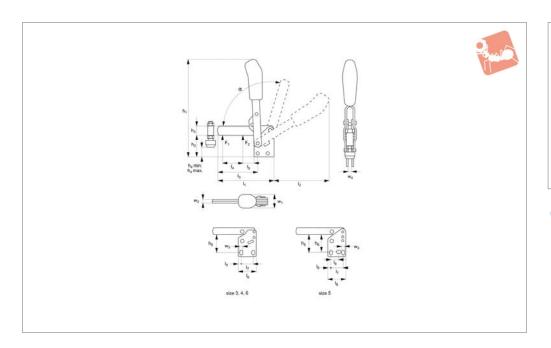


# **Vertical Acting Toggle Clamps** solid arm - vertical base





40250

### Material

Body: steel, zinc plated.

Rivets: stainless steel running in hardened hushes

Pre-lubricated bearings (grease suitable for food industry use).

Ergonomic, soft feel, oil-resistant handle

with large grip area.

Supplied complete with weldable clamping screw (with rubber pad).

### **Technical Notes**

For mounting to struts and for welding jigs. The arm can be shortened to suit the

workpiece, the sleeve is then welded to the

Opening angle (symbola/symbol/symbola/ symbol\*) can be changed by pressing in a stop pin on the clamp body.

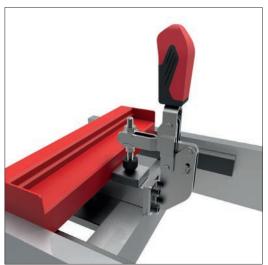
Temperature range -10°C to +80°C.

Order No.	Size	F <sub>1</sub> kN	F <sub>2</sub> kN	Clamping scre	w h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub> min.	h <sub>4</sub> max.	h <sub>5</sub>	h <sub>6</sub>	$I_1$	l <sub>2</sub>	Weight g
40250.W0003	3	1.4	2.5	M 8x45	200	0 48	18	14.5	26.0	41.0	-	108.5	111.0	400
40250.W0004	4	2.0	3.0	M 8x65	24	4 65	20	13.0	44.0	55.5	-	141.5	129.5	585
40250.W0005	5	3.0	5.0	M12x80	302	2 77	25	15.0	47.0	66.0	64	196.5	184.0	1480
40250.W0006	6	3.5	5.5	M12x110	369	9 117	30	28.5	86.5	102.0	-	232.0	206.0	2200
Order No.	l <sub>3</sub>	I <sub>4</sub>	I <sub>5</sub>	I <sub>6</sub>	I <sub>7</sub>	I <sub>8</sub>	l <sub>9</sub>		$w_1$	$w_2$	w <sub>3</sub>	$W_4$	α	α*
40250.W0003	81.0	43	19.5	35	20.0	-	7.5	5 :	27	6	7.5	6	105°	60°
40250.W0004	101.0	61	17.0	53	32.0	-	13.	0 :	34	8	8.6	8	105°	60°
40250.W0005	141.0	88	30.5	65	45.0	26,5-31,5	9.5	5 :	36	10	8.5	10	115°	60°
40250.W0006	166.5	90	20.5	90	50.5	-	24.	5	39	10	13.0	10	140°	60°

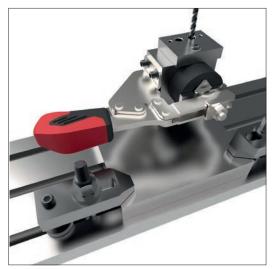


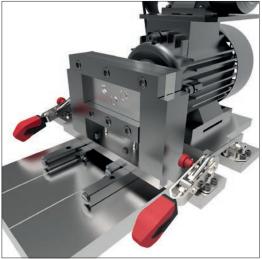
## **Welding Fixtures**





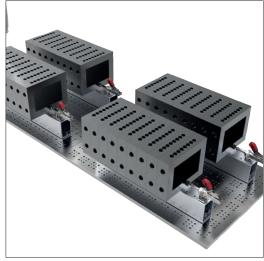
# Machining and Jig Assemblies





### Cmm's



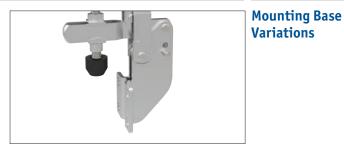


# **Wixroyd Toggle Clamps**

overview



Vertical base



Angled base

**Clamping Variations** 



Vertical acting



Horizontal acting



Push-pull



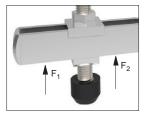
Hook type



Latch type

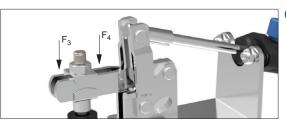
# **Explanation of forces**

The force transmitted to the workpiece by the toggle clamp's closed arm, without itself being deformed when machine forces are applied. The holding force value is dependent upon the proximity of the measuring load point to the toggle clamp's pivot point (therefore two values, F1 and F2 are provided).



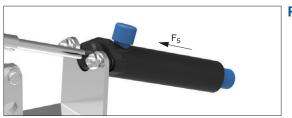
Holding Forces F<sub>1</sub> or F<sub>2</sub>

The force applied to the workpiece when the toggle clamp's arm is closed. These clamping forces can only be stated for pneumatic toggle clamps, clamping forces of manual clamps cannot be easily measured as they are dependent upon the operator.



Clamping Forces F<sub>3</sub> or F<sub>4</sub>

For pneumatically controlled toggle clamps only, F5 is the piston force required (at 6 bar to) achieve the stated clamping force.



Piston Forces F<sub>5</sub>



ov-W40000,1-A-T-W42070-A-T-b-rnh- Updated -27-10-2022

### **Quality Features**

STEEL TOGGLE CLAMPS



overview

Ergonomic soft grip 2-component handle



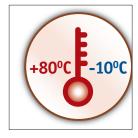
Stainless rivets and hardened bushings



Moveable stop for variable opening angle



Operator finger protection



Temperature resistant

### **Unique Features**



Safety catches



Heavy duty versions



Pneumatic versions



Matt black surface for optical measurement

### **Materials**



Steel, zinc plated and passivated



Stainless steel (304)



Steel, matt black vario-spektron coated



Protective cap and handle made of an electrostatic conductive (dissipative) material.