



## APPENDIX

## 3

## Syntax for Selected SAS Functions Used with the %SYSFUNC Function

This appendix provides summary descriptions and syntax for selected SAS functions that can be used with the %SYSFUNC function. These functions are documented online.

Table A3.1 on page 289 shows the syntax for selected SAS functions that can be used with the %SYSFUNC function.

**Table A3.1** Function Arguments for %SYSFUNC

Argument	Description and Syntax
ATTRC	returns the value of a character attribute for a SAS data set. <code>%SYSFUNC(ATTRC(<u>data-set-id</u>,<u>attr-name</u>))</code>
ATTRN	returns the value of a numeric attribute for specified SAS data set. <code>%SYSFUNC(ATTRN(<u>data-set id</u>,<u>attr-name</u>))</code>
CEXIST	verifies the existence of a SAS catalog or SAS catalog entry. <code>%SYSFUNC(CEXIST(<u>entry</u> &lt;, 'U'&gt;))</code>
CLOSE	closes a SAS data set. <code>%SYSFUNC(CLOSE(<u>data-set-id</u>))</code>
CUROBS	returns the number of the current observation. <code>%SYSFUNC(CUROBS(<u>data-set-id</u>))</code>
DCLOSE	closes a directory. <code>%SYSFUNC(DCLOSE(<u>directory-id</u>))</code>
DINFO	returns a specified information item for a directory. <code>%SYSFUNC(DINFO(<u>directory-id</u>,<u>info-items</u>))</code>
DNUM	returns the number of members in a directory. <code>%SYSFUNC(DNUM(<u>directory-id</u>))</code>
DOPEN	opens a directory. <code>%SYSFUNC(DOPEN(<u>fileref</u>))</code>
DOPTNAME	returns a specified directory attribute. <code>%SYSFUNC(DOPTNAME(<u>directory-id</u>,<u>nval</u>))</code>
DOPTNUM	returns the number of information items available for a directory. <code>%SYSFUNC(DOPTNUM(<u>directory-id</u>))</code>
DREAD	returns the name of a directory member. <code>%SYSFUNC(DREAD(<u>directory-id</u>,<u>nval</u>))</code>
DROPNOTE	deletes a note marker from a SAS data set or an external file. <code>%SYSFUNC(DROPNOTE(<u>data-set-id</u> <u>file-id</u>,<u>note-id</u>))</code>
DSNAME	returns the data set name associated with a data set identifier. <code>%SYSFUNC(DSNAME(&lt;<u>dsid</u>&gt;))</code>
EXIST	verifies the existence of a SAS data library member. <code>%SYSFUNC(EXIST(<u>member-name</u>&lt;, <u>member-type</u>&gt;))</code>

Argument	Description and Syntax
FAPPEND	appends a record to the end of an external file. <code>%SYSFUNC(FAPPEND(<u>file-id</u>&lt;, <u>cc</u>&gt;))</code>
FCLOSE	closes an external file, directory, or directory member. <code>%SYSFUNC(FCLOSE(<u>file-id</u>))</code>
FCOL	returns the current column position in the File Data Buffer (FDB) <code>%SYSFUNC(FCOL(<u>file-id</u>))</code>
FDELETE	deletes an external file. <code>%SYSFUNC(FDELETE(<u>fileref</u>))</code>
FETCH	reads the next nondeleted observation from a SAS data set into Data Set Data Vector (DDV). <code>%SYSFUNC(FETCH(<u>data-set-id</u>&lt;, 'NOSET'&gt;))</code>
FETCHOBS	reads a specified observation from a SAS data set into the DDV. <code>%SYSFUNC(FETCHOBS(<u>data-set-id</u>, <u>obs-number</u>&lt;, <u>options</u>&gt;))</code>
FEXIST	verifies the existence of an external file associated with a fileref. <code>%SYSFUNC(FEXIST(<u>fileref</u>))</code>
FGET	copies data from the FDB. <code>%SYSFUNC(FGET(<u>file-id</u>, <u>cval</u>&lt;, <u>length</u>&gt;))</code>
FILEEXIST	verifies the existence of an external file by its physical name. <code>%SYSFUNC(FILEEXIST(<u>file-name</u>))</code>
FILENAME	assigns or deassigns a fileref for an external file, directory, or output device. <code>%SYSFUNC(FILENAME(<u>fileref</u>, <u>filename</u>&lt;, <u>device</u>&lt;, <u>hostoptions</u>&lt;, <u>dir-ref</u>&gt;&gt;&gt;))</code>
FILEREF	verifies that a fileref has been assigned for the current SAS session. <code>%SYSFUNC(FILEREF(<u>fileref</u>))</code>
FINFO	returns a specified information item for a file. <code>%SYSFUNC(FINFO(<u>file-id</u>, <u>info-item</u>))</code>
FNOTE	identifies the last record that was read. <code>%SYSFUNC(FNOTE(<u>file-id</u>))</code>
FOPEN	opens an external file. <code>%SYSFUNC(FOPEN(<u>fileref</u>&lt;, <u>open-mode</u>&lt;, <u>record-length</u>&lt;, <u>record-format</u>&gt;&gt;&gt;))</code>
FOPTNAME	returns the name of an information item for an external file. <code>%SYSFUNC(FOPTNAME(<u>file-id</u>, <u>nval</u>))</code>
FOPTNUM	returns the number of information items available for an external file. <code>%SYSFUNC(FOPTNUM(<u>file-id</u>))</code>
FPOINT	positions the read pointer on the next record to be read. <code>%SYSFUNC(FPOINT(<u>file-id</u>, <u>note-id</u>))</code>
FPOS	sets the position of the column pointer in the FDB. <code>%SYSFUNC(FPOS(<u>file-id</u>, <u>nval</u>))</code>
FPUT	moves data to the FDB of an external file starting at the current column position. <code>%SYSFUNC(FPUT(<u>file-id</u>, <u>cval</u>))</code>
FREAD	reads a record from an external file into the FDB. <code>%SYSFUNC(FREAD(<u>file-id</u>))</code>
FREWIND	positions the file pointer at the first record. <code>%SYSFUNC(FREWIND(<u>file-id</u>))</code>
FRLEN	returns the size of the last record read, or the current record size for a file opened for output. <code>%SYSFUNC(FRLEN(<u>file-id</u>))</code>
FSEP	sets the token delimiters for the FGET function. <code>%SYSFUNC(FSEP(<u>file-id</u>, <u>cval</u>))</code>

Argument	Description and Syntax
FWRITE	writes a record to an external file. <b>%SYSFUNC(FWRITE(<u>file-id</u>&lt;, <u>cc</u>&gt;))</b>
GETOPTION	returns the value of a SAS system or graphics option. <b>%SYSFUNC(GETOPTION(<u>option-name</u>&lt;, <u>reporting-options</u>&lt;, ...&gt;&gt;))</b>
GETVARC	assigns the value of a SAS data set variable to a character DATA step or macro variable. <b>%SYSFUNC(GETVARC(<u>data-set-id</u>, <u>var-num</u>))</b>
GETVARN	assigns the value of a SAS data set variable to a numeric DATA step or macro variable. <b>%SYSFUNC(GETVARN(<u>data-set-id</u>, <u>var-num</u>))</b>
LIBNAME	assigns or deassigns a libref for a SAS data library. <b>%SYSFUNC(LIBNAME(<u>libref</u>&lt;, <u>SAS-data-library</u>&lt;, <u>engine</u>&lt;, <u>options</u>&gt;&gt;&gt;))</b>
LIBREF	verifies that a libref has been assigned. <b>%SYSFUNC(LIBREF(<u>libref</u>))</b>
MOPEN	opens a directory member file. <b>%SYSFUNC(MOPEN(<u>directory-id</u>, <u>member-name</u>&lt;<u>open-mode</u>&lt;, <u>record-length</u>&lt;, <u>record-format</u>&gt;&gt;&gt;))</b>
NOTE	returns an observation ID for current observation of a SAS data set. <b>%SYSFUNC(NOTE(<u>data-set-id</u>))</b>
OPEN	opens a SAS data file. <b>%SYSFUNC(OPEN(&lt;<u>data-file-name</u>&lt;, <u>mode</u>&gt;&gt;))</b>
PATHNAME	returns the physical name of a SAS data library or an external file. <b>%SYSFUNC(PATHNAME(<u>fileref</u>))</b>
POINT	locates an observation identified by the NOTE function. <b>%SYSFUNC(POINT(<u>data-set-id</u>, <u>note-id</u>))</b>
REWIND	positions the data set pointer to beginning of a SAS data set. <b>%SYSFUNC(REWIND(<u>data-set-id</u>))</b>
SPEDIS	returns a number for the operation required to change an incorrect keyword in a WHERE clause to a correct keyword. <b>%SYSFUNC(SPEDIS(<u>query</u>, <u>keyword</u>))</b>
SYSGET	returns the value of the specified host environment variable. <b>%SYSFUNC(sysget(<u>host-variable</u>))</b>
SYSMSG	returns the error or warning message produced by the last function that attempted to access a data set or external file. <b>%SYSFUNC(SYSMSG())</b>
SYSRC	returns the system error number or exit status of the entry most recently called. <b>%SYSFUNC(SYSRC())</b>
VARFMT	returns the format assigned to a data set variable. <b>%SYSFUNC(VARFMT(<u>data-set-id</u>, <u>var-num</u>))</b>
VARINFMT	returns the informat assigned to a data set variable. <b>%SYSFUNC(VARINFMT(<u>data-set-id</u>, <u>var-num</u>))</b>
VARLABEL	returns the label assigned to a data set variable. <b>%SYSFUNC(VARLABEL(<u>data-set-id</u>, <u>var-num</u>))</b>
VARLEN	returns the length of a data set variable. <b>%SYSFUNC(VARLEN(<u>datasetid</u>, <u>var-num</u>))</b>
VARNAME	returns the name of a data set variable. <b>%SYSFUNC(VARNAME(<u>data-set-id</u>, <u>var-num</u>))</b>

Argument	Description and Syntax
VARNUM	returns the number of a data set variable. <code>%SYSFUNC(VARNUM(<u>data-set-id</u>, <u>var-name</u>))</code>
VARTYPE	returns the data type of a data set variable. <code>%SYSFUNC(VARTYPE(<u>data-set-id</u>, <u>var-num</u>))</code>

The correct bibliographic citation for this manual is as follows: SAS Institute Inc., *SAS Macro Language: Reference, Version 8*, Cary, NC: SAS Institute Inc., 1999. 310 pages.

**SAS Macro Language: Reference, Version 8**

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1-58025-522-1

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SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513.

1st printing, October 1999

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