

**Sturmey
Archer** 



...the only choice

AW/AWC THREE SPEED HUB GEARS

The AW 3 speed hub gear system, introduced in 1936, is still a top-selling product throughout the world.

The AW system has a fully sealed mechanism offering total protection against the elements. No grit, salt or moisture can get in, and it is completely shielded from knocks. Maintenance requirements are thus minimal.

Based on the epicyclic gear principle, the AW is the perfect commuting gear. With it, you can change gears with confidence and precision even when stationary.

The AWC gear mechanism enjoys all the benefits of the AW whilst also incorporating 'coaster' (back pedal) brake which provides constant high efficiency braking, irrespective of the gear selected.



AW 3 Speed

Weight: 1.00kg
 Spoke Holes: 20, 28, 36, 40
 Axle Lengths: 146mm, 163mm
 Standard Overlocknut
 Dimension: 110mm, 117mm
 Gear Ratios: 1: - 25%
 2: 1:1
 3: + 33.3%

AWC 3 Speed Coaster

Weight: 1.38kg
 Spoke Holes: 28, 36
 Axle Lengths: 152mm, 163mm
 Standard Overlocknut
 Dimensions: 115mm, 117mm
 Gear Ratios: 1: - 25%
 2: 1:1
 3: + 33.3%



5 STAR/5 STAR ELITE FIVE SPEED HUB GEARS

The latest in an historic line of Sturmey-Archer gear systems is the magnificent 5 STAR five speed hub gear.

Like the AW 3 system, the mechanism is totally enclosed in a sealed casing and with factory-lubrication makes routine maintenance a thing of the past.

The 5 STAR system, however, offers a far wider gearing range than the AW system. Its five conveniently spaced gears make it ideal for both touring and commuting, especially in hilly terrain. There is, furthermore, no slipping position, with the gears being continuously in 'drive' whilst changing up or down.

The 5 STAR Elite enjoys all the advantages of the 5 STAR whilst also incorporating a powerful drum brake.



5 STAR 5 Speed

Weight: 1.15kg
 Spoke Holes: 28, 36
 Axle Length: 162mm
 Standard Overlocknut
 Dimensions: 113mm, 117mm
 Gear Ratios: 1: - 33.3%
 2: - 21.1% 3: 1:1
 4: + 26.6% 5: + 50%



5 STAR Elite 5 Speed Rear Brake

Weight: 1.37kg
 Spoke Holes: 36
 Axle Length: 162mm
 Standard Overlocknut
 Dimension: 117mm
 Gear Ratios: 1: - 33.3%
 2: - 21.1% 3: 1:1
 4: + 26.6% 5: + 50%

DRUM BRAKES

Sturmey-Archer drum brakes - whether from the Elite, Steelite or 90mm range - are the product of unparalleled excellence in design engineering.

The braking performance they afford in all weather conditions is

outstanding. Braking, is smooth, controlled and progressive in both wet and dry conditions, making them extremely reliable and powerful.

Like the gear mechanisms in the AW and 5 STAR systems, the drum

brakes are also protected from knocks and external damage by virtue of the braking mechanism being totally enclosed.

The Elite Range

Our top range is the Elite 70mm alloy hub brake comprising four variants.

The VT is a front brake which for optimum braking performance should be used in combination with one of the following units.

The ST rear hub can be combined with a 5, 6, or 7 speed block for use on a derailleur-gear bicycle, and the AT3 and 5 STAR Elite combine a drum brake mechanism with a 3 and 5 speed hub gear respectively.

The Elite range is wonderfully versatile. It can be used on either hub or derailleur-gear bicycles, by town or touring cyclist. It is lightweight and, through its use of specially-formulated anti-fade brake material, ultimately reliable, controllable and effective.

VT Front Brake

Weight: 0.76kg
Spoke Holes: 36
Axle Length: 136mm
Standard Overlocknut
Dimensions: 100mm



AT3 3 Speed Rear Brake

Weight: 1.38kg
Spoke Holes: 36
Axle Length: 163mm
Standard Overlocknut
Dimension: 117mm
Gear Ratios: 1: - 25%
2: 1:1
3: + 33.3%

ST Rear Brake

Weight: 0.82kg
Spoke Holes: 36
Axle Lengths: 174mm
Standard Overlocknut
Dimensions: 130mm

The Steelite Range

The Steelite 70mm range was developed directly from the Elite to give more cyclists the braking power and performance previously enjoyed by the privileged few.

Steelite hub brakes are also remarkably light. Moreover, with sparkling chrome or satin black finish, and die cast alloy brake plate, they are eye-catchingly attractive too!

The Steelite range comprises the SBF front brake and the SBR and SAB rear brakes.

The SBR can be combined with a 5, 6 or 7 speed block for use on a derailleur-gear bicycle, and the SAB combines a drum brake mechanism with a 3 speed hub gear.

SBF Front Brake

Weight: 0.73kg
Spoke Holes: 36
Axle Length: 136mm
Standard Overlocknut
Dimensions: 100mm



SAB 3 Speed Rear Brake

Weight: 1.35kg
Spoke Holes: 36
Axle Length: 163mm
Standard Overlocknut
Dimension: 117mm
Gear Ratios: 1: - 25%
2: 1:1
3: + 33.3%

SBR Rear Brake

Weight: 0.82kg
Spoke Holes: 36
Axle Lengths: 162mm, 170mm
Standard Overlocknut
Dimensions: 118mm, 126mm

The 90mm Range

Manufactured for over 50 years and immensely popular, these enjoy all the advantages of all our other hub brakes.

The 90mm range comprises the BFC front brake and the ABC rear brake, the latter being the only 90mm 3 speed hub in the world.

ABC 3 Speed Rear Brake

Weight: 1.55kg
Spoke Holes: 36
Axle Length: 163mm
Standard Overlocknut
Dimension: 117mm
Gear Ratios: 1: - 25%
2: 1:1
3: + 33.3%

BFC Front Brake

Weight: 1.00kg
Spoke Holes: 36
Axle Length: 136mm
Standard Overlocknut
Dimensions: 100mm



CONTROLS AND BRAKE LEVERS

Sturmey-Archer produces total hub gear and brake systems, not simply hubs in isolation. The essential controls, cables and fittings are an integral part of the gearing or braking package.

All Sturmey-Archer gear controls have a light, positive action, can change gear when the wheel is stationary and are indexed (a system pioneered by the company).

The 3 speed trigger control can be used in conjunction with all Sturmey-

Archer 3 speed hubs and is available in stylish white as well as traditional black.

The 'Nimbus' thumbshifter action control is designed for use with 3 speed brake systems. The control can be affixed either in front of or behind the handlebar and can also be precision adjusted for optimum comfort, control and safety.

The 5 STAR control shares all the convenience, attractiveness and versatility of the 'Nimbus', but has been

designed specifically for the 2 hubs in the 5 STAR range.

Linking these to the brake themselves are Sturmey-Archer drum brake cables. For optimum efficiency and totally reliable transmission of crucial braking force it is recommended that these cables exclusively be used with Sturmey-Archer drum brakes.

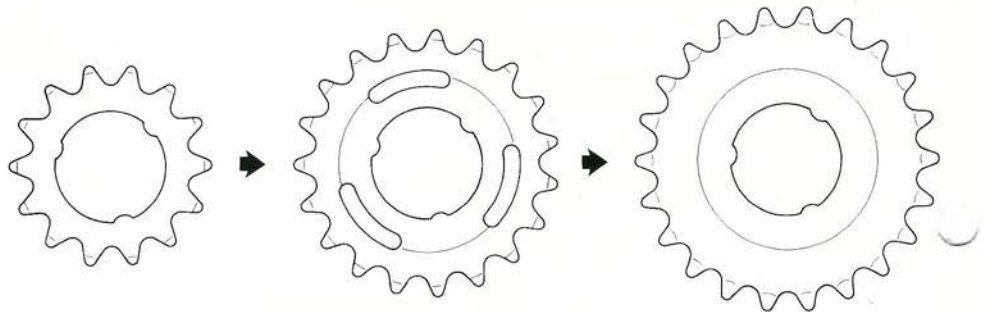
Other fittings supplied by Sturmey-Archer as part of gearing or braking

1. PKL 205 DELRIN Brake Lever RH/LH 22.2mm Clip
- PKL 206 DELRIN Brake Lever RH/LH 23.8mm Clip
2. HSJ 823 NIMBUS 3 Speed Drum Brake Control 22.2mm Clip
- HSJ 834 STANZA 3 Speed Control 22.2mm Clip (Not shown)
3. HSJ 829 5-STAR Control 22.2mm Clip c/w Cables
4. HSJ 762 Black Trigger Control 22.2mm Clip
- HSJ 765 Black Trigger Control 23.8mm Clip
- HSJ 821 White Trigger Control 22.2mm Clip
- HSJ 822 White Trigger Control 23.8mm Clip



SPROCKETS - 1/8"

| | | | |
|---------|--------------|---------|--------------|
| HSL 714 | 14T | HSL 719 | 19T (dished) |
| HSL 715 | 15T | HSL 720 | 20T (dished) |
| HSL 716 | 16T | HSL 747 | 21T (dished) |
| HSL 717 | 17T (dished) | HSL 722 | 22T (dished) |
| HSL 718 | 18T (dished) | | |



INDICATORS

| Sales No. | Fitment | Marking |
|-----------|---|---------|
| HSA 125 | AW (146mm Axle) | |
| HSA 126 | AW (163mm Axle) AWC (152mm Axle) (SAB, ABC, AT3 (after 6.89)) | |
| HSA 315 | SAB, ABC, AT3 (after 6.89) | |
| HSA 316 | 5-STAR, 5-STAR ELITE (RH) AWC (163mm Axle) | |
| HSA 453 | 5-STAR, 5-STAR ELITE (LH) | |

Indicator illustrations shown actual size

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