

SY80U

SANY

Quality Changes the World



EFFICIENCY IN THE SMALLEST OF SPACES

COMPACT. POWERFUL. COMFORTABLE.

CONSTRUCTION MACHINERY



COMPACT EXCAVATORS **SY80U**

Engine
YANMAR 4TNV98CT-VSY
rated Power
53.7 kW / 2 100 rpm
Bucket capacity
0.28 m³
Operating mass
8 800 kg

SANY

SY80U

For challenging tasks, you need a first-class partner

Quality comes from experience. And from new ideas. This is why we combine these two crucial factors at SANY. This is because we are one of the world's leading producers, having sold more than **320 000** excavators in **10 years**. This means that you can always rely on sophisticated products that have been tried and tested in practice. An impressive **5–7%** of our annual turnover is dedicated to research and development. This is why we give you not only our word, but also our extraordinary **five-year warranty** as a guarantee of how powerful and robust our products are.

320 000
EXCAVATORS SOLD IN
10 YEARS

5–7%
TURNOVER FOR RESEARCH
AND DEVELOPMENT

**FIVE-YEAR
WARRANTY***

Quality Changes the World

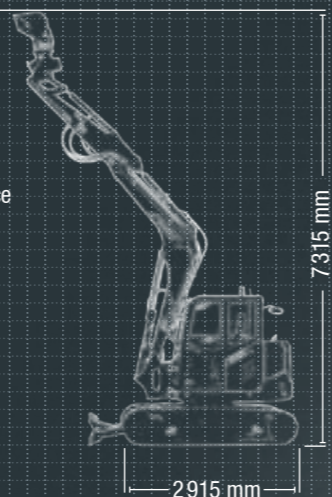
SY80U HARD FACTS

Max. bucket digging force
72.7 kN (ISO)

Max. arm digging force
40.5 kN (ISO)

Swingspeed
10 rpm

Max. travel speed
4.5 km/h



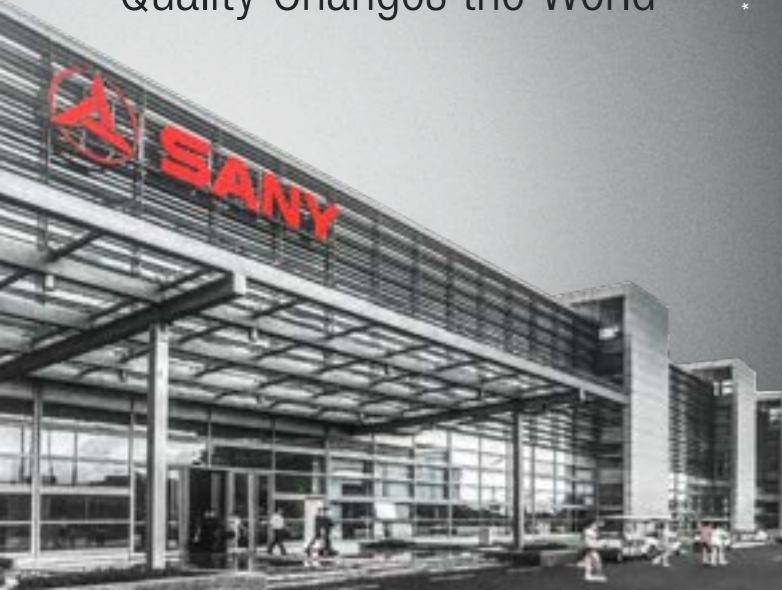
SETTING THE BAR HIGH FOR THE COMPACT CLASS

Its compact dimensions and minimal slewing radius make the SY80U short-tail-swing excavator the smallest SANY compact excavator there is. It is therefore in its element anywhere where precise power is needed in confined spaces and on construction sites with impaired visibility. With an efficient slewing radius of no more than 1 480 mm,

it is an ideal choice for road and line construction, work on bridges, for redevelopment in urban housing construction and in landscaping. This is where it can display its other strengths – its comprehensive standard features, good panoramic visibility and clarity for the driver and its high cost-effectiveness thanks to low operating costs.



* Applicable in certain markets, please check with your local dealer.



QUALITY

For the greatest loads – particularly precise robot-manufactured welded seams guarantee durability even in the toughest conditions.

DIMENSIONS

Safe operation in the smallest of spaces – the compact dimensions of the short-tail-swing machine allow for safe working and manoeuvring even in extremely confined places.

USER EXPERIENCE

Maximum comfort, maximum productivity – with its ergonomic seating position on the suspended seat and various comfort features such as air-conditioning and convenient gear changing on the blade lever, the driver's cab has been designed with optimal user comfort in mind.



SAFETY

Safety first – comprehensive safety features as standard – from stable cylinder covers to lockable protective hoods to standard safety valves.

COMPONENTS

Reliable power – the tried-and-tested YANMAR 4-cylinder diesel engine is the centre piece of the powerhouse. The powerful transmission guarantees reliable performance for all tasks, even in harsh working conditions.

ECONOMY

Lower consumption means greater savings – this is especially the case for fuel consumption. The automatic speed setting ensures that the short-tail-swing excavator remains economical in the long-term even when delivering maximum performance.

DIMENSIONS

MINIMAL SLEWING RADIUS, MAXIMUM STABILITY

Whether during large-scale loading work or work in confined spaces – the SANY SY80U short-tail-swing excavator can do its job optimally anywhere. With its minimal tail swing radius, and thanks to its compact, rounded short tail design, the driver can completely concentrate on their working area without having to watch out for the tail. In this way, the machine can work safely in the smallest of spaces or in the direct proximity of obstacles. This is perfect for tasks in inner-city areas or in landscaping. Safety has not been compromised here – even with its long digging reach and great dumping height, the SY80U remains reliably sturdy.



Our highlights – the added benefits SANY offers you:

- + Extremely compact short-tail-swing excavator
- + Comfortable driver's cab
- + Hydraulic pipework for quick coupler attachment
- + 2 prop. control circuits on the joystick
- + LED working lights
- + Gear switching on the blade lever

SAFETY

Enhanced productivity through safety

From the ROPS- and FOPS-certified driver's cab to the wide field of vision for the operator to the standard safety valves and the lockable protective hood – the SY80U doesn't cut corners when it comes to safety. Right down to the smallest detail – even safety valves and cylinder covers are, as with the LED working lights, provided ex works as standard. This is also the case for maintenance and service – rotating or hot engine components are protected against inadvertent contact.



USER EXPERIENCE

COMFORT ZONE DRIVER'S CAB

The driver's seat with high seat backrest offers the driver a comfortable workplace, thereby reducing symptoms of fatigue to a minimum. The positioning of the controls is ergonomically designed – clear and easy to reach, they help to ensure that the driver can achieve maximum productivity while working.

The joysticks with 2 proportional control circuits are also part of the standard equipment and allow safe and precise control of the machine, including all attachment devices.

The ergonomic and handily placed control lever for the dozer blade now also has gear switching integrated, making adapting the machine to the work situation even easier and more effective.



ECONOMY

Economical with every task

The „auto idle“ - function ensures that fuel consumption is minimised. All without compromising the performance. The load-sensing hydraulic system delivers more hydraulic power with less loss. „With intuition“ – the system regulates the flow rate and pressure as required.

Absolute reliability – for peace of mind!

SANY's five-year warranty* gives you the assurance that you can fully count on your equipment.

* With participating partners



ECONOMY

Service-friendly in every regard

All important places for routine maintenance or checks are conveniently accessible from the ground. Lubrication points are combined in a meaningful and easily accessible way. This means that regular service work can be completed quickly and safely. This increases the availability and service life of the machines and ensures that operators and equipment are reliably protected in the long term.

The complete hydraulic preparation for the quick change mechanism ensures easy and cost-effective adaptation of the quick coupler.



COMPONENTS

Designed for the long term

The standard LED working lights don't only illuminate the night like the day, but also counter the harsh conditions to which the SY80U is subject in its daily work.

The reliable YANMAR drive unit complies with the latest emission standards and is inconspicuously hidden in the tail of the machine. All important service points are easily accessible.

The electronic fan control ensures a minimal level of noise emissions and reduced fuel consumption.

Meticulous machining and robot-controlled welded seams, accurate to the millimetre, also contribute to this. This gives track shoes, connections, bottom rollers etc. their extremely long service life.



ENGINE

| | |
|-------------------|---|
| Modell | YANMAR 4TNV98CT-VSY |
| Typ | Water-cooled, 4 cylinder, with commonrail and DPF |
| Exhaust emissions | Stage V |
| Rated power | 53.7 kW / 2 100 rpm |
| Max. torque | 290 Nm / 1 350 rpm |
| Displacement | 3 318 ccm |
| Batteries | 1 x 12 V / 120 Ah |

HYDRAULIC SYSTEM

| | |
|----------------------|--|
| Mainpump | variable-piston-pump; Load sensing control |
| Max. oilflow | 193.2 l/min |
| Travelmotor | Variable displacement axial piston motor |
| Swingmotor | Axial piston motor |
| Max. oilflow (AUX 1) | 100 l/min |
| Max. oilflow (AUX 2) | 70 l/min |

SERVICE REFILL CAPACITIES

| | |
|--------------------|--------|
| Fuel tank | 100 l |
| Engine coolant | 12 l |
| Engine oil | 10,2 l |
| Drive (per side) | 1,2 l |
| Hydraulic system | 160 l |
| Hydraulic oil tank | 120 l |

PERFORMANCE

| | |
|--------------------------|------------------------------|
| Swingspeed | 10 rpm |
| Max. travel speed | High 4.5 km/h, slow 2.5 km/h |
| Max. travel force | 70 kN |
| Gradeability | 35° |
| Bucket capacity | 0.28 m ³ |
| Groundpressure | 0.38 kg/cm ² |
| Bucket digging force ISO | 72.7 kN |
| Arm digging force ISO | 40.5 kN |

RELIEF VALVE SETTINGS

| | |
|-------------------|---------|
| Implement circuit | 280 bar |
| Swing circuit | 215 bar |
| Travel circuit | 280 bar |
| Pilot pressure | 35 bar |

UNDER AND UPPER STRUCTURE

| | |
|-----------------|--|
| Boom length | 3 520 mm |
| Arm length | 2 050 mm |
| Bottomrollers | 4 |
| Toprollers | 1 |
| Rotation device | Planetary gear reducer driven by an axial piston motor, automatic hydraulic released slewing brake |

OPERATING MASS

SY80U 8 800 kg

LIFTING CAPACITIES - DOZER BLADE DOWN

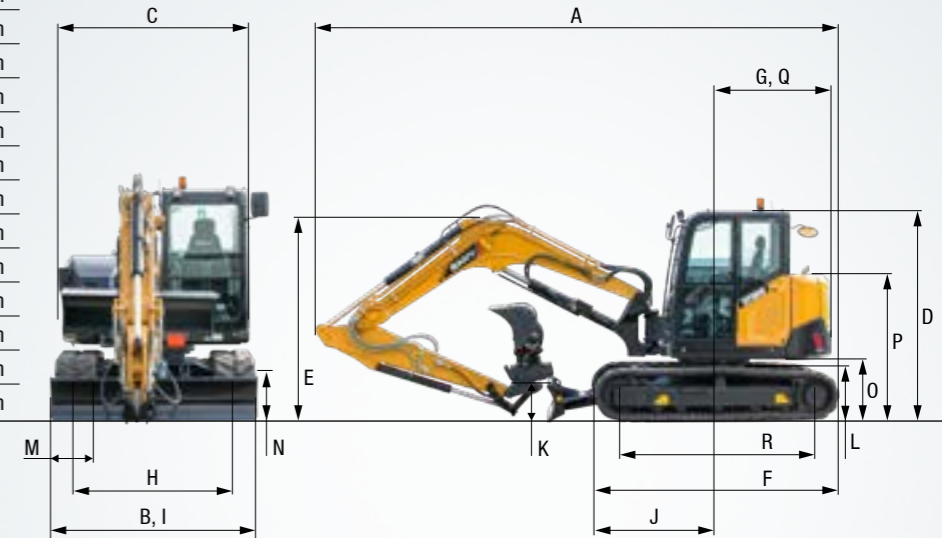
| Load point height | Radius | | | | Digging reach | | |
|-------------------|--------|-------|-------|-------|---------------|-------|-------------------|
| | 3.0 m | 4.0 m | 5.0 m | Max. | | | |
| 5.0 m kg | 1 960 | 1 960 | 1 800 | 1 338 | 1 710 | 1 325 | 5 025 |
| 4.0 m kg | 2 080 | 2 080 | 2 085 | 1 345 | 1 225 | 1 055 | 5 703 |
| 3.0 m kg | 3 100 | 3 100 | 2 540 | 1 875 | 2 275 | 1 315 | 1 585 930 6 106 |
| 2.0 m kg | 4 745 | 2 675 | 3 180 | 1 760 | 2 570 | 1 260 | 1 630 865 6 297 |
| 1.0 m kg | 4 325 | 2 450 | 3 745 | 1 650 | 2 845 | 1 205 | 1 750 855 6 297 |
| Ground line kg | 4 850 | 2 390 | 4 020 | 1 590 | 2 995 | 1 170 | 1 965 885 6 109 |
| -1.0 m kg | 5 670 | 2 360 | 3 950 | 1 550 | 2 935 | 1 140 | 2 370 995 5 707 |
| -2.0 m kg | 4 915 | 2 375 | 3 490 | 1 550 | 2 445 | 1 150 | 2 400 1 185 5 031 |
| -3.0 m kg | 3 385 | 2 450 | | | | | 2 290 1 735 3 899 |

LIFTING CAPACITIES - DOZER BLADE UP

| Load point height | Radius | | | | Digging reach | | |
|-------------------|--------|-------|-------|-------|---------------|-------|-------------------|
| | 3.0 m | 4.0 m | 5.0 m | Max. | | | |
| 5.0 m kg | 1 960 | 1 960 | 1 800 | 1 338 | 1 710 | 1 325 | 5 025 |
| 4.0 m kg | 2 080 | 2 080 | 2 085 | 1 345 | 1 225 | 1 055 | 5 703 |
| 3.0 m kg | 3 100 | 3 100 | 2 540 | 1 875 | 1 770 | 1 315 | 1 285 930 6 106 |
| 2.0 m kg | 3 850 | 2 675 | 2 425 | 1 760 | 1 715 | 1 260 | 1 185 865 6 297 |
| 1.0 m kg | 3 595 | 2 450 | 2 305 | 1 650 | 1 655 | 1 205 | 1 170 855 6 297 |
| Ground line kg | 3 525 | 2 390 | 2 240 | 1 590 | 1 615 | 1 170 | 1 215 885 6 109 |
| -1.0 m kg | 3 490 | 2 360 | 2 195 | 1 550 | 1 585 | 1 140 | 1 360 995 5 707 |
| -2.0 m kg | 3 510 | 2 375 | 1 550 | 1 550 | 1 600 | 1 150 | 1 630 1 185 5 031 |
| -3.0 m kg | 3 385 | 2 450 | | | | | 2 290 1 735 3 899 |

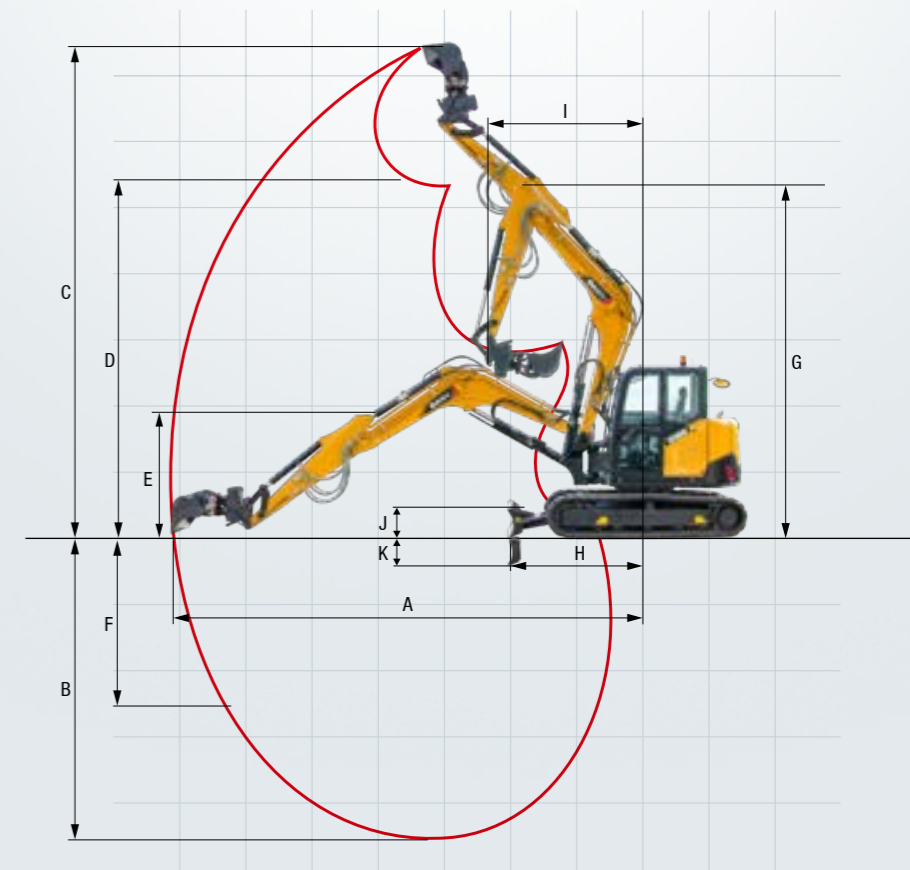
DIMENSIONS (TRANSPORT)

| | |
|--------------------------------|----------|
| A Transport length | 6 500 mm |
| B Transport width | 2 220 mm |
| C Upperstructure carriage | 2 150 mm |
| D Height over cabin/ROPS | 2 550 mm |
| E Height of Boom – transport | 2 220 mm |
| F Overall length of crawler | 2 915 mm |
| G Tail length | 1 480 mm |
| H Track gauge | 1 750 mm |
| I Undercarriage width (blade) | 2 200 mm |
| J Horizontal distance to blade | 2 080 mm |
| K Blade height | 2 080 mm |
| L Track height | 660 mm |
| M Track pads width | 450 mm |
| N Min. ground clearance | 365 mm |
| O Counterweigh clearance | 745 mm |
| P Engine cover height | 1 880 mm |
| Q Tail swing radius | 1 480 mm |
| R Center distance of tumbler | 2 315 mm |



WORKING AREA

| | |
|--|----------|
| A Max. digging reach | 7 290 mm |
| B Max. digging depth | 4 535 mm |
| C Max. digging height | 7 315 mm |
| D Max. dumping height | 5 430 mm |
| E Min. dumping height | 1 915 mm |
| F Max. vertical digging depth | 2 490 mm |
| G Overall height over arm by min. swing radius | 5 490 mm |
| H Arm head distance with work equipment retracted as far as possible | 2 080 mm |
| I Swing radius by max. boomswing (L) | 4 510 mm |
| Swing radius by max. boomswing (R) | 4 670 mm |
| Min. swing radius | 2 435 mm |
| J Max. clearance when blade up | 480 mm |
| K Max. depth of blade down | 325 mm |
| L Offset boom (L) | 636 mm |
| Offset boom (R) | 740 mm |
| Max. boom-swing angle (L) | 65° |
| Max. boom-swing angle (R) | 51° |





Enormous versatility

Many components that allow flexible use are already included as standard ex works. The attachment of the hydraulic quick coupler is already prepared for.

OPERATORS COMFORT / CABINE

| | |
|---|---|
| Suspension seat | ● |
| Heater | ● |
| Manual air condition system | ● |
| Radio and speaker | ● |
| Armrests (adjustable) | ● |
| 12v outlets | ● |
| USB port (music) | ● |
| Wiper | ● |
| AUX 1 on Joystick | ● |
| AUX 2 on Joystick | ● |
| 8 stored hydraulic settings for attachments | ● |

SAFETY

| | |
|-----------------------|---|
| Battery master switch | ● |
| Travel Alarm | ● |
| Warning beacon | ● |
| Camera | ● |

WORKING EQUIPMENT

| | |
|---|---|
| Boom and arm load holding valves with overload indicator | ● |
| Double acting circuit for hydraulic quick coupler with piping | ● |
| Breaker&Shear line proportional on Joystick with piping | ● |
| Rotation line proportional on Joystick with piping | ● |
| Flow adjustment for attachments | ● |
| Dozer blade | ● |
| Cylinder guards – boom | ● |

Standard equipment ● Special option ●

The standard and special options differ depending on the country in which the compact excavator is delivered. If you have any questions, please contact your dealer directly.

WORKING LIGHTS

| | |
|----------------------|---|
| Lights – front (LED) | ● |
| Lights – boom (LED) | ● |

UNDERCARRIAGE

| | |
|------------------------|---|
| Rubber tracks | ● |
| Steel tracks | ● |
| Holes/loops for fixing | ● |

ENGINE

| | |
|---------------|---|
| Auto idle | ● |
| Diesel filter | ● |
| DPF | ● |
| DOC | ● |
| Airfilter | ● |

HYDRAULIC SYSTEM

| | |
|--|---|
| Swing brake | ● |
| 2 speed travel | ● |
| Piping for additional hydraulic function AUX 1 | ● |
| Piping for additional hydraulic function AUX 2 | ● |
| Mainfilter | ● |
| Hydr. Pre-pressure operating joysticks | ● |
| Filter for pre-pressure circle | ● |

A SERVICE YOU CAN RELY ON

Just as we do with our excavators, we also demand high quality and reliability of our service products. This underlines our equipment's performance in terms of their durability and their excellent price-performance ratio. After all, maintenance is crucial

for efficiency, cost-effectiveness and safety. Your SANY dealer is happy to help you with a comprehensive range of services to ensure that your machine continues operating efficiently in the long term.

SANY – flexible, fast and always there for you

Rapid assistance, tailored advice and a reliable supply of original parts – that is what we mean by a premium service.



The added benefits SANY offers you:

- ✦ Fast supply thanks to the central warehouse near Cologne
- ✦ More than 15,000 spare parts to make your machine highly reliable
- ✦ Expert knowledge for optimal supply for your machine
- ✦ Thanks to SANY's special training programme, our dealers are always kept up-to-date so that they can face all technical challenges.



Parts supply – quick and reliable

With the purchase of a SANY compact excavator you have made an investment in the future. Fast availability of spare parts is your guarantee of minimal downtimes and failure times.



Detailed information in black and white

Handbooks and documents are available for all SANY compact excavators, and these can help you with operation, maintenance, servicing and repairs. These include operating and maintenance instructions and technical specifications.

HIGHLIGHTS **SY80U**

A TRUE WORKHORSE

The SY80U short-tail-swing excavator is tailored to the requirements of tough everyday use on the construction site. It demonstrates its impressive versatility when digging, loading and crushing – and its agility is evident, thanks to its swivelling boom and the short tail concept. Aside from its compact design, it impresses with its first-class performance, its low fuel consumption and its outstanding user comfort.



FOR THE GREATEST LOADS

All components are designed to withstand **high stress**. The **meticulous machining**, **high-quality materials** and welded seams perfectly executed by welding robots are guarantees for this.

IN THE SMALLEST OF SPACES

The **robust swivel bracket** is the most important aspect for all tasks. It makes the **compact manoeuvrability** of the short-tail-swing excavator possible, together with the **compact total dimensions** and the **minimal slewing radius**.

MAINTENANCE AND SERVICE

Full concentration and **maximum safety** are the first priorities on the construction site. For this purpose, the SY80U driver's cab offers the best conditions for the machine operator – from the **comfortable driver's seat** to the **large, easily legible monitor** and the **precise joystick** with fine response characteristics.

SAFETY FIRST

We have taken the full range of measures to minimise the risk to drivers in the cab and people on the construction site in the vicinity of the machine. This includes **optimal visibility on all sides**, as well as **LED working lights**, **safety valves** and **cylinder covers**.

RELIABLE POWER

With the **strong YANMAR engine**, the smallest SANY compact excavator is optimally equipped even **for large tasks**.

LESS IS MORE

The **automatic speed setting** reduces the fuel consumption, engine wear and exhaust gas emissions (Euro 5 standard). This is positively reflected in its **low fuel consumption** and exemplary **low life cycle costs**.

TECHNICAL HIGHLIGHTS

| | |
|--------------------------|----------------------|
| Engine | YANMAR 4TNV98CT-VSY |
| Rated power | 53.7 kW / 2 100 rpm |
| Max. torque | 290 Nm / 1 350 rpm |
| Bucket digging force ISO | 72.7 kN |
| Swingspeed | 10 rpm |
| Mainpump | Variable-piston-pump |
| Max. oilflow | 193.2 l/min |



„AN 8-TONNE MACHINE THAT IS STRONG, EFFICIENT AND ABSOLUTELY PRECISE IN ITS CONTROL.“

Fusini, Gilbert (Managing Director) – SARL Louis Fusni et fils

Not all products are available in all markets. As part of our continuous improvement process, we reserve the right to modify specifications and designs without giving prior notice. The figures may contain additional options.

SANY

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