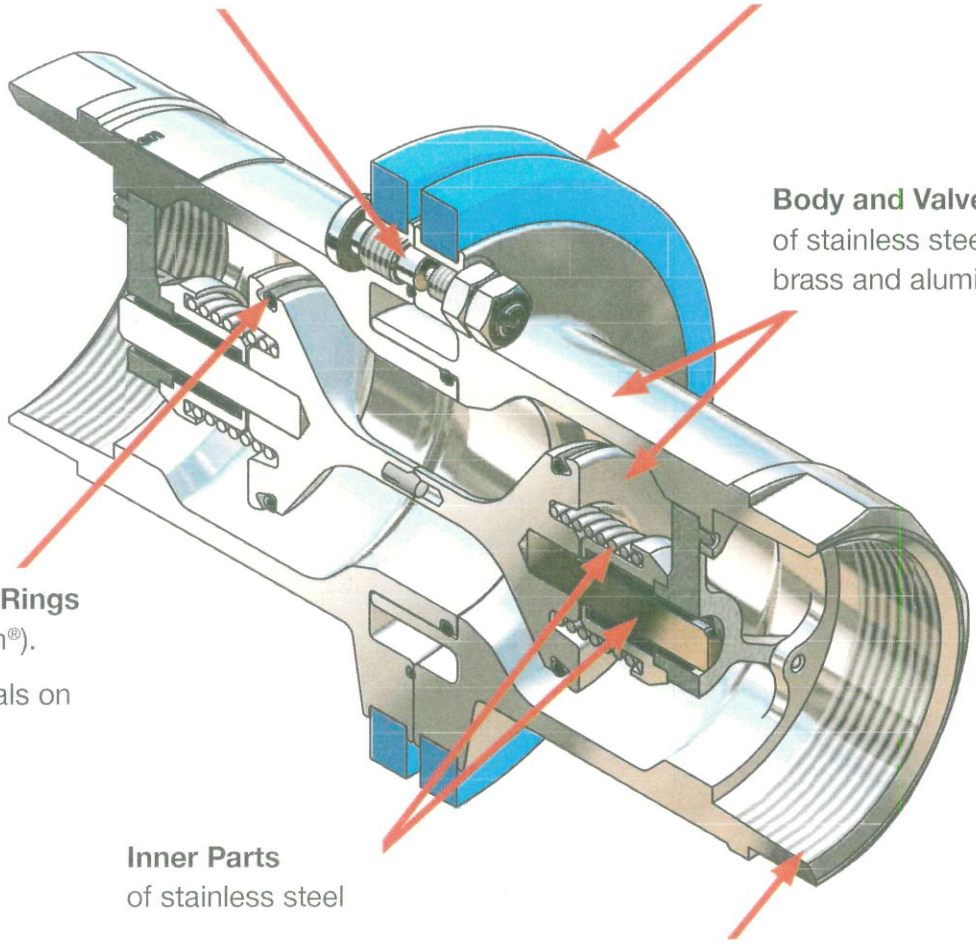
'Marine-Version'

This type is suitable for the installation between two hose assemblies.

The coupling will separate at a defined maximale tensile force, at axial (inline) pull only.

The inner construction is identical to the 'Industrial Version', but in comparison the coupling offers an increased resistance against torsion and bending loads to avoid an unwanted separataion.

Typical applications are ship to rig and ship to ship media transfers.



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Technical Data

Coupling Size, Breaking Force, Connection, Weight

DN	Breaking Force [1]		Connection [2]	Weight (kg) Stainless Steel	Weight (kg) Aluminium
	SS	Al			
1"	4,8 kN	3,2 kN	1" Thread	1,6	-
			1" Flange	2,7	-
2"	13 kN	9 kN	2" Thread	2,6	0,9
			2" Flange	7,3	2,5
2½"	22 kN	10 kN	2½" Thread	7,4	2,5
			2½" Flange	13,2	4,5
3"	33 kN	15 kN	3" Thread	8,5	2,9
			3" Flange	15,1	5,1
4"	52 kN	24 kN	4" Thread	15,5	5,3
			4" Flange	20,7	7,0
5"	81 kN	37 kN	5" Thread	32,0	12,0
			5" Victaulic®	31,0	11,7
6"	92 kN	54 kN	6" Thread	46,8	15,9
			6" Flange	57,6	19,6
8"	165 kN	96 kN	8" Thread	-	-
			8" Flange	71,0	25,9
10"	151 kN	151 kN	10" Flange	120	-
12"	217 kN	217 kN	12" Flange	185	-

[1] **Mann Tek standard**, other on request. **Note**: stated breaking forces refer to an axial separation of the hose assembly or loading arm. For non-axial loads, the necessary separation force is lower. On request, Mann Tek can give additional information if you provide data regarding angle and force application point. To calculate the necessary breaking force, please request the Mann Tek "Design Guideline".

[2] **Thread:** BSP female or male, NPT female or male
Flanges: ASA (ANSI) 150 or 300 psi, DN 25-150 PN 10/16 and PN 25/40, TW1/80, TW3/100, TW7/150, T.T.M.A.

Materials, Temperature Range

	Material	Standard	Temperature Range [3]
Body and Valves	SS (Stainless Steel)	EN 10272 - 1.4404+AT	-40° C up to 250° C
		EN 10213-4 - 1.4409+AT	
	Br/Rg (Brass/Bronze)	EN 12164 - CW614N	-40° C up to 200° C
		EN 1982 - CB491K-GS	
	Al (Aluminium)	EN 755 - AW-6262-T6	-40° C up to 150° C
		EN 1706 - AC-42100-T6	

	Material	Brand Name [4]	Temperature Range [3]
O-Ring	FKM	Viton®	-30° C up to 200° C
	EPDM	-	-40° C up to 120° C
	FFKM	Kalrez® / Chemraz®	-15° C up to 230° C
	NBR	-	-38° C up to 80° C

[3] **Note**: standard temperature range for SBCouplings -20° up to +80° C. For all applications beyond these limits, the suitability of the coupling should be determined separately. Please ask Mann Tek.

[4] Kalrez®, Viton® = registred trademarks of Pont; Chemraz® = registred trademark of Greene Tweed

Working pressure: Aluminium up to 2": PN 16 bar, Aluminium > 2½": PN 10 bar, Brass/Bronze 16 bar, Stainless Steel 25 bar (PN 40 bar on request). Mann Tek guarantees a safety factor of 1:5 as burst pressure.

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Part Number: NC6100M44

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https://configurator.manntek.se/CBC/MARINE_CBC/6/SS/FLANGE/6_ASA_150_B/FLANGE/6_ASA_150_B/PTFE/Product10.html

Product Group	**Cryogenic Breakaway Couplings**
Breakaway Type	**CBC Breaking Bolt Type - Marine Version** Used to protect hose assemblies against excessive loads, e.g. due to pull away incidents or rapid removal of the vessel in emergency situations. Typical applications include container discharge, fuel bunkering and loading operations truck-to-ship, ship-to-ship, terminal-to-ship. Designed with breaking bolts; activation at a defined tensile (pulling) force on the transfer line being applied axially. In comparison to the 'Industrial Version' the coupling offers an increased resistance to torsion and bending loads to prevent unwanted separation. CBC 'Marine-Version' have three external breaking bolts. Breaking forces (release forces) are calculated based on the working pressure of the system in question. Standard breaking forces for SBC are calculated to protect a mating hose with a burst pressure 4 times WP. To protect hoses with other burst pressure specification or adjacent equipment which may be weaker than the hose please contact your sales representative who will provide a design guideline or can forward your special request to the MannTek technical department.

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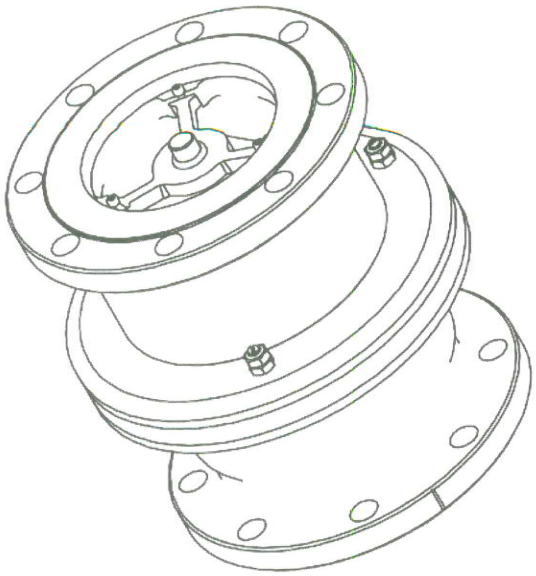

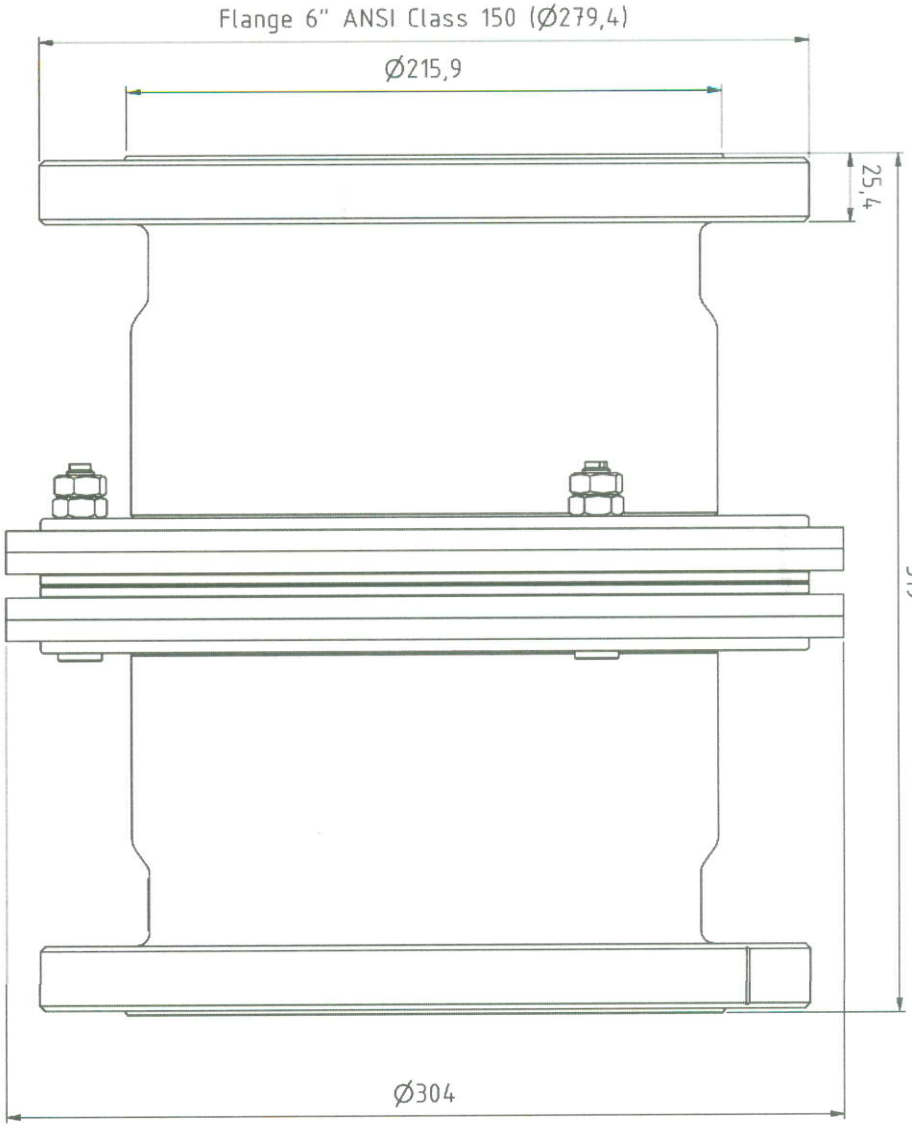

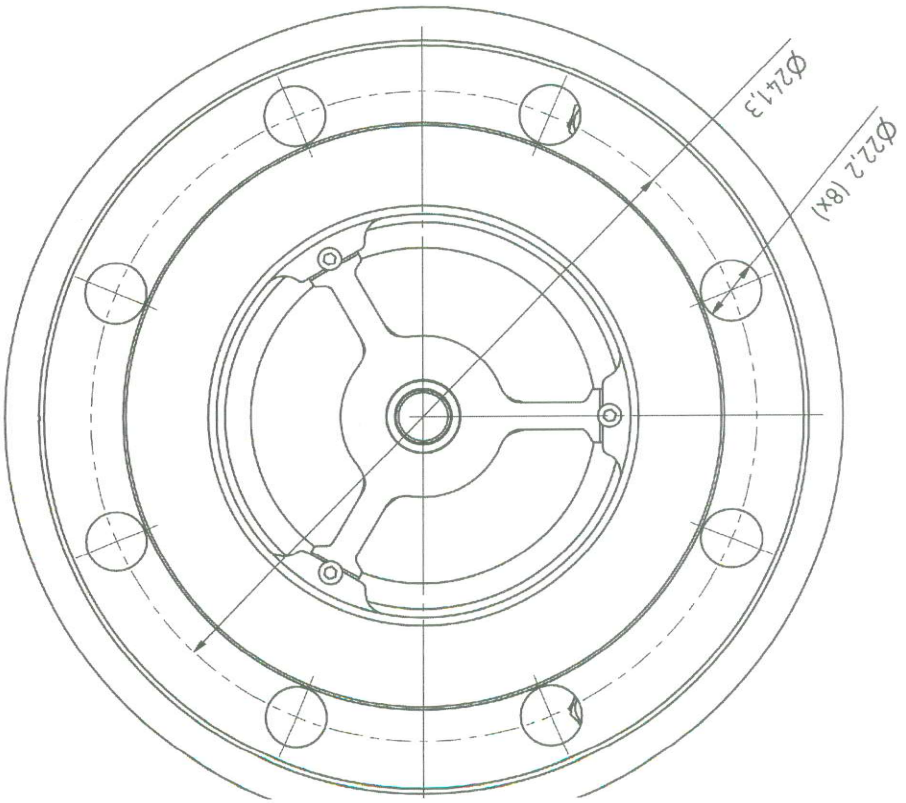

ManTek

NC6100D44-1

Cryogenic Breakaway Couplings

DN 150 (6")

6" ANSI Cl.150