

# SHIBAURA MACHINE

## S50V50 providers

**Version 1.1.2**

**User's Guide**

**August 30, 2021**

**NOTE:**

This document is translated into English using machine translation.

**[Revision History]**

Version	Date	Description
1.0.0	2019-09-19	First edition
1.1.0	2021-02-04	Added Molding condition getting command and variable.
1.1.1	2021-04-20	Fixed a bug in reception processing
	2021-04-22	Added a list of command data for V30 and V50
1.1.2	2021-08-30	Changed the company name of Toshiba Machine in the document to Shibaura Machine.

**[Compatible models]**

Model	Version	Notes
V50		
V70		
V30		
S50		

**[Operation check model]**

Model	Version	Notes
V50		
V70		
V30		

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## 1. Introduction

This document is a user's guide for the provider (hereinafter referred to as "provider") who collects data sent from Shibaura Machine's injection molding machines S50 series and V50 series (hereinafter referred to as "injection molding machines").

Fig. 1-1 shows the overall configuration of the provider and the injection molding machine.

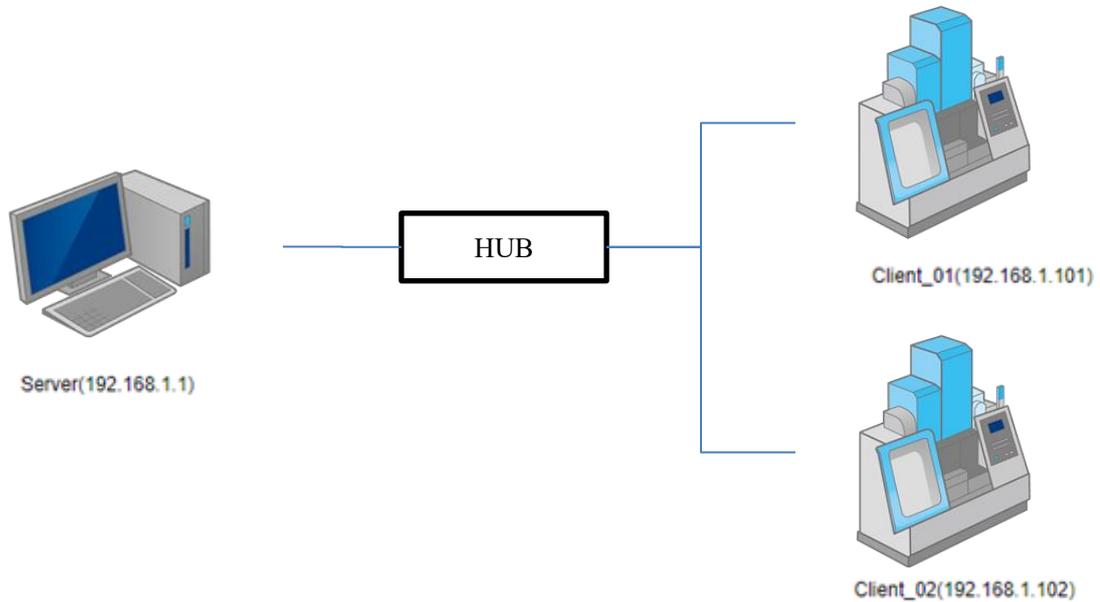


Fig. 1-1 Configuration Diagram

Fig. 1-2 shows the correspondence between the provider and the injection molding machine.  
(\* This is an example. It does not represent everything.)

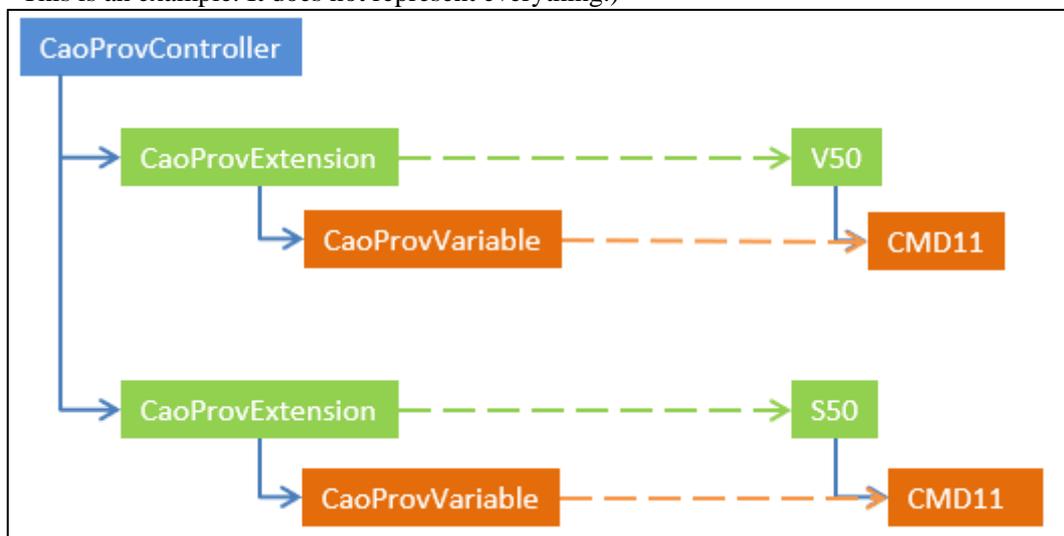


Fig. 1-2 Provider configuration and relation to injection machine information

### 1.1. Environment and version assumed by this document

The environment in which the server PC runs on Windows and the target injection molding machine supports the protocol for S50/V50 of Shibaura Machine is assumed. The development environment of PC can be developed as long as the programming environment supports Component Object Model (COM, Component Object Model).

### 1.2. Informative sources

All examples of programming in this document are described in Visual Basic 6.0, but can be developed in a variety of programming languages, including C++, Java, and .NET. See ORiN2 Programming Guide for instructions.

ORiN 2 Programming Guide applies to the following files in ORiN2 SDK installation folder:

- ORiN2\CAO\Doc\ORiN2\_ProgrammersGuide\_<lang>.pdf  
※Replace <lang> with an environment-specific linguistic string and read it.

This chapter describes the basics and techniques of ORiN2 and COM/DCOM required to develop applications using providers.

## 2. Setting Up Your Environment for Application Development

### 2.1. Connection between Injection Molding Machine and Provider

This provider communicates with TCP/IP of Ethernet, and the provider operates as a TCP server. Therefore, the provider releases its IP address and port number, and the injection molding machine (client) establishes a connection by sending a connection request to the server.

#### 2.1.1. Configuring and Starting the Server

Fig. 2-1 shows the server configuration.

Server shown in the illustration is the PC on which the provider runs. The provider operates as a server with the IP address specified by the successful AddController (see 3.2.1.1)

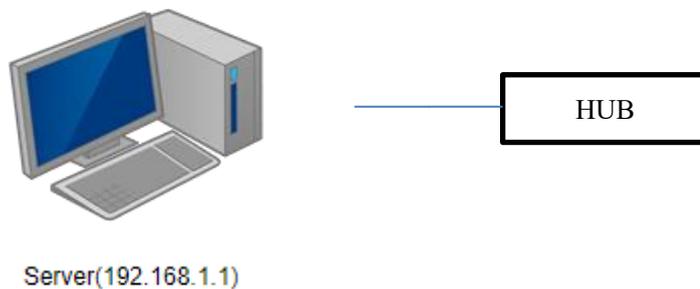


Fig. 2-1 Server (Provider) Configuration

#### 2.1.1.1. Firewall settings

Depending on the server environment, the injection molding machine may not be able to connect to the server depending on the firewall settings. Enable Cao Module as shown in Fig. 2-2. If there is no Cao Module in the list, add "[ORiN2 Install Location]\CAO\Engine\Bin\CAO.exe" from "Allow another app...".

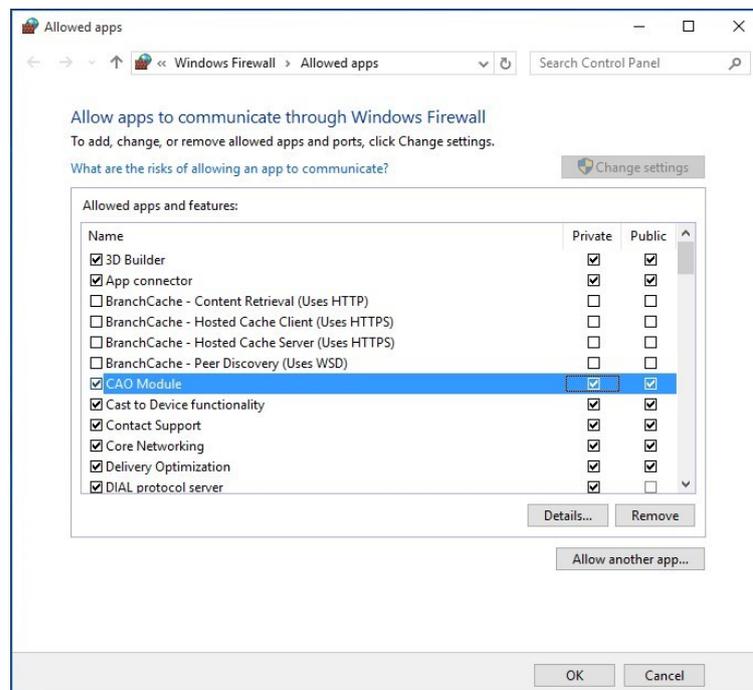


Fig. 2-2 Firewall Settings

### 2.1.2. Connection from Injection Molding Machine to Server

Fig. 2-3 to make a connection between the injection molding machine and the server (provider), a connection request must be made from the injection molding machine to the server. Refer to S50/V50 method manual for instructions on how to connect the injection molding machine to the servers.

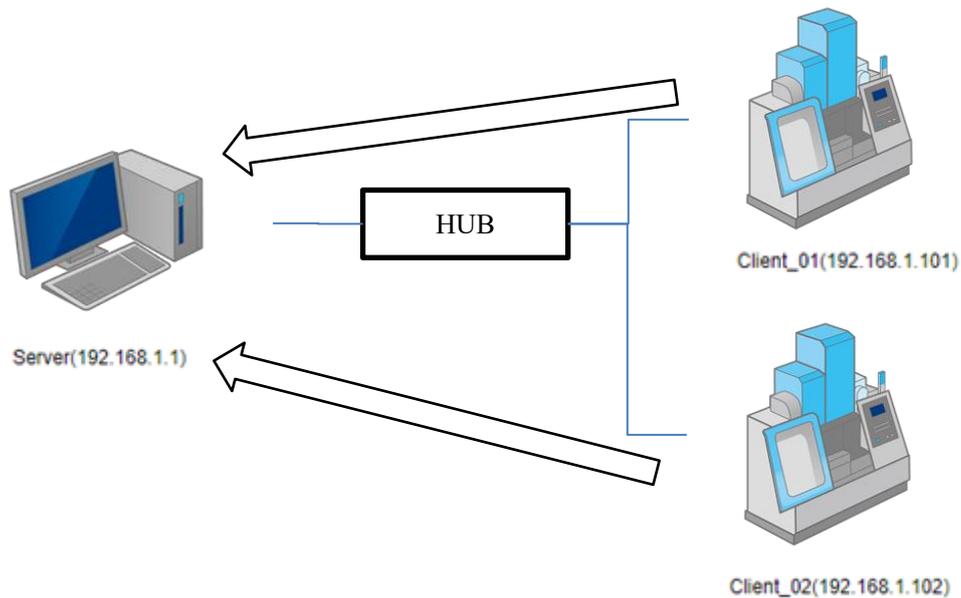


Fig. 2-3 Connection between Injection Molding Machine and Provider

## 2.2. Setting up a PC development environment

### 2.2.1. Installing S50V50 Providers Manually

If you install S50V50 providers manually, you must register the registry as shown below. To register the registry, start the command prompt with administrator privileges and execute regsvr32 command.

In addition, one or more legitimate ORiN2 SDKs must be registered for each PC before the CAO engine can operate. See the section "Adding and Removing Licenses" in ORiN2 SDKs User's Guide.

Table 2-1 SHIBAURAMACHINES50V50 providers

File name	CaoProvTOSHIBAMACHINES50V50.dll
ProgID	CaoProv.TOSHIBAMACHINE.S50V50
Registry registration	Regsvr32 CaoProvTOSHIBAMACHINES50V50.dll
Deletion of Registry Registration	Regsvr32 /u CaoProvTOSHIBAMACHINES50V50.dll

## 3. Command Reference

### 3.1. Method/Property List

Table 3-1 List of methods and properties

Category	Methods/Properties <sup>1</sup>	Function	See Also
<b>CaoWorkspace</b>			
	AddController	M Connected to controller	P.8
<b>CaoController</b>			
	AddExtension	M Adding Extended Objects	P.10
	Execute	M Execute Extended Commands	P.10
	OnMessage	E Message reception event	P.11
	VariableNames	P Retrieving Variable Names	P.11
	AddVariable	M Adding Variable Objects	P.11
<b>CaoExtension</b>			
	VariableNames	P Retrieving Variable Names	P.12
	AddVariable	M Adding Variable Objects	P.12
	Execute	M Execute Extended Commands	P.12
<b>CaoVariable</b>			
	Value	P File obtain setting	P.14
	GetDateTime	P Get Time	P.15

### 3.2. Method properties

#### 3.2.1. CaoWorkspace classes

##### 3.2.1.1. AddController method

Adds a controller object to CaoWorkspace. The providers refer to the parameters passed at the time of executing AddController method, operate as TCP servers at the appropriate IP addresses and ports, and wait for connection requests from injection molding machines. The following are the specifics of AddController method:

#### SYNOPSIS

##### AddController

```
(
    "<Controller name>",           // Controller name (optional)
    "CaoProv.TOSHIBAMACHINE.S50V50", // Provider Names (Fixed)
    "<Machine name>",             // Provider execution device name (unused)
    "<Option>"                    // Option character string
)
```

<sup>1</sup> M:Indicates methods, P: properties, and E: events, respectively.

**Option**

The following is an optional specification for Option character string: Option character string is a comma (,) string consisting of the options listed below.

Option	Required	Description	Value Range	Default Value
MyIP = <IP-address-for-server>	✓	Specify the IP addresses that you want to use as servers in IPv4 format.	--	****
MyPort = <server-port-number>	--	Specifies the port to use as the server.	1-65535	120
MaxConnection = <Max. connectable count>	--	Specify the number of simultaneous injection machines that can be connected. Cannot communicate with the specified number of injection moulders or more.	1-200	100
CommandTimeout = <command timeout>	--	Specifies the amount of time (ms) to wait when executing GetValue of the molding condition acquisition command and CMD1 variable.	2000-2147483647	5000

**Usage example (VB)**

```

Dim engine As CaoEngine      ' Engine
Dim workspace As CaoWorkspace ' Workspace
Dim controller As CaoController ' Controller

Set engine = New CaoEngine
Set workspace = engine.Workspaces.Item(0)
Set controller = workspace.AddController("any string", _
                                         "CaoProv.TOSHIBAMACHINE.S50V50", _
                                         "", _
                                         "MyIP = 192.168.1.1,MaxConnection = 99")

```

### 3.2.2. CaoController classes

#### 3.2.2.1. AddExtension method

Adds an extended object corresponding to the specified injection molding machine to CaoController. AddExtension method is specified below.

##### SYNOPSIS

##### AddExtension

```
(
    "<Extension>", // Optional
    "<Option>"    // Option character string
)
```

##### Option

The following is an optional specification for Option character string:

Option	Required	Description	Value Range	Default Value
Machine	✓	Specifies in IPv4 format the IP-address of the injection molding machine from which data is to be collected.	--	--

##### Usage example (VB)

```
' Adding Extended Objects
Dim caoExt As CaoExtension
Set caoExt = controller.AddExtension ("any string", "Machine = 192.168.1.2")
' Deleting Extended Objects
Call controller.Extensions.Remove(caoExt.Index)
Set caoExt = Nothing
```

#### 3.2.2.2. Execute method

Execute CaoController extension. Execute is specified as follows.

##### SYNOPSIS

##### Execute

```
(
    "<Extension command name>", // Extended command name
    "<Option string>"          // Option character string (optional)
)
```

The following is a list of extended commands that can be specified in Execute. The usage examples are described in detail in the extended commands.

Command	Description	See Also
GetMachineList	Obtain the IP address list of the injection molding machine connected to the server.	P.10

#### 3.2.2.2.1. GetMachineList Commands

Execute this command to obtain all the IP addresses of the injection molding machines currently connected to the provider. The following are the arguments and return values:

Item	Type	Description
Argument	None	
Return Value	VT_ARRAY   VT_BSTR	
	N   VT_BSTR	Gets the connected IP address in IPv4 format.

##### Usage example (VB)

```
Dim list() As String
Val = controller.Execute("GetMachineList")
```

**3.2.2.3. OnMessage event**

Error notifications, status changes, and received command data from the Injection Molding Machine can be received as OnMessage events.

For the events that can be received, see 3.4

**3.2.2.4. VariableNames Properties**

Gets a list of variable names that can be connected. The variable name obtained by this property can be used as the first argument of AddVariable described later. The variable names that can be retrieved are as shown in 3.3.1.

**Usage example (VB)**

```
' Get variable name list
Dim variables as Variant
Variables = controller.VariableNames
```

**3.2.2.5. AddVariable method**

Adds a variable object to CaoController. Only the variable names shown in 3.3.1 can be used. AddVariable is specified as follows.

**SYNOPSIS****AddVariable**

```
(
    "<variable name>",           // Variable name
    "<Option>"                   // Option character string (optional)
)
```

**Usage example (VB)**

```
' Get variable name list
Dim variables as Variant
Variables = controller.
```

### 3.2.3. CaoExtension classes

CaoExtension can communicate with the specified injection molding machine or get the received data using the injection molding machine with the IP address specified in CaoController::AddExtension (see 3.2.2.1).

#### 3.2.3.1. VariableNames Properties

Gets a list of variable names that can be connected. The variable name obtained by this property can be used as the first argument of AddVariable described later. The variable names that can be retrieved are as shown in 3.3.2.

##### Usage example (VB)

```
' Get variable name list
Dim variables as Variant
Variables = caoExt.VariableNames
```

#### 3.2.3.2. AddVariable method

Adds a variable object to CaoController. Only the variable names shown in 3.3.2 can be used. AddVariable is specified as follows.

##### SYNOPSIS

##### AddVariable

```
(
    "<variable name>",           // Variable name
    "<Option>"                   // Option character string (optional)
)
```

#### 3.2.3.3. Execute method

Execute ConExtension extension. Execute is specified as follows.

##### SYNOPSIS

##### Execute

```
(
    "<extension command name>", // Extended command name
    "<Option string>"           // Option character string (optional)
)
```

The following is a list of extended commands that can be specified in Execute. The usage examples are described in detail in the extended commands.

Command	Description	See Also
StartThread	Start the receiving thread.	P.12
StopThread	Stop the receive thread.	P.13
LastGetTime	Gets the last time the quality monitoring data was received.	P.13
GetCMD1	Get the molding condition data.	P.13

#### 3.2.3.3.1. StartThread Commands

Start the thread to receive data.

When the provider establishes a connection with the specified injection molding machine, it starts a dedicated data receiving thread and receives data from the specified injection molding machine. The receive thread can be stopped using StopThread (see 3.2.3.3.2) or CaoExtension class-variable @RUN (see 3.3.2.2) described below.

Item	Type Description
Argument	None
Return Value	None

##### Usage example (VB)

```
' Execute StartThread
```

---

```
Dim val As Variant
Val = caoExt.Execute("StartThread")
```

---

### 3.2.3.3.2. StopThread Commands

Stop the thread to receive data.

To resume reception, execute StartThread (3.2.3.3.1) or @RUN (see 3.3.2.2) of CaoExtension class-variable described later.

Item	Type Description
Argument	None
Return Value	None

#### Usage example (VB)

```
' Execute StopThread
Dim val As Variant
Val = caoExt.Execute("StopThread")
```

---

### 3.2.3.3.3. LastGetTime Commands

Gets the last time that the received CMD11 (quality-monitoring) data was received.

Item	Type Description
Argument	None
Return Value	VT_BSTR Gets the last time the data was received in (YYYY/MM/DD HH:mm:ss) format. Retrieve VT_EMPTY if no data has been received at all.

#### Usage example (VB)

```
' Execute LastGetTime
Dim val As Variant
Val = caoExt.Execute("LastGetTime")
```

---

### 3.2.3.3.4. GetCMD1 Commands

Gets CMD1 (molding condition) stored in the specified memory number. By specifying "0", you can get the data of the molding condition currently selected by the target injection molding machine.

To prevent a reboot of the control panel, if 1000 ms have not elapsed since the last data getting, execute the command after delaying the difference.

(Example: If only 300 ms have elapsed since the last getting, delay 700 ms before executing the command.)

Item	Type Description
Argument	VT_I4 Specify the memory number of the molding condition data to be got.
Return Value	VT_ARRAY  VT_UI1 N VT_UI1 Byte array of molding condition data

#### Usage example (VB)

```
' Execute LastGetTime
Dim val As Variant
Val = caoExt.Execute("GetCMD1",0)
```

---

**3.2.4. CaoVariable classes****3.2.4.1. Value Properties**

The behavior depends on the parent-class and variable-name of CaoVariable. For details, See 3.3.1 or 3.3.2

**3.2.4.2. DateTime Properties**

The behavior depends on the parent-class and variable-name of CaoVariable. For details, See 3.3.1 or 3.3.2. If the variable details are not specifically stated, the current time will be retrieved.

### 3.3. Variable list

Defines a list of variables that can be used in each class. Note that the variable refers to an object of CaoVariable class. DateTime property gets the current time unless otherwise stated.

#### 3.3.1. CaoController class-variable

Variable name	Description	Value		DateTime		See Also
		Get	Put	Get	Put	
@MAKER_NAME	Obtain the manufacturer's name.	✓	-	✓	-	P.17
@VERSION	Get the DLL version.	✓	-	✓	-	P.17

##### 3.3.1.1. @MAKER\_NAME

Obtain the manufacturer's name.

###### Data Type

Type Description	
VT_BSTR	Obtain the manufacturer (SHIBAURAMACHINE).

###### Usage example (VB)

```
' Add Variable
Dim var As CaoVariable
Set var = controller.AddVariable("@MAKER_NAME")
' Getting Values
Dim strVal As String
StrVal = var.value
```

##### 3.3.1.2. @VERSION

Get the DLL version.

###### Data Type

Type Description	
VT_BSTR	Major Version. Minor Version. Available in Revision Version format.

###### Usage example (VB)

```
' Add Variable
Dim var As CaoVariable
Set var = controller.AddVariable("@VERSION")
' Getting Values
Dim value As String
Value = var.value
```

#### 3.3.2. CaoExtension class-variable

Variable name	Description	Value		DateTime		See Also
		Get	Put	Get	Put	
@STATUS	Gets the current connection status	✓	-	✓	-	P.17
@RUN	Changes the reception processing status.	✓	✓	✓	-	P.17
@CMD11	Get quality monitoring data.	✓	-	✓	-	P.18
CMD1	Get the data of the molding condition.	✓	-	✓	-	P.19

##### 3.3.2.1. @STATUS

Gets the connection status with the specified injection molding machine.

If 1 is got, the receive thread is stopped, so start the receive thread.

###### Data Type

Type Description	
VT_I4	Gets the connection status.
-1	Unknown because reception thread is stopped
0	Not connected (not connected at all)
1	Connection status
2	Disconnected (once connected)

#### Usage example (VB)

```
' Add Variable
Dim var As CaoVariable
Set var = caoExt.AddVariable("@STATUS")
' Getting Values
Dim Val As Integer
Val = var.value
```

#### 3.3.2.2. @RUN

Gets or sets the status of the receive thread with the injection molding machine specified by the extended object (see 3.2.2.1).

When connected to the specified injection molding machine the receiving thread starts automatically and stops when disconnected.

#### Data Type

Type Description	
VT_I4	Gets/sets the status of the receive thread.
0	Thread running
1	Thread stopping

#### Usage example (VB)

```
' Add Variable
Dim var As CaoVariable
Set var = caoExt.AddVariable("@RUN")
' Getting Values
Dim Val As Integer
Val = var.value
' Start if stopped
If Val = 1 Then
    Var.value = 0
End If
```

#### 3.3.2.3. @CMD11

Gets the quality monitoring data that was last transmitted from the injection molding machine specified in Value properties.

In addition, DateTime property obtains the date and time when CMD11 (quality monitoring) data was last received from the specified injection molding machine. The content of the data to be received is the same as that of LastGetTime (see 3.2.3.3.3).

#### Data Type

Type Description
Gets/sets quality monitoring data.
VT_ARRAY  VT_UI1

N	VT_UI1	Byte sequence of quality monitoring data
---	--------	--

**Usage example (VB)**

```
' Add Variable
Dim var As CaoVariable
Set var = caoExt.AddVariable("@CMD11")
' Acquisition of Values
Dim Val() As Byte
Val = var.value
```

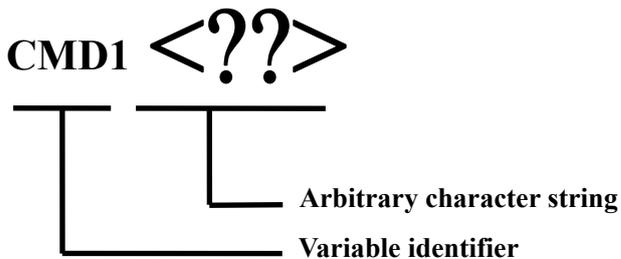
**3.3.2.4. CMD1**

Gets the molding condition data of the injection molding machine specified by Value property.

When acquiring data with Value property, GetCMD1 command is executed using the specified memory number option as an argument, and the got data is received. Refer to 3.2.3.3.4 for details.

An arbitrary string can be added to register multiple variables (useful when changing only options, etc.). To obtain the molding condition, specify "CMD1" as the variable-identifier.

The following format gives an arbitrary string to a variable name:

**Multi-variable common specification format****Option**

Option	Required	Description	Value Range	Default Value
MemoryNo = <molding condition memory number>	--	Optional Specify the memory number of the injection molding machine for acquiring the molding condition data.	0-2147483647	0

**Data Type**

Type Description		
Get the data of the molding condition.		
VT_ARRAY  VT_UI1		
N	VT_UI1	Byte array of molding condition data

**Usage example (VB)**

```
' Add Variable
Dim var As CaoVariable
Set var = caoExt.AddVariable("CMD1_SAMPLE")
' Getting Values
Dim Val() As Byte
Val = var.value
```



### 3.4. Event list

Error notifications, status changes, and received command data from the Injection Molding Machine can be received as OnMessage events.

OnMessage event list is described below.

Message number	Description	See Also
0	Connection message	P.21
1	Disconnect message	P.21
2	Reconnect message	P.21
3	Received message	P.21

#### 3.4.1. Connection message

Notifies the IP address of the injection molding machine connected to the provider.

Data Type

Message Description

VT_BSTR	Notifies the IP address to which the connection was made in IPv4 format.
---------	--

#### 3.4.2. Disconnect message

Notifies the IP address of the injection molding machine disconnected from the provider.

Data Type

Message Description

VT_BSTR	Notifies the IP-address of the disconnected injection molding machine in IPv4 format.
---------	---

#### 3.4.3. Reconnect message

Notifies the IP address of the injection molding machine reconnected to the provider.

Data Type

Message Description

VT_BSTR	Notifies the IP-address of the reconnected injection molding machine in IPv4 format.
---------	--

#### 3.4.4. Received message

The received data from the injection molding machine is notified as a message.

The IP address of the injection molding machine, the command number of the received data, and the received data are notified as the message contents.

Data Type

Message Description

VT\_ARRAY | VT\_VARIANT

0	VT_BSTR	IP-address of the received injection molding machine (IPv4 format character string)
1	VT_I4	Command number
2	VT_ARRAY   VT_UI1	
	N	VT_UI1

## 4. S50V50 Programming by provider

S50V50 providers can connect servers PCs and injection molding machines using the following procedures.

- Creating a CaoEngine
- Creating a CaoWorkspace
- Creating a CaoController (Server-up)
- A connection is requested from an injection molding machine to a provider (server).

After connecting to the injection molding machine, you can generate a CaoExtension specifying the IP-address of the connected injection molding machine and use Execute method or generate a CaoVariabe object. This enables you to check the connection status with the injection molding machine and the reception data.

CaoController::Onmessage event can also receive the source IP-address, command-number, and received data.

### 4.1. Sample Programming for Integrating Received Data

Here, as an example, create a sample program to accumulate data when there is a reception message event from the injection molding machine. Table 4-1 describes the requirements of the sample program.

**Table 4-1 Sample program requirements**

Requirements	Description
Run the server	Running Servers in Button-Processing in TCP/IP
	The IP address of the server is 192.168.1.2
	Termination of server operation is done by button processing.
Receive incoming message events	Receive a message
	Determine the received message
Analyze the contents of received messages and output a file.	Obtain the IP address of the destination injection molding machine from the contents of the received message.
	Specify the output file with the got IP address.
	The output data (Date, received data) is output in csv format.

#### 4.1.1. Sample program

The following is an overview of the sample program.

```

Sample SampleServer.vb
' Object
Dim engine As CaoEngine
Dim workspace As CaoWorkspace
Dim WithEvents controller As caoController

'Server activity button
Sub StartSever_Click()
    Call StartServer
End Sub

'End Server button
Sub FinishSever_Click()
    Call EndServer
End Sub

'Server running method
Function StartServer()
    ' Generate CaoEngine
    Set engine = New CaoEngine
    ' Generate CaoWorkspace

```

```

Set workspace = engine.AddWorkspace("NewWrks", "")
'Generate CaoController Objects (Server-Up)
Set controller = workspace.AddController("S50V50Server", _
"CaoProv.TOSHIBAMACHINE.S50V50", _
"", _
"MyIP=10.4.237.6")
End Function

' Server end method
Function FinishServer()
' Remove CaoController from CaoWorkspace
Call workspace.Controllers.Remove(controller.Index)
' Clear CaoController
Set controller = Nothing

' Remove CaoWorkspace from CaoEngine
Call engine.Workspaces.Remove(workspace.Index)
' Clear CaoWorkspace
Set workspace = Nothing

' Clear CaoEngine
Set engine = Nothing
End Function

' Notifying Message Events from Providers
Private Sub controller_OnMessage(ByVal pICaoMess As CAOLib.CaoMessage)
If pICaoMess.Number = 3 Then
' Get message contents
Dim MessageBuf As Variant
MessageBuf = pICaoMess.Value
' Write file
Call WriteFile(MessageBuf)
End If
End Sub

' Output the message contents to a file
Function WriteFile(writeData As Variant)
'Determine the file name using the IP address of the destination machine
Dim fileName As String
FileName = writeData(0) & ".csv"
'Specify the destination of the file
Dim filePath As String
If ThisWorkbook.Path = "" Then
FilePath = fileName
Else
FilePath = ThisWorkbook.Path & "\¥" & fileName
End If

'Create one line of data to write (one line of data = (Date, data))
Dim writeLine As String
WriteLine = Join(writeData)

Append to the specified file
Open filePath For Append As #1
Print #1, writeLine
Close #1
End Function

```

---

#### 4.1.1.1. Server operation

To connect a server (provider), perform the following steps:

- (1) Prepare a variable to hold the object. The objects required to connect to the controller are CaoEngine object, CaoWorkspace object, and CaoController object. CaoWorkspace object does not need to have a variable to obtain CaoController object from CaoWorkspaces. You will also need a CaoVariable for accessing the variable. The following is a sample code for VB6.

---

```
Dim engine As CaoEngine           ' Variables for CaoEngine Objects
Dim workspace As CaoWorkspace     ' Variables for CaoWorkspace Objects
Dim WithEvents controller As CaoController ' Variables for CaoController Objects
Dim extension As CaoExtension     ' Variables for CaoExtension Objects
```

---

- (2) Creates a CaoEngine object. CaoEngine object is generated using the New keyword.

---

```
' Generate CaoEngine
Set engine = New CaoEngine
```

---

- (3) Gets or generates a CaoWorkspace object. When you create a CaoEngine object, it defaults to one CaoWorkspaces object and one object. The following is a sample code/default CaoWorkspace for creating a new CaoWorkspace.

---

```
' Generate CaoWorkspace
Set workspace = engine.AddWorkspace("NewWrks", "")
```

---

- (4) Create a CaoController object. To generate a CaoController object, set the provider name to use and the parameters to use. For S50V50 providers, optionally specify the IP address to use as the server. The following is a code example:

---

```
' Generate CaoController
Set controller = workspace.AddController("S50V50Server", _
                                         "CaoProv.TOSHIBAMACHINE.S50V50", _
                                         "", _
                                         "MyIP=192.168.1.2")
```

---

#### 4.1.1.2. Analyzing Received Message Events

- (1) If the content of OnMessage event is a received message, the received data is output as a file.

---

```
' Notifying Message Events from Providers
```

```
Sub controller_OnMessage(ByVal pICaoMess As CAOLib.CaoMessage)
    If pICaoMess.Number = 3 Then
        ' Get message contents
        Dim MessageBuf As Variant
        MessageBuf = pICaoMess.Value
        ' Write file
        Call WriteFile(MessageBuf)
    End If
End Sub
```

---

- (2) Analyzes the received message and outputs the file. For the file name, specify the file name with the IP address of the connection destination, and accumulate data for each injection molding machine. Outputs (IP of connection destination, command No., received data) as output data in one line.

---

```
' Output the message contents to a file
```

```
Function WriteFile(writeData As Variant)
    'Determine the file name using the IP address of the destination machine
    Dim fileName As String
    FileName = writeData(0) & ".csv"
    'Specify the destination of the file
    Dim filePath As String
    If ThisWorkbook.Path = "" Then
        FilePath = fileName
    Else
        FilePath = ThisWorkbook.Path & "\¥" & fileName
    End If
End Function
```

---

```
'Create one line of data to write (one line of data = (Date, data))  
Dim writeLine As String  
WriteLine = Join(writeData)
```

```
Append to the specified file  
Open filePath For Append As #1  
Print #1, writeLine  
Close #1
```

```
End Function
```

---

#### 4.1.1.3. Termination of the server

When you exit the server, you erase the generated objects and delete the objects that you want to erase from the collection class that manages the objects. The following is a code example:

---

```
' Remove CaoExtension from CaoController  
If (caoExtension Is Nothing) = False Then  
    CaoController.Extensions.Remove (caoExtension.Index)  
End If  
' Remove CaoController from CaoWorkspace  
Call workspace.Controllers.Remove(controller.Index)  
' Clear CaoController  
Set controller = Nothing  
  
' Remove CaoWorkspace from CaoEngine  
Call engine.Workspaces.Remove(workspace.Index)  
' Clear CaoWorkspace  
Set workspace = Nothing  
  
' Clear CaoEngine  
Set engine = Nothing
```

---

## 5. S50V50 Provider Error Codes

This provider has the following unique error codes masked with the 0x8011\*\*\*\*. (Refer to Table 5-1 Unique Error Codes Table.)

For information about common ORiN2 errors, see the Error Codes section in ORiN2 Programming Guide.

**Table 5-1 Unique Error Codes**

Error Number	Description
0x80110001	Unconnected error: You are attempting to operate the receiving thread while it is not connected to the injection molding machine. Perform the operation after the connection is completed.
0x80110002	Molding condition option specification error: A memory number that does not exist in the injection molding machine was specified when the molding condition data was got. Specify the memory number that exists in the injection molding machine.

## 6. Trouble shooting

This section provides troubleshooting information while your provider is running.

**Table 6-1 Troubleshooting**

Problem	Corrective Actions
If the device cannot reconnect	If the device that was ready to receive data suddenly disconnects and cannot be reconnected, it may be disconnected halfway. Check LAN status and try restarting the device.
If the received data does not arrive from the device	If the received data cannot be received from the device, first check the connection status using @STATUS (see 3.3.2.1). If the device is not connected, check the device settings, check the LAN, restart the device, and set the firewall.
The contents of the received message are not known.	In this provider, command numbers and data are sent from the device as received messages. Please contact Shibaura Machine regarding the contents of the data related to the command number.

## Appendix A. List of command data

From the next page, it will be a list of command data for V50 and V30.

Please refer to the header part on the upper right for the command data for V30 or the command data for V50.

No.	Name	Item	Unit	Maximum value	Remarks
1	Operation file source number	RUNFILE	—	60	
2	Title	TITLE1	digits	30+Null	%66
3		TITLE2			
4		TITLE3			
5		TITLE4			
6		TITLE5			
7		TITLE6			
8		TITLE7			
9		TITLE8			

V50 command data  
P1

4. Molding Conditions  
4.1 Standard Data

4. Molding Conditions

4.1 Standard Data

No.	Name	Item	Unit	Maximum value	Remarks
1	Operation file source number	RUNFILE	—	60	
2	Title	TITLE1	digits	30+Null	%66
3		TITLE2			
4		TITLE3			
5		TITLE4			
6		TITLE5			
7		TITLE6			
8		TITLE7			
9		TITLE8			
10	Write date	DATE	—	—	%64
11	Write time	TIME	—	—	%65
12	Continuous and automatic changeover	AUTOLOAD		1	%5
13	Next condition number	NEXTNO	number	600	
14	Total production count	TOTALCNT	shot	99999999	%39
15	Production completion notice 1	PRECNT1	shot	9999	%40
			minutes	99	
16	Production completion notice 2	PRECNT2	shot	9999	
			minutes	99	
17	Production completion notice 3	PRECNT3	shot	9999	
			minutes	99	
18	Production completion notice 4	PRECNT4	shot	9999	
			minutes	99	
19	Production completion notice 5	PRECNT5	shot	9999	
			minutes	99	
20	Production completion notice 6	PRECNT6	shot	9999	
			minutes	99	
21	Management method	MANGE		3	%41
22	Cavity number	SHOTSZ	pieces	999	
23	Container size	CONTNR	pieces	9999	
24	Disposal shot count	REMSHT	shot	99	
25	Product weight	SHTWEIG	g	30000.0	
			oz	1058.21	
26	One shot weight	PRDWEIG	g	30000.0	
			oz	1058.21	
27	Product code	CODE1	digits	20+null	%42
28		CODE2			
29		CODE3			
30		CODE4			
31		CODE5			
32		CODE6			
33	Memory selection	MEMSEL		3	
34					
35	Resin number	MOLDNO		999	
36	Mold number	MTNO		999	
37	Startup control	STUPSH1	shot	99	
38		STUPSH2	shot	99	
39		STUPSH3	shot	99	
40	Startup condition: Injection pressure	SHIFTPH	kgf/cm2	0000.00	%4
			bar	0000.00	
			MPa	000.000	
			PSI	00000.0	
			%	00.0	
41	Startup condition: Injection speed	SHIFTVH	mm/sec	000.0	
			in/sec	00.00	
			%	00.0	
42	Startup condition: Charging completion position	SHIFTLS5	mm	00.000	
			in	0.0000	
43	Automatic stop notice	SPRECNT1	shot	9999	
44		SPRECNT2	shot	9999	
45	Startup control	STUP		1	%5
46	Molding after production	AUTST		1	%43
47	Reserved				
48	Reserved				
49	Reserved				
50	2-hour screw reverse	TRIT2	sec	9.99	
51	Take-out robot number	ROBOTNO		999	
52	Setter ID	HUMANID		FFFFFFFF	
53	Universal rotation speed	VROT	%	99.0	
54	Universal rotation-back speed	VRTR	%	99.0	
55	Filling speed VI1	VI1	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
56	Filling speed VI2	VI2	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	

No.	Name	Item	Unit	Maximum value	Remarks
57	Filling speed VI3	VI3	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
58	Filling speed VI4	VI4	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
59	Filling speed VI5	VI5	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
60	Filling speed VI6	VI6	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
61	Filling speed VI7	VI7	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
62	Filling speed VI8	VI8	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
63	Filling speed VI9	VI9	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
64	Filling speed VI10	VI10	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
65	Dwell speed VH1	VH1	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
66	Dwell speed VH2	VH2	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
67	Filling pressure PI1	PI1	kgf/cm2	4000.00	%4
			bar	4000.00	
			PSI	99999.0	
			MPa	400.000	
			%	99.0	
68	Filling pressure PI2	PI2	kgf/cm2	4000.00	
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
69	Dwelling PH1	PH1	kgf/cm2	4000.00	%4
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
70	Dwelling PH2	PH2	kgf/cm2	4000.00	
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
71	Dwelling PH3	PH3	kgf/cm2	4000.00	%4
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
72	Dwelling PH4	PH4	kgf/cm2	4000.00	%4
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
73	Screw rotation speed	SRN	rpm	999	
			%	99.0	
74	Programmed final screw rotation speed	SRNF	rpm	999	
			%	99.0	
75	Back pressure	BP	kgf/cm2	999.00	%4
			bar	999.00	
			MPa	99.000	
			PSI	9999.0	
			%	99.0	
76	Programmed final back pressure	BPF	kgf/cm2	999.00	%4
			bar	999.00	
			MPa	99.000	
			PSI	9999.0	
			%	99.0	
77	Dwell change position LS4	LS4	mm	999.990	%4
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
78	Filling speed change position LS4A	LS4A	mm	999.990	
			in	99.9990	
79	Filling speed change position LS4B	LS4B	mm	999.990	
			in	99.9990	
80	Filling speed change position LS4C	LS4C	mm	999.990	
			in	99.9990	
81	Filling speed change position LS4D	LS4D	mm	999.990	
			in	99.9990	
82	Filling speed change position LS4E	LS4E	mm	999.990	
			in	99.9990	
83	Filling speed change position LS4F	LS4F	mm	999.990	
			in	99.9990	
84	Filling speed change position LS4G	LS4G	mm	999.990	
			in	99.9990	
85	Filling speed change position LS4H	LS4H	mm	999.990	
			in	99.9990	
86	Filling speed change position LS4I	LS4I	mm	999.990	
			in	99.9990	
87	General-purpose injection position LS4X	LS4X	mm	999.990	%4
			in	99.9990	
88	General-purpose injection position LS4Y	LS4Y	mm	999.990	
			in	99.9990	
89	Filling pressure change position	LS4Z	mm	999.990	%4
			in	99.9990	
90	Charging completion position	LS5	mm	999.990	%4
			in	99.9990	
91	Programmed screw rotation start position	LS5B	mm	999.990	
			in	99.9990	
92	Programmed back pressure start position	LS5C	mm	999.990	
			in	99.9990	
93	Melt decompression position	LS10	mm	99.990	%4
			in	9.9990	
94	Melt decompression position before charging	LS10A	mm	99.990	
			in	9.9990	
95	Dwell time TRH1	TRH1	sec	99.99	%1
96	Dwell time TRH2	TRH2	sec	99.99	
97	Dwell time TRH3	TRH3	sec	99.99	
98	Dwell speed change time	TRVH	sec	999.99	
99	Injection timer	TR1	sec	999.99	%1
100	Dwell change timer	TR2	sec		
101	Cooling timer	TR3	sec	999.99	%1
102	Middle timer	TR4	sec	999.99	%1
103	Filling speed steps	INJVS		10	
104	Dwell speed steps	HOLDVS		2	
105	Filling pressure steps	HOLDPS		4	
106	Speed profile	VISLOPE		4	%2
				5	
107	Dwelling profile	PHSLOPE		4	%2
				5	
108	Filling for binary injection	FILLBIN		7	
109	Dwelling for binary injection	HOLDBIN		7	
110	Selection of dwell change control	FPCSEL		4	%3
111	Pressure for dwell change	FPCSET	kgf/cm2	9999.90	%4
			bar	9999.90	
			MPa	999.990	
			PSI	99999.9	
112	Selection of programmed screw rotation	CHGPRO		1	%5
113	Selection of automatic charging speed reduction	CHGDWN		1	%5
114	Back pressure mode after charging	CHGBPF		2	%6
115	Back pressure mode during charging	CHGBP		2	%7
116	Selection of programmed back pressure	BPPRO		1	%5
117	Torque pressure	TRQSEL		2	%8
118	Boost	BOOST		1	%5
119	Selection of melt decompression	SBSEL (SPSEL)		1	%9
120	Feeder during injection	INJFED	%	99.0	
121	Feeder during charging	SRFED	%	99.0	
122	Feeder rotation time	TRFED	sec	99.99	
123	Selection of feeder operation	FEDSEL		2	%10
124	Feeder synchronization	FEDRATEN		1	%11
125	Feeder synchronization ratio	FEDRAT			%12
126	Automatic back pressure reduction	BPDWNSL		1	%5
127	Cavity pressure calibration value	CV1SET	kgf/cm2	4000.00	%4
			bar	3922.00	
			MPa	392.200	
			PSI	56880.0	

No.	Name	Item	Unit	Maximum value	Remarks
128	Dwell change compensation value	LS4R	mm	99.990	%4
			in	9.9990	
129	Amount of spring	SPRING	mm	9999.000	%4
			in	999.9000	
130	High-speed mold closing speed VC1	VC1	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
131	High-speed mold closing speed VC2	VC2	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
132	High-speed mold closing speed VC3	VC3	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
133	High-speed mold closing speed VC4	VC4	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
134	Low-speed mold closing speed	VCS	%	99.9	
			mm/sec	99.9	
			in/sec	9.99	
135	High-speed mold opening speed VO1	VO1	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
136	High-speed mold opening speed VO2	VO2	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
137	High-speed mold opening speed VO3	VO3	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
138	High-speed mold opening speed VO4	VO4	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
139	Low-speed mold opening speed VOS1	VOS1	%	99.0	
			mm/sec	99.9	
			in/sec	9.99	
140	Low-speed mold opening speed VOS2	VOS2	%	99.0	
			mm/sec	99.9	
			in/sec	9.99	
141	Low-pressure claming pressure	PCL	%	99.0	
142	High-pressure claming pressure (Mold thickness adjustment)	PCH	tf	9999.0	%4
			tf(US)	9999.0	
			kN	99999	
			%	99.0	
143	Mold close limit	LS2	mm	9.990	%4
			in	0.9990	
144	Mold close position LS2A	LS2A	mm	999.900	
			in	99.9900	
145	Mold close position LS2F	LS2F	mm	9999.900	
			in	999.9900	
146	Mold close position LS2E	LS2E	mm	9999.900	
			in	999.9900	
147	Mold close position LS2D	LS2D	mm	9999.900	
			in	999.9900	
148	Mold open position LS3A	LS3A	mm	999.900	%4
			in	99.9900	
149	Mold open position LS3D	LS3D	mm	9999.900	
			in	999.9900	
150	Mold open position LS3E	LS3E	mm	9999.900	
			in	999.9900	
151	Mold open position LS3F	LS3F	mm	9999.900	
			in	999.9900	
152	Mold open position LS3B	LS3B	mm	9999.900	
			in	999.9900	
153	Mold open limit LS3	LS3	mm	9999.900	
			in	999.9900	
154	Take-out signal position	LS100	mm	9999.900	%4
			in	999.9900	
155	Operation-B position	LS30	mm	9999.900	%4
			in	999.9900	
156	High-pressure mold open position	LS3M	mm	999.900	%4
			in	99.9900	
157	General-purpose position LS3X1	LS3X1	mm	9999.900	%4
			in	999.9900	

No.	Name	Item	Unit	Maximum value	Remarks
158	General-purpose position LS3X2	LS3X2	mm	9999.900	
			in	999.9900	
159	Mold thickness setting	MT	mm	9999.000	%4
			in	999.9000	
160	Selection of automatic mold opening speed reduction	VODWN		1	%5
161	Selection of automatic mold closing speed reduction	VCDWN		1	%5
162	Ejection speed VE1	VE1	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
163	Ejection speed VE2	VE2	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
164	Ejector retraction speed	VR	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
165	Ejection pressure	PEJ	tf	99.9	%4
			tf(US)	99.9	
			kN	999	
			%	99.0	
166	Ejector advance limit position	LS31	mm	999.900	%4
			in	99.9900	
167	Ejector advance position	LS31A	mm	999.900	
			in	99.9900	
168	Ejector advance position	LS31B	mm	999.900	
			in	99.9900	
169	General-purpose ejector advance position LS31X	LS31X	mm	999.900	
			in	99.9900	
170	Ejector retraction limit position	LS32	mm	99.900	%4
			in	9.9900	
171	Ejector retraction position	LS32A	mm	999.900	
			in	99.9900	
172	Ejector retraction position	LS32B	mm	999.900	%9
			in	99.9900	
173	General-purpose ejector retraction position	LS32X	mm	999.900	%4
			in	99.9900	
174	Ejector speed change time	TREJ	sec	99.90	
175	Selection of ejector operation	EJEMOD		2	%13
176	Ejection count	EJECT		9	%14
177	Selection of high-pressure mold opening	HPMOPN		1	%5
178	Melt decompression speed	VSB	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
179	Cavity pressure for dwell change	CAVFPC	kgf/cm2	9999.90	%4
			bar	9999.90	
			MPa	999.990	
			PSI	99999.9	
180	Retraction limit for mold loader	LS6D	mm	9999.999	
			in	999.9999	
181	Retraction limit for purging	LS6C	mm	9999.999	
			in	999.9999	
182	Retraction limit for nozzle	LS6	mm	9999.999	
			in	999.9999	
183	Purge plate touch position	LS7B	mm	9999.999	
			in	999.9999	
184	Advance slow-down position	LS7A	mm	9999.999	
			in	999.9999	
185	Advance limit for nozzle	LS7	mm	9999.999	
			in	999.9999	
186	Nozzle retraction time	TRLS6	sec	99.99	
187	Selection of emergency stop circuit for ejector LS31	ERSSL		1	%5
188	Ejection pressure response	GAINSEL		2	%75
189	Area of mold	CLMS	cm2	9999.0	%4
			in2	999.90	
190	Core 1	Selection 1	CORE11	0101H	%15
191		Selection 2	CORE12	1	%16
192		Advance/retraction setting	CORE13	7	%17
		Retraction setting		4	%18
193	Advance setting	CORE14	3	%19	
194	Core 2	Selection 1	CORE21	0101H	%15
195		Selection 2	CORE22	1	%16

No.	Name	Item	Unit	Maximum value	Remarks
196	Core 2	Advance/retraction setting	CORE23	7	%17
		Retraction setting		4	%18
197		Advance setting	CORE24	3	%19
198	Core 3	Selection 1	CORE31	0101H	%15
199		Selection 2	CORE32	1	%16
200		Advance/retraction setting	CORE33	7	%17
		Retraction setting		4	%18
201		Advance setting	CORE34	3	%19
202	Core 4	Selection 1	CORE41	0101H	%15
203		Selection 2	CORE42	1	%16
204		Advance/retraction setting	CORE43	7	%17
		Retraction setting		4	%18
205		Advance setting	CORE44	3	%19
206	Core 5	Selection 1	CORE51	0101H	%15
207		Selection 2	CORE52	1	%16
208		Advance/retraction setting	CORE53	7	%17
		Retraction setting		4	%18
209		Advance setting	CORE54	3	%19
210	Core 6	Selection 1	CORE61	0101H	%15
211		Selection 2	CORE62	1	%16
212		Advance/retraction setting	CORE63	7	%17
		Retraction setting		4	%18
213		Advance setting	CORE64	3	%19
214	Core 7	Selection 1	CORE71	0101H	%15
215		Selection 2	CORE72	1	%16
216		Advance/retraction setting	CORE73	7	%17
		Retraction setting		4	%18
217		Advance setting	CORE74	3	%19
218	Core 8	Selection 1	CORE81	0101H	%15
219		Selection 2	CORE82	1	%16
220		Advance/retraction setting	CORE83	7	%17
		Retraction setting		4	%18
221		Advance setting	CORE84	3	%19
222	TMA core independent/sequential		COREINDE	1	%20
223	Filing speed, gradient control coefficient, acceleration/deceleration time (manual)		INJSLOPE	ms	999 %21
224	Dwelling, gradient control coefficient, pressure increase/decrease time (manual)		HLDSLOPE	ms	999 %22
225	General-purpose output 1		UNOUT1		7
226	General-purpose output 2		UNOUT2		7
227	General-purpose output 3		UNOUT3		7
228	General-purpose output 4		UNOUT4		7
229	General-purpose output 5		UNOUT5		7
230	General-purpose output 6		UNOUT6		7
231	General-purpose output 7		UNOUT7		7
232	General-purpose output 8		UNOUT8		7
233	General-purpose output 9		UNOUT9		7
234	General-purpose output 10		UNOUT10		7
235	Selection of injection speed		VIMAG		3 %23
236	Selection of nozzle operation		NZLMOD		3 %24
237	Shut-off nozzle		SOFFNZL		2 %25
238	Clamping pump unloading		PMPULD		1 %5
239	Selection of separating circuit for clamping and injection		SPINJCLP		1 %5
240	Selection of mold unloader retraction limit		DIEOFF		1 %5
241	Mold opening/closing during charging		CLPINCHG		1 %5
242	Selection of ejector advance limit 2		EJELMT2		1 %31
243	Selection of repeated ejector retraction		REPEJE		1 %26
244	Selection of vent plug		VENT		2 %27
245	Vacuum pump		VPMP		2 %28
246	Air blow mode		AIRAPRY		5 %29
247	Purging before production		APRDPURG		1 %5
248	Purging for interruption restart		INTSTUP		1 %5
249	Startup for interruption restart		INTUP		1 %5
250	Automatic start/stop condition		UPSTP		2 %30
251	General-purpose timer 1		UNTMR1	sec	999.9
				shot	9999
				min	99999
				time	99999
				count	99999

No.	Name	Item	Unit	Maximum value	Remarks
252	General-purpose timer 2	UNTMR2	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
253	General-purpose timer 3	UNTMR3	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
254	General-purpose timer 4	UNTMR4	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
255	General-purpose timer 5	UNTMR5	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
256	General-purpose timer 6	UNTMR6	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
257	General-purpose timer 7	UNTMR7	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
258	General-purpose timer 8	UNTMR8	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
259	General-purpose timer 9	UNTMR9	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
260	General-purpose timer 10	UNTMR10	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
261	General-purpose timer 11	UNTMR11	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
262	General-purpose timer 12	UNTMR12	sec	999.9	
			shot	9999	
			min	99999	
			H	99999	
			count	99999	
263	General-purpose timer 13	UNTMR13	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
264	General-purpose timer 14	UNTMR14	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
265	General-purpose timer 15	UNTMR15	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
266	General-purpose timer 16	UNTMR16	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	

No.	Name	Item	Unit	Maximum value	Remarks
267	General-purpose timer 17	UNTMR17	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
268	General-purpose timer 18	UNTMR18	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
269	General-purpose timer 19	UNTMR19	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
270	General-purpose timer 20	UNTMR20	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
271	General-purpose timer 21	UNTMR21	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
272	General-purpose timer 22	UNTMR22	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
273	General-purpose timer 23	UNTMR23	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
274	General-purpose timer 24	UNTMR24	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
275	General-purpose timer 25	UNTMR25	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
276	General-purpose timer 26	UNTMR26	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
277	General-purpose timer 27	UNTMR27	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
278	General-purpose timer 28	UNTMR28	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
279	General-purpose timer 29	UNTMR29	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
280	General-purpose timer 30	UNTMR30	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
281	General-purpose timer 31	UNTMR31	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	

No.	Name	Item	Unit	Maximum value	Remarks
282	General-purpose timer 32	UNTMR32	sec	999.99	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
283	Ejector holding time	TR30	sec	999.99	
284	Core 1 advance time	TRADV1	sec	99.99	
285	Core 2 advance time	TRADV2	sec	99.99	
286	Core 3 advance time	TRADV3	sec	99.99	
287	Core 4 advance time	TRADV4	sec	99.99	
288	Core 5 advance time	TRADV5	sec	99.99	
289	Core 6 advance time	TRADV6	sec	99.99	
290	Core 7 advance time	TRADV7	sec	99.99	
291	Core 8 advance time	TRADV8	sec	99.99	
292	Core 1 retraction time	TRRET1	sec	99.99	
293	Core 2 retraction time	TRRET2	sec	99.99	
294	Core 3 retraction time	TRRET3	sec	99.99	
295	Core 4 retraction time	TRRET4	sec	99.99	
296	Core 5 retraction time	TRRET5	sec	99.99	
297	Core 6 retraction time	TRRET6	sec	99.99	
298	Core 7 retraction time	TRRET7	sec	99.99	
299	Core 8 retraction time	TRRET8	sec	99.99	
300	Air blow timer [air blow on stationary side]	TR41	sec	999.99	
301	Air blow timer [air blow delay on stationary side]	TR41DLY	sec	999.99	
302	Air blow timer [air blow on movable side]	TR42	sec	999.99	
303	Air blow timer [air blow delay on movable side]	TR42DLY	sec	999.99	
304	Purging time before production	BPRDPT	sec	999.99	
305	Purging and charging time before production	BPRDCT	sec	999.99	
306	Purging time after production	APRDPT	sec	999.99	
307	Purging and charging time after production	APRDCT	sec	999.99	
308	Unload timer	TR17	sec	999.99	
309	Interruption detection timer	TR111	sec	999.99	
310	Remote speed setting	VRMG1	%	99.0	
311		VRMG2	%	99.0	
312		VRMG3	%	99.0	
313		VRMG4	%	99.0	
314	General-purpose remote speed	VTX11	%	99.0	
315		VTX12	%	99.0	
316		VTX21	%	99.0	
317		VTX22	%	99.0	
318	Remote pressure setting	PRMG1	%	99.0	
319		PRMG2	%	99.0	
320		PRMG3	%	99.0	
321		PRMG4	%	99.0	
322	General-purpose remote pressure	PRX11	%	99.0	
323		PRX12	%	99.0	
324		PRX21	%	99.0	
325		PRX22	%	99.0	
326	Mold change after production	MCHNG		1	%5
327	Color/resin change after production	CCHNG		1	%5
328	Resin purging after production	PAPON		1	%5
329	Selection of peak cut	FPCSLPSEL		1	%5
330	Limit value for filling time	PFIL	sec	999.99	
331	Limit value for charging time	PCHG	sec	999.99	
332	Limit value for cycle time	PCYCL	sec	9999.99	%1
333	Reference value as filling time	FILLSTD	sec	999.99	
334	Reference value as charging time	CHGSTD	sec	999.99	
335	Reference value as take-out time	TAKESTD	sec	999.99	
336	Reference value as cycle time	CYCLSTD	sec	9999.99	%1
337	Reference value as minimum cushion	MINSTD	mm	999.999	%4
			in	99.9999	
338	Reference value as cushion position	CUSSTD	mm	999.999	%4
			in	99.9999	
339	Reference value as dwell change position	SHIFTSTD	mm	999.999	%4
			in	99.9999	
340	Reference value as injection start	STARTSTD	mm	999.999	%4
			in	99.9999	
341	Reference value as maximum injection pressure	INJPKSTD	kgf/cm2	9999.00	%4
			bar	9999.00	
			MPa	999.000	
			PSI	99999.0	

No.	Name		Item	Unit	Maximum value	Remarks
342	Filling time tolerance		FILLALW	sec	99.99	
343	Charging time tolerance		CHGALW	sec	99.99	
344	Take-out time tolerance		TAKEALW	sec	99.99	
345	Cycle time tolerance		CYCLALW	sec	99.99	%1
346	Minimum cushion tolerance		MINMALW	mm	99.999	%4
				in	9.9999	%38
347	Reserved					
348	Cushion position tolerance		CUSMALW	mm	99.999	%4
				in	9.9999	%38
349	Reserved					
350	Dwell change position tolerance		SHIFALW	mm	99.999	%4
				in	9.9999	
351	Injection start tolerance		STARTALW	mm	99.999	%4
				in	9.9999	
352	Maximum injection pressure tolerance		INJPKMALW	kgf/cm2	999.00	%4
				bar	999.00	
				MPa	99.000	
				PSI	9999.0	
353	Reserved					
354	Selection of process alarm output		PRCSALM		—	%33
355	Selection of monitoring alarm output		MNTALM		—	%34
356	Mold separation value monitoring		CLAMPSEL		1	%5
357	Initial value for monitoring		MNTSHT	shot	99999	
358	Number of consecutive alarms		STOPALM	shot	99999	
359	Statistical method for monitoring data		MNTST		1	%35
360	Setting of the number of monitoring statistics		MNTSTSHT	shot	99999	
361	Reserved					
362	Manned/unmanned		MANNED		1	%37
363	Reference value as pressure for dwell change		SHIFPSTD	kgf/cm2	9999.00	%4
				bar	9999.00	
				MPa	999.900	
				PSI	99999.0	
364	Tolerance of pressure for dwell change		SHIFPALW	kgf/cm2	999.00	%4
				bar	999.00	
				MPa	99.900	
				PSI	9999.0	
365	Reserved					
366	Reserved					
367	Reserved					
368	Remote pressure setting		P1RMG1	%	99.0	
369	Remote pressure setting		P1RMG2	%	99.0	
370	Injection pressure setting		PSI1	kgf/cm2	200.00	%46
				bar	200.00	
				MPa	20.000	
				PSI	3000.0	
371	Mold clamping pressure setting		PSM1	kgf/cm2	200.00	%46
				bar	200.00	
				MPa	20.000	
				PSI	3000.0	
372	Charging pressure setting		PSC1	kgf/cm2	200.00	%46
				bar	200.00	
				MPa	20.000	
				PSI	3000.0	
373	Injection-waveform vertical axis	Pressure	INJSCLVP			%47
Speed						
374		Position	INJSCLVX		6	%48
375	Charging-waveform vertical axis (Oil pressure) (Electric)	Back pressure	CHGSCLVB		4	%49
376		Screw Rotation	CHGSCLVS		5	%50
		Torque				
377	Reference value as screw rotation speed		SRNSTD	rpm	999	
378	Screw rotation speed tolerance		SRNALW	rpm	99	
379	Filling pressure PI3		PI3	kgf/cm2	4000.00	
				bar	4000.00	
				MPa	400.000	
				PSI	99999.0	
				%	99.0	
380	Filling pressure PI4		PI4	kgf/cm2	4000.00	
				bar	4000.00	
				MPa	400.000	
				PSI	99999.0	
				%	99.0	

No.	Name	Item	Unit	Maximum value	Remarks
381	Filling pressure change position	LS4Z2	mm	999.999	
			in	99.9999	
382	Filling pressure change position	LS4Z3	mm	999.999	
			in	99.9999	
383	Remote pressure setting	P1RMG3	%	99.0	
384	Remote pressure setting	P1RMG4	%	99.0	
385	Remote mold retraction speed	MOVRMT	mm/sec	999.9	
			in/sec	99.99	
386	Remote mold retraction pressure	MOPRMT	%	99.9	
387	Remote mold advance speed	MCVRMT	mm/sec	999.9	
			in/sec	99.00	
388	Remote mold advance pressure	MCPRMT	%	99.9	
389	Remote ejector advance speed	EJFVRMT	mm/sec	999.9	
			in/sec	99.99	
390	Remote ejector advance pressure	EJFPRMT	tf	99.9	
			tf(US)	99.9	
			kN	999	
391	Remote ejector retraction speed	EJRVRMT	mm/sec	999.9	
			in/sec	99.99	
392	Remote ejector retraction pressure	EJRPRMT	tf	99.9	
			tf(US)	99.9	
			kN	999	
393	Ejector compression	EPRSEL		1	%5
394	Compression change	EPRACT		1	%52
395	Compression steps	EPRPS		6	
396	Compression start timing	EPRPST		2	%53
397	Completion position	EPRPSP		1	%54
398	Compression delay timer	EPTRD	sec	99.990	
399	Pressing pressure	EPRP1	tf	99.99	
			kN	999.9	
400	Pressing pressure	EPRP2	tf	99.99	
			kN	999.9	
401	Pressing pressure	EPRP3	tf	99.99	
			kN	999.9	
402	Pressing pressure	EPRP4	tf	99.99	
			kN	999.9	
403	Pressing pressure	EPRP5	tf	99.99	
			kN	999.9	
404	Pressing pressure	EPRP6	tf	99.99	
			kN	999.9	
405	Press speed	EPRV1	mm/sec	999.9	
406	Press speed	EPRV2	mm/sec	999.9	
407	Press speed	EPRV3	mm/sec	999.9	
408	Press speed	EPRV4	mm/sec	999.9	
409	Press speed	EPRV5	mm/sec	999.9	
410	Press speed	EPRV6	mm/sec	999.9	
411	Press time	EPRT1	sec	99.990	
412	Press time	EPRT2	sec	99.990	
413	Press time	EPRT3	sec	99.990	
414	Press time	EPRT4	sec	99.990	
415	Press time	EPRT5	sec	99.990	
416	Press time	EPRT6	sec	99.990	
417	Press position	EPRL31E1	mm	999.999	
418	Press position	EPRL31E2	mm	999.999	
419	Press position	EPRL31E3	mm	999.999	
420	Press position	EPRL31E4	mm	999.999	
421	Press position	EPRL31E5	mm	999.999	
422	Press position	EPRL31E6	mm	999.999	
423	Gain change	EPRGAIN1		1	%55
424	Gain change	EPRGAIN2		1	%55
425	Gain change	EPRGAIN3		1	%55
426	Gain change	EPRGAIN4		1	%55
427	Gain change	EPRGAIN5		1	%55
428	Gain change	EPRGAIN6		1	%55
429	First ejector hold selection	EJHOLD		1	
430	2-8th ejector hold selection	EJ28HOLD		7	
431	Re-ejection hold time	TREJHOLD		999.90	
432	LS31 stop > LS31B	LS31STOP		1	
433	Hi speed ejection	HSEJE		1	
434	Hi speed mold open	HSMOSEL		1	
435	Screw retract control selection	SCRWBACKSEL		2	%82
436	Screw retract position	LS4SB	mm	999.990	

No.	Name	Item	Unit	Maximum value	Remarks
437	Screw retract speed	VHSB	mm/sec	9999.9	
438	Screw retract LS4 stop time	TRSB1	sec	99.999	
439	Screw retract FPC delay time	TRSB2	sec	99.999	
440	DST Press	DSTPRS		1	
441	Monitoring alarm select 2	MNTALM2		—	%82
442	Lock-up during MT set	MTLUP		1	
443	Reserved				
453	Reserved				
454	Injection-waveform vertical axis	Clamping force	INJSCLCP	4	%59
		Cavity pressure		5	%59
455	Monitoring zone selection 1	EJWTSSEL1		1	%5
456	Monitoring zone 1A	EJWTSL1A	mm	999.900	
			in	99.9900	
457	Monitoring zone 1B	EJWTSL1B	mm	999.900	
			in	99.9900	
458	Acceptable variation range 1	EJWTTTRQ1	%	100.0	
459	Operation stop alarm count 1	EJWTCNT1		99	
460	Monitoring zone selection 2	EJWTSSEL2		1	%5
461	Monitoring zone 2A	EJWTSL2A	mm	999.900	
			in	99.9900	
462	Monitoring zone 2B	EJWTSL2B	mm	999.900	
			in	99.9900	
463	Acceptable variation range 2	EJWTTTRQ2	%	100.0	
464	Operation stop alarm count 2	EJWTCNT2		99	
465	Vertical axis of ejection torque waveform	EJESCALE	%	99.0	
466	Monitoring zone selection 1	MDWTSSEL1		1	%5
467	Monitoring zone 1A	MDWTSL1A	mm	9999.900	
			in	999.9900	
468	Monitoring zone 1B	MDWTSL1B	mm	9999.900	
			in	999.9900	
469	Mold protection force 1A	MDWTPRS1A	tf	99.99	
			tf(US)	99.99	
			kN	999.9	
470	Mold protection force 1B	MDWTPRS1B	tf	99.99	
			tf(US)	99.99	
			kN	999.9	
471	Operation stop alarm count 1	MDWTCNT1		99	
472	Monitoring zone selection 2	MDWTSSEL2		1	%5
473	Monitoring zone 2A	MDWTSL2A	mm	9999.900	
			in	999.9900	
474	Monitoring zone 2B	MDWTSL2B	mm	9999.900	
			in	999.9900	
475	Mold protection force 2A	MDWTPRS2A	tf	99.99	
			tf(US)	99.99	
			kN	999.9	
476	Mold protection force 2B	MDWTPRS2B	tf	99.99	
			tf(US)	99.99	
			kN	999.9	
477	Operation stop alarm count 2	MDWTCNT2		99	
478	Vertical axis of clamping force conversion waveform	MLDSCALE	tf	999.99	
			tf(US)	999.99	
			kN	9999.9	
479	Selection of PCL zone detection mode	MPPCLSEL		1	%62
480	PCL zone monitoring time	MPPCLTIM	sec	99.990	
481	VHI speed selection	VHISPD		1	%5
482	VHI pressure selection	VHIPRS		1	%5
483	Injection speed [automatic purging]	VIPG	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
484	Injection pressure [automatic purging]	PIPG	kgf/cm2	4000.00	%4
			bar	4000.00	
			PSI	99999.0	
			MPa	400.000	
			%	99.0	
485	Injection time [automatic purging]	TR1PG	sec	999.990	%1
486	Purging count [automatic purging]	CNTPG	count	999	
487	Purging completion position [automatic purging]	LS5PG	mm	999.990	%4
			in	99.9990	
488	Charging rotation speed [automatic purging]	SRNPG	rpm	999	
			%	99.0	

No.	Name	Item	Unit	Maximum value	Remarks	
489	Back pressure [automatic purging]	BPPG	kgf/cm2	999.00	%4	
			bar	999.00		
			MPa	99.000		
			PSI	9999.0		
			%	99.0		
490	First charging time [automatic purging]	TRPGA	sec	999.990	%1	
491	Charging time for screw advance limit [automatic purging]	TRPGB	sec	999.990	%1	
492	Charging time for screw retraction limit	TRPGC	sec	999.990	%1	
493	Selection of back pressure	PGBPSEL		1	%5	
494	Charging delay timer	TRCHGDLY	sec	99.990	%63	
495	Ejection delay timer	TREJEDLY	sec	99.990		
496	Selection of synchronization between air blow and ejection	AIRWEJESEL		1	%5	
497	Selection of FF control	INJFFSL		2	%71	
498	Dwell shutdown speed	VHD	mm/sec	400.0	%4	
			in/sec	40.00		
499	Pre-injection 1 selection	SPREINJ1		1	%5	
500	Pre-injection 1 speed	VPI1	mm/sec	999.9	%4	
			in/sec	99.99		
501	Pre-injection 1 pressure	PPI1	kgf/cm2	4000.00	%4	
			bar	4000.00		
			MPa	400.000		
			PSI	99999.0		
502	Pre-injection 1 time	TRPI	sec	9.990		
503	Pre-injection 2 position	SPREINJ2		1	%5	
504	Pre-injection 2 speed	VPI2	mm/sec	999.9	%4	
			in/sec	99.99		
505	Pre-injection 2 position	LS10B	mm	9.900	%4	
			in	9.9990		
506	Screw reverse 1 selection	SINVCHG1		1	%5	
507	Screw reverse 1 speed	SRNI1	min <sup>-1</sup>	999		
508	Screw reverse 1 time	TRIT1	sec	9.990		
509	Screw reverse 2 selection	SINVCHG2		1	%5	
510	Screw reverse 2 speed	SRNI2	min <sup>-1</sup>	999		
511	Reserved					
512	CEF control	CEFSEL		1	%5	
513	Start position	CEFSTR		13	%56	
514	End position	CEFSTP		13	%56	
515	Alarm selection	CEFALM		1	%5	
516	Reference value	Presence/absence	CEFDATEN		2	%57
517		Area 1	CEFAREA1		-	%58
		~	~			
626		Area 110	CEFAREA110		-	%58
627	Selection of LAP circuit	LAPSEL		1		
628	LAP circuit ejection delay	LAPIJDLY	sec	9.999		
629	LAP circuit lock-up delay	LAPPSDLY	sec	9.999		
630	Lock-up speed	MCPSLAP	mm/sec	999.9	%4	
			in/sec	99.99		
631	Remote tie rod retraction speed	TVRRMG	mm/sec	999.9		
			in/sec	99.99		
632	Remote tie rod retraction force	TPRRMG	tf	99.99		
			tf(US)	99.99		
			kN	999.9		
633	Remote tie rod advance speed	TVFRMG	mm/sec	999.9		
			in/sec	99.99		
634	Remote tie rod advance force	TPFRMG	tf	99.99		
			tf(US)	99.99		
			kN	999.9		
635	Tie rod retraction position	TBLS3X	mm	99.999		
636	Tie rod advance position	TBLS2X	mm	99.999		
637	Reference value as mold opening time	MOTIMESTD	sec	999.99		
638	Reference value as mold closing time	MCTIMESTD	sec	999.99		
639	Reference value as ejection time	EJETIMESTD	sec	999.99		
640	Reference value as safety door opening time	SDOTIMESTD	sec	999.99		
641	Reference value as mold separation value	CLAMPSTD	mm	999.999		
			in	99.9999		
642	Reference value as die retraction limit	CLPENDSTD	mm	9999.9		
			in	999.9900		
643	Reference value as injection stroke	INJSTSTD	mm	999.99		
			in	99.9990		
644	Reference value as maximum injection stroke	INJSTMAXSTD	mm	999.99		
			in	99.9990		

No.	Name	Item	Unit	Maximum value	Remarks
645	Reference value as LS4A injection pressure	INJPLS4ASTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
646	Reference value as LS4B injection pressure	INJPLS4BSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
647	Reference value as LS4C injection pressure	INJPLS4CSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
648	Reference value as LS4D injection pressure	INJPLS4DSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
649	Reference value as LS4E injection pressure	INJPLS4ESTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
650	Reference value as LS4F injection pressure	INJPLS4FSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
651	Reference value as LS4G injection pressure	INJPLS4GSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
652	Reference value as LS4H injection pressure	INJPLS4HSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
653	Reference value as LS4I injection pressure	INJPLS4ISTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
654	Reference value as maximum cavity pressure	CAVMAXSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
655	Reference value as cavity pressure for dwelling	CAVHLDSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
656	Mold opening time tolerance	MOTIMEALW	sec	99.99	
657	Mold closing time tolerance	MCTIMEALW	sec	99.99	
658	Ejection time tolerance	EJETIMEALW	sec	99.99	
659	Safety door opening time tolerance	SDOTIMEALW	sec	99.99	
660	Tolerance of mold separation value	CLAMPALW	mm	99.999	
			in	9.9999	
661	Die retraction limit tolerance	CLPENDALW	mm	999.9	
			in	99.9900	
662	Injection stroke tolerance	INJSTALW	mm	99.99	
			in	9.9990	
663	Maximum injection stroke tolerance	INJSTMAXALW	mm	99.99	
			in	9.9990	
664	LS4A injection pressure tolerance	INJPLS4AALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
665	LS4B injection pressure tolerance	INJPLS4BALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
666	LS4C injection pressure tolerance	INJPLS4CALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
667	LS4D injection pressure tolerance	INJPLS4DALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	

No.	Name	Item	Unit	Maximum value	Remarks
668	LS4E injection pressure tolerance	INJPLS4EALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
669	LS4F injection pressure tolerance	INJPLS4FALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
670	LS4G injection pressure tolerance	INJPLS4GALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
671	LS4H injection pressure tolerance	INJPLS4HALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
672	LS4I injection pressure tolerance	INJPLS4IALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
673	Maximum cavity pressure tolerance	CAVMAXALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
674	Tolerance of cavity pressure for dwelling	CAVHLDALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
675	L-statistic sampling count	LSTSMP	ショット	99999	
676	Purge mode	PGMODE		2	%73
677	Selection of completion	ENDSEL		1	%74
678	Automatic purging time	AUTOPG	sec	999.990	
679	Rotation time	SRNTIME	sec	999.990	
680	LS4PG [automatic purging]	LS4PG	mm	99.990	
			in	9.9990	
681	Selection of FPC speed reduction	FPCSETSEL		4	
682	Mold code	MTCOD1	Digits	20+null	%42
683		MTCOD2			
684		MTCOD3			
685		MTCOD4			
686		MTCOD5			
687		MTCOD6			
688	Resin code	MOLDCOD1	Digits	20+null	%42
689		MOLDCOD2			
690		MOLDCOD3			
691		MOLDCOD4			
692		MOLDCOD5			
693		MOLDCOD6			
694	Lower limit for charging torque	CHGTRQLO	%	99.0	
695	Upper limit for charging torque	CHGTRQHI	%	99.0	
696	Stop operation - cycle time	CYLSTPSEL		2	%67
697	Stop operation - filling time	FILSTPSEL		1	%68
698	Stop operation - charging time	CHGSTPSEL		1	%68
699	Stop operation - PI alarm	PIASTPSEL		1	%68
700	Stop operation - mold protection	MLDSTPSEL		5	&69
701	Stop operation - charging torque lowering	CTQLSTPSEL		1	%68
702	Stop operation - charging torque exceeding	CTQHSTPSEL		1	%68
703	Stop operation - consecutive alarms	NSHTSTPSEL		1	%68
704	Selection of manned operation mode for signal tower lighting	SIGOFFA		1	%68
705	Selection of unmanned operation mode for signal tower lighting	SIGOFFB		1	%68
706	Selection of manned operation mode for buzzer warning	BZOFFA		1	
707	Selection of manned operation mode for buzzer warning	BZOFFB		1	
708	Try-again count	TRYAGAIN		99	
709	Selection of waveform drawing	SCLVSEL		1	%70
710	Vertical axis - maximum injection pressure	SCLIPRVH	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	

No.	Name	Item	Unit	Maximum value	Remarks
711	Vertical axis - minimum injection pressure	SCLIPRVL	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
712	Vertical axis - maximum injection speed	SCLISPVH	mm/sec	9999.0	
			in/sec	999.90	
713	Vertical axis - minimum injection speed	SCLISPVL	mm/sec	9999.0	
			in/sec	999.90	
714	Vertical axis - maximum mold clamping pressure	SCLCPRVH	kN	99999	
			tf	9999	
			tf(US)	9999	
			kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
715	Vertical axis - minimum mold clamping pressure	SCLCPRVL	kN	99999	
			tf	9999	
			tf(US)	9999	
			kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
716	Vertical axis - maximum cavity pressure	SCLCAVVH	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
717	Vertical axis - minimum cavity pressure	SCLCAVVL	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
718	Vertical axis - maximum back pressure	SCLBPVH	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
719	Vertical axis - minimum back pressure	SCLBPVL	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
720	Vertical axis - maximum torque (electric) - maximum rotation speed (oil pressure)	SCLTRQVH	%	99.0	
			min-1	999	
721	Vertical axis - minimum torque (electric) - minimum rotation speed (oil pressure)	SCLTRQVL	%	99.0	
			min-1	999	
722	Vertical axis - maximum retraction speed	SCLCSPVH	mm/sec	99.9	
			in/sec	9.99	
723	Vertical axis - minimum retraction speed	SCLCSPVL	mm/sec	99.9	
			in/sec	9.99	
724	Vertical axis - maximum screw position	SCLPOSVH	mm	999.000	
			in	99.9900	
725	Vertical axis - minimum screw position	SCLPOSVL	mm	999.000	
			in	99.9900	
726	Injection waveform delay time	INJWVDLY	sec	999.990	
727	Injection waveform setting time	INJWVREC	sec	999.990	
728	General-purpose output	UNOUT11		1	
729		UNOUT12		1	
730		UNOUT13		1	
731		UNOUT14		1	
732		UNOUT15		1	
733		UNOUT16		1	
734		UNOUT17		1	
735		UNOUT18		1	
736		UNOUT19		1	
737		UNOUT20		1	
738		UNOUT21		1	
739		UNOUT22		1	
740		UNOUT23		1	
741		UNOUT24		1	
742		UNOUT25		1	
743		UNOUT26		1	
744		UNOUT27		1	
745		UNOUT28		1	
746		UNOUT29		1	
747		UNOUT30		1	
748	Reference value as charging torque	CHGTQSTD	%	99.9	

No.	Name	Item	Unit	Maximum value	Remarks
749	Charging torque tolerance	CHGTQALW	%	99.9	
750	Ejection speed	VE3	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
751	Mold name	MLDNAME1	BCD	&HFFFFFFF	%76
752	Mold name	MLDNAME2	BCD	&HFFFFFFF	%76
753	Mold name	MLDNAME3	BCD	&HFFFFFFF	%76
754	Mold name	MLDNAME4	BCD	&HFFFFFFF	%76
755	Selection of mold data link	MLDLINK		1	%77
756	Universal mold open/close position	LS3X3	mm	9999.900	%4
			in	999.9900	
757		LS3X4	mm	9999.900	
			in	999.9900	
758		LS3X5	mm	9999.900	
			in	999.9900	
759		LS3X6	mm	9999.900	
			in	999.9900	
760	Mold open position	LS3N	mm	9999.900	%4
			in	999.9900	
761	Air blow position	LSBLOW	mm	9999.900	%4
			in	999.9900	
762	Manual backpressure select	BPMSEL		1	%5
763	Manual backpressure	BPM	kgf/cm2	999.00	%4
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
764	Air blow B circuit position setting	BLOWSL		1	
765	Reserved				
766	Reserved				
767	Reserved				

%1) The units can be changed to 0.1 by specifying their parameter.

%2) Setting: 0 = Rectangle, 1 = Gradient 1, 2 = Gradient 2, 3 = Gradient 3, 4 = Broken line, 5 = Manual

%3) Setting: 0-3 = LS4/HYD/EXT/CAV

%4) The units can be changed by specifying their parameter

%5) Setting: 0 = Absence, 1 = Presence

%6) Setting: 0 = Holding, 1 = Drain, 2 = Block

%7) Setting: 0 = Control, 1 = Drain, 2 = Block

%8) Setting: 0 = Low, 1 = Medium, 2 = High

%9) Not used. Parameter used

%10) Setting: 0 = None, 1 = Manual, 2 = Automatic

%11) Setting: 0 = None, 1 = On. Status: 0 = None, 1 = On (during operation), 2 = Completion

%12) The ratio at completion of feeder synchronization is used as the setting value.

%13) Setting: 0= None, 1 = Operation A, 2 = Operation B

%14) Setting: 0-8, and 9 = 0-8, and holding, respectively

%15) Set presence/absence of core operation in the high-order two bytes, and hydraulic or pneumatic operation in the low-order two bytes.

0	0
1	Presence/absence of core operation
2	0
3	0

Setting: 0H = Not used, 100H = Used

%16) Set the core advance position/time in the high-order two bytes, and the core retraction position/time in the low-order two bytes.

0	0
1	Core advance position/time
2	0
3	Core retraction position/time

Setting for both core advance and core retraction: 0 = Position, 1 = Time

%17) When advance/retraction is set in the parameter:

Setting: 1-7 = A/B/C/D/S1/S2/S3, S1/S2/S3/S4/S5/S6/S7

%18) When independent is set in the parameter:

Setting: 1-4 = A/B/C/D, S1/S2/S3/S4

%19) Setting: 1~3=A/B/C, S1/S2/S3

%20) Setting: 0 = INDE, 1 = SEQ

%21) Used when VISLOPE (speed profile) = 5

%22) Used when PHSLOPE (dwell profile) = 5

%23) Setting: 0 = Standard, 1 = Twofold, 2 = Fourfold, 3 = (1/4)

%24) Setting: 0 = Continuous, 1 = Cooling, 2 = Injection, 3 = Charging

%25) Setting: 0 = None, 1 = Interlock, 2 = Fully open

%26) Setting: 0 = LS32, 1 = LS32A

%27) Setting: 0 = Close, 1 = Open, 2 = Interlock

%28) Setting: 0 = Off, 1 = Manual, 2 = Automatic

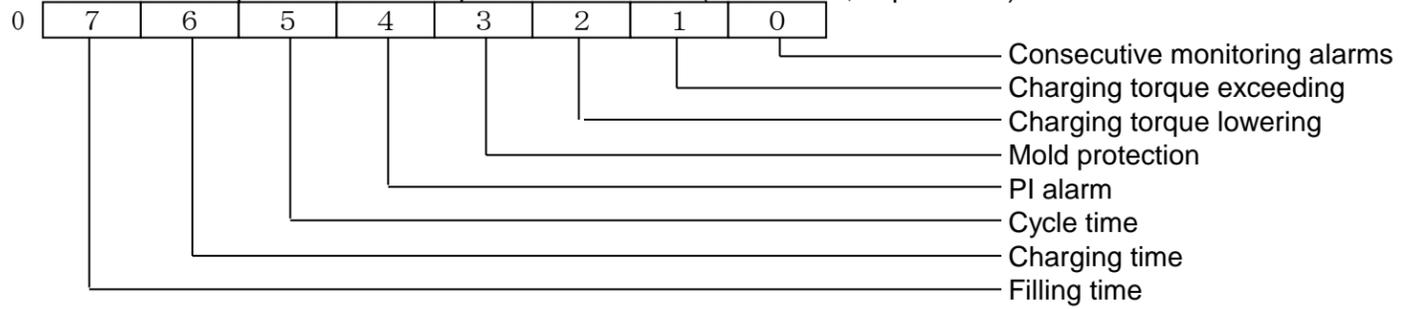
%29) Setting: 0-5 = None/C/B/A/CB/CA

%30) Setting: 0 = Continuous molding, 1 = Automatic operation stop, 2 = Resin purging

%31) Setting: 0 = LS31, 1 = LS31B

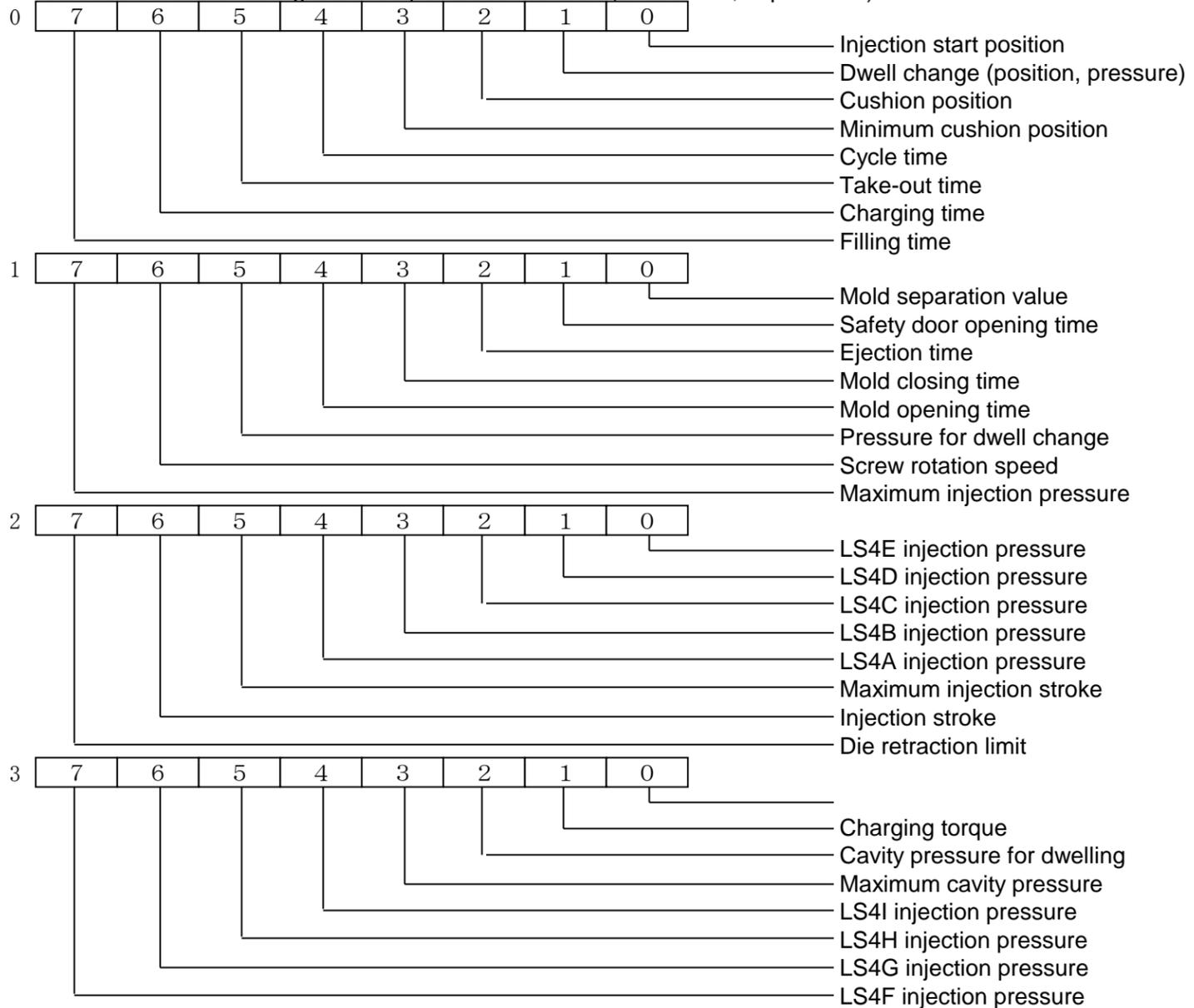
%32) The display digits can be changed to 0.001 by specifying the parameter.

%33) Presence/absence of process alarm output is set in one bit (0: absence, 1: presence).



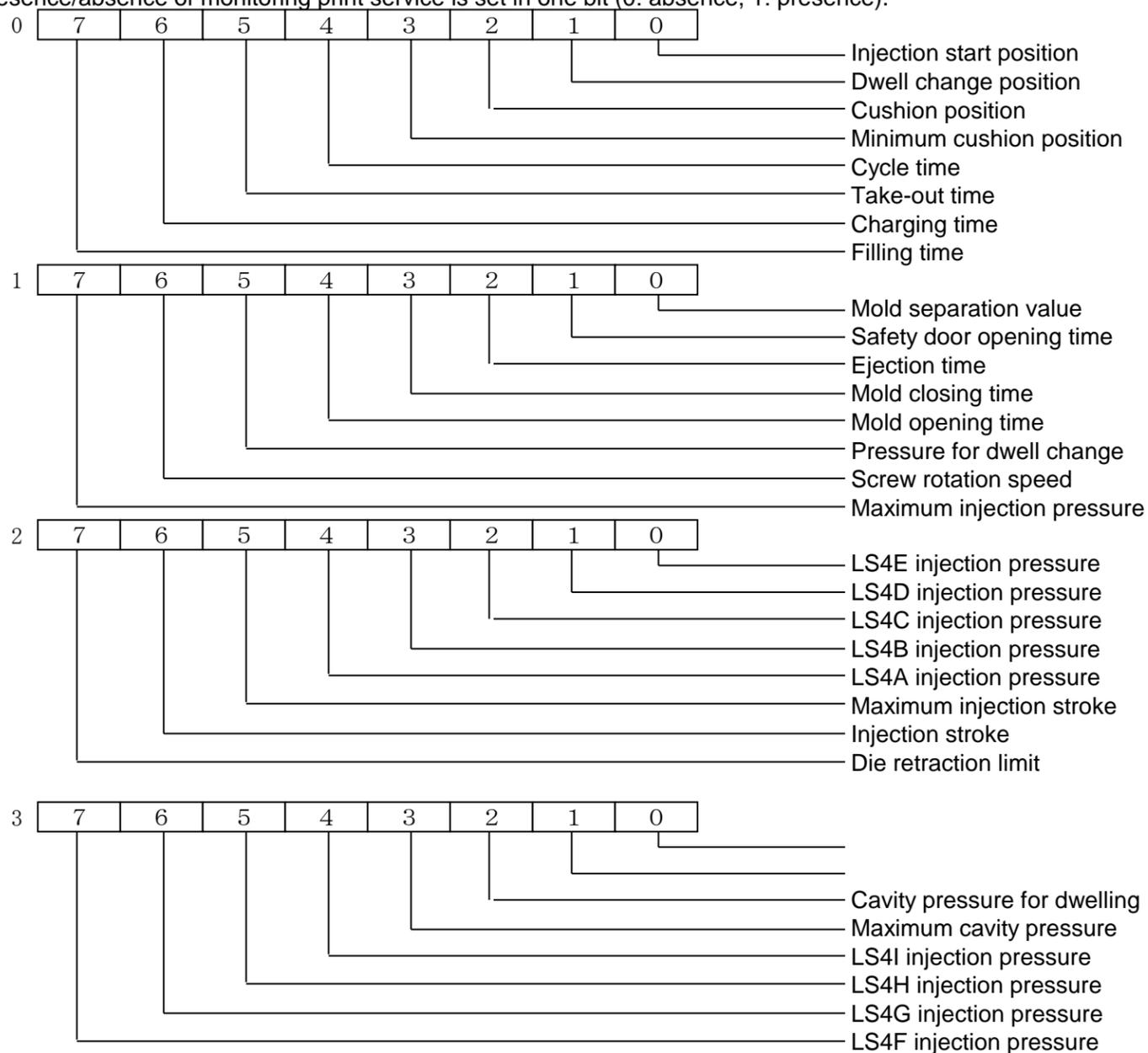
Bytes 1 to 3 are to be filled with zeros.

%34) Presence/absence of monitoring alarm output is set in one bit (0: absence, 1: presence).



%35) Setting: 0 = Continuous, 1 = Specified value

%36) Presence/absence of monitoring print service is set in one bit (0: absence, 1: presence).



%37) Setting: 0 = Manned, 1 = Unmanned

%38) Data is a positive value, but used as a negative value for setting and control.

%39) The units can be changed to [Pieces] with the management method. (Not supported yet)

%40) The units can be changed to [Minutes] by specifying their parameter.

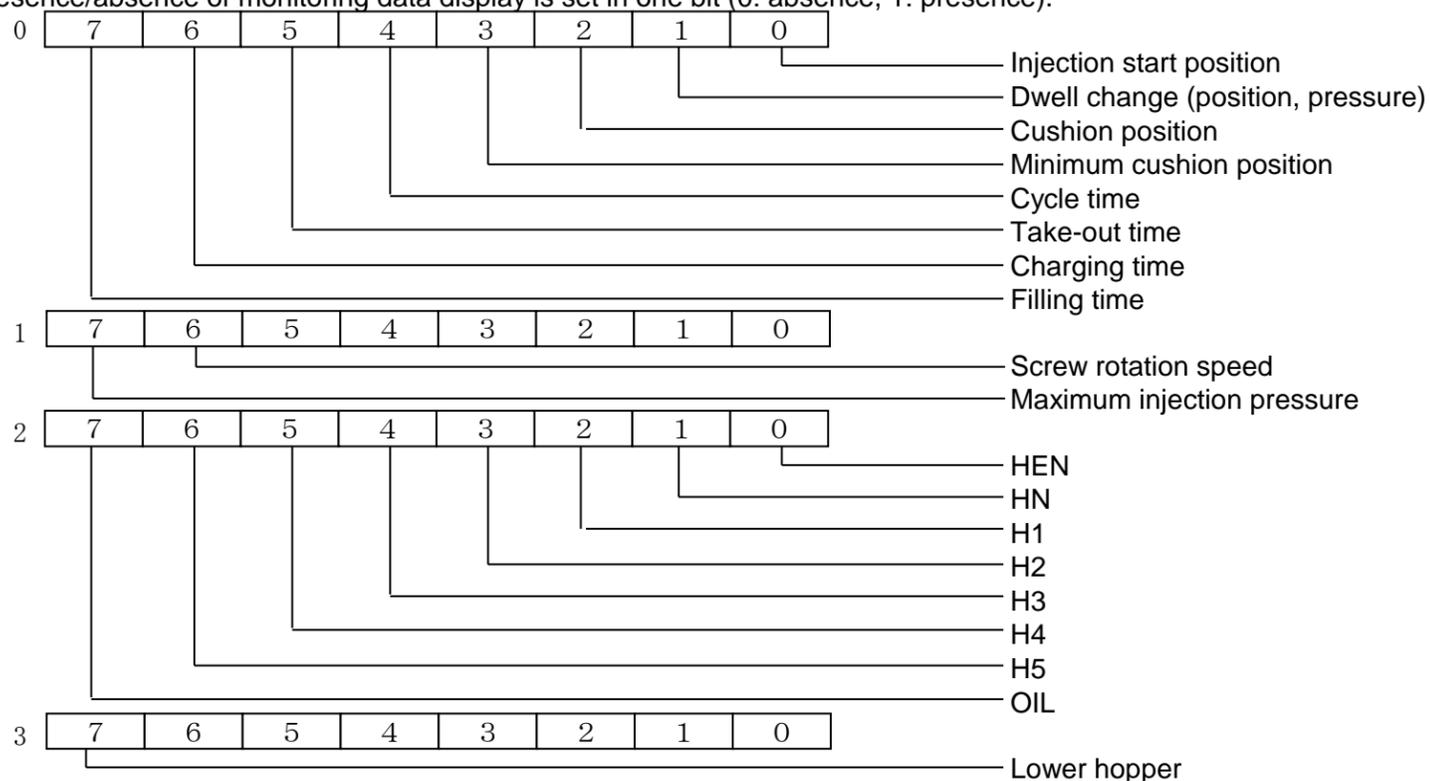
%41) Setting: 0 = Total shot count, 1 = OK-product shot count, 2 = Total production count, 3 = OK-product count

%42) The number of input digits is counted as ASCII digits. For operation such as printing out data, null is to be suffixed to the data.

%43) Setting: 0 = Continued, 1 = Stopped

%44) Setting: 0 = Position, 1 = Oil pressure

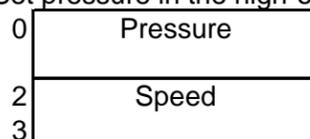
%45) Presence/absence of monitoring data display is set in one bit (0: absence, 1: presence).



%46) The setting range varies depending on the unit.

- 000.00~200.00kgf/cm<sup>2</sup>(Display digit 0.1),
- 00.000~20.000MPa(Display digit 0.01),
- 000.00~200.00bar(Display digit 0.1),
- 0000.0~3000.00PSI(Display digit 1),

%47) Set pressure in the high-order two bytes, and a vertical axis scale of speed in the low-order two bytes.



The setting of pressure varies depending on the unit.

Assuming that unit conversion has been performed and the value of parameter PIL rounded up to a unit of 500(kgf), 50(MPa),500(bar),5000(PSI) is X,  
then 0,1,2,3,4 = nil/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

Speed setting:

- 0,1,2,3,4,5 = nil/50/100/150/300/600 (mm/sec)
- 0,1,2,3,4,5 = nil/2/4/6/12/24 (in/sec)

%48) Determined by the value of P\_ISTMAX (parameter 121)

Assuming that the value of P\_ISTMAX rounded up to a unit of 50 (mm) is X,  
then 0,1,2,3,4,5,6 = nil/10/20/(X\*0.25)/(X\*0.5)/(X\*0.75)/X (mm) results.

Determined by the value of P\_ISTMAX (parameter 121)

Assuming that the value of P\_ISTMAX rounded up to a unit of 1 (in is X,  
then 0,1,2,3,4,5,6=nil/0.4/0.8/(X\*0.25)/(X\*0.5)/(X\*0.75)/X(in).

%49) The setting of pressure varies depending on the unit.

Assuming that unit conversion has been performed and the value of parameter BPL rounded up to a unit of 50(kgf),5(MPa),50(bar),500(PSI) is X,  
then 0,1,2,3,4 = nil/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

- %50) 0,1,2,3,4,5 = nil/100/200/300/400/500 (rpm)
- %51) 0,1,2,3,4,5 = nil/20/40/60/80/99 (%)
- %52) Setting: 0 = Position, 1 = Time
- %53) Setting: 0-2 = LS4PR/LS4/TR1
- %54) Setting: 0 = LS32, 1 = Holding
- %55) Setting: 0 = High, 1 = Low
- %56) Setting: 0-13 = LS5+10/LS4A-LS4/TRH1/TRH2/TRH3
- %57) Setting: 0 = None, 1 = Start Status: 0 = None, 1 = Start (during take-out), 2 = Completion
- %58) Data is written collectively by recording the reference values, and there is no individual data change.
- %59) Set mold clamping force in the high-order two bytes, and a vertical axis scale of cavity pressure in the low-order two bytes.

0	Clamping force
2	Cavity pressure
3	

The setting of mold clamping force varies depending on the unit.

Assuming that unit conversion has been performed after multiplication of parameter PCHMARC by 1.1 and that the value of parameter PCHMARC rounded up to a unit of 10(tf),10(USf),100(kN) is X, then 0,1,2,3,4 = nil/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

The setting of cavity pressure varies depending on the unit.

Assuming that the value of the CAV pressure calibration value rounded up to a unit of 200(kgf),20(MPa),200(bar),2000(PSI) is X, then 0,1,2,3,4,5 = nil/(X\*0.125)/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

- %61) The setting of cavity pressure varies depending on the unit. Assuming that unit conversion has been performed and the value of PCHMARC rounded up to a unit of 40(tf),40(USf),40(kN) is X, then 0,1,2,3,4,5,6 = nil/(X\*0.025)/(X\*0.05)/(X\*0.1)/(X\*0.2)/(X\*0.5)/X results.

%62) Setting: 0 = Time, 1 = Torque

- %63) When P\_no.21(TRSEL) = 0\*\*\*\*, the minimum is 00.00, the maximum is 99.99, and the display digit is 0.01. When P\_no.21(TRSEL) = 1\*\*\*\*, the minimum is 000.0, the maximum is 999.9, and the display digit is 0.1.

%64) Indication of the date when the molding condition was saved

0	Year(**??)
1	Year(??**)
2	Month
3	Day

Data is represented in two BCD digits.

%65) Indication of the time when the molding condition was saved

0	Hour
1	minute
2	Second
3	

Data is represented in two BCD digits.

%66) The number of input digits is counted as ASCII digits.

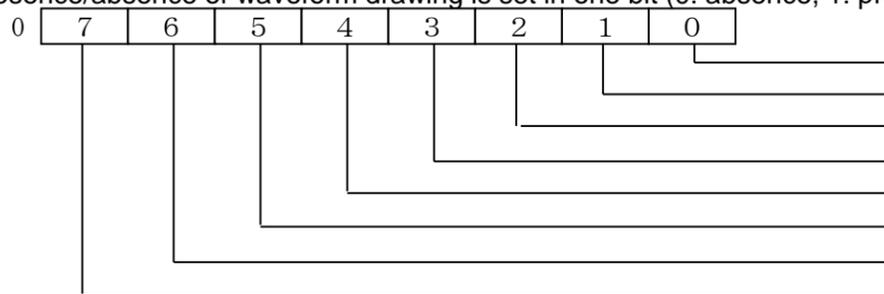
尚, プリントアウト等の関係上, データの後ろにnullを付ける.

%67) Setting: 0 = Immediate stopping, 1 = Stopping at mold open limit position (nozzle retraction), 2 = Stopping at mold open limit position

%68) Setting: 0 = Stopping at mold open limit position, 1 = Stopping after completion of ejection

%69) Setting: 0 = Immediate stopping, 1 = Stopping at mold open limit position, 2 = Stopping after completion of ejection, 3 = Try again (immediate stopping), 4 = Try again (stopping at mold open limit position), 5 = Try again (stopping after completion of ejection)

%70) Presence/absence of waveform drawing is set in one bit (0: absence, 1: presence).



- Charging waveform - retraction speed
- Charging waveform - torque (rotation speed)
- Charging waveform - back pressure
- Charging waveform - screw position
- Charging waveform - cavity pressure
- Charging waveform - mold clamping force
- Charging waveform - injection speed
- Charging waveform - injection pressure

Bytes 1 to 3 are to be filled with zeros.

%71) Setting: 0 = None, 1 = Injection to the whole area, 2 = Filling speed 1

%72) Setting: 0 = Internal, 1 = External 1, 2 = External 2, 3 = External 3

%73) Setting: 0 = None, 1 = Program, 2 = Screw rotation

%74) Setting: 0 = Number of times, 1 = Time

%75) Setting: 0 = Slow, 1 = Medium, 2 = Fast

%76) Indicates the mold name "ABCDEFGHIJKLMN" (up to 16 half-size alphanumeric characters).

MLDNAME1	ABCD
MLDNAME2	EFGH
MLDNAME3	IJKL
MLDNAME4	MNOP

Data is represented in four BCD digits.

%77) Setting: 0 = Absence, 1 = Presence

%78) Minimum, maximum and digits of TRH 1 to 3 are changed by parameter No. 20 (TRHSEL).

0: 00.00-99.99/0.01

1: 000.00-999.90/0.1

2: 0.000-9.999/0.001

%79) Minimum, maximum and digits of TRVH are changed by parameter No. 14 (VH1,2).

0 : No display

1 : 000.00-999.99/0.01

2 : 00.000-99.999/0.001

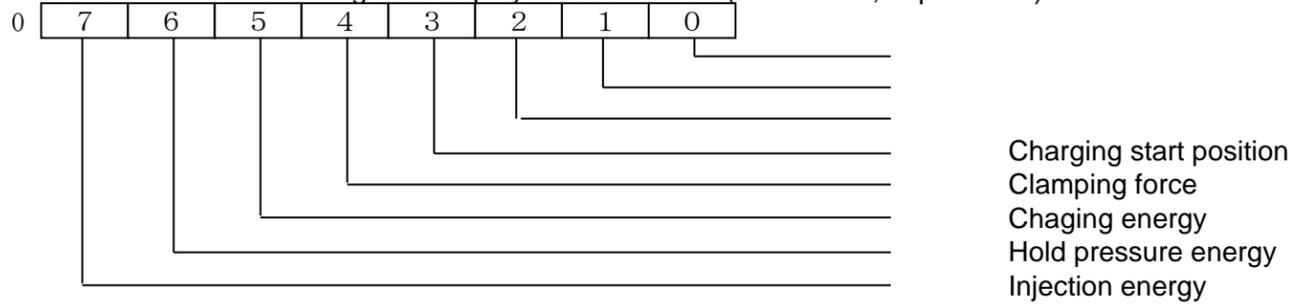
%80) Minimum, maximum and digits of TR1 are changed by parameter No. 21 (TRSEL).

- \*\*0\*\* : 000.00-999.99/0.01
- \*\*1\*\* : 0000.00-9999.90/0.1
- \*\*2\*\* : 00.000-99.999/0.001
- \*\*3\*\* : 000.000-999.990/0.01

%81) Minimum, maximum and digits of injection time monitoring are changed by parameter No. 21 (TRSEL).

- \*\*0\*\* or \*\*1\*\* : \*00.00-\*99.99/0.01
- \*\*2\*\* or \*\*3\*\* : \*0.000-\*9.999/0.001

%82) Presence/absence of monitoring data display is set in one bit (0: absence, 1: presence).



Bytes 1 to 3 are to be filled with zeros.

## 4.2 Temperature Data

No.	Name	Item	Unit	Maximum value	Remarks
769	File sorting	TMP1FORM		999	
770					
771					
772					
773					
774	HEN setting value	HENSET	°C (° F) %	600.0 (1112.0) 100.0	%1
775	HN setting value	HNSET	°C (° F) %	600.0 (1112.0) 100.0	%1
776	H1 setting value	H1SET	°C (° F) %	600.0 (1112.0) 100.0	%1
777	H2 setting value	H2SET	°C (° F) %	600.0 (1112.0) 100.0	%1
778	H3 setting value	H3SET	°C (° F) %	600.0 (1112.0) 100.0	%1
779	H4 setting value	H4SET	°C (° F) %	600.0 (1112.0) 100.0	%1
780	H5 setting value	H5SET	°C (° F) %	600.0 (1112.0) 100.0	%1
781	OIL setting value	OILSET	°C (° F) %	600.0 (1112.0) 100.0	%1
782	HEN tolerance	HENALW	°C (° F)	99.9	%1
783	HN tolerance	HNALW	°C (° F)	99.9	%1
784	H1 tolerance	H1ALW	°C (° F)	99.9	%1
785	H2 tolerance	H2ALW	°C (° F)	99.9	%1
786	H3 tolerance	H3ALW	°C (° F)	99.9	%1
787	H4 tolerance	H4ALW	°C (° F)	99.9	%1
788	H5 tolerance	H5ALW	°C (° F)	99.9	%1
789	OIL tolerance	OILALW	°C (° F)	99.9	%1
790	H1 screw stop temperature	H1SCSTP	°C (° F)	-99.9	
791	H2 screw stop temperature	H2SCSTP	°C (° F)	-99.9	
792	H3 screw stop temperature	H3SCSTP	°C (° F)	-99.9	
793	H4 screw stop temperature	H4SCSTP	°C (° F)	-99.9	
794	H5 screw stop temperature	H5SCSTP	°C (° F)	-99.9	
795	Reserved				
814	Reserved				
815	Selection of alarm output	HALM		—	%2
816	Reserved				
817	Reserved				
818	Reserved				
819	Selection of H1 blower	H1BLW		2	%4
820	Selection of H2 blower	H2BLW		2	%4
821	Selection of H3 blower	H3BLW		2	%4
822	Selection of H4 blower	H4BLW		2	%4
823	Selection of H5 blower	H5BLW		2	%4
824	Lower-hopper temperature setting	HOPSET	°C (° F) %	500.0 (932.0) 100.0	%1
825	Lower-hopper temperature tolerance	HOPALW	°C (° F)	99.9	%1
826	Reserved				
827	Reserved				
828	Reserved				

No.	Name	Item	Unit	Maximum value	Remarks
829	HM11 setting value	HM11SET	°C (° F) %	600.0 (1112.0) 100.0	%1
830	HM12 setting value	HM12SET	°C (° F) %	600.0 (1112.0) 100.0	%1
831	HM13 setting value	HM13SET	°C (° F) %	600.0 (1112.0) 100.0	%1
832	HM14 setting value	HM14SET	°C (° F) %	600.0 (1112.0) 100.0	%1
833	HM15 setting value	HM15SET	°C (° F) %	600.0 (1112.0) 100.0	%1
834	HM16 setting value	HM16SET	°C (° F) %	600.0 (1112.0) 100.0	%1
835	HM17 setting value	HM17SET	°C (° F) %	600.0 (1112.0) 100.0	%1
836	HM18 setting value	HM18SET	°C (° F) %	600.0 (1112.0) 100.0	%1
837	HM11 tolerance	HM11ALW	°C (° F)	99.9	%1
838	HM12 tolerance	HM12ALW	°C (° F)	99.9	%1
839	HM13 tolerance	HM13ALW	°C (° F)	99.9	%1
840	HM14 tolerance	HM14ALW	°C (° F)	99.9	%1
841	HM15 tolerance	HM15ALW	°C (° F)	99.9	%1
842	HM16 tolerance	HM16ALW	°C (° F)	99.9	%1
843	HM17 tolerance	HM17ALW	°C (° F)	99.9	%1
844	HM18 tolerance	HM18ALW	°C (° F)	99.9	%1
845	HM11 P item	HM11P	°C (° F)	999.9	%1
846	HM12 P item	HM12P	°C (° F)	999.9	%1
847	HM13 P item	HM13P	°C (° F)	999.9	%1
848	HM14 P item	HM14P	°C (° F)	999.9	%1
849	HM15 P item	HM15P	°C (° F)	999.9	%1
850	HM16 P item	HM16P	°C (° F)	999.9	%1
851	HM17 P item	HM17P	°C (° F)	999.9	%1
852	HM18 P item	HM18P	°C (° F)	999.9	%1
853	HM11 I item	HM11I	sec	3600	
854	HM12 I item	HM12I	sec	3600	
855	HM13 I item	HM13I	sec	3600	
856	HM14 I item	HM14I	sec	3600	
857	HM15 I item	HM15I	sec	3600	
858	HM16 I item	HM16I	sec	3600	
859	HM17 I item	HM17I	sec	3600	
860	HM18 I item	HM18I	sec	3600	
861	HM11 D item	HM11D	sec	3600	
862	HM12 D item	HM12D	sec	3600	
863	HM13 D item	HM13D	sec	3600	
864	HM14 D item	HM14D	sec	3600	
865	HM15 D item	HM15D	sec	3600	
866	HM16 D item	HM16D	sec	3600	
867	HM17 D item	HM17D	sec	3600	
868	HM18 D item	HM18D	sec	3600	
869	Zone selection	HM1ZONE		—	%5
870	Selection of alarm output	HM1ALM		—	%5
871	Reserved				
896	Reserved				

No.	Name	Item	Unit	Maximum value	Remarks
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897	File sorting	TMP2FORM			999	
898	Reserved					
899	Reserved					
900	Reserved					
901	Reserved					
902	HM21 setting value	HM21SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
903	HM22 setting value	HM22SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
904	HM23 setting value	HM23SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
905	HM24 setting value	HM24SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
906	HM25 setting value	HM25SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
907	HM26 setting value	HM26SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
908	HM27 setting value	HM27SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
909	HM28 setting value	HM28SET	°C (°F) %	600.0 (1112.0) 100.0	%1	
910	HM21 tolerance	HM21ALW	°C (°F)	99.9	%1	
911	HM22 tolerance	HM22ALW	°C (°F)	99.9	%1	
912	HM23 tolerance	HM23ALW	°C (°F)	99.9	%1	
913	HM24 tolerance	HM24ALW	°C (°F)	99.9	%1	
914	HM25 tolerance	HM25ALW	°C (°F)	99.9	%1	
915	HM26 tolerance	HM26ALW	°C (°F)	99.9	%1	
916	HM27 tolerance	HM27ALW	°C (°F)	99.9	%1	
917	HM28 tolerance	HM28ALW	°C (°F)	99.9	%1	
918	HM21 P item	HM21P	°C (°F)	999.9	%1	
919	HM22 P item	HM22P	°C (°F)	999.9	%1	
920	HM23 P item	HM23P	°C (°F)	999.9	%1	
921	HM24 P item	HM24P	°C (°F)	999.9	%1	
922	HM25 P item	HM25P	°C (°F)	999.9	%1	
923	HM26 P item	HM26P	°C (°F)	999.9	%1	
924	HM27 P item	HM27P	°C (°F)	999.9	%1	
925	HM28 P item	HM28P	°C (°F)	999.9	%1	
926	HM21 I item	HM21I	sec	3600		
927	HM22 I item	HM22I	sec	3600		
928	HM23 I item	HM23I	sec	3600		
929	HM24 I item	HM24I	sec	3600		
930	HM25 I item	HM25I	sec	3600		
931	HM26 I item	HM26I	sec	3600		
932	HM27 I item	HM27I	sec	3600		
933	HM28 I item	HM28I	sec	3600		
934	HM21 D item	HM21D	sec	3600		
935	HM22 D item	HM22D	sec	3600		
936	HM23 D item	HM23D	sec	3600		
937	HM24 D item	HM24D	sec	3600		
938	HM25 D item	HM25D	sec	3600		
939	HM26 D item	HM26D	sec	3600		
940	HM27 D item	HM27D	sec	3600		
941	HM28 D item	HM28D	sec	3600		

No.	Name	Item	Unit	Maximum value	Remarks
942	Zone selection	HM2ZONE		—	%6
943	Selection of alarm output	HM2ALM		—	%6

944	Reserved				
956	Reserved				
957	HM31 setting value	HM31SET	°C (° F) %	600.0 (1112.0) 100.0	%1
958	HM32 setting value	HM32SET	°C (° F) %	600.0 (1112.0) 100.0	%1
959	HM33 setting value	HM33SET	°C (° F) %	600.0 (1112.0) 100.0	%1
960	HM34 setting value	HM34SET	°C (° F) %	600.0 (1112.0) 100.0	%1
961	HM35 setting value	HM35SET	°C (° F) %	600.0 (1112.0) 100.0	%1
962	HM36 setting value	HM36SET	°C (° F) %	600.0 (1112.0) 100.0	%1
963	HM37 setting value	HM37SET	°C (° F) %	600.0 (1112.0) 100.0	%1
964	HM38 setting value	HM38SET	°C (° F) %	600.0 (1112.0) 100.0	%1
965	HM31 tolerance	HM31ALW	°C (° F)	99.9	%1
966	HM32 tolerance	HM32ALW	°C (° F)	99.9	%1
967	HM33 tolerance	HM33ALW	°C (° F)	99.9	%1
968	HM34 tolerance	HM34ALW	°C (° F)	99.9	%1
969	HM35 tolerance	HM35ALW	°C (° F)	99.9	%1
970	HM36 tolerance	HM36ALW	°C (° F)	99.9	%1
971	HM37 tolerance	HM37ALW	°C (° F)	99.9	%1
972	HM38 tolerance	HM38ALW	°C (° F)	99.9	%1
973	HM31 P item	HM31P	°C (° F)	999.9	%1
974	HM32 P item	HM32P	°C (° F)	999.9	%1
975	HM33 P item	HM33P	°C (° F)	999.9	%1
976	HM34 P item	HM34P	°C (° F)	999.9	%1
977	HM35 P item	HM35P	°C (° F)	999.9	%1
978	HM36 P item	HM36P	°C (° F)	999.9	%1
979	HM37 P item	HM37P	°C (° F)	999.9	%1
980	HM38 P item	HM38P	°C (° F)	999.9	%1
981	HM31 I item	HM31I	sec	3600	
982	HM32 I item	HM32I	sec	3600	
983	HM33 I item	HM33I	sec	3600	
984	HM34 I item	HM34I	sec	3600	
985	HM35 I item	HM35I	sec	3600	
986	HM36 I item	HM36I	sec	3600	
987	HM37 I item	HM37I	sec	3600	
988	HM38 I item	HM38I	sec	3600	
989	HM31 D item	HM31D	sec	3600	
990	HM32 D item	HM32D	sec	3600	
991	HM33 D item	HM33D	sec	3600	
992	HM34 D item	HM34D	sec	3600	
993	HM35 D item	HM35D	sec	3600	
994	HM36 D item	HM36D	sec	3600	
995	HM37 D item	HM37D	sec	3600	
996	HM38 D item	HM38D	sec	3600	

No.	Name	Item	Unit	Maximum value	Remarks
997	Zone selection	HM3ZONE		—	%7
998	Selection of alarm output	HM3ALM		—	%7
999	Reserved				
1024	Reserved				
1025	File sorting	TMP3FORM		999	
1026	Reserved				
1027	Reserved				
1028	Reserved				
1029	Reserved				
1030	HM41 setting value	HM41SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1031	HM42 setting value	HM42SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1032	HM43 setting value	HM43SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1033	HM44 setting value	HM44SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1034	HM45 setting value	HM45SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1035	HM46 setting value	HM46SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1036	HM47 setting value	HM47SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1037	HM48 setting value	HM48SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1038	HM41 tolerance	HM41ALW	°C (°F)	99.9	%1
1039	HM42 tolerance	HM42ALW	°C (°F)	99.9	%1
1040	HM43 tolerance	HM43ALW	°C (°F)	99.9	%1
1041	HM44 tolerance	HM44ALW	°C (°F)	99.9	%1
1042	HM45 tolerance	HM45ALW	°C (°F)	99.9	%1
1043	HM46 tolerance	HM46ALW	°C (°F)	99.9	%1
1044	HM47 tolerance	HM47ALW	°C (°F)	99.9	%1
1045	HM48 tolerance	HM48ALW	°C (°F)	99.9	%1
1046	HM41 P item	HM41P	°C (°F)	999.9	%1
1047	HM42 P item	HM42P	°C (°F)	999.9	%1
1048	HM43 P item	HM43P	°C (°F)	999.9	%1
1049	HM44 P item	HM44P	°C (°F)	999.9	%1
1050	HM45 P item	HM45P	°C (°F)	999.9	%1
1051	HM46 P item	HM46P	°C (°F)	999.9	%1
1052	HM47 P item	HM47P	°C (°F)	999.9	%1
1053	HM48 P item	HM48P	°C (°F)	999.9	%1
1054	HM41 I item	HM41I	sec	3600	
1055	HM42 I item	HM42I	sec	3600	
1056	HM43 I item	HM43I	sec	3600	
1057	HM44 I item	HM44I	sec	3600	
1058	HM45 I item	HM45I	sec	3600	
1059	HM46 I item	HM46I	sec	3600	
1060	HM47 I item	HM47I	sec	3600	
1061	HM48 I item	HM48I	sec	3600	
1062	HM41 D item	HM41D	sec	3600	
1063	HM42 D item	HM42D	sec	3600	
1064	HM43 D item	HM43D	sec	3600	

No.	Name	Item	Unit	Maximum value	Remarks
1065	HM44 D item	HM44D	sec	3600	
1066	HM45 D item	HM45D	sec	3600	
1067	HM46 D item	HM46D	sec	3600	
1068	HM47 D item	HM47D	sec	3600	
1069	HM48 D item	HM48D	sec	3600	
1070	Zone selection	HM4ZONE		—	%8
1071	Selection of alarm output	HM4ALM		—	%8
1072	Reserved				
1084	Reserved				
1085	HM51 setting value	HM51SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1086	HM52 setting value	HM52SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1087	HM53 setting value	HM53SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1088	HM54 setting value	HM54SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1089	HM55 setting value	HM55SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1090	HM56 setting value	HM56SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1091	HM57 setting value	HM57SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1092	HM58 setting value	HM58SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1093	HM51 tolerance	HM51ALW	°C (° F)	99.9	%1
1094	HM52 tolerance	HM52ALW	°C (° F)	99.9	%1
1095	HM53 tolerance	HM53ALW	°C (° F)	99.9	%1
1096	HM54 tolerance	HM54ALW	°C (° F)	99.9	%1
1097	HM55 tolerance	HM55ALW	°C (° F)	99.9	%1
1098	HM56 tolerance	HM56ALW	°C (° F)	99.9	%1
1099	HM57 tolerance	HM57ALW	°C (° F)	99.9	%1
1100	HM58 tolerance	HM58ALW	°C (° F)	99.9	%1
1101	HM51 P item	HM51P	°C (° F)	999.9	%1
1102	HM52 P item	HM52P	°C (° F)	999.9	%1
1103	HM53 P item	HM53P	°C (° F)	999.9	%1
1104	HM54 P item	HM54P	°C (° F)	999.9	%1
1105	HM55 P item	HM55P	°C (° F)	999.9	%1
1106	HM56 P item	HM56P	°C (° F)	999.9	%1
1107	HM57 P item	HM57P	°C (° F)	999.9	%1
1108	HM58 P item	HM58P	°C (° F)	999.9	%1
1109	HM51 I item	HM51I	sec	3600	
1110	HM52 I item	HM52I	sec	3600	
1111	HM53 I item	HM53I	sec	3600	
1112	HM54 I item	HM54I	sec	3600	
1113	HM55 I item	HM55I	sec	3600	
1114	HM56 I item	HM56I	sec	3600	
1115	HM57 I item	HM57I	sec	3600	
1116	HM58 I item	HM58I	sec	3600	
1117	HM51 D item	HM51D	sec	3600	
1118	HM52 D item	HM52D	sec	3600	
1119	HM53 D item	HM53D	sec	3600	

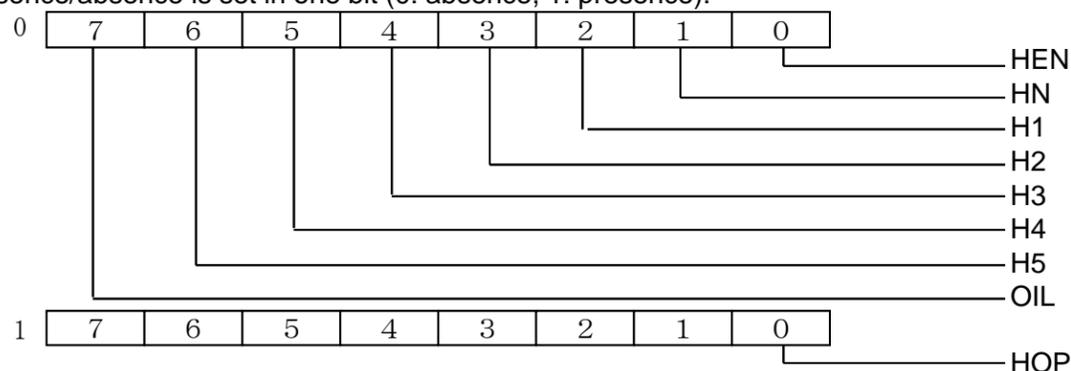
No.	Name	Item	Unit	Maximum value	Remarks
1120	HM54 D item	HM54D	sec	3600	
1121	HM55 D item	HM55D	sec	3600	
1122	HM56 D item	HM56D	sec	3600	
1123	HM57 D item	HM57D	sec	3600	
1124	HM58 D item	HM58D	sec	3600	
1125	Zone selection	HM5ZONE		—	%9
1126	Selection of alarm output	HM5ALM		—	%9
1127	Reserved				
1152	Reserved				
1153	File sorting	TMP4FORM		999	
1154	Reserved				
1155	Reserved				
1156	Reserved				
1157	Reserved				
1158	HM61 setting value	HM61SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1159	HM62 setting value	HM62SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1160	HM63 setting value	HM63SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1161	HM64 setting value	HM64SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1162	HM65 setting value	HM65SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1163	HM66 setting value	HM66SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1164	HM67 setting value	HM67SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1165	HM68 setting value	HM68SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1166	HM61 tolerance	HM61ALW	°C (° F)	99.9	%1
1167	HM62 tolerance	HM62ALW	°C (° F)	99.9	%1
1168	HM63 tolerance	HM63ALW	°C (° F)	99.9	%1
1169	HM64 tolerance	HM64ALW	°C (° F)	99.9	%1
1170	HM65 tolerance	HM65ALW	°C (° F)	99.9	%1
1171	HM66 tolerance	HM66ALW	°C (° F)	99.9	%1
1172	HM67 tolerance	HM67ALW	°C (° F)	99.9	%1
1173	HM68 tolerance	HM68ALW	°C (° F)	99.9	%1
1174	HM61 P item	HM61P	°C (° F)	999.9	%1
1175	HM62 P item	HM62P	°C (° F)	999.9	%1
1176	HM63 P item	HM63P	°C (° F)	999.9	%1
1177	HM64 P item	HM64P	°C (° F)	999.9	%1
1178	HM65 P item	HM65P	°C (° F)	999.9	%1
1179	HM66 P item	HM66P	°C (° F)	999.9	%1
1180	HM67 P item	HM67P	°C (° F)	999.9	%1
1181	HM68 P item	HM68P	°C (° F)	999.9	%1
1182	HM61 I item	HM61I	sec	3600	
1183	HM62 I item	HM62I	sec	3600	
1184	HM63 I item	HM63I	sec	3600	
1185	HM64 I item	HM64I	sec	3600	
1186	HM65 I item	HM65I	sec	3600	
1187	HM66 I item	HM66I	sec	3600	

No.	Name	Item	Unit	Maximum value	Remarks
1188	HM67 I item	HM67I	sec	3600	
1189	HM68 I item	HM68I	sec	3600	
1190	HM61 D item	HM61D	sec	3600	
1191	HM62 D item	HM62D	sec	3600	
1192	HM63 D item	HM63D	sec	3600	
1193	HM64 D item	HM64D	sec	3600	
1194	HM65 D item	HM65D	sec	3600	
1195	HM66 D item	HM66D	sec	3600	
1196	HM67 D item	HM67D	sec	3600	
1197	HM68 D item	HM68D	sec	3600	
1198	Zone selection	HM6ZONE		—	%10
1199	Selection of alarm output	HM6ALM		—	%10
1200	Reserved				
1212	Reserved				
1213	HM71 setting value	HM71SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1214	HM72 setting value	HM72SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1215	HM73 setting value	HM73SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1216	HM74 setting value	HM74SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1217	HM75 setting value	HM75SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1218	HM76 setting value	HM76SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1219	HM77 setting value	HM77SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1220	HM78 setting value	HM78SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1221	HM71 tolerance	HM71ALW	°C (° F)	99.9	%1
1222	HM72 tolerance	HM72ALW	°C (° F)	99.9	%1
1223	HM73 tolerance	HM73ALW	°C (° F)	99.9	%1
1224	HM74 tolerance	HM74ALW	°C (° F)	99.9	%1
1225	HM75 tolerance	HM75ALW	°C (° F)	99.9	%1
1226	HM76 tolerance	HM76ALW	°C (° F)	99.9	%1
1227	HM77 tolerance	HM77ALW	°C (° F)	99.9	%1
1228	HM78 tolerance	HM78ALW	°C (° F)	99.9	%1
1229	HM71 P item	HM71P	°C (° F)	999.9	%1
1230	HM72 P item	HM72P	°C (° F)	999.9	%1
1231	HM73 P item	HM73P	°C (° F)	999.9	%1
1232	HM74 P item	HM74P	°C (° F)	999.9	%1
1233	HM75 P item	HM75P	°C (° F)	999.9	%1
1234	HM76 P item	HM76P	°C (° F)	999.9	%1
1235	HM77 P item	HM77P	°C (° F)	999.9	%1
1236	HM78 P item	HM78P	°C (° F)	999.9	%1
1237	HM71 I item	HM71I	sec	3600	
1238	HM72 I item	HM72I	sec	3600	
1239	HM73 I item	HM73I	sec	3600	
1240	HM74 I item	HM74I	sec	3600	
1241	HM75 I item	HM75I	sec	3600	
1242	HM76 I item	HM76I	sec	3600	

No.	Name	Item	Unit	Maximum value	Remarks
1243	HM77 I item	HM77I	sec	3600	
1244	HM78 I item	HM78I	sec	3600	
1245	HM71 D item	HM71D	sec	3600	
1246	HM72 D item	HM72D	sec	3600	
1247	HM73 D item	HM73D	sec	3600	
1248	HM74 D item	HM74D	sec	3600	
1249	HM75 D item	HM75D	sec	3600	
1250	HM76 D item	HM76D	sec	3600	
1251	HM77 D item	HM77D	sec	3600	
1252	HM78 D item	HM78D	sec	3600	
1253	Zone selection	HM7ZONE		—	%11
1254	Selection of alarm output	HM7ALM		—	%11
1255	Reserved				
1279	Reserved				

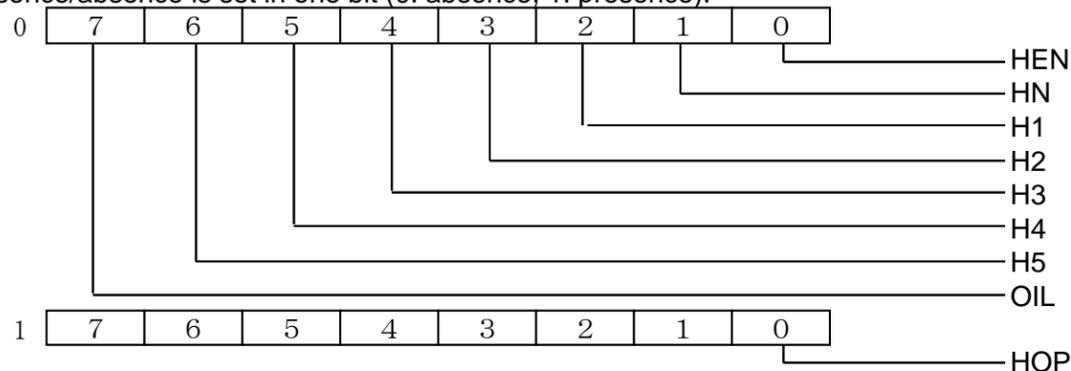
%1) The units can be changed to [°F] by specifying their parameter.

%2) Presence/absence is set in one bit (0: absence, 1: presence).



Bytes 2 to 3 are to be filled with zeros.

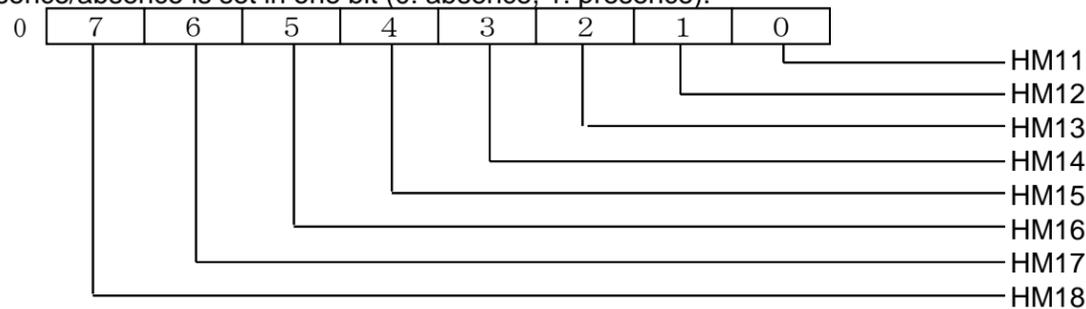
%3) Presence/absence is set in one bit (0: absence, 1: presence).



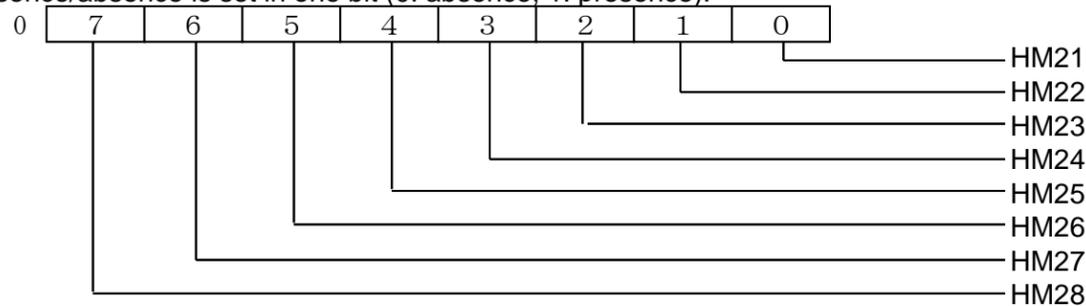
Bytes 2 to 3 are to be filled with zeros.

%4) Setting: 0 = Off, 1 = Manual, 2 = Automatic

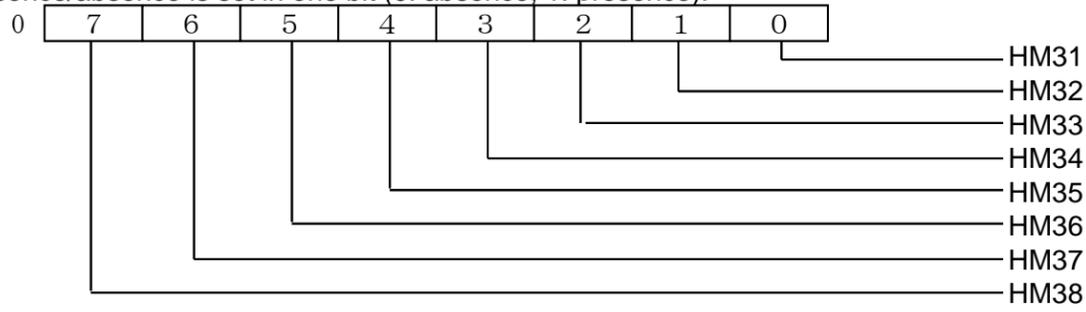
%5) Presence/absence is set in one bit (0: absence, 1: presence).



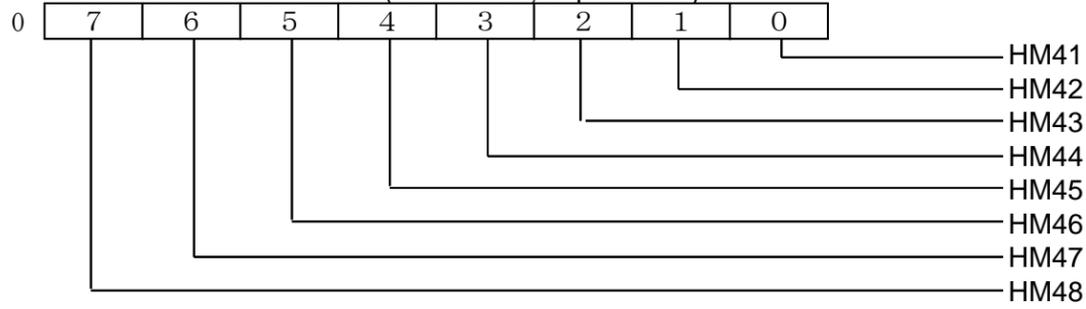
%6) Presence/absence is set in one bit (0: absence, 1: presence).



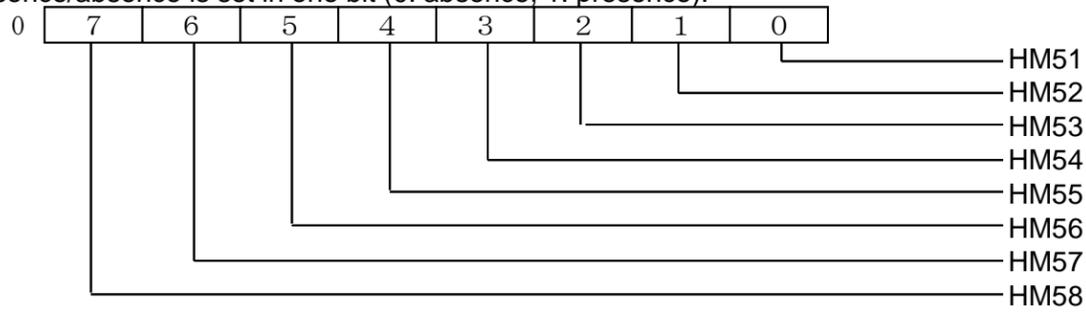
%7) Presence/absence is set in one bit (0: absence, 1: presence).



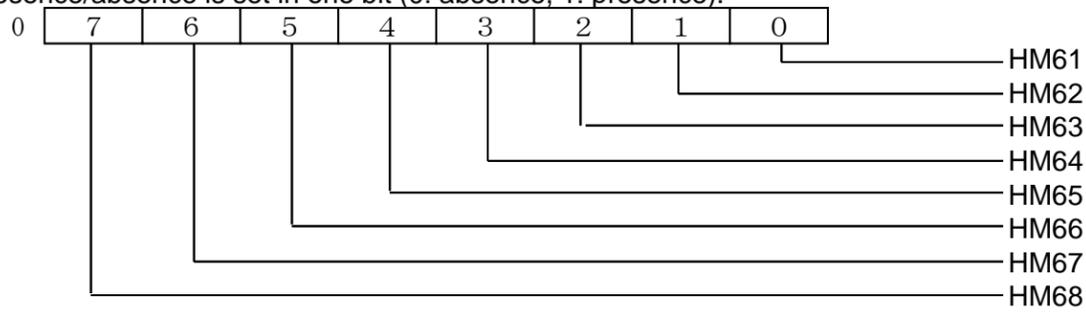
%8) Presence/absence is set in one bit (0: absence, 1: presence).



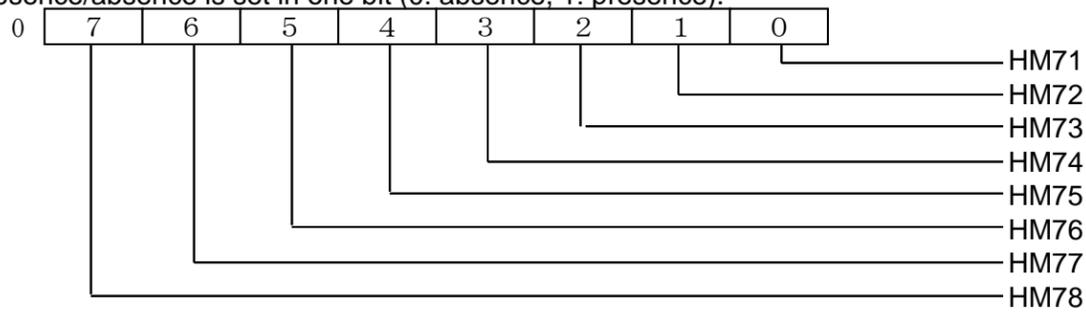
%9) Presence/absence is set in one bit (0: absence, 1: presence).



%10) Presence/absence is set in one bit (0: absence, 1: presence).



%11) Presence/absence is set in one bit (0: absence, 1: presence).



## 4.3 Temperature Control for Cooling

No.	Name	Item	Unit	Maximum value	Remarks
1281	Reserved				
1293	Reserved				
1294	HM11 P item	HM11CP	°C(°F)	999.9	%1
1295	HM12 P item	HM12CP	°C(°F)	999.9	%1
1296	HM13 P item	HM13CP	°C(°F)	999.9	%1
1297	HM14 P item	HM14CP	°C(°F)	999.9	%1
1298	HM15 P item	HM15CP	°C(°F)	999.9	%1
1299	HM16 P item	HM16CP	°C(°F)	999.9	%1
1300	HM17 P item	HM17CP	°C(°F)	999.9	%1
1301	HM18 P item	HM18CP	°C(°F)	999.9	%1
1302	HM21 P item	HM21CP	°C(°F)	999.9	%1
1303	HM22 P item	HM22CP	°C(°F)	999.9	%1
1304	HM23 P item	HM23CP	°C(°F)	999.9	%1
1305	HM24 P item	HM24CP	°C(°F)	999.9	%1
1306	HM25 P item	HM25CP	°C(°F)	999.9	%1
1307	HM26 P item	HM26CP	°C(°F)	999.9	%1
1308	HM27 P item	HM27CP	°C(°F)	999.9	%1
1309	HM28 P item	HM28CP	°C(°F)	999.9	%1
1310	HM31 P item	HM31CP	°C(°F)	999.9	%1
1311	HM32 P item	HM32CP	°C(°F)	999.9	%1
1312	HM33 P item	HM33CP	°C(°F)	999.9	%1
1313	HM34 P item	HM34CP	°C(°F)	999.9	%1
1314	HM35 P item	HM35CP	°C(°F)	999.9	%1
1315	HM36 P item	HM36CP	°C(°F)	999.9	%1
1316	HM37 P item	HM37CP	°C(°F)	999.9	%1
1317	HM38 P item	HM38CP	°C(°F)	999.9	%1
1318	HM41 P item	HM41CP	°C(°F)	999.9	%1
1319	HM42 P item	HM42CP	°C(°F)	999.9	%1
1320	HM43 P item	HM43CP	°C(°F)	999.9	%1
1321	HM44 P item	HM44CP	°C(°F)	999.9	%1
1322	HM45 P item	HM45CP	°C(°F)	999.9	%1
1323	HM46 P item	HM46CP	°C(°F)	999.9	%1
1324	HM47 P item	HM47CP	°C(°F)	999.9	%1
1325	HM48 P item	HM48CP	°C(°F)	999.9	%1
1326	HM51 P item	HM51CP	°C(°F)	999.9	%1
1327	HM52 P item	HM52CP	°C(°F)	999.9	%1
1328	HM53 P item	HM53CP	°C(°F)	999.9	%1
1329	HM54 P item	HM54CP	°C(°F)	999.9	%1
1330	HM55 P item	HM55CP	°C(°F)	999.9	%1
1331	HM56 P item	HM56CP	°C(°F)	999.9	%1
1332	HM57 P item	HM57CP	°C(°F)	999.9	%1
1333	HM58 P item	HM58CP	°C(°F)	999.9	%1
1334	HM61 P item	HM61CP	°C(°F)	999.9	%1
1335	HM62 P item	HM62CP	°C(°F)	999.9	%1
1336	HM63 P item	HM63CP	°C(°F)	999.9	%1
1337	HM64 P item	HM64CP	°C(°F)	999.9	%1
1338	HM65 P item	HM65CP	°C(°F)	999.9	%1
1339	HM66 P item	HM66CP	°C(°F)	999.9	%1
1340	HM67 P item	HM67CP	°C(°F)	999.9	%1
1341	HM68 P item	HM68CP	°C(°F)	999.9	%1
1342	HM71 P item	HM71CP	°C(°F)	999.9	%1
1343	HM72 P item	HM72CP	°C(°F)	999.9	%1
1344	HM73 P item	HM73CP	°C(°F)	999.9	%1
1345	HM74 P item	HM74CP	°C(°F)	999.9	%1
1346	HM75 P item	HM75CP	°C(°F)	999.9	%1
1347	HM76 P item	HM76CP	°C(°F)	999.9	%1
1348	HM77 P item	HM77CP	°C(°F)	999.9	%1
1349	HM78 P item	HM78CP	°C(°F)	999.9	%1
1350	Reserved				
1407	Reserved				

4.4 PRESTROL and Injection Press

No.	Name	Item	Unit	Maximum value	Remarks
1409	File sorting	PRFORM		999	
1410	Reserved				
1411	Reserved				
1412	Reserved				
1413	Reserved				
1414	PPR1 mold clamping pressure	PRP1	tf tf(US) %	9999.0 9999.0 99.0	
1415	PPR2 mold clamping pressure	PRP2	tf tf(US) %	9999.0 9999.0 99.0	
1416	PPR3 mold clamping pressure	PRP3	tf tf(US) %	9999.0 9999.0 99.0	
1417	PPR4 mold clamping pressure	PRP4	tf tf(US) %	9999.0 9999.0 99.0	
1418	PPR5 mold clamping pressure	PRP5	tf tf(US) %	9999.0 9999.0 99.0	
1419	PPR6 mold clamping pressure	PRP6	tf tf(US) %	9999.0 9999.0 99.0	
1420	Before compression Mold clamping maintained	PRPCX	tf tf(US) %	9999.0 9999.0 99.0	
1421	Mold separation value	PRLSCOM	mm in	99.999 9.9999	%1
1422	Compression start position	PRLS4	mm in	999.990 99.9990	%1
1423	Compression delay timer	PRTRD	sec	99.99	
1424	TPR1 mold clamping time	PRT1	sec	99.990	
1425	TPR2 mold clamping time	PRT2	sec	99.990	
1426	TPR3 mold clamping time	PRT3	sec	99.990	
1427	TPR4 mold clamping time	PRT4	sec	99.990	
1428	TPR5 mold clamping time	PRT5	sec	99.990	
1429	TPR6 mold clamping time	PRT6	sec	99.990	
1430	Selection of gradient control	PRSLP1		1	%2
1431	Selection of gradient control	PRSLP2		1	
1432	Selection of gradient control	PRSLP3		1	
1433	Selection of gradient control	PRSLP4		1	
1434	Selection of gradient control	PRSLP5		1	
1435	Selection of gradient control	PRSLP6		1	
1436	Compression operation	PRACT		1	%2
1437	Injection start timing	PRINJST		1	%3
1438	Compression start timing	PRST		4	%4
1439	VPR1 mold clamping speed	PRV1	%	99.0	
1440	VPR2 mold clamping speed	PRV2	%	99.0	
1441	VPR3 mold clamping speed	PRV3	%	99.0	
1442	VPR4 mold clamping speed	PRV4	%	99.0	
1443	VPR5 mold clamping speed	PRV5	%	99.0	
1444	VPR6 mold clamping speed	PRV6	%	99.0	
1445	Monitoring record timing	PRMONSEL		6	%10
1446	Detention minus temperature	RESTEMP	°C °F	500.0 900.0	
1447	Detention absolute temperature	RESTEMPA	°C °F	500.0 932.0	
1448	Detention prevent selection	RESDEG		1	
1449	Temperature control selection	RESTPSL		3	
1450	Monitoring time	RESMONTM	Minutes	999	
1451	Purge count	RESPGCNT	Count	99	
1452	Reserved				
1471	Reserved				
1472	Selection of press operation	IPRSEL		1	%2
1473	Selection of pump change	IPRPUMP		1	%5
1474	Selection of press change	IPRPRPV		1	%6
1475	Selection of die stop operation	IPRMSTP		1	%7

No.	Name	Item	Unit	Maximum value	Remarks
1476	Press start timing	IPRPST		2	%8
1477	PIP1 pressing pressure	IPRP1	%	99.0	%9
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1478	PIP2 pressing pressure	IPRP2	%	99.0	
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1479	PIP3 pressing pressure	IPRP3	%	99.0	
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1480	PIP4 pressing pressure	IPRP4	%	99.0	
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1481	PIP5 pressing pressure	IPRP5	%	99.0	
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1482	PIP6 pressing pressure	IPRP6	%	99.0	
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1483	VIP1 press speed	IPRV1	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1484	VIP2 press speed	IPRV2	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1485	VIP3 press speed	IPRV3	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1486	VIP4 ppress speed	IPRV4	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1487	VIP5 press speed	IPRV5	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1488	VIP6 press speed	IPRV6	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1489	TIP1 press operating	IPRT1	sec	99.990	
1490	TIP2 press operating	IPRT2	sec	99.990	
1491	TIP3 press operating	IPRT3	sec	99.990	
1492	TIP4 press operating	IPRT4	sec	99.990	
1493	TIP5 press operating	IPRT5	sec	99.990	
1494	TIP6 press operating	IPRT6	sec	99.990	
1495	Press delay timer	IPRTRD	sec	99.990	
1496	LS2C die stop position	IPRLS2C	mm	999.999	%1
			in	99.9999	
1497	LS2C1 press position	IPRLS2C1	mm	999.999	
			in	99.9999	
1498	LS2C2 press position	IPRLS2C2	mm	999.999	
			in	99.9999	
1499	LS2C3 press position	IPRLS2C3	mm	999.999	
			in	99.9999	
1500	LS2C4 press position	IPRLS2C4	mm	999.999	
			in	99.9999	
1501	LS2C5 press position	IPRLS2C5	mm	999.999	
			in	99.9999	
1502	Press start position LS4N	IPRLS4N	mm	999.999	%1
			in	99.9990	
1503	Pressing pressure during injection	IPRP0	%	99.0	%9
			tf	9999.9	
			kN	99999	
			tf(US)	9999.9	
1504	Press speed during injection	IPRV0	%	99.0	
			mm/s	999.9	
			in/s	99.99	

No.	Name	Item	Unit	Maximum value	Remarks
1505	Reserved				
1509	Reserved				
1510	Selection of core-back operation	CBACT		1	%2
1511	Selection of core-back speed change type	CBMOD		1	%6
1512	Selection of core-back speed change steps	CBVS		3	
1513	Selection of core-back start timing	CBPST		2	%8
1514	Reserved				
1515	Reserved				
1516	Core-back delay timer CBDLY	CBDLY	sec	99.990	
1517	Core-back force PCB1	PCB1	tf	999.99	
			kN	9999.9	
			tf(US)	999.99	
1518	Core-back speed VCB1	VCB1	mm/sec	999.9	
			in/sec	99.99	
1519	Core-back speed VCB2	VCB2	mm/sec	999.9	
			in/sec	99.99	
1520	Core-back speed VCB3	VCB3	mm/sec	999.9	
			in/sec	99.99	
1521	Core-back completion position LS3CB	LS3CB	mm	99.990	
			in	9.9990	
1522	Change position LS3CB1	LS3CB1	mm	99.990	
			in	9.9990	
1523	Change position LS3CB2	LS3CB2	mm	99.990	
			in	9.9990	
1524	Change time TRCB1	TRCB1	sec	99.900	
1525	Change time TRCB2	TRCB2	sec	99.900	
1526	Offset value	CBOFFSET	mm	9.990	
			in	0.9990	
1527	Reserved				
1535	Reserved				

%1) The units can be changed by specifying their parameter

%2) Setting: 0 = Absence, 1 = Presence

%3) Setting: 0 = PCX, 1 = LSCOM

%4) Setting: 0-4 = LS4PR/LS4/PCX/LSCOM/TR1

%5) Setting: 0 = Standard, 1 = Special

%6) Setting: 0 = Time, 1 = Position

%7) Setting: 0 = Advance, 1 = Retract

%8) Setting: 0-2 = LS4N/LS4PR/TR1

%9) The settings from the unit to the display digits are the same as for IPRP1.

%10) Monitoring record timing: 0 = Press start, 1 = TPR1 complete - 6 = TPR6 complete

4.5 MOLDLYZER

No.	Name	Item	Unit	Maximum value	Remarks	
1537	File sorting	MLFORM		999		
1538	Reserved					
1539	Reserved					
1540	Reserved					
1541	Reserved					
1542	Selection of MOLDLYZER	MLSEL		1	%1	
1543	Reference value	Presence/absence	MLDATEN	2	%2	
1544		START zone sampling cycle	MLSTINT	sec	9.990	
1545		START zone sampling count	MLSTNUM	Pieces	400	
1546		MIDDLE zone sampling cycle	MLMIDINT	sec	9.990	
1547		MIDDLE zone sampling count	MLMIDNUM	Pieces	400	
1548		PACK zone (before FPC) sampling cycle	MLPC1INT	sec	9.990	
1549		PACK zone (before FPC) sampling count	MLPC1NUM	Pieces	400	
1550		PACK zone (after FPC) sampling cycle	MLPC2INT	sec	9.990	
1551		PACK zone (after FPC) sampling count	MLPC2NUM	Pieces	400	
1552		HOLD zone sampling cycle	MLHLDINT	sec	9.990	
1553		HOLD zone sampling count	MLHLDNUM	Pieces	400	
1554		Sampling data (400 pieces)	MLDAT1	kgf/cm2	200.00	%3
		Sampling data (400 pieces)	~			
1953		Sampling data (400 pieces)	MLDAT400			
1954	Tolerance	START	MLSTALW	kgf/cm2	999.99	%4
1955		MIDDLE	MLMIDALW	kgf/cm2	999.99	%4
1956		PACK	MLPACALW	kgf/cm2	999.99	%4
1957		HOLD	MLHLDALW	kgf/cm2	999.99	%4
1958		PMAX	MLMAXALW	kgf/cm2	9999.99	%5
1959		One-point method	MLPTALW	kgf/cm2	999.99	%4
1960	One-point decision timer	MLPHTTIM	sec	9.99		
1961	Sensor selection	MLCENSEL		1	%6	
1962	Decision method	MLJUDGE		2	%7	
1963	Selection of reference point as one-point decision	MLPHTSEL		13	%8	
1964	STOP alarm	MLSTPALM	Shot	99		
1965	Selection of area/multipoint method alarm output	MLALM		-	%9	
1966	Selection of one-point method alarm output	MLPTALM		-	%2	
1967	Selection of PMAX alarm output	MLMAXALM		-	%2	
1968	Reserved					
2047	Reserved					

%1) Setting: 0 = Not used, 1 = Used

%2) Status: 0 = None, 1 = Start (during operation), 2 = Completion

%3) Data is written collectively by recording the reference values, and there is no individual data change.  
Thus, the settings are assumed to be equivalent to monitored values,  
and a unit of 0.01 kgf/cm2 is fixed.

%4) The setting range varies depending on the unit.

000.00~999.99kgf/cm2(Display digit 0.1),

00.000~99.999MPa(Display digit 0.01),

000.00~999.99bar(Display digit 0.1),

0000.0~9999.9PSI(Display digit 1),

%5) The setting range varies depending on the detection pressure and unit.

If hydraulic pressure is detected:

0000.00~9999.99kgf/cm2(Display digit 0.1),

000.000~999.999MPa(Display digit 0.01),

0000.00~9999.99bar(Display digit 0.1),

00000.0~99999.9PSI(Display digit 1),

If cavity pressure is detected:

0000.00~4000.00kgf/cm2(Display digit 0.1),

000.000~400.000MPa(Display digit 0.01),

0000.00~4000.00bar(Display digit 0.1),

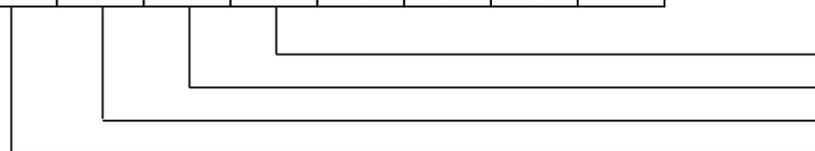
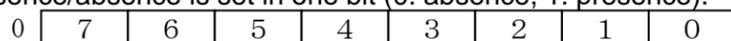
00000.0~60000.0PSI(Display digit 1),

%6) Setting: 0 = HYD, 1 = CAV

%7) Setting: 0 = Area method, 1 = Multipoint method, 2 = One-point method

%8) Setting: 0~13=LS5/LS4A/LS4B/LS4C/LS4D/LS4E/LS4F/LS4G/  
LS4H/LS4I/LS4/TRH1/TRH2/TRH3.

%9) Presence/absence is set in one bit (0: absence, 1: presence).



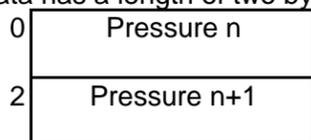
HOLD  
PACK  
MIDDLE  
START



## 4.7 ACTROL and ACTLYZER

No.	Name	Item	Unit	Maximum value	Remarks
2305	File sorting	ALFORM		999	
2306	Reserved				
2307	Reserved				
2308	Reserved				
2309	Reserved				
2310	Selection of ACTLYZER	ALSEL		1	%1
2311	Reference value	Presence/absence	ALDATEN	2	%2
2312		START zone sampling cycle	ALSTINT	mm	99.999
2313		START zone sampling count	ALSTNUM	Pieces	25 %3
2314		MIDDLE1 zone sampling cycle	ALMD1INT	mm	99.999
2315		MIDDLE1 zone sampling count	ALMD1NUM	Pieces	25 %3
2316		MIDDLE2 zone sampling cycle	ALMD2INT	mm	99.999
2317		MIDDLE2 zone sampling count	ALMD2NUM	Pieces	25 %3
2318		END zone sampling cycle	ALENDINT	mm	99.999
2319		END zone sampling count	ALENDNUM	Pieces	25 %3
2320		Cavity pressure sampling data	ALCP1		4000.0 %4
		Cavity pressure sampling data			
2369		Cavity pressure sampling data	ALCP50		4000.0 %4
2370		Filling pressure sampling data	ALIP1		4000.0 %4
		Filling pressure sampling data			
2419		Filling pressure sampling data	ALIP50		4000.0 %4
2420		Screw position sampling data	ALPOS1	mm	999.999 %9
		Screw position sampling data			
2519		Screw position sampling data	ALPOS100	mm	999.999 %9
2520		Time sampling data	ALTIM1	sec	999.999
		Time sampling data			
2619		Time sampling data	ALTIM100	sec	999.999
2620	Cavity pressure tolerance	START	ALSTCALW		600000 %5
2621		MIDDLE1	ALM1CALW		600000 %5
2622		MIDDLE2	ALM2CALW		600000 %5
2623		END	ALECALW		600000 %5
2624	Filling pressure tolerance	START	ALSTIALW		600000 %6
2625		MIDDLE1	ALM1IALW		600000 %6
2626		MIDDLE2	ALM2IALW		600000 %6
2627		END	ALEIALW		600000 %6
2628	Filling speed tolerance	START	ALSTVALW	mm/sec	99.999
				in/sec	9.9999
2629		MIDDLE1	ALM1VALW	mm/sec	99.999
				in/sec	9.9999
2630		MIDDLE2	ALM2VALW	mm/sec	99.999
				in/sec	9.9999
2631		END	ALEVALW	mm/sec	99.999
				in/sec	9.9999
2632	Vertical axis scale of CAV pressure	ALCPH		600000	%5
2633	Vertical axis scale of filling pressure	ALIPH		600000	%6
2634	Vertical axis scale of filling speed	ALIVH	mm/sec	600.000	
			in/sec	60.0000	
2635	Horizontal axis scale of MAX time	ALMAXW	sec	999.99	
2636	Horizontal axis scale of dwell time	ALHOLDW	sec	999.99	
2637	Control start position	ALSTRPOS	mm	999.999	
			in	99.9999	
2638	Control end position	ALSTPPOS	mm	999.999	
			in	99.9999	
2639	Selection of detection pressure	ALCENSEL		1	%7
2640	STOP alarm	ALSTPALM	Shot	99	
2641	Selection of CAV pressure alarm output	ALCPALM		—	%8
2642	Selection of injection pressure alarm output	ALIPALM		—	%8
2643	Selection of filling speed alarm output	ALIVALM		—	%8
2644	Upper limit alarm setting for cavity pressure	ALCAVPMA		600000	%5
2645	Upper limit alarm setting for filling pressure	ALINJPMA		600000	%6
2646	Reserved				
2647	Reserved				
2648	Closed-loop proportional gain	ACT_P		1.00	
2649	Closed-loop integral gain	ACT_I		99.99	
2650	Closed-loop differential gain	ACT_D		99.9	
2651	ACTROL timer	ACTTR	sec	999.990	
2652	ACTROL control	ACTSEL		1	%10
2653	ACTROL target CAV pressure	ACTCPG		600000	%5
2654	ACTROL target filling pressure	ACTIPG		600000	%6
2655	ACTROL filling speed control method	ACTROLSL		1	%11
2656	Reserved				
2815	Reserved				

- %1) Setting: 0 = Not used, 1 = Used
- %2) Status: 0 = None, 1 = Start (during operation), 2 = Completion
- %3) Total sampling count (START zone sampling count + MIDDLE1 zone sampling count + MIDDLE2 zone sampling count + END zone sampling count) is 100 or less.
- %4) Data has a length of two bytes.



Data is written collectively by recording the reference values, and there is no individual data change. Thus, the settings are assumed to be equivalent to monitored values, and a unit of 0.1 kgf/cm<sup>2</sup> is fixed.

- %5) The setting range varies depending on the detection pressure and unit.

(Tolerance)

- 000.00~999.99kgf/cm<sup>2</sup>(Display digit 0.1),
- 00.000~99.999MPa(Display digit 0.01),
- 000.00~999.99bar(Display digit 0.1),
- 0000.0~9999.9PSI(Display digit 1),

(Vertical axis scale)

- 0000.00~4000.00kgf/cm<sup>2</sup>(Display digit 1),
- 000.000~400.000MPa(Display digit 0.1),
- 0000.00~4000.00bar(Display digit 1),
- 00000.0~60000.0PSI(Display digit 1),

(Upper limit alarm setting, target pressure)

- 0000.00~4000.00kgf/cm<sup>2</sup>(Display digit 0.1),
- 000.000~400.000MPa(Display digit 0.01),
- 0000.00~4000.00bar(Display digit 0.1),
- 00000.0~60000.0PSI(Display digit 1),

- %6) The setting range varies depending on the detection pressure and unit.

(Tolerance)

- 000.00~999.99kgf/cm<sup>2</sup>(Display digit 0.1),
- 00.000~99.999MPa(Display digit 0.01),
- 000.00~999.99bar(Display digit 0.1),
- 0000.0~9999.9PSI(Display digit 1),

(Vertical axis scale)

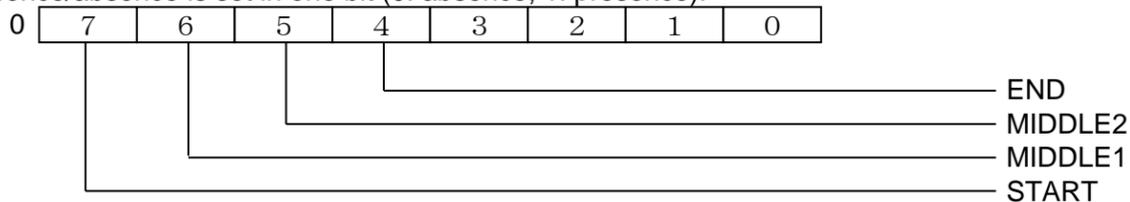
- 0000.00~9999.99kgf/cm<sup>2</sup>(Display digit 1),
- 000.000~999.999MPa(Display digit 0.1),
- 0000.00~9999.99bar(Display digit 1),
- 00000.0~99999.9PSI(Display digit 1),

(Upper limit alarm setting, target pressure)

- 0000.00~9999.99kgf/cm<sup>2</sup>(Display digit 0.1),
- 000.000~999.999MPa(Display digit 0.01),
- 0000.00~9999.99bar(Display digit 0.1),
- 00000.0~99999.9PSI(Display digit 1),

- %7) Setting: 0 = CAV pressure, 1 = Filling pressure

- %8) Presence/absence is set in one bit (0: absence, 1: presence).



- %9) Unit fixed

- %10) Setting: 0,1=LS4/TRACT

- %11) Setting: 0 = Standard, 1 = ACTROL, 2 = Speed 100

## 4.8 Lamina Control

No.	Name	Item	Unit	Maximum value	Remarks
2817	File sorting	LAMIFORM		999	
2818					
2819					
2820					
2821					
2822	Selection of lamina	LMNSEL		1	%1
2823	Reference value	LMNDATEN		2	%2
2824	Filling speed	VI400	mm/sec	400.0	%3
		~	in/sec	40.00	
2923		VI499			
2924	Speed change position	LS400	mm	999.990	%3
		~	in	99.9990	
3023		LS499			
3024	General-purpose injection position 1	LS4X1	mm	999.990	%3
			in	99.9990	
3025	General-purpose injection position 2	LS4X2	mm	999.990	%3
			in	99.9990	
3026	General-purpose injection position 3	LS4X3	mm	999.990	%3
			in	99.9990	
3027	General-purpose injection position 4	LS4X4	mm	999.990	%3
			in	99.9990	
3028	General-purpose injection position 5	LS4X5	mm	999.990	%3
			in	99.9990	
3029	General-purpose injection position 6	LS4X6	mm	999.990	%3
			in	99.9990	
3030	General-purpose injection position 7	LS4X7	mm	999.990	%3
			in	99.9990	
3031	General-purpose injection position 8	LS4X8	mm	999.990	%3
			in	99.9990	
3032	General-purpose injection position 9	LS4X9	mm	999.990	%3
			in	99.9990	
3033	General-purpose injection position 10	LS4X10	mm	999.990	%3
			in	99.9990	
3034	General-purpose injection position 11	LS4X11	mm	999.990	%3
			in	99.9990	
3035	General-purpose injection position 12	LS4X12	mm	999.990	%3
			in	99.9990	
3036	General-purpose injection position 13	LS4X13	mm	999.990	%3
			in	99.9990	
3037	General-purpose injection position 14	LS4X14	mm	999.990	%3
			in	99.9990	
3038	General-purpose injection position 15	LS4X15	mm	999.990	%3
			in	99.9990	
3039	General-purpose injection position 16	LS4X16	mm	999.990	%3
			in	99.9990	
3040	General-purpose injection position 17	LS4X17	mm	999.990	%3
			in	99.9990	
3041	General-purpose injection position 18	LS4X18	mm	999.990	%3
			in	99.9990	
3042	General-purpose injection position 19	LS4X19	mm	999.990	%3
			in	99.9990	
3043	General-purpose injection position 20	LS4X20	mm	999.990	%3
			in	99.9990	
3044	General-purpose injection position 21	LS4X21	mm	999.990	%3
			in	99.9990	
3045	General-purpose injection position 22	LS4X22	mm	999.990	%3
			in	99.9990	
3046	General-purpose injection position 23	LS4X23	mm	999.990	%3
			in	99.9990	
3047	General-purpose injection position 24	LS4X24	mm	999.990	%3
			in	99.9990	
3048	General-purpose injection position 25	LS4X25	mm	999.990	%3
			in	99.9990	
3049	General-purpose injection position 26	LS4X26	mm	999.990	%3
			in	99.9990	
3050	General-purpose injection position 27	LS4X27	mm	999.990	%3
			in	99.9990	
3051	General-purpose injection position 28	LS4X28	mm	999.990	%3
			in	99.9990	
3052	General-purpose injection position 29	LS4X29	mm	999.990	%3
			in	99.9990	
3053	General-purpose injection position 30	LS4X30	mm	999.990	%3
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
3054	General-purpose injection position 31	LS4X31	mm	999.990	%3
			in	99.9990	
3055	General-purpose injection position 32	LS4X32	mm	999.990	%3
			in	99.9990	
3056	Reserved				
3071	Reserved				

## 4.9 Temperature Control

No.	Name	Item	Unit	Maximum value	Remarks
3072	Reserved				
3136	Reserved				
3137	Selection of concurrent temperature rise	HSYNCRISE		1	
3138	FF value	H1	H1FF	%	100.0
3139		H2	H2***	%	100.0
3140		H3	H3***	%	100.0
3141		H4	H4***	%	100.0
3142		H5	H5***	%	100.0
3143	FF selection	H1	H1FFSEL	-	1
3144		H2	H2***	-	1
3145		H3	H3***	-	1
3146		H4	H4***	-	1
3147		H5	H5***	-	1
3148	Detected heater current value	HEN	HENAMP1	A	100.0
3149	Detected heater current value	HEN	HEN2	A	100.0
3150	Detected heater current value	NEN	HEN3	A	100.0
3151	Detected heater current value	NN	HN 1	A	100.0
3152	Detected heater current value	HN	HN 2	A	100.0
3153	Detected heater current value	HN	HN 3	A	100.0
3154	Detected heater current value	H1	H11	A	100.0
3155	Detected heater current value	H1	H12	A	100.0
3156	Detected heater current value	H1	H13	A	100.0
3157	Detected heater current value	H2	H21	A	100.0
3158	Detected heater current value	H2	H22	A	100.0
3159	Detected heater current value	H2	H23	A	100.0
3160	Detected heater current value	H3	H31	A	100.0
3161	Detected heater current value	H3	H32	A	100.0
3162	Detected heater current value	H3	H33	A	100.0
3163	Detected heater current value	H4	H41	A	100.0
3164	Detected heater current value	H4	H42	A	100.0
3165	Detected heater current value	H4	H43	A	100.0
3166	Detected heater current value	H5	H51	A	100.0
3167	Detected heater current value	H5	H52	A	100.0
3168	Detected heater current value	H5	H53	A	100.0
3169	Detected heater current value	HOP	HOP1	A	100.0
3170	Detected heater current value	HOP	HOP2	A	100.0
3171	Detected heater current value	HOP	HOP3	A	100.0
3172	Detected heater current value	HM11	HM111	A	100.0
3173	Detected heater current value	HM11	HM112	A	100.0
3174	Detected heater current value	HM11	HM113	A	100.0
3175	Detected heater current value	HM12	HM121	A	100.0
3176	Detected heater current value	HM12	HM122	A	100.0
3177	Detected heater current value	HM12	HM123	A	100.0
3178	Detected heater current value	HM13	HM131	A	100.0
3179	Detected heater current value	HM13	HM132	A	100.0
3180	Detected heater current value	HM13	HM133	A	100.0
3181	Detected heater current value	HM14	HM141	A	100.0
3182	Detected heater current value	HM14	HM142	A	100.0
3183	Detected heater current value	HM14	HM143	A	100.0
3184	Detected heater current value	HM15	HM151	A	100.0
3185	Detected heater current value	HM15	HM152	A	100.0
3186	Detected heater current value	HM15	HM153	A	100.0
3187	Detected heater current value	HM16	HM161	A	100.0
3188	Detected heater current value	HM16	HM162	A	100.0
3189	Detected heater current value	HM16	HM163	A	100.0
3190	Detected heater current value	HM17	HM171	A	100.0
3191	Detected heater current value	HM17	HM172	A	100.0
3192	Detected heater current value	HM17	HM173	A	100.0
3193	Detected heater current value	HM18	HM181	A	100.0
3194	Detected heater current value	HM18	HM182	A	100.0
3195	Detected heater current value	HM18	HM183	A	100.0
3196	Detected heater current value	HM21	HM211	A	100.0
3197	Detected heater current value	HM21	HM212	A	100.0
3198	Detected heater current value	HM21	HM213	A	100.0
3199	Detected heater current value	HM22	HM221	A	100.0



No.	Name	Item	Unit	Maximum value	Remarks
3277	Detected heater current value	HM54	HM541	A	100.0
3278	Detected heater current value	HM54	HM542	A	100.0
3279	Detected heater current value	HM54	HM543	A	100.0
3280	Detected heater current value	HM55	HM551	A	100.0
3281	Detected heater current value	HM55	HM552	A	100.0
3282	Detected heater current value	HM55	HM553	A	100.0
3283	Detected heater current value	HM56	HM561	A	100.0
3284	Detected heater current value	HM56	HM562	A	100.0
3285	Detected heater current value	HM56	HM563	A	100.0
3286	Detected heater current value	HM57	HM571	A	100.0
3287	Detected heater current value	HM57	HM572	A	100.0
3288	Detected heater current value	HM57	HM573	A	100.0
3289	Detected heater current value	HM58	HM581	A	100.0
3290	Detected heater current value	HM58	HM582	A	100.0
3291	Detected heater current value	HM58	HM583	A	100.0
3292	Detected heater current value	HM61	HM611	A	100.0
3293	Detected heater current value	HM61	HM612	A	100.0
3294	Detected heater current value	HM61	HM613	A	100.0
3295	Detected heater current value	HM62	HM621	A	100.0
3296	Detected heater current value	HM62	HM622	A	100.0
3297	Detected heater current value	HM62	HM623	A	100.0
3298	Detected heater current value	HM63	HM631	A	100.0
3299	Detected heater current value	HM63	HM632	A	100.0
3300	Detected heater current value	HM63	HM633	A	100.0
3301	Detected heater current value	HM64	HM641	A	100.0
3302	Detected heater current value	HM64	HM642	A	100.0
3303	Detected heater current value	HM64	HM643	A	100.0
3304	Detected heater current value	HM65	HM651	A	100.0
3305	Detected heater current value	HM65	HM652	A	100.0
3306	Detected heater current value	HM65	HM653	A	100.0
3307	Detected heater current value	HM66	HM661	A	100.0
3308	Detected heater current value	HM66	HM662	A	100.0
3309	Detected heater current value	HM66	HM663	A	100.0
3310	Detected heater current value	HM67	HM671	A	100.0
3311	Detected heater current value	HM67	HM672	A	100.0
3312	Detected heater current value	HM67	HM673	A	100.0
3313	Detected heater current value	HM68	HM681	A	100.0
3314	Detected heater current value	HM68	HM682	A	100.0
3315	Detected heater current value	HM68	HM683	A	100.0
3316	Detected heater current value	HM71	HM711	A	100.0
3317	Detected heater current value	HM71	HM712	A	100.0
3318	Detected heater current value	HM71	HM713	A	100.0
3319	Detected heater current value	HM72	HM721	A	100.0
3320	Detected heater current value	HM72	HM722	A	100.0
3321	Detected heater current value	HM72	HM723	A	100.0
3322	Detected heater current value	HM73	HM731	A	100.0
3323	Detected heater current value	HM73	HM732	A	100.0
3324	Detected heater current value	HM73	HM733	A	100.0
3325	Detected heater current value	HM74	HM741	A	100.0
3326	Detected heater current value	HM74	HM742	A	100.0
3327	Detected heater current value	HM74	HM743	A	100.0
3328	Detected heater current value	HM75	HM751	A	100.0
3329	Detected heater current value	HM75	HM752	A	100.0
3330	Detected heater current value	HM75	HM753	A	100.0
3331	Detected heater current value	HM76	HM761	A	100.0
3332	Detected heater current value	HM76	HM762	A	100.0
3333	Detected heater current value	HM76	HM763	A	100.0
3334	Detected heater current value	HM77	HM771	A	100.0
3335	Detected heater current value	HM77	HM772	A	100.0
3336	Detected heater current value	HM77	HM773	A	100.0
3337	Detected heater current value	HM78	HM781	A	100.0
3338	Detected heater current value	HM78	HM782	A	100.0
3339	Detected heater current value	HM78	HM783	A	100.0
3340	Reserved				
3350	Reserved				

4.10 Memo

No.	Name	Item	Unit	Maximum value	Remarks
3351	Memo	MEMO001			%1
3455		MEMO105			

%1) 420-byte character string

4.11 Valve Gate

No.	Name	Item	Unit	Maximum value	Remarks
3457	Reserved				
3458	Reserved				
3459	Reserved				
3460	Reserved				
3461	Reserved				
3462	Selection of zone 01	VGUSE01		1	%1
3463	Selection of zone 02	VGUSE02		1	%1
3464	Selection of zone 03	VGUSE03		1	%1
3465	Selection of zone 04	VGUSE04		1	%1
3466	Selection of zone 05	VGUSE05		1	%1
3467	Selection of zone 06	VGUSE06		1	%1
3468	Selection of zone 07	VGUSE07		1	%1
3469	Selection of zone 08	VGUSE08		1	%1
3470	Selection of zone 09	VGUSE09		1	%1
3471	Selection of zone 10	VGUSE10		1	%1
3472	Selection of zone 11	VGUSE11		1	%1
3473	Selection of zone 12	VGUSE12		1	%1
3474	Selection of zone 13	VGUSE13		1	%1
3475	Selection of zone 14	VGUSE14		1	%1
3476	Selection of zone 15	VGUSE15		1	%1
3477	Selection of zone 16	VGUSE16		1	%1
3478	Selection of zone 17	VGUSE17		1	%1
3479	Selection of zone 18	VGUSE18		1	%1
3480	Selection of zone 19	VGUSE19		1	%1
3481	Selection of zone 20	VGUSE20		1	%1
3482	Selection of zone 21	VGUSE21		1	%1
3483	Selection of zone 22	VGUSE22		1	%1
3484	Selection of zone 23	VGUSE23		1	%1
3485	Selection of zone 24	VGUSE24		1	%1
3486	Selection of zone 25	VGUSE25		1	%1
3487	Selection of zone 26	VGUSE26		1	%1
3488	Selection of zone 27	VGUSE27		1	%1
3489	Selection of zone 28	VGUSE28		1	%1
3490	Selection of zone 29	VGUSE29		1	%1
3491	Selection of zone 30	VGUSE30		1	%1
3492	Selection of zone 31	VGUSE31		1	%1
3493	Selection of zone 32	VGUSE32		1	%1
3494	Selection of zone 01 open	VGOSEL01		1	%2
3495	Selection of zone 02 open	VGOSEL02		1	%2
3496	Selection of zone 03 open	VGOSEL03		1	%2
3497	Selection of zone 04 open	VGOSEL04		1	%2
3498	Selection of zone 05 open	VGOSEL05		1	%2
3499	Selection of zone 06 open	VGOSEL06		1	%2
3500	Selection of zone 07 open	VGOSEL07		1	%2
3501	Selection of zone 08 open	VGOSEL08		1	%2
3502	Selection of zone 09 open	VGOSEL09		1	%2
3503	Selection of zone 10 open	VGOSEL10		1	%2
3504	Selection of zone 11 open	VGOSEL11		1	%2
3505	Selection of zone 12 open	VGOSEL12		1	%2
3506	Selection of zone 13 open	VGOSEL13		1	%2
3507	Selection of zone 14 open	VGOSEL14		1	%2
3508	Selection of zone 15 open	VGOSEL15		1	%2
3509	Selection of zone 16 open	VGOSEL16		1	%2
3510	Selection of zone 17 open	VGOSEL17		1	%2
3511	Selection of zone 18 open	VGOSEL18		1	%2
3512	Selection of zone 19 open	VGOSEL19		1	%2
3513	Selection of zone 20 open	VGOSEL20		1	%2
3514	Selection of zone 21 open	VGOSEL21		1	%2
3515	Selection of zone 22 open	VGOSEL22		1	%2
3516	Selection of zone 23 open	VGOSEL23		1	%2
3517	Selection of zone 24 open	VGOSEL24		1	%2
3518	Selection of zone 25 open	VGOSEL25		1	%2
3519	Selection of zone 26 open	VGOSEL26		1	%2
3520	Selection of zone 27 open	VGOSEL27		1	%2
3521	Selection of zone 28 open	VGOSEL28		1	%2
3522	Selection of zone 29 open	VGOSEL29		1	%2
3523	Selection of zone 30 open	VGOSEL30		1	%2
3524	Selection of zone 31 open	VGOSEL31		1	%2
3525	Selection of zone 32 open	VGOSEL32		1	%2
3526	Zone 01 open position	VGOPOS01	mm	999.990	
			in	99.9990	
3527	Zone 02 open position	VGOPOS02	mm	999.990	
			in	99.9990	
3528	Zone 03 open position	VGOPOS03	mm	999.990	
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
3529	Zone 04 open position	VGOPOS04	mm	999.990	
			in	99.9990	
3530	Zone 05 open position	VGOPOS05	mm	999.990	
			in	99.9990	
3531	Zone 06 open position	VGOPOS06	mm	999.990	
			in	99.9990	
3532	Zone 07 open position	VGOPOS07	mm	999.990	
			in	99.9990	
3533	Zone 08 open position	VGOPOS08	mm	999.990	
			in	99.9990	
3534	Zone 09 open position	VGOPOS09	mm	999.990	
			in	99.9990	
3535	Zone 10 open position	VGOPOS10	mm	999.990	
			in	99.9990	
3536	Zone 11 open position	VGOPOS11	mm	999.990	
			in	99.9990	
3537	Zone 12 open position	VGOPOS12	mm	999.990	
			in	99.9990	
3538	Zone 13 open position	VGOPOS13	mm	999.990	
			in	99.9990	
3539	Zone 14 open position	VGOPOS14	mm	999.990	
			in	99.9990	
3540	Zone 15 open position	VGOPOS15	mm	999.990	
			in	99.9990	
3541	Zone 16 open position	VGOPOS16	mm	999.990	
			in	99.9990	
3542	Zone 17 open position	VGOPOS17	mm	999.990	
			in	99.9990	
3543	Zone 18 open position	VGOPOS18	mm	999.990	
			in	99.9990	
3544	Zone 19 open position	VGOPOS19	mm	999.990	
			in	99.9990	
3545	Zone 20 open position	VGOPOS20	mm	999.990	
			in	99.9990	
3546	Zone 21 open position	VGOPOS21	mm	999.990	
			in	99.9990	
3547	Zone 22 open position	VGOPOS22	mm	999.990	
			in	99.9990	
3548	Zone 23 open position	VGOPOS23	mm	999.990	
			in	99.9990	
3549	Zone 24 open position	VGOPOS24	mm	999.990	
			in	99.9990	
3550	Zone 25 open position	VGOPOS25	mm	999.990	
			in	99.9990	
3551	Zone 26 open position	VGOPOS26	mm	999.990	
			in	99.9990	
3552	Zone 27 open position	VGOPOS27	mm	999.990	
			in	99.9990	
3553	Zone 28 open position	VGOPOS28	mm	999.990	
			in	99.9990	
3554	Zone 29 open position	VGOPOS29	mm	999.990	
			in	99.9990	
3555	Zone 30 open position	VGOPOS30	mm	999.990	
			in	99.9990	
3556	Zone 31 open position	VGOPOS31	mm	999.990	
			in	99.9990	
3557	Zone 32 open position	VGOPOS32	mm	999.990	
			in	99.9990	
3558	Zone 01 open timer	VGOTIM01	sec	655.350	%3
3559	Zone 02 open timer	VGOTIM02	sec	655.350	%3
3560	Zone 03 open timer	VGOTIM03	sec	655.350	%3
3561	Zone 04 open timer	VGOTIM04	sec	655.350	%3
3562	Zone 05 open timer	VGOTIM05	sec	655.350	%3
3563	Zone 06 open timer	VGOTIM06	sec	655.350	%3
3564	Zone 07 open timer	VGOTIM07	sec	655.350	%3
3565	Zone 08 open timer	VGOTIM08	sec	655.350	%3
3566	Zone 09 open timer	VGOTIM09	sec	655.350	%3
3567	Zone 10 open timer	VGOTIM10	sec	655.350	%3
3568	Zone 11 open timer	VGOTIM11	sec	655.350	%3
3569	Zone 12 open timer	VGOTIM12	sec	655.350	%3
3570	Zone 13 open timer	VGOTIM13	sec	655.350	%3
3571	Zone 14 open timer	VGOTIM14	sec	655.350	%3
3572	Zone 15 open timer	VGOTIM15	sec	655.350	%3
3573	Zone 16 open timer	VGOTIM16	sec	655.350	%3
3574	Zone 17 open timer	VGOTIM17	sec	655.350	%3
3575	Zone 18 open timer	VGOTIM18	sec	655.350	%3
3576	Zone 19 open timer	VGOTIM19	sec	655.350	%3

No.	Name	Item	Unit	Maximum value	Remarks
3577	Zone 20 open timer	VGOTIM20	sec	655.350	%3
3578	Zone 21 open timer	VGOTIM21	sec	655.350	%3
3579	Zone 22 open timer	VGOTIM22	sec	655.350	%3
3580	Zone 23 open timer	VGOTIM23	sec	655.350	%3
3581	Zone 24 open timer	VGOTIM24	sec	655.350	%3
3582	Zone 25 open timer	VGOTIM25	sec	655.350	%3
3583	Zone 26 open timer	VGOTIM26	sec	655.350	%3
3584	Zone 27 open timer	VGOTIM27	sec	655.350	%3
3585	Zone 28 open timer	VGOTIM28	sec	655.350	%3
3586	Zone 29 open timer	VGOTIM29	sec	655.350	%3
3587	Zone 30 open timer	VGOTIM30	sec	655.350	%3
3588	Zone 31 open timer	VGOTIM31	sec	655.350	%3
3589	Zone 32 open timer	VGOTIM32	sec	655.350	%3
3590	Selection of zone 01 close	VGCSEL01		2	%4
3591	Selection of zone 02 close	VGCSEL02		2	%4
3592	Selection of zone 03 close	VGCSEL03		2	%4
3593	Selection of zone 04 close	VGCSEL04		2	%4
3594	Selection of zone 05 close	VGCSEL05		2	%4
3595	Selection of zone 06 close	VGCSEL06		2	%4
3596	Selection of zone 07 close	VGCSEL07		2	%4
3597	Selection of zone 08 close	VGCSEL08		2	%4
3598	Selection of zone 09 close	VGCSEL09		2	%4
3599	Selection of zone 10 close	VGCSEL10		2	%4
3600	Selection of zone 11 close	VGCSEL11		2	%4
3601	Selection of zone 12 close	VGCSEL12		2	%4
3602	Selection of zone 13 close	VGCSEL13		2	%4
3603	Selection of zone 14 close	VGCSEL14		2	%4
3604	Selection of zone 15 close	VGCSEL15		2	%4
3605	Selection of zone 16 close	VGCSEL16		2	%4
3606	Selection of zone 17 close	VGCSEL17		2	%4
3607	Selection of zone 18 close	VGCSEL18		2	%4
3608	Selection of zone 19 close	VGCSEL19		2	%4
3609	Selection of zone 20 close	VGCSEL20		2	%4
3610	Selection of zone 21 close	VGCSEL21		2	%4
3611	Selection of zone 22 close	VGCSEL22		2	%4
3612	Selection of zone 23 close	VGCSEL23		2	%4
3613	Selection of zone 24 close	VGCSEL24		2	%4
3614	Selection of zone 25 close	VGCSEL25		2	%4
3615	Selection of zone 26 close	VGCSEL26		2	%4
3616	Selection of zone 27 close	VGCSEL27		2	%4
3617	Selection of zone 28 close	VGCSEL28		2	%4
3618	Selection of zone 29 close	VGCSEL29		2	%4
3619	Selection of zone 30 close	VGCSEL30		2	%4
3620	Selection of zone 31 close	VGCSEL31		2	%4
3621	Selection of zone 32 close	VGCSEL32		2	%4
3622	Zone 01 close position	VGCPOS01	mm	999.990	
			in	99.9990	
3623	Zone 02 close position	VGCPOS02	mm	999.999	
			in	99.9990	
3624	Zone 03 close position	VGCPOS03	mm	999.999	
			in	99.9990	
3625	Zone 04 close position	VGCPOS04	mm	999.999	
			in	99.9990	
3626	Zone 05 close position	VGCPOS05	mm	999.999	
			in	99.9990	
3627	Zone 06 close position	VGCPOS06	mm	999.999	
			in	99.9990	
3628	Zone 07 close position	VGCPOS07	mm	999.999	
			in	99.9990	
3629	Zone 08 close position	VGCPOS08	mm	999.999	
			in	99.9990	
3630	Zone 09 close position	VGCPOS09	mm	999.999	
			in	99.9990	
3631	Zone 10 close position	VGCPOS10	mm	999.999	
			in	99.9990	
3632	Zone 11 close position	VGCPOS11	mm	999.999	
			in	99.9990	
3633	Zone 12 close position	VGCPOS12	mm	999.999	
			in	99.9990	
3634	Zone 13 close position	VGCPOS13	mm	999.999	
			in	99.9990	
3635	Zone 14 close position	VGCPOS14	mm	999.999	
			in	99.9990	
3636	Zone 15 close position	VGCPOS15	mm	999.999	
			in	99.9990	
3637	Zone 16 close position	VGCPOS16	mm	999.999	
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
3638	Zone 17 close position	VGCP0S17	mm	999.999	
			in	99.9990	
3639	Zone 18 close position	VGCP0S18	mm	999.999	
			in	99.9990	
3640	Zone 19 close position	VGCP0S19	mm	999.999	
			in	99.9990	
3641	Zone 20 close position	VGCP0S20	mm	999.999	
			in	99.9990	
3642	Zone 21 close position	VGCP0S21	mm	999.999	
			in	99.9990	
3643	Zone 22 close position	VGCP0S22	mm	999.999	
			in	99.9990	
3644	Zone 23 close position	VGCP0S23	mm	999.999	
			in	99.9990	
3645	Zone 24 close position	VGCP0S24	mm	999.999	
			in	99.9990	
3646	Zone 25 close position	VGCP0S25	mm	999.999	
			in	99.9990	
3647	Zone 26 close position	VGCP0S26	mm	999.999	
			in	99.9990	
3648	Zone 27 close position	VGCP0S27	mm	999.999	
			in	99.9990	
3649	Zone 28 close position	VGCP0S28	mm	999.999	
			in	99.9990	
3650	Zone 29 close position	VGCP0S29	mm	999.999	
			in	99.9990	
3651	Zone 30 close position	VGCP0S30	mm	999.999	
			in	99.9990	
3652	Zone 31 close position	VGCP0S31	mm	999.999	
			in	99.9990	
3653	Zone 32 close position	VGCP0S32	mm	999.999	
			in	99.9990	
3654	Zone 01 close timer	VGCTIM01	sec	655.350	%3
3655	Zone 02 close timer	VGCTIM02	sec	655.350	%3
3656	Zone 03 close timer	VGCTIM03	sec	655.350	%3
3657	Zone 04 close timer	VGCTIM04	sec	655.350	%3
3658	Zone 05 close timer	VGCTIM05	sec	655.350	%3
3659	Zone 06 close timer	VGCTIM06	sec	655.350	%3
3660	Zone 07 close timer	VGCTIM07	sec	655.350	%3
3661	Zone 08 close timer	VGCTIM08	sec	655.350	%3
3662	Zone 09 close timer	VGCTIM09	sec	655.350	%3
3663	Zone 10 close timer	VGCTIM10	sec	655.350	%3
3664	Zone 11 close timer	VGCTIM11	sec	655.350	%3
3665	Zone 12 close timer	VGCTIM12	sec	655.350	%3
3666	Zone 13 close timer	VGCTIM13	sec	655.350	%3
3667	Zone 14 close timer	VGCTIM14	sec	655.350	%3
3668	Zone 15 close timer	VGCTIM15	sec	655.350	%3
3669	Zone 16 close timer	VGCTIM16	sec	655.350	%3
3670	Zone 17 close timer	VGCTIM17	sec	655.350	%3
3671	Zone 18 close timer	VGCTIM18	sec	655.350	%3
3672	Zone 19 close timer	VGCTIM19	sec	655.350	%3
3673	Zone 20 close timer	VGCTIM20	sec	655.350	%3
3674	Zone 21 close timer	VGCTIM21	sec	655.350	%3
3675	Zone 22 close timer	VGCTIM22	sec	655.350	%3
3676	Zone 23 close timer	VGCTIM23	sec	655.350	%3
3677	Zone 24 close timer	VGCTIM24	sec	655.350	%3
3678	Zone 25 close timer	VGCTIM25	sec	655.350	%3
3679	Zone 26 close timer	VGCTIM26	sec	655.350	%3
3680	Zone 27 close timer	VGCTIM27	sec	655.350	%3
3681	Zone 28 close timer	VGCTIM28	sec	655.350	%3
3682	Zone 29 close timer	VGCTIM29	sec	655.350	%3
3683	Zone 30 close timer	VGCTIM30	sec	655.350	%3
3684	Zone 31 close timer	VGCTIM31	sec	655.350	%3
3685	Zone 32 close timer	VGCTIM32	sec	655.350	%3
3686	Selection of open/close confirmation	VGOPCLSEL		1	%5
3687	Reserved				
3711	Reserved				

%1) Setting: 0 = Not used, 1 = Used

%2) Setting: 0 = Position, 1 = TR

%3) Sequence timers are to be used.

Use T600-T61F with VGOTIM01-VGOTIM32.

Use T620-T63F with VGCTIM01-VGCTIM32.

%4) Setting: 0 = Position, 1 = TR, 2 = TRH

%5) Setting: 0 = LS, 1 = TR

## 4.12 Reference and tolerance data for additional monitoring items

No.	Name	Item	Unit	Maximum value	Remarks
3712	DST injection waveform zone	DSTINJSEC	—	1	%1
3713	DST injection start position	DSTINJSTR	—	10	%1
3714	DST injection complete position	DSTINJSTP	—	10	%2
3715	DST monitoring estimation item	DSTMONITEM	—	100	%3
3716	DST reference shot number	DSTSTDSHT	Shot	999	
3717	DST average shot number	DSTAVESHT	Shot	999	
3718	DST offset condition	DSTADJCND	—	7	%4
3719	DST offset zone	DSTADJRNG	—	99.99	
3720	DST offset coefficient	DSTADJVAL	—	99.999	
3721	DST offset interval shot	DSTADJSHT	Shot	99	
3722	DST charging time reference	DSTCHGSTD	sec	999.990	
3723	DST charging torque reference	DSTCHGTQSTD	%	99.9	
3724	DST minimum cushion reference	DSTMINSTD	mm	999.990	
			in	99.9990	
3725	DST cushion reference	DSTCUSSTD	mm	999.990	
			in	99.9990	
3726	DST FPC pressure reference	DSTSHIFPSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
3727	DST injection energy monitoring alarm reference	DSTEINJSTD	J	9999.90	
3728	DST holding energy monitoring alarm reference	DSTEHLSTD	J	9999.90	
3729	DST charging energy monitoring alarm reference	DSTECHGSTD	J	9999.90	
3730	DST average injection pressure reference	DSTINJINT	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
3731	DST estimation item	DSTEVAL	—	1	%7
3732	DST input selection mode	DSTINPSLMD	—	1	%8
3733	Estimation / Offset	DSTEVAADJ	—	6	%9
3734	Monitoring convergence tolerance (Pressure)	DSTCVGRNGPRS	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
3735	Monitoring convergence tolerance (Position)	DSTCVGRNGPOS	mm	999.990	
			in	99.9990	
3736	Standard offset zone (temperature)	DSTADJRNGTMP	°C(°F)	999.9	
3737	Standard offset zone (Pressure)	DSTADJRNGPRS	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
3738	Standard offset zone (Position)	DSTADJRNGPOS	mm	999.990	
			in	99.9990	
3739	Restart shot number	RESTARTSHOT	Shot	99	
3740	Reserved	dmy			
3741	Reserved	dmy			
3742	Reserved	dmy			
3743	Reserved	dmy			
3744	Injection energy monitoring alarm reference	EINJSTD	J	9999.90	
3745	Holding energy monitoring alarm reference	EHLSTD	J	9999.90	
3746	Charging energy monitoring alarm reference	ECHGSTD	J	9999.90	

No.	Name	Item	Unit	Maximum value	Remarks
3747	Injection pressure integral monitoring reference	IINJSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
3748	DST temperature reference	DSTTMPSTD	°C	999.9	
			(° F)		
3749	DST injection speed reference	DSTIJSSTD	mm/sec	999.9	
			in/sec	99.99	
3750	DST FPC position reference	DSTHDLSTD	mm	999.990	
			in	99.9990	
3751	DST screw rotation speed reference	DSTSCRSTD	rpm	999	
3752	DST holdong and back pressure reference	DSTHBPSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
3753	Reserved				
3754	Clamping force offset monitoring reference	CPRSTD	tf	9999.9	
			tf(US)	9999.9	
			kN	99999	
3755	Charging start position monitoring reference	SLCSTD	mm	999.990	
			in	99.9990	
3756	DST estimation reference	EVL DSTSTD		99.99	
3757	DST offset reference	ADJ DSTSTD		99.99	
3758	Reserved	dmy			
3759	Reserved	dmy			
3760	Injection energy monitoring alarm tolerance	EINJALW	J	999.90	
3761	Holding energy monitoring alarm tolerance	EHL DALW	J	999.90	
3762	Charging energy monitoring alarm tolerance	ECH GALW	J	999.90	
3763	Clamping force monitoring tolerance	CPALW	tf	999.9	
			tf(US)	999.9	
			kN	9999	
3764	Chargin start position monitoring tolerance	SLCALW	mm	99.990	
			in	9.9990	
3765	Reserved				
3766	Reserved				
3767	Reserved				
3768	Reserved				
3769	Reserved				
3770	Reserved				
3771	Reserved				
3772	Reserved				
3773	Reserved				
3774	Reserved				
3775	Reserved				
3776	Gate cutting selection	GCSEL		1	
3777	Gate cuttion IN limit	GCLSIN	mm	999.990	
			in	99.9990	
3778	Gate cutting IN delay timer	GCINDLY	sec	999.990	
3779	Gate cutting IN time	GCTRIN	sec	999.990	
3780	Gate cutting IN speed	GCINVS	mm/sec	999.9	
			in/sec	99.99	
3781	Gate cutting IN force	GCINPR	tf	99.9	
			kN	999	
			tf(US)	99.9	
3782	Gate cutting OUT speed	GCBKVS	mm/sec	999.9	
			in/sec	99.99	
3783	Gate cutting OUT force	GCBKPR	tf	99.9	
			kN	999	
			tf(US)	99.9	
3784	Mold open stop selection	MSTPSL		1	
3785	Stop position	LSMSTP	mm	999.990	
			in	99.9990	
3786	Stop time	TRMSTP	sec	999.900	
3787	Unscrew selection	UNSCSL		1	
3788	Unscrew position	LSUNSC	mm	999.990	
			in	99.9990	
3789	Unscrew time	TRUNSC	sec	999.900	
3790	Mold open movement mode	UNSCMSL		1	
3791	Auto clamp mode	MCLPSL		1	
3792	Insert molding mode	INSTSL		1	
3793	Degas mode	DEGSEL		4	%5

No.	Name	Item	Unit	Maximum value	Remarks
3794	Mold open position for degas	MLSDEG	mm	5.000	
			in	2.0000	
3795	Degas start position	ILSDEG	mm	999.990	
			in	99.9990	
3796	Degas time	TRDEG	sec	999.900	
3797	Reserved				
3798	Reserved				
3799	Reserved				
3800	Reserved				
3801	Reserved				
3802	Reserved				
3803	Reserved				
3804	Reserved				
3805	Reserved				
3806	Reserved				
3807	Reserved				
3808	T2 speed remote 5	T2RMG5	%	99.0	
3809	T2 speed remote 6	T2RMG6	%	99.0	
3810	T2 speed remote 7	T2RMG7	%	99.0	
3811	T2 speed remote 8	T2RMG8	%	99.0	
3812	R2 pressure remote 5	R2RMG5	%	99.0	
3813	R2 pressure remote 6	R2RMG6	%	99.0	
3814	R2 pressure remote 7	R2RMG7	%	99.0	
3815	R2 pressure remote 8	R2RMG8	%	99.0	
3816	Reserved	dmy			
3817	Reserved	dmy			
3818	Reserved	dmy			
3819	Reserved	dmy			
3820	Reserved	dmy			
3821	Reserved	dmy			
3822	Reserved	dmy			
3823	Reserved	dmy			
3824	Clamp acceleration and deceleration mode	XHMDSEL		2 %6	
3825	Reserved	dmy			
3826	Reserved	dmy			
3827	Reserved	dmy			
3828	Reserved	dmy			
3829	Reserved	dmy			
3830	Reserved	dmy			
3831	Reserved	dmy			
3832	Reserved	dmy			
3833	Reserved	dmy			
3834	Reserved	dmy			
3835	Reserved	dmy			
3836	Reserved	dmy			
3837	Reserved	dmy			
3838	Reserved	dmy			
3839	Reserved	dmy			

%1) Setting: 0 = Whole injection area, 1 = Optional zone

%2) Setting: 0~10 = LS5+10/LS4A~LS4

%3) Setting: 0=Absence, 1=Charging time, 2=Charging torque, 3=Minimum cushion, 4=Cushion,  
5=FPC pressure, 6=Injection energy, 7=Holding energy, 8=Charging energy

%4) Setting: 0=Absence, 1=HN~H1, 2=H1, 3=HN~H3, 4=Whole injection area,  
5=FPC position, 6=Back pressure, 7=Screw rotation, 8=Holding pressure

%5) Setting: 0=Absence, 1=Clamp neutral after injection, 2=Mold open after injection,  
3=Clamp neutral during injection, 4=Mold open during injection

%6) Setting: 0=Slow, 1=Middle, 2=Fast

%7) Setting: 0=Monitoring, 1=Injection profile

%8) Setting: 0=Manual, 1=Auto

%9) Setting: 0=FPC pressure(estimation)-H1 temperature(offset)

1=FPC pressure(estimation) - HN and H1 temperature(offset)

2=Avarage injection pressure(estimation) - H1 temperature(offset)

3=Avarage injection pressure(estimation) - HN and H1 temperature(offset)

4=Minimum cushion(estimation) - Holding pressure(offset)

5=Minimum cushion(estimation) - FPC position(offset)

6=Cushion(estimation) - Holding pressure(offset)

4.13 MODBUS Data

No.	Name	Item	Unit	Maximum value	Remarks
3840	Mold temperature control 1	Setting	MTC1SET °C (°F)	400.0 (752.0)	
3841		Upper limit	MTC1HI °C (°F)	100.0 (212.0)	
3842		Lower limit	MTC1LO °C (°F)	100.0 (212.0)	
3843	Mold temperature control 2	Setting	MTC2SET °C (°F)	400.0 (752.0)	
3844		Upper limit	MTC2HI °C (°F)	100.0 (212.0)	
3845		Lower limit	MTC2LO °C (°F)	100.0 (212.0)	
3846	Mold temperature control 3	Setting	MTC3SET °C (°F)	400.0 (752.0)	
3847		Upper limit	MTC3HI °C (°F)	100.0 (212.0)	
3848		Lower limit	MTC3LO °C (°F)	100.0 (212.0)	
3849	Mold temperature control 4	Setting	MTC4SET °C (°F)	400.0 (752.0)	
3850		Upper limit	MTC4HI °C (°F)	100.0 (212.0)	
3851		Lower limit	MTC4LO °C (°F)	100.0 (212.0)	
3852	Mold temperature control 5	Setting	MTC5SET °C (°F)	400.0 (752.0)	
3853		Upper limit	MTC5HI °C (°F)	100.0 (212.0)	
3854		Lower limit	MTC5LO °C (°F)	100.0 (212.0)	
3855	Mold temperature control 6	Setting	MTC6SET °C (°F)	400.0 (752.0)	
3856		Upper limit	MTC6HI °C (°F)	100.0 (212.0)	
3857		Lower limit	MTC6LO °C (°F)	100.0 (212.0)	
3858	Chiller 1	Setting	CHIL1SET °C (°F)	400.0 (752.0)	
3859		Upper limit	CHIL1HI °C (°F)	100.0 (212.0)	
3860		Lower limit	CHIL1LO °C (°F)	100.0 (212.0)	
3861	Drier DF	Dry temperature setting	DRDFDRY °C	999	
3862		Restart temperature setting	DRDFREPR °C	999	
3863		Transform 2 time	DRDFTRAN sec	99.9	
3864		Transform 2 airblow time	DRDFAIRB sec	99.9	
3865		Transform 2 ejection waiting time	DRDFAIRW sec	99.9	
3866		Transform 2 ejection time	DRDFAIRT sec	99.9	
3867		Transform 2 batch gate open time	DRDFBGOT sec	99.9	
3868	Drier DV	Heatup complete timer setting	DRDVHEAT °C	999	
3869		Transform 2 airblow time	DRDVBLOW sec	99.9	
3870		Transform 2 ejection time	DRDVAIRT sec	99.9	
3871		Transform 2 batch gate open time	DRDVBGOT sec	99.9	
3872	Reserved				
3967	Reserved				

4.14 SPI Data

No.	Name	Item	Unit	Maximum value	Remarks
3968	Reserved				
3969	Reserved				
3970	Reserved				
3971	Reserved				
3972	Reserved				
3973	Equipment 1	SPI11SET	—	—	%1
3974		SPI12SET			
3975		SPI13SET			
3976	Equipment 2	SPI21SET	—	—	%1
3977		SPI22SET			
3978		SPI23SET			
3979	Equipment 3	SPI31SET	—	—	%1
3980		SPI32SET			
3981		SPI33SET			
3982	Equipment 4	SPI41SET	—	—	%1
3983		SPI42SET			
3984		SPI43SET			
3985	Equipment 5	SPI51SET	—	—	%1
3986		SPI52SET			
3987		SPI53SET			
3988	Equipment 6	SPI61SET	—	—	%1
3989		SPI62SET			
3990		SPI63SET			
3991	Equipment 7	SPI71SET	—	—	%1
3992		SPI72SET			
3993		SPI73SET			
3994	Equipment 8	SPI81SET	—	—	%1
3995		SPI82SET			
3996		SPI83SET			
3997	Equipment 9	SPI91SET	—	—	%1
3998		SPI92SET			
3999		SPI93SET			
4000	Equipment 10	SPIA1SET	—	—	%1
4001		SPIA2SET			
4002		SPIA3SET			
4003	Equipment 11	SPIB1SET	—	—	%1
4004		SPIB2SET			
4005		SPIB3SET			
4006	Equipment 12	SPIC1SET	—	—	%1
4007		SPIC2SET			
4008		SPIC3SET			
4009	Temperature Controls (DEVID #26)	SPID01SE	° F (° C)	999 (999)	
4010		SPID02SE			
4011		SPID03SE			
4012		SPID04SE			
4013		SPID05SE			
4014		SPID06SE			
4015		SPID07SE			
4016		SPID08SE			
4017		SPID09SE			
4018		SPID10SE			
4019		SPID11SE			
4020		SPID12SE			
4021		SPID13SE			
4022		SPID14SE			
4023		SPID15SE			
4024		SPID16SE			
4025		SPID17SE			
4026		SPID18SE			
4027		SPID19SE			
4028		SPID20SE			
4029		SPID21SE			
4030		SPID22SE			
4031		SPID23SE			
4032		SPID24SE			
4033		SPID25SE			
4034		SPID26SE			
4035		SPID27SE			
4036		SPID28SE			
4037		SPID29SE			
4038		SPID30SE			
4039		SPID31SE			
4040		SPID32SE			
4041		SPID33SE			
4042		SPID34SE			
4043		SPID35SE			

No.	Name	Item	Unit	Maximum value	Remarks
4044	Temperature Controls (DEVID #26)	SPID36SE	° F (° C)	999 (999)	
4045		SPID37SE			
4046		SPID38SE			
4047		SPID39SE			
4048		SPID40SE			
4049		SPID41SE			
4050		SPID42SE			
4051		SPID43SE			
4052		SPID44SE			
4053		SPID45SE			
4054		SPID46SE			
4055		SPID47SE			
4056		SPID48SE			
4057		SPID49SE			
4058		SPID50SE			
4059		SPID51SE			
4060		SPID52SE			
4061		SPID53SE			
4062		SPID54SE			
4063		SPID55SE			
4064		SPID56SE			
4065		SPID57SE			
4066		SPID58SE			
4067	SPID59SE				
4068	SPID60SE				
4069	SPID61SE				
4070	SPID62SE				
4071	SPID63SE				
4072	SPID64SE				
4073	Reserved				
4095	Reserved				

%1) DEVID#20,#21,#22

Item	Name	Unit	Maximum value
SPI*1SET	Setting	° F	999
		(° C)	(999)
SPI*2SET	Alarm H1 setting	° F	999
		(° C)	(999)
SPI*3SET	Alarm LO setting	° F	999
		(° C)	(999)

DEVID#23

Item	Name	Unit	Maximum value
SPI*1SET	Timer A setting	sec	999
SPI*2SET	Timer B setting	sec	999
SPI*3SET	No use	—	—

DEVID#25

Item	Name	Unit	Maximum value
SPI*1SET	SETPOINT ADDITIVE		
SPI*2SET	SETPOINT REFERENCE		
SPI*3SET	SETPOINT CALBRATION		

4.15 Spare 1

No.	Name	Item	Unit	Maximum value	Remarks
4096	Reserved	dmy			
		dmy			
4223	Reserved	dmy			

4.16 Spare 2

No.	Name	Item	Unit	Maximum value	Remarks
4224	Reserved	dmy			
		dmy			
4351	Reserved	dmy			

4.17 Spare 3

No.	Name	Item	Unit	Maximum value	Remarks
4352	Reserved	dmy			
		dmy			
4479	Reserved	dmy			

4.18 Spare 4

No.	Name	Item	Unit	Maximum value	Remarks
4480	Reserved	dmy			
		dmy			
4607	Reserved	dmy			

4.19 Charging Waveform Data

1) Position, back pressure, screw rotation speed, and screw torque

No.	Name	Item	Unit	Maximum value	Remarks
4608	Waveform recording	CHGDTEN	—	—	%5
4609	Screen clear	CHGCLR	—	—	%1
4610	Waveform display	CHGDSP	—	—	%2
4611	Completion of waveform	CHGEND	—	1	%3
4612	Shot No.	CHGSHT	—	0	%4
4613	Sampling time	CHGSMPL	msec	9999	
4614	Total data count	CHGTTL	Pieces	200	
4615	Data count	CHGNUM	Pieces	200	
4616	Position data (400 pieces)	CHGPS1	mm	999.999	
4617		CHGPS2			
5014		CHGPS399			
5015		CHGPS400			
5016	Back pressure data (400 pieces)	CHGPR1	kgf/cm2	040.00	
5017		CHGPR2			
5414		CHGPR399			
5415		CHGPR400			
5416	(Oil pressure) Rotation data (Electric) Torque data (400 pieces)	CHGRV1	rpm —	999 2047	
5417		CHGRV2			
5814		CHGRV399			
5815		CHGRV400			
5816	Screw retraction speed data (400 pieces)	CHGSPD1	mm/sec	600.00	
5817		CHGSPD2			
6214		CHGSPD399			
6215		CHGSPD400			
6216	Reserved				
6217	Reserved				
6218	Reserved				
6219	Reserved				
6220	Reserved				
6221	Reserved				
6222	Reserved				
6223	Charging waveform end position	CHGWAVEEND		—	

%1) Incremented by one when the first waveform data arrives

%2) Incremented by one when waveform data arrives

%3) Data: 0 = During data collection, 1 = End of data collection

%4) Shot No.: Relative shot No. from the current one (0: Current shot)

%5) Setting: 0 = Null, 1 = Start. Status: 0 = Null, 1 = Start (in operation), 2 = Completion

4.20 Injection Waveform Data

1) Filling - injection position, pressure and speed

No.	Name	Item	Unit	Maximum value	Remarks
6224	Waveform recording	INJD TEN	—	—	%6
6225	Screen clear	FILCLR	—	—	%1
6226	Waveform display	FILDSP	—	—	%2
6227	Completion of waveform	FILEND	—	1	%3
6228	shot No.	FILSHT	—	0	%4
6229	Sampling time	FILSMPL	msec	9090	
6230	Maximum value on horizontal axis	FILMAX	sec	999.999	%8
6231	The filling time	FILTIME	sec	999.999	
6232	FPC position	FILPOS	mm	999.999	%5
6233	FPC time	FPCTIME	sec	999.999	%7
6234	Injection position compensation value	INJPOSCPS	mm	999.999	
6235	Data count	FILNUM	Pieces	520	
6236	Position data (520 pieces)	FILPS1	mm	999.999	
6237		FILPS2			
6754		FILPS519			
6755		FILPS520			
6756	Pressure data (520 pieces)	FILPR1	kgf/cm2	9999.99	
6757		FILPR2			
7274		FILPR519			
7275		FILPR520			
7276	Speed data (520 pieces)	FILSP1	mm/sec	600.00	
7277		FILSP2			
7794		FILSP519			
7795		FILSP520			
7796	Clamping force data (520 pieces)	FILCP1	tf	999.99	
7797		FILCP2			
8314		FILCP519			
8315		FILCP520			
8316	Cavity pressure data (520 pieces)	FILCAV1	kgf/cm2	9999.99	
8317		FILCAV2			
8834		FILCAV519			
8835		FILCAV520			
8836	Reserved				
8837	Reserved				
8838	Reserved				
8839	Reserved				
8840	Reserved				
8841	Reserved				
8842	Reserved				
8843	Reserved				
8844	Reserved				
8845	Reserved				
8846	Reserved				
8847	Reserved				

- %1) Incremented by one when the first waveform data arrives
- %2) Incremented by one when waveform data arrives
- %3) Data: 0 = During data collection, 1 = End of data collection
- %4) Shot No.: Relative shot No. from the current one (0: Current shot)
- %5) Dwell change position: Dwell change position of the current shot
- %6) Status: 0 = None, 1 = Start (during operation), 2 = Completion
- %7) Dwell change time for waveform drawing
- %8) Minimum, maximum and degits are changed by parameter No. 21(TRSEL)
  - 0: 000.00~999.99, 0.01
  - 1: 0000.00~9999.90, 0.1
  - 2: 00.000~99.999, 0.001
  - 3: 000.000~999.990, 0.01

2) Dwell - injection position, pressure and speed

No.	Name	Item	Unit	Maximum value	Remarks
8848	Sampling time	HLDSMPL	msec	16666	
8849	Maximum value on horizontal axis	HLDMAX	sec	999.999	%1
8850	Data count 1	HLDNUM	Pieces	100	
8851	Sampling time 2	HLDSMPL2	msec	16666	
8852	Data count 2	HLDNUM2	Pieces	180	
8853	Position data (280 pieces)	HLDPS1	mm	999.999	
8854		HLDPS2			
9131		HLDPS279			
9132		HLDPS280			
9133	Pressure data (280 pieces)	HLDPR1	kgf/cm2	9999.99	
9134		HLDPR2			
9411		HLDPR279			
9412		HLDPR280			
9413	Speed data (280 pieces)	HLDSP1	mm/sec	600.00	
9414		HLDSP2			
9691		HLDSP279			
9692		HLDSP280			
9693	Clamping force data (280 pieces)	HLDCP1	tf	999.99	
9694		HLDCP2			
9971		HLDCP279			
9972		HLDCP280			
9973	Cavity pressure data (280 pieces)	HLDCAV1	kgf/cm2	9999.99	
9974		HLDCAV2			
10251		HLDCAV279			
10252		HLDCAV280			
10253	Injection waveform end position	INJWAVEEND			—
10254	Reserved				
10255	Reserved				
10256	Reserved				

%1) Minimum, maximum and digits are changed by parameter No. 21(TRSEL)

- 0: 000.00~999.99, 0.01
- 1: 0000.00~9999.90, 0.1
- 2: 00.000~99.999, 0.001
- 3: 000.000~999.990, 0.01

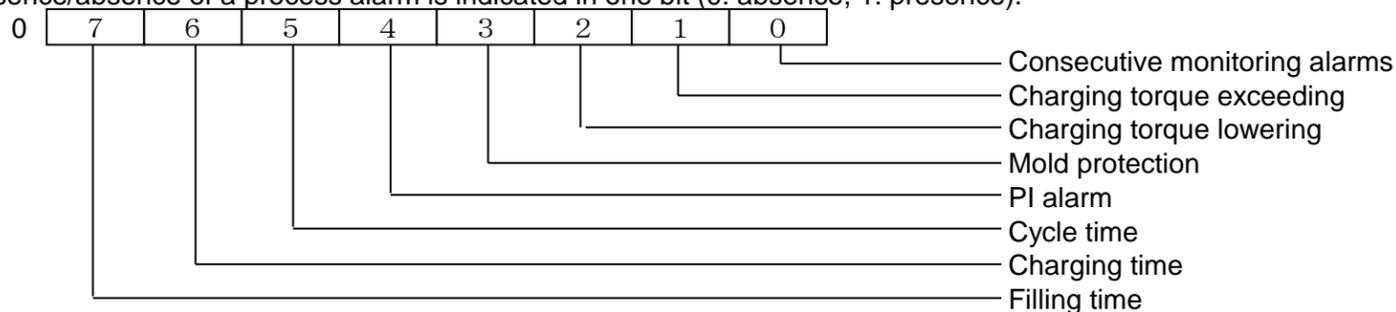
5. Quality Monitoring Data  
5.1 Standard Data

No.	Name	Item	Unit	Maximum value	Remarks	
1	Production shot	SHOT	Shot	99999999		
2	OK-product shot	OKSHOT	Shot	99999999		
3	NG-product shot	NGSHOT	Shot	99999999		
4	Print shot	PTRSHOT	Shot	99999		
5	Filling time	FILL	sec	999.999	%20	
6	Charging time	CHG	sec	999.999		
7	Take-out time	TAKE	sec	999.999		
8	Cycle time	CYCL	sec	9999.999	%1	
9	Minimum cushion position	MIN	mm	999.999		
10	Cushion position	CUS	mm	999.999		
11	Dwell change position	SHIFT	mm	999.999		
12	Injection start position	START	mm	999.999		
13	Maximum injection pressure	INJPEAK	kgf/cm2	200.00		
14	Dwell pressure	FPC	kgf/cm2	4000.00		
15	Screw rotation speed	SCRW	rpm	999		
16	Die retraction limit	CLPEND	mm	999.999	%3	
17	Process alarm	PALM		—	%4	
18	Monitoring alarm	MALM		—	%5	
19	Barrel temperature	HEN	HEN	°C	999.9	%6
20		HN	HN	°C	999.9	
21		H1	H1	°C	999.9	
22		H2	H2	°C	999.9	
23		H3	H3	°C	999.9	
24		H4	H4	°C	999.9	
25		H5	H5	°C	999.9	
26		OIL	OIL	°C	999.9	
27		HOP	HOP	°C	999.9	
28	Upper/lower limit alarm for barrel temperature	HHLALM		—	%8	
29	Barrel thermocouple failure	HRMALM		—	%8	
30	Barrel overheat alarm	HOVALM		—	%7	
31	Heater band failure	HEN	HENHTALM		—	%9
32		HN	HNHTALM		—	
33		H1	H1HTALM		—	
34		H2	H2HTALM		—	
35		H3	H3HTALM		—	
36		H4	H4HTALM		—	
37		H5	H5HTALM		—	
38		HM11	HM11HTALM		—	
39		HM12	HM12HTALM		—	
40	Mold temperature 1	HM11	HM11	°C	999.9	%6
41		HM12	HM12	°C	999.9	
42		HM13	HM13	°C	999.9	
43		HM14	HM14	°C	999.9	
44		HM15	HM15	°C	999.9	
45		HM16	HM16	°C	999.9	
46		HM17	HM17	°C	999.9	
47		HM18	HM18	°C	999.9	
48	Upper/lower limit alarm for mold temperature 1	HM1HLALM		—	%10	
49	Thermocouple failure for mold temperature 1	HM1RMALM		—	%10	
50	Overheat alarm for mold temperature 1	HM1OVALM		—	%10	
51	Mold temperature 2	HM21	HM21	°C	999.9	%6
52		HM22	HM22	°C	999.9	
53		HM23	HM23	°C	999.9	
54		HM24	HM24	°C	999.9	
55		HM25	HM25	°C	999.9	
56		HM26	HM26	°C	999.9	
57		HM27	HM27	°C	999.9	
58		HM28	HM28	°C	999.9	
59	Upper/lower limit alarm for mold temperature 2	HM2HLALM		—	%11	
60	Thermocouple failure for mold temperature 2	HM2RMALM		—	%11	
61	Overheat alarm for mold temperature 2	HM2OVALM		—	%11	
62	Mold temperature 3	HM31	HM31	°C	999.9	%6
63		HM32	HM32	°C	999.9	
64		HM33	HM33	°C	999.9	
65		HM34	HM34	°C	999.9	
66		HM35	HM35	°C	999.9	
67		HM36	HM36	°C	999.9	
68		HM37	HM37	°C	999.9	
69		HM38	HM38	°C	999.9	
70	Upper/lower limit alarm for mold temperature 3	HM3HLALM		—	%12	

No.	Name	Item	Unit	Maximum value	Remarks
71	Thermocouple failure for mold temperature 3	HM3RMALM		—	%10
72	Overheat alarm for mold temperature 3	HM3OVALM		—	%12
73	Mold temperature 4	HM41	°C	999.9	%6
74		HM42	°C	999.9	
75		HM43	°C	999.9	
76		HM44	°C	999.9	
77		HM45	°C	999.9	
78		HM46	°C	999.9	
79		HM47	°C	999.9	
80		HM48	°C	999.9	
81	Overheat alarm for mold temperature 4	HM4HLALM		—	%13
82	Thermocouple failure for mold temperature 4	HM4RMALM		—	%13
83	Overheat alarm for mold temperature 4	HM4OVALM		—	%13
84	Mold temperature 5	HM51	°C	999.9	%6
85		HM52	°C	999.9	
86		HM53	°C	999.9	
87		HM54	°C	999.9	
88		HM55	°C	999.9	
89		HM56	°C	999.9	
90		HM57	°C	999.9	
91		HM58	°C	999.9	
92	Overheat alarm for mold temperature 5	HM5HLALM		—	%14
93	Thermocouple failure for mold temperature 5	HM5RMALM		—	%10
94	Overheat alarm for mold temperature 5	HM5OVALM		—	%14
95	Mold temperature 6	HM61	°C	999.9	%6
96		HM62	°C	999.9	
97		HM63	°C	999.9	
98		HM64	°C	999.9	
99		HM65	°C	999.9	
100		HM66	°C	999.9	
101		HM67	°C	999.9	
102		HM68	°C	999.9	
103	Overheat alarm for mold temperature 6	HM6HLALM		—	%14
104	Thermocouple failure for mold temperature 6	HM6RMALM		—	%10
105	Overheat alarm for mold temperature 6	HM6OVALM		—	%14
106	Mold temperature 7	HM71	°C	999.9	%6
107		HM72	°C	999.9	
108		HM73	°C	999.9	
109		HM74	°C	999.9	
110		HM75	°C	999.9	
111		HM76	°C	999.9	
112		HM77	°C	999.9	
113		HM78	°C	999.9	
114	Overheat alarm for mold temperature 7	HM7HLALM		—	%14
115	Thermocouple failure for mold temperature 7	HM7RMALM		—	%10
116	Overheat alarm for mold temperature 7	HM7OVALM		—	%14
117	Injection stroke	INJST	mm	999.999	
118	MAX injection stroke	INJSTMAX	mm	999.999	
119	Mold opening time	MOTIME	s	999.999	
120	Mold closing time	MCTIME	s	999.999	
121	Ejection time	EJETIME	s	999.999	
122	Safety door opening time	SDOTIME	s	999.999	
123	LS4A injection pressure	INJPLS4A	kgf/cm2	999.99	
124	LS4B injection pressure	INJPLS4B	kgf/cm2	999.99	
125	LS4C injection pressure	INJPLS4C	kgf/cm2	999.99	
126	LS4D injection pressure	INJPLS4D	kgf/cm2	999.99	
127	LS4E injection pressure	INJPLS4E	kgf/cm2	999.99	
128	LS4F injection pressure	INJPLS4F	kgf/cm2	999.99	
129	LS4G injection pressure	INJPLS4G	kgf/cm2	999.99	
130	LS4H injection pressure	INJPLS4H	kgf/cm2	999.99	
131	LS4I injection pressure	INJPLS4I	kgf/cm2	999.99	
132	Mold separation value	CLAMP	mm	999.999	
133	Maximum cavity pressure	CAVMAX	kgf/cm2	999.99	
134	Cavity pressure for dwelling	CAVHLD	kgf/cm2	999.99	
135	Charging waveform	CHGCLR	—	—	
136	Injection waveform	FILCLR	—	—	
137	Reserved		—	—	
138	Reserved		—	—	
139	Charging torque	CHGTRQ	%	99.9	
140	Injection energy	ENEFIL	J	9999.99	
141	Holding energy	ENEHLD	J	9999.99	
142	Charging energy	ENECHG	J	9999.99	

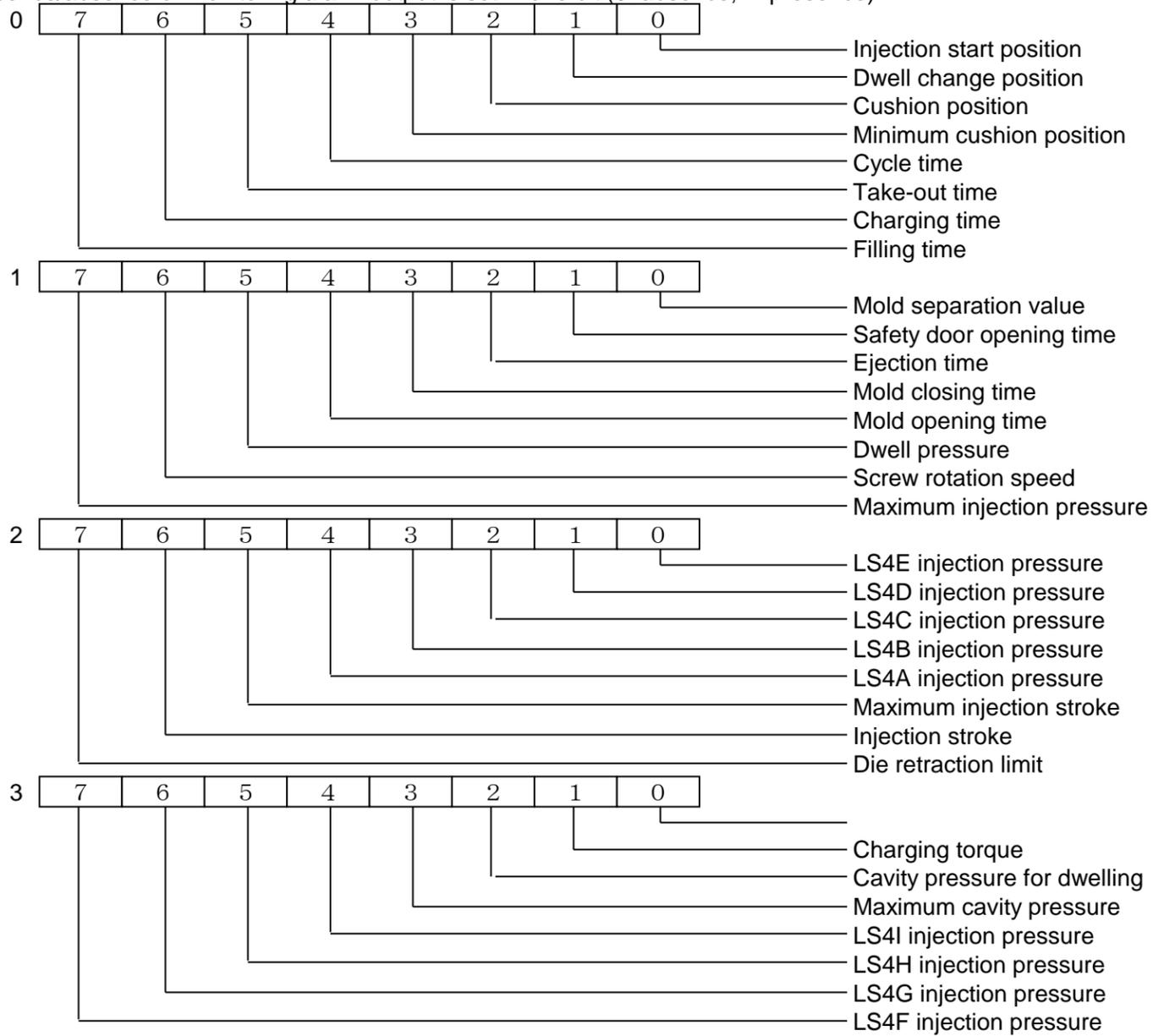
No.	Name	Item	Unit	Maximum value	Remarks
143	Injection pressure integral value	INJINT	kgf/cm2	9999.99	
144	DST temperature offset value	DSTTMP	°C	999.9	
145	DST injection speed offset value	DSTISP	mm/sec	999.999	
146	DST FPC position offset value	DSTHLDL	mm	999.999	
147	DST screw rotation speed offset value	DSTSCRRPM	rpm	999	
148	DST holding and backpressure offset value	DSTHLDBP	kgf/cm2	9999.99	
149	Clamping force	CLPPRS	tf	9999.9	
150	Clamping force offset value	CLPPRSRV	tf	9999.9	
151	Charging start position	STPOSCHG	mm	999.999	
152	DST estimation	DSTEVL		99.99	
153	DST offset	DSTADJ		99.99	
154	Reserved				
155	Reserved				
156	Reserved				
157	Reserved				
158	Reserved				
159	Reserved				
160	Date	DATE	—	—	
161	Time	TIME	—	—	
162	Title	TITLE1	Degits	30+Null	
163		TITLE2			
164		TITLE3			
165		TITLE4			
166		TITLE5			
167		TITLE6			
168		TITLE7			
169		TITLE8			
170	Product code	CODE1	Degits	20+null	
171		CODE2			
172		CODE3			
173		CODE4			
174		CODE5			
175		CODE6			
176	OK-product count in container	CNTOK	Pieces	999999	
177	Container change count	CNTCHG	Count	999999	
178	Total production count	TOTALCNT	Pieces	99999999	
179	OK production count (after transfer)	OKCNT	Pieces	99999999	
180	Memory No.	MEMNO		600	
181	Mold code	MTCOD1	Degits	20+null	
182		MTCOD2			
183		MTCOD3			
184		MTCOD4			
185		MTCOD5			
186		MTCOD6			
187	Process alarm output	PALMO		—	%4
188	Monitoring alarm	MALMO		—	%5
189	Barrel alarm output	HHLAO		—	%8
190	Mold temperature alarm output 1	HMHLAO1		—	%18
191	Mold temperature alarm output 2	HMHLAO2		—	%19
192	Monitoring alarm output 2	MALMO2		—	%21
193	Reserved				
194	Reserved				
195	Reserved				
196	Reserved				
197	Reserved				
198	Reserved				
199	Reserved				

- %1) The display digit setting can be changed to 0.1 by specifying the parameter.
- %2) The display digit setting can be changed to 0.001 by specifying the parameter.
- %3) Used with the in-house inspection system. Not used for general quality monitoring.
- %4) Presence/absence of a process alarm is indicated in one bit (0: absence, 1: presence).



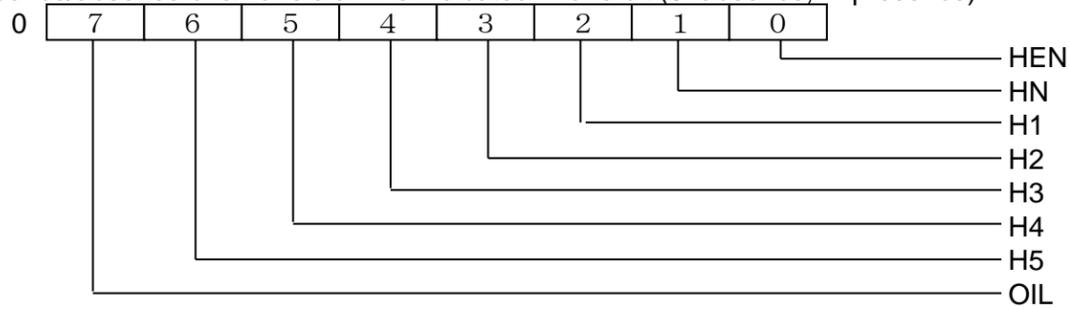
Bytes 1 to 3 are to be filled with zeros.

%5) Presence/absence of monitoring alarm output is set in one bit (0: absence, 1: presence).



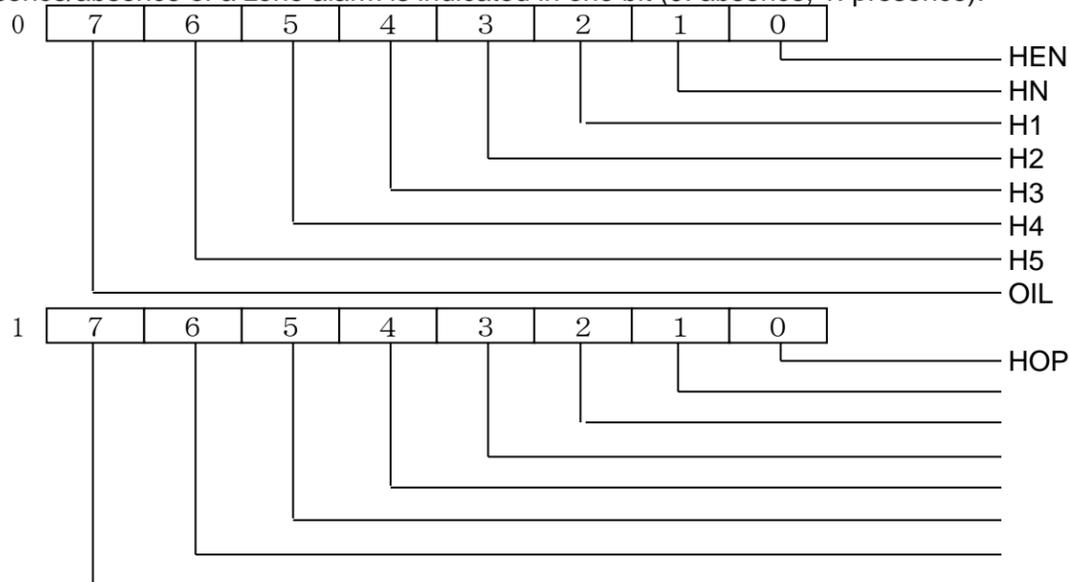
%6) Temperature is set in the range 0 to 500°C, and displayed in the range 0 to 999.9°C.  
(999.9°C is displayed when a thermocouple failure occurs.)

%7) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



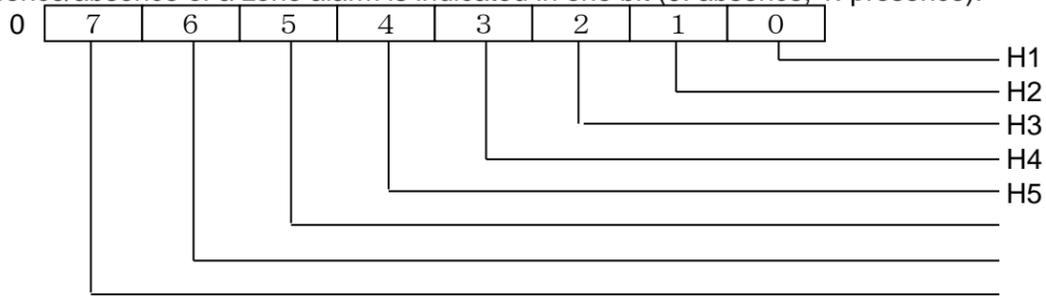
Bytes 1 to 3 are to be filled with zeros.

%8) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



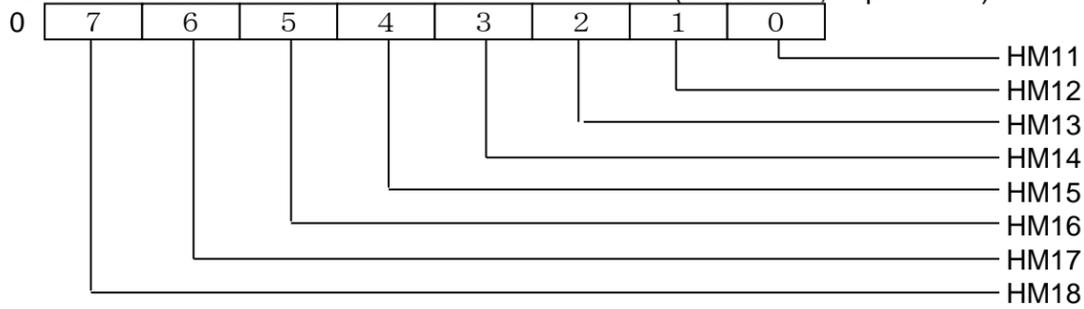
Bytes 1 to 3 are to be filled with zeros.

%9) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



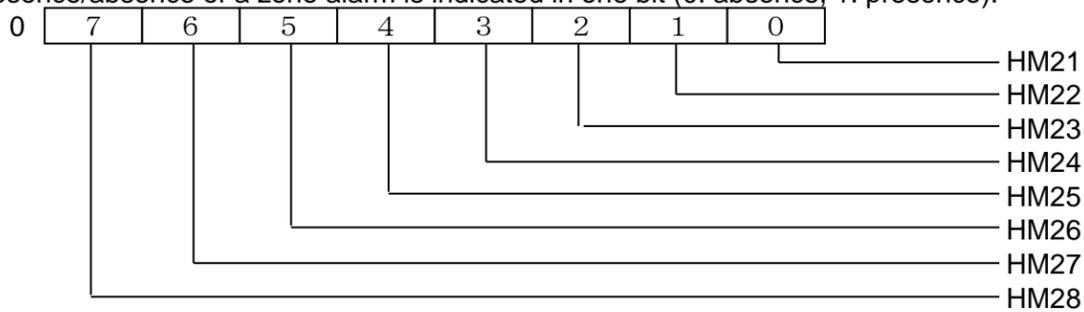
Bytes 1 to 3 are to be filled with zeros.

%10) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



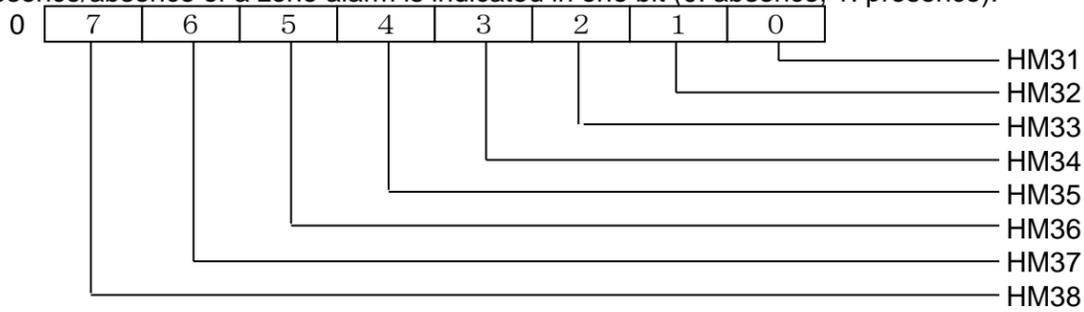
Bytes 1 to 3 are to be filled with zeros.

%11) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



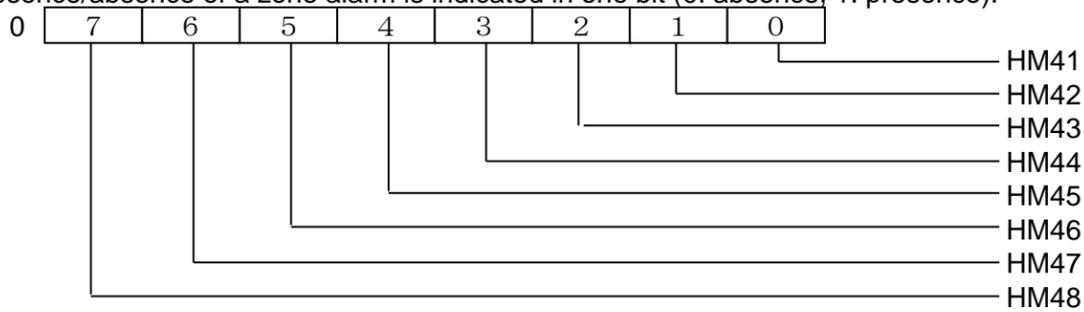
Bytes 1 to 3 are to be filled with zeros.

%12) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



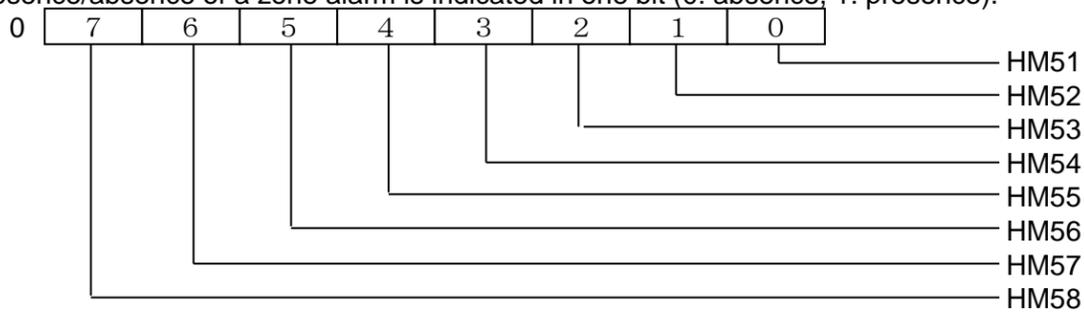
Bytes 1 to 3 are to be filled with zeros.

%13) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



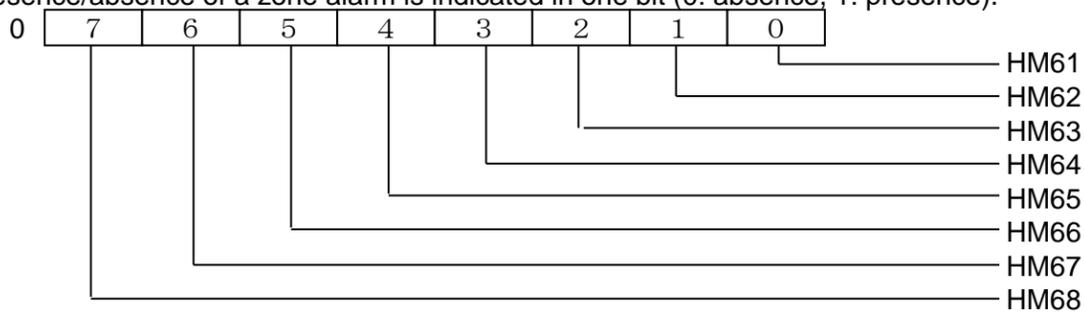
Bytes 1 to 3 are to be filled with zeros.

%14) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



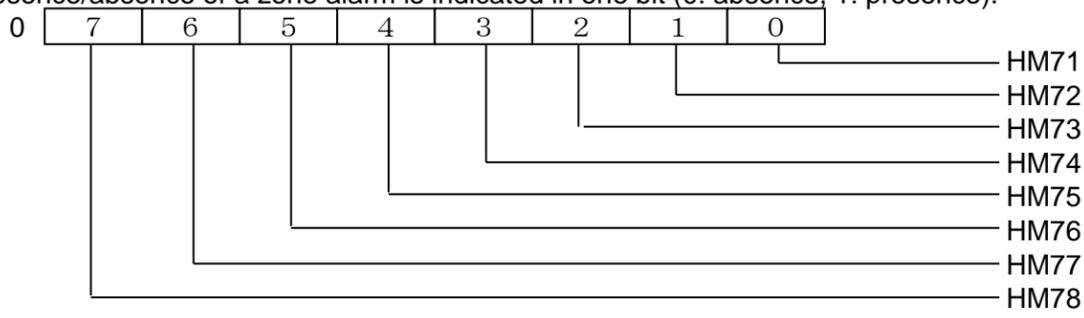
Bytes 1 to 3 are to be filled with zeros.

%15) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



Bytes 1 to 3 are to be filled with zeros.

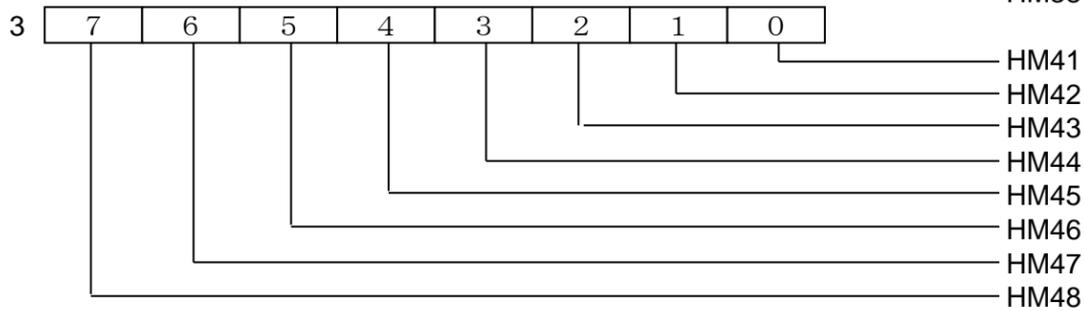
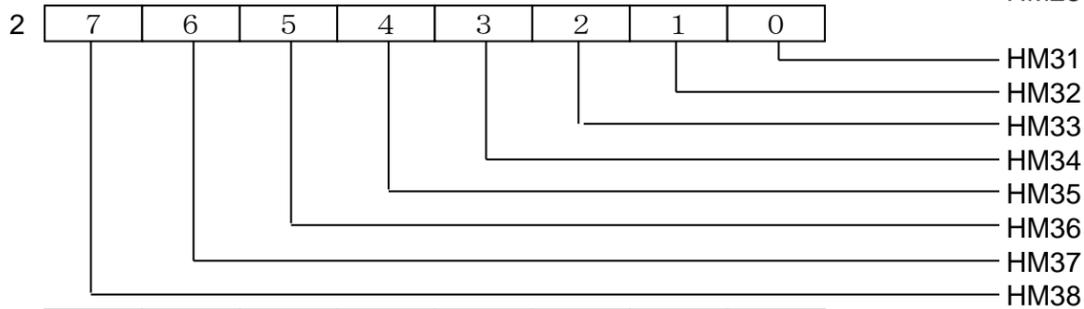
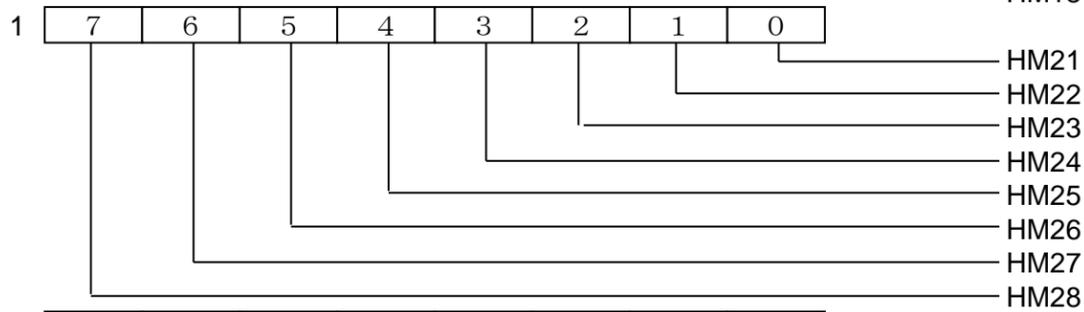
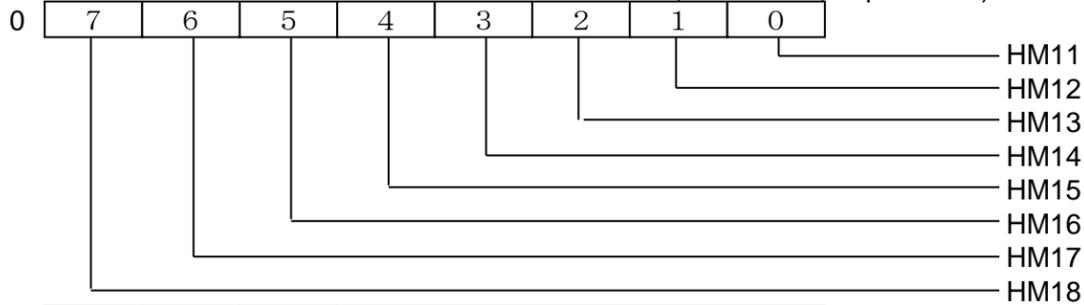
%16) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



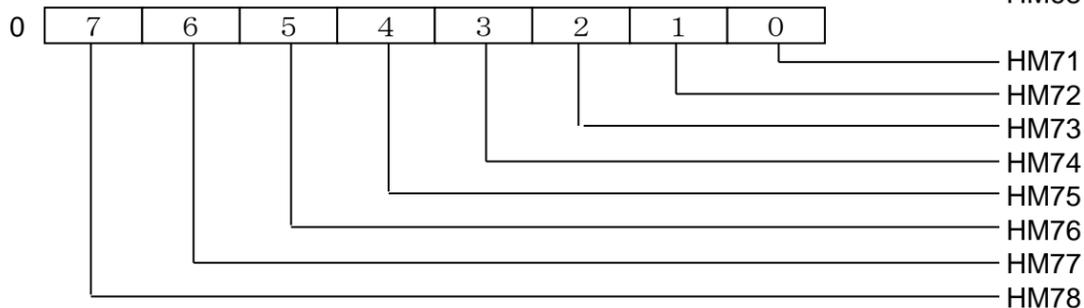
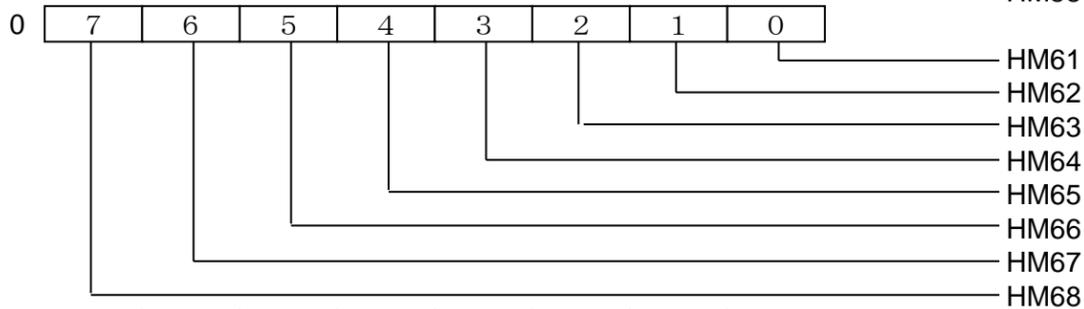
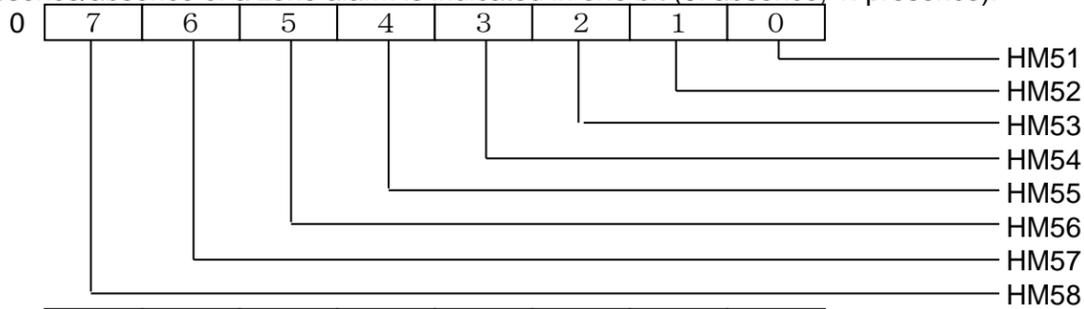
Bytes 1 to 3 are to be filled with zeros.

%17) Copy of waveform \*\*\*CLP

%18) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



%19) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



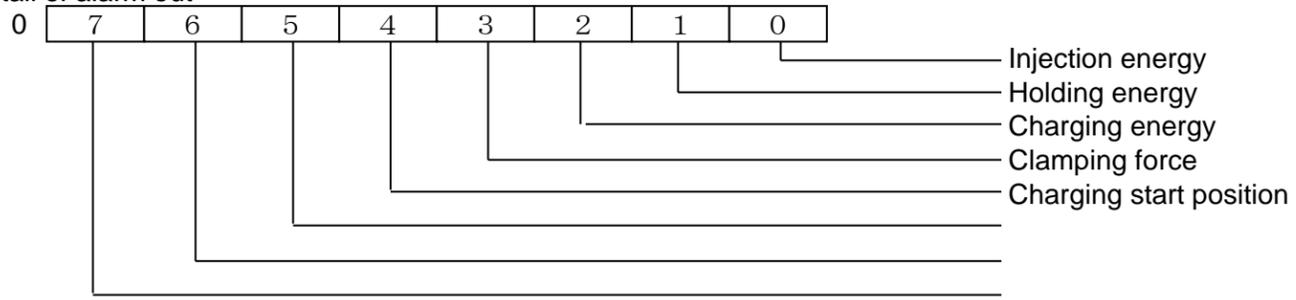
Byte 3 is to be filled with zeros.

%20) Minimum, maximum and degits of injection time monitoring are changed byparameter No. 21(TRSEL).

\*\*0\*\* or \*\*1\*\*\*: 000.00~999.99, 0.01

\*\*2\*\* or \*\*3\*\*\*: 00.00~99.999, 0.001

%21) Detail of alarm out

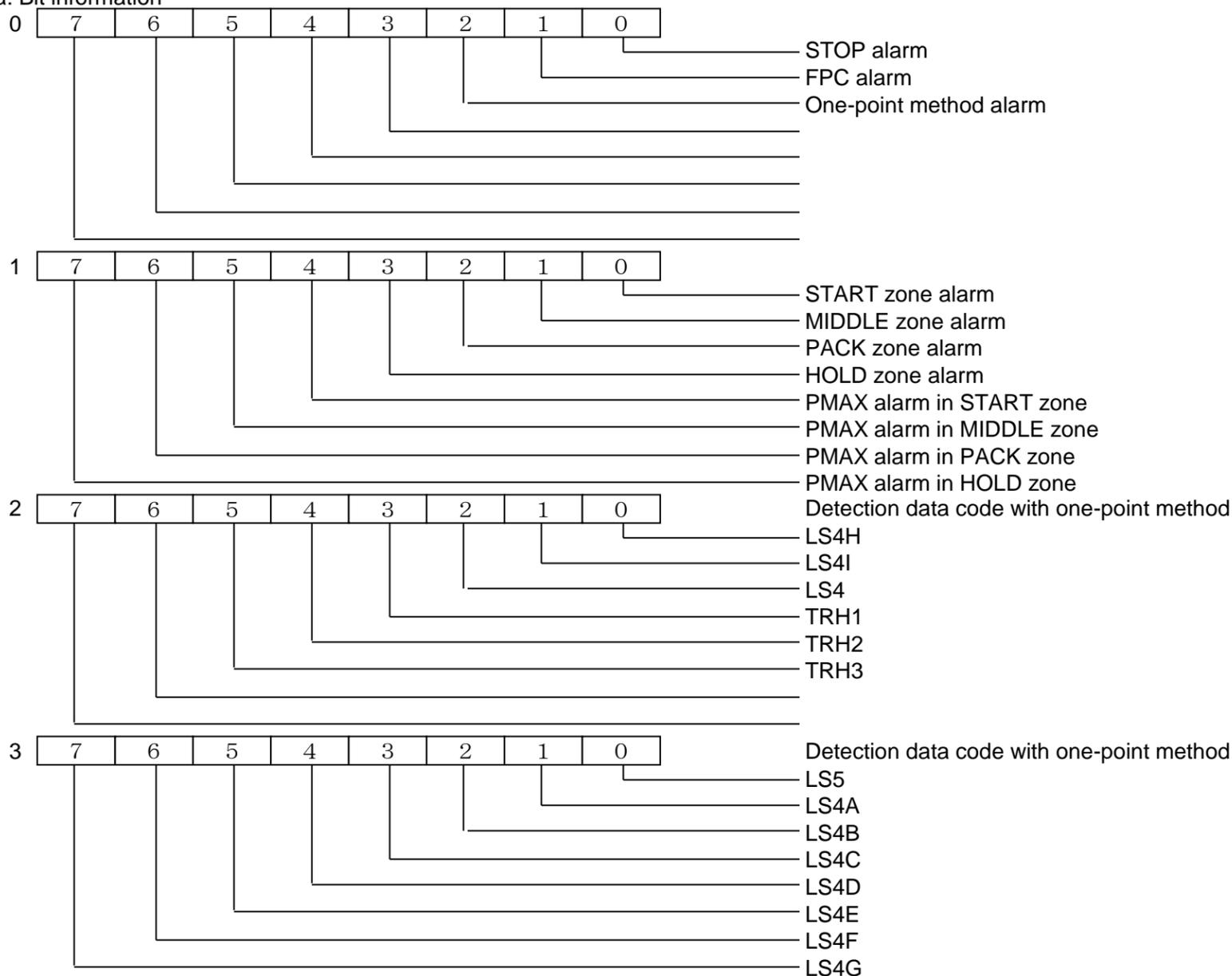


Bytes 1 to 3 are to be filled with zeros.

5.2 MOLDLYZER Data

No.	Name	Item	Unit	Maximum value	Remarks
257	Presence/absence of alarm	1MLALM			%1
258	Maximum pressure in START zone	1MLSTPEAK	kgf/cm2	4000.00	
259	Maximum pressure in MIDDLE zone	1MLMIPEAK			
260	Maximum pressure in PACK zone	1MLPAPEAK			
261	Maximum pressure in HOLD zone	1MLHOPEAK	kgf/cm2	4000.00	
262	Maximum deviation in START zone	1MLSTMAX			
263	Maximum deviation in MIDDLE zone	1MLMIMAX			
264	Maximum deviation in PACK zone	1MLPAMAX			
265	Maximum deviation in HOLD zone	1MLHOMAX	kgf/cm2	4000.00	
266	Average deviation in START zone	1MLSTAVE			
267	Average deviation in MIDDLE zone	1MLMIAVE			
268	Average deviation in PACK zone	1MLPAAVE			
269	Average deviation in HOLD zone	1MLHOAVE			
270	Pressure detection with one-point method	1MLMAX	kgf/cm2	4000.00	
271	Average deviation with one-point method	1MLAVE	kgf/cm2	4000.00	
272	FPC PRESS	1MLFPC	kgf/cm2	4000.00	
273	Not used	1MLDMY1			
274	Not used	1MLDMY2			
275	Not used	1MLDMY3			
276	Reserved				
277	Reserved				
278	Reserved				
279	Reserved				
280	Reserved				
281	Reserved				
282	Reserved				
283	Reserved				
284	Reserved				
285	Reserved				
286	Reserved				
287	Reserved				

%1) Data: Bit information



## 5.3 ACTLYZER Data

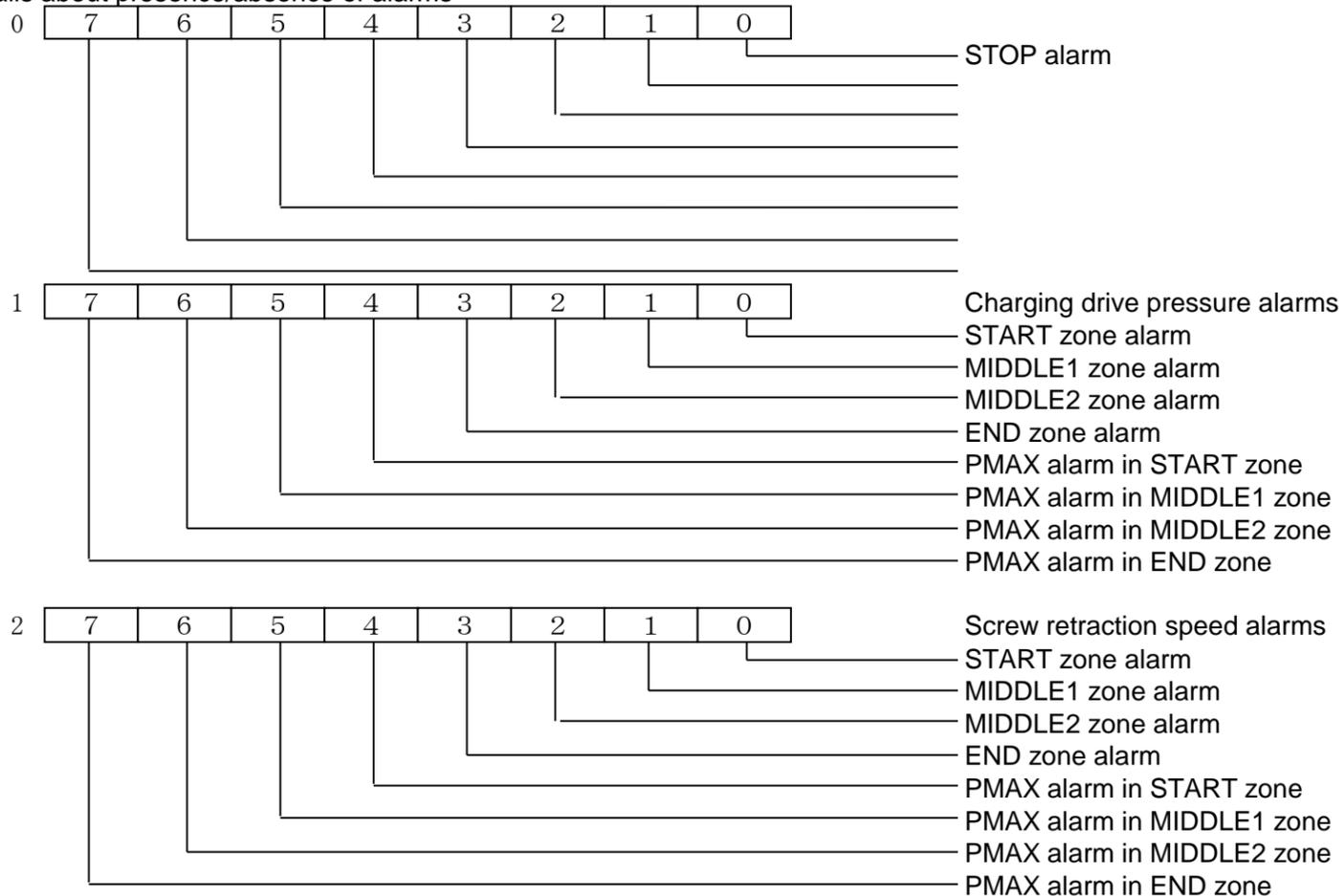
No.	Name	Item	Unit	Maximum value	Remarks
289	Presence/absence of alarm	1ALALM			%1
290	Peak cavity pressure in ST zone	1ALCPSTPEK	kgf/cm2	4000.00	
291	Peak cavity pressure in M1 zone	1ALCPM1PEK			
292	Peak cavity pressure in M2 zone	1ALCPM2PEK			
293	Peak cavity pressure in ED zone	1ALCPEDPEK			
294	Maximum deviation of cavity pressure in ST zone	1ALCPSTMAX	kgf/cm2	4000.00	
295	Maximum deviation of cavity pressure in M1 zone	1ALCPM1MAX			
296	Maximum deviation of cavity pressure in M2 zone	1ALCPM2MAX			
297	Maximum deviation of cavity pressure in ED zone	1ALCPEDMAX			
298	Average deviation of cavity pressure in ST zone	1ALCPSTAVE	kgf/cm2	4000.00	
299	Average deviation of cavity pressure in M1 zone	1ALCPM1AVE			
300	Average deviation of cavity pressure in M2 zone	1ALCPM2AVE			
301	Average deviation of cavity pressure in ED zone	1ALCPEDAVE			
302	Peak filling pressure in ST zone	1ALIPSTPEK	kgf/cm2	200.00	
303	Peak filling pressure in M1 zone	1ALIPM1PEK			
304	Peak filling pressure in M2 zone	1ALIPM2PEK			
305	Peak filling pressure in ED zone	1ALIPEDPEK			
306	Maximum deviation of filling pressure in ST zone	1ALIPSTMAX	kgf/cm2	200.00	
307	Maximum deviation of filling pressure in M1 zone	1ALIPM1MAX			
308	Maximum deviation of filling pressure in M2 zone	1ALIPM2MAX			
309	Maximum deviation of filling pressure in ED zone	1ALIPEDMAX			
310	Average deviation of filling pressure in ST zone	1ALIPSTAVE	kgf/cm2	200.00	
311	Average deviation of filling pressure in M1 zone	1ALIPM1AVE			
312	Average deviation of filling pressure in M2 zone	1ALIPM2AVE			
313	Average deviation of filling pressure in ED zone	1ALIPEDAVE			
314	Peak filling speed in ST zone	1ALIVSTPEK	mm/sec	600.000	
315	Peak filling speed in M1 zone	1ALIVM1PEK			
316	Peak filling speed in M2 zone	1ALIVM2PEK			
317	Peak filling speed in ED zone	1ALIVEDPEK			
318	Maximum deviation of filling speed in ST zone	1ALIVSTMAX	mm/sec	600.000	
319	Maximum deviation of filling speed in M1 zone	1ALIVM1MAX			
320	Maximum deviation of filling speed in M2 zone	1ALIVM2MAX			
321	Maximum deviation of filling speed in ED zone	1ALIVEDMAX			
322	Average deviation of filling speed in ST zone	1ALIVSTAVE	mm/sec	600.000	
323	Average deviation of filling speed in M1 zone	1ALIVM1AVE			
324	Average deviation of filling speed in M2 zone	1ALIVM2AVE			
325	Average deviation of filling speed in ED zone	1ALIVEDAVE			
326	Reserved				
327	Reserved				
328	Reserved				
329	Reserved				
330	Reserved				
331	Reserved				
332	Reserved				
333	Reserved				
334	Reserved				
335	Reserved				



5.4 PLASTLYZER Data

No.	Name	Item	Unit	Maximum value	Remarks
337	Presence/absence of alarm	1ALALM			%1
338	Peak pressure in ST zone	1PLSTPPEAK	kgf/cm2	200.00	%2
339	Peak pressure in M1 zone	1PLM1PPEAK			
340	Peak pressure in M2 zone	1PLM2PPEAK			
341	Peak pressure in ED zone	1PLEDPPEAK			
342	Maximum deviation of pressure in ST zone	1PLSTPMAX	kgf/cm2	200.00	%2
343	Maximum deviation of pressure in M1 zone	1PLM1PMAX			
344	Maximum deviation of pressure in M2 zone	1PLM2PMAX			
345	Maximum deviation of pressure in ED zone	1PLEDPMAX			
346	Average deviation of pressure in ST zone	1PLSTPAVE	kgf/cm2	200.00	%2
347	Average deviation of pressure in M1 zone	1PLM1PAVE			
348	Average deviation of pressure in M2 zone	1PLM2PAVE			
349	Average deviation of pressure in ED zone	1PLEDPAVE			
350	Peak speed in ST zone	1PLSTVPEAK	mm/sec	600.000	%3
351	Peak speed in M1 zone	1PLM1VPEAK			
352	Peak speed in M2 zone	1PLM2VPEAK			
353	Peak speed in ED zone	1PLEDVPEAK			
354	Maximum deviation of speed in ST zone	1PLSTVMAX	mm/sec	600.000	%3
355	Maximum deviation of speed in M1 zone	1PLM1VMAX			
356	Maximum deviation of speed in M2 zone	1PLM2VMAX			
357	Maximum deviation of speed in ED zone	1PLEDVMAX			
358	Average deviation of speed in ST zone	1PLSTVAVE	mm/sec	600.000	%3
359	Average deviation of speed in M1 zone	1PLM1VAVE			
360	Average deviation of speed in M2 zone	1PLM2VAVE			
361	Average deviation of speed in ED zone	1PLEDVAVE			
362	Reserved				
363	Reserved				
364	Reserved				
365	Reserved				
366	Reserved				
367	Reserved				

%1) Details about presence/absence of alarms



%2)Charging drive pressure

%3)Screw retraction speed

4. Molding Conditions  
4.1 Standard Data

No.	Name	Item	Unit	Maximum value	Remarks
1	Operation file source number	RUNFILE	—	60	
2	Title	TITLE1	digits	30+Null	%66
3		TITLE2			
4		TITLE3			
5		TITLE4			
6		TITLE5			
7		TITLE6			
8		TITLE7			
9		TITLE8			
10	Write date	DATE	—	—	%64
11	Write time	TIME	—	—	%65
12	Continuous and automatic changeover	AUTOLOAD		1	%5
13	Next condition number	NEXTNO	number	600	
14	Total production count	TOTALCNT	shot	99999999	%39
15	Production completion notice 1	PRECNT1	shot	9999	%40
			minutes	99	
16	Production completion notice 2	PRECNT2	shot	9999	
			minutes	99	
17	Production completion notice 3	PRECNT3	shot	9999	
			minutes	99	
18	Production completion notice 4	PRECNT4	shot	9999	
			minutes	99	
19	Production completion notice 5	PRECNT5	shot	9999	
			minutes	99	
20	Production completion notice 6	PRECNT6	shot	9999	
			minutes	99	
21	Management method	MANGE		3	%41
22	Cavity number	SHOTSZ	pieces	999	
23	Container size	CONTNR	pieces	9999	
24	Disposal shot count	REMVSH	shot	99	
25	Product weight	SHTWEIG	g	30000.0	
			oz	1058.21	
26	One shot weight	PRDWEIG	g	30000.0	
			oz	1058.21	
27	Product code	CODE1	digits	20+null	%42
28		CODE2			
29		CODE3			
30		CODE4			
31		CODE5			
32		CODE6			
33	Memory selection	MEMSEL		3	
34					
35	Resin number	MOLDNO		999	
36	Mold number	MTNO		999	
37	Startup control	STUPSH1	shot	99	
38		STUPSH2	shot	99	
39		STUPSH3	shot	99	
40	Startup condition: Injection pressure	SHIFTPH	kgf/cm2	0000.00	%4
			bar	0000.00	
			MPa	000.000	
			PSI	00000.0	
			%	00.0	
41	Startup condition: Injection speed	SHIFTVH	mm/sec	000.0	
			in/sec	00.00	
			%	00.0	
42	Startup condition: Charging completion position	SHIFTLS5	mm	00.000	
			in	0.0000	
43	Automatic stop notice	SPRECNT1	shot	9999	
44		SPRECNT2	shot	9999	
45	Startup control	STUP		1	%5
46	Molding after production	AUTST		1	%43
47	Reserved				

No.	Name	Item	Unit	Maximum value	Remarks
48	Reserved				
49	Reserved				
50	2-hour screw reverse	TRIT2	sec	9.99	
51	Take-out robot number	ROBOTNO		999	
52	Setter ID	HUMANID		FFFFFFFF	
53	Universal rotation speed	VROT	%	99.0	
54	Universal rotation-back speed	VRTR	%	99.0	
55	Filling speed VI1	VI1	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
56	Filling speed VI2	VI2	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
57	Filling speed VI3	VI3	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
58	Filling speed VI4	VI4	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
59	Filling speed VI5	VI5	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
60	Filling speed VI6	VI6	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
61	Filling speed VI7	VI7	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
62	Filling speed VI8	VI8	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
63	Filling speed VI9	VI9	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
64	Filling speed VI10	VI10	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
65	Dwell speed VH1	VH1	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
66	Dwell speed VH2	VH2	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
67	Filling pressure PI1	PI1	kgf/cm2	4000.00	%4
			bar	4000.00	
			PSI	99999.0	
			MPa	400.000	
			%	99.0	
68	Filling pressure PI2	PI2	kgf/cm2	4000.00	
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
69	Dwelling PH1	PH1	kgf/cm2	4000.00	%4
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
70	Dwelling PH2	PH2	kgf/cm2	4000.00	
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
71	Dwelling PH3	PH3	kgf/cm2	4000.00	%4
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	
72	Dwelling PH4	PH4	kgf/cm2	4000.00	%4
			bar	4000.00	
			MPa	400.000	
			PSI	99999.0	
			%	99.0	

No.	Name	Item	Unit	Maximum value	Remarks
73	Screw rotation speed	SRN	rpm	999	
			%	99.0	
74	Programmed final screw rotation speed	SRNF	rpm	999	
			%	99.0	
75	Back pressure	BP	kgf/cm2	999.00	%4
			bar	999.00	
			MPa	99.000	
			PSI	9999.0	
			%	99.0	
76	Programmed final back pressure	BPF	kgf/cm2	999.00	%4
			bar	999.00	
			MPa	99.000	
			PSI	9999.0	
			%	99.0	
77	Dwell change position LS4	LS4	mm	999.990	%4
			in	99.9990	
78	Filling speed change position LS4A	LS4A	mm	999.990	
			in	99.9990	
79	Filling speed change position LS4B	LS4B	mm	999.990	
			in	99.9990	
80	Filling speed change position LS4C	LS4C	mm	999.990	
			in	99.9990	
81	Filling speed change position LS4D	LS4D	mm	999.990	
			in	99.9990	
82	Filling speed change position LS4E	LS4E	mm	999.990	
			in	99.9990	
83	Filling speed change position LS4F	LS4F	mm	999.990	
			in	99.9990	
84	Filling speed change position LS4G	LS4G	mm	999.990	
			in	99.9990	
85	Filling speed change position LS4H	LS4H	mm	999.990	
			in	99.9990	
86	Filling speed change position LS4I	LS4I	mm	999.990	
			in	99.9990	
87	General-purpose injection position LS4X	LS4X	mm	999.990	%4
			in	99.9990	
88	General-purpose injection position LS4Y	LS4Y	mm	999.990	
			in	99.9990	
89	Filling pressure change position	LS4Z	mm	999.990	%4
			in	99.9990	
90	Charging completion position	LS5	mm	999.990	%4
			in	99.9990	
91	Programmed screw rotation start position	LS5B	mm	999.990	
			in	99.9990	
92	Programmed back pressure start position	LS5C	mm	999.990	
			in	99.9990	
93	Melt decompression position	LS10	mm	99.990	%4
			in	9.9990	
94	Melt decompression position before charging	LS10A	mm	99.990	
			in	9.9990	
95	Dwell time TRH1	TRH1	sec	99.99	%1
96	Dwell time TRH2	TRH2	sec	99.99	
97	Dwell time TRH3	TRH3	sec	99.99	
98	Dwell speed change time	TRVH	sec	999.99	
99	Injection timer	TR1	sec	999.99	%1

No.	Name	Item	Unit	Maximum value	Remarks
100	Dwell change timer	TR2	sec		
101	Cooling timer	TR3	sec	999.99	%1
102	Middle timer	TR4	sec	999.99	%1
103	Filling speed steps	INJVS		10	
104	Dwell speed steps	HOLDVS		2	
105	Filling pressure steps	HOLDPS		4	
106	Speed profile	VISLOPE		4 5	%2
107	Dwelling profile	PHSLOPE		4 5	%2
108	Filling for binary injection	FILLBIN		7	
109	Dwelling for binary injection	HOLDBIN		7	
110	Selection of dwell change control	FPCSEL		4	%3
106	Pressure for dwell change	FPCSET	kgf/cm2 bar MPa PSI	9999.90 9999.90 999.990 99999.9	%4
112	Selection of programmed screw rotation	CHGPRO		1	%5
113	Selection of automatic charging speed reduction	CHGDWN		1	%5
114	Back pressure mode after charging	CHGBPF		2	%6
115	Back pressure mode during charging	CHGBP		2	%7
116	Selection of programmed back pressure	BPPRO		1	%5
117	Torque pressure	TRQSEL		2	%8
118	Boost	BOOST		1	%5
119	Selection of melt decompression	SBSEL (SPSEL)		1	%9
120	Feeder during injection	INJFED	%	99.0	
121	Feeder during charging	SRFED	%	99.0	
122	Feeder rotation time	TRFED	sec	99.99	
123	Selection of feeder operation	FEDSEL		2	%10
124	Feeder synchronization	FEDRATEN		1	%11
125	Feeder synchronization ratio	FEDRAT			%12
126	Automatic back pressure reduction	BPDWNSEL		1	%5
127	Cavity pressure calibration value	CV1SET	kgf/cm2 bar MPa PSI	4000.00 3922.00 392.200 56880.0	%4
128	Dwell change compensation value	LS4R	mm in	99.990 9.9990	%4
129	Amount of spring	SPRING	mm in	9999.000 999.9000	%4
130	High-speed mold closing speed VC1	VC1	% mm/sec in/sec	99.0 999.0 99.90	
131	High-speed mold closing speed VC2	VC2	% mm/sec in/sec	99.0 999.0 99.90	
132	High-speed mold closing speed VC3	VC3	% mm/sec in/sec	99.0 999.0 99.90	
133	High-speed mold closing speed VC4	VC4	% mm/sec in/sec	99.0 999.0 99.90	
134	Low-speed mold closing speed	VCS	% mm/sec in/sec	99.9 99.9 9.99	
135	High-speed mold opening speed VO1	VO1	% mm/sec in/sec	99.0 999.0 99.90	
136	High-speed mold opening speed VO2	VO2	% mm/sec in/sec	99.0 999.0 99.90	
137	High-speed mold opening speed VO3	VO3	% mm/sec in/sec	99.0 999.0 99.90	

No.	Name	Item	Unit	Maximum value	Remarks
138	High-speed mold opening speed VO4	VO4	%	99.0	
			mm/sec	999.0	
			in/sec	99.90	
139	Low-speed mold opening speed VOS1	VOS1	%	99.0	
			mm/sec	99.9	
			in/sec	9.99	
140	Low-speed mold opening speed VOS2	VOS2	%	99.0	
			mm/sec	99.9	
			in/sec	9.99	
141	Low-pressure claming pressure	PCL	%	99.0	
142	High-pressure claming pressure (Mold thickness adjustment)	PCH	tf	9999.0	%4
			tf(US)	9999.0	
			kN	99999	
			%	99.0	
143	Mold close limit	LS2	mm	9.990	%4
			in	0.9990	
144	Mold close position LS2A	LS2A	mm	999.900	
			in	99.9900	
145	Mold close position LS2F	LS2F	mm	9999.900	
			in	999.9900	
146	Mold close position LS2E	LS2E	mm	9999.900	
			in	999.9900	
147	Mold close position LS2D	LS2D	mm	9999.900	
			in	999.9900	
148	Mold open position LS3A	LS3A	mm	999.900	%4
			in	99.9900	
149	Mold open position LS3D	LS3D	mm	9999.900	
			in	999.9900	
150	Mold open position LS3E	LS3E	mm	9999.900	
			in	999.9900	
151	Mold open position LS3F	LS3F	mm	9999.900	
			in	999.9900	
152	Mold open position LS3B	LS3B	mm	9999.900	
			in	999.9900	
153	Mold open limit LS3	LS3	mm	9999.900	
			in	999.9900	
154	Take-out signal position	LS100	mm	9999.900	%4
			in	999.9900	
155	Operation-B position	LS30	mm	9999.900	%4
			in	999.9900	
156	High-pressure mold open position	LS3M	mm	999.900	%4
			in	99.9900	
157	General-purpose position LS3X1	LS3X1	mm	9999.900	%4
			in	999.9900	
158	General-purpose position LS3X2	LS3X2	mm	9999.900	
			in	999.9900	
159	Mold thickness setting	MT	mm	9999.000	%4
			in	999.9000	
160	Selection of automatic mold opening speed reduction	VODWN		1	%5
161	Selection of automatic mold closing speed reduction	VCDWN		1	%5
162	Ejection speed VE1	VE1	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
163	Ejection speed VE2	VE2	mm/sec	400.0	
			in/sec	40.00	
			%	99.0	
164	Ejector retraction speed	VR	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	

No.	Name	Item	Unit	Maximum value	Remarks
165	Ejection pressure	PEJ	tf	99.9	%4
			tf(US)	99.9	
			kN	999	
			%	99.0	
166	Ejector advance limit position	LS31	mm	999.900	%4
			in	99.9900	
167	Ejector advance position	LS31A	mm	999.900	
			in	99.9900	
168	Ejector advance position	LS31B	mm	999.900	
			in	99.9900	
169	General-purpose ejector advance position LS31X	LS31X	mm	999.900	
			in	99.9900	
170	Ejector retraction limit position	LS32	mm	99.900	%4
			in	9.9900	
171	Ejector retraction position	LS32A	mm	999.900	
			in	99.9900	
172	Ejector retraction position	LS32B	mm	999.900	%9
			in	99.9900	
173	General-purpose ejector retraction position	LS32X	mm	999.900	%4
			in	99.9900	
174	Ejector speed change time	TREJ	sec	99.90	
175	Selection of ejector operation	EJEMOD		2	%13
176	Ejection count	EJECT		9	%14
177	Selection of high-pressure mold opening	HPMOPN		1	%5
178	Melt decompression speed	VSB	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
179	Cavity pressure for dwell change	CAVFPC	kgf/cm2	9999.90	%4
			bar	9999.90	
			MPa	999.990	
			PSI	99999.9	
180	Retraction limit for mold loader	LS6D	mm	9999.999	
			in	999.9999	
181	Retraction limit for purging	LS6C	mm	9999.999	
			in	999.9999	
182	Retraction limit for nozzle	LS6	mm	9999.999	
			in	999.9999	
183	Purge plate touch position	LS7B	mm	9999.999	
			in	999.9999	
184	Advance slow-down position	LS7A	mm	9999.999	
			in	999.9999	
185	Advance limit for nozzle	LS7	mm	9999.999	
			in	999.9999	
186	Nozzle retraction time	TRLS6	sec	99.99	
187	Selection of emergency stop circuit for ejector LS31	ERSSL		1	%5
188	Ejection pressure response	GAINSEL		2	%75
189	Area of mold	CLMS	cm2	9999.0	%4
			in2	999.90	
190	Core 1	Selection 1	CORE11	0101H	%15
191		Selection 2	CORE12	1	%16
192		Advance/retraction setting	CORE13	7	%17
		Retraction setting		4	%18
193	Advance setting	CORE14	3	%19	
194	Core 2	Selection 1	CORE21	0101H	%15
		Selection 2	CORE22	1	%16
		Advance/retraction setting	CORE23	7	%17
		Retraction setting		4	%18
197	Advance setting	CORE24	3	%19	
198	Core 3	Selection 1	CORE31	0101H	%15
		Selection 2	CORE32	1	%16
		Advance/retraction setting	CORE33	7	%17
		Retraction setting		4	%18
200	Advance setting	CORE34	3	%19	
201					

No.	Name	Item	Unit	Maximum value	Remarks
202	Core 4	Selection 1	CORE41	0101H	%15
203		Selection 2	CORE42	1	%16
204		Advance/retraction setting	CORE43	7	%17
		Retraction setting		4	%18
205		Advance setting	CORE44	3	%19
206	Core 5	Selection 1	CORE51	0101H	%15
207		Selection 2	CORE52	1	%16
208		Advance/retraction setting	CORE53	7	%17
		Retraction setting		4	%18
209		Advance setting	CORE54	3	%19
210	Core 6	Selection 1	CORE61	0101H	%15
211		Selection 2	CORE62	1	%16
212		Advance/retraction setting	CORE63	7	%17
		Retraction setting		4	%18
213		Advance setting	CORE64	3	%19
214	Core 7	Selection 1	CORE71	0101H	%15
215		Selection 2	CORE72	1	%16
216		Advance/retraction setting	CORE73	7	%17
		Retraction setting		4	%18
217		Advance setting	CORE74	3	%19
218	Core 8	Selection 1	CORE81	0101H	%15
219		Selection 2	CORE82	1	%16
220		Advance/retraction setting	CORE83	7	%17
		Retraction setting		4	%18
221		Advance setting	CORE84	3	%19
222	TMA core independent/sequential	COREINDE		1	%20
223	Filing speed, gradient control coefficient, acceleration/deceleration time (manual)	INJSLOPE	ms	999	%21
224	Dwelling, gradient control coefficient, pressure increase/decrease time (manual)	HLDSLOPE	ms	999	%22
225	General-purpose output 1	UNOUT1		7	
226	General-purpose output 2	UNOUT2		7	
227	General-purpose output 3	UNOUT3		7	
228	General-purpose output 4	UNOUT4		7	
229	General-purpose output 5	UNOUT5		7	
230	General-purpose output 6	UNOUT6		7	
231	General-purpose output 7	UNOUT7		7	
232	General-purpose output 8	UNOUT8		7	
233	General-purpose output 9	UNOUT9		7	
234	General-purpose output 10	UNOUT10		7	
235	Selection of injection speed	VIMAG		3	%23
236	Selection of nozzle operation	NZLMOD		3	%24
237	Shut-off nozzle	SOFFNZL		2	%25
238	Clamping pump unloading	PMPULD		1	%5
239	Selection of separating circuit for clamping and injection	SPINJCLP		1	%5
240	Selection of mold unloader retraction limit	DIEOFF		1	%5
241	Mold opening/closing during charging	CLPINCHG		1	%5
242	Selection of ejector advance limit 2	EJELMT2		1	%31
243	Selection of repeated ejector retraction	REPEJE		1	%26
244	Selection of vent plug	VENT		2	%27
245	Vacuum pump	VPMP		2	%28
246	Air blow mode	AIRAPRY		5	%29
247	Purging before production	APRDPURG		1	%5
248	Purging for interruption restart	INTSTUP		1	%5
249	Startup for interruption restart	INTUP		1	%5
250	Automatic start/stop condition	UPSTP		2	%30
251	General-purpose timer 1	UNTMR1	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
252	General-purpose timer 2	UNTMR2	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
253	General-purpose timer 3	UNTMR3	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	

No.	Name	Item	Unit	Maximum value	Remarks
254	General-purpose timer 4	UNTMR4	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
255	General-purpose timer 5	UNTMR5	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
256	General-purpose timer 6	UNTMR6	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
257	General-purpose timer 7	UNTMR7	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
258	General-purpose timer 8	UNTMR8	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
259	General-purpose timer 9	UNTMR9	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
260	General-purpose timer 10	UNTMR10	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
261	General-purpose timer 11	UNTMR11	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
262	General-purpose timer 12	UNTMR12	sec	999.9	
			shot	9999	
			min	99999	
			H	99999	
			count	99999	
263	General-purpose timer 13	UNTMR13	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
264	General-purpose timer 14	UNTMR14	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
265	General-purpose timer 15	UNTMR15	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
266	General-purpose timer 16	UNTMR16	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
267	General-purpose timer 17	UNTMR17	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	

No.	Name	Item	Unit	Maximum value	Remarks
268	General-purpose timer 18	UNTMR18	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
269	General-purpose timer 19	UNTMR19	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
270	General-purpose timer 20	UNTMR20	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
271	General-purpose timer 21	UNTMR21	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
272	General-purpose timer 22	UNTMR22	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
273	General-purpose timer 23	UNTMR23	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
274	General-purpose timer 24	UNTMR24	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
275	General-purpose timer 25	UNTMR25	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
276	General-purpose timer 26	UNTMR26	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
277	General-purpose timer 27	UNTMR27	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
278	General-purpose timer 28	UNTMR28	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
279	General-purpose timer 29	UNTMR29	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
280	General-purpose timer 30	UNTMR30	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
281	General-purpose timer 31	UNTMR31	sec	999.9	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	

No.	Name	Item	Unit	Maximum value	Remarks
282	General-purpose timer 32	UNTMR32	sec	999.99	
			shot	9999	
			min	99999	
			time	99999	
			count	99999	
283	Ejector holding time	TR30	sec	999.99	
284	Core 1 advance time	TRADV1	sec	99.99	
285	Core 2 advance time	TRADV2	sec	99.99	
286	Core 3 advance time	TRADV3	sec	99.99	
287	Core 4 advance time	TRADV4	sec	99.99	
288	Core 5 advance time	TRADV5	sec	99.99	
289	Core 6 advance time	TRADV6	sec	99.99	
290	Core 7 advance time	TRADV7	sec	99.99	
291	Core 8 advance time	TRADV8	sec	99.99	
292	Core 1 retraction time	TRRET1	sec	99.99	
293	Core 2 retraction time	TRRET2	sec	99.99	
294	Core 3 retraction time	TRRET3	sec	99.99	
295	Core 4 retraction time	TRRET4	sec	99.99	
296	Core 5 retraction time	TRRET5	sec	99.99	
297	Core 6 retraction time	TRRET6	sec	99.99	
298	Core 7 retraction time	TRRET7	sec	99.99	
299	Core 8 retraction time	TRRET8	sec	99.99	
300	Air blow timer [air blow on stationary side]	TR41	sec	999.99	
301	Air blow timer [air blow delay on stationary side]	TR41DLY	sec	999.99	
302	Air blow timer [air blow on movable side]	TR42	sec	999.99	
303	Air blow timer [air blow delay on movable side]	TR42DLY	sec	999.99	
304	Purging time before production	BPRDPT	sec	999.99	
305	Purging and charging time before production	BPRDCT	sec	999.99	
306	Purging time after production	APRDPT	sec	999.99	
307	Purging and charging time after production	APRDCT	sec	999.99	
308	Unload timer	TR17	sec	999.99	
309	Interruption detection timer	TR111	sec	999.99	
310	Remote speed setting	VRMG1	%	99.0	
311		VRMG2	%	99.0	
312		VRMG3	%	99.0	
313		VRMG4	%	99.0	
314	General-purpose remote speed	VTX11	%	99.0	
315		VTX12	%	99.0	
316		VTX21	%	99.0	
317		VTX22	%	99.0	
318	Remote pressure setting	PRMG1	%	99.0	
319		PRMG2	%	99.0	
320		PRMG3	%	99.0	
321		PRMG4	%	99.0	
322	General-purpose remote pressure	PRX11	%	99.0	
323		PRX12	%	99.0	
324		PRX21	%	99.0	
325		PRX22	%	99.0	
326	Mold change after production	MCHNG		1	%5
327	Color/resin change after production	CCHNG		1	%5
328	Resin purging after production	PAPON		1	%5
329	Selection of peak cut	FPCSLPSEL		1	%5
330	Limit value for filling time	PFIL	sec	999.99	
331	Limit value for charging time	PCHG	sec	999.99	
332	Limit value for cycle time	PCYCL	sec	9999.99	%1
333	Reference value as filling time	FILLSTD	sec	999.99	
334	Reference value as charging time	CHGSTD	sec	999.99	
335	Reference value as take-out time	TAKESTD	sec	999.99	
336	Reference value as cycle time	CYCLSTD	sec	9999.99	%1
337	Reference value as minimum cushion	MINSTD	mm	999.999	%4
			in	99.9999	
338	Reference value as cushion position	CUSSTD	mm	999.999	%4
			in	99.9999	
339	Reference value as dwell change position	SHIFTSTD	mm	999.999	%4
			in	99.9999	
340	Reference value as injection start	STARTSTD	mm	999.999	%4
			in	99.9999	
341	Reference value as maximum injection pressure	INJPKSTD	kgf/cm2	9999.00	%4
			bar	9999.00	
			MPa	999.000	
			PSI	99999.0	

No.	Name		Item	Unit	Maximum value	Remarks	
342	Filling time tolerance		FILLALW	sec	99.99		
343	Charging time tolerance		CHGALW	sec	99.99		
344	Take-out time tolerance		TAKEALW	sec	99.99		
345	Cycle time tolerance		CYCLALW	sec	99.99	%1	
346	Minimum cushion tolerance		MINMALW	mm	99.999	%4	
				in	9.9999	%38	
347	Reserved						
348	Cushion position tolerance		CUSMALW	mm	99.999	%4	
				in	9.9999	%38	
349	Reserved						
350	Dwell change position tolerance		SHIFALW	mm	99.999	%4	
				in	9.9999		
351	Injection start tolerance		STARTALW	mm	99.999	%4	
				in	9.9999		
352	Maximum injection pressure tolerance		INJPKMALW	kgf/cm2	999.00	%4	
				bar	999.00		
				MPa	99.000		
				PSI	9999.0		
353	Reserved						
354	Selection of process alarm output		PRCSALM		—	%33	
355	Selection of monitoring alarm output		MNTALM		—	%34	
356	Mold separation value monitoring		CLAMPSEL		1	%5	
357	Initial value for monitoring		MNTSHT	shot	99999		
358	Number of consecutive alarms		STOPALM	shot	99999		
359	Statistical method for monitoring data		MNTST		1	%35	
360	Setting of the number of monitoring statistics		MNTSTSHT	shot	99999		
361	Reserved						
362	Manned/unmanned		MANNED		1	%37	
363	Reference value as pressure for dwell change		SHIFPSTD	kgf/cm2	9999.00	%4	
				bar	9999.00		
				MPa	999.900		
				PSI	99999.0		
364	Tolerance of pressure for dwell change		SHIFPALW	kgf/cm2	999.00	%4	
				bar	999.00		
				MPa	99.900		
				PSI	9999.0		
365	Reserved						
366	Reserved						
367	Reserved						
368	Remote pressure setting		P1RMG1	%	99.0		
369	Remote pressure setting		P1RMG2	%	99.0		
370	Injection pressure setting		PSI1	kgf/cm2	200.00	%46	
				bar	200.00		
				MPa	20.000		
				PSI	3000.0		
371	Mold clamping pressure setting		PSM1	kgf/cm2	200.00	%46	
				bar	200.00		
				MPa	20.000		
				PSI	3000.0		
372	Charging pressure setting		PSC1	kgf/cm2	200.00	%46	
				bar	200.00		
				MPa	20.000		
				PSI	3000.0		
373	Injection-waveform vertical axis	Pressure	INJSCLVP			%47	
Speed							
374		Position	INJSCLVX		6	%48	
375	Charging-waveform vertical axis (Oil pressure) (Electric)	Back pressure	CHGSCLVB		4	%49	
376		Screw Rotation		CHGSCLVS		5	%50
		Torque					%51
377	Reference value as screw rotation speed		SRNSTD	rpm	999		
378	Screw rotation speed tolerance		SRNALW	rpm	99		
379	Filling pressure PI3		PI3	kgf/cm2	4000.00		
				bar	4000.00		
				MPa	400.000		
				PSI	99999.0		
				%	99.0		
380	Filling pressure PI4		PI4	kgf/cm2	4000.00		
				bar	4000.00		
				MPa	400.000		
				PSI	99999.0		
				%	99.0		

No.	Name	Item	Unit	Maximum value	Remarks
381	Filling pressure change position	LS4Z2	mm	999.999	
			in	99.9999	
382	Filling pressure change position	LS4Z3	mm	999.999	
			in	99.9999	
383	Remote pressure setting	P1RMG3	%	99.0	
384	Remote pressure setting	P1RMG4	%	99.0	
385	Remote mold retraction speed	MOVRMT	mm/sec	999.9	
			in/sec	99.99	
386	Remote mold retraction pressure	MOPRMT	%	99.9	
387	Remote mold advance speed	MCVRMT	mm/sec	999.9	
			in/sec	99.00	
388	Remote mold advance pressure	MCPRMT	%	99.9	
389	Remote ejector advance speed	EJFVRMT	mm/sec	999.9	
			in/sec	99.99	
390	Remote ejector advance pressure	EJFPRMT	tf	99.9	
			tf(US)	99.9	
			kN	999	
391	Remote ejector retraction speed	EJRVRMT	mm/sec	999.9	
			in/sec	99.99	
392	Remote ejector retraction pressure	EJRPRMT	tf	99.9	
			tf(US)	99.9	
			kN	999	
393	Ejector compression	EPRSEL		1	%5
394	Compression change	EPRACT		1	%52
395	Compression steps	EPRPS		6	
396	Compression start timing	EPRPST		2	%53
397	Completion position	EPRPSP		1	%54
398	Compression delay timer	EPTRTD	sec	99.99	
399	Pressing pressure	EPRP1	tf	99.99	
			kN	999.9	
400	Pressing pressure	EPRP2	tf	99.99	
			kN	999.9	
401	Pressing pressure	EPRP3	tf	99.99	
			kN	999.9	
402	Pressing pressure	EPRP4	tf	99.99	
			kN	999.9	
403	Pressing pressure	EPRP5	tf	99.99	
			kN	999.9	
404	Pressing pressure	EPRP6	tf	99.99	
			kN	999.9	
405	Press speed	EPRV1	mm/sec	999.9	
406	Press speed	EPRV2	mm/sec	999.9	
407	Press speed	EPRV3	mm/sec	999.9	
408	Press speed	EPRV4	mm/sec	999.9	
409	Press speed	EPRV5	mm/sec	999.9	
410	Press speed	EPRV6	mm/sec	999.9	
411	Press time	EPRT1	sec	99.99	
412	Press time	EPRT2	sec	99.99	
413	Press time	EPRT3	sec	99.99	
414	Press time	EPRT4	sec	99.99	
415	Press time	EPRT5	sec	99.99	
416	Press time	EPRT6	sec	99.99	
417	Press position	EPRL31E1	mm	999.999	
418	Press position	EPRL31E2	mm	999.999	
419	Press position	EPRL31E3	mm	999.999	
420	Press position	EPRL31E4	mm	999.999	
421	Press position	EPRL31E5	mm	999.999	
422	Press position	EPRL31E6	mm	999.999	
423	Gain change	EPRGAIN1		1	%55
424	Gain change	EPRGAIN2		1	%55
425	Gain change	EPRGAIN3		1	%55
426	Gain change	EPRGAIN4		1	%55
427	Gain change	EPRGAIN5		1	%55
428	Gain change	EPRGAIN6		1	%55
429	Reserved				
430	Reserved				
431	Reserved				
432	Reserved				
433	Reserved				
434	Reserved				
~					
453	Reserved				

No.	Name	Item	Unit	Maximum value	Remarks
454	Injection-waveform vertical axis	Clamping force		4	%59
		Cavity pressure		5	%59
455	Monitoring zone selection 1	EJWTSSEL1		1	%5
456	Monitoring zone 1A	EJWTSLS1A	mm	999.900	
			in	99.9900	
457	Monitoring zone 1B	EJWTSLS1B	mm	999.900	
			in	99.9900	
458	Acceptable variation range 1	EJWTTTRQ1	%	100.0	
459	Operation stop alarm count 1	EJWTCNT1		99	
460	Monitoring zone selection 2	EJWTSSEL2		1	%5
461	Monitoring zone 2A	EJWTSLS2A	mm	999.900	
			in	99.9900	
462	Monitoring zone 2B	EJWTSLS2B	mm	999.900	
			in	99.9900	
463	Acceptable variation range 2	EJWTTTRQ2	%	100.0	
464	Operation stop alarm count 2	EJWTCNT2		99	
465	Vertical axis of ejection torque waveform	EJESCALE	%	99.0	
466	Monitoring zone selection 1	MDWTSSEL1		1	%5
467	Monitoring zone 1A	MDWTSLS1A	mm	9999.900	
			in	999.9900	
468	Monitoring zone 1B	MDWTSLS1B	mm	9999.900	
			in	999.9900	
469	Mold protection force 1A	MDWTPRS1A	tf	999.99	
			tf(US)	999.99	
			kN	9999.9	
470	Mold protection force 1B	MDWTPRS1B	tf	999.99	
			tf(US)	999.99	
			kN	9999.9	
471	Operation stop alarm count 1	MDWTCNT1		99	
472	Monitoring zone selection 2	MDWTSSEL2		1	%5
473	Monitoring zone 2A	MDWTSLS2A	mm	9999.900	
			in	999.9900	
474	Monitoring zone 2B	MDWTSLS2B	mm	9999.900	
			in	999.9900	
475	Mold protection force 2A	MDWTPRS2A	tf	999.99	
			tf(US)	999.99	
			kN	9999.9	
476	Mold protection force 2B	MDWTPRS2B	tf	999.99	
			tf(US)	999.99	
			kN	9999.9	
477	Operation stop alarm count 2	MDWTCNT2		99	
478	Vertical axis of clamping force conversion waveform	MLDSCALE	tf	9999.99	
			tf(US)	9999.99	
			kN	99999.9	
479	Selection of PCL zone detection mode	MPPCLSEL		1	%62
480	PCL zone monitoring time	MPPCLTIM	sec	99.99	
481	VHI speed selection	VHISPD		1	%5
482	VHI pressure selection	VHIPRS		1	%5
483	Injection speed [automatic purging]	VIPG	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
484	Injection pressure [automatic purging]	PIPG	kgf/cm2	4000.00	%4
			bar	4000.00	
			PSI	99999.0	
			MPa	400.000	
			%	99.0	
485	Injection time [automatic purging]	TR1PG	sec	999.99	%1
486	Purging count [automatic purging]	CNTPG	count	999	
487	Purging completion position [automatic purging]	LS5PG	mm	999.990	%4
			in	99.9990	
488	Charging rotation speed [automatic purging]	SRNPG	rpm	999	
			%	99.0	
489	Back pressure [automatic purging]	BPPG	kgf/cm2	999.00	%4
			bar	999.00	
			MPa	99.000	
			PSI	9999.0	
			%	99.0	
490	First charging time [automatic purging]	TRPGA	sec	999.99	%1
491	Charging time for screw advance limit [automatic purging]	TRPGB	sec	999.99	%1
492	Charging time for screw retraction limit	TRPGC	sec	999.99	%1
493	Selection of back pressure	PGBPSEL		1	%5
494	Charging delay timer	TRCHGDLY	sec	99.99	%63

No.	Name		Item	Unit	Maximum value	Remarks
495	Ejection delay timer		TREJEDLY	sec	99.99	
496	Selection of synchronization between air blow and ejection		AIRWEJESEL		1	%5
497	Selection of FF control		INJFFSL		2	%71
498	Dwell shutdown speed		VHD	mm/sec	400.0	%4
				in/sec	40.00	
499	Pre-injection 1 selection		SPREINJ1		1	%5
500	Pre-injection 1 speed		VPI1	mm/sec	999.9	%4
				in/sec	99.99	
501	Pre-injection 1 pressure		PPI1	kgf/cm2	4000.00	%4
				bar	4000.00	
				MPa	400.000	
				PSI	99999.0	
502	Pre-injection 1 time		TRPI	sec	9.99	
503	Pre-injection 2 position		SPREINJ2		1	%5
504	Pre-injection 2 speed		VPI2	mm/sec	999.9	%4
				in/sec	99.99	
505	Pre-injection 2 position		LS10B	mm	9.900	%4
				in	9.9990	
506	Screw reverse 1 selection		SINVCHG1		1	%5
507	Screw reverse 1 speed		SRNI1	min-1	999	
508	Screw reverse 1 time		TRIT1	sec	9.99	
509	Screw reverse 2 selection		SINVCHG2		1	%5
510	Screw reverse 2 speed		SRNI2	min-1	999	
511	Reserved					
512	CEF control		CEFSEL		1	%5
513	Start position		CEFSTR		13	%56
514	End position		CEFSTP		13	%56
515	Alarm selection		CEFALM		1	%5
516	Reference value	Presence/absence	CEFDATEN		2	%57
517		Area 1	CEFAREA1		-	%58
~		~	~			
626		Area 110	CEFAREA110		-	%58
627	Selection of LAP circuit		LAPSEL		1	
628	LAP circuit ejection delay		LAPIJDLY	sec	9.999	
629	LAP circuit lock-up delay		LAPPSDLY	sec	9.999	
630	Lock-up speed		MCPSLAP	mm/sec	999.9	%4
				in/sec	99.99	
631	Remote tie rod retraction speed		TVRRMG	mm/sec	999.9	
				in/sec	99.99	
0632	Remote tie rod retraction force		TPRRMG	tf	99.99	
				tf(US)	99.99	
				kN	999.9	
633	Remote tie rod advance speed		TVFRMG	mm/sec	999.9	
				in/sec	99.99	
634	Remote tie rod advance force		TPFRMG	tf	99.99	
				tf(US)	99.99	
				kN	999.9	
635	Tie rod retraction position		TBLS3X	mm	99.999	
636	Tie rod advance position		TBLS2X	mm	99.999	
637	Reference value as mold opening time		MOTIMESTD	sec	999.99	
638	Reference value as mold closing time		MCTIMESTD	sec	999.99	
639	Reference value as ejection time		EJETIMESTD	sec	999.99	
640	Reference value as safety door opening time		SDOTIMESTD	sec	999.99	
641	Reference value as mold separation value		CLAMPSTD	mm	999.999	
				in	99.9999	
642	Reference value as die retraction limit		CLPENDSTD	mm	9999.9	
				in	999.9900	
643	Reference value as injection stroke		INJSTSTD	mm	999.99	
				in	99.9990	
644	Reference value as maximum injection stroke		INJSTMAXSTD	mm	999.99	
				in	99.9990	
645	Reference value as LS4A injection pressure		INJPLS4ASTD	kgf/cm2	9999.00	
				bar	9999.00	
				MPa	999.900	
				PSI	99999.0	
646	Reference value as LS4B injection pressure		INJPLS4BSTD	kgf/cm2	9999.00	
				bar	9999.00	
				MPa	999.900	
				PSI	99999.0	
647	Reference value as LS4C injection pressure		INJPLS4CSTD	kgf/cm2	9999.00	
				bar	9999.00	
				MPa	999.900	
				PSI	99999.0	

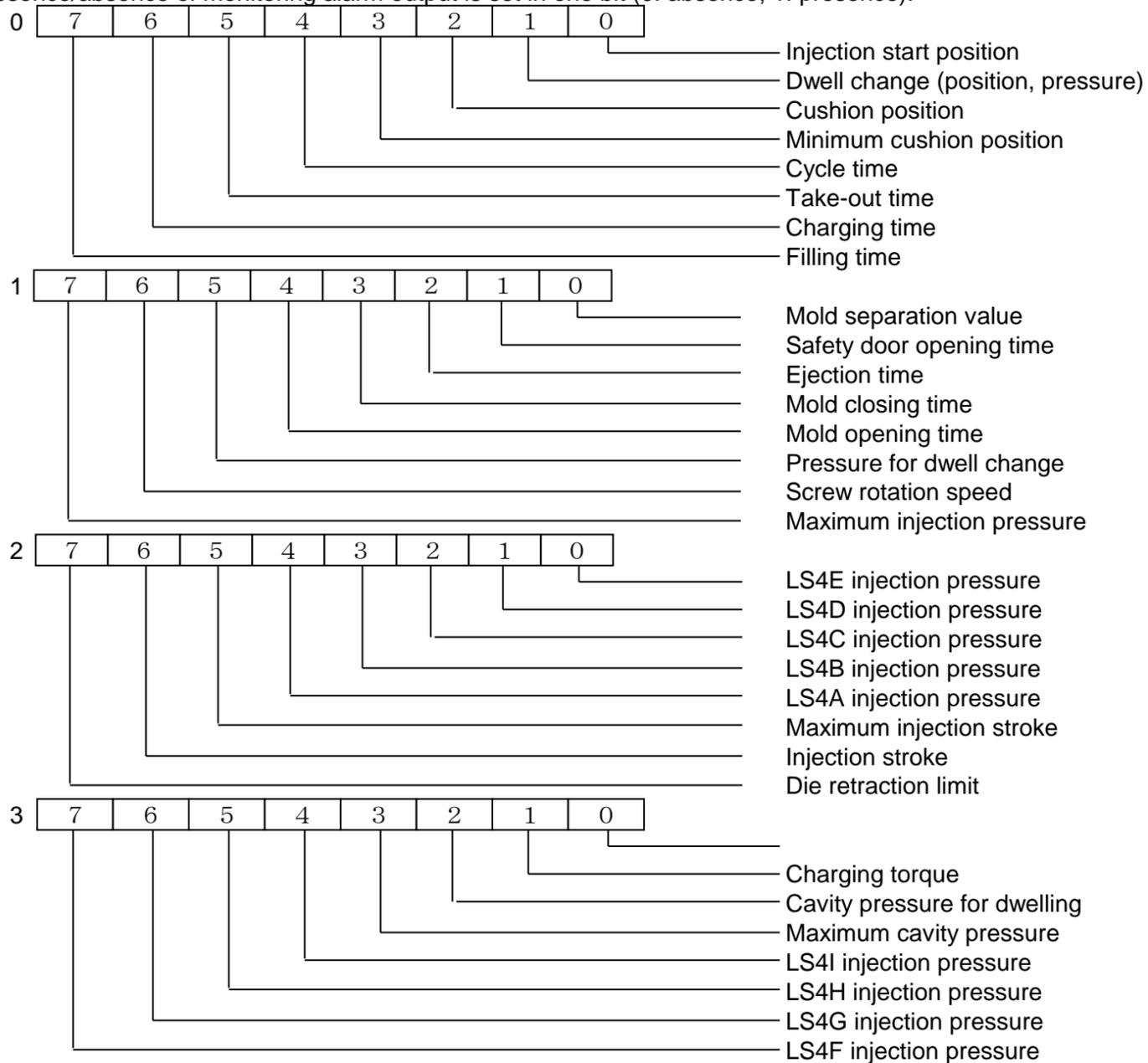
No.	Name	Item	Unit	Maximum value	Remarks
648	Reference value as LS4D injection pressure	INJPLS4DSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
649	Reference value as LS4E injection pressure	INJPLS4ESTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
650	Reference value as LS4F injection pressure	INJPLS4FSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
651	Reference value as LS4G injection pressure	INJPLS4GSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
652	Reference value as LS4H injection pressure	INJPLS4HSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
653	Reference value as LS4I injection pressure	INJPLS4ISTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
654	Reference value as maximum cavity pressure	CAVMAXSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
655	Reference value as cavity pressure for dwelling	CAVHLDSTD	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
656	Mold opening time tolerance	MOTIMEALW	sec	99.99	
657	Mold closing time tolerance	MCTIMEALW	sec	99.99	
658	Ejection time tolerance	EJETIMEALW	sec	99.99	
659	Safety door opening time tolerance	SDOTIMEALW	sec	99.99	
660	Tolerance of mold separation value	CLAMPALW	mm	99.999	
			in	9.9999	
661	Die retraction limit tolerance	CLPENDALW	mm	999.9	
			in	99.9900	
662	Injection stroke tolerance	INJSTALW	mm	99.99	
			in	9.9990	
663	Maximum injection stroke tolerance	INJSTMAXALW	mm	99.99	
			in	9.9990	
664	LS4A injection pressure tolerance	INJPLS4AALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
665	LS4B injection pressure tolerance	INJPLS4BALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
666	LS4C injection pressure tolerance	INJPLS4CALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
667	LS4D injection pressure tolerance	INJPLS4DALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
668	LS4E injection pressure tolerance	INJPLS4EALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
669	LS4F injection pressure tolerance	INJPLS4FALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
670	LS4G injection pressure tolerance	INJPLS4GALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	

No.	Name	Item	Unit	Maximum value	Remarks
671	LS4H injection pressure tolerance	INJPLS4HALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
672	LS4I injection pressure tolerance	INJPLS4IALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
673	Maximum cavity pressure tolerance	CAVMAXALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
674	Tolerance of cavity pressure for dwelling	CAVHLDALW	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
675	L-statistic sampling count	LSTSMP	shot	99999	
676	Purge mode	PGMODE		2	%73
677	Selection of completion	ENDSEL		1	%74
678	Automatic purging time	AUTOPG	sec	999.99	
679	Rotation time	SRNTIME	sec	999.99	
680	LS4PG [automatic purging]	LS4PG	mm	99.990	
			in	9.9990	
681	Selection of FPC speed reduction	FPCSETSEL		4	
682	Mold code	MTCOD1	digits	20+null	%42
683		MTCOD2			
684		MTCOD3			
685		MTCOD4			
686		MTCOD5			
687		MTCOD6			
688	Resin code	MOLDCOD1	digits	20+null	%42
689		MOLDCOD2			
690		MOLDCOD3			
691		MOLDCOD4			
692		MOLDCOD5			
693		MOLDCOD6			
694	Lower limit for charging torque	CHGTRQLO	%	99.0	
695	Upper limit for charging torque	CHGTRQHI	%	99.0	
696	Stop operation - cycle time	CYLSTPSEL		2	%67
697	Stop operation - filling time	FILSTPSEL		1	%68
698	Stop operation - charging time	CHGSTPSEL		1	%68
699	Stop operation - PI alarm	PIASTPSEL		1	%68
700	Stop operation - mold protection	MLDSTPSEL		5	&69
701	Stop operation - charging torque lowering	CTQLSTPSEL		1	%68
702	Stop operation - charging torque exceeding	CTQHSTPSEL		1	%68
703	Stop operation - consecutive alarms	NSHTSTPSEL		1	%68
704	Selection of manned operation mode for signal tower lighting	SIGOFFA		1	%68
705	Selection of unmanned operation mode for signal tower lighting	SIGOFFB		1	%68
706	Selection of manned operation mode for buzzer warning	BZOFFA		1	
707	Selection of manned operation mode for buzzer warning	BZOFFB		1	
708	Try-again count	TRYAGAIN		99	
709	Selection of waveform drawing	SCLVSEL		1	%70
710	Vertical axis - maximum injection pressure	SCLIPRVH	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
711	Vertical axis - minimum injection pressure	SCLIPRVL	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
712	Vertical axis - maximum injection speed	SCLISPVH	mm/sec	9999.0	
			in/sec	999.90	
713	Vertical axis - minimum injection speed	SCLISPVL	mm/sec	9999.0	
			in/sec	999.90	
714	Vertical axis - maximum mold clamping pressure	SCLCPRVH	kN	99999	
			tf	9999	
			tf(US)	9999	
			kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	

No.	Name	Item	Unit	Maximum value	Remarks
715	Vertical axis - minimum mold clamping pressure	SCLCPRVL	kN	99999	
			tf	9999	
			tf(US)	9999	
			kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
716	Vertical axis - maximum cavity pressure	SCLCAVVH	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
717	Vertical axis - minimum cavity pressure	SCLCAVVL	kgf/cm2	9999.00	
			bar	9999.00	
			MPa	999.900	
			PSI	99999.0	
718	Vertical axis - maximum back pressure	SCLBPVH	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
719	Vertical axis - minimum back pressure	SCLBPVL	kgf/cm2	999.00	
			bar	999.00	
			MPa	99.900	
			PSI	9999.0	
720	Vertical axis - maximum torque (electric) - maximum rotation speed (oil pressure)	SCLTRQVH	%	99.0	
			min-1	999	
721	Vertical axis - minimum torque (electric) - minimum rotation speed (oil pressure)	SCLTRQVL	%	99.0	
			min-1	999	
722	Vertical axis - maximum retraction speed	SCLCSPVH	mm/sec	99.9	
			in/sec	9.99	
723	Vertical axis - minimum retraction speed	SCLCSPVL	mm/sec	99.9	
			in/sec	9.99	
724	Vertical axis - maximum screw position	SCLPOSVH	mm	999.000	
			in	99.9900	
725	Vertical axis - minimum screw position	SCLPOSVL	mm	999.000	
			in	99.9900	
726	Injection waveform delay time	INJWVDLY	sec	999.99	
727	Injection waveform setting time	INJWVREC	sec	999.99	
728	General-purpose output	UNOUT11		1	
729		UNOUT12		1	
730		UNOUT13		1	
731		UNOUT14		1	
732		UNOUT15		1	
733		UNOUT16		1	
734		UNOUT17		1	
735		UNOUT18		1	
736		UNOUT19		1	
737		UNOUT20		1	
738		UNOUT21		1	
739		UNOUT22		1	
740		UNOUT23		1	
741		UNOUT24		1	
742		UNOUT25		1	
743		UNOUT26		1	
744		UNOUT27		1	
745		UNOUT28		1	
746		UNOUT29		1	
747		UNOUT30		1	
748	Reference value as charging torque	CHGTQSTD	%	99.9	
749	Charging torque tolerance	CHGTQALW	%	99.9	
750	Ejection speed	VE3	mm/sec	400.0	%4
			in/sec	40.00	
			%	99.0	
751	Mold name	MLDNAME1	BCD	&HFFFFFFF	%76
752	Mold name	MLDNAME2	BCD	&HFFFFFFF	%76
753	Mold name	MLDNAME3	BCD	&HFFFFFFF	%76
754	Mold name	MLDNAME4	BCD	&HFFFFFFF	%76
755	Selection of mold data link	MLDLINK		1	%77
756	Universal mold open/close position	LS3X3	mm	9999.900	%4
			in	999.9900	
757		LS3X4	mm	9999.900	
			in	999.9900	
758		LS3X5	mm	9999.900	
			in	999.9900	

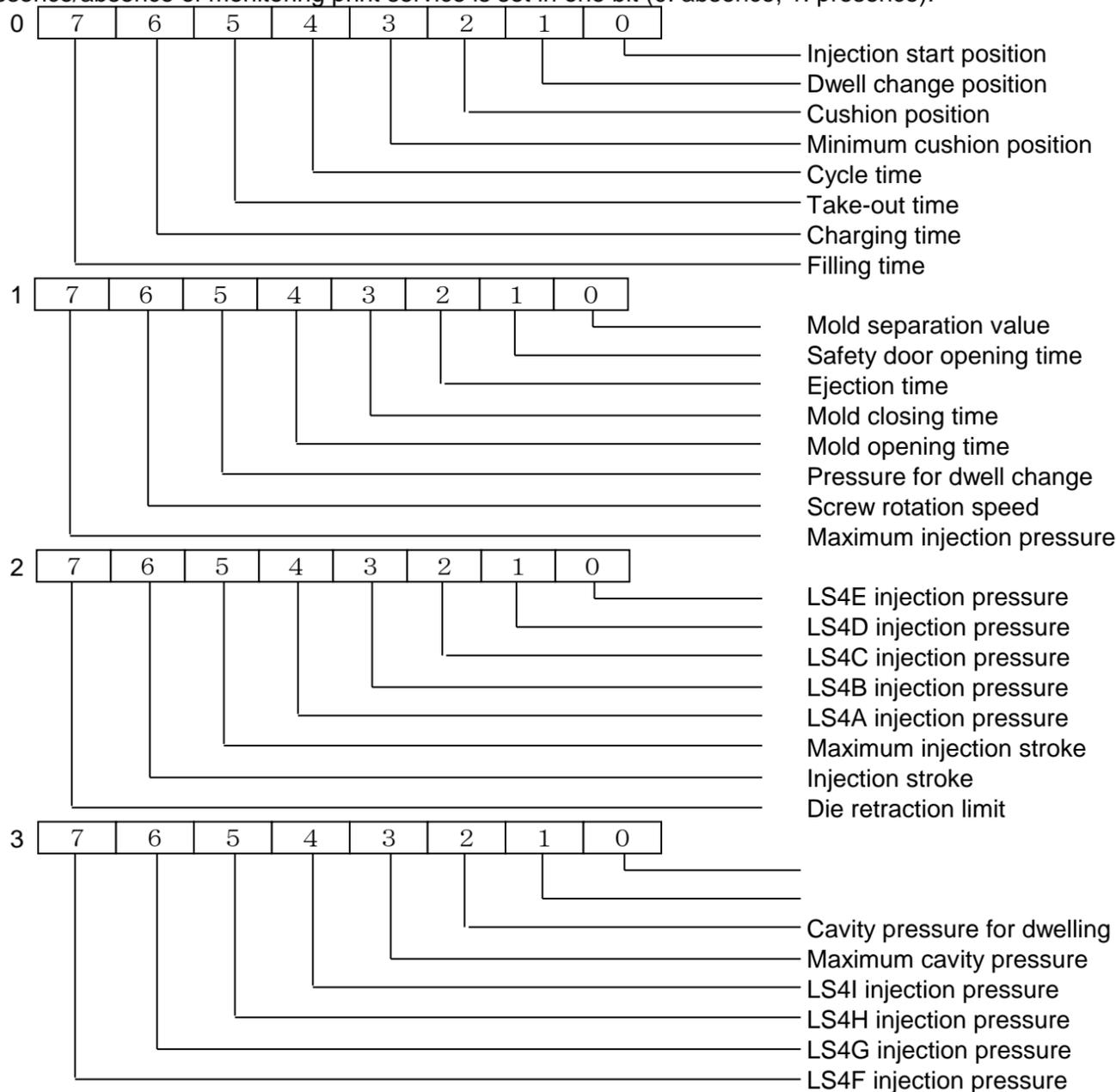


%34) Presence/absence of monitoring alarm output is set in one bit (0: absence, 1: presence).

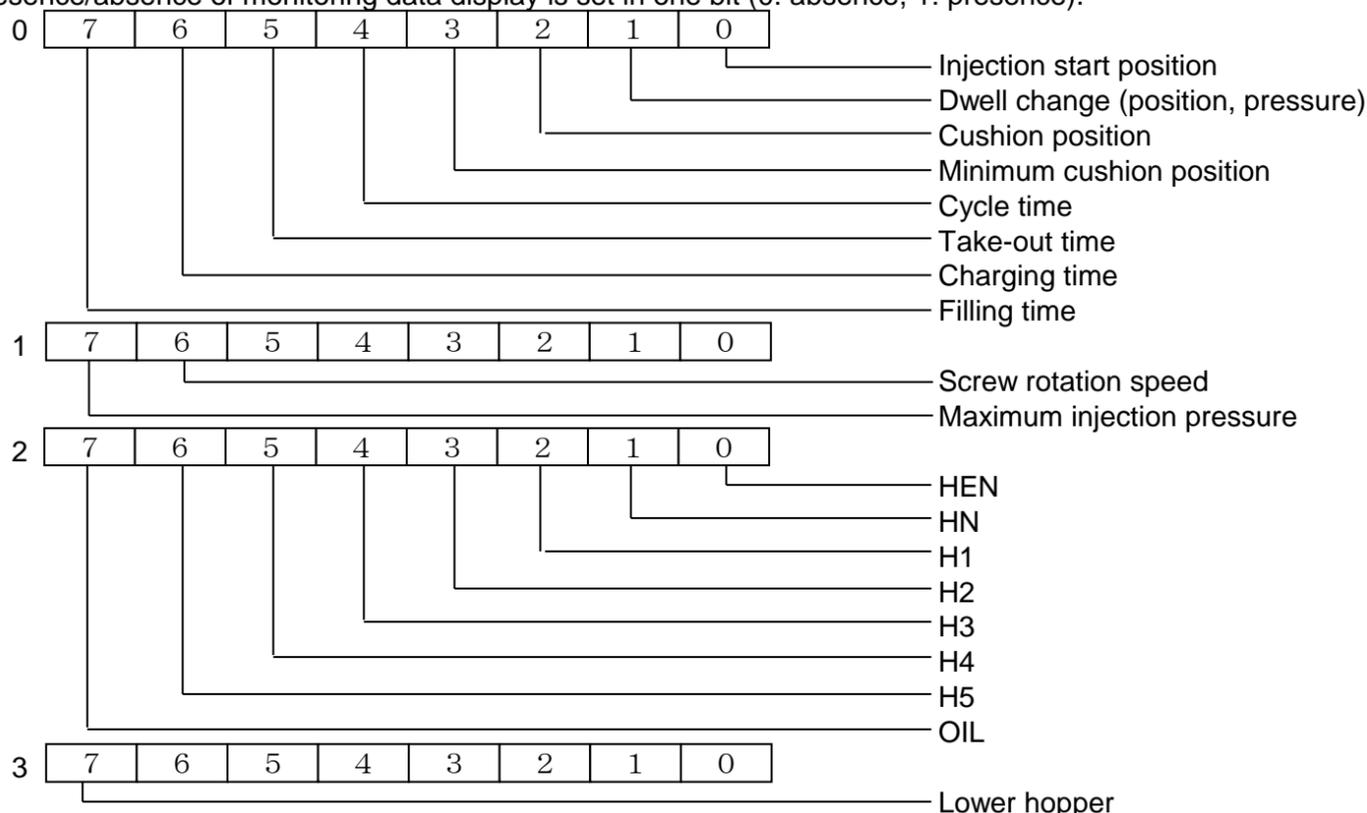


%35) Setting: 0 = Continuous, 1 = Specified value

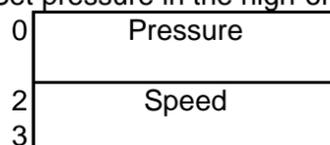
%36) Presence/absence of monitoring print service is set in one bit (0: absence, 1: presence).



- %37) Setting: 0 = Manned, 1 = Unmanned
- %38) Data is a positive value, but used as a negative value for setting and control.
- %39) The units can be changed to [Pieces] with the management method. (Not supported yet)
- %40) The units can be changed to [Minutes] by specifying their parameter.
- %41) Setting: 0 = Total shot count, 1 = OK-product shot count, 2 = Total production count, 3 = OK-product count
- %42) The number of input digits is counted as ASCII digits. For operation such as printing out data, null is to be suffixed to the data.
- %43) Setting: 0 = Continued, 1 = Stopped
- %44) Setting: 0 = Position, 1 = Oil pressure
- %45) Presence/absence of monitoring data display is set in one bit (0: absence, 1: presence).



- %46) The setting range varies depending on the unit.  
 000.00~200.00kgf/cm2(Display digit 0.1),  
 00.000~20.000MPa(Display digit 0.01),  
 000.00~200.00bar(Display digit 0.1),  
 0000.0~3000.00PSI(Display digit 1),
- %47) Set pressure in the high-order two bytes, and a vertical axis scale of speed in the low-order two bytes.



The setting of pressure varies depending on the unit.  
 Assuming that unit conversion has been performed and the value of parameter PIL rounded up to a unit of 500(kgf), 50(MPa),500(bar),5000(Psi) is X,  
 then 0,1,2,3,4 = nil/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

Speed setting:  
 0,1,2,3,4,5 = nil/50/100/150/300/600 (mm/sec)  
 0,1,2,3,4,5 = nil/2/4/6/12/24 (in/sec)

- %48) Determined by the value of P\_ISTMAX (parameter 121)  
 Assuming that the value of P\_ISTMAX rounded up to a unit of 50 (mm) is X,  
 then 0,1,2,3,4,5,6 = nil/10/20/(X\*0.25)/(X\*0.5)/(X\*0.75)/X (mm) results.  
 Determined by the value of P\_ISTMAX (parameter 121)  
 Assuming that the value of P\_ISTMAX rounded up to a unit of 1 (in is X,  
 then 0,1,2,3,4,5,6=nil/0.4/0.8/(X\*0.25)/(X\*0.5)/(X\*0.75)/X(in).

- %49) The setting of pressure varies depending on the unit.  
 Assuming that unit conversion has been performed and the value of parameter BPL rounded up to a unit of 50(kgf),5(MPa),50(bar),500(Psi) is X,  
 then 0,1,2,3,4 = nil/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

%50) 0,1,2,3,4,5 = nil/100/200/300/400/500 (rpm)

%51) 0,1,2,3,4,5 = nil/20/40/60/80/99 (%)

%52) Setting: 0 = Position, 1 = Time

%53) Setting: 0-2 = LS4PR/LS4/TR1

%54) Setting: 0 = LS32, 1 = Holding

%55) Setting: 0 = High, 1 = Low

%56) Setting: 0-13 = LS5+10/LS4A-LS4/TRH1/TRH2/TRH3

%57) Setting: 0 = None, 1 = Start Status: 0 = None, 1 = Start (during take-out), 2 = Completion

%58) Data is written collectively by recording the reference values,  
 and there is no individual data change.

%59) Set mold clamping force in the high-order two bytes, and a vertical axis scale of cavity pressure in the low-order two bytes.

0	Clamping force
2	Cavity pressure
3	

The setting of mold clamping force varies depending on the unit.

Assuming that unit conversion has been performed after multiplication of parameter PCHMARC by 1.1 and that the value of parameter PCHMARC rounded up to a unit of 10(tf),10(UStf),100(kN) is X, then 0,1,2,3,4 = nil/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

The setting of cavity pressure varies depending on the unit.

Assuming that the value of the CAV pressure calibration value rounded up to a unit of 200(kgf),20(MPa),200(bar),2000(PSI) is X, then 0,1,2,3,4,5 = nil/(X\*0.125)/(X\*0.25)/(X\*0.5)/(X\*0.75)/X results.

%61) The setting of cavity pressure varies depending on the unit.

Assuming that unit conversion has been performed and the value of PCHMARC rounded up to a unit of 40(tf),40(UStf),40(kN) is X, then 0,1,2,3,4,5,6 = nil/(X\*0.025)/(X\*0.05)/(X\*0.1)/(X\*0.2)/(X\*0.5)/X results.

%62) Setting: 0 = Time, 1 = Torque

%63) When P\_no.21(TRSEL) = 0\*\*\*\*, the minimum is 00.00, the maximum is 99.99, and the display digit is 0.01.

When P\_no.21(TRSEL) = 1\*\*\*\*, the minimum is 000.0, the maximum is 999.9, and the display digit is 0.1.

%64) Indication of the date when the molding condition was saved

0	Year(**??)
1	Year(??**)
2	Month
3	Day

Data is represented in two BCD digits.

%65) Indication of the time when the molding condition was saved

0	Hour
1	minute
2	Second
3	

Data is represented in two BCD digits.

%66) The number of input digits is counted as ASCII digits.

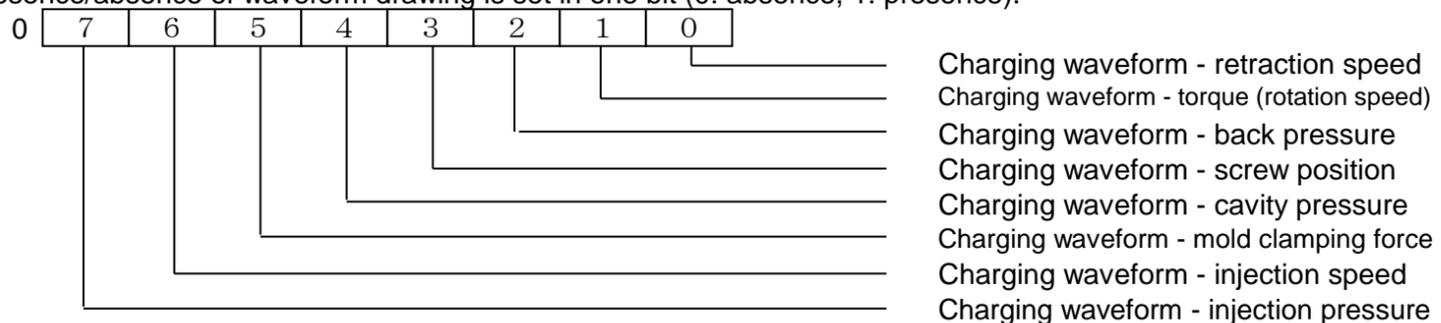
For operation such as printing out data, null is to be suffixed to the data.

%67) Setting: 0 = Immediate stopping, 1 = Stopping at mold open limit position (nozzle retraction), 2 = Stopping at mold open limit position

%68) Setting: 0 = Stopping at mold open limit position, 1 = Stopping after completion of ejection

%69) Setting: 0 = Immediate stopping, 1 = Stopping at mold open limit position, 2 = Stopping after completion of ejection, 3 = Try again (immediate stopping), 4 = Try again (stopping at mold open limit position), 5 = Try again (stopping after completion of ejection)

%70) Presence/absence of waveform drawing is set in one bit (0: absence, 1: presence).



Bytes 1 to 3 are to be filled with zeros.

Setting: 0 = None, 1 = Injection to the whole area, 2 = Filling speed 1

%72) Setting: 0 = Internal, 1 = External 1, 2 = External 2, 3 = External 3

%73) Setting: 0 = None, 1 = Program, 2 = Screw rotation

%74) Setting: 0 = Number of times, 1 = Time

%75) Setting: 0 = Slow, 1 = Medium, 2 = Fast

%76) Indicates the mold name "ABCDEFGHJKLMN" (up to 16 half-size alphanumeric characters).

MLDNAME1	ABCD
MLDNAME2	EFGH
MLDNAME3	IJKL
MLDNAME4	MNOP

Data is represented in four BCD digits.

%77) Setting: 0 = Absence, 1 = Presence

4.2 Temperature Data

No.	Name	Item	Unit	Maximum value	Remarks
769	File sorting	TMP1FORM		999	
770					
771					
772					
773					
774	HEN setting value	HENSET	°C (° F) %	600.0 (1112.0) 100.0	%1
775	HN setting value	HNSET	°C (° F) %	600.0 (1112.0) 100.0	%1
776	H1 setting value	H1SET	°C (° F) %	600.0 (1112.0) 100.0	%1
777	H2 setting value	H2SET	°C (° F) %	600.0 (1112.0) 100.0	%1
778	H3 setting value	H3SET	°C (° F) %	600.0 (1112.0) 100.0	%1
779	H4 setting value	H4SET	°C (° F) %	600.0 (1112.0) 100.0	%1
780	H5 setting value	H5SET	°C (° F) %	600.0 (1112.0) 100.0	%1
781	OIL setting value	OILSET	°C (° F) %	600.0 (1112.0) 100.0	%1
782	HEN tolerance	HENALW	°C (° F)	99.9	%1
783	HN tolerance	HNALW	°C (° F)	99.9	%1
784	H1 tolerance	H1ALW	°C (° F)	99.9	%1
785	H2 tolerance	H2ALW	°C (° F)	99.9	%1
786	H3 tolerance	H3ALW	°C (° F)	99.9	%1
787	H4 tolerance	H4ALW	°C (° F)	99.9	%1
788	H5 tolerance	H5ALW	°C (° F)	99.9	%1
789	OIL tolerance	OILALW	°C (° F)	99.9	%1
790	H1 screw stop temperature	H1SCSTP	°C (° F)	-99.9	
791	H2 screw stop temperature	H2SCSTP	°C (° F)	-99.9	
792	H3 screw stop temperature	H3SCSTP	°C (° F)	-99.9	
793	H4 screw stop temperature	H4SCSTP	°C (° F)	-99.9	
794	H5 screw stop temperature	H5SCSTP	°C (° F)	-99.9	
795	Reserved				
796	Reserved				
797	Reserved				
798	Reserved				
799	Reserved				
800	Reserved				
801	Reserved				
802	Reserved				
803	Reserved				
804	Reserved				
805	Reserved				
806	Reserved				
807	Reserved				
808	Reserved				
809	Reserved				
810	Reserved				
811	Reserved				

No.	Name	Item	Unit	Maximum value	Remarks
812	Reserved				
813	Reserved				
814	Reserved				
815	Selection of alarm output	HALM		—	%2
816	Reserved				
817	Reserved				
818	Reserved				
819	Selection of H1 blower	H1BLW		2	%4
820	Selection of H2 blower	H2BLW		2	%4
821	Selection of H3 blower	H3BLW		2	%4
822	Selection of H4 blower	H4BLW		2	%4
823	Selection of H5 blower	H5BLW		2	%4
824	Lower-hopper temperature setting	HOPSET	°C (° F) %	500.0 (932.0) 100.0	%1
825	Lower-hopper temperature tolerance	HOPALW	°C (° F)	99.9	%1
826	Reserved				
827	Reserved				
828	Reserved				
829	HM11 setting value	HM11SET	°C (° F) %	600.0 (1112.0) 100.0	%1
830	HM12 setting value	HM12SET	°C (° F) %	600.0 (1112.0) 100.0	%1
831	HM13 setting value	HM13SET	°C (° F) %	600.0 (1112.0) 100.0	%1
832	HM14 setting value	HM14SET	°C (° F) %	600.0 (1112.0) 100.0	%1
833	HM15 setting value	HM15SET	°C (° F) %	600.0 (1112.0) 100.0	%1
834	HM16 setting value	HM16SET	°C (° F) %	600.0 (1112.0) 100.0	%1
835	HM17 setting value	HM17SET	°C (° F) %	600.0 (1112.0) 100.0	%1
836	HM18 setting value	HM18SET	°C (° F) %	600.0 (1112.0) 100.0	%1
837	HM11 tolerance	HM11ALW	°C (° F)	99.9	%1
838	HM12 tolerance	HM12ALW	°C (° F)	99.9	%1
839	HM13 tolerance	HM13ALW	°C (° F)	99.9	%1
840	HM14 tolerance	HM14ALW	°C (° F)	99.9	%1
841	HM15 tolerance	HM15ALW	°C (° F)	99.9	%1
842	HM16 tolerance	HM16ALW	°C (° F)	99.9	%1
843	HM17 tolerance	HM17ALW	°C (° F)	99.9	%1
844	HM18 tolerance	HM18ALW	°C (° F)	99.9	%1
845	HM11 P item	HM11P	°C (° F)	999.9	%1
846	HM12 P item	HM12P	°C (° F)	999.9	%1
847	HM13 P item	HM13P	°C (° F)	999.9	%1
848	HM14 P item	HM14P	°C (° F)	999.9	%1
849	HM15 P item	HM15P	°C (° F)	999.9	%1
850	HM16 P item	HM16P	°C (° F)	999.9	%1
851	HM17 P item	HM17P	°C (° F)	999.9	%1

No.	Name	Item	Unit	Maximum value	Remarks
852	HM18 P item	HM18P	°C (° F)	999.9	%1
853	HM11 I item	HM11I	sec	3600	
854	HM12 I item	HM12I	sec	3600	
855	HM13 I item	HM13I	sec	3600	
856	HM14 I item	HM14I	sec	3600	
857	HM15 I item	HM15I	sec	3600	
858	HM16 I item	HM16I	sec	3600	
859	HM17 I item	HM17I	sec	3600	
860	HM18 I item	HM18I	sec	3600	
861	HM11 D item	HM11D	sec	3600	
862	HM12 D item	HM12D	sec	3600	
863	HM13 D item	HM13D	sec	3600	
864	HM14 D item	HM14D	sec	3600	
865	HM15 D item	HM15D	sec	3600	
866	HM16 D item	HM16D	sec	3600	
867	HM17 D item	HM17D	sec	3600	
868	HM18 D item	HM18D	sec	3600	
869	Zone selection	HM1ZONE		—	%5
870	Selection of alarm output	HM1ALM		—	%5
871	Reserved				
872	Reserved				
895	Reserved				
~					
896	Reserved				
897	File sorting	TMP2FORM		999	
898	Reserved				
899	Reserved				
900	Reserved				
901	Reserved				
902	HM21 setting value	HM21SET	°C (° F) %	600.0 (1112.0) 100.0	%1
903	HM22 setting value	HM22SET	°C (° F) %	600.0 (1112.0) 100.0	%1
904	HM23 setting value	HM23SET	°C (° F) %	600.0 (1112.0) 100.0	%1
905	HM24 setting value	HM24SET	°C (° F) %	600.0 (1112.0) 100.0	%1
906	HM25 setting value	HM25SET	°C (° F) %	600.0 (1112.0) 100.0	%1
907	HM26 setting value	HM26SET	°C (° F) %	600.0 (1112.0) 100.0	%1
908	HM27 setting value	HM27SET	°C (° F) %	600.0 (1112.0) 100.0	%1
909	HM28 setting value	HM28SET	°C (° F) %	600.0 (1112.0) 100.0	%1
910	HM21 tolerance	HM21ALW	°C (° F)	99.9	%1
911	HM22 tolerance	HM22ALW	°C (° F)	99.9	%1
912	HM23 tolerance	HM23ALW	°C (° F)	99.9	%1
913	HM24 tolerance	HM24ALW	°C (° F)	99.9	%1
914	HM25 tolerance	HM25ALW	°C (° F)	99.9	%1
915	HM26 tolerance	HM26ALW	°C (° F)	99.9	%1
916	HM27 tolerance	HM27ALW	°C (° F)	99.9	%1
917	HM28 tolerance	HM28ALW	°C (° F)	99.9	%1
918	HM21 P item	HM21P	°C (° F)	999.9	%1
919	HM22 P item	HM22P	°C (° F)	999.9	%1

No.	Name	Item	Unit	Maximum value	Remarks
920	HM23 P item	HM23P	°C (° F)	999.9	%1
921	HM24 P item	HM24P	°C (° F)	999.9	%1
922	HM25 P item	HM25P	°C (° F)	999.9	%1
923	HM26 P item	HM26P	°C (° F)	999.9	%1
924	HM27 P item	HM27P	°C (° F)	999.9	%1
925	HM28 P item	HM28P	°C (° F)	999.9	%1
926	HM21 I item	HM21I	sec	3600	
927	HM22 I item	HM22I	sec	3600	
928	HM23 I item	HM23I	sec	3600	
929	HM24 I item	HM24I	sec	3600	
930	HM25 I item	HM25I	sec	3600	
931	HM26 I item	HM26I	sec	3600	
932	HM27 I item	HM27I	sec	3600	
933	HM28 I item	HM28I	sec	3600	
934	HM21 D item	HM21D	sec	3600	
935	HM22 D item	HM22D	sec	3600	
936	HM23 D item	HM23D	sec	3600	
937	HM24 D item	HM24D	sec	3600	
938	HM25 D item	HM25D	sec	3600	
939	HM26 D item	HM26D	sec	3600	
940	HM27 D item	HM27D	sec	3600	
941	HM28 D item	HM28D	sec	3600	
942	Zone selection	HM2ZONE		—	%6
943	Selection of alarm output	HM2ALM		—	%6
944	Reserved				
945	Reserved				
946	Reserved				
947	Reserved				
948	Reserved				
949	Reserved				
950	Reserved				
951	Reserved				
952	Reserved				
953	Reserved				
954	Reserved				
955	Reserved				
956	Reserved				
957	HM31 setting value	HM31SET	°C (° F) %	600.0 (1112.0) 100.0	%1
958	HM32 setting value	HM32SET	°C (° F) %	600.0 (1112.0) 100.0	%1
959	HM33 setting value	HM33SET	°C (° F) %	600.0 (1112.0) 100.0	%1
960	HM34 setting value	HM34SET	°C (° F) %	600.0 (1112.0) 100.0	%1
961	HM35 setting value	HM35SET	°C (° F) %	600.0 (1112.0) 100.0	%1
962	HM36 setting value	HM36SET	°C (° F) %	600.0 (1112.0) 100.0	%1
963	HM37 setting value	HM37SET	°C (° F) %	600.0 (1112.0) 100.0	%1
964	HM38 setting value	HM38SET	°C (° F) %	600.0 (1112.0) 100.0	%1
965	HM31 tolerance	HM31ALW	°C (° F)	99.9	%1
966	HM32 tolerance	HM32ALW	°C (° F)	99.9	%1
967	HM33 tolerance	HM33ALW	°C (° F)	99.9	%1

No.	Name	Item	Unit	Maximum value	Remarks
968	HM34 tolerance	HM34ALW	°C (°F)	99.9	%1
969	HM35 tolerance	HM35ALW	°C (°F)	99.9	%1
970	HM36 tolerance	HM36ALW	°C (°F)	99.9	%1
971	HM37 tolerance	HM37ALW	°C (°F)	99.9	%1
972	HM38 tolerance	HM38ALW	°C (°F)	99.9	%1
973	HM31 P item	HM31P	°C (°F)	999.9	%1
974	HM32 P item	HM32P	°C (°F)	999.9	%1
975	HM33 P item	HM33P	°C (°F)	999.9	%1
976	HM34 P item	HM34P	°C (°F)	999.9	%1
977	HM35 P item	HM35P	°C (°F)	999.9	%1
978	HM36 P item	HM36P	°C (°F)	999.9	%1
979	HM37 P item	HM37P	°C (°F)	999.9	%1
980	HM38 P item	HM38P	°C (°F)	999.9	%1
981	HM31 I item	HM31I	sec	3600	
982	HM32 I item	HM32I	sec	3600	
983	HM33 I item	HM33I	sec	3600	
984	HM34 I item	HM34I	sec	3600	
985	HM35 I item	HM35I	sec	3600	
986	HM36 I item	HM36I	sec	3600	
987	HM37 I item	HM37I	sec	3600	
988	HM38 I item	HM38I	sec	3600	
989	HM31 D item	HM31D	sec	3600	
990	HM32 D item	HM32D	sec	3600	
991	HM33 D item	HM33D	sec	3600	
992	HM34 D item	HM34D	sec	3600	
993	HM35 D item	HM35D	sec	3600	
994	HM36 D item	HM36D	sec	3600	
995	HM37 D item	HM37D	sec	3600	
996	HM38 D item	HM38D	sec	3600	
997	Zone selection	HM3ZONE		—	%7
998	Selection of alarm output	HM3ALM		—	%7
999	Reserved				
1000	Reserved				
1001	Reserved				
~					
1024	Reserved				
1025	File sorting	TMP3FORM		999	
1026	Reserved				
1027	Reserved				
1028	Reserved				
1029	Reserved				
1030	HM41 setting value	HM41SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1031	HM42 setting value	HM42SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1032	HM43 setting value	HM43SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1033	HM44 setting value	HM44SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1034	HM45 setting value	HM45SET	°C (°F) %	600.0 (1112.0) 100.0	%1
1035	HM46 setting value	HM46SET	°C (°F) %	600.0 (1112.0) 100.0	%1

No.	Name	Item	Unit	Maximum value	Remarks
1036	HM47 setting value	HM47SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1037	HM48 setting value	HM48SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1038	HM41 tolerance	HM41ALW	°C (° F)	99.9	%1
1039	HM42 tolerance	HM42ALW	°C (° F)	99.9	%1
1040	HM43 tolerance	HM43ALW	°C (° F)	99.9	%1
1041	HM44 tolerance	HM44ALW	°C (° F)	99.9	%1
1042	HM45 tolerance	HM45ALW	°C (° F)	99.9	%1
1043	HM46 tolerance	HM46ALW	°C (° F)	99.9	%1
1044	HM47 tolerance	HM47ALW	°C (° F)	99.9	%1
1045	HM48 tolerance	HM48ALW	°C (° F)	99.9	%1
1046	HM41 P item	HM41P	°C (° F)	999.9	%1
1047	HM42 P item	HM42P	°C (° F)	999.9	%1
1048	HM43 P item	HM43P	°C (° F)	999.9	%1
1049	HM44 P item	HM44P	°C (° F)	999.9	%1
1050	HM45 P item	HM45P	°C (° F)	999.9	%1
1051	HM46 P item	HM46P	°C (° F)	999.9	%1
1052	HM47 P item	HM47P	°C (° F)	999.9	%1
1053	HM48 P item	HM48P	°C (° F)	999.9	%1
1054	HM41 I item	HM41I	sec	3600	
1055	HM42 I item	HM42I	sec	3600	
1056	HM43 I item	HM43I	sec	3600	
1057	HM44 I item	HM44I	sec	3600	
1058	HM45 I item	HM45I	sec	3600	
1059	HM46 I item	HM46I	sec	3600	
1060	HM47 I item	HM47I	sec	3600	
1061	HM48 I item	HM48I	sec	3600	
1062	HM41 D item	HM41D	sec	3600	
1063	HM42 D item	HM42D	sec	3600	
1064	HM43 D item	HM43D	sec	3600	
1065	HM44 D item	HM44D	sec	3600	
1066	HM45 D item	HM45D	sec	3600	
1067	HM46 D item	HM46D	sec	3600	
1068	HM47 D item	HM47D	sec	3600	
1069	HM48 D item	HM48D	sec	3600	
1070	Zone selection	HM4ZONE		—	%8
1071	Selection of alarm output	HM4ALM		—	%8
1072	Reserved				
1073	Reserved				
1074	Reserved				
1075	Reserved				
1076	Reserved				
1077	Reserved				
1078	Reserved				
1079	Reserved				
1080	Reserved				
1081	Reserved				
1082	Reserved				
1083	Reserved				
1084	Reserved				
1085	HM51 setting value	HM51SET	°C (° F) %	600.0 (1112.0) 100.0	%1

No.	Name	Item	Unit	Maximum value	Remarks
1086	HM52 setting value	HM52SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1087	HM53 setting value	HM53SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1088	HM54 setting value	HM54SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1089	HM55 setting value	HM55SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1090	HM56 setting value	HM56SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1091	HM57 setting value	HM57SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1092	HM58 setting value	HM58SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1093	HM51 tolerance	HM51ALW	°C (° F)	99.9	%1
1094	HM52 tolerance	HM52ALW	°C (° F)	99.9	%1
1095	HM53 tolerance	HM53ALW	°C (° F)	99.9	%1
1096	HM54 tolerance	HM54ALW	°C (° F)	99.9	%1
1097	HM55 tolerance	HM55ALW	°C (° F)	99.9	%1
1098	HM56 tolerance	HM56ALW	°C (° F)	99.9	%1
1099	HM57 tolerance	HM57ALW	°C (° F)	99.9	%1
1100	HM58 tolerance	HM58ALW	°C (° F)	99.9	%1
1101	HM51 P item	HM51P	°C (° F)	999.9	%1
1102	HM52 P item	HM52P	°C (° F)	999.9	%1
1103	HM53 P item	HM53P	°C (° F)	999.9	%1
1104	HM54 P item	HM54P	°C (° F)	999.9	%1
1105	HM55 P item	HM55P	°C (° F)	999.9	%1
1106	HM56 P item	HM56P	°C (° F)	999.9	%1
1107	HM57 P item	HM57P	°C (° F)	999.9	%1
1108	HM58 P item	HM58P	°C (° F)	999.9	%1
1109	HM51 I item	HM51I	sec	3600	
1110	HM52 I item	HM52I	sec	3600	
1111	HM53 I item	HM53I	sec	3600	
1112	HM54 I item	HM54I	sec	3600	
1113	HM55 I item	HM55I	sec	3600	
1114	HM56 I item	HM56I	sec	3600	
1115	HM57 I item	HM57I	sec	3600	
1116	HM58 I item	HM58I	sec	3600	
1117	HM51 D item	HM51D	sec	3600	
1118	HM52 D item	HM52D	sec	3600	
1119	HM53 D item	HM53D	sec	3600	
1120	HM54 D item	HM54D	sec	3600	
1121	HM55 D item	HM55D	sec	3600	
1122	HM56 D item	HM56D	sec	3600	
1123	HM57 D item	HM57D	sec	3600	
1124	HM58 D item	HM58D	sec	3600	
1125	Zone selection	HM5ZONE		—	%9
1126	Selection of alarm output	HM5ALM		—	%9
1127	Reserved				

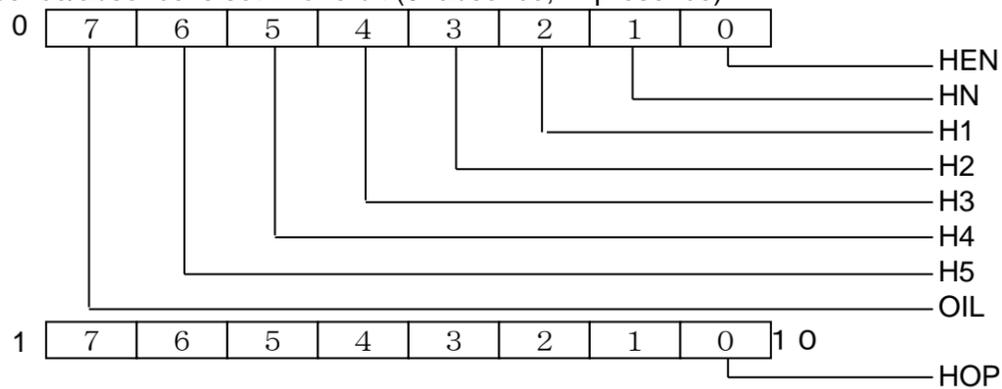
No.	Name	Item	Unit	Maximum value	Remarks
1128	Reserved				
~	Reserved				
1152	Reserved				
1153	File sorting	TMP4FORM		999	
1154	Reserved				
1155	Reserved				
1156	Reserved				
1157	Reserved				
1158	HM61 setting value	HM61SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1159	HM62 setting value	HM62SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1160	HM63 setting value	HM63SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1161	HM64 setting value	HM64SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1162	HM65 setting value	HM65SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1163	HM66 setting value	HM66SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1164	HM67 setting value	HM67SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1165	HM68 setting value	HM68SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1166	HM61 tolerance	HM61ALW	°C (° F)	99.9	%1
1167	HM62 tolerance	HM62ALW	°C (° F)	99.9	%1
1168	HM63 tolerance	HM63ALW	°C (° F)	99.9	%1
1169	HM64 tolerance	HM64ALW	°C (° F)	99.9	%1
1170	HM65 tolerance	HM65ALW	°C (° F)	99.9	%1
1171	HM66 tolerance	HM66ALW	°C (° F)	99.9	%1
1172	HM67 tolerance	HM67ALW	°C (° F)	99.9	%1
1173	HM68 tolerance	HM68ALW	°C (° F)	99.9	%1
1174	HM61 P item	HM61P	°C (° F)	999.9	%1
1175	HM62 P item	HM62P	°C (° F)	999.9	%1
1176	HM63 P item	HM63P	°C (° F)	999.9	%1
1177	HM64 P item	HM64P	°C (° F)	999.9	%1
1178	HM65 P item	HM65P	°C (° F)	999.9	%1
1179	HM66 P item	HM66P	°C (° F)	999.9	%1
1180	HM67 P item	HM67P	°C (° F)	999.9	%1
1181	HM68 P item	HM68P	°C (° F)	999.9	%1
1182	HM61 I item	HM61I	sec	3600	
1183	HM62 I item	HM62I	sec	3600	
1184	HM63 I item	HM63I	sec	3600	
1185	HM64 I item	HM64I	sec	3600	
1186	HM65 I item	HM65I	sec	3600	
1187	HM66 I item	HM66I	sec	3600	
1188	HM67 I item	HM67I	sec	3600	
1189	HM68 I item	HM68I	sec	3600	
1190	HM61 D item	HM61D	sec	3600	

No.	Name	Item	Unit	Maximum value	Remarks
1191	HM62 D item	HM62D	sec	3600	
1192	HM63 D item	HM63D	sec	3600	
1193	HM64 D item	HM64D	sec	3600	
1194	HM65 D item	HM65D	sec	3600	
1195	HM66 D item	HM66D	sec	3600	
1196	HM67 D item	HM67D	sec	3600	
1197	HM68 D item	HM68D	sec	3600	
1198	Zone selection	HM6ZONE		—	%10
1199	Selection of alarm output	HM6ALM		—	%10
1200	Reserved				
1201	Reserved				
1202	Reserved				
1203	Reserved				
1204	Reserved				
1205	Reserved				
1206	Reserved				
1207	Reserved				
1208	Reserved				
1209	Reserved				
1210	Reserved				
1211	Reserved				
1212	Reserved				
1213	HM71 setting value	HM71SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1214	HM72 setting value	HM72SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1215	HM73 setting value	HM73SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1216	HM74 setting value	HM74SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1217	HM75 setting value	HM75SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1218	HM76 setting value	HM76SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1219	HM77 setting value	HM77SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1220	HM78 setting value	HM78SET	°C (° F) %	600.0 (1112.0) 100.0	%1
1221	HM71 tolerance	HM71ALW	°C (° F)	99.9	%1
1222	HM72 tolerance	HM72ALW	°C (° F)	99.9	%1
1223	HM73 tolerance	HM73ALW	°C (° F)	99.9	%1
1224	HM74 tolerance	HM74ALW	°C (° F)	99.9	%1
1225	HM75 tolerance	HM75ALW	°C (° F)	99.9	%1
1226	HM76 tolerance	HM76ALW	°C (° F)	99.9	%1
1227	HM77 tolerance	HM77ALW	°C (° F)	99.9	%1
1228	HM78 tolerance	HM78ALW	°C (° F)	99.9	%1
1229	HM71 P item	HM71P	°C (° F)	999.9	%1
1230	HM72 P item	HM72P	°C (° F)	999.9	%1
1231	HM73 P item	HM73P	°C (° F)	999.9	%1
1232	HM74 P item	HM74P	°C (° F)	999.9	%1
1233	HM75 P item	HM75P	°C (° F)	999.9	%1
1234	HM76 P item	HM76P	°C (° F)	999.9	%1

No.	Name	Item	Unit	Maximum value	Remarks
1235	HM77 P item	HM77P	°C (° F)	999.9	%1
1236	HM78 P item	HM78P	°C (° F)	999.9	%1
1237	HM71 I item	HM71I	sec	3600	
1238	HM72 I item	HM72I	sec	3600	
1239	HM73 I item	HM73I	sec	3600	
1240	HM74 I item	HM74I	sec	3600	
1241	HM75 I item	HM75I	sec	3600	
1242	HM76 I item	HM76I	sec	3600	
1243	HM77 I item	HM77I	sec	3600	
1244	HM78 I item	HM78I	sec	3600	
1245	HM71 D item	HM71D	sec	3600	
1246	HM72 D item	HM72D	sec	3600	
1247	HM73 D item	HM73D	sec	3600	
1248	HM74 D item	HM74D	sec	3600	
1249	HM75 D item	HM75D	sec	3600	
1250	HM76 D item	HM76D	sec	3600	
1251	HM77 D item	HM77D	sec	3600	
1252	HM78 D item	HM78D	sec	3600	
1253	Zone selection	HM7ZONE		—	%11
1254	Selection of alarm output	HM7ALM		—	%11
1255	Reserved				
1256	Reserved				
~	Reserved				
1279	Reserved				

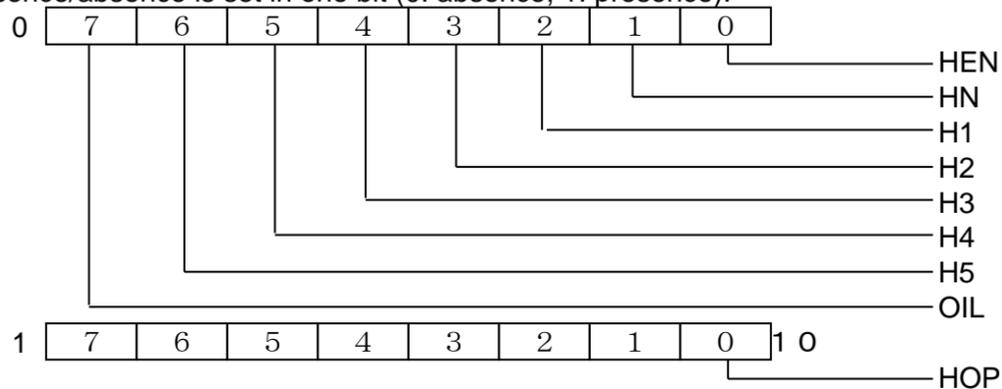
%1) The units can be changed to [°F] by specifying their parameter.

%2) Presence/absence is set in one bit (0: absence, 1: presence).



Bytes 2 to 3 are to be filled with zeros.

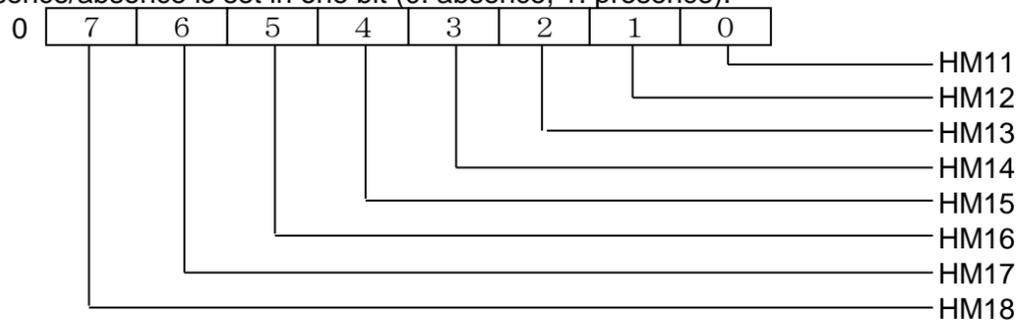
%3) Presence/absence is set in one bit (0: absence, 1: presence).



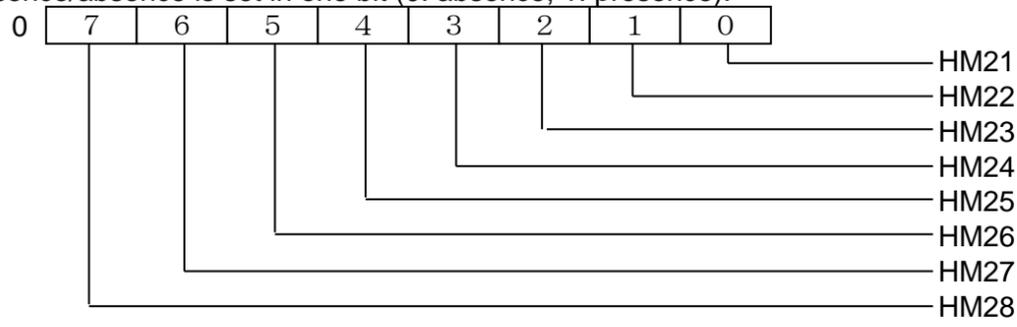
Bytes 2 to 3 are to be filled with zeros.

%4) Setting: 0 = Off, 1 = Manual, 2 = Automatic

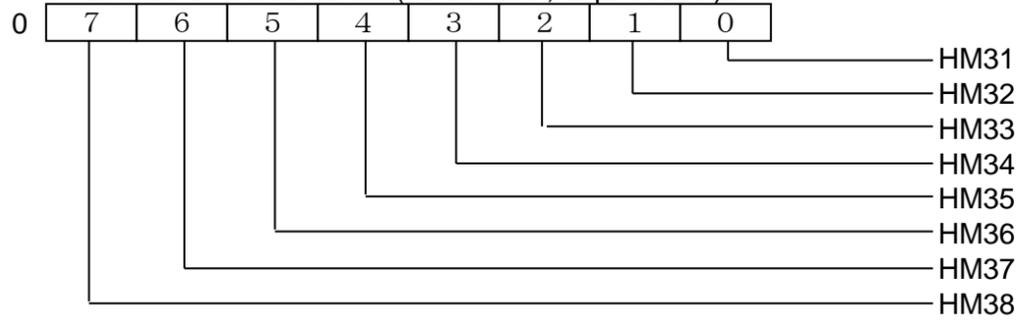
%5) Presence/absence is set in one bit (0: absence, 1: presence).



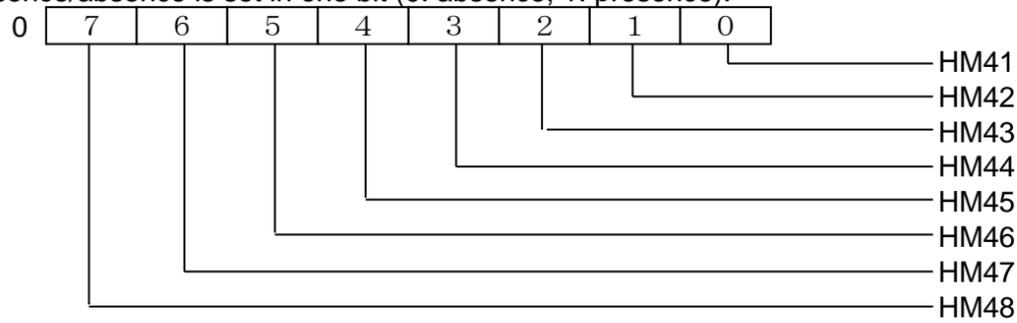
%6) Presence/absence is set in one bit (0: absence, 1: presence).



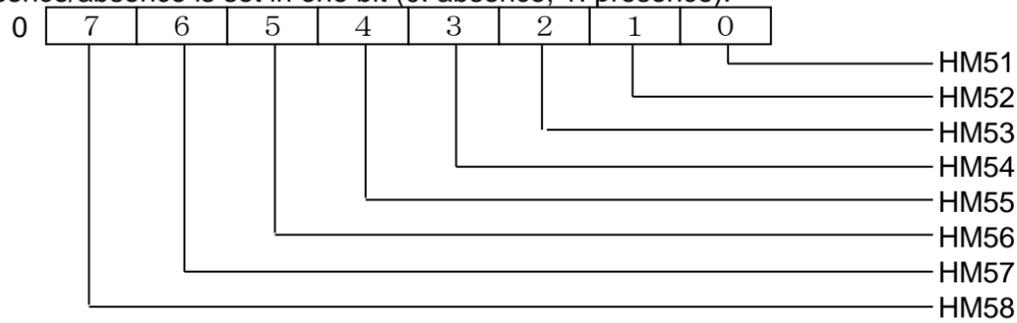
%7) Presence/absence is set in one bit (0: absence, 1: presence).



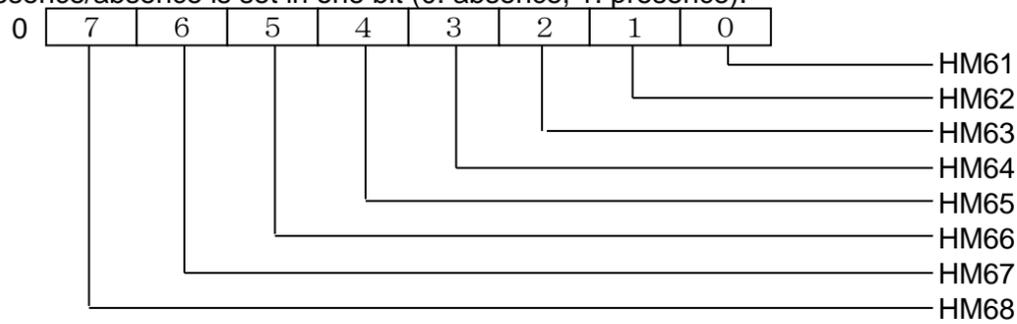
%8) Presence/absence is set in one bit (0: absence, 1: presence).



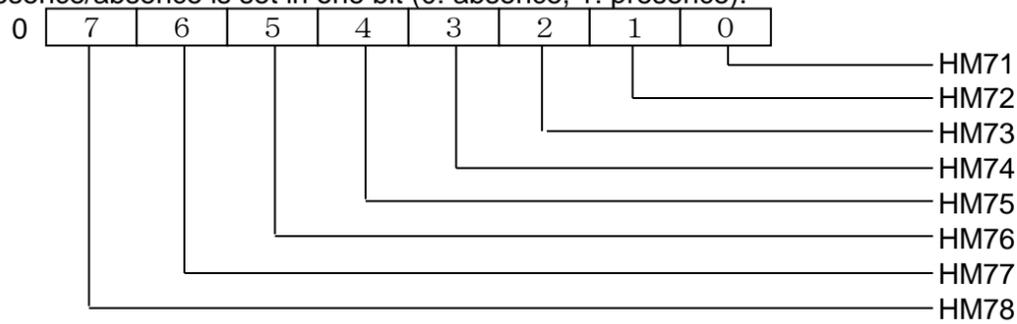
%9) Presence/absence is set in one bit (0: absence, 1: presence).



%10) Presence/absence is set in one bit (0: absence, 1: presence).



%11) Presence/absence is set in one bit (0: absence, 1: presence).



## 4.3 Temperature Control for Cooling

No.	Name	Item	Unit	Maximum value	Remarks
1281	Reserved				
1282	Reserved				
1283	Reserved				
1284	Reserved				
1285	Reserved				
1286	Reserved				
1287	Reserved				
1288	Reserved				
1289	Reserved				
1290	Reserved				
1291	Reserved				
1292	Reserved				
1293	Reserved				
1294	HM11 P item	HM11CP	°C(° F)	999.9	%1
1295	HM12 P item	HM12CP	°C(° F)	999.9	%1
1296	HM13 P item	HM13CP	°C(° F)	999.9	%1
1297	HM14 P item	HM14CP	°C(° F)	999.9	%1
1298	HM15 P item	HM15CP	°C(° F)	999.9	%1
1299	HM16 P item	HM16CP	°C(° F)	999.9	%1
1300	HM17 P item	HM17CP	°C(° F)	999.9	%1
1301	HM18 P item	HM18CP	°C(° F)	999.9	%1
1302	HM21 P item	HM21CP	°C(° F)	999.9	%1
1303	HM22 P item	HM22CP	°C(° F)	999.9	%1
1304	HM23 P item	HM23CP	°C(° F)	999.9	%1
1305	HM24 P item	HM24CP	°C(° F)	999.9	%1
1306	HM25 P item	HM25CP	°C(° F)	999.9	%1
1307	HM26 P item	HM26CP	°C(° F)	999.9	%1
1308	HM27 P item	HM27CP	°C(° F)	999.9	%1
1309	HM28 P item	HM28CP	°C(° F)	999.9	%1
1310	HM31 P item	HM31CP	°C(° F)	999.9	%1
1311	HM32 P item	HM32CP	°C(° F)	999.9	%1
1312	HM33 P item	HM33CP	°C(° F)	999.9	%1
1313	HM34 P item	HM34CP	°C(° F)	999.9	%1
1314	HM35 P item	HM35CP	°C(° F)	999.9	%1
1315	HM36 P item	HM36CP	°C(° F)	999.9	%1
1316	HM37 P item	HM37CP	°C(° F)	999.9	%1
1317	HM38 P item	HM38CP	°C(° F)	999.9	%1
1318	HM41 P item	HM41CP	°C(° F)	999.9	%1
1319	HM42 P item	HM42CP	°C(° F)	999.9	%1
1320	HM43 P item	HM43CP	°C(° F)	999.9	%1
1321	HM44 P item	HM44CP	°C(° F)	999.9	%1
1322	HM45 P item	HM45CP	°C(° F)	999.9	%1
1323	HM46 P item	HM46CP	°C(° F)	999.9	%1
1324	HM47 P item	HM47CP	°C(° F)	999.9	%1
1325	HM48 P item	HM48CP	°C(° F)	999.9	%1
1326	HM51 P item	HM51CP	°C(° F)	999.9	%1
1327	HM52 P item	HM52CP	°C(° F)	999.9	%1
1328	HM53 P item	HM53CP	°C(° F)	999.9	%1
1329	HM54 P item	HM54CP	°C(° F)	999.9	%1
1330	HM55 P item	HM55CP	°C(° F)	999.9	%1
1331	HM56 P item	HM56CP	°C(° F)	999.9	%1
1332	HM57 P item	HM57CP	°C(° F)	999.9	%1
1333	HM58 P item	HM58CP	°C(° F)	999.9	%1
1334	HM61 P item	HM61CP	°C(° F)	999.9	%1
1335	HM62 P item	HM62CP	°C(° F)	999.9	%1
1336	HM63 P item	HM63CP	°C(° F)	999.9	%1
1337	HM64 P item	HM64CP	°C(° F)	999.9	%1
1338	HM65 P item	HM65CP	°C(° F)	999.9	%1
1339	HM66 P item	HM66CP	°C(° F)	999.9	%1
1340	HM67 P item	HM67CP	°C(° F)	999.9	%1
1341	HM68 P item	HM68CP	°C(° F)	999.9	%1
1342	HM71 P item	HM71CP	°C(° F)	999.9	%1
1343	HM72 P item	HM72CP	°C(° F)	999.9	%1
1344	HM73 P item	HM73CP	°C(° F)	999.9	%1
1345	HM74 P item	HM74CP	°C(° F)	999.9	%1
1346	HM75 P item	HM75CP	°C(° F)	999.9	%1
1347	HM76 P item	HM76CP	°C(° F)	999.9	%1
1348	HM77 P item	HM77CP	°C(° F)	999.9	%1
1349	HM78 P item	HM78CP	°C(° F)	999.9	%1
1350	Reserved				
~					
1407	Reserved				

## 4.4 PRESTROL Injection Press

No.	Name	Item	Unit	Maximum value	Remarks
1409	File sorting	PRFORM		999	
1410	Reserved				
1411	Reserved				
1412	Reserved				
1413	Reserved				
1414	PPR1 mold clamping pressure	PRP1	tf	999.0	%1
			tf(US)	999.0	
			%	99.0	
1415	PPR2 mold clamping pressure	PRP2	tf	999.0	
			tf(US)	999.0	
			%	99.0	
1416	PPR3 mold clamping pressure	PRP3	tf	999.0	
			tf(US)	999.0	
			%	99.0	
1417	PPR4 mold clamping pressure	PRP4	tf	999.0	
			tf(US)	999.0	
			%	99.0	
1418	PPR5 mold clamping pressure	PRP5	tf	999.0	
			tf(US)	999.0	
			%	99.0	
1419	PPR6 mold clamping pressure	PRP6	tf	999.0	
			tf(US)	999.0	
			%	99.0	
1420	Before compression Mold clamping maintained	PRPCX	tf	999.0	
			tf(US)	999.0	
			%	99.0	
1421	Mold separation value	PRLSCOM	mm	99.999	%1
1422	Compression start position	PRLS4	mm	999.990	%1
			in	99.9990	
1423	Compression delay timer	PRTRD	sec	99.99	
1424	TPR1 mold clamping time	PRT1	sec	99.99	
1425	TPR2 mold clamping time	PRT2	sec	99.99	
1426	TPR3 mold clamping time	PRT3	sec	99.99	
1427	TPR4 mold clamping time	PRT4	sec	99.99	
1428	TPR5 mold clamping time	PRT5	sec	99.99	
1429	TPR6 mold clamping time	PRT6	sec	99.99	
1430	Selection of gradient control	PRSLP1		1	%2
1431	Selection of gradient control	PRSLP2		1	
1432	Selection of gradient control	PRSLP3		1	
1433	Selection of gradient control	PRSLP4		1	
1434	Selection of gradient control	PRSLP5		1	
1435	Selection of gradient control	PRSLP6		1	
1436	Compression operation	PRACT		1	%2
1437	Injection start timing	PRINJST		1	%3
1438	Compression start timing	PRST		4	%4
1439	VPR1 mold clamping speed	PRV1	%	99.0	
1440	VPR2 mold clamping speed	PRV2	%	99.0	
1441	VPR3 mold clamping speed	PRV3	%	99.0	
1442	VPR4 mold clamping speed	PRV4	%	99.0	
1443	VPR5 mold clamping speed	PRV5	%	99.0	
1444	VPR6 mold clamping speed	PRV6	%	99.0	
1445	Reserved				
~	Reserved				
1471	Reserved				
1472	Selection of press operation	IPRSEL		1	%2
1473	Selection of pump change	IPRPUMP		1	%5
1474	Selection of press change	IPRPRPV		1	%6
1475	Selection of die stop operation	IPRMSTP		1	%7
1476	Press start timing	IPRPST		2	%8
1477	PIP1 pressing pressure	IPRP1	%	99.0	%9
			tf	9999.9	
			kN	99999	
1478	PIP2 pressing pressure	IPRP2	%	99.0	
			tf	9999.9	
			kN	99999	
1479	PIP3 pressing pressure	IPRP3	%	99.0	
			tf	9999.9	
			kN	99999	

No.	Name	Item	Unit	Maximum value	Remarks
1480	PIP4 pressing pressure	IPRP4	%	99.0	
			tf	9999.9	
			kN	99999	
1481	PIP5 pressing pressure	IPRP5	%	99.0	
			tf	9999.9	
			kN	99999	
1482	PIP6 pressing pressure	IPRP6	%	99.0	
			tf	9999.9	
			kN	99999	
1483	VIP1 press speed	IPRV1	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1484	VIP2 press speed	IPRV2	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1485	VIP3 press speed	IPRV3	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1486	VIP4 ppress speed	IPRV4	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1487	VIP5 press speed	IPRV5	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1488	VIP6 press speed	IPRV6	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1489	TIP1 press operating	IPRT1	sec	99.99	
1490	TIP2 press operating	IPRT2	sec	99.99	
1491	TIP3 press operating	IPRT3	sec	99.99	
1492	TIP4 press operating	IPRT4	sec	99.99	
1493	TIP5 press operating	IPRT5	sec	99.99	
1494	TIP6 press operating	IPRT6	sec	99.99	
1495	Press delay timer	IPRTRD	sec	99.99	
1496	LS2C die stop position	IPRLS2C	mm	999.999	%1
			in	99.9999	
1497	LS2C1 press position	IPRLS2C1	mm	999.999	
			in	99.9999	
1498	LS2C2 press position	IPRLS2C2	mm	999.999	
			in	99.9999	
1499	LS2C3 press position	IPRLS2C3	mm	999.999	
			in	99.9999	
1500	LS2C4 press position	IPRLS2C4	mm	999.999	
			in	99.9999	
1501	LS2C5 press position	IPRLS2C5	mm	999.999	
			in	99.9999	
1502	Press start position LS4N	IPRLS4N	mm	999.999	%1
			in	99.9990	
1503	Pressing pressure during injection	IPRP0	%	99.0	%9
			tf	9999.9	
			kN	99999	
1504	Press speed during injection	IPRV0	%	99.0	
			mm/s	999.9	
			in/s	99.99	
1505	Reserved				
~	Reserved				
1509	Reserved				
1510	Selection of core-back operation	CBACT		1	%2
1511	Selection of core-back speed change type	CBMOD		1	%6
1512	Selection of core-back speed change steps	CBVS		3	
1513	Selection of core-back start timing	CBPST		2	%8
1514	Reserved				
1515	Reserved				
1516	Core-back delay timer CBDLY	CBDLY	sec	99.99	
1517	Core-back force PCB1	PCB1	tf	999.99	
			kN	9999.9	
1518	Core-back speed VCB1	VCB1	mm/sec	999.9	
			in/sec	99.99	
1519	Core-back speed VCB2	VCB2	mm/sec	999.9	
			in/sec	99.99	
1520	Core-back speed VCB3	VCB3	mm/sec	999.9	
			in/sec	99.99	

No.	Name	Item	Unit	Maximum value	Remarks
1521	Core-back completion position LS3CB	LS3CB	mm	99.990	
			in	9.9990	
1522	Change position LS3CB1	LS3CB1	mm	99.990	
			in	9.9990	
1523	Change position LS3CB2	LS3CB2	mm	99.990	
			in	9.9990	
1524	Change time TRCB1	TRCB1	sec	99.90	
1525	Change time TRCB2	TRCB2	sec	99.90	
1526	Reserved				
~	Reserved				
1535	Reserved				

%1) The units can be changed by specifying their parameter

%2) Setting: 0 = Absence, 1 = Presence

%3) Setting: 0 = PCX, 1 = LSCOM

%4) Setting: 0-4 = LS4PR/LS4/PCX/LSCOM/TR1

%5) Setting: 0 = Standard, 1 = Special

%6) Setting: 0 = Time, 1 = Position

%7) Setting: 0 = Advance, 1 = Retract

%8) Setting: 0-2 = LS4N/LS4PR/TR1

%9) The settings from the unit to the display digits are the same as for IPRP1.

4.5 MOLDLYZER

No.	Name	Item	Unit	Maximum value	Remarks
1537	File sorting	MLFORM		999	
1538	Reserved				
1539	Reserved				
1540	Reserved				
1541	Reserved				
1542	Selection of MOLDLYZER	MLSEL		1	%1
1543	Reference value	Presence/absence	MLDATEN	2	%2
1544		START zone sampling cycle	MLSTINT	sec	9.990
1545		START zone sampling count	MLSTNUM	pieces	400
1546		MIDDLE zone sampling cycle	MLMIDINT	sec	9.990
1547		MIDDLE zone sampling count	MLMIDNUM	pieces	400
1548		PACK zone (before FPC) sampling cycle	MLPC1INT	sec	9.990
1549		PACK zone (before FPC) sampling count	MLPC1NUM	pieces	400
1550		PACK zone (after FPC) sampling cycle	MLPC2INT	sec	9.990
1551		PACK zone (after FPC) sampling count	MLPC2NUM	pieces	400
1552		HOLD zone sampling cycle	MLHLDINT	sec	9.990
1553		HOLD zone sampling count	MLHLDNUM	pieces	400
1554		Sampling data (400 pieces)	MLDAT1	kgf/cm2	200.00 %3
~		Sampling data (400 pieces)	~	kgf/cm2	200.00 %3
1953		Sampling data (400 pieces)	MLDAT400	kgf/cm2	200.00 %3
1954	tolerance	START	MLSTALW	kgf/cm2	999.99 %4
1955		MIDDLE	MLMIDALW	kgf/cm2	999.99 %4
1956		PACK	MLPACALW	kgf/cm2	999.99 %4
1957		HOLD	MLHLDALW	kgf/cm2	999.99 %4
1958		PMAX	MLMAXALW	kgf/cm2	9999.99 %5
1959		One-point method	MLPTALW	kgf/cm2	999.99 %4
1960	One-point decision timer	MLPHTTIM	sec	9.99	
1961	Sensor selection	MLCENSEL		1	%6
1962	Decision method	MLJUDGE		2	%7
1963	Selection of reference point as one-point decision	MLPHTSEL		13	%8
1964	STOP alarm	MLSTPALM	shot	99	
1965	Selection of area/multipoint method alarm output	MLALM		-	%9
1966	Selection of one-point method alarm output	MLPTALM		-	%2
1967	Selection of PMAX alarm output	MLMAXALM		-	%2
1968	Reserved				
1969	Reserved				
1970	Reserved				
1971	Reserved				
1972	Reserved				
1973	Reserved				
1974	Reserved				
1975	Reserved				
1976	Reserved				
1977	Reserved				
1978	Reserved				
1979	Reserved				
1980	Reserved				
1981	Reserved				
1982	Reserved				
1983	Reserved				
1984	Reserved				
1985	Reserved				
1986	Reserved				
1987	Reserved				
1988	Reserved				
1989	Reserved				
1990	Reserved				
1991	Reserved				
1992	Reserved				
1993	Reserved				
1994	Reserved				
1995	Reserved				
1996	Reserved				
1997	Reserved				
1998	Reserved				
1999	Reserved				
2000	Reserved				
2001	Reserved				
2002	Reserved				
2003	Reserved				
2004	Reserved				

No.	Name	Item	Unit	Maximum value	Remarks
2005	Reserved				
2006	Reserved				
2007	Reserved				
2008	Reserved				
2009	Reserved				
2010	Reserved				
2011	Reserved				
2012	Reserved				
2013	Reserved				
2014	Reserved				
2047	Reserved				

%1) Setting: 0 = Not used, 1 = Used

%2) Status: 0 = None, 1 = Start (during operation), 2 = Completion

%3) Data is written collectively by recording the reference values, and there is no individual data change.

Thus, the settings are assumed to be equivalent to monitored values,  
and a unit of 0.01 kgf/cm<sup>2</sup> is fixed.

%4) The setting range varies depending on the unit.

000.00~999.99kgf/cm<sup>2</sup>(Display digit 0.1),

00.000~99.999MPa(Display digit 0.01),

000.00~999.99bar(Display digit 0.1),

0000.0~9999.9PSI(Display digit 1),

%5) The setting range varies depending on the detection pressure and unit.

If hydraulic pressure is detected:

0000.00~9999.99kgf/cm<sup>2</sup>(Display digit 0.1),

000.000~999.999MPa(Display digit 0.01),

0000.00~9999.99bar(Display digit 0.1),

00000.0~99999.9PSI(Display digit 1),

If cavity pressure is detected:

0000.00~4000.00kgf/cm<sup>2</sup>(Display digit 0.1),

000.000~400.000MPa(Display digit 0.01),

0000.00~4000.00bar(Display digit 0.1),

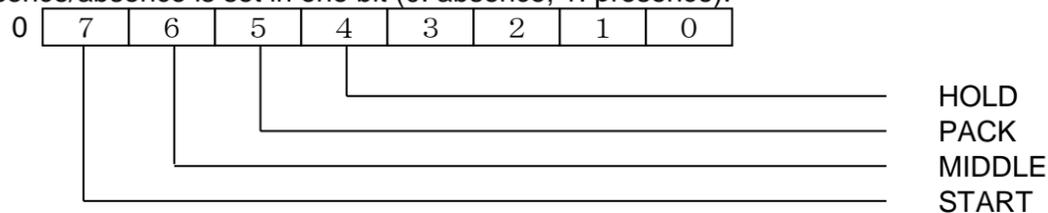
00000.0~60000.0PSI(Display digit 1),

%6) Setting: 0 = HYD, 1 = CAV

%7) Setting: 0 = Area method, 1 = Multipoint method, 2 = One-point method

%8) Setting: 0~13=LS5/LS4A/LS4B/LS4C/LS4D/LS4E/LS4F/LS4G/  
LS4H/LS4I/LS4/TRH1/TRH2/TRH3.

%9) Presence/absence is set in one bit (0: absence, 1: presence).



4.6 PLASTLYZER

No.	Name	Item	Unit	Maximum value	Remarks	
2049	File sorting	PLFORM		999		
2050	Reserved					
2051	Reserved					
2052	Reserved					
2053	PL selection	PLSEL		1	%1	
2054	Reference value	Presence/absence	PLDATEN	2	%2	
2055		START zone sampling cycle	PLSTINT	sec	9.990	
2056		START zone sampling count	PLSTNUM	pieces	25	%3
2057		MIDDLE1 zone sampling cycle	PLMD1INT	sec	9.990	
2058		MIDDLE1 zone sampling count	PLMD1NUM	pieces	25	%3
2059		MIDDLE2 zone sampling cycle	PLMD2INT	sec	9.990	
2060		MIDDLE2 zone sampling count	PLMD2NUM	pieces	25	%3
2061		END zone sampling cycle	PLENDINT	sec	9.990	
2062		END zone sampling count	PLENDNUM	pieces	27	%3
2063		Charging drive zone sampling data	PLP1		200.00	%4
~		Charging drive zone sampling data	~			
2162		Charging drive zone sampling data	PLP100		200.00	%4
2163		Screw position sampling data	PLPOS1	mm	999.999	%8
~		Screw position sampling data	~			%8
2262		Screw position sampling data	PLPOS100		999.999	%8
2263		Charging drive pressure tolerance	START	PLSTPALW	2000.0	%5
2264			MIDDLE1	PLM1PALW	2000.0	%5
2265	MIDDLE2		PLM2PALW	2000.0	%5	
2266	END		PLEPALW	2000.0	%5	
2267	Screw retraction speed tolerance	START	PLSTVALW	mm/sec	99.999	
				in/sec	9.9999	
2268		MIDDLE1	PLM1VALW	mm/sec	99.999	
				in/sec	9.9999	
2269		MIDDLE2	PLM2VALW	mm/sec	99.999	
				in/sec	9.9999	
2270		END	PLEVALW	mm/sec	99.999	
				in/sec	9.9999	
2271	Decision method	PLJUDGE		1	%6	
2272	STOP alarm	PLSTPALM	shot	99		
2273	Selection of charging drive pressure alarm output	PLPALM		-	%7	
2274	Selection of screw retraction speed alarm output	PLVALM		-	%7	
2275	Reserved					
~	Reserved					
2303	Reserved					

%1) Setting: 0 = Not used, 1 = Used

%2) Status: 0 = None, 1 = Start (during operation), 2 = Completion

%3) Total sampling count (START zone sampling count + MIDDLE1 zone sampling count + MIDDLE2 zone sampling count + END zone sampling count) is 100 or less.

%4) Data is written collectively by recording the reference values, and there is no individual data change. Thus, the settings are assumed to be equivalent to monitored values, and a unit of 0.01 kgf/cm2 is fixed.

%5) The setting range varies depending on the unit.

00.00~99.99kgf/cm2(Display digit 0.1),

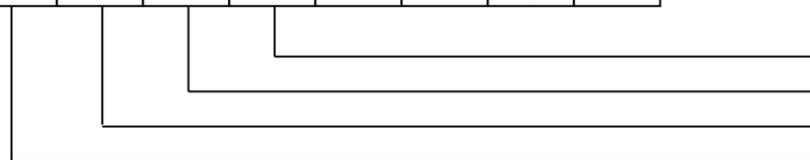
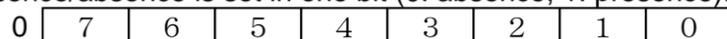
0.000~9.999MPa(Display digit 0.01),

00.00~99.99bar(Display digit 0.1),

000.0~2000.0PSI(Display digit 1),

%6) Setting: 0 = Area method, 1 = Multipoint method

%7) Presence/absence is set in one bit (0: absence, 1: presence).



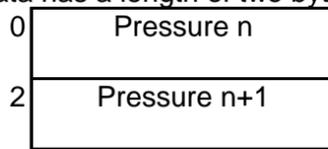
END  
MIDDLE2  
MIDDLE1  
START

%8) Unit fixed

4.7 ACTROL and ACTLYZER

No.	Name	Item	Unit	Maximum value	Remarks
2305	File sorting	ALFORM		999	
2306					
2307					
2308					
2309					
2310	Selection of ACTLYZER	ALSEL		1	%1
2311	Reference value	ALDATEN		2	%2
2312		START zone sampling cycle	ALSTINT	mm	99.999
2313		START zone sampling count	ALSTNUM	pieces	25 %3
2314		MIDDLE1 zone sampling cycle	ALMD1INT	mm	99.999
2315		MIDDLE1 zone sampling count	ALMD1NUM	pieces	25 %3
2316		MIDDLE2 zone sampling cycle	ALMD2INT	mm	99.999
2317		MIDDLE2 zone sampling count	ALMD2NUM	pieces	25 %3
2318		END zone sampling cycle	ALENDINT	mm	99.999
2319		END zone sampling count	ALENDNUM	pieces	25 %3
2320		Cavity pressure sampling data	ALCP1		4000.0 %4
~		Cavity pressure sampling data	~		
2369		Cavity pressure sampling data	ALCP50		4000.0 %4
2370		Filling pressure sampling data	ALIP1		4000.0 %4
~		Filling pressure sampling data	~		
2419		Filling pressure sampling data	ALIP50		4000.0 %4
2420		Screw position sampling data	ALPOS1	mm	999.999 %9
~		Screw position sampling data	~		
2519		Screw position sampling data	ALPOS100	mm	999.999 %9
2520		Time sampling data	ALTIM1	sec	999.999
~		Time sampling data	~		
2619		Time sampling data	ALTIM100	sec	999.999
2620	Cavity pressure tolerance	START	ALSTCALW		600000 %5
2621		MIDDLE1	ALM1CALW		600000 %5
2622		MIDDLE2	ALM2CALW		600000 %5
2623		END	ALECALW		600000 %5
2624	Filling pressure tolerance	START	ALSTIALW		600000 %6
2625		MIDDLE1	ALM1IALW		600000 %6
2626		MIDDLE2	ALM2IALW		600000 %6
2627		END	ALEIALW		600000 %6
2628	Filling speed tolerance	START	ALSTVALW	mm/sec	99.999
				in/sec	9.9999
2629		MIDDLE1	ALM1VALW	mm/sec	99.999
				in/sec	9.9999
2630		MIDDLE2	ALM2VALW	mm/sec	99.999
				in/sec	9.9999
2631		END	ALEVALW	mm/sec	99.999
				in/sec	9.9999
2632	Vertical axis scale of CAV pressure	ALCPH		600000	%5
2633	Vertical axis scale of filling pressure	ALIPH		600000	%6
2634	Vertical axis scale of filling speed	ALIVH	mm/sec	600.000	
			in/sec	60.0000	
2635	Horizontal axis scale of MAX time	ALMAXW	sec	999.99	
2636	Horizontal axis scale of dwell time	ALHOLDW	sec	999.99	
2637	Control start position	ALSTRPOS	mm	999.999	
			in	99.9999	
2638	Control end position	ALSTPPOS	mm	999.999	
			in	99.9999	
2639	Selection of detection pressure	ALCENSEL		1	%7
2640	STOP alarm	ALSTPALM	shot	99	
2641	Selection of CAV pressure alarm output	ALCPALM		-	%8
2642	Selection of injection pressure alarm output	ALIPALM		-	%8
2643	Selection of filling speed alarm output	ALIVALM		-	%8
2644	Upper limit alarm setting for cavity pressure	ALCAVPMA		600000	%5
2645	Upper limit alarm setting for filling pressure	ALINJPMAX		600000	%6
2646	Reserved				
2647	Reserved				
2648	Closed-loop proportional gain	ACT_P		1.00	
2649	Closed-loop integral gain	ACT_I		99.99	
2650	Closed-loop differential gain	ACT_D		99.9	
2651	ACTROL timer	ACTTR	sec	999.99	
2652	ACTROL control	ACTSEL		1	%10
2653	ACTROL target CAV pressure	ACTCPG		600000	%5
2654	ACTROL target filling pressure	ACTIPG		600000	%6
2655	ACTROL filling speed control method	ACTROLSL		1	%11
2656	Reserved				
~	Reserved				
2815	Reserved				

- %1) Setting: 0 = Not used, 1 = Used
- %2) Status: 0 = None, 1 = Start (during operation), 2 = Completion
- %3) Total sampling count (START zone sampling count + MIDDLE1 zone sampling count + MIDDLE2 zone sampling count + END zone sampling count) is 100 or less.
- %4) Data has a length of two bytes.



Data is written collectively by recording the reference values, and there is no individual data change. Thus, the settings are assumed to be equivalent to monitored values, and a unit of 0.1 kgf/cm<sup>2</sup> is fixed.

- %5) The setting range varies depending on the detection pressure and unit.

(Tolerance)

000.00~999.99kgf/cm<sup>2</sup>(Display digit 0.1),  
 00.000~99.999MPa(Display digit 0.01),  
 000.00~999.99bar(Display digit 0.1),  
 0000.0~9999.9PSI(Display digit 1),

(Vertical axis scale)

0000.00~4000.00kgf/cm<sup>2</sup>(Display digit 1),  
 000.000~400.000MPa(Display digit 0.1),  
 0000.00~4000.00bar(Display digit 1),  
 00000.0~60000.0PSI(Display digit 1),

(Upper limit alarm setting, target pressure)

0000.00~4000.00kgf/cm<sup>2</sup>(Display digit 0.1),  
 000.000~400.000MPa(Display digit 0.01),  
 0000.00~4000.00bar(Display digit 0.1),  
 00000.0~60000.0PSI(Display digit 1),

- %6) The setting range varies depending on the detection pressure and unit.

(Tolerance)

000.00~999.99kgf/cm<sup>2</sup>(Display digit 0.1),  
 00.000~99.999MPa(Display digit 0.01),  
 000.00~999.99bar(Display digit 0.1),  
 0000.0~9999.9PSI(Display digit 1),

(Vertical axis scale)

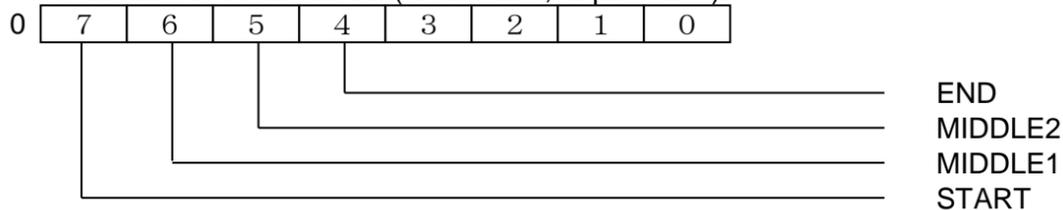
0000.00~9999.99kgf/cm<sup>2</sup>(Display digit 1),  
 000.000~999.999MPa(Display digit 0.1),  
 0000.00~9999.99bar(Display digit 1),  
 00000.0~99999.9PSI(Display digit 1),

(Upper limit alarm setting, target pressure)

0000.00~9999.99kgf/cm<sup>2</sup>(Display digit 0.1),  
 000.000~999.999MPa(Display digit 0.01),  
 0000.00~9999.99bar(Display digit 0.1),  
 00000.0~99999.9PSI(Display digit 1),

- %7) Setting: 0 = CAV pressure, 1 = Filling pressure

- %8) Presence/absence is set in one bit (0: absence, 1: presence).



- %9) Unit fixed

- %10) Setting: 0,1=LS4/TRACT

- %11) Setting: 0 = Standard, 1 = ACTROL, 2 = Speed 100

## 4.8 Lamina Control

No.	Name	Item	Unit	Maximum value	Remarks
2817	File sorting	LAMIFORM		999	
2818					
2819					
2820					
2821					
2822	Selection of lamina	LMNSEL		1	%1
2823	Reference value	LMNDATEN		2	%2
2824	Filling speed	VI400	mm/sec	400.0	%3
~		~	in/sec	40.00	
2923		VI499			
2924	Speed change position	LS400	mm	999.990	%3
~		~	in	99.9990	
3023		LS499			
3024	General-purpose injection position 1	LS4X1	mm	999.990	%3
			in	99.9990	
3025	General-purpose injection position 2	LS4X2	mm	999.990	%3
			in	99.9990	
3026	General-purpose injection position 3	LS4X3	mm	999.990	%3
			in	99.9990	
3027	General-purpose injection position 4	LS4X4	mm	999.990	%3
			in	99.9990	
3028	General-purpose injection position 5	LS4X5	mm	999.990	%3
			in	99.9990	
3029	General-purpose injection position 6	LS4X6	mm	999.990	%3
			in	99.9990	
3030	General-purpose injection position 7	LS4X7	mm	999.990	%3
			in	99.9990	
3031	General-purpose injection position 8	LS4X8	mm	999.990	%3
			in	99.9990	
3032	General-purpose injection position 9	LS4X9	mm	999.990	%3
			in	99.9990	
3033	General-purpose injection position 10	LS4X10	mm	999.990	%3
			in	99.9990	
3034	General-purpose injection position 11	LS4X11	mm	999.990	%3
			in	99.9990	
3035	General-purpose injection position 12	LS4X12	mm	999.990	%3
			in	99.9990	
3036	General-purpose injection position 13	LS4X13	mm	999.990	%3
			in	99.9990	
3037	General-purpose injection position 14	LS4X14	mm	999.990	%3
			in	99.9990	
3038	General-purpose injection position 15	LS4X15	mm	999.990	%3
			in	99.9990	
3039	General-purpose injection position 16	LS4X16	mm	999.990	%3
			in	99.9990	
3040	General-purpose injection position 17	LS4X17	mm	999.990	%3
			in	99.9990	
3041	General-purpose injection position 18	LS4X18	mm	999.990	%3
			in	99.9990	
3042	General-purpose injection position 19	LS4X19	mm	999.990	%3
			in	99.9990	
3043	General-purpose injection position 20	LS4X20	mm	999.990	%3
			in	99.9990	
3044	General-purpose injection position 21	LS4X21	mm	999.990	%3
			in	99.9990	
3045	General-purpose injection position 22	LS4X22	mm	999.990	%3
			in	99.9990	
3046	General-purpose injection position 23	LS4X23	mm	999.990	%3
			in	99.9990	
3047	General-purpose injection position 24	LS4X24	mm	999.990	%3
			in	99.9990	
3048	General-purpose injection position 25	LS4X25	mm	999.990	%3
			in	99.9990	
3049	General-purpose injection position 26	LS4X26	mm	999.990	%3
			in	99.9990	
3050	General-purpose injection position 27	LS4X27	mm	999.990	%3
			in	99.9990	
3051	General-purpose injection position 28	LS4X28	mm	999.990	%3
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
3052	General-purpose injection position 29	LS4X29	mm	999.990	%3
			in	99.9990	
3053	General-purpose injection position 30	LS4X30	mm	999.990	%3
			in	99.9990	
3054	General-purpose injection position 31	LS4X31	mm	999.990	%3
			in	99.9990	
3055	General-purpose injection position 32	LS4X32	mm	999.990	%3
			in	99.9990	
3056	Reserved				
~	Reserved				
3071	Reserved				

%1) Setting: 0 = Not used, 1 = Used

%2) Status: 0 = None, 1 = Start (during operation), 2 = Completion

%3) The units can be changed by specifying their parameter.

4.9 Temperature Control

No.	Name	Item	Unit	Maximum value	Remarks
3072	Reserved				
3073	Reserved				
3074	Reserved				
3075	Reserved				
3076	Reserved				
3077	Reserved				
3078	Reserved				
3079	Reserved				
3080	Reserved				
3081	Reserved				
3082	Reserved				
3083	Reserved				
3084	Reserved				
3085	Reserved				
3086	Reserved				
3087	Reserved				
3088	Reserved				
3089	Reserved				
3090	Reserved				
3091	Reserved				
3092	Reserved				
3093	Reserved				
3094	Reserved				
3095	Reserved				
3096	Reserved				
3097	Reserved				
3098	Reserved				
3099	Reserved				
3100	Reserved				
3101	Reserved				
3102	Reserved				
3103	Reserved				
3104	Reserved				
3105	Reserved				
3106	Reserved				
3107	Reserved				
3108	Reserved				
3109	Reserved				
3110	Reserved				
3111	Reserved				
3112	Reserved				
3113	Reserved				
3114	Reserved				
3115	Reserved				
3116	Reserved				
3117	Reserved				
3118	Reserved				
3119	Reserved				
3120	Reserved				
3121	Reserved				
3122	Reserved				
3123	Reserved				
3124	Reserved				
3125	Reserved				
3126	Reserved				
3127	Reserved				
3128	Reserved				
3129	Reserved				
3130	Reserved				
3131	Reserved				
3132	Reserved				
3133	Reserved				
3134	Reserved				
3135	Reserved				
3136	Selection of concurrent temperature rise	HSYNCRISE		1	
3137	FF value	H1	H1FF	%	100.0
3138		H2	H2FF	%	100.0
3139		H3	H3FF	%	100.0
3140		H4	H4FF	%	100.0
3141		H5	H5FF	%	100.0

No.	Name	Item	Unit	Maximum value	Remarks
3142	FF selection	H1	H1FFSEL	-	1
3143		H2	H2FFSEL	-	1
3144		H3	H3FFSEL	-	1
3145		H4	H4FFSEL	-	1
3146		H5	H5FFSEL	-	1
3147	Detected heater current value	HEN	HENAMP1	A	100.0
3148	Detected heater current value	HEN	HEN2	A	100.0
3149	Detected heater current value	NEN	HEN3	A	100.0
3150	Detected heater current value	NN	HN1	A	100.0
3151	Detected heater current value	HN	HN2	A	100.0
3152	Detected heater current value	HN	HN3	A	100.0
3153	Detected heater current value	H1	H11	A	100.0
3154	Detected heater current value	H1	H12	A	100.0
3155	Detected heater current value	H1	H13	A	100.0
3156	Detected heater current value	H2	H21	A	100.0
3157	Detected heater current value	H2	H22	A	100.0
3158	Detected heater current value	H2	H23	A	100.0
3159	Detected heater current value	H3	H31	A	100.0
3160	Detected heater current value	H3	H32	A	100.0
3161	Detected heater current value	H3	H33	A	100.0
3162	Detected heater current value	H4	H41	A	100.0
3163	Detected heater current value	H4	H42	A	100.0
3164	Detected heater current value	H4	H43	A	100.0
3165	Detected heater current value	H5	H51	A	100.0
3166	Detected heater current value	H5	H52	A	100.0
3167	Detected heater current value	H5	H53	A	100.0
3168	Detected heater current value	HOP	HOP1	A	100.0
3169	Detected heater current value	HOP	HOP2	A	100.0
3170	Detected heater current value	HOP	HOP3	A	100.0
3171	Detected heater current value	HM11	HM111	A	100.0
3172	Detected heater current value	HM11	HM112	A	100.0
3173	Detected heater current value	HM11	HM113	A	100.0
3174	Detected heater current value	HM12	HM121	A	100.0
3175	Detected heater current value	HM12	HM122	A	100.0
3176	Detected heater current value	HM12	HM123	A	100.0
3177	Detected heater current value	HM13	HM131	A	100.0
3178	Detected heater current value	HM13	HM132	A	100.0
3179	Detected heater current value	HM13	HM133	A	100.0
3180	Detected heater current value	HM14	HM141	A	100.0
3181	Detected heater current value	HM14	HM142	A	100.0
3182	Detected heater current value	HM14	HM143	A	100.0
3183	Detected heater current value	HM15	HM151	A	100.0
3184	Detected heater current value	HM15	HM152	A	100.0
3185	Detected heater current value	HM15	HM153	A	100.0
3186	Detected heater current value	HM16	HM161	A	100.0
3187	Detected heater current value	HM16	HM162	A	100.0
3188	Detected heater current value	HM16	HM163	A	100.0
3189	Detected heater current value	HM17	HM171	A	100.0
3190	Detected heater current value	HM17	HM172	A	100.0
3191	Detected heater current value	HM17	HM173	A	100.0
3192	Detected heater current value	HM18	HM181	A	100.0
3193	Detected heater current value	HM18	HM182	A	100.0
3194	Detected heater current value	HM18	HM183	A	100.0
3195	Detected heater current value	HM21	HM211	A	100.0
3196	Detected heater current value	HM21	HM212	A	100.0
3197	Detected heater current value	HM21	HM213	A	100.0
3198	Detected heater current value	HM22	HM221	A	100.0
3199	Detected heater current value	HM22	HM222	A	100.0
3200	Detected heater current value	HM22	HM223	A	100.0
3201	Detected heater current value	HM23	HM231	A	100.0
3202	Detected heater current value	HM23	HM232	A	100.0
3203	Detected heater current value	HM23	HM233	A	100.0
3204	Detected heater current value	HM24	HM241	A	100.0
3205	Detected heater current value	HM24	HM242	A	100.0
3206	Detected heater current value	HM24	HM243	A	100.0
3207	Detected heater current value	HM25	HM251	A	100.0
3208	Detected heater current value	HM25	HM252	A	100.0
3209	Detected heater current value	HM25	HM253	A	100.0
3210	Detected heater current value	HM26	HM261	A	100.0
3211	Detected heater current value	HM26	HM262	A	100.0
3212	Detected heater current value	HM26	HM263	A	100.0
3213	Detected heater current value	HM27	HM271	A	100.0
3214	Detected heater current value	HM27	HM272	A	100.0

No.	Name	Item	Unit	Maximum value	Remarks	
3215	Detected heater current value	HM27	HM273	A	100.0	
3216	Detected heater current value	HM28	HM281	A	100.0	
3217	Detected heater current value	HM28	HM282	A	100.0	
3218	Detected heater current value	HM28	HM283	A	100.0	
3219	Detected heater current value	HM31	HM311	A	100.0	
3220	Detected heater current value	HM31	HM312	A	100.0	
3221	Detected heater current value	HM31	HM313	A	100.0	
3222	Detected heater current value	HM32	HM321	A	100.0	
3223	Detected heater current value	HM32	HM322	A	100.0	
3224	Detected heater current value	HM32	HM323	A	100.0	
3225	Detected heater current value	HM33	HM331	A	100.0	
3226	Detected heater current value	HM33	HM332	A	100.0	
3227	Detected heater current value	HM33	HM333	A	100.0	
3228	Detected heater current value	HM34	HM341	A	100.0	
3229	Detected heater current value	HM34	HM342	A	100.0	
3230	Detected heater current value	HM34	HM343	A	100.0	
3231	Detected heater current value	HM35	HM351	A	100.0	
3232	Detected heater current value	HM35	HM352	A	100.0	
3233	Detected heater current value	HM35	HM353	A	100.0	
3234	Detected heater current value	HM36	HM361	A	100.0	
3235	Detected heater current value	HM36	HM362	A	100.0	
3236	Detected heater current value	HM36	HM363	A	100.0	
3237	Detected heater current value	HM37	HM371	A	100.0	
3238	Detected heater current value	HM37	HM372	A	100.0	
3239	Detected heater current value	HM37	HM373	A	100.0	
3240	Detected heater current value	HM38	HM381	A	100.0	
3241	Detected heater current value	HM38	HM382	A	100.0	
3242	Detected heater current value	HM38	HM383	A	100.0	
3243	Detected heater current value	HM41	HM411	A	100.0	
3244	Detected heater current value	HM41	HM412	A	100.0	
3245	Detected heater current value	HM41	HM413	A	100.0	
3246	Detected heater current value	HM42	HM421	A	100.0	
3247	Detected heater current value	HM42	HM422	A	100.0	
3248	Detected heater current value	HM42	HM423	A	100.0	
3249	Detected heater current value	HM43	HM431	A	100.0	
3250	Detected heater current value	HM43	HM432	A	100.0	
3251	Detected heater current value	HM43	HM433	A	100.0	
3252	Detected heater current value	HM44	HM441	A	100.0	
3253	Detected heater current value	HM44	HM442	A	100.0	
3254	Detected heater current value	HM44	HM443	A	100.0	
3255	Detected heater current value	HM45	HM451	A	100.0	
3256	Detected heater current value	HM45	HM452	A	100.0	
3257	Detected heater current value	HM45	HM453	A	100.0	
3258	Detected heater current value	HM46	HM461	A	100.0	
3259	Detected heater current value	HM46	HM462	A	100.0	
3260	Detected heater current value	HM46	HM463	A	100.0	
3261	Detected heater current value	HM47	HM471	A	100.0	
3262	Detected heater current value	HM47	HM472	A	100.0	
3263	Detected heater current value	HM47	HM473	A	100.0	
3264	Detected heater current value	HM48	HM481	A	100.0	
3265	Detected heater current value	HM48	HM482	A	100.0	
3266	Detected heater current value	HM48	HM483	A	100.0	
3267	Detected heater current value	HM51	HM511	A	100.0	
3268	Detected heater current value	HM51	HM512	A	100.0	
3269	Detected heater current value	HM51	HM513	A	100.0	
3270	Detected heater current value	HM52	HM521	A	100.0	
3271	Detected heater current value	HM52	HM522	A	100.0	
3272	Detected heater current value	HM52	HM523	A	100.0	
3273	Detected heater current value	HM53	HM531	A	100.0	
3274	Detected heater current value	HM53	HM532	A	100.0	
3275	Detected heater current value	HM53	HM533	A	100.0	
3276	Detected heater current value	HM54	HM541	A	100.0	
3277	Detected heater current value	HM54	HM542	A	100.0	
3278	Detected heater current value	HM54	HM543	A	100.0	
3279	Detected heater current value	HM55	HM551	A	100.0	
3280	Detected heater current value	HM55	HM552	A	100.0	
3281	Detected heater current value	HM55	HM553	A	100.0	
3282	Detected heater current value	HM56	HM561	A	100.0	
3283	Detected heater current value	HM56	HM562	A	100.0	
3284	Detected heater current value	HM56	HM563	A	100.0	
3285	Detected heater current value	HM57	HM571	A	100.0	
3286	Detected heater current value	HM57	HM572	A	100.0	
3287	Detected heater current value	HM57	HM573	A	100.0	

No.	Name	Item	Unit	Maximum value	Remarks	
3288	Detected heater current value	HM58	HM581	A	100.0	
3289	Detected heater current value	HM58	HM582	A	100.0	
3290	Detected heater current value	HM58	HM583	A	100.0	
3291	Detected heater current value	HM61	HM611	A	100.0	
3292	Detected heater current value	HM61	HM612	A	100.0	
3293	Detected heater current value	HM61	HM613	A	100.0	
3294	Detected heater current value	HM62	HM621	A	100.0	
3295	Detected heater current value	HM62	HM622	A	100.0	
3296	Detected heater current value	HM62	HM623	A	100.0	
3297	Detected heater current value	HM63	HM631	A	100.0	
3298	Detected heater current value	HM63	HM632	A	100.0	
3299	Detected heater current value	HM63	HM633	A	100.0	
3300	Detected heater current value	HM64	HM641	A	100.0	
3301	Detected heater current value	HM64	HM642	A	100.0	
3302	Detected heater current value	HM64	HM643	A	100.0	
3303	Detected heater current value	HM65	HM651	A	100.0	
3304	Detected heater current value	HM65	HM652	A	100.0	
3305	Detected heater current value	HM65	HM653	A	100.0	
3306	Detected heater current value	HM66	HM661	A	100.0	
3307	Detected heater current value	HM66	HM662	A	100.0	
3308	Detected heater current value	HM66	HM663	A	100.0	
3309	Detected heater current value	HM67	HM671	A	100.0	
3310	Detected heater current value	HM67	HM672	A	100.0	
3311	Detected heater current value	HM67	HM673	A	100.0	
3312	Detected heater current value	HM68	HM681	A	100.0	
3313	Detected heater current value	HM68	HM682	A	100.0	
3314	Detected heater current value	HM68	HM683	A	100.0	
3315	Detected heater current value	HM71	HM711	A	100.0	
3316	Detected heater current value	HM71	HM712	A	100.0	
3317	Detected heater current value	HM71	HM713	A	100.0	
3318	Detected heater current value	HM72	HM721	A	100.0	
3319	Detected heater current value	HM72	HM722	A	100.0	
3320	Detected heater current value	HM72	HM723	A	100.0	
3321	Detected heater current value	HM73	HM731	A	100.0	
3322	Detected heater current value	HM73	HM732	A	100.0	
3323	Detected heater current value	HM73	HM733	A	100.0	
3324	Detected heater current value	HM74	HM741	A	100.0	
3325	Detected heater current value	HM74	HM742	A	100.0	
3326	Detected heater current value	HM74	HM743	A	100.0	
3327	Detected heater current value	HM75	HM751	A	100.0	
3328	Detected heater current value	HM75	HM752	A	100.0	
3329	Detected heater current value	HM75	HM753	A	100.0	
3330	Detected heater current value	HM76	HM761	A	100.0	
3331	Detected heater current value	HM76	HM762	A	100.0	
3332	Detected heater current value	HM76	HM763	A	100.0	
3333	Detected heater current value	HM77	HM771	A	100.0	
3334	Detected heater current value	HM77	HM772	A	100.0	
3335	Detected heater current value	HM77	HM773	A	100.0	
3336	Detected heater current value	HM78	HM781	A	100.0	
3337	Detected heater current value	HM78	HM782	A	100.0	
3338	Detected heater current value	HM78	HM783	A	100.0	
3339	Reserved					
3340	Reserved					
~	Reserved					
3350	Reserved					

## 4.10 Memo

No.	Name	Item	Unit	Maximum value	Remarks
3351	Memo	MEMO001			%1
~		~			
3455		MEMO105			

%1) 420-byte character string

4.11 Valve Gate

No.	Name	Item	Unit	Maximum value	Remarks
3457	Reserved				
3458	Reserved				
3459	Reserved				
3460	Reserved				
3461	Reserved				
3462	Selection of zone 01	VGUSE01		1	%1
3463	Selection of zone 02	VGUSE02		1	%1
3464	Selection of zone 03	VGUSE03		1	%1
3465	Selection of zone 04	VGUSE04		1	%1
3466	Selection of zone 05	VGUSE05		1	%1
3467	Selection of zone 06	VGUSE06		1	%1
3468	Selection of zone 07	VGUSE07		1	%1
3469	Selection of zone 08	VGUSE08		1	%1
3470	Selection of zone 09	VGUSE09		1	%1
3471	Selection of zone 10	VGUSE10		1	%1
3472	Selection of zone 11	VGUSE11		1	%1
3473	Selection of zone 12	VGUSE12		1	%1
3474	Selection of zone 13	VGUSE13		1	%1
3475	Selection of zone 14	VGUSE14		1	%1
3476	Selection of zone 15	VGUSE15		1	%1
3477	Selection of zone 16	VGUSE16		1	%1
3478	Selection of zone 17	VGUSE17		1	%1
3479	Selection of zone 18	VGUSE18		1	%1
3480	Selection of zone 19	VGUSE19		1	%1
3481	Selection of zone 20	VGUSE20		1	%1
3482	Selection of zone 21	VGUSE21		1	%1
3483	Selection of zone 22	VGUSE22		1	%1
3484	Selection of zone 23	VGUSE23		1	%1
3485	Selection of zone 24	VGUSE24		1	%1
3486	Selection of zone 25	VGUSE25		1	%1
3487	Selection of zone 26	VGUSE26		1	%1
3488	Selection of zone 27	VGUSE27		1	%1
3489	Selection of zone 28	VGUSE28		1	%1
3490	Selection of zone 29	VGUSE29		1	%1
3491	Selection of zone 30	VGUSE30		1	%1
3492	Selection of zone 31	VGUSE31		1	%1
3493	Selection of zone 32	VGUSE32		1	%1
3494	Selection of zone 01 open	VGOSEL01		1	%2
3495	Selection of zone 02 open	VGOSEL02		1	%2
3496	Selection of zone 03 open	VGOSEL03		1	%2
3497	Selection of zone 04 open	VGOSEL04		1	%2
3498	Selection of zone 05 open	VGOSEL05		1	%2
3499	Selection of zone 06 open	VGOSEL06		1	%2
3500	Selection of zone 07 open	VGOSEL07		1	%2
3501	Selection of zone 08 open	VGOSEL08		1	%2
3502	Selection of zone 09 open	VGOSEL09		1	%2
3503	Selection of zone 10 open	VGOSEL10		1	%2
3504	Selection of zone 11 open	VGOSEL11		1	%2
3505	Selection of zone 12 open	VGOSEL12		1	%2
3506	Selection of zone 13 open	VGOSEL13		1	%2
3507	Selection of zone 14 open	VGOSEL14		1	%2
3508	Selection of zone 15 open	VGOSEL15		1	%2
3509	Selection of zone 16 open	VGOSEL16		1	%2
3510	Selection of zone 17 open	VGOSEL17		1	%2
3511	Selection of zone 18 open	VGOSEL18		1	%2
3512	Selection of zone 19 open	VGOSEL19		1	%2
3513	Selection of zone 20 open	VGOSEL20		1	%2
3514	Selection of zone 21 open	VGOSEL21		1	%2
3515	Selection of zone 22 open	VGOSEL22		1	%2
3516	Selection of zone 23 open	VGOSEL23		1	%2
3517	Selection of zone 24 open	VGOSEL24		1	%2
3518	Selection of zone 25 open	VGOSEL25		1	%2
3519	Selection of zone 26 open	VGOSEL26		1	%2
3520	Selection of zone 27 open	VGOSEL27		1	%2
3521	Selection of zone 28 open	VGOSEL28		1	%2
3522	Selection of zone 29 open	VGOSEL29		1	%2
3523	Selection of zone 30 open	VGOSEL30		1	%2
3524	Selection of zone 31 open	VGOSEL31		1	%2
3525	Selection of zone 32 open	VGOSEL32		1	%2
3526	Zone 01 open position	VGOPOS01	mm	999.990	
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
3527	Zone 02 open position	VGOPOS02	mm	999.990	
			in	99.9990	
3528	Zone 03 open position	VGOPOS03	mm	999.990	
			in	99.9990	
3529	Zone 04 open position	VGOPOS04	mm	999.990	
			in	99.9990	
3530	Zone 05 open position	VGOPOS05	mm	999.990	
			in	99.9990	
3531	Zone 06 open position	VGOPOS06	mm	999.990	
			in	99.9990	
3532	Zone 07 open position	VGOPOS07	mm	999.990	
			in	99.9990	
3533	Zone 09 open position	VGOPOS09	mm	999.990	
			in	99.9990	
3534	Zone 11 open position	VGOPOS11	mm	999.990	
			in	99.9990	
3535	Zone 13 open position	VGOPOS13	mm	999.990	
			in	99.9990	
3536	Zone 15 open position	VGOPOS15	mm	999.990	
			in	99.9990	
3537	Zone 17 open position	VGOPOS17	mm	999.990	
			in	99.9990	
3538	Zone 19 open position	VGOPOS19	mm	999.990	
			in	99.9990	
3539	Zone 21 open position	VGOPOS21	mm	999.990	
			in	99.9990	
3540	Zone 23 open position	VGOPOS23	mm	999.990	
			in	99.9990	
3541	Zone 25 open position	VGOPOS25	mm	999.990	
			in	99.9990	
3542	Zone 26 open position	VGOPOS26	mm	999.990	
			in	99.9990	
3543	Zone 27 open position	VGOPOS27	mm	999.990	
			in	99.9990	
3544	Zone 28 open position	VGOPOS28	mm	999.990	
			in	99.9990	
3545	Zone 29 open position	VGOPOS29	mm	999.990	
			in	99.9990	
3546	Zone 30 open position	VGOPOS30	mm	999.990	
			in	99.9990	
3547	Zone 31 open position	VGOPOS31	mm	999.990	
			in	99.9990	
3548	Zone 32 open position	VGOPOS32	mm	999.990	
			in	99.9990	
3549	Zone 01 open timer	VGOTIM01	sec	655.35	%3
3550	Zone 02 open timer	VGOTIM02	sec	655.35	%3
3551	Zone 03 open timer	VGOTIM03	sec	655.35	%3
3552	Zone 04 open timer	VGOTIM04	sec	655.35	%3
3553	Zone 05 open timer	VGOTIM05	sec	655.35	%3
3554	Zone 06 open timer	VGOTIM06	sec	655.35	%3
3555	Zone 07 open timer	VGOTIM07	sec	655.35	%3
3556	Zone 08 open timer	VGOTIM08	sec	655.35	%3
3557	Zone 09 open timer	VGOTIM09	sec	655.35	%3
3558	Zone 10 open timer	VGOTIM10	sec	655.35	%3
3559	Zone 11 open timer	VGOTIM11	sec	655.35	%3
3560	Zone 12 open timer	VGOTIM12	sec	655.35	%3
3561	Zone 13 open timer	VGOTIM13	sec	655.35	%3
3562	Zone 14 open timer	VGOTIM14	sec	655.35	%3
3563	Zone 15 open timer	VGOTIM15	sec	655.35	%3
3564	Zone 16 open timer	VGOTIM16	sec	655.35	%3
3565	Zone 17 open timer	VGOTIM17	sec	655.35	%3
3566	Zone 18 open timer	VGOTIM18	sec	655.35	%3
3567	Zone 19 open timer	VGOTIM19	sec	655.35	%3
3568	Zone 20 open timer	VGOTIM20	sec	655.35	%3
3569	Zone 21 open timer	VGOTIM21	sec	655.35	%3
3570	Zone 22 open timer	VGOTIM22	sec	655.35	%3
3571	Zone 23 open timer	VGOTIM23	sec	655.35	%3
3572	Zone 24 open timer	VGOTIM24	sec	655.35	%3
3573	Zone 25 open timer	VGOTIM25	sec	655.35	%3
3574	Zone 26 open timer	VGOTIM26	sec	655.35	%3
3575	Zone 27 open timer	VGOTIM27	sec	655.35	%3
3576	Zone 28 open timer	VGOTIM28	sec	655.35	%3
3577	Zone 29 open timer	VGOTIM29	sec	655.35	%3

No.	Name	Item	Unit	Maximum value	Remarks
3578	Zone 30 open timer	VGOTIM30	sec	655.35	%3
3579	Zone 31 open timer	VGOTIM31	sec	655.35	%3
3580	Zone 32 open timer	VGOTIM32	sec	655.35	%3
3581	Selection of zone 01 close	VGCSEL01		2	%4
3582	Selection of zone 02 close	VGCSEL02		2	%4
3583	Selection of zone 03 close	VGCSEL03		2	%4
3584	Selection of zone 04 close	VGCSEL04		2	%4
3585	Selection of zone 05 close	VGCSEL05		2	%4
3586	Selection of zone 06 close	VGCSEL06		2	%4
3587	Selection of zone 07 close	VGCSEL07		2	%4
3588	Selection of zone 08 close	VGCSEL08		2	%4
3589	Selection of zone 09 close	VGCSEL09		2	%4
3590	Selection of zone 10 close	VGCSEL10		2	%4
3591	Selection of zone 11 close	VGCSEL11		2	%4
3592	Selection of zone 12 close	VGCSEL12		2	%4
3593	Selection of zone 13 close	VGCSEL13		2	%4
3594	Selection of zone 14 close	VGCSEL14		2	%4
3595	Selection of zone 15 close	VGCSEL15		2	%4
3596	Selection of zone 16 close	VGCSEL16		2	%4
3597	Selection of zone 17 close	VGCSEL17		2	%4
3598	Selection of zone 18 close	VGCSEL18		2	%4
3599	Selection of zone 19 close	VGCSEL19		2	%4
3600	Selection of zone 20 close	VGCSEL20		2	%4
3601	Selection of zone 21 close	VGCSEL21		2	%4
3602	Selection of zone 22 close	VGCSEL22		2	%4
3603	Selection of zone 23 close	VGCSEL23		2	%4
3604	Selection of zone 24 close	VGCSEL24		2	%4
3605	Selection of zone 25 close	VGCSEL25		2	%4
3606	Selection of zone 26 close	VGCSEL26		2	%4
3607	Selection of zone 27 close	VGCSEL27		2	%4
3608	Selection of zone 28 close	VGCSEL28		2	%4
3609	Selection of zone 29 close	VGCSEL29		2	%4
3610	Selection of zone 30 close	VGCSEL30		2	%4
3611	Selection of zone 31 close	VGCSEL31		2	%4
3612	Selection of zone 32 close	VGCSEL32		2	%4
3613	Zone 01 close position	VGCP0S01	mm	999.999	
			in	99.9990	
3614	Zone 02 close position	VGCP0S02	mm	999.999	
			in	99.9990	
3615	Zone 03 close position	VGCP0S03	mm	999.999	
			in	99.9990	
3616	Zone 04 close position	VGCP0S04	mm	999.999	
			in	99.9990	
3617	Zone 05 close position	VGCP0S05	mm	999.999	
			in	99.9990	
3618	Zone 06 close position	VGCP0S06	mm	999.999	
			in	99.9990	
3619	Zone 07 close position	VGCP0S07	mm	999.999	
			in	99.9990	
3620	Zone 08 close position	VGCP0S08	mm	999.999	
			in	99.9990	
3621	Zone 09 close position	VGCP0S09	mm	999.999	
			in	99.9990	
3622	Zone 10 close position	VGCP0S10	mm	999.999	
			in	99.9990	
3623	Zone 11 close position	VGCP0S11	mm	999.999	
			in	99.9990	
3624	Zone 12 close position	VGCP0S12	mm	999.999	
			in	99.9990	
3625	Zone 13 close position	VGCP0S13	mm	999.999	
			in	99.9990	
3626	Zone 14 close position	VGCP0S14	mm	999.999	
			in	99.9990	
3627	Zone 15 close position	VGCP0S15	mm	999.999	
			in	99.9990	
3628	Zone 16 close position	VGCP0S16	mm	999.999	
			in	99.9990	
3629	Zone 17 close position	VGCP0S17	mm	999.999	
			in	99.9990	
3630	Zone 18 close position	VGCP0S18	mm	999.999	
			in	99.9990	
3631	Zone 19 close position	VGCP0S19	mm	999.999	
			in	99.9990	

No.	Name	Item	Unit	Maximum value	Remarks
3632	Zone 20 close position	VGCPOS20	mm	999.999	
			in	99.9990	
3633	Zone 21 close position	VGCPOS21	mm	999.999	
			in	99.9990	
3634	Zone 22 close position	VGCPOS22	mm	999.999	
			in	99.9990	
3635	Zone 23 close position	VGCPOS23	mm	999.999	
			in	99.9990	
3636	Zone 24 close position	VGCPOS24	mm	999.999	
			in	99.9990	
3637	Zone 25 close position	VGCPOS25	mm	999.999	
			in	99.9990	
3638	Zone 26 close position	VGCPOS26	mm	999.999	
			in	99.9990	
3639	Zone 27 close position	VGCPOS27	mm	999.999	
			in	99.9990	
3640	Zone 28 close position	VGCPOS28	mm	999.999	
			in	99.9990	
3641	Zone 29 close position	VGCPOS29	mm	999.999	
			in	99.9990	
3642	Zone 30 close position	VGCPOS30	mm	999.999	
			in	99.9990	
3643	Zone 31 close position	VGCPOS31	mm	999.999	
			in	99.9990	
3644	Zone 32 close position	VGCPOS32	mm	999.999	
			in	99.9990	
3645	Zone 01 close timer	VGCTIM01	sec	655.35	%3
3646	Zone 02 close timer	VGCTIM02	sec	655.35	%3
3647	Zone 03 close timer	VGCTIM03	sec	655.35	%3
3648	Zone 04 close timer	VGCTIM04	sec	655.35	%3
3649	Zone 05 close timer	VGCTIM05	sec	655.35	%3
3650	Zone 06 close timer	VGCTIM06	sec	655.35	%3
3651	Zone 07 close timer	VGCTIM07	sec	655.35	%3
3652	Zone 08 close timer	VGCTIM08	sec	655.35	%3
3653	Zone 09 close timer	VGCTIM09	sec	655.35	%3
3654	Zone 10 close timer	VGCTIM10	sec	655.35	%3
3655	Zone 11 close timer	VGCTIM11	sec	655.35	%3
3656	Zone 12 close timer	VGCTIM12	sec	655.35	%3
3657	Zone 13 close timer	VGCTIM13	sec	655.35	%3
3658	Zone 14 close timer	VGCTIM14	sec	655.35	%3
3659	Zone 15 close timer	VGCTIM15	sec	655.35	%3
3660	Zone 16 close timer	VGCTIM16	sec	655.35	%3
3661	Zone 17 close timer	VGCTIM17	sec	655.35	%3
3662	Zone 18 close timer	VGCTIM18	sec	655.35	%3
3663	Zone 19 close timer	VGCTIM19	sec	655.35	%3
3664	Zone 20 close timer	VGCTIM20	sec	655.35	%3
3665	Zone 21 close timer	VGCTIM21	sec	655.35	%3
3666	Zone 22 close timer	VGCTIM22	sec	655.35	%3
3667	Zone 23 close timer	VGCTIM23	sec	655.35	%3
3668	Zone 24 close timer	VGCTIM24	sec	655.35	%3
3669	Zone 25 close timer	VGCTIM25	sec	655.35	%3
3670	Zone 26 close timer	VGCTIM26	sec	655.35	%3
3671	Zone 27 close timer	VGCTIM27	sec	655.35	%3
3672	Zone 28 close timer	VGCTIM28	sec	655.35	%3
3673	Zone 29 close timer	VGCTIM29	sec	655.35	%3
3674	Zone 30 close timer	VGCTIM30	sec	655.35	%3
3675	Zone 31 close timer	VGCTIM31	sec	655.35	%3
3676	Zone 32 close timer	VGCTIM32	sec	655.35	%3
3677	Selection of open/close confirmation	VGOPCLSEL		1	%5
3678	Reserved				
~	Reserved				
3711	Reserved				

%1) Setting: 0 = Not used, 1 = Used

%2) Setting: 0 = Position, 1 = TR

%3) Sequence timers are to be used.

Use T600-T61F with VGOTIM01-VGOTIM32.

Use T620-T63F with VGCTIM01-VGCTIM32.

%4) Setting: 0 = Position, 1 = TR, 2 = TRH

%5) Setting: 0 = LS, 1 = TR

4.12 Injection Waveform Data

1) Filling - injection position, pressure and speed

No.	Name	Item	Unit	Maximum value	Remarks
3712	Waveform recording	INJD TEN	—	—	%6
3713	Screen clear	FILCLR	—	—	%1
3714	Waveform display	FILDSP	—	—	%2
3715	Completion of waveform	FILEND	—	1	%3
3716	shot No.	FILSHT	—	0	%4
3717	Sampling time	FILSMPL	msec	9090	
3718	Maximum value on horizontal axis	FILMAX	sec	999.99	
3719	The filling time	FILTIME	sec	999.99	
3720	Dwell change position	FILPOS	mm	999.999	%5
3721	Injection position compensation value	INJPOSCPS	mm	999.999	
3722	Data count	FILNUM	pieces	130	
3723	Position data	FILPS1	mm	999.999	
3724	(4*130 pieces)	FILPS2			
:		:			
3851		FILPS129			
3852		FILPS130			
3853	Pressure data	FILPR1	kgf/ cm2	9999.99	
3854	(4*130 pieces)	FILPR2			
:		:			
3981		FILPR129			
3982		FILPR130			
3983	Speed data	FILSP1	mm/sec	600.00	
3984	(4*130 pieces)	FILSP2			
:		:			
4111		FILSP129			
4112		FILSP130			
4113	Clamping force data	FILCP1	tf	999.99	
4114	(4*130 pieces)	FILCP2			
:		:			
4241		FILCP129			
4242		FILCP130			
4243	Dwell change time	FPCTIME	sec	999.99	%7
4244	Reserved				
:	Reserved				
4255	Reserved				

- %1) Incremented by one when the first waveform data arrives
- %2) Incremented by one when waveform data arrives
- %3) Data: 0 = During data collection, 1 = End of data collection
- %4) Shot No.: Relative shot No. from the current one (0: Current shot)
- %5) Dwell change position: Dwell change position of the current shot
- %6) Status: 0 = None, 1 = Start (during operation), 2 = Completion
- %7) Dwell change time for waveform drawing

2) Dwell - injection position, pressure and speed

No.	Name	Item	Unit	Maximum value	Remarks
4257	Sampling time	HLDSMPL	msec	16666	
4258	Maximum value on horizontal axis	HLDMAX	sec	999.99	
4259	Data count	HLDNUM	pieces	70	
4260	Position data	HLDPS1	mm	999.999	
4261	(4*70 pieces)	HLDPS2			
:		:			
4328		HLDPS69			
4329		HLDPS70			
4330	Pressure data	HLDPR1	kgf/ cm2	9999.99	
4331	(4*70 pieces)	HLDPR2			
:		:			
4398		HLDPR69			
4399		HLDPR70			
4400	Speed data	HLDSP1	mm/sec	600.00	
4401	(4*70 pieces)	HLDSP2			
:		:			
4468		HLDSP69			
4469		HLDSP70			
4470	Clamping force data	HLDCP1	tf	999.99	
4471	(4*70 pieces)	HLDCP2			
:		:			
4538		HLDCP69			
4539		HLDCP70			
4540	Reserved				
:	Reserved				
4543	Reserved				

3) Cavity pressure

No.	Name	Item	Unit	Maximum value	Remarks
4545	Cavity pressure data for filling (4*130 pieces)	FILCAV1	kgf/ cm2	9999.99	
4546		FILCAV2			
:		:			
4673		FILCAV129			
4674		FILCAV130			
4675	Cavity pressure data for dwelling (4*70 pieces)	HLDCAV1	kgf/ cm2	9999.99	
4676		HLDCAV2			
:		:			
4743		HLDCAV69			
4744		HLDCAV70			
4745	Reserved				
:	Reserved				
4750	Reserved				
4751	Injection waveform end position	INJWAVEEND			-

4.13 Charging Waveform Data

1) Position, back pressure, screw rotation speed, and screw torque

No.	Name	Item	Unit	Maximum value	Remarks
4752	Waveform recording	CHGDTEN	-	-	%5
4753	Screen clear	CHGCLR	-	-	%1
4754	Waveform display	CHGDSP	-	-	%2
4755	Completion of waveform	CHGEND	-	1	%3
4756	Shot No.	CHGSHT	-	0	%4
4757	Sampling time	CHGSAMPL	msec	9999	
4758	Total data count	CHGTTL	pieces	200	
4759	Data count	CHGNUM	pieces	200	
4760	Position data (4*200 pieces)	CHGPS1	mm	999.999	
4761		CHGPS2			
:		:			
4958		CHGPS199			
4959		CHGPS200			
4960	Back pressure data (4*200 pieces)	CHGPR1	kgf/ cm2	040.00	
4961		CHGPR2			
:		:			
5158		CHGPR199			
5159		CHGPR200			
5160	(Oil pressure) Rotation data (Electric) Torque data (4*200 pieces)	CHGRV1	rpm -	999 2047	
5161		CHGRV2			
:		:			
5358		CHGRV199			
5359		CHGRV200			

- %1) Incremented by one when the first waveform data arrives
- %2) Incremented by one when waveform data arrives
- %3) Data: 0 = During data collection, 1 = End of data collection
- %4) Shot No.: Relative shot No. from the current one (0: Current shot)
- %5) Setting: 0 = Null, 1 = Start. Status: 0 = Null, 1 = Start (in operation), 2 = Completion

2) Screw retraction speed

No.	Name	Item	Unit	Maximum value	Remarks
5361	Screw retraction speed Data (4*200 pieces)	CHGSPD1	mm/sec	600.00	
5362		CHGSPD2			
:		:			
5559		CHGSPD199			
5560		CHGSPD200			
5561	Reserved				
:	Reserved				
5566	Reserved				
5567	Charging waveform end position	CHGWAVEEND			-

## 5. Quality Monitoring Data

## 5.1 Standard Data

No.	Name	Item	Unit	Maximum value	Remarks
1	Production shot	SHOT	shot	99999999	
2	OK-product shot	OKSHOT	shot	99999999	
3	NG-product shot	NGSHOT	shot	99999999	
4	Print shot	PTRSHOT	shot	99999	
5	Filling time	FILL	sec	999.99	
6	Charging time	CHG	sec	999.99	
7	Take-out time	TAKE	sec	999.99	
8	Cycle time	CYCL	sec	9999.99	%1
9	Minimum cushion posit	MIN	mm	999.999	
10	Cushion position	CUS	mm	999.999	
11	Dwell change position	SHIFT	mm	999.999	
12	Injection start position	START	mm	999.999	
13	Maximum injection pres	INJPEAK	kgf/cm2	200.00	
14	Dwell pressure	FPC	kgf/cm2	4000.00	
15	Screw rotation speed	SCRW	rpm	999	
16	Die retraction limit	CLPEND	mm	999.999	%3
17	Process alarm	PALM		—	%4
18	Monitoring alarm	MALM		—	%5
19	Barrel temperature	HEN	°C	999.9	%6
20		HN	°C	999.9	
21		H1	°C	999.9	
22		H2	°C	999.9	
23		H3	°C	999.9	
24		H4	°C	999.9	
25		H5	°C	999.9	
26		OIL	°C	999.9	
27		HOP	°C	999.9	
28	Upper/lower limit alarm	HHLALM		—	%8
29	Barrel thermocouple fa	HRMALM		—	%8
30	Barrel overheat alarm	HOVALM		—	%7
31	Heater band failure	HENHTALM		—	%9
32		HNHTALM		—	
33		H1HTALM		—	
34		H2HTALM		—	
35		H3HTALM		—	
36		H4HTALM		—	
37		H5HTALM		—	
38		HM11HTALM		—	
39		HM12HTALM		—	
40	Mold temperature 1	HM11	°C	999.9	%6
41		HM12	°C	999.9	
42		HM13	°C	999.9	
43		HM14	°C	999.9	
44		HM15	°C	999.9	
45		HM16	°C	999.9	
46		HM17	°C	999.9	
47		HM18	°C	999.9	
48	Upper/lower limit alarm	HM1HLALM		—	%10
49	Thermocouple failure fo	HM1RMALM		—	%10
50	Overheat alarm for mol	HM1OVALM		—	%10
51	Mold temperature 2	HM21	°C	999.9	%6
52		HM22	°C	999.9	
53		HM23	°C	999.9	
54		HM24	°C	999.9	
55		HM25	°C	999.9	
56		HM26	°C	999.9	
57		HM27	°C	999.9	
58		HM28	°C	999.9	
59	Upper/lower limit alarm	HM2HLALM		—	%11
60	Thermocouple failure fo	HM2RMALM		—	%11
61	Overheat alarm for mol	HM2OVALM		—	%11
62	Mold temperature 3	HM31	°C	999.9	%6
63		HM32	°C	999.9	
64		HM33	°C	999.9	
65		HM34	°C	999.9	
66		HM35	°C	999.9	
67		HM36	°C	999.9	
68		HM37	°C	999.9	
69		HM38	°C	999.9	

No.	Name	Item	Unit	Maximum value	Remarks
70	Upper/lower limit alarm	HM3HLALM		—	%12
71	Thermocouple failure for mold	HM3RMALM		—	%10
72	Overheat alarm for mold	HM3OVALM		—	%12
73	Mold temperature 4 HM	Q000HM41	°C	999.9	%6
74	Mold temperature 4 HM	Q000HM42	°C	999.9	
75	Mold temperature 4 HM	Q000HM43	°C	999.9	
76	Mold temperature 4 HM	Q000HM44	°C	999.9	
77	Mold temperature 4 HM	Q000HM45	°C	999.9	
78	Mold temperature 4 HM	Q000HM46	°C	999.9	
79	Mold temperature 4 HM	Q000HM47	°C	999.9	
80	Mold temperature 4 HM	Q000HM48	°C	999.9	
81	Overheat alarm for mold	Q000HM4HLALM		—	%13
82	Thermocouple failure for mold	Q000HM4RMALM		—	%13
83	Overheat alarm for mold	Q000HM4OVALM		—	%13
84	Mold temperature 5 HM	Q000HM51	°C	999.9	%6
85	Mold temperature 5 HM	Q000HM52	°C	999.9	
86	Mold temperature 5 HM	Q000HM53	°C	999.9	
87	Mold temperature 5 HM	Q000HM54	°C	999.9	
88	Mold temperature 5 HM	Q000HM55	°C	999.9	
89	Mold temperature 5 HM	Q000HM56	°C	999.9	
90	Mold temperature 5 HM	Q000HM57	°C	999.9	
91	Mold temperature 5 HM	Q000HM58	°C	999.9	
92	Overheat alarm for mold	Q000HM5HLALM		—	%14
93	Thermocouple failure for mold	Q000HM5RMALM		—	%14
94	Overheat alarm for mold	Q000HM5OVALM		—	%14
95	Mold temperature 6 HM	Q000HM61	°C	999.9	%6
96	Mold temperature 6 HM	Q000HM62	°C	999.9	
97	Mold temperature 6 HM	Q000HM63	°C	999.9	
98	Mold temperature 6 HM	Q000HM64	°C	999.9	
99	Mold temperature 6 HM	Q000HM65	°C	999.9	
100	Mold temperature 6 HM	Q000HM66	°C	999.9	
101	Mold temperature 6 HM	Q000HM67	°C	999.9	
102	Mold temperature 6 HM	Q000HM68	°C	999.9	
103	Overheat alarm for mold	Q000HM6HLALM		—	%15
104	Thermocouple failure for mold	Q000HM6RMALM		—	%15
105	Overheat alarm for mold	Q000HM6OVALM		—	%15
106	Mold temperature 7 HM	Q000HM71	°C	999.9	%6
107	Mold temperature 7 HM	Q000HM72	°C	999.9	
108	Mold temperature 7 HM	Q000HM73	°C	999.9	
109	Mold temperature 7 HM	Q000HM74	°C	999.9	
110	Mold temperature 7 HM	Q000HM75	°C	999.9	
111	Mold temperature 7 HM	Q000HM76	°C	999.9	
112	Mold temperature 7 HM	Q000HM77	°C	999.9	
113	Mold temperature 7 HM	Q000HM78	°C	999.9	
114	Overheat alarm for mold	Q000HM7HLALM		—	%16
115	Thermocouple failure for mold	Q000HM7RMALM		—	%16
116	Overheat alarm for mold	Q000HM7OVALM		—	%16
117	Injection stroke	INJST	mm	999.999	
118	MAX injection sutoro-ku	INJSTMAX	mm	999.999	
119	Mold opening time	MOTIME	s	999.99	
120	Mold closing time	MCTIME	s	999.99	
121	Ejection time	EJETIME	s	999.99	
122	Safety door opening time	SDOTIME	s	999.99	
123	LS4A injection pressure	INJPLS4A	kgf/cm2	999.99	
124	LS4B injection pressure	INJPLS4B	kgf/cm2	999.99	
125	LS4C injection pressure	INJPLS4C	kgf/cm2	999.99	
126	LS4D injection pressure	INJPLS4D	kgf/cm2	999.99	
127	LS4E injection pressure	INJPLS4E	kgf/cm2	999.99	
128	LS4F injection pressure	INJPLS4F	kgf/cm2	999.99	
129	LS4G injection pressure	INJPLS4G	kgf/cm2	999.99	
130	LS4H injection pressure	INJPLS4H	kgf/cm2	999.99	
131	LS4I injection pressure	INJPLS4I	kgf/cm2	999.99	
132	Mold separation value	CLAMP	mm	999.999	
133	Maximum cavity pressure	CAVMAX	kgf/cm2	999.99	
134	Cavity pressure for dwell	CAVHLD	kgf/cm2	999.99	
135	Charging waveform	CHGCLR	—	—	
136	Injection waveform	FILCLR	—	—	
137	Reserved		—	—	
138	Reserved		—	—	
139	Charging torque	CHGTRQ	%	99.9	
140	Reserved		—	—	
141	Reserved		—	—	
142	Reserved		—	—	
143	Reserved		—	—	

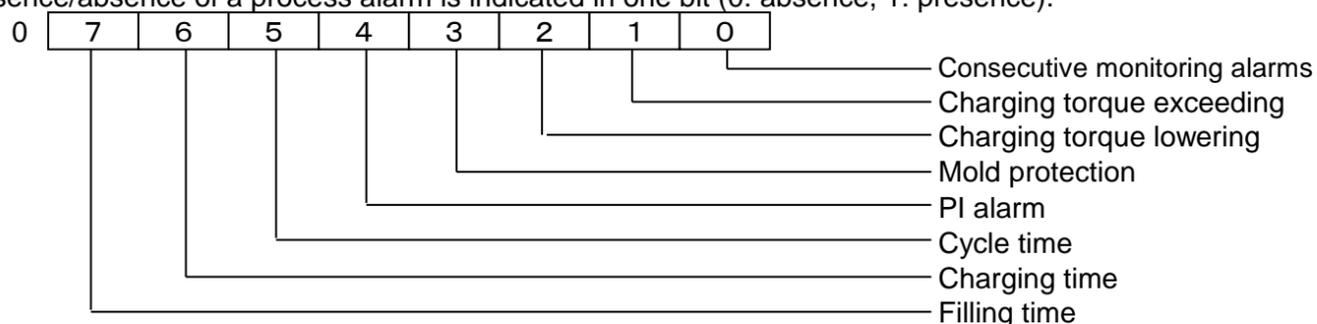
No.	Name	Item	Unit	Maximum value	Remarks
144	Reserved		—	—	
145	Date	DATE	—	—	
146	Time	TIME	—	—	
147	Title	TITLE1	digits	30+Null	
148		TITLE2			
149		TITLE3			
150		TITLE4			
151		TITLE5			
152		TITLE6			
153		TITLE7			
154		TITLE8			
155	Product code	CODE1	digits	20+null	
156		CODE2			
157		CODE3			
158		CODE4			
159		CODE5			
160		CODE6			
161	OK-product count in co	CNTOK	pieces	999999	
162	Container change coun	CNTCHG	count	999999	
163	Total production count	TOTALCNT	pieces	99999999	
164	OK production count (a	OKCNT	pieces	99999999	
165	Memory No.	MEMNO		600	
166	Mold code`	MTCOD1	digits	20+null	
167		MTCOD2			
168		MTCOD3			
169		MTCOD4			
170		MTCOD5			
171		MTCOD6			
172	Process alarm output	PALMO		—	%4
173	Monitoring alarm	MALMO		—	%5
174	Barrel alarm output	HHLAO		—	%8
175	Mold temperature alarm	HMHLAO1		—	%19
176	Mold temperature alarm	HMHLAO2		—	%20
177	Reserved				
178	Resin code	MOLDCOD1	digits	20+null	%17
179		MOLDCOD2			
180		MOLDCOD3			
181		MOLDCOD4			
182		MOLDCOD5			
183		MOLDCOD6			
184	Operation file source n	RUNFILE	—	60	
185	Setter ID	HUMANID		FFFFFFFF	
186	Production start time	STIME1		9999999	%18
187		STIME2			
188	count (Total production count)	TOTALCNT	shot	9999999	%21

%1) The display digit setting can be changed to 0.1 by specifying the parameter.

%2) The display digit setting can be changed to 0.001 by specifying the parameter.

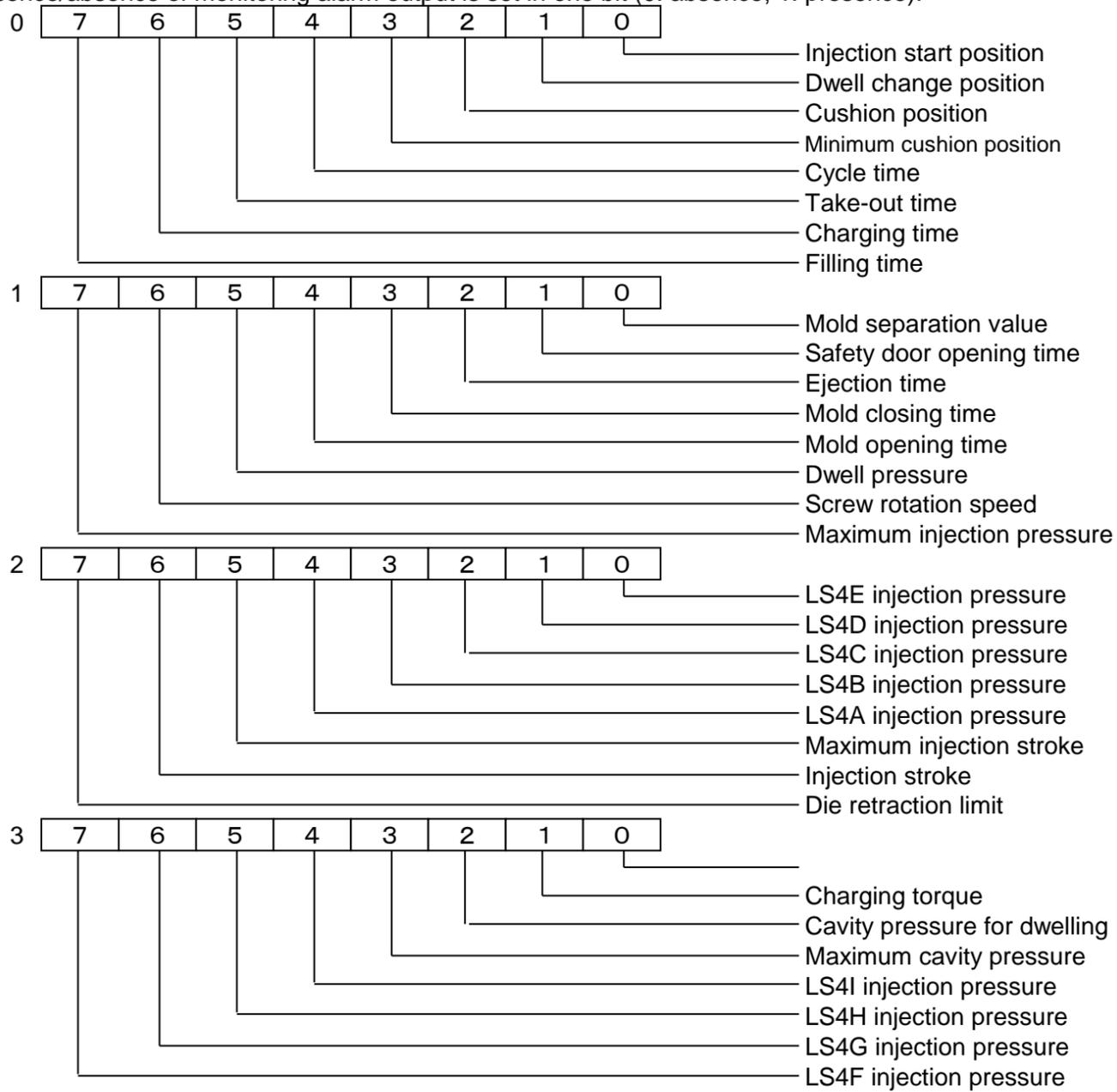
%3) Used with the in-house inspection system. Not used for general quality monitoring.

%4) Presence/absence of a process alarm is indicated in one bit (0: absence, 1: presence).



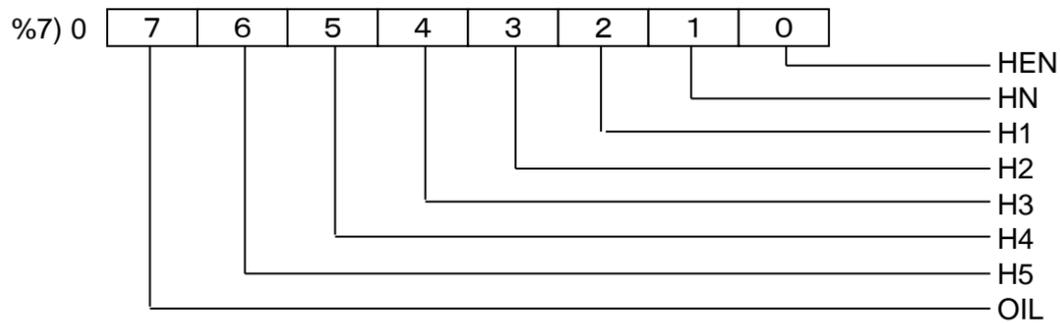
Bytes 1 to 3 are to be filled with zeros.

%5) Presence/absence of monitoring alarm output is set in one bit (0: absence, 1: presence).



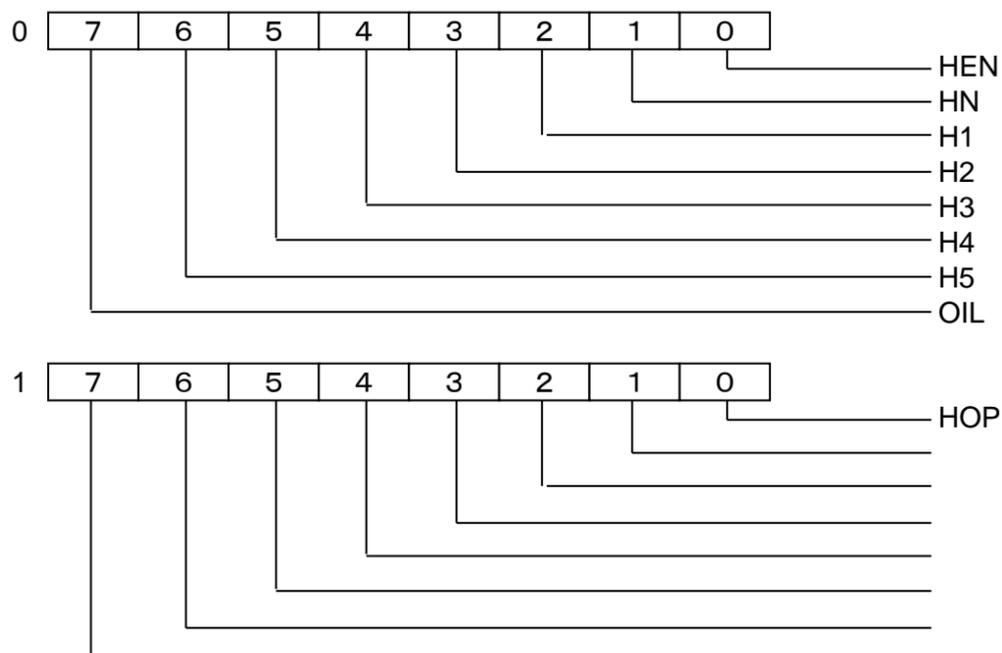
%6) Temperature is set in the range 0 to 500°C, and displayed in the range 0 to 999.9°C.  
(999.9°C is displayed when a thermocouple failure occurs.)

%7) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



Bytes 1 to 3 are to be filled with zeros.

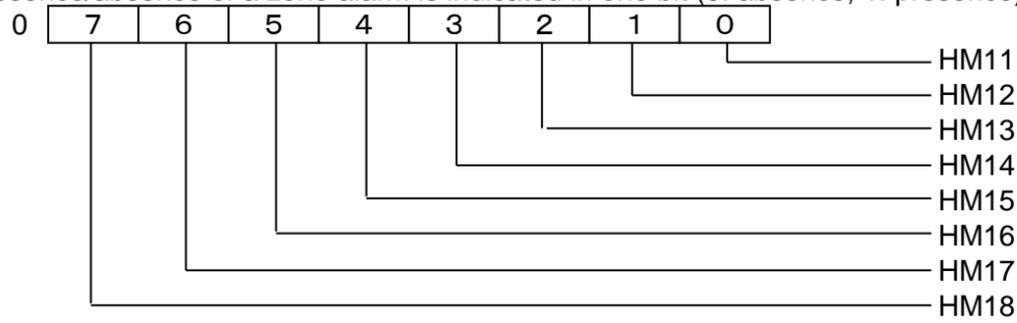
%8) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



Bytes 1 to 3 are to be filled with zeros.

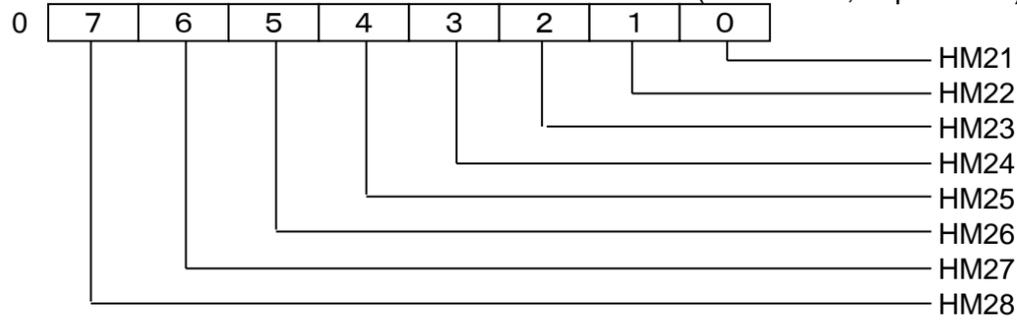
%9) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).

%10) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



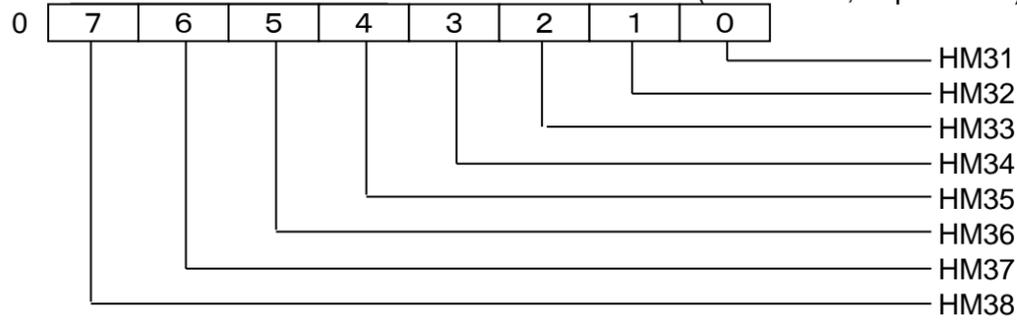
Bytes 1 to 3 are to be filled with zeros.

%11) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



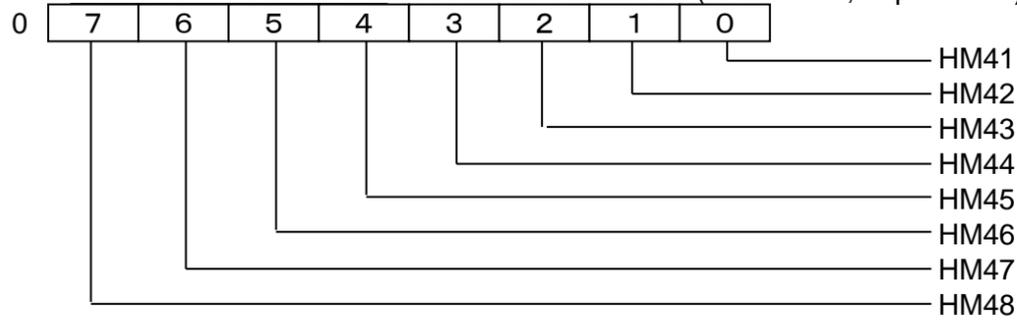
Bytes 1 to 3 are to be filled with zeros.

%12) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



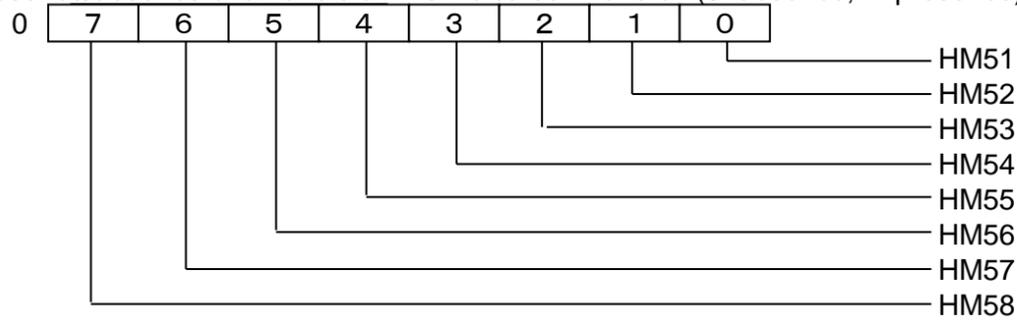
Bytes 1 to 3 are to be filled with zeros.

%13) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



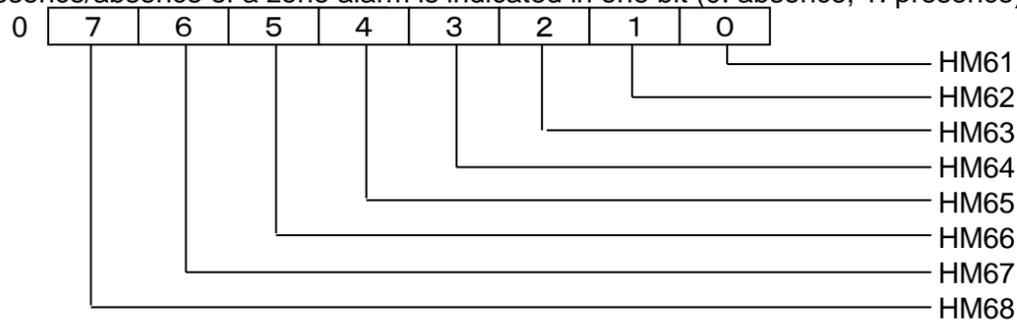
Bytes 1 to 3 are to be filled with zeros.

%14) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).



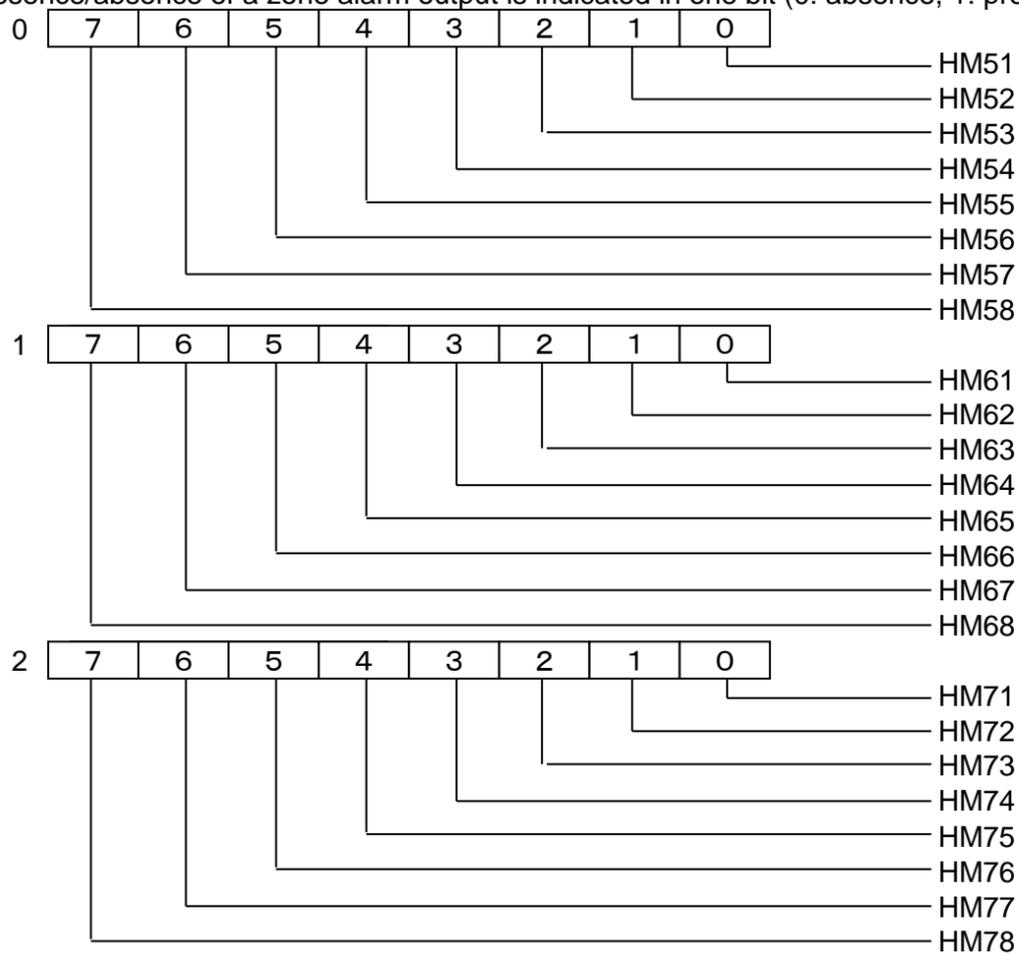
Bytes 1 to 3 are to be filled with zeros.

%15) Presence/absence of a zone alarm is indicated in one bit (0: absence, 1: presence).





%20) Presence/absence of a zone alarm output is indicated in one bit (0: absence, 1: presence).



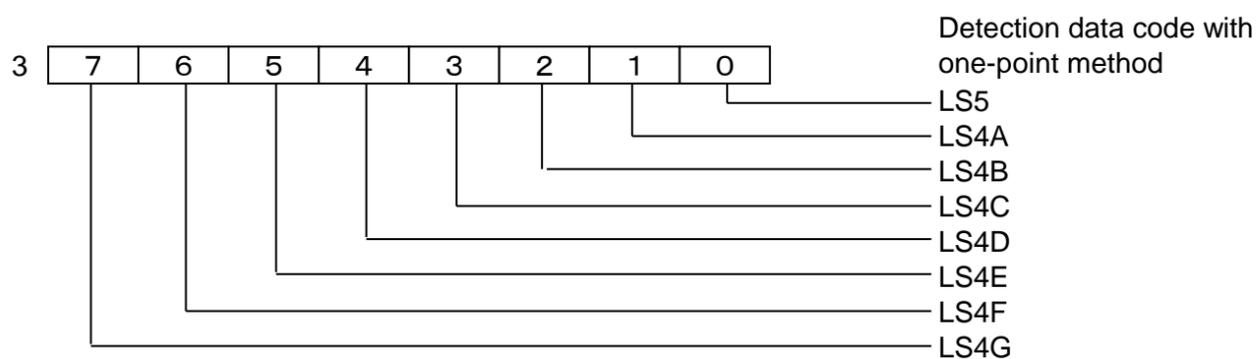
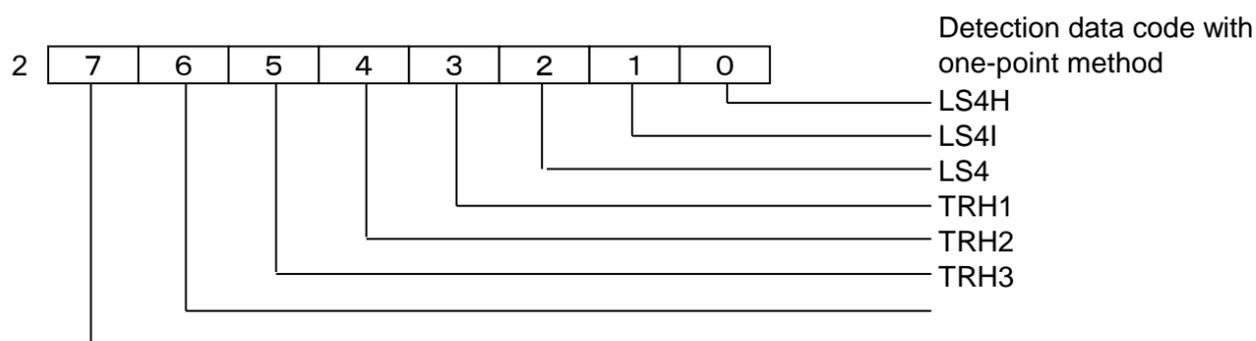
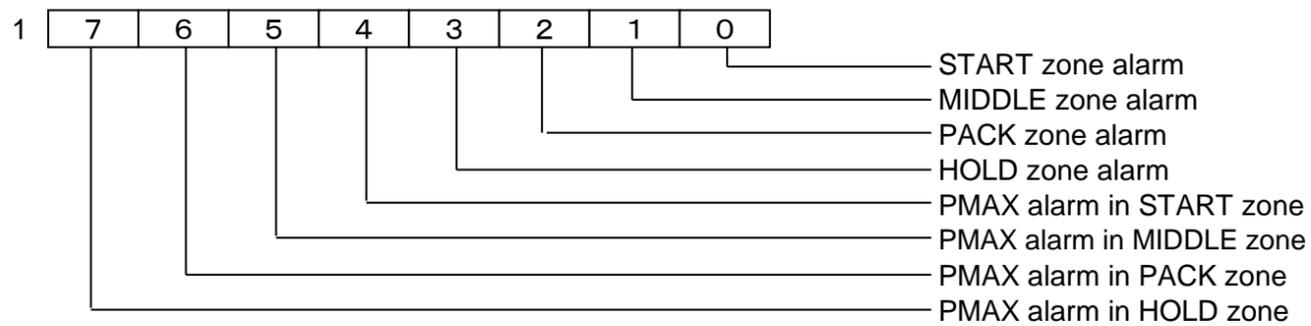
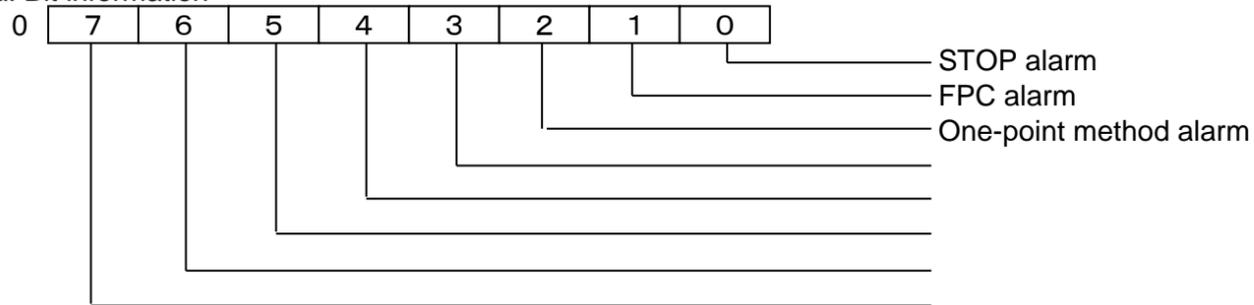
Byte 3 is to be filled with zeros.

%21) The unit can be changed to [pieces] with the management method.

5.2 MOLDLYZER Data

No.	Name	Item	Unit	Maximum value	Remarks
193	Presence/absence of a	1MLALM			%1
194	Maximum pressure in S	1MLSTPEAK	kgf/cm2	4000.00	
195	Maximum pressure in M	1MLMIPEAK	kgf/cm2	4000.00	
196	Maximum pressure in P	1MLPAPEAK	kgf/cm2	4000.00	
197	Maximum pressure in H	1MLHOPEAK	kgf/cm2	4000.00	
198	Maximum deviation in S	1MLSTMAX	kgf/cm2	4000.00	
199	Maximum deviation in M	1MLMIMAX	kgf/cm2	4000.00	
200	Maximum deviation in P	1MLPAMAX	kgf/cm2	4000.00	
201	Maximum deviation in H	1MLHOMAX	kgf/cm2	4000.00	
202	Average deviation in S	1MLSTAVE	kgf/cm2	4000.00	
203	Average deviation in M	1MLMIAVE	kgf/cm2	4000.00	
204	Average deviation in P	1MLPAAVE	kgf/cm2	4000.00	
205	Average deviation in H	1MLHOAVE	kgf/cm2	4000.00	
206	Pressure detection with	1MLMAX	kgf/cm2	4000.00	
207	Average deviation with	1MLAVE	kgf/cm2	4000.00	
208	FPC PRESS	1MLFPC	kgf/cm2	4000.00	
209	Not used	1MLDMY1			
210	Not used	1MLDMY2			
211	Not used	1MLDMY3			
212	Reserved				
:	Reserved				
223	Reserved				

%1) Data: Bit information

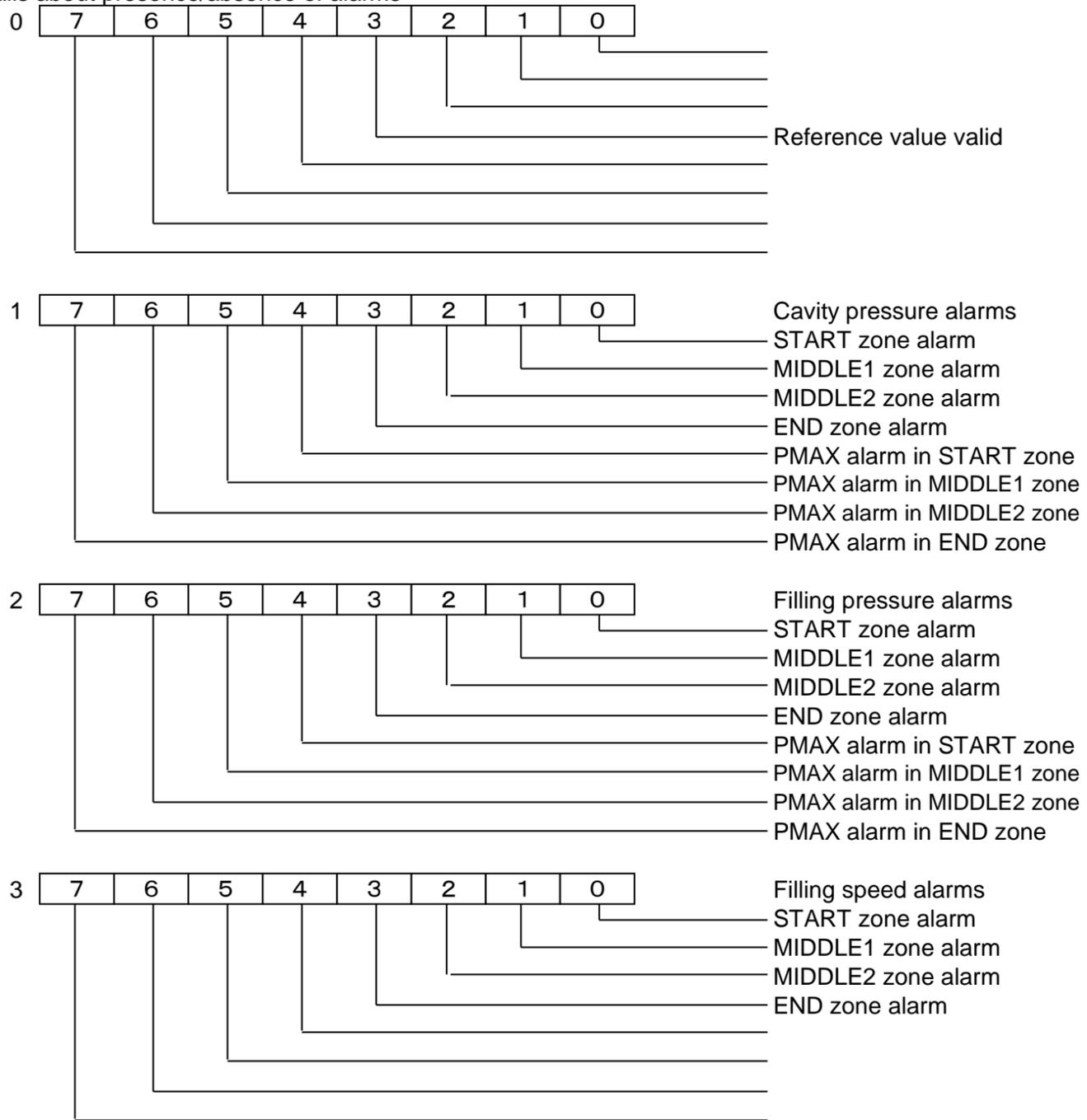


5.3 ACTLYZER Data

No.	Name	Item	Unit	Maximum value	Remarks
225	Presence/absence of a	1ALALM			%1
226	Peak cavity pressure in	1ALCPSTPEK	kgf/cm2	4000.00	
227	Peak cavity pressure in	1ALCPM1PEK	kgf/cm2	4000.00	
228	Peak cavity pressure in	1ALCPM2PEK	kgf/cm2	4000.00	
229	Peak cavity pressure in	1ALCPEDPEK	kgf/cm2	4000.00	
230	Maximum deviation of cavity pressure in ST zone	1ALCPSTMAX	kgf/cm2	4000.00	
231	Maximum deviation of cavity pressure in M1 zone	1ALCPM1MAX	kgf/cm2	4000.00	
232	Maximum deviation of cavity pressure in M2 zone	1ALCPM2MAX	kgf/cm2	4000.00	
233	Maximum deviation of cavity pressure in ED zone	1ALCPEDMAX	kgf/cm2	4000.00	
234	Average deviation of cavity pressure in ST zone	1ALCPSTAVE	kgf/cm2	4000.00	
235	Average deviation of cavity pressure in M1 zone	1ALCPM1AVE	kgf/cm2	4000.00	
236	Average deviation of cavity pressure in M2 zone	1ALCPM2AVE	kgf/cm2	4000.00	
237	Average deviation of cavity pressure in ED zone	1ALCPEDAVE	kgf/cm2	4000.00	
238	Peak filling pressure in	1ALIPSTPEK	kgf/cm2	200.00	
239	Peak filling pressure in	1ALIPM1PEK	kgf/cm2	200.00	
240	Peak filling pressure in	1ALIPM2PEK	kgf/cm2	200.00	
241	Peak filling pressure in	1ALIPEDPEK	kgf/cm2	200.00	
242	Maximum deviation of filling pressure in ST zone	1ALIPSTMAX	kgf/cm2	200.00	
243	Maximum deviation of filling pressure in M1 zone	1ALIPM1MAX	kgf/cm2	200.00	
244	Maximum deviation of filling pressure in M2 zone	1ALIPM2MAX	kgf/cm2	200.00	
245	Maximum deviation of filling pressure in ED zone	1ALIPEDMAX	kgf/cm2	200.00	
246	Average deviation of filling pressure in ST zone	1ALIPSTAVE	kgf/cm2	200.00	
247	Average deviation of filling pressure in M1 zone	1ALIPM1AVE	kgf/cm2	200.00	
248	Average deviation of filling pressure in M2 zone	1ALIPM2AVE	kgf/cm2	200.00	
249	Average deviation of filling pressure in ED zone	1ALIPEDAVE	kgf/cm2	200.00	
250	Peak filling speed in ST zone	1ALIVSTPEK	mm/sec	600.000	
251	Peak filling speed in M1 zone	1ALIVM1PEK	mm/sec	600.000	
252	Peak filling speed in M2 zone	1ALIVM2PEK	mm/sec	600.000	
253	Peak filling speed in ED zone	1ALIVEDPEK	mm/sec	600.000	
254	Maximum deviation of filling speed in ST zone	1ALIVSTMAX	mm/sec	600.000	
255	Maximum deviation of filling speed in M1 zone	1ALIVM1MAX	mm/sec	600.000	
256	Maximum deviation of filling speed in M2 zone	1ALIVM2MAX	mm/sec	600.000	
257	Maximum deviation of filling speed in ED zone	1ALIVEDMAX	mm/sec	600.000	
258	Average deviation of filling speed in ST zone	1ALIVSTAVE	mm/sec	600.000	
259	Average deviation of filling speed in M1 zone	1ALIVM1AVE	mm/sec	600.000	
260	Average deviation of filling speed in M2 zone	1ALIVM2AVE	mm/sec	600.000	
261	Average deviation of filling speed in ED zone	1ALIVEDAVE	mm/sec	600.000	

No.	Name	Item	Unit	Maximum value	Remarks
262	Reserved				
:	Reserved				
271	Reserved				

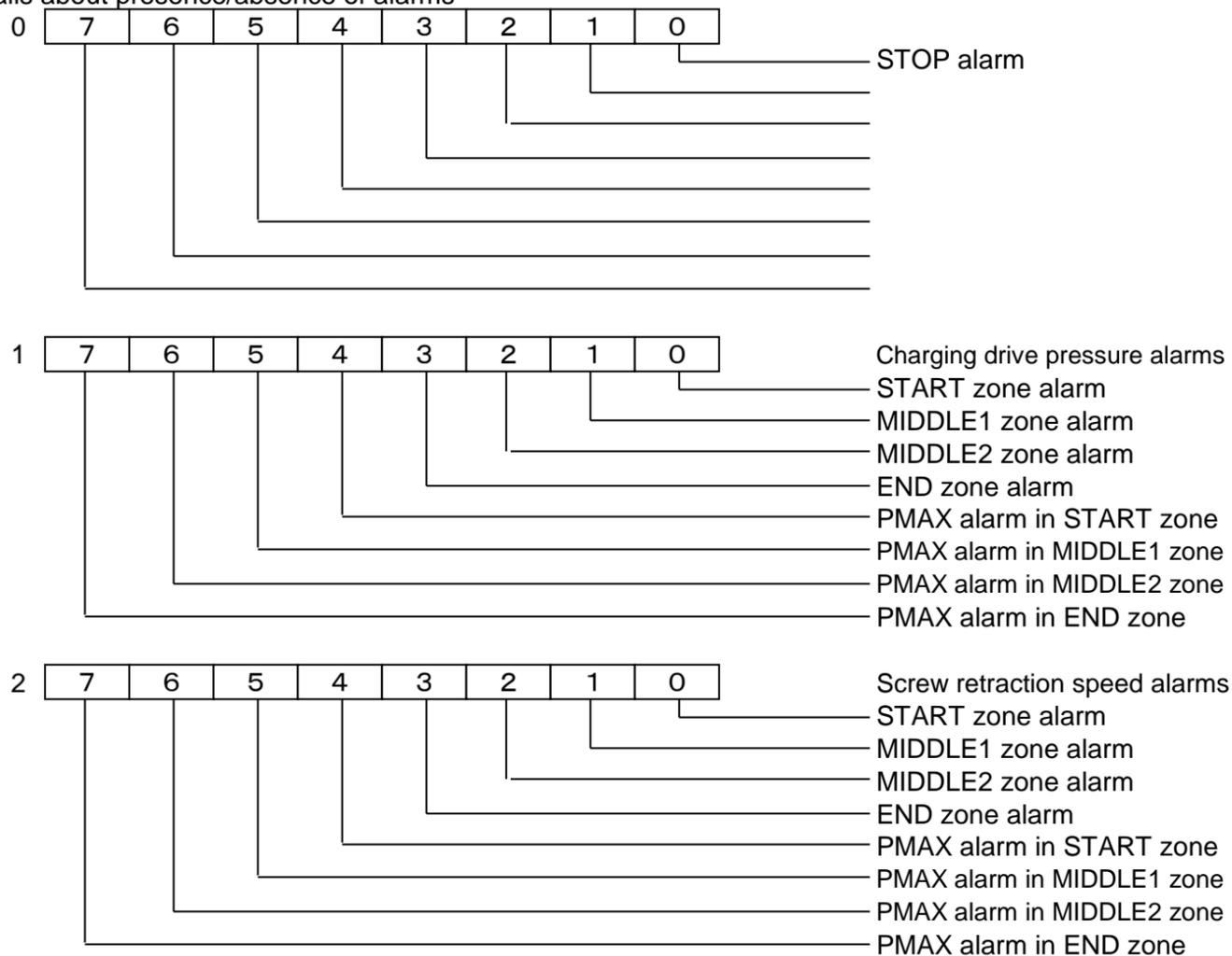
%1) Details about presence/absence of alarms



5.4 PLASTLYZER Data

No.	Name	Item	Unit	Maximum value	Remarks
273	Presence/absence of a	1ALALM			%1
274	Peak pressure in ST zone	1PLSTPPEAK	kgf/cm2	200.00	%2
275	Peak pressure in M1 zone	1PLM1PPEAK	kgf/cm2	200.00	%2
276	Peak pressure in M2 zone	1PLM2PPEAK	kgf/cm2	200.00	%2
277	Peak pressure in ED zone	1PLEDPPEAK	kgf/cm2	200.00	%2
278	Maximum deviation of p	1PLSTPMAx	kgf/cm2	200.00	%2
279	Maximum deviation of p	1PLM1PMAx	kgf/cm2	200.00	%2
280	Maximum deviation of p	1PLM2PMAx	kgf/cm2	200.00	%2
281	Maximum deviation of p	1PLEDPMAx	kgf/cm2	200.00	%2
282	Average deviation of p	1PLSTPAVE	kgf/cm2	200.00	%2
283	Average deviation of p	1PLM1PAVE	kgf/cm2	200.00	%2
284	Average deviation of p	1PLM2PAVE	kgf/cm2	200.00	%2
285	Average deviation of p	1PLEDPAVE	kgf/cm2	200.00	%2
286	Peak speed in ST zone	1PLSTVPEAK	mm/sec	600.000	%3
287	Peak speed in M1 zone	1PLM1VPEAK	mm/sec	600.000	%3
288	Peak speed in M2 zone	1PLM2VPEAK	mm/sec	600.000	%3
289	Peak speed in ED zone	1PLEDVPEAK	mm/sec	600.000	%3
290	Maximum deviation of s	1PLSTVMAx	mm/sec	600.000	%3
291	Maximum deviation of s	1PLM1VMAx	mm/sec	600.000	%3
292	Maximum deviation of s	1PLM2VMAx	mm/sec	600.000	%3
293	Maximum deviation of s	1PLEDVMAx	mm/sec	600.000	%3
294	Average deviation of s	1PLSTVAVE	mm/sec	600.000	%3
295	Average deviation of s	1PLM1VAVE	mm/sec	600.000	%3
296	Average deviation of s	1PLM2VAVE	mm/sec	600.000	%3
297	Average deviation of s	1PLEDVAVE	mm/sec	600.000	%3
298	Reserved				
:	Reserved				
303	Reserved				

%1) Details about presence/absence of alarms



%2)Charging drive pressure

%3)Screw retraction speed