IO-Link Interface Description - V1
VP23 Proportional Valve
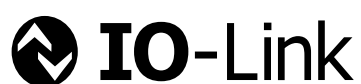
IO-Link

IMI

Content

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1. Device variant

VP23 Proportional Valve

DeviceName = "VP23"
DeviceFamily = "VP23"
ProductName = "VP23IOL"
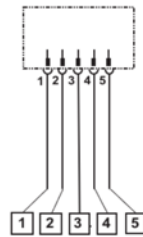
1	+Vs, brown
2	2L+ (VA), white
3	Vs GND, blue
4	C/Q, black
5	2M (VA GND), grey

2. Communication Setup

Vendor ID	0x03AE
Device ID	0x1F72C9
COM Profile	COM3
min. Cycletime	5 ms
SIO mode compatible	no
Block Parameterisation	no
Remanent dataset	yes
Supported profiles	BLOB FW-Update
Support of IO-Link 1.0	yes

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3. Relevant parameter list

Function / Name	Index	Sub- Index	Access	Data Type	
Vendor Name	16	0	ro	StringT [64]	
Vendor Text	17	0	ro	StringT [64]	
Product Name	18	0	ro	StringT [64]	
Product ID	19	0	ro	StringT [64]	
Product Text	20	0	ro	StringT [64]	
Serial Number	21	0	ro	StringT [16]	
Hardware Revision	22	0	ro	StringT [64]	
Firmware Revision	23	0	ro	StringT [64]	
Function Tag	25	0	rw	StringT [32]	
Location Tag	26	0	rw	StringT [32]	
Specific Parameters:					
User Parameter	64	0	rw	IntegerT_16	
Pressure Unit	65	0	rw	IntegerT_16	
Ramp_Rise_Rate %/ms	66	0	rw	IntegerT_16	
Ramp_Fall_Rate %/ms	67	0	rw	IntegerT_16	
User_PID_Kp %	68	0	rw	IntegerT_16	
User_PID_Ki %	69	0	rw	IntegerT_16	
User_Integral_Rise_Deadtime %	70	0	rw	IntegerT_16	
User_Integral_Fall_Deadtime %	71	0	rw	IntegerT_16	
Parameter Address	100	0	rw	IntegerT_16	
Parameter Value	101	0	rw	IntegerT_16	
Parameter Option	102	0	rw	UIntegerT_32	
Operating Minutes	103	0	ro	IntegerT_32	
Operating Hours	104	0	ro	IntegerT_32	

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4. Process Data I/O

Name	Description	ByteMask	Datatype	Bitoffset	Range	Scaling
PDO (32 bit)						
Setpoint Pressure	Pressure Setpoint	BBBB	Float32T	0	0 – nominal pressure	Bar/MPa/PSI
PDI (40 bit)						
Actual Pressure	Actual pressure value	X-BBBB	Float32T	0	0 – nominal pressure	Bar/MPa/PSI
Statusbyte	Statusbyte VP23	B-XXXX	UIntegerT	32	0 – 255	-
Interpretation of status byte		**Bit-Mask**				
V_S supply voltage out of range	V_S < min.	0bXXXX-XXXb	byte	0	false/true	-
Watchdog pressure controller out of range	Ctrl. Out of range for > max. (default 2%)	0bXXXX-XbXX	byte	2	false/true	-
Valve's internal temperature out of range	Internal temp. overheat (>80°C)	0bXXXX-bXXX	byte	3	false/true	-
Actuator nominal consumption out of range	Actuator curr. consumption too high.	0bXXXb-XXXX	byte	4	false/true	-
V_A voltage out of range	V_A < min.	0bXXbX-XXXX	byte	5	false/true	-

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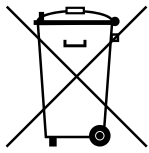
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