SRZ TC Helical Gear Flow Meter

Positive displacement measurement for demanding fluids



Application overview

Helical positive displacement flow meters with tungsten carbide sleeve bushings for high-viscosity, abrasive and filled fluids, including lubricating and non-lubricating media. Temperature-driven viscosity changes have only a marginal effect on measuring accuracy.

Typical applications
Polyurethanes and polymers
Adhesives and sealants
Petrochemical products
Light and heavy fuel oil

Technical specifications

Flow ranges	0.1-10.6 | 0.26-26.4 | 1.1-105.7 GPM
Measuring accuracy	+/-0.5% over full range with 30 cP fluid
Repeatability	+/-0.05%
Maximum resolution*	32,247 pulses/gal | 3.5 pulses/cc
Maximum operating pressure	4,500 psi | 315 bar (model dependent; see page 2)
Fluid temperature	-40 to 302 F (-40 to 150 C)
Ports / turndown	NPT standard; BSPP optional / 100:1
Calibration	7-point logarithmic calibration

Materials of construction

Body	303 stainless steel or 316L stainless steel
Helical gears	Stainless steel DIN 1.4122, QPQ coating
Index gear	Stainless steel DIN 1.4122
O-ring	FKM or PTFE
Sleeve bushings and shafts	Tungsten carbide
Bolts	Zinc flake coated carbon steel

Output options: Frequency; analog voltage or 4-20 mA; battery, loop or DC-powered displays.

*Source resolution values conflict. See technical verification note on page 2.

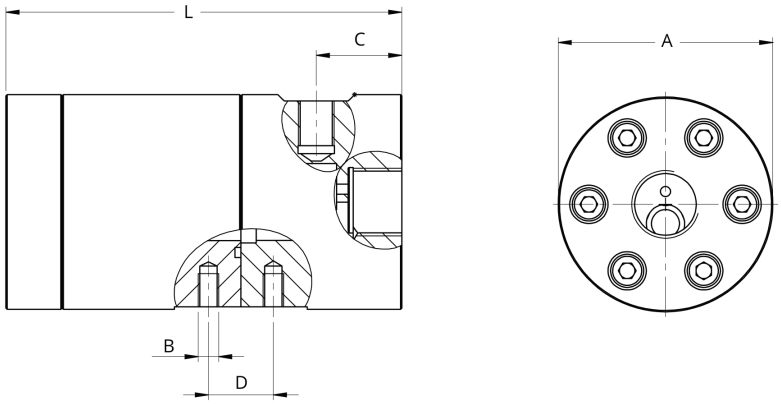
Model selection and dimensional reference

Meter data

Model	GPM / LPM	Pulses/gal Pulses/L / cc	NPT port	Filter microns	psi / bar
SRZ#-40TC	0.1-10.6 0.4-40	32,247* 3,500 / 3.5	3/4 in	200	4,500 / 315
SRZ#-100TC	0.26-26.4 1.0-100	3,214 850 / 0.85	1 in	300	3,600 / 250
SRZ#-400TC	1.1-105.7 4.0-400	810 214 / 0.214	1-1/2 in	300	2,900 / 200

identifies housing material: M = 303 SS; S = 316L SS. Sizes 100 and 400 are available only in 316L SS per the source ordering guide.

Meter dimensions



Model	A	B	C	D	L	lb / kg
SRZ#-40TC	3.4 in 85 mm	M8	1.3 in 33.5 mm	1.0 in 25 mm	6.1 in 155 mm	13.7 / 6.2
SRZ#-100TC	4.3 in 109 mm	M10	2.1 in 53 mm	1.7 in 44 mm	8.7 in 221 mm	33.1 / 15.0
SRZ#-400TC	5.3 in 134 mm	M12	2.4 in 60 mm	3.2 in 80 mm	12.5 in 318 mm	75.0 / 34.0

Technical verification: The source lists 32,247 pulses/gal for SRZ#-40TC alongside 3,500 pulses/L and 3.5 pulses/cc. These values are not equivalent (3,500 pulses/L is approximately 13,249 pulses/US gal). Values are reproduced as supplied; obtain manufacturer confirmation before using a calibration factor.

Dimensions and weights reproduced from the source. Drawing is a reference illustration; do not scale. 3D STEP models available on request.

Ordering guide and electronics options

Part number selection

Retain the SRZ-TC model designation when specifying the meter. Select each configuration field below; confirm the complete order code with Kirkco.

Selection field	Available codes / options
Housing material	M = 303 stainless steel / DIN 1.4305 S = 316L stainless steel / DIN 1.4404
Flow range	40 = 0.1-10.6 GPM 100 = 0.26-26.4 GPM (316L housing only) 400 = 1.1-105.7 GPM (316L housing only)
Housing seal	V = FKM O-ring T = PTFE O-ring
Port type	N = NPT G = BSPP
Sensor hole	S = M14 x 1.5 B = 3/8 in NPT (EX meters only)
Additional options	EX = cCSAus, ATEX, IECEx (includes material certification) M = Material certification

Electronics and signal integration

Kirkco can assist with selection and integration of compatible sensors, pickups, monitors and controllers to deliver flow data in the required format. Available options in the source product range include:

- Analog voltage and 4-20 mA
- Frequency
- Modbus, HART and Bluetooth
- Local and remote electronic displays
- Certified units: UL, cCSAus, ATEX and IECEx
- Wireless radio-frequency monitoring

Electronics, communications and certifications depend on the selected configuration. Confirm compatibility and approvals for the complete meter and electronics assembly.

Application and ordering support

Send Kirkco the fluid description, viscosity, flow range, operating pressure, temperature, port requirements and required output signal for configuration review.

Products may change without notice. Confirm current specifications and approvals before purchase. Technical basis: supplied SRZ-TC datasheet, Doc ID SRZTCDS21. Kirkco publication layout; SRZ-TC remains the source product designation. Product image is an AI-enhanced publication illustration.