

SR sensors and accessories for use with HPM Series meters

SR sensors are plug-and-play systems with the HPM meters. SR sensors are compatible with the current range of HPM meters and backwards compatible with previous meters.

There is a wide range of cables and connectors to suit all applications. The CT and CTR series of turbine flow meters, provide a complete solution to the flow and temperature measurement of hydraulic systems on test stands, machine tools and other fixed or mobile applications. The flow meter can be installed anywhere in the hydraulic circuit for production testing, commissioning, development testing and control systems. The compact design allows the flow meters to be installed where space is limited.

The integral loading valve built into the CTR series provides smooth progressive pressure control in both flow directions allowing components such as cylinders or motors to be tested without re-plumbing the test connections.

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Features

- BI directional flowmeters operation.
- Flowmeters with loading valve have BI directional operation 'INTERPASS™' safety system, bypasses oil internally in the event of valve being over pressurised.
- Flowmeter temperature range of -20 to 90 °C, -4 to 194 °F.
- Pressure transducer temperature range of -25 to 105 °C, -13 to 221 °F.
- Pressure transducer housed in a stainless-steel body and are available in ranges up to 1000 bar, 14500 psi.
- CAN sensors for use with HPM series meters available, see CAN series.



Flowmeters Specifications

| | |
|-----------------------------------|--|
| Maximum Rated Pressure: | 480 bar, 7,000 psi |
| Maximum Rated Flow: | 750 L/min, 200 US gpm |
| Ambient Temperature Range: | -10 to 50°C, 14 to 122°F |
| Fluid Temperature Range: | -20 to 90°C, -4 to 194°F continuous use |
| Compatible Fluid: | Mineral oils to ISO 11158. Other fluids consult sales office |
| Viscosity range: | 10...100 cSt |
| Accuracy/Tolerances: | Reading 15% to 100% of flow range - 1% of indicated reading. Readings below 15% of full scale flow - fixed accuracy of 0.15% of full scale (CT15 is 1% of full scale). |
| Repeatability: | Better than ± 0.2% |
| Filtration: | Oil cleanliness should be better than DIN ISO4406: 21/19/16 or NAS 10 (typically achieved with 20-20u filters). CT15; should be better than DIN ISO4406: 19/16/13 or NAS 7 (typically achieved with 10u filters or less). |
| Porting: | BSPP, SAE |
| Material: | |
| Flow Body: | 600/750 High tensile Aluminium 2014A T6 60/150/300/400 High tensile Aluminium 2011 T6 15 High tensile Aluminium 6082 T6 |
| Internal Materials: | Aluminium, Steel, Stainless Steel. |
| Transducer: | Body and nut - steel 212A42 electroless nickel plated Housing and Lid - Aluminium 2011 T3 electroless nickel plated |
| Seal: | FKM (EPDM seals - CT models only. Consult sales office) |
| IP Rating: | IP54 (EN60529) |
| Power Supply: | 7-15 Vdc |
| Response Time: | 50 ms |

Sales Order Code

Please contact our technical sales team to discuss any special order requirements.

Flowmeters Model Number Table

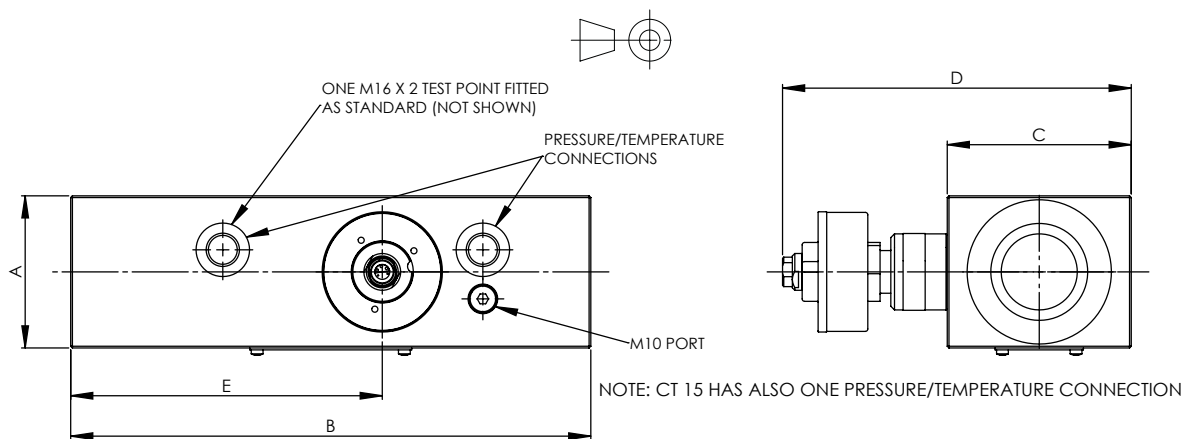
| MODEL NUMBER | MAIN PORTS | TOP PORTS | FLOW RANGE | MAX. PRESSURE |
|----------------|--------------------------------------|------------------------|-----------------|---------------|
| CT15-SR-B-B-6 | 1/2" BSPP | 1/4" BSPP | 1 - 15 L/min | 420 bar |
| CT15-SR-S-S-6 | 3/4" -16UN #8 SAE ORB | 7/16" -20UN #4 SAE ORB | 0.25 - 4 US gpm | 6000 psi |
| CT60-SR-B-B-6 | 3/4" BSPP | 1/4" BSPP | 3 - 60 L/min | 420 bar |
| CT60-SR-S-S-6 | 1-1/16" -12UN #12 SAE ORB | 7/16" -20UN #4 SAE ORB | 0.8 - 16 US gpm | 6000 psi |
| CT150-SR-B-B-6 | 3/4" BSPP | 1/4" BSPP | 5 - 150 L/min | 420 bar |
| CT150-SR-S-S-6 | 1-1/16" -12UN #12 SAE ORB | 7/16" -20UN #4 SAE ORB | 1.3 - 40 US gpm | 6000 psi |
| CT300-SR-B-B-6 | 1" BSPP | 1/4" BSPP | 8 - 300 L/min | 420 bar |
| CT300-SR-S-S-6 | 1-5/16" -12UN #16 SAE ORB | 7/16" -20UN #4 SAE ORB | 2 - 80 US gpm | 6000 psi |
| CT600-SR-B-B-5 | 1-1/4" BSPP | 1/4" BSPP | 15 - 600 L/min | 350 bar |
| CT600-SR-S-S-5 | 1-5/8" -12UN #20 SAE ORB | 7/16" -20UN #4 SAE ORB | 4 - 160 US gpm | 5000 psi |
| CT750-SR-S-B-7 | 1-7/8" -12UN #24 SAE ORB | 1/4" BSPP | 20 - 750 L/min | 480 bar |
| CT750-SR-S-S-7 | 1-7/8" -12UN #24 SAE ORB | 7/16" -20UN #4 SAE ORB | 5 - 200 US gpm | 7000 psi |
| CT750-SR-F-B-3 | 1-1/2" #24 SAE CODE 61 4-BOLT FLANGE | 1/4" BSPP | 20 - 750 L/min | 210 bar |
| CT750-SR-F-S-3 | 1-1/2" #24 SAE CODE 61 4-BOLT FLANGE | 7/16" -20UN #4 SAE ORB | 5 - 200 US gpm | 3000 psi |

Note: To order please quote the model number from the table above

Installation Details

Flowmeters Dimension Table

| MODEL NUMBER | A | | B | | C | | D | | E | | WEIGHT | |
|--------------|-----|-------|-----|-------|----|-------|-----|-------|------|-------|--------|-----|
| | mm | Inch | mm | Inch | mm | Inch | mm | Inch | mm | Inch | kg | lb |
| CT15 | 37 | 1-1/2 | 136 | 5-3/8 | 37 | 1-1/2 | 114 | 4-5/8 | 69.5 | 2-3/4 | 0.7 | 1.5 |
| CT60 | 62 | 2-1/2 | 190 | 7-1/2 | 50 | 2 | 127 | 5 | 103 | 4 | 1.6 | 3.5 |
| CT150 | 62 | 2-1/2 | 190 | 7-1/2 | 50 | 2 | 127 | 5 | 103 | 4 | 1.6 | 3.5 |
| CT300 | 62 | 2-1/2 | 190 | 7-1/2 | 50 | 2 | 131 | 5-1/8 | 103 | 4 | 1.7 | 3.7 |
| CT600 | 62 | 2-1/2 | 212 | 8-3/8 | 75 | 3 | 145 | 5-5/8 | 127 | 5 | 2.7 | 6 |
| CT750-SR-F | 100 | 4 | 212 | 8-3/8 | 75 | 3 | 151 | 5-7/8 | 126 | 5 | 5 | 11 |
| CT750 | 100 | 4 | 212 | 8-3/8 | 75 | 3 | 151 | 5-7/8 | 126 | 5 | 5 | 11 |



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Flowmeters with Loading Valve Model Number Table

| MODEL NUMBER | MAIN PORTS | TOP PORTS | FLOW RANGE | MAX. PRESSURE |
|-----------------|--------------------------------------|------------------------|----------------|---------------|
| CT300R-SR-B-B-6 | 1" BSPP | 1/4" BSPP | 8 - 300 L/min | 420 bar |
| CT300R-SR-S-S-6 | 1-5/16" -12UN #16 SAE ORB | 7/16" -20UN #4 SAE ORB | 2 - 80 US gpm | 6000 psi |
| CT600R-SR-F-B-3 | 1-1/2" #24 SAE CODE 61 4-BOLT FLANGE | 1/4" BSPP | 20 - 600 L/min | 210 bar |
| CT600R-SR-F-S-3 | 1-1/2" #24 SAE CODE 61 4-BOLT FLANGE | 7/16" -20UN #4 SAE ORB | 5 - 160 US gpm | 3000 psi |
| CT600R-SR-S-B-7 | 1-7/8" -12UN #24 SAE ORB | 1/4" BSPP | 20 - 600 L/min | 480 bar |
| CT600R-SR-S-S-7 | 1-7/8" -12UN #24 SAE ORB | 7/16" -20UN #4 SAE ORB | 5 - 160 US gpm | 7000 psi |
| CT750R-SR-S-B-7 | 1-7/8" -12UN #24 SAE ORB | 1/4" BSPP | 20 - 750 L/min | 480 bar |
| CT750R-SR-S-S-7 | 1-7/8" -12UN #24 SAE ORB | 7/16" -20UN #4 SAE ORB | 5 - 200 US gpm | 7000 psi |
| CT750R-SR-F-B-3 | 1-1/2" #24 SAE CODE 61 4-BOLT FLANGE | 1/4" BSPP | 20 - 750 L/min | 210 bar |
| CT750R-SR-F-S-3 | 1-1/2" #24 SAE CODE 61 4-BOLT FLANGE | 7/16" -20UN #4 SAE ORB | 5 - 200 US gpm | 3000 psi |

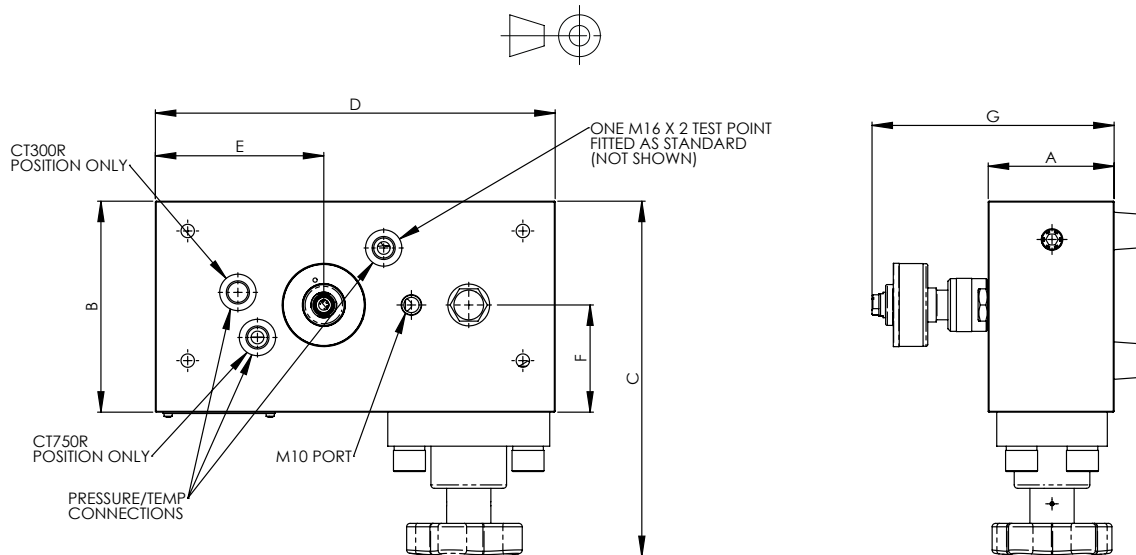
Note: To order please quote the model number from the table above

Installation Details

Flowmeters with Loading Valve Dimension Table

| MODEL NUMBER | A | | B | | C | | D | | E | | F | | G | | WEIGHT | |
|--------------|----|----|-----|----|-----|-------|-----|-------|-------|-------|------|-------|-----|-------|--------|------|
| Units | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | kg | ld |
| CT300R | 49 | 2 | 100 | 4 | 182 | 7-1/8 | 222 | 8-3/4 | 102.5 | 4 | 47.6 | 1-7/8 | 129 | 5-1/8 | 3.7 | 8.1 |
| CT600R | 75 | 3 | 125 | 5 | 211 | 8-3/8 | 235 | 9-3/4 | 99 | 3-7/8 | 63 | 2-1/2 | 148 | 5-3/4 | 7.5 | 16.5 |
| CT750R | 75 | 3 | 125 | 5 | 211 | 8-3/8 | 235 | 9-3/4 | 99 | 3-7/8 | 63 | 2-1/2 | 148 | 5-3/4 | 7.5 | 16.5 |

Add 20mm (3/4") to G for full height including feet



Pressure Transducer Specifications

| | |
|-----------------------------------|--|
| Maximum Rated Pressure: | 1000 bar, 14,500 psi |
| Ambient Temperature Range: | -25 to 85°C, -13 to 185°F |
| Fluid Temperature Range: | -25 to 105°C, -13 to 221°F continuous use |
| Compatible Fluid: | Mineral oils to ISO 11158. Other fluids consult sales office |
| Accuracy/Tolerances: | |
| Pressure: | ± 0.5% full scale |
| Temperature: | ± 3 °C, 5.4 °F (SR-PTT-* ONLY) |
| Porting: | Supplied with M16 x 2 test point connector rated to a maximum pressure of 630 bar, 9100 psi and a 'live' connection pressure of 400 bar, 5800 psi or less. |
| Material: | |
| Body Materials: | Stainless steel 1.4301 |
| Seal: | FKM |
| Weight: | 170 g, 0.4 lb |
| IP Rating: | IP54 (EN60529) |
| Power Supply: | 7-15 Vdc |
| Response Time: | 1 ms |

Sales Order Code

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SR Pressure Transducers Model Number Table

| MODEL NUMBER | PRESSURE RANGE BAR | OVERLOAD PRESSURE P _{MAX} BAR |
|------------------|--------------------|--|
| SR-PT*-015-05-0C | -1 - 15 | 32 |
| SR-PT*-060-05-0C | 0 - 60 | 120 |
| SR-PT*-150-05-0C | 0 - 150 | 320 |
| SR-PT*-400-05-0C | 0 - 400 | 800 |
| SR-PT*-600-05-0C | 0 - 600 | 1000 |
| SR-PT*-1K0-05-0C | 0 - 1000 | 1000** |

Note: To order please quote the model number from the table above.

Replace * with 'N' for no temperature and with 'T' for unit with temperature.

**When using the 1000 bar sensor above 630 bar we recommend the M16x2 test point adapter is not used - connect the sensor directly.

SR Cables

| MODEL NUMBER | LENGTH | TYPE |
|------------------|--------|------------|
| SR-CBL-003-55-MM | 3m | Connecting |
| SR-CBL-005-55-MF | 5m | Extension |

Accessories/Spares

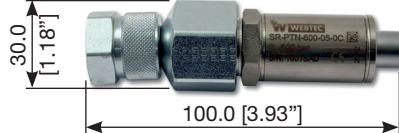
| MODEL NUMBER | DESCRIPTION |
|------------------|------------------------|
| SR-USB-HPM6000 | USB cable type A to B |
| SR-HPM-CHG-03-0C | In car charger adaptor |

Other sensors & accessories

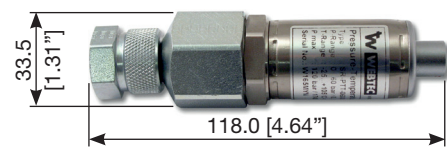
| MODEL NUMBER | DESCRIPTION |
|------------------|---|
| SR-RPM-300-05-3C | SR Tach with 5 pin fixed cable |
| SR-RPM-WHL-00-0C | Tach contact wheel |
| SR-RPM-ADP-00-0C | Focus adaptor |
| SR-VADC-710 | SR/CAN voltage, current & frequency converter |
| SR-TTP-190-05-0C | SR Temperature transducer -40 to 150 °C 1/4" BSPP |

Installation Details Dimensions in mm [Inches]

SR-PTN-***-05-0C



SR-PTT-***-05-0C



Webtec reserve the right to make improvements and changes to the specification without notice