## **400LXR Series Linear Motor Tables**

High precision "plug and play" modules

- Pre-engineered package
- Performance matched components
- Protection from environment
- Laser certified precision



#### **Typical Enhancements**

- Velocity to 3 m/sec.
- Acceleration to 5 Gs
- Encoder resolution to 0.1 microns
- Long life cable management system
- Proven protective strip seal
- Certified accuracy and repeatability



404LXR

Linear motors cannot function on their own. Before motion can occur, a platform must be engineered to provide support, direction, and feedback for the linear motor. Bearings, cables, connectors, encoder, travel stops, homing sensor and other components must be performance matched and integrated to achieve desired motion and control.

Parker linear motor tables provide all this and more in a pre-engineered, easily mounted, ready to run package. The linear motor magnet rail is mounted to a stationary base and the forcer is mounted to the moveable carriage. The only contact between the moving carriage and the stationary base is through the linear support bearings. High-precision square rail bearings provide load support, low-friction translation, and a precise linear path.



406LXR

A high resolution linear encoder provides the required velocity and positional information to the motor controller, and a unique cable management system enables high performance motion with a life of 10 million cycles, dependent on motion cycle speeds, acceleration, and environmental condition.

Parker tables, with the slotless linear motor, are offered in two sizes: 404LXR and 406LXR.

The 400LXR Series linear servo motor tables achieve optimum performance by combining slotless motor technology with performance matched mechanical elements and feedback devices. Fast response, high acceleration, smooth translation, high velocity, and quick settling time describe the performance characteristics found in the 400LXR while high repeatability, precise accuracy, and sub-micron resolution

Series	404LXR	406LXR
Travel (mm)	1000	1950
Load (kg)	45	180
Continuous Force (N)	50	110
Peak Force (N)	180	330

define the positioning attributes.

The 400LXR Tables are offered in two widths (100 and 150mm), and travel lengths up to 2 meters to accommodate the size and performance requirements of many industries including life sciences, photonics, semiconductor, digital printing, solar panel, and general automation.

A vast assortment of "designer friendly" features and options simplify the engineering challenges often confronted with "base model" positioning devices. Features like the IP30 protective strip seal and long life cable management system exemplify the built-in value found in the 400LXR units. Other selectable enhancements like cleanroom compatibility, travel limit sensors, motor drives, encoder resolution, and pinning holes for tooling location, simplify machine design and integration efforts.

#### FEATURES



#### (1) "Pass-Through" Cabling

Pre-wired, plug-in connection of the moving payload for easy hookup of user instruments or end effectors.

#### (2) Connector Panel

Electrically shielded panel provides "plug-in" connectivity and quick disconnect for all signal and power requirements.

#### (3) High Strength Aluminum Body

Extruded aluminum housing is precision machined to provide outstanding straightness and flatness.

#### (4) Magnet Rail

Single rail of high energy rare earth magnets offers lower weight and lower cost than double magnet type.

#### (5) Slotless Linear Motor

Provides a highly responsive, zero backlash drive system. Slotless motors offer excellent heat management, durability, and have built-in thermal sensor and hall sensors.

#### 6 Linear Guidance System

The highly engineered carriage and bearing system effectively counters the combined problematic effects of heat, high-speed and high acceleration.

#### (7) Integral Linear Encoder

Protected non-contact feedback with selectable resolutions to 0.1 micron. Z channel is factory aligned to home sensor for precise homing.

#### (8) Limit/Home Sensors

Proximity sensors establish end of travel and "home" location and are easily adjustable over entire length to restrict the travel envelope.

#### (9) "Quick Change" Cabling

Innovative cable transport module offers extended life (10 million cycles, dependent on motion cycle speeds, acceleration, and environmental condition) and a simple cable changing system for preventative maintenance.

#### (10) Protective Seals

Hard shell aluminum cover combined with stainless steel strip seals provide IP30 protection to interior components as well as enhances overall appearance.

#### "Designer Friendly" Features and Options

A vast assortment of "designer friendly" features and options simplify the engineering challenges often confronted with "base model" positioning devices. Features like the IP30 protective strip seal and long life cable



management system exemplify the built-in value found in the 400LXR units. Other selectable enhancements like cleanroom compatibility, travel limit sensors, motor drives, encoder resolution, and pinning holes for tooling location, simplify machine design and integration efforts.

#### Flexibility and Multi-Axis Compatibility

The 400LXR's selection flexibility and mounting compatibility with the 400XR ballscrew driven tables enables single-axis or complex multi-axis units to be configured in a straightforward manner. Parker's matching servo drives and motion controllers can be included to complete the motion system.



#### **Customs and Systems**

For specialized applications requiring customization, Parker design engineers can easily modify these tables to suit, or engineer complete interactive linear motion systems to desired specifications. Parker's 400LXR series tables



have taken the mystery, difficulty and cost out of integrating linear motor tables into high throughput precision positioning applications.

# SPECIFICATIONS 404LXR and 406LXR



The 400LXR Series linear servo motor tables are preengineered "plug and play" modules that combine slotless linear motor technology with performance matched mechanical elements.

Model		404LXR	406L)	KR
Motor		8 Pole	8 Pole	12 Pole
Rated Load	kg (lb)	45 (99)	180 (396)	180 (396)
Maximum Acceleration			5 Gs	
Maximum Velocity Encoder Resolution: 0.1 μm 0.5 μm 1.0 μm 5.0 μm Sine Output	(m/sec)	0.3 1.5 3.0 3.0 3.0	0.3 1.5 3.0 3.0 3.0	0.3 1.5 3.0 3.0 3.0
Positional Repeatability Encoder Resolution: 0.1 µm 0.5 µm 1.0 µm 5.0 µm Sine Output		: (Interpo	± 1.0 μm ± 1.0 μm ± 2.0 μm ± 10.0 μm lation Dependent	t)
Peak Force	N (lb)	180 (40)	225 (50)	330 (75)
Continuous Force	N (lb)	50 (11)	75 (17)	110 (25)
Carriage Mass	(kg)	1.4	3.2	4.1

#### **Travel Dependent Specifications**

		Accura	acy* (µm)	Ur	nit Weight (K	(g)		
	Posit	tional						
Travel	Reso	lution	Straightness	404LXR	406LXR	406LXR		
(mm)	0.1	5.0	& Flatness	8-Pole	8-Pole	12-Pole		
	0.5	5.0						
50	1.0	16	6	1 1	07			
100	7	17	0	4.4	0.7	11.1		
100	(	10	0	4.8	10.0	10.4		
150	10	18	10	5.2	10.3	13.4		
200	10	20	10	5.6	12.6	- 1/1		
200	1/	22	12	6.4	12.0	14.1		
350	14	24	15	6.8	12.2	15.7		
400	18	28	16	7.2	-	-		
450	20	30	18	-	14.8	17.2		
500	21	31	19	8.0	-	_		
550	23	33	21	-	16.4	18.7		
600	25	35	22	8.9	-	-		
650	26	36	24	-	17.9	20.2		
700	28	38	25	9.7	_	_		
750	29	39	27	-	19.4	21.8		
800	31	41	29	10.6	-	-		
850	32	43	30	-	20.9	23.3		
900	33	44	32	11.5	-	-		
950	34	44	33	-	22.5	-		
1000	35	45	35	12.4	-	27.1		
1050	37	47	36	-	-	—		
1200	39	49	41	-	-			
1350	42	52	45	-	-	30.9		
1450	43	53	48	-	30.1	-		
1500	44	54	50	-	-	-		
1600	45	55	53	-	-	34.7		
1700	46	56	56	-	33.9	-		
1/50	40	56	57	-	-	-		
1050	47	57	60	-	-	38.6		
2000	48	20	03	-	31.1	-		
2000	40	50	76	_	-	-		
2500	49	60	80	_		_		
2850	50	60	84	_				
3000	50	60	84	_	_	_		
	00	00	0.					

#### **Encoder Specifications**

Description	Specification
Input Power	5 VDC ±5% 150 mA
Output (Incremental)	Square wave differential line driver (EIA RS422) 2 channels A and B in quadrature (90°) phase shift.
Reference (Z Channel)	Synchronized pulse, duration equal to one resolution bit. Repeatability of position is unidirectional moving toward positive direction.

#### **Limit and Home Specifications**

Description	Specification						
Input Power	+5 to +24 VDC 60 mA (20 mA per sensor)						
Output	Output form is selectable with product: Normally Closed Current Sinking Normally Open Current Sinking Normally Closed Current Sourcing Normally Open Current Sourcing All types Sink or Source max of 50 mA						
Repeatability	Limits: ±10 microns (unidirectional) Home: See Z channel specifications						

#### Hall Effect Specifications

Description	Specification
Input Power	+5 to +24 VDC, 30 mA
Output	Open Collector, Current Sinking, 20 mA Max

\* Accuracy stated is at 20° C, utilizing slope correction factor provided

## DIMENSIONS 404LXR

#### Download 2D & 3D files from www.parker.com/emn/404LXR



#### DIMENSIONS

#### **Dimensions (mm)**









Front View **Z-Channel Location** 





40.0 @ O

Cable Module (Strip Seal/Hardcover)





Cable Module/Hardcover

70.0

End Views A-A

	Travel	Dimensions (mm)									
Model	(mm)	Α	В	С	D	Е					
404T00LXR	50	368.0	1	100.0	12	346.0					
404T01LXR	100	418.0	1	100.0	12	396.0					
404T02LXR	150	468.0	1	100.0	12	446.0					
404T03LXR	200	518.0	1	100.0	12	496.0					
404T04LXR	250	568.0	1	100.0	12	546.0					
404T05LXR	300	618.0	2	200.0	16	596.0					
404T06LXR	350	668.0	2	200.0	16	646.0					
404T07LXR	400	718.0	2	200.0	16	696.0					
404T09LXR	500	818.0	3	300.0	20	796.0					
404T11LXR	600	918.0	3	300.0	20	896.0					
404T13LXR	700	1018.0	4	400.0	24	996.0					
404T15LXR	800	1118.0	4	400.0	24	1096.0					
404T17LXR	900	1218.0	5	500.0	28	1196.0					
404T19LXR	1000	1318.0	5	500.0	28	1296.0					



## OPTIONS & ACCESSORIES

#### **OPTIONS & ACCESSORIES**

### Cable Transport Module

The LXR's Cable Transport Module offers the convenience of "plug and play" connectivity for fast, easy table installation and "quick change" replacement. This system of cable management includes the highest quality high-flex cable with a life rating of 10 million cycles (dependent on motion cycle speeds, acceleration, and environmental condition), a cable track with support brackets, a "quick change" carriage cartridge, and a plug-in connector panel housing. It also provides a "pass-through" connection and cabling for customer application. This transport module option is ideal for high throughput continuous duty requirements where downtime is not acceptable.

#### Connection Ends



#### OEM Cable System

The LXR's unharnessed cable system is offered for OEMs and others who have independent methods of routing and managing cables. These systems offer the "quick change" cartridge, "pass-through" connection and round high-flex cables in lengths of 3.0 or 7.5 meters. They are available with flying lead end terminations, as well as Gemini connectors.



"Quick Change" Cartridge



Cable Extensions – Flying Leads Terminations



#### Cable Transport Module Order Code Order Extension Cable

Order	Extension Cable						
Code	Length (m)	Termination					
CM02	No E	xtension Cables					
CM07	3.0	Flying Leads					
CM08	7.5	Flying Leads					
CM13	3.0	HD15M-VF Connector					
CM14	7.5	HD15M-VF Connector					
CM17	2.0	HD15M-CF12					
CIVIT7	5.0	Connector					
CM18	75	HD15M-CF12					
OWITO	1.0	Connector					



2-Axis System w/Expandable Cable

Management

#### **OEM Cable System Order Code**

Order	Extension Cable						
Code	Length (m)	Termination					
CM03	3.0	Flying Leads					
CM04	7.5	Flying Leads					
CM11	3.0	HD15M-VF Connector					
CM12	7.5	HD15M-VF Connector					
CM15	3.0	HD15M-CF12 Connector					
CM16	7.5	HD15M-CF12 Connector					

#### User "Pass-Through" Cabling

Cable concerns regarding routing and durability for payload or instrument signals are addressed by the pass-through connectivity feature included with both of the LXR cable management systems. Nine pin D-connectors provided on the carriage (with the transport module units) and the cable connecting block combine with high-flex, long life cables for easy setup and dependable performance.

Note: Extension cables are available and can be ordered separately: 006-1743-01 (3 meters); 006-1743-02 (7.5 meters).



- Pre-wired plug-in connection to the moving payload
- Nine user conductors for end-effectors or instruments
- High-flex long life cables:
  - Ribbon Cable Transport Module System Round Cable – OEM System

#### HD15M-VF HD15M-CF12 15 Pin HD-SUB Plug 15 Pin HD-SUB Plug Pin # Function Pin # Function Z+ 1 SENSE-Z-2 2 SENSE+ GND 3 3 HALL1 4 NO CONN 4 +5V +5V 5 5 +5V 6 GND 6 HALL2 A-A-/SIN-8 A+ 8 A+/SIN+ 9 HALL. 9 HALL3 TEMP 10 10 TEMP B-11 11 B-/COS-12 B+ 12 B+/COS+ HALL2 13 13 Z+ 14 HALL3 14 7-NO CONN 15 15 GND HD15M-VF Connector compatible HD15M-CF12 Connector with IPA. Vix and Aries Feedback compatible with Compax 3 F12 Connector Feedback Connector

### Cable Connector Configuration

## Simple Configuration - Digital Drive Options

All digital drives ordered in the LXR part number configuration come set up with a motor file including electrical parameters to set continuous and peak currents, current loop compensation values, and default gain settings. Users will have the ability to override these parameters for special application requirements. Tuning is easy to use and intuitive for users and is available via a variety of methods. The motor and loading information must be known by the drive to determine the baseline tuning gains. These are simple parameter entries the user can complete with the help of standard Parker supplied front-end software tools.



## For complete details on drive product features and specifications, please refer to the "Drives & Controllers" section of this catalog.

## Dowel Pinning Options order Codes: P1 P2 P3

Standard dowel pin locating holes P1 are offered on all 400LXR units to facilitate repeatable mounting of tooling or payload.

In addition, pinning options P2 and P3 are offered for precise orthogonal mounting of the second axis in a multi-axis system. In this case, the bottom side of the table base is match drilled and reamed to the first axis to provide exact orthogonal location. This convenient option eliminates concerns regarding contamination or damage often associated with machining for locating pins in an assembled unit. In some instances a 404LXR pinning adapter may be required part number 100-9584-01.



#### **OPTIONS & ACCESSORIES**

### Cleanroom Preparation Option

#### Order Codes: R2

Cleanroom compatible linear tables are often required for laboratory and production applications in industries such as semiconductor, life science, electronics, and pharmaceuticals.

400LXR tables with cleanroom preparation were tested in Parker's vertical laminar flow work station, which utilizes ULPA filters to produce an environment having a cleanliness of class 1 prior to testing. Tables were tested in a variety of orientations with sampling both below the table and at the carriage mounting surface. Laminar flow rate is 0.65 inches W.C.

Special cleanroom testing can be provided upon request. For more information on cleanroom testing, contact a Parker Applications Engineer at 800-245-6903.

#### **About Cleanrooms**

A room in which the concentration of airborne particles is controlled within defined limits. Federal Standard 209E statistically defines the allowable number of particles per cubic foot of air.

The chart below describes the conditions that must be maintained for the cleanroom to have a specific "class" rating.

#### Number of Allowable Particles (Measured particle size in microns µm)

Class	0.1	0.2	0.3	0.5	5
1	35	7.5	3	1	0
10	350	75	30	10	0
100	—	750	300	100	0
1000	—	—	-	1000	7
10000	—	—	-	10000	70
100000	—	—	-	100000	700

#### Toe Clamp Accessories

Part Number:

100-8376-01 (404LXR) 002-3624-01 (406LXR)

Toe clamps for mounting 400LXR tables are ordered separately.

Note that 400LXR Series toe clamps are not interchangeable with toe clamps for 400XR Series tables.



**Standard Cleanroom Preparation** 

- Stringent cleaning and handling measures
- Cleanroom rated lubrication
- Strip seal replaced with hard shell cover





Testing at 4.5 inches below table

Testing at carriage mounting surface

#### 400LXR Cleanroom Compatibility

	Clas	SS
Table Velocity	4.5" Below Table	At Carriage Surface
250 mm/sec	10	1
500 mm/sec	25	1
1000 mm/sec	50	5
2000 mm/sec	250	25
3000 mm/sec	500	100



## ORDERING INFORMATION

## 404LXR

Fill in an order code from each of the numbered fields to create a complete model order code.

			1	2	3	4	5	6	7	8	9	10	11	(12)	13	(14)
	Order	Example:	404	T04	LXR	М	Ρ	D13	H3	L2	CM09	Z2	E2	R1	<b>A</b> 4	P1
1	Series 404						(	9	Cable I CM01	Manag No C	<b>ement</b> ables – Fr	ree Trav	vel	A		
2	Travel -	mm 8 Pole Motor							CM02 CM03 CM04	3.0m	OEM Cal OEM Cal	ole Set	uie (oniy : - FL : - FL	)		
	T00	50						(	CM07	Cable	e Trans M	od. w/3	3.0m - F	Ľ*		
	T01	100						(	CM08	Cable	e Trans M	od. w/7	7.5m - F	L*		
	T02 T03	200						(	CM11	3.0 m	n OEM Ca	ble Se	t - HD15	5M-VF C	Connecto	or
	T04	250						(	CM12	7.5 m	n OEM Ca	ible Se	t - HD15	5M-VF C		or
	T05	300						(	CM13	Cable	e Irans M	od. w/3	3.0m - F	1D15M-	VF Conn	ector
	T06	350								Cable	e Irans M	od. w/i	(.5m - F	1D15M-	VF Conn	lector
	T07	400								3.0m	OEM Cal	ole Set	- HD15	M-CF12	Connec	ctor
	T09	500							CIVITO	7.5m	OEIVI Cal	ole Set	- HD 15	IVI-CET2		ctor
	 T12	600 700						(	CM17	Cable	ector	00. W/3	5.0m - F		JF12	
	T15	800							CM19	Cable	e Trans M	od. w/7	7.5m - H	ID15M-0	CF12	
	T17	900					*	Evtonci	on cable f	Conn	lector	noction	ic availat	alo and o	an ha ard	orod
	T19	1000					S	separatel	y: #006-1	743-01 (	3 meters); :	#006-17	743-02 (7	.5 meters	an de ord S)	ereu
							*	* When v	wiring to a	Compa	x3 please s	elect cu	irrent sou	ircing sen	isors	
3	Model						1	Notes - H Connecto	HD15M-VH or	- Connec	tor compa	tible with	h IPA, Vix	and Arie	s Feedba	.ck
	LXR	Linear Motor					F	HD15M-(	CF12 Con	nector co	ompatible v	vith Cor	mpax 3 F	12 Feedb	ack Conr	nector
							Ν	MD14-PF	- Connect	or comp	atible with I	Series	s (PD-xxP	) Feedba	ck Conne	ector
4	Mounti	ng					(	10	Z Chan	nel Lo	cation*					
	М	Metric							Z1	None	) 					
									Z2 70	Posit	IVE END F	ositior	า			
5	Grade								23 74	Nega	er Positic ative End	Positic	מר			
	Р	Precision						4	<b>_</b> 7	* Refe	r to dimensi	ons				
							(·	<u>1</u> 1	Encode	or Onti	on					
(6)	Drive Iy	/pe							Encoue F1	None	2					
	D3	Free Iravel (No I	Vlotor)						E2	1.0 µ	, ım Resolı	ution				
	D13	8 Pole Motor							E3	0.5 u	ım Resolı	ution				
~								I	E4	0.1 µ	ım Resolu	ution				
(7)	Home S	Sensor						I	E5	5.0 µ	ım Resolu	ution				
	H1	None-Free Trave	el (only)					I	E7	Sine	Output E	ncode	r			
	H2	N.C. Current Sir	nking				6	ญ เ	Enviror	mont						
	H3	N.O. Current Sir	nking				C	<u>1</u>	Enviror D1	Strin	soal					
	H4	N.C. Current Sc	ourcing						R2	Hard	Cover w	/Class	10 Cle	anroom	Pren	
	H5	N.O. Current Sc	ourcing						R3	Hard	Cover w	ithout	Cleanro	om Pre	p	
(8)	Limit Se	ensor					(	13)	Digital	Drive						
C	11	None-Free Trave	el (only)					<u> </u>	A1	No D	rive					
	12	N.C. Current Sir	nkina				,	<u> </u>	<b>.</b>	<b>•</b> • •						
	13	N O Current Sir	nkina				(	14)	Pinning	J Optic	on .	·				
	14	N.C. Curront So	urcina						ГI D0 *		IUITI-AXIS	pinning	J Na ta V	or 7 ou!		KO 000
	L-+ 1.5								r2 " D2 *	× axi	s transfer	pinnir ninnir	iy lo Y i na ta V i	or Z axis	s - 3∪ ai D aro, co	IC-SEC
	LO	N.O. Current SC	urcing					,	r J * Transfer	t axi t ninnina t	o XR from I	VR rea	IY IU A i Uires add	axis - 30 litional br	J arc-Se acket and	I FPS
								1	request. C	all 1-800	)-245-6903	for mul	Iti-axis pir	nning opt	ions & qu	ote

# ORDERING INFORMATION 406LXR

Fill in an order code from each of the numbered fields to create a complete model order code.

			1	2	3	4	5	6	7	8	9	10	11	12	(13)	14)	
	Order	Example:	406	T08	LXR	М	Ρ	D13	H2	L2	CM09	<b>Z</b> 2	E2	R1	A4	P1	
1	Series 406							9	Cable Management CM01 No Cables – Free Travel CM02 Cable Transport Module (oph)								
2	Travel – mm 8 Pole Mo			otor 12 Pole Motor					CM02 CM03	3.0 7.6	)m OEM (	Cable S	Set-FL	iiy)			
	<b>T01</b> 50			-					CM07	Ca	ble Trans	Mod. v	v/3.0m-l	FL*			
	T02	150			50	)			CM08	Ca	ble Trans	Mod. v	v/7.5m-l	FL*			
	T03	250			150	)			CM11	3.0	) m OEM	Cable S	et - HD <sup>-</sup>	15M-VF	Connec	tor	
	T04	350			250	)			CM12	7.5	im OEM C	Cable S	et - HD	15M-VF	Connec	tor	
	T05 T06	400			450	)			CM13	Ca	ble Trans	Mod. v	v/3.0m -	- HD15N	Л-VF Co	nnector	
	T07	650	550 650					CM14	CM14 Cable Trans Mod. w/7.5m - HD15M-VF Connector 3.0m OEM Cable Set - HD15M-CF12 Connector								
	T08	750						CM15									
	T09	850			750				CM16	(.5m UEM Gable Set - HD15M-CF12 Connector							
	T10	950			850	)			CM17	CM17 Cable Trans Mod. w/3.5m - HD15W-CF12 Connector CM18 Cable Trans Mod. w/7.5m - HD15M-CF12 Connector * Extension cable for pass through connection is available and can be					VI-01 12		
	111 T12	1200			1100	)			CM18								
	T12	1700			1650	)			* Extens					can be			
	T14	1950			1850	)			ordered separately: #006-1743-0 ** When wiring to a Compax3 plex Notes - HD15M-VE Connector oc					s); #006- current s	1743-02 ourcing s	(7.5 meters) ensors ries	
3	Model								Feedbac	k Conn	ector		ipatiole v	vici i i 7 (, 1		105	
	LXR Linear Motor							HD15M-CF12 Connector compatible with Compax 3 F12 Fe Connector MD14-PF Connector compatible with P Series (PD-xxP) Fee							dback back		
4	Mountin	ng							Connect	or				,	,		
	М	Metric (1)						10	Z Channel Location*								
(5)	Grade								Z1 70		one oitivo Enc	1 Dooit	ion				
0	P	Precision							73	Ce	onter Posi	tion	1011				
	-								Z4	Ne	gative En	id Pos	ition				
6	Drive Ty	/pe			* R(	efer to dime	nsions										
	Free Tra	vel (No Motor)						11	Encod	ler Op	otion						
	D3	8 Pole Motor (N	lo Moto	r)					E1	Nc	ne						
	D5	12 Pole Motor (	No Mote	or)					E2	1.0	) µm Res	olution					
	Linear Motor								E3	0.5	5 µm Res	olution					
	D13	8 Pole Motor C	arriage						E4	0.1	l µm Res	olution					
	D15	12 Pole Motor (	'ole Motor Carriage						E5 E7	5.0 Sir	) µm Res ne Output	olution : Enco	der				
7	Home Sensor							(12)	Enviro	onmer	ntal						
	H1	None-Free Trav	el (only)						R1	Str	rip Seal						
	H2	N.C. Current Si	nking						R2	Ha	rd Cover	w/Cla	ss 10 C	leanroo	m Prep		
	H3	N.O. Current Si	nking					(13)	Digital Drive								
	H4	N.C. Current Sc	ourcing						A1	Nc	) Drive						
	H5	N.O. Current So	ourcing					$\sim$		_							
	Linet C						(14)	Pinnir P1	i <b>g Op</b> f No	<b>tion</b> multi-axi	is pinn	ing					
8									P2 *	Xa	axis trans	fer pini	ning to `	Y or Z a	ixis - 30	arc-sec	
		None-Free Irav	el (only)						P3 *	Υa	axis trans	fer pin	ning to 2	X axis -	30 arc-	sec	
	L2	N.C. Current Si						* Transfe	* Transfer pinning to XR from LXR requires additional bra				bracket a	and EPS			
	L3	N.O. Current SI	uking	) a					request. Call 1-800-245-6903 for multi-axis pinning options & quote					quote			

L5

N.O. Current Sourcing