

MTB components

Rear derailleur

1. Direct mount dropout dimensions

Note1:

Horizontal Line D goes thru BB center and FH center.

Note2:

The drawings are for Rigid frame, but in case of rear suspension type, Line D should be determined by riding height such as 1G sag. Line D needs to go thru BB center and FH center, also.

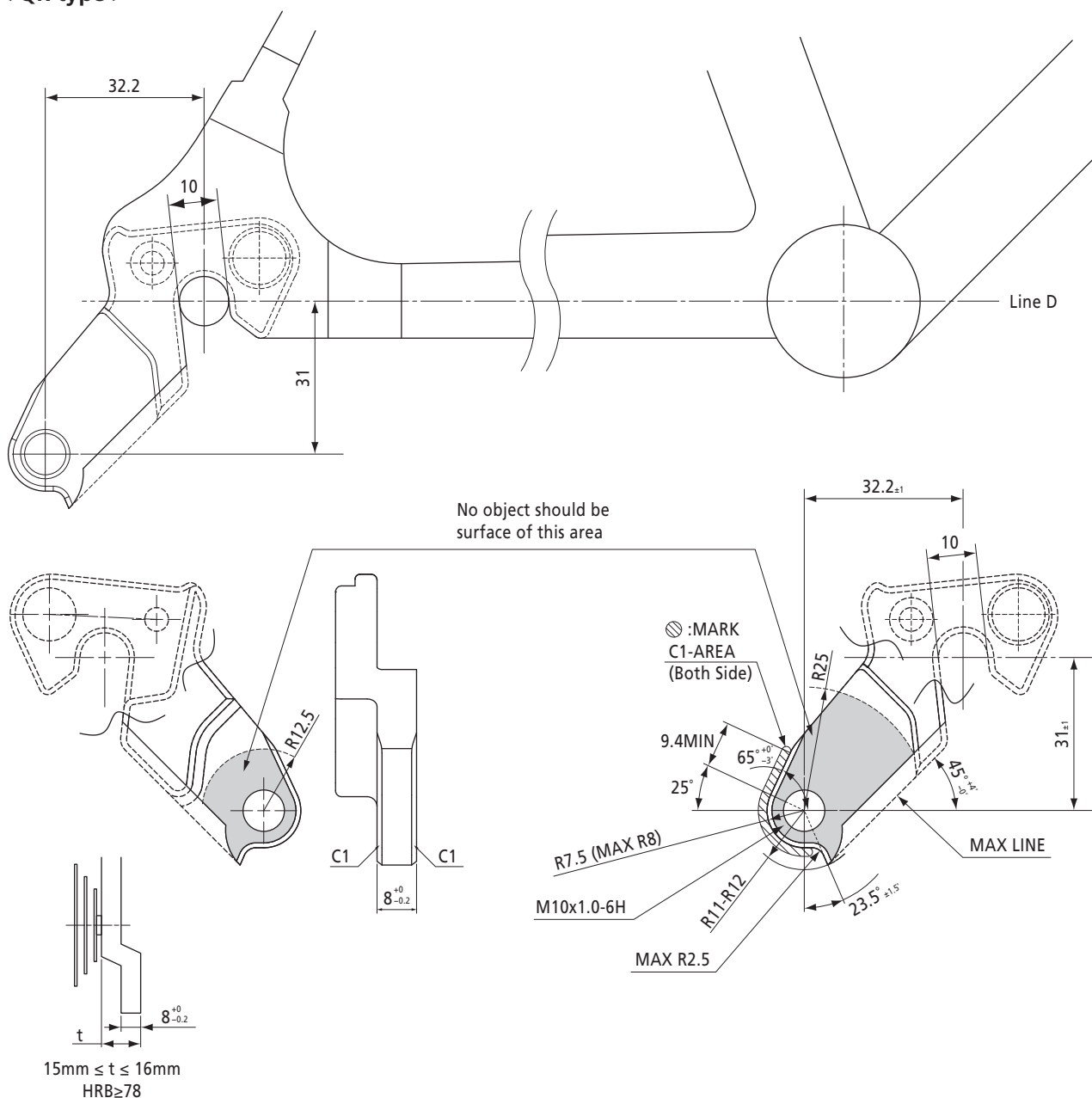
Note3:

SM-AX75,60 are not recommended for downhill usage.

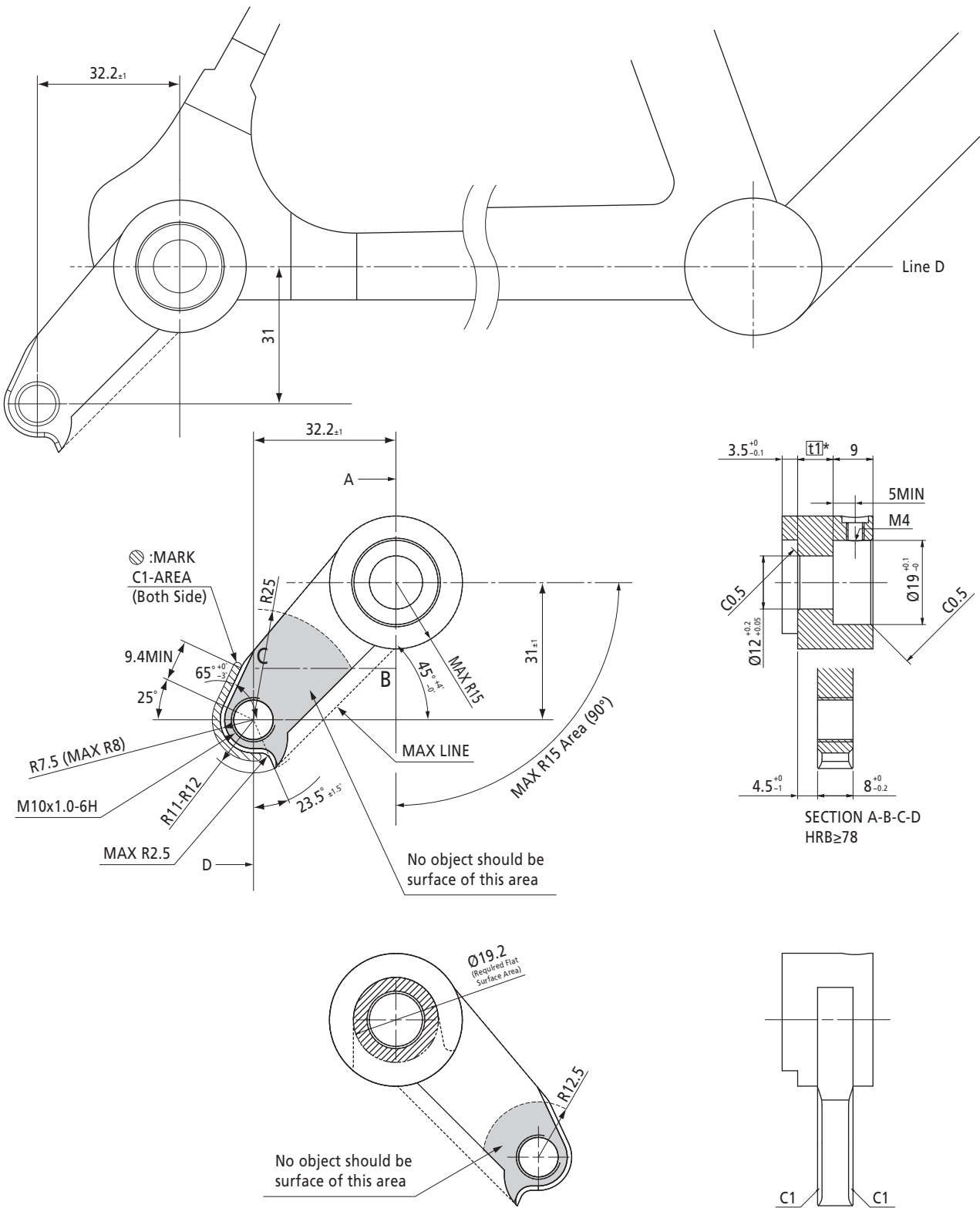
1-1. Dimensions for standard rear derailleur

< NEW RD-M986 / NEW M981 / NEW M786 / NEW M781 / NEW M675 / NEW M670 >

< QR type >



< E-thru type (O.L.D 142 mm) >



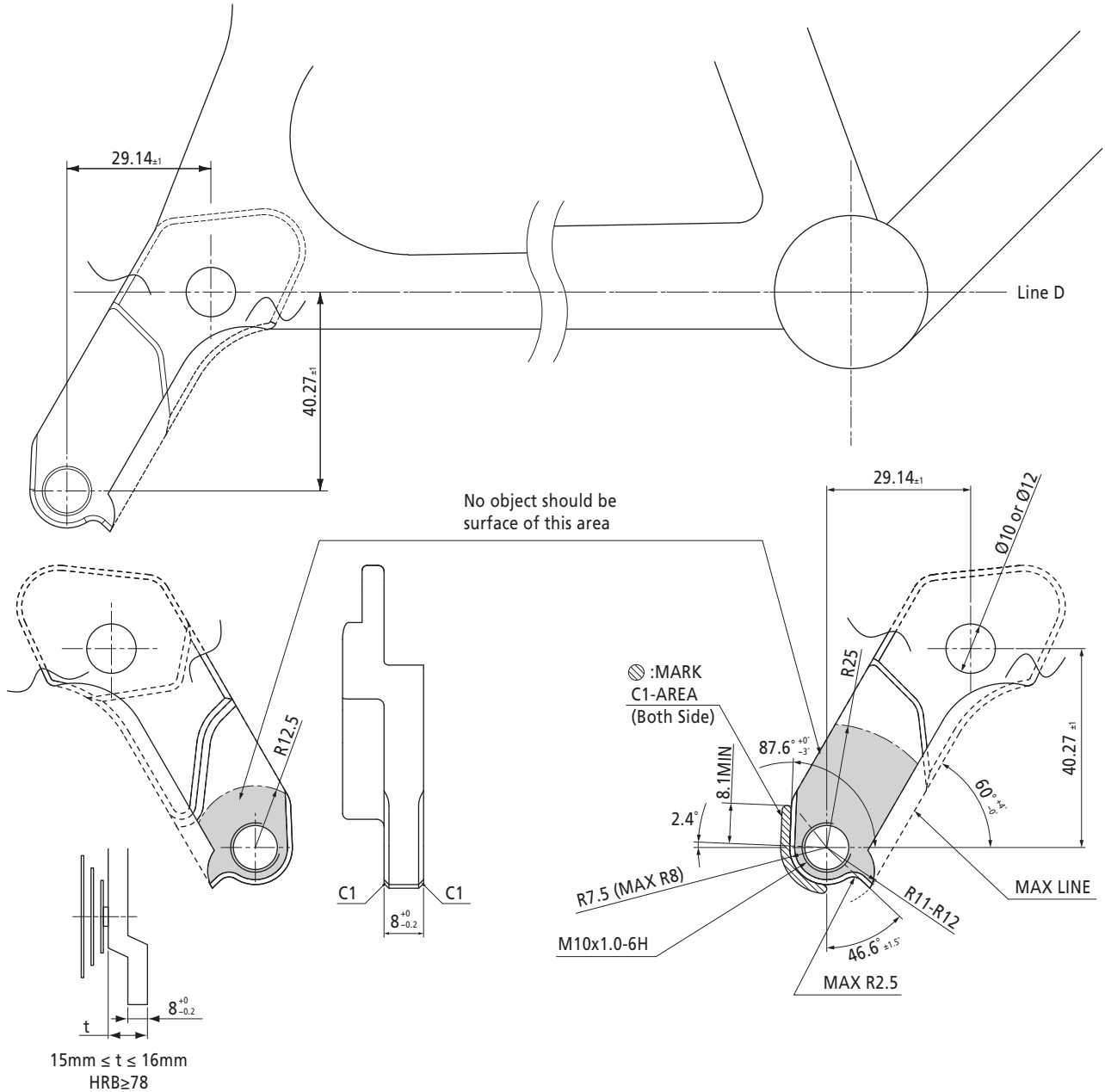
*Please refer to page 19 for more rear E-thru system information.

1-2. Dimensions for SAINT, ZEE (DH mode and DH spec)

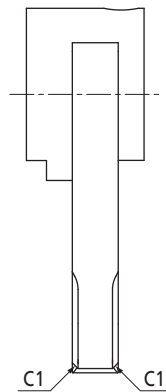
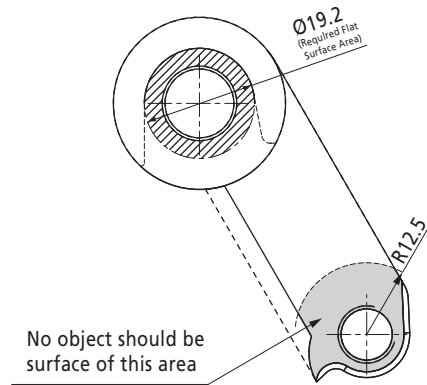
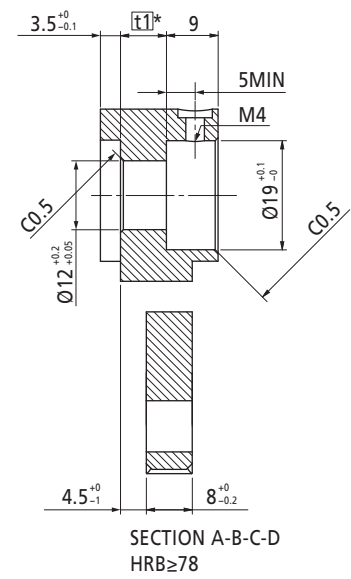
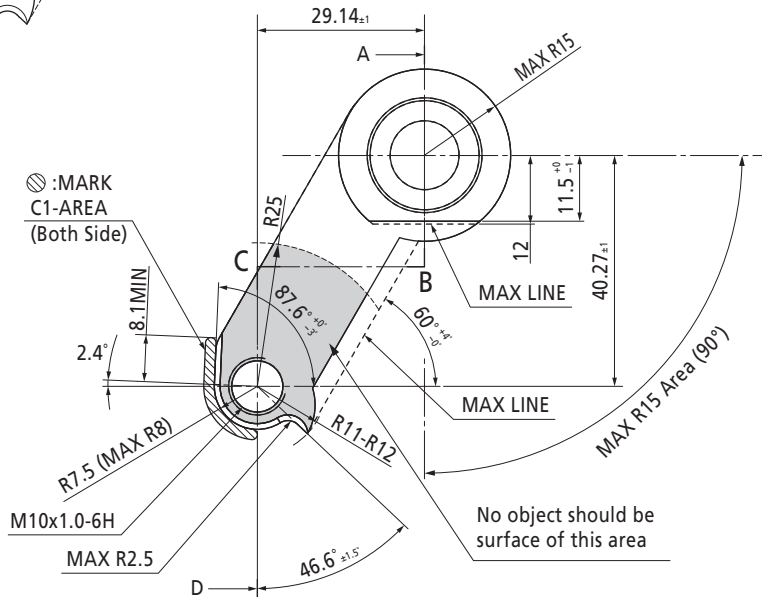
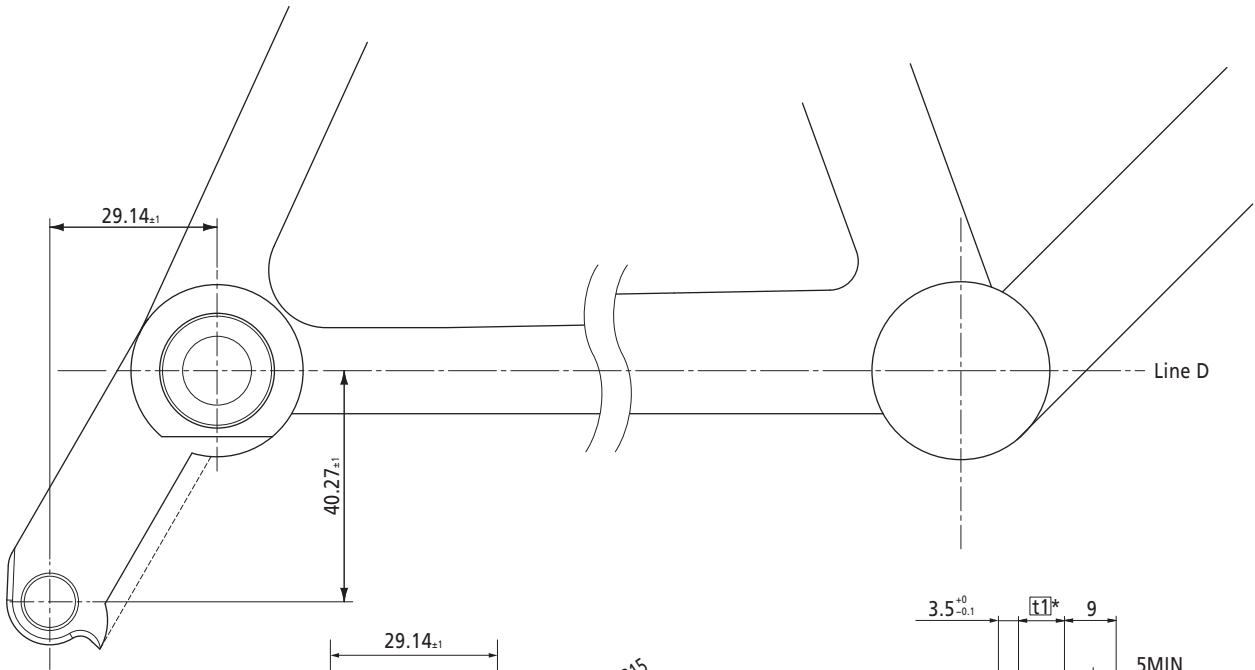
These dimensions are for DH mode and DH spec for close ratio cassette. (Smaller than 11-28T)
Please refer to page 64 for more information.

Note: This dimension of DH mode / DH spec is different from FR mode / FR spec (Standard MTB cassette)

< Thru Axle type (O.L.D 135 / 150 mm) >

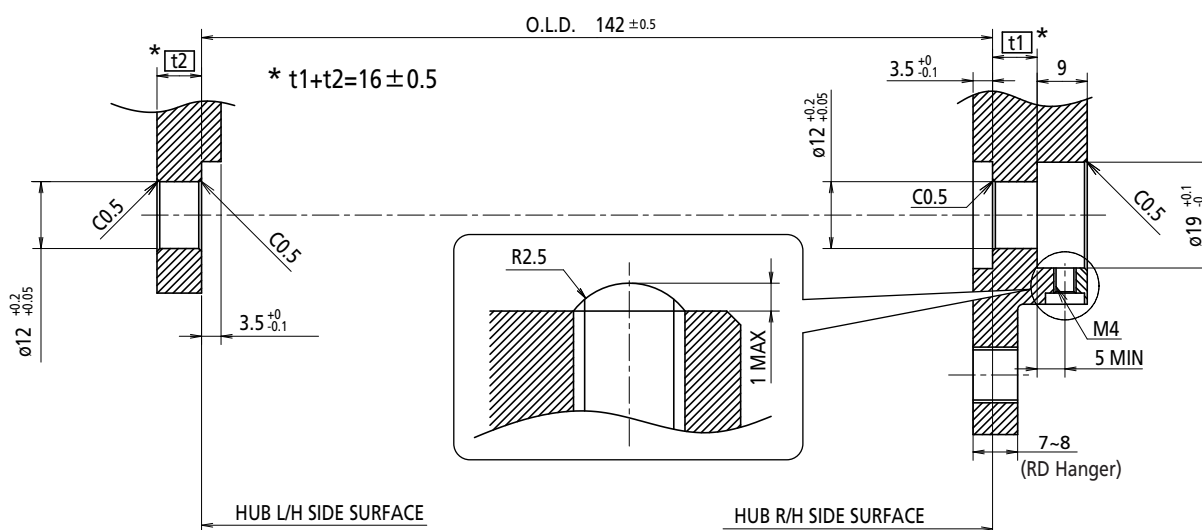


< Thru Axle type (O.L.D 142 mm) >

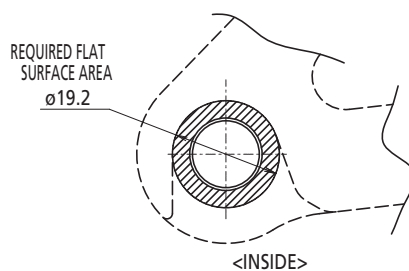


2. Rear E-thru system

2-1. Dropout dimensions



Required flat surface area



2-2. Other information about E-thru rear freehub (FH-M988/WH-M988-R12/FH-M788/WH-M788-R12/FH-M678/WH-MT68-R12/WH-MT66-R12-29) 12 mm thru axle

- Total dropout thickness should be less than $16 \pm 0.5 \text{ mm}$.
- Chart's SM-AX75 adjust nut keeper section is design example.
- SM-AX75 specification is lever axle with adjust nut set.
- SM-AX75 total axle length is 171mm specification only.
- About clearance between the smallest sprocket (top gear) and dropout is explained at page 6.
- Dropout configuration and SHIMANO SHADOW RD dropout dimension are explained at page 20 and 21 Disc brake mount dimensions are explained at page 10.
- There are variety of frame design as well as tire width, so when deciding frame dimensions, please be put attention of rear wheel install and removal operation.
- Upper drawing shows an example of dropout and nut keeper.
Please design and consider for dropout and nut keeper as a whole by your frame design.
- Please design nut keeper section which doesn't give side force to adjust nut.
- If adjust nut is given unnecessary side force, SM-AX75 screwing and rescrewing operation will be heavy.