



ELIS PLZEŇ a.s.



**ULTRASONIC FLOW METERS SONOELIS SE 404X  
SONOELIS SE 406X**

## SONOELIS SE 404X, SE 406X

Ultrasonic flow meters of the SONOELIS SE 404X (single-beam) and SE 406X (dual-beam) type series are intended for flow-rate measurements of conductive, non-conductive and aggressive liquids. Ultrasonic flow meters operate on the principle of measuring the difference in transit times of ultrasonic waves travelling in and against the fluid flow direction. The meter consists of a flow sensor and associated electronic unit. Ultrasonic flow meters offer excellent user value in their high measurement accuracy over a wide range of measured values, long-term stability, negligible hydraulic losses and the capability of measuring the flow-rate of virtually any liquid medium.

The electronic unit supplies power to both ultrasonic probes and, via its outputs, communicates the flow-rate data to other co-operating data processing systems. The meter can be supplied either as a compact system or with remote electronic unit. Regarding operator comfort and optional accessories, the meter can be delivered in three configurations: COMFORT (including a display unit and control keyboard, signal outputs), STANDARD (including a display unit, signal outputs) or ECONOMIC (signal outputs only). In the compact version, the electronic unit is provided with an aluminium housing, in the remote version it is fitted into a plastic box.

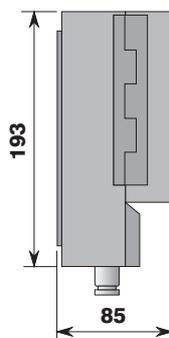
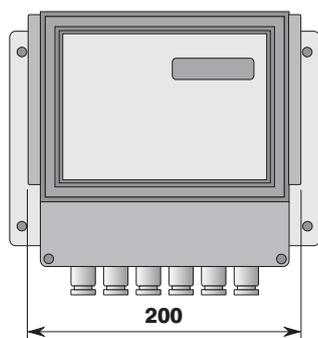
### METER SPECIFICATIONS

nominal diameter DN	DN 32 to DN 300
nominal pressure PN	16, 40
measurement accuracy, SE 404X	±1.0% for velocity of the measured liquid $v > 0.5\text{m/s}$
measurement accuracy, SE 406X	±0.5% for velocity of the measured liquid $v > 0.5\text{m/s}$
temperature of measured liquid	0 to 150°C
ambient temperature	5 to 55°C
display unit	alpha-numerical LCD unit, two lines of 16 characters each
power supply	90 to 250VAC, 50 to 60Hz (AC)
protection class (electronic unit)	IP 65 - remote version, IP 67 - compact version
protection class (sensor)	IP 67
outputs (insulated)	pulse type, one pulse per 0.1 to 1,000 litres frequency type, 0 to 1,000Hz or 10kHz relay type 24VAC/0.1 A
optional accessories	communication line RS 485 extended temperature range: -20°C to +180°C current output 0 (4) to 20mA mass flow-rate measurement capability flow-rate measurement in two directions sensor protection class IP68

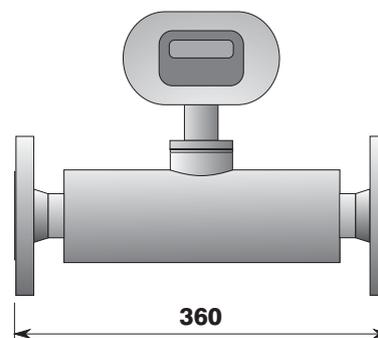
### METER VERSION, CONFIGURATION AND TYPE DESIGNATION

version	COMPACT			REMOTE		
	ECONOMIC	STANDARD	COMFORT	ECONOMIC	STANDARD	COMFORT
single-beam sensor	SE 4040	SE 4042	SE 4044	SE 4041	SE 4043	SE 4045
dual-beam sensor	SE 4060	SE 4062	SE 4064	SE 4061	SE 4063	SE 4065

### REMOTE ELECTRONIC UNIT



### FLOW METER IN COMPACT VERSION



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