



IOCS S.r.L.

Hoses & Ancillaries Equipment Supply for Oil & Gas Industry

MANUAL QCDC

MANUAL QCDC

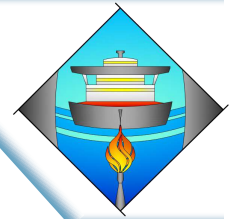
QUICK CONNECT DISCONNECT COUPLING

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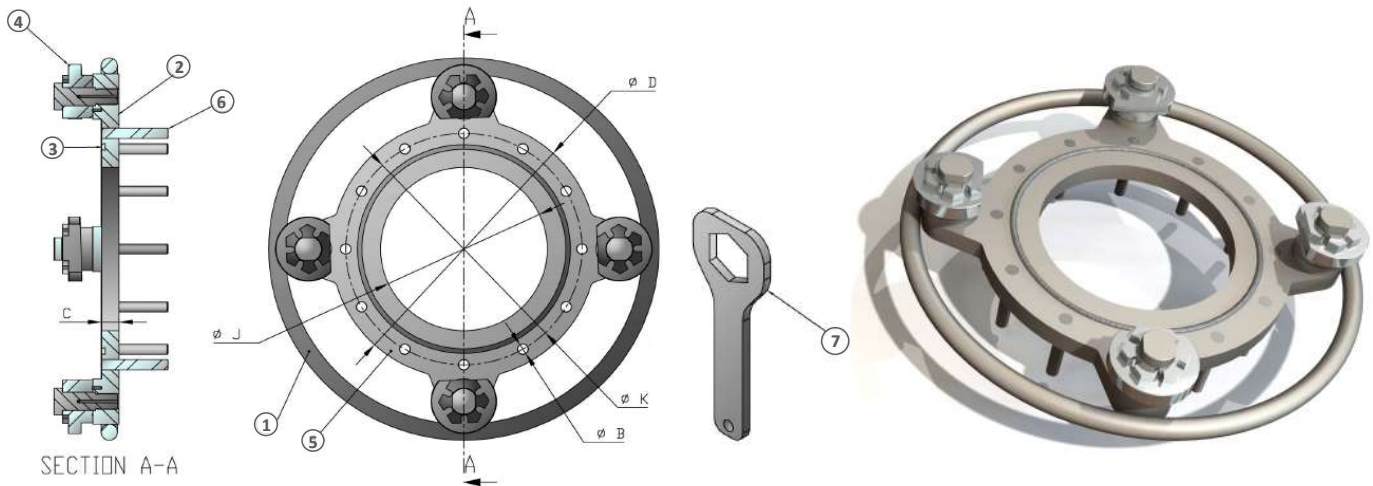
- Studded QCDC
- Short Spool Piece QCDC





Studded Camlock Coupling

Flange ASME B 16.5 Class 150lb



The camlock coupling is a quick connection / disconnection coupling. It is situated at the end of the rail hose. The connection is made by means of a number of cams mounted on the periphery of the camlock coupling flange.

A rubber O-ring retained by a groove in the camlock flange acts as a seal with the tanker flange.

The camlock is manufactured in two basic designs, short spool and studded.

The short spool camlock eliminates the need for a separate spool piece. Moreover the short spool camlock has a full set of back-up jointing capability in case of cam damage.

The cam guard is added to the coupling to prevent fouling of the cam by pick-up chain. Short spool camlock coupling can be supplied with c/w lifting lugs upon request.

ITEM	DESCRIPTION	MATERIAL
1	CAM GUARD RING	S275 JR
2	CAM SUPPORT	ASTM A516 GR 60/70 or equivalent
3	O-RING	BUNA-N (NBR) or Viton (FKM)
4	CAM & CAM BOLTS	AISI 316L or 42CrMo4
5	FLANGE	ASTM A 105 or equivalent
6	STUD BOLTS	ASTM A 193 Gr. B7 or Gr. B8M
7	WRENCH	S355 JR

COATINGS:

- 1) *Electroless Nickel Plating.*
- 2) *Epoxy paint or Black Bitumastic*

HYDRAULIC TESTS:

At 22.5 bar (337 PSI) for 15 Min.

NOTE:

Available with ratched Cams.

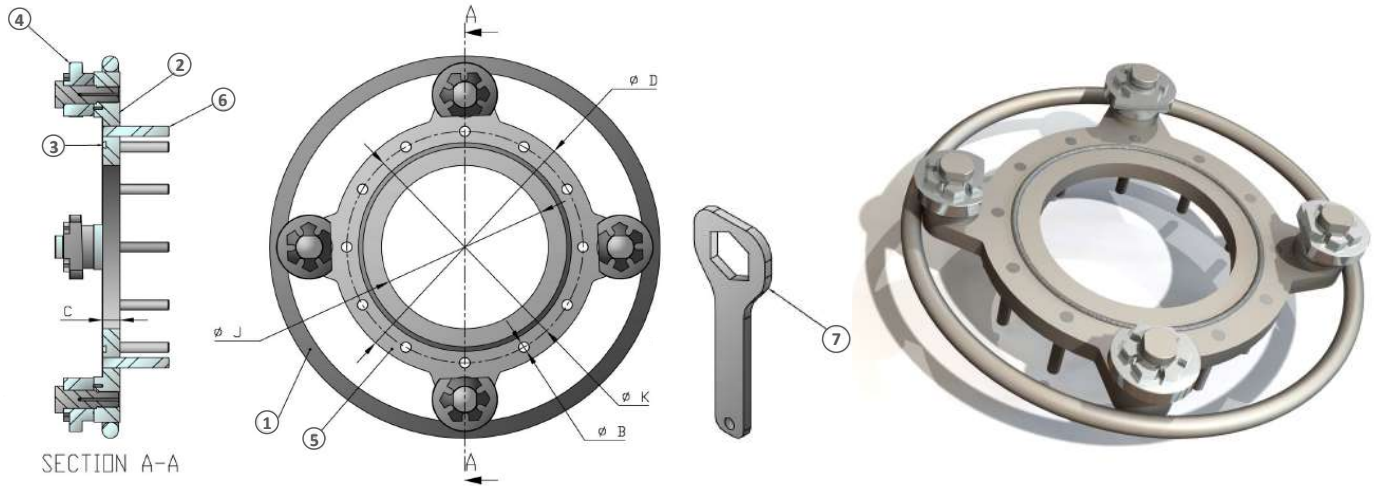
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb								
NOMINAL DIAMETER (Inch / mm)	Ø D (mm)	Ø J (mm)	Ø K (mm)	Ø B (mm)	C (mm)	CAMS (N°)	STUD BOLTS (N°)	WEIGHT (Kg)
6" / 150	279,5	154,2	241,3	22,5	23,8	2	8	25
8" / 200	343,0	202,7	298,4	22,5	27,0	3	8	30
10" / 250	406,5	254,5	361,9	25,5	28,6	3	12	36
12" / 300	482,5	304,8	431,8	25,5	30,1	4	12	46,5
16" / 400	597,0	387,3	539,7	28,5	34,9	5	16	68
20" / 500	698,5	488,9	635,0	32,0	41,3	6	20	103



Studded Camlock Coupling

Flange ASME B 16.5 Class 300lb

Prod. Code: 041



The camlock coupling is a quick connection / disconnection coupling. It is situated at the end of the rail hose. The connection is made by means of a number of cams mounted on the periphery of the camlock coupling flange.

A rubber O-ring retained by a groove in the camlock flange acts as a seal with the tanker flange.

The camlock is manufactured in two basic designs, short spool and studded.

The short spool camlock eliminates the need for a separate spool piece. Moreover the short spool camlock has a full set of back-up jointing capability in case of cam damage.

The cam guard is added to the coupling to prevent fouling of the cam by pick-up chain. Short spool camlock coupling can be supplied with c/w lifting lugs upon request.

ITEM	DESCRIPTION	MATERIAL
1	CAM GUARD RING	S275 JR
2	CAM SUPPORT	ASTM A516 GR 60/70 or equivalent
3	O-RING	BUNA-N (NBR) or Viton (FKM)
4	CAM & CAM BOLTS	AISI 316L or 42CrMo4
5	FLANGE	ASTM A 105 or equivalent
6	STUD BOLTS	ASTM A 193 Gr. B7 or Gr. B8M
7	WRENCH	S355 JR

COATINGS:

- 1) *Electroless Nickel Plating.*
- 2) *Epoxy paint or Black Bitumastic*

HYDRAULIC TESTS:

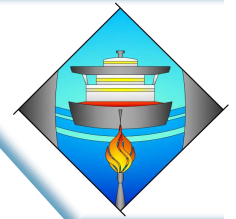
At 31.5 bar (450 PSI) for 15 Min.

NOTE:

Available with ratched Cams.

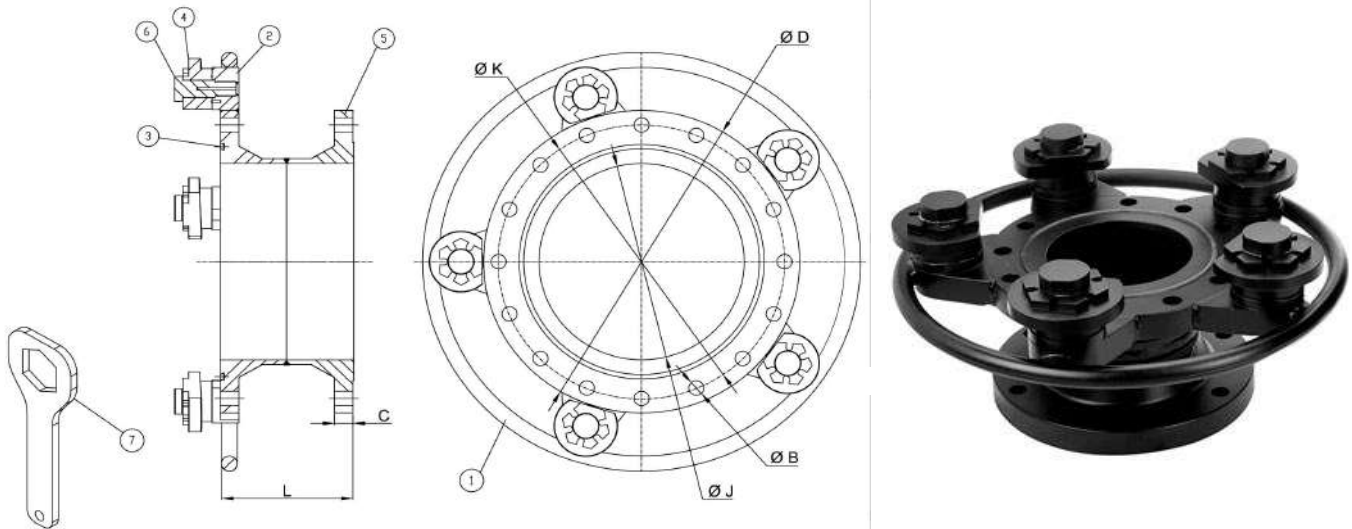
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb

NOMINAL DIAMETER (inch / mm)	Ø D (mm)	Ø J (mm)	Ø K (mm)	Ø B (mm)	C (mm)	CAMS (N°)	STUD BOLTS (N°)	WEIGHT (Kg)
6" / 150	317,5	154,2	269,9	22,5	35,4	2	12	N.A.
8" / 200	381,0	202,7	330,2	25,5	39,4	3	12	N.A.
10" / 250	444,5	254,5	387,3	28,5	46,4	3	16	N.A.
12" / 300	520,5	304,8	450,8	32,0	49,4	4	16	N.A.
16" / 400	647,5	387,3	571,5	35,0	55,4	5	20	N.A.
20" / 500	774,5	488,9	685,8	35,0	62,4	6	24	N.A.



Short Spool Piece Camlock Coupling

Flange ASME B 16.5 Class 150lb



WELDING: procedure used for flange to be qualified in accordance with ASME IX

ITEM	DESCRIPTION	MATERIAL
1	CAM GUARD RING	S275 JR
2	CAM SUPPORT	ASTM A516 GR 60/70 or equivalent
3	O-RING	BUNA-N (NBR) or Viton (FKM)
4	CAM	AISI 316L
5	FLANGE	ASTM A 105 or equivalent
6	CAM BOLTS	AISI 316L or 42CrMo4
7	WRENCH	S355 JR

COATINGS:

- 1) *Electroless Nickel Plating.*
- 2) *Epoxy paint or Black Bitumastic*

HYDRAULIC TESTS:

At 22.5 bar (337 PSI) for 15 Min.

NOTE:

Available with ratched Cams.

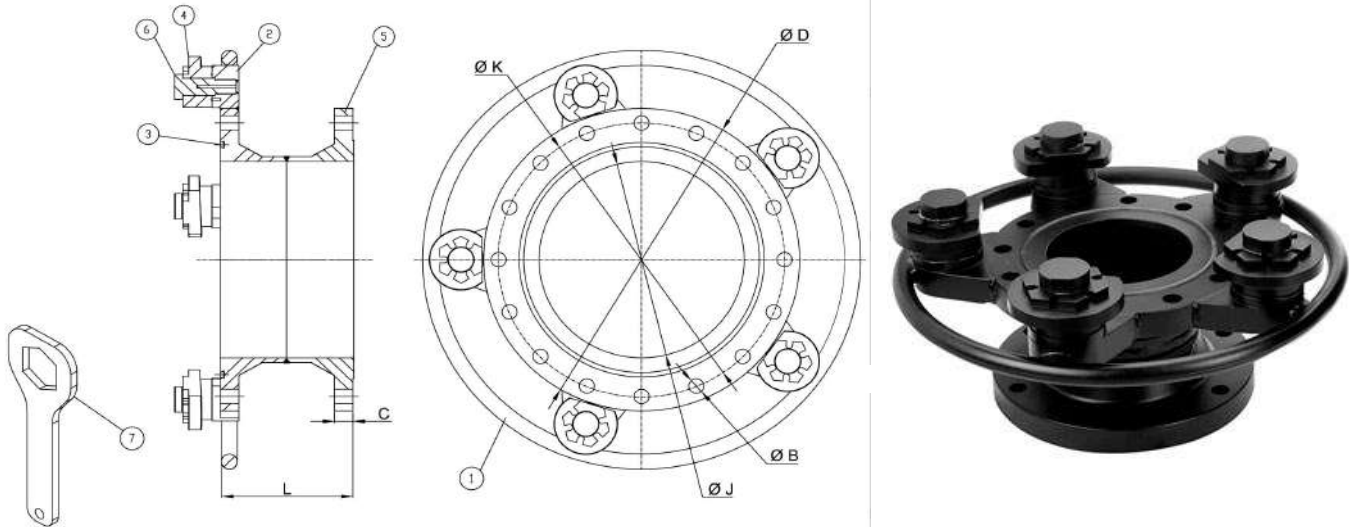
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb										
N.D.	N.D.	Ø D	Ø J	Ø B	Ø K	L	C	CAMS	HOLS	WEIGHT
(mm)	(Inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(N°)	(N°)	(Kg)
6"	150	279,0	154,2	22,5	241,3	180	23,8	2	8	N.A.
8"	200	343,0	202,7	22,5	298,4	210	27,0	3	8	52
10"	250	406,5	254,5	25,5	361,9	210	28,6	3	12	68
12"	300	482,5	304,8	25,5	431,8	230	30,1	4	12	97
16"	400	597,0	387,3	28,5	539,7	260	34,9	5	16	138
20"	500	698,5	488,9	32,0	635,0	300	41,3	6	20	217



Short Spool Piece Camlock Coupling

Flange ASME B 16.5 Class 300lb

Prod. Code: 111



WELDING: procedure used for flange to be qualified in accordance with ASME IX

ITEM	DESCRIPTION	MATERIAL
1	CAM GUARD RING	S275 JR
2	CAM SUPPORT	ASTM A516 GR 60/70 or equivalent
3	O-RING	BUNA-N (NBR) or Viton (FKM)
4	CAM	AISI 316L
5	FLANGE	ASTM A 105 or equivalent
6	CAM BOLTS	AISI 316L or 42CrMo4
7	WRENCH	S355 JR

COATINGS:

- 1) *Electroless Nickel Plating.*
- 2) *Epoxy paint or Black Bitumastic*

HYDRAULIC TESTS:

At 31.5 bar (450 PSI) for 15 Min.

NOTE:

Available with ratched Cams.

DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb										
N.D.	N.D.	Ø D	Ø J	Ø B	Ø K	L	C	CAMS	HOLES	WEIGHT
(mm)	(Inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(N°)	(N°)	(Kg)
6"	150	318,0	154,2	22,5	270,0	196	35,4	2	12	N.A.
8"	200	381,0	202,7	25,5	330,2	225	39,4	3	12	N.A.
10"	250	444,5	254,5	28,5	387,3	237	46,4	3	16	N.A.
12"	300	520,5	304,8	32,0	450,8	262	49,4	4	16	N.A.
16"	400	647,5	387,3	35,0	571,5	294	55,4	5	20	N.A.
20"	500	774,5	488,9	35,0	685,8	324	62,4	6	24	N.A.