FORZA®

PERFORADORES DE CHAPA REDONDOS SIN RECTIFICAR
CIRCULAR MECHANICAL PUNCHES WITHOUT GRIDING

Manual de instrucciones

Manual instructions

ES

MI54VAL
Rev. 2 - 15.09.2023

EN

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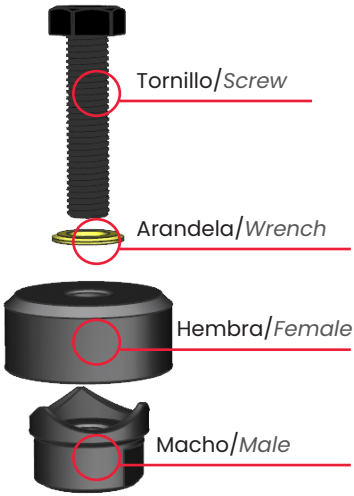
Características / ***Characteristics***

Los perforadores mecánicos se componen de: / *Mechanical punches are made up of* :



Los perforadores estándar pueden cortar hasta 2 mm en chapas de acero y 1.5 mm en chapas de acero inoxidable.* / *The standard punches can cut up to 2 mm in steel sheet plates and up to 1.5 in stainless steel sheet plates*.*

*Esta recomendación es general, hay gran variedad de aceros y aceros inoxidables. Es recomendable aceitar bien la chapa antes de cortar (por ejemplo usar Protoo Lube). En caso de duda, se recomienda utilizar la serie 56. / **This is a general recommendation; there is a wide range of steels an stainless steels. It is strongly recommended to use oil in the steel plate before cutting (e.g. using protoolube).*

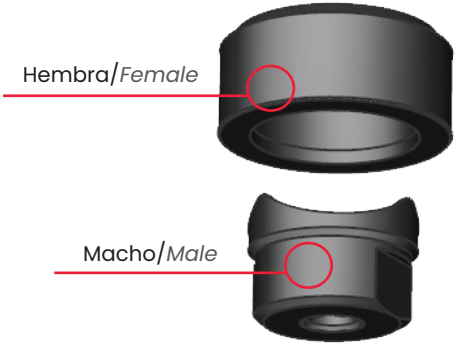
In case of any doubt, it is recommended to use serie 56 (more cutting capacity).

El tornillo / ***The screw***

Los perforadores mecánicos de la serie 54VAL utilizan tornillos de cabeza hexagonal de calidad 8.8. / *54VAL mechanical punches use screws of hexagonal heads of 8.8 quality*

Perforadores de chapa redondos sin rectificar
Hydraulic circular punches without griding

Existe una gama completa de perforadores de chapa redondos de Ø13mm a Ø116mm. / *There is a complete range of circular knockout punches from Ø13mm to Ø116mm*



Las piezas principales de los perforadores de chapa son el macho y la hembra. / *Male and die are the principal parts of the knock out punches.*

REF VALLCIA	REF. CONDUIT	mm	Tornillo Screw	Peso Weight	Macho Male	Hembra Die
54VAL13		12,7 (1/2")	M8 54V08	0,1	54VAL1301	54VAL1302
54VAL14		14		0,1	54VAL1401	54VAL1402
54VAL15		15		0,1	54VAL1501	54VAL1502
54VAL16		16 (5/8")		0,1	54VAL1601	54VAL1602
54VAL18		18,4		0,1	54VAL1801	54VAL1802
54VAL19		19 (3/4")		0,1	54VAL1901	54VAL1902
54VAL20		20,4		0,1	54VAL2001	54VAL2002
54VAL22	54VAL050	22,5 (7/8")	M10x40 54V10	0,1	54VAL2201	54VAL2202
54VAL25		25 (1")		0,1	54VAL2501	54VAL2502
54VAL28	54VAL075	28,4 (1-3/32")	M12x50 54V12	0,2	54VAL2801	54VAL2802
54VAL30		30		0,3	54VAL3001	54VAL3002
54VAL32		32 (1-1/4")		0,3	54VAL3201	54VAL3202
54VAL34	54VAL100	34 (1-11/32")		0,4	54VAL3401	54VAL3402
54VAL35		35		0,4	54VAL3501	54VAL3502
54VAL37		37		0,4	54VAL3701	54VAL3702
54VAL38		38 (1-1/2")		0,4	54VAL3801	54VAL3802
54VAL40		40	M14x60 54V14	0,6	54VAL4001	54VAL4002
54VAL43	55VAL125	43 (1-11/16")		0,7	54VAL4301	54VAL4302
54VAL45		45		0,7	54VAL4501	54VAL4502
54VAL47		47		0,7	54VAL4701	54VAL4702
54VAL49		49 (1-15/16")		0,9	54VAL4901	54VAL4902
54VAL50	55VAL150	50 (1-31/32")		0,8	54VAL5001	54VAL5002
54VAL51		51 (2")		0,9	54VAL5101	54VAL5102
54VAL52		52		0,8	54VAL5201	54VAL5202
54VAL55		55	M20x80 54V20	1,5	54VAL5501	54VAL5502
54VAL60		60 (2-3/8")		1,6	54VAL6001	54VAL6002
54VAL62	54VAL200	62 (2-7/16")		1,7	54VAL6201	54VAL6202
54VAL63		63		1,6	54VAL6301	54VAL6302
54VAL76	54VAL250	76 (3")		2,2	54VAL7601	54VAL7602
54VAL89		89 (3-1/2")		3,2	54VAL8901	54VAL8902
54VAL91	54VAL300	91 (3 -9/16")		3,3	54VAL9101	54VAL9102
54VAL102	54VAL350	102 (4")		3,8	54VAL10201	54VAL10202
54VAL116	54VAL400	116 (4-9/16")		4,5	54VAL11601	54VAL11602

NO ES RECOMENDABLE USAR LLAVES DE IMPACTO / *IT IS NOT RECOMMENDED TO USE POWER TOOLS*

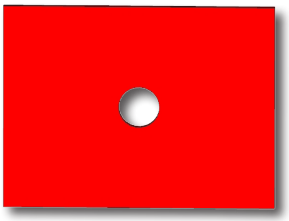
1- Mantenga las normas de higiene y seguridad en el trabajo. / *Keep the standards of hygiene and safety at work .*

2- Utilice los elementos de protección individual obligatorios. /*Always wear suitable personal protective equipment.*

1

Haga un agujero en la chapa un poco más grande que el diámetro del tornillo del perforador / *Make a hole in the sheet a little bit higher than the diameter of the drilling screw.*

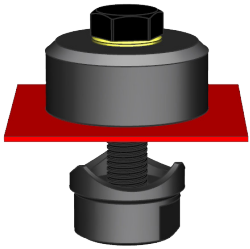
Si es un tornillo de 10 haga un agujero de Ø11,si el tornillo es de 20 puede hacer el agujero previo de Ø12 y luego agrandarlo con en perforador de Ø21. / *If the screw diameter is 10, make a hole o 11 , if the screw diameter is 20, a previous hole of Ø 12 can be made and then make it bigger by using the Ø21 knockout punch.*

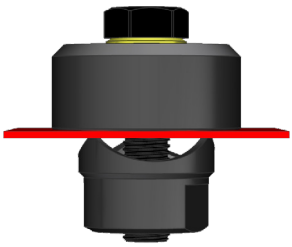


Si hace el agujero con una broca tenga cuidado de no dejar la rebarba como se ve en la figura anterior, si el agujero está muy justo y deja rebarba esta se introducirá en la rosca del tornillo. Al cortar no lo notara pero al intentar sacar el tornillo para soltar el perforador este se puede gripar. / *If the hole is made with a drill, be careful not to leave rough edges as seen in the previous figure, if the hole is very tight and it leaves rough edges it will be introduced in the thread of the screw. When cutting, you will not notice it, but when you try to remove the screw to release the knockout punch, it can be seized up.*

2

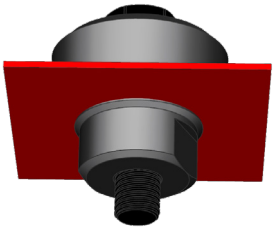
Coloque la chapa entre el macho y la hembra. Si el perforador y la chapa están bien engrasados el corte será mucho más fácil. Ajuste el tornillo con la mano hasta que el macho y la hembra toquen la chapa. / *Place the sheet between the male and the die. If the punch and the plate are well greased the cut will be much easier. Adjust the screw by hand until the male and the die touch the sheet plate.*

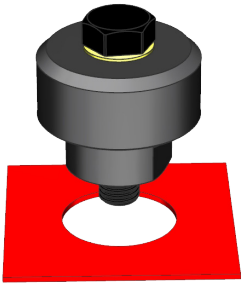




3

Gira el tornillo con una llave hasta que la superficie cortante del macho atraviese la chapa. Puede sacar el perforador completamente de la chapa cortada. / *Turn the screw with a wrench until the cutting surface of the male pierce the sheet plate. Then, the sheet plate can be completely remove from the knock-out punch.*





Desmonte el perforador desenroscando el tornillo (en este momento puede gripar el tornillo si había rebarba). Elimine el recorte de chapa del interior de la hembra. *Disassemble the knockout punch by loosen the screw. (In this moment, the screw can seize up if there is any burring) Remove the cut sheet plate from the internal part of the die.*

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