

Straight Beam Contact Transducers, Delay Line



Applications

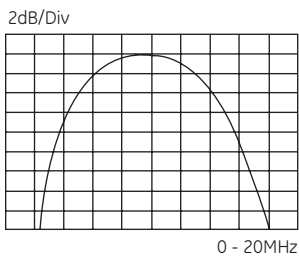
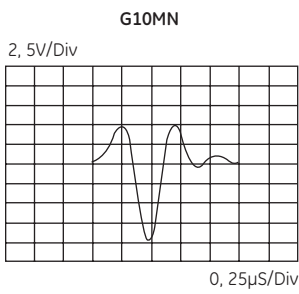
- Thickness measurement
- Near surface flaw detection
- Inspection of thin sections
- Curved parts, tubing, pipe
- Composites and plastics
- Turbine blades

Features and Benefits

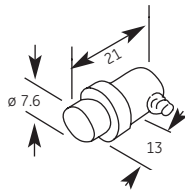
- Excellent near surface resolution.
- Replaceable delay line—long life and versatility.
- Higher frequencies improve resolution and small flaw detectability.
- All models have side mounted Microdot connector.

Delay Line Transducers—European Standards

Type G..MN



Typical waveform and frequency spectrum



| Type | Order Code | D | | f | N | | Sketch |
|---------|------------|----|------|-------|----|-----|---------|
| | | mm | in | (MHz) | mm | in | |
| G 5 MN | 53046 | 5 | 0.20 | 5 | 5 | 0.2 | Type 14 |
| G 10 MN | 53047 | 5 | 0.20 | 10 | 10 | 0.4 | |
| G 15 MN | 53058 | 5 | 0.20 | 15 | 15 | 0.6 | |

Custom configurations are available by special order.

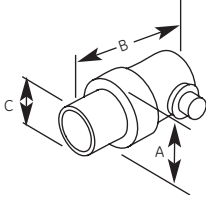
Accessories

| Description | Type | Remark |
|---------------------------|--------------------------------|---|
| Cable | MPKM2 (52999) | |
| Delay Line (exchangeable) | CLFV1 (54258) CLFV3 (54262) | .37 in (9.5 mm) for G.MN .49 in (12.5 mm) for G.MN |

Delay Line Transducers—North American Standards

Types DFR and K-PEN

Removable Delay Line—Type DFR

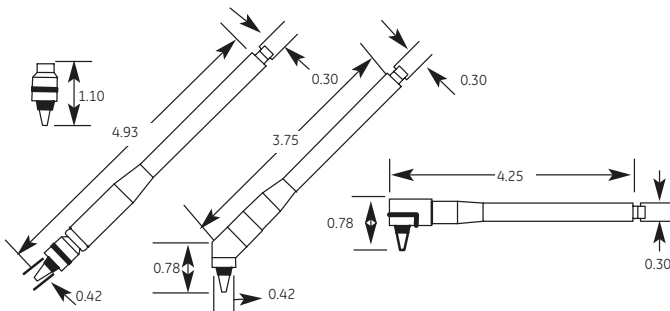


| Element Ø | | A | | B | | C | |
|-----------|---------------|-------|------|------|------|------|------|
| mm | in | mm | in | mm | in | mm | in |
| 3 or 6 | 0.125 or 0.25 | 13 | 0.51 | 21.3 | 0.84 | 7.6 | 0.30 |
| 13 | 0.50 | 22.4 | 0.88 | 35.1 | 1.38 | 15.2 | 0.60 |
| Mini-DFR | | | | | | | |
| 3 | 0.125 | 10.41 | 0.41 | 19.6 | 0.77 | 4.8 | 0.19 |



K-PEN Replaceable Delay Line Pencil Probe

- Focused, high resolution pencil probe
- Interchangeable delay lines, two tip diameters
- Extremely small contact area
- Tightly curved surfaces, such as turbine blades
- Wall thickness measurement from the bottom of an external pit
- Straight, right angle and 45° handles
- Straight model has removable handle



| Freq. (MHz) | Element Ø | | Order Codes | | | | Accessories |
|------------------|-----------|------|--------------|-------------------------------------|-------------------------------------|---|-------------|
| | mm | in | Alpha Series | Delay Line 10-PK .38 in (9.5 mm) Lg | Delay Line 10-PK .5 in (12.7 mm) Lg | | |
| 2.25 | 6 | .250 | 122-660 | 118-440-050 | 118-440-051 | Cables | |
| | 13 | .500 | 140-500 | | 118-440-052 | | |
| 3.5 | 6 | .250 | 123-660 | 118-440-050 | 118-440-051 | BNC 118-140-012 | |
| | 13 | .500 | 144-660 | | 118-440-052 | | |
| 5.0 | 6 | .250 | 126-660 | 118-440-050 | 118-440-051 | LEMO-1 118-140-022 | |
| | 13 | .500 | 140-602 | | 118-440-052 | | |
| 10.0 | 6 | .250 | 127-660 | 118-440-050 | 118-440-051 | Delay Line Couplant 118-300-740 | |
| 15.0 | 6 | .250 | 127-660 | 118-440-050 | 118-440-051 | | |
| 22.0 | 3 | .125 | 118-660 | 118-440-050 | 118-440-051 | Spring Loaded VEE Block 118-480-007 | |
| Mini-DFR 20.0 | 3 | .125 | 518-650 | 118-440-502 | | | |

*H-007 fits .125 in (3 mm) and .25 in (6 mm) units only with exception of Mini DFR. Custom configurations are available by special order.

| Freq. (MHz) | Order Code | | | | | |
|-------------|----------------|-------------|-------------------|----------------------------------|----------------------------------|-------------|
| | Straight K-PEN | 45° K-PEN | Right Angle K-PEN | .065 in (1.7 mm) Tip Delay 10-PK | .090 in (2.3 mm) Tip Delay 10-PK | BNC Cable |
| 7.5 | 389-042-200 | 389-042-880 | 389-042-870 | 387-003-109 | 387-003-110 | 118-140-012 |
| 20.0 | 389-030-290 | 389-041-270 | 389-040-660 | | | |

