

# **Application Note**

Group	Drives & Slides	Date	
Series	S300 & DS4	Revised	8/21/07
Element Group	Limit Switches	Revision	2
Element	Position and Home Sensors	Author	J. Coleman
		# Of Pages	2

### DS4 Position & Home Sensors For Use With S300 Drive

Languages	Target Group	Status	Usage	International Restrictions checked = allowed to view
☑ English	■ Basic	□ In Process	$\square$ Internal	☑ U.S. Citizens
□ German	□ Normal		Public	Non-Restricted Countries, End
□	□ Specialist			✓ Uses, and End Users (www.bis.doc.gov)

# **About the Content:**

This document contains information on the limit and home sensors used for the DS4 and S300 drive. It includes the options for ordering the sensors with the DS4 and the part numbers for ordering the sensors separately.

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# **Drive Input Information**

The S300 digital inputs are sinking inputs and therefore require sourcing (PNP) limit and home sensors. Limit sensors for the S300 are Normally Closed (N.C.) and the home sensor is Normally Open (N.O.).

# **Sensors**

The following sensors are Inductive Proximity Sensors. The aluminum carriage on the DS4 table triggers the sensors.



#### **Limit Sensors**

The limit sensors used for the S300 are Normally Closed (N.C.). Limit sensors will use digital inputs 3 and 4 and are represented in the drive software as "PSTOP" and "NSTOP."

	How To Order	Description
DS4 Option	<b>LP2</b> - When ordering the DS4 choose LP2 as the limit switches.	LP2 contains a quantity of two (2) pieces of IDC part-number 61-0037.
Ordering Part Number	61-0037 - Use this part number to order sensors separately. This part number includes the sensor only and does not include the housing or mounting screws. In order to get the housing you will need to purchase the LP2 option at the time of ordering the DS4	61-0037 is a PNP (sourcing) Normally Closed (N.C.) position sensor.
*Housing	81-0183 - Use this part number to order the sensor housing. This part number does not include the mounting screws or T-nut.	81-0183 is the plastic housing that holds the inductive proximity sensor.

#### **Home Sensors**

The home sensor used for the S300 and the DS4 table is Normally Open (N.O.). A home sensor will use digital input 1 or 2, or an input on the expansion I/O option card, and will be represented in the drive software as "Machine Home (Reference) Switch."

	How To Order	Description
DS4 Option	<b>HP1</b> - When ordering the DS4 choose HP1 as the home switch.	HP1 contains a quantity of one (1) piece IDC part number 61-0036.
Ordering Part Number	61-0036 - Use this part number to order the home sensor separately. This part number only includes the sensor and does not include the housing or mounting screws.	61-0036 is a PNP (sourcing) Normally Open (N.O.) sensor.
*Housing	81-0183 - Use this part number to order the sensor housing. This part number does not include the mounting screws or T-nut.	81-0183 is the plastic housing that holds the inductive proximity sensor.

# **Summary**

When ordering DS4 with position switches for use with an S300, you will need to choose options LP2 and HP1. If ordering the position switches separately, order 2 pieces of 61-0037 and 1 piece of 61-0036. HP1 (61-0036) will connect with the S300 drive at your choice of digital input 1 or 2, or an input on the expansion I/O option card. LP2 (61-0037) will connect with the S300 drive with one sensor wired to digital input 3 and the other sensor wired to digital input 4.