



Precision Meter Data

TS20CV

Mechanical Flow Meters

MODELS: TS20CV03, TS20CV04, TS20CV05, TS20CV06, TS20CV07, TS20CV09, TS20CV11, TS20CV13, TS20CV17

TS series oval gear positive displacement precision meters offer weights and measures accuracy for fluid custody transfer. The patented “Wave Form” oval gear design provides smooth and accurate operation in the meters only two parts. This package matches a TS10 or TS15 precision meter to a register. Refer to Precision Meter Technical Manual or Precision Meter Price book for complete list of options.



Specifications

Capacity with standard LV rotors

Standard 5:1 Turn-down **Industrial** 30:1 Turndown

To 1500 SSU visc. (300cP)	150 GPM (570 lpm)
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Pressure Rating

Meter	150 psi at 100°F = 10 bar at 40°C
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Temperature Rating

Meter	-15°F to +180°F = -26°C to +80°C
MID:COM	-13°F to +131°F = -25°C to +55°C

Viscosity

With LV rotors	100% capacity to 1,500 SSU (300 cP)
With HV rotors	100% capacity to 5,000 SSU (1000 cP)

Connections

Standard	2" Bolted companion flanges with NPT or BSP port
Optional	Bolted welding flanges Bolted 150# RF ANSI adaptors, carbon steel

Materials

Case	Anodized aluminum
Gears	PPS with carbon bearings, PTFE bearings option
Posts	Hard chromed Stainless steel
Seals	Viton™ standard, PTFE optional.
Flanges	Anodized aluminum standard

Pulser

	None
Optional	10:1 dry reed on mechanical register 100:1 solid state on mechanical register

Pulse Resolution

	10:1	100:1
1/10 gallon register	10 Pulses Per Gallon	10 Pulses Per Gallon
1/10 liter register	10 Pulses Per Liter	10 Pulses Per Liter

Measurement Approvals

NTEP	99-210
MID	GB-1366
Measurement Canada	AV-2360

Safety Approvals

CE, ATEX	Meter Only
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Registration, Signals and Accessories

Mechanical Registers

Register	#7887 standard (5 digit reset & 8 digit totalizer) #7886 standard (5 digit reset & 8 digit totalizer)
Register Volume	1/10 gallon or 1/10 liter standard 1/10 gallon or whole liter optional
Preset Counter	#7889 2-stage shut-off, optional micro switch kit in X-Prf enclosure
Ticket Printer	#7888 Zero Start stander, accumulative optional

Accessories

Inlet strainer for flow meter protection, air eliminator mounted on strainer, backpressure valve for enhanced air elimination on trucks, air check valve on flow meter outlet side, mechanical preset valve and electronic preset and system.

Model Number Specifications

TS								
20								
C	C	Material	316 Stainless Steel					
Assembly Number								
Flange	A B C	NPT BSP 150# ANSI Adaptors						
Register Calibration								
Pressure Rating	C	150 PSI (10 BAR)						
Rotor & Bearing								
Drive								
Pulsar	X D S	none 10:1 dry reed 100:1 solid state						
Seals								
Strainer	S H	Tuthill 90° Strainer Tuthill High Capacity						
Basket Mesh	4 2	40 Mesh Basket (std. with LV & HT rotors) 20 Mesh Basket (std. with HV rotors)						

	Size	Nominal Capacity	GPM	GPH	lpm	m ³ /h
20	2"	50 mm	150	9,000	570	35

Mechanical Register

T	1/10 US gallons
U	1/10 IMP gallons
G	1/1 US gallons
I	1/1 IMP gallons
Y	1/10 liter
L	1/1 liter

Type Mat'l Bearing

B	LV	PPS	Carbon
I	HV	PPS	Carbon
C	LV	PPS	PTFE
J	HV	PPS	PTFE

M Mechanical

A Viton™ (std. in Anodized Aluminum Models)
B PTFE (std. in SS, opt in AA)

V03		Meter Only - No Register (Register Ready), Calibrator, RAD Adaptor, No Ratio Gear Plate (Distributor to Add)
V04		Meter Only - Calibrator, RAD Adaptor, Ratio Gear Plate & Register
V05		V04 + Strainer
V06		Calibrator, RAD Adaptor, Ratio Gear Plate, Register, Strainer & Air Eliminator
V07		V04 + Zero Start Ticket Printer
V09		V06 + Zero Start Ticket Printer
V11		V04 + 2-Stage Preset Counter & Preset Valve
V13		V06 + 2-Stage Preset Counter & Preset Valve
V17		V06 + 2-Stage Preset Counter, Preset Valve & Zero Start Ticket Printer

