

OEM Piezomotor Linear Drive

COST-EFFECTIVE FOR AUTOMATION



U-264KSPA

- Travel range 200 mm (optional 100 to 300 mm)
- Integrated linear encoder, 0.6 µm resolution
- Self-locking at rest, requires no current
- Velocity to 150 mm/s

Fast OEM linear drive

Light-weight, cost-effective design made of aluminum or optionally from engineering thermoplastics for series production. With plain bearing guides for integration into guided systems. Integrated linear encoder for reliable position control, repeatable accuracy. Optical reference point switch

PILine® ultrasonic piezomotors

Ceramic direct drive as cost-effective alternative to

motor-spindle combinations or electromagnetic linear motors. Self-locking at rest, thus no heat generation. Excellent start/stop dynamics. Easy integration by coupling the guided load to the moving runner

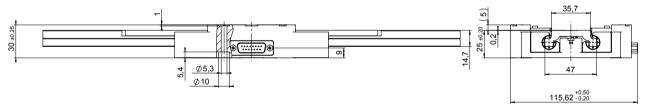
Fields of application

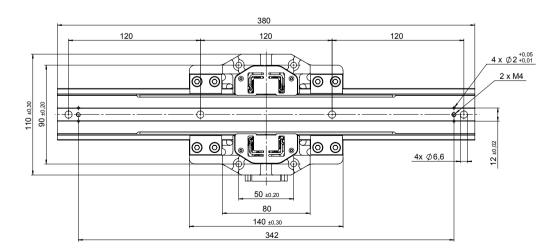
OEM drives in automation. For handling tasks and precision positioning systems, micromanipulation

Keltive Achsen X Motion and positioning Travel range 200 Ichtegrated sensor Linear encoder Sensor resolution 0.6 µm Min. incremental motion 6 µm Undirectional repeatability 10 µm Bidirectional repeatability 10 µm Velocity (closed-loop) 10 mm/s Maximum velocity 50 mm/s Maximum push/pull force 6 N Holding force 6 N Lateral force 0 verenal guiding required Motor type 2 x Pl Line* U-164 ultrasonic piezomotors Current consumption 2 A (max.) Reference point switch 9 ticle More type 2 x Pl Line* U-164 ultrasonic piezomotors Foresting temperature range 10 -40 °C Material 10 -40 °C Material 1 kg Albel length 2 kg Cy = without signal amplification 2 m without signal amplification cy a m vinaut-resonant operation 2 current on sungerial	Preliminary data	U-264KSPA
Travel range 200 Integrated sensor Linear encoder Sensor resolution 0.6 µm Min. incremental motion 6µm Unidirectional repeatability 10 µm Bidirectional repeatability 100 mm/s Maximum velocity (closed-loop) 100 mm/s Maximum push/pull force 6N Holding force 6N Lateral force 0, external guiding required Drive properties Motor type 2x PlLine® U-164 ultrasonic piezomotors Current consumption 2A (max.) Reference point switch Optical Miscellaneous Mass 1 kg Cable length 6 Sub-D 15ft o Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Aktive Achsen	X
Integrated sensor Linear encoder Sensor resolution 0.6 μm Min. incremental motion 6 μm Unidirectional repeatability 10 μm Bidirectional repeatability 10 μm Velocity (closed-loop) 100 mm/s Maximum velocity 150 mm/s Mechanical properties *** Maximum push/pull force 6 N Holding force 6 N Lateral force 0, external guiding required Drive properties Wotor type 2x PlLine* U-164 ultrasonic piezomotors Current consumption 2 A (max.) Reference point switch Optical Miscellaneous *** Operating temperature range 10 – 40 °C Material Aluminum Mass 1 kg Cable length Sub-D 15f to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Motion and positioning	
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Min. incremental motion 6 μm Unidirectional repeatability 10 μm Bidirectional repeatability 100 mm/s Velocity (closed-loop) 150 mm/s Maximum velocity 50 mm/s Mechanical properties *** Maximum push/pull force 6 N Holding force 6 N Lateral force 0, external guiding required Drive properties **** Motor type 2x PlLine® U-164 ultrasonic piezomotors Current consumption 2 A (max.) Reference point switch Optical Miscellaneous **** Operating temperature range 10 - 40 °C Material Aluminum Mass 1 kg Cable length Sub-D 15f to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Integrated sensor	Linear encoder
Unidirectional repeatability Bidirectional repeatability 10 µm Velocity (closed-loop) 100 mm/s Maximum velocity 150 mm/s Mechanical properties Maximum push/pull force 6 N Holding force 6 N Lateral force 0, external guiding required Drive properties Motor type 2x PlLine® U-164 ultrasonic piezomotors Current consumption 2 A (max.) Reference point switch Optical Miscellaneous Operating temperature range 10 – 40 °C Material Mass 1 kg Cable length Sub-D 15ft to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Sensor resolution	0.6 μm
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Current consumption 2 A (max.) Reference point switch Optical Miscellaneous Operating temperature range 10 – 40 °C Material Aluminum Mass 1 kg Cable length Sub-D 15fr to Sub-D 15m cable required as accessory 2 m without signal amplification 5 m in auto-resonant operation	Drive properties	
Reference point switch Miscellaneous Operating temperature range 10 – 40 °C Material Aluminum Mass 1 kg Cable length Sub-D 15f to Sub-D 15m cable required as accessory 2 m without signal amplification 6 m in auto-resonant operation	Motor type	2x PILine® U-164 ultrasonic piezomotors
Miscellaneous Operating temperature range 10 - 40 °C Material Aluminum Mass 1 kg Cable length Sub-D 15f to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Current consumption	2 A (max.)
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Material Aluminum Mass 1 kg Cable length Sub-D 15f to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Miscellaneous	
Mass 1 kg Cable length Sub-D 15f to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Operating temperature range	10 – 40 °C
Cable length Sub-D 15f to Sub-D 15m cable required as accessory < 2 m without signal amplification < 6 m in auto-resonant operation	Material	Aluminum
< 2 m without signal amplification < 6 m in auto-resonant operation	Mass	1 kg
Connector Sub-D 15m	Cable length	< 2 m without signal amplification
	Connector	Sub-D 15m

Ask about custom designs!

* Notation





U-264KSPA, dimensions in mm