



Electronic pressure-independent 6-way characterised control valve

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Data-Pool General Notes

- General information**
- The device supports the MP Data-Pool functional profile. All available data points are managed in a data pool and accessible with MP read/write commands.
 - This document describes all public data pool values of the device. It's divided into process values and configuration values.
 - The MP Data-Pool functional profile is specified in the MP Cooperation Documentation. The document is provided to Belimo MP-Partners.
 - See the technical datasheet for technical information about the device itself.

Identification The connected type can be identified by its series number:

Prefix	Profile Type	Profile Category	Type
2	7	23	EP..R-R6+BAC

Configuration Configuration data are password protected
The default password is '0000'

Timing of MP-Bus queries Master implementations typically poll the slaves in cycles (MP1, MP2, MP3, ...). Reading all data pool values of this node in one cycle is not recommended, because it would reduce the overall MP-Bus performance

Recommendation:

- Split up the queries into several cycles (e.g. 3 queries per cycle).
- Adjust repetition rates (reading values) according to the rate of change of the value
- Prevent from reading unused data pool values

Data-Pool Values Overview

	ID	Name	R/W
Process	1	Setpoint [%]	R/W
	2	Override Control	R/W
	4	Relative Position [%]	R
	5	Absolute Position [°]	R
	6	Relative Flow [%]	R
	7	Setpoint Absolute Flow [UnitSel]	R
	8	Absolute Flow [UnitSel]	R
	9	Absolute Flow [l/h]	R
	10	Absolute Flow [gpm]	R
	14	Active Sequence	R
Service	103	Malfunction & Service information	R
	104	Vmax Sequence 1 [%]	R/W
	105	Vmax Sequence 2 [%]	R/W
	108	Absolute Vnom [UnitSel]	R
	109	Absolute Vnom [l/h]	R
	110	Absolute Vnom [gpm]	R
	113	Unit Selection Flow	R/W
118	Control Mode	R/W	

Data-Pool Values

Process Data

Nr	Description	Unit	Scaling	Values	Size	R/W
1	Setpoint [%]	%	0.01	0...100.00	2	R/W
2	Override Control			0=None 1=Seq1Open (FbPos: 0%) 2=Seq2Open (FbPos: 100%) 3=Close (FbPos: 50%) 4=Seq1Vmax 5=Seq2Vmax	1	R/W
4	Relative Position [%]	%	0.01	0...100.00	2	R
5	Absolute Position [°]	°	0.01	0...100.00	2	R
6	Relative Flow [%]	%	0.01	0...100.00	2	R
7	Setpoint Absolute Flow [UnitSel]	UnitSel	0.001	0...4'294'967.295	4	R
8	Absolute Flow [UnitSel]	UnitSel	0.001	0...4'294'967.295	4	R
9	Absolute Flow [l/h]	l/h	0.001	0... 4'294'967.295	4	R
10	Absolute Flow [gpm]	gpm	0.001	0...4'294'967.295	4	R
14	Active Sequence			0=Sequence1 (0...33%) 1=Sequence2 (66...100%) 2=Dead Band (34...65%)	1	R

Service Data

ID	Description	Unit	Scaling	Range / Enum	Size	R/W
103	Malfunction & Service information			Bit00(1) = Bit01(2) = Bit02(4) = Error flow sensor Bit03(8) = Actuator can't move Bit04(16) = Flow with closed valve Bit05(32) = Airbubbles Bit06(64) = Flow not reached Bit07(128) = Bit08(256) = Bit09(512) = Gear disengaged Bit10(1024) = Bit11(2048) =	2	R
104	Vmax Sequence 1 [%]	%	0.01	0...100.00	2	R/W
105	Vmax Sequence 2 [%]	%	0.01	0...100.00	2	R/W
108	Absolute Vnom [UnitSel]	UnitSel	0.001	0...4'294'967.295	4	R
109	Absolute Vnom [l/h]	l/h	0.001	0...4'294'967.295	4	R
110	Absolute Vnom [gpm]	gpm	0.001	0...4'294'967.295	4	R
113	Unit Selection Flow			0=m3/s 1=m3/h 2=l/s 3=l/min 4=l/h 5=gpm 6=cfm	1	R/W
118	Control Mode			0=Position Control 1=Flow	1	R/W