

CO

COMPOSITE

The CO is Oseco's high-quality, multi-layered rupture disc

- **Standard sizes available are 11/16"-42" Consult Oseco for other available sizes**
- **Pressure ranges are 3 psig to 2000 psig**
- **Standard materials for the CO rupture disc: 316 Series Stainless Steel, Nickel, Inconel® 600 and Monel®. Oseco uses quality PFA fluoropolymer. Consult factory for additional materials**
- **If the CO rupture disc is subjected to vacuum conditions, it is necessary to have a vacuum support to complement the rupture disc**
- **Excellent for static or high-cycling service**
- **ASME Approved**

CO

The Oseco CO rupture disc is a composite style rupture disc. It consists of a metal slotted top section, a slit-slot cover and a fluoropolymer or metal seal. The metal top section controls the burst pressure and the seal isolates the top section from the process media and also prevent leakage.

The composite construction of the CO gives it its name, it may include options such as a metal seal, fluoropolymer liners, metal support rings and vacuum supports, all of which may be incorporated into the disc's configuration.

The CO rupture disc is available in both 30° angular seat (CO) and the flat seat designs, (F)CO. The patented, "tear drop" feature of the CO reduces the possibility of fragmentation. The CO is excellent for liquid, gas or vapor service applications. For best results, the CO should not be exposed to pressures in excess of 80% of its stamped burst pressure.



COMMON APPLICATIONS

Small and large low pressure applications

OPERATING RATIO

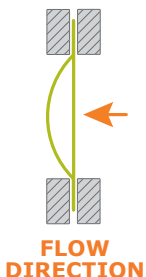
80%

BURST TOLERANCE

±5% over 40 psig, ±2 psig from 3-40 psig

MANUFACTURING RANGE

Manufacturing Range - See Chart



oseco pressure intelligence

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CO Minimum / Maximum Burst Pressure @ 72° F (psig) / 22° C (barg)

Disc Size (Inches)			Type: CO, COV, COR, RCOR, RCOV						LCO	LVCO	LCVL	
			TOP SECTION CHOICE: 316, Nickel, Inconel, Monel						TOP SECTION CHOICE: 316, NICKEL, INCONEL OR MONEL		TOP SECTION	
			SEAL MATERIAL								316 SS	Nickel
			Fluoropolymer	Ni	Mon	Inconel	316	Al	Fluoropolymer Seal	Fluoropolymer Seal	Fluoropolymer Seal	Fluoropolymer Seal
1"	Min	psig 3.0	44 12.4	180 15.2	220 19.6	285 27.6	400 3.4	50	87 6.0	87 6.0	300 20.7	230 15.9
	Max	psig 68.9	1000 137.9	2000 137.9	2000 137.9	2000 137.9	1600 110.3	1600	1000 68.9	300 20.7	1000 68.9	600 41.4
1.5"	Min	psig 2.1	31 8.3	120 10.0	145 12.8	185 18.3	265 2.3	33	61 4.2	61 4.2	140 9.7	105 7.2
	Max	psig 48.3	700 96.5	1400 96.5	1400 96.5	1400 96.5	1300 89.6	1300	700 48.3	140 9.7	700 48.3	450 31.0
2"	Min	psig 1.0	15 4.8	69 8.4	84 5.8	109 7.5	150 10.3	20 1.4	30 2.1	30 2.1	100 6.9	75 5.2
	Max	psig 38.3	555 75.8	1100 75.8	1100 75.8	1100 75.8	960 66.2	960	555 38.3	100 6.9	555 38.3	395 27.2
3"	Min	psig 0.8	11 3.6	52 4.3	62 4.3	79 5.4	115 7.9	15 1.0	21 1.4	21 1.4	65 4.5	45 3.1
	Max	psig 31.0	450 62.1	900 62.1	900 62.1	900 62.1	730 50.3	730	450 31.0	65 4.5	450 31.0	315 21.7
4"	Min	psig 0.6	8 2.7	39 3.2	47 3.2	60 4.1	85 5.9	12 0.8	16 1.1	16 1.1	60 4.1	35 2.4
	Max	psig 28.6	415 57.2	830 57.2	830 57.2	830 57.2	630 43.4	630	415 28.6	60 4.1	415 28.6	300 20.7
6"	Min	psig 0.4	6 2.0	29 2.4	35 2.4	45 3.1	64 4.4	9 0.6	12 0.8	12 0.8	75 5.2	45 3.1
	Max	psig 22.1	320 44.1	640 44.1	640 44.1	640 44.1	485 33.4	485	320 22.1	75 5.2	320 22.1	225 15.5
8"	Min	psig 0.3	5 1.6	23 1.9	28 1.9	35 2.4	50 3.4	7 0.5	11 0.8	11 0.8	75 5.2	55 3.8
	Max	psig 20.3	295 40.7	590 40.7	590 40.7	590 40.7	420 29.0	420	295 20.3	75 5.2	295 20.3	200 13.8
10"	Min	psig 0.3	4 1.2	18 1.5	22 1.5	28 1.9	38 2.6	5 0.3	9 0.6	9 0.6	60 4.1	35 2.4
	Max	psig 16.5	240 16.5	480 33.1	480 33.1	480 33.1	340 23.4	340	240 16.5	60 4.1	240 16.5	160 11.0
12"	Min	psig 0.2	3 1.0	15 1.3	19 1.3	24 1.7	34 2.3	5 0.3	6 0.4	6 0.4	45 3.1	30 2.1
	Max	psig 13.8	200 13.8	400 27.6	400 27.6	400 27.6	290 20.0	290	200 13.8	45 3.1	200 13.8	140 9.7
14"	Min	psig 0.2	3 1.0	14 1.2	17 1.2	22 1.5	29 2.0	4 0.3	6 0.4	6 0.4	40 2.8	30 2.1
	Max	psig 11.7	170 11.7	350 24.1	350 24.1	350 24.1	270 18.6	270	170 11.7	40 2.8	170 11.7	120 8.3
16"	Min	psig 0.2	3 0.8	12 1.0	14 1.0	19 1.3	25 1.7	4 0.3	6 0.4	6 0.4	35 2.4	25 1.7
	Max	psig 10.3	150 10.3	300 20.7	300 20.7	300 20.7	250 17.2	250	150 10.3	35 2.4	150 10.3	105 7.2
18"	Min	psig 0.2	3 0.7	10 0.9	13 0.9	17 1.2	23 1.6	4 0.3	6 0.4	6 0.4	35 2.4	35 2.4
	Max	psig 9.3	135 9.3	270 18.6	270 18.6	270 18.6	225 15.5	225	135 9.3	35 2.4	135 9.3	90 6.2
20"	Min	psig 0.2	3 0.7	10 0.8	12 0.8	15 1.0	20 1.4	3 0.2	6 0.4	6 0.4	35 2.4	35 2.4
	Max	psig 8.3	120 8.3	240 16.5	240 16.5	240 16.5	200 13.8	200	120 8.3	35 2.4	120 8.3	80 5.5
24"	Min	psig 0.2	3 0.8	40 2.8	55 3.8	45 3.1	45 3.1	3 0.2	6 0.4	6 0.4	35 2.4	35 2.4
	Max	psig 6.9	100 6.9	200 13.8	200 13.8	200 13.8	170 11.7	170	100 6.9	35 2.4	100 6.9	70 4.8
Max Tem p	(° F) (° C)	500 260.0	750 399.0	800 427.0	900 482.0	900 482.0	250 121.0	250	500 260.0	500 260.0	500 260.0	500 260.0

CO Free Flow Area/Minimum Net Flow Area (MNFA)

Disc Size (Inch)	Net Flow Area (Sq. In.)
1	0.651
1.5	1.507
2	3.355
3	7.392
4	12.73
6	25.45
8	44.41
10	73.71
12	100.5
14	137.1
16	179.4
18	228
20	281.7
24	405.9

Standard Manufacturing Design Ranges for CO Rupture Discs

Specified Rupture Pressure		Manufacturing Design Range %
PSIG @ 72° F	BARG @ 22° C	
3 – 8	.21 – .55	+40 to -40
9 – 12	.62 – .83	+30 to -30
13 – 20	.90 – 1.4	+20 to -10
21 – 45	1.4 – 3.1	+16 to -8
46 – 90	3.2 – 6.2	+12 to -6
91 – 270	6.3 – 18.6	+10 to -5
271 – Up	18.7 Up	+6 to -3

Burst Tolerance

±2 psig from 3 to 40 psig

±5% above 40 psig

Related products**SENSORS**SVT
AMS
CMS**HOLDERS**CO:
Union Holders
RDI
RDH-1 through RDH-9

(F)CO:

FRDI
FRDI (P)

Let us help you with all your pressure relief questions. Contact Oseco at **800-395-3475** or email us at info@oseco.com.

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