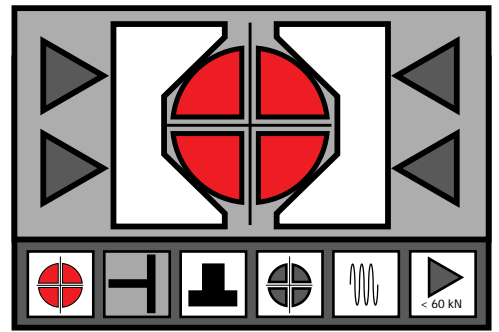


Hydraulically operated  
equalising clamping fixtures  
using double-wedge principle  
Series 2105

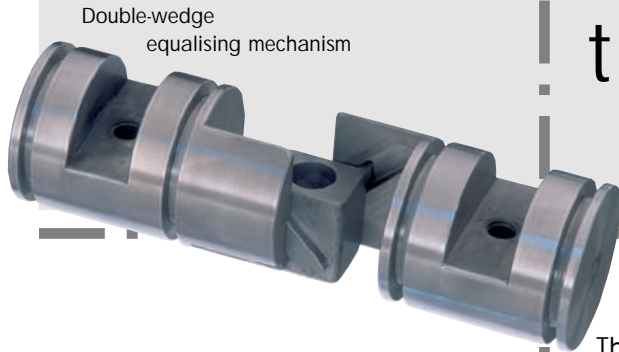


The  
fastest  
way  
to the  
centre  
...

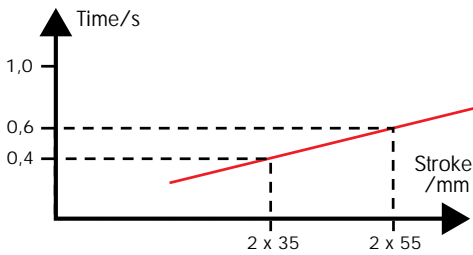


- Quick and precise thanks to the double-wedge drive patented by HICO
- Compact design
- Customised jaw arrangement
- Clamping ranges up to  $\varnothing$  350mm
- Clamping forces ranging from 10 to 60 kN

# The fastest way to the centre



## Fast

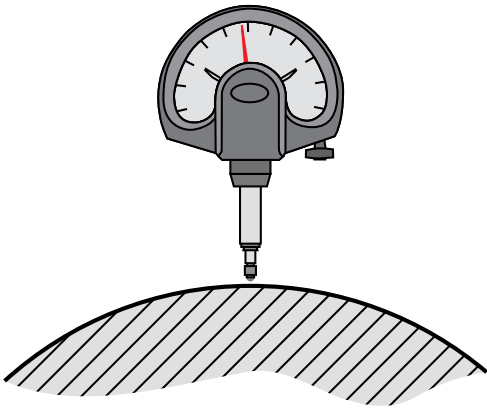


The double-wedge mechanism patented by HICO turn the compact equalising vice into one of the fastest and, at the same time, most accurate means available for your production.

The unique double-wedge equalising mechanism is based upon the principle of "inclined plane". It allows strokes of any length. The system itself is running in an oil bath, hence no lubrication is required. (Only the clamping slides need lubrication).

It is an outstanding feature of our equalising fixture that it allows the clamping jaws to be arranged to suit the customers requirements. The double-wedge system is integrated within the fixture body, this is true for the power fluid supply lines, as well. As a result, you get an easy-care fixturing module for your production facility.

## Precise



Since 1997 already, the equalising fixture has been used successfully in a wide variety of applications in production.

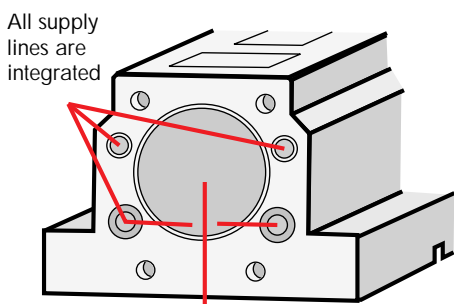
The response shows us that we are on "the right track" with this invention. This is why we are extending our program to 4 sizes each having two stroke ranges.

As a result, you will have an extremely powerful and multi-purpose fixture - featuring high quality and flexibility.

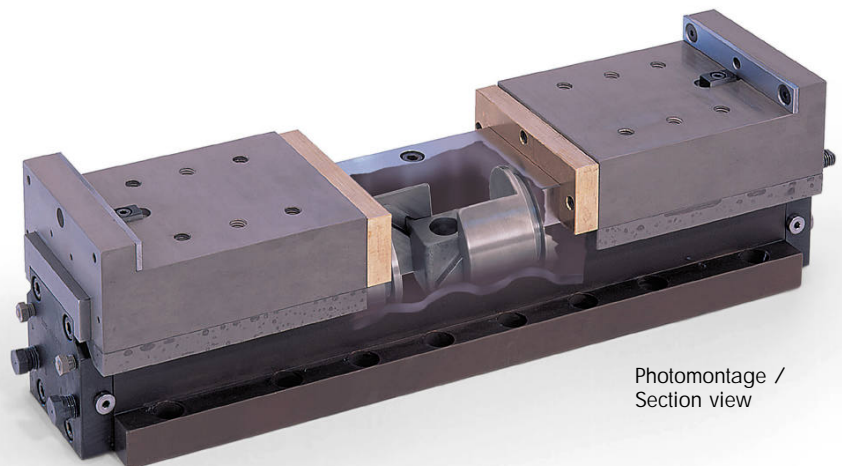
Should you however have particular requirements, you are equally on the right road with us.

Since 1984 HICO has been specialising in finding the best possible solution to any particular problem in the field of equalising part clamping.

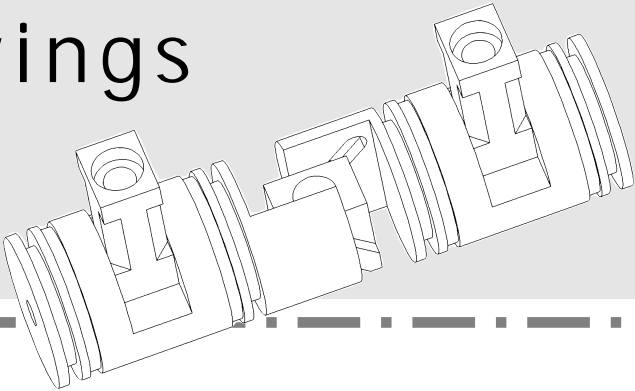
## Compact



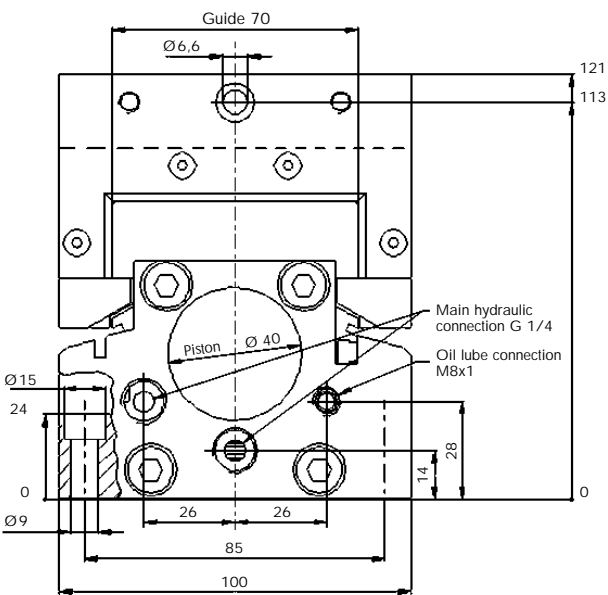
Drive piston within the fixture body



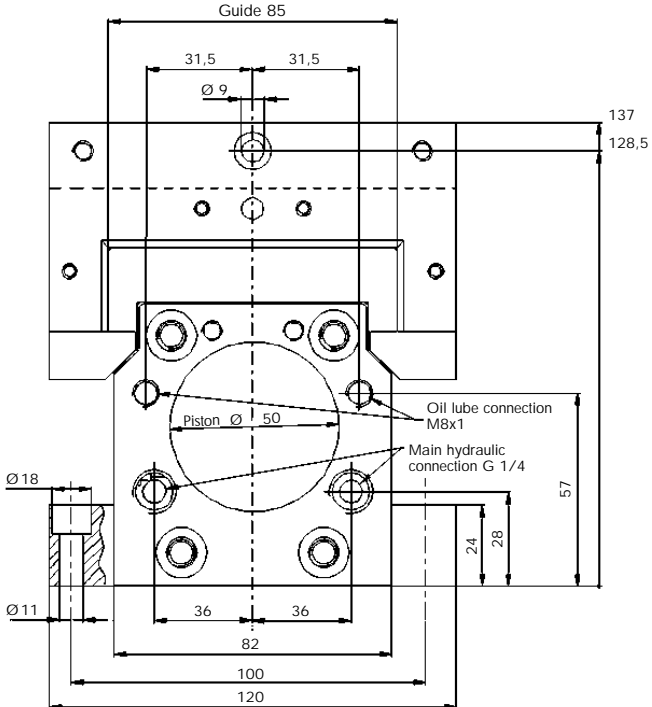
# Scale drawings



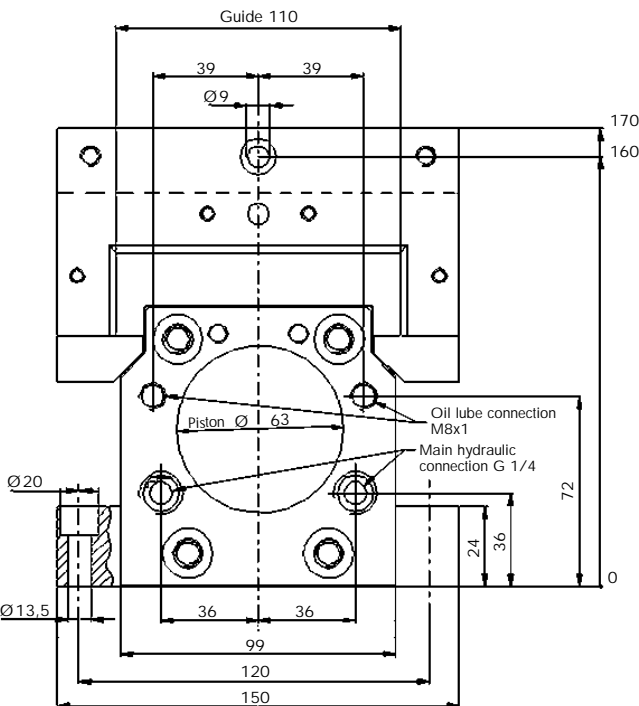
Front view 1  
2105-005 /-010



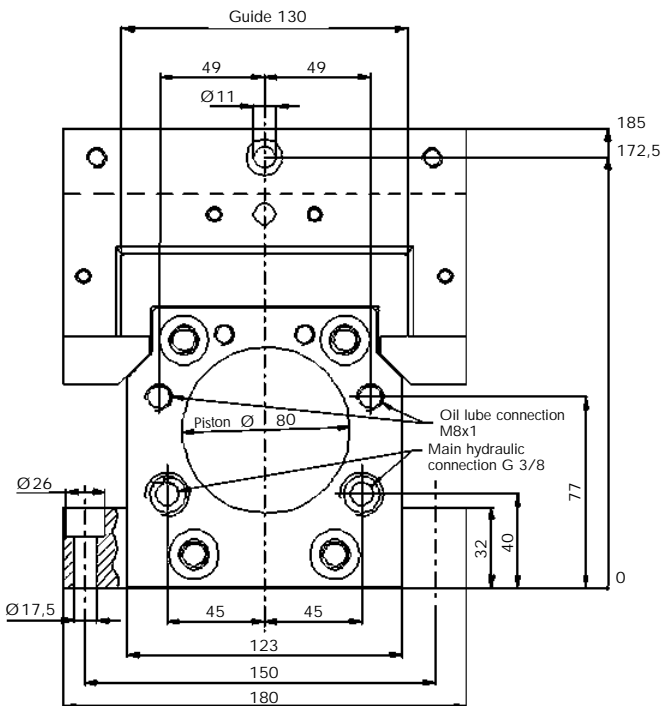
Front view 2  
2105-015 /-020

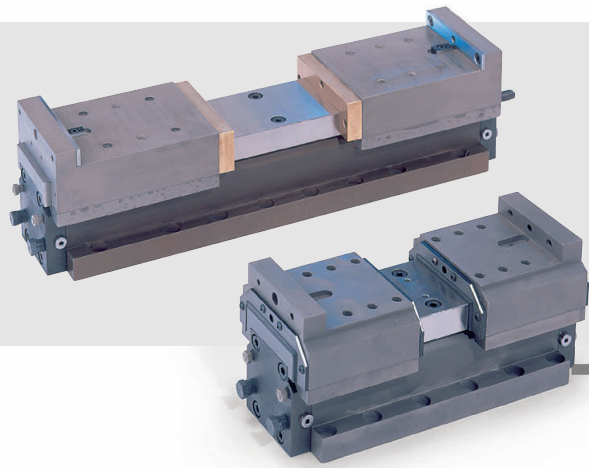


Front view 3  
2105-025 /-030

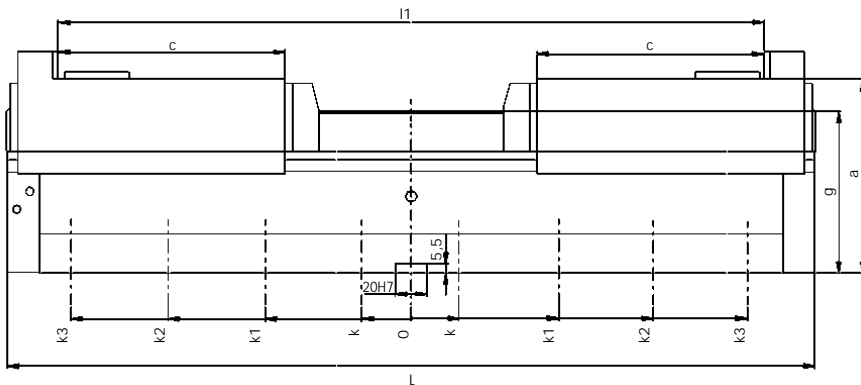


Front view 4  
2105-035 /-040

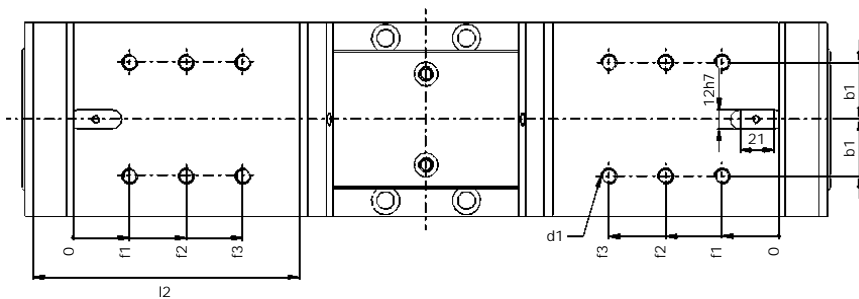




Side view (1-4)



Top view (1-4)



Special patented features:

- Compact design  
Double-wedge drive ensuring equalising clamping action with pistons integrated within the fixture body
- Equalising clamping system running in an oil bath; Hence no lubrication required; lubrication is necessary only for the clamping slides
- Hydraulic and lubrication oil ports alternatively at the front faces.  
All supply lines are integrated within the fixture body
- Flat clamping slides allowing a wide variety of clamping arrangements
- High clamping forces at a low hydraulic service pressure

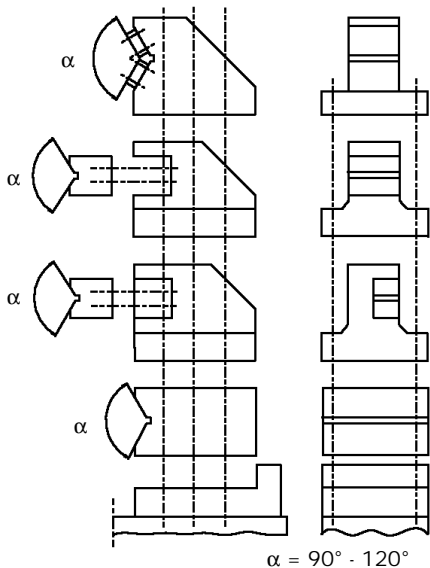
### Technical Data for Item N° 2105-xxx

Ordering number	2105-005	2105-010	2105-015	2105-020	2105-025	2105-030	2105-035	2105-040
	Short stroke	Long stroke	Short stroke	Long stroke	Short stroke	Long stroke	Short stroke	Long stroke
Sizes in mm								
Max. clamping dia. horizontal	40	85	65	120	100	220	160	330
Clamping stroke	2x8	2x22	2x15	2x35	2x20	2x45	2x30	2x55
Clamping range "l1"	128-144	271-315	206-236	366-436	278-318	430-520	354-414	504-614
Clamping force (kN)	12	12	21	21	40	40	60	60
Max. service pressure (bar)	120	120	130	130	140	140	140	140
Repeat accuracy*	0,03	0,03	0,03	0,03	0,04	0,04	0,05	0,05
Overall length "L"	200	365	300	500	400	600	500	700
Clamping height "a" ± 0,02	105	105	120	120	150	150	160	160
Jaw mounting face "c"	58	98	83,5	140	110	175	147	202
Tapped hole "d1"	M8x10 deep	M8x10 deep	M10x12 deep	M10x12 deep	M12x15 deep	M12x15 deep	M16x18 deep	M16x18 deep
Hole pitch "f1"	20	25	25	35	30	50	40	50
"f2"	40	50	50	70	60	100	80	100
"f3"	-	75	75	105	90	150	120	150
Hole pitch "b1"	30	30	35	35	40	40	50	50
Slide length "l2"	76	120	110	165	140	205	180	235
Guide height "g"	85	85	100	100	125	125	135	135
Hole pitch "k"	25	25	25	25	50	50	50	50
"k1"	70	75	75	75	100	100	125	125
"k2"	-	125	120	120	150	150	200	200
"k3"	-	-	-	200	-	250	-	300

For further dimensions refer to clamping fixture sections.  
\*at constant clamping pressure

# Accessories\*

\*Extra price as per actual price list



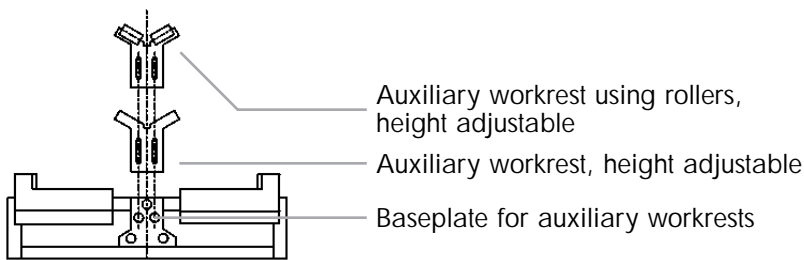
- Basic jaws with changeable jaws (2A05-040)

- Basic jaws with changeable jaws centrally arranged (2A05-010 /-030)

- Basic jaws with changeable jaws LH or RH (2A05-010 /-040)

- Direct mounted jaws (2A05-005 /-020)

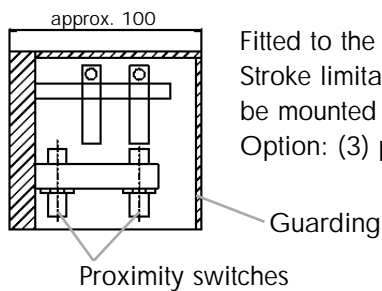
$\alpha = 90^\circ - 120^\circ$



Auxiliary workrest using rollers, height adjustable

Auxiliary workrest, height adjustable

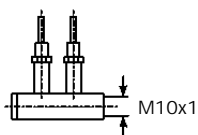
Baseplate for auxiliary workrests



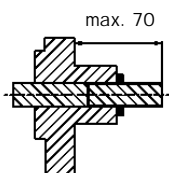
Fitted to the front face with (2) proximity switches. Stroke limitation, if fitted at the same time, will be mounted to the opposite side. Option: (3) proximity switches

Guarding

Proximity switches



Centralised oil lube port M10x1  
Lubrication pulse every hour 2 x 0.1 ccm  
(Standard: manual oil supply M8x1)



Stroke limitation infinitely adjustable from inside to outside.  
Mounted to the front face. Position detection, if fitted at the same time, will be mounted to the opposite side.

## Clamping jaws

2A05 - XXX

For more clearness ask for our extra leaflet "Clamping jaws 2A05-XXX"

## Auxiliary workrests

2B05 - XXX

## Position detection

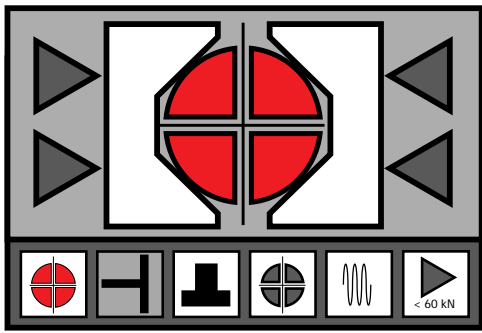
2C05 - XXX

## Centralised oil lubrication port

2D05 - XXX

## Stroke limitation

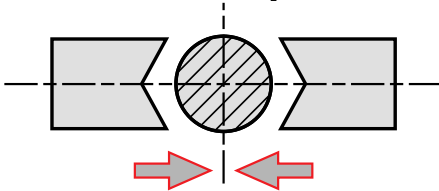
2E05 - XXX



# Application Capabilities / Options\*

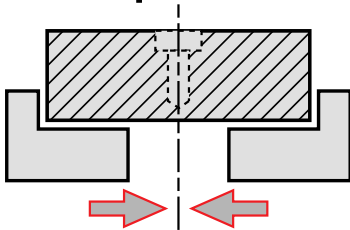
\*Extra price as per actual price list

## Round parts



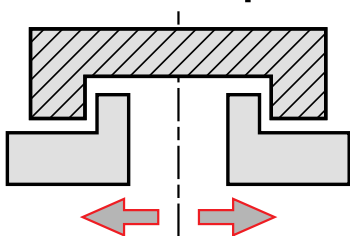
- Ends machining
- Keyways
- Centre machining horizontal / vertical

## Flat parts



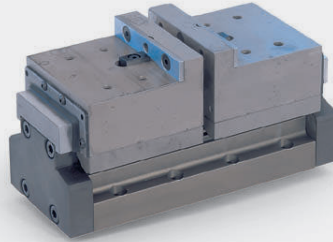
- Centre machining vertical

## Formed parts

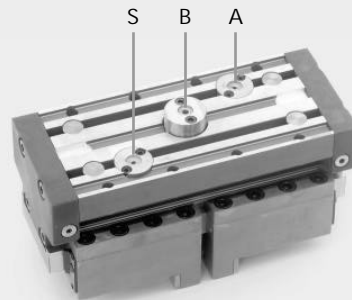


- Centre alignment
- Clamp

Equalising clamping fixture  
Clamping from inside to outside



Supply lines from bottom  
- not from the front face



A = Clamp  
B = Unclamp  
S = Lubrication

Hydraulic power unit  
with 2-hand safety control

