



MODEL NUMBER

Models available for quick shipment, usually within one week after factory receipt of a complete purchase order, through the Expedite Ship Plan (ESP).

COAXIAL PROBE

| BASIC MODEL NUMBER – GWR probe suited for external cage and/or in-tank mounting | | |
|---|--|---|
| 7 * R | GWR probe for overall level | $\epsilon_r \geq 1.4$ - WHG approved |
| 7 * M | GWR probe for level w/ flushing connection | $\epsilon_r \geq 1.4$ - WHG approved |
| 7 * T | GWR probe for interface level | upper liq: $\epsilon_r \geq 1.4$ and ≤ 5 / lower liq: ≥ 15 - WHG aprvd. |
| 7 * N | GWR probe for interface level w/ flushing connection | upper liq: $\epsilon_r \geq 1.4$ and ≤ 5 / lower liq: ≥ 15 - WHG aprvd. |

*Specify "E" for English (e.g., 7ER) or "M" for Metric (e.g., 7MR)

MATERIAL OF CONSTRUCTION – wetted parts (including process connection flange when applicable)

| | |
|---|--|
| A | 316/316L (1.4401/1.4404) SS w/ Teflon® spacers |
| B | Hastelloy C (2.4819) |
| C | Monel (2.4360) |
| J | 316/316L SS NACE Construction |

PROCESS CONNECTION – SIZE/TYPE (consult factory for other process connections)

Refer to Bulletin 57-102 for Enlarged Coaxial Probe

Threaded

| | | | |
|-----|-----------------|-----|--------------------|
| 1 1 | 3/4" NPT Thread | 2 2 | 1" BSP (G1) thread |
|-----|-----------------|-----|--------------------|

ANSI Flanges

| | | | |
|-----|---------------------|-----|---------------------|
| 2 3 | 1" 150# ANSI RF | 4 5 | 2" 600 lbs. ANSI RF |
| 2 4 | 1" 300# ANSI RF | 5 3 | 3" 150 lbs. ANSI RF |
| 2 5 | 1" 600# ANSI RF | 5 4 | 3" 300 lbs. ANSI RF |
| 3 3 | 1 1/2" 150# ANSI RF | 5 5 | 3" 600 lbs. ANSI RF |
| 3 4 | 1 1/2" 300# ANSI RF | 6 3 | 4" 150 lbs. ANSI RF |
| 3 5 | 1 1/2" 600# ANSI RF | 6 4 | 4" 300 lbs. ANSI RF |
| 4 3 | 2" 150# ANSI RF | 6 5 | 4" 600 lbs. ANSI RF |
| 4 4 | 2" 300# ANSI RF | | |

EN/DIN Flanges

| | | | | | |
|-----|--------------------|-------------------|-----|------------------|-------------------|
| B B | DN 25, PN 16/25/40 | EN 1092-1 Type A | E A | DN 80, PN 16 | EN 1092-1 Type A |
| B C | DN 25, PN 63/100 | EN 1092-1 Type B2 | E B | DN 80, PN 25/40 | EN 1092-1 Type A |
| C B | DN 40, PN 16/25/40 | EN 1092-1 Type A | E D | DN 80, PN 63 | EN 1092-1 Type B2 |
| C C | DN 40, PN 63/100 | EN 1092-1 Type B2 | E E | DN 80, PN 100 | EN 1092-1 Type B2 |
| D A | DN 50, PN 16 | EN 1092-1 Type A | F A | DN 100, PN 16 | EN 1092-1 Type A |
| D B | DN 50, PN 25/40 | EN 1092-1 Type A | F B | DN 100, PN 25/40 | EN 1092-1 Type A |
| D D | DN 50, PN 63 | EN 1092-1 Type B2 | F D | DN 100, PN 63 | EN 1092-1 Type B2 |
| D E | DN 50, PN 100 | EN 1092-1 Type B2 | F E | DN 100, PN 100 | EN 1092-1 Type B2 |

Torque Tube Mating Flanges ①

| | | |
|-----|---|--|
| T T | 600# Fisher (249B/259B) in carbon steel – | as per dimensions of Figure 1 on page 11 |
| T U | 600# Fisher (249C) in stainless steel – | as per dimensions of Figure 2 on page 11 |
| U T | 600# Masoneilan flange in carbon steel – | as per dimensions of Figure 3 on page 11 |
| U U | 600# Masoneilan flange in stainless steel – | as per dimensions of Figure 3 on page 11 |

PROCESS SEAL – O-RING MATERIAL ②

| | | |
|---|---|-------------------------------------|
| 0 | Viton GFLT seal – for universal use | -40 °F (-40 °C) / +400° F (+200 °C) |
| 2 | Kalrez 4079 seal – for aggressive media ③ | -40 °F (-40 °C) / +400° F (+200 °C) |
| 8 | Aegis PF 128 seal – for steam √ and NACE apps | -4 °F (-20 °C) / +400° F (+200 °C) |

INSERTION LENGTH f

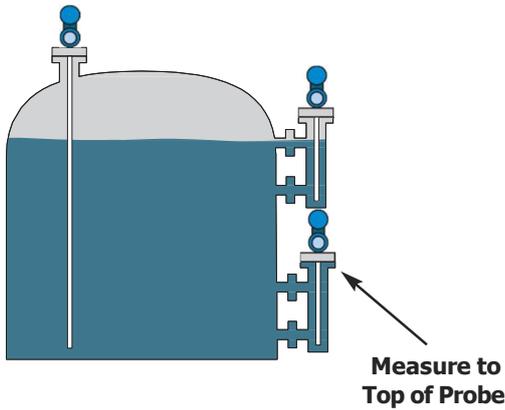
24 to 240 inches (60 to 610 cm)
(unit of measure is determined by second digit of Model Number)

Examples: 24 inches = 024; 60 centimeters = 060



- ① Always check dimensions if ANSI/DIN flanges are not used.
- ② Consult factory for alternative o-ring materials.
- ③ For ammonia/chlorine applications use the 7xD GWR probe. Consult factory for HF acid applications.
- √ Max +400 °F (+200 °C) for use on steam.

COAXIAL PROBE MOUNTING



OVERFILL SAFE & OVERFILL PROOF

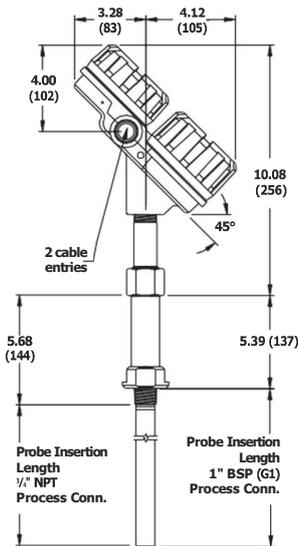
ECLIPSE 7xR, 7xM, 7xT and 7xN coaxial type GWR probes are “overflow safe” in operation and “Overflow proof” certified.

Overflow safe means that the unit is capable of measuring up to the process connection. “Non overflow safe” probes often use software algorithms to ignore level readings in the blocking distance or transition zone. When level rises in this zone, non-overflow safe may consider the end of probe reflection as to the real level and may report an empty vessel instead of a full vessel.

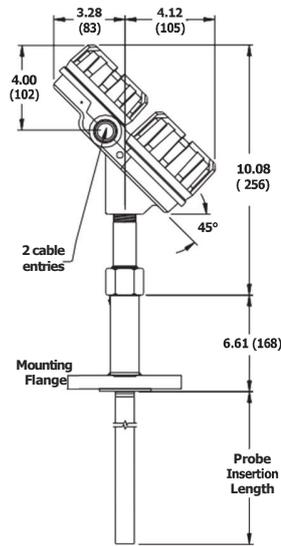
Overflow proof protection (such as WHG or VLAREM) certifies reliable operation when the transmitter is used as overflow alarm but assumes that the installation is designed in such way that the vessel/ cage cannot overflow.

COAXIAL PROBE DIMENSIONS

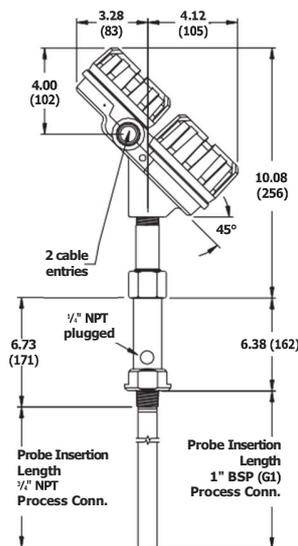
INCHES (mm)



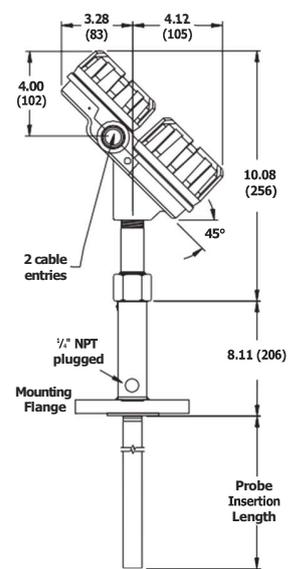
7xR / 7xT with threaded connection



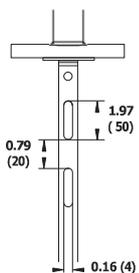
7xR / 7xT with flanged connection



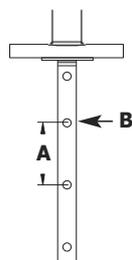
7xM / 7xN with flushing connection



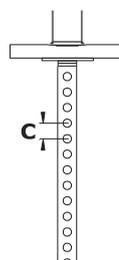
7xM / 7xN with flushing connection



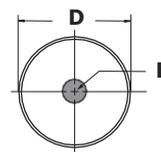
Slots for 7xR-A (order with “x” description)



Venting holes for level



Venting holes for interface



Coaxial GWR Probe, End View

| Dim. | Standard | Enlarged |
|------|--------------|---|
| A | 12 (305) | 12 (305) |
| B | Ø 0.25 (6.4) | Ø 0.5 (12.7) |
| C | 0.75 (19) | 1 (25.4) |
| D | 0.88 (22.5) | 1.75 (45) - SST 1.92 (49) - HC and Monel |
| E | 0.31 (8) | 0.63 (16) |



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