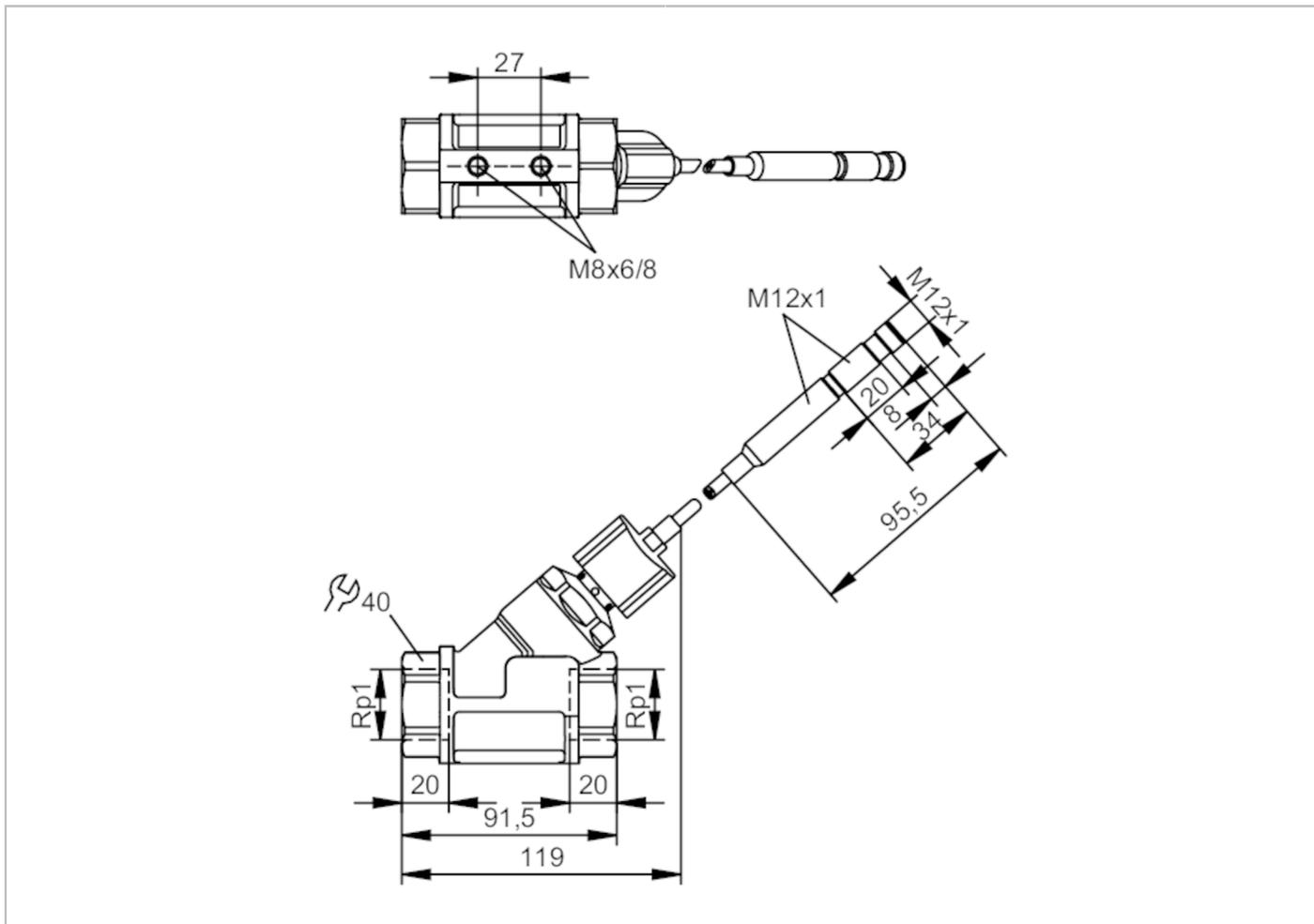


# SBT646



## Flow transmitter with integrated backflow prevention

SBT11XKX10KG/O/US



Product characteristics		
Measuring range	[l/min]	2...100
Process connection		Rp 1
Application		
Media		Liquids; water; glycol solutions
Medium temperature	[°C]	10...180
Pressure rating	[bar]	40
Pressure rating	[MPa]	4
Note on pressure rating		static
Electrical data		
Operating voltage tolerance	[%]	-15...10
Operating voltage	[V]	24 DC; (to SELV/PELV)
Current consumption	[mA]	< 35
Protection class		III
Reverse polarity protection		yes
Outputs		
Output signal		analogue signal

# SBT646



## Flow transmitter with integrated backflow prevention

SBT11XKX10KG/O/US

Analogue current output	[mA]	4...20
Max. load	[Ω]	500
Short-circuit protection		yes
Overload protection		yes

### Measuring/setting range

Measuring range	[l/min]	2...100
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### Accuracy / deviations

Repeatability	[X16]	1
Measuring error	[X16]	± 5

### Response times

Response time	[s]	< 0.01
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### Operating conditions

Ambient temperature	[°C]	0...60
Storage temperature	[°C]	-15...80
Protection		IP 65; IP 67

### Tests / approvals

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 (10...2000 Hz)
MTTF	[ANN]	393

### Mechanical data

Weight	[g]	1275
Materials		brass white bronze coated; PPS; copper alloy; aluminium anodised; PEI; silicone; O-ring: EPDM; FKM
Materials (wetted parts)		stainless steel (316 / 1.4401); stainless steel (1.4301 / 304); brass; brass chemically nickel-plated; PPS; O-ring: FKM; magnet: metallic alloy nickel-plated; Two-component adhesive
Process connection		Rp 1
Switching cycles mechanical		10 million

### Remarks

Remarks	Recommendation Use 200 micron filtration All data refer to water (20 °C).
Pack quantity	1 pcs.

### Electrical connection

Cable: 0.3 m, silicone

### Electrical connection - plug

Connector: 1 x M12; coding: A



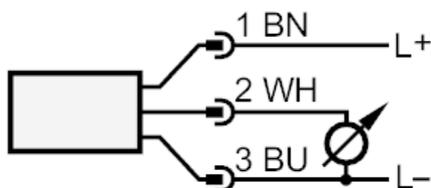
# SBT646



## Flow transmitter with integrated backflow prevention

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### Connection

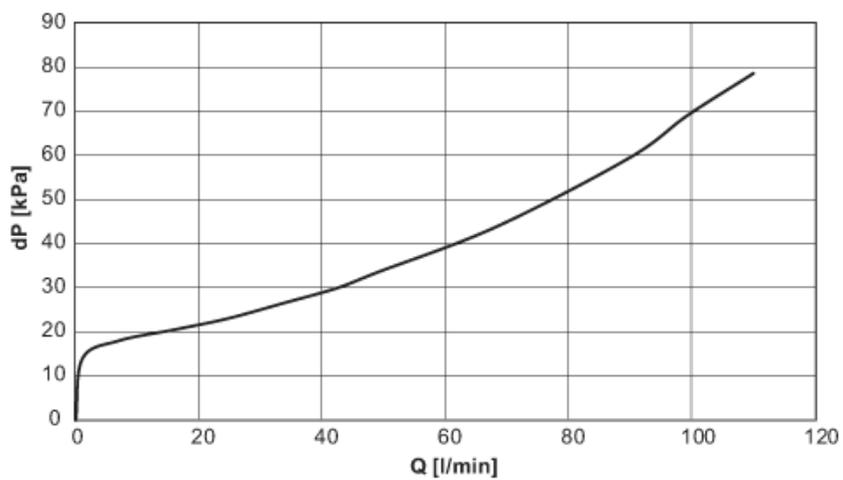


colours to DIN EN 60947-5-2

Core colours :

BN = brown  
BU = blue  
WH = white

### Diagrams and graphs



dP Pressure loss

Q volumetric flow quantity