

Potenzas para colocar piedras.



MSA	Ø alisadura husillo	Ø alisadura mesa	Kg
13.100	3 mm	4 mm	0.600
13.100-4	4 mm	4 mm	0.600

Potenza de tornillo micrométrico para colocar piedras (rubíes), para rectificar los juegos de altura.

- Despeje : 25 mm
- Altura total : 120 mm
- Zócalo : 80 x 45 mm
- Mesa : Ø 20 mm
- Paso del tornillo micrométrico = 1.00 mm / 50 divisiones (1 división = 0.02 mm).

Pieza de recambio :

MSA	Elemento
13.101-T	Mesa Ø 40 mm



MSA	Ø alisadura husillo	Ø alisadura mesa	Kg
13.102-3	3 mm	4 mm	0.600
13.102-4	4 mm	4 mm	0.600

Potenza especial de tornillo micrométrico (PASO FINO) para colocar piedras (rubíes), para rectificar los juegos de altura.

- Despeje : 25 mm
- Altura total : 120 mm
- Zócalo : 80 x 45 mm
- Mesa : Ø 20 mm
- Paso del tornillo micrométrico 0.50 mm / 50 divisiones (1 división = 0.01 mm).

Pieza de recambio :

MSA	Elemento
13.101-T	Mesa Ø 40 mm



MSA	Ø alisadura husillo	Ø alisadura mesa	Kg
13.101	3 mm	4 mm	1.130
13.101-4	4 mm	4 mm	1.130

Potenza con palanca y tornillo micrométrico para colocar piedras (rubíes), para rectificar los juegos de altura, graduación 0.02 mm.

- Despeje : 30 mm
- Altura total : 125 mm
- Zócalo : 90 x 50 mm
- Mesa : Ø 23 mm.

Piezas de recambio :

MSA	Elemento
13.101-C	Husillo Ø 3 mm, longitud 73 mm
13.101-A	Husillo Ø 4 mm, longitud 73 mm
13.101-B	Palanca
13.101-T	Mesa Ø 40 mm



MSA	Ø alisadura husillo	Ø alisadura mesa	Kg
13.104	6 mm	14 mm	3.260
13.104-12	6 mm	12 mm	3.260

Potenza gran modelo con palanca para colocar piedras (rubíes), con tornillo micrométrico, graduación 0.02 mm.

- Distancia máxima entre la mesa y el husillo : 50 mm
- Despeje : 35 mm
- Altura total : 200 mm
- Longitud del zócalo : 140 mm
- Mesa : Ø 35 mm.

Punzones y tases para potencias para colocar piedras.



SURTIDO

MSA	Utilización	Kg
13.110	Para husillo Ø 3 mm	0.039
13.110-4	Para husillo Ø 4 mm	0.039

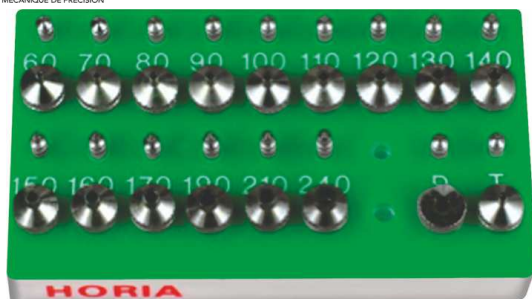
Surtido n° 1 conteniendo 8 punzones a muelle y 3 tases.



SURTIDO

MSA	Utilización	Kg
13.111	Para husillo Ø 3 mm	0.086
13.111-4	Para husillo Ø 4 mm	0.086

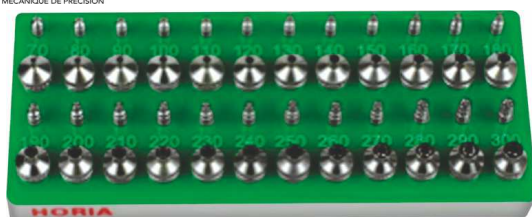
Surtido n° 3 conteniendo 12 punzones a muelle y 6 tases.



SURTIDO

MSA	Utilización	Kg
13.113	Para husillo Ø 3 mm	0.124
13.113-4	Para husillo Ø 4 mm	0.124

Surtido n° 2 conteniendo 15 punzones a muelle, 15 tases, 1 juego para las tijas de áncora y 1 juego para empujar los dardos.

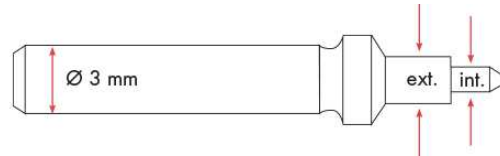


SURTIDO

MSA	Utilización	Kg
13.112	Para husillo Ø 3 mm	0.188
13.112-4	Para husillo Ø 4 mm	0.188

Surtido n° 4 conteniendo 24 punzones a muelle y 24 tases.

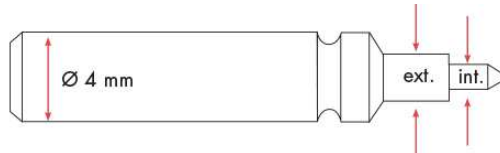
POTENZAS PARA COLOCAR PIEDRAS



MSA	N° punzón	Ø interior	Ø exterior	Kg
13.120-3040	40	0.20 mm	0.40 mm	0.001
13.120-3050	50	0.20 mm	0.50 mm	0.001
13.120-3060	60	0.40 mm	0.55 mm	0.001
13.120-3070	70	0.40 mm	0.65 mm	0.001
13.120-3080	80	0.40 mm	0.75 mm	0.001
13.120-3090	90	0.50 mm	0.85 mm	0.001
13.120-3100	100	0.50 mm	0.95 mm	0.001
13.120-3110	110	0.50 mm	1.05 mm	0.001
13.120-3120	120	0.50 mm	1.15 mm	0.001
13.120-3130	130	0.70 mm	1.25 mm	0.001
13.120-3140	140	0.70 mm	1.35 mm	0.001
13.120-3150	150	0.70 mm	1.45 mm	0.001
13.120-3160	160	0.70 mm	1.55 mm	0.001
13.120-3170	170	0.70 mm	1.65 mm	0.001

MSA	N° punzón	Ø interior	Ø exterior	Kg
13.120-3180	180	0.70 mm	1.75 mm	0.001
13.120-3190	190	0.80 mm	1.85 mm	0.001
13.120-3200	200	0.80 mm	1.95 mm	0.001
13.120-3210	210	0.80 mm	2.05 mm	0.001
13.120-3220	220	0.80 mm	2.15 mm	0.001
13.120-3230	230	0.80 mm	2.25 mm	0.001
13.120-3240	240	0.80 mm	2.35 mm	0.001
13.120-3250	250	0.80 mm	2.45 mm	0.001
13.120-3260	260	0.80 mm	2.55 mm	0.001
13.120-3270	270	0.80 mm	2.65 mm	0.001
13.120-3280	280	0.80 mm	2.75 mm	0.001
13.120-3290	290	0.80 mm	2.85 mm	0.001
13.120-3300	300	0.80 mm	2.95 mm	0.001

Punzón a muelle para los husillos Ø 3 mm de las potencias para colocar piedras (rubíes) MSA13.100, MSA13.101 y MSA13.102-3.



MSA	N° punzón	Ø interior	Ø exterior	Kg
13.120-4040	40	0.20 mm	0.40 mm	0.001
13.120-4050	50	0.20 mm	0.50 mm	0.001
13.120-4060	60	0.40 mm	0.55 mm	0.001
13.120-4070	70	0.40 mm	0.65 mm	0.001
13.120-4080	80	0.40 mm	0.75 mm	0.001
13.120-4090	90	0.50 mm	0.85 mm	0.001
13.120-4100	100	0.50 mm	0.95 mm	0.001
13.120-4110	110	0.50 mm	1.05 mm	0.001
13.120-4120	120	0.50 mm	1.15 mm	0.001
13.120-4130	130	0.70 mm	1.25 mm	0.001
13.120-4140	140	0.70 mm	1.35 mm	0.001
13.120-4150	150	0.70 mm	1.45 mm	0.001
13.120-4160	160	0.70 mm	1.55 mm	0.001
13.120-4170	170	0.70 mm	1.65 mm	0.001

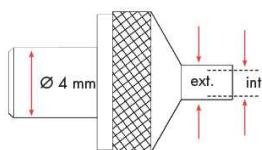
MSA	N° punzón	Ø interior	Ø exterior	Kg
13.120-4180	180	0.70 mm	1.75 mm	0.001
13.120-4190	190	0.80 mm	1.85 mm	0.001
13.120-4200	200	0.80 mm	1.95 mm	0.001
13.120-4210	210	0.80 mm	2.05 mm	0.001
13.120-4220	220	0.80 mm	2.15 mm	0.001
13.120-4230	230	0.80 mm	2.25 mm	0.001
13.120-4240	240	0.80 mm	2.35 mm	0.001
13.120-4250	250	0.80 mm	2.45 mm	0.001
13.120-4260	260	0.80 mm	2.55 mm	0.001
13.120-4270	270	0.80 mm	2.65 mm	0.001
13.120-4280	280	0.80 mm	2.75 mm	0.001
13.120-4290	290	0.80 mm	2.85 mm	0.001
13.120-4300	300	0.80 mm	2.95 mm	0.001

Punzón a muelle para los husillos Ø 4 mm de las potencias para colocar piedras (rubíes) MSA13.100-4, MSA13.101-4 y MSA13.102-4.



Pieza de recambio :

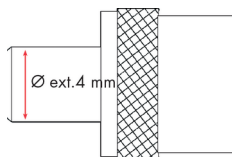
MSA	Elemento	Kg
13.120-R	Resorte para punzones a muelle MSA13.120-xxxx	0.001



MSA	N° tás	Ø interior	Ø exterior	Kg
13.121-050	50	0.60 mm	1.00 mm	0.002
13.121-060	60	0.70 mm	1.40 mm	0.002
13.121-070	70	0.80 mm	1.50 mm	0.002
13.121-080	80	0.90 mm	1.60 mm	0.002
13.121-090	90	1.00 mm	1.80 mm	0.002
13.121-100	100	1.10 mm	1.90 mm	0.002
13.121-110	110	1.20 mm	2.00 mm	0.002
13.121-120	120	1.30 mm	2.10 mm	0.002
13.121-130	130	1.40 mm	2.20 mm	0.002
13.121-140	140	1.50 mm	2.40 mm	0.002
13.121-150	150	1.60 mm	2.50 mm	0.002
13.121-160	160	1.70 mm	2.70 mm	0.002
13.121-170	170	1.80 mm	2.90 mm	0.002

MSA	N° tás	Ø interior	Ø exterior	Kg
13.121-180	180	1.90 mm	3.00 mm	0.002
13.121-190	190	2.00 mm	3.20 mm	0.002
13.121-200	200	2.10 mm	3.30 mm	0.002
13.121-210	210	2.20 mm	3.40 mm	0.002
13.121-220	220	2.30 mm	3.50 mm	0.002
13.121-230	230	2.40 mm	3.60 mm	0.002
13.121-240	240	2.50 mm	3.80 mm	0.002
13.121-250	250	2.60 mm	4.00 mm	0.002
13.121-260	260	2.70 mm	4.10 mm	0.002
13.121-270	270	2.80 mm	4.20 mm	0.002
13.121-280	280	2.90 mm	4.30 mm	0.002
13.121-290	290	3.00 mm	4.40 mm	0.002
13.121-300	300	3.10 mm	4.50 mm	0.002

Tás Ø 4 mm para las potenzas para colocar piedras (rubíes) MSA13.100, MSA13.100-4, MSA13.101, MSA13.101-4, MSA13.102-3 y MSA13.102-4.

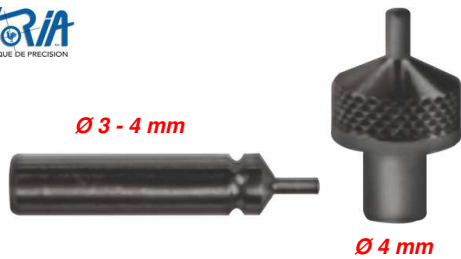


MSA	N° tás	Ø exterior	Kg
13.130-070	070	0.70 mm	0.003
13.130-080	080	0.80 mm	0.003
13.130-090	090	0.90 mm	0.003
13.130-100	100	1.00 mm	0.003
13.130-130	130	1.30 mm	0.003
13.130-150	150	1.50 mm	0.003
13.130-190	190	1.90 mm	0.003
13.130-200	200	2.00 mm	0.003

MSA	N° tás	Ø exterior	Kg
13.130-250	250	2.50 mm	0.003
13.130-300	300	3.00 mm	0.003
13.130-400	**	4.00 mm	0.003
13.130-500	500	5.00 mm	0.003
13.130-600	**	6.00 mm	0.003
13.130-700	700	7.00 mm	0.003
13.130-800	**	8.00 mm	0.003

Tás plano especial.
Otros diámetros bajo petición.

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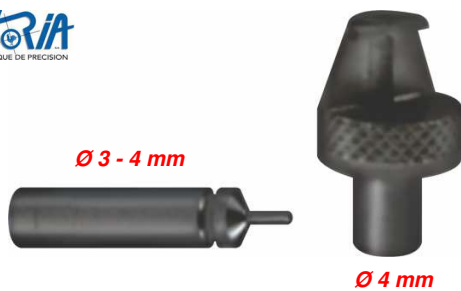
SURTIDO

MSA	Utilización	Kg
13.122	Con MSA13.100 + MSA13.101 + MSA13.102-3 (husillo Ø 3 mm)	0.002
13.122-4	Con MSA13.100-4 + MSA13.101-4 + MSA13.102-4 (husillo Ø 4 mm)	0.002

Surtido de 1 punzón a muelle y 1 tás para tija de ancora.

Piezas de recambio :

MSA	Elemento	Kg
13.122-P	Punzón a muelle para husillo Ø 3 mm, Ø int.0.2 - Ø ext. 0.8 mm	0.001
13.122-P4	Punzón a muelle para husillo Ø 4 mm, Ø int.0.2 - Ø ext. 0.8 mm	0.001
13.122-T4	Tás Ø 4 mm para tija de áncora, Ø int.0.5 - Ø ext. 0.8 mm	0.002



SURTIDO

MSA	Utilización	Kg
13.123	Con MSA13.100 + MSA13.101 + MSA13.102-3 (husillo Ø 3 mm)	0.002
13.123-4	Con MSA13.100-4 + MSA13.101-4 + MSA13.102-4 (husillo Ø 4 mm)	0.002

Surtido de 1 punzón a muelle y 1 tás para empujar los dardos.

Piezas de recambio :

MSA	Elemento	Kg
13.123-P	Punzón a muelle para husillo Ø 3 mm	0.001
13.123-P4	Punzón a muelle para husillo Ø 4 mm	0.001
13.123-T4	Tás Ø 4 mm para empujar los dardos	0.002



Puzón lleno para los husillos Ø 3 mm.

MSA	N°	Ø	Kg	MSA	N°	Ø	Kg	MSA	N°	Ø	Kg
13.124-3015	15	0.15 mm	0.001	13.124-3115	115	1.15 mm	0.001	13.124-3210	210	2.10 mm	0.001
13.124-3020	20	0.20 mm	0.001	13.124-3120	120	1.20 mm	0.001	13.124-3215	215	2.15 mm	0.001
13.124-3025	25	0.25 mm	0.001	13.124-3125	125	1.25 mm	0.001	13.124-3220	220	2.20 mm	0.001
13.124-3030	30	0.30 mm	0.001	13.124-3130	130	1.30 mm	0.001	13.124-3225	225	2.25 mm	0.001
13.124-3035	35	0.35 mm	0.001	13.124-3135	135	1.35 mm	0.001	13.124-3230	230	2.30 mm	0.001
13.124-3040	40	0.40 mm	0.001	13.124-3140	140	1.40 mm	0.001	13.124-3235	235	2.35 mm	0.001
13.124-3045	45	0.45 mm	0.001	13.124-3145	145	1.45 mm	0.001	13.124-3240	240	2.40 mm	0.001
13.124-3050	50	0.50 mm	0.001	13.124-3150	150	1.50 mm	0.001	13.124-3245	245	2.45 mm	0.001
13.124-3055	55	0.55 mm	0.001	13.124-3155	155	1.55 mm	0.001	13.124-3250	250	2.50 mm	0.001
13.124-3060	60	0.60 mm	0.001	13.124-3160	160	1.60 mm	0.001	13.124-3255	255	2.55 mm	0.001
13.124-3065	65	0.65 mm	0.001	13.124-3165	165	1.65 mm	0.001	13.124-3260	260	2.60 mm	0.001
13.124-3070	70	0.70 mm	0.001	13.124-3170	170	1.70 mm	0.001	13.124-3265	265	2.65 mm	0.001
13.124-3075	75	0.75 mm	0.001	13.124-3175	175	1.75 mm	0.001	13.124-3270	270	2.70 mm	0.001
13.124-3080	80	0.80 mm	0.001	13.124-3180	180	1.80 mm	0.001	13.124-3275	275	2.75 mm	0.001
13.124-3085	85	0.85 mm	0.001	13.124-3185	185	1.85 mm	0.001	13.124-3280	280	2.80 mm	0.001
13.124-3090	90	0.90 mm	0.001	13.124-3190	190	1.90 mm	0.001	13.124-3285	285	2.85 mm	0.001
13.124-3095	95	0.95 mm	0.001	13.124-3195	195	1.95 mm	0.001	13.124-3290	290	2.90 mm	0.001
13.124-3100	100	1.00 mm	0.001	13.124-3200	200	2.00 mm	0.001	13.124-3295	295	2.95 mm	0.001
13.124-3105	105	1.05 mm	0.001	13.124-3205	205	2.05 mm	0.001	13.124-3300	300	3.00 mm	0.001
13.124-3110	110	1.10 mm	0.001								

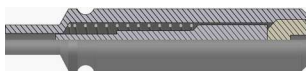
POTENZAS PARA COLOCAR PIEDRAS



Puzón lleno para los husillos Ø 4 mm.

MSA	N°	Ø	Kg	MSA	N°	Ø	Kg	MSA	N°	Ø	Kg
13.124-4015	15	0.15 mm	0.001	13.124-4145	145	1.45 mm	0.001	13.124-4275	275	2.75 mm	0.001
13.124-4020	20	0.20 mm	0.001	13.124-4150	150	1.50 mm	0.001	13.124-4280	280	2.80 mm	0.001
13.124-4025	25	0.25 mm	0.001	13.124-4155	155	1.55 mm	0.001	13.124-4285	285	2.85 mm	0.001
13.124-4030	30	0.30 mm	0.001	13.124-4160	160	1.60 mm	0.001	13.124-4290	290	2.90 mm	0.001
13.124-4035	35	0.35 mm	0.001	13.124-4165	165	1.65 mm	0.001	13.124-4295	295	2.95 mm	0.001
13.124-4040	40	0.40 mm	0.001	13.124-4170	170	1.70 mm	0.001	13.124-4300	300	3.00 mm	0.001
13.124-4045	45	0.45 mm	0.001	13.124-4175	175	1.75 mm	0.001	13.124-4305	305	3.05 mm	0.001
13.124-4050	50	0.50 mm	0.001	13.124-4180	180	1.80 mm	0.001	13.124-4310	310	3.10 mm	0.001
13.124-4055	55	0.55 mm	0.001	13.124-4185	185	1.85 mm	0.001	13.124-4315	315	3.15 mm	0.001
13.124-4060	60	0.60 mm	0.001	13.124-4190	190	1.90 mm	0.001	13.124-4320	320	3.20 mm	0.001
13.124-4065	65	0.65 mm	0.001	13.124-4195	195	1.95 mm	0.001	13.124-4325	325	3.25 mm	0.001
13.124-4070	70	0.70 mm	0.001	13.124-4200	200	2.00 mm	0.001	13.124-4330	330	3.30 mm	0.001
13.124-4075	75	0.75 mm	0.001	13.124-4205	205	2.05 mm	0.001	13.124-4335	335	3.35 mm	0.001
13.124-4080	80	0.80 mm	0.001	13.124-4210	210	2.10 mm	0.001	13.124-4340	340	3.40 mm	0.001
13.124-4085	85	0.85 mm	0.001	13.124-4215	215	2.15 mm	0.001	13.124-4345	345	3.45 mm	0.001
13.124-4090	90	0.90 mm	0.001	13.124-4220	220	2.20 mm	0.001	13.124-4350	350	3.50 mm	0.001
13.124-4095	95	0.95 mm	0.001	13.124-4225	225	2.25 mm	0.001	13.124-4355	355	3.55 mm	0.001
13.124-4100	100	1.00 mm	0.001	13.124-4230	230	2.30 mm	0.001	13.124-4360	360	3.60 mm	0.001
13.124-4105	105	1.05 mm	0.001	13.124-4235	235	2.35 mm	0.001	13.124-4365	365	3.65 mm	0.001
13.124-4110	110	1.10 mm	0.001	13.124-4240	240	2.40 mm	0.001	13.124-4370	370	3.70 mm	0.001
13.124-4115	115	1.15 mm	0.001	13.124-4245	245	2.45 mm	0.001	13.124-4375	375	3.75 mm	0.001
13.124-4120	120	1.20 mm	0.001	13.124-4250	250	2.50 mm	0.001	13.124-4380	380	3.80 mm	0.001
13.124-4125	125	1.25 mm	0.001	13.124-4255	255	2.55 mm	0.001	13.124-4385	385	3.85 mm	0.001
13.124-4130	130	1.30 mm	0.001	13.124-4260	260	2.60 mm	0.001	13.124-4390	390	3.90 mm	0.001
13.124-4135	135	1.35 mm	0.001	13.124-4265	265	2.65 mm	0.001	13.124-4395	395	3.95 mm	0.001
13.124-4140	140	1.40 mm	0.001	13.124-4270	270	2.70 mm	0.001	13.124-4400	400	4.00 mm	0.001

Punzones para colocar grupillas.



MSA	N° punzón	Ø interior	Ø exterior	Kg
13.128-021	021	0.21 mm	0.80 mm	0.001
13.128-031	031	0.31 mm	0.80 mm	0.001
13.128-041	041	0.41 mm	0.90 mm	0.001
13.128-051	051	0.51 mm	1.00 mm	0.001
13.128-061	061	0.61 mm	1.10 mm	0.001
13.128-071	071	0.71 mm	1.20 mm	0.001
13.128-081	081	0.81 mm	1.30 mm	0.001
13.128-091	091	0.91 mm	1.40 mm	0.001
13.128-101	101	1.01 mm	1.50 mm	0.001

Punzón especial para colocar las grupillas Ø 3 mm.
Tope interior ajustable para garantizar que los pasadores se colocan siempre a la misma altura.

*Longitud máxima para colocar : 3.00 mm.
Longitud exterior de la punta del punzón : 2.70 mm.*