



**Transducers**

# **ACUSON Juniper** **ultrasound system**

Release 3.0

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# ACUSON Juniper

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# Curved



## 5C1 Transducer

Form factor	Curved
Design	1D, Hanafy, Piezoceramic
Number of elements	128
Bandwidth	1.4-5.0 MHz
Field of view	70 deg
Physical footprint	22.8 mm x 70.6 mm



## 6C1 Transducer

Form factor	Curved
Design	Single Crystal
Number of elements	128
Bandwidth	1.0-5.6 MHz
Field of view	72 deg
Physical footprint	18.2 mm x 63.3 mm



## 7C2 Transducer

Form factor	Curved
Design	1D, Hanafy, Piezoceramic
Number of elements	192
Bandwidth	2.1-7.0 MHz
Field of view	70 deg
Physical footprint	22.9 mm x 70.6 mm



## 9VC2 Transducer

Form factor	Curved
Design	1D, Piezoceramic
Number of elements	128
Bandwidth	1.8-8.5 MHz
Field of view	69 deg
Physical footprint	47 mm x 72 mm

# Linear



## 11L4 Transducer

Form factor	Linear
Design	Piezoceramic
Number of elements	128
Bandwidth	3.6-12.9 MHz
Field of view	120 mm
Physical footprint	18.8 mm x 50.6 mm



## 12L3 Transducer

Form factor	Linear
Design	1D, Hanafy, Piezoceramic
Number of elements	192
Bandwidth	2.6-11.5 MHz
Field of view	133 mm
Physical footprint	14.6 mm x 61.9 mm



## 14L4 Transducer

Form factor	Linear
Design	1D, Piezoceramic
Number of elements	256
Bandwidth	4.0-12.7 MHz
Field of view	150 mm
Physical footprint	12.9 mm x 60.3 mm



## 16L4 Transducer

Form factor	Linear
Design	1D, Piezoceramic
Number of elements	192
Bandwidth	4.3-15.4 MHz
Field of view	65 mm
Physical footprint	12.1 mm x 43.3 mm



## 18H5 Transducer

Form factor	Linear
Design	1D, Piezoceramic
Number of elements	192
Bandwidth	4.5-18.0 MHz
Field of view	68 mm
Physical footprint	10.2 mm x 35.8 mm

# Endocavity



## 9MC3 Transducer

Form factor	Curved
Design	1D, Piezoceramic
Number of elements	192
Bandwidth	3.2-8.5 MHz
Field of view	220 deg
Physical footprint	17 mm x 22 mm



## 9VE4 Transducer

Form factor	Curved
Design	1D, Piezoceramic
Number of elements	128
Bandwidth	3.1-8.7 MHz
Field of view	135 deg
Physical footprint	26 mm x 26 mm



## 10MC3 Transducer

Form factor	Curved
Design	1D, Piezoceramic
Number of elements	128
Bandwidth	3.5-10.2 MHz
Field of view	150 deg
Physical footprint	19 mm x 22.2 mm



## 10BCC3 Transducer

Form factor	Bi Plane Convex
Design	1D, Piezoceramic
Number of elements	96
Bandwidth	3.0-10.4 MHz
Field of view	Sagittal plane: 164 deg Transverse plane: 164 deg
Physical footprint	22 mm x 21 mm

# Micro-convex



## 11M3 Transducer

Form factor	Micro-convex
Design	1D, Piezoceramic
Number of elements	128
Bandwidth	3.5-11.0 MHz
Field of view	110 deg
Physical footprint	12.8 mm x 29 mm

# Phased Array



## 5P1 Transducer

Form factor	Phased
Design	1D, Single Crystal
Number of elements	96
Bandwidth	1.1-5.0 MHz
Field of view	90 deg
Physical footprint	17.5 mm x 27.8 mm

# Vector



## 5VT Transducer

Form factor	Vector
Design	1D, Piezoceramic
Number of elements	64
Bandwidth	3.1-9.2 MHz
Field of view	90 deg
Physical footprint	14.8 mm x 11.6 mm



## 8V4 Transducer

Form factor	Vector
Design	1D, Piezoceramic
Number of elements	64
Bandwidth	2.7-8.0 MHz
Field of view	90 deg
Physical footprint	14.1 mm x 15.2 mm



## 10V4 Transducer

Form factor	Vector
Design	1D, Piezoceramic
Number of elements	128
Bandwidth	3.4-10.4 MHz
Field of view	90 deg
Physical footprint	22.6 mm x 14.3 mm

# Pencil



## CW2 Transducer

Form factor	Pencil
Design	1D, Piezoceramic
Bandwidth	N/A
Field of view	N/A
Physical footprint	17.1 mm



## CW5 Transducer

Form factor	Pencil
Design	1D, Piezoceramic
Bandwidth	N/A
Field of view	N/A
Physical footprint	12.0 mm

# Table 1: Selectable frequencies

Transducer	Fundamental	Harmonic	Color Doppler	PW Doppler	CW	DTI
5C1	2.5, 3.1, 4.0	3.1, 3.4, 3.6, 4.4, 5.0	2.0, 2.7	2.7, 3.3	—	—
6C1	2.5, 3.1, 3.8	3.1, 3.4, 3.6, 4.4, 5.0 (OB)	2.0, 2.7, 3.3, 4.0	2.0, 2.7, 3.3, 4.0	—	—
7C2	3.6, 4.4, 5.0, 5.7	4.4, 5.0, 5.7	2.7, 3.3	2.7, 3.3	—	—
9VC2	4.4, 5.0, 5.3, 5.7, 6.1	4.4, 5.0, 5.3, 5.7, 6.1	2.7, 3.1, 3.3	2.7, 3.1, 3.3	—	—
9MC3	4.2, 5.7, 7.3	5.0, 5.7, 6.2, 7.3	4.0, 5.3	4.0, 5.3	—	—
9VE4	5.7, 6.6, 7.3	5.7, 6.6, 7.3	4.0, 4.7, 5.3	4.0, 4.7, 5.3	—	—
10MC3	5.0, 6.2, 7.3	6.6, 7.2, 9.4	4.0, 5.3, 6.2	4.0, 5.3, 6.2	—	—
10BCC3	5.0, 6.2, 7.3	6.6, 7.2, 9.4	4.0, 5.3, 6.2	4.0, 5.3, 6.2	—	—
11L4	6.2, 8.0, 10.0	7.3, 8.0, 9.4	4.0, 5.3, 6.2	4.0, 5.3, 6.2	—	—
12L3	6.2, 8.0, 13.3	6.7, 8.4, 10.0	4.0, 6.7	4.0, 6.7	—	—
14L4	6.2, 10.0, 14.0	7.6, 11.4, 14.0	4.4, 5.3, 6.2	4.0, 5.3, 6.2	—	—
16L4	8.0, 10.0, 13.3	9.4, 10.7, 12.3	5.3, 6.2	5.3, 6.2	—	—
18H5	8.0, 11.4, 13.3	10.6, 12.3, 14.5	6.2, 7.3	6.2, 7.3	—	—
11M3	4.0, 4.3, 5.7, 8.0	6.2, 7.3, 8.0	3.6, 4.4	3.6, 4.4	—	3.6, 4.4
5P1	1.6 (TCD), 2 (TCD), 2.5, 3.1, 3.6	2.7, 3.0, 3.7, 4.0	1.8, 2.2, 2.5	1.8, 2.2, 2.5	1.8	1.8, 2.2, 2.5
5VT	3.6, 4.0, 5.0, 5.7	5.0, 5.7	3.1, 3.8	3.1, 3.8	2.9, 3.3	3.1, 3.8
8V4	4.2, 5.7, 6.7	5.4, 6.2, 7.2	3.6, 4.4	3.6, 4.4	3.6, 4.0	4.2, 5.7, 6.7
10V4	4.0, 5.3, 7.2, 8.9	6.6, 7.2, 8.0, 8.8	4.0, 5.0, 6.2	4.0, 5.0, 6.2	4.0, 4.4, 5.0	4.0, 5.3
CW2	—	—	—	—	2.0	—
CW5	—	—	—	—	5.0	—

## Table 2: Cable length

Transducer	Cable length
5C1	1.95 m
6C1	2.10 m
7C2	1.95 m
9VC2	2.20 m
9MC3	2.20 m
9VE4	2.20 m
10MC3	2.10 m
10BCC3	2.10 m
11L4	2.20 m
12L3	2.10 m
14L4	2.10 m
16L4	2.10 m
18H5	2.10 m
11M3	2.10 m
5P1	2.10 m
5VT	1.90 m
8V4	2.10 m
10V4	2.10 m
CW2	1.90 m
CW5	2.10 m

## Table 3: Connector type

Transducer	Connector type
5C1	TC-ZIF
6C1	TC-ZIF
7C2	TC-ZIF
9VC2	TC-ZIF
9MC3	TC-ZIF
9VE4	TC-ZIF
10MC3	TC-ZIF
10BCC3	TC-ZIF
11L4	TC-ZIF
12L3	TC-ZIF
14L4	TC-ZIF
16L4	TC-ZIF
18H5	TC-ZIF
11M3	TC-ZIF
5P1	TC-ZIF
5VT	TC-ZIF
8V4	TC-ZIF
10V4	TC-ZIF
CW2	Hirose
CW5	Hirose

## Table 4:

# Needle guide

Transducer	Product description	Guidance angle selection – depth
5C1	Ultra-Pro II needle guide	A – 4 cm B – 8 cm
6C1	Verza needle guide	
7C2	Ultra-Pro II needle guide	A – 10 cm
9VC2	N/A	N/A
9MC3	Endocavity needle guide	15.7 cm (Disposable), 16 cm (Reusable)
9VE4	Disposable Endocavity guide	N/A
10MC3	Endocavity needle guide	0° angle
10BCC3	Endocavity needle guide	0° angle
11L4	Ultra-Pro II needle guide	A – 2.4 cm B – 4.0 cm
12L3	Ultra-Pro II needle guide	A – 3.0 cm
14L4	Verza needle guide	
16L4	Infinih	Free angle
18H5	N/A	N/A
11M3	N/A	N/A
5P1	N/A	N/A
5VT	N/A	N/A
8V4	N/A	N/A
10V4	N/A	N/A
CW2	N/A	N/A
CW5	N/A	N/A

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