



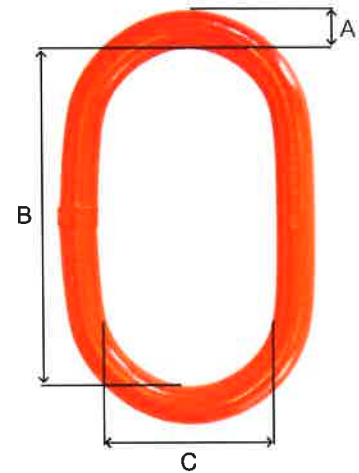
# HA MASTER LINKS AND QUAD ASSEMBLIES



HA MASTER LINKS - Type Approval No. TAS000013Z Certified to: DNV 2.7-1, DNV 2.7-3, EN 12079-2, EN 1677-4

Part Code	Description	A Inches	B Inches	C Inches	WLL lbs	MPF lbs	MBL lbs	Mass lbs
330.160	HA16ML	5/8"	6"	3"	9,036	22,591	45,182	1.54
330.22S	HA22MLS	7/8"	6-1/2"	3-5/8"	19,461	48,653	97,307	3.30
330.220	HA22ML	7/8"	10-3/4"	5-5/8"	12,783	31,958	63,916	5.07
330.250	HA25ML	1"	10-3/4"	5-5/8"	19,461	48,653	97,307	7.27
330.28S	HA28MLS	1-1/8"	8"	4-3/8"	31,958	79,895	159,790	6.61
330.280	HA28ML	1-1/8"	10-3/4"	5-5/8"	31,958	79,895	159,790	8.37
330.320	HA32ML	1-1/4"	10-3/4"	5-5/8"	37,688	94,221	188,442	11.24
330.360	HA36ML	1-7/16"	10-3/4"	5-5/8"	50,692	126,730	235,460	14.33
330.400	HA40ML	1-9/16"	11"	6"	61,932	154,831	309,662	18.73
330.450	HA45ML	1-3/4"	12-3/4"	7"	84,413	211,033	422,066	26.89
330.500	HA50ML	2"	14"	7-3/4"	99,180	247,950	495,900	36.59
330.600	HA60ML	2-23/64"	16-1/4"	8-3/4"	143,260	358,150	716,300	64.37
330.650	HA65ML	2-9/16"	16-9/64"	8-21/32"	165,340	413,684	826,847	73.20
330.700	HA70ML	2-3/4"	18"	10"	187,340	468,350	936,700	97.66
330.750	HA75ML	2-61/64"	18"	10"	220,460	551,456	1,102,687	108.68
330.900*	HA90ML	3-5/8"	21"	12-1/2"	330,600	661,611	1,654,590	189.59
330.1200*	HA120ML	4-3/4"	24"	16-3/8"	551,000	1,102,685	2,205,371	434.31

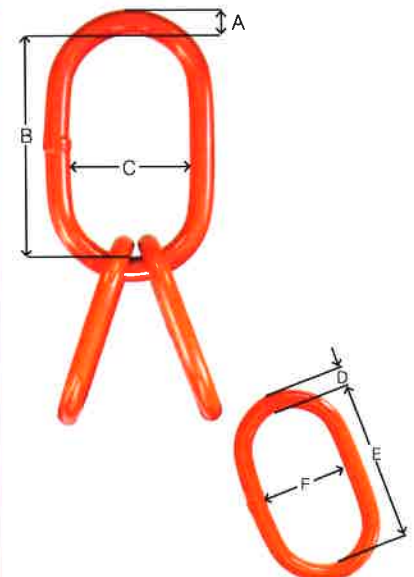
Average impact energy (charpy)  
42 Joules minimum impact resistance  
at -40°C up to 50mm diameter



\*Certified on a batch basis to the requirements of DNV 2.7-1

HA QUAD ASSEMBLIES - Type Approval No. TAS000013Z Certified to: DNV 2.7-1, DNV 2.7-3, EN 12079-2, EN 1677-4

Part Code	Description	A Inches	B Inches	C Inches	D Inches	E Inches	F Inches	WLL lbs	Mass lbs
350.160	HA16QA	5/8"	6"	3"	9/16"	5"	2-3/8"	9,036	2.86
350.220	HA22QA	7/8"	6-1/2"	3-5/8"	3/4"	5-5/8"	2-3/4"	19,461	7.83
350.230	HA23QA	7/8"	10-3/4"	5-5/8"	5/8"	6"	3"	12,783	8.45
350.250	HA25QA	1"	10-3/4"	5-5/8"	3/4"	5-5/8"	2-3/4"	19,461	11.66
350.260	HA26QA	1-1/8"	10-3/4"	5-5/8"	3/4"	5-5/8"	2-3/4"	31,958	12.96
350.280	HA28QA	1-1/8"	8"	4-3/8"	7/8"	5-5/8"	2-3/4"	31,958	12.16
350.320	HA32QA	1-1/4"	10-3/4"	5-5/8"	1"	7-5/8"	4"	37,688	21.27
350.360	HA36QA	1-7/16"	10-3/4"	5-5/8"	1-1/8"	7-5/8"	4"	50,692	26.18
350.400	HA40QA	1-9/16"	11"	6"	1-1/4"	10-3/4"	5-5/8"	61,932	40.92
350.450	HA45QA	1-3/4"	12-3/4"	7"	1-7/16"	10-3/4"	5-5/8"	84,413	55.90
350.500	HA50QA	2"	14"	7-3/4"	1-9/16"	10-3/4"	5-5/8"	99,180	71.10
350.600	HA60QA	2-33/64"	16-1/4"	8-3/4"	2"	14"	7-3/4"	143,260	140.60
350.650	HA65QA	2-9/16"	16-9/16"	8-21/32"	2"	14"	7-3/4"	165,340	149.70
350.700	HA70QA	2-3/4"	18"	10"	2-3/8"	16-1/4"	8-3/4"	187,340	225.70
350.750	HA75QA	2-61/64"	18"	10"	2-3/8"	16-1/4"	8-3/4"	220,460	255.00
350.900*	HA90QA	3-5/8"	21"	12-1/2"	2-3/4"	15-3/4"	7-7/8"	330,600	360.00



Operational temperature range is  
-40°C to 200°C

\*Certified on a batch basis to the requirements of DNV 2.7-1