



Precision Meter Data

TS20AV

Mechanical Flow Meters

MODELS: TS20AV03, TS20AV04, TS20AV05, TS20AV06, TS20AV07, TS20AV09, TS20AV11, TS20AV13, TS20AV17

TS series oval gear positive displacement precision meters offer weights and measures accuracy for fluid custody transfer. Using only two moving parts, the patented "Wave Form" design provides smooth and accurate operation. This package matches a TS20 precision meter to a register. Refer to Precision Meter Technical Manual or Precision Meter Price book for a complete list of options.

Specifications

Capacity with standard rotors

Standard 10:1 Turn-down

To 1500 SSU visc. (300cP) | 150 gpm (570 lpm) max

Pressure Rating

Meter | 150 PSI at 100°F = 10 BAR at 40°C

Temperature Rating

Meter | -15°F to +176°F = -26°C to +80°C
MID Approval | -13°F to +131°F = -25°C to +55°C

Viscosity

Standard Rotors (Low Viscosity) | 0 - 300 cp (1500 SSU)
High Viscosity Rotors | > 300 cp (1500 SSU)

Connections

Standard | 2" Bolted companion flanges with NPT or BSP port.

Materials

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

Pulser

Optional | 10:1 dry reed on mechanical register

Pulse Resolution

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



TS20AV06

Measurement Approvals

| | | |
|--------------------|---------|--|
| NTEP | 99-210 | 15 - 150 gpm (57 - 570 lpm) |
| MID | GB-1366 | 15 - 150 gpm (57 - 570 lpm) |
| Measurement Canada | AV-2360 | Refined Petroleum Products/General Solvents 20 - 100 gpm (75 - 380 lpm) Lubricating Oils 10.5 - 47.5 gpm (40 - 180 lpm) |

Safety Approvals

CE, ATEX | Meter Only

Registration, Signals and Accessories

Mechanical Registers

| | |
|-----------------|--|
| Register | #7887 standard (5 digit reset & 8 digit totalizer) |
| Register Volume | 1/10 gallon or whole liter standard |
| Preset Counter | #7889 2-stage shut-off |
| Ticket Printer | #7888 Zero Start |

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, 10:1 and 100:1 pulsers, 150# ANSI flanges, weldment flanges. 20, 40, 100, and 200 mesh strainer baskets. Accumulative ticket printer, micro switch for preset.

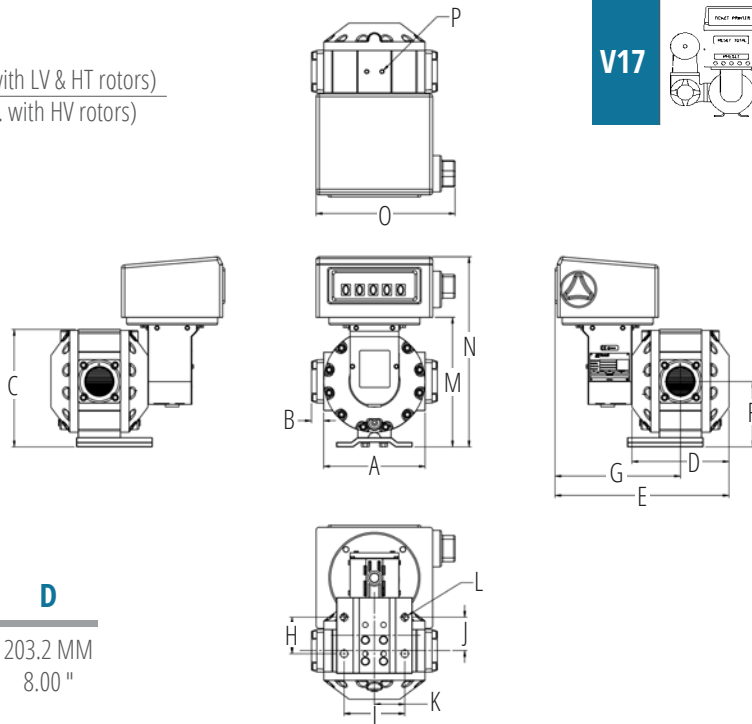


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Model Number Specifications

| TS | | | Max Flow | | | |
|----------------------|---|----------|---|-------|-------------|------|
| | Inlet/Outlet Size | | GPM | GPH | lpm | m³/h |
| 20 | 20 | 2" 50 mm | 150 | 9,000 | 570 | 35 |
| A | Material | | | | | |
| A | Anodized Aluminum | | | | | |
| Assembly Number | | | | | | |
| Flange | A NPT B BSP | | | | | |
| Register Calibration | | | Mechanical Register | | | |
| | | | T 1/10 US gallons | | L 1/1 liter | |
| Pressure Rating | C 150 PSI (10 BAR) | | | | | |
| Rotor & Bearing | | | Type Mat'l Bearing | | | |
| | | | B LV PPS Carbon | | | |
| | | | I HV PPS Carbon | | | |
| | | | C LV PPS PTFE | | | |
| Drive | | | M Mechanical | | | |
| Pulser | X none D 10:1 dry reed | | | | | |
| Seals | | | A Viton™ (std. in Anodized Aluminum Models) B PTFE (std. in SS, opt in AA) | | | |
| Strainer | S Tuthill 90° Strainer | | | | | |
| Basket Mesh | 4 40 Mesh Basket (std. with LV & HT rotors) 2 20 Mesh Basket (std. with HV rotors) | | | | | |

| | | |
|-----|--|--|
| 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 |



Dimensions

| MODEL | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|----------|--------------------|-------------------|--------------------|--------------------|-------------------|--------------------|---------------------|-------------------|------------------|-------------------|-------------------|------------|---------------------|---------------------|-------------------|----------------------|
| TS20AV04 | 212.7 MM 8.38 " | 25.4 MM 1.00 " | 244.5 MM 9.63 " | 203.2 MM 8.00 " | 364 MM 14.33 " | 136.5 MM 5.38 " | 262.4 MM 10.33 " | 76.2 MM 3.00 " | 127 MM 5.00 " | 69.9 MM 2.75 " | 63.5 MM 2.50 " | 0.625 THRU | 269.9 MM 10.63 " | 396.5 MM 15.61 " | 291 MM 11.46 " | 5/16 - 18 UNC - 2 |