

# UQS 7

Electronic flow sensors

► Flow



- Ultrasonic sensor
- linearity error 2.5 % m.v.
- rotatable display unit

**Barksdale**  
CONTROL PRODUCTS  
**CRANE** Barksdale, Inc./Barksdale GmbH  
A Subsidiary of Crane Co.

Electronic flow sensor for flow and volume flow monitoring with ultrasonic sensor, digital display, 2 set points and analog output, linearity error 2.5 % m.v.

## Features

7-segment LED display, microprocessor-controlled, self monitoring with error display. all parameters are configured by keypad, tamper proof, keypad lock, rugged construction, vibration- and shock-proof, long term stability, display unit rotatable in steps of 90°

## Applications

OEM applications, Automotive, cooling, automobile industry

## Technical Data

<b>Sensor element:</b>	ultrasonic sensor				
<b>Media:</b>	Water and similar media, max. pressure 25 bar (higher pressures on request)				
<b>Materials:</b>	Wetted parts: Brass, pressed Electronics housing: Aluminum die-cast seals (media): Klingersil® Keypad: Polyester				
<b>Operating elements:</b>	3 easy-response pushbuttons				
<b>System of protection:</b>	IP65				
<b>Protection class:</b>	III				
<b>Process connection:</b>	G3/4, G1, G1 1/4, G2				
<b>Dimensions:</b>	100 x 140 mm				
<b>Weight [g]:</b>	850	850	1200	3000	4000
<b>Measuring range [l/min]:</b>	10	25	40	100	170
<b>Linearity error:</b>	±2,5 % m.v. at 25 °C				
<b>A/D converter:</b>	Scanning rate: 500 ms				
<b>Digital display:</b>	4-digit 7-segment LED display, red, digit height 12 mm Display rate: 500 ms Error display: LED yellow and alphanumeric display				
<b>Electrical connection:</b>	Plug M12 x 1, 4-/5-pin				
<b>Temperature influence:</b>	±0,2 % m.v./10K				
<b>Compensation range:</b>	-10 °C... +70 °C				
<b>Repeatability:</b>	±0,1 % m.v.				



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<b>Temperature range:</b>	Medium (enclosure separate from sensor): +4 °C...+130 °C Electronics: -10 °C...+70 °C Storage: -30 °C...+80 °C
<b>Inlet - Outflow Zone:</b>	Integrated in the meas. device
<b>Power supply:</b>	15...32 V DC, reversed polarity protected (SELV, PELV)
<b>Power consumption:</b>	approx. 50 mA (without load)
<b>Analog output:</b>	Current output: 4...20 mA Load: max. RI = (Ub-12 V)/20 mA RI = 600 Ohm at Ub = 24 V DC Load influence: 0.3 % / 100 Ohm Scanning rate: 500 ms Resolution: 10 Bit (1024 steps per measuring span)
<b>Option</b>	Voltage output: 0...10 V DC Rating: max. 10 mA, short-circuit proof Adjustment range: 25 %... 100 % m.v.
<b>Transistor switching outputs:</b>	Switching function: Normally open / normally closed, standard / window mode and diagnosis function adjustable Adjustment range: 0 %... 125 % m.v. Switching frequency: max. 100 Hz max. 500 mA, short-circuit proof Delay: 0.0 s ... 9.9 s adjustable Display: LED green
<b>Pulse output:</b>	on request
<b>Accessories:</b>	Plug connector

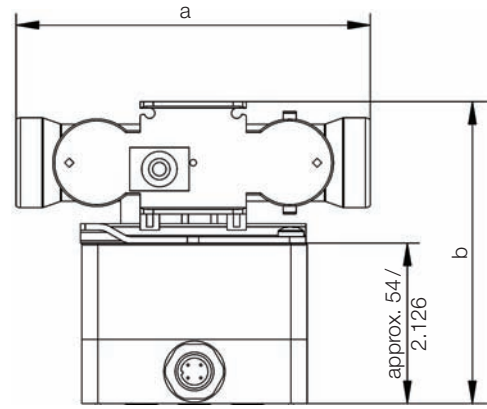
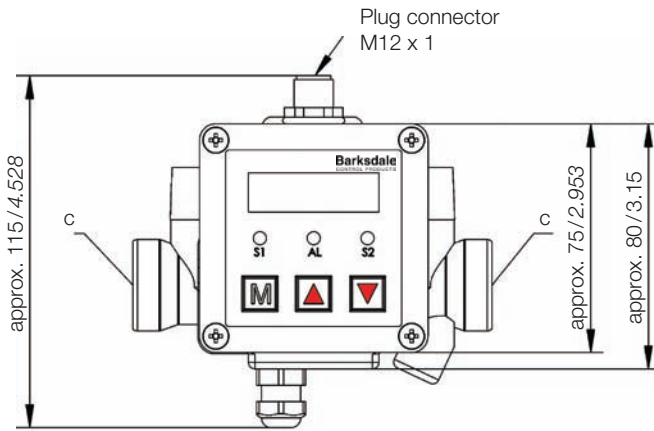
Specifications are subject to changes without notice.

## Electronic Flow Sensors

## Type UQS 7

### Dimensions (in mm / inch)

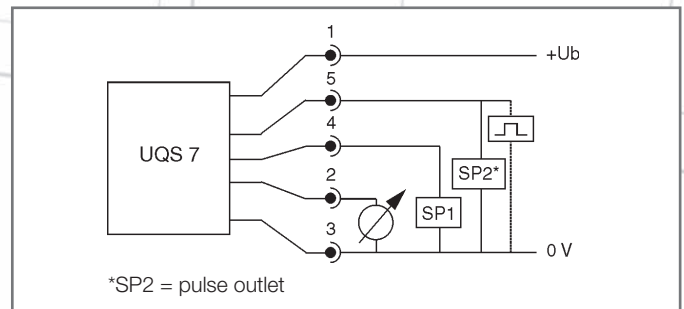
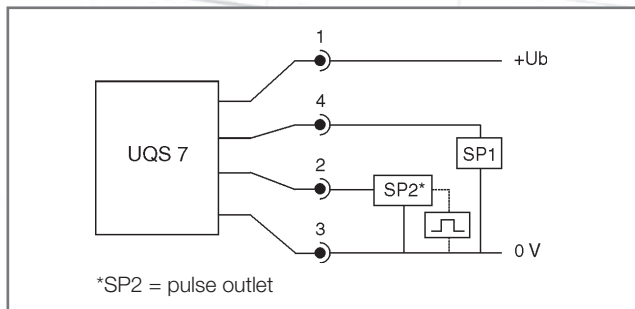
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Type	Measuring range [l/min]	a [mm/inch]	b [mm/inch]	c
UQS 7 - 10	0...10	110/4.331	100/3.937	G3/4
UQS 7 - 25	0...25	110/4.331	100/3.937	G3/4
UQS 7 - 40	0...40	190/7.48	100/3.937	G1

Type	Measuring range [l/min]	a [mm/inch]	b [mm/inch]	c
UQS 7 - 100	0...100	260/10.236	130/5.118	G1 1/4
UQS 7 - 170	0...170	300/11.811	135/5.315	G2

### Connection diagram

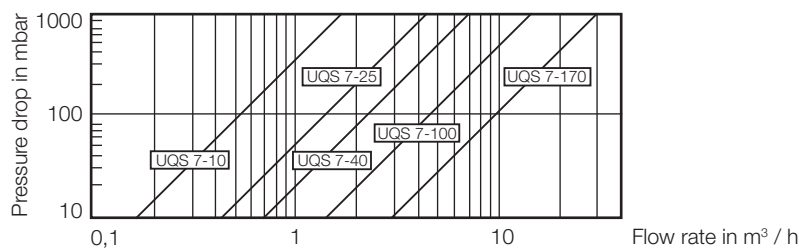


### Order Numbers

Type	UQS 7 - 10	UQS 7 - 25	UQS 7 - 40	UQS 7 - 100	UQS 7 - 170
Measuring range (Qn)*	0,04...10 l / min	0,1...25 l / min	0,16...40 l / min	0,4...100 l / min	0,68...170 l / min
Process connection	G3/4	G3/4	G1	G1 1/4	G2
2 switching outputs	0728-001	0728-003	0728-005	0728-014	0728-016
2 switching outputs, 1 analog output 4...20 mA	0728-002	0728-004	0728-006	0728-015	0728-017

\* Qmax = Qn x 2; in the range of Qmax the accuracy class is 3%.

### Pressure Drop



### Accessories

Order Number	Description
901-0677	Damping screw M4 x 0.2 for UDS 3, UDS 7, Switch 2000, material: brass
0099-001	Mounting traverse (1 set = 2 pcs)

# Experts

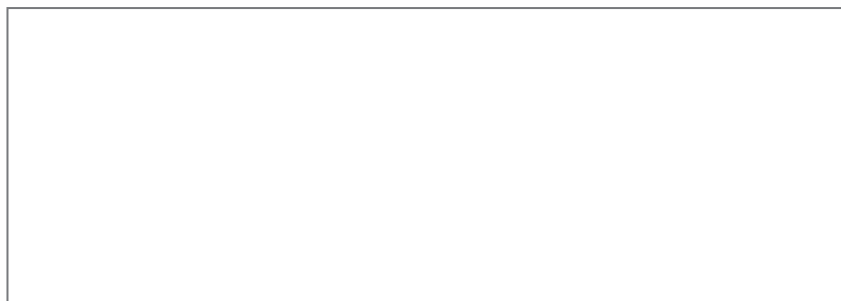
## Specialists for monitoring and control of:

- ▶ Pressure
- ▶ Temperature
- ▶ Level
- ▶ Flow

Almost sixty years of experience in the area of mechanical and electronic control of liquid media and responding to customers needs have resulted in an extensive range of products to meet a wide range of applications. Barksdale's priority is clear. It is our commitment to quality instrumentation and exceptional customer service that has remained the cornerstone of our success. Based on our innovative and market-focused technologies in the areas of pressure, level, flow and temperature measuring processes we provide solutions that fit.



## Global Presence



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