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Control Head Type CTOP-S	
Vendor ID	1840 (0x0730)
Vendor Name	Inoxpa S.A.U.
Vendor Text	www.inoxpa.com
Vendor URL	www.inoxpa.com
Device ID	4 (0x000004)
DeviceFamily	Control Heads
	
Features	
Block Parameter	yes
Data Storage	yes
Profile Characteristic	0x0031 (Device Profile: Firmware Update), 0x4000 (Common Application Profile: Identification and Diagnosis)
Supported Access Locks	Parameter: no, Data Storage: no, Local Parameterization: yes, Local User Interface: yes
Communication	
IO-Link Revision	V1.1
Compatible with	V1.0
Transmission Rate	230400 bit/s (COM3)
Minimum Cycle Time	1 ms
SIO Mode Supported	no
M-Sequence Capability	PREOPERATE = TYPE_1_2 with 2 octets on-request data OPERATE = TYPE_2_V with 2 octets on-request data ISDU supported
Device Variant	
Control Head Type CTOP-S Class A 3EV	
Description	Control Head Type CTOP-S with 3 valves, IO-Link Class A
Product ID	CTOP-S 3EV IO-Link
Device Icon	
Device Symbol	
Connection Type	M12-4 connector
- pin 1	brown; L+
- pin 2	white; NC
- pin 3	(light) blue; L-
- pin 4	black; C/Q

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ProcessData id=PD\_DATA\_3EV (condition V\_2300.Valves and positions enables = 3)

ProcessDataIn "Process input data" id=PD\_IN\_3EV

bit length: 32  
data type: 32-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						S0	
2	1	Boolean						S1	
3	2	Boolean						S2	
4	3	Boolean						S3	
5	8	16-bit Integer						Position	
6	24	4-bit UInteger	0 = Normal operation, 1 = Teach on-the-fly, 2 = Automatic teach, 3 = Manual operation, 4 = Error					Device actual operative mode	
7	30	Boolean						Error flag	

8	31	Boolean						Warning flag	
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#### Octet 0

bit offset	31	30	29	28	27	26	25	24
subindex	8	7	/////	/////	6			
element bit					3	2	1	0

#### Octet 1

bit offset	23	22	21	20	19	18	17	16
subindex	5							
element bit	15	14	13	12	11	10	9	8

#### Octet 2

bit offset	15	14	13	12	11	10	9	8
subindex	5							
element bit	7	6	5	4	3	2	1	0

#### Octet 3

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	4	3	2	1

### ProcessDataOut "Process output data" id=PD\_OUT\_3EV

bit length: 8

data type: 8-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						V1	
2	1	Boolean						V2	
3	2	Boolean						V3	

#### Octet 0

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	3	2	1

### ProcessData id=PD\_DATA\_2EV-A (condition V\_2300.Valves and positions enables = 2)

### ProcessDataIn "Process input data" id=PD\_IN\_2EV-A

bit length: 32

data type: 32-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						S0	
2	1	Boolean						S1	
3	2	Boolean						S2	
5	8	16-bit Integer						Position	
6	24	4-bit UInteger	0 = Normal operation, 1 = Teach on-the-fly, 2 = Automatic teach, 3 = Manual operation, 4 = Error					Device actual operative mode	
7	30	Boolean						Error flag	
8	31	Boolean						Warning flag	

#### Octet 0

bit offset	31	30	29	28	27	26	25	24
subindex	8	7	/////	/////	6			
element bit					3	2	1	0

#### Octet 1

bit offset	23	22	21	20	19	18	17	16
subindex	5							
element bit	15	14	13	12	11	10	9	8

#### Octet 2

bit offset	15	14	13	12	11	10	9	8
subindex	5							
element bit	7	6	5	4	3	2	1	0

#### Octet 3

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	3	2	1

### ProcessDataOut "Process output data" id=PD\_OUT\_2EV-A

bit length: 8  
data type: 8-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						V1	
2	1	Boolean						V2	

#### Octet 0

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	/////	2	1

**ProcessData id=PD\_DATA\_2EV-B (condition V\_2300.Valves and positions enables = 1)**

**ProcessDataIn "Process input data" id=PD\_IN\_2EV-B**

bit length: 32  
data type: 32-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
2	1	Boolean						S1	
3	2	Boolean						S2	
5	8	16-bit Integer						Position	
6	24	4-bit UInteger	0 = Normal operation, 1 = Teach on-the-fly, 2 = Automatic teach, 3 = Manual operation, 4 = Error					Device actual operative mode	
7	30	Boolean						Error flag	
8	31	Boolean						Warning flag	

#### Octet 0

bit offset	31	30	29	28	27	26	25	24
subindex	8	7	/////	/////	6			
element bit					3	2	1	0

#### Octet 1

bit offset	23	22	21	20	19	18	17	16
subindex	5							
element bit	15	14	13	12	11	10	9	8

#### Octet 2

bit offset	15	14	13	12	11	10	9	8
subindex	5							
element bit	7	6	5	4	3	2	1	0

#### Octet 3

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	3	2	/////

**ProcessDataOut "Process output data" id=PD\_OUT\_2EV-B**

bit length: 8  
data type: 8-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						V1	
2	1	Boolean						V2	

#### Octet 0

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	/////	2	1

**ProcessData id=PD\_DATA\_1EV (condition V\_2300.Valves and positions enables = 0)**

**ProcessDataIn "Process input data" id=PD\_IN\_1EV**

bit length: 32  
data type: 32-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						S0	

2	1	Boolean	0 = Normal operation, 1 = Teach on-the-fly, 2 = Automatic teach, 3 = Manual operation, 4 = Error					S1	
5	8	16-bit Integer						Position	
6	24	4-bit UInteger						Device actual operative mode	
7	30	Boolean						Error flag	
8	31	Boolean						Warning flag	

Octet 0

bit offset	31	30	29	28	27	26	25	24
subindex	8	7	/////	/////	6			
element bit					3	2	1	0

Octet 1

bit offset	23	22	21	20	19	18	17	16
subindex	5							
element bit	15	14	13	12	11	10	9	8

Octet 2

bit offset	15	14	13	12	11	10	9	8
subindex	5							
element bit	7	6	5	4	3	2	1	0

Octet 3

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	/////	2	1

ProcessDataOut "Process output data" id=PD\_OUT\_1EV

bit length: 8  
data type: 8-bit Record

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean						V1	

Octet 0

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	/////	/////	/////	1

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Standard Variable "Direct Parameters - Page 1" index=0 id=V\_DirectParameters\_1

description: Comprises the required parameters defining the communication characteristics and identifiers for device validation.  
data type: 128-bit Record  
access rights: rw

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	120	8-bit UInteger			ro			Reserved	
2	112	8-bit UInteger			ro			Master Cycle Time	Communication: Current communication cycle duration used by the master. This value defines the process data cycle.
3	104	8-bit UInteger			ro			Min Cycle Time	Communication: Minimum communication cycle duration supported by the device. This value defines the lowest possible process data cycle.
4	96	8-bit UInteger			ro			M-Sequence Capability	Communication: Information on the structure and the supported features of the communication messages.
5	88	8-bit UInteger		17	ro			IO-Link Revision ID	Communication: Identifier for the currently used communication protocol revision.
6	80	8-bit UInteger			ro			Process Data Input Length	Communication: Information on width and features of the process input data (Process Data from Device to Master).
7	72	8-bit UInteger			ro			Process Data Output Length	Communication: Information on width of the process output data (Process Data from Master to Device).
8	64	8-bit UInteger			ro			Vendor ID 1	Identification: Highest octet of the Vendor ID. Combined with the parameter Vendor ID 2, this parameter defines the 16-bit value of the unique Vendor ID as assigned by the IO-Link Community.

9	56	8-bit UInteger			ro			Vendor ID 2	Identification: Lowest octet of the Vendor ID. Combined with the parameter Vendor ID 1, this parameter defines the 16-bit value of the unique Vendor ID as assigned by the IO-Link Community.
10	48	8-bit UInteger			ro			Device ID 1	Identification: Highest octet of the Device ID. Combined with the parameters Device ID 2 and 3, this parameter defines the 24-bit value of the vendor-specific Device ID.
11	40	8-bit UInteger			ro			Device ID 2	Identification: Middle octet of the Device ID. Combined with the parameters Device ID 1 and 3, this parameter defines the 24-bit value of the vendor-specific Device ID.
12	32	8-bit UInteger			ro			Device ID 3	Identification: Lowest octet of the Device ID. Combined with the parameters Device ID 1 and 2, this parameter defines the 24-bit value of the vendor-specific Device ID.
13	24	8-bit UInteger			ro			Reserved	
14	16	8-bit UInteger			ro			Reserved	
15	8	8-bit UInteger			ro			Reserved	
16	0	8-bit UInteger			wo	X		System Command	Application: Command interface for devices without ISDU support. Validity and execution of commands are not confirmed.

octet	0	1	2	3	4	5	6	7
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64
subindex	1	2	3	4	5	6	7	8
element bit	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0

octet	8	9	10	11	12	13	14	15
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0
subindex	9	10	11	12	13	14	15	16
element bit	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0

## Standard Variable "System Command" index=2 id=V\_SystemCommand

description: Command interface for applications. A positive acknowledge indicates the complete and correct finalization of the requested function.

data type: 8-bit UInteger

allowed values: 80 = Start unlocking sequence, 81 = Unlocking command 1, 82 = Unlocking command 2, 128 = Device Reset, 129 = Application Reset, 130 = Restore Factory Settings, 131 = Back-to-box, 160 = Start automatic teach, 161 = Start on the fly teach, 162 = Manual teach S0, 163 = Manual teach S1, 164 = Manual teach S2, 165 = Manual teach S3, 166 = Abort teach process, 167 = Teach reset, 168 = Localize device, 169 = Stop localize function

access rights: wo

modifies other variables

octet	0	
bit offset	7 - 0	
element bit	7 - 0	

## Standard Variable "Device Access Locks" index=12 id=V\_DeviceAccessLocks

description: The access to the device parameters can be restricted by setting appropriate flags within this parameter.

data type: 16-bit Record (subindex access not supported)

access rights: rw

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	0	Boolean	false = Unlocked, true = Locked					Parameter Write Access	This lock prevents the write access to all read/write parameters of the device except for the parameter 'Device Access Locks'.
2	1	Boolean	false = Unlocked, true = Locked					Data Storage	This lock prevents the write access to the device parameters via the data storage mechanism.
3	2	Boolean	false = Unlocked, true = Locked	0				Local Parameterization	This lock prevents the device settings from being changed via local operating elements on the device.

4	3	Boolean	false = Unlocked, true = Locked	0				Local User Interface	This lock prevents the access to the device settings and display via a local user interface. The user interface is disabled.
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#### Octet 0

bit offset	15	14	13	12	11	10	9	8
subindex	/////	/////	/////	/////	/////	/////	/////	/////

#### Octet 1

bit offset	7	6	5	4	3	2	1	0
subindex	/////	/////	/////	/////	4	3	2	1

### Standard Variable "Vendor Name" index=16 id=V\_VendorName

description: The vendor name that is assigned to a Vendor ID.

data type: 64-octet String UTF-8

default value: "Inoxpa S.A.U."

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320

octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

### Standard Variable "Vendor Text" index=17 id=V\_VendorText

description: Additional information about the vendor.

data type: 64-octet String UTF-8

default value: "www.inoxpa.com"

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320

octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Product Name" index=18 id=V\_ProductName

description: Complete product name.

data type: 64-octet String UTF-8

default value: "CTOP-S 3EV IO-Link"

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320

octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Product ID" index=19 id=V\_ProductID

description: Vendor-specific product or type identification (e.g., item number or model number).

data type: 64-octet String UTF-8

default value: "CTOP-S 3EV IO-Link"

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320

octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
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bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128
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octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Product Text" index=20 id=V\_ProductText

description: Additional product information for the device.

data type: 64-octet String UTF-8

default value: "CTOP-S"

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320

octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Serial Number" index=21 id=V\_SerialNumber

description: Unique, vendor-specific identifier of the individual device.

data type: 16-octet String UTF-8

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	8	9	10	11	12	13	14	15
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Hardware Revision" index=22 id=V\_HardwareRevision

description: Unique, vendor-specific identifier of the hardware revision of the individual device.

data type: 64-octet String UTF-8

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
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bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320
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octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Firmware Revision" index=23 id=V\_FirmwareRevision

description: Unique, vendor-specific identifier of the firmware revision of the individual device.

data type: 64-octet String UTF-8

access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448

octet	8	9	10	11	12	13	14	15
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384

octet	16	17	18	19	20	21	22	23
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320

octet	24	25	26	27	28	29	30	31
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256

octet	32	33	34	35	36	37	38	39
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	40	41	42	43	44	45	46	47
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	48	49	50	51	52	53	54	55
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	56	57	58	59	60	61	62	63
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Application-specific Tag" index=24 id=V\_ApplicationSpecificTag

description: Possibility to mark a device with user- or application-specific information.

data type: 32-octet String UTF-8

default value: "\*\*\*\*\*"

access rights: rw

octet	0	1	2	3	4	5	6	7
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	8	9	10	11	12	13	14	15
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	16	17	18	19	20	21	22	23
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	24	25	26	27	28	29	30	31
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Standard Variable "Device Status" index=36 id=V\_DeviceStatus

description: Indicator for the current device condition and diagnosis state.

data type: 8-bit UInteger

allowed values: 0 = Device is OK, 1 = Maintenance required, 2 = Out of specification, 3 = Functional check, 4 = Failure

access rights: ro

dynamic

octet	0	
bit offset	7 - 0	
element bit	7 - 0	

## Standard Variable "Detailed Device Status" index=37 id=V\_DetailedDeviceStatus

description: List of all currently pending events in the device.

data type: Array[10] of 3-octet OctetString (subindex access not supported)

access rights: ro

dynamic

octet	0	1	2	3	4	5	6	7
bit offset	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192	191 - 184	183 - 176
subindex	1	1	1	2	2	2	3	3

octet	8	9	10	11	12	13	14	15
bit offset	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128	127 - 120	119 - 112
subindex	3	4	4	4	5	5	5	6

octet	16	17	18	19	20	21	22	23
bit offset	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64	63 - 56	55 - 48
subindex	6	6	7	7	7	8	8	8

octet	24	25	26	27	28	29	
bit offset	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0	
subindex	9	9	9	10	10	10	

[Top]

## Variable "Function Tag" index=25 id=V\_CP\_FunctionTag

description: Possibility to mark a device with function-specific information.

data type: 32-octet String UTF-8

default value: "\*\*\*\*\*"

access rights: rw

octet	0	1	2	3	4	5	6	7
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192

octet	8	9	10	11	12	13	14	15
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	16	17	18	19	20	21	22	23
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	24	25	26	27	28	29	30	31
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

## Variable "Location Tag" index=26 id=V\_CP\_LocationTag

description: Possibility to mark a device with location-specific information.

data type: 32-octet String UTF-8

default value: "\*\*\*\*\*"

access rights: rw

octet	0	1	2	3	4	5	6	7
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bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192
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octet	8	9	10	11	12	13	14	15
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128

octet	16	17	18	19	20	21	22	23
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	24	25	26	27	28	29	30	31
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

Variable "Inoxpa Device Description Object" index=8192 id=V\_2000

data type: 1280-bit Record  
access rights: ro

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	1024	32-octet String US_ASCII			ro			Manufacture date	
2	768	32-octet String US_ASCII			ro			Factory firmware version	
3	512	32-octet String US_ASCII			ro			PCBA manufacture date	
4	256	32-octet String US_ASCII			ro			PCB version	
5	0	32-octet String US_ASCII			ro			PCBA version	

octet	0	1	2	3	4	5	6	7
bit offset	1279 - 1272	1271 - 1264	1263 - 1256	1255 - 1248	1247 - 1240	1239 - 1232	1231 - 1224	1223 - 1216
subindex	1	1	1	1	1	1	1	1

octet	8	9	10	11	12	13	14	15
bit offset	1215 - 1208	1207 - 1200	1199 - 1192	1191 - 1184	1183 - 1176	1175 - 1168	1167 - 1160	1159 - 1152
subindex	1	1	1	1	1	1	1	1

octet	16	17	18	19	20	21	22	23
bit offset	1151 - 1144	1143 - 1136	1135 - 1128	1127 - 1120	1119 - 1112	1111 - 1104	1103 - 1096	1095 - 1088
subindex	1	1	1	1	1	1	1	1

octet	24	25	26	27	28	29	30	31
bit offset	1087 - 1080	1079 - 1072	1071 - 1064	1063 - 1056	1055 - 1048	1047 - 1040	1039 - 1032	1031 - 1024
subindex	1	1	1	1	1	1	1	1

octet	32	33	34	35	36	37	38	39
bit offset	1023 - 1016	1015 - 1008	1007 - 1000	999 - 992	991 - 984	983 - 976	975 - 968	967 - 960
subindex	2	2	2	2	2	2	2	2

octet	40	41	42	43	44	45	46	47
bit offset	959 - 952	951 - 944	943 - 936	935 - 928	927 - 920	919 - 912	911 - 904	903 - 896
subindex	2	2	2	2	2	2	2	2

octet	48	49	50	51	52	53	54	55
bit offset	895 - 888	887 - 880	879 - 872	871 - 864	863 - 856	855 - 848	847 - 840	839 - 832
subindex	2	2	2	2	2	2	2	2

octet	56	57	58	59	60	61	62	63
bit offset	831 - 824	823 - 816	815 - 808	807 - 800	799 - 792	791 - 784	783 - 776	775 - 768
subindex	2	2	2	2	2	2	2	2

octet	64	65	66	67	68	69	70	71
bit offset	767 - 760	759 - 752	751 - 744	743 - 736	735 - 728	727 - 720	719 - 712	711 - 704

subindex	3	3	3	3	3	3	3	3
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octet	72	73	74	75	76	77	78	79
bit offset	703 - 696	695 - 688	687 - 680	679 - 672	671 - 664	663 - 656	655 - 648	647 - 640
subindex	3	3	3	3	3	3	3	3

octet	80	81	82	83	84	85	86	87
bit offset	639 - 632	631 - 624	623 - 616	615 - 608	607 - 600	599 - 592	591 - 584	583 - 576
subindex	3	3	3	3	3	3	3	3

octet	88	89	90	91	92	93	94	95
bit offset	575 - 568	567 - 560	559 - 552	551 - 544	543 - 536	535 - 528	527 - 520	519 - 512
subindex	3	3	3	3	3	3	3	3

octet	96	97	98	99	100	101	102	103
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448
subindex	4	4	4	4	4	4	4	4

octet	104	105	106	107	108	109	110	111
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384
subindex	4	4	4	4	4	4	4	4

octet	112	113	114	115	116	117	118	119
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320
subindex	4	4	4	4	4	4	4	4

octet	120	121	122	123	124	125	126	127
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256
subindex	4	4	4	4	4	4	4	4

octet	128	129	130	131	132	133	134	135
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192
subindex	5	5	5	5	5	5	5	5

octet	136	137	138	139	140	141	142	143
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128
subindex	5	5	5	5	5	5	5	5

octet	144	145	146	147	148	149	150	151
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64
subindex	5	5	5	5	5	5	5	5

octet	152	153	154	155	156	157	158	159
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0
subindex	5	5	5	5	5	5	5	5

## Variable "Device Information (User Configuration Object)" index=8448 id=V\_2100

data type: 768-bit Record  
access rights: rw

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	512	32-octet String US_ASCII			rw			Unique device name	
2	256	32-octet String US_ASCII			rw			Location	
3	0	32-octet String US_ASCII			rw			Description	

octet	0	1	2	3	4	5	6	7
bit offset	767 - 760	759 - 752	751 - 744	743 - 736	735 - 728	727 - 720	719 - 712	711 - 704
subindex	1	1	1	1	1	1	1	1

octet	8	9	10	11	12	13	14	15
bit offset	703 - 696	695 - 688	687 - 680	679 - 672	671 - 664	663 - 656	655 - 648	647 - 640
subindex	1	1	1	1	1	1	1	1

octet	16	17	18	19	20	21	22	23
bit offset	639 - 632	631 - 624	623 - 616	615 - 608	607 - 600	599 - 592	591 - 584	583 - 576
subindex	1	1	1	1	1	1	1	1

octet	24	25	26	27	28	29	30	31
bit offset	575 - 568	567 - 560	559 - 552	551 - 544	543 - 536	535 - 528	527 - 520	519 - 512
subindex	1	1	1	1	1	1	1	1

octet	32	33	34	35	36	37	38	39
bit offset	511 - 504	503 - 496	495 - 488	487 - 480	479 - 472	471 - 464	463 - 456	455 - 448
subindex	2	2	2	2	2	2	2	2

octet	40	41	42	43	44	45	46	47
bit offset	447 - 440	439 - 432	431 - 424	423 - 416	415 - 408	407 - 400	399 - 392	391 - 384
subindex	2	2	2	2	2	2	2	2

octet	48	49	50	51	52	53	54	55
bit offset	383 - 376	375 - 368	367 - 360	359 - 352	351 - 344	343 - 336	335 - 328	327 - 320
subindex	2	2	2	2	2	2	2	2

octet	56	57	58	59	60	61	62	63
bit offset	319 - 312	311 - 304	303 - 296	295 - 288	287 - 280	279 - 272	271 - 264	263 - 256
subindex	2	2	2	2	2	2	2	2

octet	64	65	66	67	68	69	70	71
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192
subindex	3	3	3	3	3	3	3	3

octet	72	73	74	75	76	77	78	79
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128
subindex	3	3	3	3	3	3	3	3

octet	80	81	82	83	84	85	86	87
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64
subindex	3	3	3	3	3	3	3	3

octet	88	89	90	91	92	93	94	95
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0
subindex	3	3	3	3	3	3	3	3

## Variable "Device operative status" index=8704 id=V\_2200

data type: 176-bit Record

access rights: ro

dynamic

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	168	4-bit UInteger	0 = Normal operation, 1 = Teach on-the-fly, 2 = Automatic teach, 3 = Manual operation, 4 = Error		ro			Device actual operative mode	
2	152	16-bit Integer			ro			Device temperature	
3	120	32-bit UInteger			ro			Operation time since last boot	
4	104	16-bit Integer			ro			Max. temperature	

5	88	16-bit Integer			ro			Min. temperature	
6	56	32-bit UInteger			ro			Boot counter	
7	48	8-bit UInteger			ro			Bit-coded actual position	
8	32	16-bit UInteger			ro			Remaining teach on-the-fly time	
9	24	8-bit UInteger			ro			Bit-coded actual valve state	
10	16	8-bit UInteger			ro			Bit-coded actual input state	
11	0	16-bit UInteger			ro			Bit-coded error codes	

#### Octet 0

bit offset	175	174	173	172	171	170	169	168
subindex	/////	/////	/////	/////	1			
element bit					3	2	1	0

#### Octet 1

bit offset	167	166	165	164	163	162	161	160
subindex	2							
element bit	15	14	13	12	11	10	9	8

#### Octet 2

bit offset	159	158	157	156	155	154	153	152
subindex	2							
element bit	7	6	5	4	3	2	1	0

#### Octet 3

bit offset	151	150	149	148	147	146	145	144
subindex	3							
element bit	31	30	29	28	27	26	25	24

#### Octet 4

bit offset	143	142	141	140	139	138	137	136
subindex	3							
element bit	23	22	21	20	19	18	17	16

#### Octet 5

bit offset	135	134	133	132	131	130	129	128
subindex	3							
element bit	15	14	13	12	11	10	9	8

#### Octet 6

bit offset	127	126	125	124	123	122	121	120
subindex	3							
element bit	7	6	5	4	3	2	1	0

#### Octet 7

bit offset	119	118	117	116	115	114	113	112
subindex	4							
element bit	15	14	13	12	11	10	9	8

#### Octet 8

bit offset	111	110	109	108	107	106	105	104
subindex	4							
element bit	7	6	5	4	3	2	1	0

#### Octet 9

bit offset	103	102	101	100	99	98	97	96
subindex	5							
element bit	15	14	13	12	11	10	9	8

#### Octet 10

bit offset	95	94	93	92	91	90	89	88
subindex	5							
element bit	7	6	5	4	3	2	1	0

#### Octet 11

bit offset	87	86	85	84	83	82	81	80
subindex	6							
element bit	31	30	29	28	27	26	25	24

#### Octet 12

bit offset	79	78	77	76	75	74	73	72
subindex	6							
element bit	23	22	21	20	19	18	17	16

**Octet 13**

bit offset	71	70	69	68	67	66	65	64
subindex	6							
element bit	15	14	13	12	11	10	9	8

**Octet 14**

bit offset	63	62	61	60	59	58	57	56
subindex	6							
element bit	7	6	5	4	3	2	1	0

**Octet 15**

bit offset	55	54	53	52	51	50	49	48
subindex	7							
element bit	7	6	5	4	3	2	1	0

**Octet 16**

bit offset	47	46	45	44	43	42	41	40
subindex	8							
element bit	15	14	13	12	11	10	9	8

**Octet 17**

bit offset	39	38	37	36	35	34	33	32
subindex	8							
element bit	7	6	5	4	3	2	1	0

**Octet 18**

bit offset	31	30	29	28	27	26	25	24
subindex	9							
element bit	7	6	5	4	3	2	1	0

**Octet 19**

bit offset	23	22	21	20	19	18	17	16
subindex	10							
element bit	7	6	5	4	3	2	1	0

**Octet 20**

bit offset	15	14	13	12	11	10	9	8
subindex	11							
element bit	15	14	13	12	11	10	9	8

**Octet 21**

bit offset	7	6	5	4	3	2	1	0
subindex	11							
element bit	7	6	5	4	3	2	1	0

**Variable "Control head settings" index=8960 id=V\_2300**

data type: 32-bit Record  
access rights: rw

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	24	8-bit UInteger	0 = 0 - Safety Position, 1 = 1 - Maintain Position (Last position)		rw			Set point error (Safety Mode)	
2	16	8-bit UInteger	0..7		rw			Valves Safety Position	
3	8	8-bit UInteger	0 = S0(NO VALVE) + S1(V1), 1 = S1(V1) + S2(V2), 2 = S0(NO VALVE) + S1(V1) + S2(V2), 3 = S0(NO VALVE) + S1(V1) + S2(V2) + S3(V3)	0	rw			Valves and positions enables	
4	0	8-bit UInteger	0 = Do not permit simultaneous activation, 1 = Simultaneous activation of valves permitted		rw			Simultaneous valve activation	

octet	0	1	2	3	
bit offset	31 - 24	23 - 16	15 - 8	7 - 0	
subindex	1	2	3	4	
element bit	7 - 0	7 - 0	7 - 0	7 - 0	

**Variable "LED settings" index=9216 id=V\_2400**

data type: 56-bit Record  
access rights: rw

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	48	8-bit UInteger	0 = Off, 1 = Red, 2 = Orange, 3 = Yellow, 4 = Green, 5 = Cyan, 6 = Blue, 7 = Purple, 8 = Pink, 9 = White		rw			Color Position None	
2	40	8-bit UInteger	0 = Position signal, 1 = Fixed color, 2 = LEDs off		rw			LED Mode	
3	32	8-bit UInteger	0 = Off, 1 = Red, 2 = Orange, 3 = Yellow, 4 = Green, 5 = Cyan, 6 = Blue, 7 = Purple, 8 = Pink, 9 = White		rw			Color for fixed mode	
4	24	8-bit UInteger	0 = Off, 1 = Red, 2 = Orange, 3 = Yellow, 4 = Green, 5 = Cyan, 6 = Blue, 7 = Purple, 8 = Pink, 9 = White		rw			Color Position S0	
5	16	8-bit UInteger	0 = Off, 1 = Red, 2 = Orange, 3 = Yellow, 4 = Green, 5 = Cyan, 6 = Blue, 7 = Purple, 8 = Pink, 9 = White		rw			Color Position S1	
6	8	8-bit UInteger	0 = Off, 1 = Red, 2 = Orange, 3 = Yellow, 4 = Green, 5 = Cyan, 6 = Blue, 7 = Purple, 8 = Pink, 9 = White		rw			Color Position S2	
7	0	8-bit UInteger	0 = Off, 1 = Red, 2 = Orange, 3 = Yellow, 4 = Green, 5 = Cyan, 6 = Blue, 7 = Purple, 8 = Pink, 9 = White		rw			Color Position S3	

octet	0	1	2	3	4	5	6	
bit offset	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0	
subindex	1	2	3	4	5	6	7	
element bit	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	7 - 0	

## Variable "Position measuring system" index=9472 id=V\_2500

data type: 96-bit Record

access rights: ro

dynamic

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	88	8-bit UInteger		0	ro			Bit-coded expected external sensor signals	
2	80	8-bit UInteger		0	ro			Bit-coded teach positions	
3	72	8-bit UInteger	0 = Teach completed, 1 = Automatic teach S0 in progress, 2 = Automatic teach S1 in progress, 3 = Automatic teach S2 in progress, 4 = Automatic teach S3 in progress, 5 = On the fly teach in progress, 6 = Manual teach in progress, 7..255	0	ro			Teach state	
4	64	8-bit UInteger	0 = Missing teach positions or no positions teach, 1 = Teach complete and good, 2 = Automatic teach in progress, 3 = On-the-fly teach in progress, 4 = Overlapping teach positions, 5..255	0	ro			Teach status	
5	48	16-bit Integer		0	ro			Expected position measurement for S0	
6	32	16-bit Integer		0	ro			Expected position measurement for S1	
7	16	16-bit Integer		0	ro			Expected position measurement for S2	
8	0	16-bit Integer		0	ro			Expected position measurement for S3	

octet	0	1	2	3	4	5	6	7
bit offset	95 - 88	87 - 80	79 - 72	71 - 64	63 - 56	55 - 48	47 - 40	39 - 32
subindex	1	2	3	4	5	5	6	6
element bit	7 - 0	7 - 0	7 - 0	7 - 0	15 - 8	7 - 0	15 - 8	7 - 0



octet	8	9	10	11	
bit offset	31 - 24	23 - 16	15 - 8	7 - 0	
subindex	7	7	8	8	
element bit	15 - 8	7 - 0	15 - 8	7 - 0	

## Variable "Life Data" index=9728 id=V\_2600

data type: 256-bit Record

access rights: ro

dynamic

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	224	32-bit UInteger		0	ro			Operation Time Total	
2	192	32-bit UInteger		0	ro			Operation Time Resettable	
3	160	32-bit UInteger		0	ro			Cycles V1 Total	
4	128	32-bit UInteger		0	ro			Cycles V1 Resettable	
5	96	32-bit UInteger		0	ro			Cycles V2 Total	
6	64	32-bit UInteger		0	ro			Cycles V2 Resettable	
7	32	32-bit UInteger		0	ro			Cycles V3 Total	
8	0	32-bit UInteger		0	ro			Cycles V3 Resettable	

octet	0	1	2	3	4	5	6	7
bit offset	255 - 248	247 - 240	239 - 232	231 - 224	223 - 216	215 - 208	207 - 200	199 - 192
subindex	1	1	1	1	2	2	2	2
element bit	31 - 24	23 - 16	15 - 8	7 - 0	31 - 24	23 - 16	15 - 8	7 - 0

octet	8	9	10	11	12	13	14	15
bit offset	191 - 184	183 - 176	175 - 168	167 - 160	159 - 152	151 - 144	143 - 136	135 - 128
subindex	3	3	3	3	4	4	4	4
element bit	31 - 24	23 - 16	15 - 8	7 - 0	31 - 24	23 - 16	15 - 8	7 - 0

octet	16	17	18	19	20	21	22	23
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64
subindex	5	5	5	5	6	6	6	6
element bit	31 - 24	23 - 16	15 - 8	7 - 0	31 - 24	23 - 16	15 - 8	7 - 0

octet	24	25	26	27	28	29	30	31
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0
subindex	7	7	7	7	8	8	8	8
element bit	31 - 24	23 - 16	15 - 8	7 - 0	31 - 24	23 - 16	15 - 8	7 - 0

## Variable "Device operation temperature limits" index=9984 id=V\_2700

data type: 80-bit Record

access rights: rw

subindex	bit offset	data type	allowed values	default value	acc. restr.	mod. other var.	excl. from DS	name	description
1	64	16-bit Integer	-200..200		rw			Error high	
2	48	16-bit Integer	-200..200		rw			Error low	
3	32	16-bit Integer	-200..200		rw			Warning high	
4	16	16-bit Integer	-200..200		rw			Warning low	
5	0	16-bit UInteger	1..20		rw			Hysteresis	

octet	0	1	2	3	4	5	6	7
bit offset	79 - 72	71 - 64	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16
subindex	1	1	2	2	3	3	4	4
element bit	15 - 8	7 - 0	15 - 8	7 - 0	15 - 8	7 - 0	15 - 8	7 - 0

octet	8	9	
bit offset	15 - 8	7 - 0	
subindex	5	5	
element bit	15 - 8	7 - 0	

### Variable "Firmware password" index=17341 id=V\_FW-Password

data type: 16-octet String UTF-8  
 access rights: wo

octet	0	1	2	3	4	5	6	7
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	8	9	10	11	12	13	14	15
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

### Variable "Hardware Identification Key" index=17342 id=V\_HW\_ID\_Key

data type: 16-octet String UTF-8  
 access rights: ro

octet	0	1	2	3	4	5	6	7
bit offset	127 - 120	119 - 112	111 - 104	103 - 96	95 - 88	87 - 80	79 - 72	71 - 64

octet	8	9	10	11	12	13	14	15
bit offset	63 - 56	55 - 48	47 - 40	39 - 32	31 - 24	23 - 16	15 - 8	7 - 0

### Variable "Bootmode status" index=17343 id=V\_BootmodeStatus

data type: 8-bit UInteger  
 allowed values: 0 = Bootloader is inactive, 1 = Bootloader is active  
 access rights: ro

octet	0	
bit offset	7 - 0	
element bit	7 - 0	

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Subindex 2:
Subindex 3:
Subindex 4:
Subindex 5: * 0.01 mm Dec.1
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Formatting for Process Data id=PD_OUT_3EV
Subindex 1:
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Formatting for Process Data id=PD_IN_2EV-A
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Subindex 2:
Subindex 3:
Subindex 5: * 0.01 mm Dec.1
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Subindex 7:
Subindex 8:

Formatting for Process Data id=PD_OUT_2EV-A
Subindex 1:
Subindex 2:

Formatting for Process Data id=PD_IN_2EV-B
Subindex 2:
Subindex 3:
Subindex 5: * 0.01 mm Dec.1
Subindex 6:
Subindex 7:
Subindex 8:

Formatting for Process Data id=PD_OUT_2EV-B
Subindex 1:
Subindex 2:

Formatting for Process Data id=PD_IN_1EV
Subindex 1:
Subindex 2:
Subindex 5: * 0.01 mm Dec.1
Subindex 6:
Subindex 7:
Subindex 8:

Formatting for Process Data id=PD_OUT_1EV
Subindex 1:

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