

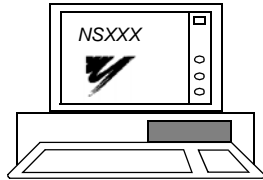
Selecting Your Sigma II Indexer System

Specify part number JUSP-NS500, 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

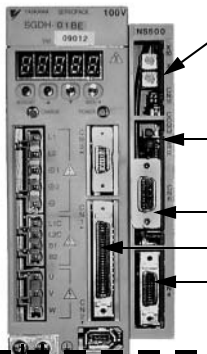
Setup and mounting software



GSD Software File



(B) SGDH Amplifier



Sigma II Application Module

- 11CN setup software mating connector or cable
- Profibus™ network connector
- 1CN I/O cable or connector
- 4CN I/O cable or connector



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

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:

Profibus™ Interface Unit Users Manual: SIE-C718-8

Linear Motor Users Manual: YEA-SIA-S800-39.11

(Manual provided at no charge with a purchase order, but must be requested).

JUSP-NS500 Indexer

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 publications 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

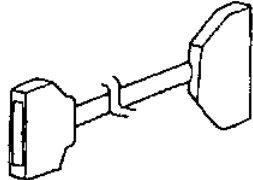
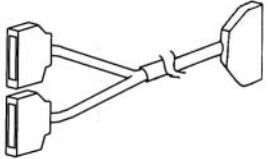
Use the servomotor and amplifier selection of this catalog for specification and selection of Sigma II servomotor and servo amplifier.

| Component Description | Part Number | Comments | Item Class |
|--------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------|------------|
| Sigma II Add-on Indexer Application Module | JUSP-NS500 | 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 with Pigtail Leads | CKI-NS300-□□ | Use the following key to specify required cable length (last two digits of the part number): 01: 1m (standard) 02: 2m 03: 3m | |

| | | | | |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Input/Output 1CN Cable Cable with Female D-Sub output Con- nector* |  | 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 Con- nector* Applicable only for SGDH-1E (15 kW) and below. |  | CKI-NS300D-□□** (for use with NS500 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 | |

* 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

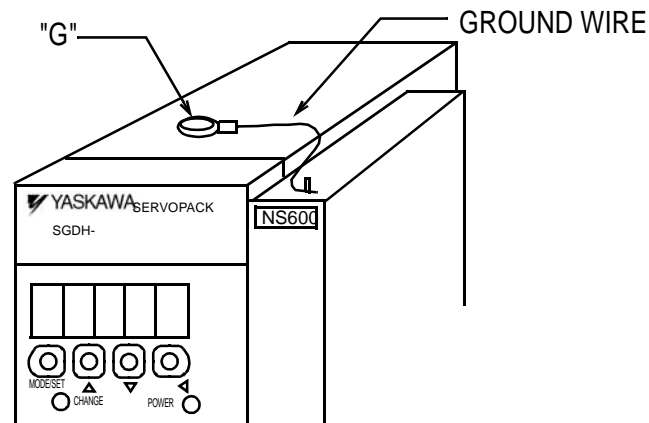
| Component Description (E) | Part Number | Comments | Item Class |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------|
| 1CN Mating Connector |  | JZSP-CKI9 | for SGDH I/O 50-pin |
| 4CN Mating Connector |  | DE-9406973 | Solder type with cover |
| 3CN Peripheral Mating Connector | — | YSC-1 | — |
| CN11 Setup Software Mating Connector | — | DE9404559 | Strongly advised: YS-16 cable (next page) |
| Profibus Mating Connector | — | | Standard 9-pin male D-Sub connector. (Note: termination resistors are required for the end of the network.) |

**JZSP-NS500
 Indexer**

Supplementary Information


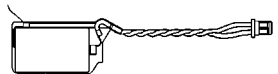
For grounding, connect the ground wire of the Sigma II Indexer application module to the point marked "G" on the SGDH servo amplifier. Refer to the following table for the proper screw size.

| 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 NS500 |
| SGDH-15-50AE SGDH-15-50DE | M4 x 10 (round head phillips with split lock washer and flat washer) | One supplied with NS500 |
| SGDH-60-1EAE SGDH-60-1EDE | M4 x 8 (round head phillips with split lock washer and flat washer) | One supplied with NS500 Use front panel side screw hole. |

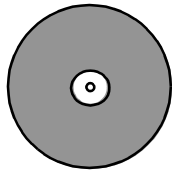


Example: For SGDH (30W to 5.0kW)

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) | |
| Setup Software Interface Cable for CN10 | — | YS-16 | Pre-wired 1.5m cable with 9-pin connector (RS232) for NSXXX software | |

Sigma II Network Tools and Documentation

| Component Description (E) | | Publication Number* | Comments | Item Class |
|-----------------------------------|-------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Fieldbus Tools and documentation* |  | YEA-CD-S800-34.1 | Includes : <ul style="list-style-type: none"> • Yaskawa's NSXXX monitoring and set-up software for Windows 95, Windows 98, and Windows NT. • Electronic Data Sheet (GSD) software for Profibus™ configuration software manager. • NS500 User's Manual.pdf. | Stock |

*Available by request. Contact: literature@yaskawa.com.