

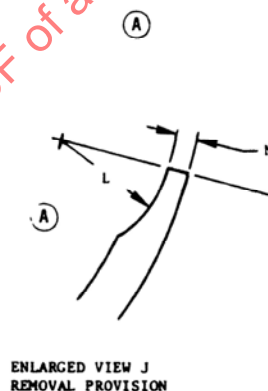
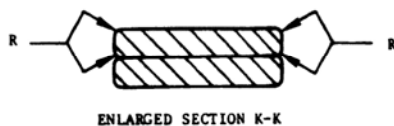
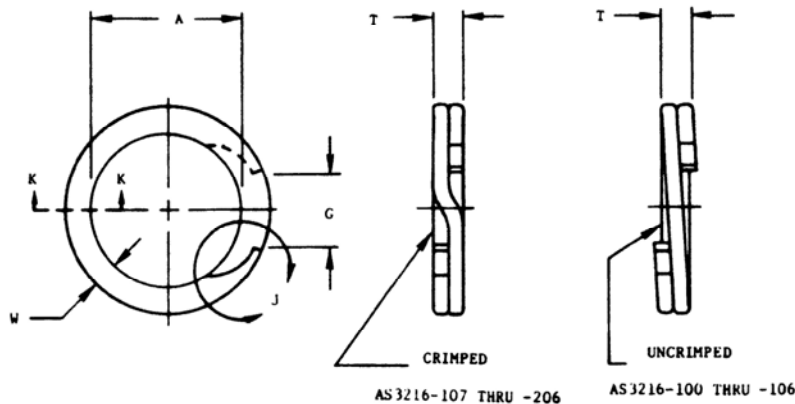
REV.
A

SAE AS3216

RATIONALE

AS3216A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

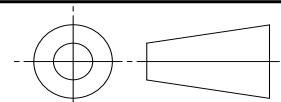
FEDERAL SUPPLY CLASS
5365



1. MATERIAL: CORROSION RESISTANT STEEL AMS 7330
2. DIMENSIONAL AND ACCEPTANCE REQUIREMENTS: AS3219
3. SURFACE TEXTURE: ANSI B46.1-1962. SURFACES TO BE 32 MICROINCHES (0.8 MICROMETRES).
4. DIMENSIONS IN INCHES. METRIC CONVERSIONS ARE INTERNATIONAL SYSTEM UNITS (SI).
5. DIMENSIONING AND TOLERANCING: ANSI Y14.5-1973.
6. DO NOT USE UNASSIGNED PART NUMBERS.

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS3216A>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: NONE

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

RING, RETAINING-SPIRAL, EXTERNAL,
HEAVY DUTY, CRES

SAE AS3216
SHEET 1 OF 5

REV.
A

Retaining Ring Dimensions in Inches

(A)

Part Number	Nom. Shaft Dia.	A	T	F	C	R	L	N
AS3216-100	.469	.426-.439	.023-.027	.040-.048	.156-.344	.003-.006		.012-.028
AS3216-101	.500	.451-.464	.033-.037	.045-.053	.156-.344	.005-.009		.013-.028
AS3216-102	.551	.501-.514	.033-.037	.045-.053	.156-.344	.005-.009		.013-.028
AS3216-103	.562	.512-.525	.033-.037	.045-.053	.156-.344	.005-.009		.013-.028
AS3216-104	.594	.541-.554	.033-.037	.045-.053	.156-.344	.005-.009	.082	.013-.028
AS3216-105	.625	.570-.583	.033-.037	.050-.058	.156-.344	.005-.009	.042	.012-.030
AS3216-106	.669	.610-.623	.033-.037	.050-.058	.156-.344	.005-.009		.012-.030
AS3216-107	.688	.628-.641	.040-.044	.060-.068	.156-.344	.006-.011		.015-.035
AS3216-108	.750	.685-.698	.040-.044	.060-.068	.156-.344	.006-.011		.015-.035
AS3216-109	.781	.714-.727	.040-.044	.060-.068	.156-.344	.006-.011		.015-.035
AS3216-110	.812	.743-.756	.040-.044	.060-.068	.156-.344	.006-.011		.015-.035
AS3216-111	.875	.801-.814	.040-.044	.070-.078	.187-.375	.006-.011		.015-.040
AS3216-112	.938	.862-.875	.040-.044	.070-.078	.187-.375	.006-.011		.015-.040
AS3216-113	.984	.906-.919	.040-.044	.080-.088	.187-.375	.006-.011		.030-.045
AS3216-114	1.000	.919-.932	.040-.044	.080-.088	.187-.375	.006-.011		.030-.045
AS3216-115	1.023	.940-.953	.040-.044	.080-.088	.187-.375	.006-.011	.145	.030-.045
AS3216-116	1.062	.973-.986	.048-.052	.098-.106	.187-.375	.006-.012	.105	.035-.060
AS3216-117	1.125	1.034-1.047	.048-.052	.098-.106	.187-.375	.006-.012		.035-.060
AS3216-118	1.188	1.092-1.105	.048-.052	.098-.106	.187-.375	.006-.012		.035-.060
AS3216-119	1.250	1.150-1.163	.048-.052	.098-.106	.187-.375	.006-.012		.035-.060
AS3216-120	1.312	1.205-1.218	.048-.052	.113-.121	.187-.375	.006-.012		.045-.065
AS3216-121	1.375	1.264-1.277	.048-.052	.113-.121	.187-.375	.006-.012		.045-.065
AS3216-122	1.438	1.323-1.336	.048-.052	.113-.121	.254-.442	.006-.012		.045-.065
AS3216-123	1.500	1.372-1.385	.048-.052	.113-.121	.254-.442	.006-.012		.045-.065
AS3216-124	1.562	1.433-1.453	.059-.065	.123-.131	.254-.442	.008-.015		.045-.070
AS3216-125	1.625	1.493-1.513	.059-.065	.123-.131	.254-.442	.008-.015		.045-.070
AS3216-126	1.687	1.553-1.573	.059-.065	.123-.131	.254-.442	.008-.015		.045-.070
AS3216-127	1.750	1.613-1.633	.059-.065	.123-.131	.254-.442	.008-.015	.208	.045-.070
AS3216-128	1.771	1.631-1.651	.059-.065	.123-.131	.254-.442	.008-.015	.168	.045-.070
AS3216-129	1.812	1.670-1.690	.059-.065	.123-.131	.254-.442	.008-.015		.045-.070
AS3216-130	1.875	1.731-1.751	.059-.065	.153-.161	.254-.442	.008-.015		.050-.085
AS3216-131	1.969	1.818-1.838	.059-.065	.153-.161	.254-.442	.008-.015		.050-.085
AS3216-132	2.000	1.847-1.867	.059-.065	.153-.161	.254-.442	.008-.015		.050-.085
AS3216-133	2.062	1.907-1.932	.075-.081	.161-.171	.312-.500	.010-.019		.050-.090
AS3216-134	2.125	1.964-1.989	.075-.081	.161-.171	.312-.500	.010-.019		.050-.090
AS3216-135	2.156	1.993-2.018	.075-.081	.161-.171	.312-.500	.010-.019		.050-.090
AS3216-136	2.250	2.080-2.105	.075-.081	.161-.171	.312-.500	.010-.019		.050-.090
AS3216-137	2.312	2.138-2.163	.075-.081	.161-.171	.312-.500	.010-.019		.050-.090
AS3216-138	2.375	2.198-2.223	.075-.081	.194-.204	.312-.500	.010-.019		.075-.110
AS3216-139	2.437	2.258-2.283	.075-.081	.194-.204	.312-.500	.010-.019		.075-.110
AS3216-140	2.500	2.318-2.343	.075-.081	.194-.204	.312-.500	.010-.019		.075-.110
AS3216-141	2.559	2.377-2.402	.075-.081	.194-.204	.312-.500	.010-.019		.075-.110
AS3216-142	2.625	2.439-2.464	.075-.081	.194-.204	.312-.500	.010-.019		.075-.110
AS3216-143	2.687	2.498-2.523	.075-.081	.194-.204	.312-.500	.010-.019		.075-.110
AS3216-144	2.750	2.554-2.584	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-145	2.875	2.672-2.702	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-146	2.937	2.730-2.760	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-147	3.000	2.788-2.818	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-148	3.062	2.848-2.878	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-149	3.125	2.906-2.936	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-150	3.156	2.935-2.965	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-151	3.250	3.024-3.054	.090-.096	.219-.229	.375-.625	.012-.023	.520	.085-.120
AS3216-152	3.344	3.114-3.144	.090-.096	.219-.229	.375-.625	.012-.023	.480	.085-.120
AS3216-153	3.437	3.204-3.234	.090-.096	.219-.229	.375-.625	.012-.023		.085-.120
AS3216-154	3.500	3.258-3.293	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-155	3.543	3.298-3.333	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-156	3.625	3.376-3.411	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-157	3.687	3.434-3.469	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-158	3.750	3.492-3.527	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-159	3.875	3.612-3.647	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-160	3.938	3.673-3.708	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-161	4.000	3.730-3.765	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-162	4.250	4.002-4.037	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-163	4.375	4.126-4.161	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140
AS3216-164	4.500	4.245-4.280	.108-.114	.264-.274	.469-.657	.014-.027		.090-.140

Retaining Ring Dimensions in Inches (Cont.)

Part Number	Nom. Shaft Dia.	A	T	W	G	R	I	"
AS3216-165	4.750	4.483- 4.518	.108-.114	.264-.274	.469-.467	.014-.027	.520	.090-.140
AS3216-166	5.000	4.721- 4.756	.108-.114	.264-.274	.656-.844	.014-.027	.480	.090-.140
AS3216-167	5.250	4.945- 4.995	.123-.131	.342-.354	.656-.844	.016-.031		.105-.175
AS3216-168	5.500	5.178- 5.228	.123-.131	.342-.354	.656-.844	.016-.031		.105-.175
AS3216-169	5.750	5.416- 5.466	.123-.131	.342-.354	.656-.844	.016-.031		.105-.175
AS3216-170	6.000	5.655- 5.705	.123-.131	.342-.354	.656-.844	.016-.031		.105-.175
AS3216-171	6.250	5.878- 5.938	.151-.161	.410-.422	.656-.844	.020-.039		.130-.210
AS3216-172	6.500	6.121- 6.181	.151-.161	.410-.422	.656-.844	.020-.039		.130-.210
AS3216-173	6.750	6.350- 6.410	.151-.161	.410-.422	.656-.844	.020-.039		.130-.210
AS3216-174	7.000	6.588- 6.648	.151-.161	.410-.422	.656-.844	.020-.039		.130-.210
AS3216-175	7.250	6.821- 6.891	.151-.161	.429-.441	.750-1.000	.020-.039		.135-.220
AS3216-176	7.500	7.060- 7.130	.182-.192	.429-.441	.750-1.000	.023-.046		.135-.220
AS3216-177	7.750	7.298- 7.368	.182-.192	.429-.441	.750-1.000	.023-.046		.135-.220
AS3216-178	8.000	7.536- 7.606	.182-.192	.429-.441	.750-1.000	.023-.046	1.020	.135-.220
AS3216-179	8.250	7.775- 7.845	.182-.192	.429-.441	.750-1.000	.023-.046	.980	.135-.220
AS3216-180	8.500	8.013- 8.083	.182-.192	.429-.441	.750-1.000	.023-.046		.135-.220
AS3216-181	8.750	8.254- 8.324	.182-.192	.429-.441	.750-1.000	.023-.046		.135-.220
AS3216-182	9.000	8.490- 8.560	.182-.192	.490-.505	.750-1.000	.023-.046		.160-.250
AS3216-183	9.250	8.728- 8.798	.182-.192	.490-.505	.750-1.000	.023-.046		.160-.250
AS3216-184	9.500	8.966- 9.036	.182-.192	.490-.505	.750-1.000	.023-.046		.160-.250
AS3216-185	9.750	9.205- 9.275	.182-.192	.493-.507	.750-1.031	.023-.046		.160-.250
AS3216-186	10.000	9.438- 9.508	.182-.192	.493-.507	.750-1.031	.023-.046		.160-.250
AS3216-187	10.250	9.655- 9.745	.182-.192	.493-.507	1.250-1.500	.023-.046		.160-.250
AS3216-188	10.500	9.894- 9.984	.182-.192	.493-.507	1.250-1.500	.023-.046		.160-.250
AS3216-189	10.750	10.131-10.221	.182-.192	.493-.507	1.250-1.500	.023-.046		.160-.250
AS3216-190	11.000	10.369-10.459	.182-.192	.493-.507	1.250-1.500	.023-.046		.160-.250
AS3216-191	11.250	10.602-10.692	.182-.192	.493-.507	1.250-1.500	.023-.046		.160-.250
AS3216-192	11.500	10.844-10.934	.182-.192	.552-.567	1.250-1.500	.023-.046		.185-.280
AS3216-193	11.750	11.081-11.171	.182-.192	.552-.567	1.250-1.500	.023-.046		.185-.280
AS3216-194	12.000	11.320-11.410	.182-.192	.552-.567	1.250-1.500	.023-.046		.185-.280
AS3216-195	12.250	11.557-11.647	.182-.192	.552-.567	1.250-1.500	.023-.046		.185-.280
AS3216-196	12.500	11.795-11.885	.182-.192	.552-.567	1.250-1.500	.023-.046		.185-.280
AS3216-197	12.750	12.014-12.124	.182-.192	.552-.567	1.437-1.813	.023-.046		.185-.280
AS3216-198	13.000	12.251-12.361	.182-.192	.652-.667	1.437-1.813	.023-.046		.230-.330
AS3216-199	13.250	12.488-12.598	.182-.192	.652-.667	1.437-1.813	.023-.046	1.520	.230-.330
AS3216-200	13.500	12.727-12.837	.182-.192	.652-.667	1.437-1.813	.023-.046	1.480	.230-.330
AS3216-201	13.750	12.964-13.074	.182-.192	.652-.667	1.437-1.813	.023-.046		.230-.330
AS3216-202	14.000	13.201-13.311	.182-.192	.652-.667	1.437-1.813	.023-.046		.230-.330
AS3216-203	14.250	13.438-13.548	.182-.192	.652-.667	1.437-1.813	.023-.046		.230-.330
AS3216-204	14.500	13.677-13.787	.182-.192	.740-.755	1.437-1.813	.023-.046		.250-.375
AS3216-205	14.750	13.914-14.024	.182-.192	.740-.755	1.437-1.813	.023-.046		.250-.375
AS3216-206	15.000	14.152-14.262	.182-.192	.740-.755	1.437-1.813	.023-.046		.250-.375

Retaining Ring Dimensions in Millimetres

(A)

Part Number	Nom. Shaft Dia.	A	T	W	G	R	I	M
AS3216-100	11.91	10.82-11.15	0.58-0.69	1.02-1.22	4.0-8.7	0.076-0.152	2.1	0.30-0.71
AS3216-101	12.70	11.46-11.79	0.84-0.94	1.14-1.35	4.0-8.7	0.13-0.23		0.33-0.71
AS3216-102	14.00	12.73-13.06	0.84-0.94	1.14-1.35	4.0-8.7	0.13-0.23		0.33-0.71
AS3216-103	14.27	13.00-13.34	0.84-0.94	1.14-1.35	4.0-8.7	0.13-0.23		0.33-0.71
AS3216-104	15.09	13.74-14.07	0.84-0.94	1.14-1.35	4.0-8.7	0.13-0.23	1.1	0.30-0.71
AS3216-105	15.88	14.48-14.81	0.84-0.94	1.27-1.47	4.0-8.7	0.13-0.23		0.30-0.76
AS3216-106	16.99	15.49-15.82	0.84-0.94	1.27-1.47	4.0-8.7	0.13-0.23		0.30-0.76
AS3216-107	17.48	15.95-16.28	1.02-1.12	1.52-1.73	4.0-8.7	0.15-0.28		0.38-0.89
AS3216-108	19.05	17.40-17.73	1.02-1.12	1.52-1.73	4.0-8.7	0.15-0.28	3.7	0.38-0.89
AS3216-109	19.84	18.14-18.47	1.02-1.12	1.52-1.73	4.0-8.7	0.15-0.28		0.38-0.89
AS3216-110	20.62	18.87-19.20	1.02-1.12	1.52-1.73	4.0-8.7	0.15-0.28		0.38-0.89
AS3216-111	22.22	20.35-20.68	1.02-1.12	1.78-1.98	4.7-9.5	0.15-0.28		0.38-1.02
AS3216-112	23.83	21.89-22.22	1.02-1.12	1.78-1.98	4.7-9.5	0.15-0.28	2.7	0.38-1.02
AS3216-113	24.99	23.01-23.34	1.02-1.12	2.03-2.24	4.7-9.5	0.15-0.28		0.76-1.14
AS3216-114	25.40	23.34-23.67	1.02-1.12	2.03-2.24	4.7-9.5	0.15-0.28		0.76-1.14
AS3216-115	25.98	23.88-24.21	1.02-1.12	2.03-2.24	4.7-9.5	0.15-0.28		0.76-1.14
AS3216-116	26.97	24.71-25.04	1.22-1.32	2.49-2.69	4.7-9.5	0.15-0.30	5.3	0.89-1.52
AS3216-117	28.58	26.26-26.59	1.22-1.32	2.49-2.69	4.7-9.5	0.15-0.30		0.89-1.52
AS3216-118	30.18	27.74-28.07	1.22-1.32	2.49-2.69	4.7-9.5	0.15-0.30		0.89-1.52
AS3216-119	31.75	29.21-29.54	1.22-1.32	2.49-2.69	4.7-9.5	0.15-0.30		0.89-1.52
AS3216-120	33.32	30.61-30.94	1.22-1.32	2.87-3.07	4.7-9.5	0.15-0.30	4.3	1.14-1.65
AS3216-121	34.92	32.11-32.44	1.22-1.32	2.87-3.07	4.7-9.5	0.15-0.30		1.14-1.65
AS3216-122	36.53	33.60-33.93	1.22-1.32	2.87-3.07	6.5-11.2	0.15-0.30		1.14-1.65
AS3216-123	38.10	34.85-35.18	1.22-1.32	2.87-3.07	6.5-11.2	0.15-0.30		1.14-1.65
AS3216-124	39.67	36.40-36.91	1.50-1.65	3.12-3.33	6.5-11.2	0.20-0.38	5.3	1.14-1.78
AS3216-125	41.28	37.92-38.43	1.50-1.65	3.12-3.33	6.5-11.2	0.20-0.38		1.14-1.78
AS3216-126	42.85	39.45-39.95	1.50-1.65	3.12-3.33	6.5-11.2	0.20-0.38		1.14-1.78
AS3216-127	44.45	40.97-41.48	1.50-1.65	3.12-3.33	6.5-11.2	0.20-0.38		1.14-1.78
AS3216-128	44.98	41.43-41.94	1.50-1.65	3.12-3.33	6.5-11.2	0.20-0.38	4.3	1.14-1.78
AS3216-129	46.02	42.42-42.93	1.50-1.65	3.12-3.33	6.5-11.2	0.20-0.38		1.14-1.78
AS3216-130	47.62	43.97-44.48	1.50-1.65	3.89-4.09	6.5-11.2	0.20-0.38		1.27-2.16
AS3216-131	50.01	46.18-46.69	1.50-1.65	3.89-4.09	6.5-11.2	0.20-0.38		1.27-2.16
AS3216-132	50.80	46.91-47.42	1.50-1.65	3.89-4.09	6.5-11.2	0.20-0.38	13.2	1.27-2.16
AS3216-133	52.37	48.44-49.07	1.90-2.06	4.09-4.34	7.9-12.7	0.25-0.48		1.3-2.3
AS3216-134	53.98	49.89-50.52	1.90-2.06	4.09-4.34	7.9-12.7	0.25-0.48		1.3-2.3
AS3216-135	54.76	50.62-51.26	1.90-2.06	4.09-4.34	7.9-12.7	0.25-0.48		1.3-2.3
AS3216-136	57.15	52.83-53.47	1.90-2.06	4.09-4.34	7.9-12.7	0.25-0.48	13.2	1.3-2.3
AS3216-137	58.72	54.31-54.94	1.90-2.06	4.09-4.34	7.9-12.7	0.25-0.48		1.3-2.3
AS3216-138	60.32	55.83-56.46	1.90-2.06	4.93-5.18	7.9-12.7	0.25-0.48		1.90-2.79
AS3216-139	61.90	57.35-57.99	1.90-2.06	4.93-5.18	7.9-12.7	0.25-0.48		1.90-2.79
AS3216-140	63.50	58.88-59.51	1.90-2.06	4.93-5.18	7.9-12.7	0.25-0.48	13.2	1.90-2.79
AS3216-141	65.00	60.38-61.01	1.90-2.06	4.93-5.18	7.9-12.7	0.25-0.48		1.90-2.79
AS3216-142	66.68	61.95-62.59	1.90-2.06	4.93-5.18	7.9-12.7	0.25-0.48		1.90-2.79
AS3216-143	68.25	63.45-64.08	1.90-2.06	4.93-5.18	7.9-12.7	0.25-0.48		1.90-2.79
AS3216-144	69.85	64.87-65.63	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58	13.2	2.16-3.05
AS3216-145	73.02	67.87-68.63	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-146	74.60	69.34-70.10	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-147	76.20	70.82-71.58	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-148	77.77	72.34-73.10	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58	13.2	2.16-3.05
AS3216-149	79.38	73.81-74.57	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-150	80.16	74.55-75.31	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-151	82.55	76.81-77.57	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-152	84.94	79.10-79.86	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58	13.2	2.16-3.05
AS3216-153	87.30	81.38-82.14	2.29-2.44	5.56-5.82	9.5-15.9	0.30-0.58		2.16-3.05
AS3216-154	88.90	82.75-83.64	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-155	89.99	83.77-84.66	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69	13.2	2.3-3.6
AS3216-156	92.08	85.75-86.64	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-157	93.65	87.22-88.11	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-158	95.25	88.70-89.59	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-159	98.42	91.74-92.63	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69	13.2	2.3-3.6
AS3216-160	100.03	93.29-94.18	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-161	101.60	94.74-95.63	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-162	107.95	101.65-102.54	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6
AS3216-163	111.12	104.80-105.69	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69	13.2	2.3-3.6
AS3216-164	114.30	107.82-108.71	2.74-2.90	6.71-6.96	11.9-16.7	0.36-0.69		2.3-3.6