FLENDER DRAWING **5134735**

Minimum V-Block Gap for ⌀140mm diameter = 195 mm

G56

⌀145mm side

$12 \begin{smallmatrix} +0.3 \\ -0.0 \end{smallmatrix}$

$36 \begin{smallmatrix} +0.0 \\ -0.062 \end{smallmatrix}$

G56

⌀130mm side

$11 \begin{smallmatrix} +0.2 \\ -0.0 \end{smallmatrix}$

$32 \begin{smallmatrix} +0.0 \\ -0.062 \end{smallmatrix}$

G56 Gauge:

$35.94 = 1.44 + 14 + 20.5$

G54 Gauge:

$31.94 = 1.44 + 10.5 + 20$
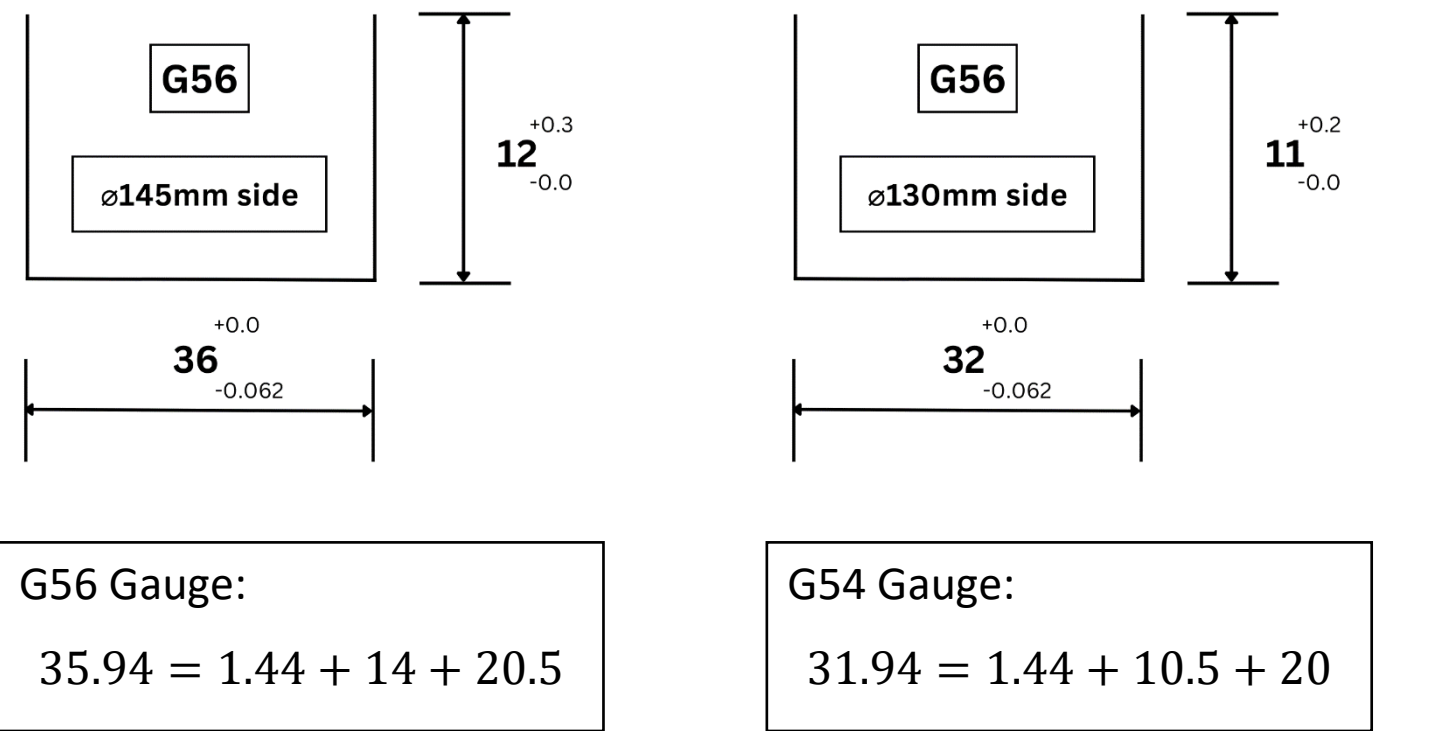
TOLERANCE

Side	145mm - G56		130mm - G54	
	Actual	Tolerance	Actual	Tolerance
Width	36	+0 / -0.062	32	+0 / -0.062
Depth	12	+0.3 / -0	11	+0.2 / -0
Length	139		200	
Symmetry		0.055		0.055
Reference	21		7.5	

G56: ⌀145mm side – CLOSED SLOT (Left side)
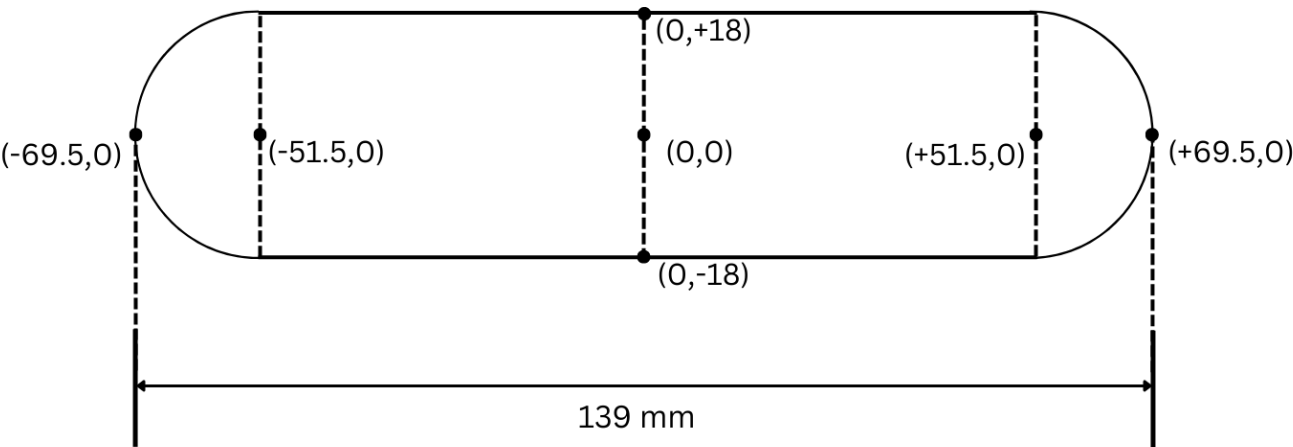
Drawing Reference	21 mm
Centre Distance from reference Collar	48.5 mm
Centre Distance from reference slot Edge	69.5 mm

G54: ⌀130mm side – CLOSED SLOT (Right side)
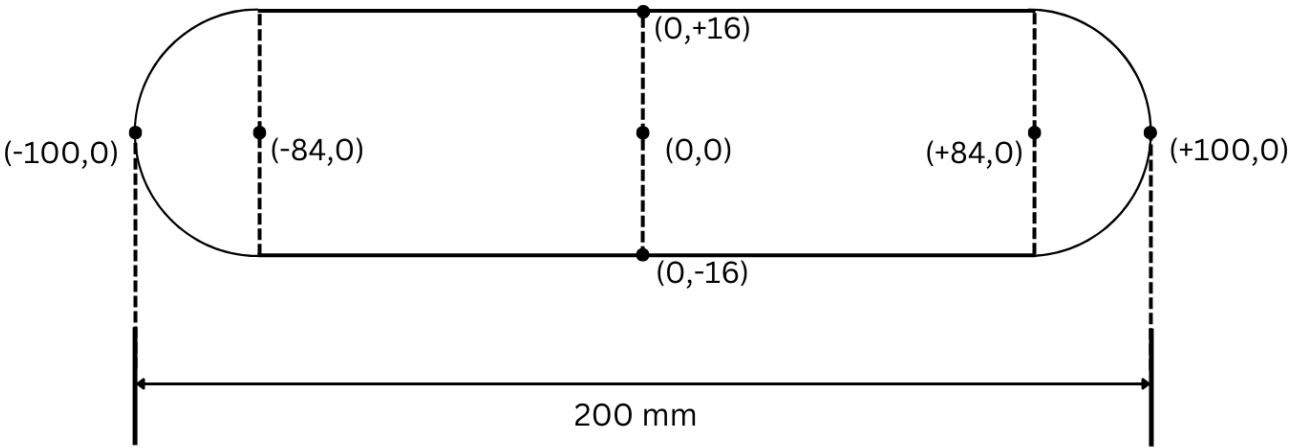
Drawing Reference	7.5 mm
Centre Distance from reference Collar	107.5 mm
Centre Distance from reference slot Edge	100 mm

OFFSETS

NUMBER	TOOL	SIDE	H LOCATION	D LOCATION
13	Marking Pencil	G56	H45	Not Required for Checking
		G54	H46	
14	⌀26.5mm Insert DRILL	G56	H47	Not Required for Drilling
		G54	H48	
15	⌀25mm CUTTER (16mm Insert)	G56	H49	Not Required for Slotting
		G54	H50	
16	⌀25mm CUTTER (9mm Insert)	G56	H51	D51 = 13.0
		G54	H52	D52 = 13.0
17	⌀16mm SC ENDMILL	G56	H53	D53 = 8.4
		G54	H54	D54 = 8.4
		G56	Not Required for Finishing	**D55** = 8.2
		G54		**D56** = 8.2

PROGRAMMING

O7351	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.

O7352	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.

O7353		Finishing	
G56	H53	**D55**	R = 8.2
G54	H54	**D56**	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.

O7354	Depth

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

CHECKLIST

O7352		Roughing		
Operation	Side	H Offset	D offset	Radius
Collar cut	G56	H51	**O7359**	
Drilling	G56	H47	Not Required for Drilling	
	G54	H48		
Slotting	G56	H49	Not Required for Slotting	
	G54	H50		
Semi roughing	G56	H51	**O7358**	
	G54	H52	**O7357**	
Semi finishing	G56	H53	D53	R = 8.4
	G54	H54	D54	R = 8.4

O7353		Finishing		
Operation	Side	H Offset	D offset	Radius
Wall finish	G56	H53	**D55**	R = 8.2
	G54	H54	**D56**	R = 8.2

O7354		Depth		
Operation	Side	H Offset	D offset	Radius
Depth finish	G56	H53	Not Required for Depth cut	
	G54	H54		

O7357		Semi Roughing		
Operation	Side	H Offset	D offset	Radius
Sub-program	**G54**		D52	R = 13.0

O7358		Semi Roughing		
Operation	Side	H Offset	D offset	Radius
Sub-program	**G56**		D51	R = 13.0

O7359		Collar Cut		
Operation	Side	H Offset	D offset	Radius
Sub-program	G56		D51	R = 13.0