

DIVERTING VALVE SERIES SLB130 SUPERFLOW

The Super flow valve SLB 130 represents a high speed Diverting and Mixing valve. Combined with high flow rates and an advanced modern control interface they are the ideal product for our OEM customers, where flexibility ,compactness and customization is wanted and needed.



SLB130

OPERATION

The ESBE Series SLB130 is a high speed compact diverting and mixing valve made out of brass. Thanks to the new motor drive system a high speed change-over time of 2 seconds, and a high precision control over the flow characteristics is possible.

VERSIONS

The actuator is available in 12V DC or 24V AC/DC versions with 2-point, PWM or proportional (0-10V, 2-10V, 0-20mA, 4-20mA) control signal. Customer specific settings, such as type of control signal, start-up behavior, mixing or diverting function, alarms and warnings could be configured on the customer behalf.

A configuration guide will be sent out to your attention to configure "YOUR SUPERFLOW VALVE". Based on this customer-specific configuration ESBE will supply the SLB130 valve.

SERVICE AND MAINTENANCE

The slender and compact design of the valve allows for easy tool access when assembling and disassembling the valve. The standard SLB130 valves are maintenance free so no exchangeable parts exists.

TECHNICAL DATA

Valve:

Pressure class: _____ PN 16
Media temperature: _____ max. (continuously) +95°C
_____ max. (temporarily) +110°C
_____ min. +5°C
Max. differential pressure drop: _____ 100 kPa (1.0 bar)
Internal leakage: _____ 0.00 %
Connections: _____ External thread (G), ISO 228/1 B

Material

Valve body: _____ Brass CW 617N
Plunger: _____ PPS composite
O-rings: _____ EPDM
Motor spindle: _____ Stainless steel
Plunger washer: _____ Stainless steel
Nyloc nut: _____ Stainless steel EN 1.4310
Packing box sealing: _____ EPDM
Packing box washer: _____ Stainless steel EN 1.4310
Wire ring: _____ Stainless steel EN 1.4310



LVD 2014/35/EU
EMC 2014/30/EU
RoHS 2011/65/EU
PED 2014/68/EU, article 4.3

Actuator:

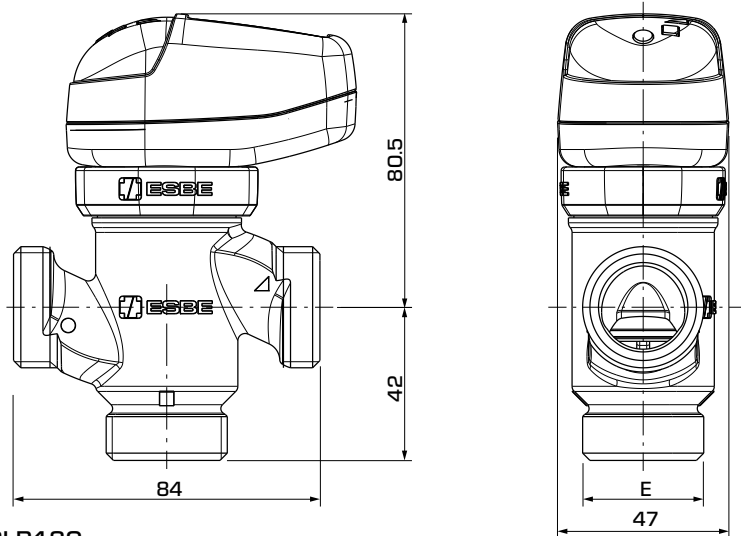
Ambient temperature: _____ max. +60°C
_____ min. -15°C
Running time accuracy: _____ ± 10 %
Power supply, - SLB132: _____ 12 ± 15% V DC
- SLB136: _____ 24 ± 10% V AC/DC
Max. peak current consumption, - SLB132: _____ 850 mA
- SLB136: _____ 600 mA
Max. power consumption idle, - SLB132: _____ 0.7 W
- SLB136: _____ 0.8 W

Material

Cover: _____ PC UL94-V0
Under body: _____ PC UL94-V0
Collar: _____ PA6 UL94-V0
Cable: _____ PVC 4x0.25 mm²

DIVERTING VALVE

SERIES SLB130 SUPERFLOW



SLB130

SERIES SLB132, EXTERNAL THREAD

Art. No.	Reference	Supply voltage	DN	Kvs *	Connection E	Note	Weight [kg]
On request	SLB132	12V DC	20	12	G 1"		0.51
On request	SLB136	24V AC/DC					0.51

* Kvs-value in diverting mode measured as m³/h at a pressure drop of 1 bar.

TECHNICAL DATA, CONTROL SIGNALS

2-point Control signal

OFF voltage range: _____ 0.0 - 2.5 V DC
 ON voltage range: _____ 4.0 - 15.0 V DC
 Undefined voltage range: _____ 2.5 - 4.0 V DC
 Input resistance: _____ 10 kΩ

PWM* Control signal

OFF voltage range: _____ 0.0 - 2.5 V DC
 ON voltage range: _____ 4.0 - 15.0 V DC
 Undefined voltage range: _____ 2.5 - 4.0 V DC
 Input resistance: _____ 10 kΩ
 Position resolution: _____ 0.1 %
 Position accuracy: _____ ± 1.5 %
 Timing inaccuracy: _____ ± 3 μs
 PWM frequency range: _____ 100 - 4000 Hz
 PWM period time: _____ 250 - 10.000 μs
 PWM ratio range: _____ 0 - 100 %
 PWM ratio proportional band, lower limit: _____ 0 - 3 %
 upper limit: _____ 97 - 100 %

* = Pulse-Width Modulation

Proportional Control signal

Input resistance, - 10V: _____ 10 kΩ
 - 20 mA: _____ 475 Ω
 Integration time, - 10V: _____ 100 ms
 - 20 mA: _____ 100 ms
 Proportional band, - 10V: lower limit: _____ 0.1 - 0.3V
 upper limit: _____ 8.5 - 10V
 - 20 mA: lower limit: _____ 0.25 - 0.75 mA
 upper limit: _____ 17 - 20 mA

Feedback signal

Status ON output resistance: _____ 730 Ω
 Status OFF output resistance: _____ 30 Ω
 Recommended load resistance: _____ ≥ 1.5 kΩ
 OFF voltage range: _____ 0.0 - 1.0 V DC
 ON voltage range unloaded: _____ 9.2 - 13.8 V DC
 ON voltage range @ 1.5 kΩ load: _____ 6.0 - 13.8 V DC