

ELEMENT STANDARD

Réduction Excentrique en Acier Inox WP316L selon ASTM A403-Chanfreine-- Norme: ASME/ANSI B16.9-Cryogenie

REEXA505BEID10216

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B5123A525

Rev.E

Excentric Reducer-ASTM A403/403M Stainless Steel WP316L-Beveled End--

ASME/ANSI B16.9-Cryogenic

PRINCIPALES UTILISATIONS

Pour cryogénie

DOCUMENTS DE REFERENCE

FOURNISSEUR FABRICANT

Non imposé

ETAT DE LIVRAISON

DOCUMENTS DE CONTROLE

Document de contrôle suivant NF EN 10-204 type 2.1, type 2.2, type 3.1, type 3.2 si spécifié sur la commande.

MATERIEL AVEC APPROBATION

Suivant spécification technique de commande

MATIERE TRAITEMENT DE SURFACE

CARACTERISTIQUES

Temperature: - 196°, + 80°C

Reduction suivant: ANSI / ASME B 16.9

Exception:

Diam. ext. et épaisseurs suivant : ANSI / ASME B 36.19 M O.D. et tolérances suivant : ASTM A 530 / A 530 M

traitement Thermique: Hypertrempe (ASTM A182/A182M)

MAIN USES

For cryogenics

REFERENCE DOCUMENTS

SUPPLIER MANUFACTURER

No imposed

DELIVERY STATUS

CONTROL DOCUMENTS

Certificate according to NF EN 10204 type 2.1, type 2.2, type 3.1, type 3.2 if specified on the order

MATERIAL WITH APPROVAL

Following technical specification of command

MATERIAL SURFACE TREATMENT

CHARACTERISTICS

Temperature : - 196°, + 80°C

Reduction as per: ANSI/ASME B 16.9

Excepted:

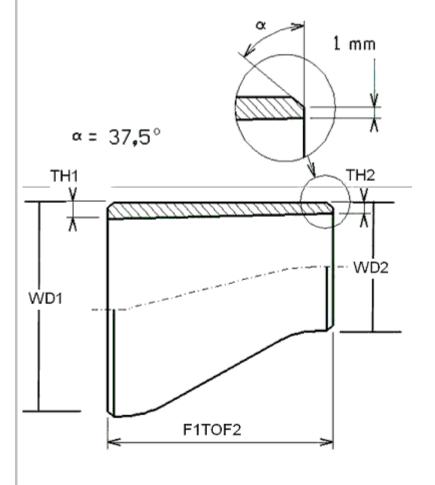
Outside diameter and thickness as per :

ANSI / ASME B 36.19 M

O.D. and thickness allowances as per:

ASTM A 530 / A 530 M

Heat traitement: Hypertrempe (ASTM A182/A182M)





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Excentric Reducer-ASTM A403/403M Stainless Steel WP316L-Beveled End-ASME/ANSI B16.9-Cryogenic

Référence Objet	DN1 (mm)	DN2 (mm)	TH1 (mm)	TH2 (mm)	Weight (kg)	Water Weight (kg)	Work Diam 1 Out D1 (mm)	Work Diam 2 WD2 (mm)	Pipe Length (mm)	F1 TO F2 (mm)	NPS1 (-)	NPS2 (-)	SCH1 (-)	SCH2 (-)
SA019567	20	10	2.11	1.65	0.09	0.01	26.7	17.1	38	38	3/4	3/8	10S	10S
5000002052	20	10	2.87	2.31	.11	.01	26.7	17.1	38	38	3/4	3/8	40S	40S
5000013420	20	10	3.91	3.2	.17	.01	26.7	17.1	38	38	3/4	3/8	808	80S
SA019566	20	15	2.11	2.11	0.1	0.012	26.7	21.3	38	38	3/4	1/2	10S	10S
5000002053	20	15	2.87	2.77	.13	.012	26.7	21.3	38	38	3/4	1/2	40S	40S
5000013421	20	15	3.91	3.73	.18	.012	26.7	21.3	38	38	3/4	1/2	80S	80S
SA019569	25	15	2.77	2.11	0.12	0.02	33.4	21.3	51	51	1	1/2	10S	10S
5000002054	25	15	3.38	2.77	.14	.02	33.4	21.3	51	51	1	1/2	40S	40S
5000013422	25	15	4.55	3.73	.19	.02	33.4	21.3	51	51	1	1/2	80S	80S
SA019568	25	20	2.77	2.11	0.13	0.025	33.4	26.7	51	51	1	3/4	10S	10S
5000002055	25	20	3.38	2.87	.15	.025	33.4	26.7	51	51	1	3/4	40S	40S
5000013423	25	20	4.55	3.91	.21	.025	33.4	26.7	51	51	1	3/4	80S	80S
SA019572	32	15	2.77	2.11	0.16	0.029	42.2	21.3	51	51	1 1/4	1/2	10S	10S
5000002056	32	15	3.56	2.77	.18	.029	42.2	21.3	51	51	1 1/4	1/2	40S	40S
5000013424	32	15	4.85	3.73	.23	.029	42.2	21.3	51	51	1 1/4	1/2	808	80S
SA019571	32	20	2.77	2.11	0.17	0.035	42.2	26.7	51	51	1 1/4	3/4	10S	10S
5000002057	32	20	3.56	2.87	.19	.035	42.2	26.7	51	51	1 1/4	3/4	40S	40S
5000013425	32	20	4.85	3.91	.25	.035	42.2	26.7	51	51	1 1/4	3/4	80S	80S
SA019570	32	25	2.77	2.77	0.18	0.042	42.2	33.4	51	51	1 1/4	1	10S	108
5000002058	32	25	3.56	3.38	.2	.042	42.2	33.4	51	51	1 1/4	1	40S	40S
5000013426	32	25	4.85	4.55	.27	.042	42.2	33.4	51	51	1 1/4	1	80S	80S
SA019576	40	15	2.77	2.11	0.17	0.045	48.3	21.3	64	64	1 1/2	1/2	10S	10S
5000002059	40	15	3.68	2.77	.19	.045	48.3	21.3	64	64	1 1/2	1/2	40S	40S
5000013427 SA019575	40	15 20	5.08 2.77	3.73 2.11	.31	.045	48.3	21.3	64	64	1 1/2	3/4	80S 10S	80S 10S
5000002150	40	20	3.68	2.11	0.18	0.053	48.3	26.7	64	64	1 1/2	3/4	40S	40S
5000002130	40	20	5.08	3.91	.32	.053	48.3	26.7	64	64	1 1/2	3/4	80S	80S
SA019574	40	25	2.77	2.77	0.2	0.063	48.3	33.4	64	64	1 1/2	1	108	108
5000002087	40	25	3.68	3.38	.23	.063	48.3	33.4	64	64	1 1/2	1	40S	40S
5000013429	40	25	5.08	4.55	.33	.063	48.3	33.4	64	64	1 1/2	1	80S	80S
SA019573	40	32	2.77	2.77	0.21	0.079	48.3	42.2	64	64	1 1/2	1 1/4	10S	108
5000002088	40	32	3.68	3.56	.24	.079	48.3	42.2	64	64	1 1/2	1 1/4	40S	40S
5000013430	40	32	5.08	4.85	.36	.079	48.3	42.2	64	64	1 1/2	1 1/4	80S	80S
SA019580	50	20	2.77	2.11	0.25	0.089	60.3	26.7	76	76	2	3/4	10S	10S
5000002089	50	20	2.77	2.87	.28	.089	60.3	26.7	76	76	2	3/4	10S	40S
5000013431	50	20	3.91	2.87	.36	.089	60.3	26.7	76	76	2	3/4	40S	40S
5000013432	50	20	5.54	3.91	.5	.089	60.3	26.7	76	76	2	3/4	80S	80S
SA019579	50	25	2.77	2.77	0.28	0.102	60.3	33.4	76	76	2	1	10S	10S
5000002160	50	25	2.77	3.38	.3	.102	60.3	33.4	76	76	2	1	10S	40S
5000013433	50	25	3.91	3.38	.4	.102	60.3	33.4	76	76	2	1	40S	40S
5000013434	50	25	5.54	4.55	.53	.102	60.3	33.4	76	76	2	1	80S	80S
SA019578	50	32	2.77	2.77	0.3	0.125	60.3	42.2	76	76	2	1 1/4	10S	10S
5000002161	50	32	2.77	3.56	.33	.125	60.3	42.2	76	76	2	1 1/4	10S	40S
5000013435	50	32	3.91	3.56	.43	.125	60.3	42.2	76	76	2	1 1/4	40S	40S
5000013436	50	32	5.54	4.85	.57	.125	60.3	42.2	76	76	2	1 1/4	80S	808
SA019577	50	40	2.77	2.77	0.31	0.142	60.3	48.3	76	76	2	1 1/2	10S	10S
5000002162	50	40	2.77	3.68	.35	.142	60.3	48.3	76	76	2	1 1/2	10S	40S
5000013437	50	40	3.91	3.68	.45	.142	60.3	48.3	76	76	2	1 1/2	40S	40S



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Excentric Reducer-ASTM A403/403M Stainless Steel WP316L-Beveled End-ASME/ANSI B16.9-Cryogenic

Référence Objet	DN1 (mm)	DN2 (mm)	TH1 (mm)	TH2 (mm)	Weight (kg)	Water Weight (kg)	Work Diam 1 Out D1 (mm)	Work Diam 2 WD2 (mm)	Pipe Length (mm)	F1 TO F2 (mm)	NPS1 (-)	NPS2 (-)	SCH1 (-)	SCH2 (-)
5000013438	50	40	5.54	5.08	.59	.142	60.3	48.3	76	76	2	1 1/2	80S	80S
SA019586	65	25	3.05	2.77	0.38	0.157	73	33.4	89	89	2 1/2	1	10S	10S
5000002163	65	25	3.05	3.38	.42	.157	73	33.4	89	89	2 1/2	1	10S	40S
5000013439	65	25	5.16	3.38	.64	.157	73	33.4	89	89	2 1/2	1	40S	40S
5000013440	65	25	7.01	4.55	.87	.157	73	33.4	89	89	2 1/2	1	80S	80S
SA019584	65	32	3.05	2.77	0.43	0.187	73	42.2	89	89	2 1/2	1 1/4	10S	10S
5000002164	65	32	3.05	3.56	.45	.187	73	42.2	89	89	2 1/2	1 1/4	10S	40S
5000013441	65	32	5.16	3.56	.73	.187	73	42.2	89	89	2 1/2	1 1/4	40S	408
5000013442	65	32	7.01	4.85	.9	.187	73	42.2	89	89	2 1/2	1 1/4	80S	808
SA019582	65	40	3.05	2.77	0.44	0.21	73	48.3	89	89	2 1/2	1 1/2	10S	10S
5000002165	65	40	3.05	3.68	.49	.21	73	48.3	89	89	2 1/2	1 1/2	10S	40S
5000013443	65	40	5.16	3.68	.76	.21	73	48.3	89	89	2 1/2	1 1/2	40S	40\$
5000013444	65	40	7.01	5.08	.94	.21	73	48.3	89	89	2 1/2	1 1/2	80S	80\$
SA019581	65	50	3.05	2.77	0.47	0.259	73	60.3	89	89	2 1/2	2	10S	108
5000013445	65	50	5.16	3.91	.8	.259	73	60.3	89	89	2 1/2	2	40\$	408
5000013446	65	50	7.01	5.54	1.05	.259	73	60.3	89	89	2 1/2	2	808	80\$
SA019603	80	32	3.05	2.77	0.47	0.249	88.9	42.2	89	89	3	1 1/4	10S	108
5000002166	80	32	3.05	3.56	.53	.249	88.9	42.2	89	89	3	1 1/4	10S	40\$
5000013447	80	32	5.48	3.56	.85	.249	88.9	42.2	89	89	3	1 1/4	40S	40\$
5000013448	80	32	7.62	4.85	.85	.249	88.9	42.2	89	89	3	1 1/4	80S	808
SA019602	80	40	3.05	2.77	0.51	0.276	88.9	48.3	89	89	3	1 1/2	10S	108
5000002167	80	40	3.05	3.68	.59	.276	88.9	48.3	89	89	3	1 1/2	10S	40\$
5000013449	80	40	5.49	3.68	.94	.276	88.9	48.3	89	89	3	1 1/2	40\$	40\$
5000013450 SA019601	80	40 50	7.62 3.05	5.08 2.77	0.55	0.331	88.9	48.3 60.3	89 89	89	3	1 1/2	80S 10S	10S
5000013451	80	50	5.49	3.91	0.55	.331	88.9	60.3	89	89	3	2	40S	40S
5000013451	80	50	7.62	5.54	1.29	.331	88.9	60.3	89	89	3	2	80S	80S
SA019587	80	65	3.05	3.05	0.59	0.392	88.9	73	89	89	3	2 1/2	108	108
5000013453	80	65	5.49	5.16	1.1	.392	88.9	73	89	89	3	2 1/2	40S	40S
5000013454	80	65	7.62	7.01	1.49	.392	88.9	73	89	89	3	2 1/2	805	80S
SA019607	100	40	3.05	2.77	0.68	0.456	114.3	48.3	102	102	4	1 1/2	10S	108
5000002168	100	40	3.05	3.68	.78	.456	114.3	48.3	102	102	4	1 1/2	10S	40\$
5000013455	100	40	6.02	3.68	1.35	.456	114.3	48.3	102	102	4	1 1/2	40S	40S
5000013456	100	40	8.56	5.08	1.9	.456	114.3	48.3	102	102	4	1 1/2	80S	80S
SA019606	100	50	3.05	2.77	0.78	0.532	114.3	60.3	102	102	4	2	10S	10S
5000013457	100	50	6.02	3.91	1.6	.532	114.3	60.3	102	102	4	2	40S	40S
5000013458	100	50	8.56	5.54	1.95	.532	114.3	60.3	102	102	4	2	808	80S
SA019605	100	65	3.05	3.05	0.83	0.614	114.3	73	102	102	4	2 1/2	10S	10S
5000013459	100	65	6.02	5.16	1.65	.614	114.3	73	102	102	4	2 1/2	40S	40S
5000013460	100	65	8.56	7.01	2.2	.614	114.3	73	102	102	4	2 1/2	80S	80S
SA019604	100	80	3.05	3.05	0.87	0.731	114.3	88.9	102	102	4	3	10S	10S
5000013461	100	80	6.02	5.49	1.75	.731	114.3	88.9	102	102	4	3	40S	40\$
5000013462	100	80	8.56	7.62	2.3	.731	114.3	88.9	102	102	4	3	808	80S
SA019611	125	50	3.4	2.77	1.4	0.893	141.3	60.3	127	127	5	2	10S	10S
5000013464	125	50	6.35	3.91	2.5	.893	141.3	60.3	127	127	5	2	40S	408
5000013463	125	50	9.53	5.54	3.3	.893	141.3	60.3	127	127	5	2	808	80S
SA019610	125	65	3.4	3.05	1.45	1.011	141.3	73	127	127	5	2 1/2	10S	10S
5000013466	125	65	6.35	5.16	2.7	1.011	141.3	73	127	127	5	2 1/2	40S	408



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Excentric Reducer-ASTM A403/403M Stainless Steel WP316L-Beveled End-ASME/ANSI B16.9-Cryogenic

Référence Objet	DN1 (mm)	DN2 (mm)	TH1 (mm)	TH2 (mm)	Weight (kg)	Water Weight (kg)	Work Diam 1 Out D1 (mm)	Work Diam 2 WD2 (mm)	Pipe Length (mm)	F1 TO F2 (mm)	NPS1 (-)	NPS2 (-)	SCH1 (-)	SCH2 (-)
5000013465	125	65	9.53	7.01	3.6	1.011	141.3	73	127	127	5	2 1/2	80S	80S
SA019609	125	80	3.4	3.05	1.48	1.177	141.3	88.9	127	127	5	3	10S	10S
5000013467	125	80	6.35	5.49	2.8	1.177	141.3	88.9	127	127	5	3	40S	40S
5000013468	125	80	9.53	7.62	3.9	1.177	141.3	88.9	127	127	5	3	80S	80S
SA019608	125	100	3.4	3.05	1.5	1.469	141.3	114.3	127	127	5	4	10S	10S
5000013470	125	100	6.35	6.02	3	1.469	141.3	114.3	127	127	5	4	40S	40S
5000013469	125	100	9.53	8.56	4.1	1.469	141.3	114.3	127	127	5	4	80S	80S
SA019615	150	65	3.4	3.05	1.55	1.434	168.3	73	140	140	6	2 1/2	10S	10S
5000013472	150	65	7.11	5.16	3.8	1.434	168.3	73	140	140	6	2 1/2	40S	40S
5000013471	150	65	10.97	7.01	4.9	1.434	168.3	73	140	140	6	2 1/2	808	80S
SA019614	150	80	3.4	3.05	1.8	1.633	168.3	88.3	140	140	6	3	10S	10S
5000013473	150	80	7.11	5.49	4	1.633	168.3	88.3	140	140	6	3	40S	408
5000013474	150	80	10.97	7.62	5.5	1.633	168.3	88.3	140	140	6	3	80S	80S
SA019613	150	100	3.4	3.05	2	1.999	168.3	114.3	140	140	6	4	10S	10S
5000013475	150	100	7.11	6.02	4.1	1.999	168.3	114.3	140	140	6	4	40\$	40\$
5000013476 SA019612	150	100 125	10.97 3.4	8.56	5.95 2.3	1.999	168.3	114.3	140	140	6	4	80S 10S	80S 10S
5000013477	150 150	125	7.11	3.4 6.55	4.3	2.408	168.3 168.3	141.3	140	140	6	5	40S	40S
5000013477	150	125	10.97	9.52	6.2	2.408	168.3	141.3	140	140	6	5	80S	80S
SA019618	200	100	3.76	3.05	3	3.052	219.1	114.3	152	152	8	4	10S	10S
5000013480	200	100	8.18	6.02	6.5	3.052	219.1	114.3	152	152	8	4	40S	40S
5000013479	200	100	12.7	8.56	9.2	3.052	219.1	114.3	152	152	8	4	80S	80S
SA019617	200	125	3.76	3.4	3.1	3.575	219.1	141.3	152	152	8	5	108	10S
5000013482	200	125	8.18	6.55	6.7	3.575	219.1	141.3	152	152	8	5	40S	40S
5000013481	200	125	12.7	9.53	9.7	3.575	219.1	141.3	152	152	8	5	80S	80S
SA019616	200	150	3.76	3.4	3.2	4.154	219.1	168.3	152	152	8	6	10S	10S
5000013484	200	150	8.18	7.11	6.9	4.154	219.1	168.3	152	152	8	6	408	40S
5000013483	200	150	12.7	10.97	10.1	4.154	219.1	168.3	152	152	8	6	80S	80S
SA019625	250	100	4.19	3.05	4.7	4.858	273	114.3	178	178	10	4	10S	10S
5000013486	250	100	9.27	6.02	10.5	4.858	273	114.3	178	178	10	4	40S	40S
5000013485	250	100	12.7	8.56	12.5	4.858	273	114.3	178	178	10	4	80S	80S
SA019624	250	125	4.19	3.4	4.9	5.567	273	141.3	178	178	10	5	10S	10S
5000013488	250	125	9.27	6.55	10.8	5.567	273	141.3	178	178	10	5	40S	40 S
5000013487	250	125	12.7	9.53	14.2	5.567	273	141.3	178	178	10	5	80S	80S
SA019623	250	150	4.19	3.4	5	6.346	273	168.3	178	178	10	6	10S	10S
5000013490	250	150	9.27	7.11	11.1	6.346	273	168.3	178	178	10	6	40S	40S
5000013489	250	150	12.7	10.97	14.8	6.346	273	168.3	178	178	10	6	80S	80S
SA019622	250	200	4.19	3.76	5.2	7.926	273	219.1	178	178	10	8	10S	10S
5000013492	250	200	9.27	8.18	11.5	7.926	273	219.1	178	178	10	8	40S	40S
5000013491	250	200	12.7	12.7	15.6	7.926	273	219.1	178	178	10	8	808	80S
SA019629	300	125	4.57	3.4	7.3	8.045	323.9	141.3	203	203	12	5	10S	10S
5000013494	300	125	9.53	6.55	15.2	8.045	323.9	141.3	203	203	12	5	40\$	40S
5000013493	300	125	12.7	9.53	19.4	8.045	323.9	141.3	203	203	12	5	80S	80S
SA019628	300	150	4.57	3.4	7.4	9.041	323.9	168.3	203	203	12	6	10S	10S
5000013496	300	150	9.53	7.11	15.5	9.041	323.9	168.3	203	203	12	6	40\$	40\$
5000013495	300	150	12.7	10.97	20.1	9.041	323.9	168.3	203	203	12	6	80S	80S
SA019627	300	200	4.57	3.76	7.7	11.042	323.9	219.1	203	203	12	8	108	10\$
5000013498	300	200	9.53	8.18	16	11.042	323.9	219.1	203	203	12	8	40S	40S



ELEMENT STANDARD

Réduction Excentrique en Acier Inox WP316L selon ASTM A403-Chanfreine-- Norme : ASME/ANSI B16.9-Cryogenie

REEXA505BEID10216 B5123A525 Rev.E

Excentric Reducer-ASTM A403/403M Stainless Steel WP316L-Beveled End--ASME/ANSI B16.9-Cryogenic

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Référence Objet	DN1 (mm)	DN2 (mm)	TH1 (mm)	TH2 (mm)	Weight (kg)	Water Weight (kg)	Work Diam 1 Out D1 (mm)	Work Diam 2 WD2 (mm)	Pipe Length (mm)	F1 TO F2 (mm)	NPS1 (-)	NPS2 (-)	SCH1 (-)	SCH:	2
5000013497	300	200	12.7	12.7	20.9	11.042	323.9	219.1	203	203	12	8	80S	808	
SA019626	300	250	4.57	4.19	8	13.38	323.9	273	203	203	12	10	10S	108	j
5000013500	300	250	9.53	9.27	16.6	13.38	323.9	273	203	203	12	10	40S	408	;
5000013499	300	250	12.7	12.7	21.6	13.38	323.9	273	203	203	12	10	80S	808	
SA019633	350	150	4.78	3.4	13.1	16.691	355.6	168.3	330	330	14	6	10S	108	;
5000013502	350	150	9.53	7.11	26.3	16.691	355.6	168.3	330	330	14	6	40S	408	
5000013501	350	150	12.7	12.7	35.2	16.691	355.6	168.3	330	330	14	6	80S	808	
SA019632	350	200	4.78	3.76	13.9	20.147	355.6	219.1	330	330	14	8	10S	10S	;
5000013504	350	200	9.53	8.18	27.7	20.147	355.6	219.1	330	330	14	8	40S	40S	
5000013503	350	200	12.7	12.7	36.8	20.147	355.6	219.1	330	330	14	8	80S	80S	
SA019631	350	250	4.78	4.19	14.4	24.163	355.6	273	330	330	14	10	10S	10S	;
5000013506	350	250	9.53	9.27	28.8	24.163	355.6	273	330	330	14	10	40S	40S	
5000013505	350	250	12.7	12.7	38.7	24.163	355.6	273	330	330	14	10	80S	808	;
SA019630	350	300	4.78	4.57	15.3	28.293	355.6	323.9	330	330	14	12	10S	10S	;
5000013508	350	300	9.53	9.53	30.5	28.293	355.6	323.9	330	330	14	12	40S	408	
5000013507	350	300	12.7	12.7	40.3	28.293	355.6	323.9	330	330	14	12	80S	80S	
SA019637	400	200	4.78	3.76	16.7	25.926	406.4	219.1	356	356	16	8	10S	108	;
SA019636	400	250	4.78	4.19	17.7	30.583	406.4	273	356	356	16	10	108	108	;
SA019635	400	300	4.78	4.57	18.3	35.396	406.4	323.9	356	356	16	12	10S	108	;
SA019634	400	350	4.78	4.78	18.8	38.576	406.4	355.6	356	356	16	14	108	108	;
SA019641	450	250	4.78	4.19	21	37.952	457.2	273	381	381	18	10	10S	108	;
SA019640	450	300	4.78	4.57	21.4	43.483	457.2	323.9	381	381	18	12	108	108	;
SA019639	450	350	4.78	4.78	21.9	47.124	457.2	355.6	381	381	18	14	10S	108	;
SA019638	450	400	4.78	4.78	22.5	53.35	457.2	406.4	381	381	18	16	10S	108	i
SA019645	500	300	5.54	4.57	30	65.715	508	323.9	508	508	20	12	10S	108	i
SA019644	500	350	5.54	4.78	31	70.877	508	355.6	508	508	20	14	10S	108	i
SA019643	500	400	5.54	4.78	32	79.677	508	406.4	508	508	20	16	10S	108	í
SA019642	500	450	5.54	4.78	33	88.992	508	457.2	508	508	20	18	10S	108	i
SA029207	550	350	5.54	4.78	40	79.713	559	355.6	508	508	22	14	10S	108	i
SA029206	550	400	5.54	4.78	41	89.03	559	406.4	508	508	22	16	10S	108	i
SA029205	550	450	5.54	4.78	43	98.862	559	457.2	508	508	22	18	10S	108	í
SA029202	550	500	5.54	5.54	44	108.891	559	508	508	508	22	20	10S	108	i
SA019648	600	400	6.35	4.78	45	98.501	609.6	406.4	508	508	24	16	10S	108	,
SA019647	600	450	6.35	4.78	47	108.829	609.6	457.2	508	508	24	18	10S	108	;
SA019646	600	500	6.35	5.54	49	119.34	609.6	508	508	508	24	20	10S	108	i

Rév. E : (L.ANDRE le 31/05/2018) ajouté les reduction excentrique en schedule 40S et 80S de DN20 à DN350