

Quality Inspection Report
QIR 30-29-202-C3 Glass Dome
ATA Cooled Feed

Part Identifier: **SN: 004, Borosilicate, H. S. Martin**

Description	Name	Dim (mm) Nominal Tol +/-	Dim (mm) Max Min	Dim (in) Max Min	Measured	Comment
Length overall.	A =	610 10	620 600	24.409 23.622	23.625	Almost to short. *****
Length cylinder.	B =	300 20	320 280	12.598 11.024		Good
Cylinder wall thickness.	C =	5 1	6 4	0.236 0.157	0.234 0.236	Good, on high side?
Cylinder diameter.	D =	300 6	306 294	12.047 11.575		Good
Flange edge thickness.	E =	7 0.8	7.8 6.2	0.307 0.244	0.236 0.246	Good.
Flange diameter.	F =	330 2	332 328	13.071 12.913		Very good.
Flange width ground.	G =	18	18 18	0.709 0.709	0.716 0.757	Please make wider, note below.
Flange width overall.	H =	20	20	0.787 0.000		Good.
Flange radius edges.	K =	1	1	0.039 0.000		Okay.
Flange radius inside.	L =	2	2	0.079 0.000		Please make smaller.
Flange radius at root.	M =	4 2	6 2	0.236 0.079		Okay.
Flange Angle. (deg)	N =	15 2	17 13	17.0 13.0		Okay.
Dome radius outside.	R =	76 6	82 70	3.228 2.756		Good.
Dome thickness.	T =	1.50 0.25	1.75 1.25	0.069 0.049	0.045 0.055	VERY GOOD. EXCENT.

General Comments

Excellent first part. Please try to do a more uniform taper from hemisphere edge seal along taper region. The thickness at the edge of hemisphere is a quite a bit thicker than desirable in the future. Please achieve a smoother finish on the oring surface in the future.

