FLENDER DRAWING **5876659**

Minimum V-Block Gap for ⌀170mm diameter = 225 mm

G56

⌀180mm side

15 $^{+0.3}_{-0.0}$

45 $^{+0.0}_{-0.062}$

G54

⌀160mm side

13 $^{+0.3}_{-0.0}$

40 $^{+0.0}_{-0.062}$

G56 Gauge:

$$44.94 = 1.44 + 20.5 + 23$$

G54 Gauge:

$$39.94 = 1.44 + 18.5 + 20$$
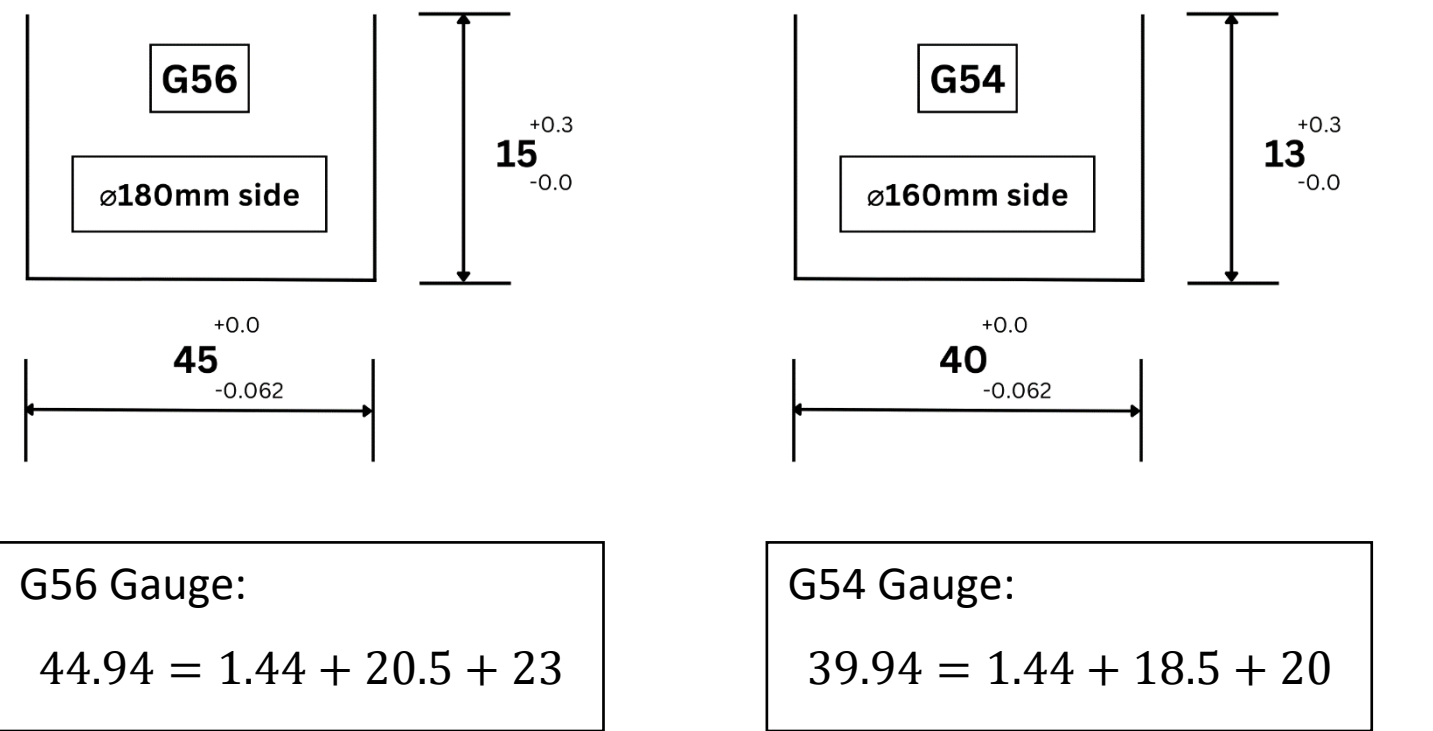
TOLERANCE

Side	180mm - G56		160mm - G54	
	Actual	Tolerance	Actual	Tolerance
Width	45	+0 / -0.062	40	+0 / -0.062
Depth	15	+0.3 / -0	13	+0.3 / -0
Length	165		280	
Symmetry		0.070		0.084
Reference	23.5		20	

G56: ∅180mm side – CLOSED SLOT (Left side)

Coordinate points: (0,+22.5), (-82.5,0), (-60,0), (0,0), (+60,0), (+82.5,0), (0,-22.5)

165 mm
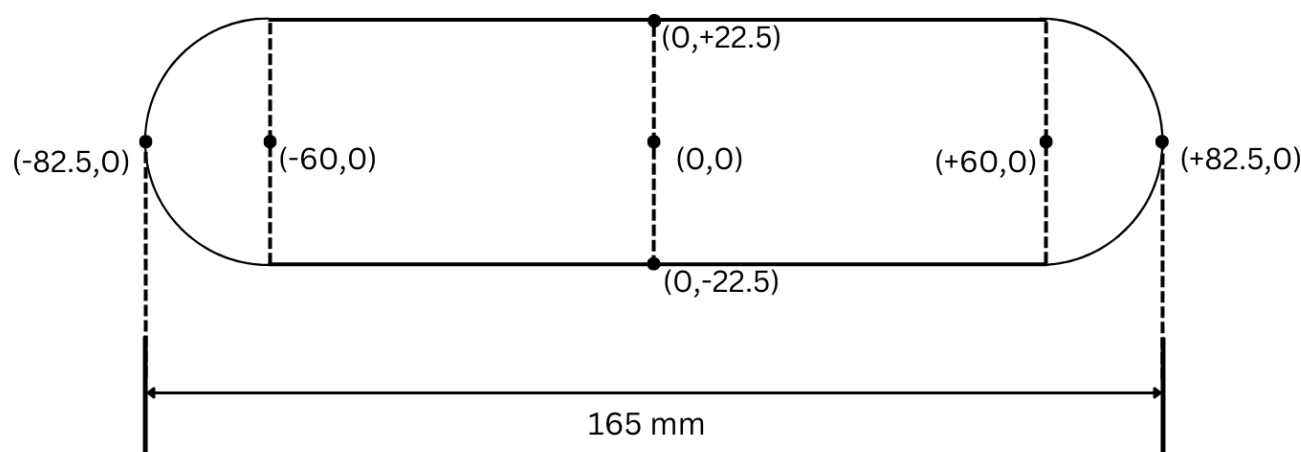
Drawing Reference	23.5 mm
Centre Distance from reference Collar	59 mm
Centre Distance from reference slot Edge	82.5 mm

G54: ∅160mm side – OPEN SLOT (Right side)

Coordinate points: (0,+20), (-150,0), (-130,0), (0,0), (+130,0), (0,-20)

280 mm
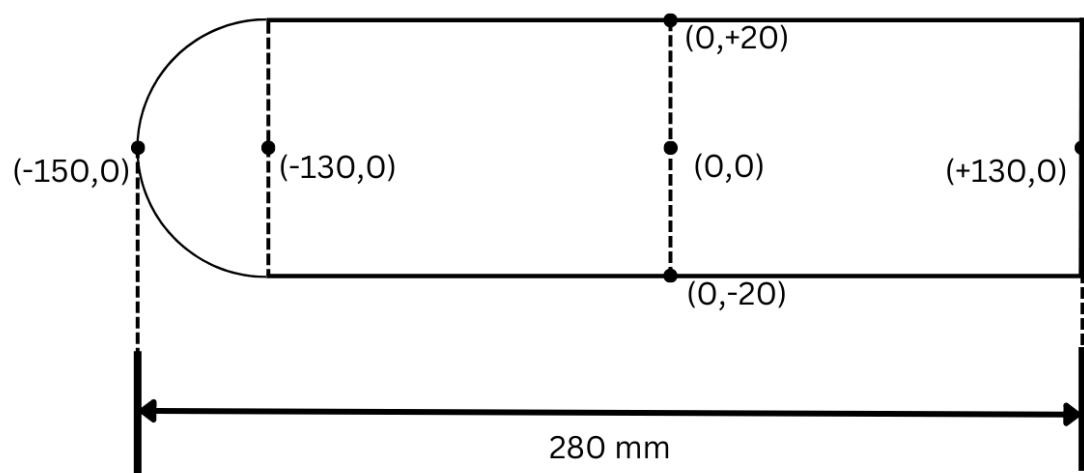
Drawing Reference	20 mm
Centre Distance from reference Collar	170 mm
Centre Distance from reference slot Edge	150 mm

OFFSETS

NUMBER	TOOL	SIDE	H LOCATION	D LOCATION
13	Marking Pencil	G56	H75	Not Required for Checking
		G54	H76	
14	⌀26.5mm Insert DRILL	G56	H77	Not Required for Drilling
		G54	H78	
15	⌀25mm CUTTER (16mm Insert)	G56	H79	Not Required for Slotting
		G54	H80	
16	⌀25mm CUTTER (9mm Insert)	G56	H81	D81 = 13.0
		G54	H82	D82 = 13.0
17	⌀16mm SC ENDMILL	G56	H83	D83 = 8.4
		G54	H84	D84 = 8.4
		G56	Not Required for Finishing	**D85** = 8.2
		G54		**D86** = 8.2

PROGRAMMING

O6591	Checking

* Check if Pencil Marking Tool is stopping at the edge of the Reference Collar. If not, please stop program and re-measure centre distance (x axis).

Program will stop before every tool dip to 1mm. Measure Z centring here if needed.
If any tool touches the job body, H value (height compensation) is deviating by more than 1mm. Please rectify the tool height and try again.

O6592	Roughing

Please **MEASURE SYMMETRY** after completion. If symmetry deviation is **30-micron** or more, shift Y-axis as required.
Only reduce tool radius after width measurement. Radius reduction will be according to stock material remaining.

O6593		Finishing	
G56	H83	**D85**	R = 8.2
G54	H84	**D86**	R = 8.2

Please **CHECK SLIP GAUGE AFTER G56** side completes. In case of deviation, stop program and report.
Slip gauge must go fully inside the keyway to pass. Reduce radius accordingly.

O6594	Depth

Depth slotting for middle bar with 16mm Diameter SC End-Mill.

CHECKLIST

O6592		Roughing		
Operation	Side	H Offset	D offset	Radius
Collar cut	G56	H81	**O6599**	
Drilling	G56	H77		
	G54	H78	Not Required	
Slotting	G56	H79		
	G54	H80		
Semi roughing	G56	H81	**O6598**	
	G54	H82	**O6597**	
Semi finishing	G56	H83	D83	R = 8.4
	G54	H84	D84	R = 8.4

O6593		Finishing		
Operation	Side	H Offset	D offset	Radius
Wall finish	G56	H83	**D85**	R = 8.2
	G54	H84	**D86**	R = 8.2

O6594		Depth		
Operation	Side	H Offset	D offset	Radius
Depth finish	G56	H83		
	G54	H84	Not Required	

O6597		Semi Roughing		
Operation	Side	H Offset	D offset	Radius
Sub-program	**G54**		D82	R = 13.0

O6598		Semi Roughing		
Operation	Side	H Offset	D offset	Radius
Sub-program	**G56**		D81	R = 13.0

O6599		Collar Cut		
Operation	Side	H Offset	D offset	Radius
Sub-program	G56		D81	R = 13.0