



TECHNICAL SPECIFICATIONS

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2 - KEY FEATURES TURBINES

KEY FEATURES TURBINES	PRIME LINE	ECO LINE	BASIC LINE
Coating A brushed surface with crystal structure resists stains and hides micro-abrasions better. In combination with titanium or chrome, the coating treatment gives each handpiece a distinctive character. With laser etching and clean styling, our turbines are lightweight and perfectly balanced.	Titanium	Chrome	Chrome
Back cap Thorough back cap tightening for maximum patient safety. The MK-dent back caps, made of durable and high-quality metals, form the basis for quick bur changes due to their smooth push-button mechanism.	Push button	Push button	Push button
Cartridge Ultimate blend of supreme performance: MK-dent introduces its outstanding premium cartridge. The Aero blade series, honed to create steady power output. Thanks to proprietary laser balancing technology, the turbines run smoothly and vibration-free.	AeroAcoustic blade	AeroPerformance blade	AeroPerformance blade
Bur guide The world of drilling would not be the same without carbide. Pressed with 12 tons of pressure and heated to 1,500 °C, carbide is so hard, industrial diamond – the world's hardest material – is used to grind it. Perfect concentricity and unrivaled 40 N of retention force improve long-term precision during operations.	Carbide	Carbide	Steel
Reverse flow protection The non-return system for reverse flow protection is an entire system fabricated onto a single component, vastly minimizing the entry of particles and contaminants into the head. With endurance from start to finish line, it is designed for optimized cleanability.	•	-	_

KEY FEATURES TURBINES		PRIME LINE	ECO LINE	BASIC LINE
Automatic pressure regulation Achieving the right balance between strength and durability is the engineer's dream. The pressure regulation can adjust to virtually any situation. It has been carefully sculpted to regulate the airflow and ensure a constant level of pressure. This enhances gradually the lifetime of the cartridge and bearings.		• / _1	-	-
Refined ceramic bearings Dental bearings face the most extreme conditions: Particularly high rounds per minute, attacks by superheated steam or various cleaning fluids. Paired with a corrosion-resistant cage as well as the remarkably refined formula of the lubricant, the ceramic balls will have a long journey ahead of them.		•	•	•
Glass rod fiber optics Light is not always what it seems. In combination with MK-dent LED and Xenon couplings, available glass rod fiber optics provides 100 % glare-free light, bringing brilliance in the dark. The glass rod is designed for color accurate illumination of the preparation area.		•	o	o
Sterilisable and thermodisinfectable Regular reprocessing after each use is required to ensure patient safety. MK-dent turbines should be pre-cleaned, thermally disinfected, lubricated and sterilized in a hygienic working environment. Correct execution of the reprocessing is essential for a long lifetime of dental instruments.	135°C M	•	•	•

• standard – not available **o** optional

1) Only available on some models in combination with K couplers from our range.

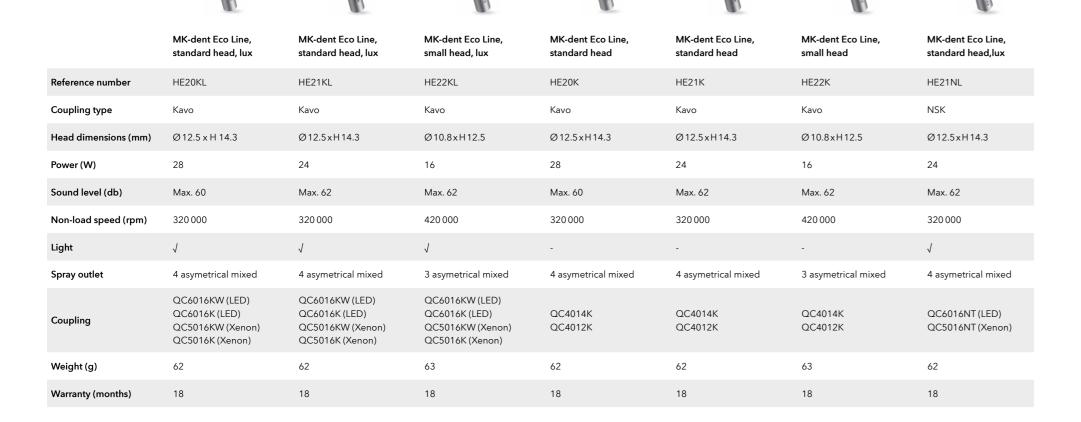
4 - PRIME LINE TURBINES - 5

PRIME LINE TURBINES

	MK-dent Prime Line, standard head, lux	MK-dent Prime Line, small head, lux	MK-dent Prime Line, standard head, lux	MK-dent Prime Line, small head, lux	MK-dent Prime Line, standard head, lux	MK-dent Prime Line, standard head, lux	MK-dent Prime Line, small head, lux
Reference number	HP21KL	HP22KL	HP21NL	HP22NL	HP21SL	HP21WL	HP22WL
Coupling type	Kavo	Kavo	NSK	NSK	Sirona	W&H	W&H
Head dimensions (mm)	Ø12.5xH14.3	Ø10.8xH12.5	Ø12.5xH14.3	Ø10.8xH12.5	Ø12.5xH14.3	Ø12.5xH14.3	Ø10.8xH12.5
Power (W)	25	18	25	18	25	25	18
Sound level (db)	Max. 55	Max. 60	Max. 55	Max. 60	Max. 55	Max. 55	Max. 60
Non-load speed (rpm)	350 000	420 000	350 000	420 000	350 000	350 000	420 000
Light	\checkmark	\checkmark	\checkmark	\checkmark	√	√	√
Spray outlet	4 asymetrical mixed	3 asymetrical mixed	4 asymetrical mixed	3 asymetrical mixed	4 asymetrical mixed	4 asymetrical mixed	3 asymetrical mixed
Coupling	QC6116KW (LED) QC6116K (LED) QC6016KW (LED) QC6016K (LED)	QC6116KW (LED) QC6116K (LED) QC6016KW (LED) QC6016K (LED)	QC6016NT (LED)	QC6016NT (LED)	QC6016SW (LED)	QC5016W	QC5016W
Weight (g)	69	67	69	67	69	69	67
Warranty (months)	24	24	24	24	24	24	24

6 - ECO LINE TURBINES

ECO LINE TURBINES



ECO LINE TURBINES

	MK-dent Eco Line, small head, lux	MK-dent Eco Line, standard head	MK-dent Eco Line, small head	MK-dent Eco Line, standard head, lux	MK-dent Eco Line, standard head, lux	MK-dent Eco Line, small head, Lux	MK-dent Eco Line, standard head
Reference number	HE22NL	HE21N	HE22N	HE21SL	HE21WL	HE22WL	HE21W
Coupling type	NSK	NSK	NSK	Sirona	W&H	W&H	W&H
Head dimensions (mm)	Ø10.8xH12.5	Ø12.5×H14.3	Ø10.8×H12.5	Ø12.5xH14.3	Ø12.5×H14.3	Ø10.8×H12.5	Ø12.5×H14.3
Power (W)	16	24	16	24	24	16	24
Sound level (db)	Max. 62	Max. 62	Max. 62	Max. 62	Max. 62	Max. 62	Max. 62
Non-load speed (rpm)	420 000	320 000	420 000	320 000	320 000	420 000	320 000
Light	J	-	-	√	√	J	-
Spray outlet	3 asymetrical mixed	4 asymetrical mixed	3 asymetrical mixed	4 asymetrical mixed	4 asymetrical mixed	3 asymetrical mixed	4 asymetrical mixed
Coupling	QC6016NT (LED) QC5016NT (Xenon)	QC4014NT	QC4014NT	QC6016SW (LED) QC5016SW (Xenon)	QC5016W	QC5016W	QC4014W
Weight (g)	63	62	63	62	62	63	62
Warranty (months)	18	18	18	18	18	18	18

8 - ECO LINE TURBINES

ECO LINE TURBINES

	MK-dent Eco Line, small head	MK-dent Eco Line, standard head	MK-dent Eco Line, mini head	MK-dent Eco Line, standard head	MK-dent Eco Line, mini head	MK-dent Eco Line, standard head	MK-dent Eco Line, small head
Reference number	HE22W	HE15L	HE16L	HE12	HE14	HE17	HE18
Coupling type	W&H	Midwest 5-hole	Midwest 5-hole	Midwest 4-hole	Midwest 4-hole	Midwest 4-hole	Midwest 4-hole
Head dimensions (mm)	Ø10.8xH12.5	Ø12.5×H14.3	Ø11.0xH13.3	Ø12.5 x H14.3	Ø11.0xH13.3	Ø12.5xH14.3	Ø10.8xH12.5
Power (W)	16	18	15	18	15	28	18
Sound level (db)	Max. 62	Max. 60	Max. 60	Max. 60	Max. 60	Max. 60	Max. 60
Non-load speed (rpm)	475 000	335 000	425 000	335 000	425 000	360 000	410 000
Light	-	J	J	-	-	-	-
Spray outlet	3 asymetrical mixed	4 asymetrical mixed	3 asymetrical mixed	1	1	4 asymetrical mixed	3 asymetrical mixed
Coupling	QC4014W					-	
Weight (g)	63	63	63	63	63	63	60
Warranty (months)	18	18	18	18	18	18	18

ECO LINE TURBINES

	MK-dent Eco Line, standard head	MK-dent Eco Line, standard head
Reference number	HE11	HE17B
Coupling type	Borden 2-hole	Borden 2-hole
Head dimensions (mm)	Ø12.5xH14.3	Ø12.5xH14.3
Power (W)	18	28
Sound level (db)	Max. 60	Max. 60
Non-load speed (rpm)	335 000	320 000
Light	-	-
Spray outlet	1	4 asymetrical mixed
Coupling	-	-
Weight (g)	63	62
Warranty (months)	18	18

10 - BASIC LINE TURBINES

BASIC LINE TURBINES

	MK-dent Basic Line, standard head, lux	MK-dent Basic Line, mini head, lux	MK-dent Basic Line, standard head	MK-dent Basic Line, mini head	MK-dent Basic Line, standard head, lux	MK-dent Basic Line, mini head, lux	MK-dent Basic Line, standard head
Reference number	HB21KL	HB23KL	HB21K	HB23K	HB15L	HB16L	HB12
Coupling type	Kavo	Kavo	Kavo	Kavo	Midwest 5-hole	Midwest 5-hole	Midwest 4-hole
Head dimensions (mm)	Ø12.5×H14.3	Ø11.0xH13.3	Ø12.5xH14.3	Ø11.0xH13.3	Ø12.5xH14.3	Ø11.0xH13.3	Ø12.5xH14.3
Power (W)	21	15	21	15	18	15	18
Sound level (db)	Max. 65	Max. 65	Max. 65	Max. 65	Max. 65	Max. 65	Max. 65
Non-load speed (rpm)	350 000	420 000	350 000	420 000	335 000	425 000	320 000
Light	J	\checkmark	-	-	J	J	-
Spray outlet	4 asymetrical mixed	1	4 asymetrical mixed	1	1	1	1
Coupling	QC6016KW (LED) QC6016K (LED) QC5016KW (Xenon) QC5016K (Xenon)	QC6016KW (LED) QC6016K (LED) QC5016KW (Xenon) QC5016K (Xenon)	QC4014K QC4012K	QC4014K QC4012K			Midwest 4-hole
Weight (g)	63	66	63	66	57	56	57
Warranty (months)	12	12	12	12	12	12	12

BASIC LINE TURBINES

MK-dent Basic Line,

Reference number	HB14
Coupling type	Midwest 4-hole
Head dimensions (mm)	Ø11.0xH13.3
Power (W)	15
Sound level (db)	Max. 65
Non-load speed (rpm)	425 000
Light	-
Spray outlet	1
Coupling	Midwest 4-hole
Weight (g)	55
Warranty (months)	12

12 - COUPLINGS

COUPLINGS



COUPLINGS



14 - COUPLINGS - 15

COUPLINGS







	MK-dent coupling	MK-dent coupling	MK-dent coupling
Reference number	QC4014NT	QC4014W	QC4012K
Coupling type	NSK	W&H	Kavo
Water regulation	-	-	-
Coating	Chrome	Chrome	Chrome
Non-retraction valve	√	√	√
Color temperature (K)	-	-	-
Operating voltage of the high-pressure lamp (V)	-	-	-
Tubing	4-pin	4-pin	2-pin
Weight (g)	33	33	24
Warranty (months)	24	24	24

16 - KEY FEATURES CONTRA-ANGLES

KEY FEATURES CONTRA-ANGLES	PRIME LINE	ECO LINE	BASIC LINE
Coating A brushed surface with crystal structure resists stains and hides micro-abrasions better. In combination with titanium or chrome, the coating treatment gives each handpiece a distinctive character. With laser etching and clean styling, our contra-angles are lightweight and perfectly balanced.	Titanium	Chrome	Chrome
Back cap Thorough back cap tightening for maximum patient safety. The MK-dent back caps, made of durable and high-quality metals, form the basis for quick bur changes due to their smooth push-button mechanism.	Push button	Push button	Push button
Range of transmission Standard gear design in contra-angle handpieces provides a constant speed ratio. Choose from a broad range of purpose-built transmissions, from 1:1 down to 7,4:1 ratio for a variety of indications as well as according speed and torque ranges. Simple to use technology, developed for what you do every day.	from 1:5 down to 7,4:1	from 1:5 down to 7.4:1	1:1
Changeable heads Developed for versatility, the MK-dent interchangeable heads are time-saving and improve sustainability. Simply turn the tension ring of the contra-angle handpiece and choose between several drill heads for a variety of indications. Made out of stainless steel and either coated with titanium or chrome for unmatched longevity.	•	•	_
Long-life gears At the heart of every outstanding contra-angle handpiece are exceptional gears. MK-dent long-life gears are engineered to excel at every angle, encouraging complete synthesis between dentist and instrument. Optimized for vibration-free performance thanks to improved torque ratio and class-leading precision.	•	•	_

KEY FEATURES CONTRA-ANGLES		PRIME LINE	ECO LINE	BASIC LINE
Optimum balance Designed to be a natural extension of the user's hand. Contra-Angle handpieces manufactured by MK-dent precisely convey the practitioner's intent during treatment, reducing fatigue and ensuring smooth operation - especially for procedures that require precision and delicate movements.		•	•	-
Lightweight for tireless working Exceeding the expectations of lightweight without compromising performance. MK-dent's high-class materials are durable and more heat-resistant while delivering the size and weight reduction demanded by long hours of usage.		•	•	•
Glass rod light conductor Light is not always what it seems. In combination with MK-dent LED and Xenon couplings, available glass rod fiber optics provides 100 % glare-free light, bringing brilliance in the dark. The glass rod is designed for color accurate illumination of the preparation area.		•	•	•
Sterilisable and thermodisinfectable Regular reprocessing after each use is required to ensure patient safety. MK-dent turbines should be pre-cleaned, thermally disinfected, lubricated and sterilized in a hygienic working environment. Correct execution of the reprocessing is essential for a long lifetime of dental instruments.	135°C	•	•	•

• standard – not available **o** optional

18 - PRIME LINE CONTRA-ANGLES & HEADS

PRIME LINE CONTRA-ANGLES & HEADS



	MK-dent Prime Line contra-angle, lux	MK-dent Prime Line straight handpiece, lux			
Reference number	LP15L	LP11L	LP54L	LP74L	LP01L
Coupling type	ISO	ISO	ISO	ISO	ISO
Head dimensions (mm)	Ø10.3×H15.3	Ø9.8xH14.3	Ø9.8xH14.3	Ø9.8xH14.3	-
Gear ratio	1:5 red	1:1 blue	5,4:1 green	7,4:1 green	1:1 blue
Usable burs	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	HP-burs (Ø 2.35 mm)
Non-load speed (rpm)	200 000	40 000	7 407	5 405	40 000
Light	√	\checkmark	\checkmark	√	√
Spray outlet	3 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed
Weight (g)	80	78	78	78	92
Warranty (months)	24	24	24	24	24

PRIME LINE CONTRA-ANGLES & HEADS







	MK-dent Prime Line contra-angle head	MK-dent Prime Line contra-angle head	MK-dent Prime Line contra-angle head
Reference number	LPH11	LPH16	LPH21
Coupling type	Kavo	Kavo	Kavo
Head dimensions (mm)	Ø9.8xH14.3	Ø9.8xH14.8	Ø9.8xH14.3
Gear ratio	1:1 blue	1:1 blue	2:1 green
Usable burs	CA-burs (Ø 2.35 mm)	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)
Non-load speed (rpm)	40 000	40 000	20 000
Light	-	-	-
Spray outlet	-	-	-
Weight (g)	12	12	12
Warranty (months)	24	24	24

20 - ECO LINE CONTRA-ANGLES & HEADS

ECO LINE CONTRA-ANGLES & HEADS

	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle, lux
Reference number	LE15L	LE11L	LE16L	LE21L	LE27L	LE54L	LE54LP
Coupling type	ISO	ISO	ISO	ISO	ISO	ISO	ISO
Head dimensions (mm)	Ø10.3xH15.1	Ø9.8xH14.3	Ø9.8×H14.8	Ø9.8xH14.3	Ø9.8xH14.3	Ø9.8xH14.3	Ø9.5xH16.7
Gear ratio	1:5 red	1:1 blue	1:1 blue	2:1 green	2,7:1 green	5,4:1 green	5,4:1 green
Usable burs	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	Screw-in and snap-on cups
Non-load speed (rpm)	200 000	40 000	40 000	20 000	14815	7 407	7 407
Light	√	√	J	√	√	√	√
Spray outlet	3 asymetrical mixed	3 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed
Weight (g)	80	80	80	80	80	80	80
Warranty (months)	24	24	24	24	24	24	24

ECO LINE CONTRA-ANGLES & HEADS

	MK-dent Eco Line contra-angle, lux	MK-dent Eco Line contra-angle					
Reference number	LE74L	LE15	LE11	LE16	LE21	LE27	LE54
Coupling type	ISO	ISO	ISO	ISO	ISO	ISO	ISO
Head dimensions (mm)	Ø9.8xH14.3	Ø10.3xH15.1	Ø9.8×H14.3	Ø9.8xH14.8	Ø9.8xH14.3	Ø9.8xH14.3	Ø9.8xH14.3
Gear ratio	7,4:1 green	1:5 red	1:1 blue	1:1 blue	2:1 green	2,7:1 green	5,4:1 green
Usable burs	CA-burs (Ø 2.35 mm)	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)
Non-load speed (rpm)	5 405	200 000	40 000	40 000	20 000	14 815	7 407
Light	√	-	-	-	-	-	-
Spray outlet	1 asymetrical mixed	3 asymetrical mixed	1 asymetrical mixed				
Weight (g)	80	80	80	80	80	80	80
Warranty (months)	24	24	24	24	24	24	24

22 - ECO LINE CONTRA-ANGLES & HEADS

ECO LINE CONTRA-ANGLES & HEADS









	MK-dent Eco Line contra-angle	MK-dent Eco Line contra-angle	MK-dent Eco Line straight handpiece, lux	MK-dent Eco Line straight handpiece
Reference number	LE54P	LE74	LE01L	LE01
Coupling type	ISO	ISO	ISO	ISO
Head dimensions (mm)	Ø9.5xH16.7	Ø9.8xH14.3	-	-
Gear ratio	5,4:1 green	7,4:1 green	1:1 blue	1:1 blue
Usable burs	Screw-in and snap-on cups	CA-burs (Ø 2.35 mm)	HP-burs (Ø 2.35 mm)	HP-burs (Ø 2.35 mm)
Non-load speed (rpm)	7 407	5 405	40 000	40 000
Light	-	-	J	-
Spray outlet	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed	1 asymetrical mixed
Weight (g)	80	80	100	100
Warranty (months)	24	24	24	24

ECO LINE CONTRA-ANGLES & HEADS









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	MK-dent Eco Line contra-angle head			
Reference number	LCH11	LCH16	LCH21	LCH21P
Coupling type	-	-	-	-
Head dimensions (mm)	Ø9.8xH14.3	Ø9.8xH14.3	Ø9.8xH14.3	Ø9.5xH16.7
Gear ratio	1:1 blue	1:1 blue	2:1 green	2:1 green
Usable burs	CA-burs (Ø 2.35 mm)	FG-burs (Ø 1.6 mm)	CA-burs (Ø 2.35 mm)	Screw-in and snap-on cups
Non-load speed (rpm)	40 000	40 000	20 000	20 000
Light	-	-	-	-
Spray outlet	-	-	-	-
Weight (g)	12	12	12	12
Warranty (months)	24	24	24	24

24 - ECO LINE CONTRA-ANGLES & HEADS

BASIC LINE CONTRA-ANGLES & HEADS











	MK-dent Basic Line contra-angle	MK-dent Basic Line contra-angle	MK-dent Basic Line contra-angle	MK-dent Basic Line straight handpiece	MK-dent Basic Line straight handpiece
Reference number	LB11W	LB1111	LB1111C	LB01W	LB02
Coupling type	ISO	ISO	ISO	ISO	ISO
Head dimensions (mm)	Ø9.8×H14.8	Ø9.5×H14.5	Ø8.0×H13.3	-	-
Gear ratio	1:1 blue	1:1 blue	1:1 blue	1:1 blue	1:1 blue
Usable burs	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	HP-burs (Ø 2.35 mm)	HP-burs (Ø 2.35 mm)
Non-load speed (rpm)	40 000	20 000	20 000	40 000	40 000
Light	-	-	-	-	-
Spray outlet	1 asymetrical mixed	External	External	External	External
Weight (g)	66	54	54	88	85
	40	10	40	40	40

BASIC LINE CONTRA-ANGLES & HEADS







	MK-dent Basic Line contra-angle head	MK-dent Basic Line contra-angle head	MK-dent Basic Line contra-angle head
Reference number	LBH11	LBH11C	LBH11P
Coupling type	-	-	-
Head dimensions (mm)	Ø9.5xH13.3	Ø8.0×H13.3	Ø7.7xH14.2
Gear ratio	1:1 blue	1:1 blue	1:1 blue
Usable burs	CA-burs (Ø 2.35 mm)	CA-burs (Ø 2.35 mm)	Snap-on cups
Non-load speed (rpm)	20 000	40 000	40 000
Light	-	-	-
Spray outlet	-	-	-
Weight (g)	12	12	12
Warranty (months)	12	12	12

26 - MOTORS

MOTORS

Weight (g)

Warranty (months)



PREMIUM SERVICE OIL



OIL ADAPTER

	MK-dent aluminium oil adapter	MK-dent aluminium oil adapter	MK-dent aluminium oil adapter	MK-dent aluminium oil adapter	MK-dent aluminium oil adapter	MK-dent aluminium oil adapter	MK-dent aluminium oil adapter
Reference number	LT1012	LT1013	LT1014	LT1015	LT1017	LT1018	LT1020
Anti-retraction valve	High speed handpieces with MK-dent and Kavo coupling	Low speed handpieces with ISO coupling	FG- and PB-burs (Ø1.6 mm)	4-hole and 5-hole coupling	High speed handpieces with Sirona coupling	Handpieces with W&H coupling	Handpieces with NSK coupling (Ti-Max)

NOTES







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