

DIRECT DRIVE TECHNOLOGY



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Direct Drive Technology



Since 2018 R.T.A. has approached the Direct Drive technology, in partnership with PBA Systems, a well-established innovative company from Singapore.

Since then R.T.A. has enlarged its products portfolio with a new line: LINEAR MOTORS and DIRECT DRIVE ROTARY MOTORS.

The direct drive solutions offered by R.T.A. are very diversified, but special customized solutions can also be developed.

All Direct Drive solutions are managed through Sanyo Denki amplifiers.

The Direct Drive Technology key advantages

- High Speed and acceleration.
- High Accuracy and Repeatability.
- Long Stroke.
- Zero Backlash.
- Longer Lifetime, No Maintenance.
- Maximum Smoothness & Rigidity.
- Multiple Carriages on the Same Track.



HIGH
SPEED



COMPACT
DESIGN



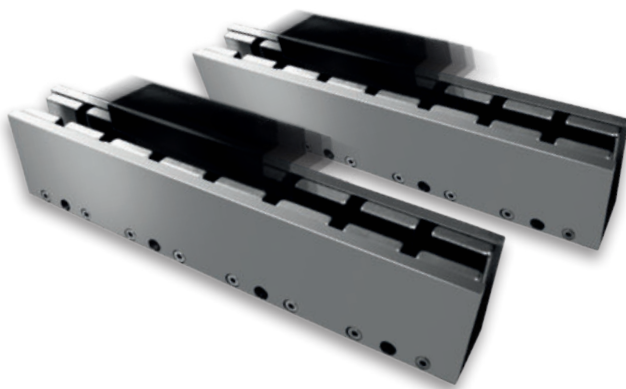
HIGH
FORCE

3 main motors families

1 IRONLESS LINEAR MOTORS

- Low moving mass, suitable for high acceleration application.
- High Precision motion.
- No Backlash.
- Excellent repeatability.
- Cogging free.
- Low velocity rippling even at very low speed.
- Unlimited length for magnet track.
- Easy assembly and installation.

IRONLESS
LINEAR MOTOR



DXB/BT Series

Main Features

	PEAK FORCE (N)	CONTINUOUS FORCE AC (N)	PEAK CURRENT (A)	CONTINUOUS CURRENT AC (A)	COIL LENGTH (mm)
DX10B	63.3	12.7	14.01	2.8	22-85
DX20B	229	60	21	5.46	61-151
DX30B/BT	724	188	47.25	12.29	61-301
DX50B/BT	1339	348	52.50	13.65	61-361
DX65B/BT	5191	1247	93.75	22.50	121-901
DX90B/BT	5366	1234	67.50	15.53	121-721

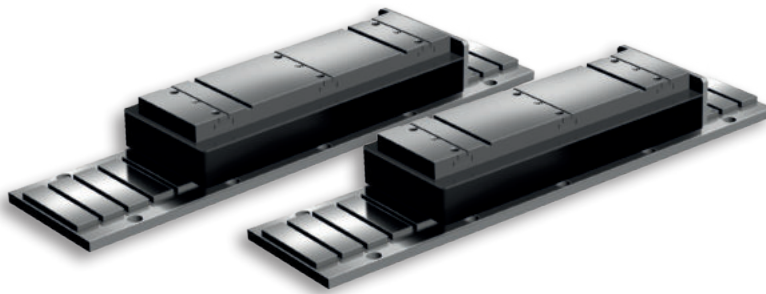
Application fields

Precision positioning, Semiconductor machines, Laser trimming, Precision Stamping, Biotech handlers, Microscope stages.

2 IRON-CORE LINEAR MOTORS

- High output force.
- Compact design.
- High rigidity structure.
- Low cogging force.
- No Backlash.
- Excellent repeatability.
- Easy installation.

IRONCORE
LINEAR MOTOR



PIX/PIXA Series

Main Features

	PEAK FORCE (N)	CONTINUOUS FORCE AC (N)	PEAK CURRENT (A)	CONTINUOUS CURRENT AC (A)	COIL LENGTH (mm)
PIX200-027	1393	279	60.8	8.60	64-320
PIX200-040	2307	461	43.8	8.80	64-320
PIXA030	320	80	11.31	2.83	120-480
PIXA050	597	149	21.27	5.32	120-480
PIXA065	2205	551	36.25	9.06	120-480
PIXA085	3968	992	65.27	16.32	120-480
PIXA110	6409	1602	82.01	20.50	120-480
PIXA135	8196	2049	76.75	19.19	120-480
PIXA160	9827	2457	92.02	23.01	120-480

Application fields

Pick and place, Laser cutting, Extruders, Machine Tools, Large format printing, Digital printing.

3 DIRECT-DRIVE ROTARY MOTORS

- Ultra-compact size.
- Direct mounting without additional mechanical power transmission.
- High precision with quick responsiveness time.
- High resolution.
- Repeatability of rotary positioning.
- High torque & infinite rotations.
- Low mechanical vibrations, longer lifetime, no maintenance.

DIRECTDRIVE
ROTARY MOTOR



PDDR Series Series

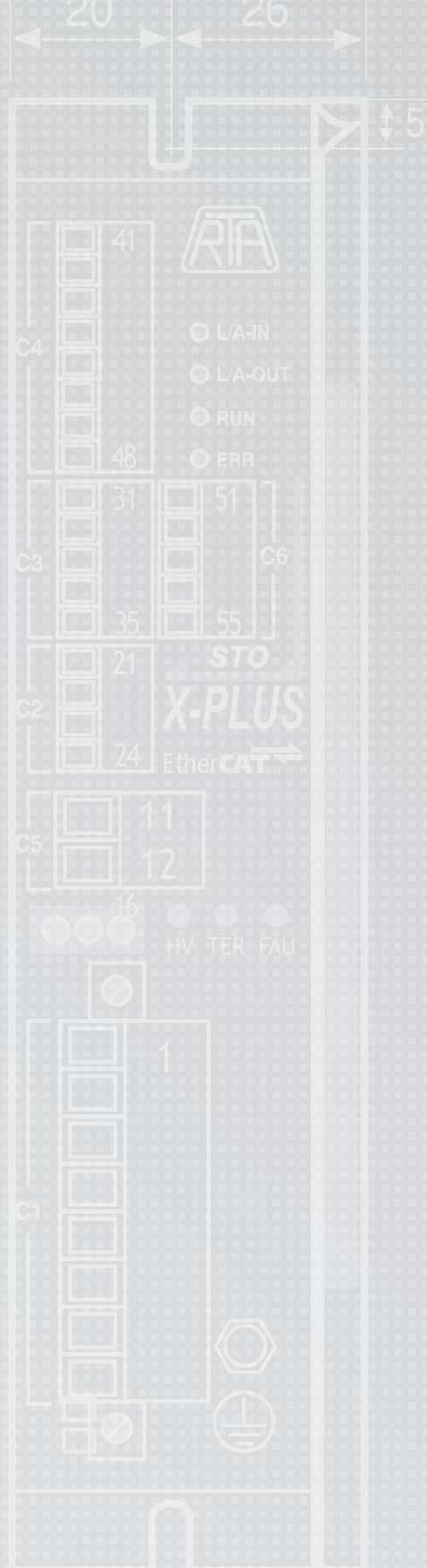
Main Features

	PEAK TORQUE (Nm)	MAX SPEED (RPS)	REPEATABILITY (arcsec)	ACCURACY (arcsec)
PDDR110-06-I	6.0	10.0	+/-2.5	+/-30
PDDR110-12-I	12.0	8.0	+/-2.5	+/-30
PDDR150-T-I	4.3	10.0	+/-2	+/-30
PDDR150-15-O	15.7	5.0	+/-2	+/-30
PDDR150-30-O	32.2	5.0	+/-2	+/-30
PDDR150-50-O	54.4	5.0	+/-2	+/-30
PDDR150-80-O	86.6	5.0	+/-2	+/-30
PDDR160-40-I	40.0	8.0	+/-4	+/-30
PDDR160-80-I	81.0	9.0	+/-4	+/-30
PDDR240-30-I	30.7	5.0	+/-2	+/-30
PDDR240-80-I	80.6	4.5	+/-2	+/-30
PDDR240-132-I	132.0	2.8	+/-2	+/-30
PDDR300-150-I	150.1	2.9	+/-2	+/-30
PDDR300-300-I	299.7	3.0	+/-2	+/-30
PDDR300-450-I	450.9	2.0	+/-2	+/-30
PDDR490-600-I	540.0	2.8	+/-2	+/-30
PDDR490-900-I	780.0	1.9	+/-2	+/-30
PDDR490-1200-I	1090.0	1.4	+/-2	+/-30

Application fields

Radars, Scanners, Rotary indexing table, Robots, Packaging, Inspection stations, Direction change conveyors, General automation.

For further information about R.T.A. Direct Drive Technology solutions, please contact R.T.A.



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CATALOGUE
 DIGITAL EDITION



Look Ahead!