

Bright
ENGINEERS

Shell & Tube Condenser





Bright is an Indian based manufacturing engineering company that designs, manufactures & offers reliable, cost effective industrial engineering products mainly

Heat Ex-changer's for Air Conditioning & Refrigeration industries and Water / Air / Gas / Oil cooling applications since 1981.

Vision & Mission

Bright's **Vision** is to become a leading reputed manufacturer & provider of Shell & Tube Condensers & Evaporators in Indian market with the best possible design to deliver efficient performance by using better designed & developed material & quality workmanship at reasonable cost.

Bright's **Mission** is to expand and continually improve utilizing quality practices and employee involvement to manufacture Heat Ex-changer's for the Refrigeration industry, both in the domestic and international markets, that result in customer and employee satisfaction.

What is a Heat Ex-changer

A heat ex-changer is an equipment that is used to transfer heat between two different fluids without mixing with each other. Heat ex-changer's are used in both cooling and heating processes. Heat Ex-changer's are very important in any Air Conditioning & Refrigeration System.

Heat Ex-changer plays a vital role in any AC & R System. With perfect designing & selection of proper material, HE's shall save the energy & environment. Bright is a team of professional engineers, designing with technical calculation & selection of suitable material to deliver best performance and result.

Products

- Shell & Tube type Water Cooled Condenser
- Shell & Tube type Evaporator (U-Bundle design & Straight Tube design)
- Shell In Shell type Evaporator
- Oil Coolers
- Inter / After Coolers

Condenser Model Nomenclature

B	CD	XXX	X	XX
Bright	Condenser	Model No.	Length Variations S X M Y W Z	NS – Non Standard SW – Sea Water HP – High Pressure

Evaporator Model Nomenclature

B	CH	XXX	X	XX
Bright	Chiller	Model No.	Circuit S – Single D – Double T – Triple Q – Four	NS – Non Standard BT – Brine Temperature SS04 – SS304 Construction SS16 – SS316 Construction

Bright's shell and tube condensers represent the flawless solution for all the application where HFC condensation is required such as Water cooled chillers, Condensing units and heat pumps for industrial cooling & air conditioning in combination with

different types of processes and Commercial refrigeration plants with water cooled condensation. On-board or all the other applications where sea, lake or river water is available.



Air Conditioning



Industrial & Process Cooling Refrigeration



Marine Refrigeration

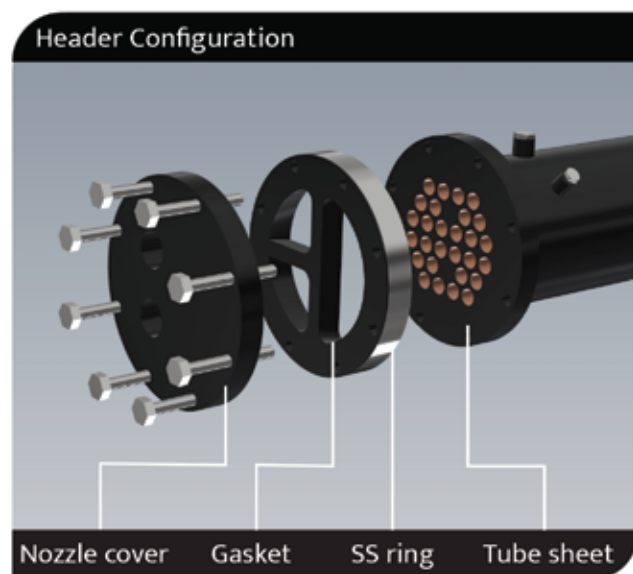


Commercial Refrigeration

An Extensive Range

Bright's Shell & Tube Condenser production includes a various range of condensers providing easy solutions for Air conditioning, Refrigeration and Cooling application including marine applications.

- Bright condensers have been carefully optimized for the most used HCFC / HFC refrigerants.
- All condenser models are easily openable for inspection and maintenance purposes.
- Standard models attain condensation capacity ranging from 3 to 900 kW. Also higher capacity models shall be offered on request.
- Multi circuit (2/3/4) condensers are also available on request for multi-circuit chillers.
- Customized length with different MOC can be designed for specific application as per request.
- Bright's quality systems are certified in accordance with ISO 9001 : 2015, which further improves the warranty of the S & T condenser.



Salient Features & Benefits

- 1) **High Performance** due to exceptionally designed integrally finned (enhancing Heat Transfer area) & inner grooved (for better performance due to turbulence on water side path) Copper / Cupro-Nickle tubes and specific tube geometry pattern.
- 2) **Low Ref. Gas volume requirement** due to compact Size, less space consumption & less weight.
- 3) **Wide model range** for easy and ideal selection.
- 4) **Optimized for Various Refrigerant Gas** – R-22 / R-134a / R- 404a / R-407c / R-410a (Ammonia Ref. Gas shall be available on request).
- 5) **2 passes & 4 passes version** (3 pass available on request).
- 6) **Easily open-able** for inspection & maintenance / cleaning.
- 7) **Solutions for applications with fresh water & sea water.**
- 8) **All the material are thoroughly inspected, tested & manufactured as per standard pressure vessel codes.** Specific third party inspections / approvals available on request.
- 9) **All condensers are pressure & leak tested** before delivery ensuring top quality products.
- 10) **Extra care taken for proper Internal & external cleaning** to run system smoothly.
- 11) **Synthetic enamel spray painting** with prior primer coating to make product more attractive.
- 12) **Proper packing** make equipment reach your place safely.

Manufacturing Quality & Efficient Component Design

Models designed for fresh water application has following major components.

- Shell : Carbon steel
- Tube sheet : Carbon steel
- Tubes : Copper (Integrally finned & Inner-grooved)
- End Covers : Carbon steel
- Gasket : Thermopolymer compound
- Hardware : Graded Alloy Steel as per pressure requirements (High Tensile)

Bright's Condensers are also available in stainless steel execution (AISI 304 / 316 / 316L) for corrosive atmosphere.

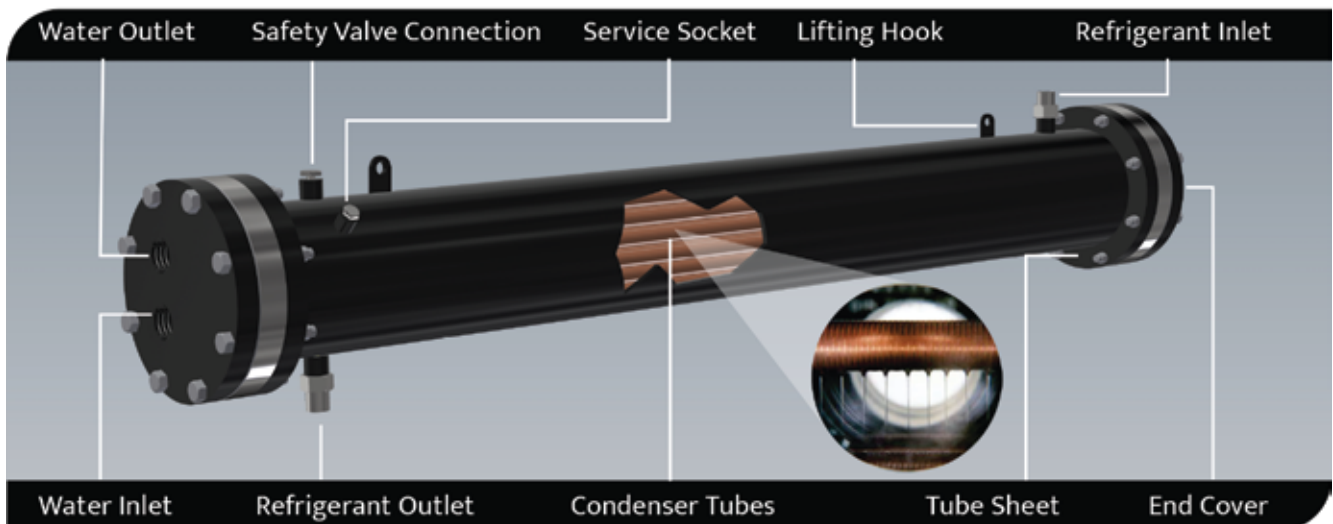
Bright shell and tube Condensers have a high level of mechanical strength and resistance to vibration and corrosion.

All machining, drilling operations are carried out with CNC/VMC for accuracy to meet required quality.

The material selection is done not only to achieve

Heat Ex-change target, but also to meet pressure needs due to years of intensive usage.

All the carbon steel components are sand blasted and cleaned thoroughly including the internal wall of the shell before assembly. Also, tube sheets & end covers are completely zinc-coated to avoid corrosion and rusting. Provision of sight glass on shell side is available as an option.



Marine application (Sea Water Condensers)

Different condenser models are available ranging from 15 kW to 900 kW, for on board marine applications and for all the other installations where it is mandatory to use the sea as a natural source of cooling water.

Marine models are equipped with the following components:

- Shell : Carbon steel
- Tube sheets : AISI 316L stainless steel
- Tubes : Integrally finned Cu/Ni tubes (90/10% or 70/30%)
- Covers : AISI 316L stainless steel
- Gasket : Thermopolymer compound

Marine units are provided with interchangeable sacrificing anodes made of special metal to protect equipment.



Quality & Approvals

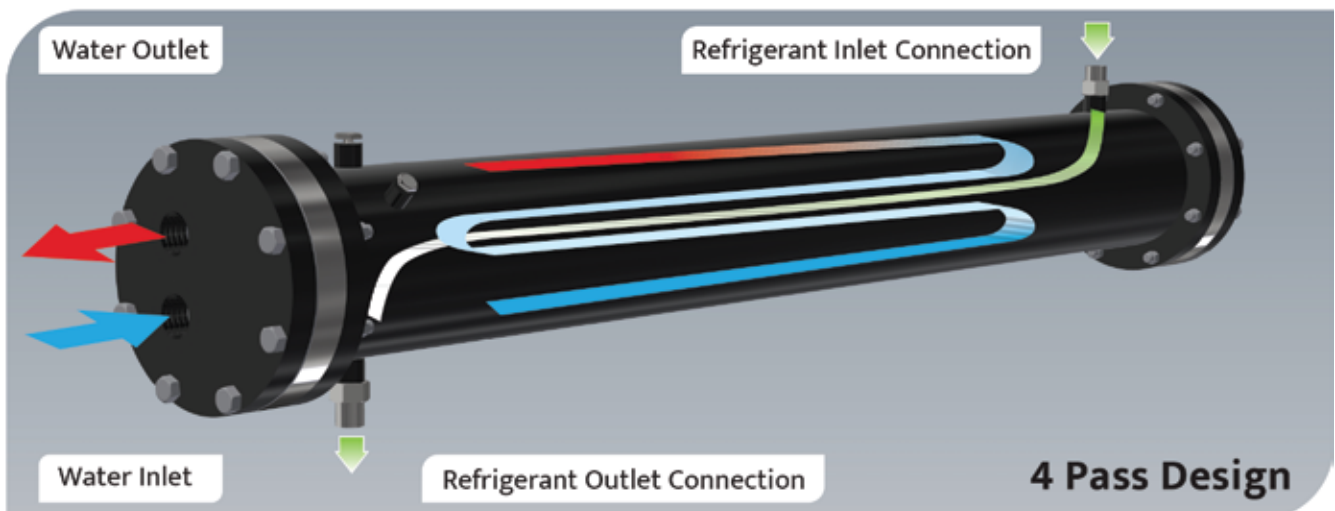
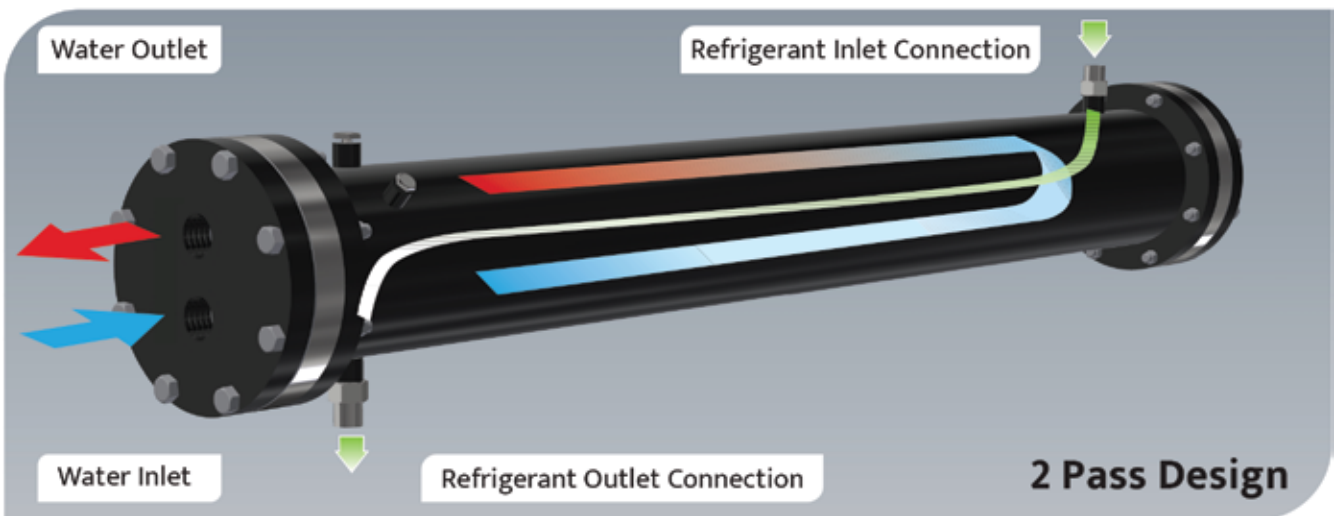
The working limits are defined by the design pressure (i. e. the maximum working pressure) and the working temperature range. These limits depend on the pressure vessel approval required. Bright's condensers are available as a standard with the most diffused pressure vessel approvals. On request marine or other specific approvals are available.

Testing Pressure Limits

Bright's shell and tube condensers are manufactured in accordance with ISO 9001:2015. Each and every unit goes through an individual pressure / leak test as specified by the relevant authority and in accordance with Bright's internal quality testing procedures.

Nominal Data	Unit	Bright (Self Inspected)	CE (PED 97/23 EC)	ASME
Design pressure refrigerant side	bar	20	30	30
Test pressure refrigerant side	bar	23	43	45
Design pressure water side	bar	5	10	10.3
Test pressure water side	bar	10	15	15.5
Design temperature range	°C.	(-) 10°C / (+) 90°C	(-) 10°C / (+) 90°C	(-) 10°C / (+) 90°C

Versions



Best Performance with preventive maintenance

Shell and tube condensers are often used with impure / hard water for heavy duty applications. It is a thrilling challenge for a designed product in order to have a long working life and efficient performance. In these cases, periodical cleaning is required in order to

keep the heat exchanger's performances unchanged over a period of time. Bright's fresh and sea water condensers ensure easy opening for inspection, cleaning and maintenance purposes.

The nominal performances have been calculated on the basis of a Fouling Factor equal to 0.000043 m²K/W (0.0005 h m²K/kcal)

v > 1.2 m/s	Normal city Water Treated tower water Clean river water Sea Water	FF 0.000086 m ² K/W
v > 1.2 m/s	City lime water Normal tower water Brine	FF 0.000172 m ² K/W
v > 1.2 m/s	Tower lime water Muddy water	FF 0.000344 m ² K/W



Variation available in Connections

Refrigerant side :

- Coupling Connections (NPT)
- Rotolock Connections
- Bush Connections
- Pipe Connections

Reference page no : 21 & 22

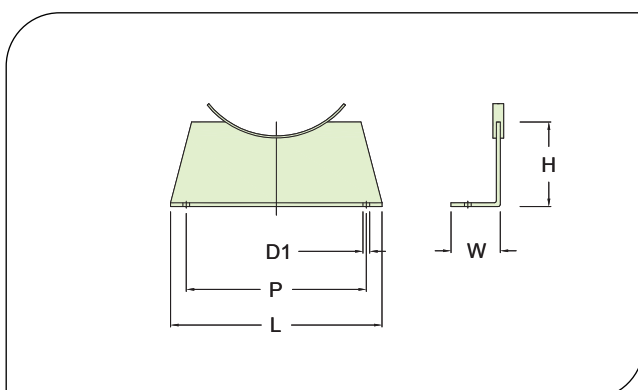
Water Side :

- Threaded Connections (BSP)
- Pipe connections
- Flange Connections
- Victaulic Connections

Supports / Mountings

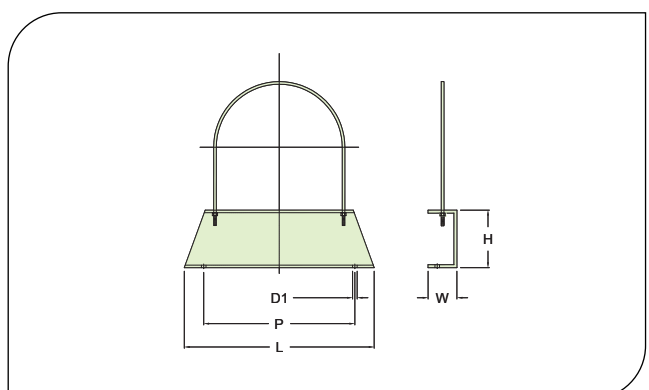
Weldable Mounting bracket :

Bright's Condenser can be provided with supports welded to the shell.



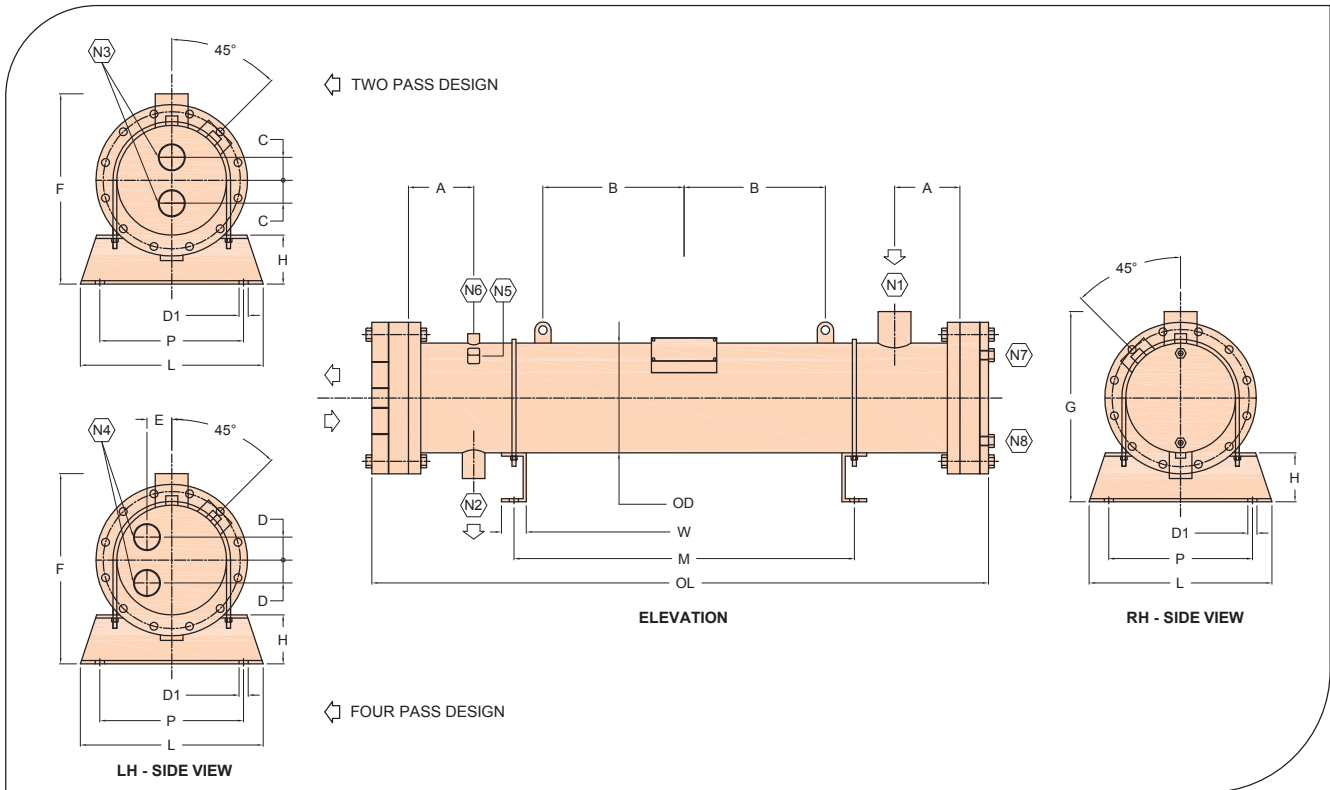
“U” Clamp Mounting bracket :

Universal “U” Clamp brackets are easily movable across the length & positioned as per convenience during the installation with ease and flexibility.



* Illustrated in technical data pages

Shell & Tube Condenser

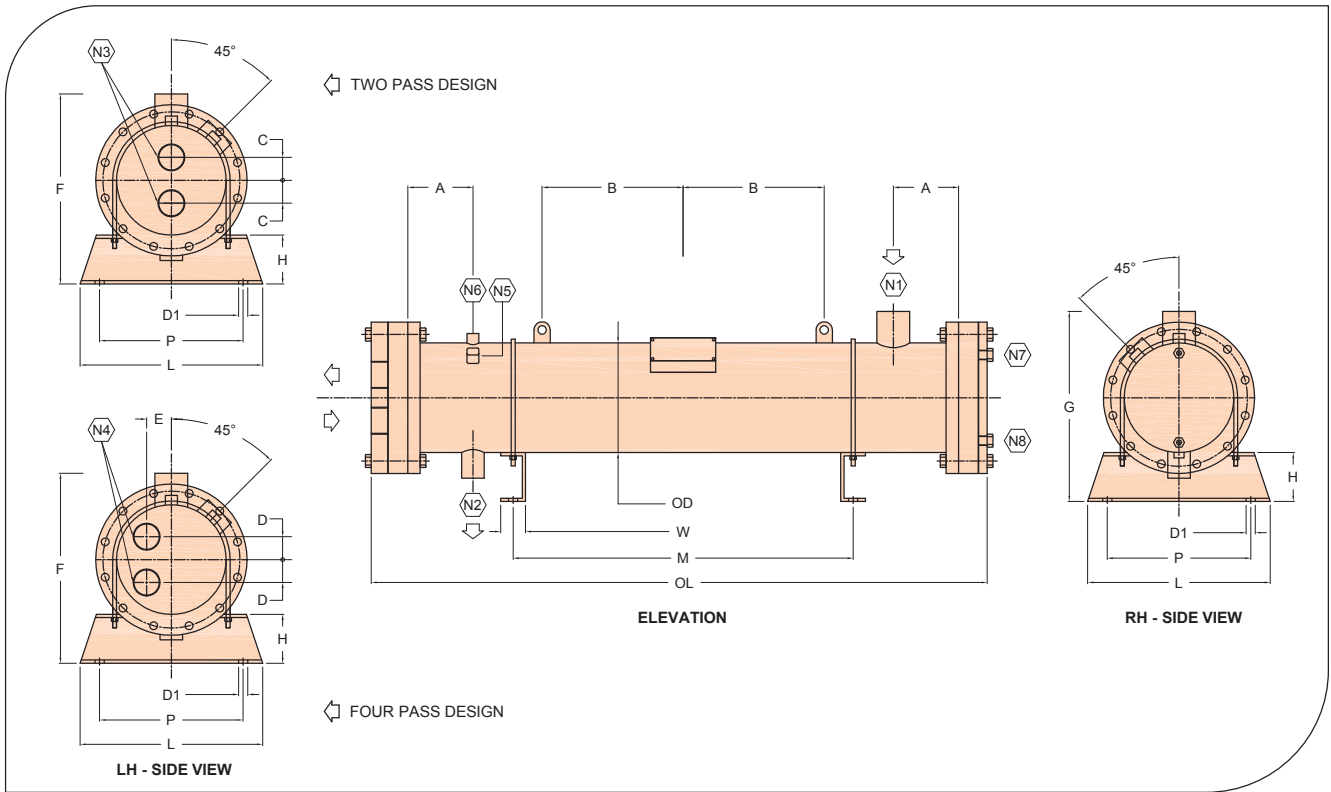


MODEL			BCD 08	BCD 12	BCD 15	BCD 35	BCD 45	BCD 60	BCD 80	BCD 100	BCD 120	BCD 145
DETAILS	SIGN	UNIT										
Dimension	OD	mm	140	140	140	168	168	168	168	168	168	168
	OL	mm	760	760	760	800	800	800	800	1500	1500	1500
	A	mm	100	100	100	100	100	100	100	100	100	100
	B	mm	130	130	130	130	130	130	130	480	480	480
	C	mm	35	35	35	45	45	45	45	45	45	45
	D	mm	32	32	32	35	35	35	35	35	35	35
	E	mm	28	28	28	35	35	35	35	35	35	35
	F	mm	275	275	275	328	328	328	328	333	333	333
Mounting Bracket	D1	mm	14	14	14	14	14	14	14	14	14	14
	P	mm	200	200	200	220	220	220	220	220	220	220
	L	mm	250	250	250	280	280	280	280	280	280	280
	W	mm	38	38	38	38	38	38	38	38	38	38
	M	mm	380	380	380	380	380	380	380	700	700	700
	H	mm	75	75	75	75	75	75	75	75	75	75
Connection	N1	-	RC 16	RC 16	RC 16	RC 28	RC 28	RC 28	RC 28	RC 35	RC 35	RC 35
	N2	-	RC 13	RC 13	RC 13	RC 22	RC 22	RC 22	RC 22	RC 22	RC 22	RC 22
	N3	-	TC 25	TC 25	TC 25	TC 50	TC 50	TC 50	TC 50	TC 50	TC 50	TC 50
	N4	-	TC 25	TC 25	TC 25	TC 40	TC 40	TC 40	TC 40	TC 40	TC 40	TC 40
	N5	In-NPT	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	N6	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	N7	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	N8	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Volumes	V-Ref	dm ³	7.4	6.8	6.5	10.3	10	9.1	8.5	21.1	19.3	18.7
	V-H2O	dm ³	1.1	1.7	2.1	2.3	2.6	3.5	4.1	5.3	7.1	7.7
Weight	W	Kg	42	44	45	51	52	53	55	70	75	77

- N1 Refrigerant Inlet
- N2 Refrigerant Outlet
- N3 Water Inlet/Outlet (2 Pass)
- N4 Water Inlet/Outlet (4 Pass)

- N5 Service Socket
- N6 Safety Valve Connection
- N7 Vent Connection
- N8 Water Drain Port

- OD Outer Diameter
- OL Overall Length
- V-Ref Refrigerant Volume
- V-H2O Water Volume



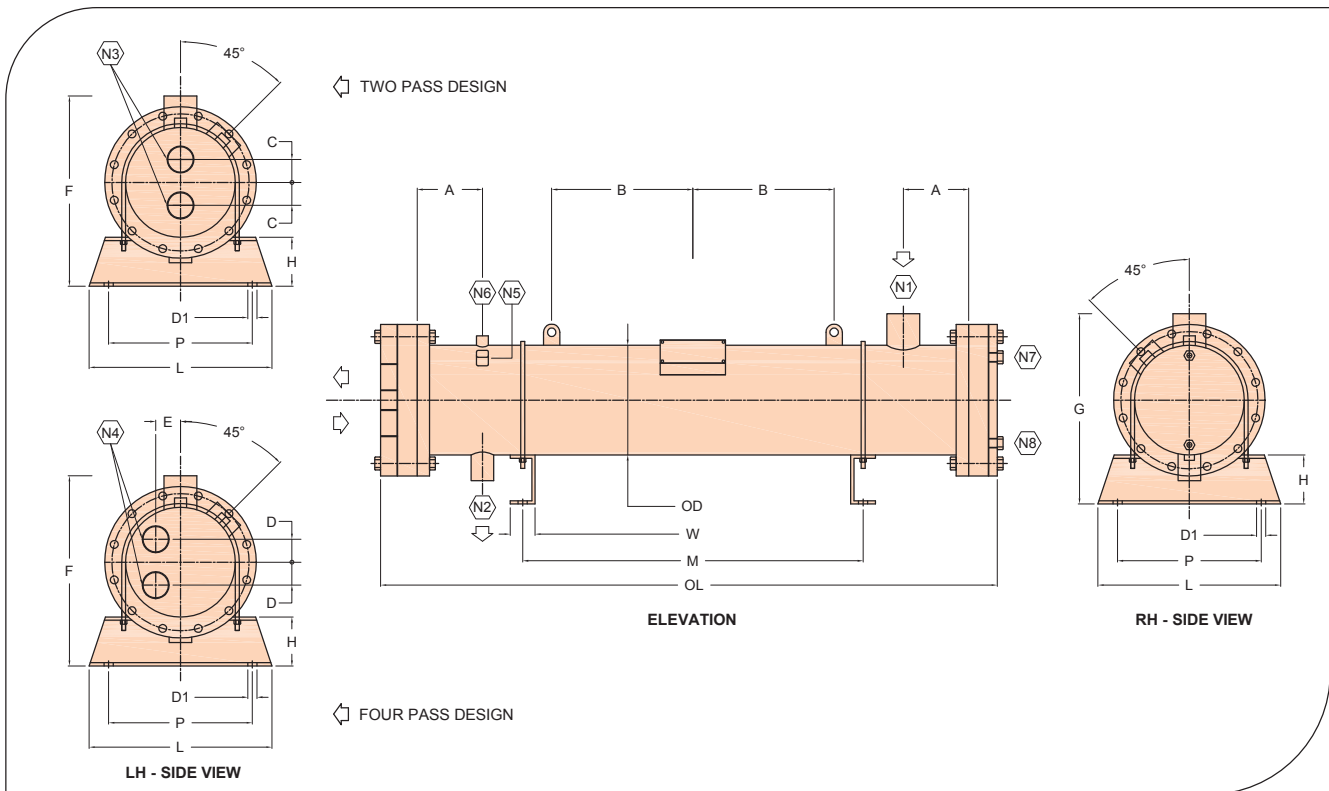
MODEL			BCD 160	BCD 180	BCD 210	BCD 235	BCD 260	BCD 285	BCD 335	BCD 390	BCD 440	BCD 520
DETAILS	SIGN	UNIT										
Dimension	OD	mm	168	219	219	219	219	273	273	273	273	273
	OL	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	A	mm	100	110	110	110	110	140	140	140	140	140
	B	mm	480	450	450	450	450	420	420	420	420	420
	C	mm	45	50	50	50	50	60	60	60	60	60
	D	mm	35	45	45	45	45	60	60	60	60	60
	F	mm	333	419	419	419	419	453	453	453	453	453
Mounting Bracket	D1	mm	14	14	14	14	14	14	14	14	14	14
	P	mm	220	280	280	280	280	340	340	340	340	340
	L	mm	280	330	330	330	330	390	390	390	390	390
	W	mm	38	50	50	50	50	50	50	50	50	50
	H	mm	75	100	100	100	100	100	100	100	100	100
Connection	N1	-	RC 35	RC 42	RC 42	RC 42	RC 42	BC 54	BC 54	BC 54	BC 54	BC 54
	N2	-	RC 22	RC 28	RC 28	RC 28	RC 28	RC 35	RC 35	RC 35	RC 35	RC 35
	N3	-	TC 50	TC 65	TC 65	TC 65	TC 65	TC 80	TC 80	TC 80	TC 80	TC 80
	N4	-	TC 40	TC 50	TC 50	TC 50	TC 50	TC 80	TC 80	TC 80	TC 80	TC 80
	N5	In-NPT	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	N6	In-NPT	3/8	3/8	3/8	3/8	3/8	1/2	1/2	1/2	1/2	1/2
	N7	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	N8	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Volumes	V-Ref	dm3	18.1	36.2	35	33.8	32	55.6	53.2	50.8	49.6	48.4
	V-H2O	dm3	8.3	10.1	11.3	12.5	14.2	16.7	19.1	21.4	22.6	23.8
Weight	W	Kg	79	103	106	109	114	161	168	174	177	180

- N1 Refrigerant Inlet
- N2 Refrigerant Outlet
- N3 Water Inlet/Outlet (2 Pass)
- N4 Water Inlet/Outlet (4 Pass)

- N5 Service Socket
- N6 Safety Valve Connection
- N7 Vent Connection
- N8 Water Drain Port

- OD Outer Diameter
- OL Overall Length
- V-Ref Refrigerant Volume
- V-H2O Water Volume

Shell & Tube Condenser



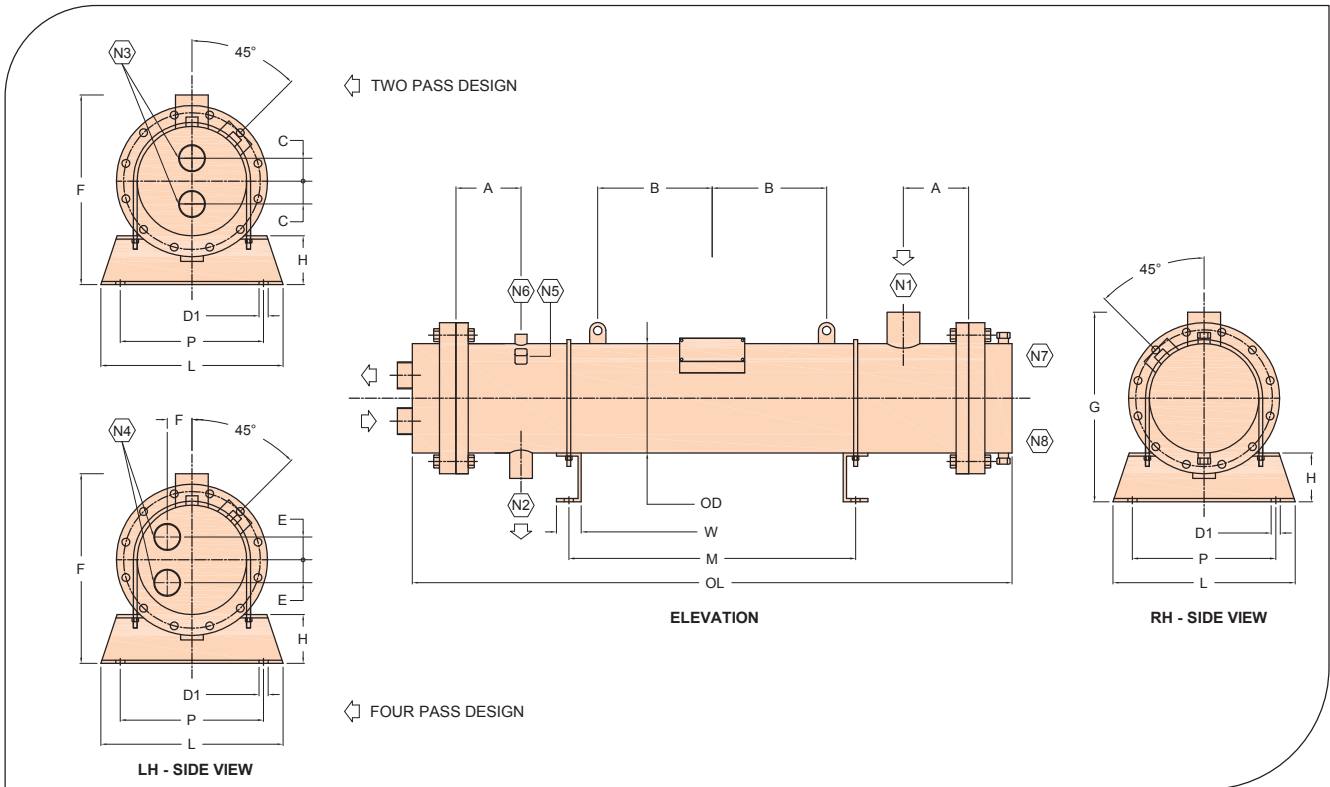
MODEL			BCD 180W	BCD 210W	BCD 235W	BCD 260W	BCD 390W	BCD 390X	BCD 520W	BCD 520X
DETAILS	SIGN	UNIT								
Dimension	OD	mm	219	219	219	219	273	273	273	273
	OL	mm	1900	1900	1900	1900	1900	2500	1900	2500
	A	mm	110	110	110	110	140	140	140	140
	B	mm	450	450	450	450	420	420	420	420
	C	mm	50	50	50	50	60	60	60	60
	D	mm	45	45	45	45	60	60	60	60
	E	mm	45	45	45	45	60	60	60	60
	F	mm	419	419	419	419	453	453	453	453
Mounting Bracket	D1	mm	14	14	14	14	14	14	14	14
	P	mm	280	280	280	280	340	340	340	340
	L	mm	330	330	330	330	390	390	390	390
	W	mm	50	50	50	50	50	50	50	50
	M	mm	1235	1235	1235	1235	1235	1235	1235	1235
	H	mm	100	100	100	100	100	100	100	100
Connection	N1	-	RC 42	RC 42	RC 42	RC 42	BC 54	BC 54	BC 54	BC 54
	N2	-	RC 28	RC 28	RC 28	RC 28	RC 35	RC 35	RC 35	RC 35
	N3	-	TC 65	TC 65	TC 65	TC 65	TC 80	TC 80	TC 80	TC 80
	N4	-	TC 50	TC 50	TC 50	TC 50	TC 80	TC 80	TC 80	TC 80
	N5	In-NPT	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	N6	In-NPT	3/8	3/8	3/8	3/8	1/2	1/2	1/2	1/2
	N7	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
	N8	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Volumes	V-Ref	dm3	47	45.5	44	41.7	66.1	89	63	85
	V-H2O	dm3	13	14.5	16.1	18.4	27.6	36.7	30.6	40.8
Weight	W	Kg	109	112	115	120	189	210	195	215

- N1 Refrigerant Inlet
- N2 Refrigerant Outlet
- N3 Water Inlet/Outlet (2 Pass)
- N4 Water Inlet/Outlet (4 Pass)

- N5 Service Socket
- N6 Safety Valve Connection
- N7 Vent Connection
- N8 Water Drain Port

- OD Outer Diameter
- OL Overall Length
- V-Ref Refrigerant Volume
- V-H2O Water Volume

Shell & Tube Condenser

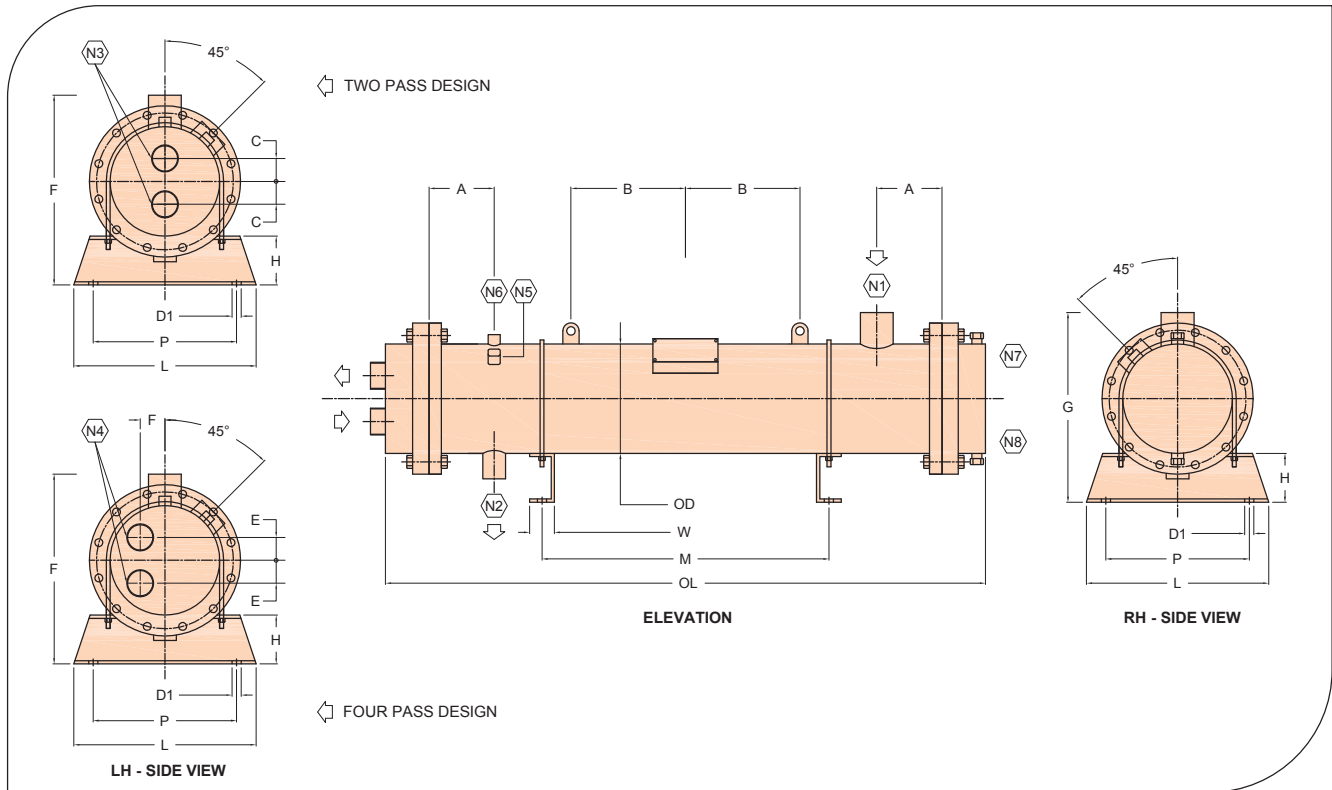


MODEL			BCD 470W	BCD 470X	BCD 530W	BCD 530X	BCD 550W	BCD 550X	BCD 610X	BCD 680X	BCD 760X
DETAILS	SIGN	UNIT									
Dimension	OD	mm	324	324	324	324	324	324	406	406	406
	OL	mm	1970	2570	1970	2570	1970	2570	2570	2570	2570
	A	mm	150	150	150	150	150	150	150	150	150
	B	mm	500	800	500	800	500	800	800	800	800
	C	mm	120	120	120	120	120	120	140	140	140
	E	mm	75	75	75	75	75	75	90	90	90
	F	mm	62	62	62	62	62	62	75	75	75
Mounting Bracket	G	mm	524	524	524	524	524	524	656	656	656
	D1	mm	14	14	14	14	14	14	18	18	18
	P	mm	380	380	380	380	380	380	480	480	480
	L	mm	440	440	440	440	440	440	585	585	585
	W	mm	50	50	50	50	50	50	75	75	75
	H	mm	100	100	100	100	100	100	150	150	150
Connection	N1	-	PC 65	PC 65	PC 65	PC 65	PC 65	PC 65	PC 100	PC 100	PC 100
	N2	-	RC 42	RC 42	RC 42	RC 42	RC 42	RC 42	BC 54	BC 54	BC 54
	N3	-	FC 100	FC 100	FC 100	FC 100	FC 100	FC 100	FC 125	FC 125	FC 125
	N4	-	PC 100	PC 100	PC 100	PC 100	PC 100	PC 100	PC 125	PC 125	PC 125
	N5	In-NPT	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	N6	In-NPT	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	N7	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	1/2	1/2	1/2
	N8	In-NPT	3/8	3/8	3/8	3/8	3/8	3/8	1/2	1/2	1/2
Volumes	V-Ref	dm ³	94.8	127.7	92.5	124.6	86.4	116.5	208.2	201.1	190.9
	V-H2O	dm ³	39	52	41.3	55.1	47.5	63.3	71.4	78.6	88.8
Weight	W	Kg	307	335	315	345	330	365	525	540	565

- N1 Refrigerant Inlet
- N2 Refrigerant Outlet
- N3 Water Inlet/Outlet (2 Pass)
- N4 Water Inlet/Outlet (4 Pass)

- N5 Service Socket
- N6 Safety Valve Connection
- N7 Vent Connection
- N8 Water Drain Port

- OD Outer Diameter
- OL Overall Length
- V-Ref Refrigerant Volume
- V-H2O Water Volume



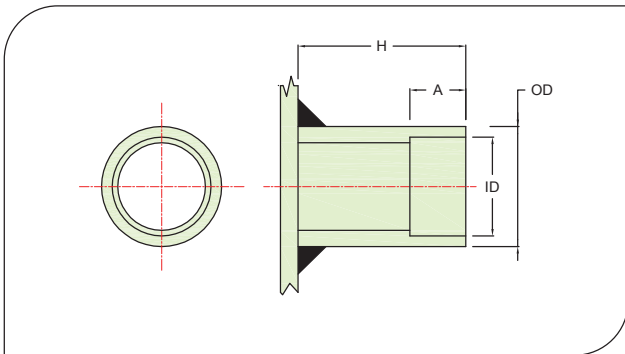
MODEL			BCD 840X	BCD 900X	BCD 900Y	BCD 940X	BCD 940Y	BCD 960Y	BCD 960Z	BCD 980Y	BCD 980Z
DETAILS	SIGN	UNIT									
Dimension	OD	mm	406	456	456	456	456	508	508	508	508
	OL	mm	2570	2570	2870	2570	2870	2870	3170	2870	3170
	A	mm	150	150	150	150	150	150	150	150	150
	B	mm	800	800	950	800	950	950	1100	950	1100
	C	mm	140	150	150	150	150	150	150	150	150
	E	mm	90	100	100	100	100	105	105	105	105
	F	mm	75	90	90	90	90	100	100	100	100
	G	mm	656	706	706	706	706	758	758	758	758
Mounting Bracket	D1	mm	18	18	18	18	18	18	18	18	18
	P	mm	480	530	530	530	530	580	580	580	580
	L	mm	585	635	635	635	635	635	635	635	635
	W	mm	75	75	75	75	75	75	75	75	75
	M	mm	1835	1835	2115	1835	2115	2115	2630	2115	2630
	H	mm	150	150	150	150	150	150	150	150	150
Connection	N1	-	PC 100	PC 100	PC 100	PC 100	PC 100	PC 100	PC 100	PC 100	PC 100
	N2	-	BC 54	BC 54	BC 54	BC 54	BC 54	BC 54	BC 54	BC 54	BC 54
	N3	-	FC 125	FC 150	FC 150	FC 150	FC 150	FC 150	FC 150	FC 150	FC 150
	N4	-	PC 125	PC 125	PC 125	PC 125	PC 125	PC 125	PC 125	PC 125	PC 125
	N5	In-NPT	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	N6	In-NPT	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	N7	In-NPT	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	N8	In-NPT	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Volumes	V-Ref	dm ³	186.8	257.1	290.4	234.6	265.1	333.2	371.5	312.6	348.5
	V-H ₂ O	dm ³	92.9	102.1	114.8	124.5	140	160.7	178.6	181.4	201.6
Weight	W	Kg	575	665	715	710	760	925	990	980	1050

- N1 Refrigerant Inlet
- N2 Refrigerant Outlet
- N3 Water Inlet/Outlet (2 Pass)
- N4 Water Inlet/Outlet (4 Pass)

- N5 Service Socket
- N6 Safety Valve Connection
- N7 Vent Connection
- N8 Water Drain Port

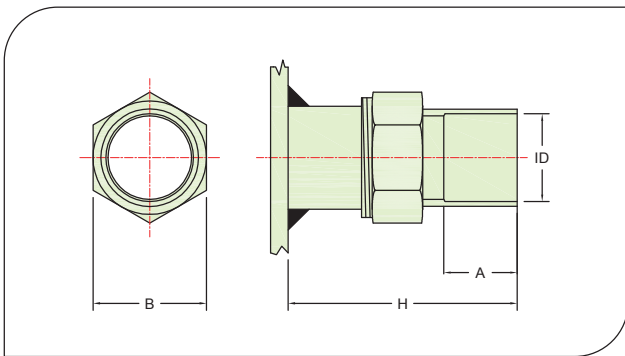
- OD Outer Diameter
- OL Overall Length
- V-Ref Refrigerant Volume
- V-H₂O Water Volume

Bush Connection (BC)



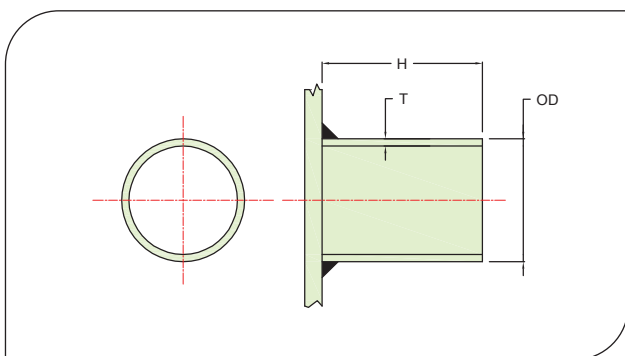
Type	OD [mm]	ID [mm]	A [mm]	H [mm]
BC 16	21.8	16.2	15	60
BC 22	27.3	22.5	15	60
BC 28	34.2	28.9	20	60
BC 35	42.9	35.3	20	60
BC 42	48.8	41.7	30	80
BC 54	60.8	54	30	80
BC 67	76.6	67	40	100

Rotolock Connection (RC)



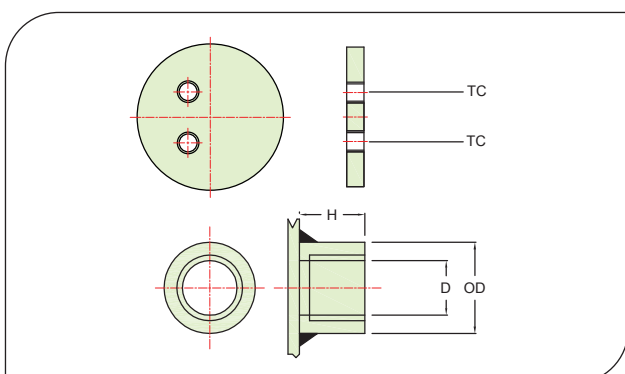
Type	Thread	ODS [Inch]	ID [mm]	A [mm]	B [mm]	H [mm]
RC 13	1" - UNS	1/2	13	16	30	55
RC 16	1" - UNS	5/8	16.2	16	30	55
RC 19	1-1/4" - UNF	3/4	19.3	22	36	70
RC 22	1-1/4" - UNF	7/8	22.5	22	36	70
RC 28	1-3/4" - UN	1-1/8	28.9	22	50	85
RC 35	1-3/4" - UN	1-3/8	35.3	35	50	90
RC 42	2-1/4" - UN	1-5/8	41.7	35	62	100

Pipe Connection (PC)



Type	OD [Inch]	T [mm]	H [mm]
PC 50	60.8	4.5	100
PC 65	76.6	4.5	100
PC 80	89.9	4.85	100
PC 100	115	5.4	100
PC 125	140.8	5.4	100
PC 150	166.5	5.4	100

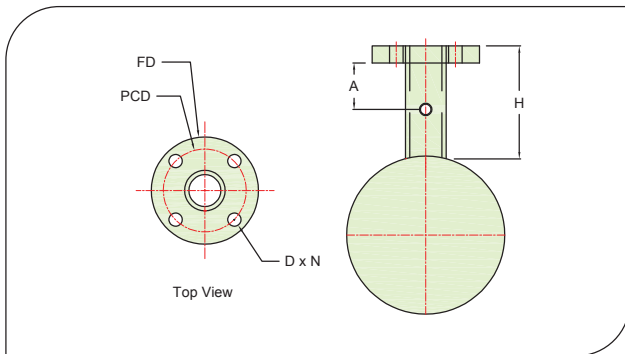
Threaded Connection (TC) / NPT Coupling Connection (NC)



Type	Thread	D [Inch]
TC 25	BSP	1
TC 40	BSP	1.5
TC 50	BSP	2
TC 65	BSP	2.5
TC 80	BSP	3

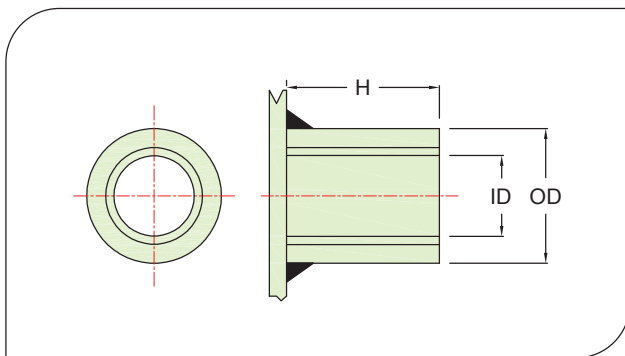
Type	D [Inch]	OD [mm]	H [mm]
NC 14	1/4	20	21
NC 38	3/8	25	21
NC 12	1/2	30	25
NC 01	1	35	30

Flange Connection (FC)



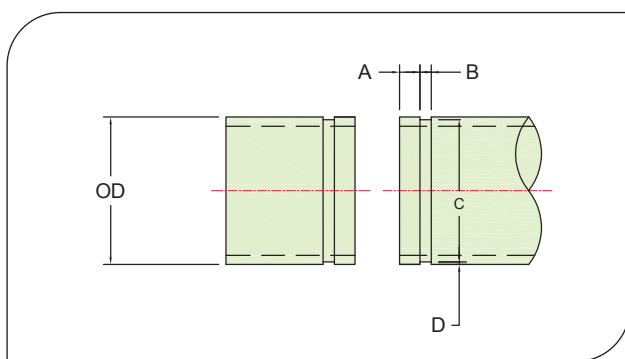
Type	DN [Inch]	H [mm]	A [mm]	FD [mm]	PCD [mm]	D [mm]	N [Nos.]
FC 40	1.5	130	55	127	98	16	4
FC 50	2	130	55	152	120	19	4
FC 65	2.5	130	55	178	140	19	4
FC 80	3	150	65	190	152	19	4
FC 100	4	150	65	228	190	19	8
FC 150	6	150	65	279	241	22	8

BSP Coupling Connection (CC)



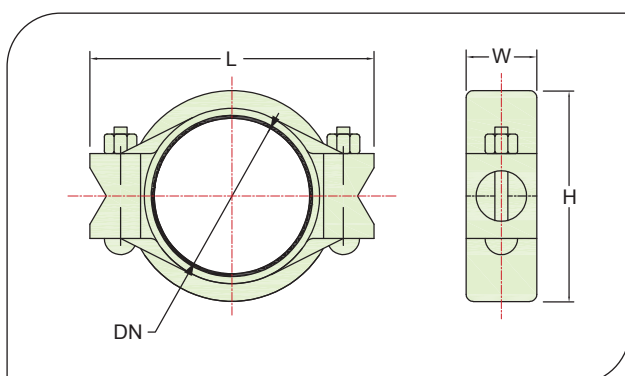
Type	D [mm]	H [mm]
CC 40	55	55
CC 50	70	65
CC 65	85	70
CC 80	100	75
CC 100	125	90

Victaulic Pipe Connection (VPC)



Type	DN [Inch]	OD [mm]	A [mm]	B [mm]	C [mm]	D [mm]
VPC 40	1.5	48.3	15.88	7.14	45.09	1.6
VPC 50	2	60.3	15.88	8.74	57.15	1.6
VPC 65	2.5	73	15.88	8.74	69.09	1.98
VPC 80	3	88.9	15.88	8.74	84.94	1.98
VPC 100	4	114.3	15.88	8.74	110.08	2.11
VPC 125	5	141.3	15.88	8.74	137.03	2.13
VPC 150	6	168.3	15.88	8.74	163.96	2.16

Victaulic Coupling Connection (VC)*



Type	DN [Inch]	L [mm]	H [mm]	W [mm]
VC 40	1.5	112	70	44
VC 50	2	124	82	44
VC 65	2.5	148	96	44
VC 80	3	166	113	44
VC 100	4	193	140	48
VC 125	5	222	167	50
VC 150	6	252	196	44

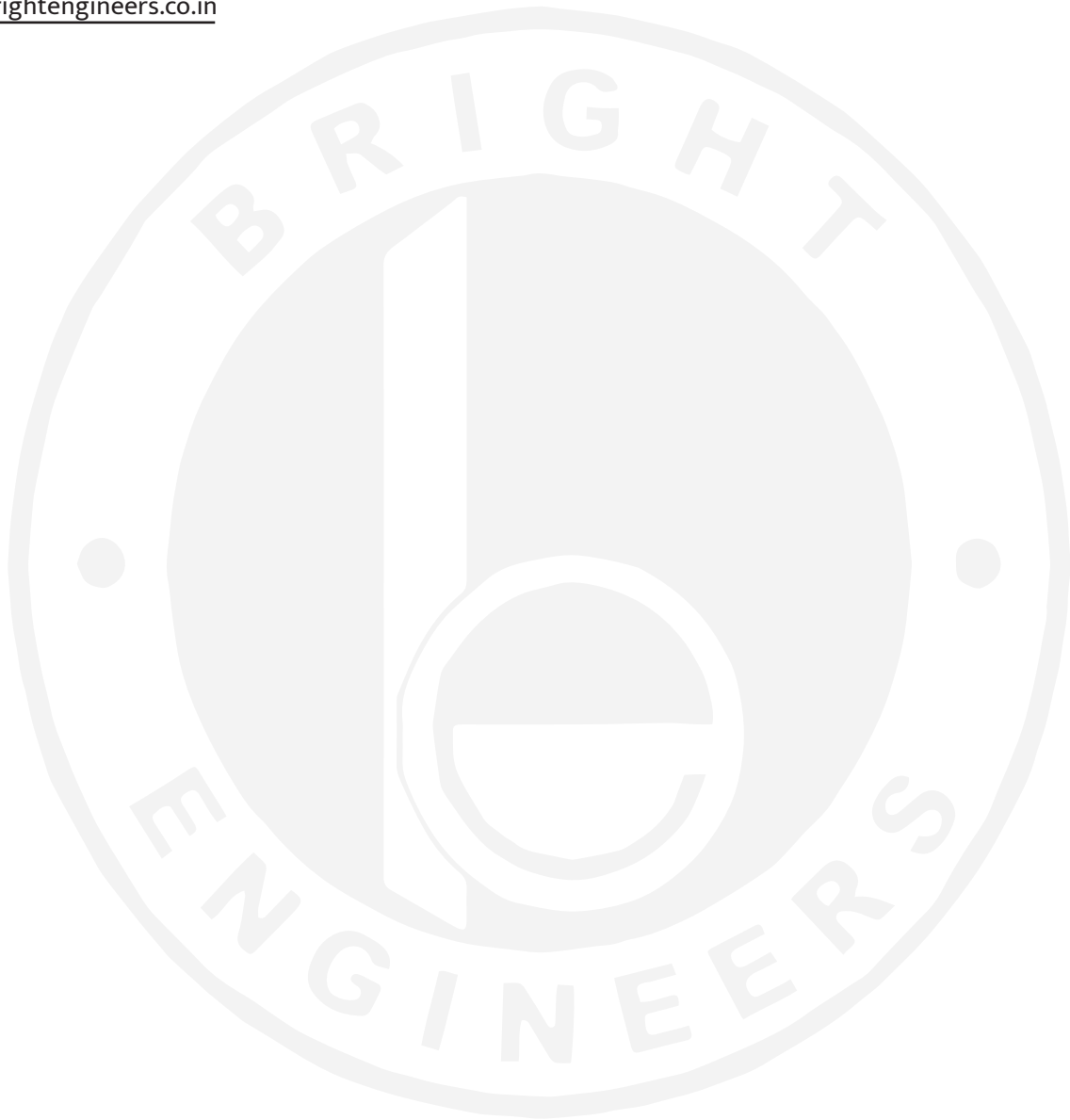
* Will be provided on special request at additional cost.

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