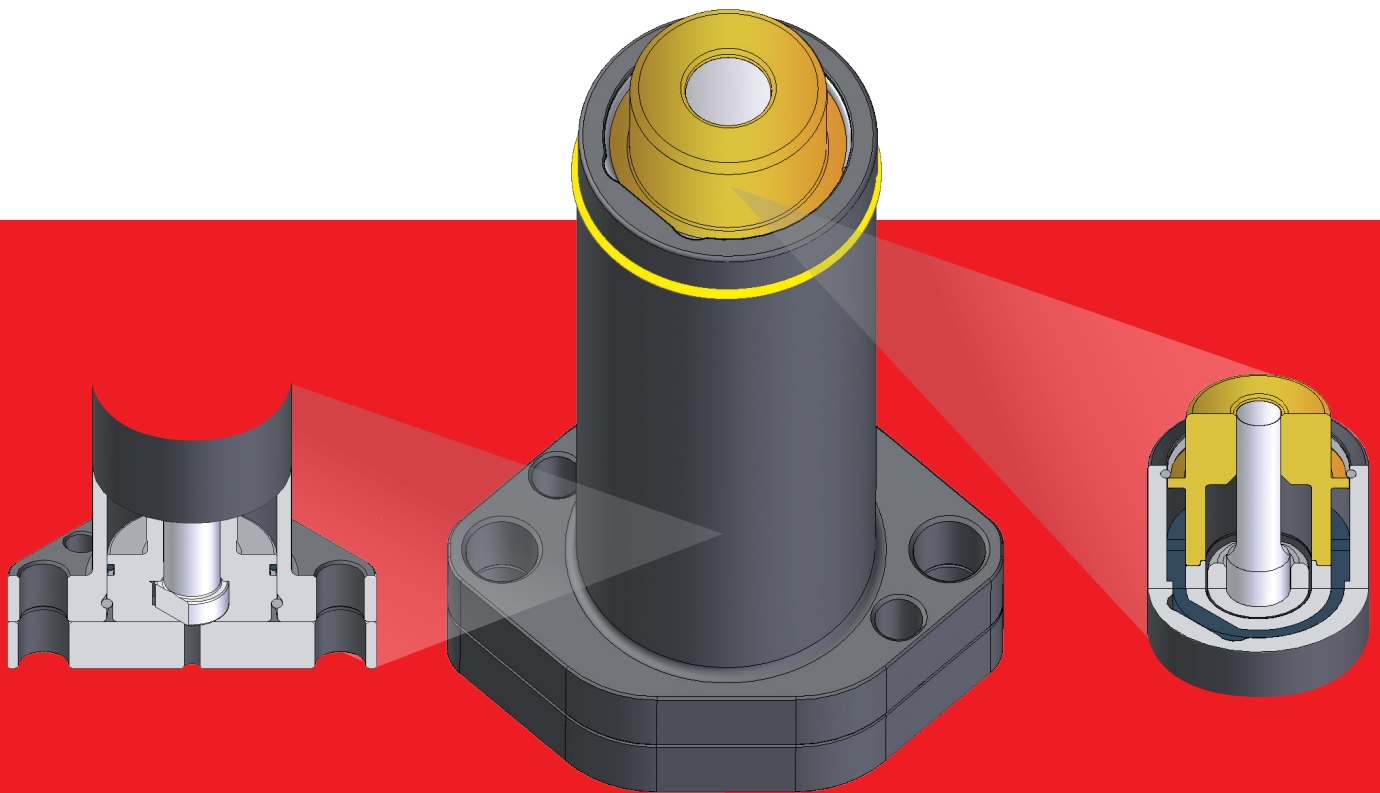


NITROGEN PUNCHING UNIT

- Removable and mouldable stripper head.
- Easy positioning.
- High and adjustable holding and stripping force.
- Compact dimensions.
- Suitable for ISO 8020 shoulder style punch.
- Standard retainer not required.
- Ideal for use with cam units.

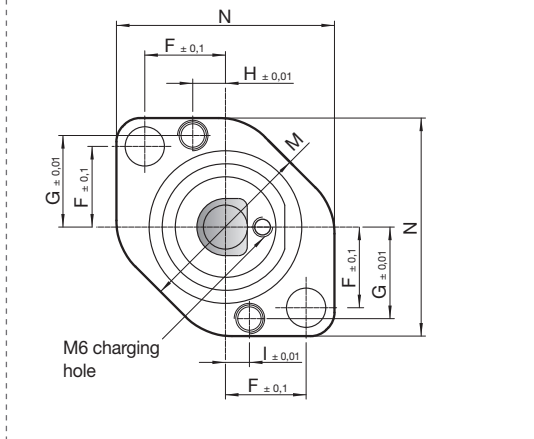
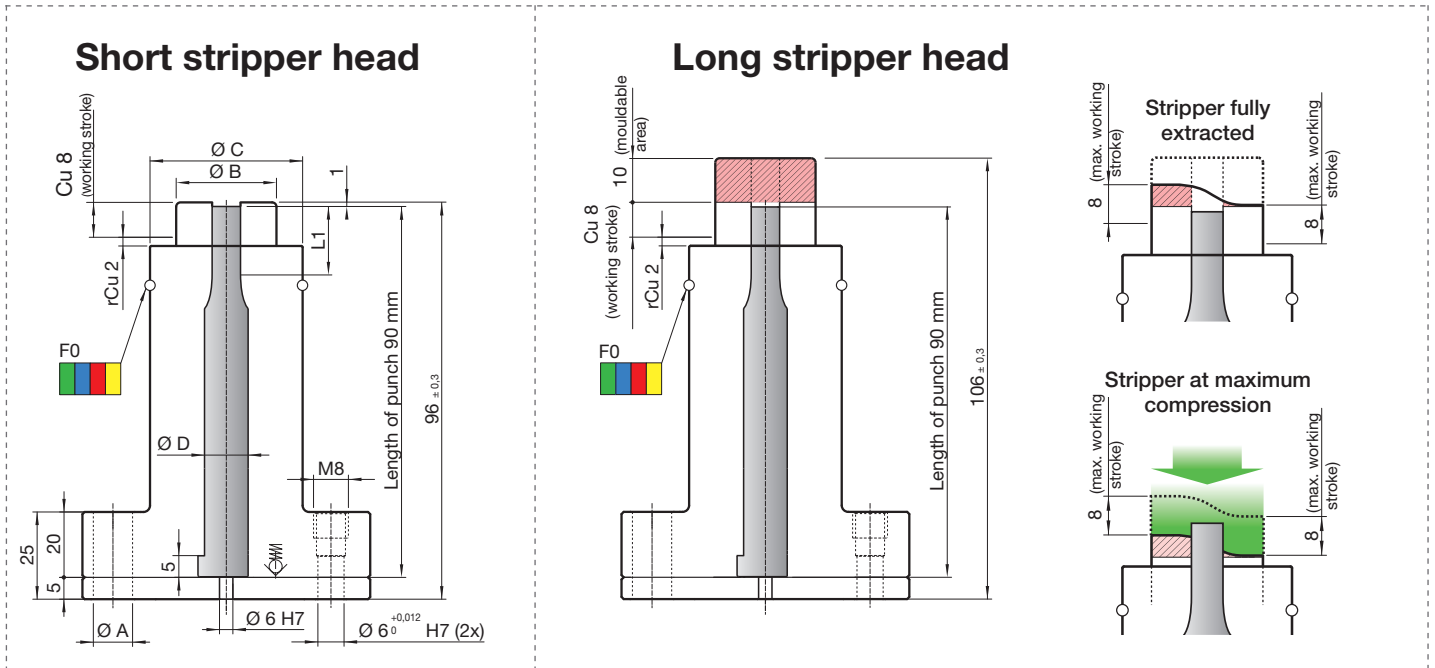


PatentPending

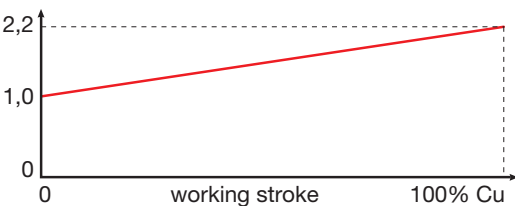
**INNOVATING
SAFETY**
since 1978

SPECIAL SPRINGS

90 mm shoulder style punch length



Force increase coefficient:



! Any moulded contour of the stripper head will cause a loss of working stroke.
The short stripper head is recommended for flat piercing.

! The long stripper head is recommended for piercing where a moulded head is required. The mouldable area of the stripper is 10 mm long and shall be machined by the user.

IMPORTANT
! The maximum working stroke of the stripper head is always 8 mm.
! The working stroke of the stripper head shall be always calculated starting from the first point of contact of the stripper with the sheet metal part.

! Special Springs' nitrogen punching unit with removable and mouldable stripper head is designed to fit ISO 8020 shoulder style punch standard.

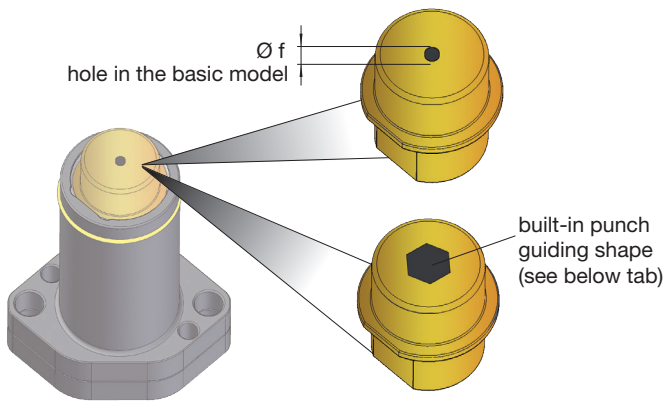
! The supply of the nitrogen punching unit always includes the stripper head and a bottom hardened counter plate. See how to order examples.

NITROGEN PUNCHING UNIT CODE	D ISO 8020	B	C	Cu	rCu*	A	F	G	H	I	M	N	L1	S**	F0 daN ±5%			
															(25 bar at 20° C)	(50 bar at 20° C)	(75 bar at 20° C)	(100 bar at 20° C)
short and long stripper	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm ²	GR	BU	RD	YW
3L P01A (GR/BU...)	10	23	35	8	2	9 (2x)	19	22	7	5	42	55	≥ 19	5,05	125	255	380	505
3L P02A (GR/BU...)	13	29	43	8	2	9 (2x)	24	27	7	5	50	65	≥ 19	6,95	175	350	520	695
3L P03A (GR/BU...)	16	29	43	8	2	9 (2x)	24	27	7	5	50	65	≥ 19	6,95	175	350	520	695
3L P04A (GR/BU...)	20	40	58	8	2	11 (2x)	28	32,5	13	11	64	78	≥ 19	11,6	290	580	870	1160
3L P05A (GR/BU...)	25	40	58	8	2	11 (2x)	28	32,5	13	11	64	78	≥ 25	11,6	290	580	870	1160
3L P06A (GR/BU...)	32	48	67	8	2	13 (2x)	31	37	14	12	74	85	≥ 25	13,85	345	695	1040	1390
3L P07A (GR/BU...)	40	60	81	8	2	13 (2x)	36	42,5	21	19	90	96	≥ 25	18,85	470	940	1410	1880

All sizes in mm.

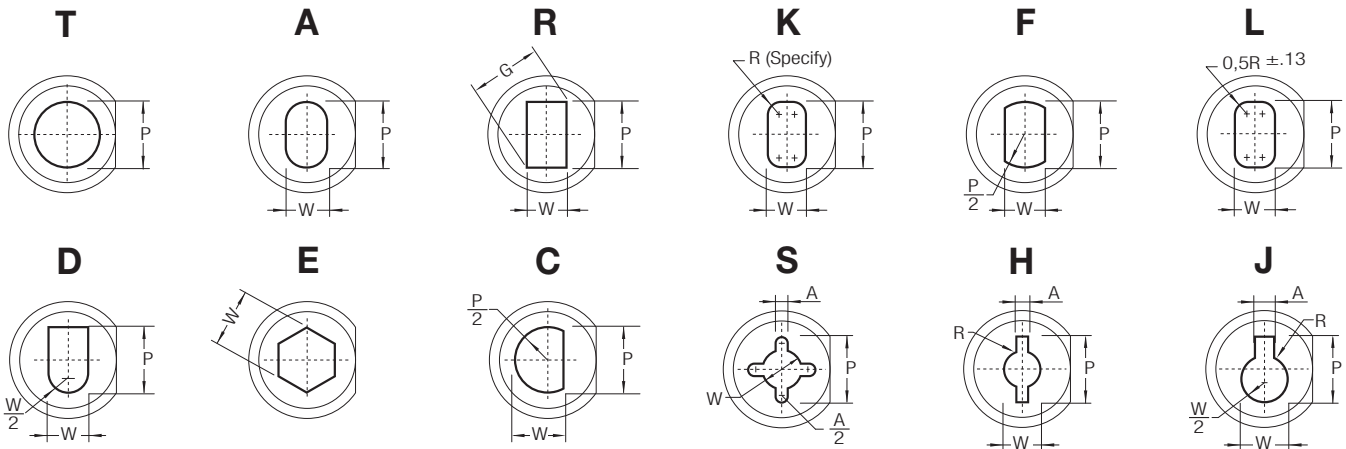
*rCu: reserve of stroke

**S: piston working size



- The stripper head can also be supplied separately from the nitrogen punching unit. It can be supplied with or without (basic model) built-in punch guiding shape.
- Geometry size and tolerance of the built-in punch guiding shape is always referred to the nominal punch size.
- The recommended radial clearance between punch and punch guiding shape is max 0,1 mm.

REFERENCE TO NITROGEN PUNCHING UNIT CODE	Ø D punch	Short model stripper head punch length = 90 mm		Long model stripper head punch length = 90 mm	
	mm	code	Ø f mm	code	Ø f mm
3L P01A	10	42 S 01	1,5	42 S 02	1,5
3L P02A	13	42 S 03	3	42 S 04	3
3L P03A	16	42 S 03	3	42 S 04	3
3L P04A	20	42 S 07	3	42 S 08	3
3L P05A	25	42 S 07	3	42 S 08	3
3L P06A	32	42 S 11	3	42 S 12	3
3L P07A	40	42 S 13	3	42 S 14	3

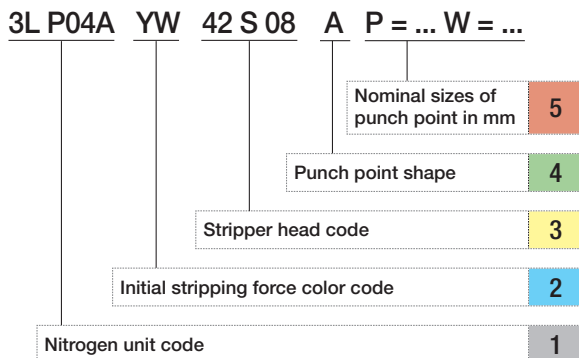


Other shapes upon request



HOW TO ORDER

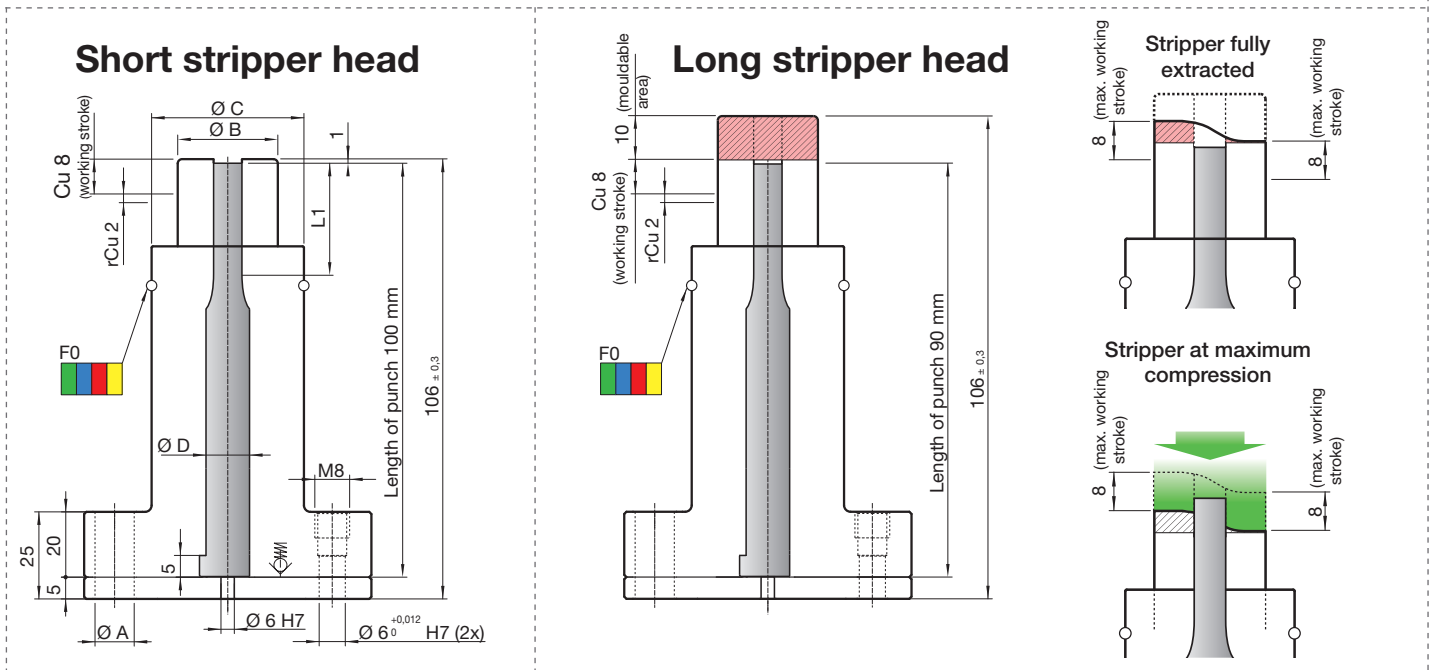
Punch not included!



Ordering options	Code example
Nitrogen unit only	1 + 2 3L P04A YW
Stripper head only	3 42 S 08
Stripper head + Punch point guiding shape	3 + 4 + 5 42 S 08 A P=... W=...
Nitrogen punching unit + Stripper head + Punch point guiding shape	1 + 2 + 3 + 4 + 5 3L P04A YW 42 S 08 A P=.. W=..

All dimensions in mm unless otherwise specified

100 mm shoulder style punch length



! Any moulded contour of the stripper head will cause a loss of working stroke.
The short stripper head is recommended for flat piercing.

! The long stripper head is recommended for piercing where a moulded head is required. The mouldable area of the stripper is 10 mm long and shall be machined by the user.

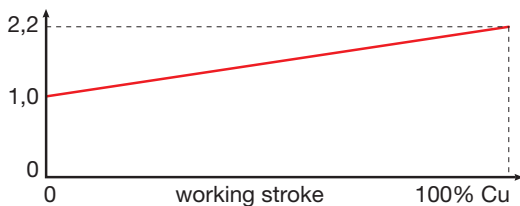
IMPORTANT

! The maximum working stroke of the stripper head is always 8 mm.
! The working stroke of the stripper head shall be always calculated starting from the first point of contact of the stripper with the sheet metal part.

! Special Springs' nitrogen punching unit with removable and mouldable stripper head is designed to fit ISO 8020 shoulder style punch standard.

! The supply of the nitrogen punching unit always includes the stripper head and a bottom hardened counter plate. See how to order examples.

Force increase coefficient:

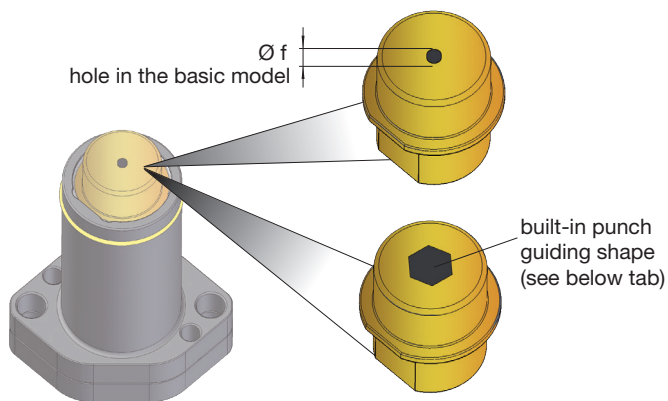


NITROGEN PUNCHING UNIT CODE	D ISO 8020	B	C	Cu	rCu*	A	F	G	H	I	M	N	L1	S**	F0 daN ±5%			
															(25 bar at 20° C)	(50 bar at 20° C)	(75 bar at 20° C)	(100 bar at 20° C)
short and long stripper	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm ²	GR	BU	RD	YW
3L P01A (GR/BU...)	10	23	35	8	2	9 (2x)	19	22	7	5	42	55	≥ 19	5,05	125	255	380	505
3L P02A (GR/BU...)	13	29	43	8	2	9 (2x)	24	27	7	5	50	65	≥ 19	6,95	175	350	520	695
3L P03A (GR/BU...)	16	29	43	8	2	9 (2x)	24	27	7	5	50	65	≥ 19	6,95	175	350	520	695
3L P04A (GR/BU...)	20	40	58	8	2	11 (2x)	28	32,5	13	11	64	78	≥ 19	11,6	290	580	870	1160
3L P05A (GR/BU...)	25	40	58	8	2	11 (2x)	28	32,5	13	11	64	78	≥ 25	11,6	290	580	870	1160
3L P06A (GR/BU...)	32	48	67	8	2	13 (2x)	31	37	14	12	74	85	≥ 25	13,85	345	695	1040	1390
3L P07A (GR/BU...)	40	60	81	8	2	13 (2x)	36	42,5	21	19	90	96	≥ 25	18,85	470	940	1410	1880

All sizes in mm.

*rCu: reserve of stroke

**S: piston working size



The stripper head can also be supplied separately from the nitrogen punching unit. It can be supplied with or without (basic model) built-in punch guiding shape.

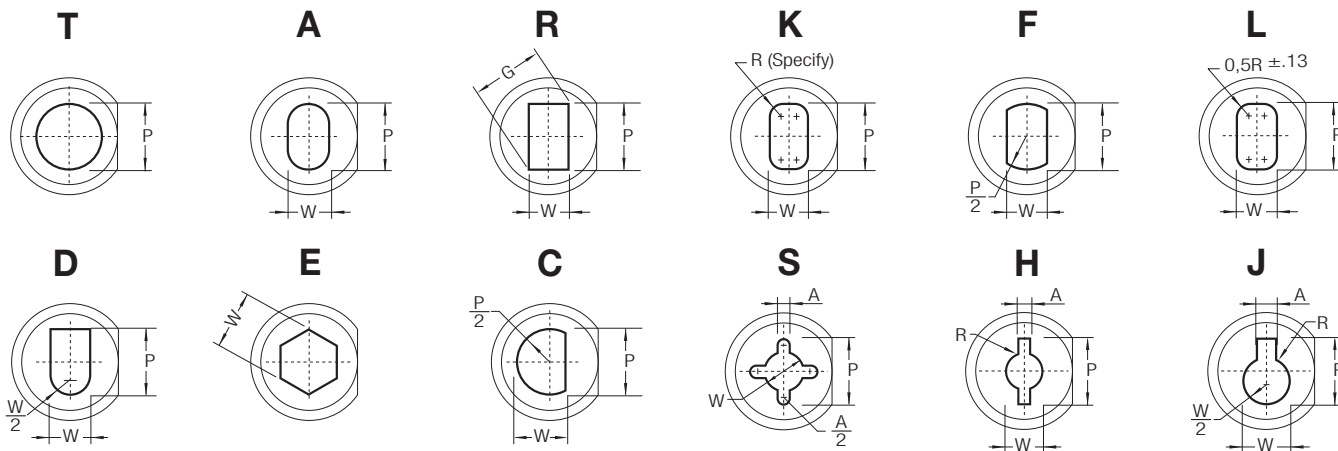


Geometry size and tolerance of the built-in punch guiding shape is always referred to the nominal punch size.



The recommended radial clearance between punch and punch guiding shape is max 0,1 mm.

REFERENCE TO NITROGEN PUNCHING UNIT CODE	$\varnothing D$ punch	Short model stripper head punch length = 100 mm		Long model stripper head punch length = 100 mm	
	mm	code	$\varnothing f$ mm	code	$\varnothing f$ mm
3L P01A	10	42 S 15	1,5	42 S 16	1,5
3L P02A	13	42 S 17	3	42 S 18	3
3L P03A	16	42 S 17	3	42 S 18	3
3L P04A	20	42 S 21	3	42 S 22	3
3L P05A	25	42 S 21	3	42 S 22	3
3L P06A	32	42 S 25	3	42 S 26	3
3L P07A	40	42 S 27	3	42 S 28	3



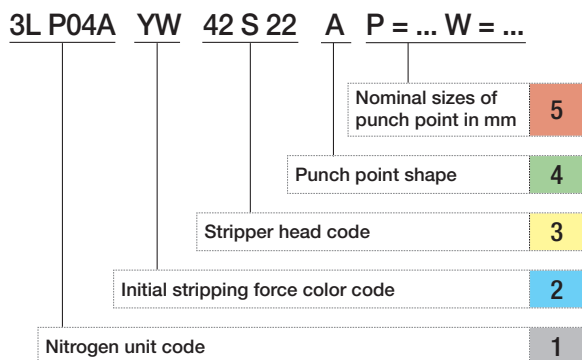
Other shapes upon request



HOW TO ORDER



Punch not included!



Ordering options

Nitrogen unit only	1 + 2
Stripper head only	3
Stripper head + Punch point guiding shape	3 + 4 + 5
Nitrogen punching unit + Stripper head + Punch point guiding shape	1 + 2 + 3 + 4 + 5

Code example

3L P04A YW
42 S 22
42 S 22 A P=... W=...
3L P04A YW 42 S 22 A P=.. W=..

All dimensions in mm unless otherwise specified

! The machining of the punch guiding shape and/or contour of the stripper head requires the removal of the stripper head from the nitrogen unit body.
 The clamp jig is always re-usable.
 Size, fixing and orientation of the anti-rotation correspond to the same of the nitrogen unit body.

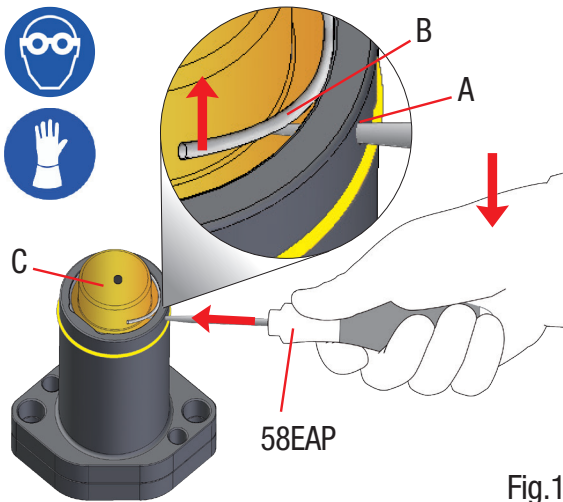


Fig.1

To remove the stripper head C, press and lift up the C-ring B through the hole A. Tool required 58EAP.

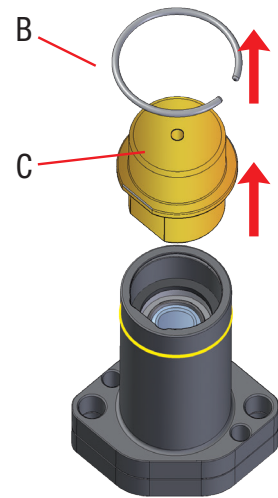


Fig.2

Remove the C-ring B from the groove and take the stripper head C out of the unit body.

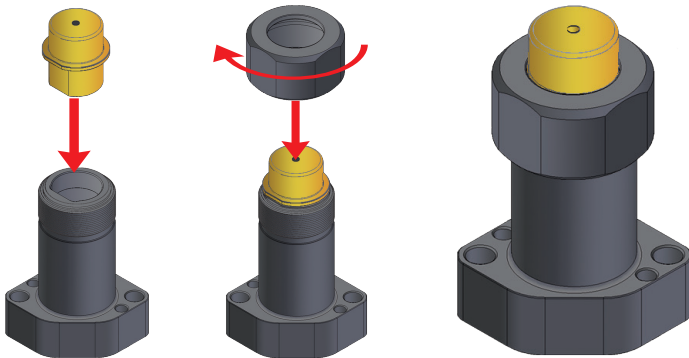


Fig.3
 Select the appropriate model of clamp jig and position the stripper head into the lodging hole. Screw and lock the retaining nut.

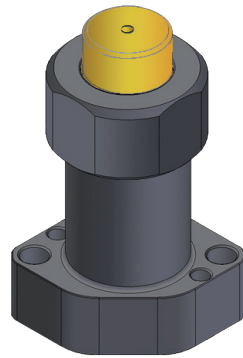
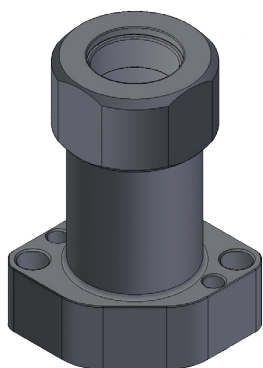
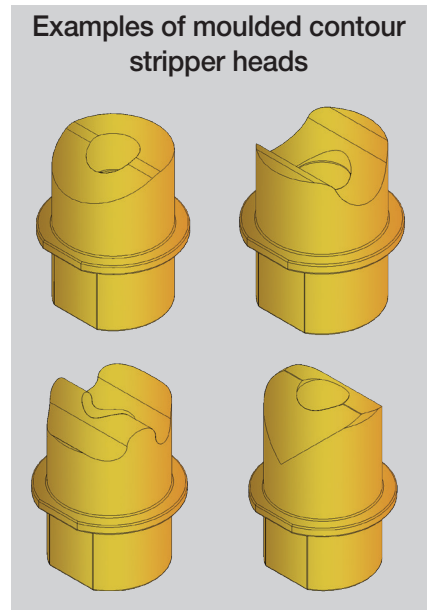
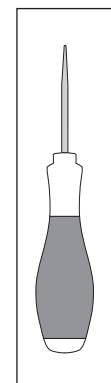


Fig.4
 Position and lock the clamp jig on the machine tool, wire EDM and/or tool plate and proceed with the required machining. Clean the stripper head and re-assemble it on the nitrogen unit body following the reverse procedure.



REFERENCE TO NITROGEN UNIT CODE	Stripper head clamp jig code
3L P01A (GR/BU ...)	3L MP01A
3L P02A (GR/BU ...)	3L MP02A
3L P03A (GR/BU ...)	3L MP02A
3L P04A (GR/BU ...)	3L MP04A
3L P05A (GR/BU ...)	3L MP04A
3L P06A (GR/BU ...)	3L MP06A
3L P07A (GR/BU ...)	3L MP07A



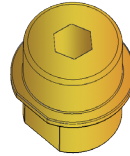
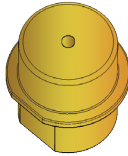
Cod. 58EAP
 Retaining C-ring removal tool



Stripper head retaining C-ring

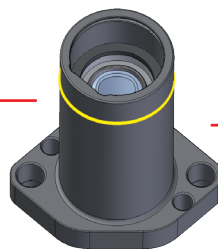
Removable and mouldable
stripper head.

Basic model with 3 mm hole.



Removable and mouldable
stripper head with built-in
punch guiding shape.

Force identification color ring

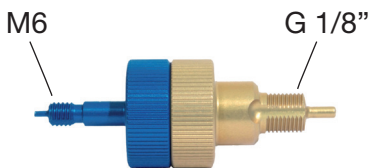


Nitrogen and shoulder
style punch
retainer unit.

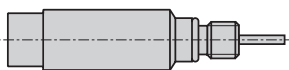


Hardened bottom
counter plate

Discharging and charging devices

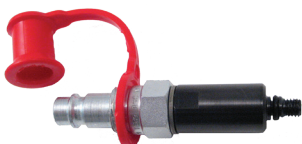


Discharging device Cod. 39DDS01A



Charging adapter Cod. ADM08 (included in the Cod. 39DMA set)
To be used in combination with units Cod. 39DMCILA + Cod.
39DMCPVA.

For more details see: Nitrogen cylinders catalogue.



Cejin male quick fit adapter for direct charging Cod. QDFV02

To be used in combination with unit Cod. 39DMCPVA only.

For more details see: Nitrogen cylinders catalogue.

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