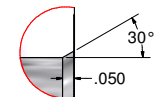
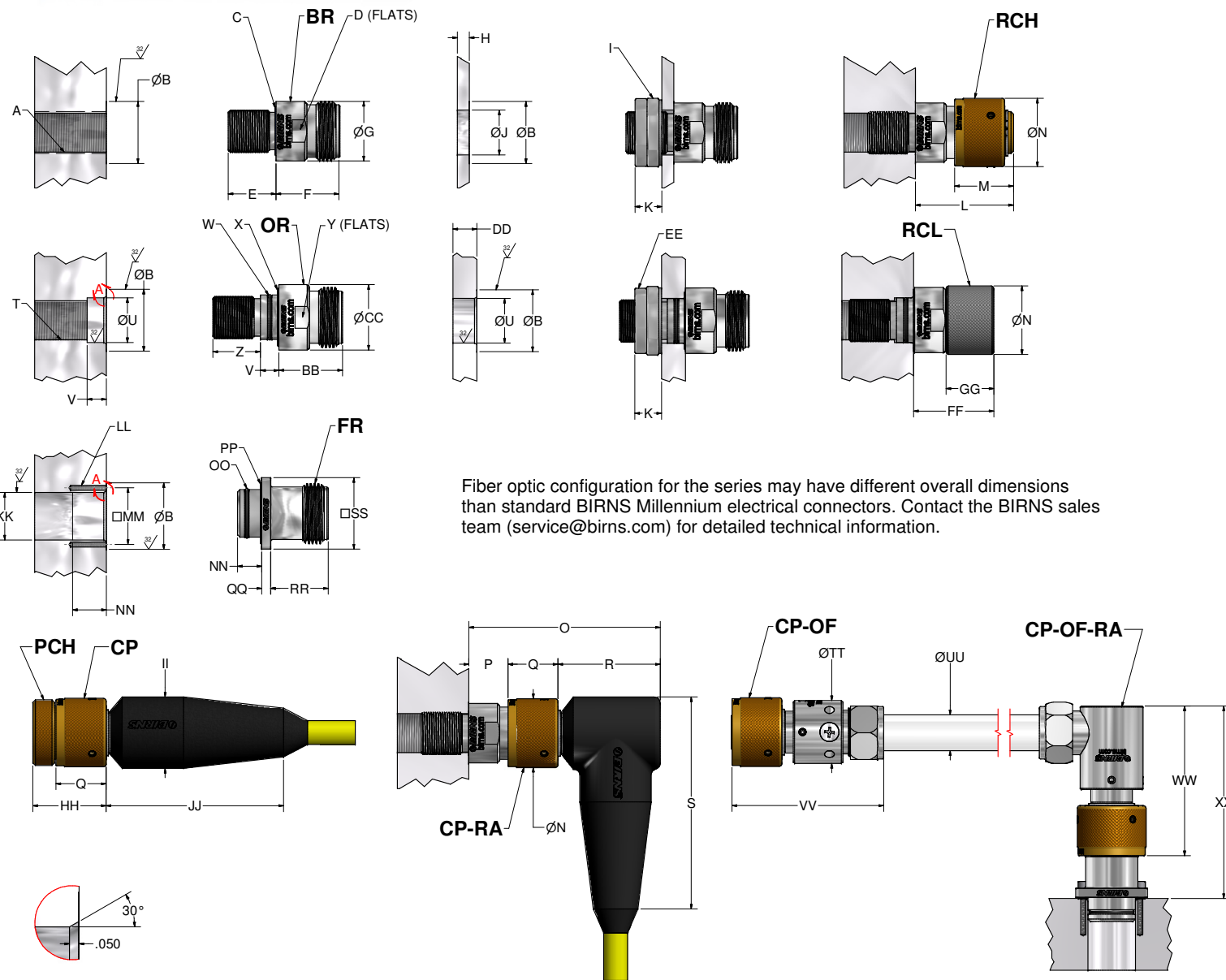


# BIRNS® Millennium 3F Dimensions



**DETAIL A**  
TYPICAL O-RING  
LEAD IN

Callout	Description	3F
A	BR Mounting Thread	1/2-20 UNF-2B
B	O-Ring Spot Face	0.88
C	BR Face O-Ring	2-015
D	BR Wrench Flats	3/4
E	BR Thread Length	1
F	BR Body Height	0.88
G	BR Body Diameter	0.82
H	BR Vessel Thickness, Drilled	0.5
I	BR Nut/Washer Assy P/N	23F-066
J	BR Drilled Hole Diameter	0.52
K	BR/OR Nut and Washer Height	0.56
L	BR/RCH Combined Height	
M	RCH Height	
N	Engaging Nut Diameter	0.75
O	BR/CP-RA Combined Height	
P	CP to Face Distance, on BR	0.45
Q	Engaging Nut Height	0.75
R	RA Overmold Height	
S	RA Overmold Length	
T	OR Mounting Thread	1/2-20 UNF-2B
U	OR Shaft Seal Diameter	.562 +.002/- .000
V	OR Shaft Seal Depth	0.38
W	OR Shaft Seal O-Ring	2-013
X	OR Face Seal O-Ring	2-016
Y	OR Wrench Flats	0.75
Z	OR Thread Length	1
BB	OR Body Height	0.88
CC	OR Body Diameter	0.93
DD	OR Vessel Thickness, Drilled	0.88
EE	OR Nut/Washer Assy P/N	
FF	OR/RCL Combined Height	
GG	RCL Height	
HH	Engaging Nut/PCH Comb. Height	1.07
II	Straight Overmold Diameter	0.75
JJ	Straight Overmold Length	1.05
KK	FR Shaft Seal Diameter	.500 +.002/- .000
LL	FR Mounting Screw Size	#4
MM	FR Mounting Screw Pattern	0.78
NN	FR Shaft Seal Depth	0.5
OO	FR Shaft Seal O-Ring	2-012
PP	FR Face Seal O-Ring	2-016
QQ	FR Flange Thickness	0.19
RR	FR Body Height	0.68
SS	FR Flange Dimension	1
TT	CP-OF Body Diameter	
UU	Oil-Filled Tubing Diameter	
VV	CP-OF Overall Length	
WW	CP-OF-RA Height	
XX	FR/CP-OF-RA Clearance Height	

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