

Sizing Rules – 'Matches'

When 'Matches' is ticked the Sizing Guide will return results which will meet or exceed the requirements entered in the search.

When 'Matches' is ticked the following sizing rules are applied to the torque value –

- Results with a Rated Torque of 95.0% or above the requested torque are returned.
- For Linear sizing, results with a Rated Thrust of 98% or above the requested thrust value are returned.
- Any results with a Rated Torque between 95.0% and 99.9% of the requested torque are returned with the torque value displayed in red and with a [Low Torque](#) warning.
- For Linear sizing any results with a Rated Thrust between 98% and 99.9% of the requested thrust are returned with the thrust value displayed in red with a [Low Thrust](#) warning.
- The '% of Seating' column will display the percentage of requested torque/thrust that the results will achieve.

Sizing Rules – 'Alternatives'

When 'Alternatives' is ticked, results with any of the warnings specified below are returned, as long as they meet 95% or above the requested torque value.

When 'Alternatives' is ticked the following sizing rules are applied –

- Results with a Rated Torque of 95.0% or above are returned.
- Any results with a Rated Torque between 95.0% and 99.9% are returned with the torque value displayed in red and with a [Low Torque](#) warning.
- For Linear sizing any results with a Rated Thrust between 98% and 99.9% of the requested thrust are returned with the thrust value displayed in red with a [Low Thrust](#) warning.
- Results may be returned with a lower Maximum Stem Acceptance than the value entered in the search. They will be returned with a [Rising Stem Diameter](#) warning.
- Results may be returned with a Rated Thrust value which is less than the calculated Resultant Thrust. They will be returned with a [Resultant Thrust](#) warning.
- Results without a gearbox may be returned with an RPM of 144 or 192. They will be returned with an [RPM](#) warning.
- Results may be returned with a Stroke Time of above 600seconds. They will be returned with a [Stroke Time](#) warning.



Warnings

[Low Torque Warning –](#)

If $T_s > T_r$ then a warning is returned.

[Low Thrust Warning –](#)

If $T_{kN} > T_{rkN}$ then a warning is returned

[Rising Stem Diameter Warning –](#)

If $RS\phi_{max} > RS\phi$ then a warning is returned.

[Resultant Thrust Warning –](#)

If $(T_r) / (\frac{T_s}{T_{kN}}) > T_{rkN}$ then a warning is returned.

[RPM Warning –](#)

If the result has no gearbox and an $RPM = 144$ or $RPM = 192$ then a warning is returned.

[Stroke Time Warning –](#)

If $ST > 600s$ then a warning is returned.

KEY

T_s = Seating Torque

T_r = Rated Torque

$RS\phi_{max}$ = Max Rising Stem Diameter of result

$RS\phi$ = Stem Diameter entered in search

T_{kN} = Thrust entered in search

T_{rkN} = Rated Thrust of result

ST = Stroke Time of result

