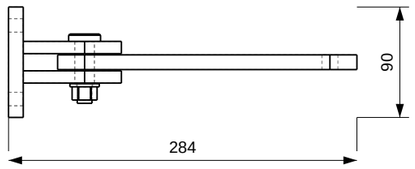
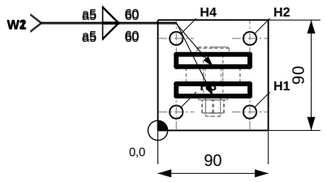
FRONT VIEW



LEFT SIDE VIEW



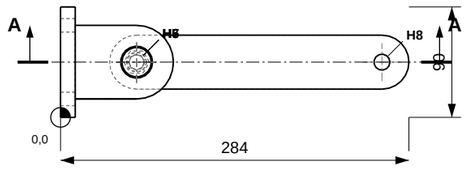
DRIVING DIMENSIONS

Parameter	Value	Unit
Pin diameter	16	mm
Cheek thickness	10	mm
Cheek eye radius	30	mm
Pin to back plate	50	mm
Arm thickness	12	mm
Side clearance	1	mm
Arm length	200	mm
Arm width	44	mm
Back plate thickness	12	mm
Back plate height	90	mm
Back plate width	90	mm
Mount hole offset Y	30	mm
Mount hole offset Z	30	mm
Mount hole diameter	11	mm
Pin head diameter	26	mm
Pin head height	6	mm
Thread stub length	16	mm
End hole	13	mm

PARTS LIST

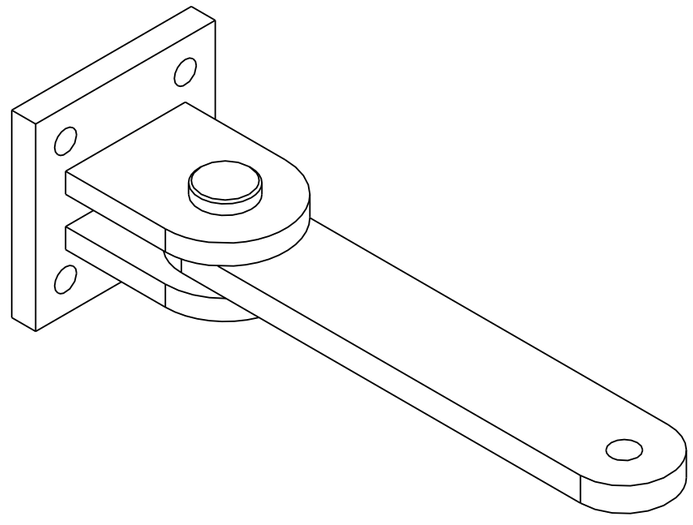
Pos	Part	Qty	Standard / mass
1	back_plate	1	727.2 g
2	cheek_upper	1	330.7 g
3	cheek_lower	1	330.7 g
4	arm	1	940.8 g
5	clevis_pin	1	93.3 g
6	Plain washer M12	1	washer
7	Hexagon nut M12	1	nut

TOP VIEW



Dimensions in mm · unspecified tolerances ISO 2768-m · surface Ra 3.2 unless noted · break sharp edges 0.5 × 45° · welded

ISOMETRIC



Hidden lines omitted · not to scale

NOTES

1. Shaft clevis pin: safety 0.27 below 2.5 - increase to at least Ø34 mm or use a stronger steel (C45 / 42CrMo4)
2. Tongue eye has no bushing: for frequent motion, add a bronze bush or a lube groove
3. Use a self-locking nut, or add a split-pin hole, against loosening under oscillation
4. Cheek bending under side loads has not been checked; side loads are assumed small
5. 'Clawis' read as 'clevis'; the sketch has no dimensions, so all sizes are chosen
6. Pin Ø16, cheeks 10 mm plate, tongue 12 mm flat bar, 1 mm side clearance per side
7. Pin centre 50 mm from back plate, cheek eye radius 30 mm
8. Arm 200 mm pin-to-end, 44 mm wide, with a Ø13 attachment hole at the free end
9. Design load 2 kN at the arm end (about 400 Nm at the pivot)

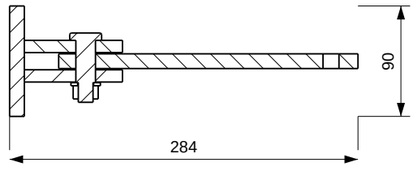
TITLE

Welded Clevis with Pivot Arm

LUXXO

DRAWN BY Luxxo AI design engineer	DATE 2026-11-12	PROJECTION ISO first angle [|O] -O
MATERIAL Steel (S235)	GENERAL TOLERANCE ISO 2768-m ± 0.2 mm	MASS (calc.) 2.44 kg
SCALE 1 : 5	SHEET 1 / 2 A3	DRAWING No. LX-84348D-v1

SECTION A-A



A-A (1 : 5) cutting plane y = 0 mm, viewed from the front

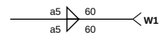
HOLE TABLE (X / Y from datum 0,0 of the view F / S / T on sheet 1)

Tag	Ø	X	Y	Depth	View	Thread / fit / note
H1	Ø11	75	15	THRU	S	Ø11 H13 for M10 (ISO 273 medium)
H2	Ø11	75	75	THRU	S	Ø11 H13 for M10 (ISO 273 medium)
H3	Ø11	15	15	THRU	S	Ø11 H13 for M10 (ISO 273 medium)
H4	Ø11	15	75	THRU	S	Ø11 H13 for M10 (ISO 273 medium)
H5	Ø16	62	45	THRU	T	Drilled
H6	Ø16	62	45	THRU	T	Drilled
H7	Ø16	62	45	THRU	T	Ø16 H7 (+0.018 / 0) arm eye
H8	Ø13	262	45	THRU	T	Drilled

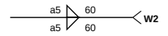
FITS & TOLERANCES (ISO 286)

Feature	Size	Max / min	Fit
pin in cheeks	Ø16 d9	15.95 / 15.907	H9/d9 clearance
arm eye	Ø16 H7	16.018 / 16.0	H7/f7 clearance

WELDS (ISO 2553, symbols on sheet 1)



W1 upper cheek to back plate
Prep: no edge preparation, fit-up gap ≤ 1 mm



W2 lower cheek to back plate
Prep: no edge preparation, fit-up gap ≤ 1 mm

ENGINEERING CHECKS (simplified hand calculations)

!! clevis pin: Ø16: T = 400 N·m, M = 10 N·m → σv = 861.8 MPa, safety 0.27 vs. Re 235 MPa (need 2.5), min. Ø33.5

Flat patterns: 3 DXF files (4 pcs) for laser cutting - download in the app.

TITLE: **Welded Clevis with Pivot Arm**		LUXXO
DRAWN BY: Luxxo AI design engineer	DATE: 2026-11-12	PROJECTION: ISO first angle [|O] -O
MATERIAL: Steel (S235)	GENERAL TOLERANCE: ISO 2768-m ± 0.2 mm	MASS (calc.): 2.44 kg
SCALE: 1 : 5	SHEET: 2 / 2 A3	DRAWING No.: LX-84348D-v1

Section hatching per ISO 128-50 · hole coordinates from the datum symbol · fits ISO 286-2 · weld symbols ISO 2553 · weld preparation EN ISO 9692-1