

Tandler ServoFoxx[®]

Servo Gearheads

Operation, Installation & Maintenance



DIEQUA
Corporation

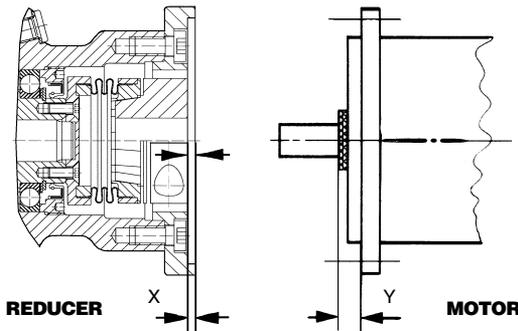
Congratulations!

You have received one of the most precise and versatile motion control drives available. Tandler ServoFoxx® gearheads provide a variety of benefits to maximize the performance of your application. To achieve the greatest performance, please familiarize yourself with the following important information.

Motor Mounting

ServoFoxx® incorporates a revolutionary flexible element to compensate for motor shaft misalignment, which maintains torsional rigidity, maximizes performance, reduces noise, and eases motor mounting and disassembly.

1. Measure dimension X (top of coupling to top of adapter plate) using a depth gauge.
2. Add the coupling pretensioning value to dimension X. The result is dimension Y.
3. Position the coupling hub or add a shim to the motor shaft to achieve Y.
4. Tighten hub bolt using proper tightening torque.



Size	Pretensioning Values	Tightening Torque
00	0.2 – 1.0 mm	4.5 Nm
01	0.5 – 1.5 mm	15 Nm
A1	0.5 – 1.5 mm	40 Nm
B1	0.5 – 1.5 mm	70 Nm

Gearhead Mounting

The most favorable mounting position is with all shafts in a horizontal plane. Whenever shafts are oriented vertically, special lubrication considerations may be necessary. Consult your DieQua representative for the proper specification.

When connecting the gearhead to the load, use flexible couplings for shaft to shaft connections. When using a hollow bore, consider the alignment of other support bearings. When driving a pulley or gear, calculate radial loads.

Input Speed

The input speed capacity of these gearheads is a function of size, cycle times, backlash, bearing loads, and gear ratio.

Continuous input speeds of 3000 RPM are generally acceptable for the reducers in this catalog, with the

exception of some low ratio single stage models and certain SKP2FS series ratios. Cycle speeds of up to 8000 RPM are possible in some applications. Consult your DieQua representative for the maximum speed possible of the gearhead selected.

Backlash

Two levels of backlash are offered. When selecting the appropriate backlash value for a given application the speed and cycle time must be considered. Continuous high speed at the lowest backlash setting may create excessive noise and heat.

Backlash Values in Minutes

Model		Standard	Reduced
FS	1 stage	5 - 6	3 - 4
PL2FS	1 stage	5 - 6	2 - 3
PL2FS	2 stage	8 - 9	5 - 6
SKP2FS	2 stage	8 - 9	5 - 6
PSK2FS	2 stage	8 - 9	5 - 6

Radial Load Capacity

Radial load capacities are based on ratio, torque, speed, and cycles. Higher speeds or more cycles result in lower ratings. For series FS and PL2FS, consult the product selection

chart in the engineering catalog for the approximate radial load capacity. For series PSK2FS and SKP2FS, consult your DieQua representative.

Lubrication

The operational life of any gearbox depends greatly on proper lubrication. The correct oil or grease applied to the gears and bearings acts as both a lubricant and as a coolant. Speed, torque, mounting, and cycle times are the primary considerations in determining the correct lubrication option.

Because of the wide variety of models and configurations offered, different lubrication types are incorporated.

Some are oil filled, some are grease filled, and some two and three stage designs have a combination of oil and grease in the different stages. Generally, all models are lubricated for the rated life of the unit and don't require lubrication changes.

When mounting any shaft in a vertical orientation, special considerations may be necessary. Contact your DieQua representative for these proper lubrication options.

Service

DieQua Corporation is an authorized service and repair center for Tandler ServoFoxy® gearheads. Should service be required, please contact us for a return merchandise

authorization number and return instructions. A prompt repair analysis will be made and you will be advised before work is completed.

DIEQUA

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