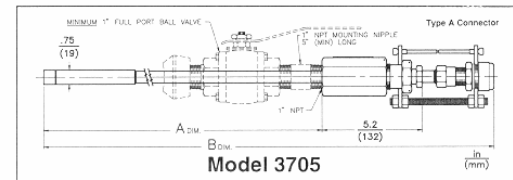
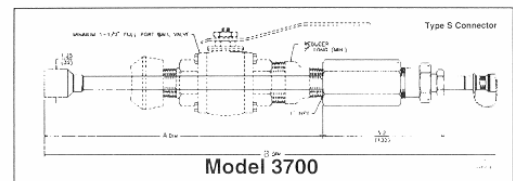


# Model 3700/3705 CORROSOMETER® Probe

## FLUSH ELEMENT



### Specifications:

- **Mounting - 1" Full Port Valve Minimum (Model 3705)**
- **Mounting - 1½" Valve Minimum (Model 3700)**
- **Temp. Rating - +500° F/+260° C**
- **Pressure Rating - 1500 PSI/10.3 MPa**
- **Element Seal Material –**  
     **Glass (Model 3705)**  
     **Ryton (Model 3700)**
- **Fill Material - Ceramic**
- **Probe Body Material – Stainless Steel**

Model 3700

| Order Length | "A" Dimension |     | "B" Dimension |      |
|--------------|---------------|-----|---------------|------|
|              | Inches        | mm  | Inches        | mm   |
| 18           | 19.0          | 483 | 25.0          | 635  |
| 24           | 25.0          | 635 | 31.0          | 787  |
| 30           | 31.0          | 787 | 37.0          | 940  |
| 36           | 37.0          | 940 | 43.0          | 1092 |

Model 3705

| Order Length | "A" Dimension |     | "B" Dimension |      |
|--------------|---------------|-----|---------------|------|
|              | Inches        | mm  | Inches        | mm   |
| 18           | 16.9          | 429 | 24.75         | 628  |
| 24           | 22.9          | 582 | 30.75         | 781  |
| 30           | 28.9          | 734 | 36.75         | 933  |
| 36           | 34.9          | 886 | 42.75         | 1086 |

Model 3700 and 3705 retractable process probes have a flat strip measuring element sealed and mounted at the end of a heavy walled stainless steel tube. By adjusting the position of the probe or proper selection of the physical dimensions of the coupling system, the measuring element can be positioned flush with the inner surface of the pipe or vessel. Corrosion or erosion can then be measured right at this surface, and the lines may be

pigged without moving the probes. The Model 3705 is smaller in size but limited to a sensitive S8 element. For higher corrosion rate, the larger Model 3700 provides for thicker elements. These probes may be used in any organic or inorganic environment up to a pH of 9. No replacement insert is available for the Model 3705, but is available on the Model 3700.

## Element Availability:

| UNS Number               | Alloy Code | Alloy                   | S8   | S10  | S20  | S40  | UNS Number               | Alloy Code | Alloy     | S8   | S10  | S20  | S40  |
|--------------------------|------------|-------------------------|------|------|------|------|--------------------------|------------|-----------|------|------|------|------|
| K03005                   | -----      | Pipe Grade Carbon Steel | •    | •    | •    | •    | S31600                   | 8020       | 316 S.S.  | •    |      | •    |      |
| S30400                   | 8013       | 304 S.S.                | •    |      | •    |      | S31603                   | 8021       | 316L S.S. | •    |      | •    |      |
| S30403                   | 8014       | 304L S.S.               | •    |      | •    |      |                          |            |           |      |      |      |      |
| <b>Inches</b>            |            |                         | .004 | .005 | .010 | .020 | <b>Inches</b>            |            |           | .004 | .005 | .010 | .020 |
| <b>Useful Range (mm)</b> |            |                         | .100 | .175 | .250 | .510 | <b>Useful Range (mm)</b> |            |           | .100 | .175 | .250 | .510 |

**Table 1**

Other element alloys or styles may be supplied subject to material availability.

## Ordering Information:

| Model       | Retractable CORROSOMETER® Probe         |   |                  |
|-------------|---|---|------------------|
| 3700        | Complete Probe Assembly                 |   |                  |
| 3701        | Replacement Probe Insert for Model 3700 |   |                  |
| 3705        | Complete Probe Assembly <sup>1</sup>    |   |                  |
|             | <b>Code</b>                             | <b>Element Form: See Table 1 for availability</b>                           |                  |
|             | S8                                      | Strip, Flush (4 mil useful probe life:3705 only)                            |                  |
|             | S10                                     | Flush Strip Element, 10 mil thickness (5 mil useful probe life: 3700 only)  |                  |
|             | S20                                     | Flush Strip Element, 20 mil thickness (10 mil useful probe life: 3700 only) |                  |
|             | S40                                     | Flush Strip Element, 40 mil thickness (20 mil useful probe life: 3700 only) |                  |
|             | <b>Code</b>                             | <b>Element Alloy: See Table 1 for availability</b>                          |                  |
|             | XXXXXX                                  | Enter UNS number  |                  |
|             | <b>Code</b>                             | <b>Order Length</b>   |                  |
|             | 18                                      | 18 inches   |                  |
|             | 24                                      | 24 inches   |                  |
|             | 30                                      | 30 inches   |                  |
|             | 36                                      | 36 inches   |                  |
|             | <b>Code</b>                             | <b>Safety Clamp</b>   |                  |
|             | 0                                       | Not Included  |                  |
|             | 1                                       | Safety Clamp Installed  |                  |
| <b>3700</b> | <b>— S10 —</b>                          | <b>K03005 — 24 — 1</b>  | <b>← Example</b> |
| <b>3701</b> | <b>— S10 —</b>                          | <b>K03005 — 24</b>  | <b>← Example</b> |
| <b>3705</b> | <b>— S8 —</b>                           | <b>K03005 — 18 — 1</b>  | <b>← Example</b> |

Note 1: A replacement insert is not available for this model since the stuffing box is trapped between the probe header and the A type connector.



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