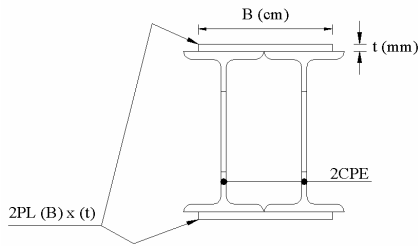


## مقاطع 2CPE



- مساحت مقطع : A  
 سختی پیچشی مقطع : J  
 ممان اینرسی مقطع :  $I_3, I_2$   
 مساحت موثر برشی :  $AV_2, AV_3$   
 اساس مقطع :  $S_3, S_2$   
 مدول پلاستیک مقطع :  $Z_3, Z_2$   
 شعاع ژیراسیون مقطع :  $R_3, R_2$

NAME (نام مقطع)	A Cm <sup>2</sup>	J Cm <sup>4</sup>	$I_3$ Cm <sup>4</sup>	$I_2$ Cm <sup>4</sup>	$AV_2$ Cm <sup>2</sup>	$AV_3$ Cm <sup>2</sup>	$S_3$ Cm <sup>3</sup>	$S_2$ Cm <sup>3</sup>	$Z_3$ Cm <sup>3</sup>	$Z_2$ Cm <sup>3</sup>	$R_3$ Cm	$R_2$ Cm
<b>2CPE140</b>												
2CPE140	26.24	3.44	2532.0	439.4	19.74	16.79	241.1	60.2	257.1	95.8	9.82	4.09
2CPE140 + 2PL100×6	38.24	4.88	3932.0	539.4	19.74	26.79	354.2	73.9	386.7	125.8	10.14	3.76
2CPE140 + 2PL100×8	42.24	6.85	4433.8	572.7	19.74	30.12	392.4	78.5	431.5	135.8	10.25	3.68
2CPE140 + 2PL100×10	46.24	10.11	4953.7	606.0	19.74	33.46	430.8	83.0	477.1	145.8	10.35	3.62
2CPE140 + 2PL100×12	50.24	14.96	5491.9	639.4	19.74	36.79	469.4	87.6	523.5	155.8	10.46	3.57
2CPE140 + 2PL100×15	56.24	25.94	6334.5	689.4	19.74	41.79	527.9	94.4	594.6	170.8	10.61	3.50
2CPE140 + 2PL120×6	40.64	5.17	4212.0	612.2	19.74	28.79	379.5	83.9	412.6	139.0	10.18	3.88
2CPE140 + 2PL120×8	45.44	7.54	4814.2	669.8	19.74	32.79	426.0	91.8	466.4	153.4	10.29	3.84
2CPE140 + 2PL120×10	50.24	11.44	5438.0	727.4	19.74	36.79	472.9	99.6	521.1	167.8	10.40	3.81
2CPE140 + 2PL120×12	55.04	17.26	6083.9	785.0	19.74	40.79	520.0	107.5	576.8	182.2	10.51	3.78
2CPE140 + 2PL120×15	62.24	30.44	7095.0	871.4	19.74	46.79	591.3	119.4	662.1	203.8	10.68	3.74
2CPE140 + 2PL180×6	47.84	6.03	5052.1	1022.6	19.74	34.79	455.1	113.6	490.4	193.0	10.28	4.62
2CPE140 + 2PL180×8	55.04	9.58	5955.3	1217.0	19.74	40.79	527.0	135.2	571.0	225.4	10.40	4.70
2CPE140 + 2PL180×10	62.24	15.44	6891.0	1411.4	19.74	46.79	599.2	156.8	653.1	257.8	10.52	4.76
2CPE140 + 2PL180×12	69.44	24.18	7859.9	1605.8	19.74	52.79	671.8	178.4	736.6	290.2	10.64	4.81
2CPE140 + 2PL180×15	80.24	43.94	9376.5	1897.4	19.74	61.79	781.4	210.8	864.6	338.8	10.81	4.86
<b>2CPE160</b>												
2CPE160	32.16	5.38	4062.0	677.2	24.00	20.23	338.5	82.6	360.4	131.7	11.24	4.59
2CPE160 + 2PL100×6	44.16	6.82	5877.8	777.2	24.00	30.23	466.5	94.8	508.0	161.7	11.54	4.20
2CPE160 + 2PL100×8	48.16	8.79	6523.0	810.5	24.00	33.56	509.6	98.8	558.8	171.7	11.64	4.10
2CPE160 + 2PL100×10	52.16	12.05	7188.7	843.9	24.00	36.89	553.0	102.9	610.4	181.7	11.74	4.02
2CPE160 + 2PL100×12	56.16	16.90	7875.1	877.2	24.00	40.23	596.6	107.0	662.8	191.7	11.84	3.95
2CPE160 + 2PL100×15	62.16	27.88	8944.5	927.2	24.00	45.23	662.6	113.1	742.9	206.7	12.00	3.86
2CPE160 + 2PL120×6	46.56	7.11	6241.0	850.0	24.00	32.23	495.3	103.7	537.6	174.9	11.58	4.27
2CPE160 + 2PL120×8	51.36	9.48	7015.2	907.6	24.00	36.23	548.1	110.7	598.5	189.3	11.69	4.20
2CPE160 + 2PL120×10	56.16	13.38	7814.0	965.2	24.00	40.23	601.1	117.7	660.4	203.7	11.80	4.15
2CPE160 + 2PL120×12	60.96	19.20	8637.7	1022.8	24.00	44.23	654.4	124.7	723.3	218.1	11.90	4.10
2CPE160 + 2PL120×15	68.16	32.38	9921.0	1109.2	24.00	50.23	734.9	135.3	819.4	239.7	12.06	4.03
2CPE160 + 2PL180×6	53.76	7.97	7330.5	1260.4	24.00	38.23	581.8	140.0	626.1	228.9	11.68	4.84
2CPE160 + 2PL180×8	60.96	11.52	8491.8	1454.8	24.00	44.23	663.4	161.6	717.6	261.3	11.80	4.89
2CPE160 + 2PL180×10	68.16	17.38	9690.0	1649.2	24.00	50.23	745.4	183.2	810.4	293.7	11.92	4.92
2CPE160 + 2PL180×12	75.36	26.12	10925.6	1843.6	24.00	56.23	827.7	204.8	904.8	326.1	12.04	4.95
2CPE160 + 2PL180×15	86.16	45.88	12850.5	2135.2	24.00	65.23	951.9	237.2	1048.9	374.7	12.21	4.98

NAME (نام مقطع)	A Cm <sup>2</sup>	J Cm <sup>4</sup>	I <sub>3</sub> Cm <sup>4</sup>	I <sub>2</sub> Cm <sup>4</sup>	AV <sub>2</sub> Cm <sup>2</sup>	AV <sub>3</sub> Cm <sup>2</sup>	S <sub>3</sub> Cm <sup>3</sup>	S <sub>2</sub> Cm <sup>3</sup>	Z <sub>3</sub> Cm <sup>3</sup>	Z <sub>2</sub> Cm <sup>3</sup>	R <sub>3</sub> Cm	R <sub>2</sub> Cm
<b>2CPE180</b>												
2CPE180	38.24	6.94	6150.0	993.7	28.62	24.27	455.6	109.2	484.0	174.2	12.68	5.10
2CPE180 + 2PL100×6	50.24	8.38	8435.6	1093.7	28.62	34.27	598.3	120.2	649.6	204.2	12.96	4.67
2CPE180 + 2PL100×8	54.24	10.35	9242.2	1127.0	28.62	37.60	646.3	123.8	706.4	214.2	13.05	4.56
2CPE180 + 2PL100×10	58.24	13.61	10071.7	1160.3	28.62	40.93	694.6	127.5	764.0	224.2	13.15	4.46
2CPE180 + 2PL100×12	62.24	18.46	10924.3	1193.7	28.62	44.27	743.2	131.2	822.4	234.2	13.25	4.38
2CPE180 + 2PL100×15	68.24	29.44	12247.5	1243.7	28.62	49.27	816.5	136.7	911.5	249.2	13.40	4.27
2CPE180 + 2PL120×6	52.64	8.67	8892.8	1166.5	28.62	36.27	630.7	128.2	682.7	217.4	13.00	4.71
2CPE180 + 2PL120×8	57.44	11.04	9860.7	1224.1	28.62	40.27	689.6	134.5	750.8	231.8	13.10	4.62
2CPE180 + 2PL120×10	62.24	14.94	10856.0	1281.7	28.62	44.27	748.7	140.8	820.0	246.2	13.21	4.54
2CPE180 + 2PL120×12	67.04	20.76	11879.2	1339.3	28.62	48.27	808.1	147.2	890.0	260.6	13.31	4.47
2CPE180 + 2PL120×15	74.24	33.94	13467.0	1425.7	28.62	54.27	897.8	156.7	997.0	282.2	13.47	4.38
2CPE180 + 2PL150×6	56.24	9.10	9578.5	1331.2	28.62	39.27	679.3	146.3	732.4	241.7	13.05	4.87
2CPE180 + 2PL150×8	62.24	12.06	10788.3	1443.7	28.62	44.27	754.4	158.6	817.6	264.2	13.17	4.82
2CPE180 + 2PL150×10	68.24	16.94	12032.5	1556.2	28.62	49.27	829.8	171.0	904.0	286.7	13.28	4.78
2CPE180 + 2PL150×12	74.24	24.22	13311.5	1668.7	28.62	54.27	905.5	183.4	991.6	309.2	13.39	4.74
2CPE180 + 2PL150×15	83.24	40.69	15296.3	1837.4	28.62	61.77	1019.8	201.9	1125.2	343.0	13.56	4.70
2CPE180 + 2PL200×6	62.24	9.82	10721.3	1793.7	28.62	44.27	760.4	179.4	815.2	294.2	13.12	5.37
2CPE180 + 2PL200×8	70.24	13.77	12334.4	2060.3	28.62	50.93	862.5	206.0	928.8	334.2	13.25	5.42
2CPE180 + 2PL200×10	78.24	20.27	13993.3	2327.0	28.62	57.60	965.1	232.7	1044.0	374.2	13.37	5.45
2CPE180 + 2PL200×12	86.24	29.98	15698.6	2593.7	28.62	64.27	1067.9	259.4	1160.8	414.2	13.49	5.48
2CPE180 + 2PL200×15	98.24	51.94	18345.0	2993.7	28.62	74.27	1223.0	299.4	1339.0	474.2	13.67	5.52
<b>2CPE200</b>												
2CPE200	45.60	10.50	9050.0	1424.0	33.60	28.33	603.3	142.4	642.1	228.2	14.09	5.59
2CPE200 + 2PL120×6	60.00	12.23	12421.3	1596.8	33.60	40.33	796.2	159.7	862.4	271.4	14.39	5.16
2CPE200 + 2PL120×8	64.80	14.60	13604.5	1654.4	33.60	44.33	861.0	165.4	937.8	285.8	14.49	5.05
2CPE200 + 2PL120×10	69.60	18.50	14818.0	1712.0	33.60	48.33	926.1	171.2	1014.1	300.2	14.59	4.96
2CPE200 + 2PL120×12	74.40	24.32	16062.2	1769.6	33.60	52.33	991.5	177.0	1091.4	314.6	14.69	4.88
2CPE200 + 2PL120×15	81.60	37.50	17987.0	1856.0	33.60	58.33	1090.1	185.6	1209.1	336.2	14.85	4.77
2CPE200 + 2PL150×6	63.60	12.66	13264.2	1761.5	33.60	43.33	850.3	176.2	917.5	295.7	14.44	5.26
2CPE200 + 2PL150×8	69.60	15.62	14743.1	1874.0	33.60	48.33	933.1	187.4	1011.7	318.2	14.55	5.19
2CPE200 + 2PL150×10	75.60	20.50	16260.0	1986.5	33.60	53.33	1016.3	198.7	1107.1	340.7	14.67	5.13
2CPE200 + 2PL150×12	81.60	27.78	17815.3	2099.0	33.60	58.33	1099.7	209.9	1203.7	363.2	14.78	5.07
2CPE200 + 2PL150×15	90.60	44.25	20221.3	2267.8	33.60	65.83	1225.5	226.8	1350.9	396.9	14.94	5.00
2CPE200 + 2PL180×6	67.20	13.09	14107.0	2007.2	33.60	46.33	904.3	200.7	972.6	325.4	14.49	5.47
2CPE200 + 2PL180×8	74.40	16.64	15881.7	2201.6	33.60	52.33	1005.2	220.2	1085.6	357.8	14.61	5.44
2CPE200 + 2PL180×10	81.60	22.50	17702.0	2396.0	33.60	58.33	1106.4	239.6	1200.1	390.2	14.73	5.42
2CPE200 + 2PL180×12	88.80	31.24	19568.3	2590.4	33.60	64.33	1207.9	259.0	1316.0	422.6	14.84	5.40
2CPE200 + 2PL180×15	99.60	51.00	22455.5	2882.0	33.60	73.33	1360.9	288.2	1492.6	471.2	15.02	5.38
2CPE200 + 2PL220×6	72.00	13.67	15230.8	2488.8	33.60	50.33	976.3	226.3	1046.0	373.4	14.54	5.88
2CPE200 + 2PL220×8	80.80	18.01	17399.9	2843.7	33.60	57.67	1101.3	258.5	1184.2	421.8	14.67	5.93
2CPE200 + 2PL220×10	89.60	25.17	19624.7	3198.7	33.60	65.00	1226.5	290.8	1324.1	470.2	14.80	5.97
2CPE200 + 2PL220×12	98.40	35.84	21905.7	2271.6	33.60	72.33	1352.2	206.5	1465.8	518.6	14.92	4.80
2CPE200 + 2PL220×15	111.60	60.00	25434.5	2804.0	33.60	83.33	1541.5	254.9	1681.6	591.2	15.10	5.01

NAME (نام مقطع)	A Cm <sup>2</sup>	J Cm <sup>4</sup>	I <sub>3</sub> Cm <sup>4</sup>	I <sub>2</sub> Cm <sup>4</sup>	AV <sub>2</sub> Cm <sup>2</sup>	AV <sub>3</sub> Cm <sup>2</sup>	S <sub>3</sub> Cm <sup>3</sup>	S <sub>2</sub> Cm <sup>3</sup>	Z <sub>3</sub> Cm <sup>3</sup>	Z <sub>2</sub> Cm <sup>3</sup>	R <sub>3</sub> Cm	R <sub>2</sub> Cm
<b>2CPE220</b>												
2CPE220	53.44	13.68	12936.0	2026.6	38.94	33.73	784.0	184.2	830.8	295.0	15.56	6.16
2CPE220 + 2PL150×6	71.44	15.84	18016.9	2364.1	38.94	48.73	1053.6	214.9	1133.2	362.5	15.88	5.75
2CPE220 + 2PL150×8	77.44	18.80	19791.9	2476.6	38.94	53.73	1144.0	225.1	1236.4	385.0	15.99	5.66
2CPE220 + 2PL150×10	83.44	23.68	21608.5	2589.1	38.94	58.73	1234.8	235.4	1340.8	407.5	16.09	5.57
2CPE220 + 2PL150×12	89.44	30.96	23467.1	2701.6	38.94	63.73	1325.8	245.6	1446.4	430.0	16.20	5.50
2CPE220 + 2PL150×15	98.44	47.43	26334.8	2870.3	38.94	71.23	1463.0	260.9	1607.1	463.8	16.36	5.40
2CPE220 + 2PL180×6	75.04	16.27	19033.0	2609.8	38.94	51.73	1113.0	237.3	1193.7	392.2	15.93	5.90
2CPE220 + 2PL180×8	82.24	19.82	21163.1	2804.2	38.94	57.73	1223.3	254.9	1317.5	424.6	16.04	5.84
2CPE220 + 2PL180×10	89.44	25.68	23343.0	2998.6	38.94	63.73	1333.9	272.6	1442.8	457.0	16.16	5.79
2CPE220 + 2PL180×12	96.64	34.42	25573.3	3193.0	38.94	69.73	1444.8	290.3	1569.5	489.4	16.27	5.75
2CPE220 + 2PL180×15	107.44	54.18	29014.5	3484.6	38.94	78.73	1611.9	316.8	1762.3	538.0	16.43	5.69
2CPE220 + 2PL200×6	77.44	16.56	19710.5	2826.6	38.94	53.73	1152.7	257.0	1234.0	415.0	15.95	6.04
2CPE220 + 2PL200×8	85.44	20.51	22077.2	3093.2	38.94	60.40	1276.1	281.2	1371.6	455.0	16.07	6.02
2CPE220 + 2PL200×10	93.44	27.01	24499.3	3359.9	38.94	67.07	1400.0	305.4	1510.8	495.0	16.19	6.00
2CPE220 + 2PL200×12	101.44	36.72	26977.4	3626.6	38.94	73.73	1524.1	329.7	1651.6	535.0	16.31	5.98
2CPE220 + 2PL200×15	113.44	58.68	30801.0	4026.6	38.94	83.73	1711.2	366.1	1865.8	595.0	16.48	5.96
2CPE220 + 2PL250×6	83.44	17.28	21404.1	3589.1	38.94	58.73	1251.7	287.1	1334.8	482.5	16.02	6.56
2CPE220 + 2PL250×8	93.44	22.21	24362.5	4109.9	38.94	67.07	1408.2	328.8	1506.8	545.0	16.15	6.63
2CPE220 + 2PL250×10	103.44	30.35	27390.2	4630.7	38.94	75.40	1565.2	370.5	1680.8	607.5	16.27	6.69
2CPE220 + 2PL250×12	113.44	42.48	30487.8	5151.6	38.94	83.73	1722.5	412.1	1856.8	670.0	16.39	6.74
2CPE220 + 2PL250×15	128.44	69.93	35267.3	5932.8	38.94	96.23	1959.3	474.6	2124.6	763.8	16.57	6.80
<b>2CPE240</b>												
2CPE240	62.56	18.04	18126.0	2820.2	44.64	39.20	1007.0	235.0	1068.8	378.8	17.02	6.71
2CPE240 + 2PL150×6	80.56	20.20	24154.6	3157.7	44.64	54.20	1298.6	263.1	1398.2	446.3	17.32	6.26
2CPE240 + 2PL150×8	86.56	23.16	26252.7	3270.2	44.64	59.20	1396.4	272.5	1510.4	468.8	17.42	6.15
2CPE240 + 2PL150×10	92.56	28.04	28396.0	3382.7	44.64	64.20	1494.5	281.9	1623.8	491.3	17.52	6.05
2CPE240 + 2PL150×12	98.56	35.32	30584.9	3495.2	44.64	69.20	1593.0	291.3	1738.4	513.8	17.62	5.96
2CPE240 + 2PL150×15	107.56	51.79	33954.8	3663.9	44.64	76.70	1741.3	305.3	1912.5	547.6	17.77	5.84
2CPE240 + 2PL180×6	84.16	20.63	25360.3	3403.4	44.64	57.20	1363.5	283.6	1464.0	476.0	17.36	6.36
2CPE240 + 2PL180×8	91.36	24.18	27878.1	3597.8	44.64	63.20	1482.9	299.8	1598.7	508.4	17.47	6.28
2CPE240 + 2PL180×10	98.56	30.04	30450.0	3792.2	44.64	69.20	1602.6	316.0	1734.8	540.8	17.58	6.20
2CPE240 + 2PL180×12	105.76	38.78	33076.7	3986.6	44.64	75.20	1722.7	332.2	1872.3	573.2	17.68	6.14
2CPE240 + 2PL180×15	116.56	58.54	37120.5	4278.2	44.64	84.20	1903.6	356.5	2081.3	621.8	17.85	6.06
2CPE240 + 2PL200×6	86.56	20.92	26164.1	3620.2	44.64	59.20	1406.7	301.7	1508.0	498.8	17.39	6.47
2CPE240 + 2PL200×8	94.56	24.87	28961.6	3886.8	44.64	65.87	1540.5	323.9	1657.6	538.8	17.50	6.41
2CPE240 + 2PL200×10	102.56	31.37	31819.3	4153.5	44.64	72.53	1674.7	346.1	1808.8	578.8	17.61	6.36
2CPE240 + 2PL200×12	110.56	41.08	34737.8	4420.2	44.64	79.20	1809.3	368.3	1961.6	618.8	17.73	6.32
2CPE240 + 2PL200×15	122.56	63.04	39231.0	4820.2	44.64	89.20	2011.8	401.7	2193.8	678.8	17.89	6.27
2CPE240 + 2PL270×8	105.76	27.26	32754.1	5444.6	44.64	75.20	1742.2	403.3	1863.6	670.4	17.60	7.17
2CPE240 + 2PL270×10	116.56	36.04	36612.0	6100.7	44.64	84.20	1926.9	451.9	2067.8	743.3	17.72	7.23
2CPE240 + 2PL270×12	127.36	49.14	40552.0	6756.8	44.64	93.20	2112.1	500.5	2274.0	816.2	17.84	7.28
2CPE240 + 2PL270×15	143.56	78.79	46617.8	7740.9	44.64	106.70	2390.7	573.4	2587.5	925.6	18.02	7.34

NAME (نام مقطع)	A Cm <sup>2</sup>	J Cm <sup>4</sup>	I <sub>3</sub> Cm <sup>4</sup>	I <sub>2</sub> Cm <sup>4</sup>	AV <sub>2</sub> Cm <sup>2</sup>	AV <sub>3</sub> Cm <sup>2</sup>	S <sub>3</sub> Cm <sup>3</sup>	S <sub>2</sub> Cm <sup>3</sup>	Z <sub>3</sub> Cm <sup>3</sup>	Z <sub>2</sub> Cm <sup>3</sup>	R <sub>3</sub> Cm	R <sub>2</sub> Cm
<b>2CPE270</b>												
2CPE270	73.44	24.24	26934.0	4186.1	53.46	45.90	1330.1	310.1	1407.8	498.7	19.15	7.55
2CPE270 + 2PL150×6	91.44	26.40	34536.0	4523.6	53.46	60.90	1656.4	335.1	1777.7	566.2	19.43	7.03
2CPE270 + 2PL150×8	97.44	29.36	37169.4	4636.1	53.46	65.90	1765.8	343.4	1903.4	588.7	19.53	6.90
2CPE270 + 2PL150×10	103.44	34.24	39853.4	4748.6	53.46	70.90	1875.5	351.7	2030.3	611.2	19.63	6.78
2CPE270 + 2PL150×12	109.44	41.52	42588.3	4861.1	53.46	75.90	1985.5	360.1	2158.4	633.7	19.73	6.66
2CPE270 + 2PL150×15	118.44	57.99	46787.4	5029.9	53.46	83.40	2151.1	372.6	2352.8	667.4	19.88	6.52
2CPE270 + 2PL180×6	95.04	26.83	36056.4	4769.3	53.46	63.90	1729.3	353.3	1851.7	595.9	19.48	7.08
2CPE270 + 2PL180×8	102.24	30.38	39216.5	4963.7	53.46	69.90	1863.0	367.7	2002.5	628.3	19.59	6.97
2CPE270 + 2PL180×10	109.44	36.24	42437.3	5158.1	53.46	75.90	1997.0	382.1	2154.8	660.7	19.69	6.87
2CPE270 + 2PL180×12	116.64	44.98	45719.2	5352.5	53.46	81.90	2131.4	396.5	2308.5	693.1	19.80	6.77
2CPE270 + 2PL180×15	127.44	64.74	50758.1	5644.1	53.46	90.90	2333.7	418.1	2541.8	741.7	19.96	6.65
2CPE270 + 2PL200×6	97.44	27.12	37070.0	4986.1	53.46	65.90	1777.9	369.3	1901.0	618.7	19.50	7.15
2CPE270 + 2PL200×8	105.44	31.07	40581.2	5252.8	53.46	72.57	1927.8	389.1	2068.6	658.7	19.62	7.06
2CPE270 + 2PL200×10	113.44	37.57	44159.8	5519.4	53.46	79.23	2078.1	408.8	2237.8	698.7	19.73	6.98
2CPE270 + 2PL200×12	121.44	47.28	47806.4	5786.1	53.46	85.90	2228.7	428.6	2408.6	738.7	19.84	6.90
2CPE270 + 2PL200×15	133.44	69.24	53405.3	6186.1	53.46	95.90	2455.4	458.2	2667.8	798.7	20.01	6.81
2CPE270 + 2PL220×6	99.84	27.41	38083.6	5250.9	53.46	67.90	1826.6	389.0	1950.3	643.9	19.53	7.25
2CPE270 + 2PL220×8	108.64	31.75	41945.9	5605.8	53.46	75.23	1992.7	415.2	2134.7	692.3	19.65	7.18
2CPE270 + 2PL220×10	117.44	38.91	45882.4	5960.8	53.46	82.57	2159.2	441.5	2320.8	740.7	19.77	7.12
2CPE270 + 2PL220×12	126.24	49.58	49893.7	6315.7	53.46	89.90	2326.0	467.8	2508.7	789.1	19.88	7.07
2CPE270 + 2PL220×15	139.44	73.74	56052.4	6848.1	53.46	100.90	2577.1	507.3	2793.8	861.7	20.05	7.01
2CPE270 + 2PL250×8	113.44	32.77	43993.0	6269.4	53.46	79.23	2089.9	464.4	2233.8	748.7	19.69	7.43
2CPE270 + 2PL250×10	123.44	40.91	48466.3	6790.3	53.46	87.57	2280.8	503.0	2445.3	811.2	19.81	7.42
2CPE270 + 2PL250×12	133.44	53.04	53024.6	7311.1	53.46	95.90	2472.0	541.6	2658.8	873.7	19.93	7.40
2CPE270 + 2PL250×15	148.44	80.49	60023.1	8092.4	53.46	108.40	2759.7	599.4	2982.8	967.4	20.11	7.38
2CPE270 + 2PL300×8	121.44	34.48	47404.8	7786.1	53.46	85.90	2252.0	519.1	2399.0	858.7	19.76	8.01
2CPE270 + 2PL300×10	133.44	44.24	52772.8	8686.1	53.46	95.90	2483.4	579.1	2652.8	948.7	19.89	8.07
2CPE270 + 2PL300×12	145.44	58.80	58242.7	9586.1	53.46	105.90	2715.3	639.1	2909.0	1038.7	20.01	8.12
2CPE270 + 2PL300×15	163.44	91.74	66640.9	10936.1	53.46	120.90	3063.9	729.1	3297.8	1173.7	20.19	8.18
<b>2CPE300</b>												
2CPE300	86.08	29.66	38814.0	6050.0	63.90	53.50	1725.1	403.3	1824.3	646.1	21.23	8.38
2CPE300 + 2PL180×6	107.68	32.25	50043.2	6633.2	63.90	71.50	2166.4	442.2	2316.7	743.3	21.56	7.85
2CPE300 + 2PL180×8	114.88	35.80	53918.5	6827.6	63.90	77.50	2314.1	455.2	2483.8	775.7	21.66	7.71
2CPE300 + 2PL180×10	122.08	41.66	57861.0	7022.0	63.90	83.50	2462.2	468.1	2652.3	808.1	21.77	7.58
2CPE300 + 2PL180×12	129.28	50.40	61871.1	7216.4	63.90	89.50	2610.6	481.1	2822.2	840.5	21.88	7.47
2CPE300 + 2PL180×15	140.08	70.16	68014.5	7508.0	63.90	98.50	2833.9	500.5	3079.8	889.1	22.03	7.32
2CPE300 + 2PL200×6	110.08	32.54	51290.9	6850.0	63.90	73.50	2220.4	456.7	2371.5	766.1	21.59	7.89
2CPE300 + 2PL200×8	118.08	36.49	55596.8	7116.7	63.90	80.17	2386.1	474.4	2557.1	806.1	21.70	7.76
2CPE300 + 2PL200×10	126.08	42.99	59977.3	7383.3	63.90	86.83	2552.2	492.2	2744.3	846.1	21.81	7.65
2CPE300 + 2PL200×12	134.08	52.70	64433.0	7650.0	63.90	93.50	2718.7	510.0	2933.1	886.1	21.92	7.55
2CPE300 + 2PL200×15	146.08	74.66	71259.0	8050.0	63.90	103.50	2969.1	536.7	3219.3	946.1	22.09	7.42
2CPE300 + 2PL220×6	112.48	32.83	52538.6	7114.8	63.90	75.50	2274.4	474.3	2426.2	791.3	21.61	7.95
2CPE300 + 2PL220×8	121.28	37.17	57275.1	7469.7	63.90	82.83	2458.2	498.0	2630.3	839.7	21.73	7.85
2CPE300 + 2PL220×10	130.08	44.33	62093.7	7824.7	63.90	90.17	2642.3	521.6	2836.3	888.1	21.85	7.76
2CPE300 + 2PL220×12	138.88	55.00	66994.9	8179.6	63.90	97.50	2826.8	545.3	3043.9	936.5	21.96	7.67
2CPE300 + 2PL220×15	152.08	79.16	74503.5	8712.0	63.90	108.50	3104.3	580.8	3358.8	1009.1	22.13	7.57

NAME (نام مقطع)	A Cm <sup>2</sup>	J Cm <sup>4</sup>	I <sub>3</sub> Cm <sup>4</sup>	I <sub>2</sub> Cm <sup>4</sup>	AV <sub>2</sub> Cm <sup>2</sup>	AV <sub>3</sub> Cm <sup>2</sup>	S <sub>3</sub> Cm <sup>3</sup>	S <sub>2</sub> Cm <sup>3</sup>	Z <sub>3</sub> Cm <sup>3</sup>	Z <sub>2</sub> Cm <sup>3</sup>	R <sub>3</sub> Cm	R <sub>2</sub> Cm
2CPE300 + 2PL250×8	126.08	38.19	59792.5	8133.3	63.90	86.83	2566.2	542.2	2740.3	896.1	21.78	8.03
2CPE300 + 2PL250×12	136.08	46.33	65268.2	8654.2	63.90	95.17	2777.4	576.9	2974.3	958.6	21.90	7.97
2CPE300 + 2PL250×12	146.08	58.46	70837.8	9175.0	63.90	103.50	2988.9	611.7	3210.3	1021.1	22.02	7.93
2CPE300 + 2PL250×15	161.08	85.91	79370.3	9956.3	63.90	116.00	3307.1	663.8	3568.0	1114.9	22.20	7.86
2CPE300 + 2PL280×8	130.88	39.22	62310.0	8976.9	63.90	90.83	2674.2	598.5	2850.2	959.7	21.82	8.28
2CPE300 + 2PL280×10	142.08	48.33	68442.7	9708.7	63.90	100.17	2912.5	647.2	3112.3	1038.1	21.95	8.27
2CPE300 + 2PL280×12	153.28	61.92	74680.7	10440.4	63.90	109.50	3151.1	696.0	3376.6	1116.5	22.07	8.25
2CPE300 + 2PL280×15	170.08	92.66	84237.0	11538.0	63.90	123.50	3509.9	769.2	3777.3	1234.1	22.25	8.24
2CPE300 + 2PL320×8	137.28	40.58	65666.5	10419.1	63.90	96.17	2818.3	651.2	2996.7	1055.7	21.87	8.71
2CPE300 + 2PL320×10	150.08	50.99	72675.3	11511.3	63.90	106.83	3092.6	719.5	3296.3	1158.1	22.01	8.76
2CPE300 + 2PL320×12	162.88	66.52	79804.5	12603.6	63.90	117.50	3367.3	787.7	3598.3	1260.5	22.14	8.80
2CPE300 + 2PL320×15	182.08	101.66	90726.0	14242.0	63.90	133.50	3780.3	890.1	4056.3	1414.1	22.32	8.84
2CPE300 + 2PL350×10	156.08	52.99	75849.8	13195.8	63.90	111.83	3227.7	754.0	3434.3	1258.6	22.04	9.19
2CPE300 + 2PL350×12	170.08	69.98	83647.3	14625.0	62.38	123.50	3529.4	835.7	3764.7	1381.1	22.18	9.27
2CPE300 + 2PL350×15	191.08	108.41	95592.8	16768.8	62.38	141.00	3983.0	958.2	4265.5	1564.9	22.37	9.37