

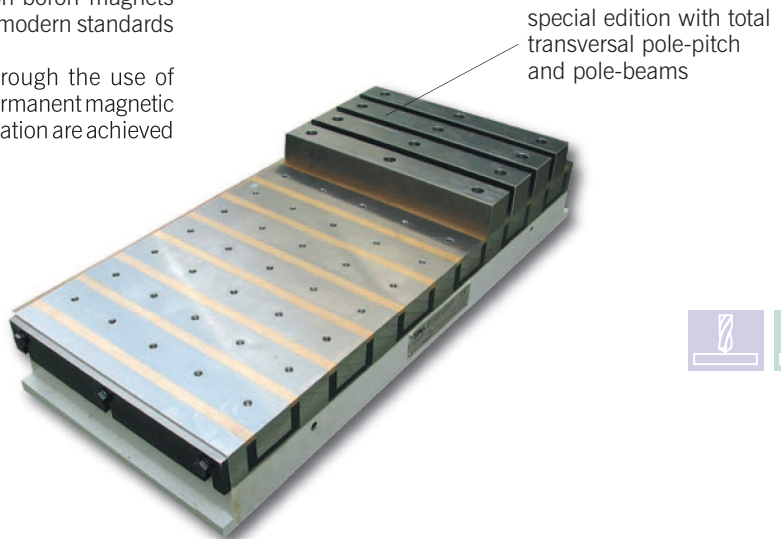
## Electro-Permanent Magnetic Chuck

SAV 243.77

With transverse pole arrangement, suitable for milling work  
Pole pitch  $P = 27.5, 55$  and  $85$  mm

This clamping system with neodymium-iron-boron magnets was developed in accordance with the most modern standards in magnet technology.

Exceptionally high holding forces arise through the use of AlNiCo/ Neodymium magnets in an electro-permanent magnetic configuration. Magnetization and demagnetization are achieved through short electric current pulses.

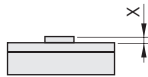


### Use:

For heavy milling work with coarse chip removal.

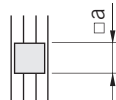
Ideal for use on indexing palette systems

- for workpiece with min. thickness =  $x$ :  
8.0 mm at  $P = 27.5$  mm  
20.0 mm at  $P = 55.0$  mm  
35.0 mm at  $P = 85.0$  mm



- for flat workpieces with min. dimensions  $a$ :

- 45 x 45 mm<sup>2</sup> at  $P = 27.5$  mm
- 95 x 95 mm<sup>2</sup> at  $P = 55.0$  mm
- 150 x 150 mm<sup>2</sup> at  $P = 85.0$  mm



### Nominal holding force:

195 N/cm<sup>2</sup> on full inducible steel load

110 N/cm<sup>2</sup> at  $P = 27.5$  mm

150 N/cm<sup>2</sup> at  $P = 55.0$  mm

170 N/cm<sup>2</sup> at  $P = 85.0$  mm

adjustable with control unit with encoded switch

### Nominal operating voltage:

360 V DC



### Features:

- optimized high energy magnetic system
- holding forces in physically maximum range
- due to transverse pole arrangement high flux concentration to the workpiece
- due to deep magnetic field bigger air gaps can be bridged
- total chuck surface active, no "dead" zones
- solid mono-block construction
- real magnetic (N/S) poles
- electro-permanent system, guaranteeing safe operation during power failure
- pole separation with brass for optimal wear behaviour
- pole plate wearing limit 8 mm
- tapped holes grid for fixed or flexible pole raisers on request (M)
- T-slots possible on pole pitch  $P = 85$  mm according DIN 650-10H10 (T)
- mounting slots in both short faces
- through holes for mounting in sizes over 1000 mm length on specification
- robust and waterproof
- sealed to IP 65
- for use with control unit type SAV 876.10 (see chapter 04)

### Auxiliary equipment:

- connecting cable, 3 m, on the right-hand, short face
- with industrial watertight plug-in type connector on request
- lifting bolts on larger models

## Electro-Permanent Magnetic Chuck

SAV 243.77-27.5

Suitable for milling work

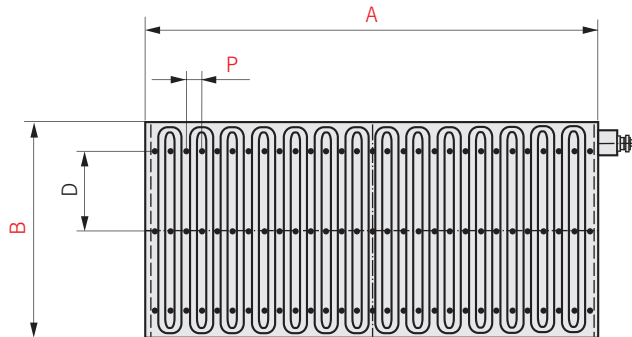
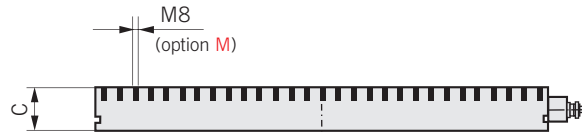
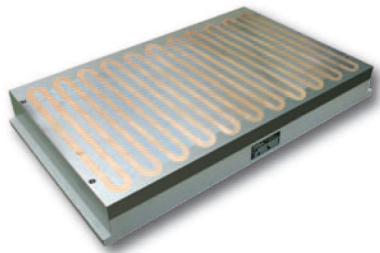
### SAV 243.77 - 27.5

Small transverse pole arrangement

**Use:**

Heavy milling of thin plates

- min. thickness of workpiece: 5 - 8 mm
- min. size of workpiece: 45 x 45 mm<sup>2</sup>
- nominal holding force: 110 N/cm<sup>2</sup>



Dimensions in mm					Optional number of threads per pole (M)	Number of poles (M)	Number of threads total (M)	Weight in kg	Control unit max. current in A	
A	B	C	D	P						
410	200	80	100	27.5	2	15	30	46.0	30	876.10
520	200	80	100	27.5	2	19	38	58.0	30	876.10
630	200	80	100	27.5	2	23	46	71.0	30	876.10
520	300	80	100	27.5	3	19	57	87.0	60	876.10
630	300	80	100	27.5	3	23	69	107.0	60	876.10
800	300	80	100	27.5	3	29	87	135.0	60	876.10
630	400	80	150	27.5	3	23	69	143.0	60 x 2	876.10
800	400	80	150	27.5	3	29	87	180.0	60 x 2	876.10
1015	400	80	150	27.5	3	37	111	228.0	60 x 2	876.10
800	500	80	200	27.5	3	29	87	225.0	60 x 2	876.10
1015	500	80	200	27.5	3	37	111	285.0	60 x 2	876.10
1180	500	80	200	27.5	3	43	129	331.0	60 x 3	876.10

Ordering example: Electro-Permanent Magnetic Chuck SAV 243.77 - 1180 x 500 - 27.5 - 360 V

Ordering key: Name SAV - No. - A x B - P - Chuck voltage

## Electro-Permanent Magnetic Chuck

SAV 243.77-55

Suitable for milling work

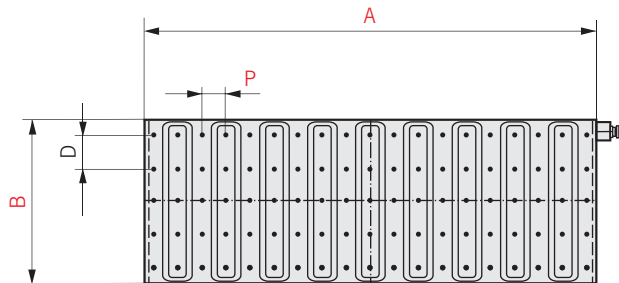
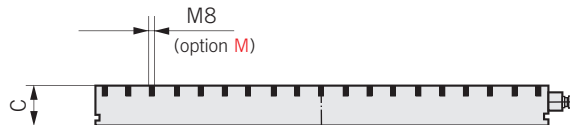
### SAV 243.77 - 55

Middle transverse pole arrangement

**Use:**

For universal machining and heavy milling.

- min. thickness of workpiece: 20 mm
- min. size of workpiece: 95 x 95 mm<sup>2</sup>
- nominal holding force: 150 N/cm<sup>2</sup>



Dimensions in mm					Optional number of threads per pole (M)	Number of poles (M)	Number of threads total (M)	Weight in kg	Control unit max. current in A	Suitable control unit
A	B	C	D	P						
480	300	97	60	55	4	9	36	94.0	30	876.10
590	300	97	60	55	4	11	44	116.0	30	876.10
810	300	97	60	55	4	15	60	159.0	30	876.10
1030	300	97	60	55	4	19	76	202.0	30	876.10
1140	300	97	60	55	4	23	92	224.0	30 x 2	876.10
810	400	97	80	55	5	15	75	212.0	30	876.10
1030	400	97	80	55	5	19	95	270.0	60	876.10
1140	400	97	80	55	5	23	115	299.0	60	876.10
1580	400	97	80	55	5	29	145	414.0	60	876.10
2020	400	97	80	55	5	37	185	529.0	60 x 2	876.10
1030	500	97	70	55	7	19	133	337.0	60	876.10
1140	500	97	70	55	7	23	161	373.0	60	876.10
1580	500	97	70	55	7	29	203	517.0	60 x 2	876.10
2020	500	97	70	55	7	37	259	661.0	60 x 2	876.10

Ordering example: **Electro-Permanent Magnetic Chuck SAV 243.77 - 1580 x 500 - 55 - 360 V**

Ordering key: Name SAV - No. - A x B - P - Chuck voltage

## Electro-Permanent Magnetic Chuck

SAV 243.77-85

Suitable for milling work

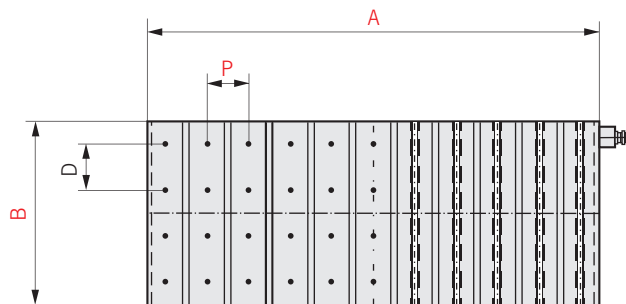
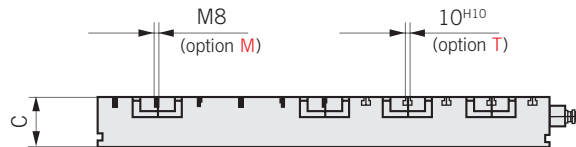
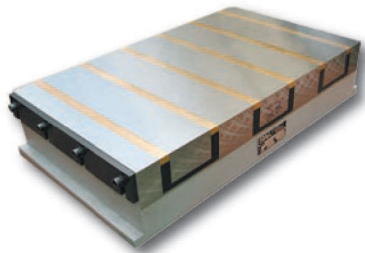
### SAV 243.77 - 85

Large transverse pole arrangement

**Use:**

For heavy milling of large and thick workpieces.  
For large air gaps.

- min. thickness of workpiece: 35 mm
- min. size of workpiece: 150 x 150 mm<sup>2</sup>
- nominal holding force: 170 N/cm<sup>2</sup>



Dimensions in mm					Optional number of threads per pole (M)	Number of poles (M) / T-slots (T)	Number of threads total (M)	Weight in kg	Control unit max. current in A	Suitable control unit
A	B	C <sub>±0.1</sub>	D	P						
580	300	110	90	85	3	7	21	129.0	30	876.10
750	300	110	90	85	3	9	27	167.0	30	876.10
750	400	100	90	85	4	9	36	203.0	60	876.10
1090	400	100	90	85	4	13	52	294.0	60	876.10
1430	400	100	90	85	4	17	68	386.0	60	876.10
1600	400	100	90	85	4	19	76	432.0	60	876.10
750	500	110	90	85	5	9	45	278.0	60	876.10
1090	500	110	90	85	5	13	65	405.0	60	876.10
1430	500	110	90	85	5	17	85	531.0	60	876.10
1600	500	110	90	85	5	19	95	594.0	60 x 2	876.10
1090	600	110	90	85	6	13	78	486.0	60	876.10
1430	600	110	90	85	6	17	102	637.0	60 x 2	876.10
1600	600	110	90	85	6	19	114	713.0	60 x 2	876.10

Ordering example: Electro-Permanent Magnetic Chuck SAV 243.77 - 1600 x 600 - 85 - 360 V

Ordering key: Name SAV - No. - A x B - P - Chuck voltage