

■Output number layout / Process data

The process data of this product is designed with byte array base data type, so the byte order when solenoid output is allocated on the PLC memory is based on the endian type of the transmission format of the IO-Link master gateway upper communication, either big endian format or little endian format.

The following illustration shows the byte order in each case.

For the fieldbus / Industrial Ethernet with the big endian transmission format

(e.g. Profibus-DP, ProfiNet)

Output assignment in byte

Bit: 7	0	
7	0	Byte n
15	8	Byte n+1
23	16	Byte n+2
31	24	Byte n+3

Output assignment in Word

Bit: 15	MSO	8	7	LSO	0	
7		0	15		8	Word n
23		16	31		24	Word n+1

Output assignment in Double Word

Bit: 31	MSO	24	23		16	15		8	7	LSO	0	
7		0	15		8	23		16	31		24	Double Word n

Byte order on solenoid outputs

Bit No.	0	2	4	6	0	2	4	6	0	2	4	6	0	2	4	6	
Output No.	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	Solenoid A side
D side	(Byte n)				(Byte n+1)				(Byte n+2)				(Byte n+3)				U side
Output No.	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	Solenoid B side
Bit No.	1	3	5	7	1	3	5	7	1	3	5	7	1	3	5	7	

Valve manifold

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In this product, Device Status can be added to input data by the switch setting (Page 13).

(Refer to the table below)

Bit offset			Index 36 (Device Status)		
2	1	0	value	Status definition	Details
0	0	0	0	In normal operation	-
0	0	1	1	Maintenance required	Output switching counter value over-run
0	1	0	2	Out of specification	Solenoid power voltage over-run Solenoid power voltage under-run
0	1	1	3	Function check	N/A
1	0	0	4	Failure	- SI unit hardware fault - SI unit other internal fault - Output short circuit - Output open circuit

Bit offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Item	Reserved								Reserved					Device Status		

- The process data of this product is byte array type.

The above mapping in word data format is for the case where the transmission order of the upper communication is little endian.

Please note that the byte order will change in case of big endian.

Refer to the table below for the Endian type of the major upper communication.

Endian type	Upper communication protocol
Big-Endian type	Such as PROFIBUS and PROFINET
Little-Endian type	Such as EtherNET/IP, EtherCAT and CC-Link IE Field.