



Permissible loads

Permissible loads – fixed

The screw jacks themselves are specified for full static nominal load under tension and compression. The permissible load depends on the type of fastening.

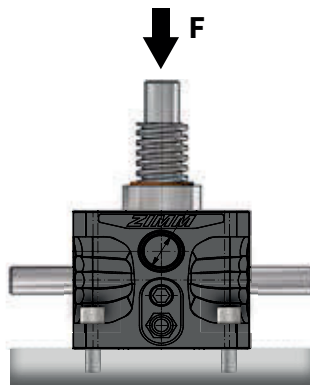
Compressive load

Full rated load

The gearbox can accept the full static rated load.

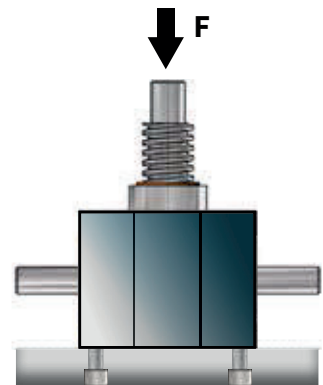
ZE- & Z-Series

Rated load 100%



GSZ-Series

Rated load 100%



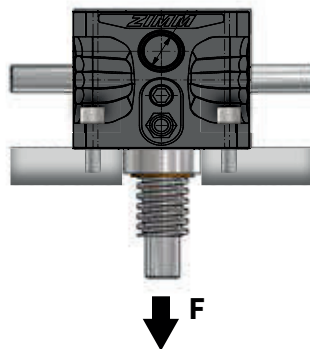
Mounting plate with tensile load

Full rated load

The gearbox can accept the full static rated load.

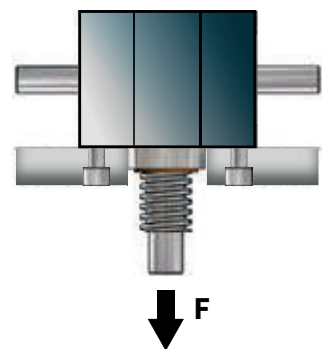
ZE- & Z-Series

Rated load 100%



GSZ-Series

Rated load 100%





Permissible loads

Permissible loads – fixed

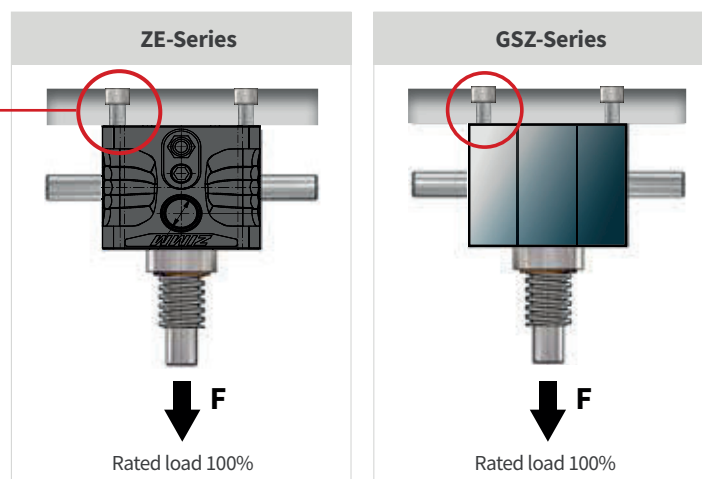
Tensile load on the fixing screws (blind tapped holes)

Full rated load

Providing the screw-in depth is maintained and the screws are tightened to the full tightening torque, the full rated load is permissible.



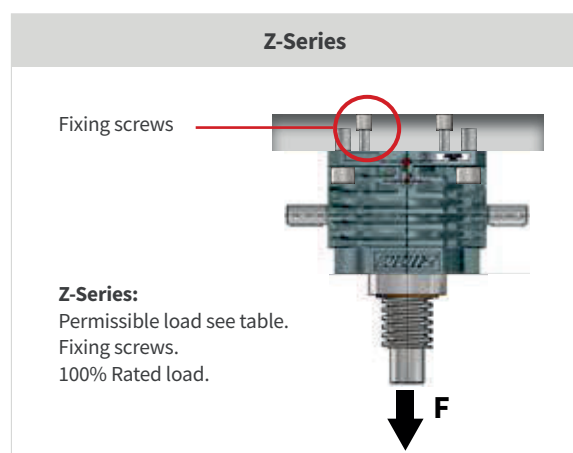
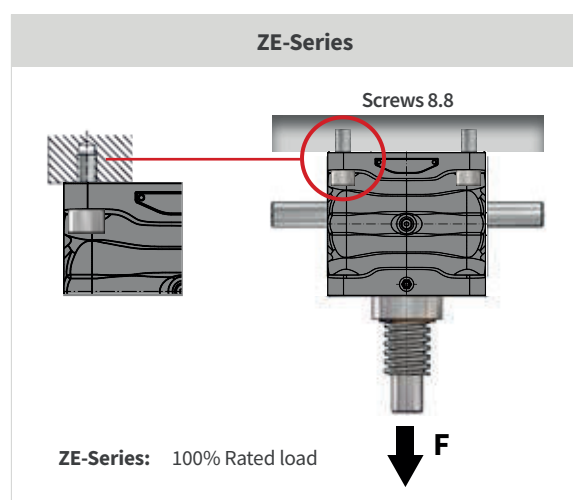
Gearbox	Thread	Screw-in depth mm	Tightening torque Nm
ZE-5	GSZ-2	M6	8 bis 10
ZE-10	GSZ-5	M8	10 bis 11,5
ZE-25	GSZ-10	M8	10 bis 15
ZE-50	GSZ-25	M10	12 bis 15
GSZ-100	GSZ-50	M12	12 bis 17
GSZ-150	GSZ-100	M16	16 bis 20
	GSZ-150	M20	24 bis 27



Tensile load on the fixing screws (though holes in the housing)

Gearbox	Permissible load kN	with fixing screws*
ZE-5	100% Rated load	
ZE-10	100% Rated load	
ZE-25	100% Rated load	
ZE-35	100% Rated load	
ZE-50	100% Rated load	
ZE-100	100% Rated load	
ZE-150	100% Rated load	
ZE-200	100% Rated load	
Z-250	70	Rated load 250 kN
Z-350	180	Rated load 350 kN
Z-500	110	Rated load 500 kN
Z-750	210	Rated load 750 kN
Z-1000	on request	Rated load 1000 kN

*Though holes and blind tapped holes, dimension sheet and screw-in depth on request.





Permissible loads

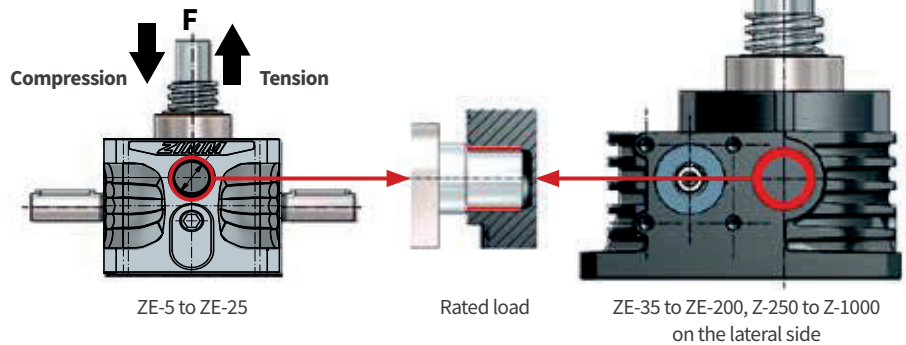
Permissible loads – pivoting

ZE & Z-Series pivot bearing in the housing

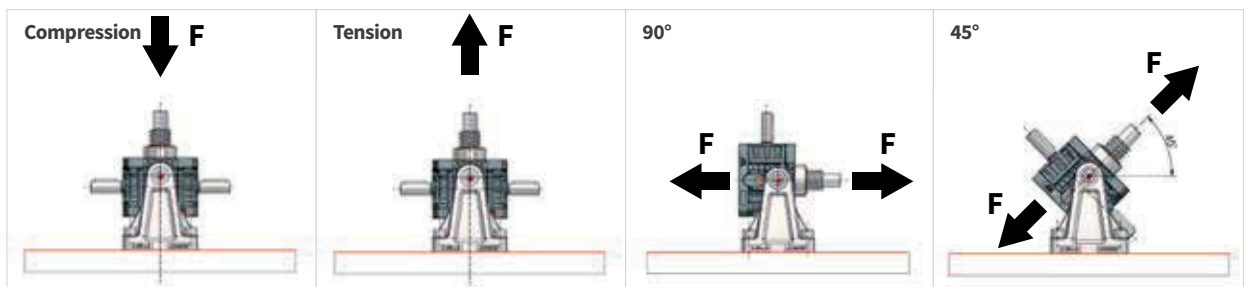
Pivot bushes are incorporated in the gearbox housing

ZE- and Z-Series:

Swivel bushes can be subjected to the full nominal load with either compression or tension.

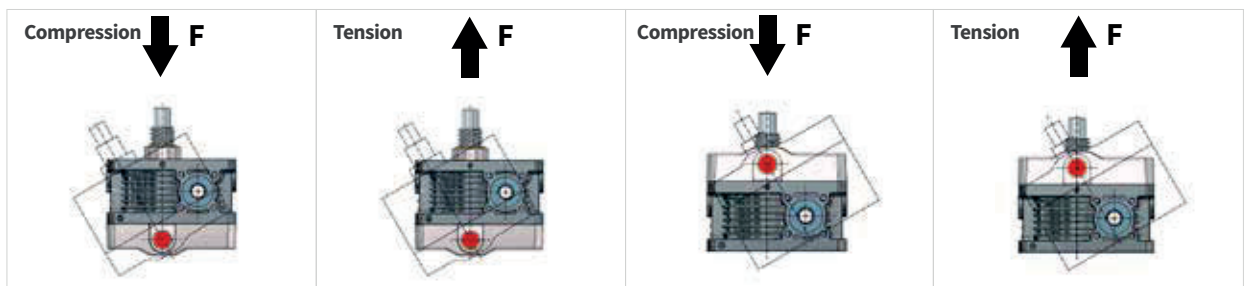


Pivot mounts LB for ZE-5 to ZE-25



ZE-5 (ZE-5/10-LB)	Rated load 5 kN	Rated load 5 kN	Rated load 5 kN	Rated load 5 kN
ZE-10 (ZE-5/10-LB)	Rated load 10 kN	Rated load 10 kN	7 kN	6,5 kN
ZE-25 (ZE-25-LB)	19,5 kN	17,5 kN	10 kN	9,5 kN

ZE-5 to ZE-25 – Pivot bearing plate KAR



ZE-5-KAR	Rated load 5 kN	2,5 kN	2,5 kN	Rated load 5 kN
ZE-10-KAR	Rated load 10 kN	3,5 kN	3,5 kN	Rated load 10 kN
ZE-25-KAR	Rated load 25 kN	10 kN	10 kN	Rated load 25 kN



- When dimensioning, include all the parts you will use
- The direction of loading should be selected so that the gearbox is pressed against the pivot bearing plate. When the load is in the opposite direction, reduced load values apply.

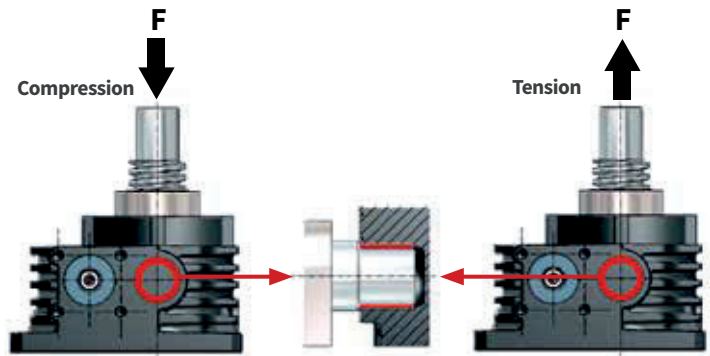
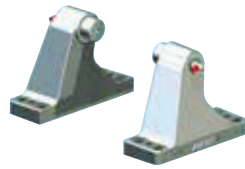


Permissible loads

Permissible loads – pivoting

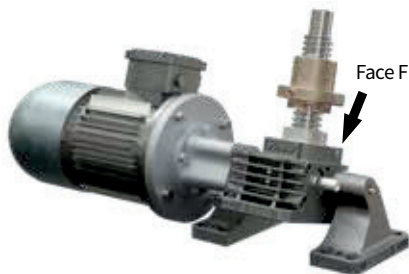
ZE-35 to ZE-200 and Z-250 to Z-1000 – Pivot bearing in the housing

For the design see table.



Z-500 to Z-1000 Installation

From Z-500 the gearbox is mounted the opposite way round (Face F), since the footplate is broader than the rest of the housing.



Permissible loads gearbox housing

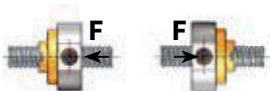
Permissible load
Pivot mount for
tension, compression
90° and 45°
direction of load

Gearbox	Compression	Tension	
ZE-35	Rated load 35 kN	Rated load 35 kN	Rated load 35 kN
ZE-50	Rated load 50 kN	Rated load 50 kN	Rated load 50 kN
ZE-100	Rated load 100 kN	Rated load 100 kN	Rated load 100 kN
ZE-150	Rated load 150 kN	Rated load 150 kN	Rated load 150 kN
ZE-200	Rated load 200 kN	Rated load 200 kN	Rated load 200 kN
Z-250	177 kN	Rated load 250 kN	Rated load 250 kN
Z-350	250 kN	260 kN	350 kN
Z-500	280 kN	310 kN	on request
Z-750	on request	on request	on request
Z-1000	on request	on request	on request

ZE-35 to ZE-200, Z-250 to Z-1000 – Pivot mount LB

Compression	Tension	90°	45°
see table above	see table above	see table above	see table above

Duplex nut adapter DMA



Main direction of loading

Select the main direction of loading so that tensile loads on the nut are avoided.



Support tube STRO



In compression the full rated load permissible. In tension the support tube should be subjected only to limited loads.