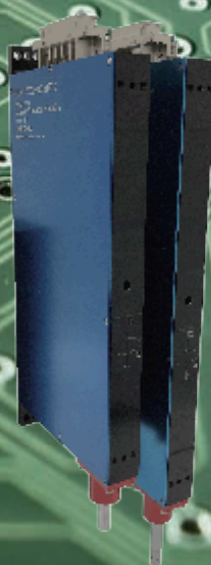


Linear rotary actuator  
For small parts pick & place



## ZLR45-15 ZLR25-15

### Linear rotary actuator

A linear actuator that integrates the Z axis (linear axis) and the  $\theta$  axis (rotary axis). The shaft has a vacuum line that can pick up and transport parts. Using a Z-axis (linear axis) linear motor and a  $\theta$ -axis (rotation axis) coreless AC servomotor, Each axis is equipped with our optical encoder to achieve high speed and high accuracy.

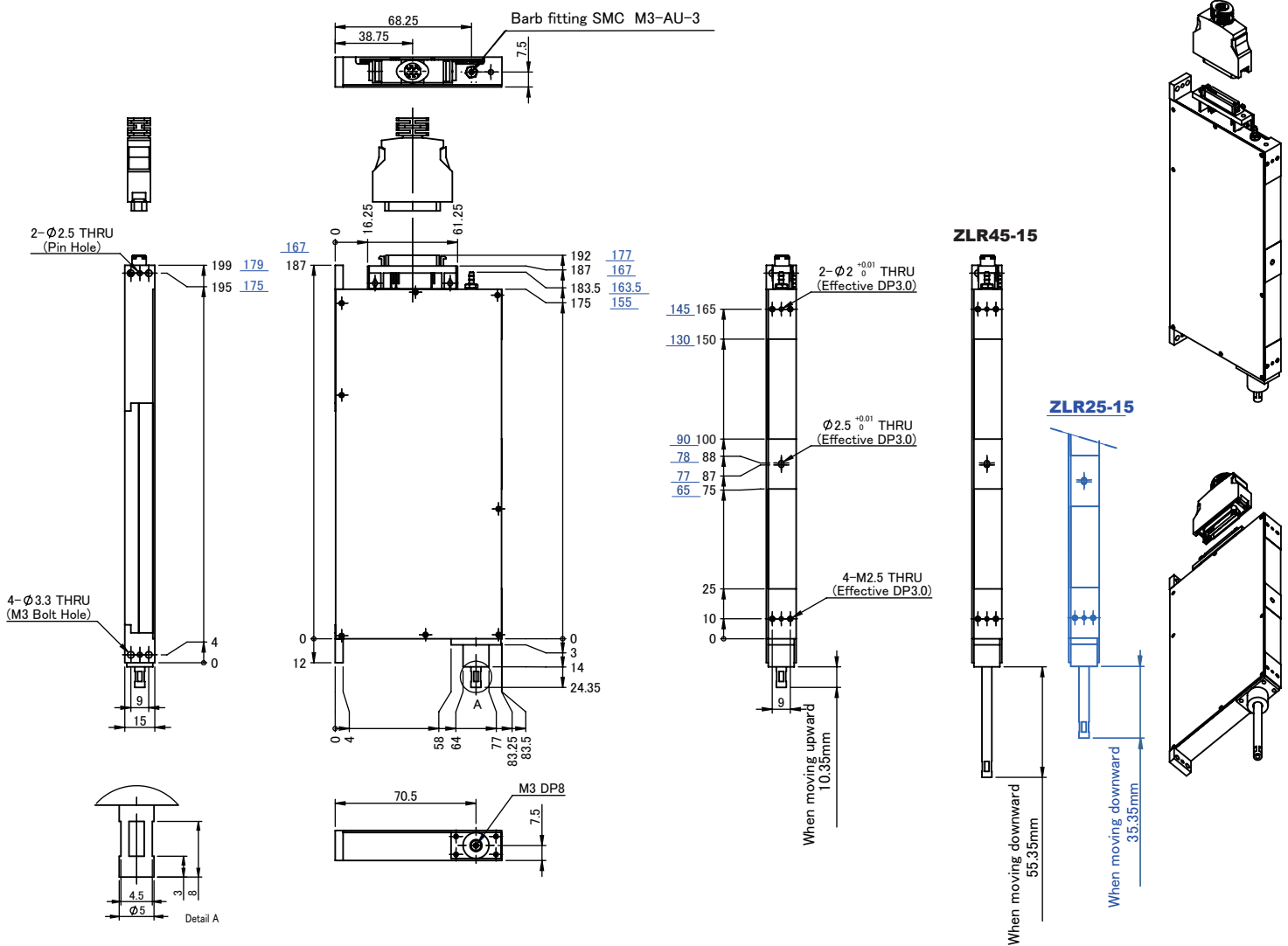
- **Features** -
  - ◆  $\pm 15 \mu\text{m}$  or less of tip shaft shake with optimized mechanism
  - ◆ Built-in Hall sensor and temperature sensor
  - ◆ Internally processed with FPCB without wire cable
  - ◆ Ball splines can be added to increase shaft rigidity

		ZLR45-15	ZLR25-15
Body	Size (H/D/W)	216.4/83.5/15.0mm	196.4/83.5/15.0mm
	Weight	570g	520g
	Movable part weight	150g	150g
	Power-supply	DC24V	DC24V
	Z-axis drive motor	Linear motor	Linear motor
	(Option)	Ball spline type	Ball spline type
	Tip shaft shake	$\pm 15 \mu\text{m}$	$\pm 15 \mu\text{m}$
Vacuum port	M3 $\times$ 0.5	M3 $\times$ 0.5	
Linear	Stroke	45mm	25mm
	Resolution	0.1 $\mu\text{m}$	0.1 $\mu\text{m}$
	Positioning accuracy	$\pm 3\text{pls}$	$\pm 3\text{pls}$
	Acceleration	5G	5G
	Maximum thrust	18N	18N
	Average thrust	6.5N/A	6.5N/A
	Rated current	1A	1A
	Maximum current	3.5A	3.5A
	Maximum speed	1.5m/sec	1.0m/sec
Rotary	Rated current	1A	1A
	Resolution (pls)	0.005deg	0.005deg
	Positioning accuracy	$\pm 3\text{pls}$	$\pm 3\text{pls}$
	Maximum torque	0.07mN·m	0.07mN·m
	Maximum rotation speed	7000rpm	7000rpm

## ZLR45-15

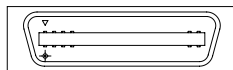
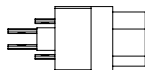
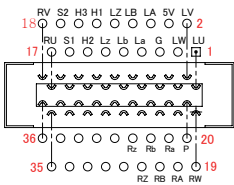
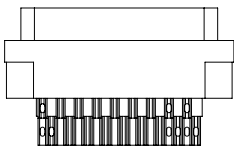
## ZLR25-15

※ZLR25-15 Dimensions are in blue, Black text is common



Cable side connector : 3M Square connector 10136-3000VE

Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name
1	Linear U	10	Linear Z	19	Rotary W	28	-
2	Linear V	11	Linear z	20	P(Ground)	29	-
3	Linear W	12	Hall sensor H1	21	Rotary A	30	-
4	5V	13	Hall sensor H2	22	Rotary a	31	-
5	GND	14	Hall sensor H3	23	Rotary B	32	-
6	Linear A	15	Thermistor S1	24	Rotary b	33	-
7	Linear a	16	Thermistor S2	25	Rotary Z	34	-
8	Linear B	17	Rotary U	26	Rotary z	35	-
9	Linear b	18	Rotary V	27	-	36	-



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