

# 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.

Make it **BLUE**

## Features

- BI directional flowmeters operation.
- Flowmeters with loading valve have Interpass® safety protection system, bypasses oil internally in the event of the valve being over pressurised in either flow direction.
- 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

<b>Maximum Rated Pressure:</b>	480 bar, 7,000 psi
<b>Maximum Rated Flow:</b>	750 L/min, 200 US gpm
<b>Ambient Temperature Range:</b>	-10 to 50 °C, 14 to 122 °F
<b>Fluid Temperature Range:</b>	-20 to 90 °C, -4 to 194 °F continuous use
<b>Compatible Fluid:</b>	Mineral oils to ISO 11158. Other fluids consult sales office
<b>Viscosity range:</b>	10...100 cSt
<b>Accuracy/Tolerances:</b>	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).
<b>Repeatability:</b>	Better than ± 0.2%
<b>Filtration:</b>	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).
<b>Porting:</b>	BSPP, SAE
<b>Material:</b>	
<b>Flow Body:</b>	600/750 High tensile Aluminium 2014A T6 60/150/300/400 High tensile Aluminium 2011 T6 15 High tensile Aluminium 6082 T6
<b>Internal Materials:</b>	Aluminium, Steel, Stainless Steel.
<b>Transducer:</b>	Body and nut - steel 212A42 electroless nickel plated Housing and Lid - Aluminium 2011 T3 electroless nickel plated
<b>Seal:</b>	FKM (EPDM seals - CT models only. Consult sales office) IP54 (EN60529)
<b>IP Rating:</b>	IP54 (EN60529)
<b>Power Supply:</b>	7-15 V d.c
<b>Response Time:</b>	50 ms

## Sales Order Code

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

### Flowmeters Model Number Table

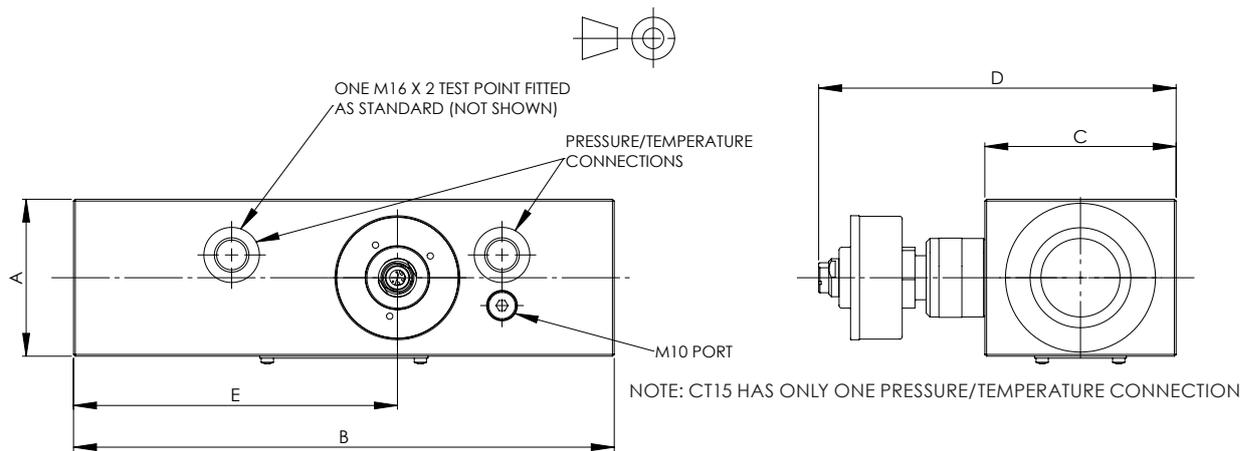
MODEL NUMBER	MAIN PORTS	TOP PORTS	FLOW RANGE	MAX. PRESSURE
CT15-SR-B-B-6	1/2" BSPP	1/4" BSPP	1 - 15 L/min	420 bar
CT15-SR-S-S-6	3/4" -16UN #8 SAE ORB	7/16" -20UN #4 SAE ORB	0.25 - 4 US gpm	6000 psi
CT60-SR-B-B-6	3/4" BSPP	1/4" BSPP	3 - 60 L/min	420 bar
CT60-SR-S-S-6	1-1/16" -12UN #12 SAE ORB	7/16" -20UN #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



## Sales Order Code

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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

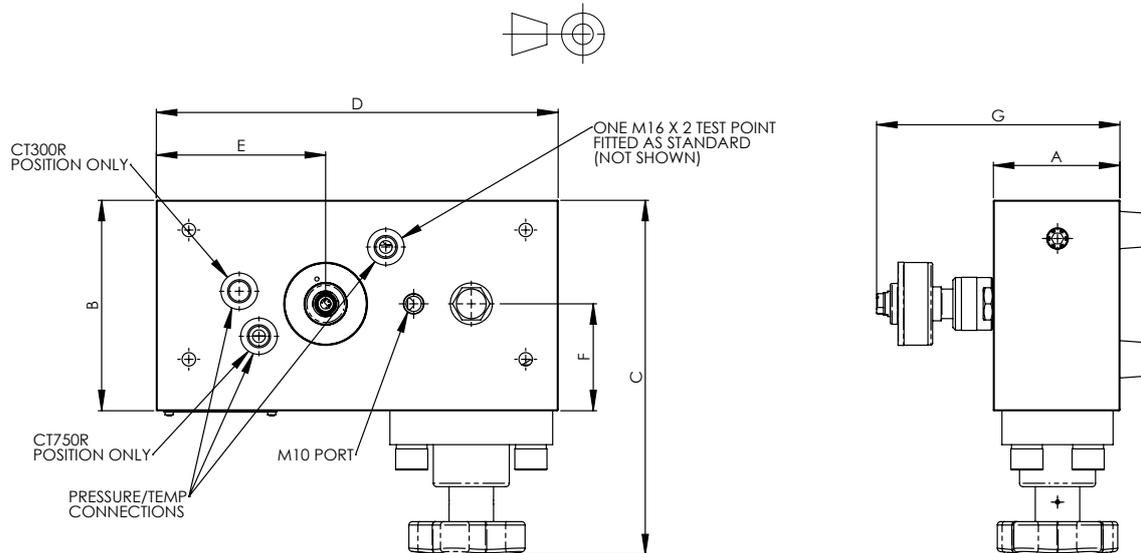
Note: To order please quote the model number from the table above

## 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	lb
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
  - Cables:** Cable Jacket - Polyurethane  
Nut - Chrome plated Zinc  
Contact - Brass
- Weight:** 170 g, 0.4 lb
- IP Rating:** IP54 (EN60529)
- Power Supply:** 7-15 V d.c
- Response Time:** 1 ms

## Sales Order Code

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

### SR Pressure Transducers Model Number Table

MODEL NUMBER	PRESSURE RANGE BAR	OVERLOAD PRESSURE PMAX 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]

