

Kempower Satellite

Version 2

The Kempower Satellite DC charging system is the optimal solution for public charging and other sites that need multiple fast charging outputs.

Satellites are connected to Power Unit or Station Charger. One Power Unit can simultaneously provide energy for up to 12 DC charging outputs with 800 VDC systems and up to 9 outputs with Adaptive Voltage systems covering both 400 VDC and 800 VDC charging.

The maximum available charging power of the system is 1200 kW, depending on Power Unit configuration. Each output can deliver up to 320 kW to the charging Satellite when using the optional 400 A charging cable.

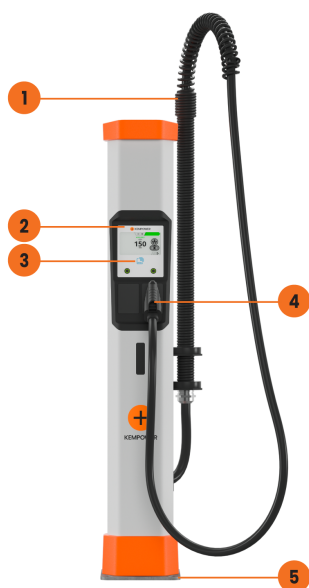
Kempower Satellite is available with CCS1 and J3400-NACS vehicle connectors, including configurations specifically for NEVI-funded charging sites to provide drivers the flexibility to choose the connector that matches their vehicle.

Maximum charging power

Up to 320 kW

Number of Satellites in the system

1–12



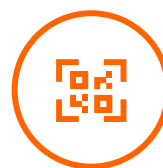
1. Charging cable support system
2. 7" touch screen display
3. RFID reader
4. Vehicle connector
5. Mounting flange



Advanced cable support system for premium user experience



Easy-to-use, intuitive user menu on a 7" touch screen display



On-screen QR code for following the charging status on your mobile phone



Kempower advanced charging Satellite system with up to 12 simultaneous charging outputs



Cabling distance between Power Unit and Satellites up to 262 feet/80 meters



Advanced charging control and customization with Kempower ChargeEye

Product code interpretation

ST•N•7•L•P•L•C0

Kempower Satellite Version 2 • 1 x J3400-NACS connector • 23 ft./7 m charging cable • 350 A cable current • Payter P68 payment terminal • North American version • unbranded

Item	Code	Description
Product type	ST	Kempower Satellite Version 2
Vehicle connector type	U	CCS1
	N	J3400-NACS
	UU	2 x CCS1
	UN	CCS1 & J3400-NACS
	NN	2 x J3400-NACS
	Y	CCS1 or J3400-NACS ^A
Charging cable length	5	16.4 ft./5 m
	7	23 ft./7 m
Nominal charging cable current	C	200 A (CCS1)
	D	250 A (J3400-NACS)
	E	300 A (CCS1)
	G	380 A (J3400-NACS) ^B
	H	400 A (CCS1) ^B
	L	350 A (J3400-NACS) ^B
User interface and payment	S	Standard user interface
	O	Payter Apollo: Contactless payment with online PIN entry and verification ^C
	P	Payter P68 payment terminal with contactless, chip reader, and magnetic stripe (no PIN pad) ^D
Equipment stop	E	Equipment stop button ^E
Certification	BL	Buy America compliant North American version
	L	North American version (ETL-approved product meeting UL and CSA requirements)
Branding	C0	Unbranded: roof and base in black color, no stickers
	Cn	Branded: number (n) indicates branding, e.g. C8

^AAvailable in 400 A/380 A configuration for charging one vehicle per Satellite with either CCS1 or J3400-NACS.

^BOnly single-cable Satellites or when configured as Kempower Flex Satellite.

^CWhen a credit card reader is needed in Washington State, use Payter P68 due to local regulations.

^DAvailable in the US only.

^ENot available for Kempower Flex Satellite configuration with vehicle connector type Y. Remote equipment stop button can still be used.

Product codes

Product code	Charging outputs	Vehicle connector	Simul. charging with 2 outputs	Max. charging current	Charging power at 400 VDC	Charging power at 800 VDC
Product codes with 16.4 ft./5 m charging cables						
ST•U•5•C•S•L•	1	CCS1	N/A	200 A	80 kW	160 kW
ST•U•5•H•S•L•	1	CCS1	N/A	400 A	160 kW	320 kW
ST•N•5•D•S•L•	1	J3400-NACS	N/A	250 A	100 kW	200 kW
ST•N•5•G•S•L•	1	J3400-NACS	N/A	380 A	152 kW	304 kW
ST•N•5•L•S•L•	1	J3400-NACS	N/A	350 A	140 kW	280 kW
ST•UU•5•C•S•L•	2	2 x CCS1	Yes	2 x 200 A	2 x 80 kW	2 x 160 kW
ST•UU•5•E•S•L•	2	2 x CCS1	Yes	2 x 300 A	2 x 120 kW	2 x 240 kW
ST•UN•5•CD•S•L•	2	CCS1 & J3400-NACS	Yes	200 A & 250 A	80 kW & 100 kW	160 kW & 200 kW
ST•UN•5•ED•S•L•	2	CCS1 & J3400-NACS	Yes	300 A & 250 A	120 kW & 100 kW	240 kW & 200 kW
ST•NN•5•D•S•L•	2	2 x J3400-NACS	Yes	2 x 250 A	2 x 100 kW	2 x 200 kW
ST•Y•5•HG•S•L•	2	CCS1 or J3400-NACS	No	400 A or 380 A	160 kW or 152 kW	320 kW or 304 kW

Note: Versions with 23 ft./7 m charging cables: Change **5** to **7** in the product code, e.g. from STU**5**CSL to STU**7**CSL.

Note: Versions with a payment terminal: Change **S** to **O** or **P** in the product code, e.g. from STU**5**CSL to STU**5**COL or STU**5**CPL.

General electrical specifications

DC charging connector options	CCS1, J3400-NACS
Voltage	Max. 1000 VDC
Standby power	25 W

Environmental specifications

Operating temperature	-22...131 °F/-30...+55 °C (derating above 104 °F/+40 °C)
Derating	Charging cable pin temperature limits charging current. For other limiting variables, see the applicable Power Unit datasheet.
Storage temperature	-40...140 °F/-40...+60 °C
Ambient air humidity	< 95% relative humidity
Enclosure rating	NEMA 3R

Connections and protocols

Ethernet	RJ45, IEEE 802.3/802.3u
OCPP	1.6j/2.0.1
Connectivity	Kempower ChargeEye solution
CCSI	SAE J1772/CCS, DIN 70121:2012, ISO 15118-1:2013, ISO 15118-2:2014
NACS	SAE J3400
Authentication methods	RFID: ISO 14443A, ISO 15693, ISO 14443B (STM SRI512) Customer backend via OCPP Payment terminal AutoCharge ISO 15118-2 Plug & Charge

Electrical connections (between Satellite and Power Unit)

DC power cable per vehicle connector (terminals 2 x 300 MCM/2 x 150 mm ² per pole)
Control power cable (24 VDC)
Communications cable (RJ45)

Electrical protections

Vehicle connector pin temperature monitoring
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Compliance to standards

IEC 61851-1, IEC 61851-21-2, IEC 61851-23
UL 2202, UL 2231-2
CSA Std. c22.2 No. 281.2, CSA Std. c22.2 No. 107.1
FCC 47 CFR Part 15 Subpart B, Class A
CTEP Certified to Accuracy Class 2.0 (< 1.0% error):
- COA No. 5982-24 for Kempower standard devices without a 3rd party DC meter - COA No. 5981-24 for Kempower devices with an integrated 3rd party DC meter

Options

Payment terminal	Payter Apollo	Contactless payment with online PIN entry and verification ^A
	Payter P68	Contactless payment with chip reader, and magnetic stripe (no PIN pad) ^B
Equipment stop button ^C		
Customized branding	Branding options, such as custom colors and stickers Contact Kempower for availability, pricing, and minimum order quantity	

^AWhen a credit card reader is needed in Washington State, use Payter P68 due to local regulations.

^BAvailable in the US only.

^CNot available for Kempower Flex Satellite configuration with vehicle connector type Y. Remote equipment stop button can still be used.

Mechanical dimensions

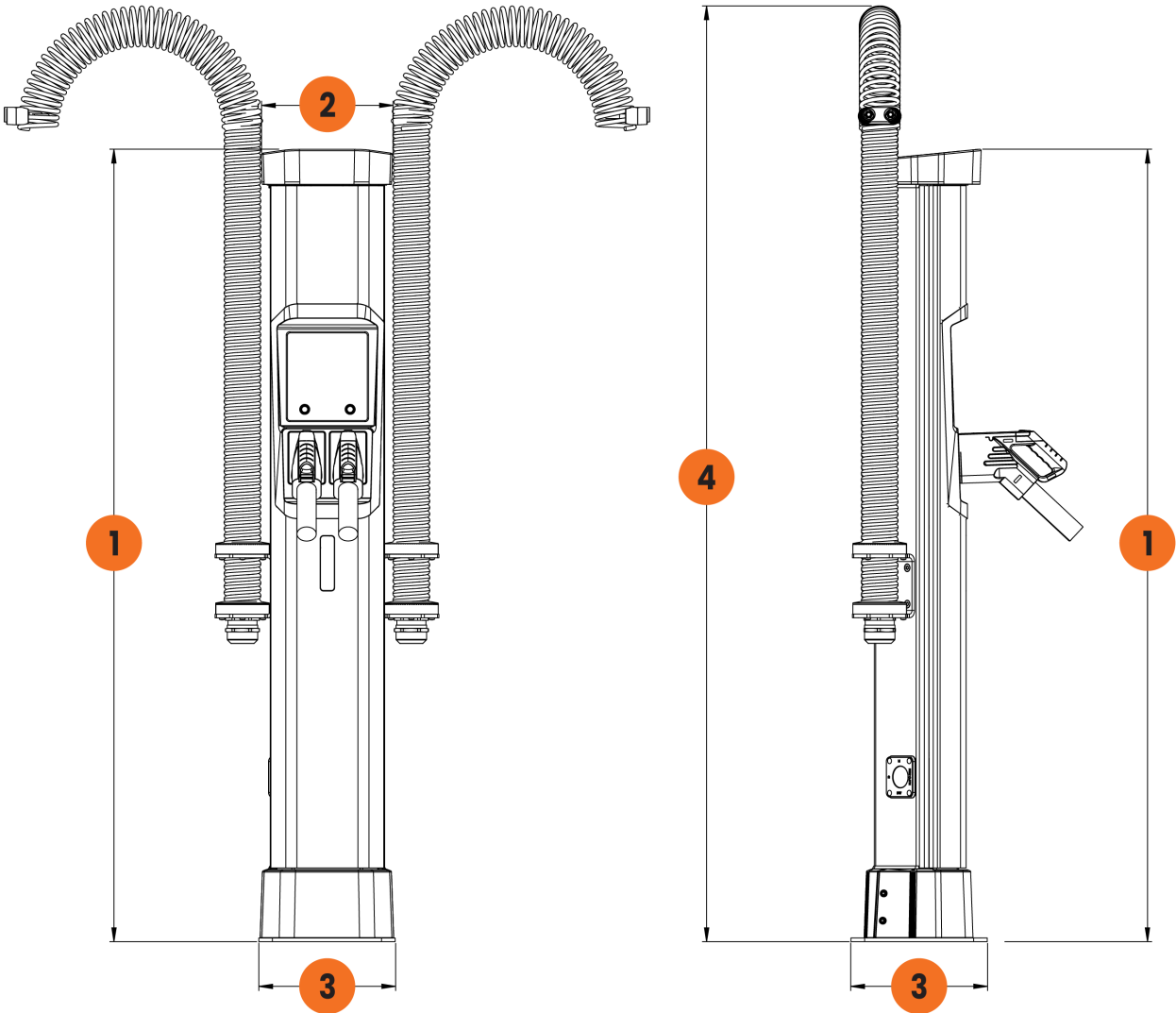
Size (W x H x D)

11.8 x 68.4 x 11.8 in./300 x 1738 x 300 mm

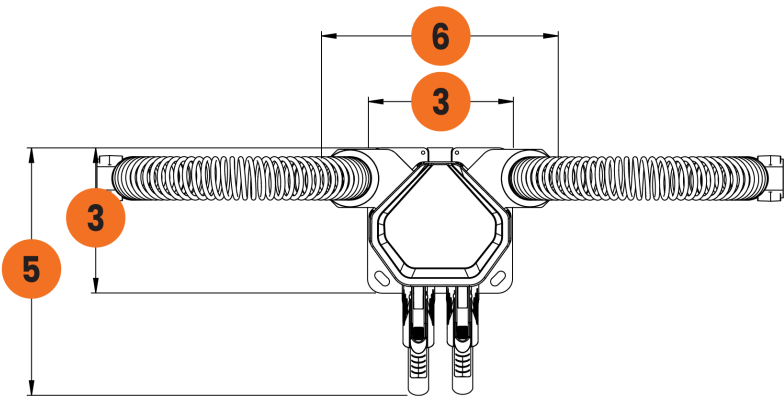
Product code	Weight
ST•U•5•C•S•L•	179 lb./81 kg
ST•U•5•H•S•L•	193 lb./87 kg
ST•N•5•D•S•L•	176 lb./80 kg
ST•N•5•G•S•L•	188 lb./85 kg
ST•N•5•L•S•L•	188 lb./85 kg
ST•UU•5•C•S•L•	269 lb./122 kg
ST•UU•5•E•S•L•	295 lb./134 kg
ST•UN•5•CD•S•L•	274 lb./124 kg
ST•UN•5•ED•S•L•	304 lb./138 kg
ST•NN•5•D•S•L•	267 lb./121 kg
ST•Y•5•HG•S•L•	302 lb./137 kg

Note: Versions with 23 ft./7 m charging cables: Add 8.8 lb./4 kg to the weight.

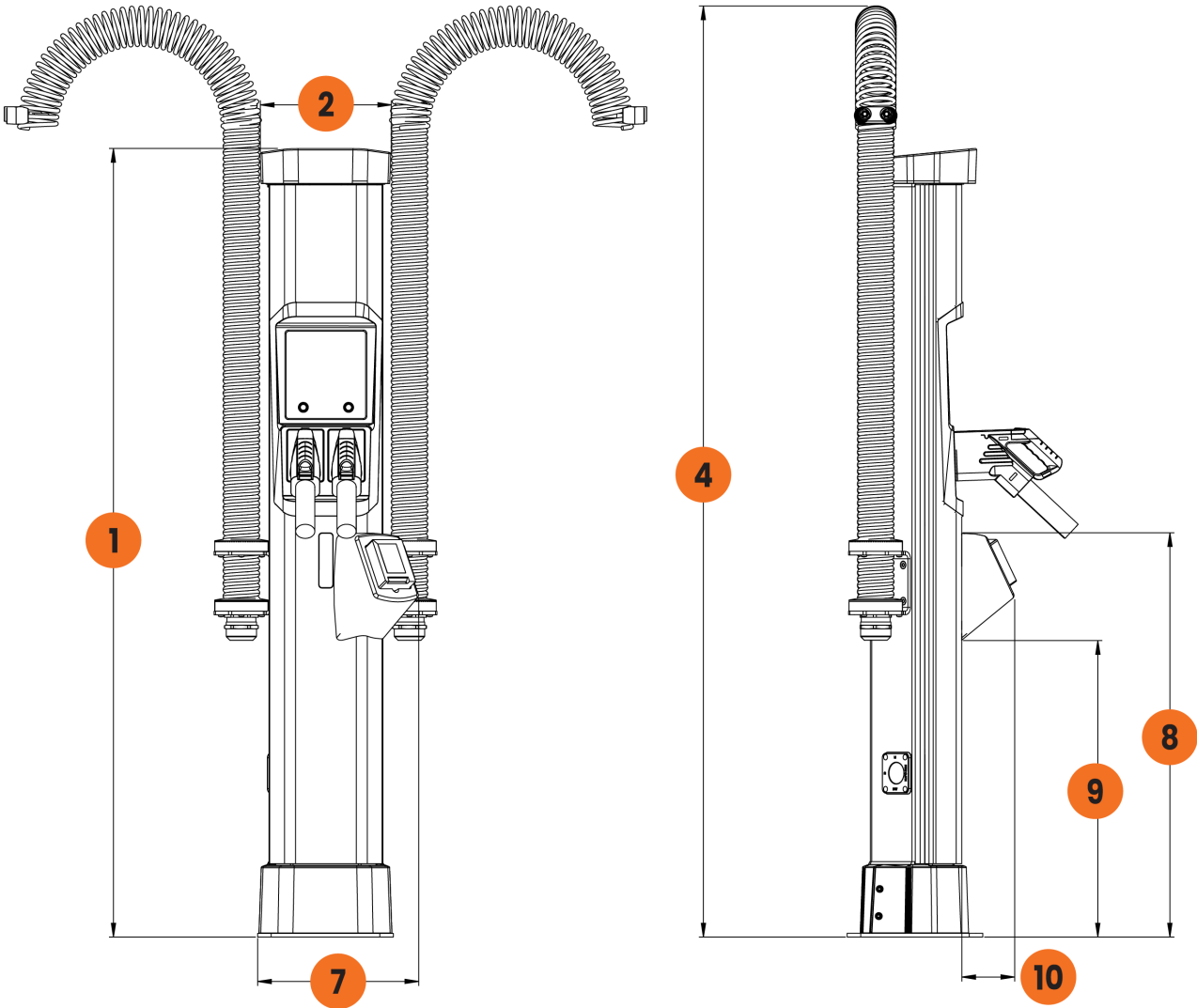
Satellite with two DC charging outputs, front and side view



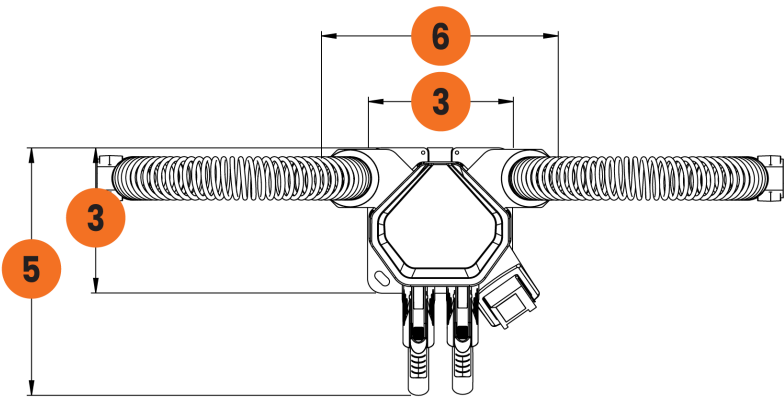
Satellite with two DC charging outputs, top view



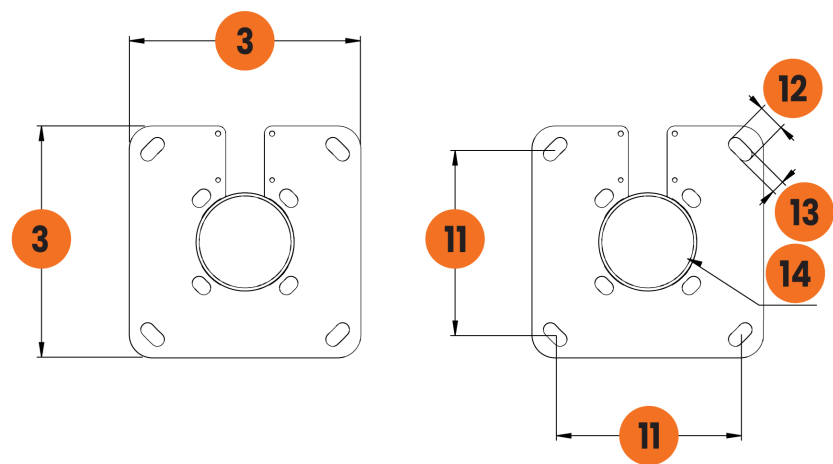
Satellite with two DC charging outputs and payment terminal, front and side view



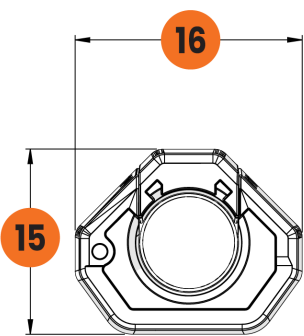
Satellite with two DC charging outputs and payment terminal, top view



Footprint of standard installation flange

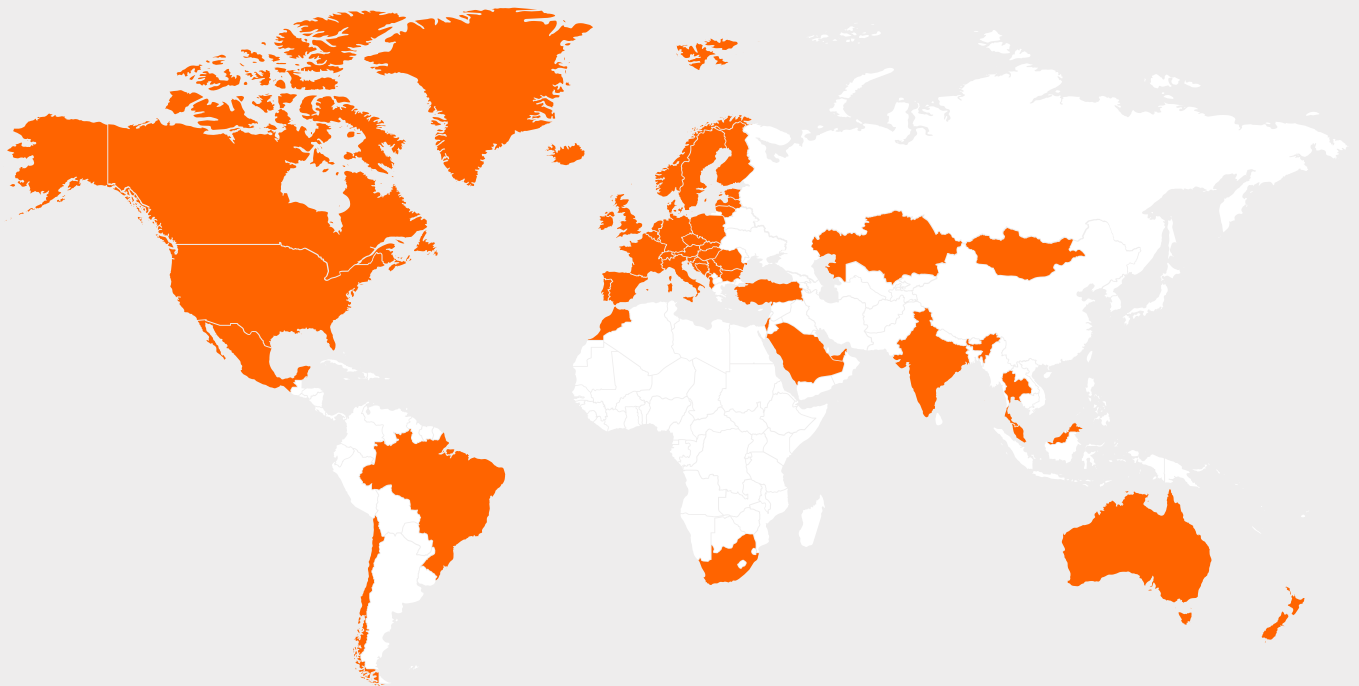


Footprint with mounting tube



Measurements

1.	68.4 in./1738 mm	6.	19.4 in./493 mm	11.	9.4 in./240 mm	16.	11.6 in./294 mm
2.	11.4 in./289 mm	7.	13.9 in./354 mm	12.	1.4 in./36 mm		
3.	11.8 in./300 mm	8.	35.9 in./911 mm	13.	0.7 in./18 mm		
4.	82.7...94.5 in./2100...2400 mm	9.	26.6 in./675 mm	14.	Ø 4.7 in./120 mm		
5.	18.6 in./473 mm	10.	4.5 in./115 mm	15.	9.4 in./239 mm		



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