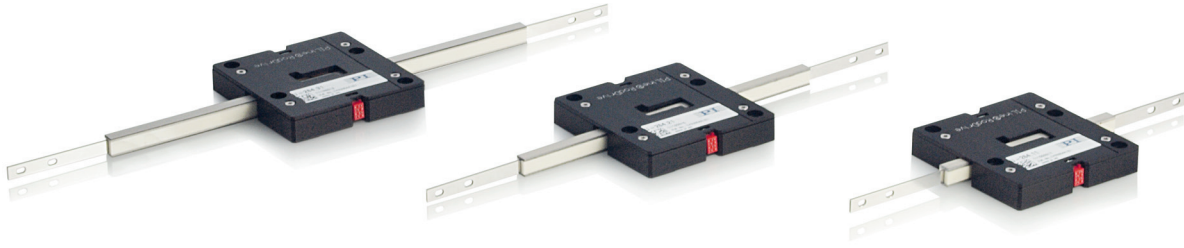


# RodDrive Piezomotor Direct Drive



## U-264

- Velocity up to 250 mm/s
- Travel ranges up to 150 mm
- Linear drive for integration
- Generated force up to 15 N

### Fast OEM linear drive

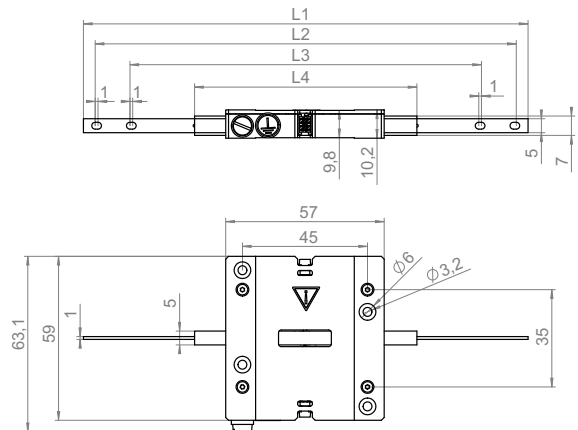
For integration into guided systems

### RodDrive direct drive with integrated and preloaded PILine ultrasonic piezo drives

Self-locking, no heat generation at rest. Excellent start/stop dynamics. Easy integration by coupling the rod to a guided payload (e.g. a linear slide)

### Application fields

OEM drives for automation. For handling and high-precision positioning systems



	U-264.10/11	U-264.20/21	U-264.30/31
L1	160.0	210.0	260.0
L2	151.5	201.5	251.5
L3	126.5	176.5	226.5
L4	80.0	130.0	180.0

U-264, dimensions in mm

### Related Products

M-272 Linear Drive for Automation

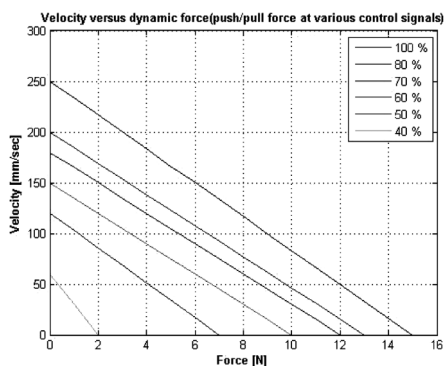
N-310 NEXACT OEM Miniature Linear Motor / Actuator

C-872 Driver for PILine® Ultrasonic Piezomotors

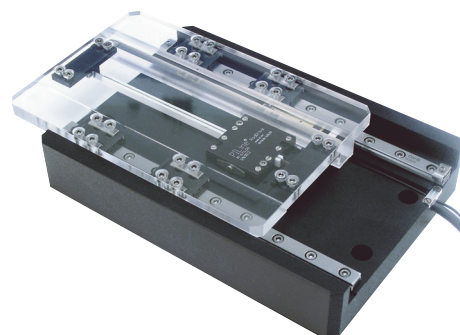
	U-264.10/20/30	U-264.11/21/31	Units	Tolerance
<b>Motion and positioning</b>				
Travel range	50 / 100 / 150	50 / 100 / 150	mm	
Open-loop step size	0.1*	2*	μm	typ.
Open-loop velocity	250	200	mm/sec	max.
<b>Mechanical properties</b>				
Stiffness when powered down	1.5	1.5	N/μm	±10 %
Holding force when powered down	8	15	N	max.
Push/pull force	7 (at 50 mm/s) 2 (at 250 mm/s)	12 (at 50 mm/s) 3 (at 200 mm/s)	N	max.
<b>Drive properties</b>				
Resonant frequency	158	159	kHz	±2 kHz
Motor voltage	200 V <sub>pp</sub> 65 V <sub>rms</sub>	200 V <sub>pp</sub> 65 V <sub>rms</sub>		
Input impedance	40 to 80**	50 to 100**	Ω	
<b>Miscellaneous</b>				
Operating temperature range	0 to 40	0 to 40	°C	
Material case	Al (black anodized)	Al (black anodized)		
Mass	0.08 / 0.09 / 0.1	0.08 / 0.09 / 0.1	kg	±5 %
Connector	D-Sub 15 (m)	D-Sub 15 (m)		
Recommended controller/driver	C-872.160 driver, C-867 motion controller/driver	C-872.160 driver, C-867 motion controller/driver		
Dimensions	57 x 63 x 10.2 plus rod	57 x 63 x 10.2 plus rod	mm	

\* pulsed operation, 1 msec ON time, 50 % duty cycle

\*\* at resonant frequency



U-264.11/21/31, velocity (open-loop) vs. dynamic force (push/pull force) at various drive signal amplitudes



RodDrive integrated in a micro stage