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Ordering Instructions

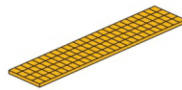
Conventional Ultrasonic Phased Array transducer frequency is 1MHz ~15MHz. Element quantity is from 8 to 128, custom order can be up to 1024 elements. In this handbook, contains full information of transducers including Linear(L), Matrix(M), Annular(A), Concave(C), Wedge Integrated and so on. Other type of transducers can be customized according to customers' requirements. Wedges, connectors, connector switches and extension cables also can be customized.



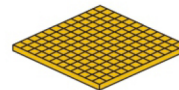
Linear(L)



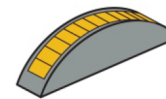
Internal Focused(S)



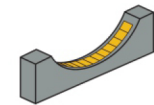
1.5D Array (M)



2D Array (M)



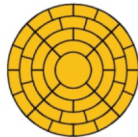
Convex (V)



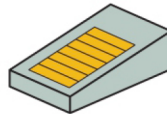
Concave (C)



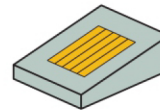
Annular (A)



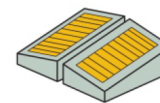
Annular Sectorial (S)



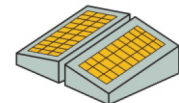
Variable angle(L)



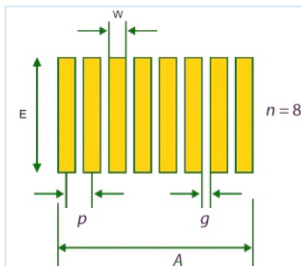
Skew (S)



Dual linear(S)

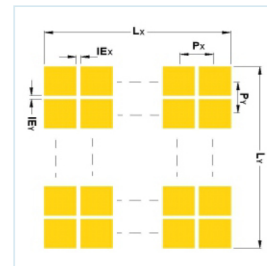


Dual 1.5 (S)



1D Probe parameters

A: Active aperture
 g : Internal element spacing
 W : Element width
 p : Elementary pitch
 E : Elevation
 n : Number of elements in the PA probe
 Active aperture: $A = n \times p$
 Precise active aperture: $A = (n - 1) \times p + W$
 Near field: $N = D / (4\lambda)$



2D Probe parameters

Px: Primary Pitch
 Py: Secondary Pitch
 Iex: Primary element spacing
 Iey: Secondary element spacing
 Lx: Primary Aperture
 Ly: Secondary Aperture

Probe Model Illustration: 10 L 64 - 0.6 x 7 - D3 - U - 110 - 2.0 - T1

Frequency Array type No. elements Pitch Elevation Probe Casing type Cable jacket type Cable capacitance (/m) Cable length Connector type

Wedge Model Illustration: SD3 - N 55 S - I H C - AOD 203.2

Wedge type Mounting method Refraction angle Wave type Irrigation Scanner yoke attachment points Adjustable carbide wear pins Radius type Tube diameter

Probe Model Illustration

Frequency 1=1MHz 2.5=2.5MHz 5=5 MHz 7.5=7.5 MHz 10=10 MHz 20=20 Mhz
 Array Type L(linear) V(convex) C(concave) M (matrix) A(Annular) S(special)
 No. Elements 64=64 Elements
 Pitch 0.6=0.6mm
 Elevation 7=7mm
 Probe Type D3=D3 Series
 Cable Jacket Type P: PVC U: PU (Required by nuclear industry)
 Cable Capacitance 110=110PF 50=50PF
 Cable Length 2.0=2m
 Connector Type H1:Hypetronics P1:Omni Connector 160PIN D3:DL-96P
 D1:DL-156P D2:DL-260P M2:MOLEX 160PIN
 J1:D38999/26FF35SN M1:MOLEX 78PIN
 C1:CONEC 78PIN T1:ITT-cannon QLC260P

Wedge Model Illustration

Wedge Type SXX: Casing type matched to the wedge XX
 Mounting Method N=Normal L= Lateral
 Refraction Angle 0=0° 45=45° 55=55°
 Wave Type S=Share Wave L=Longitudal Wave
 IHC I=Irrigation
 H=Scaner yoke attachment points
 C=Adjustable carbide wear pins
 Radius Type AOD=Axial outside diameter (circumferential scan)
 COD=Circumferential outside diameter (axial scan)
 Tube Diameter 50=50mm

Custom Probe Description

We have a professional R&D technical team and a world-class ultrasonic transducer production line. We can customize transducers according to customer requirements. To develop self-defined transducers for customers, we need to know:

1. Application scenarios, how to use existing transducers
2. Transducer frequency, number of array elements, array element spacing, array element length, array configuration, probe type
3. Requirements such as size restrictions
4. Cable length and environmental requirements
5. Connector type and wire sequence requirements



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