







ALFRA PRESS AP 250



ALFRA PRESS AP 400

	Page 74	Page 78	
	Control cabinet housing, Control cabinet doors, Mounting panels	Control cabinet housing, Control cabinet doors, Mounting panels	
Prod.-No.	03170	03195	
Overhang with limit stop in mm	250	400	
Overall height in mm	820	1,700	
Total weight in kg approx.	50 (without base)	220	
Space requirement in mm	1,000 x 1,000	1,200 x 800	
Tool dimension in mm:			
Circular Ø	3.2 – 40.5	3.2 – 40.5	
Square up to	28.0 x 28.0	28.0 x 28.0	
Max. diagonals of	40.0	40.0	
Max. material thickness in mm:			
Sheet steel S235 / stainless steel	2.5 / 2.0	2.5 / 2.0	
Aluminium / plastic	4.0	4.0	
Hydraulic system:			
Mode of action	single-action	single-action	
Punching force F	46 kN at 600 bar	46 kN at 600 bar	
Punching stroke in mm	50	50	
Operating voltage in V	-	-	
Workpiece fold in mm	22	22	



ALFRA PRESS AP 500



ALFRA PRESS AP 600-2



ALFRA PRESS AP 800

	Page 82	Page 86	Page 90
	Control cabinet doors, Mounting panels, various control cabinet housings	Control cabinet doors, Mounting panels	Control cabinet doors, Mounting panels
	03093	03090	03400
	500	600	800
	1,500	1,600	1,700
	200	360	850
	1,500 x 1,500 mm	2,000 x 3,000	2,360 x 4,440
	3.2 – 63.5	3.2 – 70.0	3.2 – 120.0
	46.0 x 46.0	68.0 x 68.0	110.0 x 110.0
	60.0	90.0	140.0
	3.0 / 2.0	3.0 / 2.0	3.0 / 2.0
	4.0	4.0	4.0
	double-action	double-action	double-action
	48 kN at 130 bar	60 kN at 165 bar	135 kN at 190 bar
	66	66	72
	220	400	400
	30	30	40

APress 250

Overhang 250 mm



For rapid punching-out of circular, square, rectangular or special forms without pre-drilling in control cabinet doors, terminal boxes, cable ducts, housings, cable management panels etc. right up to margins. Simple tool change carried out in seconds.

Description:

- Flexible in use - on mobile base (optional) or stationary, fitted on the workbench.
- Rapid tool change helps in problem areas with a wide range of break-through types.
- A range of die mountings is available, even for punching very close to margins.
- Rows of punch-outs are no problem thanks to attachable folding stops.
- Tip: Use a laser pointer as an option - no scribing, no centre punching, a simple crosshair with the pin is sufficient.
- Operation using a manual pump is sufficient as a "starter solution" - this makes "punching without pre-drilling" possible at low cost.

Technical data:

Overhang with limit stop:	250 mm
Overhang without limit stop:	265 mm
Punching stroke:	50 mm
Punching force F:	46 kN at 600 bar
Hydraulic connection:	R 1/4"
Weight without base:	50 kg
Weight with base:	120 kg
Space requirement with base approx.:	1,000 mm x 1,000 mm

Punching capacity:

Circular:	Ø 3.2 - 40.5 mm
Square:	28.0 x 28.0 mm
Rectangle:	22.0 x 30.0 mm
Special forms up to a max. diagonal of:	40.0 mm

Material thicknesses (max):

Sheet steel (S235):	2.5 mm
Stainless steel (F = 600 N/mm²):	2.0 mm
Aluminium (F = 22 N/mm²):	4.0 mm
Punchable plastics:	4.0 mm

Prod.-No.

ALFRA PRESS AP 250 (without options)

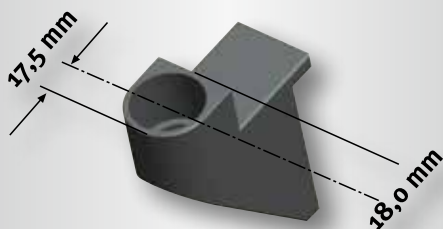
03170

Note:

- All circular tools for ALFRA PRESS punches AP 250 - AP 800 are made of special tool steel and have a special cutting geometry developed by ALFRA.

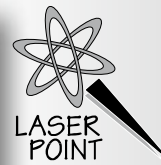
Special tools can be manufactured in our own toolmaking works at short notice!

Technical features when punching close to margins with die holder Type I



Smallest-possible axial dimension (border spacing) when using die holder Type I

Prod.-No. 03174



LASER POINT
Laser pointer for optical display of tool centre



Tool drawer, pivoting



Length and depth limit stop with foldable add-on stops



Pivoting support arms, height adjustable, each with 2 rubber supports (option)



We recommend our electro-hydraulic pump ALH-600 Prod.-No. 03190 as a drive unit.

Prod.-No. 03190

APress 250

Overhang 250 mm

Stationary hole punch - AP 250

Type	Designation	Prod.-No.
Machine	Punching yoke ALFRA PRESS 250 with hydraulic cylinder and quick coupling, cylinder piston with non-twist device for insertion of all punch sockets	03170
Pump	Electro-hydraulic pump ALH 600	03190
Special fitting	Laser pointer with power unit for electro-hydraulic pump ALH 600	03181
	Laser pointer, cpl. with power unit and connector plug for separate mains cable 230V/50Hz	03182
	Combined length and depth limit stops with 2 adjustable limit stops per axis. The limit stops in the X direction are foldable and are suitable as an add-on limit stop for rows of punch-outs.	03177
	Pivoting support arms (pairs) height adjustable, each with 2 rubber supports	03179
	Limit switch for stroke limitation (only in combination with hydraulic pump ALH-600)	03183
	Mobile base	03189
Punch socket	with scraper and centring pin Ø 3.2 - 30.5 mm with mounting shaft for AP 250 - 400	03171
	with scraper and centring pin for round punch Ø 32.5 - 40.5 mm with 19 mm Female thread for AP 250 - 400	03172
Die holder	Type I Dies Ø 3.2 - 22.5 mm for punching right up to margins for AP 250 - 400	03174
	Type II Dies Ø 3.2 - 30.5 mm and moulding tool up to 21 x 21 mm (30.5 mm max. diagonals) for AP 250 - 400	03175
	Type IV Dies Ø 30.6 - 40.5 mm and moulding tool up to 28 x 28 mm (40.0 mm max. diagonals) AP 250 - 400	03176

Square and rectangular hole punches - AP 250 (with mounting shaft and centring point, including die)

Type	Designation	Prod.-No.	AP 250	AP 400	AP 500	AP 600	AP 800
Square holes	21.0 x 21.0 mm for AP 250 - 400	03087	●	●			
	25.4 x 25.4 mm for AP 250 - 400	03088	●	●			
Rectangular holes	22.0 x 30.0 mm for AP 250 - 400	03089	●	●			
Special holes	Ø 22.5 mm with 4 lugs for AP 250 - 400	03086	●	●			
Spare neoprene scraper	for punch socket (03171) Ø 3.2 - 30.5 mm	03185	●	●			
	for punch socket (03172) Ø 30.6 - 40.5 mm	03186	●	●			

Circular punches and dies - AP 250

Type	Mounting holder	Ø in mm	Size Metric	Size PG	Prod.-No.	AP 250	AP 400	AP 500	AP 600-2	AP 800
Punch Ø 3.2 - 30.5 mm		3.2			03131	●	●	●	●	●
		4.5			03132	●	●			
		5.4			03133	●	●	●	●	●
		6.5			03134	●	●	●	●	
		8.5	M8		03135	●	●	●	●	●
		10.5	M10		03136	●	●	●	●	●
		12.7	M12	PG7	03137	●	●	●	●	●
		15.2		PG9	03138	●	●	●	●	●
		16.2	M16		03139	●	●	●	●	●
		18.6		PG11	03140	●	●	●	●	●
		20.4	M20	PG13	03141	●	●	●	●	●
		22.5		PG16	03142	●	●	●	●	●
		25.4	M25		03143	●	●	●	●	●
		28.3		PG21	03144	●	●	●	●	●
		30.5			03145	●	●	●	●	●
Punch Ø 32.5 - 40.5 mm		32.5	M32		03146	●	●	●	●	●
		37.0		PG29	03158	●	●	●	●	●
		40.5	M40		03147	●	●	●	●	●
Die Ø 3.2 - 22.5 mm	TYPE I	3.2			03500	●	●			
		4.5			03501	●	●			
		5.4			03502	●	●			
		6.5			03503	●	●			
		8.5	M8		03504	●	●			
		10.5	M10		03505	●	●			
		12.7	M12	PG7	03506	●	●			
		15.2		PG9	03507	●	●			
		16.2	M16		03508	●	●			
		18.6		PG11	03509	●	●			
		20.4	M20	PG13	03510	●	●			
		22.5		PG16	03511	●	●			
Die Ø 3.2 - 30.5 mm	TYPE II	3.2			03063	●	●	●	●	●
		4.5			03066	●	●	●	●	●
		5.4			03068	●	●	●	●	●
		6.5			03074	●	●	●	●	●
		8.5	M8		03076	●	●	●	●	●
		10.5	M10		03079	●	●	●	●	●
		12.7	M12	PG7	03022	●	●	●	●	●
		15.2		PG9	03023	●	●	●	●	●
		16.2	M16		03084	●	●	●	●	●
		18.6		PG11	03024	●	●	●	●	●
		20.4	M20	PG13	03025	●	●	●	●	●
		22.5		PG16	03026	●	●	●	●	●
		25.4	M25		03085	●	●	●	●	●
		28.3		PG21	03110	●	●	●	●	●
		30.5			03111	●	●	●	●	●
Die Ø 30.6 - 40.5mm	TYPE IV	32.5	M32		03165	●	●			
		37.0		PG29	03166	●	●			
		40.5	M40		03167	●	●			

APress 400

Overhang 400 mm



For rapid punching-out in circular, square, rectangular or special forms without pre-drilling in control cabinet doors, terminal boxes, cable ducts, housings, cable management panels etc. right up to margins. Simple tool change carried out in seconds.

Description:

- Flexible in use - on mobile base.
- Rapid tool change helps in problem areas with a wide range of break-through types.
- A range of die mountings is available, even for punching very close to margins.
- Rows of punch-outs are no problem thanks to attachable folding stops.
- Tip: Use a laser pointer as an option - no scribing, no centre punching, a simple crosshair with the pin is sufficient.
- Operation using a manual pump is sufficient as a "starter solution" - this makes "punching without pre-drilling" possible at low cost.

Technical data:

Overhang with limit stop:	400 mm
Overhang without limit stop:	430 mm
Punching stroke:	50 mm
Punching force F:	46 kN at 600 bar
Hydraulic connection:	R 1/4"
Weight:	220 kg
Space requirement with base approx.:	1,200 x 800 mm

Punching capacity:

Circular from:	Ø 3.2 - 40.5 mm
Square up to:	28.0 x 28.0 mm
Rectangular up to:	22.0 x 30.0 mm
Special forms up to a max. diagonal of:	40.0 mm

Material thicknesses (max):

Sheet steel (S235):	2.5 mm
Stainless steel (F = 600 N/mm ²):	2.0 mm
Aluminium (F = 22 N/mm ²):	4.0 mm
Punchable plastics:	4.0 mm

Prod.-No.

ALFRA PRESS AP 400 (without options)

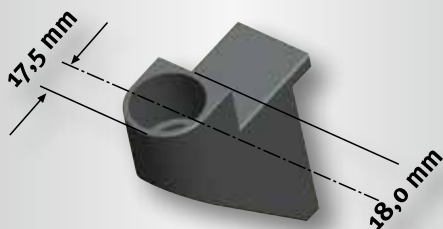
03195

Note:

- All circular tools for ALFRA PRESS punches AP 250 - AP 800 are made of special tool steel and have a special cutting geometry developed by ALFRA.

Special tools can be manufactured in our own toolmaking works at short notice!

Technical features when punching close to margins with die holder Type I



Smallest-possible axial dimension (border spacing) when using die holder Type I

Prod.-No. 03174



Laser pointer for optical display of tool centre



Die holder Type II



Tool drawer, pivoting



Length and depth limit stop with foldable add-on stops (Option)



Pivoting support arms, height adjustable, each with 3 rubber supports (Option)



We recommend our electro-hydraulic pump ALH-600 Prod.-No. 03190 as a drive unit.

Prod.-No. 03190

APress 400

Overhang 400 mm

Stationary hole punch - AP 400

Type	Designation	Prod.-No.
Machine Pump	Punching yoke ALFRA PRESS 400 E with hydraulic cylinder and quick coupling, cylinder piston with non-twist device for insertion of all punch sockets	03195
	Electro-hydraulic pump ALH 600	03190
Special fitting	Laser pointer with power unit for electro-hydraulic pump ALH 600	03181
	Laser pointer, with power unit and connector plug for separate mains cable 230V/50Hz	03182
	Combined length and depth limit stops with 2 adjustable limit stops per axis. The limit stops in the X direction are foldable and are suitable as an add-on limit stop for rows of punch-outs.	03196
	Pivoting support arms (pairs) height adjustable, each with 2 rubber supports	03197
Punch socket	with scraper and centring pin Ø 3.2 - 30.5 mm with mounting shaft for AP 250 - 400	03171
	with scraper and centring pin for round punch Ø 32.5 - 40.5 mm with 19 mm Female thread for AP 250 - 400	03172
Die holder	Type I Dies Ø 3.2 - 22.5 mm for punching right up to margins for AP 250 - 400	03174
	Type II Dies Ø 3.2 - 30.5 mm and moulding tool up to 21 x 21 mm (30.5 mm max. diagonals) for AP 250 - 400	03175
	Type IV Dies Ø 30.6 - 40.5 mm and moulding tool up to 28 x 28 mm (40.0 mm max. diagonals) AP 250 - 400	03176

Square and rectangular hole punches - AP 400 (with mounting shaft and centring point, including die)

Type	Designation	Prod.-No.	AP 250	AP 400	AP 500	AP 600	AP 800
Square holes	21.0 x 21.0 mm for AP 250 - 400	03087	●	●			
	25.4 x 25.4 mm for AP 250 - 400	03088	●	●			
Rectangular holes	22.0 x 30.0 mm for AP 250 - 400	03089	●	●			
Special holes	Ø 22.5 mm with 4 lugs for AP 250 - 400	03086	●	●			
Spare neoprene scraper	for punch socket (03171) Ø 3.2 - 30.5 mm	03185	●	●			
	for punch socket (03172) Ø 30.6 - 40.5 mm	03186	●	●			

Circular punches and dies - AP 400

Type	Mounting holder	Ø in mm	Size Metric	Size PG	Prod.-No.	AP 250	AP 400	AP 500	AP 600-2	AP 800
Punch Ø 3.2 - 30.5 mm		3.2			03131	●	●	●	●	●
		4.5			03132	●	●			
		5.4			03133	●	●	●	●	●
		6.5			03134	●	●	●	●	
		8.5	M8		03135	●	●	●	●	●
		10.5	M10		03136	●	●	●	●	●
		12.7	M12	PG7	03137	●	●	●	●	●
		15.2		PG9	03138	●	●	●	●	●
		16.2	M16		03139	●	●	●	●	●
		18.6		PG11	03140	●	●	●	●	●
		20.4	M20	PG13	03141	●	●	●	●	●
		22.5		PG16	03142	●	●	●	●	●
		25.4	M25		03143	●	●	●	●	●
		28.3		PG21	03144	●	●	●	●	●
		30.5			03145	●	●	●	●	●
Punch Ø 32.5 - 40.5 mm		32.5	M32		03146	●	●	●	●	●
		37.0		PG29	03158	●	●	●	●	●
		40.5	M40		03147	●	●	●	●	●
Die Ø 3.2 - 22.5 mm	TYPE I	3.2			03500	●	●			
		4.5			03501	●	●			
		5.4			03502	●	●			
		6.5			03503	●	●			
		8.5	M8		03504	●	●			
		10.5	M10		03505	●	●			
		12.7	M12	PG7	03506	●	●			
		15.2		PG9	03507	●	●			
		16.2	M16		03508	●	●			
		18.6		PG11	03509	●	●			
		20.4	M20	PG13	03510	●	●			
		22.5		PG16	03511	●	●			
Die Ø 3.2 - 30.5 mm	TYPE II	3.2			03063	●	●	●	●	●
		4.5			03066	●	●	●	●	●
		5.4			03068	●	●	●	●	●
		6.5			03074	●	●	●	●	●
		8.5	M8		03076	●	●	●	●	●
		10.5	M10		03079	●	●	●	●	●
		12.7	M12	PG7	03022	●	●	●	●	●
		15.2		PG9	03023	●	●	●	●	●
		16.2	M16		03084	●	●	●	●	●
		18.6		PG11	03024	●	●	●	●	●
		20.4	M20	PG13	03025	●	●	●	●	●
		22.5		PG16	03026	●	●	●	●	●
		25.4	M25		03085	●	●	●	●	●
		28.3		PG21	03110	●	●	●	●	●
		30.5			03111	●	●	●	●	●
Die Ø 30.6 - 40.5mm	TYPE IV	32.5	M32		03165	●	●			
		37.0		PG29	03166	●	●			
		40.5	M40		03167	●	●			

APress 500

Overhang 500 mm



The stationary hole punch has been developed for control cabinet and switch gear makers and is suitable for quick punching-out of circular, square, rectangular or special forms in sheet metal and control cabinet doors up to 2000 mm x 1000 mm and 30 mm margin fold height. Punching possible right up to margins. Simple, rapid tool change carried out in seconds.

Control cabinets/housings up to 300 mm in depth can also be processed.

Description:

- Stable press body with adjustable stand feet.
- Dual-action hydraulic cylinder, flanged force-locking and form-locking to machine body.
- Anti-twist piston rod Ø 55 mm made of tempered stainless steel with tool holder.
- Die bed, fixed force-locking to press body.
- Rapid tool change helps in problem areas with a wide range of break-through types.
- Hold-down device with safety function, fixed with electrical safety lock for accident prevention.
- Height-adjustable length and depth limit stops - available in 2 versions.
- Tape measure display for length and depth limit stops.
- Dual-circuit hydraulic unit with electric pump, oil container and solenoid valves (very low noise).
- Safety footswitch with double pedal for infinitely variable operation of punching and return stroke.

Technical data:

Overhang with limit stop:	500 mm
Overhang without limit stop:	540 mm
Punching stroke:	66 mm
Punching force F:	48 kN at 130 bar
Motor power:	0.37 kW
Operating voltage:	220 V
Weight approx.:	200 kg
Overall height:	1,500 mm
Working height:	1,000 mm
Width of punch body:	130 mm
Depth of punch body:	950 mm
Length of limit stock rails:	1,500 mm
Space requirement approx.:	1,500 x 1,500 mm

Punching capacity:

Circular from:	Ø 3.2 - 63.5 mm
Square up to:	46.0 x 46.0 mm
Special forms up to a max. diagonal of:	60.0 mm

Material thicknesses (max):

Sheet steel (S235):	3.0 mm
Stainless steel (F = 600 N/mm²):	2.0 mm
Aluminium (F = 22 N/mm²):	4.0 mm
Punchable plastics:	4.0 mm

Prod.-No.

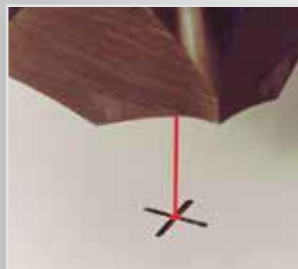
ALFRA PRESS AP 500 (without options)

03093

Note:

- All circular tools for ALFRA PRESS punches AP 250 - AP 800 are made of special tool steel and have a special cutting geometry developed by ALFRA.

Special tools can be manufactured in our own toolmaking works at short notice!



Laser pointer for optical display of tool centre



Electrical safety lock for accident prevention.



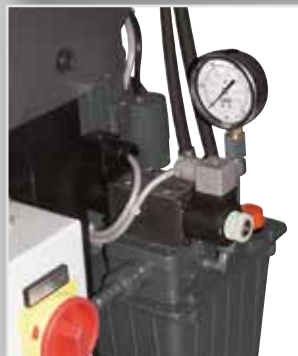
Limit stop system in Y direction
Mobile, 2 guide shafts in press body.



Die holder



Tape measures display for Y-axis



Dual-circuit hydraulic unit

APress 500

Overhang 500 mm

Stationary hole punch - AP 500

Type	Designation	Prod.-No.
Machine	Stationary hole punch ALFRA PRESS 500 LPV with hydraulic cylinder, dual-action Hydraulic unit, adjustable stand feet, safety footswitch	03093
Special fitting	Laser pointer for optical display of tool centre	03021
	Length and depth limit stops movable in Y direction	03094
	Length and depth limit stops movable in X and Y direction	03095
	Pivoting double joint arm for supporting workpiece (individual)	03078
Punch socket	with scraper and centring pin for round punch with mounting shaft AP 500 - 600 Ø 3.2 - 30.5 mm	03036
	AP 500 - 600 Ø 32.5 - 40.5 mm	03035
Die holder	Type A Circular die Type A Ø 3.2 - 25.4 mm	03040
	Type B Circular die Type A Ø 28.3 - 40.5 mm	03041
	Type C Circular die Type A Ø 40.6 - 63.5 mm	03077

Square and rectangular hole punches - AP 500 (with mounting shaft and centring point, including die)

Type	Designation	Prod.-No.	AP 250	AP 400	AP 500	AP 600	AP 800
Square holes	12.7 x 12.7 mm for AP 500 - 600	03042			●	●	
	19.0 x 19.0 mm for AP 500 - 600	03044			●	●	
	22.2 x 22.2 mm for AP 500 - 600	03045			●	●	
	25.4 x 25.4 mm for AP 500 - 600	03046			●	●	
	46.0 x 46.0 mm for AP 500 - 600	03047			●	●	
	68.0 x 68.0 mm for AP 600	03050				●	
Rectangular holes	22.0 x 30.0 mm for AP 500 - 600	03048			●	●	
	22.0 x 42.0 mm for AP 500 - 600	03049			●	●	
Special holes	Ø 22.5 mm 1 lug 3.2 mm for AP 500 - 600	03051			●	●	
	Ø 22.5 mm with 2 lugs 3.2 mm for AP 500 - 600	03052			●	●	
	Ø 22.5 mm, flattened on 4 sides to 20.1 mm for AP 500 - 600	03055			●	●	

Circular punches and dies - AP 500

Type	Mounting holder	Ø in mm	Size Metric	Size PG	Prod.-No.	AP 250	AP 400	AP 500	AP 600-2	AP 800
Punch Ø 3.2 - 30.5 mm		3.2			03131	●	●	●	●	●
		4.5			03132	●	●	●	●	●
		5.4			03133	●	●	●	●	●
		6.5			03134	●	●	●	●	●
		8.5	M8		03135	●	●	●	●	●
		10.5	M10		03136	●	●	●	●	●
		12.7	M12	PG7	03137	●	●	●	●	●
		15.2		PG9	03138	●	●	●	●	●
		16.2	M16		03139	●	●	●	●	●
		18.6		PG11	03140	●	●	●	●	●
		20.4	M20	PG13	03141	●	●	●	●	●
		22.5		PG16	03142	●	●	●	●	●
		25.4	M25		03143	●	●	●	●	●
		28.3		PG21	03144	●	●	●	●	●
		30.5			03145	●	●	●	●	●
Punch Ø 32.5 - 40.5 mm		32.5	M32		03146	●	●	●	●	●
		37.0		PG29	03158	●	●	●	●	●
		40.5	M40		03147	●	●	●	●	●
		47.0		PG36	03159			●	●	●
		50.5	M50		03148			●	●	●
		54.0		PG42	03160			●	●	●
		60.0		PG48	03161			●	●	●
		63.5	M63		03149			●	●	●
Die Ø 3.2 - 25.4 mm	TYPE A	3.2			03063	●	●	●	●	●
		4.5			03066	●	●	●	●	●
		5.4			03068	●	●	●	●	●
		6.5			03074	●	●	●	●	●
		8.5	M8		03076	●	●	●	●	●
		10.5	M10		03079	●	●	●	●	●
		12.7	M12	PG7	03022	●	●	●	●	●
		15.2		PG9	03023	●	●	●	●	●
		16.2	M16		03084	●	●	●	●	●
		18.6		PG11	03024	●	●	●	●	●
		20.4	M20	PG13	03025	●	●	●	●	●
		22.5		PG16	03026	●	●	●	●	●
		25.4	M25		03085	●	●	●	●	●
Die Ø 28.3 - 40.5 mm	TYPE B	28.3		PG21	03027			●	●	●
		30.5			03028			●	●	●
		32.5	M32		03163			●	●	●
		37.0		PG29	03029			●	●	●
		40.5	M40		03164			●	●	●
Die Ø 47.0 - 63.5 mm	TYPE C	47.0		PG36	03030			●	●	●
		50.5	M50		03168			●	●	●
		54.0			03031			●	●	●
		60.0		PG48	03032			●	●	●
		63.5	M63		03169			●	●	●



Punching without pre-drilling

APress **600-2**

Overhang 600 mm



The stationary hole punch has been developed for control cabinet and switch gear makers and is suitable for quick punching-out of circular, square, rectangular or special forms in sheet metal and control cabinet doors up to 2200 mm x 1000 mm and 30 mm margin fold height. Punching possible right up to margins. Simple, rapid tool change carried out in seconds - even on fitted door. Limit stop system can be moved in X and Y directions.

Description:

- Stable press body in heavy-duty, torsionally-stiff welded construction.
- Dual-action hydraulic cylinder, flanged force-locking and form-locking to machine body.
- Anti-twist piston rod $\varnothing$ 55 mm made of tempered stainless steel with tool holder.
- Die bed, fixed force-locking to press body.
- Rapid tool change helps in problem areas with a wide range of breakthrough types.
- Hold-down device with safety function, fixed with electrical safety lock for accident prevention.
- Length and depth limit stops movable in X and Y directions, bearings in hardened double ball bearing slides for smooth mobility.
- Tape measure display for length and depth adjustment.
- Digital measuring indicator optionally available for X and Y axes.
- Dual-circuit hydraulic unit with electric pump, oil container and solenoid valves (very low noise).
- Safety footswitch with double pedal for infinitely variable operation of punching and return stroke.

Technical data:

Overhang with limit stop:	600 mm
Punching stroke:	66 mm
Punching force F:	60 kN at 165 bar
Motor power:	0.75 KW
Operating voltage:	400 V
Weight approx.:	360 kg
Overall height:	1,600 mm
Working height:	1,000 mm
Width of punch body:	310 mm
Depth of punch body:	1,150 mm
Length of limit stock rails:	1,500 mm
Space requirement approx.:	2,000 x 3,000 mm

Punching capacity:

Circular from:	$\varnothing$ 3.2 - 70.0 mm
Square up to:	68.0 x 68.0 mm
Special forms up to a max. diagonal of:	90.0 mm

Material thicknesses (max):

Sheet steel (S235):	3.0 mm
Stainless steel ($F = 600 \text{ N/mm}^2$):	2.0 mm
Aluminium ($F = 22 \text{ N/mm}^2$):	4.0 mm
Punchable plastics up to:	4.0 mm

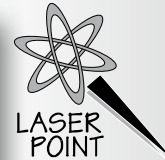
Prod.-No.
03090

ALFRA PRESS AP 600-2 (without options)

Note:

- All circular tools for ALFRA PRESS punches AP 250 - AP 800 are made of special tool steel and have a special cutting geometry developed by ALFRA.

Special tools can be manufactured in our own toolmaking works at short notice!



Laser pointer for optical display of tool centre



Stable piston rod ($\varnothing$ 55 mm) with tool anti-twist device



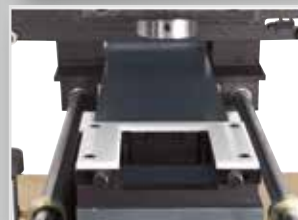
Tool drawer with compartments



Dual-circuit hydraulic unit in cabinet base



Reciprocal quick-clamping system for edge folds either top or bottom



Die bed holder. Tool changes can also be carried out when control cabinet door is fitted.



Length and depth limit stops guided in double ball bearing slides on both sides. 2 adjustable limit stops right and left on the Y-axis.

APress 600-2

Overhang 600 mm

Stationary hole punch - AP 600-2

Type	Designation	Prod.-No.
Machine	Stationary hole punch ALFRA PRESS 600-2 with hydraulic cylinder, cabinet base, length and depth limit stops movable in X and Y directions, cylinder pistons with anti-twist device for use with all punch sockets, dual-action hydraulic unit, safety footswitch.	03090
Special fitting	Laser pointer for optical display of tool centre	03021
	Digital measuring indicator Y-axis	03091
	Digital measuring indicator X-axis	03092
	Pivoting double joint arm for supporting workpiece (individual)	03078
Punch socket	with scraper and centring pin for round punch with mounting shaft for AP 500 - 600 Ø 3.2 - 30.5 mm	03036
	with scraper and centring pin for round punch with 19 mm female thread for AP 500 - 600 Ø 32.5 - 40.5 mm	03035
Die holder	Type A Circular die Type A Ø 3.2 - 25.4 mm	03040
	Type B Circular die Type A Ø 28.3 - 40.5 mm	03041
	Type C Circular die Type A Ø 40.5 - 63.5 mm	03077

Square and rectangular hole punches - AP 600-2 (with mounting shaft and centring point, including die)

Type	Designation	Prod.-No.	AP 250	AP 400	AP 500	AP 600	AP 800
Square holes	12.7 x 12.7 mm for AP 500 - 600	03042			●	●	
	19.0 x 19.0 mm for AP 500 - 600	03044			●	●	
	22.2 x 22.2 mm for AP 500 - 600	03045			●	●	
	25.4 x 25.4 mm for AP 500 - 600	03046			●	●	
	46.0 x 46.0 mm for AP 500 - 600	03047			●	●	
	68.0 x 68.0 mm for AP 600	03050				●	
Rectangular holes	22.0 x 30.0 mm for AP 500 - 600	03048			●	●	
	22.0 x 42.0 mm for AP 500 - 600	03049			●	●	
Special holes	Ø 22.5 mm 1 lug 3.2 mm for AP 500 - 600	03051			●	●	
	Ø 22.5 mm with 2 lugs 3.2 mm for AP 500 - 600	03052			●	●	
	Ø 22.5 mm, flattened on 4 sides to 20.1 mm for AP 500 - 600	03055			●	●	

Circular punches and dies - AP 600-2

Type	Mounting holder	Ø in mm	Size Metric	Size PG	Prod.-No.	AP 250	AP 400	AP 500	AP 600-2	AP 800
Punch Ø 3.2 - 30.5 mm		3.2			03131	●	●	●	●	●
		4.5			03132	●	●	●	●	●
		5.4			03133	●	●	●	●	●
		6.5			03134	●	●	●	●	●
		8.5	M8		03135	●	●	●	●	●
		10.5	M10		03136	●	●	●	●	●
		12.7	M12	PG7	03137	●	●	●	●	●
		15.2		PG9	03138	●	●	●	●	●
		16.2	M16		03139	●	●	●	●	●
		18.6		PG11	03140	●	●	●	●	●
		20.4	M20	PG13	03141	●	●	●	●	●
		22.5		PG16	03142	●	●	●	●	●
		25.4	M25		03143	●	●	●	●	●
		28.3		PG21	03144	●	●	●	●	●
		30.5			03145	●	●	●	●	●
		32.5	M32		03146	●	●	●	●	●
Punch Ø 32.5-40.5 mm		37.0		PG29	03158	●	●	●	●	●
		40.5	M40		03147	●	●	●	●	●
		47.0		PG36	03159			●	●	●
		50.5	M50		03148			●	●	●
		54.0		PG42	03160			●	●	●
		60.0		PG48	03161			●	●	●
		63.5	M63		03149			●	●	●
Die Ø 3.2 - 25.4 mm	TYPE A	3.2			03063	●	●	●	●	●
		4.5			03066	●	●	●	●	●
		5.4			03068	●	●	●	●	●
		6.5			03074	●	●	●	●	●
		8.5	M8		03076	●	●	●	●	●
		10.5	M10		03079	●	●	●	●	●
		12.7	M12	PG7	03022	●	●	●	●	●
		15.2		PG9	03023	●	●	●	●	●
		16.2	M16		03084	●	●	●	●	●
		18.6		PG11	03024	●	●	●	●	●
		20.4	M20	PG13	03025	●	●	●	●	●
		22.5		PG16	03026	●	●	●	●	●
		25.4	M25		03085	●	●	●	●	●
Die Ø 28.3 - 40.5 mm	TYPE B	28.3		PG21	03027			●	●	●
		30.5			03028			●	●	●
		32.5	M32		03163			●	●	●
		37.0		PG29	03029			●	●	●
		40.5	M40		03164			●	●	●
Die Ø 47.0 - 63.5 mm	TYPE C	47.0		PG36	03030			●	●	●
		50.5	M50		03168			●	●	●
		54.0			03031			●	●	●
		60.0		PG48	03032			●	●	●
		63.5	M63		03169			●	●	●

APress 8000

Overhang 800 mm



The stationary hole punch has been developed for control cabinet and switch gear makers and is suitable for quick punching-out of circular, square, rectangular or special forms in sheet metal and control cabinet doors up to 2200 mm x 1000 mm and 40 mm margin fold height. Punching possible right up to margins. Simple, rapid tool change carried out in seconds - even on fitted door. Limit stop system can be moved in X and Y directions.

Description:

- Stable press body in heavy-duty, torsionally-stiff welded construction, fitted on stands with rubber-bonded metal feet.
- Pivoting control panel with digital display, emergency stop button, electrical operating buttons and two-hand operation.
- Dual-action hydraulic cylinder, flanged force-locking and form-locking to machine body.
- Anti-twist piston rod Ø 63 mm made of tempered stainless steel with tool holder.
- Die bed, fixed force-locking to press body.
- Time relay for piston return saves working time.
- Hold-down device/scrapper combination with figure protection.
- X – Y limit stop system, easily movable in heavy-duty, precise profile roller guides.
- Form and force-fitting workpiece mounting and clamping device.
- Pivoting workpiece mounting left of press body for easy raising of workpiece.
- Locking of limit stop system using electrically-operated hydraulic brakes.
- Digital path measurement and display of X and Y travel with a display accuracy of 0.1 mm and a measuring accuracy of 1%.
- Rapid tool change helps in problem areas with a wide range of break-through types.
- Dual-circuit hydraulic unit with electric pump, oil container and solenoid valves (very low noise).

Technical data:

Overhang with limit stop:	800 mm
Punching stroke:	72 mm
Punching force F:	135 kN at 190 bar
Motor power:	1.5 kW
Operating voltage:	400 V
Weight approx.:	850 kg
Overall height:	1,700 mm
Working height:	1,000 mm
Width of punch body:	280 mm
Depth of punch body:	1,700 mm
Space requirement approx.:	2,360 x 4,440 mm

Punching capacity:

Circular from:	Ø 3.2 - 120.0 mm
Square up to:	110.0 x 110.0 mm
Special forms up to a max. diagonal of:	140.0 mm

Material thicknesses (max):

Sheet steel (S235):	3.0 mm
Stainless steel (F = 600 N/mm ²):	2.0 mm
Aluminium (F = 22 N/mm ²):	4.0 mm
Punchable plastics up to:	4.0 mm

Prod.-No.

03400

ALFRA PRESS AP 800 (without options)

Special tools can be manufactured in our own toolmaking works at short notice!



Pivoting control panel with two-hand operation



Form and force-locking workpiece mounting with quick-action clamping system



Tool holder, anti-twist in piston rod, hold-down device / scraper combination



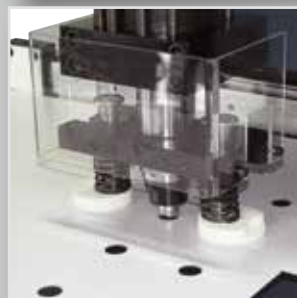
Die holder, tool change also possible with fitted control cabinet door



Path measurement of X and Y travel



Dual-circuit hydraulic unit



Hold-down device/scrapper combination

APress 800

Overhang 800 mm

Stationary hole punch - AP 800

Type	Designation	Prod.-No.
Machine	Stationary hole punch ALFRA PRESS 800 LPV in heavy duty welded construction, dual-action hydraulic cylinder, limit stop system can be moved in X and Y directions, hold-down device/scrapper combination with safety function, cylinder pistons with anti-twist device for use with all punch sockets, dual-circuit hydraulic unit, movable control panel, time relay for piston return, pivoting workpiece mounting, die holder, rubber-bonded metal feet.	03400
Special fitting	Laser pointer for optical display of tool centre	03021
Punch socket	with centring pin for round punch with mounting shaft	03413
	with scraper and centring pin for round punch with 19 mm female thread	03411
Die holder	Type A Ø 3.2 - 25.4 mm	03405
	Type B Ø 28.3 - 40.5 mm	03406
	Type C Ø 40.6 - 63.5 mm	03407
	Ø 64.0 - 80.0 mm	03408
	Ø 80.1 - 100.0 mm	03409

Square and rectangular hole punches - AP 800 (with mounting shaft and centring point, including die)

Type	Designation	Prod.-No.	AP 250	AP 400	AP 500	AP 600	AP 800
Square holes	46.0 x 46.0 mm	03425					•
	68.0 x 68.0 mm	03491					•
	92.0 x 92.0 mm	03435					•
Rectangular holes	22.0 x 30.0 mm	03417					•
	24.0 x 36.0 mm	03419					•
	22.0 x 42.0 mm	03421					•
	35.0 x 65.0 mm	03428					•
	46.0 x 92.0 mm	03433					•
Special holes	Ø 22.5 mm with 2 lugs 3.2 mm	03452					•
	Ø 30.5 mm with 2 lugs 3.2 mm	03454					•
	Double louvre tool 100.0 x 8.0 mm up to 2.0 mm material thickness	03456					•

Circular punches and dies - AP 800

Type	Mounting holder	Ø in mm	Size Metric	Size PG	Prod.-No.	AP 250	AP 400	AP 500	AP 600-2	AP 800
Punch Ø 3.2 - 30.5 mm		3.2			03131	●	●	●	●	●
		4.5			03132	●	●	●	●	●
		5.4			03133	●	●	●	●	●
		6.5			03134	●	●	●	●	●
		8.5	M8		03135	●	●	●	●	●
		10.5	M10		03136	●	●	●	●	●
		12.7	M12	PG7	03137	●	●	●	●	●
		15.2		PG9	03138	●	●	●	●	●
		16.2	M16		03139	●	●	●	●	●
		18.6		PG11	03140	●	●	●	●	●
		20.4	M20	PG13	03141	●	●	●	●	●
		22.5		PG16	03142	●	●	●	●	●
		25.4	M25		03143	●	●	●	●	●
		28.3		PG21	03144	●	●	●	●	●
		30.5			03145	●	●	●	●	●
		32.5	M32		03146	●	●	●	●	●
Punch Ø 32.5 - 40.5 mm		37.0		PG29	03158	●	●	●	●	●
		40.5	M40		03147	●	●	●	●	●
		47.0		PG36	03159			●	●	●
		50.5	M50		03148			●	●	●
		54.0		PG42	03160			●	●	●
		60.0		PG48	03161			●	●	●
		63.5	M63		03149			●	●	●
Die Ø 3.2 - 25.4 mm	TYPE A	3.2			03063	●	●	●	●	●
		4.5			03066	●	●	●	●	●
		5.4			03068	●	●	●	●	●
		6.5			03074	●	●	●	●	●
		8.5	M8		03076	●	●	●	●	●
		10.5	M10		03079	●	●	●	●	●
		12.7	M12	PG7	03022	●	●	●	●	●
		15.2		PG9	03023	●	●	●	●	●
		16.2	M16		03084	●	●	●	●	●
		18.6		PG11	03024	●	●	●	●	●
		20.4	M20	PG13	03025	●	●	●	●	●
		22.5		PG16	03026	●	●	●	●	●
		25.4	M25		03085	●	●	●	●	●
Die Ø 28.3 - 40.5 mm	TYPE B	28.3		PG21	03027			●	●	●
		30.5			03028			●	●	●
		32.5	M32		03163			●	●	●
		37.0		PG29	03029			●	●	●
		40.5	M40		03164			●	●	●
Die Ø 47.0 - 63.5 mm	TYPE C	47.0		PG36	03030			●	●	●
		50.5	M50		03168			●	●	●
		54.0			03031			●	●	●
		60.0		PG48	03032			●	●	●
		63.5	M63		03169			●	●	●