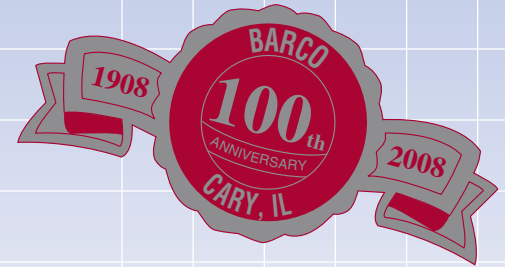


BARCO SERIES TYPE "CO" & "CFO"

# Hot Oil Duo-flow Fixed Syphon



## BC-54000 SERIES HOT OIL

### Special Design Features

- Two widely spaced Carbon Bearings provides greater support to the syphon pipe and hoses.
- Carbon Seal placed under compression add strength and shock resistance. Joints lasts longer.
- External seal wear indicator allows for planned maintenance reducing expensive downtime.



Sizes 1/2" to 3"

Type "C" Hot Oil Rotary Joints are ideal for a wide range of applications using heat transfer fluids. These joints feature an iron casing, ferrous sleeve and end cap, stainless steel spring and spring guides.

The high density carbon seal under compression and widely spaced bearing surfaces assure exceptionally long service life without lubrication. A key maintenance feature is the external seal wear indicator.

#### Operating Parameters:

Temperature:	+600°F (+315°C)
Pressure Rating:	100 psi (6.8 BAR)

# TYPE "CO" & "CFO"



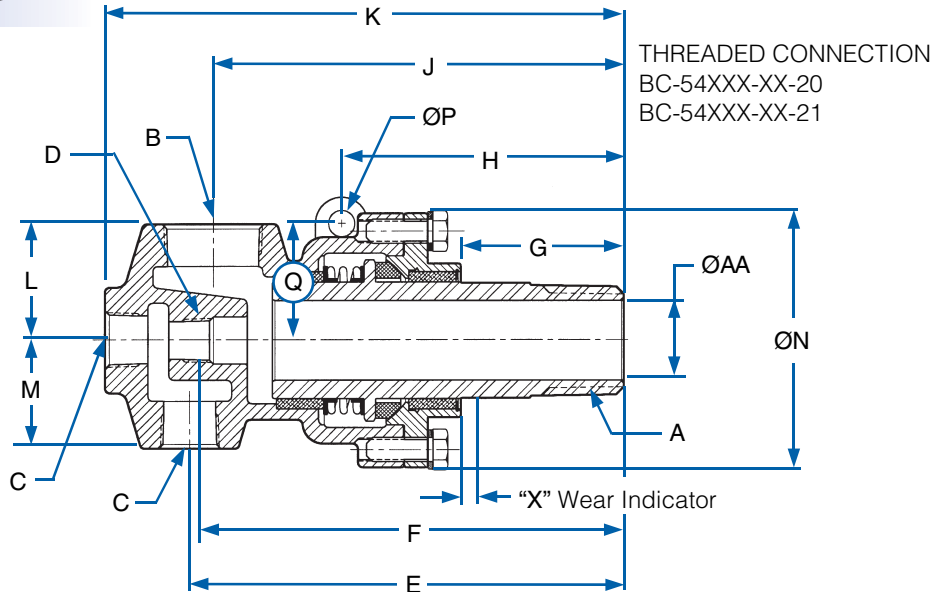
Ferrous Trim Construction  
Recommended for Hot Oil service to  
100 psi (6.8 BAR)

For BSPT threads:

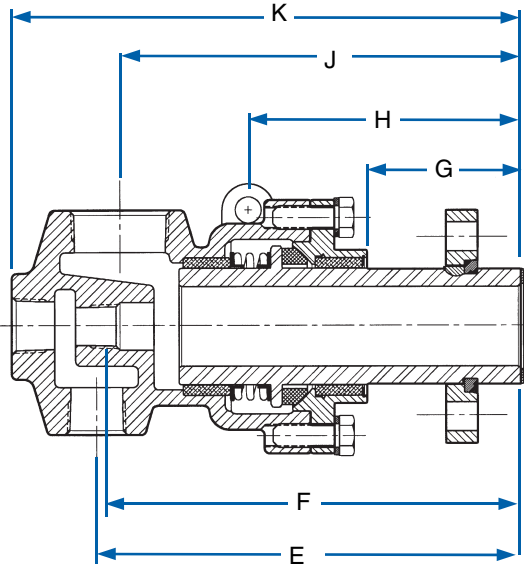
Add a "B" to the end of the part number.

Example: BC-54000-08-20B

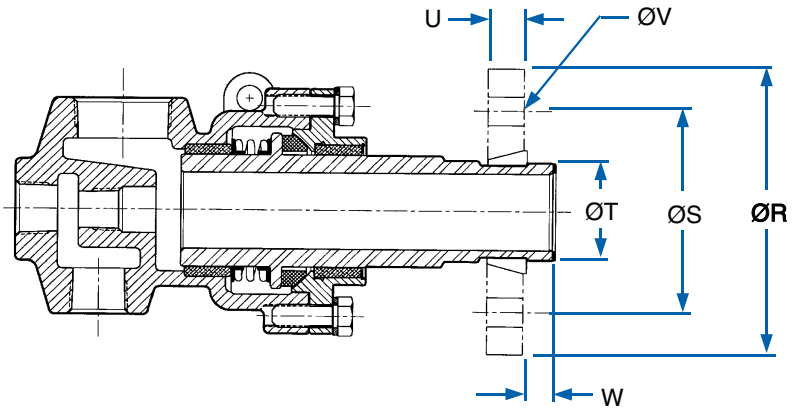
\*BSPT Models are not supplied with syphon bushing



Joint Size	Ferrous Trim Part Number	A NPT	B NPT	øAA	C NPT	D Syphon Thread NPT	D Syphon Thd With Bushing*	E	F	G	H	J	K
1/2"	BC-54000-08-20	1/2" R.H.	1/2"	Ø.50"	1/4"	1/8"	—	5.37"	5.06"	1.73"	—	4.54"	5.87"
	BC-54000-08-21	1/2" L.H.	1/2"	Ø.50"	1/4"	1/8"	—	5.37"	5.06"	1.73"	—	4.54"	5.87"
3/4"	BC-54000-12-20	3/4" R.H.	3/4"	Ø.75"	1/2"	1/4"	1/8"	5.16"	5.25"	1.68"	—	4.54"	6.17"
	BC-54000-12-21	3/4" L.H.	3/4"	Ø.75"	1/2"	1/4"	1/8"	5.16"	5.25"	1.68"	—	4.54"	6.17"
1"	BC-54000-16-20	1" R.H.	1"	Ø1.00"	1/2"	3/8"	1/4"	5.96"	6.04"	2.03"	4.01"	5.21"	7.01"
	BC-54000-16-21	1" L.H.	1"	Ø1.00"	1/2"	3/8"	1/4"	5.96"	6.04"	2.03"	4.01"	5.21"	7.01"
	BC-54000-16-30	CF	1"	Ø1.00"	1/2"	3/8"	1/4"	6.69"	6.78"	2.77"	4.75"	5.94"	7.75"
	BC-54000-16-32	QR	1"	Ø1.00"	1/2"	3/8"	1/4"	6.70"	6.79"	2.78"	4.76"	5.95"	7.76"
1 1/4"	BC-54000-20-20	1 1/4" R.H.	1 1/4"	Ø1.25"	3/4"	1/2"	3/8"	6.99"	7.25"	1.89"	4.37"	6.68"	8.60"
	BC-54000-20-21	1 1/4" L.H.	1 1/4"	Ø1.25"	3/4"	1/2"	3/8"	6.99"	7.25"	1.89"	4.37"	6.68"	8.60"
	BC-54000-20-32	QR	1 1/4"	Ø1.25"	3/4"	1/2"	3/8"	8.55"	8.81"	3.45"	5.93"	8.24"	10.16"
1 1/2"	BC-54000-24-20	1 1/2" R.H.	1 1/2"	Ø1.50"	3/4"	3/4"	1/2"	7.48"	7.53"	2.12"	4.72"	7.04"	9.03"
	BC-54000-24-21	1 1/2" L.H.	1 1/2"	Ø1.50"	3/4"	3/4"	1/2"	7.48"	7.53"	2.12"	4.72"	7.04"	9.03"
	BC-54000-24-30	CF	1 1/2"	Ø1.50"	3/4"	3/4"	1/2"	8.89"	8.94"	3.53"	6.13"	8.45"	10.45"
	BC-54000-24-32	QR	1 1/2"	Ø1.50"	3/4"	3/4"	1/2"	8.89"	8.94"	3.53"	6.13"	8.45"	10.45"
2"	BC-54000-32-20	2" R.H.	2"	Ø1.88"	1 1/4"	3/4"	1/2"	8.62"	8.62"	2.19"	5.01"	8.06"	10.63"
	BC-54000-32-21	2" L.H.	2"	Ø1.88"	1 1/4"	3/4"	1/2"	8.62"	8.62"	2.19"	5.01"	8.06"	10.63"
	BC-54000-32-30	CF	2"	Ø1.88"	1 1/4"	3/4"	1/2"	10.09"	10.08"	3.66"	6.48"	9.53"	12.10"
	BC-54000-32-32	QR	2"	Ø1.88"	1 1/4"	3/4"	1/2"	9.71"	9.71"	3.28"	6.10"	9.15"	11.72"
2 1/2"	BC-54000-40-20	2 1/2" R.H.	2 1/2"	Ø2.25"	1 1/4"	1"	3/4"	10.14"	10.24"	2.91"	6.33"	9.76"	12.45"
	BC-54000-40-21	2 1/2" L.H.	2 1/2"	Ø2.25"	1 1/4"	1"	3/4"	10.14"	10.24"	2.91"	6.33"	9.76"	12.45"
	BC-54000-40-30	CF	2 1/2"	Ø2.25"	1 1/4"	1"	3/4"	10.09"	10.56"	3.66"	6.48"	9.53"	12.10"
	BC-54000-40-32	QR	2 1/2"	Ø2.25"	1 1/4"	1"	3/4"	10.77"	10.86"	3.54"	6.96"	10.39"	13.08"
3"	BC-54000-48-20	3" R.H.	3"	Ø2.88"	1 1/2"	1 1/2"	1"	10.86"	11.03"	3.05"	6.60"	10.67"	13.04"
	BC-54000-48-21	3" L.H.	3"	Ø2.88"	1 1/2"	1 1/2"	1"	10.86"	11.03"	3.05"	6.60"	10.67"	13.04"
	BC-54000-48-30	CF	3"	Ø2.88"	1 1/2"	1 1/2"	1"	11.35"	11.53"	3.55"	7.10"	11.16"	13.53"
	BC-54000-48-32	QR	3"	Ø2.88"	1 1/2"	1 1/2"	1"	11.36"	11.53"	3.55"	7.10"	11.16"	13.54"



“CF” CONNECTION  
BC-54XXX-XX-30

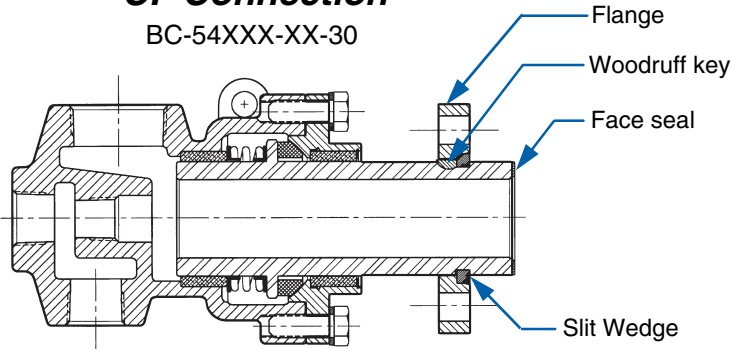


QUICK RELEASE CONNECTION  
BC-54XXX-XX-32

L	M	ØN	ØP	Torque Rod O.D. Max.	Q	ØR	ØS	ØT	U	4X ØV	W	“X”	Weight	Joint Size
1.62"	1.16"	Ø3.00"	—	—	—	—	—	—	—	—	—	.19"	3.5 lbs	1/2"
1.62"	1.16"	Ø3.00"	—	—	—	—	—	—	—	—	—	.19"	3.5 lbs	
1.75"	1.25"	Ø3.38"	—	—	—	—	—	—	—	—	—	.19"	5 lbs.	3/4"
1.75"	1.25"	Ø3.38"	—	—	—	—	—	—	—	—	—	.19"	5 lbs.	
2.06"	1.25"	Ø3.62"	Ø.50"	Ø.38"	1.75"	—	—	—	—	—	—	.25"	6 lbs.	1"
2.06"	1.25"	Ø3.62"	Ø.50"	Ø.38"	1.75"	—	—	—	—	—	—	.25"	6 lbs.	
2.06"	1.25"	Ø3.62"	Ø.50"	Ø.38"	1.75"	Ø3.88"	Ø2.75"	Ø1.399"-1.401"	.75"	Ø.56"	1.092"	.25"	9 lbs.	1 1/4"
2.06"	1.25"	Ø3.62"	Ø.50"	Ø.38"	1.75"	Ø5.00"	Ø3.12"	Ø1.276"-1.278"	.56"	Ø.56"	.438"	.25"	9 lbs.	
2.19"	1.78"	Ø4.38"	Ø.62"	Ø.50"	2.09"	—	—	—	—	—	—	.25"	13 lbs	1 1/4"
2.19"	1.78"	Ø4.38"	Ø.62"	Ø.50"	2.09"	—	—	—	—	—	—	.25"	13 lbs	
2.19"	1.78"	Ø4.38"	Ø.62"	Ø.50"	2.09"	Ø5.50"	Ø3.50"	Ø1.620"-1.622"	.62"	Ø.56"	.50"	.25"	18 lbs.	1 1/2"
2.44"	2.06"	Ø4.75"	Ø.62"	Ø.50"	2.26"	—	—	—	—	—	—	.25"	15 lbs	
2.44"	2.06"	Ø4.75"	Ø.62"	Ø.50"	2.26"	—	—	—	—	—	—	.25"	15 lbs	1 1/2"
2.44"	2.06"	Ø4.75"	Ø.62"	Ø.50"	2.26"	Ø4.88"	Ø3.62"	Ø2.091"-2.093"	.75"	Ø.69"	1.092"	.25"	19 lbs	
2.44"	2.06"	Ø4.75"	Ø.62"	Ø.50"	2.26"	Ø5.50"	Ø3.88"	Ø1.872"-1.870"	.69"	Ø.56"	.50"	.25"	19 lbs.	2"
2.75"	2.56"	Ø6.00"	Ø.62"	Ø.50"	2.76"	—	—	—	—	—	—	.31"	26 lbs	
2.75"	2.56"	Ø6.00"	Ø.62"	Ø.50"	2.76"	—	—	—	—	—	—	.31"	26 lbs	2"
2.75"	2.56"	Ø6.00"	Ø.62"	Ø.50"	2.76"	Ø5.50"	Ø4.25"	Ø2.714"-2.716"	.75"	Ø.69"	1.092"	.31"	31 lbs	
2.75"	2.56"	Ø6.00"	Ø.62"	Ø.50"	2.76"	Ø6.81"	Ø4.75"	Ø2.318"-2.320"	.75"	Ø.56"	.625"	.31"	34 lbs.	2 1/2"
3.00"	2.50"	Ø6.75"	Ø.75"	Ø.62"	3.06"	—	—	—	—	—	—	.25"	33 lbs.	
3.00"	2.50"	Ø6.75"	Ø.75"	Ø.62"	3.06"	—	—	—	—	—	—	.25"	33 lbs.	2 1/2"
3.00"	2.50"	Ø6.75"	Ø.75"	Ø.62"	3.06"	Ø5.88"	Ø4.62"	Ø3.089"-3.091"	.75"	Ø.75"	1.092"	.25"	40 lbs	
3.00"	2.50"	Ø6.75"	Ø.75"	Ø.62"	3.06"	Ø6.75"	Ø4.75"	Ø2.838"-2.840"	.88"	Ø.56"	.75"	.25"	42 lbs.	3"
3.62"	2.88"	Ø7.88"	Ø.94"	Ø.75"	3.62"	—	—	—	—	—	—	.25"	45 lbs.	
3.62"	2.88"	Ø7.88"	Ø.94"	Ø.75"	3.62"	—	—	—	—	—	—	.25"	45 lbs.	3"
3.62"	2.88"	Ø7.88"	Ø.94"	Ø.75"	3.62"	Ø6.50"	Ø5.25"	Ø3.714"-3.716"	.75"	Ø.69"	1.092"	.25"	50 lbs	
3.62"	2.88"	Ø7.88"	Ø.94"	Ø.75"	3.62"	Ø8.00"	Ø6.75"	Ø3.430"-3.732"	.94"	Ø.69"	.88"	.25"	57 lbs.	3"

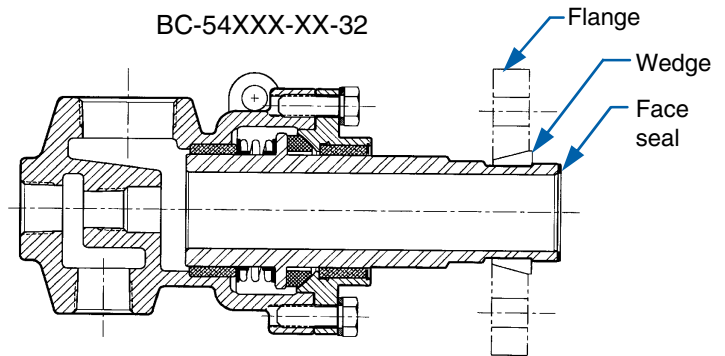
### CF Connection

BC-54XXX-XX-30



### Quick Release Connection

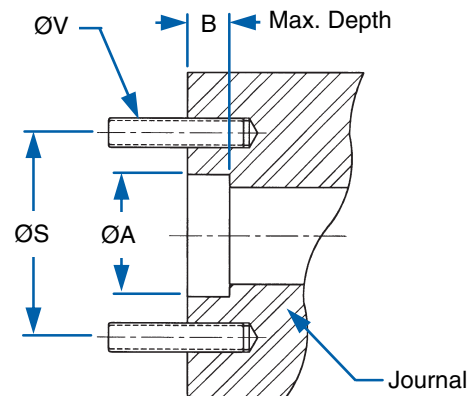
BC-54XXX-XX-32



### Journal Dimensions

Joint size	CF Connection		Quick Release Connection	
	ØA	B	ØA	B
1"	Ø1.408"-1.406"	1.052"	Ø1.283"-1.279"	.312"
1 1/2"	Ø2.099"-2.096"	1.052"	Ø1.877"-1.873"	.375"
2"	Ø2.724"-2.721"	1.052"	Ø2.325"-2.321"	.500"
2 1/2"	Ø3.099"-3.096"	1.052"	Ø2.845"-2.841"	.625"
3"	Ø3.724"-3.721"	1.052"	Ø3.439"-3.435"	.875"

Quick Release Flanges and split wedges are available. Contact Barco for more information.



Barco's "Hot Oil" joints are recommended for applications using Dowtherm and other heat transfer fluids for circulating systems at temperatures up to +600°F (+316°C). The Type "CO" Hot Oil joint has been field-tested and proven to be the only satisfactory joint among those tested. It is being successfully used on a number of machines designed by several manufacturers of paper, textile, and rubber goods machinery.

Many of the present oils used tend to "coke" at high temperatures and deposit material which settles in the joint and must be periodically cleaned to remove this residue. In addition, hot spots in the system may generate this material. Barco recommends a 40-60 micron filter to be installed upstream from that rotary joint to collect this material and prevent its introduction to the joint.

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