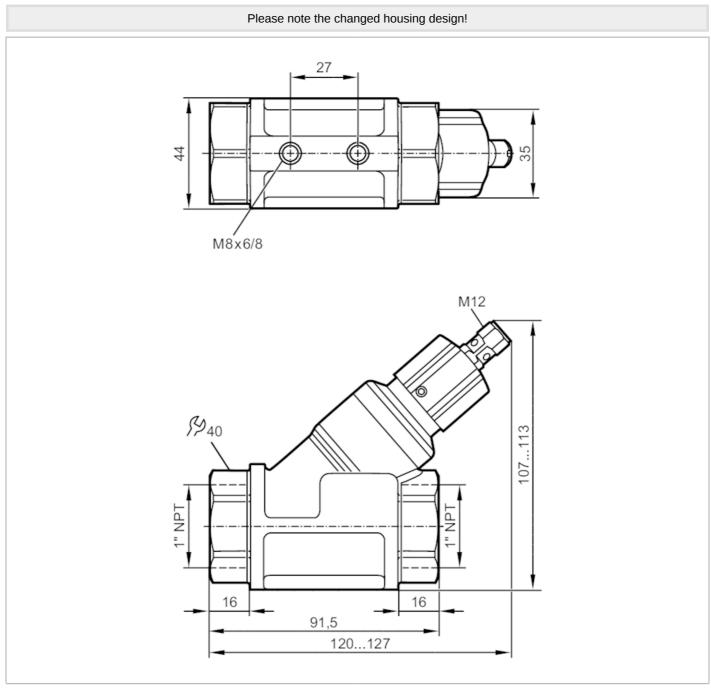
SBN346

Flow sensor with fast response time



SBY11BF0BPKG/US



Product characteristics						
Number of inputs and out	puts	Number of digital outputs: 1				
Process connection		1" NPT				
Application						
Media		Liquids; water; glycol solutions; Coolants				
Medium temperature	[°F]	32185				
Pressure rating	[bar]	25				
Pressure rating	[MPa]	2.5				

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Flow sensor with fast response time



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Operating voltage [M] 1030 DC; (to SELV/PELV) Current consumption [mA] < 15 Protection class III III Reverse polarity protection yes III Number of inputs and outputs Number of digital outputs: 1 Outputs Outputs ignal 1 1 Outputs Outputs ignal 1 0 1 0 Output signal Switching signal 1 0 0 1 0 <th>Electrical data</th> <th></th> <th></th> <th></th>	Electrical data					
Current consumption (mA) < 15		[V]		1030 DC; (to SELV/PELV)		
Protection class III Reverse polarity protection yes Inputs / outputs Number of digital outputs: 1 Outputs Number of digital outputs: 1 Outputs 1 Outputs signal switching signal Electrical design PNP Number of digital outputs 1 Output signal 0.00000000000000000000000000000000000						
Inputs / outputs Number of linputs and outputs Number of digital outputs: 1 Outputs 1 Total number of outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output function normally open Max. voltage drop switching [M] output DC 2.5 Permanent current rating of [mA] switching output DC yes Short-circuit protection yes Overload protection yes Measuring/setting range 1 Keaturing/setting range 1 (% of the final value] ± 5 Reaction times < 0.01	-					
Inputs / outputs Number of digital outputs: 1 Number of ligital outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output function normally open Max. voltage drop switching [M] output DC 2.5 Permanent current rating of [mA] switching output DC yes Overload protection yes Overload protection yes Overload protection yes Measuring/setting range [gmt] Setting range [gmt] Protection ± 5 Response time [s] Cotariang conditions < 0.01	Reverse polarity protection					
Number of digital outputs: 1 Outputs Total number of outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output function normally open Max. voltage drop switching output DC 2.5 Permanent current rating of [mA] switching output DC 1000 Short-circuit protection yes Overlaad protection yes Overlaad protection yes Repeatability 1 [% of the final value] 1 Physteresis [gpm] Operating conditions 2168 Measuring error ±5 [% of the final value] 2160 Operating conditions 2140 Storage temperature ["F] Scale temperature ["F] Scale temperature ["F] Schock resistance DIN EN 61000-6-2 <				,		
Outputs 1 Total number of outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output function normally open Max. voltage drop switching output DC [M] Permanent current rating of switching output DC 100 Stont-circuit protection yes Overload protection yes Overload protection yes Overload protection yes Repeatability 1 [% of the final value] 1 Hysteresis [gmm] Operating conditions <0.01		S	Number of digital outputs: 1			
Total number of outputs 1 Output signal switching signal Electrical design PNP Number of digital outputs 1 Output function normally open Max. voltage drop switching of [mA] switching output DC 2.5 Permanent current rating of [mA] switching output DC jess Overload protection yes Overload protection yes Overload protection yes Overload protection yes Measuring/setting range [gm] Setting range [gm] 1.3226.4 Accuracy / deviations Repeatability 1 f% of the final value] \$ f% of the final value] \$ f% of the final value] \$ f% of the final value] 1 f% of the final value] 1 f% of the final value] 1 f% of the final value] \$ <td< td=""><td>Outputs</td><td></td><td></td><td></td></td<>	Outputs					
Electrical design PNP Number of digital outputs 1 Output tunction normally open Max. voltage drop switching output DC 2.5 Permanent current rating of [mA] switching output DC 100 Short-circuit protection yes Overload protection yes Measuring/setting range 1 Setting range [gpm] 1.3226.4 Accuracy / deviations 1 Repeatability [96 of the final value] 1 Pysteresis [gpm] 0.81,58 Measuring error [9k of the final value] ±5 Perating conditions 4 Ambient temperature [°F] 5140 Storage temperature [°F] 5176 Protection IP 65; IP 67 Fests / approvals DIN EN 61000-6-2 DIN EN 61000-6-3 EMC DIN EN 61000-6-2 DIN EN 61000-6-3 Shock resistance DIN EN 60068-2-27 20 g (11 ms) Vibration resistance DIN EN 60068-2-6 5 g (102000 Hz) MTF [years] 3318 Mederial brass chemically nickel-plated; PPS; aluminum anodized; PA stainless steel (1.4310 / 301); stainless steel (1.4310 / 3	-			1		
Electrical design PNP Number of digital outputs 1 Output function normally open Max. voitage drop switching (M) 2.5 output DC 2.5 Permanent current rating of [mA] 100 Short-circuit protection yes Overload protection yes Overload protection yes Measuring/setting range 1 Repeatability 1 [% of the final value] 1 Hysteresis [gpm] (% of the final value] ±5 Reaction times Response time [\$] Operating conditions Arotico final value] ±5 Protection IP 65; IP 67 Tests / approvals EMC DIN EN 61000-6-2 DIN EN 61000-6-3 DIN EN 61000-6-3 Shock resistance DIN EN 61000-6-3 Shock resistance DIN EN 60068-2-27 20 g (11 ms) Mitherial Divason cesistance Storage (10,4301 / 301; Staniless steel (1,4301 / 304; PB	Output signal					
Output function normally open Max. voltage drop switching (M) output DC 2.5 Permanent current rating of [mA] switching output DC 100 Short-circuit protection yes Overload protection yes Overload protection yes Measuring/setting range 5 Setting range [gpm] 1.3226.4 Accuracy / deviations 1 Repeatability [% of the final value] 1 Hysteresis [gpm] 0.81,58 Measuring error [% of the final value] ± 5 [% of the final value] ± 5 Response time [s] < 0.01	Electrical design					
Max. voltage drop switching [V] 2.5 Permanent current rating of [mA] 100 Switching output DC yes 9 Short-circuit protection yes 9 Overload protection yes 9 Measuring/setting range [gpm] 1.3226.4 Accuracy / deviations 1 1 Repeatability 1 1 [% of the final value] 1 1 Hysteresis [gpm] 0,81,58 Measuring error ±5 5 [% of the final value] ±5 5 Response time [s]<<<0.01	Number of digital outputs					
Max. voltage drop switching Vi 2.5 Permanent current rating of [mA] 100 Switching output DC yes 00 Short-circuit protection yes 00 Overload protection yes 00 Setting range [gpm] 1.3226.4 Accuracy / deviations 1 0.81,58 Repeatability 1 1 [% of the final value] 1 1 Hysteresis [gpm] 0.81,58 Measuring error 1 5 [% of the final value] ± 5 5 Response time [s] < 0.01	Output function					
switching output DC 100 Short-circuit protection yes Overload protection yes Weasuring/setting range [gpm] Setting range [gpm] Accuracy / deviations 1 Repeatability 1 [% of the final value] 1 Hysteresis [gpm] 0,81,58 Measuring error ± 5 [% of the final value] ± 5 Reaction times Response time [s] < 0.01		[V]				
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Setting range [gpm] 1.3226.4 Accuracy / deviations 1 Repeatability 1 [% of the final value] 1 Hysteresis [gpm] 0.81,58 Measuring error ± 5 [% of the final value] ± 5 Reaction times <0.01	Overload protection		yes			
Accuracy / deviations Repeatability 1 [% of the final value] 1 Hysteresis [gpm] Measuring error ± 5 [% of the final value] ± 5 Reaction times Response time [s] < 0.01	Measuring/setting range					
Repeatability [% of the final value]1Hysteresis[gpm]0,81,58Measuring error [% of the final value]±5Reaction timesResponse time[\$]<0.01	Setting range	[gpm]		1.3226.4		
Image: Properties of the final value]Image: Properties of the final value]Hysteresis[gpm]0,81,58Measuring error [% of the final value]± 5Reaction timesResponse time[s]< 0.01	Accuracy / deviations					
[% of the final value]Hysteresis[gpm] $0.81,58$ Measuring error ± 5 [% of the final value] ± 5 Reaction timesResponse time[s] < 0.01 Operating conditionsAmbient temperature[°F]Ambient temperature[°F]Storage temperature[°F]ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-27Vibration resistanceDIN EN 60068-2-6Vibration resistanceDIN EN 60068-2-6MTTF[years]Mechanical dataWeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4301 / 301); stainless steel (1.4301 / 304); PBT;	Repeatability			1		
Measuring error [% of the final value]± 5Reaction timesResponse time[s]< 0.01Operating conditionsAmbient temperature[°F]32140Storage temperature[°F]5176ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2 DIN EN 61000-6-3Shock resistanceDIN EN 61000-6-3Shock resistanceDIN EN 60068-2-27Vibration resistanceDIN EN 60068-2-6Storage temperature5 g (102000 Hz)MTTF[years]Mechanical dataWeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	[% of the final	l value]				
Image: Book and the series of the s	Hysteresis	[gpm]	0,81,58			
Reaction timesResponse time[s]< 0.01	=		± 5			
Response time[s]< 0.01Operating conditionsAmbient temperature[°F]32140Storage temperature[°F]5176ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2 DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-27Vibration resistanceDIN EN 60068-2-6Shock resistanceDIN EN 60068-2-6MTTF[years]Mechanical dataWeight[g]1088.45Materialbrass chemically nickel-plated; PPS; aluminum anodized; PA stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	-	I value]				
Operating conditionsAmbient temperature[°F]Storage temperature[°F]ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2 DIN EN 61000-6-3Shock resistanceDIN EN 6068-2-27DIN EN 6068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-6DIN EN 60068-2-65 g (102000 Hz)MTTF[years]Mechanical dataWeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.431 / 301); stainless steel (1.4301 / 304); PBT;						
Ambient temperature[°F]32140Storage temperature[°F]5176ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2 DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataWeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PA stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	·	[5]	< 0.01			
Storage temperature[°F]5176ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2 DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataWeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PA stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;		[0 1				
ProtectionIP 65; IP 67Tests / approvalsEMCDIN EN 61000-6-2 DIN EN 61000-6-3Shock resistanceDIN EN 61000-6-3Vibration resistanceDIN EN 60068-2-27Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataWeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PA stainless steel (1.4301 / 304); PBT;	-					
Tests / approvalsEMCDIN EN 61000-6-2DIN EN 61000-6-3DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataVeight[g]Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.430 / 304); PBT;	- · ·	[-]				
EMCDIN EN 61000-6-2DIN EN 61000-6-3DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataWeight[g]MaterialMaterials (wetted parts)brass chemically nickel-plated; PPS; aluminum anodized; PA stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;				וא א א א גע או איז א א א א א א א א א א א א א א א א א א		
DIN EN 61000-6-3Shock resistanceDIN EN 60068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataWeight[g]1088.45Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;						
Shock resistanceDIN EN 60068-2-2720 g (11 ms)Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical dataWeight[g]1088.45Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;						
Vibration resistanceDIN EN 60068-2-65 g (102000 Hz)MTTF[years]3318Mechanical data1088.45Weight[g]1088.45Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	Shock resistance			20 g (11 ms)		
MTTF[years]3318Mechanical data1088.45Weight[g]1088.45Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;						
Weight[g]1088.45Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	MTTF	[years]				
Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	Mechanical data					
Materialbrass chemically nickel-plated; PPS; aluminum anodized; PAMaterials (wetted parts)stainless steel (1.4310 / 301); stainless steel (1.4301 / 304); PBT;	Weight	[g]	1088.45			
	Material					
brass chemically nickel-plated; PP; PPS; Polyolefin; O-ring: FKM	Materials (wetted parts)					

SBN346

Flow sensor with fast response time

SBY11BF0BPKG/US



Process connection	1" NPT				
Switching cycles mechanical	10 million				
Displays / operating elements					
Display	Switching status 4 x LED, yellow		4 x LED, yellow		
Accessories					
Items supplied	Allen key				
Remarks					
Remarks	Caution Do not turn the cap beyond the maximum value of the setting range.				
	All data refer to water (68 °F).				
Notes	Please note the changed housing design!				
Pack quantity	1 pcs.				
Electrical connection					
Connector: 1 x M12: codina: A					

Connection

2

