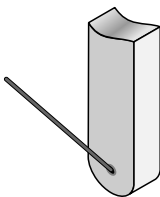
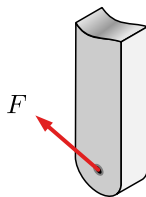


Two-force support — One reaction —
two-force member constrains translation

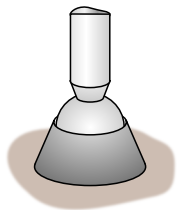


cable (or other
two-force member)

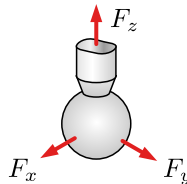


reaction force in-line
with two-force member

Ball & socket — Three reactions —
ball cannot slide but is free to rotate

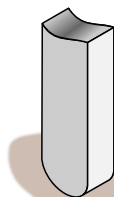


ball stays in socket
& is free to rotate

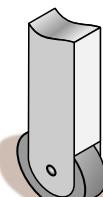


three reaction
force components

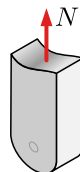
Smooth surface — One reaction —
smooth surface constrains translation



body contacts
smooth surface

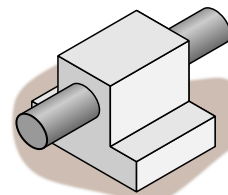


roller on
smooth surface

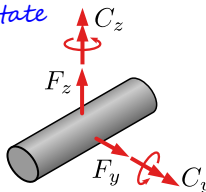


force perpendicular
to surface

Free-axis bearing — Four reactions —
axle free to slide & rotate

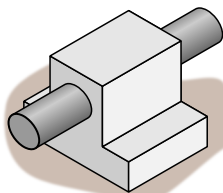


journal bearing

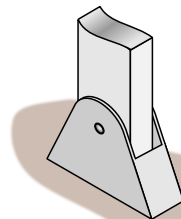


two reaction forces and
two reaction couples
perpendicular to axle

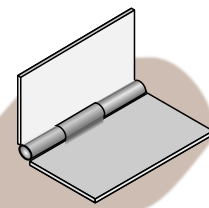
Confined-axle bearing — Five reactions —
axle/pin cannot slide but is free to rotate



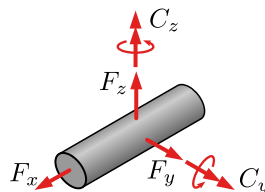
thrust bearing



smooth pin

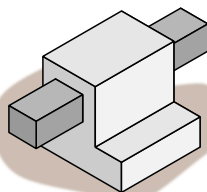


hinge

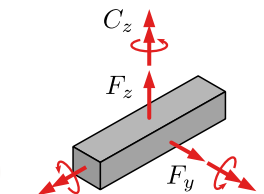


two reaction forces and
two reaction couples
all perpendicular to axle,
plus reaction force along axle

Square-axle bearing — Five reactions —
square axle free to slide but cannot rotate

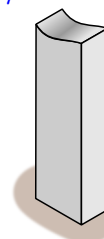


square axle
journal bearing

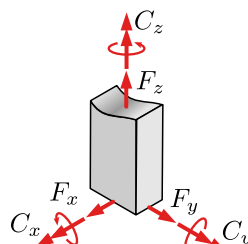


two reaction forces
perpendicular to axle,
three reaction couples

Fixed support — Six reactions —
body cannot slide & cannot rotate



welded, bolted,
or anchored



three reaction forces
& three reaction couples