

## Technical Specification

# DX50

DX50 Standard Linear Servo Motor

Parallel Connected Coils

Parameter	Unit		DX50-C2P	DX50-C3P	DX50-C4P
Continuous Force	N		126	189	252
Peak Force	N		450	675	900
Motor Constant	N/SqRt(W)		15.53	19.02	21.96
Force Constant	N/Amp		22.5	33.8	45.0
Back EMF Constant	V/m/s		26.6	39.9	53.2
Continuous Current	Amps		5.6	5.6	5.6
Peak Current	Amps		20	20	20
Inductance	mH		1.8	2.7	3.6
Phase Resistance@25°C	ohms		2.1	3.2	4.2

Series Coils

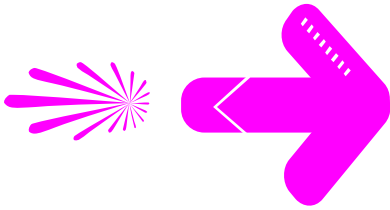
Parameter	Unit	DX50-C1S	DX50-C2S	DX50-C3S	DX50-C4S
Continuous Force	N	63	126	189	252
Peak Force	N	225	450	675	900
Motor Constant	N/SqRt(W)	10.98	15.53	19.02	21.96
Force Constant	N/Amp	22.5	45.0	67.5	90.0
Back EMF Constant	V/m/s	26.6	53.2	79.8	106.4
Continuous Current	Amps	2.8	2.8	2.8	2.8
Peak Current	Amps	10	10	10	10
Inductance	mH	3.6	7.2	10.8	14.4
Phase Resistance@25°C	ohms	4.2	8.4	12.6	16.8
Continuous Power	W	32.9	65.9	98.8	131.7
Peak Power	W	420	840	1260	1680
Coil Weight	gm	280	520	760	1000
Coil Length (L)	mm	100	160	220	280

Notes:

- All coils are built with normally closed thermostat sensor for over temperature protection. Thermistor option is also available.
- Standard cable length = 2 metres. Other length options are available.
- Standard coil comes with digital hall sensor.

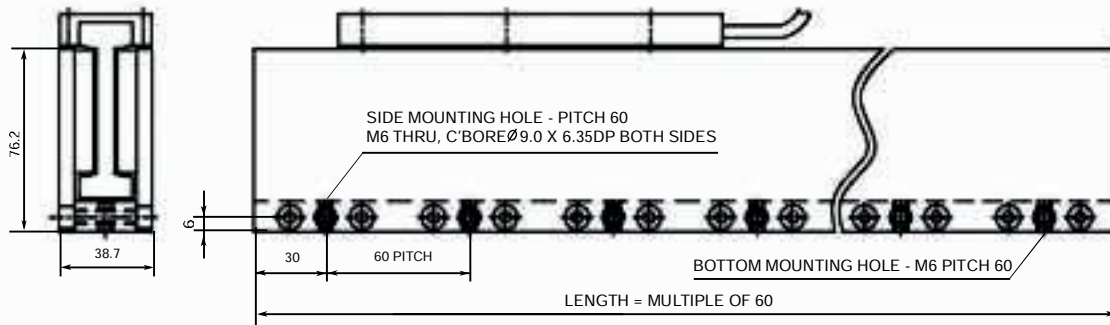
DX50 Standard Magnet Track

- Track length comes in standard length of 300, 600 and 900mm. Custom lengths are available in incremental of 30mm.
- Minimum track length is 240mm.
- Track weight = 866gm per 60mm.

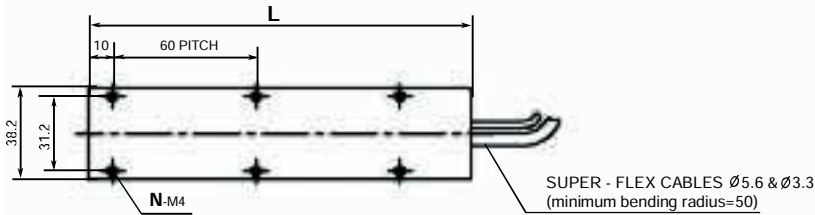


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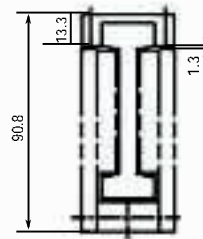
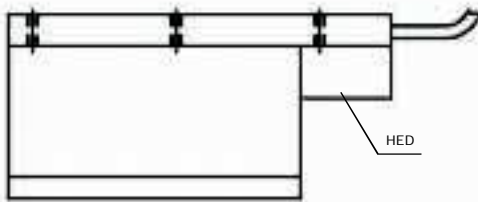
### DX50 MAGNET TRACK



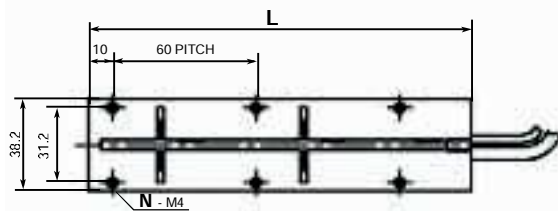
### DX50 COIL



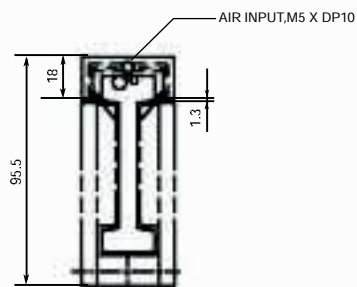
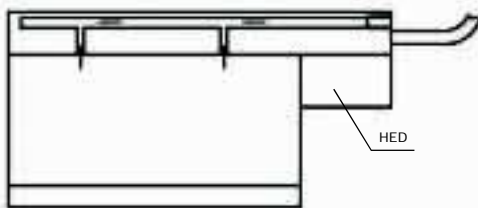
Coil Type	L	N
C1	100	4
C2	160	6
C3	220	8
C4	280	10

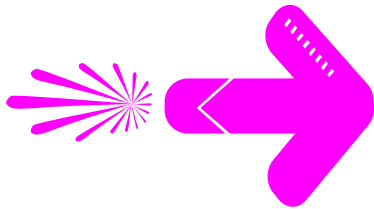


### DX50 COIL - AIR COOLING OPTION

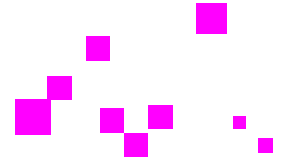


Coil Type	L	N
C1	100	4
C2	160	6
C3	220	8
C4	280	10



**DX 50B**

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**Technical Specification****DX 50B**  
DX 50B

## DX50B Standard Linear Servo Motor

## Parallel Connected Coils

Parameter	Unit		DX50B-C2P	DX50B-C3P	DX50B-C4P
Continuous Force	N		112	168	224
Peak Force	N		448	672	896
Motor Constant	N/SqRt(W)		16.05	19.66	22.7
Force Constant	N/Amp		24.3	36.5	97.4
Back EMF Constant	V/m/s		27.7	41.6	58.4
Continuous Current	Amps		4.6	4.6	2.3
Peak Current	Amps		18.4	18.4	9.2
Inductance	mH		1.8	2.7	14.4
Phase Resistance@25°C	ohms		2.3	3.5	18.4

## Series Coils

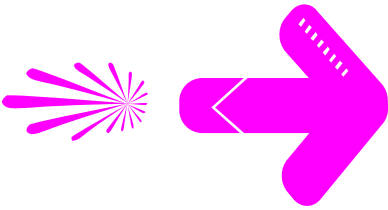
Parameter	Unit	DX50B-C1	DX50B-C2S	DX50B-C3S	DX50B-C4S
Continuous Force	N	56	112	168	224
Peak Force	N	224	448	672	896
Motor Constant	N/SqRt(W)	11.4	16.1	19.7	22.7
Force Constant	N/Amp	24.3	48.7	73.0	97.4
Back EMF Constant	V/m/s	27.7	55.4	83.1	110.8
Continuous Current	Amps	2.3	2.3	2.3	2.3
Peak Current	Amps	9.2	9.2	9.2	9.2
Inductance	mH	3.6	7.2	10.8	14.4
Phase Resistance@25°C	ohms	4.6	9.2	13.8	18.4
Continuous Power	W	24.3	48.7	73	97.3
Peak Power	W	389	779	1168	1557
Coil Weight	gm	220	450	680	910
Coil Length(L)	mm	61	121	181	241

## Notes:

- All coils are built with normally closed thermostat sensor for over temperature protection. Thermistor option is also available.
- Standard cable length = 2 metres. Other length options are available.
- Standard coil comes with digital hall sensor.

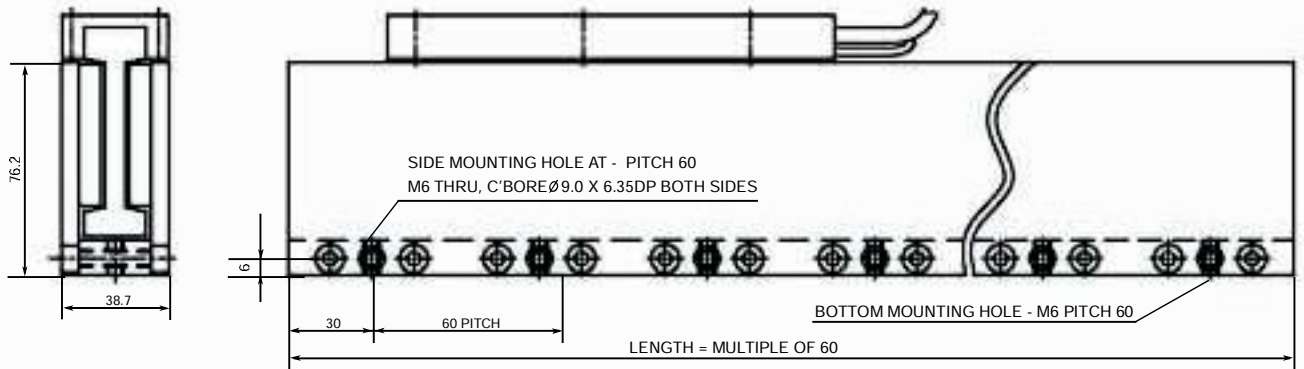
## DX50B Standard Magnet Track

- Track length comes in standard length of 300, 600 and 900mm. Custom lengths are available in incremental of 30mm.
- Minimum track length is 240mm.
- Track weight = 866gm per 60mm.

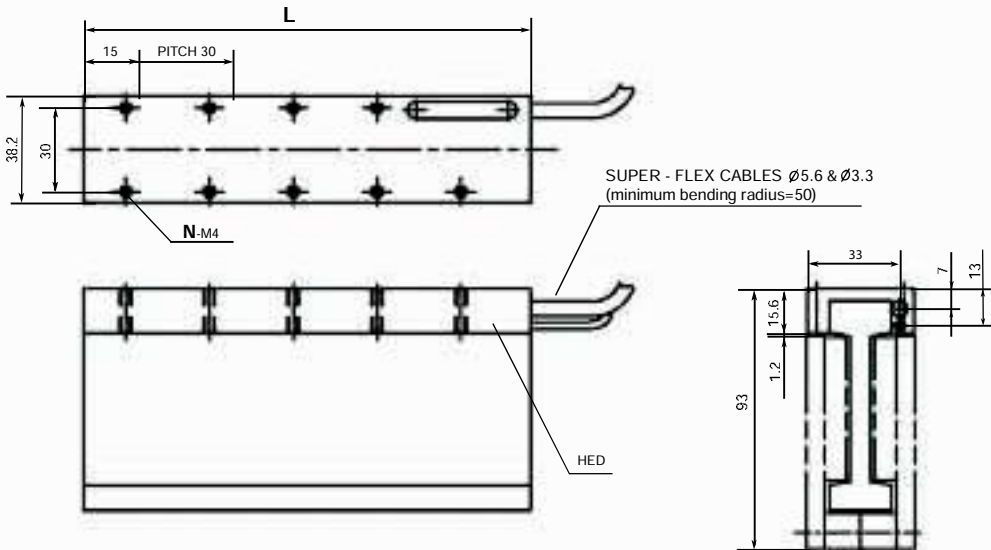


# DX 50B

## DX 50B MAGNET TRACK



## DX 50B COIL



Coil Type	L	N
C1	61	3
C2	121	7
C3	181	11
C4	241	15