

## **Xpansion Clamps - Side-Loc**





#### Material

Mild steel body, with heat-treated tapered screw (coated to prevent seizing).

#### **Technical Notes**

For clamping blind holes from 17,8mm to 53mm.

Actuated from the side. The cam shaft and the plunger expand the clamp.

#### Tips

Actuated by turning a socket head cam shaft on the side which moves a tapered plunger to expand the clamp. Two versions: one for milling (type: mill) and one for turning (type: lathe).  $"d_2"$  is the minimum diameter the  $"d_1"$  dimension can be machined or turned down to.

Mounting screws included.

#### **Important Notes**

Installation Instructions: ID Xpansion Clamps are designed for clamping on the inside diameter of a component. To install correctly, please follow the following guidelines:

1. Expand the clamp approximately 0,1mm over its relaxed diameter and machine diameter d<sub>1</sub> to suit bore of the workpiece, either on lathe or mill.

2. If machining the clamp on a lathe use the nut provided, on the back of the clamp, to tighten the tapered screw. This nut is used only to machine the clamp.

3. Machine a pocket in the fixture to the close tolerance of dimension  $w^{}_{1\prime}$  and depth  $h^{}_{\lambda}.$ 

4. Drill and tap mounting holes as per dimension  $r_1$ .

5. In the centre of the pocket, drill and tap a hole to dimension  $d_3$  for the tapered screw.

6. For additional rigidity, a recessed dowel pin may be installed into the flange, if required.

Order No.	h	l	h <sub>2</sub>	h <sub>3</sub>	w <sub>1</sub> +0.000 -0.05	Туре	$d_1$	d <sub>2</sub> min.	d <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	$r_1$ on PCD	A/F	Torque to Nm max.	Holding force kN	Weight g
12052.W08	<b>28</b> 41	.3	22.2	17.5	50.0	Mill	28.7	17.8	-	19.0	-	Ø39,4 (M 4)	Μ6	66	20	340.2
12052.W08	<b>53</b> 44	.4	25.4	21.3	-	Lathe	53.3	17.8	25	19.0	44.4	-	Μ6	66	20	





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## **ID Expansion Clamp**

## and side-loc xpansion clamp

# 12051 - 12052 Clamping & Height Setting

**ID Xpansion Clamp**,

The ID Xpansion Clamp is the ideal way to hold multiple parts on an inside diameter for machining on your VMC

Machinable

or HMC.



ID Xpansion Clamps can be used to hold components with complex internal shapes, not just plain bores.

These machinable clamps are produced in 10 sizes and can hold internal diameters from 21.8 to 45,5mm.



- Low profile and ideal for secondary operations on lathe parts.
- Easily machined to size on lathe or mill.
- Excellent for palletised setups.
- Allow more parts per workcube or fixture plates.
- Body made of mild steel for machinability.
- Tighten with hex key, hydraulic pull cylinders or speed block.

## Side-Loc Xpansion Clamp machinable

# 12052

**BORE CLAMPING** 

Wixroyd introduces a new style clamp to its range of ID-Xpansion clamps, the Side-Loc Xpansion Clamp. Actuated by turning a socket head cam shaft on the side, it is ideal for clamping on blind internal diameters. The locking ring provides an accurate preset diameter and rigidity for machining. Like our original ID Xpansion clamps, the Side-Loc Xpansion Clamp has the dead length feature which is critical for close tolerance dimensions.

Designed in two styles, one for milling operations and one for lathe applications; the mill Side-Loc Xpansion Clamp can be machined from 28.4 to 18mm and the lathe version from 53 to 18mm.



Clamp activated from the side with a standard hex key



Side-Loc Xpansion Clamp, when the component obstructs the clamps tapered screw.





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