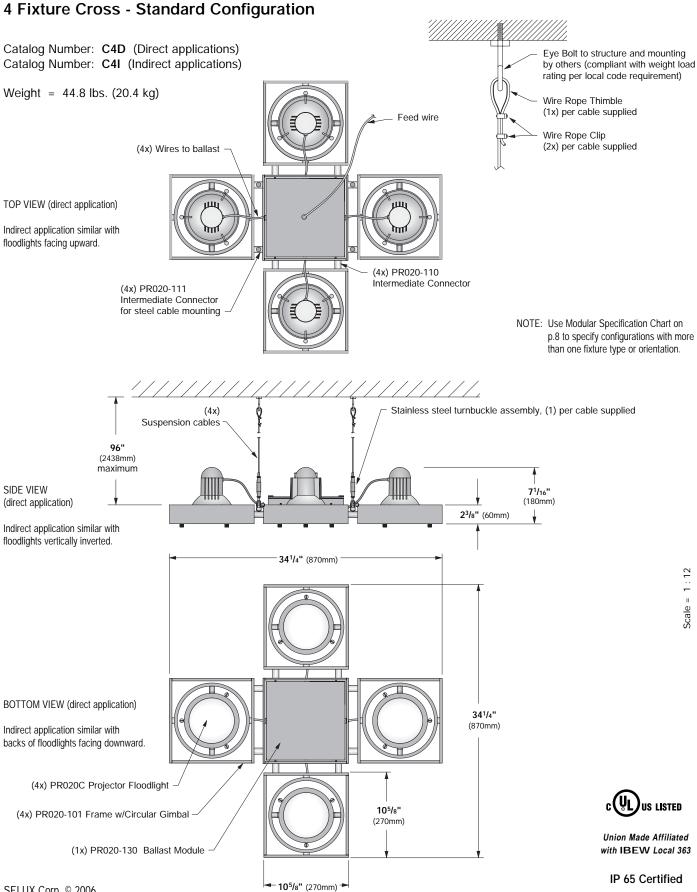
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NOTE: Use Modular Specification Chart on

5 Fixture Square - Standard Configuration

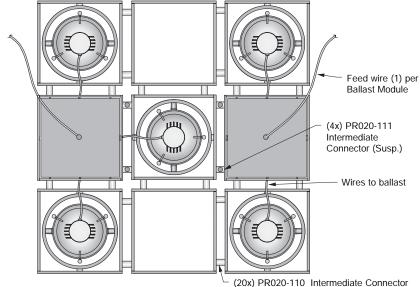
p.8 to specify configurations with more than one fixture type or orientation.

Catalog Number: S5D (Direct applications) Catalog Number: S5 I (Indirect applications)

Weight = 69.2 lbs. (31.4 kg)

TOP VIEW (direct application)

Indirect application similar with floodlights facing upward.

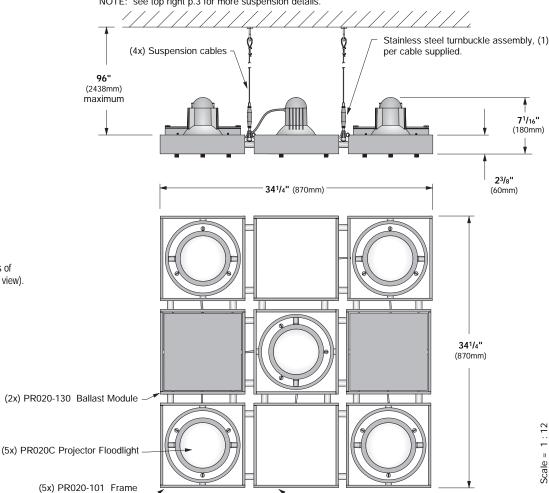


NOTE: see top right p.3 for more suspension details.

SIDE VIEW (direct application)

Indirect application similar with fixture/frame assemblies vertically inverted.

BOTTOM VIEW (direct application) Indirect application similar with backs of floodlights facing downward (see top view).



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w/Circular Gimbal

(2x) PR020-100 Empty Frame

Wires to ballast



2 Fixture Rectangle - Standard Configuration

NOTE: Use Modular Specification Chart on p.8 to specify configurations with more than one fixture type or orientation.

Catalog Number: R2D (Direct applications)
Catalog Number: R2I (Indirect applications)

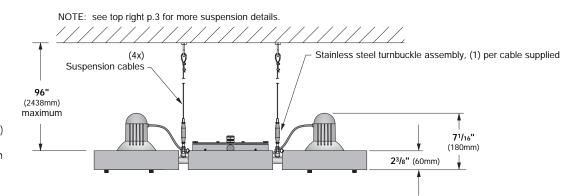
Weight = 30.4 lbs. (13.8 kg)

Feed wire

(4x) PR020-111 Intermediate Connector (Susp.)

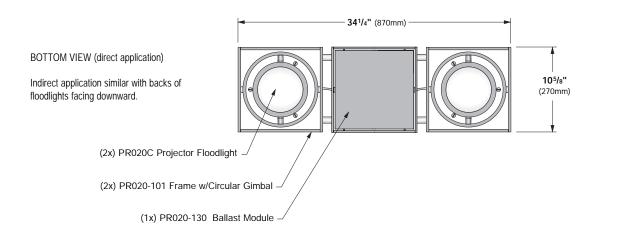
TOP VIEW (direct application)

Indirect application similar with floodlights facing upward.



SIDE VIEW (direct application)

Indirect application similar with ffloodlights vertically inverted.



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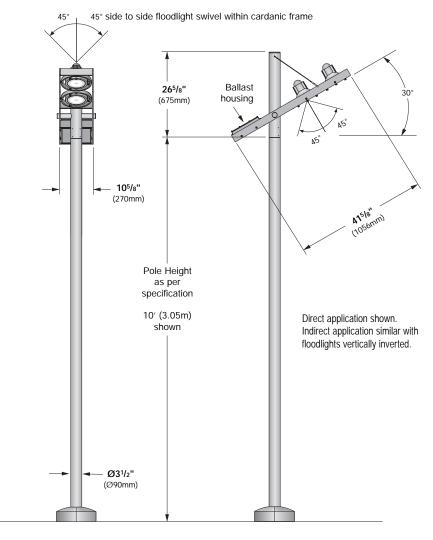


2 Fixture Pole Mast System

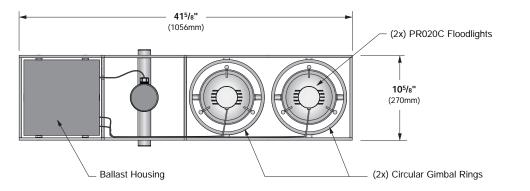
Catalog Number: **P2D** (Direct) Catalog Number: **P2I** (Indirect)

Pole top assembly integrates gimbal ring based mounting frame for two PR020C floodlights on one end and ballast housing on the other end. Pole Mast assembly made of corrosion resistant, high strength aluminum. Complete frame pivots on an aluminum rod that passes through pole top, and is secured by a stainless steel threaded rod. Frame is also secured in place with two steel suspension cables that are field adjustable +/- 2". Cardanic frame suspended at 30° from horizontal, for other tilt options consult factory.

Weight (excluding pole) = 44 lbs. (20 kg) EPA (excluding pole) = 4 ft² (0.372m²)



2 Fixture Pole Mast System - Cardanic Frame (top view - direct version)



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In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product. Specification sheets found at www.selux.com/usa are the most recent versions and supercede all other printed or electronic versions.

Scale = 1:12

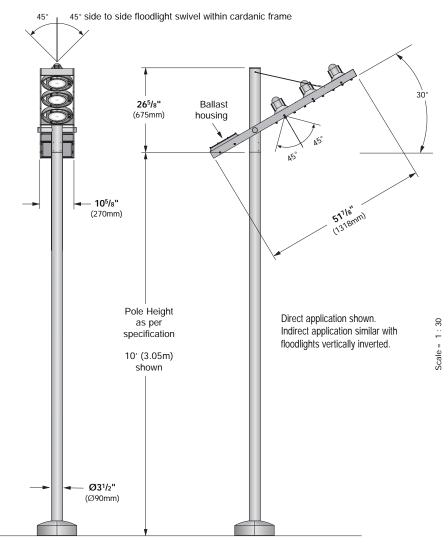


3 Fixture Pole Mast System

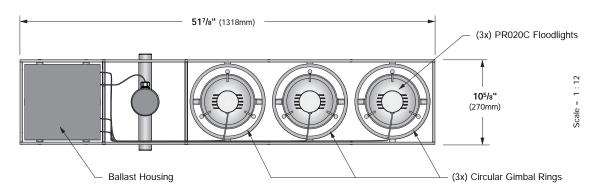
Catalog Number: **P3D** (Direct) Catalog Number: **P3I** (Indirect)

Pole top assembly integrates gimbal ring based mounting frame for three PR020C floodlights on one end and ballast housing on the other end. Pole Mast assembly made of corrosion resistant, high strength aluminum. Complete frame pivots on an aluminum rod that passes through pole top, and is secured by a stainless steel threaded rod. Frame is also secured in place with two steel suspension cables that are field adjustable +/- 2". Cardanic frame suspended at 30° from horizontal, for other tilt options consult factory.

Weight (excluding pole) = 50 lbs. (22.7 kg) EPA (excluding pole) = 4.5 ft^2 (0.418m²)



3 Fixture Pole Mast System - Cardanic Frame (top view - direct version)



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Modular Specification Chart

Each position block represents one location, as viewed from below, of a potential 9 unit square configuration. Use any combination of contiguous position blocks. Use check boxes to designate either Fixture Module, Ballast Module or Empty Frame. For each specified Fixture Module, indicate complete PR020C catalog number *(refer to page 1)*, and indicate whether for direct or indirect application. Specify at least one (1) Ballast Module for every four (4) Fixture Modules*.

*Ballast Module not required for use with PAR38 Halogen lamping, however it can be useful for routing feed wiring.

Position: A1	Position: B1	Position: C1			
Fixture Module PR020 - 101	☐ Fixture Module PR020 - 101	Fixture Module PR020 - 101			
☐ Direct application ☐ Indirect application	☐ Direct application ☐ Indirect application	☐ Direct application ☐ Indirect application			
Refer to page1 to determine Floodlight specification:	Refer to page1 to determine Floodlight specification:	Refer to page1 to determine Floodlight specification:			
PR020C	PR020C	PR020C			
	1 ··· □				
☐ Ballast Module PR020 - 130	☐ Ballast Module PR020 - 130	☐ Ballast Module PR020 - 130			
☐ Empty Frame <u>PR020</u> - <u>100</u>	☐ Empty Frame <u>PR020</u> - <u>100</u>	☐ Empty Frame <u>PR020</u> - <u>100</u>			
		_			
Botton					
Position: A2	Position: B2	Position: C2			
☐ Fixture Module PR020 - 101	Fixture Module PR020 - 101	☐ Fixture Module <u>PR020</u> - <u>101</u>			
☐ Direct application ☐ Indirect application	☐ Direct application ☐ Indirect application	☐ Direct application ☐ Indirect application			
Refer to page1 to determine Floodlight specification:	Refer to page1 to determine Floodlight specification:	Refer to page1 to determine Floodlight specification:			
PR020C	PR020C	PR020C			
	┦ ┃──˙──˙──˙				
——————————————————————————————————————		П - и . и			
Ballast Module PR020 - 130	Ballast Module PR020 - 130	☐ Ballast Module PR020 - 130			
☐ Empty Frame <u>PR020</u> - <u>100</u>	☐ Empty Frame <u>PR020</u> - <u>100</u>	☐ Empty Frame <u>PR020</u> - <u>100</u>			
Empty Frame 1-K020 100	Empty Frame FR020 100	Empty Frame <u>FR020</u> 100			
Botton	Niew Bottom	View			
Position: A3	Position: B3	Position: C3			
☐ Fixture Module PR020 - 101	Fixture Module PR020 - 101	☐ Fixture Module PR020 - 101			
☐ Direct application ☐ Indirect application Refer to page1 to determine Floodlight specification:	☐ Direct application ☐ Indirect application Refer to page1 to determine Floodlight specification:	Direct application Indirect application Refer to page1 to determine Floodlight specification:			
PR020C	PRO20C	PRO20C			
☐ Ballast Module PR020 - 130	☐ Ballast Module PR020 - 130	☐ Ballast Module PR020 - 130			
☐ Empty Frame <u>PR020</u> - <u>100</u>	☐ Empty Frame <u>PR020</u> - <u>100</u>	☐ Empty Frame <u>PR020</u> - <u>100</u>			

SELUX engineering will determine optimum suspension locations. Consult factory for more details, or for assistance in specifying modular Cardanic Systems configuration.

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Cardanic Frame w/Circular Gimbal

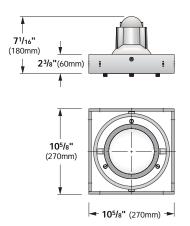
(shown as complete **Fixture Module** with installed PR020C floodlight)

Part Number: PR020 -101

Gimbal ring based mounting frame for PR020C floodlight. Constructed of high quality 3/8" aluminum.

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Weight (with fixture) = 7.04 lbs. (3.20 kg)



cale = 1:16

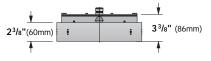
Ballast Module

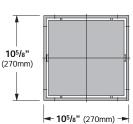
Part Number: PR020 -130

Holds up to four 100W electronic ballast units. May also be used as a central location to route feed wires when used with Halogen PAR38 lamps.

Frame and ballast case made of corrosion resistant, high strength aluminum.

Weight (with ballast) = 16.00 lbs. (7.27 kg)





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Empty Frame Unit

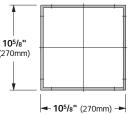
Part Number: PR020 -150

For spacing and support between modules.

Made of corrosion resistant, high strength aluminum.

Weight = 2.86 lbs. (1.3 kg)





11.16

Intermediate Connectors

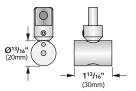
For connecting all modules. Intermediate Connector for Steel Cable Mounting has integral hardware for attaching supplied stainless steel turnbuckle/suspension cable assembly.

Made of corrosion resistant, high strength aluminum.

Intermediate Connector

Weight = 0.08 lbs. (36 g)

Intermediate Connector for Steel Cable Mounting



Weight = 0.09 lbs. (41 g)

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Modular System Components

A. TROZOC TROZOT TOOMINING WITH CARACTIC SYSTEM	Α.	PR020C	PR020 Floodlight unit fitte	ed for mounting with Cardanic Systems
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B. PR020-101 Cardanic Frame w/Circular GimbalC. PR020-102 Cardanic Frame w/Square Gimbal*

D. PR020-130 Frame with up to four electronic ballasts (up to 150W)

E. PR020-110 Intermediate connector

F. PR020-111 Intermediate connector for steel cable mounting

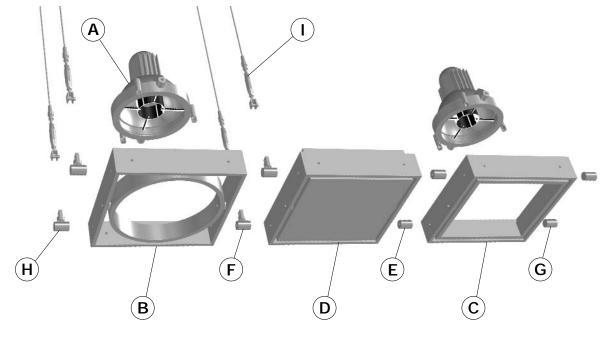
G. PR020-115 End connector*

H. PR020-116 End connector for steel cable mounting*

I. PR020-120 Cable suspension/turnbuckle assembly for surface mounting

PR020-100 (not shown) Empy frame for spacing and support

*Frame w/Square Gimbal and End Connectors are special order items, consult factory for details.



Modular Configuration Examples

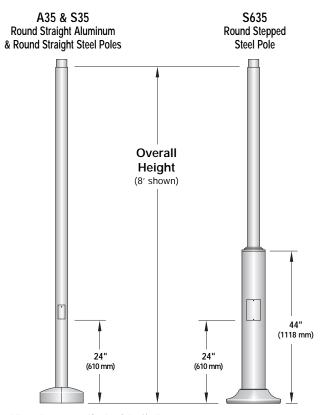
Modules can be combined into a wide array of configurations according to application/design needs. Consult factory for assistance in specifying your modular Cardanic System configuration.





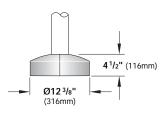
Pole Information

Refer to A35, S635, or S35 Pole specification sheets for construction details, anchorage information and additional options.



Straight Poles (A35 & S35) BC5 Standard Base Cover

Two-piece cast aluminum



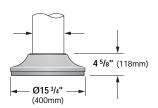
BC1 Optional Base Cover

(A35 & S35) One-piece cast aluminum



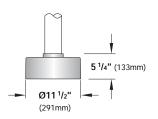
Stepped Steel Pole (S635) BC6 Standard Base Cover

One-piece cast aluminum



BC4 Optional Base Cover

(A35 & S35) One-piece cast aluminum



All poles supplied with Ø3" tenon.

Dolo Sorios			E	PA Inf	ormati	on (ft2))	 Height Finish Opt			Ontions						
	Pole Series	Circle	70 mph	80 mph	90 mph	100 mph	110 mph	пе	eigni	FINISN	Options						
S635	3-1/2" Diameter Stepped Steel Pole	9"	57.6	44.3	34.6	27.5	22.8			WH White	BC1	Decorative Cast					
A35	3-1/2" Diameter Straight Aluminum Pole	7 3/4"	16.1	12.2	9.4	7.3	5.9	8 8 ft.	8 8 ft.	8 8 ft.	8 8 ft.		8 8 ft.		BK Black		Aluminum Base Cover (for A35 &
S35	3-1/2" Diameter Straight Steel Pole	7 3/4"	14.8	11.3	8.6	6.7	5.4			DK DIACK		S35 poles only)					
S635	3-1/2" Diameter Stepped Steel Pole	9"	45.6	35.0	27.3	21.6	17.8			BZ Bronze BC4							
A35	3-1/2" Diameter Straight Aluminum Pole	7 3/4"	12.4	9.3	7.1	5.4	4.3	10	0 10 ft.) 10 ft.	10 ft.	10 ft.	SV Silver		Aluminum Base Cover (for A35 &		
S35	3-1/2" Diameter Straight Steel Pole	7 3/4"	11.4	8.6	6.5	4.9	3.9			OV SIIVEI		S35 poles only)					
S635	3-1/2" Diameter Stepped Steel Pole	9"	37.6	28.7	22.3	17.5	14.4			SP Specify RAL#	REC	GFCI Receptacle					
A35	3-1/2" Diameter Straight Aluminum Pole	7 3/4"	9.9	7.3	5.4	4.0	3.1	12 12 ft		INALπ		with weather- proof cover*					
S35	3-1/2" Diameter Straight Steel Pole	7 3/4"	9.1	6.7	4.9	3.6	2.8				PCT	Photocell Tenon					
S635 3-1/2" Diameter Stepped Steel Pole A35 3-1/2" Diameter Straight Aluminum Pole		9"	31.7	24.2	18.6	14.6	11.9										
		7 3/4"	8.0	5.8	4.2	3.0	2.2	14	14 ft.		T3	3" Tenon (included					
S35	- v		7.3	5.3	3.8	2.7	1.9					with all poles)					
S635 3 1/2" Diameter Stepped Steel Pole		9"	21.7	15.8	12.3	9.6	7.6					weatherproof cover intended					
A35	3 1/2" Diameter Straight Aluminum Pole	7 3/4"	4.9	3.2	2.2	1.4	.08	16	16 ft.		for portable tools or other portable equipment connected to the outlet only when attended. For other						
S35	3 1/2" Diameter Straight Steel Pole	7 3/4"	4.4	2.8	1.9	1.2	0.6	1				nents please consult factory.					
Other pole configurations available, consult factory. EPA Calculations allow for 1.3 Gust Factor																	

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PR020C Projector Floodlights



Beam Information

Catalog Number	NEI Distrib		Max	Cande	la	Beam (50	Angle %)		Angle 0%)	E	·)	
Į	Н	V	Candela	Н	V	Н	V	Н	V	Beam	Field	Total
PR020 - SN - H035T6 - RL	1	1	48338	0°	0°	7.4°	7.4°	16.2°	16.2°	11.37%	28.78%	39.42%
PR020 - SM - H035T6 - RL	3	3	11474	0°	0°	15.9°	15.9°	32.6°	32.6°	13.78%	30.55%	36.29%
PR020 - SN - H070T6 - RL	2	2	64733	0°	0°	9.5°	9.5°	21.2°	21.2°	16.60%	33.75%	48.18%
PR020 - SM - H070T6 - RL	3	3	19140	0°	0°	17.2°	17.2°	36.7°	36.7°	14.88%	30.54%	37.59%
PR020 - SN - Q050 - RL	1	1	22033	0°	0°	5.6°	5.6°	12.4°	12.4°	10.25%	27.41%	41.72%
PR020 - SN - Q090 - RL	1	1	52120	0°	0°	5.6°	5.6°	12.4°	12.4°	10.25%	27.41%	41.72%

For photometric curves and data refer to PR020 spec sheet. For IES files refer to www.selux.com/usa—PR020 webpage in Products/Exerior/Floodlights/

Lamp Data

Other color temperatures available upon request

Catalog Number	Description	Bulb	Operating Position	Base	Lamp Finish	Lamp Color	ANSI Designation	Initial Lumens	Mean Lumens	CRI	CCT (K)	Life (hours)
060PAR38	60 Watt	PAR38		Medium				850				3,000
060PAR38	60 Watt	PAR38		Medium				850				3,000
060PAR38	60 Watt	PAR38		Medium				850				3,000
060PAR38	60 Watt	PAR38		Medium				850				3,000
070PAR38	70 Watt	PAR38	Universal	Medium		830	M139/O	4300		85	3000	10,000
070PAR38	70 Watt	PAR38	Universal	Medium		830	M139/O	4300		85	3000	10,000
070PAR38	70 Watt	PAR38	Universal	Medium		830	M139/O	4300		85	3000	10,000
080PAR38	80 Watt	PAR38		Medium				1500				3,000
080PAR38	80 Watt	PAR38		Medium				1500				3,000
100PAR38	100 Watt	PAR38	Universal	Medium		830	M139/O	6500		85	3000	12,000
100PAR38	100 Watt	PAR38	Universal	Medium		830	M139/O	6500		85	3000	12,000
100PAR38	100 Watt	PAR38	Universal	Medium		830	M139/O	6500		85	3000	12,000
H035T6	39 Watt	T6	Universal	G12	Clear	830	M130/E	3400	2720	82	3000	9,000
H070T6	70 Watt	T6	Universal	G12	Clear	830	M139/E	6600	5200	82	3000	12,000
Q035	35 Watt	T4	Universal	GY6.35	Clear	N/A	N/A	600				4,000
Q050	50 Watt	T4	Universal	GY6.35	Clear	N/A	N/A	910		_		4,000
Q075	75 Watt	T4	Universal	GY6.35	Clear	N/A	N/A	1450				4,000
Q090	90 Watt	T4	Universal	GY6.35	Clear	N/A	N/A	1800				4,000

Note: Lamp data provided for reference only and is believed to be accurate at time of printing. Consult manufacturers' data for updated and accurate specifications, along with any specifications and precautions. Contact SELUX for specific manufacture if required. Other lamps are available, contact SELUX with any special requests. All lamps and ballasts supplied by SELUX are usually covered under the ballast and lamp manufacturers' warranties.

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