



**Sonatest**

Inspect with confidence

**TRANSDUCER CATALOGUE**



# QCG and QW

Single Crystal transducers, threaded for use with "Quick Change" shear wave wedges

## Features

- Single crystal angle beam shear wave quick change transducer and wedges
- Circular lead metaniobate crystal
- Max operating temperature 50°C / 120°F
- High temperature options available up to 285°C / 545°F on request
- Medium damped for medium bandwidth
- Highly damped option for wide bandwidth available see PQC transducer list
- Wedges available in refracted longitudinal angles on request



## Common Applications

- General Welds / Tube & Pipe • Forgings

Transducer Models				
Product Code	Description	Frequency (MHz)	Crystal Diameter (mm / Inches)	Nearfield Length in Steel (mm / Inches)
QCG2525	2.25MHz ¼" QuickChange	2.25	6.4mm / 0.252"	7.1mm / 0.28"
QCG3725	2.25MHz ⅜" QuickChange	2.25	9.5mm / 0.374"	15.7mm / 0.618"
QCG5025	2.25MHz ½" QuickChange	2.25	12.7mm / 0.5"	28.1mm / 1.106"
QCG2550	5MHz ¼" QuickChange	5	6.4mm / 0.252"	15.9mm / 0.626"
QCG3750	5MHz ⅜" QuickChange	5	9.5mm / 0.374"	34.9mm / 1.374"
QCG5050	5MHz ½" QuickChange	5	12.7mm / 0.5"	62.4mm / 2.457"
QCG2510	10MHz ¼" QuickChange	10	6.4mm / 0.252"	31.7mm / 1.248"
QCG3710	10MHz ⅜" QuickChange	10	9.5mm / 0.374"	69.9mm / 2.752"
QCG5010	10MHz ½" QuickChange	10	12.7mm / 0.5"	124.8mm / 4.913"

Case Dimensions and Details				
Transducer Size	Width/Diameter (mm)	Height (mm)	Connector Options	Position Options
6.4mm / 0.252"	12.7mm / 0.5"	19.05mm / 0.75"	D S	Top
9.5mm / 0.374"	14.5mm / 0.571"	19.05mm / 0.75"	D S	Top
12.7mm / 0.5"	17.2mm / 0.677"	19.05mm / 0.75"	D S	Top

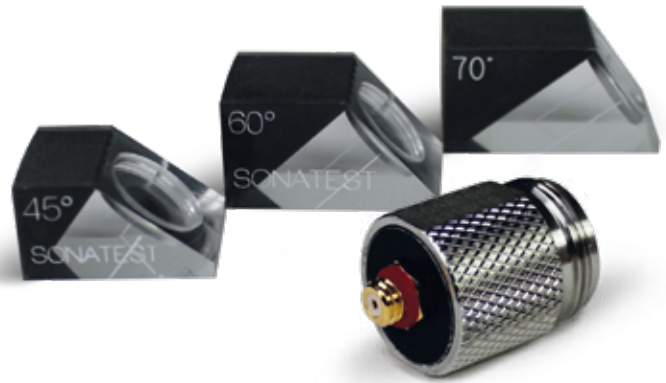
Wedge Details						
Product Code	Description	θ wedge Angle in Steel (°)	Applicable Probe Diameter	Width (mm / Inches)	Height (mm / Inches)	Length (mm / Inches)
QW2545	45° wedge for ¼" QCG probe	45	6.4mm / 0.252"	12.7mm / 0.5"	11.5mm / 0.453"	20.3mm / 0.799"
QW2560	60° wedge for ¼" QCG probe	60	6.4mm / 0.252"	12.7mm / 0.5"	12.6mm / 0.496"	23.5mm / 0.925"
QW2570	70° wedge for ¼" QCG probe	70	6.4mm / 0.252"	12.7mm / 0.5"	12.7mm / 0.5"	26mm / 1.024"
QW3745	45° wedge for ⅜" QCG probe	45	9.5mm / 0.374"	16mm / 0.63"	12.7mm / 0.5"	25.2mm / 0.992"
QW3760	60° wedge for ⅜" QCG probe	60	9.5mm / 0.374"	16mm / 0.63"	15mm / 0.591"	28.5mm / 1.122"
QW3770	70° wedge for ⅜" QCG probe	70	9.5mm / 0.374"	16mm / 0.63"	15.5mm / 0.61"	30.5mm / 1.201"
QW5045	45° wedge for ½" QCG probe	45	12.7mm / 0.5"	22.2mm / 0.874"	15.3mm / 0.602"	28.6mm / 1.126"
QW5060	60° wedge for ½" QCG probe	60	12.7mm / 0.5"	22.2mm / 0.874"	18.1mm / 0.713"	34.4mm / 1.354"
QW5070	70° wedge for ½" QCG probe	70	12.7mm / 0.5"	22.2mm / 0.874"	18.6mm / 0.732"	36.8mm / 1.449"

# PQC and QW

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- Max operating temperature 50°C / 120°F
- High temperature options available up to 285°C / 545°F see QCG transducer list
- Highly damped for wide bandwidth
- Medium damped for medium bandwidth option see QCG transducer list
- Wedges available in refracted longitudinal angles on request



ANGLE BEAMS

## Common Applications

- General Welds / Tube & Pipe / Forgings

Transducer Models				
Product Code	Description	Frequency (MHz)	Crystal Diameter (mm / Inches)	Nearfield Length in Steel (mm / Inches)
PQC501	1MHz ½" QuickChange MICRODOT	1	12.7mm / 0.5"	12.5mm / 0.492"
PQC2525	2.25MHz ¼" QuickChange	2.25	6.4mm / 0.252"	7.1mm / 0.28"
PQC3725	2.25MHz ⅜" QuickChange	2.25	9.5mm / 0.374"	15.7mm / 0.618"
PQC5025	2.25MHz ½" QuickChange	2.25	12.7mm / 0.5"	28.1mm / 1.106"
PQC2550	5MHz ¼" QuickChange	5	6.4mm / 0.252"	15.9mm / 0.626"
PQC3750	5MHz ⅜" QuickChange	5	9.5mm / 0.374"	34.9mm / 1.374"
PQC5050	5MHz ½" QuickChange	5	12.7mm / 0.5"	62.4mm / 2.457"
PQC2510	10MHz ¼" QuickChange	10	6.4mm / 0.252"	31.7mm / 1.248"

Case Dimensions and Details				
Probe size	Width/Diameter (mm / Inches)	Height (mm / Inches)	Connector Options	Position Options
6.4mm / 0.252"	13mm / 0.512"	19.05mm / 0.75"	D S	Top
9.5mm / 0.374"	14.5mm / 0.571"	19.05mm / 0.75"	D S	Top
12.7mm / 0.5"	17.2mm / 0.677"	19.05mm / 0.75"	D S	Top

Wedge Details						
Product Code	Description	∅ wedge Angle in Steel (°)	Applicable Transducer ∅ (mm / Inches)	Width (mm)	Height (mm / Inches)	Length (mm)
QW2545	45° wedge for ¼" QCG probe	45	6.4mm / 0.252"	12.7mm / 0.5"	11.5mm / 0.453"	20.3mm / 0.799"
QW2560	60° wedge for ¼" QCG probe	60	6.4mm / 0.252"	12.7mm / 0.5"	12.6mm / 0.496"	23.5mm / 0.925"
QW2570	70° wedge for ¼" QCG probe	70	6.4mm / 0.252"	12.7mm / 0.5"	12.7mm / 0.5"	26mm / 1.024"
QW3745	45° wedge for ⅜" QCG probe	45	9.5mm / 0.374"	16mm / 0.63"	12.7mm / 0.5"	25.2mm / 0.992"
QW3760	60° wedge for ⅜" QCG probe	60	9.5mm / 0.374"	16mm / 0.63"	15mm / 0.591"	28.5mm / 1.122"
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QW5045	45° wedge for ½" QCG probe	45	12.7mm / 0.5"	22.2mm / 0.874"	15.3mm / 0.602"	28.6mm / 1.126"
QW5060	60° wedge for ½" QCG probe	60	12.7mm / 0.5"	22.2mm / 0.874"	18.1mm / 0.713"	34.4mm / 1.354"
QW5070	70° wedge for ½" QCG probe	70	12.7mm / 0.5"	22.2mm / 0.874"	18.6mm / 0.732"	36.8mm / 1.449"



**Sonatest**  
Leading Ultrasonics