

Bälz-electrodyn - control valves and control actuators

21.6 Digital positioner baelz 88-SP400 for pneumatic actuators

This positioner is a kind of servo control mechanism for air operated automatic control system.

Specifications:

	baelz 88-SP400	baelz 88-SP400 EEx	PA interface	PA interface EEx																																				
explosion protection to EN 50014, EN 50020 and EN 50021	without	EEx ia/ib II 2 G EEx ia/ib IIC T6 class1 zone1 groups A,B,C,D class1 zone1 AEx(FM)Ex(CSA)ib IIC	without	EEx ia/ib II 2 G EEx ia/ib IIC T6 class1 zone1 groups A,B,C,D class1 zone1 AEx(FM)Ex(CSA)ib IIC																																				
mounting location		zone 1		zone 1																																				
permissible ambient temperature for operation	-10...+80°C	T4: -10...+80°C T5: -10...+65°C T6: -10...+50°C	-10...+80°C	T4: -10...+80°C T5: -10...+65°C T6: -10...+50°C																																				
connection	electric M20x1.5 pneumatic G 1/4"	electric M20x1.5 pneumatic G 1/4"	electric M20x1.5 pneumatic G 1/4"	electric M20x1.5 pneumatic G 1/4"																																				
travel range (linear actuators)	8...66 mm	8...66 mm	8...66 mm	8...66 mm																																				
degree of protection	IP 65 to EN 60529 / NEMA 4x	IP 65 to EN 60529 / NEMA 4x	IP 65 to EN 60529 / NEMA 4x	IP 65 to EN 60529 / NEMA 4x																																				
rated signal range	4...20 mA (two-wire system)	4...20 mA (two-wire system) for connections to circuits with intrinsically safe U<=30 V DC, I<=100 mA P<=1 W	via bus bus voltage 9 to 32 V	via bus (certified intrinsically safe circuit) bus connection with barrier, ia or ib group IIC or IIB U _{max} <=24 V, I _{max} <=200 mA, P<=1,2 W																																				
required load voltage (Ω = at 20 mA)	<=6.4 V (=320 Ω)	<=7.8 V (=390 Ω)																																						
current to maintain power supply	>=3.6 mA	>=3.6 mA																																						
pressure	1.4...6 bar	1.4...6 bar	1.4...6 bar	1.4...6 bar																																				
consumption of inlet air in stabile state	0.036 Nm³/h	0.036 Nm³/h	0.036 Nm³/h	0.036 Nm³/h																																				
unrestr. flow of : At inlet air valve (Nm³/h) out air valve (Nm³/h)	<table border="1"> <tr><th>2 bar</th><th>4 bar</th><th>6 bar</th></tr> <tr><td>4.1</td><td>7.1</td><td>9.8</td></tr> <tr><td>8.2</td><td>13.7</td><td>18.9</td></tr> </table>	2 bar	4 bar	6 bar	4.1	7.1	9.8	8.2	13.7	18.9	<table border="1"> <tr><th>2 bar</th><th>4 bar</th><th>6 bar</th></tr> <tr><td>4.1</td><td>7.1</td><td>9.8</td></tr> <tr><td>8.2</td><td>13.7</td><td>18.9</td></tr> </table>	2 bar	4 bar	6 bar	4.1	7.1	9.8	8.2	13.7	18.9	<table border="1"> <tr><th>2 bar</th><th>4 bar</th><th>6 bar</th></tr> <tr><td>4.1</td><td>7.1</td><td>9.8</td></tr> <tr><td>8.2</td><td>13.7</td><td>18.9</td></tr> </table>	2 bar	4 bar	6 bar	4.1	7.1	9.8	8.2	13.7	18.9	<table border="1"> <tr><th>2 bar</th><th>4 bar</th><th>6 bar</th></tr> <tr><td>4.1</td><td>7.1</td><td>9.8</td></tr> <tr><td>8.2</td><td>13.7</td><td>18.9</td></tr> </table>	2 bar	4 bar	6 bar	4.1	7.1	9.8	8.2	13.7	18.9
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casing	(plastic)	(plastic)	(plastic)	(plastic)																																				
weight basic device	0.9 kg	0.9 kg	0.9 kg	0.9 kg																																				
weight with attachment parts	1.8 kg	1.8 kg	1.8 kg	1.8 kg																																				
communication			layers 1 + 2 according to PROFIBUS PA, transmission system to IEC 1158-2; slave function layer 7 (protocol layer) according to PROFIBUS DP, standard EN 50170 with extended PROFIBUS functionality (all data acyclic; manipulated variable, feedbacks and status cyclic in addition)																																					
	baelz 88-SP401	baelz 88-SP401 EEx																																						
	technical data see baelz SP400 but	technical data see baelz SP4010 EEx but																																						
casing	metal GK-AISI 12	metal GK-AISI 12																																						
weight basic device	1.3 kg	1.3 kg																																						
weight with attachment parts	2.2 kg	2.2 kg																																						

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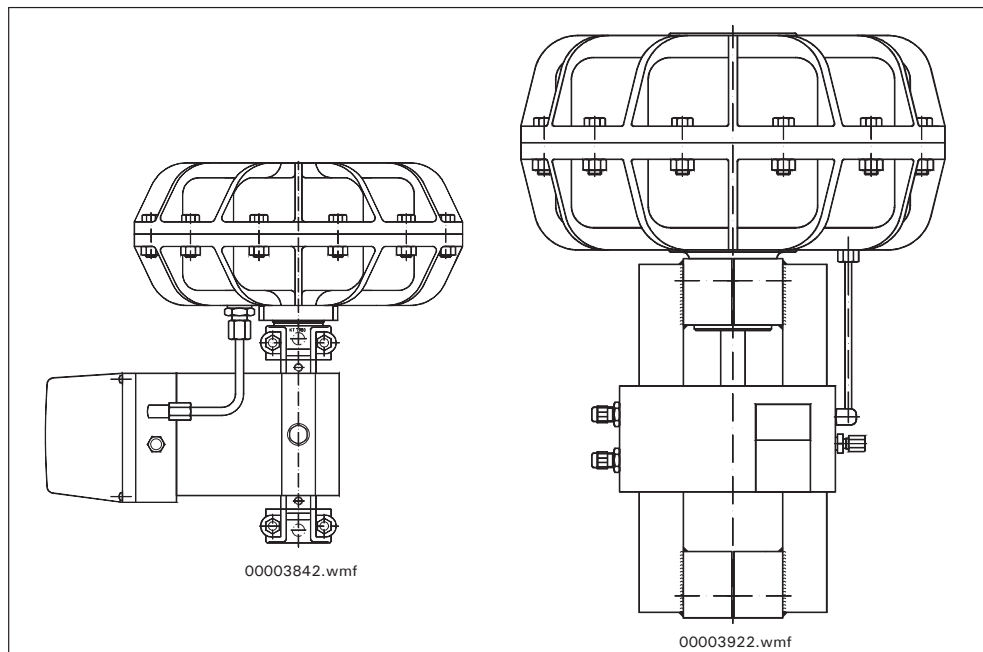


Fig. 218
baelz 373-P21-88-SP400

baelz 373-P31-88-SP400



Fig. 219
baelz 373-P22-88-SP400
pneumatic actuator with digital positioner baelz 88-SP400
and air pressure reducing set baelz 54298