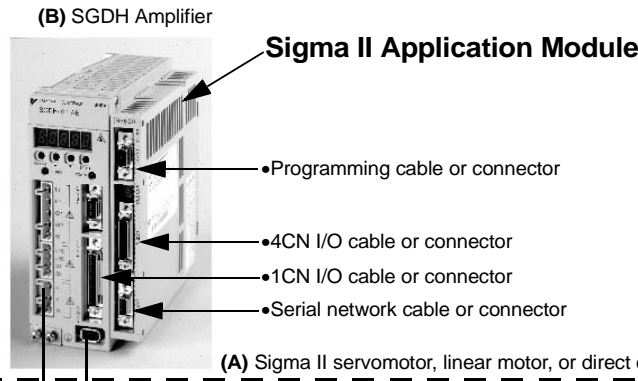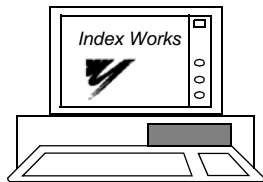# Selecting Your Sigma II Indexer System

Specify part number JUSP-NS600, the indexer add-on application module.
Use the tables beginning on the following page to specify choice of indexer interface cables, mating connectors only, set-up and monitoring tools, and software.
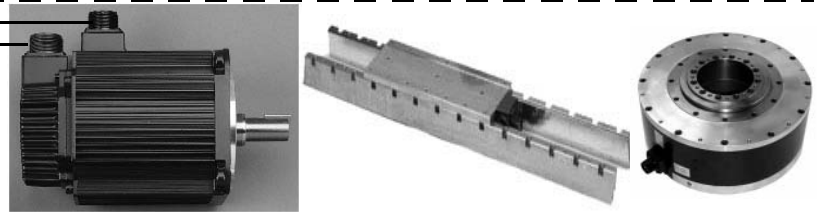
System Configuration

(B) SGDH Amplifier

Index Works

Sigma II Application Module

• Programming cable or connector

• 4CN I/O cable or connector

• 1CN I/O cable or connector

• Serial network cable or connector

(A) Sigma II servomotor, linear motor, or direct drive motor.

JUSP-NS600 Indexer

Power Components

(E) Additional regeneration resistor capacity (if necessary), optional DC reactor, etc.

(C) Pre-wired power and feedback cables or

(D) Connector kits for local cable assembly

> Specify a technical manual, if it
> is needed, on your servo system purchase order:
> *Users Manual, Sigma II Indexer*: YEA-SIA-S800-32.11
> *Users Manual, Linear Motor:* YEA-SIA-S800-39.11
> (Manuals provided at no charge with a purchase order, but must be requested).

Power Components
(motor, amplifier, and connections for power and feedback)

Select the required power components (servomotor, power and feedback connectors or pre-wired cables, amplifier, regenerative packs, etc.) from the following catalog pages.

Use this table or the Yaskawa publication referenced below to determine which catalog section describes the best servomotor for the application.

Application Requirements (Maximum)			Number of Motor Sizes	System Voltage and Sigma II Servomotor Series				Selection Guide for Power Components Page Number *
Speed (rpm)	Rated Torque oz • in [lb • in]	Peak Torque oz • in [lb • in]		100V_{ac} Single-phase	200V_{ac} Single-phase	200V_{ac} Three-phase	480V_{ac} Three-phase	
5000	338	1010	6	SGMAH	SGMAH	—	—	11
5000	676	2027	5	SGMPH	SGMPH	—	—	29
3000	[845]	[1988]	10	—	—	SGMGH	—	57
5000	[140]	[422]	6	—	—	SGMSH	—	85
3000	[845]	[1988]	10	—	—	—	SGMGH	127
5000	[140]	[422]	6	—	—	—	SGMSH	139
6000	[43]	[190]	2	—	—	—	SGMUH	139
2000	[1240]	[6120]	5	—	—	—	SGMBH	165

* Yaskawa publication: *Sigma II Servo System Product Catalog Supplement* G-MI#99001x-Sigma II,
Linear Motor Catalog KAE-S800-39.10, Direct Drive Motor Catalog YEA-KAA-DDM-1.
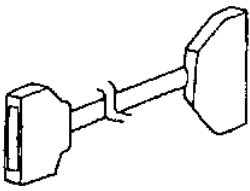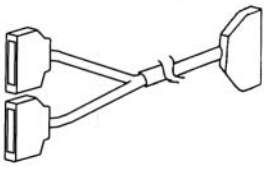
Sigma II Indexer Selection

Use the servomotor and amplifier selection of this catalog for specification and selection of Sigma II servomotor and servo amplifier.

Component Description	Part Number	Comments	Item Class
Sigma II Add-on Indexer Application Module	JUSP-NS600	Mounting hardware requirements: one ground strap mounting screw. (See supplementary information on the next page.)	Stock

For 480VAC large capacity amplifiers (22 - 55kW), refer to the Sigma II catalog for amp dimensions.

Indexer I/O Interface Cable Selection

Component Description **(E)**		Part Number	Comments	Item Class
Input/Output 1CN Cable & Transition Terminal Block		JUSP-TA50P	35mm DIN rail mountable; the cable length is 0.5m.	Stock
Input/Output 1CN Cable with Pigtail Leads		JZSP-CKI01-□(A)*	Use the following key to specify required cable length (last digit of the part number): 1: 1m (standard) 2: 2m 3: 3m	
Input/Output 4CN Cable & Transition Terminal Block		JUSP-TA36P	35mm DIN rail mountable; the cable length is 0.5m.	
Input/Output 4CN Cable with Pigtail Leads		CKI-NS600-□□	Use the following key to specify required cable length (last two digits of the part number): 01: 1m (standard) 02: 2m 03: 3m	

2

Input/Output 1CN Cable Cable with Female D-Sub output Connector		JZSP-CKI0D-□□**	Use the following key to specify required cable length (last two digits of the part number): D50: 0.5m 01: 1m (standard) 02: 2m 03: 3m	
Input/Output 1CN+4CN Cable with Female D-Sub output Connector* Applicable only for SGDH-1E (15 kW) and below.		CKI-NS600D-□□** (for use with NS600 Indexer)	Use the following key to specify required cable length (last two digits of the part number): D50: 0.5m 01: 1m (standard) 02: 2m 03: 3m	

JUSP-NS600 Indexer

* The "(A)" at the end of the cable part number indicates the revision level. Revision level may be subject to change prior to this catalog reprinting.

** 50 Pin Female D-Sub output connector mates to customer supplied third party terminal block. (e.g., Wago #289-449, Weidmuller #919658, Phoenix #2283647, Amphenol/Sine #20-51039, and many others.
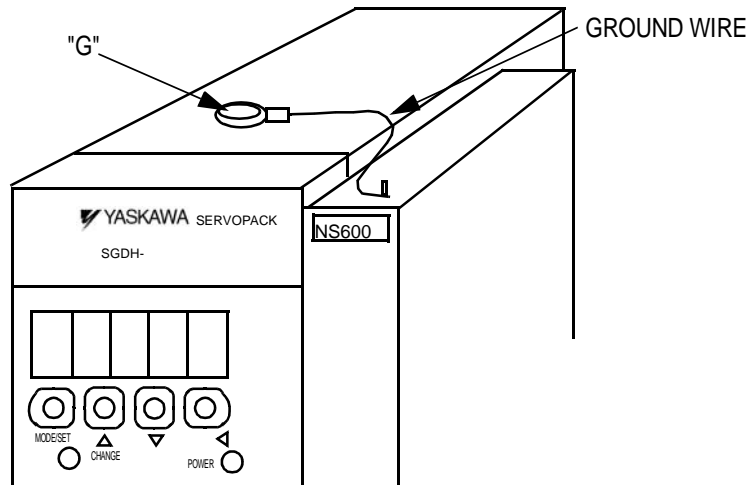
Mating Connector Selection

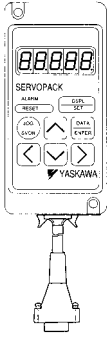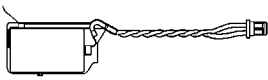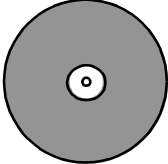| Component Description **(E)**		Part Number	Comments	Item Class
1CN Mating Connector		JZSP-CKI9	for SGDH I/O 50-pin	
4CN Mating Connector		DP-9420007	Solder type with cover	Stock
3CN, 6CN, and 7CN Peripheral Mating Connector	—	YSC-1	—	
5CN Analog Monitor Connector	—	DE9404559	—	

Supplementary Information

For grounding, connect the ground wire of the Sigma II Indexer application module to the point marked "G" on the SGDH servo amplifier. Refer to the following table for the proper screw size.

Servo Amplifier	"G" Screw	Comments
SGDH-A3-02BE SGDH-A3-10AE	M3 x 10 (round head phillips with split lock washer and flat washer	One supplied with NS600
SGDH-15-50AE SGDH-15-50DE	M4 x 10 (round head phillips with split lock washer and flat washer	One supplied with NS600
SGDH-60-1EAE SGDH-60-1EDE	M4 x 8 (round head phillips with split lock washer and flat washer	One supplied with NS600 Use front panel side screw hole.

"G"

GROUND WIRE

YASKAWA SERVOPACK

SGDH-

NS600

MODE/SET

CHANGE

POWER

Example: For SGDH (30W to 5.0kW)

Peripheral Device Selection

Component Description **(E)**		Part Number	Comments	Item Class
Hand-held Digital Operator Panel		JUSP-OP02A-1 and JZSP-CMS00-1	Portable unit with 1m adapter cable for Sigma II Indexer	Stock
Absolute Encoder Battery		JZSP-BA01	3.6V, 1000mAh (lithium battery)	
Software Interface Cable for 3CN, 6CN, or 7CN	—	YS-12	Pre-wired 2.0m cable with 9-pin connector (RS232)	
IndexWorks™ Software		NS600-GUI or JZSP-WP0001	Monitoring and set-up software for Windows 95, Windows 98, and Windows NT on a CD-ROM.	

JUSP-NS600 Indexer