

RITE CAMLOCK COUPLINGS



GENERAL NOTES:

- **RITE CAMLOCK COUPLINGS** are available in sizes: 3" - 24" etc.
- Camlock Couplings are compatible with all international flange standards, ANSI 150, 300, 600, DIN PN10, 16, 25, 40, B.S. Table E, JIS, etc.
- Blind, Slip-on and Threaded flanges are available.
- Available materials include: Carbon Steel, Stainless Steel, Low Temp Steels, etc.
- Zinc coating is standard. Other coatings are available.
- Various fluid compatible seal materials are available, Viton, Teflon etc.
- Spiral wound gaskets are available for cryogenic service.
- Couplings to bolt to one flange standard and cam against another flange standard are available.
- **RITE CAMLOCK COUPLINGS** are supplied with a Wrench and Buna O-Ring seal.
- **Covers, in Aluminium or Steel, are optional.** 3" to 8" have one handle, 10" and larger have 2 handles.
- **Contact the factory for any special designs or requirements you may have.**



Prices and Quotations

Prices quoted do not include taxes and are F.O.B. our plant. All quotations by our distributors are subject to confirmation and acceptance by head office. Quotations are firm for 30 days.

Cancellations and Returns

Firm orders accepted by us may only be cancelled subject to recovery of costs incurred. No goods may be returned for credit unless authorized by head office and subject to restocking and handling charges. **Rite Camlock Couplings manufactured for special applications cannot be returned for credit.**

Warranty

Ritepro Corporation warrants any of its products against defects of materials or workmanship for a period of one year from date of shipment and is limited to repair, replacement or refunding of purchase price. We will not be responsible for any claims for labour or any other expenses or consequential or secondary damages in any case.

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Ritepro Corporation is a world leader in the design and manufacturing of fluid handling equipment.

RITE CAMLOCK COUPLINGS are used in **chemical, petroleum, marine, cement, steel, fishing and other industries** to improve speed and safety when transferring products from one area to another.

RITE CAMLOCK COUPLINGS are used anywhere there is a need to rapidly connect and disconnect piping or hose. The simple design and operation ensures that safety is not compromised and speed of connecting and disconnecting will save time and money.

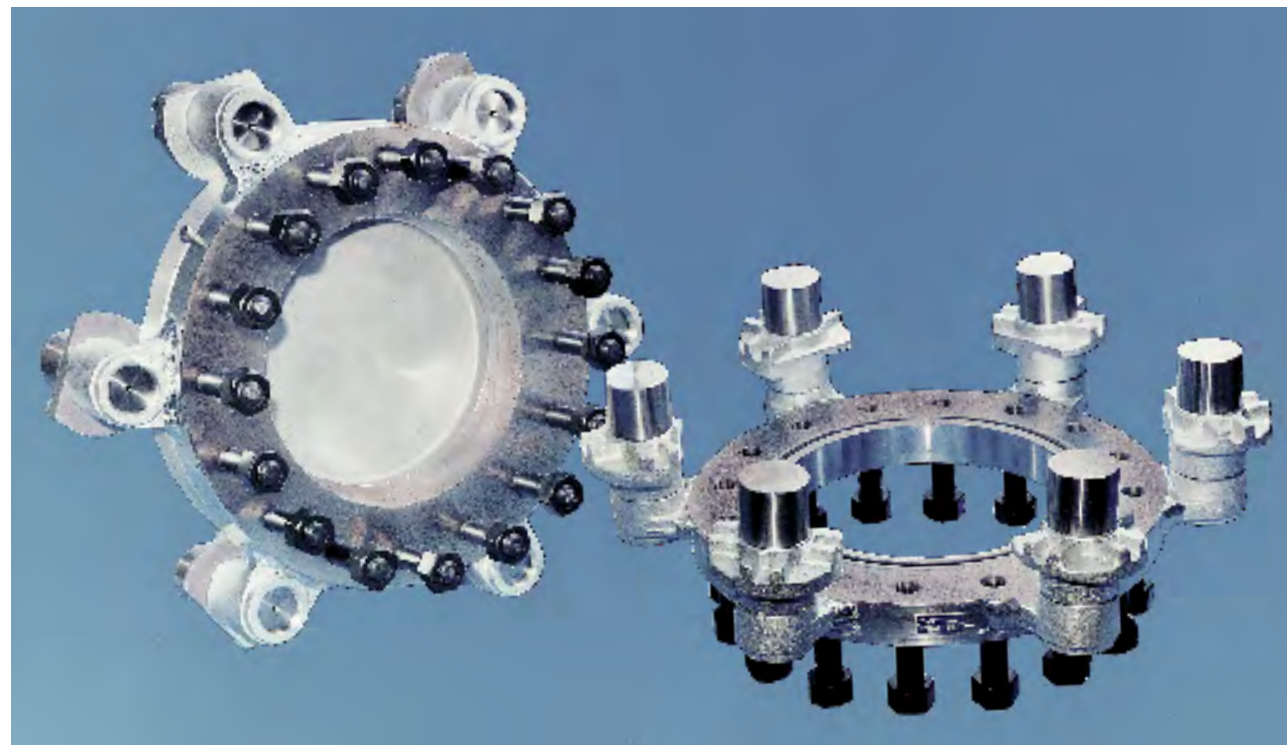
RITE CAMLOCK COUPLINGS meet the requirements of CSA B51, Boiler, Pressure Vessel and Pressure Piping Code and have the base Canadian Registration Number OA0577.6.

RITE CAMLOCK COUPLINGS are designed to meet ASME and other international codes.

RITE CAMLOCK COUPLINGS have been vibration tested by independent agencies and clients to ensure they remain connected under extreme loading conditions.

This catalogue shows the standard models. Many variations exist and special **RITE CAMLOCK COUPLINGS** can be manufactured to suit individual requirements.

Contact our Montreal head office for solutions to your fluid handling needs.



12" - 300 **Model 145**, Carbon Steel With Teflon Coated Studs.



An industrial installation is shown above. **RITE CAMLOCK COUPLINGS** allow the user to rapidly disconnect the hose from the storage tank and connect it to another. Also the hose can be connected with a **RITE CAMLOCK COUPLING** to the pump as shown below.



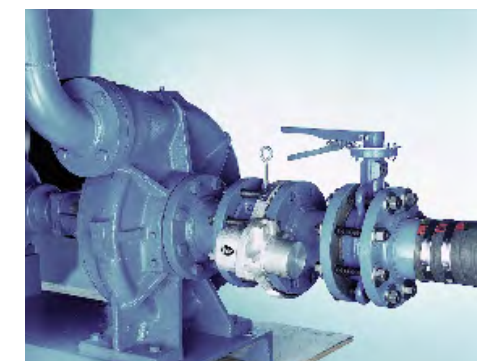
A **RITE CAMLOCK COUPLING**, connected to a hose, mounted on a Rite Swivel Joint, provides 360° rotation for connecting to multiple pumps, piping sections or storage tanks.

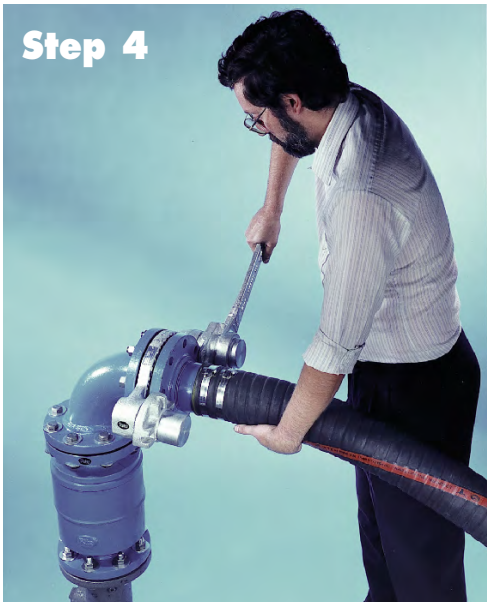
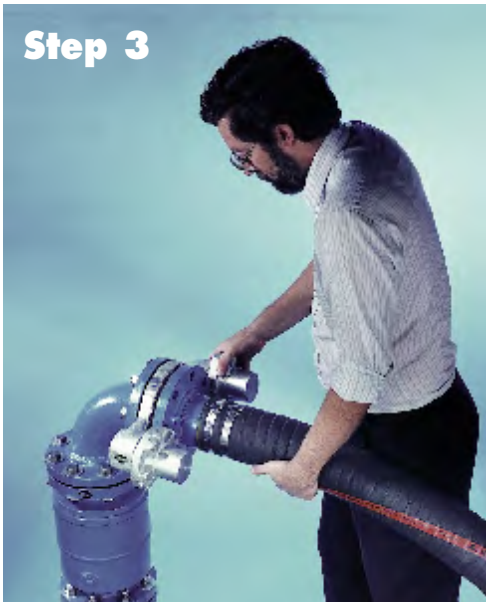


One of the most demanding applications for **RITE CAMLOCK COUPLINGS** is on marine loading arms. Shown here is an 8" Model 146, used for loading Ethylene at cryogenic temperatures, destined for Venezuela.



To facilitate rapid connection/disconnection and to eliminate spills and contamination, the setup below can be used utilizing valves and a spool piece with a bleed off connection.





INSTALLATION :
Mount the **RITE CAMLOCK COUPLING** to the matching flange or pipe (Step 1). The Camlock Coupling is now ready to be engaged to the matching flange.

HOW TO CONNECT :

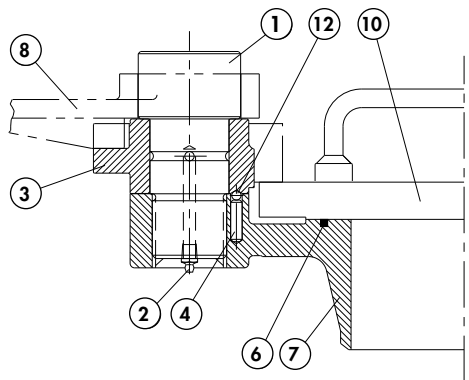
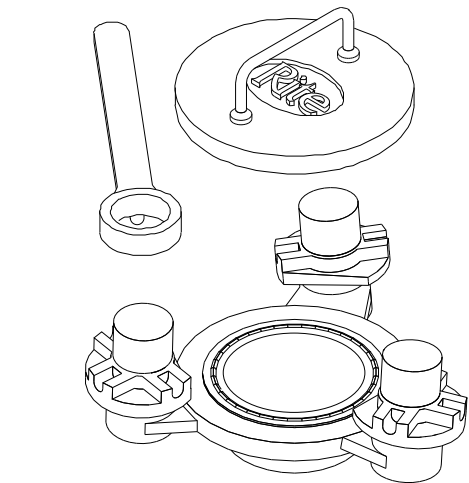
Step 1 If they are not already in position, rotate the cams so that the flats of the cams face the pipe bore to permit the mating flange to be connected, as shown.

Step 2 Position the mating flange against the camlock seal. For camlock couplings with 2 cams a support is provided to help position the flange, as shown. For couplings with more than 2 cams, the cams themselves center the mating flange.

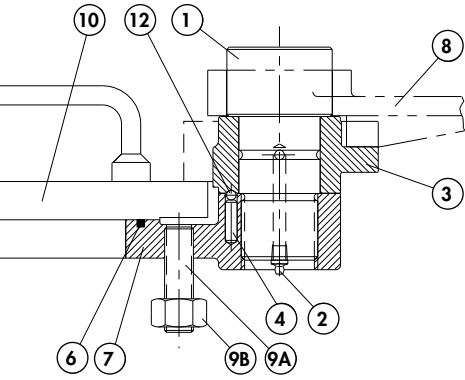
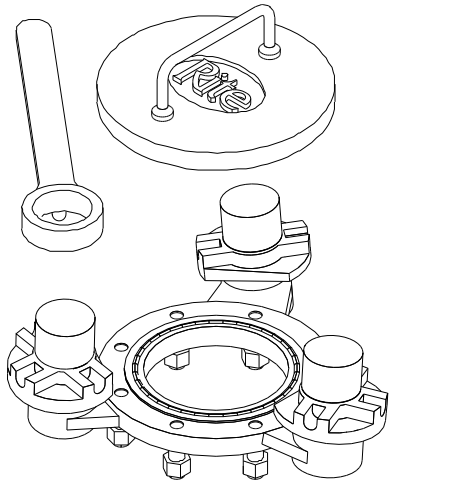
Step 3 By hand, rotate the cams clockwise to hold the flange in position.

Step 4 Using the supplied wrench, torque the cams alternately and evenly to lock the mating flange in position. The system can now be pressurized and used for fluid transfer.

To disconnect, **remove the pressure from the line**, drain the fluid and/or close the required valving. Using the wrench, rotate the cams counterclockwise until the flats face the pipe bore. The connecting hose or pipe is now free to be removed.



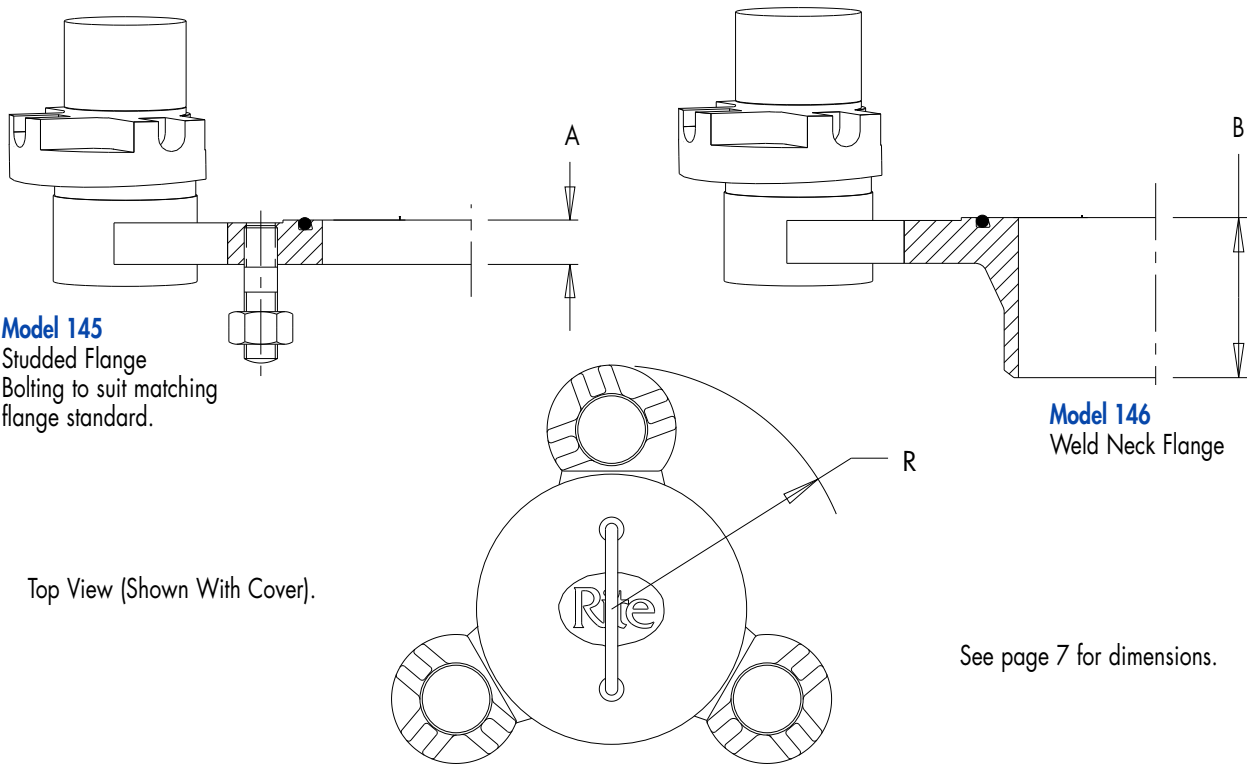
Model 146
Weldneck Flange



Model 145
Studded Flange

		Standard Materials of Construction	
Item	Description	Carbon Steel	Stainless Steel
1	Cam Bolt	ASTM A108-1045 Zinc Coated	ASTM A479-316
2	Grease Nipple	Alemite Model 1610	
3	Cam	ASTM A216-WCB Zinc Coated	ASTM A351-CF8M
4	Spring	Composite	
6	O-Ring	Buna N	
7	Flange	ASTM A105 / ASTM A216-WCB Zinc Coated	ASTM A182-F316 ASTM A351-CF8M
8	Wrench	Ductile Iron (Galvanized)	
9A	Stud	Steel Zinc Coated	Stainless Steel
9B	Nut	Steel Zinc Coated	Stainless Steel
10	Cover and Chain (Optional)	Aluminium	
12	Ball	Steel	

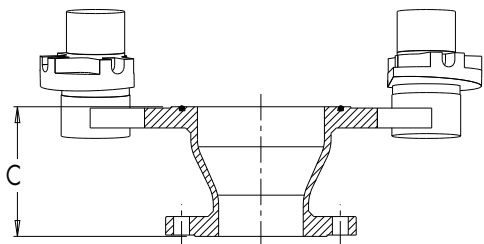
See Pages 6 and 7 for dimensions.
For additional information, see General Notes on back cover.



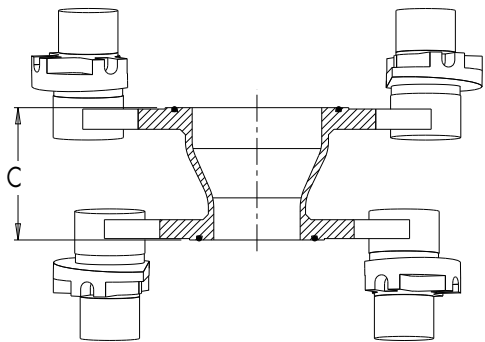
Model 145
Studded Flange
Bolting to suit matching
flange standard.

Model 146
Weld Neck Flange

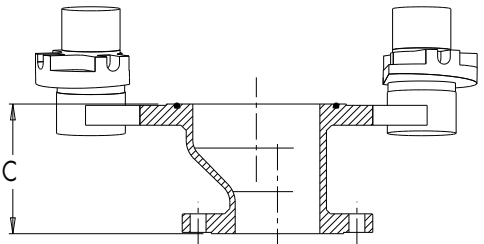
SPOOL CAMLOCK COUPLINGS



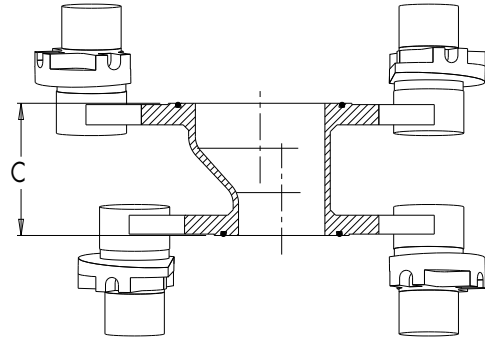
Model 154 Concentric Reducer



Model 152 Concentric Reducer



Model 159 Eccentric Reducer



Model 153 Eccentric Reducer

Straight spool Camlock Couplings available. Length to be specified by customer.

Flange ratings: ANSI 150, PN 10, PN 16, B.S. Table E

Connection Size (in/mm)											
Inches	3"	4"	5"	6"	8"	10"	12"	14"	16"	20"	24"
Millimetres	80	100	125	150	200	250	300	350	400	500	600
A	.94	1.13	.94	1.00	1.25	1.19	1.25	1.38	1.44	1.69	1.88
	23.9	28.6	23.9	25.4	31.8	30.2	31.8	34.9	36.5	42.9	47.6
B	2.75	3.00	3.50	3.50	4.00	4.00	4.50	5.00	5.00	5.69	6.00
	69.9	76.2	88.9	88.9	101.6	101.6	114.3	127.0	127.0	144.5	152.4
R	8.19	8.94	9.44	9.94	11.19	12.44	13.94	14.94	16.19	19.19	20.44
	208.0	227.1	239.8	252.5	284.2	316.0	354.1	379.5	411.2	487.4	519.2
Number of Cams	2	2	2	2 or 3	3	3	4	4	5	6	7
Model	Weight (lbs/kg)										
145	42	45	50	55/70	85	95	135	155	180	260	330
	19	20	23	25/32	39	43	61	70	82	118	150
146	42	45	50	55/70	84	97	140	162	202	260	365
	19	20	23	25/32	38	44	64	73	92	118	166

Flange ratings: ANSI 300, PN 25, PN 40

Connection Size (in/mm)											
Inches	3"	4"	5"	6"	8"	10"	12"	14"	16"	20"	24"
Millimetres	80	100	125	150	200	250	300	350	400	500	600
A	1.13	1.25	1.38	1.44	1.63	1.88	2.00	2.13	2.25	2.50	2.75
	28.7	31.8	35.1	36.6	41.4	47.8	50.8	54.1	57.2	63.5	69.9
B	3.13	3.38	3.88	3.88	4.38	4.63	5.13	5.63	5.75	6.38	6.63
	79.4	85.7	98.5	98.4	111.3	117.6	130.3	143.0	146.1	162.1	168.4
R	8.56	9.44	9.94	10.69	11.94	13.19	14.69	15.64	17.19	19.69	22.4
	217.4	239.8	252.5	271.5	303.3	335.0	373.1	397.3	436.6	500.1	569.0
Number of Cams	3	3	3	4	4	6	6	8	8	10	12
Model	Weight (lbs/kg)										
145	58	67	73	104	125	192	224	281	383	522	775
	26	30	33	47	57	87	102	127	174	237	352
146	60	70	77	102	127	181	228	306	366	528	725
	27	32	35	46	58	82	103	139	166	239	328

Spool Camlock Couplings

Connection Size (in/mm)											
Inches	3"	4"	5"	6"	8"	10"	12"	14"	16"	20"	24"
Millimetres	80	100	125	150	200	250	300	350	400	500	600
C	4.00	4.50	5.56	6.13	6.75	7.75	8.75	13.88	15.00	21.25	21.50
	102	114	141	156	171	197	222	352	381	540	546

Contact factory for working pressures of RITE CAMLOCK COUPLINGS and additional flange ratings.