

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

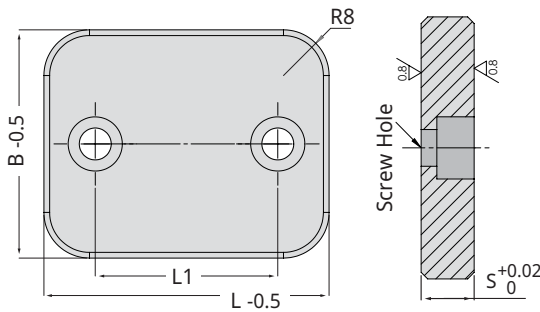


Wear - Shim Plate

Code: **G155**

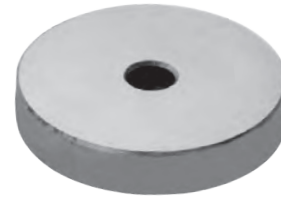
(Core bases, for movable or fixed surfaces)

Clamping / locking loads occurred with the support of 1.2842 steel materials and heat treatment during injection and 2nd pressure are equally distributed to mould surfaces except cores, the mould surfaces are protected with this way. It can be used for both (movable and fixed) surfaces when necessary.



Order Code	B	L	S	L1	Screw Hole
G1552032	20	32	8.1	16	M5
G1552040		40	10.1	24	M5
G1552064		64	12.1	40	M5
G1552532	25	32	8.1	16	M5
G1552540		40	10.1	24	M5
G1552564		64	12.1	40	M5
G1553240	32	40	8.1	24	M5
G1553264		64	8.1	40	M5
G15532100		100	10.1	64	M6
G1554050	40	50	8.1	32	M5
G1554080		80	10.1	52	M6
G15540100		100	12.1	64	M6
G1555064	50	64	10.1	40	M6
G15550100		100	12.1	64	M6
G15550125		125	12.1	80	M6
G1556480	64	80	10.1	52	M6
G15564100		100	12.1	64	M6
G15564125		125	12.1	80	M6
G15564160	80	160	12.1	100	M6
G1558080		80	12.1	52	M6
G15580100		100	12.1	64	M6
G15580125		125	12.1	80	M6
G15580160		160	12.1	100	M6

Material: 1.2842 (Heat treated) / **Hardness:** 54 - 56 HRC

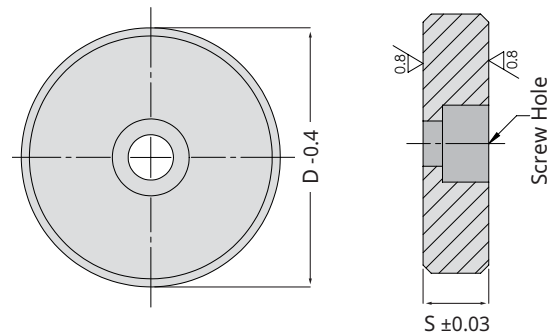


Wear - Shim Plate, Round

Code: **G156**

(Core bases, for movable or fixed surfaces)

In injection mould designs: Injection pressure on mould separation surfaces should be distributed according to a predefined value. Thus, the mould separation surfaces are aligned correctly and the height differences are easily balanced thanks to innovative Güvenal products such as **G154 / G155 / G156**. 1.2842 steel 54 - 56 HRC hardened shim plates are ready to mount with 0.2 mm precision tolerances in embedded mounting holes and round - rectangular versions.

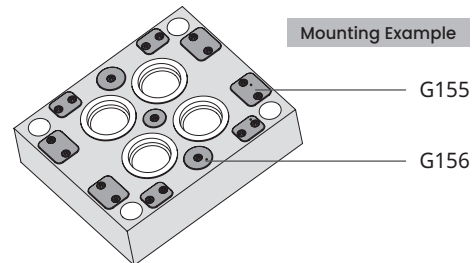


Order Code	D	S	Screw Hole
G15620	20	8.1	M5
G15625	25	8.1	M5
G15632	32	8.1	M5
G15640	40	10.1	M6
G15650	50	10.1	M6
G15664	64	12.1	M6
G15680	80	12.1	M6

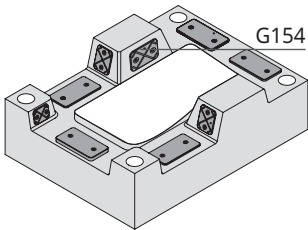


Material: 1.2842 (Heat treated)
Hardness: 54 - 56 HRC

Mounting Example



G155 / G156 - Usage: The necessary thickness should be correctly calculated during mounting. The final thickness is achieved by grinding back surface of the product when necessary. Plate to be used for the same core should be ground together. The parts to be used in mould locking should be ground together. The cleanliness and measurements of the mounting surfaces are important. Mounting hole sizes should be bigger than 0.2 (minimum) from one side. Hexagon socket head cap screws in 12.9 quality are used for connections. ***Connecting screws are provided separately**

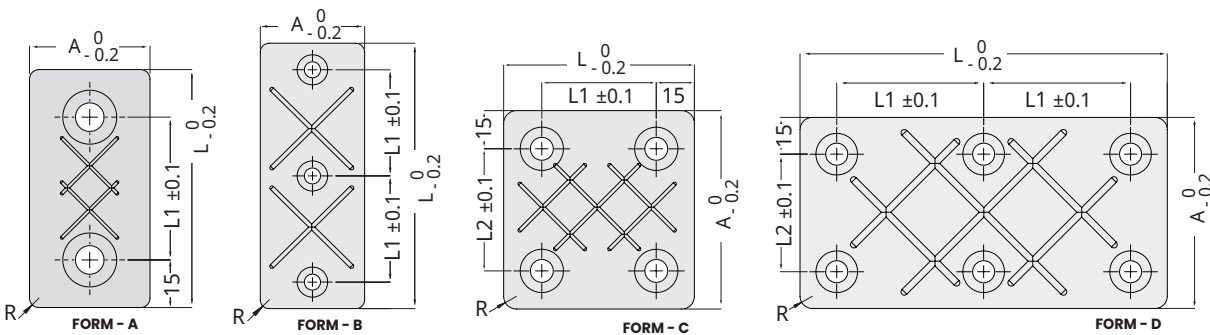


Wear - Shim Plate (with oil grooves)

Code: **G154**

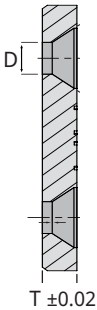
(Hard, heat-treated core bases, for movable or fixed surfaces)

Innovative wear and shim plates The difference of the mould separation surface can be easily offset by grinding back surface of the plate. It minimizes wearings due to friction with the heat treatment hardness and oil accumulated in oil grooves. used as sliding plate. Clamping / locking loads occurred with the support of 1.2842 steel materials and heat treatment during injection and 2nd pressure are equally distributed to mould surfaces except cores, the mould surfaces are protected with this way. It can be used for both (movable and fixed) surfaces when necessary.



A	L	L1	L2	R	D	T	Form
18	50	20	-	4	6.5	7	A
	75	45					B
	100	70					
	150	60					
28	50	20	-	4	9	7	A
	75	45					B
	100	70					
	150	60					
38	50	20	-	4	9	7	A
	75	45					B
	100	70					
	150	60					

A	L	L1	L2	R	D	T	Form
48	75	45	-	5	9	7	A
	100	70					B
	125	95					
	150	60					
58	75	45	-	5	9	7	A
	100	70					B
	125	95					
	150	60					
78	75	45	48	5	9	7	C
	100	70					D
	125	95					
	150	60					



A: 18 / L: 50 - 75 - 100
FORM - A M6 x 20 - 2 Pcs.
A: 18 / L: 150
FORM - B M6 x 20 - 3 Pcs.

Countersunk Head
Screws with Hex-Socket
FORM - A M8 x 20 - 2 Pcs.
FORM - B M8 x 20 - 3 Pcs.
FORM - C M8 x 20 - 4 Pcs.
FORM - D M8 x 20 - 6 Pcs.

Order: **G154**. A x L x T

Material: 1.2842 (Heat treated)

Hardness: 54 - 56 HRC

Usage: The necessary thickness should be correctly calculated during mounting. The final thickness is achieved by grinding back surface of the product when necessary. Mounting hole sizes should be bigger than 0.2 (minimum) from one side.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

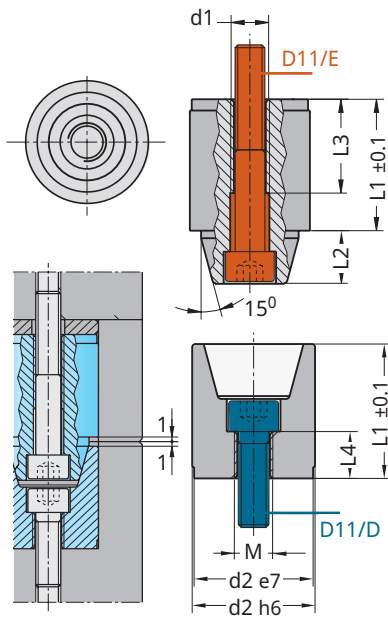
Locating / Centring Units for Moulds



Code: **G60**

Tapered Locating Unit

DIN ISO 8406



d2	L1	L2	L3	L4	M	Screw D11 / D-E
12	16	4.5	9.6	7	M4	M3 x 15 M3 x 28
14	16	6	12.4	6	M5	M4 x 15 M4 x 25
16	16	6	12.4	6	M5	M4 x 15 M4 x 25
20	26	9	19.7	19.7	M8	M6 x 20 M6 x 35
25	26	10	19.7	19.7	M8	M6 x 30 M6 x 40
30	35	14	25	25	M10	M8 x 25 M8 x 50
32	35	14	25	25	M10	M8 x 25 M8 x 50
42	45	18	27	27	M10	M8 x 30 M8 x 70

Note: "D11" bolts are delivered with the product.



Order: **G60**. d2



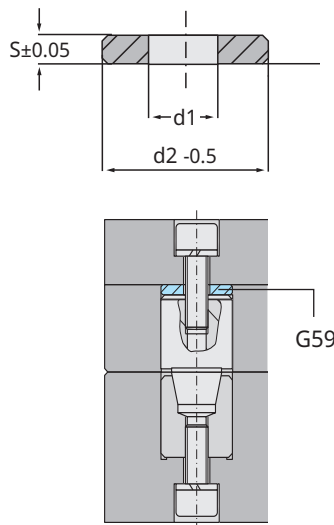
Material: 1.7131 (16MnCr5)
Hardness: 60 - 62 HRC



Code: **G59**

Support Washer

Support Washer: Additional lifting part in tapered locating units. It can also be used as in-mould assistive part.



d2	S	d1
12	5	6.5
12	10	6.5
14	5	6.5
14	10	6.5
16	5	6.5
16	10	6.5
17	5	8.5
17	10	8.5
20	5	8.5
20	10	8.5
20	20	8.5
25	5	8.5
25	10	8.5
25	20	8.5
26	5	8.5
26	10	8.5
26	20	8.5
30	5	10.5
30	10	10.5
32	5	10.5
32	10	10.5
40	5	10.5
40	10	10.5
42	5	10.5
42	10	10.5
50	5	13
50	10	13

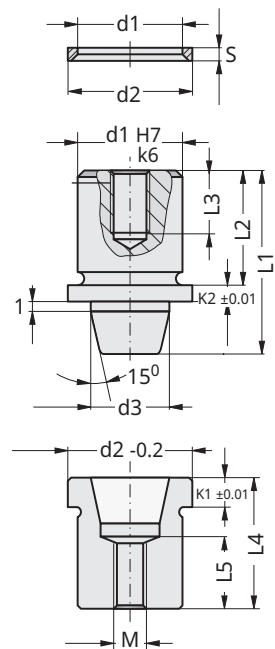


Order: **G59**. d2 x S



Code: **G82**

Tapered Locating Unit, Headed



d1	d2	d3	M	K1	K2
14	17	12	M8	4	2.5
24	28	20	M8	6	4
34	38	30	M8	8	5
42	46	35	M8	8	5

d1	L1	L2	L3	L4	L5	S
14	24.5	17	15	19.5	13	1.7
24	42	27	20	32	18	2
34	42	28	20	32	18	3
42	48	28	20	47	18	3



Order: **G82**. d1



Material: 1.7131 (16MnCr5)
Hardness: 60 - 62 HRC

Tapered Locating Units: They are used to increase speed of repeatability while providing precision centring in dies and moulds. Mounting screws are provided with products and the support washer(G59) can be provided upon request. Headed Type: It is suitable to be used for centring in female and male plates in moulds (seal-rubber & wing moulds).



Code: **G152**

Bar Lock System



Material: 1.2379 / Hardened: 58 – 60 HRC

Code: **G152K**

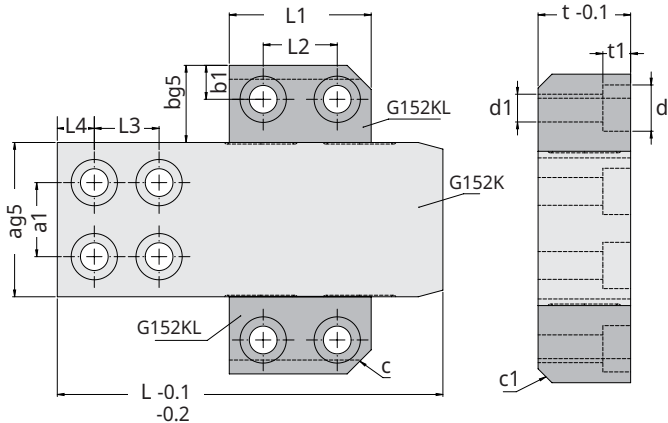
Bar Lock Slide Block



Material: 1.2842 / Hardened: 58 – 60 HRC

Code: **G152KL**

Bar Lock Guide Jaw



All parts, including part holder rings,  applied a thin layer of oil (fit for food industry) before all areas dry and get hardened. G152KL product can be used in group applications for each mould as 2 pieces and multi bar lock guide jaws can be used in different designs. There are 2 pcs jaws in 1 set.

It provides making selections among ready-made products for wide moulds with movable plates more than one for mould designers. During production, insert locks and only wipe outer surfaces. Please do not touch thin layer of lubrication in joints.



Order:
G152. t x L



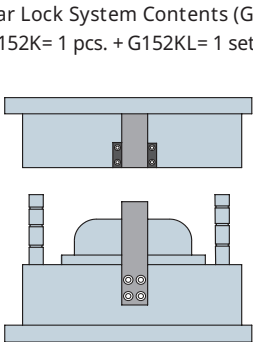
Order:
G152K. a x L



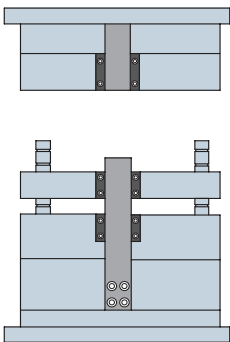
Order:
G152KL. L1 x b

a	a1	b	b1	c	c1	d	d1	L	L1	L2	L3	L4	t	t1	Screw
32	14	20	10	6	6	11	6.6	70	36	16	18	9	22	6.8	M6
								90							
								112							
50	24	25	11	8	5	15	9	90	46	24	21	12	30	9	M8
								125							
								150							
60	30	32	16	10	10	18	11	112	56	30	26	15	32	11	M10
								150							
								175							
80	44	35	16	10	10	18	11	112	56	30	26	15	35	11	M12
								150							
								175							
100	55	40	17	10	10	20	13.5	175	76	40	32	18	50	13	M12
								200							
								250							
120	75	45	20	12	12	20	13.5	200	86	50	35	20	65	13	M12
								250							
								300							

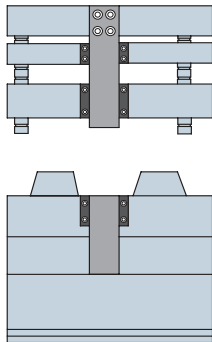
Bar Lock System Contents (G152):
G152K= 1 pcs. + G152KL= 1 set (2 pcs).



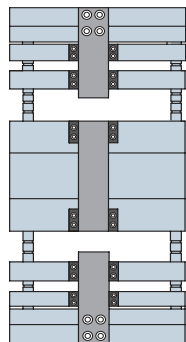
Wide Mould Applications



Stripper Plate Applications



Triple Plate Applications



Sequence Mould Application

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

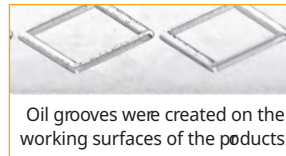
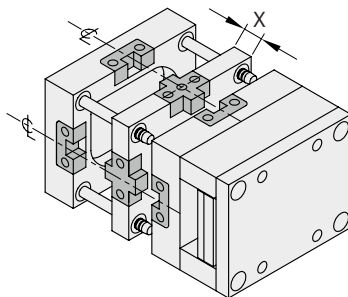
18

Locating / Centring Units for Moulds



Group Locating - Centring Unit

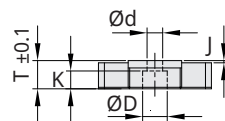
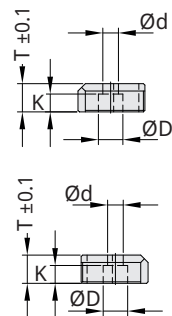
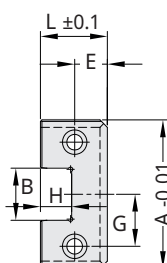
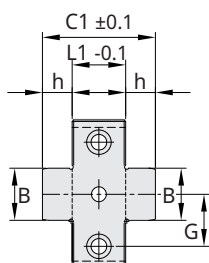
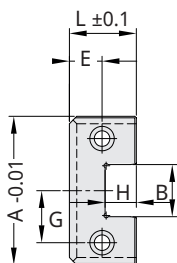
Code: **G127**



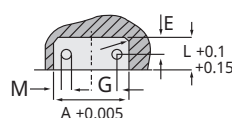
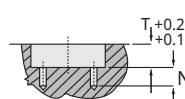
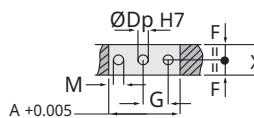
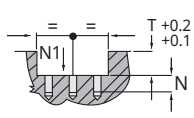
Oil grooves were created on the working surfaces of the products.



Material: 1.2510
Hardened: 52 - 54 HRC



Mounting
Mould Application

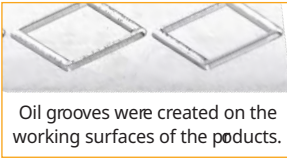
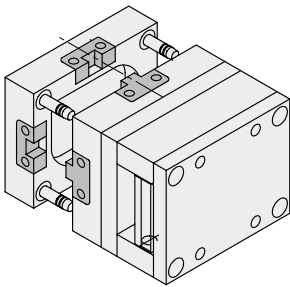


Order Code	A	X	B	C1	D	d	E	F	G	h
G127.5026	50	26	17	43	10.5	6.5	11	13	17	8.5
G127.5036		36		53				18		
G127.7526	75	26	25	54	16.5	10.5	18	13	25	14
G127.7536		36		64				18		
G127.10036	100	36	35	76	16.5	10.5	22	18	35	20
G127.10046		46		86				23		
G127.12536	125	36	45	76	16.5	10.5	22	18	42	20
G127.12546		46		86				23		

Order Code	H	J	K	L	L1	T	M	N	Dp	N1
G127.5026	9.5	1.5	8	21.5	26	16	M6	15	6	17
G127.5036					36					
G127.7526	15	1.5	12	36	26	19	M10	20	10	22
G127.7536					36					
G127.10036	21	1.5	12	45	36	19	M10	20	10	22
G127.10046					46					
G127.12536	21	1.5	12	45	36	25	M10	20	12	22
G127.12546					46					

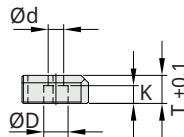
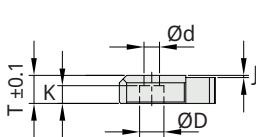
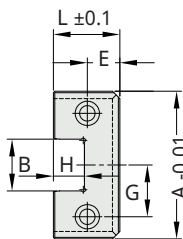
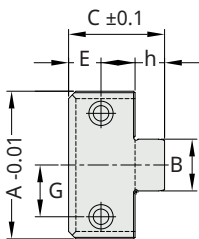
Square Locating - Centring Unit

Code: **G128**

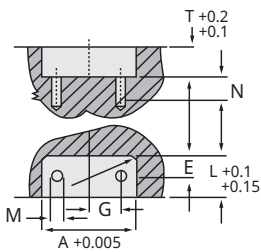


Oil grooves were created on the working surfaces of the products.

Material: 1.2510
Hardened: 52 - 54 HRC



Mounting
Mould Application



Download
www.guvenal.net

3D CAD - Formats: CATIA, STEP, IGES 3D, X_T

Order Code	A	G	E	M	L	T	N	B
G12838	38	11	7	M5	17	13	15	11
G12850	50	17	11	M6	21.5	16	15	17
G12875	75	25	18	M10	36	19	20	25
G128100	100	35	22	M10	45	19	20	35
G128125	125	42	22	M10	45	25	20	45

Order Code	C	d	D	h	H	J	K
G12838	30	5.5	9.5	8	9	1.5	5.5
G12850	30	6.5	10.5	8.5	9.5	1.5	8
G12875	50	10.5	16.5	14	15	1.5	12
G128100	65	10.5	16.5	20	21	1.5	12
G128125	65	10.5	16.5	20	21	1.5	12

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Locating / Centring Units for Moulds

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

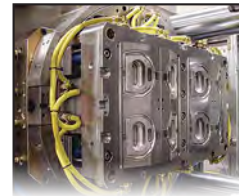
18

Locating / Centring Units for Moulds

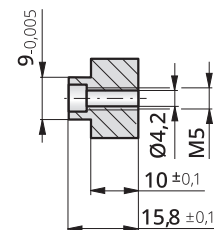
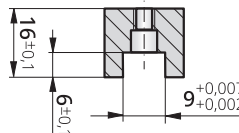
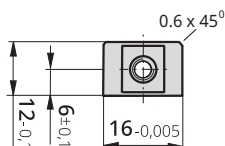
Code: **G131**

Centring Unit - DLC Coated

The G131 series is suitable for rotational multi-component moulds.
Material: 1.2344 - DLC Coated / Hardened: 52 - 54 HRC

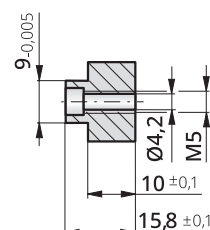
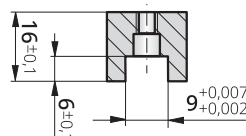
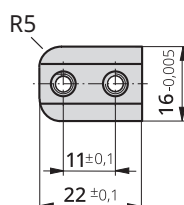


Order Code: **G131 - 1**



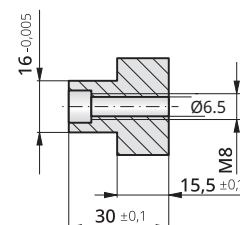
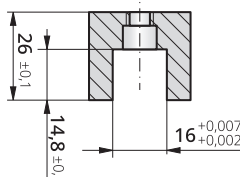
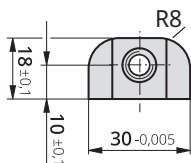
Note: Please use M4 screws for proper mounting.

Order Code: **G131 - 2**



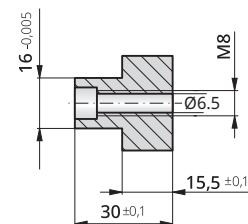
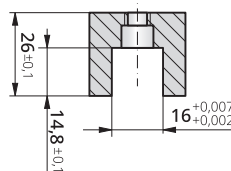
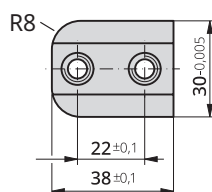
Note: Please use M4 screws for proper mounting.

Order Code: **G131 - 3**



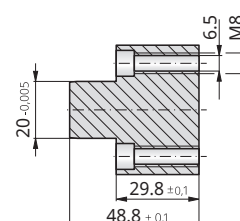
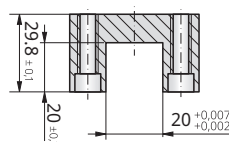
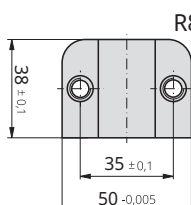
Note: Please use M6 screws for proper mounting.

Order Code: **G131 - 4**

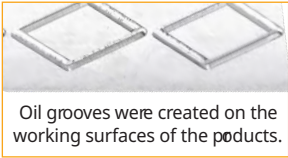
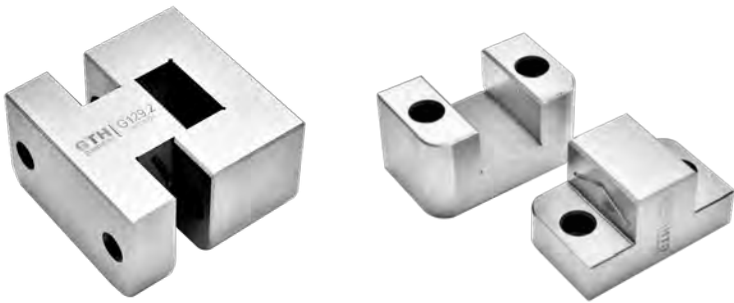


Note: Please use M6 screws for proper mounting.

Order Code: **G131 - 5**

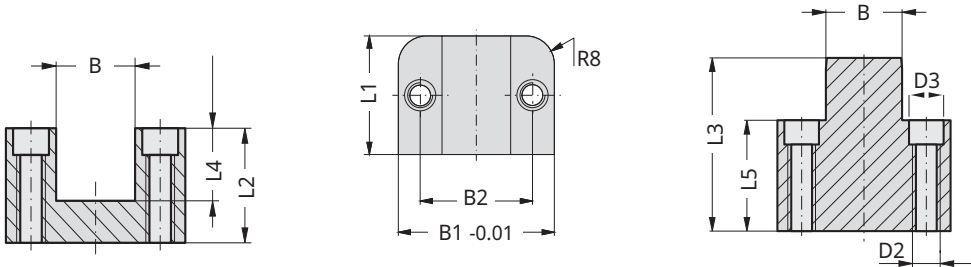


Note: Please use M6 screws for proper mounting.

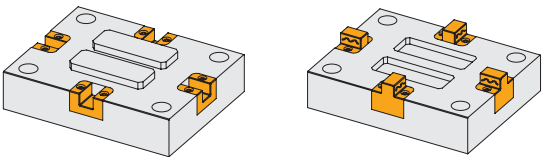


Locating - Centring Unit

Code: **G129**



Mounting Example



Order Code	B	B1	B2	L1	L2
G1291	12.7	38.1	25.5	25.4	22.2
G1292	25.5	63.5	44.5	38.1	34.9
G1293	36.6	88.9	63.5	50.8	44.5

Order Code	L3	L4	L5	D2	D3	Screw
G1291	22	13.3	9.5	M6	9	M5
G1292	34.8	19.5	15.9	M8	11	M6
G1293	44.2	25.7	19	M12	18	M10



Material: 1.2510 / Hardened: 52 - 54 HRC

Note: This product is not suitable for the rotational (multi component) moulds. Please use G131" products for the rotational multi component moulds.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Locating / Centring Units for Moulds

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

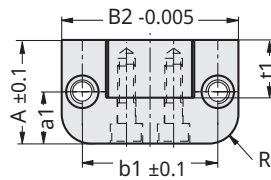
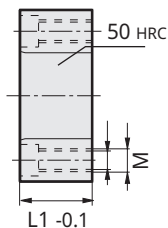
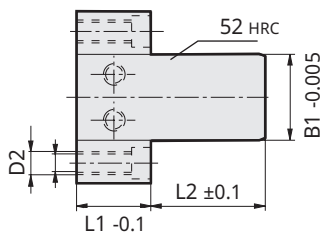
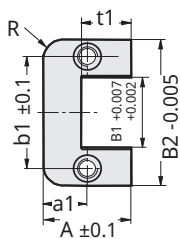
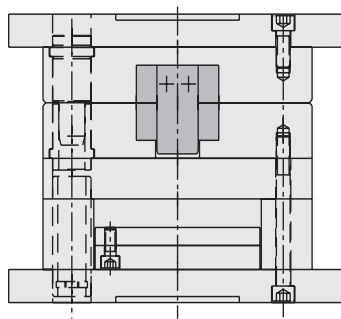
17

18

Locating / Centring Units for Moulds



Mounting Example



Code: **G130**

Square Locating - Centring Unit



Material: 1.2510 / Hardened: 52 - 54 HRC

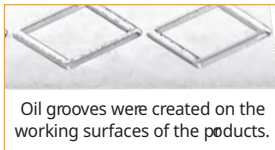
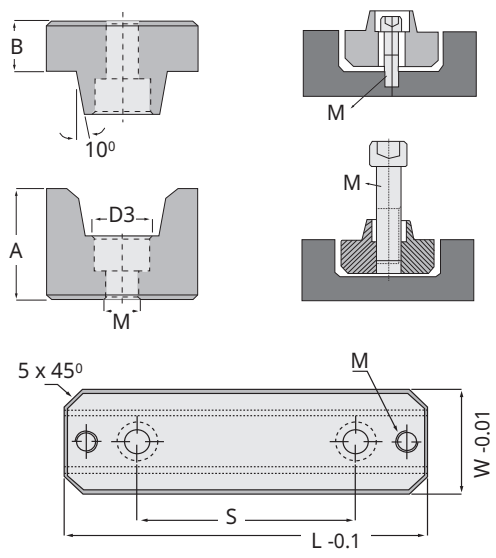
Order Code	B1	L1	L2	A	B2	M	a1	b1	t1	t2	R
G130 16 20 20	16	20	20	22	45	M8	11	30	11.5	12	8
G130 16 20 40			40								
G130 30 26 40	30	26	40	35	60	M8	17.5	46	19.5	20	10
G130 30 26 63			63								
G130 48 36 32	48	36	32	46	100	M12	23	74	25.5	26	12.5
G130 48 36 50			50								
G130 48 36 63			63								
G130 48 36 80			80								
G130 77 56 50	77	56	50	60	150	M16	30	114	35.5	36	16
G130 77 56 71			71								
G130 77 56 100			100								



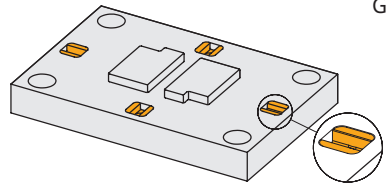


Locating - Centring Unit

Code: **G132**



Oil grooves were created on the working surfaces of the products.



Mounting Example

W	L	A	B	G	S	D3	M
25	50	17.5	8	25.5	-	9.6	M5
30	100	22	10	32	60	11	M6
40	150	25	13	38	100	14	M8

 Order:
G132 x W

 **Material:** 1.2510
Hardened: 52 - 54 HRC

"WHY DO OUR BUSINESS PARTNERS PREFER GÜVENAL PRODUCTS?"



- 1** "It reduces maintenance losses with lubrication grooves that reduce friction and extend lubrication periods"
- 2** "Easy traceability even after years with the brand and production tracking number"
- 3** "When mounted with appropriate criteria, 12.9 grade bolts that do not elongate are included with the product"
- 4** "The product has been 100% inspected by the Güvenal CMM quality team"
- 5** "The product is stored and packaged in a climate-controlled stock area, in compliance with precise tolerance requirements"



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Locating / Centring Units for Moulds

1

2

3

4

5

6

7

8

9

10

11

12

13

14

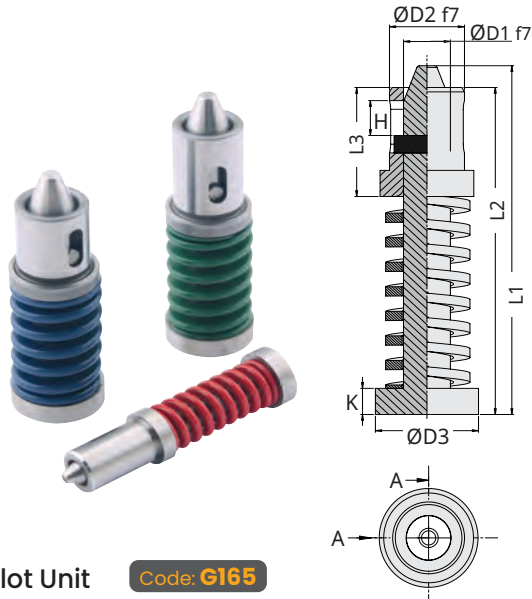
15

16

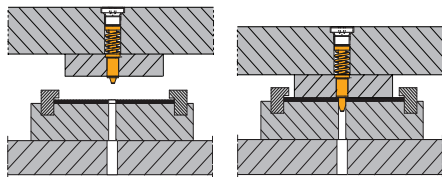
17

18

Mechanical Die Components

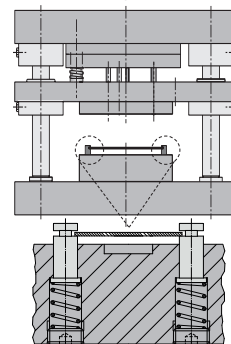
**Pilot Unit****Code: G165**

"G165" is used for centering of the moving sheet metal in progressive dies in each step. It is a compact and useful product.



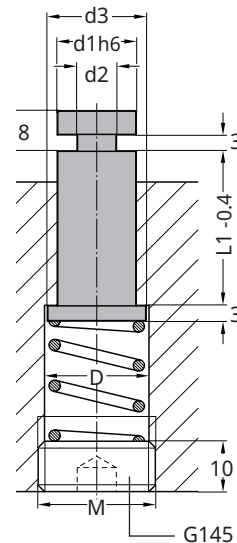
1N = 0.1 daN = 0.102 kgf

Order Code	F0 (N) preloaded	F1 (N) pressed	D1	L1	D2	D3	L2	L3	K	H
G165.05401	11	30	5	40	8	11	36	12	3	4.5
G165.05402	25	70								
G165.05403	30	84								
G165.05404	40	112								
G165.05405	55	155								
G165.05441	11	30	5	44	8	11	40	16	3	4.5
G165.05442	25	70								
G165.05443	30	84								
G165.05444	40	112								
G165.05445	55	155								
G165.08481	44	122	8	48	12	16	41	16	4	4.5
G165.08482	58	164								
G165.08483	79	220								
G165.08484	123	346								
G165.08485	165	460								
G165.08486	189	530	8	52	12	16	45	20	4	4.5
G165.08521	44	122								
G165.08522	58	164								
G165.08523	79	220								
G165.08524	123	346								
G165.08525	165	460	9.8	63.2	15	18	53	28	4	3.5
G165.08526	189	530								
G165.10631	140	391								
G165.10632	245	680								
G165.10633	540	1512								

**Mounting Example****Sheet Lifting Pin****Code: G23**

It is used to align and lifting sheet in progressive / multi-stage forming dies. G145 - Compression spring set screw and round steel spring can be used for mounting.

d1	L1	d2	d3	M	D
8	20	5	10	M12 x1.5	10.5
	25				
	32				
	40				
10	25	6	12	M14 x1.5	12.5
	32				
	40				
	50				
13	25	7	16	M18 x1.5	16.5
	32				
	40				
	50				
16	32	8	20	M22 x1.5	20.5
	40				
	50				



Order:
G23. d1 x L1

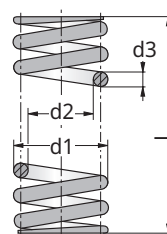


Material: 1.7131 (16MnCr5)
Hardness: 58 - 60 HRC

Round Steel Spring**Code: G23S**

L: Spring length / die plate selection as per dimension.

d1	d2	d3	L
10.5	8.5	1.5	40
12.5	10.5	1.5	55
16.5	13	2	40
21	17	2.5	40



Order:
G23S. d1 x L



Compression Spring Set Screw

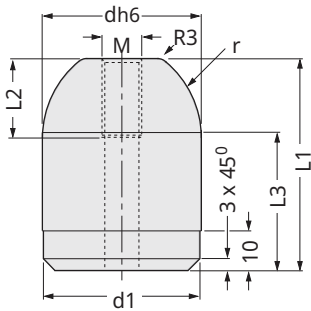
Code: G145 Page: 298





Centring Pin **Code: G65**

Reference: VW/ AUDI 39V 1205
Reference: BMW B2 4068 2



d	L1	L2	L3	d1	M	r
22	45	16	35	21.95	M8	15
22	55	16	45	21.95	M8	15
32	50	20	35	31.95	M10	20
40	55	20	35	39.95	M10	25
40	65	20	45	39.95	M10	25
50	55	20	35	49.95	M10	25



Order: **G65. d x L1**

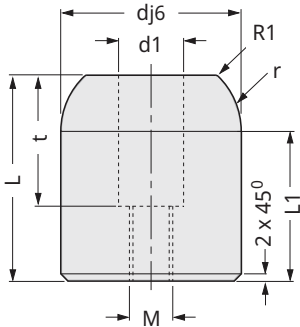


Material: 1.7131 (16MnCr5)
Hardness: 58 - 62 HRC



Centring Pin **Code: G66**

Reference: FCA STQ 40015



d	L	L1	d1	t	M	r
22	45	37.5	14	25	M10	20
32	50	40	18	35	M12	20
40	55	40	18	35	M12	20
50	55	40	18	35	M12	20



Order: **G66. d**

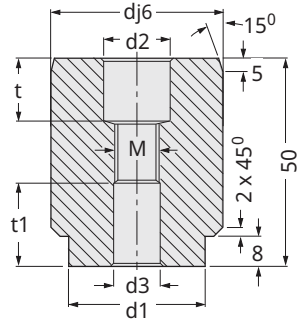


Material: 1.7131 (16MnCr5)
Hardness: 58 - 62 HRC



Centring Pin **Code: G62**

Reference: Mercedes-Benz Standard
B8 0602 321 008 801



d	d1	d2	d3	M	t	t1
22	16	11	9	M8	13	16
25	18	11	9	M8	13	16
32	25	11	9	M8	13	16
40	32	15	11	M10	16	20
50	42	15	11	M10	16	20



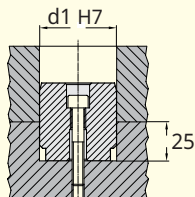
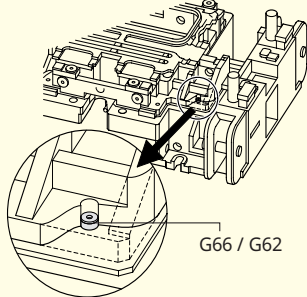
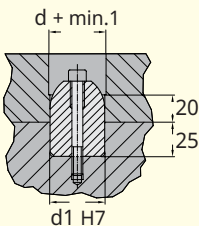
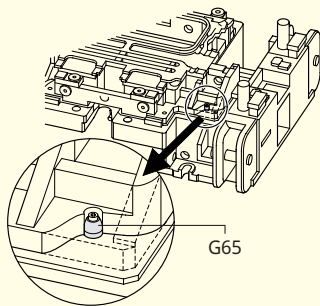
Order: **G62. d**



Material: 1.7131 (16MnCr5)
Hardness: 58 - 62 HRC



Centring Pins: It is used for centring of perforated parts. Using centring pin provides centring repeatedly with high sensitivity at dies and fixtures. Mounted parts are centered with high sensitivity and quickly. Screws used for mounting of products should be provided by user. All dimensions without tolerance are in EN 22768 - 1 (m) standards.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

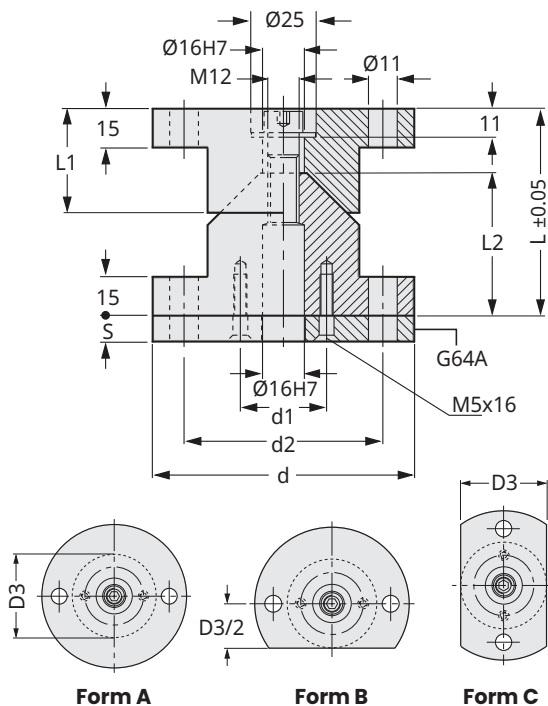
17

18

Mechanical Die Components



Code: **G64**
Locating Cone



d	L	D1	D2	D3	L1	L2	t	Form
100	80	40.5	76	58	40	55	5.5	A
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	5.5	B
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	5.5	C
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	10	A
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	10	B
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	10	C
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	10.5	A
120	90	50.5	96	78	50	65		
100	80	40.5	76	58	40	55	10.5	C
120	90	50.5	96	78	50	65		



Order: **G64**. d x L x t x Form

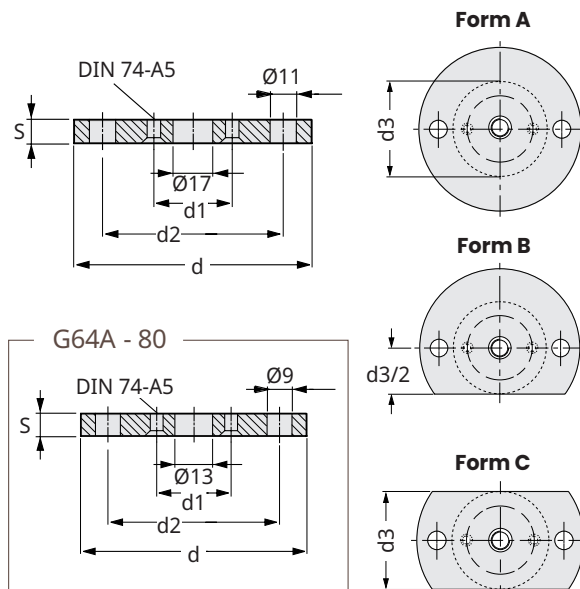
Shim plates are with the unit in thickness (t) specified dimensions as a standard. Except this, other form(A - B - C) shim plates can be ordered upon request. Mounting screws are excluded.
Material: 1.7131 (16MnCr5) / Hardness: 60 - 64 HRC



Code: **G64A**
Shim Plate for
Locating Cone



(Custom-made products upon request)



d	t	d2	d1	d3	Form
80	5	63	32	48	A
80	5.5	63	32	48	
80	5	63	32	48	C
80	5.5	63	32	48	
100	5.5	76	40.5	58	A
120	5.5	96	50.5	78	
100	5.5	76	40.5	58	B
120	5.5	96	50.5	78	
100	5.5	76	40.5	58	C
120	5.5	96	50.5	78	
100	10	76	40.5	58	A
120	10	96	50.5	78	
100	10	76	40.5	58	B
120	10	96	50.5	78	
100	10	76	40.5	58	C
120	10	96	50.5	78	
100	10.5	76	40.5	58	C
120	10.5	96	50.5	78	



Order: **G64A**. d x t x Form



Material: 1.0503 (CK45)

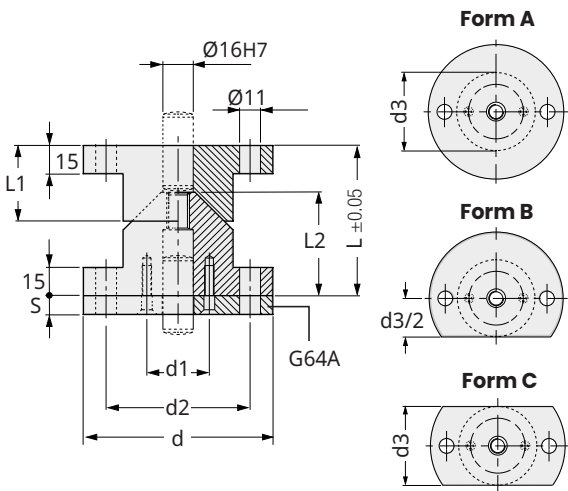
Note: Fixing screws will be provided separately.

Code: **G63**

Locating Cone - NAAMS

Shim Plate (upon request, **Form A - B**)

Reference: NAAMS G91



d	L	L1	L2	d1	d2	d3	S	Form
100	80	40	55	40.5	76	58	10.5	A
							10.5	C
							5.5	A
							10	A
							5.5	B
							10	B
							5.5	C
							10	C
120	90	50	65	50.5	96	78	10.5	A
							10.5	C
							5.5	A
							10	A
							5.5	B
							10	B
							5.5	C
							10	C



Order: **G63**. d x L x S x Form



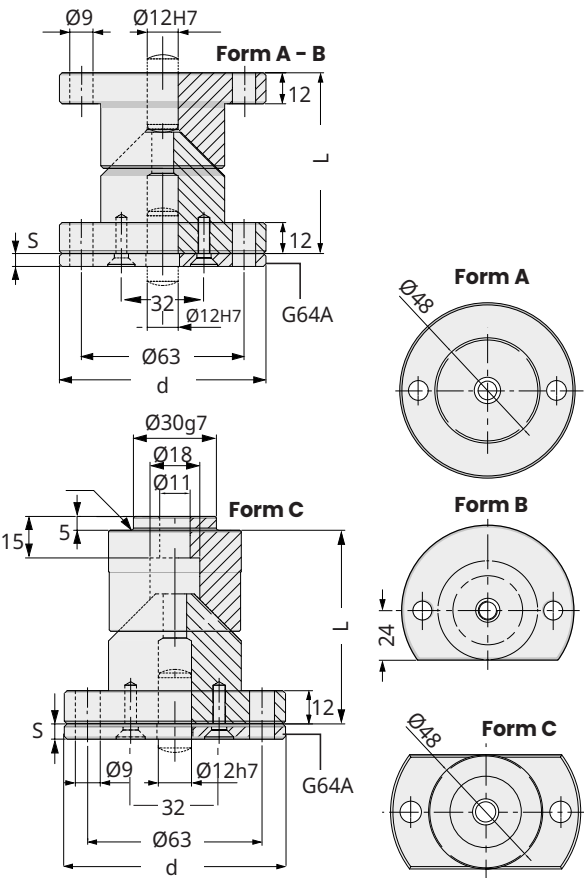
Code: **G46**

Locating Cone

Reference: WDX - 14 - 62 - 0175



(Custom-made products upon request)



d	L	S	Form
80	70	5	A
80	70	5.5	
80	70	5	B
80	70	5.5	
80	70	5	C
80	70	5.5	



Order: **G46**. d x L x S x Form



Material: 16MnCr5 (CK45)
Hardened: 60 - 62 HRC

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Mechanical Die Components

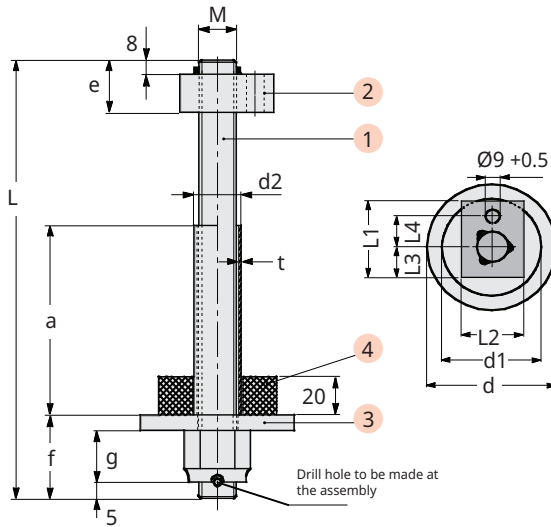
NEW



- 1 Material: 1.6511 / Screw: 8.8
- 2 Material: St 37
- 3 Material: CK45
- 4 Material: Polyurethane

Retainer Bolt
(Ref: FCA - FORD)

Code: **G169**



M	d	d1	d2	e	f	g
M16	65	50	22	28	30	19
M20	82	63	25	28	35	22
M24	105	80	30	28	42	27
M30	130	100	38	33	50	33

M	L1	L2	L3	L4	t	Max. Load kg.
M16	50	35	20	20	2	250
M20	50	40	20	20	2	450
M24	50	45	20	20	2.5	750
M30	63	50	28	26	2.5	1250

Please pay attention to the Max. Load.



Order:
G169. M x L x a

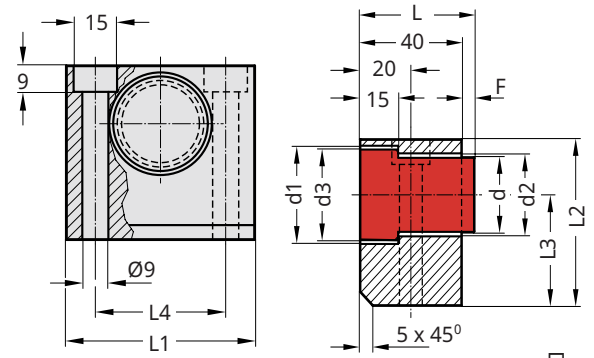
The lengths (L and a) are specified by the customer



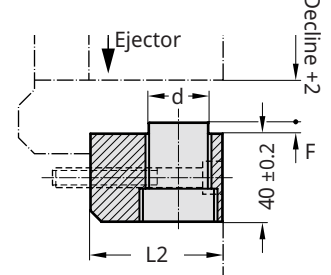
Slide Stop Block

Code: **G97**

Reference: BMW - Ford - VW - Audi



Note: Fixing screws (M8 cylinder head cap screws) should be provided separately.



Load N	d	d1	d2	d3	L	L1	L2	L3	L4	F
5200	27	35	30	34	45	65	60	40	45	5
9800	36	45	40	44	45	75	70	45	55	5



Order:
G97. L1

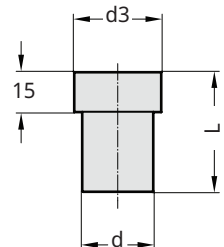


Material: CK45 Steel
Polyurethane 90 Shore



Slide Stopper

Code: **G97A**

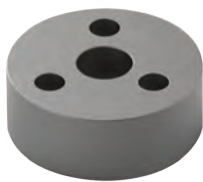


d	d3	L
27	34	45
36	44	45



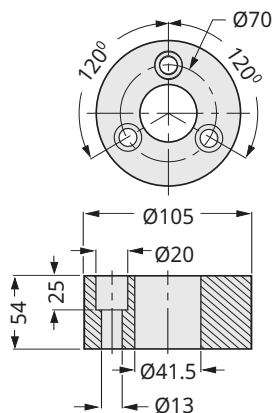
Order:
G97A. d

Slide stopper for is90 Shore. Used with slide stop block.



Code: **G99**

Cylinder Locating Block
(FCA Code: CNT_ST_01)



Material: 1.7131 (16MnCr5)
Hardness: 60 - 64 HRC

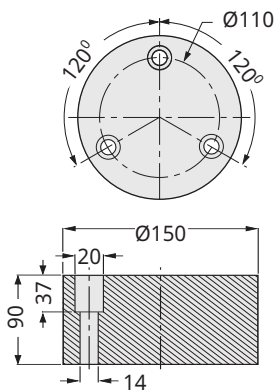


Order Code: **G99**



Code: **G99B**

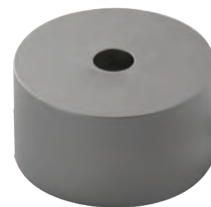
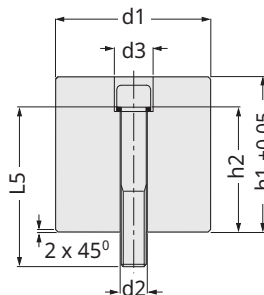
Cylinder Locating Block
Reference: PSA



Material: 1.7131 (16MnCr5)
Hardness: 60 - 64 HRC



Order Code: **G99B**



Cylinder Stopping Block

Code: **G98**

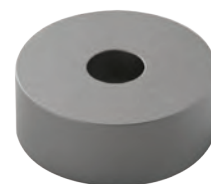
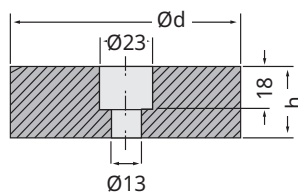
Order Code	d1	Screw	d2	d3	h1	h2	L5
G98 40	40	M10	11	18	30 ~ 60	20	30 - 40
G98 60	60	M12	14	20	40 ~ 80	22	40 - 50
G98 80	80	M12	14	20	56 ~ 100	42	50 - 60
G98 100	100	M16	18	26	80 ~ 160	62	80
G98 120	120	M20	22	33	104 ~ 160	82	100
G98 150	150	M20	22	33	124 ~ 160	102	120



Material: 1.7131 (16MnCr5) / **Hardness:** 60 - 64 HRC



Note: Fixing screws should be provided separately.



Cylinder Stopping Block

Code: **G98B**

Reference: FCA

d	h
Diameter 80 mm	Thickness 25 mm
Diameter 80 mm	Thickness 30 mm
Diameter 100 mm	Thickness 25 mm
Diameter 100 mm	Thickness 30 mm
Diameter 120 mm	Thickness 25 mm
Diameter 120 mm	Thickness 30 mm



Order:
G98B. d x h



Material: 1.7131 (16MnCr5)
Hardness: 60 - 64 HRC

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

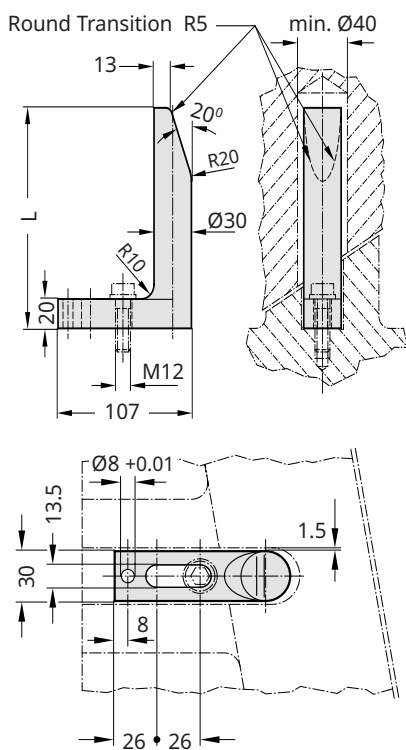
Mechanical Die Components



Guide Code: **G67**

Guide - Hardened Code: **G67S**

(Ref: BMW - Mercedes-Benz - FCA - Ford - Opel - VW/AUDI)



Order Code		L
G67 065	G67S 065	65 mm
G67 090	G67S 090	90 mm
G67 120	G67S 120	120 mm
G67 150	G67S 150	150 mm
G67 180	G67S 180	180 mm
G67 250	G67S 250	250 mm
G67 300	G67S 300	300 mm
G67 350	G67S 350	350 mm

Code: **G67** Material: CK 45 Forged

Code: **G67S** Material: CK 45 Forged
Hardened: 50 - 55 HRC

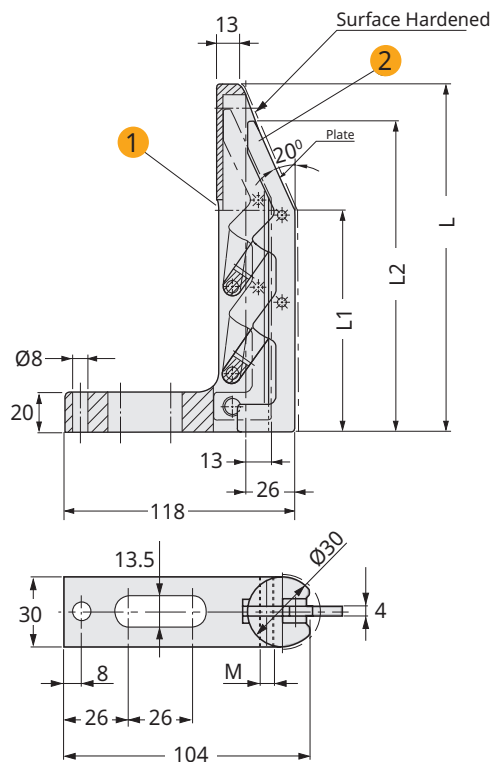
NEW



Guide for Sensor - Hardened

Code: **G68**

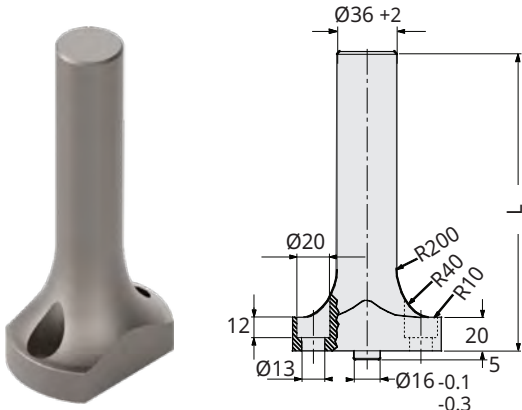
(Ref: BMW - FCA)



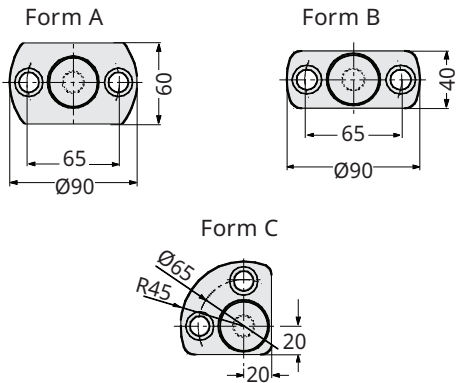
Order Code	L	L1	L2	M
G68 120A	120	78	113	M8x1
G68 120B	120	78	113	M12x1
G68 150A	150	90	130	M8x1
G68 150B	150	90	130	M12x1
G68 180A	180	114	160	M8x1
G68 180B	180	114	160	M12x1
G68 250A	250	114	160	M8x1
G68 250B	250	114	160	M12x1
G68 250C	250	184	230	M8x1
G68 250D	250	184	230	M12x1

Material: CK 60 Forged
Hardness: 58 - 60 HRC

Material: St37
Hardness: 58 - 60 HRC



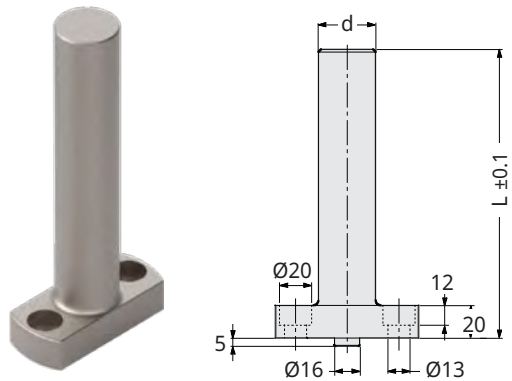
Air Pin VDI 3002 **Code: G69B**



L	L	L
150 mm	215 mm	275 mm
155 mm	220 mm	280 mm
160 mm	225 mm	285 mm
165 mm	230 mm	290 mm
170 mm	235 mm	295 mm
175 mm	240 mm	300 mm
180 mm	245 mm	310 mm
185 mm	250 mm	320 mm
190 mm	255 mm	330 mm
195 mm	260 mm	340 mm
200 mm	265 mm	350 mm
205 mm	270 mm	360 mm

 **Material:** CK 45
800 ÷ 1000 N / mm² Forged

 **Order:** G69B. L x Form



Air Pin **Code: G69**

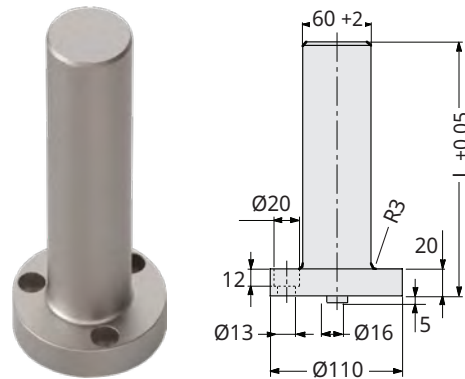
Referans: BMW B2 2615 12 / OPEL F33 15
VW AUDI 39D 638-1 / FORD WVDX 17 - 70M

d	d1	L1	L2	Max. Load	L
36	90	40	65	50	optional
46	100	50	75	70	optional

 **Material:** CK 45
800 ÷ 1000 N / mm² Forged

 **Order:** G69. d x L

 The length (L) is specified by the customer

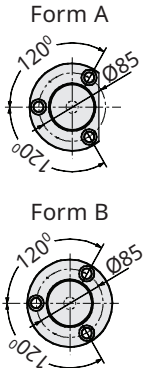


Air Pin **Code: G69 - 1**

Form	Max. Load	L
A	80	optional
B	80	optional

 **Material:** CK 45
800 ÷ 1000 N / mm² Forged

 **Order:** G69 - 1. d x L



 The length (L) is specified by the customer

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

Mechanical Die Components

A 3D model of a mechanical assembly. It consists of a cylindrical pulley with a central shaft, which is mounted on a complex, dark-colored metal bracket. The bracket has several holes and a slot, suggesting it is designed for precise alignment and mounting.



Güvenal Order Code	VW/AUDI Code	Roller
ARSL-1-A	39V 1569/1	Steel
ARSL-1-B	39V 1569/2	
ARSL-1-C	39V 1569/3	
ARSL-3-A	39V 1569/20	Steel + Vulkollan
ARSL-3-B	39V 1569/21	
ARSL-3-C	39V 1569/22	

Ref: VW/AUDI & FCA

Technical drawing of the roller assembly, showing three views:

- Side View (Top):** Shows the roller assembly with dimensions: 82 (total height), 18 (roller height), and ~110 (total width). It includes a detail of the roller with a spring and a screw.
- Cross-section (Top Right):** Shows the roller with dimensions: 11 (roller height), 5 (base height), 15 (roller diameter), 9 (base diameter), and 60 (base width). It includes a detail of the roller with a spring and a screw.
- Front View (Bottom):** Shows the roller assembly with dimensions: 46.5mm (roller height), 45 (total height), 28 (roller height), 16 (roller width), 18 (roller width), 28 (roller width), 40 (total height), 38 (roller width), and 50 (total width). It includes a detail of the roller with a spring and a screw.

Additional labels include: 46.5mm for Vulkollan and Plastic Roller, M8x60 DIN912, and Ø15, Ø9.

Technical drawing of a roller assembly, showing a side view and a cross-section view.

Side View Dimensions:

- Overall height: 98
- Top roller diameter: 38
- Bottom roller diameter: 38
- Overall width: ~162

Cross-section View Dimensions:

- Roller diameter: Ø15
- Roller height: 11
- Roller width: 55
- Roller hole diameter: Ø9
- Roller hole thread: M8x60 DIN912

Assembly Details:

- 46.5mm for Vulkollan and Plastic Roller
- 45
- 28
- 16
- 18
- 28
- 40
- 38
- 50

Technical drawing of a roller assembly, showing three views: isometric, side, and front.

Isometric View (Top Left): Shows the roller assembly with dimensions: 18 (height of the top part), 82 (total height), and ~105 (length).

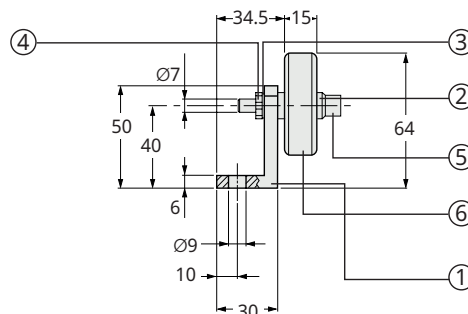
Side View (Top Right): Shows the roller assembly with dimensions: 11 (height of the top part), 55 (total height), 15 (width, labeled $\varnothing 15$), and 9 (width of the base, labeled $\varnothing 9$). The roller is labeled M8x60 DIN912.

Front View (Bottom): Shows the roller assembly with dimensions: 46.5mm (height of the roller, labeled for Vulkollan and Plastic Roller), 45 (height of the base), 28 (height of the top part), 161 (total height), 18 (height of the base), 28 (height of the top part), 40 (total height), 38 (width of the base), and 50 (total width).



Order Example: **ARSL-1-A**

Ref: FCA



Technical drawing of a mechanical part with dimensions:

- Overall length: L
- Distance from left end to first hole center: 100
- Distance between hole centers: 70
- Distance from second hole center to right end: 40
- Distance from left end to second hole center: 125
- Overall width: 25
- Height of the part: 3

- ① **Material: St 37**
- ② ③ **Washers for M6**
- ④ **Nut for M6**
- ⑤ **Screw M6x40 DIN 912**
- ⑥ **Material: Steel Roller**

Technical drawing of a mechanical part with dimensions. The part is a rectangular block with a total length L and a height of 3. It features three vertical slots, each containing a bolt. The distance from the left edge to the first slot is 100. The distance between the first and second slots is 100. The distance between the second and third slots is 90. The distance from the third slot to the right edge is 25. The distance from the left edge to the center of the second slot is 70. The distance from the center of the second slot to the center of the third slot is 90.

Order Code	Form	L	Max. Load (daN)
AFRG150	A	150	50
AFRG250	B	250	75
AFRG350	C	350	100

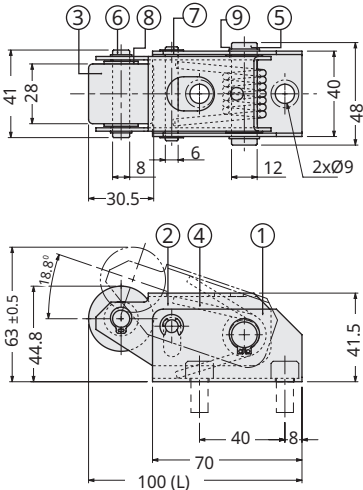
NEW

COIL SUPPORTS



Order Code: **ACS-S100**

Load (on roller)
Initial pressure:3.0 kgf
Final pressure: 5.0 kgf
Spring Constant
5.2 kgf. mm/deg

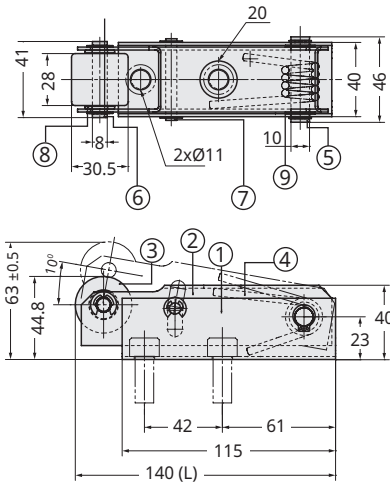


- ① Base
- ② Tilt Plate
- ③ Roller
- ④ Spring
- ⑤ Hinge Pin A
- ⑥ Hinge Pin B
- ⑦ Hinge Pin C
- ⑧ Washer
- ⑨ Shim



Order Code: **ACS-P140**

Load (on roller)
Initial pressure:3.3 kgf
Final pressure: 5.0 kgf
Spring Constant
18.84 kgf. mm/deg



- ① Base
- ② Tilt Plate
- ③ Roller
- ④ Spring
- ⑤ Hinge Pin A
- ⑥ Hinge Pin B
- ⑦ Hinge Pin C
- ⑧ Washer
- ⑨ Shim



Steel Type

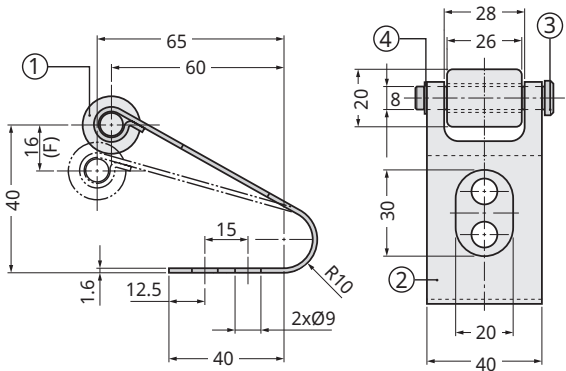
Order Code: **ACS-CTS**

Resin Type

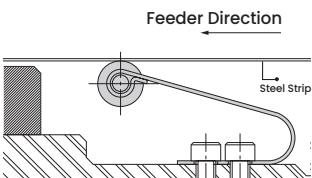
Order Code: **ACS-CTJ**

Order Code	F Max	Spring Constant N/mm (kgf/mm)
ACS-CTS	16	8.43 (0.86)
ACS-CTJ		

Travel F is max. 16mm (durability range)



- ① Roller (Steel)
- ① Roller (Resin)
- ② Plate Spring
- ③ Hinge Pin
- ④ G Type Reatining Ring
- + 2pcs. M8x20 Bolt

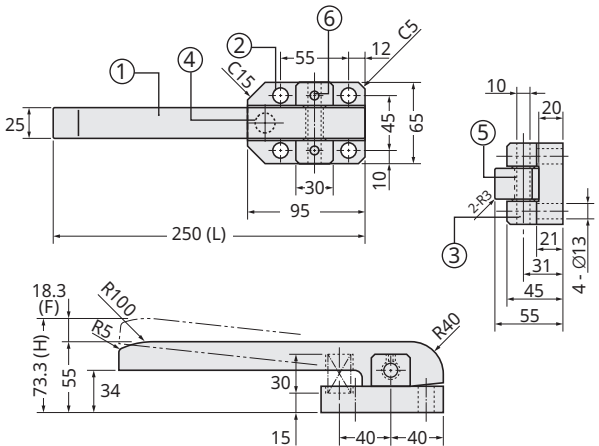


Light Load Type

Order Code: **ACS-BTL**

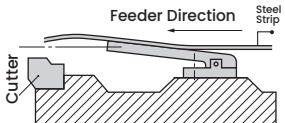
Heavy Load Type

Order Code: **ACS-BTH**



- ① Support Bar
- ② Base Plate
- ③ Pin
- ④ Spring
- ⑤ Bushing with Flange
- ⑥ Hex. Sock. Set Screw M6x8

Order Code	L	F	H	Spring Load (N)		Weight Kg.
				Initial Load	Final Load	
ACS-BTL	250	18.3	73.3	57	95	2.2
ACS-BTH				240	400	



Mechanical Die Components

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

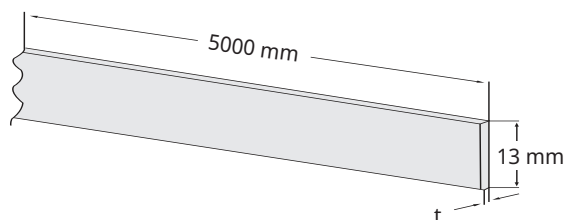
17

18



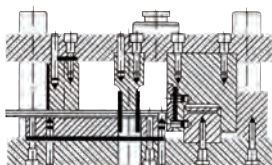
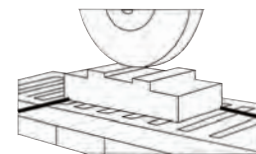
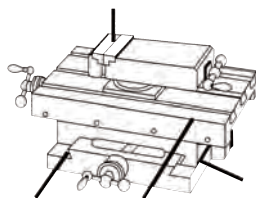
Precision Feeler Gauge Tape

Code: **C318**



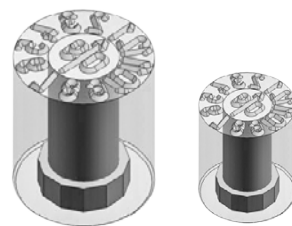
Order Code	Thickness t mm
C318 001	0.01
C318 002	0.02
C318 003	0.03
C318 004	0.04
C318 005	0.05
C318 006	0.06
C318 007	0.07
C318 008	0.08
C318 009	0.09
C318 010	0.10
C318 015	0.15
C318 020	0.20
C318 025	0.25
C318 030	0.30
C318 035	0.35
C318 040	0.40
C318 045	0.45
C318 050	0.50
C318 060	0.60
C318 070	0.70
C318 080	0.80
C318 090	0.90
C318 100	1.00

Some Applied Pictures



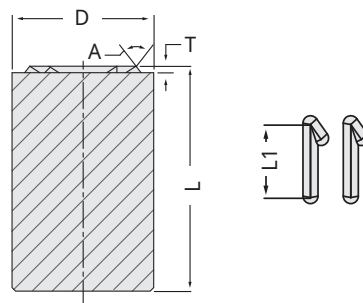
A: 13 mm x L: 5 mt.
Tolerance: T.3

Cold - rolled, spring hardness and high plain precision shim steel strip. Gauge tapes with shiny surfaces resistant to rust or acid. Usage: It is used for adjusting machine parts in fixture and set processes, straightening of workpieces as base foil, in all kinds of tolerance dimensions, in controlling of inserts and slides with tolerances, for adjusting of dyeing and stamping rolls and mould / die repairs etc.



Embossing Date Stamp for sheet metal

Code: **GCM09**



* Please provide the desired "year" for your GCM09 orders.

Order Code	D	L	T	L1	A
GCM09 08S	8	12.35	0.35	1.2	76°
GCM09 08L		19.05			
GCM09 10S	10	12.35	0.35	1.6	76°
GCM09 10L		19.05			
GCM09 12S	12	12.45	0.45	2	76°
GCM09 12L		19.05			
GCM09 16S	16	12.55	0.55	2.5	76°
GCM09 16L		19.05			
GCM09 20SA	20	12.55	0.55	3	76°
GCM09 20SB		12.55		3.5	
GCM09 20LA		19.05		3	
GCM09 20LB		19.05		3.5	
GCM09 24	24	24	0.55	4	76°
GCM09 32A	32	32	0.65	5	76°
GCM09 32B		32		6	

It is suitable to be used in all die systems. The product specifies 12 months and 1 year.

* Please provide the desired "year" for your GCM09 orders. The insert (inner hub) of GCM09 is a replaceable type. When you need to change the year of insert (inner hub) you can order it separately.



Material: 1.2379
Hardness: 58 - 60 HRC

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Mechanical Die Components



Code: **KZG**

Locating Punch

Reference: FCA / STQ 40007

a	b	c	M	t	d	e
19	16	13	M8	8	18	8
25	18	16	M10	12	24	9



Code: **K22**

Locating Punch

Reference: FCA / STQ 40007

a	b	d1	M	c	d2	d3	t
10	8	6	M4	9.9	9.5	4.2	4
13	11.2	8	M5	12.5	12	5.2	4



Order: **KZG. a**

Order: **K22. a**



Code: **KZF**

Locating Punch

Reference: * FORD * WDX20-70-0101

Material: 1.2080

Hardness: 60 - 64 HRC



Form A

Form B

Code: **MZG**

Marking Stamp

Order: **MZG. Form x Symbol**

Marking Stamps: Symbol and dimensions can be machined upon request.



Code: **MEG**

Backing Plate for Stamp Retainer

Reference: FORD

L1	Figure Size	L1	Figure Size
23.5	3.5	23.5	2
27.5	3.5	27.5	2
31.5	3.5	31.5	2

Order: **MEG. L1 x Figure Size**



Code: **MTU**

Stamp Retainer

Order: **MTU. A x B**

Polyamide material upon request



Code: **MEU**

Backing Plate for Stamp Retainer

A	B	L	D
15	28	5	6.7
	32		
	36		
	44		
	52		

Order: **MEU. A x B**

Material: 1.2080

Hardness: 54 - 56 HRC

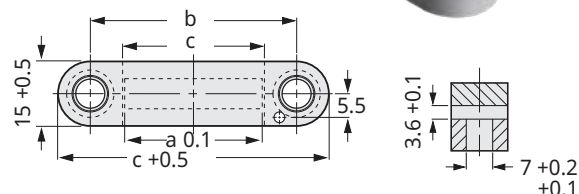
upon request:  Polyamide material

Code: **ZTP**

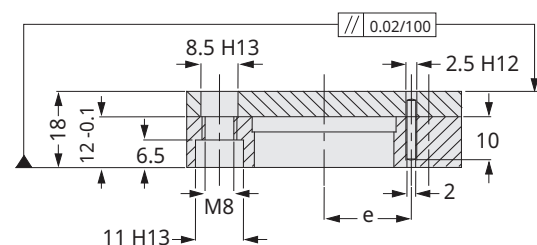
Stamp Retainer

Reference:

PSA E24.64.100.G



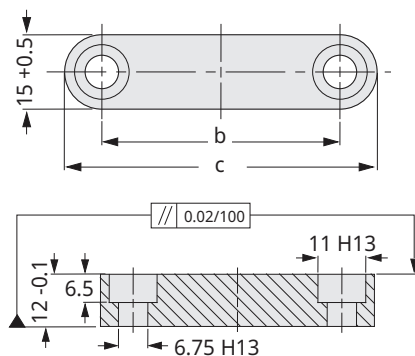
Material: 1.2379
Hardness: 60 - 62 HRC



Code: **ZDP**

Backing Plate

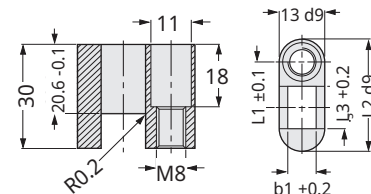
Reference: PSA E24.64.100.G



Material: 1.0503
Hardness: 60 – 62 HRC

Order Code

Order Code



Order Code	Punch Pcs.	b	c
ZDP 47	4	32	47
ZDP 56	6	40	56
ZDP 63	8	48	63
ZDP 71	10	56	71



Die Spare Parts
Precision machining / Custom-made

Die systems, sheet metal cutting / spinning - bending form dies, complicate dies and progressive dies. In addition, we produce your custom-made parts belonging to other die systems within technical drawing details, as precision heat treated and in desired materials with complete ground operations.

Centering pins, compression and clutch plates, balancing blocks, backing and shim plates, special wedges, matrix holders, special guide shaft coupling nut, separator - holder and adjustor parts, conical centering components, special washers and inserts etc.



Why Güvenal ?

"Equipment for Marking and Traceability in Compliance with Standards"

"We manufacture the parts required by companies in the automotive and other industrial sectors to ensure marking and production traceability. Our products are meticulously produced in compliance with the standards set by the main automotive manufacturers and international quality norms."



Pantograph



Laser-marking



EDM Die Sinking

"In addition to our standard products, we also manufacture marking equipment for our customers' special projects. From the design phase to final inspections and testing, we work meticulously using advanced technology machines and equipment to ensure the highest quality. At every stage, we apply the latest industry methodologies and consider international standards to provide solutions that are fully tailored to our customers' specific needs. Thanks to our innovative approaches and high-tech production processes, we maintain the performance and reliability of our branding equipment at the highest level."


For more information:
info@guvenal.net



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18