

# (F)CO

FLAT SEAT COMPOSITE

The Oseco (F)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 prevents leakage.

The patented "tear drop" feature of the (F)CO reduces the possibility of fragmentation. The (F)CO is excellent for liquid, gas or vapor service applications. For best results, the (F)CO should not be exposed to pressures in excess of 80% of its stamped burst pressure.

## The (F)CO is Oseco's high-quality, multi-layered rupture disc.

- Large range of sizes and pressures available
- Can be used in vacuum conditions with vacuum support
- Suitable for liquid, gas and vapor applications
- Standard materials of construction: 316 Series Stainless Steel, Nickel, Inconel® 600, and Monel®
- Designed to meet ASME Section VIII standards



**Sizes**  
1" - 42"

**Operating Ratio**  
80%

**$K_R$  Value**  
(F)CO KRGL: 0.5  
(F)COV KRGL: 2.37

**Manufacturing Range**  
0%



# Oseco (F)CO Technical Specifications

(F)CO Min/Max Burst Pressure @ 72° F (psig) / 22° C (barg)

SIZE inches (metric)	MATERIAL *	(F)CO, (F)COV		(F)LCO		(F)LVCO		(F)LCVL	
		MIN psig (barg)	MAX psig (barg)	MIN psig (barg)	MAX psig (barg)	MIN psig (barg)	MAX psig (barg)	MIN psig (barg)	MAX psig (barg)
<b>1"</b> <b>DN 25</b>	316 NI Inc Mon	44 (3.0)	1000 (68.9)	87 (6.0)	1000 (68.9)	87 (6.0)	300 (20.7)	300 (20.7) 230 (15.9) N/A N/A	1000 (68.9) 600 (41.4) N/A N/A
<b>1.5"</b> <b>DN 40</b>	316 NI Inc Mon	31 (2.1)	700 (48.3)	61 (4.2)	700 (48.3)	61 (4.2)	140 (9.7)	140 (9.7) 105 (7.2) N/A N/A	700 (48.3) 450 (31.0) N/A N/A
<b>2"</b> <b>DN 50</b>	316 NI Inc Mon	15 (1.0)	555 (38.3)	30 (2.1)	555 (38.3)	30 (2.1)	100 (6.9)	100 (6.9) 75 (5.2) N/A N/A	555 (38.3) 395 (27.2) N/A N/A
<b>3"</b> <b>DN 80</b>	316 NI Inc Mon	11 (0.8)	350 (24.1)	21 (1.4)	350 (24.1)	21 (1.4)	65 (4.5)	65 (4.5) 45 (3.1) N/A N/A	350 (24.1) 315 (21.7) N/A N/A
<b>4"</b> <b>DN 100</b>	316 NI Inc Mon	8 (0.6)	415 (28.6)	16 (1.1)	415 (28.6)	16 (1.1)	60 (4.1)	60 (4.1) 35 (2.4) N/A NA	415 (28.6) 300 (20.7) N/A N/A
<b>6"</b> <b>DN 150</b>	316 NI Inc Mon	6 (0.4)	320 (22.1)	12 (0.8)	320 (22.1)	12 (0.8)	75 (5.2)	75 (5.2) 45 (3.1) N/A N/A	320 (22.1) 225 (15.5) N/A N/A
<b>8"</b> <b>DN 200</b>	316 NI Inc Mon	5 (0.3)	295 (20.3)	11 (0.8)	295 (20.3)	11 (0.8)	75 (5.2)	75 (5.2) 55 (3.8) N/A N/A	295 (20.3) 200 (13.8) N/A N/A
<b>10"</b> <b>DN 250</b>	316 NI Inc Mon	4 (0.3)	240 (16.5)	9 (0.6)	240 (16.5)	9 (0.6)	60 (4.1)	60 (4.1) 35 (2.4) N/A N/A	240 (16.5) 160 (11.0) N/A N/A
<b>12"</b> <b>DN 300</b>	316 NI Inc Mon	3 (0.2)	200 (13.8)	6 (0.4)	200 (13.8)	6 (0.4)	45 (3.1)	45 (3.1) 30 (2.1) N/A N/A	200 (13.8) 140 (9.7) N/A N/A
<b>14"</b> <b>DN 350</b>	316 NI Inc Mon	3 (0.2)	170 (11.7)	6 (0.4)	170 (11.7)	6 (0.4)	40 (2.8)	40 (2.8) 30 (2.1) N/A N/A	170 (11.7) 120 (8.3) N/A N/A
<b>16"</b> <b>DN 400</b>	316 NI Inc Mon	3 (0.2)	150 (10.3)	6 (0.4)	150 (10.3)	6 (0.4)	35 (2.4)	35 (2.4) 25 (1.7) N/A N/A	150 (10.3) 105 (7.2) N/A N/A
<b>18"</b> <b>DN 450</b>	316 NI Inc Mon	3 (0.2)	135 (9.3)	6 (0.4)	135 (9.3)	6 (0.4)	35 (2.4)	35 (2.4) 35 (2.4) N/A N/A	150 (10.3) 90 (6.2) N/A N/A
<b>20"</b> <b>DN 500</b>	316 NI Inc Mon	3 (0.2)	120 (8.3)	6 (0.4)	120 (8.3)	6 (0.4)	35 (2.4)	35 (2.4) 35 (2.4) N/A N/A	150 (10.3) 80 (5.5) N/A N/A
<b>24"</b> <b>DN 600</b>	316 NI Inc Mon	3 (0.2)	100 (6.9)	6 (0.4)	100 (6.9)	6 (0.4)	35 (2.4)	35 (2.4) 35 (2.4) N/A N/A	150 (10.3) 70 (4.8) N/A N/A

\*All values based off of PFA seals. Metal seals available upon request.  
Max Temperature @ 500° F

## Related Products

### SENSORS

SVT  
AMS  
CMS

### HOLDERS

(F)RDI  
FRDH  
FRDI  
FRDI - P

## Certifications

ASME UD  
CRN  
PED 2014/68/EU  
CU/TR 032  
China SELO

# Oseco (F)CO Technical Specifications

Free Flow Area  
Minimum Net Flow Area (MNFA)

DISC SIZE (Inch)	WITHOUT VACUUM SUPPORT (Sq. Inch)	WITH VACUUM SUPPORT (Sq. Inch)
1	0.864	0.6
1.5	2.036	1.48
2	3.355	2.85
3	7.393	5.41
4	12.73	10.3
6	28.89	22.6
8	50	45.6
10	75.74	72.7
12	107.8	101
14	137.8	135
16	180.1	176
18	233.7	230
20	281.7	279
24	405.9	415
28	522.7	562
30	634.7	650
32	722.2	754
36	914.3	955
40	N/A	1194
42	1244.9	1320

### Burst Tolerance

+/-5% above 40 psig

+/-2 psig at or below 40 psig

### K<sub>R</sub> Values \* (Frictional Loss Factor)

K <sub>R</sub>	(F)CO	(F)COV
K <sub>RGL</sub>	0.5	2.37

Let us help you with all  
your pressure relief questions.  
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or email us at [info@oseco.com](mailto:info@oseco.com).

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