

HA® Quad Assembly OS+

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The HA quad assembly OS+ is a fundamental component used in a wide range of lifting and rigging applications. It is typically used in three- and four-leg wire rope, chain and synthetic sling assemblies, acting as the connection point between the sling legs below and the lifting machine above. More specifically, having received DNV type approval, our HA quad assembly OS+ range is recognised and specified globally by operators, contractors and rigging shops for use in offshore rigging and DNV 2.7-1 container lifting sets. Manufactured from grade 8 triple alloy steel, the HA quad assembly OS+ range is specially engineered for use in harsh offshore environments.

DNV type approved: certified by DNV pursuant to Type Approval No. TAS00003J2 Rev. 1 and Type Approval No. TAS0000337 Rev. 3 in accordance with DNV-ST-E271, DNV-ST-E273, BSEN ISO 10855-2, EN1677-4, ASME B30.26 and API-2CCU-2017-08.

Additional standards: in addition to the standards covered by the DNV type approvals above, this product is designed and manufactured in accordance with AS3776:2015.

Product sizes: available in diameters from 16mm to 90mm and working load limits from 4.1 tonnes to 150.0 tonnes.

Temperature: operational temperature range of - 40°C to + 200°C without reduction in working load limit.

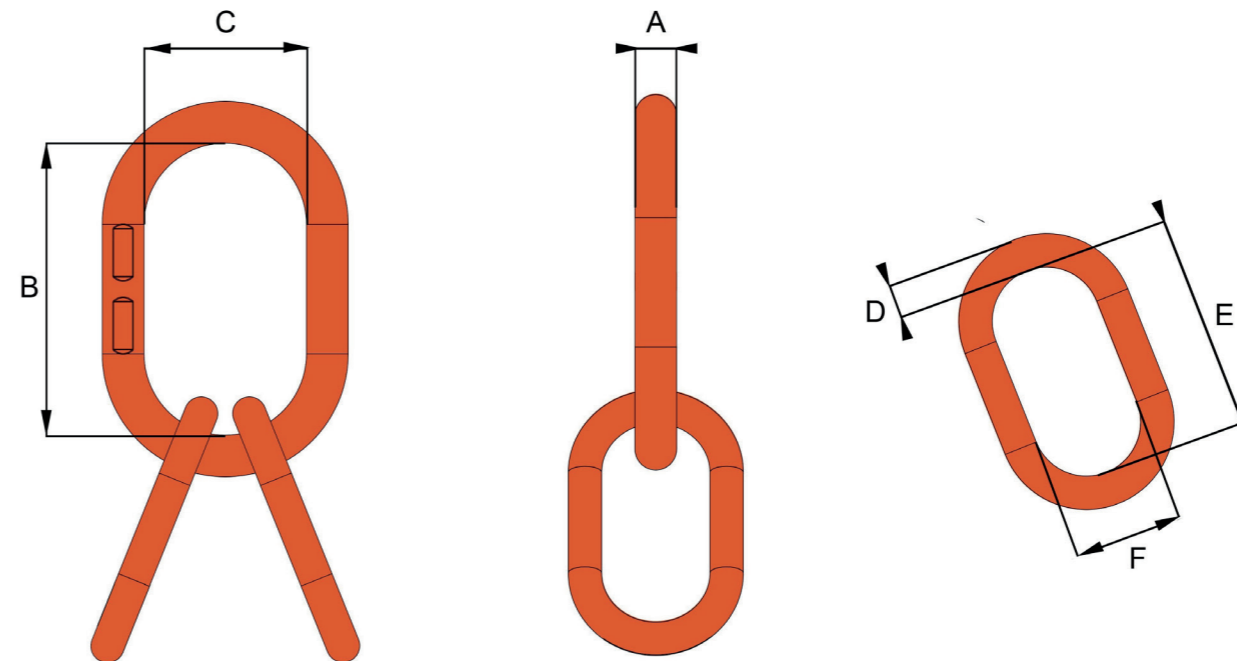
Material & hardness: manufactured from grade 8 triple alloy steel, with a hardness range of 34 to 36 HRC.

Average impact energy (Charpy): 42 Joules minimum impact resistance at -40°C (up to 50mm diameter sizes).

Testing: individually proof load tested to 2.5 times working load limit (for sizes 16mm to 75mm) and 2 times working load limit (for size 90mm), and 100% MPI tested.

Embossing: includes product description (i.e., "HA16QA 8 OS+") and batch number.

Safety factor: 5 : 1.



Specifications

Part Code	Description	A mm	B mm	C mm	D mm	E mm	F mm	WLL t	MPF kN	MBL kN	Mass kg
350.160+	HA16QA 8 OS+	16.0	150.0	75.0	14.5	125.0	60.0	4.1	101	201	1.62
350.220+	HA22QA 8 OS+	22.0	162.0	90.0	22.0	162.0	90.0	11.0	270	540	4.41
350.230+	HA23QA 8 OS+	22.0	270.0	140.0	22.0	162.0	90.0	7.0	172	343	5.22
350.250+	HA25QA 8 OS+	25.5	270.0	140.0	22.0	162.0	90.0	9.3	229	456	6.05
350.260+	HA26QA 8 OS+	28.0	270.0	140.0	22.0	162.0	90.0	14.5	356	711	6.73
350.320+	HA32QA 8 OS+	32.0	270.0	140.0	28.0	200.0	110.0	19.0	466	932	10.92
350.360+	HA36QA 8 OS+	36.0	270.0	140.0	28.0	200.0	110.0	26.0	638	1275	12.35
350.400+	HA40QA 8 OS+	40.0	280.0	155.0	32.0	270.0	140.0	30.5	749	1496	18.50
350.450+	HA45QA 8 OS+	45.0	320.0	175.0	36.0	270.0	140.0	40.0	981	1962	25.09
350.500+	HA50QA 8 OS+	50.0	350.0	195.0	45.0	320.0	175.0	51.0	1251	2502	40.89
350.650+	HA65QA 8 OS+	65.0	410.0	220.0	50.0	350.0	195.0	75.0	1840	3679	66.10
350.750+	HA75QA 8 OS+	75.0	450.0	250.0	65.0	410.0	220.0	100.0	2453	4905	115.02
350.900	HA90QA*	90.0	510.0	300.0	70.0	400.0	200.0	150.0	3679	7358	164.10

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