### Seem<sup>®</sup> 2 Grid Ceiling











recessed







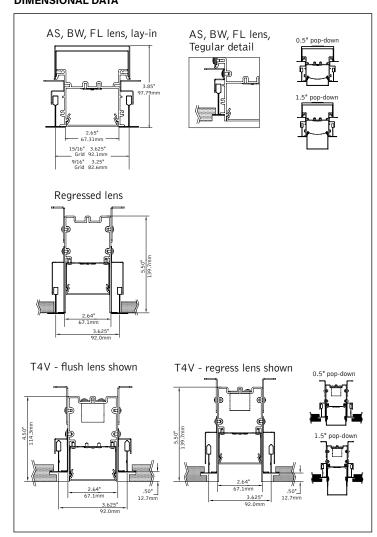
mount companions

#### wall to ceiling companion

perimeter companion



**DIMENSIONAL DATA** 



#### FEATURES

Narrow extruded aluminum 2.5" aperture recessed slot LED.

Individual units and continuous runs in 1" increments.

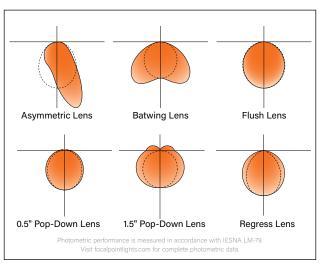
Frosted acrylic lens provides uninterrupted illumination, without pixels or shadows.

LED position and lens material optimized to provide the perfect blend of high performance and visual comfort.

Tunable White: Supports human activity, well-being, and preferences with a light quality that evolves throughout the day.

Connected Solutions: Integrates with wired and wireless building lighting control systems.

PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires.



#### DISTRIBUTIONS

#### A brand of Liegrand

Shielding Asymmetric Lens

Batwing Lens

1.5" Pop-Down Lens

375 Lumens per foot

500 Lumens per foot

625 Lumens per foot

750 Lumens per foot 875 Lumens per foot

1000 Lumens per foot

**Color Temperature** 2700K, 80+ CRI or 90+ CRI

**Circuits & Zones** 

3000K, 80+ CRI or 90+ CRI

3500K, 80+ CRI or 90+ CRI

4000K, 80+ CRI or 90+ CRI

Lumen Output

(Individual units only) Regress Lens (Housing height 5.5", Ceiling applications only)

125 Lumens per foot (LD1, L11 & D11 driver only. 4' minimum. Not available on patterns..)

(3' minimum with LH1. Not available on patterns with LH1.

Flush Lens 0.5" Pop-Down Lens FSM2L

FSM2L

AS

BW

PD05

PD15

250LF

375LF

500LF

625I F

875LF

1000LE

27K **or** 927K

30K or 930K

35K or 935K

40K or 940K

SR

#### **4' PERFORMANCE CHART**

Shield	ing	Lumens per Foot	Delivered Lumens	Tested System Watts	LPW
		125LF	500	5.9	85
		250LF	1000	8.2	122
-		375LF	1500	11.1	135
Asymmetric		500LF	2000	14.5	138
Lens		625LF	2500	17.9	140
		750LF	3000	22.1	136
		875LF	3500	25.9	135
		1000LF	4000	29.8	134
		125LF	500	5.5	91
		250LF	1000	8.7	115
-		375LF	1500	12.0	125
		500LF	2000	15.5	129
Batwing Lens	$(\mathbf{X})$	625LF	2500	20.0	125
		750LF	3000	24.0	125
	I	875LF	3500	28.1	125
		1000LF	4000	32.4	123
		125LF	500	5.6	89
		250LF	1000	9.0	111
		375LF	1500	12.4	121
-		500LF	2000	16.2	124
Flush Lens		625LF	2500	20.8	124
		750LF	3000	24.9	120
		875LF	3500	29.3	119
		1000LF	4000	33.8	113
		125LF	500	5.9	85
		250LF	1000	9.5	105
	$\perp$	375LF	1500	13.1	105
-		500LF	2000	17.2	114
Pop Down 0.5" Lens		625LF	2000	22.1	113
Lens					
		750LF	3000	26.7	112
		875LF	3500	31.3	112
		1000LF	4000	36.2	110
		125LF	500	5.8	86
		250LF	1000	9.3	107
		375LF	1500	12.9	116
Pop Down 1.5"		500LF	2000	16.9	118
Lens		625LF	2500	21.8	115
		750LF	3000	26.2	114
		875LF	3500	30.8	114
		1000LF	4000	35.6	112
		125LF	500	5.9	85
		250LF	1000	9.6	104
-		. 375LF	1500	13.4	112
Regress Lens	(( ))	500LF	2000	17.5	114
		625LF	2500	22.5	111
	I	750LF	3000	27.1	111
		875LF	3500	31.9	110
		1000LF	4000	36.9	109

1 Circuit, non-emergency Consult Ordering Guide on page 5 for multiple circuiting and zoning options Voltage	1C _C_Z_DL	
120/277 UNV Volt	UNV	
347 Volt (LD1 & L11 driver only.)	347V	
Low Voltage	LV	
Control System & Dimming Level		
0-10V - 10% Dimming	LD1	
0-10V - 1% Dimming	L11	
Low Voltage, PoE compatible (No driver. Not available with EM or EC. LV Voltage only.)	LVN	
Lutron Hi-Lume EcoSystem (LDE1) -	LH1	
1% Dimming	<b>L</b> 111	
DALI 1% Dimming	D11	
Wattstopper DLM - 1% Dimming**	DLM1	
(Not available with CP)		
Wattstopper Fixture Sensor**	LMFS1	
Low Density – 1% Dimming		
See sensor layout guide Wattstopper Fixture Sensor**1	LMFSD	
High Density – 1% Dimming	LIVII SD	
See sensor layout guide		
Lutron Athena Wireless Node**	LAW1	
Lutron Athena Wireless Sensor**1	LAWS	
	NLT1	
Acuity nLight - 1% Dimming** (Not available with CP.)		
Enlighted Smart Sensor - 1% Dimming <sup>**1</sup> See sensor layout guide	ENL1	
Encelium CLM Connected Lighting Module -**	CLM1	
1% Dimming	OLIMI	
Current NX Enabled – 1% Dimming**	NXE1	
(Not available with CP.) WaveLinx Pro – 1% Dimming**1	WLXP	
See sensor layout guide	VVLAF	
See sensor layout guide **(3' minimum length, with ECD/EM - 7' minimum.)		
<sup>1</sup> (Not available with pop-down lenses.) Ceiling Configuration		
	C1 er T1	
Std. 15/16" Lay-in (G1) or Tegular (T1) Std. 9/16" Lay-in (G2) or Tegular (T2)	G1 or T1 G2 or T2	
Std. 9/16" Lay-in (G2) <b>or</b> Teğular (T2) 9/16" Slot-tee Tegular	G3	
Tall 15/16" Lay-in (G4) or Tegular (T4)	G4 or T4	
Tall 15/16" Tegular for specialty ceilings (0.5" drop)	T4V	
Tall 9/16" Lay-in (G5) <b>or</b> Tegular (T5)	G5 or T5	
Node 9/16" Tegular	T6	
Factory Options		
(See Ordering Guide for ordering details for DC, EC, EM, & ECD.)		
Chicago Plenum (Not available with Flex Whip)	CP	
	DC	
Daylight Circuit	_DC	
Emergency Circuit	_ <u>EC</u>	
Emergency Battery Packt	ECD	
Emergency Control Device <sup>†</sup> <sup>†</sup> (4' minimum, 6' minimum with patterns. 120/277 Volt only.	_ECD	
Not available at corners)		
6' New York City Flex Whip (120V)	FNY1	
6' New York City Flex Whip (277V)	FNY2	_
6' Flex Whip	FW	
Finish		WH
Matte White Housing	WH	-
Luminaire Length	A 14	ft
Specify luminaire/row length in 1" increments (2' minimum lengths are nominal 1" increments based on T-centers.	_ft _in	
(2' minimum, lengths are nominal "f' increments based on T-centers. Housing length is 1" shorter than specified. Leave blank for patterns. Smaller increments available, consult factory.)		
Smaller increments available, consult factory.) Pattern Options		
Pattern Ontions		

### **Pattern Options** A' x B' A' x B' x C' A' x B' R

in

(4' minimum length) 'L' pattern 'U' pattern Rectangular pattern (Consult factory for other pattern options)

**10 DAY** Options in orange qualify for the Quickship program. 1000' total, 48' maximum per pattern section. Refer to Quickship Guide for complete details including EM/EC options.



fixture:

#### тw 4' PERFORMANCE CHART

Shield	ding	Lumens per Foot	Delivered Lumens	Tested System Watts	LPW
		125LF	500	7.25	79.3
	1	250LF	1000	12.90	93.1
		375LF	1500	18.55	98.5
Asymmetric		500LF	2000	18.3	101.1
Lens		625LF	2500	24.21	102.5
		750LF	3000	29.86	106.8
		875LF	3500	34.34	107.5
		1000LF	4000	39.71	107.8
		125LF	500	7.25	7.25
	I.	250LF	1000	12.90	12.90
		375LF	1500	18.55	18.55
Deturing Long		500LF	2000	18.3	18.3
Batwing Lens	$\square$	625LF	2500	24.21	24.21
		750LF	3000	29.86	29.86
	I	875LF	3500	34.34	34.34
		1000LF	4000	39.71	39.71
		125LF	500	7.25	69.0
	I.	250LF	1000	12.90	80.9
		375LF	1500	18.55	85.7
		500LF	2000	18.3	87.9
Flush Lens		625LF	2500	24.21	89.2
		750LF	3000	29.86	92.9
		875LF	3500	34,34	93.5
		1000LF	4000	39.71	93.7
		125LF	500	7.25	83
	I.	250LF	1000	12,90	66.2
		375LF	1500	18.55	77.7
Pop Down 0.5"		500LF	2000	18.3	82.2
Lens		625LF	2500	24.21	84.4
	-	750LF	3000	29.86	85.6
		875LF	3500	34,34	89.2
		1000LF	4000	39.71	89.7
		125LF	500	7.25	90
	I.	250LF	1000	12.90	65.5
		375LF	1500	18.55	76.9
Pop Down 1.5"		500LF	2000	18.3	81.4
Lens		625LF	2500	24.21	83.5
		750LF	3000	29.86	84.7
	I	875LF	3500	34,34	88.3
		1000LF	4000	39.71	88.8
		125LF	500	7.25	89.1
	I	250LF	1000	12.90	102
		375LF	1500	18.55	102
Pogroos Long		500LF	2000	18.3	110
Regress Lens		625LF	2500	24.21	106
		750LF	3000	29.86	106
		875LF	3500	34.34	100

Based on 2700K, 80CRI, 4' lengths. Lumen output may vary +/- 5%. Actual wattage may vary +/- 5%

#### Lumen Multiplier

Lumen Multiplier		Wattage Multiplier	'S
CRI	Multiplier	ССТ	Multiplier
80+	1.00	2700K	1.00
90+	0.89	3000K	0.92
		3500K	0.88
		4000K	0.86
		5000K	0.85
		5700K	0.87



TUNABLE WHITE		
Luminaire Series		FSM2L
Seem 2 LED Grid	FSM2L	
Shielding		
Asymmetric Lens	AS	
Batwing Lens	BW	
Flush Lens	FL	
0.5" Pop-Down Lens	PD05	
1.5" Pop-Down Lens (Individual units only)	PD15	
Regress Lens	SR	
(Housing height 5.5." Ceiling applications only) Lumen Output		
125 Lumens per foot	125LF	
250 Lumens per foot	250LF	
375 Lumens per foot	375LF	
500 Lumens per foot	500LF	
625 Lumens per foot	625LF	
750 Lumens per foot	750LF	
875 Lumens per foot	875LF	
1000 Lumens per foot	1000LF	
Color Temperature		
Tunable White: 2700-6500K, 80+ CRI	2765T	
Tunable White: 2700-6500K, 90+ CRI	92765T	
Circuits & Zones	10	
1 Circuit, non-emergency	1C	
Consult Ordering Guide on page 5 for multiple circuiting and zoning options	_C_Z_DL	
Voltage		
120/277 UNV Volt	UNV	
347 Volt (LD1 & L11 driver only.)	347V	
Low Voltage	LV	
Control System & Dimming Level		D1TW
DALI 1% Dimming*	D1TW	
(Default driver offers DT6 control. It requires two addresses, one for intensity & one for CCT tuning.		
Consult factory for DT8. Extended lead time applies.)		
Ceiling Configuration	C1 av T1	
Std. 15/16" Lay-in (G1) <b>or</b> Tegular (T1) Std. 9/16" Lay-in (G2) <b>or</b> Tegular (T2)	G1 <b>or</b> T1 G2 <b>or</b> T2	
9/16" Slot-tee Tegular	G2 01 12 G3	
Tall 15/16" Lay-in (G4) <b>or</b> Tegular (T4)	G4 <b>or</b> T4	
Tall 15/16" Tegular for specialty ceilings (0.5" drop)	T4V	
Tall 9/16" Lay-in (G5) <b>or</b> Tegular (T5)	G5 or T5	
Node 9/16" Tegular	T6	
Factory Options		
(See Ordering Guide for ordering details for DC, EC, EM, & ECD.)		
Chicago Plenum	CP	
(Not available with Flex Whip)		
Daylight Circuit	_DC	
Emergency Circuit	_EC	
Emergency Battery Pack <sup>†</sup>	_EM	
Emergency Control Device <sup>†</sup>	_ECD	<u> </u>
<sup>†</sup> (4' minimum, 6' minimum with patterns. 120/277 Volt only. Not available at corners)		
6' New York City Flex Whip (120V)	FNY1	
6' New York City Flex Whip (277V)	FNY2	
6' Flex Whip	FW	
Finish		WH
Matte White Housing	WH	
Luminaire Length	o .	ft in
Specify luminaire/row length in 1° increments		
(2' minimum, lengths are nominal 1" increments based on T-centers.	_ft _in	
Specify luminaire/row length in 1" increments (2' minimum, lengths are nominal " increments based on T-centers. Housing length is 1" shorter than specified. Leave blank for patterns. Smaller increments available, consult factory.)	_π _in	

Pattern Options (4' minimum length) 'L' pattern 'U' pattern A' x B' A' x B' x C' (Consult factory for other pattern options) A' x B' R

Focal Point LLC reserves the right to change specifications for product improvement without notification.

#### SPECIFICATIONS

#### LED System

Proprietary linear LED module incorporates premium LEDs on a robust platform to achieve excellent thermal management. LEDs are placed to promote a uniform appearance. Available in 2700K, 3000K, 3500K or 4000K with CRI>80 or CRI>90, 3 SDCM. 3500K and 4000K with CRI>90 have a cyanosis observation index (COI) of 3.3 or less. Non-Regress housing LED modules are replaceable from below, driver access above ceiling. Regress housing LED modules and drivers are replaceable from below.

#### Construction

One piece extruded aluminum housing. 20 Ga. steel end caps. Steel driver compartment. Flush lens weights: 4' unit: 12.18 lbs., 8' unit: 21.34 lbs. Regress lens weights: 4' unit: 10.1 lbs., 8' unit: 20.2 lbs.

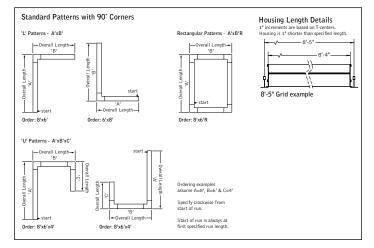
#### Optic

Extruded acrylic lens .060" thick with satin finish, up to 8' continuous. Regress lens .118" thick acrylic lay-in lens and 22 Ga. reflector finished in high reflectance white powder coat.

#### Electrical

Luminaires are pre-wired with factory installed branch circuit wiring and quick connects. Standard 120-277V constant current driver includes 0-10V analog dimming. Power factor > .9. PoE compatible: Integrates with Power over Ethernet lighting systems via standard, low-voltage wires. PoE runs require an independent PoE node and power feed for each luminaire section.

#### DETAILS



#### Emergency

Emergency Battery output - 10 watts for 90 minutes. Maximum mounting height: 19.3ft (FL), 15.6ft (PD05). Emergency Circuit with Connected Solutions (DLM1, LMFS1, LMFSD, NLT1, ENL1, CLM1, NXE1, WLXP) shipped standard with leads to connect UL924 compliant device, by others.

#### Labels

UL and cUL listed. Suitable for Dry or Damp Locations, indoor use only.

#### Finish

Polyester powder coat applied over a multi-stage pre-treatment.

#### Lumen Maintenance

Reported:	L70 at >61,000 hours	Calculated:	L70 at 385,000
	hours L90 at >61.000 hours		L90 at 103.000
	hours		L90 at 103,000

Derived from EPA TM-21 calculator. Based on typical conditions, consult factory for additional data.

#### Reliability

At Focal Point, our products are designed to stand the test of time. Each luminaire is engineered using superior components, manufactured with the utmost care and rigorously tested. Contact us for reliability data.

#### Warranty

LED system rated for operation in ambient environments up to 25°C. 5-year limited warranty.



# Seem<sup>®</sup> 2 Grid Ceiling

Focal Point provides flexibility in meeting the needs of each project by integrating with several building lighting control systems. A variety of sensors, drivers and other components can be specified that allow the luminaires to communicate with wired and wireless networks. All zoning can be digitally reconfigured through the application software. Daylight harvesting, occupancy sensing, integration with HVAC systems, and individual controls enable the monitoring and modulating of light levels and temperature in order to save energy, reduce costs and maximize occupants' comfort. All Connected Solutions luminaires require a compatible building control system.<sup>†</sup>

Connected Solution		Ordering Code	Model #**	Protocol	Compatible Networks*	Occupancy & Daylight	Temperature Reporting	Communication to Luminaire	Drivers
<b>La legrand</b> °		DLM1	LMFC-011	DLM	DLM	Enabled	No	Wired	Advance by Signify, Optotronic by eldoLED
WATTSTOPPER®		LMFS1	LMFS-601 & LMFI-111	DLM	DLM	Integrated	No	Wireless	Advance by Signify
		LMFSD	LMFS-601	Wireless	DEM				Optotronic by eldoLED (Dexal)
	-	WLXP	OEM-WAA	WaveLinx Wireless	WaveLinx Pro Trellix	Integrated	No	Wireless (WaveLinx Pro Wireless Area Controller)	Advance by Signify
@ CRESTRON	·······································	D11	Specified Driver	DALI	Crestron Zūm Wireless &	Enabled	No	Wired	eldoLED ECOdrive
		L11	Diivei	0-10V	SpaceBuilder				Advance by Signify
ENCELIUM	CLM1 adds 0.78" to overall of the ight	CLM1	ZBHA-CLM- DIM-ENC	ZigBee	Encelium X Light Management System	Enabled	No	Wireless	<b>Optotronic by eldoLED</b> Advance by Signify
Enlighted		ENL1	SU-5E-IOT	Enlighted RF	Enlighted	Integrated	Yes	Wireless	Advance by Signify
	Adds 0.78" to overall height.	LAW1	A-WN-D01- RF-WH	DALI, 0-10V	Athena Wireless	Enabled	No	Wireless	Advance by Signify
<b>፨LUTRON</b>	>	LAWS	A-WN-D01- OCC-WH	DALI, 0-10V	Athena Wireless	Integrated	No	Wireless	Advance by Signify
		LH1	LDE1	EcoSystem	Quantum, Energi Savr Node, Energi TriPak	Enabled	No	Wired	Lutron Hi-Lume
nLight	NLT1 adds 100° to overall height.	NLT1	nEPS-60-IO	nLight	nLight	Enabled	No	Wired	eldoLED ECOdrive, eldoLED SOLOdrive
LIGHTING CONTROLS	NXEI adds 1.00° to overall height.	NXE1	NXFM-LV	NX	NX Distributed Intelligence	Enabled	No	Wired	Optotronic by eldoLED

\*Not all compatible networks may be listed. \*\*For performance data and additional control system details please visit the connected solutions manufacturer websites. Primary drivers are listed in **bold.** To specify a particular driver please consult factory. +Controls systems supplied by others.

### Ordering Guide

**Direct Only Linear Circuitry, Zones & Factory Options** 



#### HOW TO USE THIS GUIDE

Fill out the worksheet on the following page to specify your requirements for circuitry, zones, and factory options.

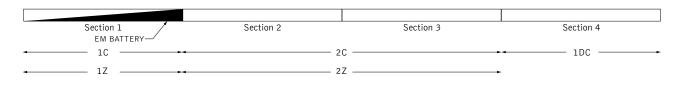
Refer to the run chart for standard run configurations, consult factory for custom configurations.

Complete the Totals / Ordering Codes at the bottom of the worksheet and add to your ordering logic on the cut sheet.

Submit the worksheet along with your order.

EXAMPLE	TOTAL RUN LENGTH:		32ft JOB NAME:			FIXTURE TYPE:			
		SHARED ELECTRICAL FEED,			EED,	FACTORY OPTIONS			
	HOUSING	SECTION		NORMAL POWER			SEPARATE ELECTRICAL FEEDS		
	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM
	1	8	1C	1Z					1EM
Ē	2	8	2C	2Z					
	3	8	2C	2Z					
	4	8				1DC			
	Totals / Ordering Codes		2C	2Z		1DC			1EM

ORDERING: FSM4L-FL-625LF-35K- 2C2Z -UNV-LD1-G2- 1DC-1EM -WH-32ft



KEY	
C = Switching Circuit	<b>DC = Daylight Circuit</b>
Switched Hot / Shared Neutral	Switched Hot / Separate Neutral
<b>Z = Dimming Zone</b>	<b>EC = Emergency Circuit</b>
Dimming Control Wires	Switched Hot / Separate Neutral
<b>DL = Daylight Zone</b>	<b>EM = Emergency Battery</b>
Daylight Dimming Control Wires	Unswitched Hot / Shared Neutral
	ECD = Emergency Control Device Unswitched Hot / Separate Neutral

#### DEFAULTS

- Zones and Factory Options illuminate entire sections from 4' to 8' in length.
- One shared or isolated circuit and zone required per housing section.
- · Limit of one EM or ECD per housing section.
- Additional electrical feed required for applications greater than three shared circuits and zones.
- Each DC, EC and ECD require an additional electrical feed.
- ECD not available in the same housing section as EC.
- Longer lead times and additional pricing may apply for custom run configurations.

#### **CUSTOM LENGTHS**

- If partial illumination of emergency or daylight section is required, indicate in ordering guide and add "partial illumination" in Order Notes. Drawing required.
- Engineering validation required, longer lead times may apply.

## Ordering Guide Worksheet



Linear Circuitry, Zones & Factory Options

				JOB NAME:		FIXTURE TYPE:				
			SHAR	ED ELECTRICAL	FEED,	FACTORY OPTIONS				
	HOUSING	SECTION	NORMAL POWER			SEPARA				
	SECTION	LENGTH	SWITCHING CIRCUIT	DIMMING ZONE	DAYLIGHT ZONE	DAYLIGHT CIRCUIT	EMERGENCY CIRCUIT	ECD	EM	
	1									
	2									
	3									
	4									
	5									
	6									
	7									
WOF	8									
WORKSHEET	9									
Ë	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	Totals / Orde	ering Codes								

Combine to create Circuits & Zones ordering code

Enter as individual Factory Options

#### **RUN CHART**

Run length (ft)	Housing Configuration Section Lengths						
9	5 + 4	21	8 + 8 + 5	33	8 + 8 + 8 + 5 + 4	45	8 + 8 + 8 + 8 + 8 + 5
10	6 + 4	22	8 + 8 + 6	34	8 + 8 + 8 + 6 + 4	46	8 + 8 + 8 + 8 + 8 + 6
11	7 + 4	23	8 + 8 + 7	35	8 + 8 + 8 + 7 + 4	47	8 + 8 + 8 + 8 + 8 + 7
12	8 + 4	24	8 + 8 + 8	36	8 + 8 + 8 + 8 + 4	48	8 + 8 + 8 + 8 + 8 + 8
13	8 + 5	25	8 + 8 + 5 + 4	37	8 + 8 + 8 + 8 + 5		
14	8 + 6	26	8 + 8 + 6 + 4	38	8 + 8 + 8 + 8 + 6		
15	8 + 7	27	8 + 8 + 7 + 4	39	8 + 8 + 8 + 8 + 7		
16	8 + 8	28	8 + 8 + 8 + 4	40	8 + 8 + 8 + 8 + 8		
17	8 + 5 + 4	29	8 + 8 + 8 + 5	41	8 + 8 + 8 + 8 + 5 + 4		
18	8 + 6 + 4	30	8 + 8 + 8 + 6	42	8 + 8 + 8 + 8 + 6 + 4		
19	8 + 7 + 4	31	8 + 8 + 8 + 7	43	8 + 8 + 8 + 8 + 7 + 4	Standard run con	figurations, consult factory for custom
20	8 + 8 + 4	32	8 + 8 + 8 + 8	44	8 + 8 + 8 + 8 + 8 + 4	configurations.	ingulations, consult labiony for clastori