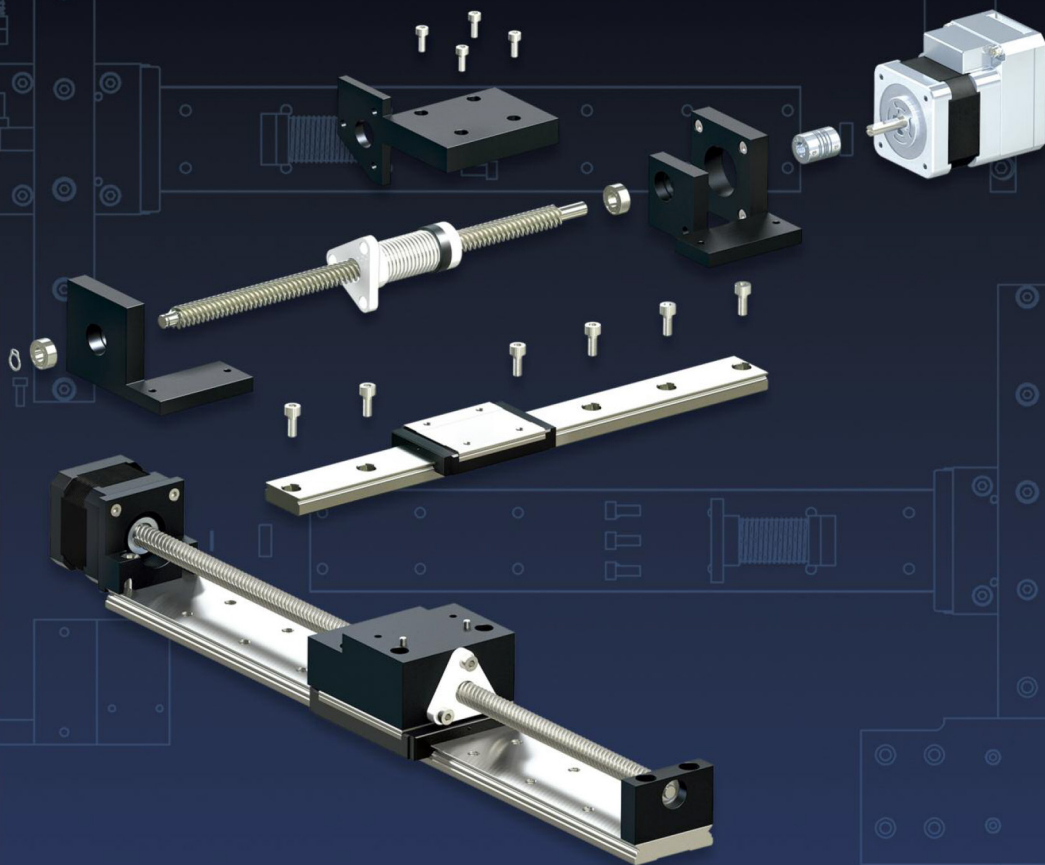




RELIANCETM

P R E C I S I O N



Precise Motion Control Solutions
Brass, Ground and Precision Spur Gears



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A complete precision gear range

With over 50 years of experience in the design and manufacture of precision spur gears, Reliance has developed an extensive range to suit a wide variety of customer applications. Alongside precision cut gears we offer hardened and precision ground gears for applications requiring higher load capacity and a very competitive range of brass gears for applications where there is a need to balance accuracy and load capacity against cost. Typical diameters range from 5 mm to 100 mm.

Precision cut gears

Our precision cut spur gear range offers anti-backlash, spur, hubless and hardened gears with many hundreds of thousands of combinations of bore size, face width, material, module and number of teeth. In line with our commitment to meeting customer requirements, any tooth number that can be configured for any given gear diameter can be supplied. This allows our customers ultimate flexibility when selecting their gear ratio and the ability to use the smallest or most practical centre distance.

Gears are available in standard modules from 0.2–1.5, bore sizes from 2–25 mm and to a minimum quality class of AQ10 (for definition of AQ10 see [page T4-1](#)). Manufactured from aerospace standard stainless steel and aluminium alloy Reliance standard precision gears can be specified for the most demanding applications. For customers that require higher transmission accuracy, to measure position more accurately or extend life in high speed applications, all Reliance's precision gears are available up to quality AQ14.



For applications that require more torque transmission, a standard range of 17-4 PH, hardened to condition H1025, is available. Further material choices are offered, commonly PEEK or acetal can be specified where low noise and/or insulating properties are required. For other application-specific requirements our engineers can help in the selection of exotic materials or add some customisation features to the component.

Reliance anti-backlash gears have been developed over a number of years and are manufactured with a two-piece construction. The fixed plate and hub are manufactured in one piece, which provides maximum integrity when attaching the gear to a shaft. This manufacturing method is far superior when compared to alternative anti-backlash designs which use a three-piece construction, with the hub and fixed plate joined together by a metal deformation technique such as swaging or riveting.



Plain precision gears



Anti-backlash gears



Hubless gears



Modification service

Reliance has a dedicated manufacturing cell where modifications can be carried out quickly and economically to customer specification. Typically weight reduction features or alternative fixing methods are requested – please contact us to discuss your requirement.

On-line gear builder

For fast, efficient and accurate selection of our precision cut gears we provide a gear builder facility which is available to use on-line. The on-line selection process gives all the required technical and commercial information appropriate to the gear specification, part description and item number.



Gear manufacture and test



On-line gear builder

Precision ground gears

The precision ground spur gear range, manufactured from chromium molybdenum steel hardened to 49-55 HRC, and with tooth profiles manufactured to ISO grade 5, is ideal for higher loaded, mechatronic applications. Available from stock or on short delivery the bore and the faces of the gears are purposely left soft to enable quick modification to suit alternative fixing or shaft diameter requirements.

Brass gears

The brass spur gear range is also available from stock or on a short delivery and provides customers with an economical alternative for less demanding applications. Manufactured from high grade brass, ISO CuZn39Pb3, the standard range of spur gears also includes pinion shafts with tooth numbers as low as 10 and a small range of internal gears (see [page 5-15](#)).



Design and manufacture of custom gears

Alongside our extensive range of standard catalogue gears Reliance also designs and manufactures bespoke gears to customers' requirements. Reliance has over 50 years of experience in gearing, ranging from high accuracy, long life applications such as radar and optical payload applications, to very short life highly loaded aerospace applications.

Gear specialists at Reliance are very happy to offer advice on the design strategy for custom gears and can help with datum positioning and dimensioning to achieve the best possible accuracy at the most economical cost. For example, simply utilising the mounting feature of the gear as the datum for the gear cutting operation avoids unnecessary tolerance build ups and interim manufacturing operations.

Reliance's engineers have a detailed knowledge of the principles of gear tooth generation and the resulting contact conditions. This enables them to work with engineers in other industries to offer advice on the modification of gear teeth to provide bespoke contact conditions that enhance the performance of the gear pair, or to achieve an imposed centre distance within the constraints of the design environment.



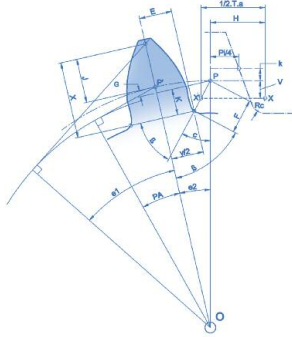
Typical market areas are aerospace, space, defence and down-hole instrumentation where performance-critical applications demand a deep understanding of gear geometry. Both external, internal and combination gears can be manufactured using high accuracy hobbing and shaping machines with a module range of between 0.2 to 1.5 module and a diameter range from 2 to 330 mm.

Custom gears can be manufactured from a range of materials such as, but not limited to, stainless steel, aluminium alloy, precipitation hardening steel, phosphor bronze, titanium and other speciality metals, as well as high performance polymers such as PEEK. Reliance also works very closely with accredited and formally approved surface coating and heat treatment specialists to provide most industry standard processes.



During manufacturing all gears are individually inspected for gear quality and size using a dual flank inspection process with maximum accuracies of 3 microns tooth-to-tooth and 5 microns total composite error. For demanding applications gears are inspected for lead, pitch and profile on our Klingelnberg P40 gear measuring machine.

Our expertise also extends to the associated structure in geared assemblies where we can provide design for manufacture advice or a full design from specification service. Typical projects can involve concept design, development testing, prototype manufacture, performance validation testing and production manufacture with final acceptance testing, see [page 3-28](#).

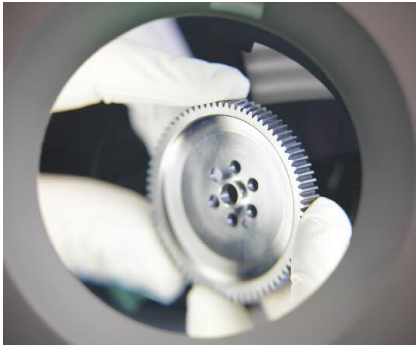


Custom gear design and development

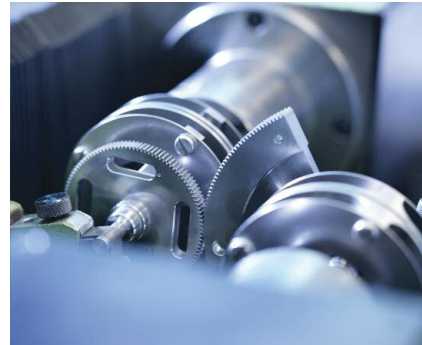


Satellite gear, manufactured for SSTL, working in orbit

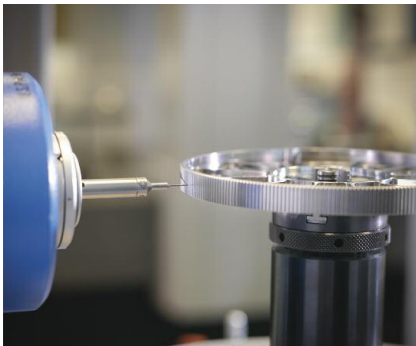
Custom gear manufacture



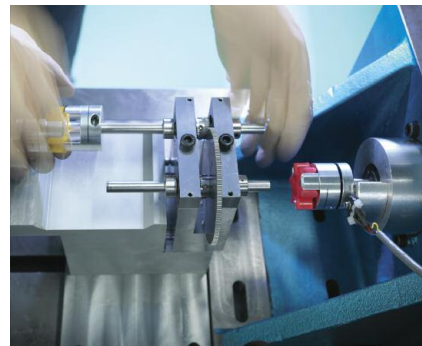
Gear deburring



Gear testing



Gear metrology



Wear and coating life test



AP 05 S1 B4 F45 A - 55 B

Gear Type

Pin hub
Clamp hub
Hubless
Anti-backlash pin hub
Anti-backlash clamp hub
Anti-backlash clamp hub, miniature

P
C
F
AP
AC
AR

Pitch

Module	DP	
1.5	150	16"
1.25	125	20"
1.0	10	32"
0.8	08	48"
0.6	06	64"
0.5	05	72"
0.4	04	80"
0.3	03	96"
0.25	025	100"
0.2	02	120"
1 mmCP	1M	1/10 "CP 31"
2 mmCP	2M	1/20 "CP 62"
2.5 mmCP	25M	

Material Code

Aluminium alloy
Stainless steel 303
Stainless steel 316
Hardened stainless steel 17-4PH
Brass
Acetal
PEEK polymer

A1
S1
S2"

S8
B2"
D1"
P1"

Bore

Metric

2 mm B2
3 mm B3
4 mm B4
5 mm B5
6 mm B6
8 mm B8
10 mm B10
12 mm B12
15 mm B15
20 mm B20

Imperial

5/64" B078"
1/8" B125"
0.12" B120"
3/16" B187"
1/4" B250"
5/16" B312"
3/8" B375"
11/16" B687"
1" B1000"

Drawing Issue

Separator

Number of Teeth

Gear Quality

AQ14 A
AQ12 B
AQ11 C
AQ10 (leave blank)*

*Standard accuracy
AQ10 (1.25 Mod, 20DP or finer), AQ9 (1.5 Mod, 16 DP or coarser).

Face Width

2 mm F2
3 mm F3
3.3 mm F33
3.5 mm F35
4 mm F4
4.5 mm F45
5 mm F5
6 mm F6
6.5 mm F61
7 mm F7
8 mm F8
8.9 mm F89
10 mm F10
12 mm F12

indicates non-standard items. Please enquire for details regarding large modules, imperial pitches and bores, and alternative materials.

Part numbering information on this page refers to the precision gears from [page 4-7 to 4-59](#).



Associated Products

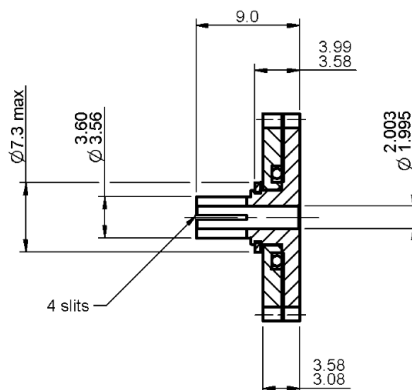
Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- <u>AR06S1B2F33A-</u> <u>25</u>				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
0.8	AR08S1B2F33A-	AR08A1B2F33A-	16 †	21
0.6	AR06S1B2F33A-	AR06A1B2F33A-	21	29
0.5	AR05S1B2F33A-	AR05A1B2F33A-	24	36
0.4	AR04S1B2F33A-	AR04A1B2F33A-	30	45
0.3	AR03S1B2F33A-	AR03A1B2F33A-	38	61
0.25	AR025S1B2F33A-	AR025A1B2F33A-	45	74
0.2	AR02S1B2F33A-	AR02A1B2F33A-	56	93

† Gears of 16 teeth will be modified - see [page T4-8](#)

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



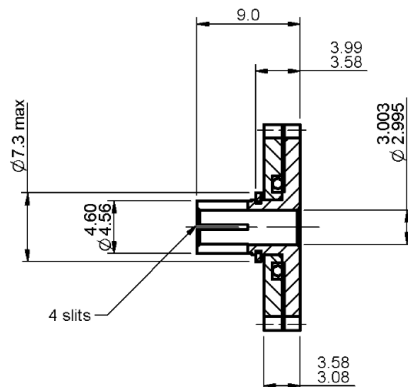
3 mm Bore

Anti-Backlash Pinions Miniature

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)



Part number selection table

Example Part No:- AR06S1B3F33A- 25				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
			Min	Max
0.8	AR08S1B3F33A-	AR08A1B3F33A-	16 †	21
0.6	AR06S1B3F33A-	AR06A1B3F33A-	21	29
0.5	AR05S1B3F33A-	AR05A1B3F33A-	24	36
0.4	AR04S1B3F33A-	AR04A1B3F33A-	30	45
0.3	AR03S1B3F33A-	AR03A1B3F33A-	38	61
0.25	AR025S1B3F33A-	AR025A1B3F33A-	45	74
0.2	AR02S1B3F33A-	AR02A1B3F33A-	56	93

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

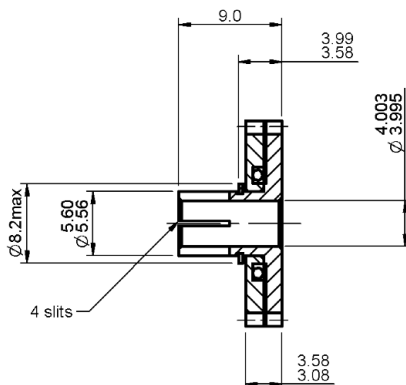
Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AR06S1B4F33A- 25				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
0.8	AR08S1B4F33A-	AR08A1B4F33A-	18	21
0.6	AR06S1B4F33A-	AR06A1B4F33A-	22	29
0.5	AR05S1B4F33A-	AR05A1B4F33A-	26	36
0.4	AR04S1B4F33A-	AR04A1B4F33A-	32	45
0.3	AR03S1B4F33A-	AR03A1B4F33A-	41	61
0.25	AR02S1B4F33A-	AR02S1B4F33A-	49	74
0.2	AR02S1B4F33A-	AR02A1B4F33A-	60	93

Precision Gears

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



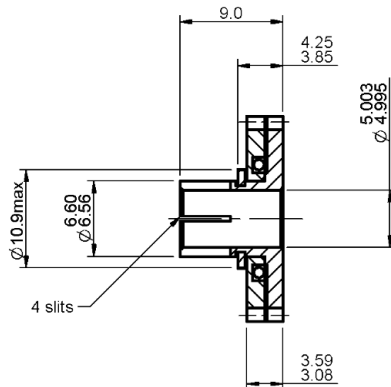
5 mm Bore

Anti-Backlash Pinions Miniature

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)



Part number selection table

Example Part No:- AR06S1B5F33A- 25				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
			Min	Max
0.8	AR08S1B5F33A-	AR08A1B5F33A-	19	21
0.6	AR06S1B5F33A-	AR06A1B5F33A-	24	29
0.5	AR05S1B5F33A-	AR05A1B5F33A-	28	36
0.4	AR04S1B5F33A-	AR04A1B5F33A-	34	45
0.3	AR03S1B5F33A-	AR03A1B5F33A-	44	61
0.25	AR025S1B5F33A-	AR025A1B5F33A-	52	74
0.2	AR02S1B5F33A-	AR02A1B5F33A-	65	93

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

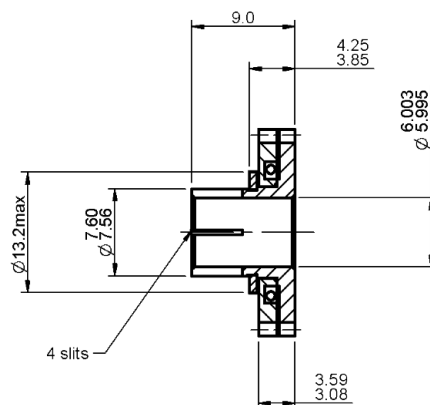
Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AR06S1B6F33A- 26				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
			Min	Max
0.8	AR08S1B6F33A-	AR08A1B6F33A-	21	21
0.6	AR06S1B6F33A-	AR06A1B6F33A-	26	29
0.5	AR05S1B6F33A-	AR05A1B6F33A-	31	36
0.4	AR04S1B6F33A-	AR04A1B6F33A-	38	45
0.3	AR03S1B6F33A-	AR03A1B6F33A-	49	61
0.25	AR025S1B6F33A-	AR025A1B6F33A-	58	74
0.2	AR02S1B6F33A-	AR02A1B6F33A-	72	93

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

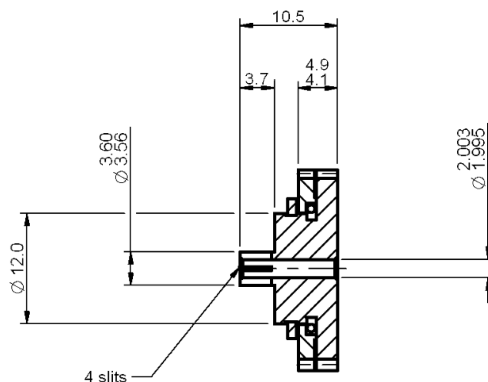
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



2 mm Bore

Anti-Backlash Clamp Hub Pinions

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products
Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:- AC06S1B2F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B2F45A-	AC150A1B2F45A-	14 †	22
1.25	AC125S1B2F45A-	AC125A1B2F45A-	16 †	27
1.0	AC10S1B2F45A-	AC10A1B2F45A-	19	35
0.8	AC08S1B2F45A-	AC08A1B2F45A-	23	44
0.6	AC06S1B2F45A-	AC06A1B2F45A-	29	59
0.5	AC05S1B2F45A-	AC05A1B2F45A-	34	72
0.4	AC04S1B2F45A-	AC04A1B2F45A-	42	90
0.3	AC03S1B2F45A-	AC03A1B2F45A-	55	121
0.25	AC025S1B2F45A-	AC025A1B2F45A-	65	146
0.2	AC02S1B2F45A-	AC02A1B2F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

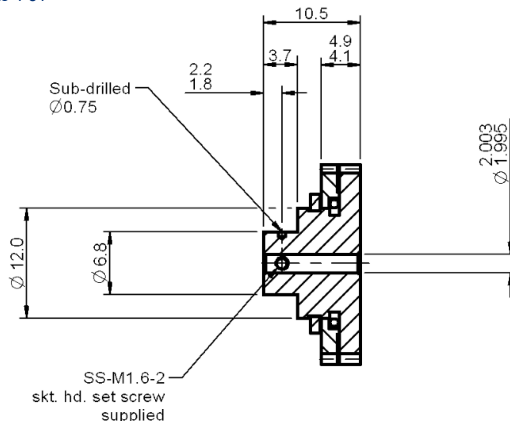
Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B2F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B2F45A-	AP150A1B2F45A-	14 †	22
1.25	AP125S1B2F45A-	AP125A1B2F45A-	16 †	27
1.0	AP10S1B2F45A-	AP10A1B2F45A-	19	35
0.8	AP08S1B2F45A-	AP08A1B2F45A-	23	44
0.6	AP06S1B2F45A-	AP06A1B2F45A-	29	59
0.5	AP05S1B2F45A-	AP05A1B2F45A-	34	72
0.4	AP04S1B2F45A-	AP04A1B2F45A-	42	90
0.3	AP03S1B2F45A-	AP03A1B2F45A-	55	121
0.25	AP025S1B2F45A-	AP025A1B2F45A-	65	146
0.2	AP02S1B2F45A-	AP02A1B2F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

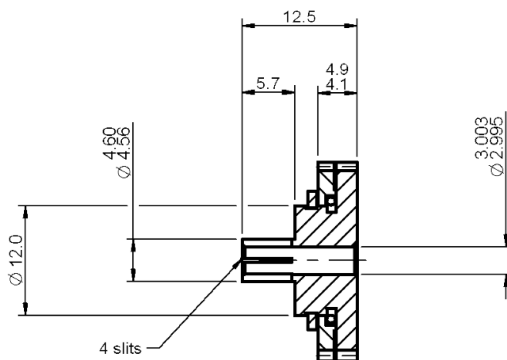
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



3 mm Bore

Anti-Backlash Clamp Hub Pinions

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:- AC06S1B3F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B3F45A-	AC150A1B3F45A-	14 †	22
1.25	AC125S1B3F45A-	AC125A1B3F45A-	16 †	27
1.0	AC10S1B3F45A-	AC10A1B3F45A-	19	35
0.8	AC08S1B3F45A-	AC08A1B3F45A-	23	44
0.6	AC06S1B3F45A-	AC06A1B3F45A-	29	59
0.5	AC05S1B3F45A-	AC05A1B3F45A-	34	72
0.4	AC04S1B3F45A-	AC04A1B3F45A-	42	90
0.3	AC03S1B3F45A-	AC03A1B3F45A-	55	121
0.25	AC025S1B3F45A-	AC025A1B3F45A-	65	146
0.2	AC02S1B3F45A-	AC02A1B3F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

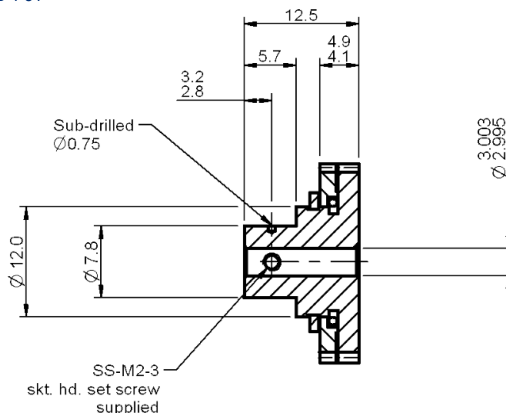
Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B3F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B3F45A-	AP150A1B3F45A-	14 †	22
1.25	AP125S1B3F45A-	AP125A1B3F45A-	16 †	27
1.0	AP10S1B3F45A-	AP10A1B3F45A-	19	35
0.8	AP08S1B3F45A-	AP08A1B3F45A-	23	44
0.6	AP06S1B3F45A-	AP06A1B3F45A-	29	59
0.5	AP05S1B3F45A-	AP05A1B3F45A-	34	72
0.4	AP04S1B3F45A-	AP04A1B3F45A-	42	90
0.3	AP03S1B3F45A-	AP03A1B3F45A-	55	121
0.25	AP025S1B3F45A-	AP025A1B3F45A-	65	146
0.2	AP02S1B3F45A-	AP02A1B3F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Precision
Gears

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

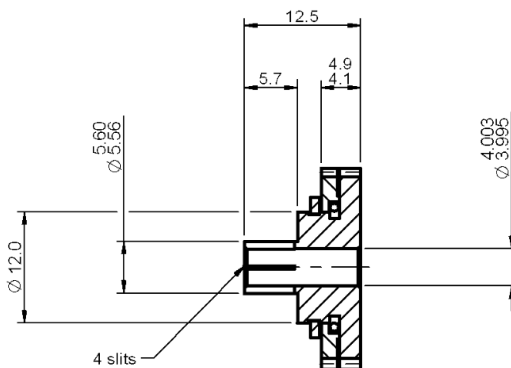
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



4 mm Bore

Anti-Backlash Clamp Hub Pinions

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products
Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:- <u>AC06S1B4F45A-</u> 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B4F45A-	AC150A1B4F45A-	14 †	22
1.25	AC125S1B4F45A-	AC125A1B4F45A-	16 †	27
1.0	AC10S1B4F45A-	AC10A1B4F45A-	19	35
0.8	AC08S1B4F45A-	AC08A1B4F45A-	23	44
0.6	AC06S1B4F45A-	AC06A1B4F45A-	29	59
0.5	AC05S1B4F45A-	AC05A1B4F45A-	34	72
0.4	AC04S1B4F45A-	AC04A1B4F45A-	42	90
0.3	AC03S1B4F45A-	AC03A1B4F45A-	55	121
0.25	AC025S1B4F45A-	AC025A1B4F45A-	65	146
0.2	AC02S1B4F45A-	AC02A1B4F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

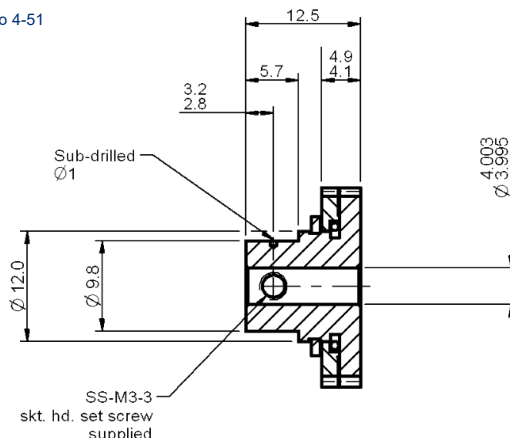
Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Example Part No:- AP06S1B4F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B4F45A-	AP150A1B4F45A-	14 †	22
1.25	AP125S1B4F45A-	AP125A1B4F45A-	16 †	27
1.0	AP10S1B4F45A-	AP10A1B4F45A-	19	35
0.8	AP08S1B4F45A-	AP08A1B4F45A-	23	44
0.6	AP06S1B4F45A-	AP06A1B4F45A-	29	59
0.5	AP05S1B4F45A-	AP05A1B4F45A-	34	72
0.4	AP04S1B4F45A-	AP04A1B4F45A-	42	90
0.3	AP03S1B4F45A-	AP03A1B4F45A-	55	121
0.25	AP025S1B4F45A-	AP025A1B4F45A-	65	146
0.2	AP02S1B4F45A-	AP02A1B4F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us

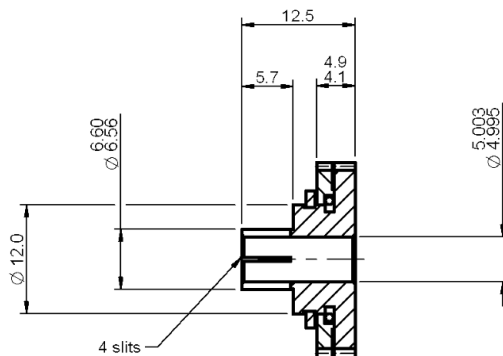


5 mm Bore

Anti-Backlash Clamp Hub Pinions

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)



Part number selection table

Example Part No:- <u>AC06S1B5F45A-</u> <u>35</u>				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B5F45A-	AC150A1B5F45A-	14 †	22
1.25	AC125S1B5F45A-	AC125A1B5F45A-	16 †	27
1.0	AC10S1B5F45A-	AC10A1B5F45A-	19	35
0.8	AC08S1B5F45A-	AC08A1B5F45A-	23	44
0.6	AC06S1B5F45A-	AC06A1B5F45A-	29	59
0.5	AC05S1B5F45A-	AC05A1B5F45A-	34	72
0.4	AC04S1B5F45A-	AC04A1B5F45A-	42	90
0.3	AC03S1B5F45A-	AC03A1B5F45A-	55	121
0.25	AC025S1B5F45A-	AC025A1B5F45A-	65	146
0.2	AC02S1B5F45A-	AC02A1B5F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

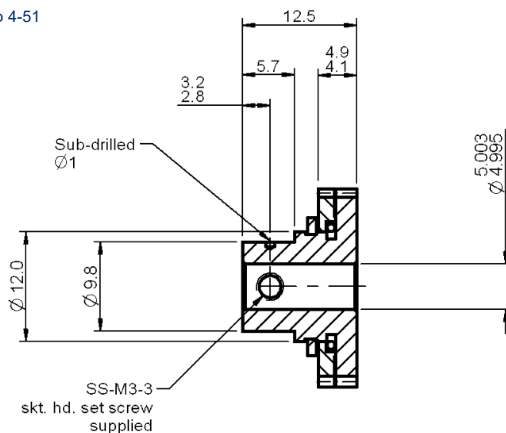
i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B5F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B5F45A-	AP150A1B5F45A-	14 †	22
1.25	AP125S1B5F45A-	AP125A1B5F45A-	16 †	27
1.0	AP10S1B5F45A-	AP10A1B5F45A-	19	35
0.8	AP08S1B5F45A-	AP08A1B5F45A-	23	44
0.6	AP06S1B5F45A-	AP06A1B5F45A-	29	59
0.5	AP05S1B5F45A-	AP05A1B5F45A-	34	72
0.4	AP04S1B5F45A-	AP04A1B5F45A-	42	90
0.3	AP03S1B5F45A-	AP03A1B5F45A-	55	121
0.25	AP025S1B5F45A-	AP025A1B5F45A-	65	146
0.2	AP02S1B5F45A-	AP02A1B5F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

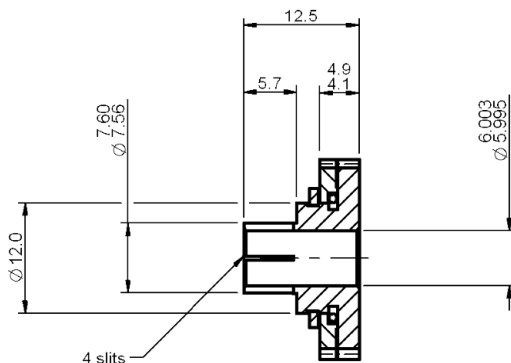
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



6 mm Bore

Anti-Backlash Clamp Hub Pinions

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:-

AC06S1B6F45A- 35

Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B6F45A-	AC150A1B6F45A-	14 †	22
1.25	AC125S1B6F45A-	AC125A1B6F45A-	16 †	27
1.0	AC10S1B6F45A-	AC10A1B6F45A-	19	35
0.8	AC08S1B6F45A-	AC08A1B6F45A-	23	44
0.6	AC06S1B6F45A-	AC06A1B6F45A-	29	59
0.5	AC05S1B6F45A-	AC05A1B6F45A-	34	72
0.4	AC04S1B6F45A-	AC04A1B6F45A-	42	90
0.3	AC03S1B6F45A-	AC03A1B6F45A-	55	121
0.25	AC025S1B6F45A-	AC025A1B6F45A-	65	146
0.2	AC02S1B6F45A-	AC02A1B6F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

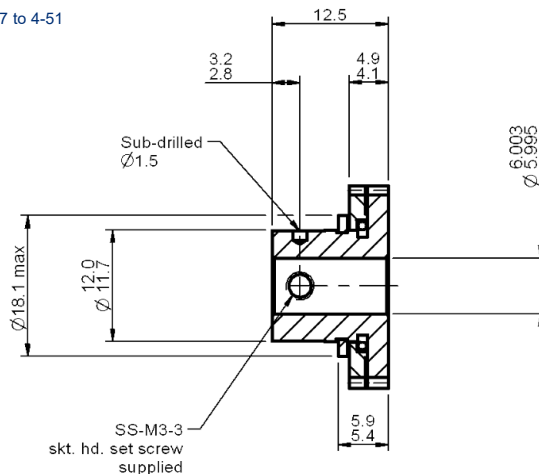
Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B6F45A- 35				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B6F45A-	AP150A1B6F45A-	14 †	22
1.25	AP125S1B6F45A-	AP125A1B6F45A-	16 †	27
1.0	AP10S1B6F45A-	AP10A1B6F45A-	19	35
0.8	AP08S1B6F45A-	AP08A1B6F45A-	23	44
0.6	AP06S1B6F45A-	AP06A1B6F45A-	29	59
0.5	AP05S1B6F45A-	AP05A1B6F45A-	34	72
0.4	AP04S1B6F45A-	AP04A1B6F45A-	42	90
0.3	AP03S1B6F45A-	AP03A1B6F45A-	55	121
0.25	AP025S1B6F45A-	AP025A1B6F45A-	65	146
0.2	AP02S1B6F45A-	AP02A1B6F45A-	80	183

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

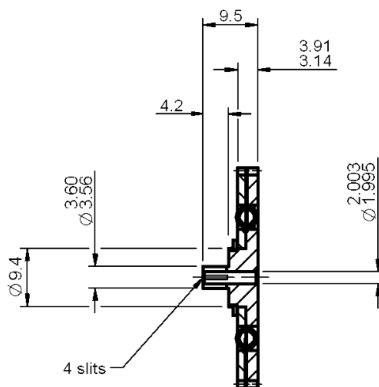
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



2 mm Bore

Anti-Backlash Clamp Hub Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products
Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:- AC06S1B2F35A- 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B2F35A-	AC150A1B2F35A-	24	46
1.25	AC125S1B2F35A-	AC125A1B2F35A-	28	56
1.0	AC10S1B2F35A-	AC10A1B2F35A-	34	70
0.8	AC08S1B2F35A-	AC08A1B2F35A-	42	88
0.6	AC06S1B2F35A-	AC06A1B2F35A-	55	119
0.5	AC05S1B2F35A-	AC05A1B2F35A-	66	143
0.4	AC04S1B2F35A-	AC04A1B2F35A-	81	179
0.3	AC03S1B2F35A-	AC03A1B2F35A-	107	240
0.25	AC025S1B2F35A-	AC025A1B2F35A-	128	289
0.2	AC02S1B2F35A-	AC02A1B2F35A-	159	361

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

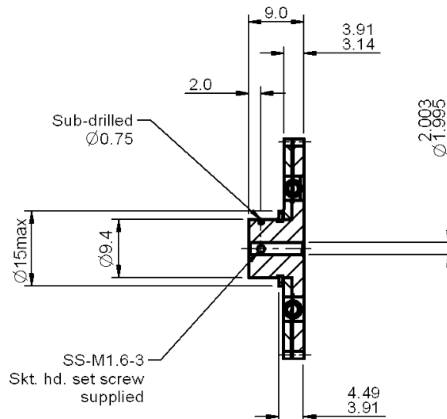
Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B2F35A- 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B2F35A-	AP150A1B2F35A-	24	46
1.25	AP125S1B2F35A-	AP125A1B2F35A-	28	56
1.0	AP10S1B2F35A-	AP10A1B2F35A-	34	70
0.8	AP08S1B2F35A-	AP08A1B2F35A-	42	88
0.6	AP06S1B2F35A-	AP06A1B2F35A-	55	119
0.5	AP05S1B2F35A-	AP05A1B2F35A-	66	143
0.4	AP04S1B2F35A-	AP04A1B2F35A-	81	179
0.3	AP03S1B2F35A-	AP03A1B2F35A-	107	240
0.25	AP025S1B2F35A-	AP025A1B2F35A-	128	289
0.2	AP02S1B2F35A-	AP02A1B2F35A-	159	361

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

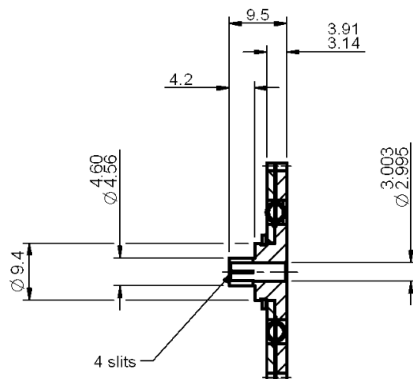
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



3 mm Bore

Anti-Backlash Clamp Hub Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:-

AC06S1B3F35A- 65

Standard Modules	Basic Part Number		Number of Teeth	
	Standard Materials		Min	Max
	Stainless Steel	Aluminium Alloy		
1.5	AC150S1B3F35A-	AC150A1B3F35A-	24	46
1.25	AC125S1B3F35A-	AC125A1B3F35A-	28	56
1.0	AC10S1B3F35A-	AC10A1B3F35A-	34	70
0.8	AC08S1B3F35A-	AC08A1B3F35A-	42	88
0.6	AC06S1B3F35A-	AC06A1B3F35A-	55	119
0.5	AC05S1B3F35A-	AC05A1B3F35A-	66	143
0.4	AC04S1B3F35A-	AC04A1B3F35A-	81	179
0.3	AC03S1B3F35A-	AC03A1B3F35A-	107	240
0.25	AC025S1B3F35A-	AC025A1B3F35A-	128	289
0.2	AC02S1B3F35A-	AC02A1B3F35A-	159	361

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

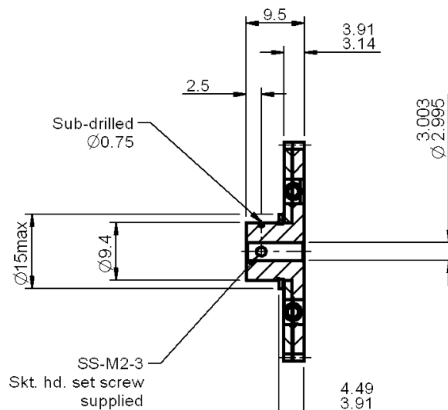
Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm

General tolerances ± 0.13 mm

Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B3F35A- 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B3F35A-	AP150A1B3F35A-	24	46
1.25	AP125S1B3F35A-	AP125A1B3F35A-	28	56
1.0	AP10S1B3F35A-	AP10A1B3F35A-	34	70
0.8	AP08S1B3F35A-	AP08A1B3F35A-	42	88
0.6	AP06S1B3F35A-	AP06A1B3F35A-	55	119
0.5	AP05S1B3F35A-	AP05A1B3F35A-	66	143
0.4	AP04S1B3F35A-	AP04A1B3F35A-	81	179
0.3	AP03S1B3F35A-	AP03A1B3F35A-	107	240
0.25	AP025S1B3F35A-	AP025A1B3F35A-	128	289
0.2	AP02S1B3F35A-	AP02A1B3F35A-	159	361

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

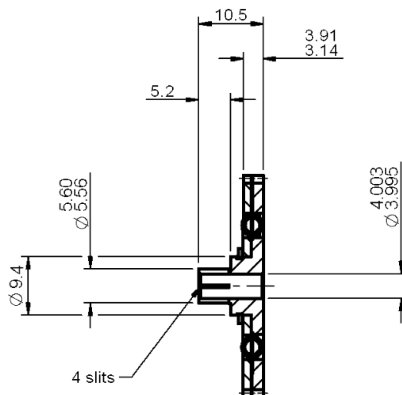
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



4 mm Bore

Anti-Backlash Clamp Hub Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:-

AC06S1B4F35A- 65

Standard Modules	Basic Part Number		Number of Teeth	
	Standard Materials		Min	Max
	Stainless Steel	Aluminium Alloy		
1.5	AC150S1B4F35A-	AC150A1B4F35A-	24	46
1.25	AC125S1B4F35A-	AC125A1B4F35A-	28	56
1.0	AC10S1B4F35A-	AC10A1B4F35A-	34	70
0.8	AC08S1B4F35A-	AC08A1B4F35A-	42	88
0.6	AC06S1B4F35A-	AC06A1B4F35A-	55	119
0.5	AC05S1B4F35A-	AC05A1B4F35A-	66	143
0.4	AC04S1B4F35A-	AC04A1B4F35A-	81	179
0.3	AC03S1B4F35A-	AC03A1B4F35A-	107	240
0.25	AC025S1B4F35A-	AC025A1B4F35A-	128	289
0.2	AC02S1B4F35A-	AC02A1B4F35A-	159	361

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

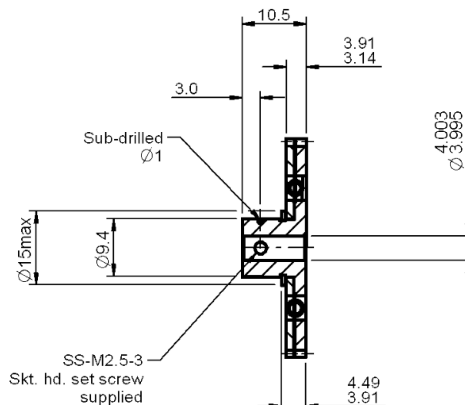
Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm

General tolerances $\pm 0,13$ mm

Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B4F35A- 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B4F35A-	AP150A1B4F35A-	24	46
1.25	AP125S1B4F35A-	AP125A1B4F35A-	28	56
1.0	AP10S1B4F35A-	AP10A1B4F35A-	34	70
0.8	AP08S1B4F35A-	AP08A1B4F35A-	42	88
0.6	AP06S1B4F35A-	AP06A1B4F35A-	55	119
0.5	AP05S1B4F35A-	AP05A1B4F35A-	66	143
0.4	AP04S1B4F35A-	AP04A1B4F35A-	81	179
0.3	AP03S1B4F35A-	AP03A1B4F35A-	107	240
0.25	AP025S1B4F35A-	AP025A1B4F35A-	128	289
0.2	AP02S1B4F35A-	AP02A1B4F35A-	159	361

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

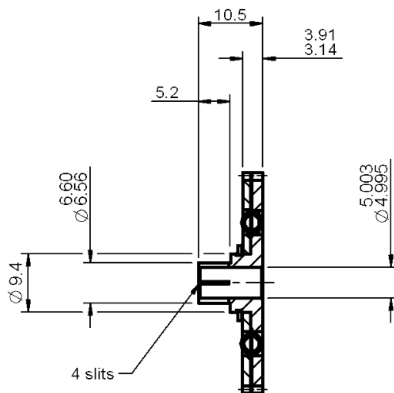
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



5 mm Bore

Anti-Backlash Clamp Hub Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products
Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:- AC06S1B5F35A- 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B5F35A-	AC150A1B5F35A-	24	46
1.25	AC125S1B5F35A-	AC125A1B5F35A-	28	56
1.0	AC10S1B5F35A-	AC10A1B5F35A-	34	70
0.8	AC08S1B5F35A-	AC08A1B5F35A-	42	88
0.6	AC06S1B5F35A-	AC06A1B5F35A-	55	119
0.5	AC05S1B5F35A-	AC05A1B5F35A-	66	143
0.4	AC04S1B5F35A-	AC04A1B5F35A-	81	179
0.3	AC03S1B5F35A-	AC03A1B5F35A-	107	240
0.25	AC025S1B5F35A-	AC025A1B5F35A-	128	289
0.2	AC02S1B5F35A-	AC02A1B5F35A-	159	361

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

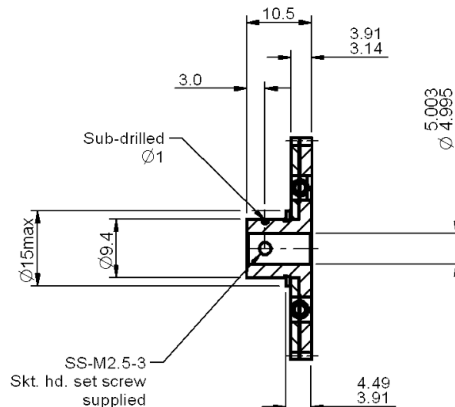
Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B5F35A- 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B5F35A-	AP150A1B5F35A-	24	46
1.25	AP125S1B5F35A-	AP125A1B5F35A-	28	56
1.0	AP10S1B5F35A-	AP10A1B5F35A-	34	70
0.8	AP08S1B5F35A-	AP08A1B5F35A-	42	88
0.6	AP06S1B5F35A-	AP06A1B5F35A-	55	119
0.5	AP05S1B5F35A-	AP05A1B5F35A-	66	143
0.4	AP04S1B5F35A-	AP04A1B5F35A-	81	179
0.3	AP03S1B5F35A-	AP03A1B5F35A-	107	240
0.25	AP025S1B5F35A-	AP025A1B5F35A-	128	289
0.2	AP02S1B5F35A-	AP02A1B5F35A-	159	361

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

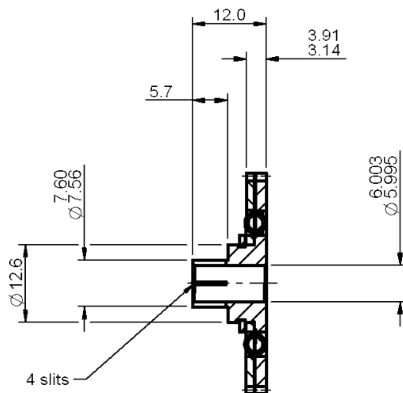
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



6 mm Bore

Anti-Backlash Clamp Hub Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)

Part number selection table

Example Part No:-

AC06S1B6F35A- 65

Standard Modules	Basic Part Number		Number of Teeth	
	Standard Materials		Min	Max
	Stainless Steel	Aluminium Alloy		
1.5	AC150S1B6F35A-	AC150A1B6F35A-	24	46
1.25	AC125S1B6F35A-	AC125A1B6F35A-	28	56
1.0	AC10S1B6F35A-	AC10A1B6F35A-	34	70
0.8	AC08S1B6F35A-	AC08A1B6F35A-	42	88
0.6	AC06S1B6F35A-	AC06A1B6F35A-	55	119
0.5	AC05S1B6F35A-	AC05A1B6F35A-	66	143
0.4	AC04S1B6F35A-	AC04A1B6F35A-	81	179
0.3	AC03S1B6F35A-	AC03A1B6F35A-	107	240
0.25	AC025S1B6F35A-	AC025A1B6F35A-	128	289
0.2	AC02S1B6F35A-	AC02A1B6F35A-	159	361

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

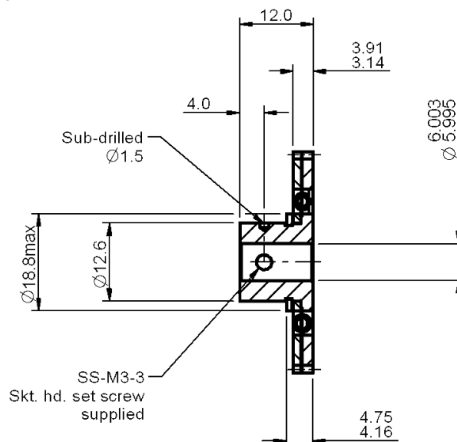
Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Part number selection table

Example Part No:- <u>AP06S1B6F35A-</u> 65				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B6F35A-	AP150A1B6F35A-	24	46
1.25	AP125S1B6F35A-	AP125A1B6F35A-	28	56
1.0	AP10S1B6F35A-	AP10A1B6F35A-	34	70
0.8	AP08S1B6F35A-	AP08A1B6F35A-	42	88
0.6	AP06S1B6F35A-	AP06A1B6F35A-	55	119
0.5	AP05S1B6F35A-	AP05A1B6F35A-	66	143
0.4	AP04S1B6F35A-	AP04A1B6F35A-	81	179
0.3	AP03S1B6F35A-	AP03A1B6F35A-	107	240
0.25	AP025S1B6F35A-	AP025A1B6F35A-	128	289
0.2	AP02S1B6F35A-	AP02A1B6F35A-	159	361

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

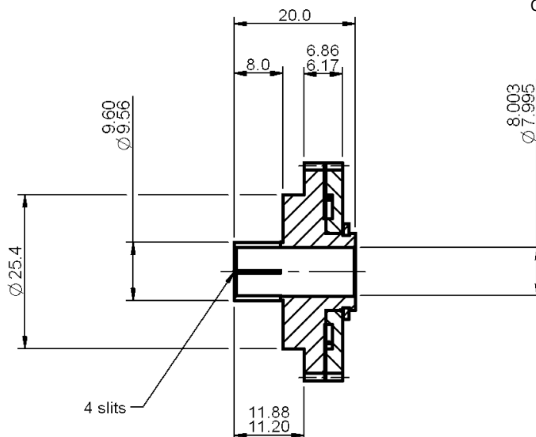
Associated Products

Clamp hub gears: [page 4-36 to 4-50](#)

Shafts: page 11-2

Bearings: [page 12-1](#)

Gear clamps: [page 11-4](#)



Part number selection table

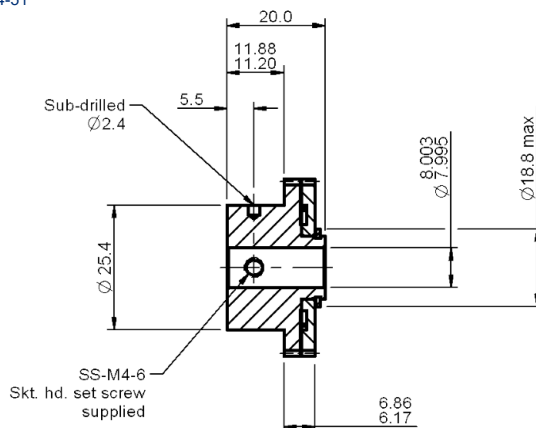
Example Part No:- AC06S1B8F61A- 90				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B8F61A-	AC150A1B8F61A-	21	75
1.25	AC125S1B8F61A-	AC125A1B8F61A-	25	91
1.0	AC10S1B8F61A-	AC10A1B8F61A-	30	114
0.8	AC08S1B8F61A-	AC08A1B8F61A-	37	143
0.6	AC06S1B8F61A-	AC06A1B8F61A-	48	192
0.5	AC05S1B8F61A-	AC05A1B8F61A-	56	230
0.4	AC04S1B8F61A-	AC04A1B8F61A-	70	289
0.3	AC03S1B8F61A-	AC03A1B8F61A-	92	386
0.25	AC025S1B8F61A-	AC025A1B8F61A-	110	463
0.2	AC02S1B8F61A-	AC02A1B8F61A-	136	580

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



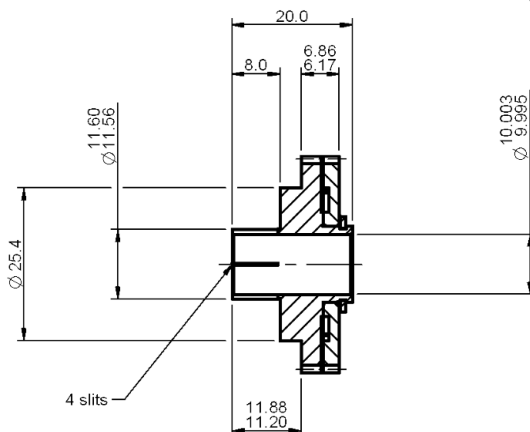


10 mm Bore

Anti-Backlash Clamp Hub Gears

All dimensions in mm
General tolerances $\pm 0.13\text{mm}$
Pressure angle 20°

Associated Products
Clamp hub gears: [page 4-36 to 4-50](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Gear clamps: [page 11-4](#)



Part number selection table

Example Part No:- AC06S1B10F61A- 90				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AC150S1B10F61A-	AC150A1B10F61A-	21	75
1.25	AC125S1B10F61A-	AC125A1B10F61A-	25	91
1.0	AC10S1B10F61A-	AC10A1B10F61A-	30	114
0.8	AC08S1B10F61A-	AC08A1B10F61A-	37	143
0.6	AC06S1B10F61A-	AC06A1B10F61A-	48	192
0.5	AC05S1B10F61A-	AC05A1B10F61A-	56	230
0.4	AC04S1B10F61A-	AC04A1B10F61A-	70	289
0.3	AC03S1B10F61A-	AC03A1B10F61A-	92	386
0.25	AC025S1B10F61A-	AC025A1B10F61A-	110	463
0.2	AC02S1B10F61A-	AC02A1B10F61A-	136	580

Precision
Gears

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Pin hub gears: [page 4-37 to 4-51](#)

Shafts: [page 11-1](#)

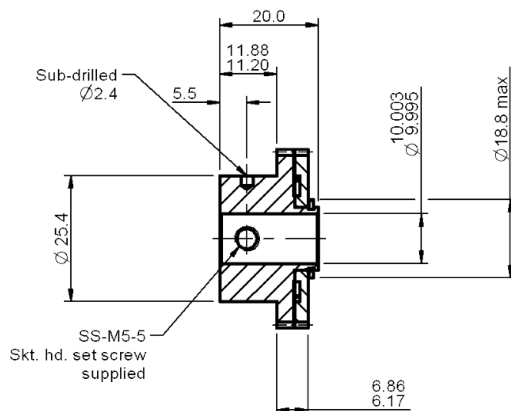
Bearings: [page 12-1](#)

Pins: [page 13-18](#)

All dimensions in mm

General tolerances $\pm 0.13\text{mm}$

Pressure angle 20°



Part number selection table

Example Part No:- AP06S1B10F61A- 90				
Standard Modules	Basic Part Number Standard Materials		Number of Teeth	
	Stainless Steel	Aluminium Alloy	Min	Max
1.5	AP150S1B10F61A-	AP150A1B10F61A-	21	75
1.25	AP125S1B10F61A-	AP125A1B10F61A-	25	91
1.0	AP10S1B10F61A-	AP10A1B10F61A-	30	114
0.8	AP08S1B10F61A-	AP08A1B10F61A-	37	143
0.6	AP06S1B10F61A-	AP06A1B10F61A-	48	192
0.5	AP05S1B10F61A-	AP05A1B10F61A-	56	230
0.4	AP04S1B10F61A-	AP04A1B10F61A-	70	289
0.3	AP03S1B10F61A-	AP03A1B10F61A-	92	386
0.25	AP025S1B10F61A-	AP025A1B10F61A-	110	463
0.2	AP02S1B10F61A-	AP02A1B10F61A-	136	580

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



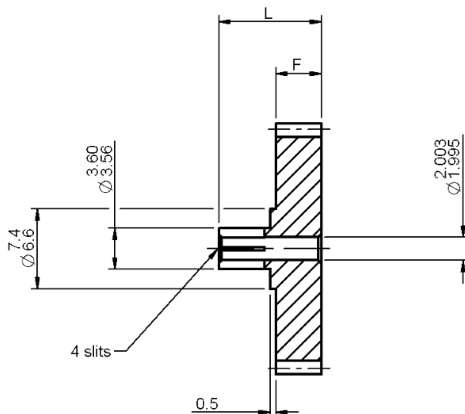
2 mm Bore

Clamp Hub Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

When $F=2, L=7$
 $F=4, L=9$



Part number selection table

Example Part No:- C06S1B2 F2A- 25						
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth		
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max	
					F2A	F4A
1.5	C150S1B2	C150A1B2	F2A- (2 mm)	12 †	21	72
1.25	C125S1B2	C125A1B2		12 †	25	86
1.0	C10S1B2	C10A1B2		12 †	32	109
0.8	C08S1B2	C08A1B2		13 †	41	136
0.6	C06S1B2	C06A1B2		14 †	56	183
0.5	C05S1B2	C05A1B2	or F4A- (4 mm)	14 †	67	220
0.4	C04S1B2	C04A1B2		15 †	85	275
0.3	C03S1B2	C03A1B2		17	114	368
0.25	C025S1B2	C025A1B2		18	137	442
0.2	C02S1B2	C02A1B2		20	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

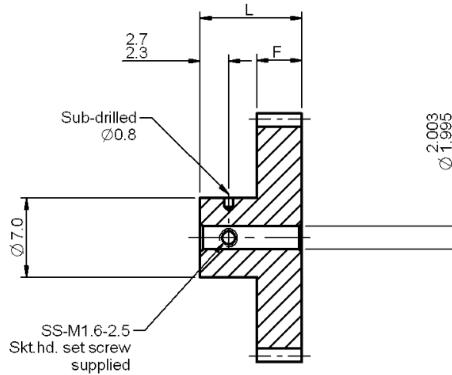
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-13 to 4-35
 Shafts: page 11-2
 Bearings: page 12-1
 Pins: page 13-18

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



When $F=2, L=7$
 $F=4, L=9$

Part number selection table

Example Part No:- P06S1B2 F2A- 25						
Standard Modules	Basic Part Number Standard Materials #		Face Width Dim F	Number of Teeth		
				Min	Max	
	Stainless Steel	Aluminium Alloy			F2A	F4A
1.5	P150S1B2	P150A1B2	F2A- (2 mm)	12 †	21	72
1.25	P125S1B2	P125A1B2		12 †	25	86
1.0	P10S1B2	P10A1B2		12 †	32	109
0.8	P08S1B2	P08A1B2		13 †	41	136
0.6	P06S1B2	P06A1B2		15 †	56	183
0.5	P05S1B2	P05A1B2	or F4A- (4 mm)	18	67	220
0.4	P04S1B2	P04A1B2		21	85	275
0.3	P03S1B2	P03A1B2		27	114	368
0.25	P025S1B2	P025A1B2		31	137	442
0.2	P02S1B2	P02A1B2		38	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

Technical support

- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



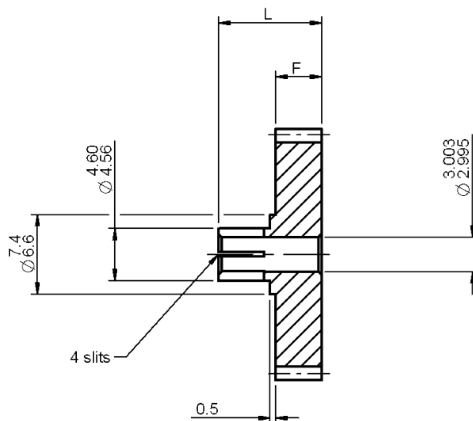
3 mm Bore

Clamp Hub Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

When $F=2$, $L=7$
 $F=4$, $L=9$



Part number selection table

Example Part No:- <u>C06S1B3</u> <u>F2A-</u> <u>25</u>						
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth		
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max	
					F2A	F4A
1.5	C150S1B3	C150A1B3	F2A- (2 mm)	12 †	21	72
1.25	C125S1B3	C125A1B3		13 †	25	86
1.0	C10S1B3	C10A1B3		13 †	32	109
0.8	C08S1B3	C08A1B3		14 †	41	136
0.6	C06S1B3	C06A1B3		15 †	56	183
0.5	C05S1B3	C05A1B3	or F4A- (4 mm)	16 †	67	220
0.4	C04S1B3	C04A1B3		18	85	275
0.3	C03S1B3	C03A1B3		20	114	368
0.25	C025S1B3	C025A1B3		22	137	442
0.2	C02S1B3	C02A1B3		25	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

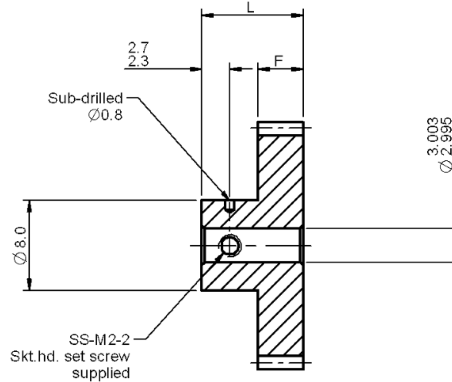
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-13 to 4-35
 Shafts: page 11-2
 Bearings: page 12-1
 Pins: page 13-18

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



When $F=2, L=7$
 $F=4, L=9$

Part number selection table

Example Part No:- P06S1B3 F2A- 25						
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth		
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max	
					F2A	F4A
1.5	P150S1B3	P150A1B3	F2A- (2 mm)	12 †	21	72
1.25	P125S1B3	P125A1B3		13 †	25	86
1.0	P10S1B3	P10A1B3		13 †	32	109
0.8	P08S1B3	P08A1B3		14 †	41	136
0.6	P06S1B3	P06A1B3		17	56	183
0.5	P05S1B3	P05A1B3	F4A- (4 mm)	20	67	220
0.4	P04S1B3	P04A1B3		23	85	275
0.3	P03S1B3	P03A1B3		30	114	368
0.25	P025S1B3	P025A1B3		35	137	442
0.2	P02S1B3	P02A1B3		43	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

Technical support

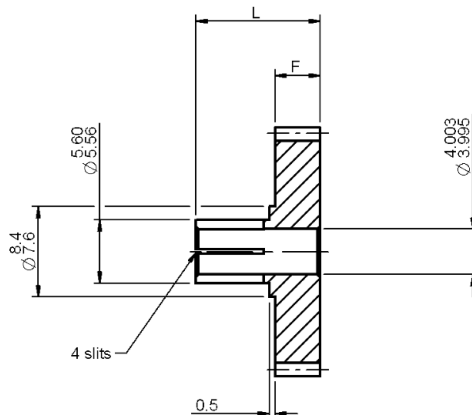
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

When $F=2$, $L=9$
 $F=4$, $L=11$



Part number selection table

Example Part No:- <u>C06S1B4</u> <u>F2A-</u> <u>25</u>						
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth		
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max	
					F2A	F4A
1.5	C150S1B4	C150A1B4	F2A- (2 mm)	13 †	21	72
1.25	C125S1B4	C125A1B4		14 †	25	86
1.0	C10S1B4	C10A1B4		14 †	32	109
0.8	C08S1B4	C08A1B4		15 †	41	136
0.6	C06S1B4	C06A1B4		17	56	183
0.5	C05S1B4	C05A1B4	or F4A- (4 mm)	18	67	220
0.4	C04S1B4	C04A1B4		20	85	275
0.3	C03S1B4	C03A1B4		24	114	368
0.25	C025S1B4	C025A1B4		26	137	442
0.2	C02S1B4	C02A1B4		30	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

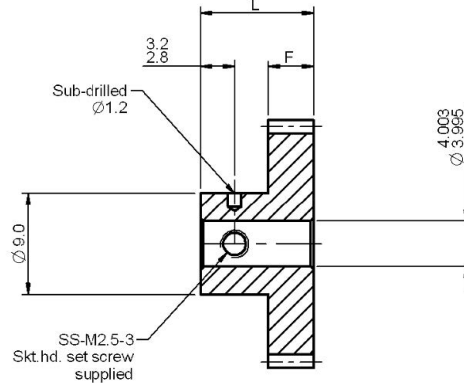
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: [page 4-13 to 4-35](#)
 Shafts: [page 11-2](#)
 Bearings: [page 12-1](#)
 Pins: [page 13-18](#)

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



When $F=2, L=8$
 $F=4, L=10$

Part number selection table

Example Part No:- P06S1B4 F2A- 25						
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth		
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max	
					F2A	F4A
1.5	P150S1B4	P150A1B4	F2A- (2 mm)	13 †	21	72
1.25	P125S1B4	P125A1B4		14 †	25	86
1.0	P10S1B4	P10A1B4		14 †	32	109
0.8	P08S1B4	P08A1B4		15 †	41	136
0.6	P06S1B4	P06A1B4		19	56	183
0.5	P05S1B4	P05A1B4	or F4A- (4 mm)	22	67	220
0.4	P04S1B4	P04A1B4		26	85	275
0.3	P03S1B4	P03A1B4		34	114	368
0.25	P025S1B4	P025A1B4		39	137	442
0.2	P02S1B4	P02A1B4		48	172	553

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



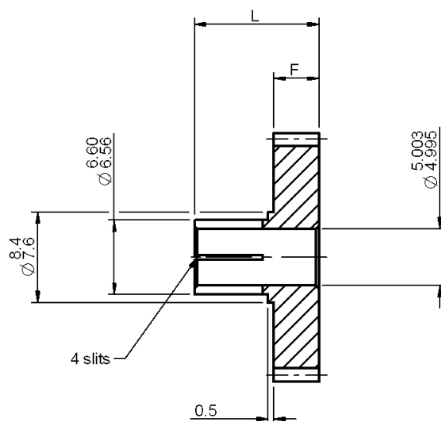
5 mm Bore

Clamp Hub Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

when $F=2, L=9$
 $F=4, L=11$



Part number selection table

Example Part No:- C06S1B5 F2A- 25						
Standard Modules	Basic Part Number Standard Materials #		Face Width Dim F	Number of Teeth		
				Min	Max	
	Stainless Steel	Aluminium Alloy			F2A	F4A
1.5	C150S1B5	C150A1B5	F2A- (2 mm)	14 †	21	72
1.25	C125S1B5	C125A1B5		14 †	25	86
1.0	C10S1B5	C10A1B5		15 †	32	109
0.8	C08S1B5	C08A1B5		17	41	136
0.6	C06S1B5	C06A1B5		19	56	183
0.5	C05S1B5	C05A1B5	or F4A- (4 mm)	20	67	220
0.4	C04S1B5	C04A1B5		23	85	275
0.3	C03S1B5	C03A1B5		27	114	368
0.25	C025S1B5	C025A1B5		30	137	442
0.2	C02S1B5	C02A1B5		35	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

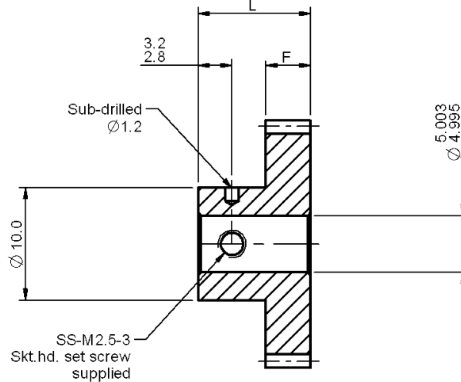
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-13 to 4-35
 Shafts: page 11-2
 Bearings: page 12-1
 Pins: page 13-18

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



when $F=2, L=8$
 $F=4, L=10$

Part number selection table

Example Part No:- P06S1B5 F2A- 25						
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth		
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max	
					F2A	F4A
1.5	P150S1B5	P150A1B5	F2A- (2 mm)	14 †	21	72
1.25	P125S1B5	P125A1B5		14 †	25	86
1.0	P10S1B5	P10A1B5		15 †	32	109
0.8	P08S1B5	P08A1B5		17	41	136
0.6	P06S1B5	P06A1B5		21	56	183
0.5	P05S1B5	P05A1B5	or F4A- (4 mm)	24	67	220
0.4	P04S1B5	P04A1B5		29	85	275
0.3	P03S1B5	P03A1B5		37	114	368
0.25	P025S1B5	P025A1B5		43	137	442
0.2	P02S1B5	P02A1B5		53	172	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

Technical support

- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



6 mm Bore

Clamp Hub Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products

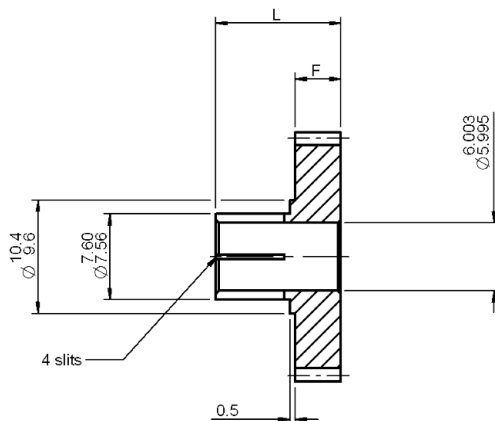
Anti-backlash gears: page 4-7 to 4-34

Shafts: page 11-2

Bearings: page 12-1

Gear clamps: page 11-4

When F=3, L=10
F=4, L=11
F=6, L=13



Part number selection table

Example Part No:- <u>C06S1B6</u> <u>F3A-</u> <u>75</u>					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	C150S1B6	C150A1B6	F3A- (3 mm)	14 †	72
1.25	C125S1B6	C125A1B6		15 †	86
1.0	C10S1B6	C10A1B6		16 †	109
0.8	C08S1B6	C08A1B6	or	18	136
0.6	C06S1B6	C06A1B6	F4A- (4 mm)	20	183
0.5	C05S1B6	C05A1B6		22	220
0.4	C04S1B6	C04A1B6		25	275
0.3	C03S1B6	C03A1B6	or	30	368
0.25	C025S1B6	C025A1B6	F6A- (6 mm)	34	442
0.2	C02S1B6	C02A1B6		40	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass

Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

Technical support

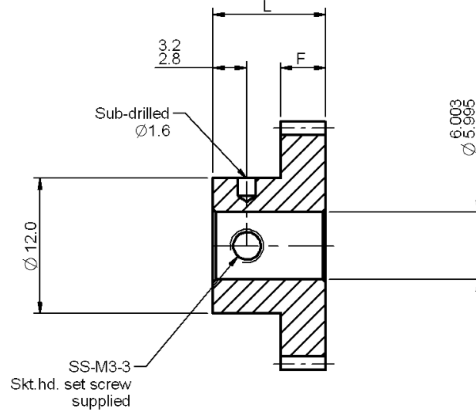
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-13 to 4-35
 Shafts: page 11-2
 Bearings: page 12-1
 Pins: page 13-18

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



When F=3, L=9
 F=4, L=10
 F=6, L=12

Part number selection table

Example Part No:- P06S1B6 F3A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	P150S1B6	P150A1B6	F3A- (3 mm)	14 †	72
1.25	P125S1B6	P125A1B6		15 †	86
1.0	P10S1B6	P10A1B6		16 †	109
0.8	P08S1B6	P08A1B6	or	19	136
0.6	P06S1B6	P06A1B6	F4A- (4 mm)	23	183
0.5	P05S1B6	P05A1B6		27	220
0.4	P04S1B6	P04A1B6		33	275
0.3	P03S1B6	P03A1B6	or	43	368
0.25	P025S1B6	P025A1B6	F6A- (6 mm)	50	442
0.2	P02S1B6	P02A1B6		62	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



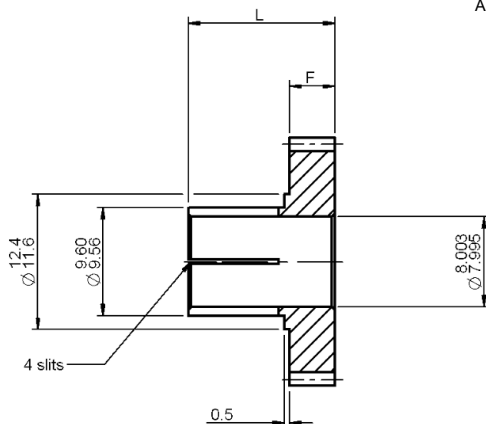
8 mm Bore

Clamp Hub Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

When $F=4, L=13$
 $F=6, L=15$



Part number selection table

Example Part No:- <u>C06S1B8</u> <u>F4A-</u> <u>75</u>					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	C150S1B8	C150A1B8	F4A- (4 mm) or F6A- (6 mm)	16 †	72
1.25	C125S1B8	C125A1B8		17	86
1.0	C10S1B8	C10A1B8		18	109
0.8	C08S1B8	C08A1B8		20	136
0.6	C06S1B8	C06A1B8		24	183
0.5	C05S1B8	C05A1B8		26	220
0.4	C04S1B8	C04A1B8		30	275
0.3	C03S1B8	C03A1B8		37	368
0.25	C025S1B8	C025A1B8		42	442
0.2	C02S1B8	C02A1B8		50	553

† Gears of 16 teeth will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

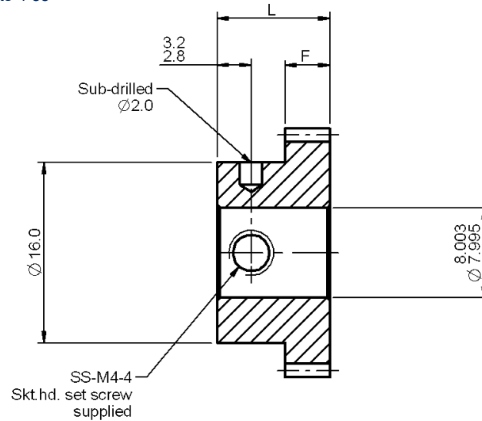
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-13 to 4-35
 Shafts: page 11-2
 Bearings: page 12-1
 Pins: page 13-18

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



When $F=4, L=10$
 $F=6, L=12$

Part number selection table

Example Part No:- P06S1B8 F4A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	P150S1B8	P150A1B8	F4A- (4 mm)	16 †	72
1.25	P125S1B8	P125A1B8		17	86
1.0	P10S1B8	P10A1B8		20	109
0.8	P08S1B8	P08A1B8		24	136
0.6	P06S1B8	P06A1B8		30	183
0.5	P05S1B8	P05A1B8	F6A- (6 mm)	35	220
0.4	P04S1B8	P04A1B8		43	275
0.3	P03S1B8	P03A1B8		56	368
0.25	P025S1B8	P025A1B8		66	442
0.2	P02S1B8	P02A1B8		82	553

† Gears of 16 teeth will be modified - see page T4-8

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

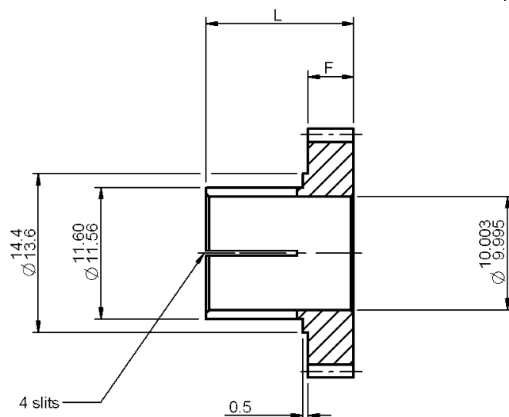
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

When $F=4$, $L=13$
 $F=6$, $L=15$



Part number selection table

Example Part No:- <u>C06S1B10</u> <u>F4A-</u> <u>75</u>					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	C150S1B10	C150A1B10	F4A- (4 mm)	17	72
1.25	C125S1B10	C125A1B10		18	86
1.0	C10S1B10	C10A1B10		20	109
0.8	C08S1B10	C08A1B10		23	136
0.6	C06S1B10	C06A1B10	or F6A- (6 mm)	27	183
0.5	C05S1B10	C05A1B10		30	220
0.4	C04S1B10	C04A1B10		35	275
0.3	C03S1B10	C03A1B10		44	368
0.25	C025S1B10	C025A1B10		50	442
0.2	C02S1B10	C02A1B10		60	553

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

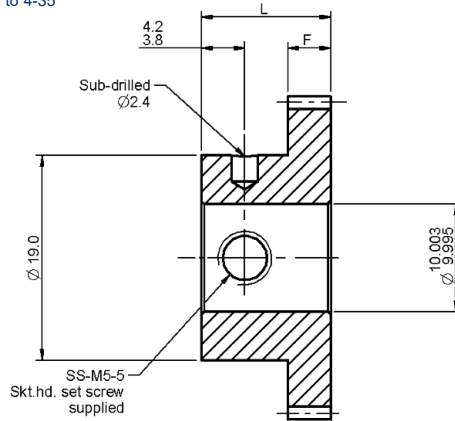
Anti-backlash gears: page 4-13 to 4-35

Shafts: page 11-2

Bearings: page 12-1

Pins: page 13-18

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



When $F=4, L=12$
 $F=6, L=14$

Part number selection table

Example Part No:- <u>P06S1B10</u> <u>F4A-</u> <u>75</u>					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	P150S1B10	P150A1B10	F4A- (4 mm)	17	72
1.25	P125S1B10	P125A1B10		19	86
1.0	P10S1B10	P10A1B10		22	109
0.8	P08S1B10	P08A1B10		27	136
0.6	P06S1B10	P06A1B10		34	183
0.5	P05S1B10	P05A1B10		40	220
0.4	P04S1B10	P04A1B10	F6A- (6 mm)	50	275
0.3	P03S1B10	P03A1B10		65	368
0.25	P025S1B10	P025A1B10		77	442
0.2	P02S1B10	P02A1B10		95	553

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

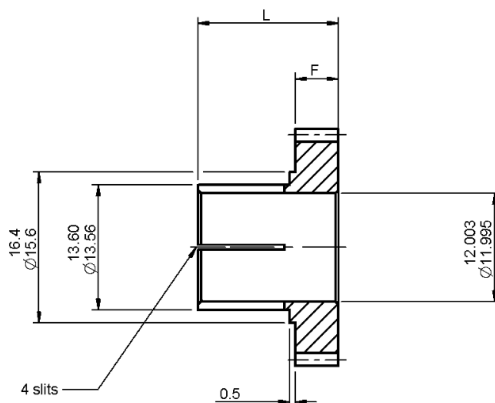
- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-34
Shafts: page 11-2
Bearings: page 12-1
Gear clamps: page 11-4

When $F=6$, $L=15$
 $F=10$, $L=19$



Part number selection table

Example Part No:- <u>C06S1B12</u> <u>F6A-</u> <u>75</u>					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	C150S1B12	C150A1B12	F6A- (6mm)	18	72
1.25	C125S1B12	C125A1B12		20	86
1.0	C10S1B12	C10A1B12		22	109
0.8	C08S1B12	C08A1B12		25	136
0.6	C06S1B12	C06A1B12		30	183
0.5	C05S1B12	C05A1B12	F10A- (10 mm)	34	220
0.4	C04S1B12	C04A1B12		40	275
0.3	C03S1B12	C03A1B12		50	368
0.25	C025S1B12	C025A1B12		58	442
0.2	C02S1B12	C02A1B12		70	553

Alternative materials - replace **S1** in the part number with **B2** for brass

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

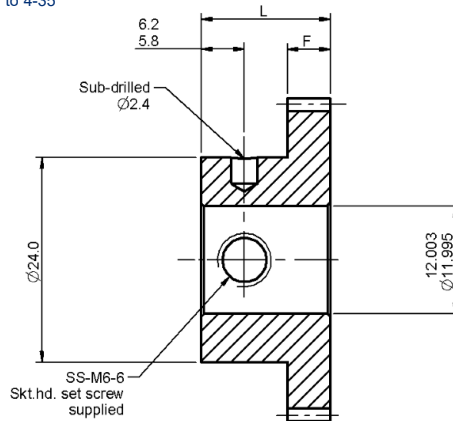
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-13 to 4-35
 Shafts: page 11-2
 Bearings: page 12-1
 Pins: page 13-18

All dimensions in mm
 General tolerances ± 0.13 mm
 Pressure angle 20°



When $F=8, L=20$
 $F=12, L=24$

Part number selection table

Example Part No:- P06S1B12 F8A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	P150S1B12	P150A1B12	F8A- (8 mm)	19	72
1.25	P125S1B12	P125A1B12		22	86
1.0	P10S1B12	P10A1B12		26	109
0.8	P08S1B12	P08A1B12		32	136
0.6	P06S1B12	P06A1B12		41	183
0.5	P05S1B12	P05A1B12	F12A- (12 mm)	48	220
0.4	P04S1B12	P04A1B12		59	275
0.3	P03S1B12	P03A1B12		77	368
0.25	P025S1B12	P025A1B12		92	442
0.2	P02S1B12	P02A1B12		113	553

Alternative materials - replace **S1** in the part number with **B2** for brass, or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us

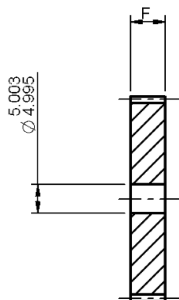


5 mm Bore

Hubless Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: [page 4-7 to 4-35](#)
Shafts: [page 11-2](#)



Note
Delrin gear bore
 $\varnothing 5.02/4.97$

Part number selection table

Example Part No:- F06S1B5 F3A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	F150S1B5	F150A1B5	F3A- (3 mm)	14 †	72
1.25	F125S1B5	F125A1B5		14 †	86
1.0	F10S1B5	F10A1B5		15 †	109
0.8	F08S1B5	F08A1B5		17	136
0.6	F06S1B5	F06A1B5		19	183
0.5	F05S1B5	F05A1B5	or	20	220
0.4	F04S1B5	F04A1B5	F6A- (6 mm)	23	275
0.3	F03S1B5	F03A1B5		27	368
0.25	F025S1B5	F025A1B5		30	442
0.2	F02S1B5	F02A1B5		35	553

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Alternative materials - replace **S1** in the part number with **B2** for brass, **D1** for Delrin or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

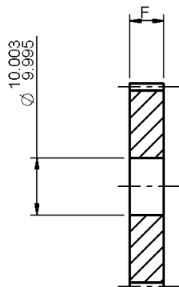
Anti-backlash gears: page 4-7 to 4-35

Shafts: page 11-2

All dimensions in mm

General tolerances ± 0.13 mm

Pressure angle 20°



Note
Delrin gear bore
 $\varnothing 10.02/9.97$

Part number selection table

Example Part No:- F06S1B10 F6A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	F150S1B10	F150A1B10	F3A- (3 mm)	17	72
1.25	F125S1B10	F125A1B10		18	86
1.0	F10S1B10	F10A1B10		20	109
0.8	F08S1B10	F08A1B10		23	136
0.6	F06S1B10	F06A1B10	F6A- (6 mm)	27	183
0.5	F05S1B10	F05A1B10		30	220
0.4	F04S1B10	F04A1B10		35	275
0.3	F03S1B10	F03A1B10		44	368
0.25	F025S1B10	F025A1B10		50	442
0.2	F02S1B10	F02A1B10		60	553

Alternative materials - replace **S1** in the part number with **B2** for brass, **D1** for Delrin or **S8** for hardened stainless steel

Precision
Gears

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

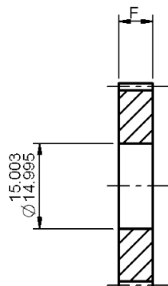
? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°

Associated Products
Anti-backlash gears: page 4-7 to 4-35



Note
Delrin gear bore
 $\varnothing 15.02/14.97$

Part number selection table

Example Part No:- F06S1B15 F3A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	F150S1B15	F150A1B15	F3A- (3 mm)	20	72
1.25	F125S1B15	F125A1B15		22	86
1.0	F10S1B15	F10A1B15		25	109
0.8	F08S1B15	F08A1B15		29	136
0.6	F06S1B15	F06A1B15		35	183
0.5	F05S1B15	F05A1B15	or	40	220
0.4	F04S1B15	F04A1B15	F6A- (6 mm)	48	275
0.3	F03S1B15	F03A1B15		60	368
0.25	F025S1B15	F025A1B15		70	442
0.2	F02S1B15	F02A1B15		85	553

Alternative materials - replace **S1** in the part number with **B2** for brass, **D1** for Delrin or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

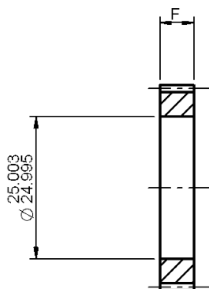
- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

Anti-backlash gears: page 4-7 to 4-35

All dimensions in mm
General tolerances ± 0.13 mm
Pressure angle 20°



Note
Delrin gear bore
 $\varnothing 25.02/24.97$

Part number selection table

Example Part No:- F06S1B25 F6A- 75					
Standard Modules	Basic Part Number Standard Materials #		Face Width	Number of Teeth	
	Stainless Steel	Aluminium Alloy	Dim F	Min	Max
1.5	F150S1B25	F150A1B25	F3A- (3 mm)	27	72
1.25	F125S1B25	F125A1B25		30	86
1.0	F10S1B25	F10A1B25	or F6A- (6 mm)	35	109
0.8	F08S1B25	F08A1B25		42	136
0.6	F06S1B25	F06A1B25		52	183
0.5	F05S1B25	F05A1B25		60	220
0.4	F04S1B25	F04A1B25		73	275
0.3	F03S1B25	F03A1B25		94	368
0.25	F025S1B25	F025A1B25		110	442
0.2	F02S1B25	F02A1B25		135	553

Alternative materials - replace **S1** in the part number with **B2** for brass, **D1** for Delrin or **S8** for hardened stainless steel

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

? Technical support

- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us

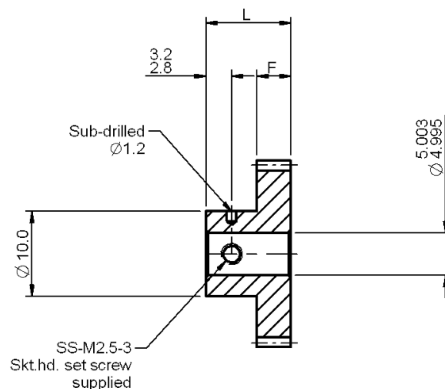


5 mm Bore

Hardened Spur Gears

All dimensions in mm
General tolerances ± 0.13 mm
Material: Stainless steel 17-4 PH,
hardened to 35-42 HRC
Pressure angle 20°

When $F=2, L=8$
 $F=4, L=10$



Associated Products

Pin hub spur gears: [page 4-37 to 4-51](#)
Shafts: [page 11-2](#)
Bearings: [page 12-1](#)
Pins: [page 13-18](#)

Part number selection table

Example Part No:- P06S8B5 F2A- 25					
Standard Modules	Basic Part Number	Face Width	Number of Teeth		
			Min	Max	
				F2A	F4A
1.5	P150S8B5	F2A- (2 mm)	14 †	21	72
1.25	P125S8B5		14 †	25	86
1.0	P10S8B5		15 †	32	109
0.8	P08S8B5		17	41	136
0.6	P06S8B5		21	56	183
0.5	P05S8B5	F4A- (4 mm)	24	67	220
0.4	P04S8B5		29	85	275
0.3	P03S8B5		37	114	368
0.25	P025S8B5		43	137	442
0.2	P02S8B5		53	172	553

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Additional bore sizes 2 mm to 12 mm available
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

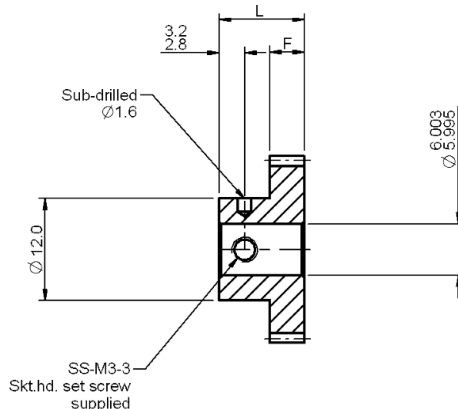
Pin hub spur gears: page 4-37 to 4-51

Shafts: page 11-2

Bearings: page 12-1

Pins: page 13-18

All dimensions in mm
General tolerances ± 0.13 mm
Material: Stainless steel 17-4 PH,
hardened to 35-42 HRc
Pressure angle 20°



When F=3, L=9
F=4, L=10
F=6, L=12

Part number selection table

Example Part No:- P06S8B6 F4A- 25				
Standard Modules	Basic Part Number	Face Width	Number of Teeth	
	Hardened Stainless Steel	Dim F	Min	Max
1.5	P150S8B6	F3A- (3 mm)	14 †	72
1.25	P125S8B6		15 †	86
1.0	P10S8B6		16 †	109
0.8	P08S8B6	or	19	136
0.6	P06S8B6	F4A- (4 mm)	23	183
0.5	P05S8B6		27	220
0.4	P04S8B6		33	275
0.3	P03S8B6	or	43	368
0.25	P025S8B6	F6A- (6 mm)	50	442
0.2	P02S8B6		62	553

† Gears of 16 teeth or fewer will be modified - see page T4-8

i Features and options

- Gear quality AQ10 as standard - see page T4-1
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see page T4-1
- Additional bore sizes 2 mm to 12 mm available
- Imperial gears available
- For all gear types and options - see page 4-6
- Product overview - see pages 4-2 to 4-6

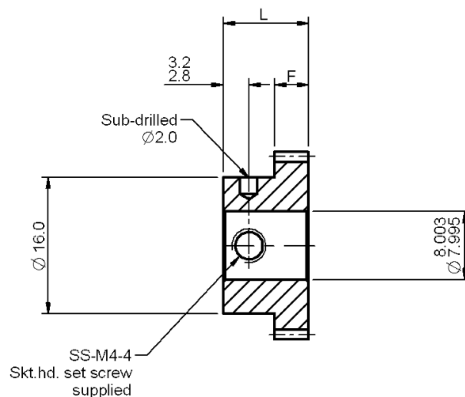
? Technical support

- Material specifications - see page T4-4
- Lubrication - see page T4-10
- Installation information - see page T4-9
- Treatment specifications - see page T4-4
- Technical information - see pages T4-1 to T4-18
- For modified or fully bespoke gear solutions, please contact us



All dimensions in mm
 General tolerances ± 0.13 mm
 Material: Stainless steel 17-4 PH,
 hardened to 35-42 HRC
 Pressure angle 20°

When $F=4, L=10$
 $F=6, L=12$

**Associated Products**

Pin hub spur gears: [page 4-37 to 4-51](#)
 Shafts: [page 11-2](#)
 Bearings: [page 12-1](#)
 Pins: [page 13-18](#)

Part number selection table

Example Part No:- P06S8B8 F4A- 50				
Standard Modules	Basic Part Number	Face Width	Number of Teeth	
	Hardened Stainless Steel	Dim F	Min	Max
1.5	P150S8B8	F4A- (4 mm)	16 †	72
1.25	P125S8B8		17	86
1.0	P10S8B8		20	109
0.8	P08S8B8		24	136
0.6	P06S8B8		30	183
0.5	P05S8B8	or F6A- (6 mm)	35	220
0.4	P04S8B8		43	275
0.3	P03S8B8		56	368
0.25	P025S8B8		66	442
0.2	P02S8B8		82	553

† Gears of 16 teeth or fewer will be modified - see [page T4-8](#)

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Additional bore sizes 2 mm to 12 mm available
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



Associated Products

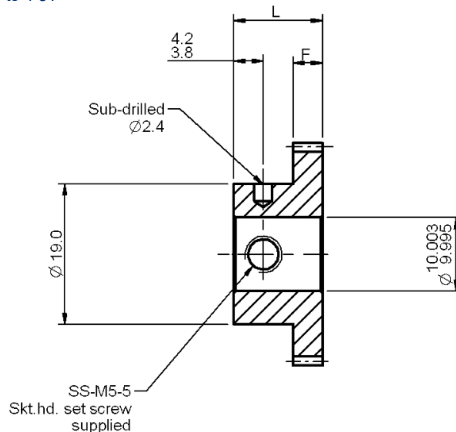
Pin hub spur gears: page 4-37 to 4-51

Shafts: page 11-2

Bearings: page 12-1

Pins: page 13-18

All dimensions in mm
General tolerances ± 0.13 mm
Material: Stainless steel 17-4 PH,
hardened to 35-42 HRc
Pressure angle 20°



When $F=4$, $L=12$
 $F=6$, $L=14$

Part number selection table

Example Part No:- P06S8B10 F4A- 65				
Standard Modules	Basic Part Number	Face Width	Number of Teeth	
	Hardened Stainless Steel	Dim F	Min	Max
1.5	P150S8B10	F4A- (4 mm)	17	72
1.25	P125S8B10		19	86
1.0	P10S8B10		22	109
0.8	P08S8B10		27	136
0.6	P06S8B10		34	183
0.5	P05S8B10	or	40	220
0.4	P04S8B10	F6A- (6 mm)	50	275
0.3	P03S8B10		65	368
0.25	P025S8B10		77	442
0.2	P02S8B10		95	553

Precision Gears

i Features and options

- Gear quality AQ10 as standard - see [page T4-1](#)
- Gear quality AQ9 for 1.5 mod
- Higher gear qualities available - see [page T4-1](#)
- Additional bore sizes 2 mm to 12 mm available
- Imperial gears available
- For all gear types and options - see [page 4-6](#)
- Product overview - see [pages 4-2 to 4-6](#)

? Technical support

- Material specifications - see [page T4-4](#)
- Lubrication - see [page T4-10](#)
- Installation information - see [page T4-9](#)
- Treatment specifications - see [page T4-4](#)
- Technical information - see [pages T4-1 to T4-18](#)
- For modified or fully bespoke gear solutions, please contact us



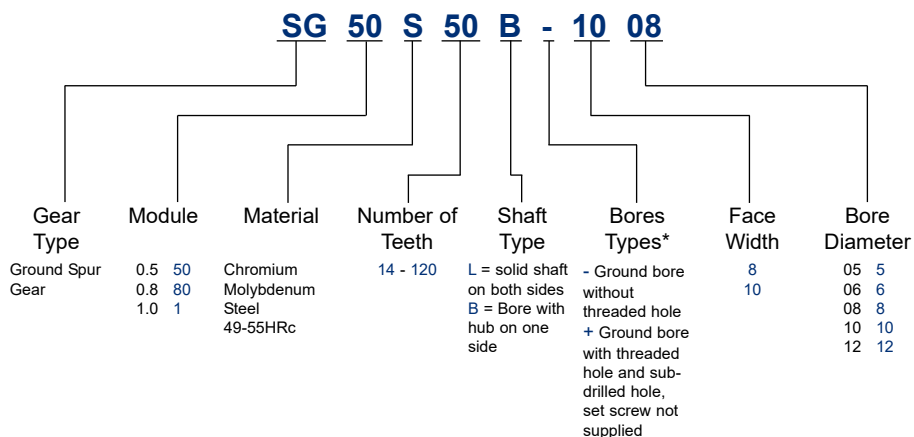
Ground spur gears

Ground spur gears are ideal for high speed mechatronic applications where higher loads and accurate motion are required.

- Modules 0.5 to 1.0 available.
- Manufactured from chromium molybdenum steel, hardened to 49-55HRC.
- Standard gear quality: ISO 5
- Bore diameter, outside diameter and other surfaces are ground to provide location datums when additional machining is required. Additional machining of the bore is not recommended.
- Keyway features available - see [page 4-69](#)



Part number structure

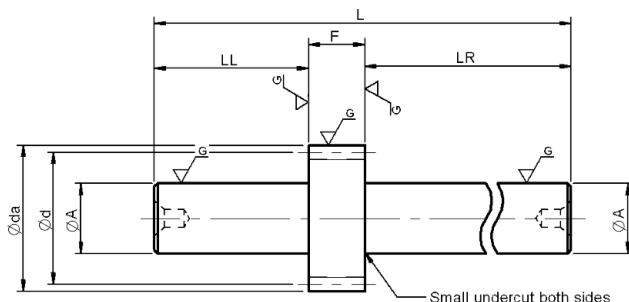


* See bore type designator in part number, - or +



Associated Products
Bearings: page 12-1

All dimensions in mm
Pressure angle 20°



Part number selection table

Part Number	Module	Number of Teeth	PCD Ød	OD Øda	Face Width F	Shaft Dia (h7) ØA	Shaft Length LL	Shaft Length LR	Overall Length L
SG50S20L-0806	0.5	20	10.0	11.0	8	6	22	50	80
SG50S22L-0808		22	11.0	12.0		8			
SG50S24L-0810		24	12.0	13.0		10			
SG50S25L-0810		25	12.5	13.5		10			
SG50S26L-0810		26	13.0	14.0		10			
SG80S15L-0806	0.8	15	12.0	13.6	8	6	22	60	90
SG80S16L-0806		16	12.8	14.4		6			
SG80S18L-0808		18	14.4	16.0		8			
SG80S20L-0810		20	16.0	17.6		10			
SG80S24L-0810		24	19.2	20.8		10			
SG80S25L-0810		25	20.0	21.6		10			
SG1S14L-1008	1.0	14	14.0	16.0	10	8	25	60	95
SG1S15L-1010		15	15.0	17.0		10			
SG1S16L-1010		16	16.0	18.0		10			
SG1S18L-1010		18	18.0	20.0		10			

i Features

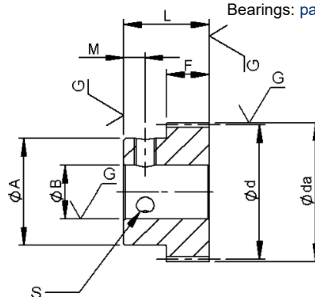
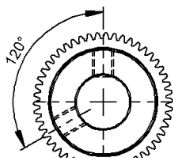
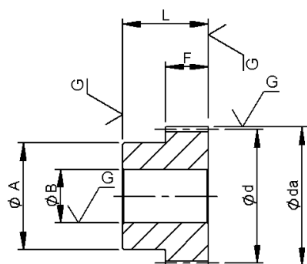
- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRc
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{1.6}$

? Technical support

- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



All dimensions in mm
Pressure angle 20°

Associated ProductsSet screws: [page 13-1](#)Shafts: [page 11-2](#)Bearings: [page 12-1](#)

- in part number denotes no threaded hole

* in part number denotes two threaded holes (set screws not supplied)

Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H7) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
SG50S28B-0805	28	14.0	15.0	5	10	8	16	-	-
SG50S30B-0805	30	15.0	16.0	5	12			-	-
SG50S30B-0806	30	15.0	16.0	6	12			-	-
SG50S30B*0806	30	15.0	16.0	6	12			M3	4
SG50S32B-0805	32	16.0	17.0	5	12			-	-
SG50S32B-0806	32	16.0	17.0	6	12			-	-
SG50S35B-0805	35	17.5	18.5	5	14			-	-
SG50S36B-0806	36	18.0	19.0	6	16			-	-
SG50S36B-0808	36	18.0	19.0	8	16			-	-
SG50S40B-0806	40	20.0	21.0	6	16			-	-
SG50S40B-0808	40	20.0	21.0	8	16			-	-
SG50S40B*0808	40	20.0	21.0	8	16			M4	4
SG50S45B-0808	45	22.5	23.5	8	16			-	-
SG50S48B-0808	48	24.0	25.0	8	20			-	-
SG50S50B-0808	50	25.0	26.0	8	20			-	-
SG50S50B-0810	50	25.0	26.0	10	20			-	-
SG50S50B*0810	50	25.0	26.0	10	20			M4	4
SG50S54B-0808	54	27.0	28.0	8	20			-	-
SG50S55B-0808	55	27.5	28.5	8	20			-	-

i Features

- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRC
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{1.6}$
- Keyway features available - see [page 4-69](#)

? Technical support

- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



Associated Products

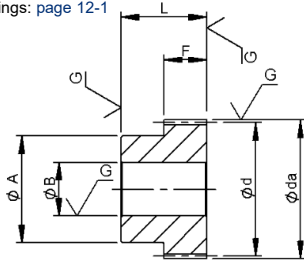
Set screws: [page 13-1](#)

Shafts: [page 11-2](#)

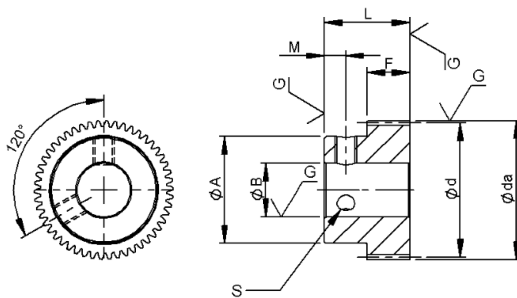
Bearings: [page 12-1](#)

All dimensions in mm

Pressure angle 20°



- in part number denotes no threaded hole



* in part number denotes two threaded holes (set screws not supplied)

Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H7) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
SG50S56B-0808	56	28.0	29.0	8	20	8	16	-	-
SG50S60B-0808	60	30.0	31.0	8	22			-	-
SG50S60B-0810	60	30.0	31.0	10	22			-	-
SG50S60B*0810	60	30.0	31.0	10	22			M4	4
SG50S64B-0808	64	32.0	33.0	8	22			-	-
SG50S70B-0808	70	35.0	36.0	8	22			-	-
SG50S72B-0808	72	36.0	37.0	8	25			-	-
SG50S75B-0808	75	37.5	38.5	8	25			-	-
SG50S80B-0808	80	40.0	41.0	8	25			-	-
SG50S80B-0810	80	40.0	41.0	10	25			-	-
SG50S80B-0812	80	40.0	41.0	12	25			-	-
SG50S80B*0812	80	40.0	41.0	12	25			M5	4
SG50S90B-0810	90	45.0	46.0	10	30			-	-
SG50S96B-0810	96	48.0	49.0	10	30			-	-
SG50S100B-0810	100	50.0	51.0	10	30			-	-
SG50S100B-0812	100	50.0	51.0	12	30			-	-
SG50S100B*0812	100	50.0	51.0	12	30			M5	4
SG50S108B-0810	108	54.0	55.0	10	35			-	-
SG50S112B-0810	112	56.0	57.0	10	35			-	-
SG50S120B-0810	120	60.0	61.0	10	35			-	-

Features

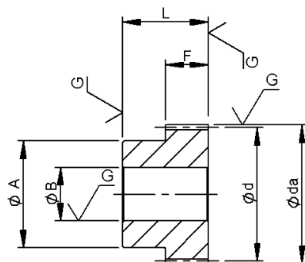
- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRC
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{1.6}$
- Keyway features available - see [page 4-69](#)

Technical support

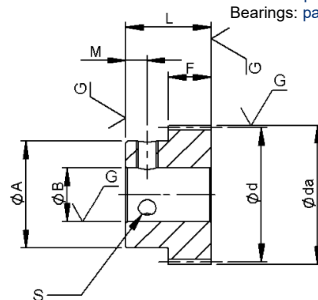
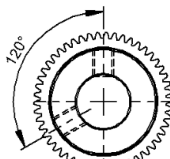
- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



All dimensions in mm
Pressure angle 20°

Associated ProductsSet screws: [page 13-1](#)Shafts: [page 11-2](#)Bearings: [page 12-1](#)

- in part number denotes no threaded hole



* in part number denotes two threaded holes (set screws not supplied)

Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H7) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
SG80S22B-0806	22	17.6	19.2	6	14	8	18	-	-
SG80S24B-0806	24	19.2	20.8	6	16			-	-
SG80S25B-0806	25	20.0	21.6	6	16			-	-
SG80S28B-0808	28	22.4	24.0	8	18			-	-
SG80S30B-0810	30	24.0	25.6	10	20			-	-
SG80S30B*0810	30	24.0	25.6	10	20			M4	5
SG80S32B-0810	32	25.6	27.2	10	20			-	-
SG80S35B-0810	35	28.0	29.6	10	20			-	-
SG80S36B-0810	36	28.8	30.4	10	20			-	-
SG80S40B-0810	40	32.0	33.6	10	25			-	-
SG80S40B*0812	40	32.0	33.6	12	25			M5	5
SG80S45B-0810	45	36.0	37.6	10	25			-	-
SG80S48B-0810	48	38.4	40.0	10	25			-	-
SG80S50B-0810	50	40.0	41.6	10	25			-	-
SG80S50B*0812	50	40.0	41.6	12	25			M5	5
SG80S54B-0810	54	43.2	44.8	10	25			-	-
SG80S55B-0810	55	44.0	45.6	10	25			-	-

i Features

- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRc
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{R}$
- Keyway features available - see [page 4-69](#)

? Technical support

- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



Associated Products

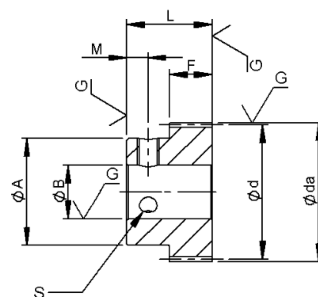
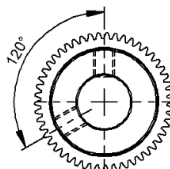
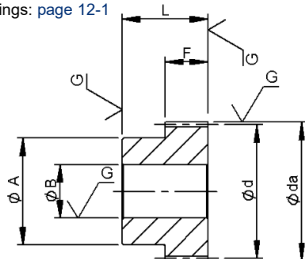
Set screws: [page 13-1](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

All dimensions in mm

Pressure angle 20°



- in part number denotes no threaded hole

* in part number denotes two threaded holes (set screws not supplied)

Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H7) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
SG80S56B-0810	56	44.8	46.4	10	25	8	18	-	-
SG80S60B-0810	60	48.0	49.6	10	25			-	-
SG80S60B*-0812	60	48.0	49.6	12	25			M5	5
SG80S64B-0812	64	51.2	52.8	12	30			-	-
SG80S70B-0812	70	56.0	57.6	12	30			-	-
SG80S72B-0812	72	57.6	59.2	12	30			-	-
SG80S75B-0812	75	60.0	61.6	12	30			-	-
SG80S80B-0812	80	64.0	65.6	12	30			-	-
SG80S90B-0812	90	72.0	73.6	12	35			-	-
SG80S96B-0812	96	76.8	78.4	12	35			-	-
SG80S100B-0812	100	80.0	81.6	12	35			-	-
SG80S108B-0812	108	86.4	88.0	12	40			-	-
SG80S112B-0812	112	89.6	91.2	12	40			-	-
SG80S120B-0812	120	96.0	97.6	12	40			-	-

Features

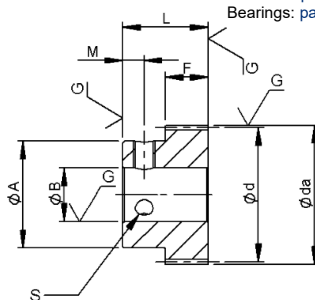
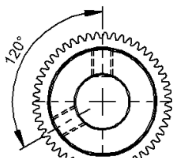
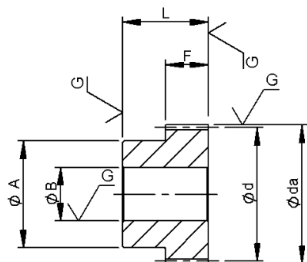
- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRC
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{0.4}$
- Keyway features available - see [page 4-69](#)

Technical support

- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



All dimensions in mm
Pressure angle 20°

Associated ProductsSet screws: [page 13-1](#)Shafts: [page 11-2](#)Bearings: [page 12-1](#)

- in part number denotes no threaded hole

* in part number denotes two threaded holes (set screws not supplied)

Part number selection table

Part Number	Number of Teeth	PCD	OD	Bore Dia (H7)	Hub Dia	Face Width	Overall Length	Set Screw	
								S	M
SG1S17B-1006	17	17.0	19.0	6	12	10	20	-	-
SG1S18B-1008	18	18.0	20.0	8	15			-	-
SG1S20B-1008	20	20.0	22.0	8	16			-	-
SG1S20B*1008	20	20.0	22.0	8	16			M4	5
SG1S20B*1010	20	20.0	22.0	10	16			M4	5
SG1S21B-1008	21	21.0	23.0	8	16			-	-
SG1S22B-1008	22	22.0	24.0	8	18			-	-
SG1S23B-1008	23	23.0	25.0	8	18			-	-
SG1S24B-1008	24	24.0	26.0	8	20			-	-
SG1S24B*1008	24	24.0	26.0	8	20			M4	5
SG1S24B*1010	24	24.0	26.0	10	20			M4	5
SG1S25B-1008	25	25.0	27.0	8	20			-	-
SG1S26B-1008	26	26.0	28.0	8	20			-	-
SG1S27B-1008	27	27.0	29.0	8	20			-	-
SG1S28B-1008	28	28.0	30.0	8	20			-	-
SG1S30B-1010	30	30.0	32.0	10	26			-	-
SG1S30B*1010	30	30.0	32.0	10	26			M4	5

i Features

- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRc
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{R_a}$
- Keyway features available - see [page 4-69](#)

? Technical support

- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



Associated Products

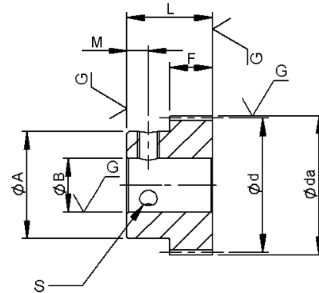
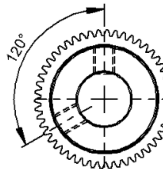
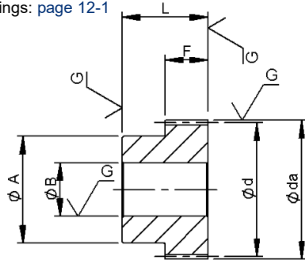
Set screws: [page 13-1](#)

Shafts: [page 11-2](#)

Bearings: [page 12-1](#)

All dimensions in mm

Pressure angle 20°



- in part number denotes no threaded hole

* in part number denotes two threaded holes (set screws not supplied)

Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H7) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
SG1S30B*1012	30	30.0	32.0	12	26	10	20	M4	5
SG1S32B-1010	32	32.0	34.0	10	26			-	-
SG1S34B-1010	34	34.0	36.0	10	26			-	-
SG1S35B-1010	35	35.0	37.0	10	26			-	-
SG1S36B-1010	36	36.0	38.0	10	26			-	-
SG1S38B-1010	38	38.0	40.0	10	26			-	-
SG1S40B-1010	40	40.0	42.0	10	26			-	-
SG1S40B-1012	40	40.0	42.0	12	26			-	-
SG1S42B-1010	42	42.0	44.0	10	35			-	-
SG1S44B-1010	44	44.0	46.0	10	35			-	-
SG1S45B-1012	45	45.0	47.0	12	35			-	-
SG1S48B-1012	48	48.0	50.0	12	35			-	-
SG1S50B-1012	50	50.0	52.0	12	35			-	-

Precision Gears

Features

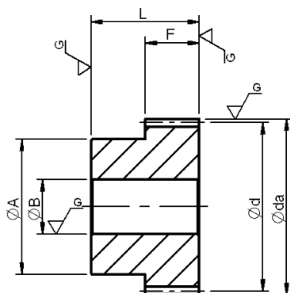
- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRc
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{R}$
- Keyway features available - see [page 4-69](#)

Technical support

- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



All dimensions in mm
Pressure angle 20°

Associated ProductsSet screws: [page 13-1](#)Shafts: [page 11-2](#)Bearings: [page 12-1](#)

- in part number denotes no threaded hole

Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H7) ØB	Hub Dia ØA	Face Width F	Overall Length L
SG1S52B-1012	52	52.0	54.0	12	35	10	20
SG1S54B-1012	54	54.0	56.0		35		
SG1S55B-1012	55	55.0	57.0		35		
SG1S56B-1012	56	56.0	58.0		35		
SG1S60B-1012	60	60.0	62.0		40		
SG1S64B-1012	64	64.0	66.0		40		
SG1S70B-1012	70	70.0	72.0		40		
SG1S72B-1012	72	72.0	74.0		45		
SG1S75B-1012	75	75.0	77.0		45		
SG1S80B-1012	80	80.0	82.0		45		
SG1S100B-1012	100	100.0	102.0		50		

i Features

- Material: Chromium molybdenum steel (ISO 34CrMo4, 42CrMo4)
- Gear tooth treatment: Induction hardened to 49-55 HRc
- Gear quality: ISO 5
- Gear tooth surface finish $\sqrt{R_a}$
- Keyway features available - see [page 4-69](#)

? Technical support

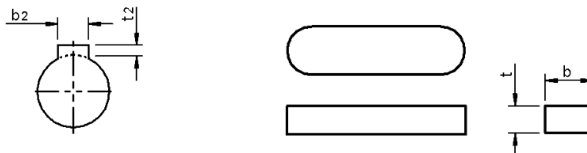
- For transmission capacity - see [page T4-17](#)
- Part number structure - see [page 4-60](#)
- For modified or fully bespoke gears, please contact us



Associated Products

Ground pin hub spur gears: page 4-62

All dimensions in mm



Tolerances for key

b x t	3 x 3	4 x 4
b Tolerance (h)	h9	h9
t Tolerance (h)	h9	h9

Keyway information

Bore Dia Ø	Keyway b ₂ x t ₂	Width		Depth	
		b ₂	Tolerance Js 9	t ₂	Tolerance
8	3 x 1.4	3	±0.0125	1.4	+0.1 -0
10					
12	4 x 1.8	4	±0.015	1.8	

Features

- The keyways above are available as options, add **-K** to the end of the part number
- Additional custom keyways are available, please contact us



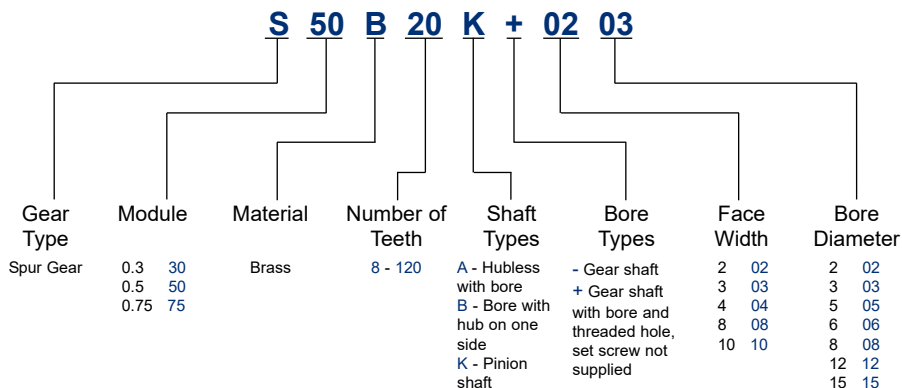
Brass gears

Brass gears are ideal for lightly loaded applications, an economic balance of accuracy and load capacity against cost.

- Modules 0.3 to 0.75 available
- Manufactured from brass (ISO CuZn38Pb2, CuZn39Pb3)
- Standard gear quality: ISO 9 - 10



Part number structure



Additional brass gears are available in the precision gear range - see [page 4-6](#)



Associated Products

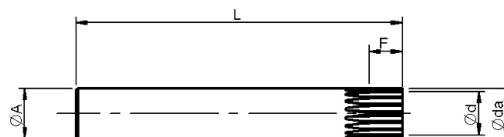
Set screws: page 13-1

Shafts: page 11-2

Bearings: page 12-1

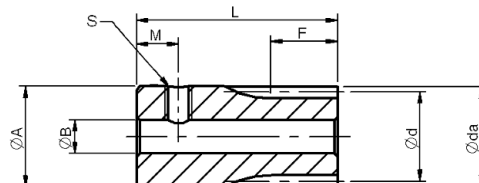
All dimensions in mm
Pressure angle 20°

Shaft Pinion



- in part number denotes shaft pinion type

Pinion



Part number selection table

set screw not supplied

Part Number	Module	Number of Teeth	PCD	OD	Bore Dia (H8)	Hub Dia	Face Width	Overall Length	Set Screw	
									S	M
S30B14K+0402	0.3	14	4.2	4.8	2	5.0	4	12	M1.6	2.5
S30B15K+0402		15	4.5	5.1		5.5		12	M1.6	2.5
S30B16K+0402		16	4.8	5.4		5.5		12	M1.6	2.5
S30B18K+0402		18	5.4	6.0		6.0		12	M2	2.5
S50B10K-1006	0.5	10	5.0	6.0	-	6.0	10	55	-	-
S50B12K-1007		12	6.0	7.0	-	7.0	10	55	-	-
S50B14K-1008		14	7.0	8.0	-	8.0	10	55	-	-
S50B15K+0803		15	7.5	8.5	3	9.0	8	18	M3	3.0
S50B16K+0803		16	8.0	9.0	3	9.0	8	18	M3	3.0
S50B18K+0803		18	9.0	10.0	3	10.0	8	18	M3	3.0
S50B20K+0803		20	10.0	11.0	3	11.0	8	18	M3	3.0
S75B10K-0809	0.75	10	7.5	9.0	-	9.0	8	55	-	-
S75B12K-0811		12	9.0	10.5	-	11.0		55	-	-
S75B14K+0805		14	10.5	12.0	5	12.0		20	M3	3.0
S75B15K+0805		15	11.25	12.75	5	12.75		20	M3	3.0
S75B16K+0805		16	12.0	13.5	5	13.5		20	M3	3.0
S75B18K+0805		18	13.5	15.0	5	15.0		20	M3	3.0
S75B20K+0805		20	15.0	16.5	5	16.5		20	M3	3.0

i Features

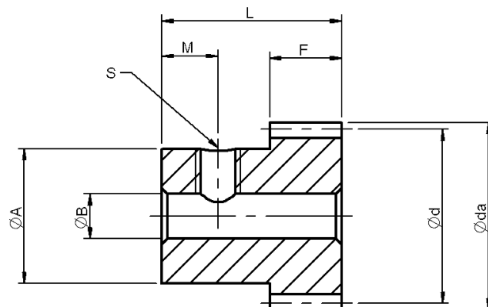
- Material: Brass (ISO CuZn39Pb3)
- Gear quality: ISO 9 - 10

? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



All dimensions in mm
Pressure angle 20°

Associated ProductsSet screws: [page 13-1](#)Shafts: [page 11-2](#)Bearings: [page 12-1](#)**Part number selection table**

set screw not supplied

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H8) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
S30B20B+0302	20	6.0	6.6	2	5	3.2	8	M1.6	2.5
S30B24B+0302	24	7.2	7.8	2	6	3.2		M2	2.5
S30B25B+0302	25	7.5	8.1	2	6	3.2		M2	2.5
S30B28B+0302	28	8.4	9.0	2	7	3.2		M2	2.5
S30B30B+0302	30	9.0	9.6	2	8	3.2		M2	2.5
S30B32B+0202	32	9.6	10.2	2	8	2.0		M2	3.0
S30B35B+0202	35	10.5	11.1	2	8	2.0		M2	3.0
S30B36B+0203	36	10.8	11.4	3	9	2.0		M3	3.0
S30B40B+0203	40	12.0	12.6	3	10	2.0		M3	3.0
S30B45B+0203	45	13.5	14.1	3	10	2.0		M3	3.0
S30B48B+0203	48	14.4	15.0	3	10	2.0		M3	3.0

i Features

- Material: Brass (ISO CuZn39Pb3)
- Gear quality: ISO 9 - 10

? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



Associated Products

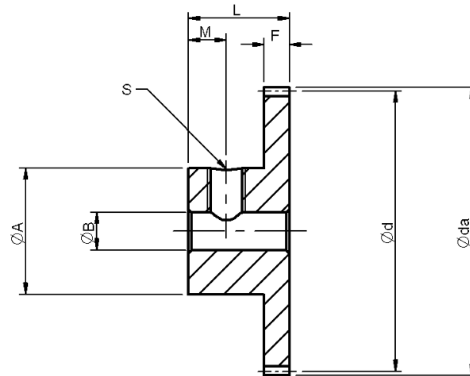
Set screws: page 13-1

Shafts: page 11-2

Bearings: page 12-1

All dimensions in mm

Pressure angle 20°



Part number selection table

set screw not supplied

Part Number	Number of Teeth	PCD Ød	OD Øda	Bore Dia (H8) ØB	Hub Dia ØA	Face Width F	Overall Length L	Set Screw	
								S	M
S30B50B+0203	50	15.0	15.6						
S30B56B+0203	56	16.8	17.4						
S30B60B+0203	60	18.0	18.6						
S30B64B+0203	64	19.2	19.8						
S30B66B+0203	66	19.8	20.4						
S30B70B+0203	70	21.0	21.6						
S30B72B+0203	72	21.6	22.2	3	10	2	8	M3	3
S30B75B+0203	75	22.5	23.1						
S30B80B+0203	80	24.0	24.6						
S30B90B+0203	90	27.0	27.6						
S30B96B+0203	96	28.8	29.4						
S30B100B+0203	100	30.0	30.6						
S30B108B+0203	108	32.4	33.0						

i Features

- Material: Brass (ISO CuZn39Pb3)
- Gear quality: ISO 9 - 10

? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



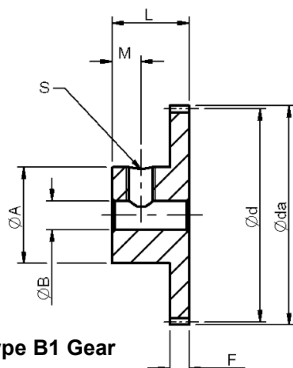
All dimensions in mm
Pressure angle 20°

Associated Products

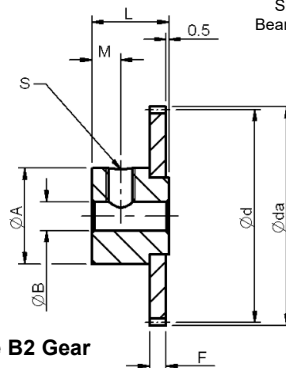
Set screws: page 13-1

Shafts: page 11-2

Bearings: page 12-1



Type B1 Gear



Type B2 Gear

Part number selection table

set screw not supplied

Part Number	Number of Teeth	Type	PCD $\varnothing d$	OD $\varnothing da$	Bore Dia (H8) $\varnothing B$	Hub Dia $\varnothing A$	Face Width F	Overall Length L	Set Screw	
									S	M
S50B20B+0303	20	B1	10.0	11.0	3	8.2	3	8	M3	2.5
S50B24B+0303	24	B1	12.0	13.0		10.0	3	8		
S50B25B+0303	25	B1	12.5	13.5		10.0	3	8		
S50B26B+0303	26	B1	13.0	14.0		10.0	3	8		
S50B28B+0303	28	B1	14.0	15.0		10.0	3	8		
S50B30B+0303	30	B1	15.0	16.0		10.0	3	8		
S50B32B+0303	32	B1	16.0	17.0		10.0	3	8		
S50B35B+0303	35	B1	17.5	18.5		10.0	3	8		
S50B36B+0303	36	B1	18.0	19.0		10.0	3	8		
S50B40B+0203	40	B2	20.0	21.0		10.0	2	7.5		
S50B42B+0203	42	B2	21.0	22.0		10.0	2	7.5		
S50B45B+0203	45	B2	22.5	23.5		10.0	2	7.5		
S50B48B+0203	48	B2	24.0	25.0		10.0	2	7.5		
S50B50B+0203	50	B2	25.0	26.0		10.0	2	7.5		
S50B55B+0203	55	B2	27.5	28.5		10.0	2	7.5		
S50B56B+0203	56	B2	28.0	29.0		10.0	2	7.5		
S50B58B+0203	58	B2	29.0	30.0		10.0	2	7.5		
S50B60B+0203	60	B2	30.0	31.0		10.0	2	7.5		

Type B2 gears have riveted hub

i Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



Associated Products

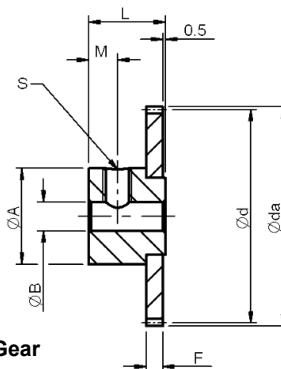
Set screws: page 13-1

Shafts: page 11-2

Bearings: page 12-1

All dimensions in mm

Pressure angle 20°



Type B2 Gear

Part number selection table

set screw not supplied

Part Number	Number of Teeth	Type	PCD	OD	Bore Dia (H8)	Hub Dia	Face Width	Overall Length	Set Screw	
									S	M
S50B62B+0203	62	B2	31.0	32.0	3	10.0	2	7.5	M3	2.5
S50B64B+0203	64	B2	32.0	33.0		10.0		7.5		2.5
S50B65B+0203	65	B2	32.5	33.5		10.0		7.5		2.5
S50B68B+0203	68	B2	34.0	35.0		10.0		7.5		2.5
S50B70B+0203	70	B2	35.0	36.0		10.0		7.5		2.5
S50B72B+0203	72	B2	36.0	37.0		10.0		7.5		2.5
S50B75B+0203	75	B2	37.5	38.5		10.0		7.5		2.5
S50B80B+0203	80	B2	40.0	41.0		10.0		7.5		2.5
S50B84B+0203	84	B2	42.0	43.0		10.0		7.5		2.5
S50B85B+0203	85	B2	42.5	43.5		10.0		7.5		2.5
S50B90B+0203	90	B2	45.0	46.0		10.0		7.5		2.5
S50B95B+0203	95	B2	47.5	48.5		10.0		7.5		2.5
S50B100B+0203	100	B2	50.0	51.0		15.0		9.5		3.5
S50B105B+0203	105	B2	52.5	53.5		15.0		9.5		3.5
S50B110B+0203	110	B2	55.0	56.0		15.0		9.5		3.5

Type B2 gears have riveted hub

Precision Gears

Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



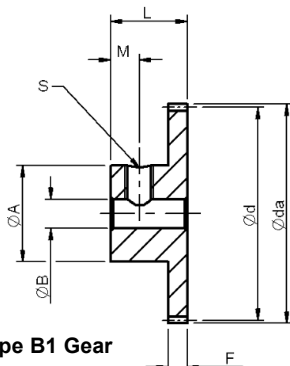
All dimensions in mm
Pressure angle 20°

Associated Products

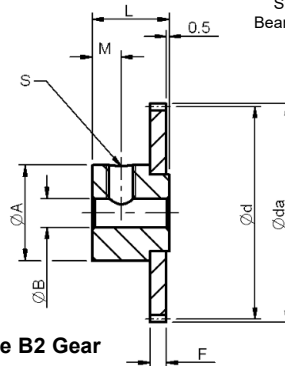
Set screws: page 13-1

Shafts: page 11-2

Bearings: page 12-1



Type B1 Gear



Type B2 Gear

Part number selection table

set screw not supplied

Part Number	Number of Teeth	Type	PCD	OD	Bore Dia (H8)	Hub Dia	Face Width	Overall Length	Set Screw	
									S	M
S75B16B+0305	16	B1	12.0	13.5	5	10.0	3	10.0	M3	3.5
S75B18B+0305	18	B1	13.5	15.0	5	11.0		10.0	M3	
S75B20B+0306	20	B1	15.0	16.5	6	12.0		10.0	M4	
S75B24B+0306	24	B1	18.0	19.5	6	14.0		10.0	M4	
S75B25B+0306	25	B1	18.75	20.25	6	14.0		10.0	M4	
S75B26B+0306	26	B1	19.5	21.0	6	14.0		10.0	M4	
S75B28B+0306	28	B1	21.0	22.5	6	14.0		10.0	M4	
S75B30B+0306	30	B1	22.5	24.0	6	15.0		10.0	M4	
S75B32B+0306	32	B1	24.0	25.5	6	15.0		10.0	M4	
S75B35B+0306	35	B1	26.25	27.75	6	18.0		10.0	M4	
S75B36B+0306	36	B1	27.0	28.5	6	18.0		10.0	M4	
S75B40B+0306	40	B1	30.0	31.5	6	20.0		10.0	M4	
S75B42B+0306	42	B1	31.5	33.0	6	20.0		10.0	M4	
S75B45B+0306	45	B1	33.75	35.25	6	20.0		10.0	M4	
S75B48B+0306	48	B1	36.0	37.5	6	20.0		10.0	M4	
S75B50B+0306	50	B2	37.5	39.0	6	20.0		10.5	M4	
S75B55B+0306	55	B2	41.25	42.75	6	20.0		10.5	M4	
S75B56B+0306	56	B2	42.0	43.5	6	20.0		10.5	M4	
S75B58B+0306	58	B2	43.5	45.0	6	20.0		10.5	M4	

Type B2 gears have riveted hub

i Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

? Technical support

- Allowable backlash - see page T4-17
- For modified or fully bespoke gears, please contact us
- Product overview - see page 4-70



Associated Products

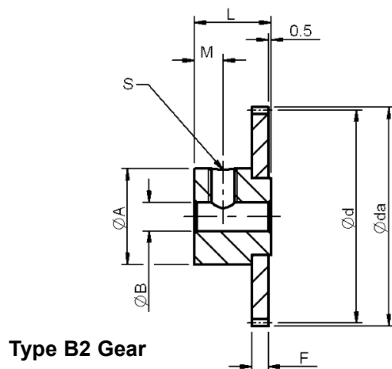
Set screws: page 13-1

Shafts: page 11-2

Bearings: page 12-1

All dimensions in mm

Pressure angle 20°



Type B2 Gear

Part number selection table

set screw not supplied

Part Number	Number of Teeth	Type	PCD	OD	Bore Dia (H8)	Hub Dia	Face Width	Overall Length	Set Screw	
									S	M
S75B60B+0306	60	B2	45.0	46.5	6	20.0	3	10.5	M4	3.5
S75B62B+0306	62	B2	46.5	48.0						
S75B64B+0306	64	B2	48.0	49.5						
S75B65B+0306	65	B2	48.75	50.25						
S75B66B+0306	66	B2	49.5	51.0						
S75B68B+0306	68	B2	51.0	52.5						
S75B70B+0306	70	B2	52.5	54.0						
S75B72B+0306	72	B2	54.0	55.5						
S75B75B+0306	75	B2	56.25	57.75						
S75B80B+0306	80	B2	60.0	61.5						
S75B85B+0306	85	B2	63.75	65.25						
S75B90B+0306	90	B2	67.5	69.0						
S75B95B+0306	95	B2	71.25	72.75						
S75B100B+0306	100	B2	75.0	76.5						
S75B105B+0306	105	B2	78.75	80.25						
S75B110B+0306	110	B2	82.5	84.0						
S75B115B+0306	115	B2	86.25	87.75						
S75B120B+0306	120	B2	90.0	91.5						

Type B2 gears have riveted hub

Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)

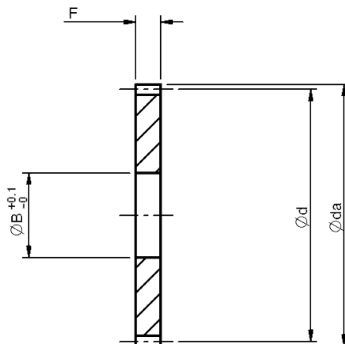


All dimensions in mm
Pressure angle 20°

Associated Products

Gears: [page 4-1](#)

Shafts: [page 11-2](#)



Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Face Width F	Bore Dia ØB
S50B40A-0208	40	20.0	21.0	2	8
S50B42A-0208	42	21.0	22.0		
S50B45A-0208	45	22.5	23.5		
S50B48A-0208	48	24.0	25.0		
S50B50A-0208	50	25.0	26.0		
S50B55A-0208	55	27.5	28.5		
S50B56A-0208	56	28.0	29.0		
S50B58A-0208	58	29.0	30.0		
S50B60A-0208	60	30.0	31.0		
S50B62A-0208	62	31.0	32.0		
S50B64A-0208	64	32.0	33.0		
S50B65A-0208	65	32.5	33.5		

i Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



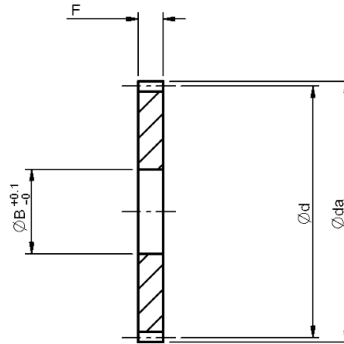
Associated Products

Gears: page 4-1

Shafts: page 11-2

All dimensions in mm

Pressure angle 20°



Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Face Width F	Bore Dia ØB
S50B68A-0208	68	34.0	35.0	2	8
S50B70A-0208	70	35.0	36.0		8
S50B72A-0208	72	36.0	37.0		8
S50B75A-0208	75	37.5	38.5		8
S50B80A-0208	80	40.0	41.0		8
S50B84A-0208	84	42.0	43.0		8
S50B85A-0208	85	42.5	43.5		8
S50B90A-0208	90	45.0	46.0		8
S50B95A-0208	95	47.5	48.5		8
S50B100A-0212	100	50.0	51.0		12
S50B105A-0212	105	52.5	53.5	2	12
S50B110A-0212	110	55.0	56.0		12

i Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

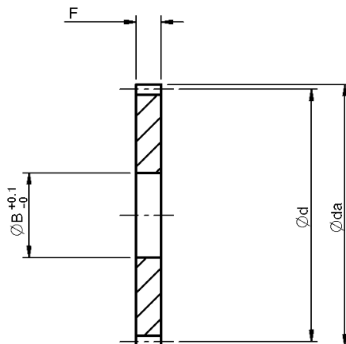
? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



All dimensions in mm
Pressure angle 20°

Associated Products
Gears: [page 4-1](#)



Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Face Width F	Bore Dia ØB
S75B50A-0315	50	37.5	39.0	3	15
S75B55A-0315	55	41.25	42.75		
S75B56A-0315	56	42.0	43.5		
S75B58A-0315	58	43.5	45.0		
S75B60A-0315	60	45.0	46.5		
S75B62A-0315	62	46.5	48.0		
S75B64A-0315	64	48.0	49.5		
S75B65A-0315	65	48.75	50.25		
S75B66A-0315	66	49.5	51.0		
S75B68A-0315	68	51.0	52.5		
S75B70A-0315	70	52.5	54.0		
S75B72A-0315	72	54.0	55.5		

i Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

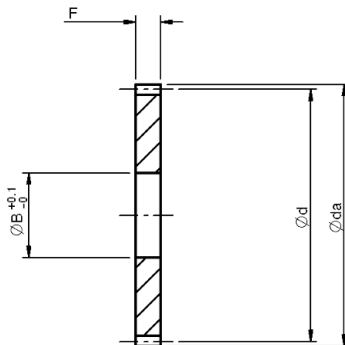
? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



Associated Products
Gears: page 4-1

All dimensions in mm
Pressure angle 20°



Part number selection table

Part Number	Number of Teeth	PCD Ød	OD Øda	Face Width F	Bore Dia ØB
S75B75A-0315	75	56.25	57.75	3	15
S75B80A-0315	80	60.0	61.5		
S75B85A-0315	85	63.75	65.25		
S75B90A-0315	90	67.5	69.0		
S75B95A-0315	95	71.25	72.75		
S75B100A-0315	100	75.0	76.5		
S75B105A-0315	105	78.75	80.25		
S75B110A-0315	110	82.5	84.0		
S75B115A-0315	115	86.25	87.75		
S75B120A-0315	120	90.0	91.5		

i Features

- Material: Brass (ISO CuZn38Pb2, CuZn39Pb3)
- Gear quality: ISO 9 - 10

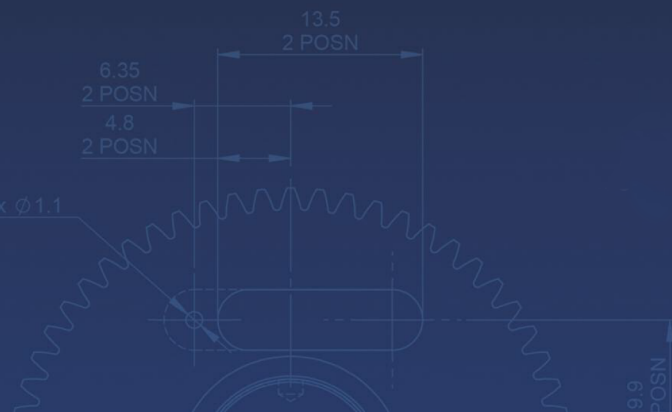
? Technical support

- Allowable backlash - see [page T4-17](#)
- For modified or fully bespoke gears, please contact us
- Product overview - see [page 4-70](#)



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