

Calibrated Size(mm)/Weight(ct) Charts for Gemstones

Oval Cut

(approximate weights)



	5x3	6x4	7x5	8x6	9x7	10x8	11x9	12x10	14x12
Alexandrite	.30	.51	.80	1.45	2.00	3.60	4.25	6.00	8.90
Amethyst	.23	.45	.85	1.25	1.75	2.40	3.20	4.50	6.50
Aquamarine	.20	.40	.75	1.10	1.75	2.25	3.00	4.50	6.75
Citrine	.23	.45	.85	1.25	1.75	2.40	3.25	4.20	5.20
Diamond	.25	.50	.75	1.40	2.00	3.00	4.00	5.00	8.00
Emerald	.25	.52	.85	1.26	1.90	2.60	3.75	5.00	7.50
Pyrope Garnet	.25	.55	1.00	1.40	2.10	2.80	3.75	5.00	7.00
Iolite	.21	.40	.63	1.02	-	-	-	-	-
Opal	.16	.28	.47	.78	1.10	1.65	2.15	3.00	4.00
Peridot	.28	.50	.95	1.35	2.00	2.50	3.50	4.00	6.00
Ruby	.35	.60	1.06	1.55	2.20	3.15	3.80	6.00	7.25
Sapphire	.35	.60	1.00	1.55	2.20	3.15	3.80	6.00	7.25
Tanzanite	.20	.48	.89	1.35	-	-	-	-	-
Topaz	.28	.57	1.10	1.60	2.50	3.50	4.50	6.00	8.80
Tourmaline	.25	.50	.90	1.18	2.30	2.90	3.50	5.25	6.80
Tsavorite	.28	.52	.75	-	-	-	-	-	-
Zircon	.40	.75	1.45	2.00	2.85	4.00	5.60	7.50	8.20

Round Cut

(approximate weights)



	2	3	4	5	6	6.5	7	8	10
Alexandrite	.04	.12	.35	.63	1.30	1.86	2.15	2.90	5.20
Amethyst	.04	.10	.20	.40	.70	1.10	1.30	1.80	3.30
Aquamarine	.04	.10	.25	.45	.75	1.31	1.60	2.40	3.50
Citrine	.04	.10	.20	.40	.70	1.10	1.30	1.80	3.30
Diamond	.03	.10	.23	.47	.80	1.00	1.25	1.90	3.50
Emerald	.04	.12	.27	.48	.80	1.26	1.70	2.50	6.10
Pyrope Garnet	.05	.13	.30	.60	1.00	1.40	1.60	2.50	5.75
Opal	.02	.09	.16	.34	.57	.75	.83	1.30	2.00
Peridot	.05	.12	.26	.50	.85	1.11	1.25	2.00	5.25
Ruby	.05	.15	.34	.65	1.05	1.41	1.60	2.25	4.50
Sapphire	.05	.15	.34	.65	1.05	1.41	1.60	2.25	4.50
Topaz	.04	.11	.30	.56	1.00	1.36	1.55	2.50	5.75
Tourmaline	.04	.12	.24	.45	.75	1.28	1.55	2.00	3.00
Zircon	.06	.17	.36	.69	1.25	1.58	1.75	2.60	5.00

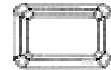
Pear Cut



	5x3	6x4	7x5	8x6	9x6	10x7	12x8	14x9
Alexandrite	.30	.50	.85	1.10	2.10	3.60	6.60	8.80
Amethyst	.20	.35	.65	.85	1.25	1.70	4.00	5.00
Aquamarine	.20	.35	.65	.90	1.30	1.85	4.20	5.60
Citrine	.20	.35	.65	.85	1.30	1.70	4.00	5.00
Diamond	.25	.50	.75	1.00	1.50	2.00	3.50	5.00
Emerald	.25	.45	.70	1.05	1.70	2.60	4.15	6.10
Pyrope Garnet	.25	.40	1.00	1.15	1.30	1.80	3.50	5.80
Opal	.13	.22	.35	.50	.70	1.03	1.40	2.45
Peridot	.25	.45	.70	.80	1.10	1.40	3.40	4.75
Ruby	.30	.50	.75	1.00	1.85	2.50	4.75	7.90
Sapphire	.30	.50	.75	1.00	1.85	2.50	4.75	7.90
Topaz	.25	.50	1.00	1.10	2.00	3.50	6.50	8.50
Tourmaline	.35	.45	.60	.90	1.10	1.40	2.80	6.75
Zircon	.30	.70	1.00	1.30	2.60	4.00	5.25	7.50

Octagon / Emerald Cut

(approximate weights)



	5x3	6x4	7x5	8x6	9x7	10x8	11x9	12x10	14x12
Alexandrite	.40	.70	1.30	2.60	3.60	4.20	6.00	8.50	9.90
Amethyst	.35	.55	1.10	1.60	2.25	2.90	4.20	5.60	7.25
Aquamarine	.25	.50	.80	1.40	2.00	3.00	4.30	4.75	7.75
Citrine	.35	.55	1.00	1.60	2.25	2.90	4.20	5.60	7.25
Diamond	.25	.50	1.00	1.50	3.00	4.00	5.00	7.80	8.80
Emerald	.30	.60	.90	1.80	2.31	3.15	4.50	5.25	5.80
Pyrope Garnet	.40	.80	1.20	1.70	2.50	3.50	4.30	6.35	9.00
Peridot	.35	.60	1.00	1.70	2.25	3.80	5.25	6.25	8.80
Ruby	.55	.75	1.15	1.60	2.30	2.75	4.00	6.25	9.00
Sapphire	.55	.75	1.15	1.75	2.30	2.75	4.00	6.25	9.00
Topaz	.40	.65	1.25	2.40	3.40	4.00	5.75	8.00	9.50
Tourmaline	.30	.60	1.60	2.15	2.80	3.60	4.30	5.20	8.50
Zircon	.60	.85	1.70	2.35	3.90	4.50	6.20	7.01	8.95

Marquise Cut









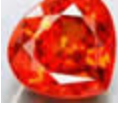














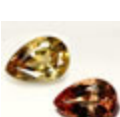


(approximate weights)



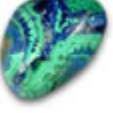









	4x2	5x3	6x3.7x3.5	8x4	10x5	12x6	14x7	
Alexandrite	.07	.20	.30	.50	.70	1.25	2.10	3.50
Amethyst	.10	.15	.20	.34	.48	.90	1.59	2.45
Aquamarine	.08	.14	.20	.25	.50	.80	1.50	2.75
Citrine	.10	.15	.20	.35	.50	.90	1.59	2.45
Diamond	.12	.18	.25	.37	.50	1.00	2.00	3.00
Emerald	.09	.19	.30	.45	.60	1.40	1.80	2.80
Pyrope Garnet	.09	.16	.25	.42	.60	1.20	2.00	2.85
Opal	.09	.13	.17	.27	.37	.59	1.00	1.25
Peridot	.10	.17	.25	.37	.50	1.00	2.00	2.55
Ruby	.13	.24	.35	.55	.75	1.15	2.20	3.00
Sapphire	.13	.24	.35	.55	.75	1.15	2.20	3.00
Topaz	.07	.17	.30	.50	.70	1.20	2.00	3.40
Tourmaline	.10	.20	.30	.45	.60	.85	1.55	2.20
Zircon	.13	.23	.33	.55	.75	1.25	1.95	3.00










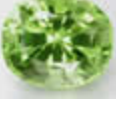

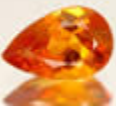
Ring Size Comparison













Size (inches)	Size (mm)	Diameter (mm)	U.S.A. size	Japanese size	British size	German size	Swiss size
1 14/16	48	15.27	4 1/2	8	I - 1/2	15 1/4	--
1 15/16	49	15.70	5	9	J 1/2	15 3/4	--
2	51	16.10	5 1/2	11	L	16	11 3/4
2 1/16	52	16.51	6	12	M	16 1/2	12 3/4
2 2/16	53	16.92	6 1/2	13	N	17	14
2 3/16	55	17.35	7	14	O	17 1/4	15 1/4
2 4/16	56	17.75	7 1/2	15	P	17 3/4	16 1/2
2 5/16	57	18.19	8	16	Q	18	17 3/4
2 6/16	58	18.53	8 1/2	17	Q 1/2	18 1/2	--
2 7/16	59	18.89	9	18	R 1/2	19	--
2 8/16	61	19.41	9 1/2	19	S 1/2	19 1/2	--
2 9/16	62	19.84	10	20	T 1/2	20	--
2 10/16	63	20.20	10 1/2	22	U 1/2	20 1/4	--
2 11/16	65	20.68	11	23	V 1/2	20 3/4	--
2 12/16	66	21.08	11 1/2	24	W 1/2	21	--
2 13/16	68	21.49	12	25	Y	21 1/4	27 1/2
2 14/16	69	21.89	12 1/2	26	Z	21 3/4	28 3/4
2 15/16	70	22.33	13	27	--	22	--




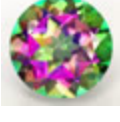

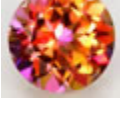



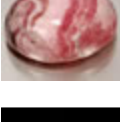
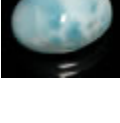

	Hematite 2.94 - 3.22	Double Refraction Yes	Birefringence 0.287
	Diamond 2.417 - 2.419	Double Refraction None	Birefringence NA
	Sphalerite 2.368 - 2.371	Double Refraction None	Birefringence NA
	Cassiterite 1.997 - 2.098	Double Refraction Yes	Birefringence 0.096 to 0.098
	Demantoid Garnet 1.88 - 1.94	Double Refraction None	Birefringence NA
	Melanite 1.88 - 1.94	Double Refraction None	Birefringence NA
	Sphene 1.843 - 2.11	Double Refraction Yes	Birefringence 0.100 to 0.192
	Zircon 1.81 - 2.024	Double Refraction Yes	Birefringence 0.002 to 0.059
	Spessartite Garnet 1.79 - 1.82	Double Refraction None	Birefringence NA
	Almandine Garnet 1.77 - 1.82	Double Refraction None	Birefringence NA
	Star Ruby 1.762 - 1.778	Double Refraction Yes	Birefringence 0.008
	Ruby 1.762 - 1.778	Double Refraction Yes	Birefringence 0.008





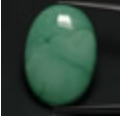


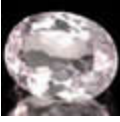




	Star Sapphire	Double Refraction	Birefringence
	1.762 - 1.778	Yes	0.008
	Color-Change Sapphire	Double Refraction	Birefringence
	1.762 - 1.788	Yes	0.008
	Sapphire	Double Refraction	Birefringence
	1.762 - 1.778	Yes	0.008
	Chrysoberyl	Double Refraction	Birefringence
	1.746 - 1.763	Yes	0.007 to 0.011
	Alexandrite	Double Refraction	Birefringence
	1.746 - 1.763	Yes	0.004 to 0.010
	Chrysoberyl Cat's Eye	Double Refraction	Birefringence
	1.746 - 1.763	Yes	0.004 to 0.010
	Mali Garnet	Double Refraction	Birefringence
	1.734 - 1.759	None	NA
	Grossularite Garnet	Double Refraction	Birefringence
	1.734 - 1.759	None	NA
	Tsavorite Garnet	Double Refraction	Birefringence
	1.734 - 1.759	None	NA
	Color-Change Garnet	Double Refraction	Birefringence
	1.73 - 1.756	None	NA
	Hessonite Garnet	Double Refraction	Birefringence
	1.73 - 1.75	None	NA
	Rhodolite Garnet	Double Refraction	Birefringence
	1.72 - 1.76	None	NA



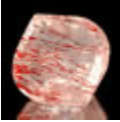









	Star Garnet	Double Refraction	Birefringence
	1.72 - 1.756	None	NA
	Pyrope Garnet	Double Refraction	Birefringence
	1.72 - 1.756	None	NA
	Azurite	Double Refraction	Birefringence
	1.72 - 1.848	Yes	0.108 to 0.110
	Rhodonite	Double Refraction	Birefringence
	1.716 - 1.752	Yes	0.010 to 0.014
	Spinel	Double Refraction	Birefringence
	1.712 - 1.762	None	NA
	Kyanite	Double Refraction	Birefringence
	1.71 - 1.734	Yes	0.0015 to 0.033
	Color-Change Diaspore	Double Refraction	Birefringence
	1.702 - 1.75	Yes	0.048
	Cat's Eye Diaspore	Double Refraction	Birefringence
	1.702 - 1.75	Yes	0.048
	Idocrase	Double Refraction	Birefringence
	1.7 - 1.723	Yes	0.002 to 0.012
	Tanzanite	Double Refraction	Birefringence
	1.691 - 1.7	Yes	0.009
	Ruby-Zoisite	Double Refraction	Birefringence
	1.691 - 1.7	Yes	0.009
	Dumortierite Quartz	Double Refraction	Birefringence
	1.678 - 1.689	Yes	0.015 to 0.037













	Tashmarine Diopside	Double Refraction	Birefringence
	1.664 - 1.73	Yes	0.024 to 0.031
	Chrome Diopside	Double Refraction	Birefringence
	1.664 - 1.73	Yes	0.024 to 0.031
	Star Diopside	Double Refraction	Birefringence
	1.664 - 1.73	Yes	0.024 to 0.031
	Kunzite	Double Refraction	Birefringence
	1.66 - 1.681	Yes	0.014 to 0.016
	Hiddenite	Double Refraction	Birefringence
	1.66 - 1.681	Yes	0.014 to 0.016
	Spodumene	Double Refraction	Birefringence
	1.66 - 1.681	Yes	0.014 to 0.016
	Axinite	Double Refraction	Birefringence
	1.656 - 1.704	Yes	0.010 to 0.012
	Sillimanite Cat's Eye	Double Refraction	Birefringence
	1.655 - 1.684	Yes	0.014 to 0.021
	Malachite	Double Refraction	Birefringence
	1.655 - 1.909	Yes	0.254
	Peridot	Double Refraction	Birefringence
	1.65 - 1.703	Yes	0.036 to 0.038
	Danburite	Double Refraction	Birefringence
	1.63 - 1.636	Yes	0.006 to 0.008
	Clinohumite	Double Refraction	Birefringence
	1.629 - 1.674	Yes	0.029 - 0.045













	Apatite	Double Refraction	Birefringence
	1.628 - 1.649	Yes	0.002 to 0.006
	Cat's Eye Apatite	Double Refraction	Birefringence
	1.628 - 1.649	Yes	0.002 to 0.006
	Andalusite	Double Refraction	Birefringence
	1.627 - 1.649	Yes	0.007 to 0.013
	Smithsonite	Double Refraction	Birefringence
	1.621 - 1.849	Yes	0.228
	Chrome Tourmaline	Double Refraction	Birefringence
	1.614 - 1.666	Yes	0.014 to 0.032
	Paraiba Tourmaline	Double Refraction	Birefringence
	1.614 - 1.666	Yes	0.014 to 0.032
	Rubellite Tourmaline	Double Refraction	Birefringence
	1.614 - 1.666	Yes	0.014 to 0.032
	Tourmaline	Double Refraction	Birefringence
	1.614 - 1.666	Yes	0.014 to 0.032
	Cat's Eye Tourmaline	Double Refraction	Birefringence
	1.614 - 1.666	Yes	0.014 to 0.032
	Hemimorphite	Double Refraction	Birefringence
	1.614 - 1.636	Yes	0.022
	Prehnite	Double Refraction	Birefringence
	1.611 - 1.669	Yes	0.0021 to 0.039
	Turquoise	Double Refraction	Birefringence
	1.61 - 1.65	Yes	0.040




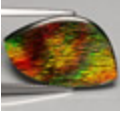








	Gaspeite	Double Refraction	Birefringence
	1.61 - 1.81	Yes	0.22
	Imperial Topaz	Double Refraction	Birefringence
	1.609 - 1.643	Yes	0.008 to 0.016
	Rutile Topaz	Double Refraction	Birefringence
	1.609 - 1.643	Yes	0.008 to 0.016
	Mystic Topaz	Double Refraction	Birefringence
	1.609 - 1.643	Yes	0.008 to 0.016
	Topaz	Double Refraction	Birefringence
	1.609 - 1.643	Yes	0.008 to 0.016
	Azotic Topaz	Double Refraction	Birefringence
	1.609 - 1.643	Yes	0.008 to 0.016
	Sugilite	Double Refraction	Birefringence
	1.607 - 1.611	Yes	0.001 to 0.004
	Nephrite Jade	Double Refraction	Birefringence
	1.6 - 1.627	Yes	0.027
	Jadeite	Double Refraction	Birefringence
	1.6 - 1.627	Yes	0.027
	Rhodochrosite	Double Refraction	Birefringence
	1.6 - 1.82	Yes	0.208 to 0.220
	Larimar	Double Refraction	Birefringence
	1.595 - 1.645	Yes	0.038
	Howlite	Double Refraction	Birefringence
	1.586 - 1.605	Yes	0.019



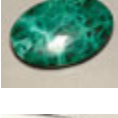








	Seraphinite	Double Refraction	Birefringence
	1.576 - 1.599	Yes	0,005 to 0.011
	Emerald	Double Refraction	Birefringence
	1.565 - 1.602	Yes	0.006
	Cat's Eye Aquamarine	Double Refraction	Birefringence
	1.564 - 1.596	Yes	0.004 to 0.005
	Aquamarine	Double Refraction	Birefringence
	1.564 - 1.596	Yes	0.004 to 0.005
	Variscite	Double Refraction	Birefringence
	1.563 - 1.594	Yes	0.031
	Goshenite	Double Refraction	Birefringence
	1.562 - 1.602	Yes	0.004 to 0.010
	Beryl	Double Refraction	Birefringence
	1.562 - 1.602	Yes	0.004 to 0.010
	Morganite	Double Refraction	Birefringence
	1.562 - 1.602	Yes	0.004 to 0.010
	Serpentine	Double Refraction	Birefringence
	1.56 - 1.571	Yes	0.008 to 0.014
	Labradorite	Double Refraction	Birefringence
	1.559 - 1.57	Yes	0.008 to 0.010
	Hamburgite	Double Refraction	Birefringence
	1.553 - 1.628	Yes	0.0072
	Verdite	Double Refraction	Birefringence
	1.552 - 1.576	None	NA

	Andesine Labradorite	Double Refraction	Birefringence
	1.551 - 1.56	Yes	0..0008
	Charoite	Double Refraction	Birefringence
	1.55 - 1.561	Yes	0.004 to 0.009
	Strawberry Quartz	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Citrine	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Amethyst	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Rutile Quartz	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Onyx	Double Refraction	Birefringence
	1.544 - 1.553	Yes	up to 0.004
	Ametrine	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Aventurine	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Mystic Quartz	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Pietersite	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Rose Quartz	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009

	Smoky Quartz	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Quartz	Double Refraction	Birefringence
	1.544 - 1.553	Yes	0.009
	Iolite	Double Refraction	Birefringence
	1.542 - 1.578	Yes	0.008 to 0.012
	Jasper	Double Refraction	Birefringence
	1.54	None	NA
	Peanut Wood	Double Refraction	Birefringence
	1.54	None	NA
	Cat's Eye Scapolite	Double Refraction	Birefringence
	1.54 - 1.579	Yes	0.006 to 0.037
	Scapolite	Double Refraction	Birefringence
	1.54 - 1.579	Yes	0.006 to 0.037
	Amber	Double Refraction	Birefringence
	1.539 - 1.545	None	NA
	Tiger's Eye	Double Refraction	Birefringence
	1.534 - 1.54	None	NA
	Quartz Cat's Eye	Double Refraction	Birefringence
	1.534 - 1.54	None	NA
	Tiger's Eye Matrix	Double Refraction	Birefringence
	1.534 - 1.54	None	NA
	Bloodstone	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004

	Agate	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Dendritic Agate	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Chalcedony	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Fire Agate	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Agate Geode	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Chrysoprase	Double Refraction	Birefringence
	1.53 - 1.54	Yes	0.004 to 0.009
	Fossil Coral	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Star Rose Quartz	Double Refraction	Birefringence
	1.53 - 1.54	Yes	0.009
	Carnelian	Double Refraction	Birefringence
	1.53 - 1.54	Yes	up to 0.004
	Sunstone	Double Refraction	Birefringence
	1.525 - 1.548	Yes	0.010
	Star Sunstone	Double Refraction	Birefringence
	1.525 - 1.548	Yes	0.010
	Lepidolite	Double Refraction	Birefringence
	1.525 - 1.586	Yes	0.0290 to 0.0380

	Amazonite	Double Refraction	Birefringence
	1.522 - 1.53	Yes	0.008
	Maw-Sit-Sit	Double Refraction	Birefringence
	1.52 - 1.74	Yes	0.0150 to 0.020
	Pearl	Double Refraction	Birefringence
	1.52 - 1.69	Yes	0.156
	Ammolite	Double Refraction	Birefringence
	1.52 - 1.68	Yes	0.155
	Star Moonstone	Double Refraction	Birefringence
	1.518 - 1.526	Yes	0.008
	Rainbow Moonstone	Double Refraction	Birefringence
	1.518 - 1.526	Yes	0.008
	Orthoclase	Double Refraction	Birefringence
	1.518 - 1.53	Yes	0.008
	Moonstone	Double Refraction	Birefringence
	1.518 - 1.526	Yes	0.008
	Lapis Lazuli	Double Refraction	Birefringence
	1.5	None	NA
	Coral	Double Refraction	Birefringence
	1.486 - 1.658	Yes	White and red: 0.160 to 0.172
	Calcite	Double Refraction	Birefringence
	1.486 - 1.658	Yes	0.172
	Hackmanite	Double Refraction	Birefringence
	1.48	None	NA

	Sodalite	Double Refraction	Birefringence
	1.48	None	NA
	Moldavite	Double Refraction	Birefringence
	1.48 - 1.54	None	NA
	Chrysocolla	Double Refraction	Birefringence
	1.469 - 1.57	Yes	0.023 to 0.040
	Snowflake Obsidian	Double Refraction	Birefringence
	1.45 - 1.55	None	NA
	Obsidian	Double Refraction	Birefringence
	1.45 - 1.55	None	NA
	Fluorite	Double Refraction	Birefringence
	1.434	None	NA
	Moss Opal	Double Refraction	Birefringence
	1.37 - 1.52	None	NA
	Opal	Double Refraction	Birefringence
	1.37 - 1.52	None	NA
	Opal Doublet	Double Refraction	Birefringence
	1.37 - 1.52	None	NA
	Fire Opal	Double Refraction	Birefringence
	1.37 - 1.52	None	NA
	Boulder Opal	Double Refraction	Birefringence
	1.37 - 1.52	None	NA