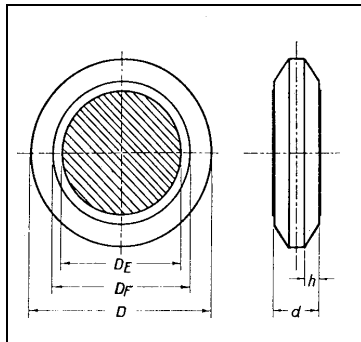




# Crystals Sensors

## Quartz Transducers



D	Outside diameter
D <sub>E</sub>	Diameter of the electrodes
D <sub>F</sub>	Diameter of the bevels
h	Height of the bevels
d	Thickness

Quartz Transducers			Outside diameter up to...mm			
Frequency [MHz]	Thickness [mm]	Cut	3 - 5	10	15	20
2.0	1.440	X	---	---	---	UX 2003
4.0	0.720	X	---	UX 1004	UX 1504	UX 2004
7.0	0.411	X	UX 0505	UX 1005	UX 1505	UX 2005
10.0	0.288	X	UX 0506	UX 1006	UX 1506	UX 2006
15.0	0.192	X	UX 0507	UX 1007	UX 1507	UX 2007
20.0	0.144	X	UX 0508	UX 1008	UX 1508	UX 2008
30.0	0.096	X	UX 0509	UX 1009	UX 1509	UX 2009
2.0	0.990	Y	---	---	---	UY 2004
4.0	0.495	Y	---	UY 1005	UY 1505	UY 2005
7.0	0.283	Y	UY 0506	UY 1006	UY 1506	UY 2006
10.0	0.198	Y	UY 0507	UY 1007	UY 1507	UY 2007
15.0	0.132	Y	UY 0508	UY 1008	UY 1508	UY 2008
20.0	0.099	Y	UY 0509	UY 1009	UY 1509	UY 2009

The tabulated figures should be considered as a general survey. Special designs with respect to crystal orientation, frequency, mechanical outlines, surface finish, and electrode deposition can be fabricated as specified by customer.

## Quartz Elements for Pressure and Force Transducers

With these elements the direct piezoelectric effect of energy conversion from mechanical displacement to generated surface charges is applied to measure mechanical force or pressure electrically. KVG fabricates a variety of these quartz crystal elements in accordance with customer specifications.

### Technical information

Upon request KVG will assist with more detailed information

## Monitor Quartz Crystals for Thin Film Deposition Control

Frequency range: 4 - 6 MHz, AT-cut  
 Crystal shapes: plane, bevelled, plano-convex  
 Diameter: 12 - 15 mm  
 Electrode: silver / gold  
 Different electrode designs  
 Recycling of used monitor crystals  
 Further information upon request

### KVG Quartz Crystal Technology

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