



SUSPENSION

INTRODUCING THE NEW 535 ONE FORK

HOLISTIC PERFORMANCE MEETS SUSPENSION

F535 ONE

MADE FOR TODAY'S PINNER

These days, technology and geometry have afforded mountain bikes new levels of stability and precision handling, allowing riders to push their limits further than ever before. The new generation of mountain bikers, who grew up on pumptracks and bike parks, are at the forefront of this, taking advantage of today's amazing rim and tyre technology. The DT Swiss 535 ONE fork is made to perfectly compliment these riders, new technology and trails.

PUSH YOUR LIMITS.



MADE FOR TODAY'S E-MTB RIDER

What was a lung-busting ordeal has now become the foreplay to the fun on the trails. eMTBs are deeply changing the game for many and bring new people to our beautiful sport. It also means we are now riding harder and further than ever, creating the need for even more durable components. Components which are easy to use and don't require an engineering degree to set up right. This is the DT Swiss 535 suspension platform. **RIDE HARDER, FURTHER, AND SHARE THE RIDE.**



HOW WE TEST

We take the ISO 4210 norm and enhance it with data gathered on trail, on proper all-mountain trails and terrain. We make sure we expose the product to the loads you will be putting it on, on your rides. **PUSH YOUR LIMITS.**

RIDE FATIGUE TESTING

Fatigue like it occurs while riding is simulated by a hydraulic cylinder bending the fork back and forth.



BACK AND FORTH

loading/unloading of the fork



MEDIUM

loads in each direction

BRAKE FATIGUE TESTING

Fatigue like it occurs while braking is simulated by a hydraulic cylinder inducing a force like a disc brake caliper does.



BRAKE FATIGUE

loading/unloading of the fork



MEDIUM

loads in each direction

IMPACT TEST

Simulates an impact into a stationary object, like it's the case when you hug a tree with your bike.



(The impact energy is generated by a weight and by gravity)



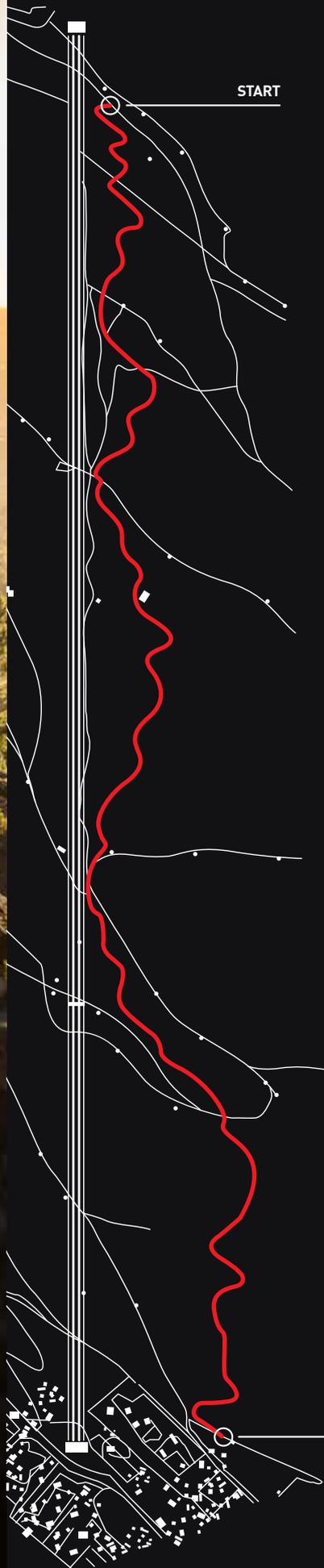
MAXIMUM

loads

0

FAILURES

allowed



625
runs per year

440
m/vert/run

1.7
runs/day

2 x 365 days
straight

THIS IS THE BIELTRAIL

This is where we have collected the ride data we simulate in the lab, for consistent, back to back testing. The ride data is logged via a telemetry equipped bike. It is analysed to result in the testing procedures you can see on the opposite page. What are the numbers above? Simply what the 535 ONE Fork has to go through in the lab, with ZERO FAILURES.

ALL MOUNTAIN THE HOLISTIC RIDE

All Mountain is the holistic kind of mountain biking, as All Mountain combines all the qualities and requirements of the individual disciplines of cross country, trail riding, enduro and downhill.

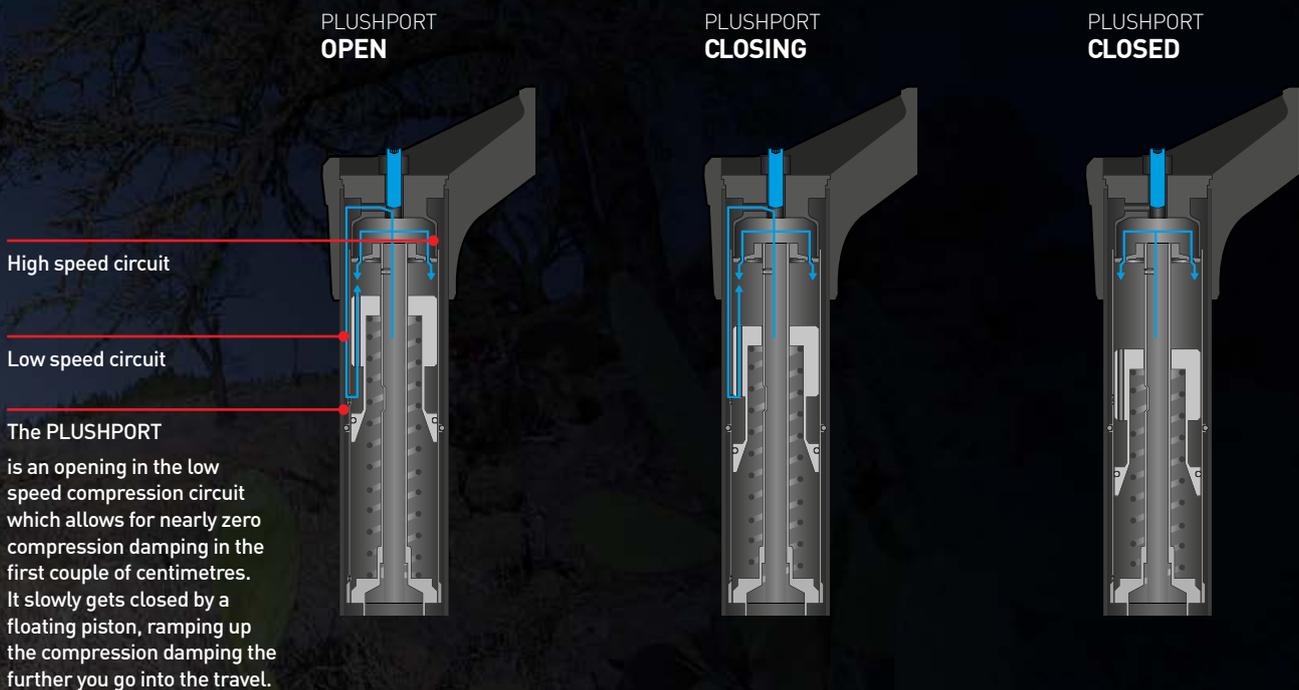
The F 535 ONE is the only fork that balances all the demands: efficiency, small bump sensitivity, mid-stroke support and end progression. With position-sensitive damping and the combination of coil and air spring, the F 535 ONE is the only fork which overcomes the trade-off between small bump sensitivity and mid-stroke support. These world-first technologies make the F 535 ONE holistic suspension for a holistic ride.



PLUSHPORT

POSITION SENSITIVE DAMPING

What it does: As a world first in cycling, with PLUSHPORT you get a damping system with position-sensitive compression in the low/high speed circuit. This simply means that the harder you push, the more stable your bike will react. **Plush for chatter, full control when charging.**



PLUSHPORT

THE NEW DIMENSION OF DAMPING

An entirely speed-dependent damping system either generates a force which is too low in the mid-stroke or too high in the beginning stroke. PLUSHPORT adds a new dimension, travel, to the common system and generates the right force in every stroke. With PLUSHPORT, you get small bump sensitivity and mid-stroke support.

PLUSHPORT is an opening in the low-speed compression circuit which allows for nearly zero compression damping in the first couple of centimetres. It is slowly closed by a floating piston, ramping up the compression damping the further you go into the travel.

INCONTROL

INCONTROL's three on-the-fly adjustments provide the correct balance between acceleration and traction at all times for efficient power transmission. It also offers rebound and lowspeed compression adjustment.

PLUSHPORT

0 - 30% TRAVEL

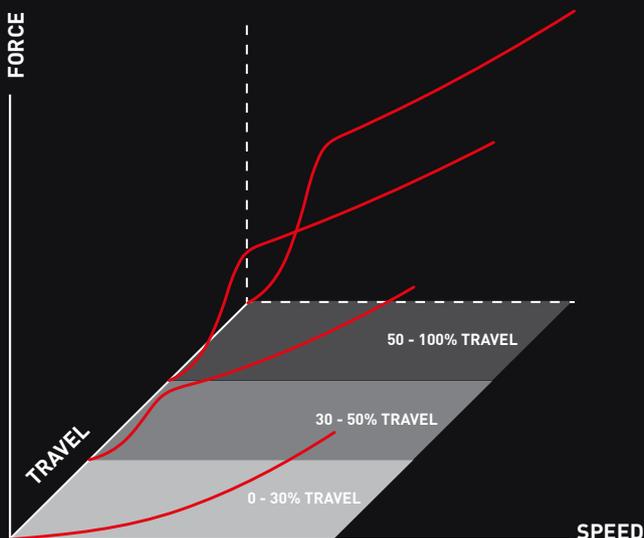
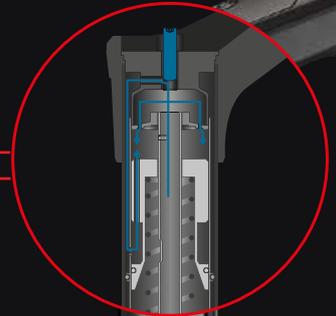
PLUSHPORT is fully open, the compression damping force is very low. The fork is super plush and offers unprecedented traction.

30 - 50% TRAVEL

The bores are slowly closed. The compression damping rate rises gradually during a couple of centimetres of travel, giving you a smooth transition and ideal support.

50 - 100% TRAVEL

The bores are closed, creating a high compression damping to keep the fork high in its travel for mid-stroke support and prevent you from bottoming out.



COILPAIR

COIL PERFORMANCE / AIR WEIGHT

COILPAIR combines a coil spring with an air spring system to provide the best of both worlds. Due to the zero friction of the coil spring, it compresses before the air spring piston even starts to move, providing real coil sensitivity. The high-end LINEAIR system is not only lightweight, it also features the much appreciated bottom-out resistance of an air spring.

APT

APT gives every rider the full tuning range for air spring progression. By adding or removing volume spacer, you choose how much end progression you get.

LINEAIR

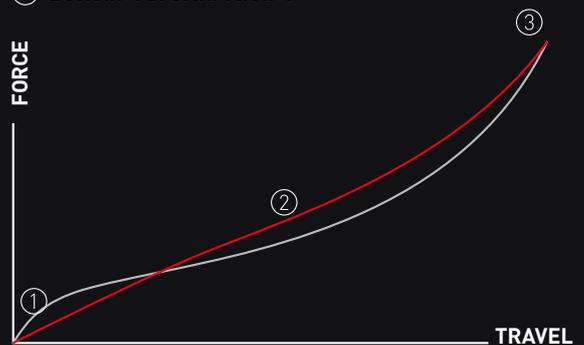
The big air chambers are responsible for the linear part of the curve and give you the mid-stroke support you need.

COILPAIR

Zero breakaway force and the low friction of the coil spring ensure plushness in the beginning stroke and a linear spring curve.

SPRING CURVE

- ① Low breakaway force: COILPAIR
- ② Linear mid-stroke: LINEAIR
- ③ Bottom-out control: APT



— F 535 ONE
— COMPETITORS

INCONTROL

DAMPING SYSTEM

The heart of our suspension system. Precision, full alloy internals and a semi-open design define the core characteristics of INCONTROL: Exceptional performance and reliability.

QUICK ACCESS RIDE MODES

Choose on the fly between: OPEN, DRIVE and LOCK mode.

PLUSHPORT

Check out the magic position sensitive technology on the next spread.

SEMI OPEN SYSTEM

The semi open damping unit approach has several key advantages: 1. Good oil cooling through the stanchion. 2. Low weight due to the lower part count. 3. Good control of cavitation through permanent pressurisation of the oil.

OVERFLOW CIRCUIT

Lubrication oil get sucked into the dampening unit by the damping shaft movement. An overflow circuit makes sure it automatically flows back into the lower for consistent damping performance.

COMPRESSION CIRCUIT

10 clicks of adjustable low speed damping, factory set linear high speed damping.

REBOUND CIRCUIT

25 clicks of adjustable low speed damping cover the whole range of rider weights and riding styles. Factory set high speed damping guarantees full control in any high speed situation.

DT SWISS LUBRICATION SYSTEM

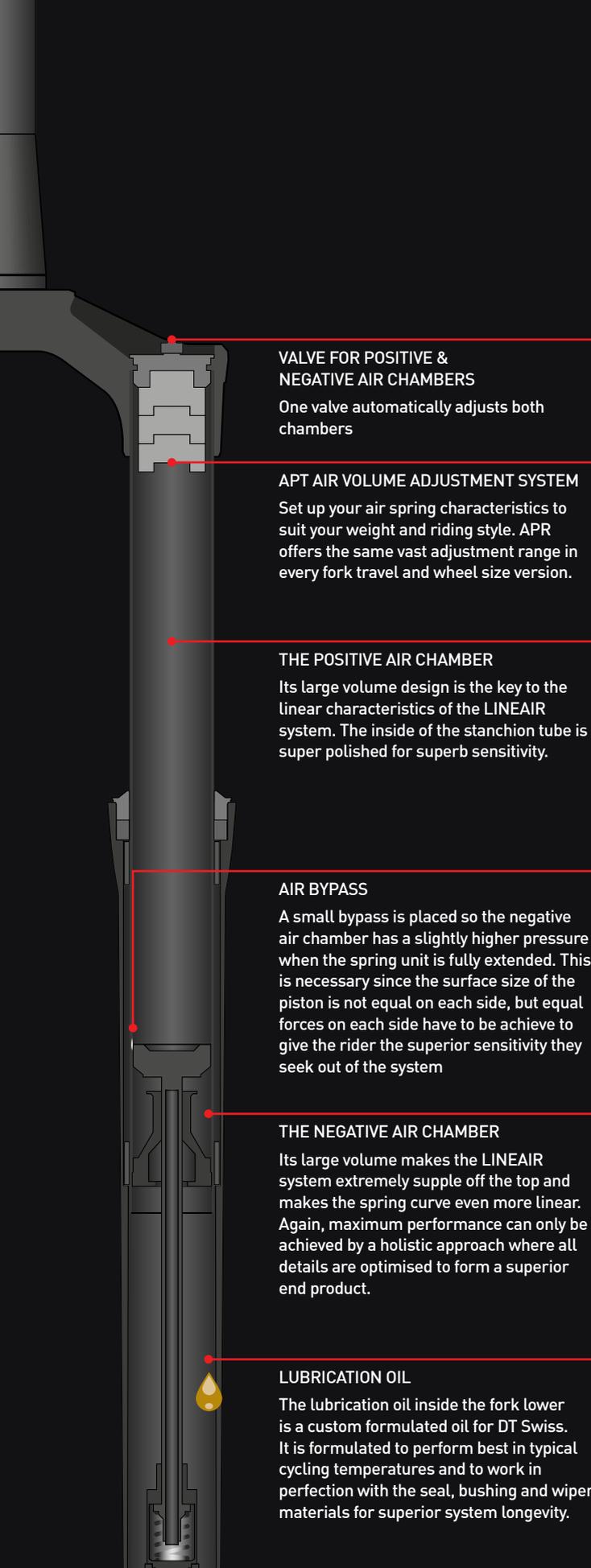
Only a well lubricated system can perform at the highest level. Our oil and wiper/bushing system is a custom DT Swiss solution, designed to work to perfection for many, many riding hours without the need for service.



LINEAIR

SPRING SYSTEM

LINEAIR is an air-spring system engineered with Swiss precision down to the tiniest detail.



VALVE FOR POSITIVE & NEGATIVE AIR CHAMBERS

One valve automatically adjusts both chambers

APT AIR VOLUME ADJUSTMENT SYSTEM

Set up your air spring characteristics to suit your weight and riding style. APR offers the same vast adjustment range in every fork travel and wheel size version.

THE POSITIVE AIR CHAMBER

Its large volume design is the key to the linear characteristics of the LINEAIR system. The inside of the stanchion tube is super polished for superb sensitivity.

AIR BYPASS

A small bypass is placed so the negative air chamber has a slightly higher pressure when the spring unit is fully extended. This is necessary since the surface size of the piston is not equal on each side, but equal forces on each side have to be achieved to give the rider the superior sensitivity they seek out of the system

THE NEGATIVE AIR CHAMBER

Its large volume makes the LINEAIR system extremely supple off the top and makes the spring curve even more linear. Again, maximum performance can only be achieved by a holistic approach where all details are optimised to form a superior end product.

LUBRICATION OIL

The lubrication oil inside the fork lower is a custom formulated oil for DT Swiss. It is formulated to perform best in typical cycling temperatures and to work in perfection with the seal, bushing and wiper materials for superior system longevity.

F 535 ONE

BENCHMARK PRODUCT DESIGN

POSITION-SENSITIVE
COMPRESSION DAMPING

COILPAIRED AIRSPRING



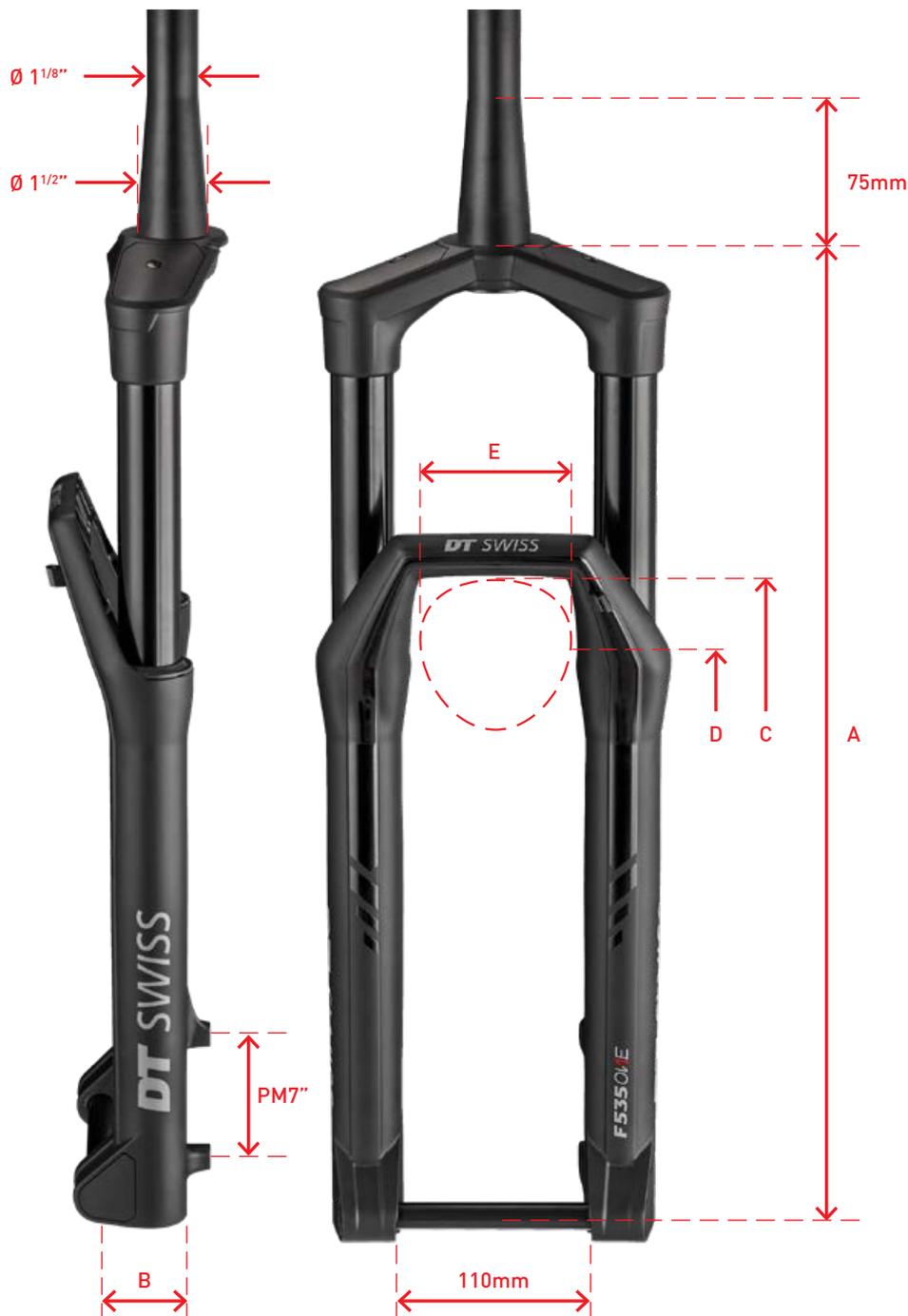
Are you the type of person who on Monday morning is still daydreaming about the weekend's ride, drifting into berms, pumping the trail and looking for the fastest line through the rock gardens? Then the F 535 ONE is the fork for you. The combination of coil and air springs and position sensitive damping gives you everything you could want from a fork for uncompromising riding. The more the fork compresses, the more compression damping you get, staying supple for ultimate traction and firming up to give you the mid stroke support when things get gnarly!

		27.5"	29"
Codes	130mm	DTF014	DTF012
	140mm	DTF018	DTF016
	150mm	DTF022	DTF020
	160mm	DTF026	DTF024
Weight		2020 g ¹	2090 g ¹
Travel		130-160mm	130-160mm
Dropout			15/110 mm
Fork Slider Colour			Matte black
Fork Slider Material			Magnesium
Spring System			LINEAIR COILPAIR ² APT

Damping System	INCONTROL, PLUSHPORT ²
Actuation	Lever
Stanchions Diameter	35 mm
Steerer Diameter	Tapered 1.5
Steerer Material	Aluminium
Accessories	RWS 15/110 mm Thru Axle incl. Setup-Tool (T10 Torx), Fender, 1 volume spacer, 3 brake hose clamps, service kit, star nut and top cap set
Intended Use	All mountain
Upgrades Available	Remote compression adjust 3 position

¹ Weight ± 3%, lightest combination without RWS, remote lever, fender, and steerer expander. RWS weight 65g, remote lever 26g.

² Patent pending



		27.5"	29" / 27.5+
A	RIDE HEIGHT ± 3mm (mm)	130mm	541
		140mm	551
		150mm	561
		160mm	571
B	FORK OFFSET (mm)	44	51
C	MAX. TYRE DIAMETER (mm)	727	760 / 736
	DIAMETER (D) AT MAX. TYRE WIDTH (E) (mm)	694	730 / 705
E	MAX. TYRE WIDTH (mm)	75	75 / 77
	MAX. TYRE SIZE¹ (inches)	2.8	2.8 / 3.0
	MAX. DISC DIAMETER (mm)	203	203

1 Important notice for 27.5 fork sizes:

For tyres bigger than 27.5 x 2.5", a minimum clearance of 6mm between tyre and crown or lower must be ensured when the fork is fully compressed.

Important notice for 29 fork sizes:

For tyres bigger than 29 x 2.5" or 27.5 x 2.6", a minimum clearance of 6 mm between tyre and crown or lower must be ensured when the fork is fully compressed.

Important notice for all fork sizes!

If the DT Swiss fender is used, the tyre clearance (and therefore the max. tyre size) will be reduced by approximately 3mm. Make sure that in all conditions (incl. fully compressed fork) a minimum tyre clearance of 6 mm between tyre and fork parts is ensured.

DT SWISS

Specifications considered correct at time of printing, and are subject to change without notice.
Refer to dtswiss.com for latest specifications and product information.