

# BAĞLAMA PABUÇLARI

CLAMPING COMPONENTS



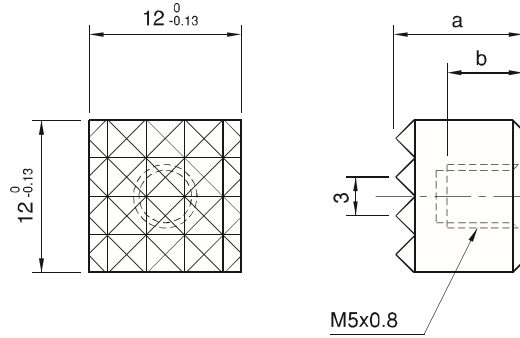
Referans Nr.	a ( $\begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$ )	b	(g)
1287-CT9120	12	7.8	13

**Ürün Nr. 1287 Baskı Pabucu**

- Sertleştirilmiş
- Siyah kaplama

**Product Nr. 1287 Pressure Pad**

- Hardened
- Black coating



Referans Nr.	a ( $\begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$ )	b ( $\begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$ )	d	p	(g)
1287-HS9102	10	12	M5x0.8	2.3	7.5
1287-HS9122	12	12	M5x0.8	3	11
1287-HS9160	16	12	M6x1	3	17
1287-HS9202	20	12	M5x0.8	3	33.5
1287-HS9252	25	12	M6x1	3	53

**Ürün Nr. 1287 Baskı Pabucu**

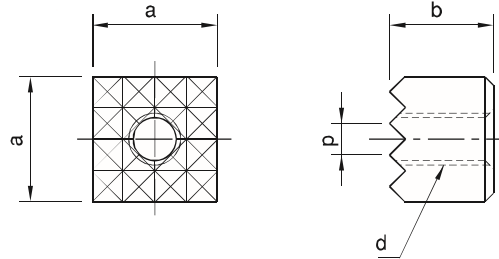
- Sertleştirilmiş
- Siyah kaplama

**Product Nr. 1287 Pressure Pad**

- Hardened
- Black coating

**Baskı Pabucu**

## Pressure Pad



Referans Nr.	a ( $\begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$ )	b ( $\begin{smallmatrix} 0 \\ -0.13 \end{smallmatrix}$ )	c	d	(g)
1287-HS9122C	12	12	6.5	M4	10
1287-HS9160C	16	12	4.5	M4	16
1287-HS9202C	20	12	5.5	M5	31
1287-HS9252C	25	12	4.5	M6	49

**Ürün Nr. 1287 Baskı Pabucu**

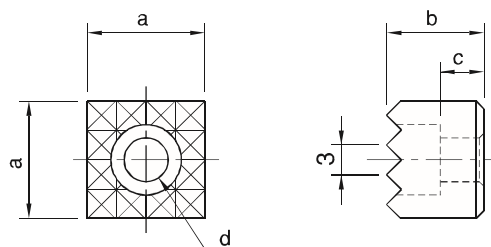
- Sertleştirilmiş
- Siyah kaplama

**Product Nr. 1287 Pressure Pad**

- Hardened
- Black coating

**Baskı Pabucu**

## Pressure Pad



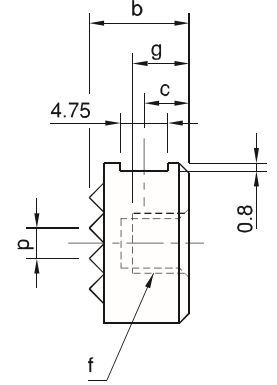
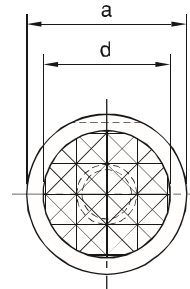
Referans Nr.	a ( <sup>0</sup> / <sub>-0.13</sub> )	b ( <sup>0</sup> / <sub>-0.13</sub> )	c	d	f	g	p	(g)
1288-CT102	10	12	6	7.9	M5x0.8	8	2.3	6
1288-CT122	12	12	6	9.5	M5x0.8	8	3	9
1288-CT162	16	12	6	12.7	M6x1	7.8	3	17
1288-CT202	20	12	6	15.9	M6x1	7.8	3	28
1288-CT252	25	12	6	19.1	M6x1	7.8	3	43

**Ürün Nr. 1288 Baskı Pabucu**

- Sertleştirilmiş
- Siyah kaplama

**Product Nr. 1288 Pressure Pad**

- Hardened
- Black coating



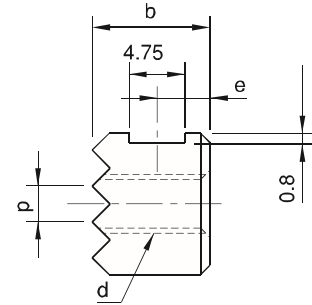
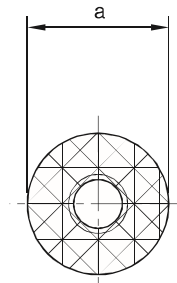
Referans Nr.	a ( <sup>0</sup> / <sub>-0.13</sub> )	b ( <sup>0</sup> / <sub>-0.13</sub> )	d	e	p	(g)
1288-HS102	10	12	M5x0.8	6	2.3	6
1288-HS122	12	12	M5x0.8	6	3	9
1288-HS162	16	12	M6x1	6	3	15
1288-HS202	20	12	M6x1	6	3	25
1288-HS252	25	12	M6x1	6	3	40

**Ürün Nr. 1288 Baskı Pabucu**

- Sertleştirilmiş
- Siyah kaplama

**Product Nr. 1288 Pressure Pad**

- Hardened
- Black coating



**Baskı Pabucu**

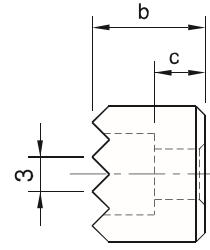
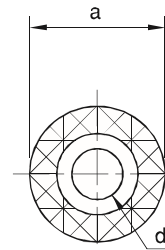
Referans Nr.	a ( <sup>0</sup> / <sub>-0.13</sub> )	b ( <sup>0</sup> / <sub>-0.13</sub> )	c	d	(g)
1288-HS122C	12	12	6.5	M4	8
1288-HS162C	16	12	6.5	M4	15
1288-HS202C	20	12	6.5	M5	23
1288-HS252C	25	12	6.5	M6	38

**Ürün Nr. 1288 Baskı Pabucu**

- Sertleştirilmiş
- Siyah kaplama

**Product Nr. 1288 Pressure Pad**

- Hardened
- Black coating



**Baskı Pabucu**

Referans Nr.	L	b1	metrik		a	b2	b3	e1	e2	(g)
			metrik	whitworth						
1290-06050	50	6.6	M6	1/4	10	20	8	10	20	50
1290-06080	80	6.6	M6	1/4	10	20	8	10	30	95
1290-08060	60	9	M8	5/16	12	25	10	13	22	100
1290-08100	100	9	M8	5/16	12	25	10	13	45	170
1290-10080	80	11	M10	3/8	15	30	12	15	30	190
1290-10100	100	11	M10	3/8	15	30	12	15	45	225
1290-12100	100	14.5	M12-M14	1/2	20	40	14	21	45	435
1290-12125	125	14.5	M12-M14	1/2	20	40	14	21	55	580
1290-16125	125	18.5	M16-M18	5/8	25	50	18	26	55	855
1290-16160	160	18.5	M16-M18	5/8	25	50	18	26	65	1175

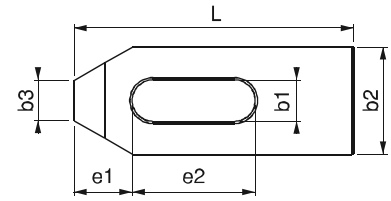
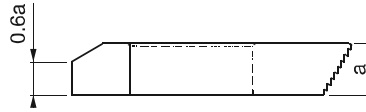


### Ürün Nr. 1290 Merdiven Diş Bağlama Pabucu

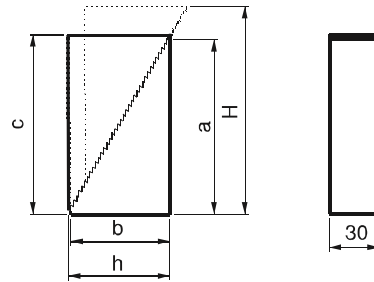
- Nr. 1310 Merdiven destek ile kullanılır
- Sertleştirilmiş
- Siyah Kaplama

### Product Nr. 1290 Serrated Thread Clamp

- Product is used with Nr. 1310 Serrated Support
- Hardened
- Black Coating



Referans Nr.	h-H	a	b	c	min-max	(g)
1310-01	37-85	57	35	60	0-40	505
1310-02	48-112	73	45	76	0-60	825
1310-03	58-139	90	55	93	0-75	1250
1310-04	66-165	108	64	111	0-90	685



## Merdiven Diş Destek

Serrated Thread Support

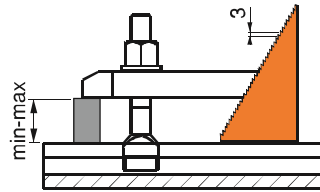


### Ürün Nr. 1310 Merdiven Diş Destek

- Nr. 1290 Merdiven diş pabucu ile kullanılır
- Siyah Kaplama

### Product Nr. 1310 Serrated Thread Support

- Product is used with Nr. 1290 Serrated Thread Clamp
- Black Coating



Referans Nr.	b1	L1	metrik		a	b2	b3	L2	L3	(g)
			metrik	whitworth						
1320-08100	9	100	M8	5/16	15	30	16	32	18	240
1320-10125	11	125	M10	3/8	20	30	20	38	24	380
1320-12160	14.5	160	M12-M14	1/2	25	40	24	47	30	800
1320-12200	14.5	200	M12-M14	1/2	25	40	24	47	30	950
1320-16200	18.5	200	M16-M18	5/8	30	50	28	57	36	1500
1320-16250	18.5	250	M16-M18	5/8	30	50	28	57	36	1850
1320-20250	22.5	250	M20-M22	3/4	40	60	35	68	45	2900
1320-20315	22.5	315	M20-M22	3/4	40	60	35	68	45	3600
1320-24250	26	250	M24	1	40	70	43	83	56	3400
1320-24315	26	315	M24	1	40	70	43	83	56	4300
1320-30315	33	315	M30	1 1/4	50	80	50	88	56	6000
1320-30400	33	400	M30	1 1/4	50	80	50	88	56	7300

## Çatal Pabuç

Bifurcated Clamp

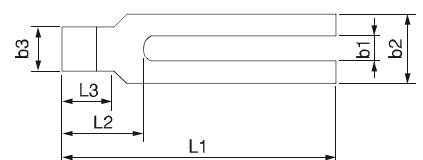
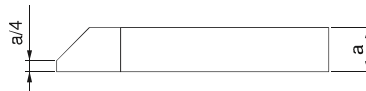


### Ürün Nr. 1320 Çatal Pabuç

- Sertleştirilmiş
- Siyah Kaplama

### Product Nr. 1320 Bifurcated Clamp

- Hardened
- Black Coating



Referans Nr.	L	b1	metrik		a	b2	b3	e1	e2	d	(g)
			metrik	whitworth							
1330-06050	50	6,6	M6	1/4	10	20	8	10	20	M8	50
1330-08060	60	9	M8	5/16	12	25	10	13	22	M8	105
1330-10080	80	11	M10	3/8	15	30	12	15	30	M10	210
1330-12100	100	14,5	M12-M14	1/2	20	40	14	21	40	M12	465
1330-12125	125							21	50		590
1330-16125	125	18,5	M16-M18	5/8	25	50	18	26	45	M16	930
1330-16160	160							26	65		1200
1330-20160	160	22,5	M20-M22	3/4	30	60	22	30	60	M20	1710
1330-20200	200				30	60	22	30	80		2170
1330-20250	250				35	70	30	35	100		3885
1330-24160	160	26	M24	1	30	70	26	35	60	M24	1965
1330-24200	200				35	70	26	35	80		2920
1330-24250	250				35	70	26	35	100		3720
1330-24315	315				40	80	35	45	100		6435
1330-30250	250	33	M30	1 1/4	40	80	34	45	100	M24	4825
1330-30315	315				50	80	34	45	130		7665
1330-36400	400	43	M36-M42	1 1/2	58	100	43	100	150	M30	14490

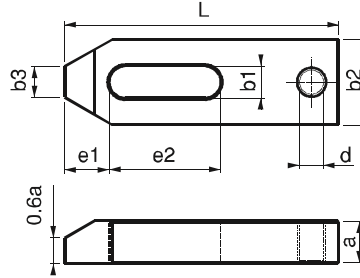


### Ürün Nr. 1330 Destek Delikli Düz Pabuç

- Sertleştirilmiş
- Siyah Kaplama

### Product Nr. 1330 Straight Clamp with Support Hole

- Hardened
- Black Coating



## Düz Pabuç

Straight Clamp

Referans Nr.	L	b1	metrik		a	b2	b3	e1	e2	(g)
			metrik	whitworth						
1350-06050	50	6,6	M6	1/4	10	20	8	10	20	60
1350-08060	60	9	M8	5/16	12	25	10	13	22	110
1350-10080	80	11	M10	3/8	15	30	12	15	30	185
1350-12100	100	14,5	M12-M14	1/2	20	40	14	21	40	480
1350-12125	125							21	50	610
1350-16125	125	18,5	M16-M18	5/8	25	50	18	26	45	980
1350-16160	160							26	65	1240
1350-20160	160	22,5	M20-M22	3/4	30	60	22	30	60	1795
1350-20200	200				30	60	22	30	80	2255
1350-24200	200	26	M24	1	30	70	26	35	80	2570
1350-24250	250				35	70	26	35	100	3875
1350-30250	250	33	M30	1 1/4	40	80	34	45	100	4990
1350-30315	315				50	80	34	45	130	7885
1350-36400	400	43	M36-M42	1 1/2	60	100	43	100	150	14450



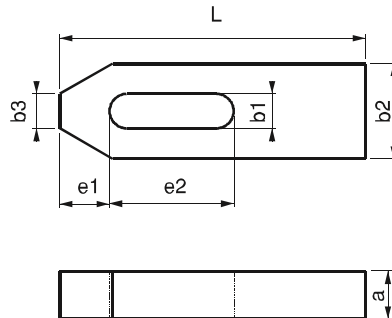
### DIN 6314

### Ürün Nr. 1350 Düz Pabuç

- Sertleştirilmiş
- Siyah Kaplama

### Product Nr. 1350 Straight Clamp

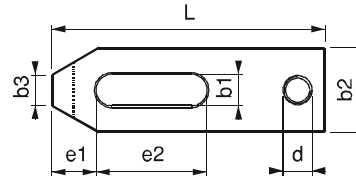
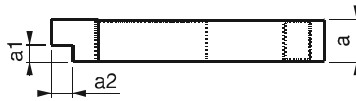
- Hardened
- Black Coating



Referans Nr.	L	b1	metrik		a	b2	a1xa2	b3	e1	e2	d	(g)
			whitworth									
1370-10080	80	11	M10	3/8	15	30	5x8	12	15	30	M10	180
1370-12100	100	14.5	M12-14	1/2	20	40	8x10	14	21	40	M12	410
1370-12125	125											590
1370-16125	125	18.5	M16-18	5/8	25	50	10x12.5	18	26	45	M16	910
1370-16160	160											1180
1370-20160	160	22.5	M20-22	3/4	30	60	12x15	22	30	60	M20	1575
1370-20200	200											2150
1370-24160	160	26	M24	1	30	70	12x15	26	35	60	M24	1800
1370-24200	200											2875
1370-24250	250											3500

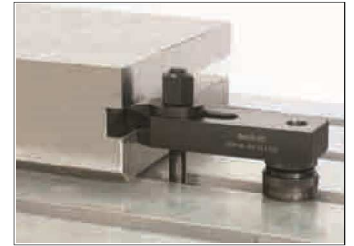
### Ürün Nr. 1370 Kademeli Destek Delikli Düz Pabuç

- Kısıtlı alanlarda yükseklikten kazanma amaçlı kullanılır.
- Sertleştirilmiş
- Siyah Kaplama



### Product Nr. 1370 Straight Clamp with Stepped Support Hole

- This product is used in restricted areas with the purpose of gaining height
- Hardened
- Black Coating



Referans Nr.	L	b1	metrik		a	b2	b3	b4	(g)
			whitworth						
1390-06060	60	6.6	M6	1/4	12	19	6.2	3	65
1390-08080	80	9	M8	5/16	15	25	8	4	140
1390-10100	100	11	M10	3/8	20	30	9.5	5	240
1390-12125	125	14.5	M12-M14	1/2	25	38	12	6	700
1390-12160	160								915
1390-12200	200	18.5	M16-M18	5/8	27	48	15	8	1235
1390-16160	160								945
1390-16200	200	22.5	M20-M22	3/4	27	52	15	8	1215
1390-16250	250								2000
1390-20200	200	26	M24	1	37	62	20	10	1650
1390-20250	250								2765
1390-20315	315	33	M30	1 1/4	47	62	20	10	3510
1390-20500	500								7200
1390-24200	200	40	M36	1 1/2	37	66	20	10	2260
1390-24250	250								2740
1390-24315	315	43	M42	1 1/2	47	73	20	12	3515
1390-24500	500								7100
1390-30250	250	40	M36	1 1/2	47	73	20	12	3500
1390-30315	315								4190
1390-30400	400	40	M36	1 1/2	47	73	20	12	5735
1390-30600	600								8455
1390-301000	1000	40	M36	1 1/2	57	93	30	12	28000
1390-36400	400								10800
1390-36600	600	43	M42	1 1/2	57	100	30	12	16500
1390-42600	600								28800

### DIN 6315B

### Ürün Nr. 1390 Çatal Pabuç

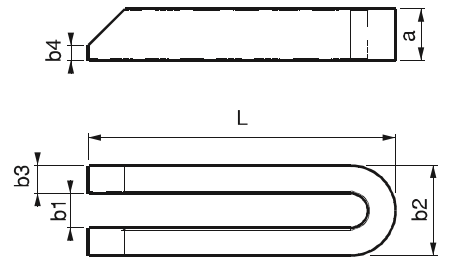
- Kademeli yüzeylerde şekilli iş parçalarının bağlanmasında pabuçun yapısı itibarı ile kolaylık sağlar
- Sertleştirilmiş
- Siyah Kaplama

### Product Nr. 1390 Bifurcated Clamp

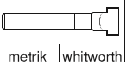

- Due to the structure of the clamp, this product provides convenience for the couplings of formed work pieces on graded surfaces
- Hardened
- Black Coating

## Çatal Pabuç

### Bifurcated Clamp





Referans Nr.	L	b1			a	b2	a1xa2	e1	e2	h	
			metrik	whitworth							
1387-12070	70	13	M12	1/2	21.5	40	8x6	11	40	14	255
1387-16070	70	17	M16	5/8	29.5	40	10x7	11	40	22	290

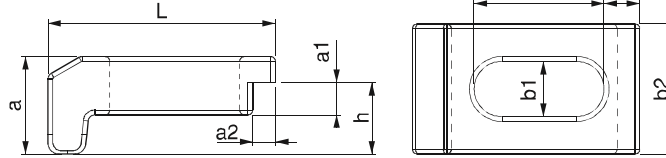


#### Ürün Nr. 1387 Plaka Sıkma Pabucu

- Yükselticisiz çalışma özelliği avantajı sağlar
- Sertleştirilmiş
- Siyah Kaplama

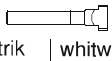

#### Product Nr. 1387 Plate Sliding Clamp

- Provides the advantage of working without support.
- Hardened
- Black coated



## Kademeli Destek Delikli Çatal Pabuç

### Bifurcated Clamp with Stepped Support Hole

Referans Nr.	L	b1			a	e2	a1xa2	b2	d	
			metrik	whitworth						
1400-10100	100	11	M10	3/8	20	70	10x10	30	M10	260
1400-12125	125	14.5	M12-14	1/2	25	90	12x12	40	M12	565
1400-16160	160	18.5	M16-18	5/8	30	110	15x15	50	M16	1235
1400-20200	200	22.5	M20-22	3/4	40	135	20x20	60	M20	2460



#### Ürün Nr. 1400 Kademeli Destek Delikli Çatal Pabuç

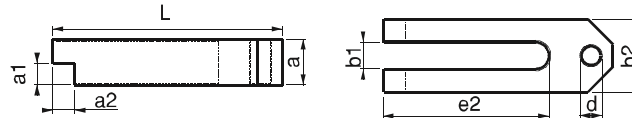
- Sertleştirilmiş
- Siyah Kaplama

Kademeli ve kısıtlı alanlarda kullanım avantajı sağlar.

It provides usage advantage in gradual and limited areas.

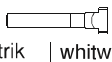

#### Product Nr. 1400 Bifurcated Clamp with stepped support Hole

- Hardened
- Black Coating



## Destek Delikli Çatal Pabuç

### Bifurcated Clamp with Support Hole

Referans Nr.	L	b1			a	e1	e2	b2	d	
			metrik	whitworth						
1410-10100	100	11	M10	3/8	20	5	70	30	M10	260
1410-12125	125	14.5	M12-14	1/2	25	6	90	40	M12	560
1410-16160	160	18.5	M16-18	5/8	30	8	110	50	M16	1230
1410-20200	200	22.5	M20-22	3/4	40	10	135	60	M20	1490



#### Ürün Nr. 1410 Destek Delikli Çatal Pabuç

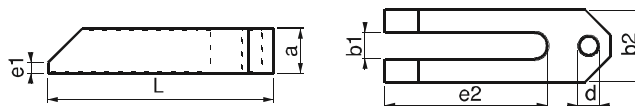
- Sertleştirilmiş
- Siyah Kaplama

Kademeli parçalarda ileri sıkmalarda hareket ve kullanım avantajı sağlar.

It provides usage advantage for gradual parts during forward tightenings.

#### Product Nr. 1410 Bifurcated clamp with support hole

- Hardened
- Black Coating

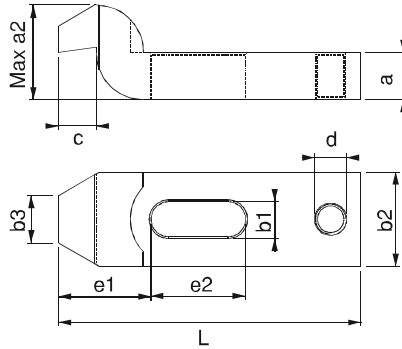


Referans Nr.	L	b1	Bağlama Pabucu		a	a2	b2	b3	c	e1	e2	d	G
			metrik	whitworth									
1450-06060	60	6.6	M6	1/4	10	20	20	10	8	20	20	M8	80
1450-08080	80	9	M8	5/16	12	24	25	12	9	25	25	M8	170
1450-10100	100	11	M10	3/8	15	30	30	15	12	32	32	M10	245
1450-12125	125	14.5	M12-M14	1/2	19	40	38	20	16	40	40	M12	600
1450-16125	125	18.5	M16-M18	5/8	24	50	48	25	20	49	40	M16	925
1450-16160	160									50	50	M16	1205
1450-20160	160	22.5	M20-M22	3/4	29	58	58	30	24	55	55	M20	1705
1450-20200	200									70	70	M20	2145
1450-24160	160	26	M24	1	33	70	70	35	28	53	55	M24	2110
1450-24200	200									72	60	M24	3070
1450-24250	250									80	80	M24	3710
1450-30250	250	33	M30	1 1/4	38	80	77	40	40	91	80	M24	4635
1450-30315	315				48	100	100	40	40	91	100	M24	7050

### DIN 6316

#### Ürün Nr. 1450 Destek Delikli Z-Bağlama Pabucu

- Yükseklikten kazanma ve somun geçişlerinde avantaj sağlar
- Sertleştirilmiş
- Siyah Kaplama



#### Product Nr. 1450 Z-Type Cranked Clamp with Support Hole

- This product provides advantage to gain from the height and in the passings of the bolt
- Hardened
- Black Coating



## Silindir Başlı Çatal Pabuç

Forked Clamp with Pin Head

Referans Nr.	L1	b1	Bağlama Pabucu		a	b2	Ød	L2	L3	G
			metrik	whitworth						
1470-08100	100	9	M8	5/6	15	30	12	30	18	180
1470-10125	125	11	M10	3/8	20	30	16	36	24	290
1470-12160	160	14.5	M12-M14	1/2	25	40	20	45	30	715
1470-12200	200									815
1470-16200	200	18.5	M16-M18	5/8	30	50	24	55	36	1210
1470-16250	250									1550
1470-20250	250	22.5	M20-M22	3/4	40	60	30	65	45	2680
1470-20315	315									3435
1470-24250	250	26	M24	1	40	70	38	80	56	3060
1470-24315	315									4120
1470-30315	315	34	M30	1 1/4	50	80	45	85	56	5600
1470-30400	400									7135

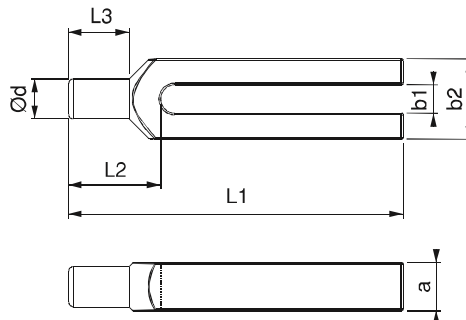
### DIN 6315C

#### Ürün Nr. 1470 Silindir Başlı Çatal Pabuç

- Muhtelif iş parçalarının delikli yüzeylerine girerek iş parçasını sabitler
- Sertleştirilmiş
- Siyah Kaplama

#### Product Nr. 1470 Forked Clamp with Pin Head

- This product fixes the work pieces by entering in the holed surfaces of various work pieces
- Hardened
- Black Coating





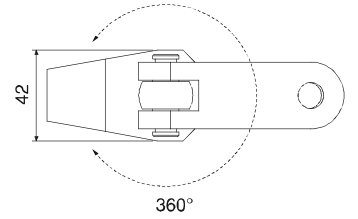
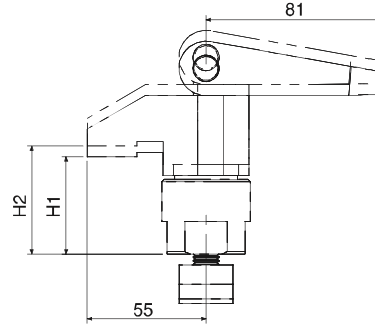
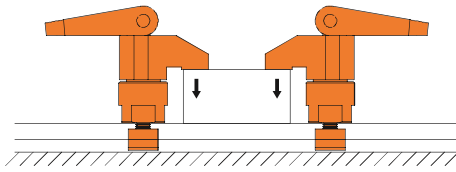
Referans Nr.		H1 - H2 (mm)	Sıkma Kuvveti Clamping Force Kgf	
1472-02530	14-16-18-20-22	25 - 30	1000	1000
1472-03035		30 - 35	1000	1150
1472-03540		35 - 40	1000	1225
1472-04045		40 - 45	1000	1245
1472-04550		45 - 50	1000	1275

**Ürün Nr. 1472 Üstten Bağlama**

- Sertleştirilmiş
- Siyah Kaplama

**Product Nr. 1472 Above Clamping**

- Hardened
- Black Coating



**Sıkıştırma Pimi**

Spring Locating Pins

Referans Nr.	P(N)	D	H (0 -1)	D1	H1	A Haraket Travel	d (+0.1 0)	
1473-06001	76	10	11	6	10.7	1	10	4
1473-08001	102	12	13	8	13.9	1.3	12	8
1473-10001	204	16	17	10	16.7	1.6	16	16



**Ürün Nr. 1473 Sıkıştırma Pimi**

**Product Nr. 1473 Spring Locating Pins**

**Özellikler**

- Geçici bir iş bağlama profili için idealdir.

**Not**

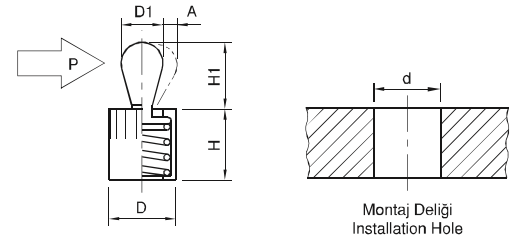
- Pimin hareket etmesi için gerekli olan minimum "P" değeri
- Parça : 90 °C'ye kadar

**Features**

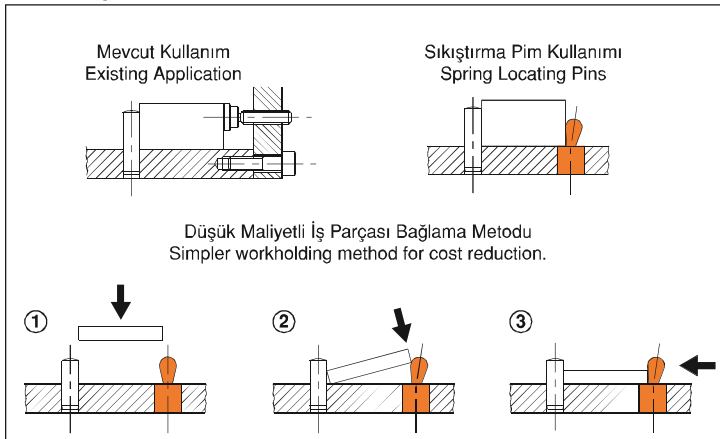
- Ideal for temporary clamping of low-profile workpieces.

**Note**

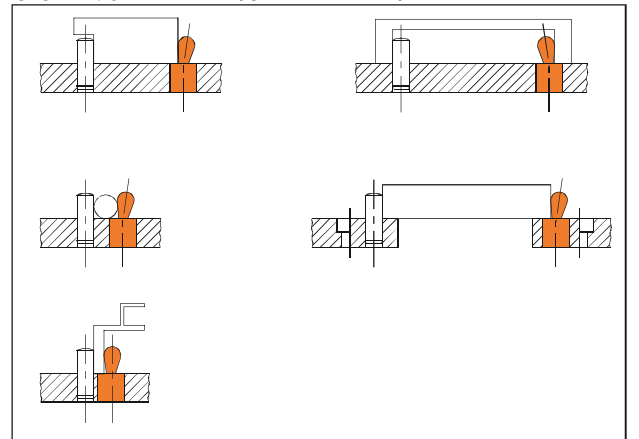
- The stated value "P" denotes the minimum force needed to move the pin.
- Heat resistance : 90 °C



**Kullanım Şekli / How To Use**



**Çeşitli Uygulamalar / Application Examples**



Referans Nr.	S	d (F7)	H2	D1	H (±0.01)	D	M	Dp	R
1474-06000	2	12	10	28	50	65	M8	40	160
1474-08000	2.5	16	12	34	63	80	M10	50	180

Referans Nr.	D2	H1	İzin Verilen Yük (N) Allowable Operating Load (N)	Sıkma Kuvveti Clamping Force Kgf	Önerilen Kalınlık Toleransı Recommended Workpiece Thickness Tolerance	(kg)
1474-06000	26	36	600	600	±0.5	1.2
1474-08000	28	45	600	800	±0.8	2.2

**Ürün Nr. 1474 Tek Dokunuş Pimli Bağlama**  
• Siyah Kaplama

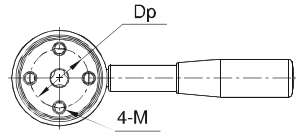
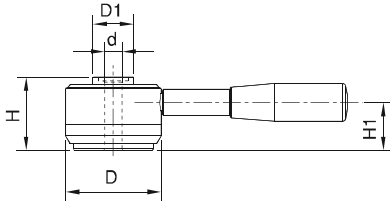
**Product Nr. 1474 Pull Clamps**  
• Black coated

**Not**

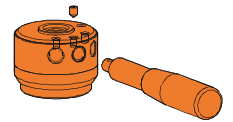
- Pimler ve çektirme civataları ayrıca sipariş edilir.

**Note**

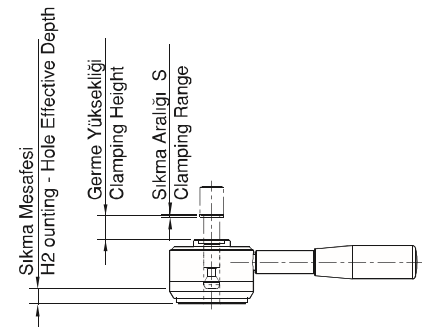
- Clamping Pins or Screws must be ordered separately.



Kol, üç ayrı noktadan bağlanabilir.  
Bağlama pozisyonu 3 opsiyonlu.



The handle can be removed by loosening the locking screw. To keep the handle mounted permanently, make sure that the locking screw is fully tightened. 3 options of handle mounting position.



Referans Nr.	D2 (f7)	D1 (f7)	L (By 0.1mm)	D	L2	L1	L3	D3	M	M1	(g)
1475-00012	12	12	0<L<100	18	23	38	21.5	6.5	M8	M8	70 ~ 160
1475-00016	16	16	0<L<100	24	23	38	21.5	6.5	M8	M8	175 ~ 265

**Ürün Nr. 1475 Tek Dokunuş Bağlama Pimi**

- Pim**
- Sertlik: İndüksiyon
  - Taşlama

- Kafa**
- Siyah Kaplama

**Product Nr. 1475 Clamping Pins**

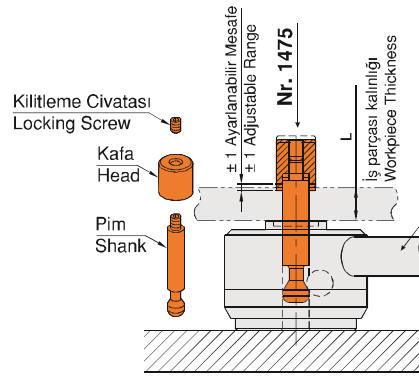
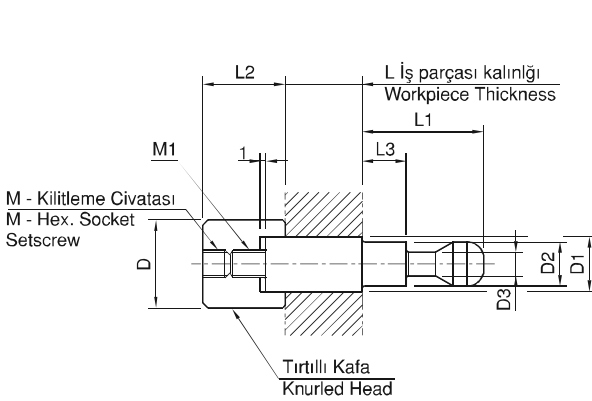
- Shank**
- Hardness: Induction
  - Precision ground

- Head**
- Black coated



- Not**
- Talebe göre üretim.

- Note**
- Custom Clamping Pins are available on request.



**Kullanım Şekli / How To Use**

Nr. 1474

L iş parçası kalınlığında ±1mm ayarlanabilir.

L dimension is adjustable by ±1mm to fit actual workpiece thickness.

**Tek Dokunuş Bağlama Civatası**

Clamping Screws

Referans Nr.	D1	M	L1	L	D	L2	L3	D2	W	L4	(g)
1476-00012	12	M12	13	38	20	21.5	2	6.5	10	4	40
1476-00016	12	M16	17	38	20	21.5	2	6.5	10	4	55

**Ürün Nr. 1476 Tek Dokunuş Bağlama Civatası**

- Siyah Kaplama

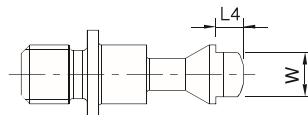
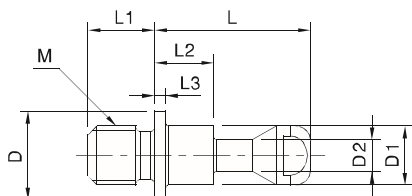
**Product Nr. 1476 Clamping Screws**

- Black coated

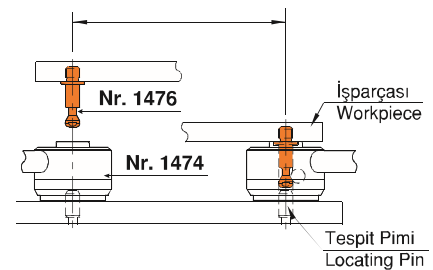


- Not**
- Özel bağlama vidalar (farklı vida boyları) istek üzerine üretim yapılır.

- Note**
- Custom Clamping Screws (different screw thread sizes) are available on request.



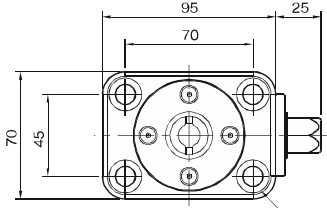
Çektirme civataları önerilen aralık toleransında olmalı  
Recommended Spacing Tolerance in Use of Clamping Screws



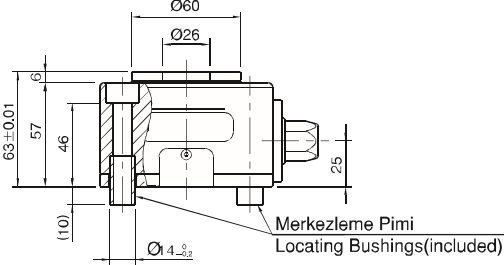
Referans Nr.	Sıkma Kuvveti Clamping Force Kgf	Tork N-m	(kg)
1477-00012	1200	40	2.3

**Ürün Nr. 1477 Pimli Bağlama**

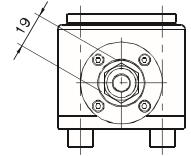
**Product Nr. 1477 Power-tool Actuated Block Pull Clamps**



Sabitleme Civata Yeri  
For M10 Cap Screws



Merkezleme Pimi  
Locating Bushings (included)

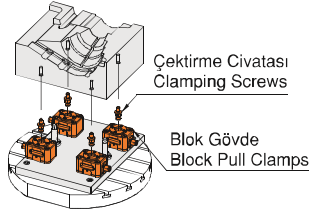


**1. 5 Eksen İşleme için İdeal Kullanım**

İş parçasının bütün açık yüzeylerini işleme olanağı sağlar.

**1. Ideal for 5-Axis Machining**

Block Pull Clamps mount under a workpiece making its surfaces to be machined fully open for the cutting tool. This allows completing multiple machining processes at a time.



Çektirme Civatası  
Clamping Screws

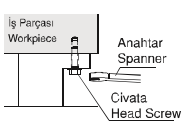
Blok Gövde  
Block Pull Clamps

**2. Daha iyi İşlenebilirlik**

Blok çekme ile daha kolay iş bağlama ve klasik yöntemden daha kullanışlıdır.

**2. Better Workability**

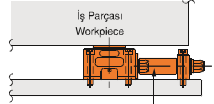
Block Pull Clamps allow fastening a workpiece easily, unlike the conventional method of fastening with hexagon head screws from below.



Mevcut Uygulama  
Conventional Method



Çektirme Civatası ile Uygulama  
Application with pull stud



Uzun Anahtar Aktuatörü Ünitesi  
Power-Tool Actuated Remote Control Unit

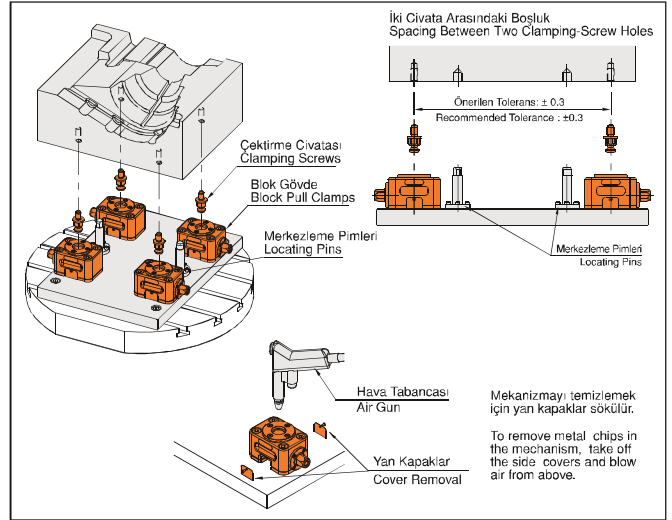
**3. Uzun Anahtar Ünite Kullanımı**

Birden fazla farklı parçaları işleme olanağı sağlar.

**3. Actuated Remote-Control Units**

If used in conjunction with Power-Tool Actuated Remote-Control Units, Block Pull Clamps can be installed at the best possible position under the workpiece.

**Kullanım Şekli / How To Use**



**Bağlama Civatası**

Clamping Screws

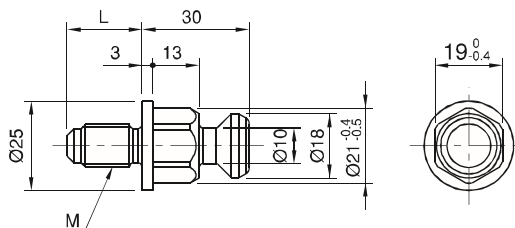
Referans Nr.	M	L	(g)
1478-00012	M12x	21	75
1478-00016	M16	28	98

**Ürün Nr. 1478 Bağlama Civatası**

- Sertleştirilmiş
- Siyah Kaplama

**Product Nr. 1478 Clamping Screws**

- Hardened
- Black coated



Referans Nr.	Sıkma Yüksekliği Clamping Height				Sıkma Torku Clamping Stroke	L2	L3	L1	L4	W	L	H4	B	Dp
	Finiş Yüzey Temas Finished Surface Contact		Kaba Yüzey Temas Rough Surface Contact											
	Min.	Max.	Min.	Max.										
1479-0618	21.8 (21.8-24.8)	23.8 (23.8-26.8)	21.4 (21.4-24.4)	23.4 (23.4-26.4)	3	22	6	26	11.5	36	18	6	4.3	27
1479-0823	30.3 (30.3-34.3)	32.3 (32.3-36.3)	31.2 (31.2-35.2)	33.2 (33.2-37.2)	4	30	8	35	15.3	45	23	8	5.3	34
1479-1030	30.5 (30.5-34.5)	37 (37-41)	31.5 (31.5-35.5)	38 (38-42)	4	37	8	45	20.7	65	30	12	8.4	48
1479-1240	34.5 (34.5-39.5)	44 (44-49)	37 (37-42)	46.5 (46.5-51.5)	5	45	8	55	25.4	85	40	15	10.5	64

Referans Nr.	H	D	W1	W2	H2	H1	M1	H3	W3	M	Sıkma Kuvveti Clamping Force Kgf	İzin Verilen Tork Allowable Screw Torque (N-m)	(g)
1479-0618	56.5	18	8	4.3	10	29	M4	22.8	10	M6	230	6	94
1479-0823	73.5	23	10	5.3	14	39	M5	28.5	13	M8	360	10.5	210
1479-1030	91	30	16	8.4	18	48	M8	45.5	17	M10	600	30	515
1479-1240	114	40	20	10.4	22	58	M10	57	19	M12	750	45	1100

### Ürün Nr. 1479 Dönmeli Üstten Bağlama

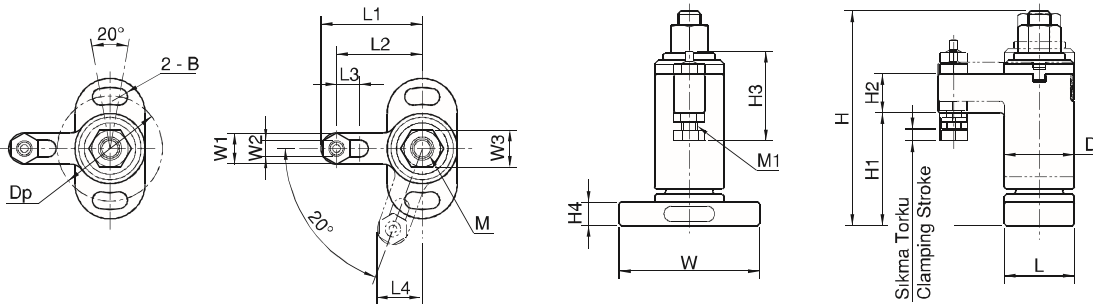
- Gövde**
- Sertleştirilmiş
  - Siyah Kaplama

- Sıkma Mili**
- Siyah Kaplama

### Product Nr. 1479 Swing Clamps For Torque Control

- Body**
- Hardened
  - Black coated

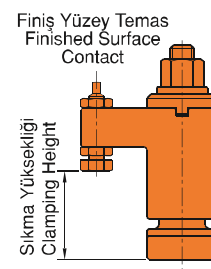
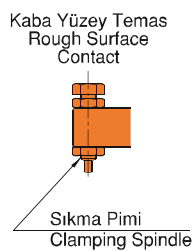
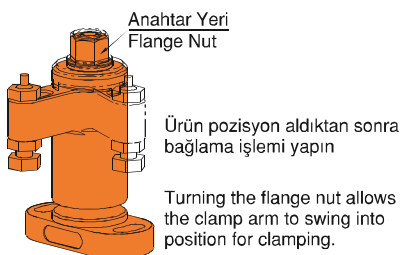
- Clamping Spindle**
- Black coated




- Not**
- Bağlama işlemini tork anahtarı ile yapın.

- Note**
- Do not use a power tool (impact wrench etc.) to turn the flange nut, for damage prevention.

### Kullanım Şekli / How To Use



Referans Nr.	H1	S	S1	M	L2	L1	W	L	H4	d	P	H	D	W1	H2	W2	H3
1480-00012	80	10	11	M12	55	66	90	50	15	11	70	139	50	22	30	19	29
1480-00016	95	10	15	M16	65	79	100	60	20	13	80	165	60	28	35	24	35

Referans Nr.	Sıkma Kuvveti Clamping Force Kgf	Tork Değeri Allowable Screw Torque (N - m)	Sıkıştırma Yönü Clamping Direction	 (kg)
1480-00012	600	28	Saat Yönünde Clockwise	1.6
1480-00016	1000	55	Saat Yönünde Clockwise	2.9



**Ürün Nr. 1480 Dönmeli Üstten Bağlama**

- Gövde**
- Sertleştirilmiş
  - Siyah Kaplama

- Sıkma Pabucu**
- Sertleştirilmiş
  - Siyah Kaplama

**Product Nr. 1480 Swing Clamps**

- Body**
- Hardened
  - Black coated

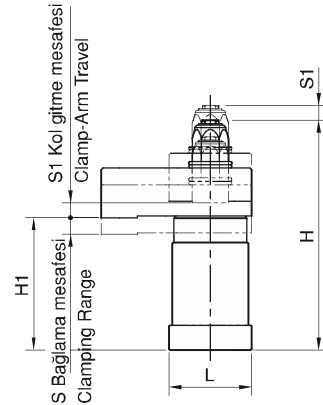
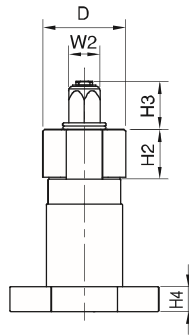
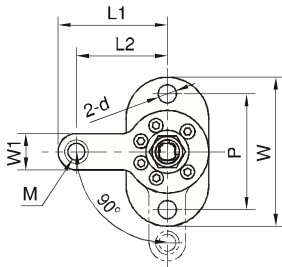
- Clamping Arm**
- Hardened
  - Black coated

**Özellikler**

- Hızlı bağlama için üründe sıkma anahtarına tepkili mekanizma vardır.
- Kısa bir harekette bağlama işlemi yapar.

**Features**

- The clamp arm swings in swift response to the turning speed of an impact wrench, for quick clamping.
- A short clamp-arm travel allows quick clamping.



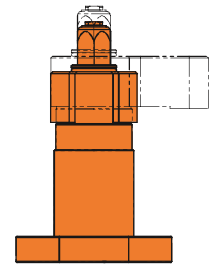
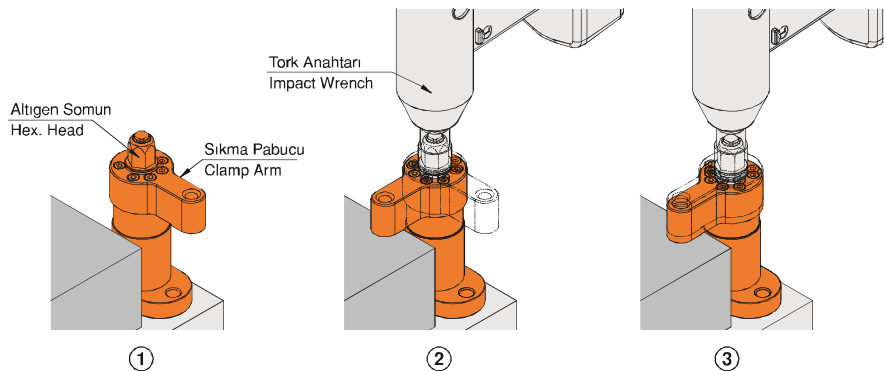
**Not**

- Bağlama işlemini kesinlikle tork anahtarı ile teknik tabloda verilen tork değerine uygun sıkma işlemi yapınız.

**Note**

- Do not use applying higher torque than allowable for a long period of time, to avoid damage. Using a torque-settable impact wrench is recommended.


**Kullanım Şekli / How To Use**



Robot hareketleri için  
sıralı dönmeli bağlama  
For robotized production lines,  
use Spiral-Acting Swing Clamps.



Referans Nr.	Sıkma Yüksekliği Clamping Height				Sıkma Torku Clamping Stroke	İnme Torku Advance Stroke	L2	L3	L1	L4	W	L	H5	B
	Finiş Yüzey Temas Finished Surface Contact		Kaba Yüzey Temas Rough Surface Contact											
	Min.	Max.	Min.	Max.										
1481-0150R	31.3	33.3	32.2	34.2	1.4	1.1	30	8	35	15.3	45	23	8	5.3
1481-0150L	(30.6-32)	(32.6-34)	(31.5-32.9)	(33.5-34.9)										
1481-0200R	32.5	39	33.5	40	1.5	1.4	37	8	45	20.7	65	30	12	8.4
1481-0200L	(31.7-33.2)	(38.2-39.7)	(32.7-34.2)	(39.2-40.7)										
1481-0300R	36.5	46	39	48.5	1.9	1.7	45	8	55	25.4	85	40	15	10.5
1481-0300L	(33.5-37.4)	(45-46.9)	(38-39.9)	(47.5-49.4)										

Referans Nr.	Dp	H	D	W1	W2	H3	H2	M	H4	R	A	H1	İzin Verilen Çalışma Yüğü Allowable Operating Load (N)	Sıkma Kuvveti Clamping Force Kgf	
1481-0150R	34	66	23	10	5.3	14	40	M5	28.5	63	20	61.3	150	180	250
1481-0150L															
1481-0200R	48	82	30	16	8.4	18	50	M8	45.5	80	26	76.5	200	220	570
1481-0200L															
1481-0300R	64	100	40	20	10.4	22	60	M10	57	100	33	93	300	350	1200
1481-0300L															

**Ürün Nr. 1481 Tek Dokunuş Dönmeli Üstten Bağlama**

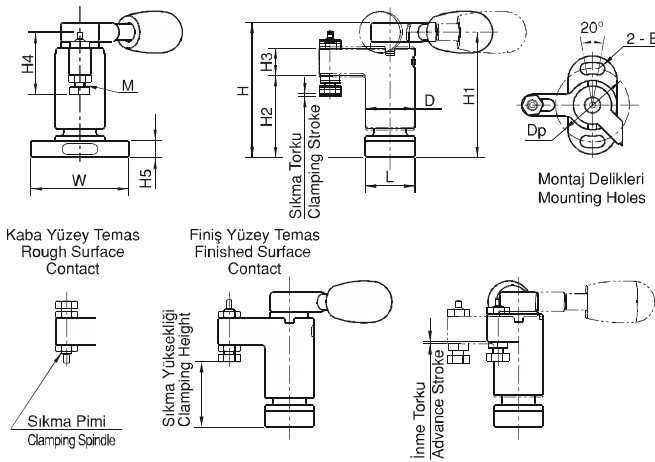
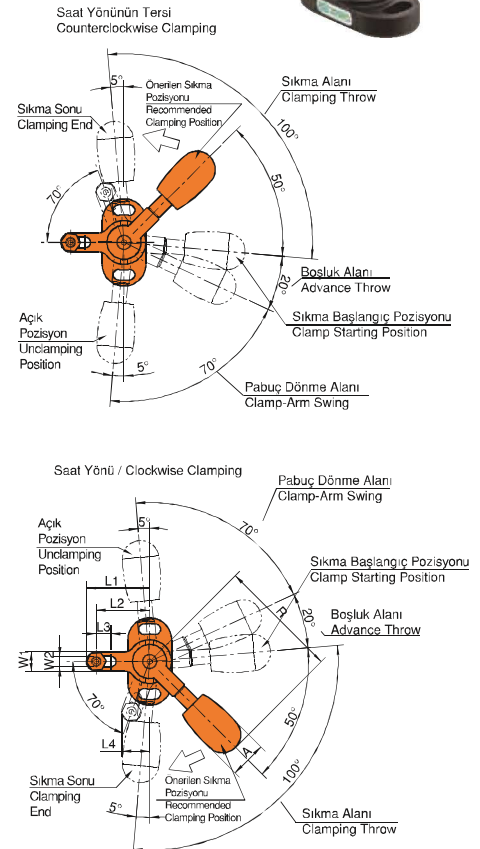
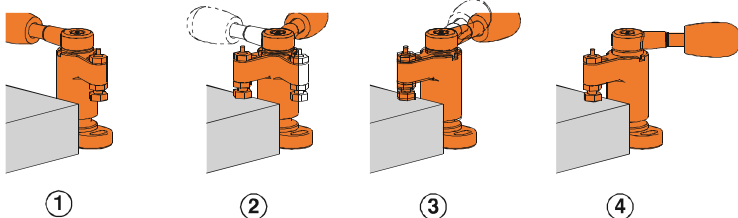
- Sertleştirilmiş
- Siyah Kaplama

- Sıkma Mili
- Siyah Kaplama


**Product Nr. 1481 Swing Clamps**

- Hardened
- Black coated

- Clamping Spindle
- Black coated


**Kullanım Şekli / How To Use**


Referans Nr.	Sıkma Yüksekliği Clamping Height				Sıkma Torku Clamping Stroke	İnme Torku Advance Stroke	L2	L3	L1	L4	W	L	H5	B
	Finiş Yüzey Temas Finished Surface Contact		Kaba Yüzey Temas Rough Surface Contact											
	Min.	Max.	Min.	Max.										
1482-0150R	31.3 (30.8-31.8)	33.3 (32.8-33.8)	32.2 (31.7-32.7)	34.2 (33.7-34.7)	1	1.5	30	8	35	15.3	45	23	8	5.3
1482-0150L														
1482-0200R	32.5 (31.9-33.1)	39 (38.4-39.6)	33.5 (32.9-34.1)	40 (39.4-40.6)	1.2	1.8	37	8	45	20.7	65	30	12	8.4
1482-0200L														
1482-0300R	36.5 (35.7-37.2)	46 (45.2-46.7)	39 (38.2-39.7)	48.5 (47.7-39.2)	1.5	2.3	45	8	55	25.4	85	40	15	10.5
1482-0300L														

Referans Nr.	Dp	H	D	W1	W2	H3	H2	M	H4	R	A	H1	İzin Verilen Çalışma Yüklü Allowable Operating Load (N)	Sıkma Kuvveti Clamping Force Kgf	
1482-0150R	34	131	23	10	5.3	14	40	M5	28.5	63	19	68	150	150	272
1482-0150L															
1482-0200R	48	167	30	16	8.4	18	50	M8	45.5	80	24	87	200	210	625
1482-0200L															
1482-0300R	64	207	40	20	10.4	22	60	M10	57	100	30	107	300	280	1340
1482-0300L															

**Ürün Nr. 1482 Tek Dokunuş Dönmeli Üstten Bağlama**

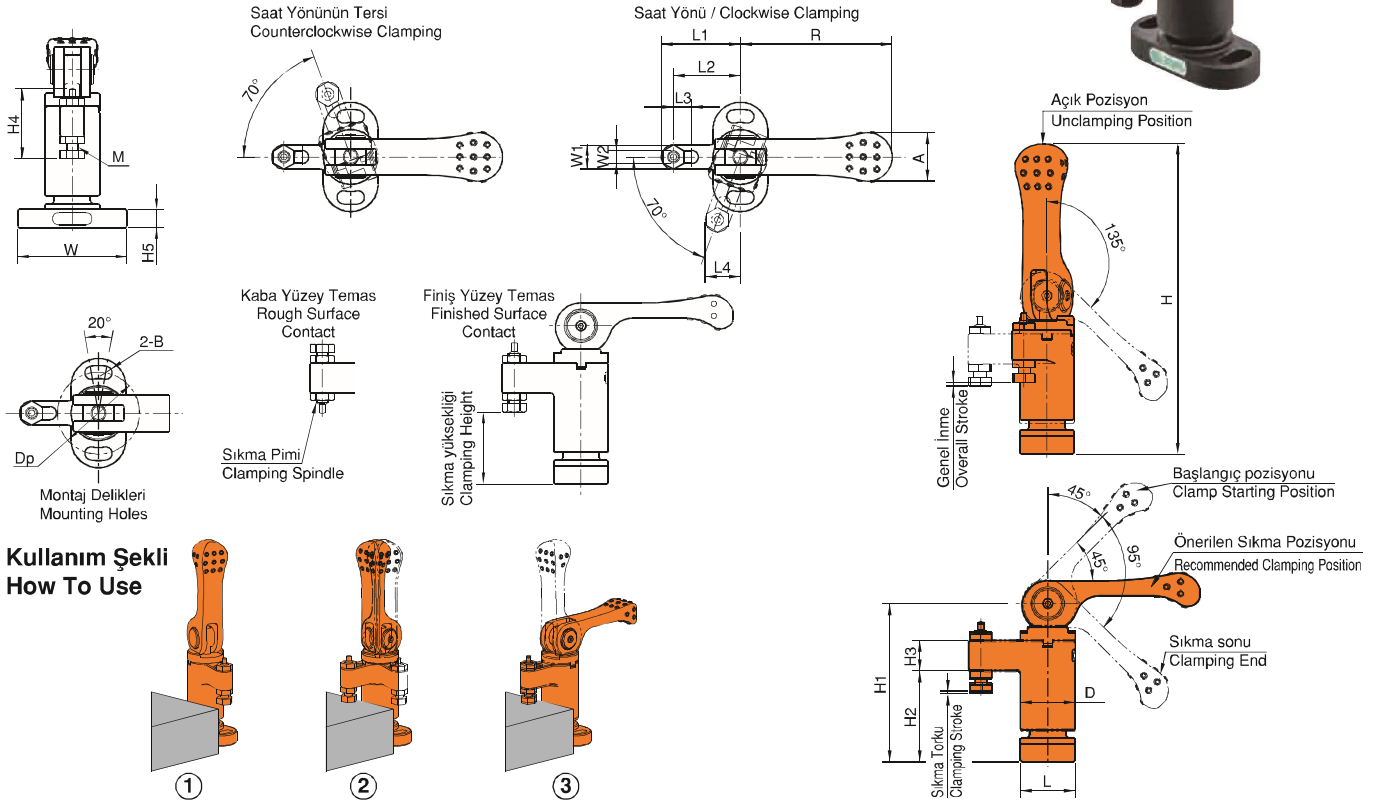
- Gövde**
- Sertleştirilmiş
  - Siyah Kaplama

- Sıkma Mili**
- Siyah Kaplama


**Product Nr. 1482 Swing Clamps With Cam Handle**

- Body**
- Hardened
  - Black coated

- Clamping Spindle**
- Black coated



Referans Nr.	Sıkma Yüksekliği Clamping Height				Sıkma Torku Clamping Stroke	L2	L5	W	L	H4	d	P	H	L1	L3	W1
	Finiş Yüzey Temas Finished Surface Contact		Kaba Yüzey Temas Rough Surface Contact													
	Min.	Max.	Min.	Max.												
1483-03240	32 (32-29.5)	40 (40-37.5)	35 (35-32.5)	43 (43-40.5)	2.5	20	11	42	18	8	5.5	32	81	25.5	25	26
1483-03748	37 (37-33.5)	48 (48-44.5)	42 (42-38.5)	53 (53-49.5)	3.5	25	14	52	22	10	6.6	40	100	32	31	32

Referans Nr.	W2	H2	H1	M	H3	R	H5	L4	Ayarlanabilir Kol Adjustable Handles	İzin Verilen Yük (N) Allowable Operating Load (N)	Sıkma Kuvveti Clamping Force Kgf	Sıkma Mekanizması Clamping Mechanism	
1483-03240	22	10	45	M6	24	40	47	16	FKF8-BR	170	240	Vida Screw	242
1483-03748	28	12	55	M8	30.5	65	63	20	FKF8-BR	210	420	Vida Screw	490

**Ürün Nr. 1483 Tek Dokunuş Üstten Bağlama**

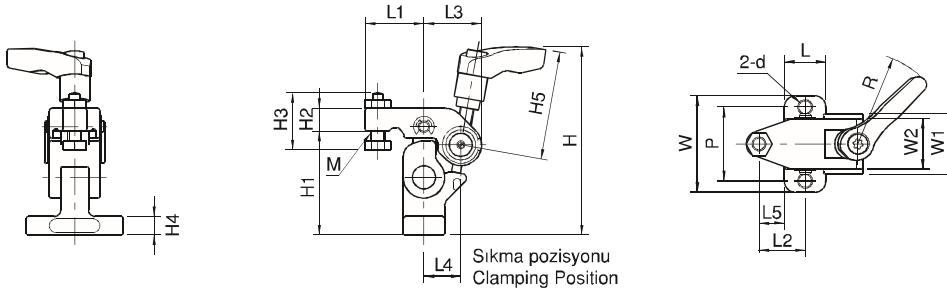
- Gövde**
- Sertleştirilmiş
  - Siyah Kaplama

- Sıkma Mili**
- Siyah Kaplama

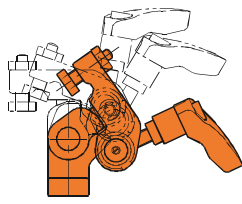
**Product Nr. 1483 One-Touch Above Clamping**

- Body**
- Hardened
  - Black coated

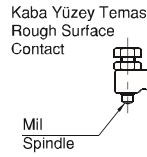
- Clamping Spindle**
- Black coated



Sıkma pozisyonu  
Clamping Position

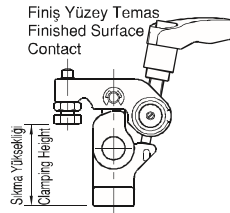


Açık Pozisyon  
Unclamped



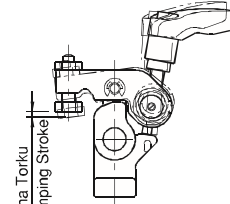
Kaba Yüzey Temas  
Rough Surface Contact

Mil  
Spindle



Finiş Yüzey Temas  
Finished Surface Contact

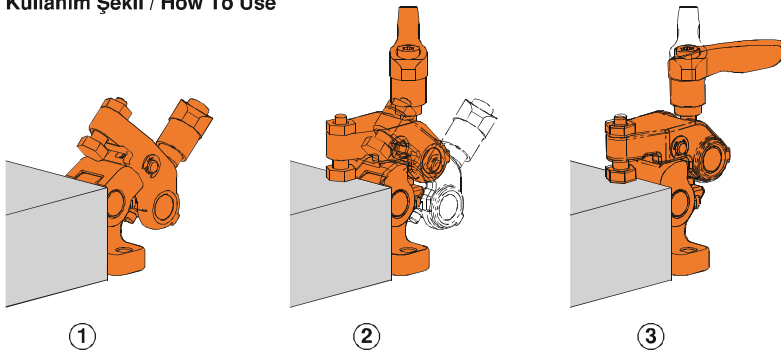
Sıkma Yüksekliği  
Clamping Height



Sıkma Torku  
Clamping Stroke

Ayarlanabilir Mesafe  
Clamping Throw

**Kullanım Şekli / How To Use**



①

②

③

Referans Nr.	A	B	C	D	E	F	G (g6)	H	J (h6)	K	L	M	N	P (±0.02)	Q	R
1484-06501	65	57	10	47	39	70	28	12	6	5	19	M6	42	26	32	25
1484-09001	90	72	15	57	46	95	42	14	8	7	23	M8	60	36	38	28

Referans Nr.	T	U	V	W	Z	Sıkma Kuvveti Clamping Force Kgf	Tork Değeri Allowable Screw Torque (N - m)	(kg)
1484-06501	15	18	4	M4	M8	400	60	1.1
1484-09001	17	22	6	M5	M10	600	100	2.6

**Ürün Nr. 1484 Dış Çap Bağlama**

**Product Nr. 1484 Outer Diameter Clamp**

**Teknik Özellikler**

- Parça tekrarlaması hassasiyeti: ±0.03
- Yumuşak ayak tekrarlaması hassasiyeti : ±0.02

**Not**

- İş parçası olmadan kilit civatasını sıkmayın.
- Çeneye izin verildiğinden daha derin işlemeyin.

**İçindekiler**

- 1 adet kilitleme pulu
- 1 adet elmas pim
- 1 imbus civata

**Technical Data**

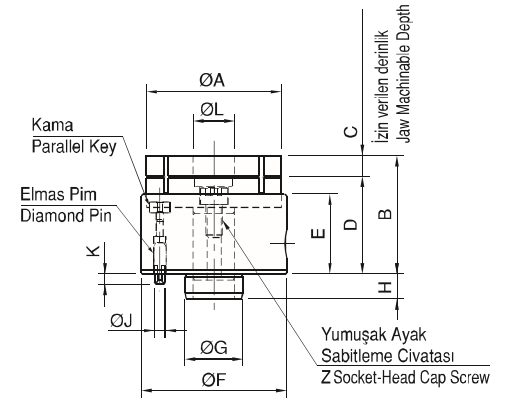
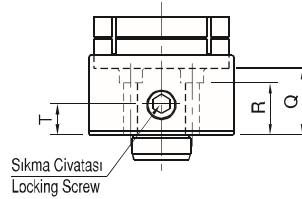
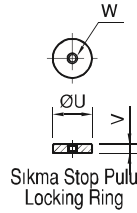
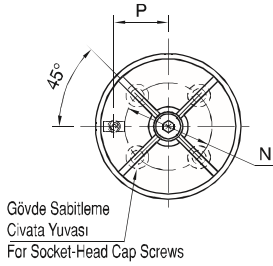
- Part locating repeatability: ±0.03
- Jaw locating repeatability: ±0.02

**Notes**

- Never tighten the locking screw without a part mounted, to avoid damage and deformation
- Do not machine the jaw deeper than allowed.

**Included**

- 1 of locking ring
- 1 of diamond pin
- 1 of socket-head cap screw



**Yumuşak Ayak**

Jaws

Referans Nr.	A	B	C	D	E	F	G	H	J	K	(g)
1485-06501	65	25	10	15	19	28	18	4	M4	M10	170
1485-09001	90	34	15	19	23	39	22	6	M5	M12	470

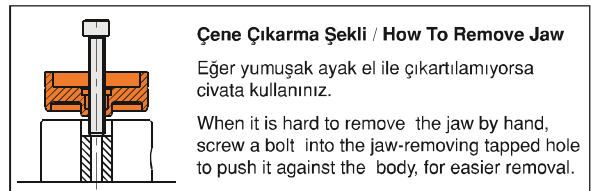
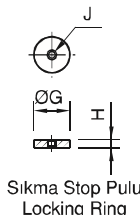
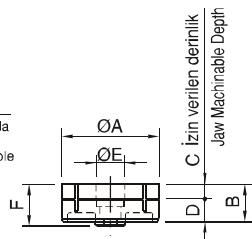
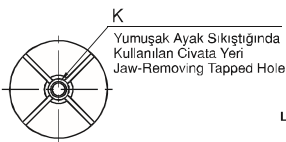
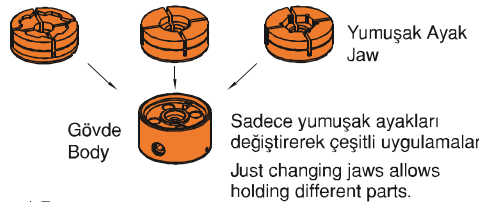
**Ürün Nr. 1485 Yumuşak Ayak**

• Malzeme: A7075

**Product Nr. 1485 Jaws**

• Material: A7075

**Özellik / Feature**



Referans Nr.	d	h (±0.01)	d1 (g6)	h1	M	h2	dp	p (±0.02)	w	h3	M1	İzin Verilen Vida Torku Allowable Screw Torque (N·m)	(kg)
1486-CP125.06501	65	25	28	12	M6	27	42	22	8	12	M8x1.25	15	0.8
1486-CP125.09001	90	30	42	14	M8	30	60	30	8	14	M10x1.5	25	1.7
1486-CP125.12001	120	35	55	18	M10	33	80	43	10	16	M10x1.5	40	3.5
1486-CP125.16001	160	40	63	24	M12	36	110	60	10	18	M12x1.75	40	7.1

Uygun Çene / Proper Jaws					
Dış Form Tutamağı İçin / For External Form Holding			İç Form Tutamağı İçin / For Internal Form Holding		
Referans Nr.	Sıkma Kuvveti Clamping Force (kN)	Sıkma Torku Clamping Torque	Referans Nr.	Sıkma Kuvveti Clamping Force (kN)	Sıkma Torku Clamping Torque
1486-CP126.06501	4.5	Ø 0.3	1486-CP127.06501	4.5	Ø 0.3
1486-CP126.09001	7		1486-CP127.09001	7	
1486-CP126.12001	10		1486-CP127.12001	10	
1486-CP126.16001	12		1486-CP127.16001	10	



**Ürün Nr. 1486 İç ve Dış Çap Bağlama**

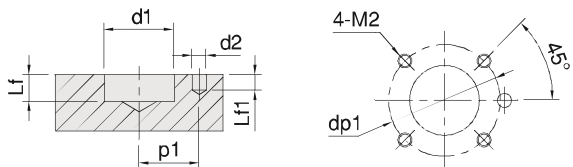
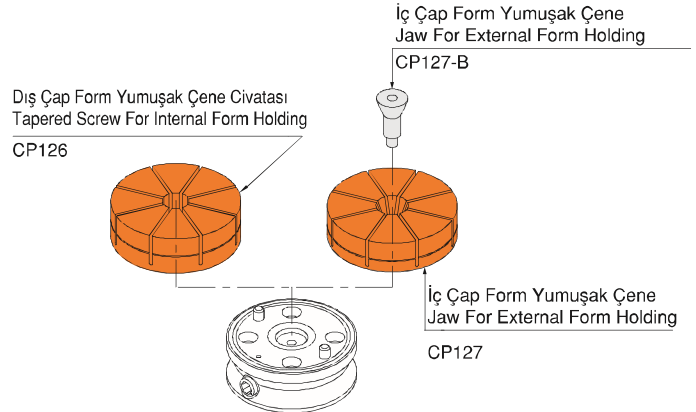
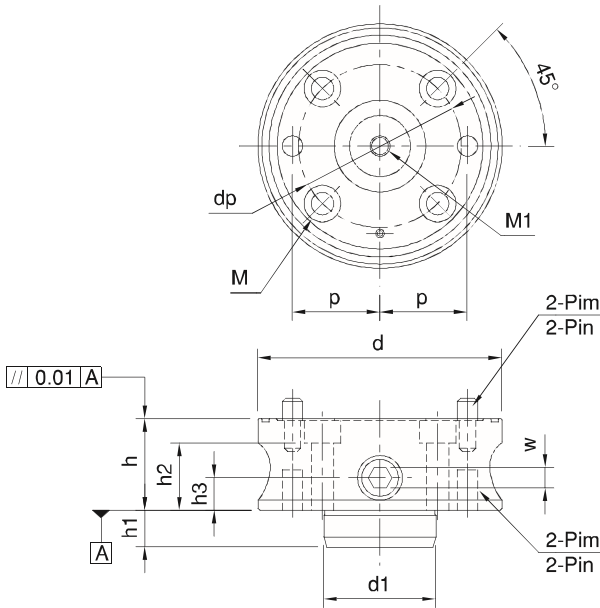
- Nikel Kaplama
- Parça Tekrarlanabilirlik ±0.03
- Yumuşak Ayak Tekrarlanabilirlik ±0.03

**Product Nr. 1486 Inner and Outer Diameter Clamp**

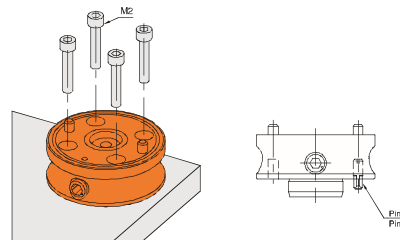
- Nickel Coating
- Part locating repeatability: ±0.03
- Jaw locating repeatability: ±0.03

Not: Yumuşak Ayak Ayrı Sipariş Verilir.

Note: Jaws must be ordered separately.



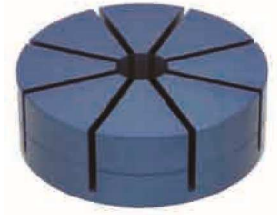
Referans Nr.	d1 (H7)	Lf	d2 (G7)	Lf1	p1 (±0.02)	M2	dp1
1486-CP125.06501	28	13	6	6	22	M 6x1	42
1486-CP125.09001	42	15	8	8	30	M 8x1.25	60
1486-CP125.12001	55	19	10	11	43	M10x1.5	80
1486-CP125.16001	63	25	12	13	60	M12x1.75	110



**Pim Ölçüleri / Pin Dimensions**

Referans Nr.	Çap Diameter
1486-CP125.06501	Ø 6h6
1486-CP125.09001	Ø 8h6
1486-CP125.12001	Ø 10h6
1486-CP125.16001	Ø 12h6

Referans Nr.	D	d	h1	h2	M	h	M	d1	t	(g)
1486-CP126.06501	65	21	25	10	M8x20	29	M5	20	4	200
1486-CP126.09001	90	25	35	15	M10x20	40	M6	24	5	500
1486-CP126.12001	120	25	40	20	M10x25	46	M6	24	5	1100
1486-CP126.16001	160	29	45	25	M12x25	52	M8	28	6	2200

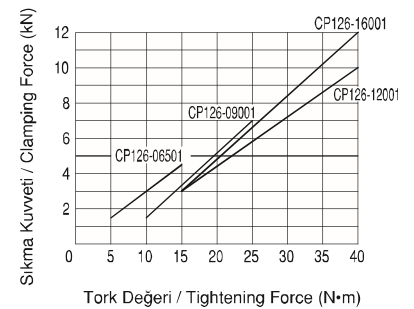
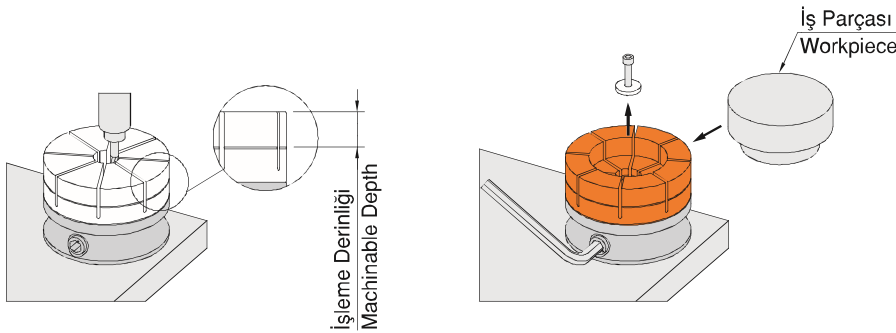
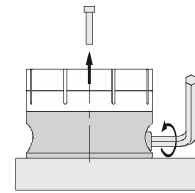
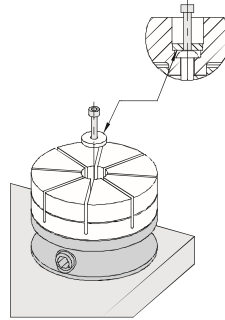
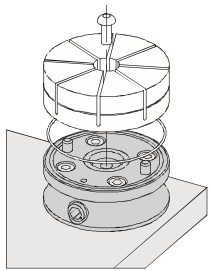
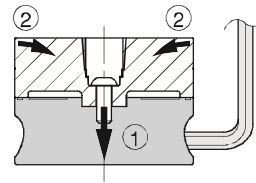
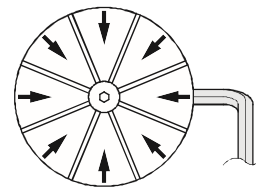
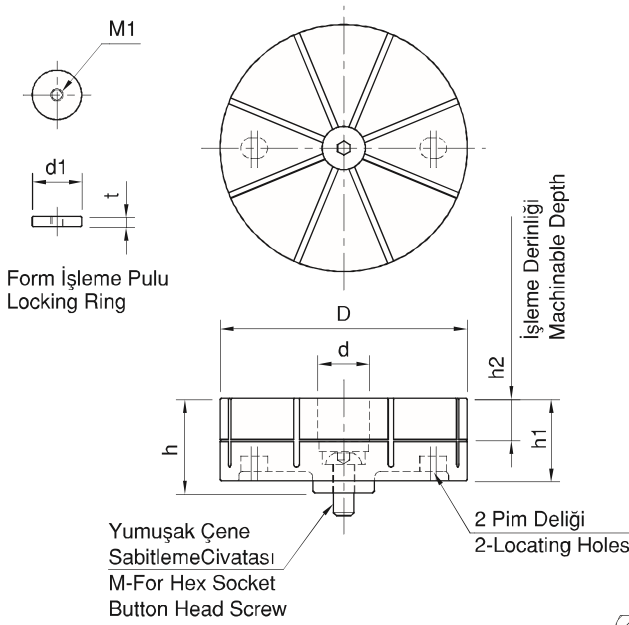


**Ürün Nr. 1486 Dış Çap Form Yumuşak Çene**

- Malzeme: Alüminyum A7075
- Mavi kaplama
- Sıkma Torku 0.15mm

**Product Nr. 1486 Outer Diameter Soft Jaw**

- Material: Aluminum A7075
- Blue coating
- Clamping Torque 0.15mm





Referans Nr.	D	h1	h2	h	(g)
1486-CP127.06501	65	25	10	28.5	200
1486-CP127.09001	90	30	15	34.5	400
1486-CP127.12001	120	35	20	40.5	900
1486-CP127.16001	160	40	25	46.5	1900

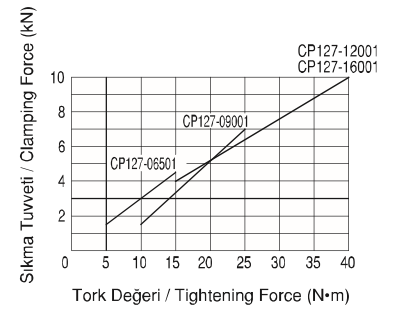
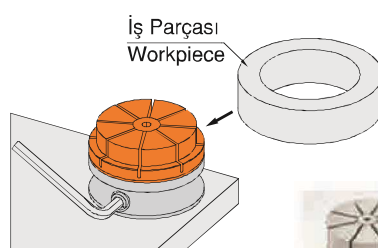
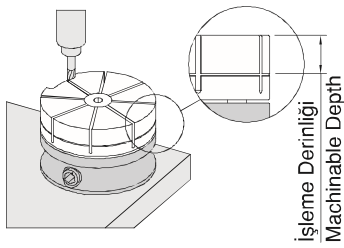
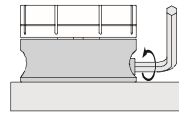
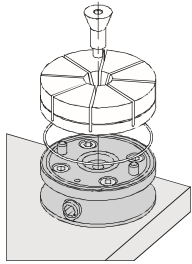
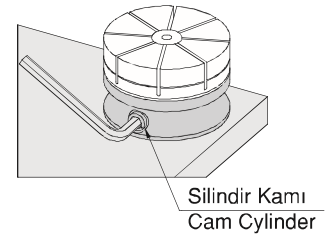
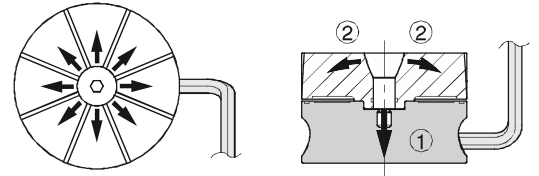
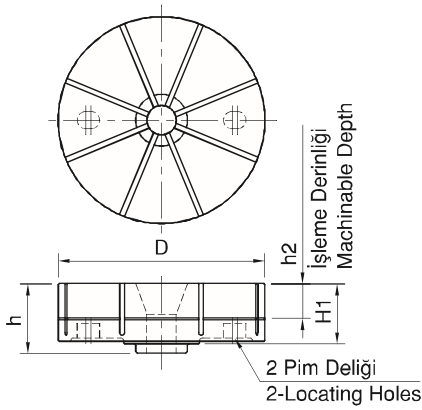


**Ürün Nr. 1486 İç Çap Form Yumuşak Çene**

- Malzeme: Alüminyum A7075
- Gümüş kaplama
- Sıkma Torku 0.15mm

**Product Nr. 1486 Inner Diameter Soft Jaw**

- Material: Aluminum A7075
- Silver coating
- Clamping Torque 0.15mm



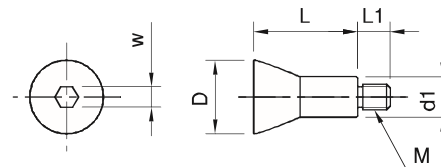
Referans Nr.	D	L	M	L1	d1	w	(g)
1486-CP127.06501B	22.5	29	M8	10	13.2	6	50
1486-CP127.09001B	27	35	M10	11	16	8	80
1486-CP127.12001B	29	41	M10	13	16	8	100
1486-CP127.16001B	33	47	M12	14	18	10	150

**Ürün Nr. 1486 İç Çap Form Yumuşak Çene Civatası**

- Gümüş kaplama

**Product Nr. 1486 Inner Diameter Soft Jaw Bolt**

- Silver coating



Referans Nr.	D		H	H1	R	H2		L1	Uygun Civatalar Proper Cap Screws	Sıkma Kuvveti Clamping Force Kgf	
	min.	max.				min.	max.				
1487-04001	19.5	24	9	2.5	R9.5	8	2.6	9.4	M4	200	20
1487-06001	23.5	29	13	4	R11.5	11.5	5	13	M6	500	45
1487-08001	28.5	36	17	5.5	R14	15	6	19	M8	900	90

**Ürün Nr. 1487 Delik İçi Bağlama**

- Sertleştirilmiş
- Siyah Kaplama

**Product Nr. 1487 I.D. Holding Clamps**

- Hardened
- Black coated

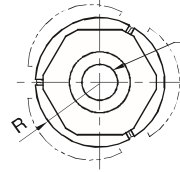


**Özellik**

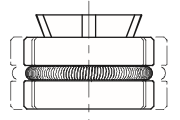
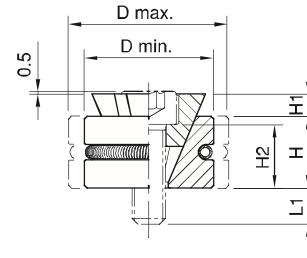
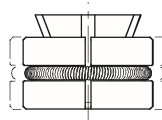
- Bu pabuçlar iş parçasını iç çaptan sıkma işlemi yapar.
- Kamanın konik yapısından dolayı güçlü bir bağlama yapar.
- Uzun strok özelliği ile dökülmüş deliklerde ve kaba deliklerde kullanım olanağı sağlar.

**Feature**

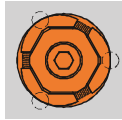
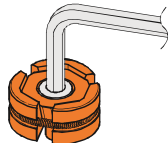
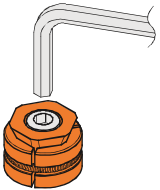
- These clamps hold the inside diameter of the workpiece.
- The wedge construction allows powerfully clamping the workpiece.
- Long clamping stroke is ideal for holding as-cast or roughly-finished holes.



Sabitleme Civata Yeri  
For Hex Socket-Head Cap Screws



**Kullanım Şekli / How To Use**



Açık Konum  
Unclamping Mode

Kapalı Konum  
Clamping Mode

İş parçasını sıkma anında çizgi halinde temas eder. Finit delikler için tavsiye edilmez. Delik içinde deforme olabilir.

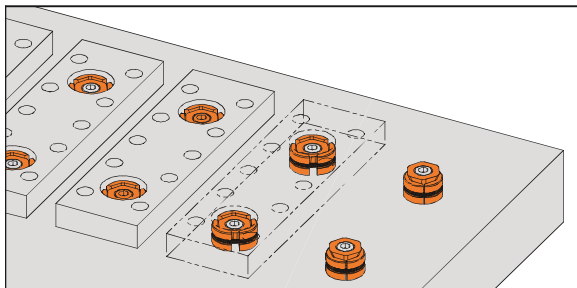
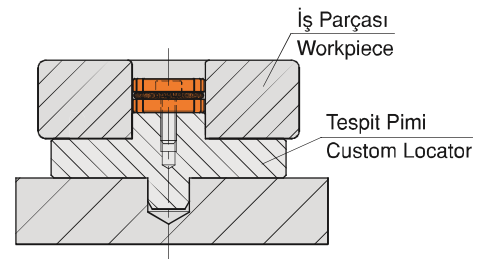
The clamp makes a line contact with the workpiece at the clamping mode. This contact can mar the surface of the workpiece depending on its materials, and using these clamps for accurately finished holes is not recommended.

**Not**


- Doğru bir merkezleme işlemi aşağıdaki görsel gibidir.

**Notes**

- For accurate locating, use these clamps with a locator as shown below.



2'li bağlama uygulama örneğidir.  
Example of application where two I.D. Holding Clamps are used.

Referans Nr.	d		h		h1	M	L1	W	Sıkma Kuvveti Clamping Force kgf	Tork Değeri Allowable Screw Torque (N - m)	 (g)
	min.	max.	d min.	d max.							
1487-04001A	8	10.3	5.5	4.6	0.9	M4x12	7.3	2.5	900	2.1	3
1487-05001A	10	12.3	6.4	5.6	1.1	M5x15	9.1	3.	1500	4.3	5
1487-06001A	12	16.3	8.6	7	1.3	M6x18	11.2	4.	2100	7.3	9
1487-08001A	16	22	11.5	9.4	1.6	M8x25	16.2	5	4000	18	22
1487-04001B	8	10.3	5.5	4.6	5.1	M4x12	7.1	3	1500	2.7	4
1487-05001B	10	12.3	6.4	5.6	6.2	M5x15	9	4	2500	5.4	7
1487-06001B	12	16.3	8.6	7	7.9	M6x18	10.6	5	5000	9.1	11
1487-08001B	16	22	11.5	9.4	10.4	M8x25	15.4	6	9000	25	28



**Ürün Nr. 1487 Delik İçi Bağlama**

- Sertleştirilmiş
- Siyah Kaplama

**Product Nr. 1487 I.D. Holding Clamps**

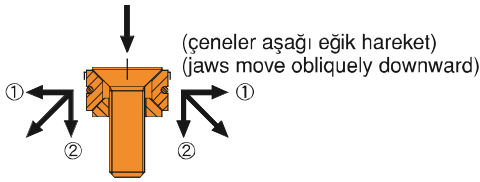
- Hardened
- Black Coated

**Özellik**

- Bu bağlamalar / clampler iş parçasının iç çapından tutar.
- İş parçasını Kama Konstrüksiyon güçlü sıkmasını sağlar.
- Uzun sıkma stroku döküm veya kabaca bitmiş delikleri tutmak için idealdir.

**Features**

- These clamps hold the inside diameter of the workpiece.
- The wedge construction allows powerfully clamping in the workpiece.
- Long clamping stroke is ideal for holding as-cast or roughly-finished holes.



- 1 İş parçasına karşı yatay basınç  
Horizontal pressure against workpiece
- 2 İş parçasının yükselmesini engelleyen dikey basınç.  
Vertical pressure preventing workpiece lift

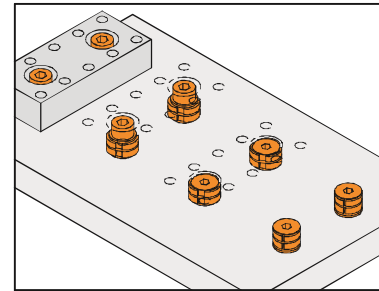
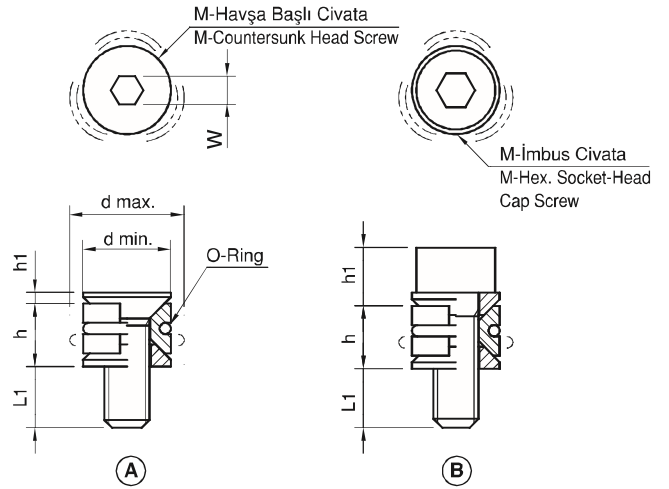
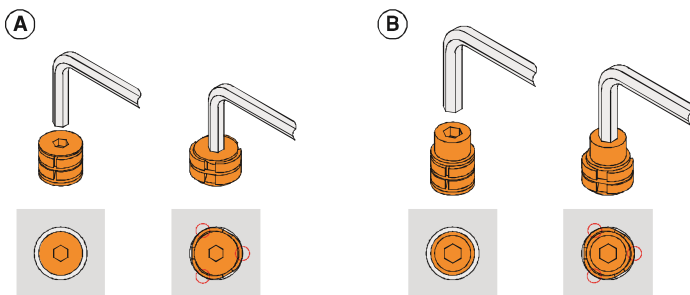
**Kullanım Şekli / How To Use**

**Not**

- Pabuç iş parçasını sıkma modundayken bağlantı hattına temas eder. Kendi meteryallerine bağlı iş parçası yüzeyini işaretleyebilirsiniz ama bitmiş / finish delikler için bu pabuçların kullanılması tavsiye edilmez.

**Notes**

- The clamp makes a line contact with the workpiece at the clamping mode. This contact can mark the surface of the workpiece depending on its materials and using these clamps for accurately finished holes is not recommended.



Delik içi bağlamaların kullanıldığı iki kompakt uygulamalardan örnek.

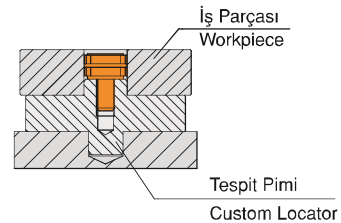
Example of applications where two compact ID holding clamps are used.

**Not**

- Aşağıda gösterildiği gibi doğru yer tespiti için, bir konum belirleyici ile bu pabuçları kullanın.

**Notes**

- For accurate locating, use these clamps with a locator as shown below.



Referans Nr.	Ayarlanabilir iş parçası çapları Adaptable Workpiece Dia.	d1	d2	h2	h1	d ( $\pm 0.05$ )	h	M	L	w	M1	L1	dp	Sıkma Kuvveti Clamping Force Kgf	Tork Değeri Allowable Screw Torque (N - m)	İzin Verilen Boşluk Recommended Range of Expansion of Dia	İzin Verilen Açılma Çapı Allowable Expansion of Dia	(g)
1488-00004	Ø7.1-Ø12.4	12.4	7.1	15	16	29.72	21.8	M4	7.2	3	M3	6	21	420	5	0.07	0.13	45
1488-00006	Ø12.2-Ø14.2	14.2	12.2	15	19	31.5	24.9	M6	11.2	5	M3	6	23.1	440	17	0.08	0.23	60
1488-00008	Ø13.5-Ø20	20	13.5	15	19	37.5	24.9	M8	13.2	6	M3	6	29	1100	34	0.08	0.30	95
1488-00010	Ø18-Ø27	27	18	17.5	22.2	50	28.6	M10	16.3	8	M4	7	39.4	2000	60	0.08	0.35	190
1488-00012	Ø23-Ø35.3	35.3	23	20.6	25.4	56	31.8	M12	20.3	10	M4	7	45.5	2600	150	0.08	0.35	300
1488-0016A	Ø29.3-Ø42	42	29.3	27	31.8	69.5	39.6	M16	21.4	14	M5	13	55.9	4400	280	0.08	0.35	570
1488-0016B	Ø29.3-Ø51.5	51.5	29.3	27	31.8	75.5	39.6	M16	21.4	14	M5	13	63.9	4400	280	0.08	0.35	750
1488-0016C	Ø29.3-Ø77.7	77.7	29.3	32.3	37.6	107.5	45.5	M16	19.3	14	M6	14	92.6	4400	280	0.15-0.4	0.60	1800
1488-0016D	Ø29.3-Ø103	103	29.3	32.3	37.6	132.9	45.5	M16	19.3	14	M6	14	118.1	4400	280	0.15-0.4	0.60	2900
1488-0016E	Ø29.3-Ø175	175	29.3	32.3	37.6	132.9	45.5	M16	19.3	14	M6	14	118.1	4400	280	0.15-0.4	0.80	6500
1488-0016F	Ø29.3-Ø250.2	250.2	29.3	32.3	37.6	152.4	45.5	M16	19.3	14	M6	14	133.4	2600	170	0.15-0.4	0.80	4800

### Ürün Nr. 1488 Delik İçi Bağlama

- Gövde**
- Siyah Kaplama

- Civata**
- Sertleştirilmiş

### Özellik

- Delik çapından tutma işlemi yapar
- Mükemmel kullanımıyla birden fazla sıkma seçeneği sağlar
- Sağ tarafta görüldüğü gibi hidrolik çekme ile de kullanım olanağı sağlar.
- İş parçasına göre ayarlama olanağı sağlar

### Not

- İşlenmiş olan parçaların köşeleri minimum 0.5 köşe olmalı. Radüs olabildiğince büyük olmalı
- İş parçasının deliği radüse denk gelirse burç kullanın
- İsteğe bağlı dış çap ölçü değişikliği yapabiliriz.

### Product Nr. 1488 I.D. Holding Clamps

- Body**
- Black coated

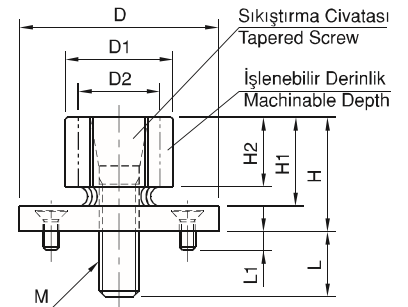
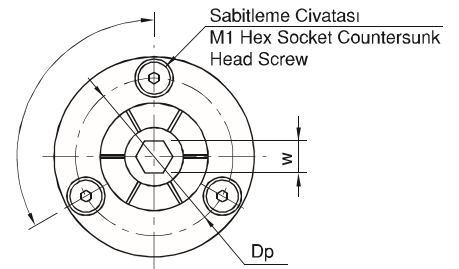
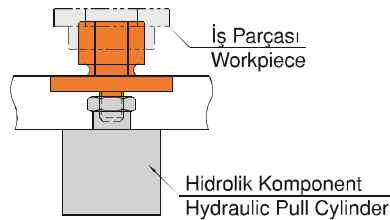
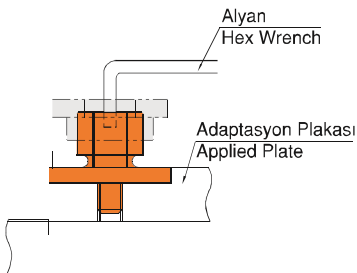
- Tapered Screw**
- Hardened

### Features

- Can hold workpieces on an inside diameter.
- Perfect for multiple-parts holding arrangement.
- Using hydraulic pull cylinders to clamp instead of using hex wrenches allows automation.
- Can be machinable to suit your workpieces.

### Notes

- The minimum radius of corners at the machined part should be 0.5mm for clamping small workpieces. To prevent stress concentration on these corners, make the radius as large as possible.
- If the radius will interfere with the bottom of the workpiece bore, we suggest a ring or rest-pads be fixed to the flange.

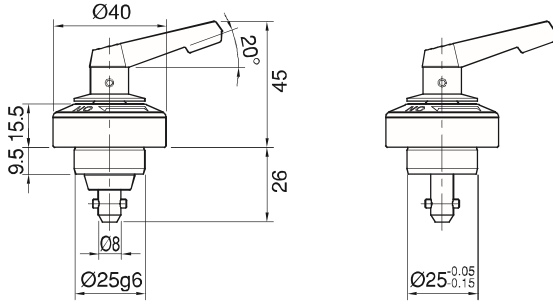
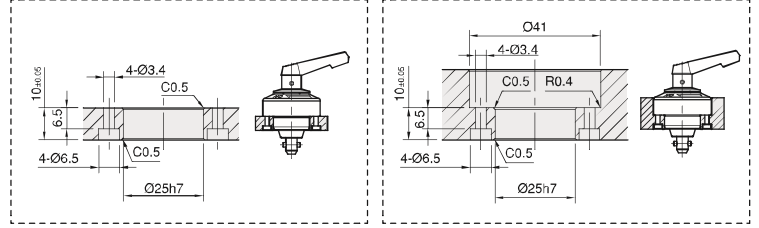
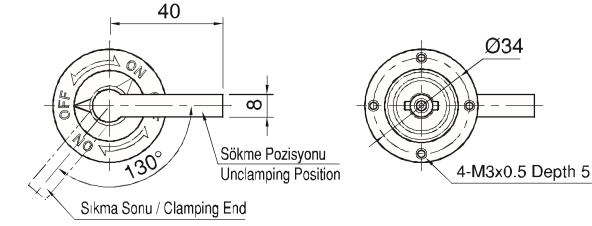


Referans Nr.	Sıkma Kuvveti Clamping Force (N)	Kaldırma Kuvveti Lifting Force (N)	(g)
1489-0840R.06	600	100	220
1489-0840R.06N	700	-	215



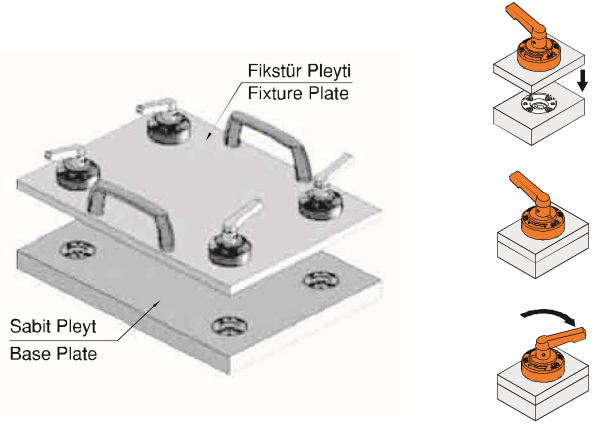
**Ürün Nr. 1489 Tek Dokunuş Bağlama**  
• Siyah Kaplama

**Product Nr. 1489 Single Touch Clamp**  
• Black coating



0840R.06

0840R.06N



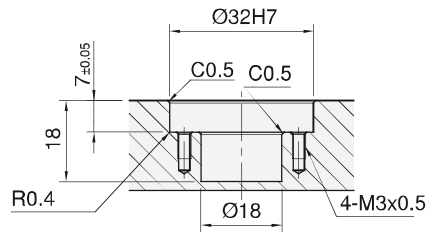
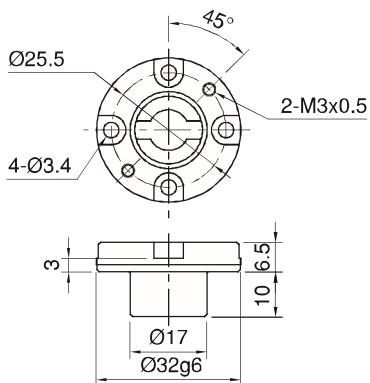
Referans Nr.	(g)
1489-0840R	32

**Ürün Nr. 1489 Tek Dokunuş Bağlama Burcu**  
• Siyah Kaplama

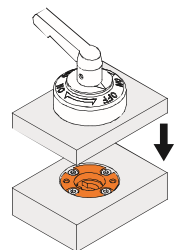
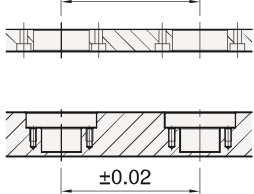
**Product Nr. 1489 Single Touch Clamping Bush**  
• Black coating

**Tek Dokunuş Bağlama Burcu**

Single Touch Clamping Bush



Tolerans / Tolerance ±0.02



Referans Nr.	D (g6)	H	D1	H1	M	H2	M1	Dp	Kaldırma Kuvveti Lifting Force (N)	(g)
1489-16032K	32	6.5	20	7	M3	3	M3x0.5	25.5	110	60
1489-25050K	50	10	32	9	M4	5	M4x0.7	42	180	160
1489-38070K	70	15	48	14	M5	9	M5x0.8	60	400	508
1489-56095K	95	22	70	21	M6	15	M6x1.0	84	690	1451

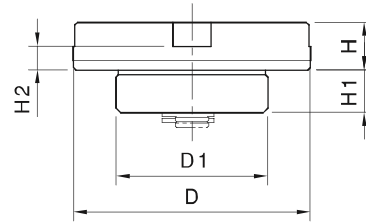
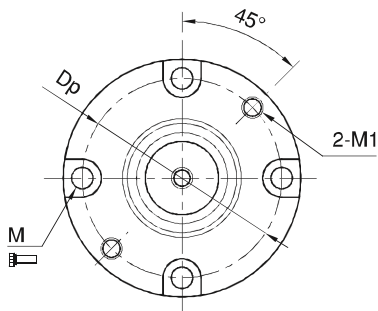


### Ürün Nr. 1489 Konumlama Burcu (Kapalı)

- Kaldırma kuvveti hareketli konik burcu yukarı itmek için yay kuvvetini kullanır.(N)
- Vidalar doğru sırayla sıkılmadığında tekrarlanabilirlik 0.01 aşabilir.
- Toplam yük, maksimum yük kapasitesini aşıyorsa, tekrarlanabilirlik 0.01 aşabilir.

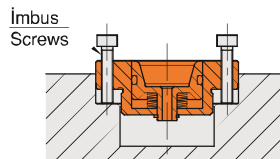
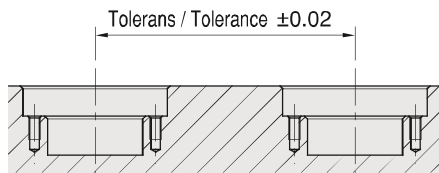
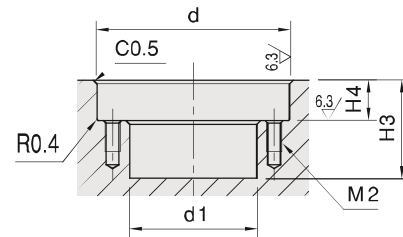
### Product Nr. 1489 Flex Locator Bushings (Blind)

- The lifting force is the power of the inner spring of the body to push up the movable tapered bushing.(N)
- If the screws are not tightened in the correct order, the locating repeatability may exceed 0.01
- If the total load exceeds the maximum loading capacity, the locating repeatability may exceed 0.01

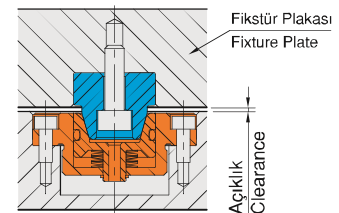
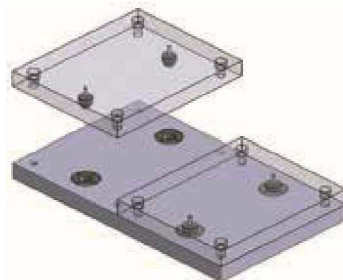
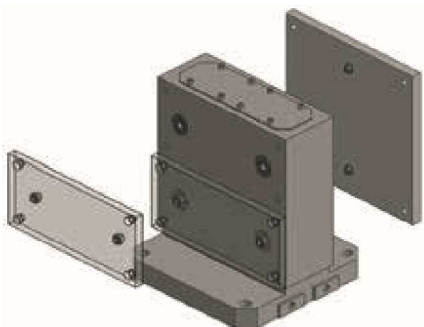


### Montaj Detayı / Mounting Details


Referans Nr.	d (H7)	H4 (±0.05)	d1	H3	M
1489-16032	32	7	21	18	M3x0.5
1489-25050	50	10.5	33	24	M4x0.7
1489-38070	70	15.5	49	35	M5x0.8
1489-56095	95	22.5	71	51	M6x1.0



### Uygulama Örneği / Application Example



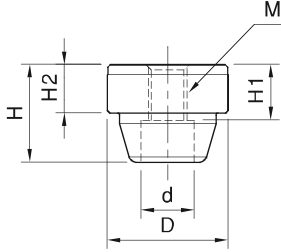


Referans Nr.	D (g6)	H2	H	M	H1	d	
1489-16032	16	5.5	11.5	M5x0.80	6	8	18
1489-25050	25	10	20	M8x1.25	11.5	11	49
1489-38070	38	15	29.5	M10x1.50	18	14	176
1489-56095	56	22	43.5	M16x2.00	28.5	20	569



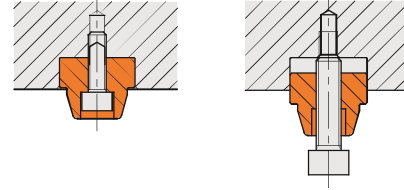
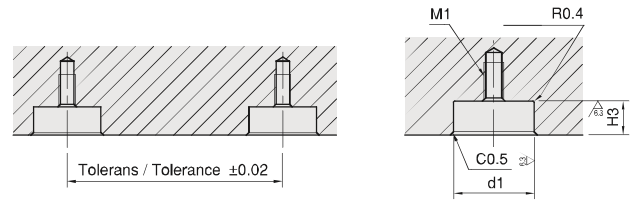
Ürün Nr. 1489 Konumlama Pimi

Product Nr. 1489 Flex Locator Pins




### Montaj Detayı / Mounting Details

Referans Nr.	d1 (H7)	H3 (±0.05)	M1
1489-16032	16	6	M4x0.7
1489-25050	25	10.5	M6x1.00
1489-38070	38	15.5	M8x1.25
1489-56095	56	22.5	M12x1.75



## Konumlama Pimi Kapağı

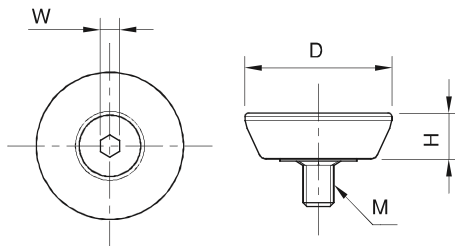
Flex Locator Protecting Covers

Referans Nr.	D	H	M	W	
1489-16032P	12	4	M3x0.5	2	3
1489-38070P	19	6	M4x0.7	2.5	5
1489-25050P	29	7	M5x0.8	3	14
1489-56095P	44	8	M6x1.0	4	35

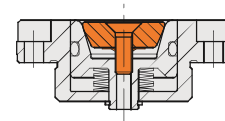


Ürün Nr. 1489 Konumlama Pimi Kapağı


Product Nr. 1489 Flex Locator Protecting Covers



### Montaj Detayı / Mounting Details





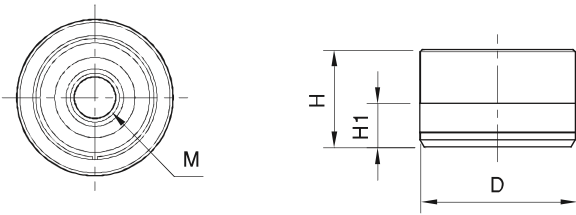
Referans Nr.	D	H	H1	M	Kaldırma Kuvveti Lifting Force (N)	 (g)
1489-12025A	25 $\begin{smallmatrix} +0.026 \\ -0.018 \end{smallmatrix}$	16	8	M8x1.25	540	46
1489-15032A	32 $\begin{smallmatrix} +0.031 \\ -0.021 \end{smallmatrix}$	20	9	M10x1.50	600	92
1489-20045A	45 $\begin{smallmatrix} +0.031 \\ -0.021 \end{smallmatrix}$	26	11	M14x1.50	780	230

### Ürün Nr. 1489 Konumlama Burcu (Açık)

- Kaldırma kuvveti hareketli konik burcu yukarı itmek için yay kuvvetini kullanır.(N)
- Vidalar doğru sırayla sıkılmadığında tekrarlanabilirlik 0.01 aşabilir.
- Toplam yük, maksimum yük kapasitesini aşıyorsa, tekrarlanabilirlik 0.01 aşabilir.

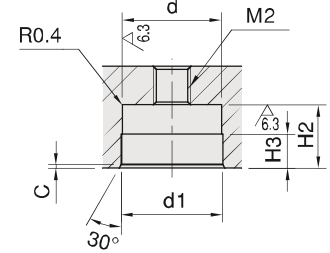
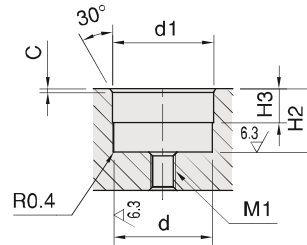
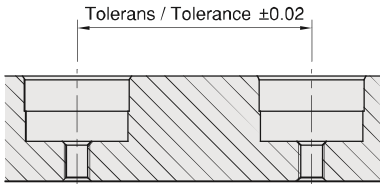
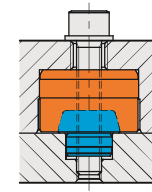
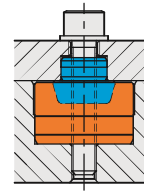
### Product Nr. 1489 Flex Locator Bushings (Through)

- The lifting force is the power of the inner spring of the body to push up the movable tapered bushing.(N)
- If the screws are not tightened in the correct order, the locating repeatability may exceed 0.01
- If the total load exceeds the maximum loading capacity, the locating repeatability may exceed 0.01

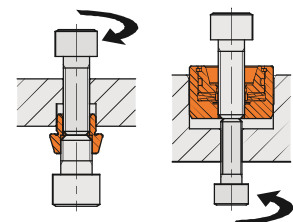
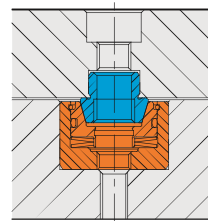
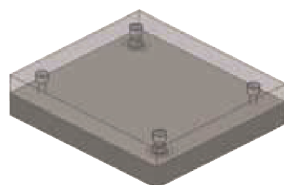
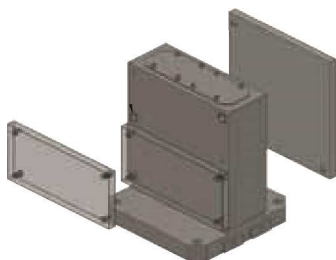



### Montaj Detayı / Mounting Details

Referans Nr.	d (H6)	H2 (±0.05)	d1	H3	M1	M2
1489-12025	25	16.5	25.2	8	M6x1.00	M10x1.50
1489-15032	32	20.5	32.2	11	M8x1.25	M12x1.75
1489-20045	45	26.5	45.2	15	M12x1.75	M16x2.00



### Uygulama Örneği / Application Example

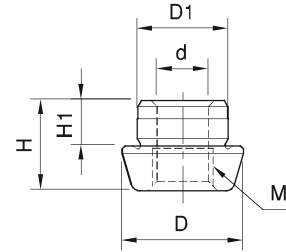


Referans Nr.	D1 (p6)	H1	D	H	M	d	
1489-12025	12	4.5	15	10	M10x1.50	8.5	6
1489-15032	15	7.5	20	15	M12x1.75	10.2	16
1489-20045	20	10	30	20	M16x2.00	14	47



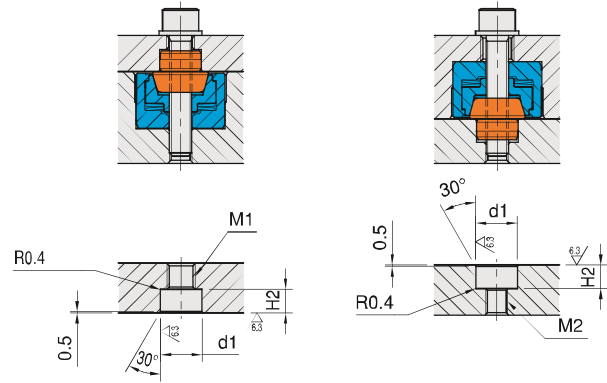
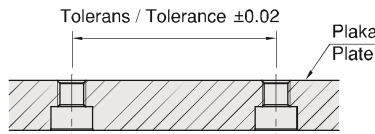
Ürün Nr. 1489 Konumlama Pimi


Product Nr. 1489 Flex Locator Pins



### Montaj Detayı / Mounting Details

Referans Nr.	d (H6)	H2	M1	M2
1489-12025	12	5.5	M8x1.25	M6x1.00
1489-15032	15	8.5	M10x1.50	M8x1.25
1489-20045	20	11	M14x1.50	M12x1.75



Referans Nr.	D	H	D1	M	
1489-12025P	15	10	9	M4x0.7	2
1489-15032P	19	13	11	M5x0.8	5
1489-20045P	29	18	16	M6x1.0	17

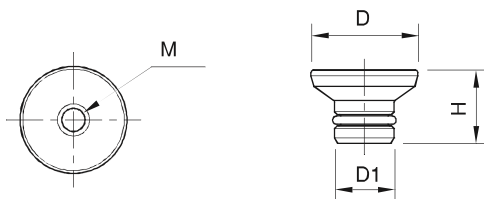
### Konumlama Pimi Kapağı

Flex Locator Protecting Covers

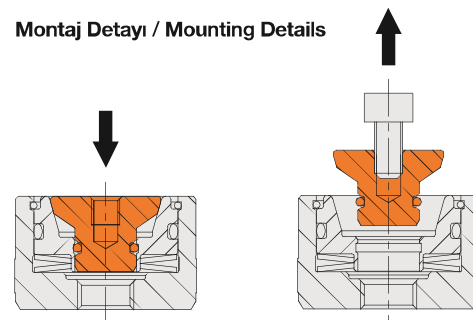


Ürün Nr. 1489 Konumlama Pimi Kapağı

Product Nr. 1489 Flex Locator Protecting Covers



### Montaj Detayı / Mounting Details



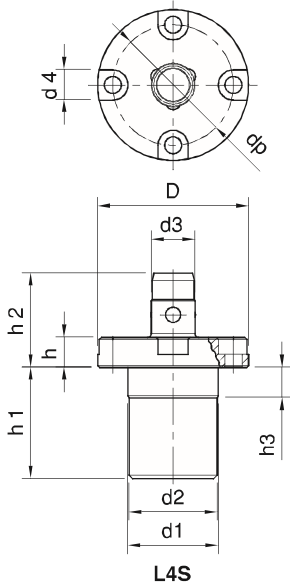
Referans Nr.	d1 g6	h3	d2	h1	D	h	d3 (h8)	h2	d	Lf	d4	dp	M	Hava Basıncı Air Pressure (MPa)	Sıkma Kuvveti Clamping Force (N)	(g)
1489-18L4S	24	8	23.4	29.5	40	8	12	11	4.5	3.5	8	32	-	0.5	250	154
1489-26L4S	32	8.5	31.4	31.7	51	9.5	16	16	5.5	4	9.5	41	-	0.5	350	289
1489-18L4SG	24	8	23.4	29.5	40	8	12	11	4.5	3.5	8	32	M4x0.7	0.5	250	136
1489-26L4SG	32	8.5	31.4	31.7	51	9.5	16	16	5.5	4	9.5	41	M5x0.8	0.5	350	252

### Ürün Nr. 1489 Pnömatik Bağlama

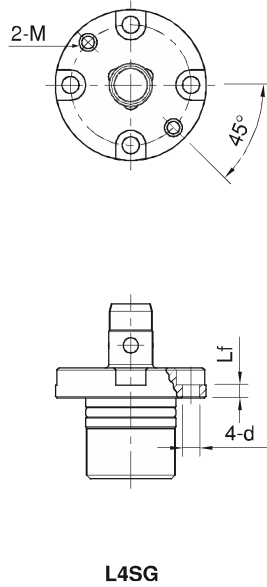
- Nikel Kaplama
- Tekrarlama Hassasiyeti  $\pm 10\mu\text{m}$

### Product Nr. 1489 Pneumatic Clamp

- Nickel Coating
- Repeat Accuracy  $\pm 10\mu\text{m}$



L4S



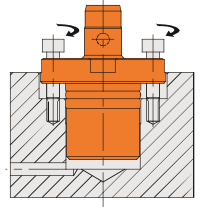
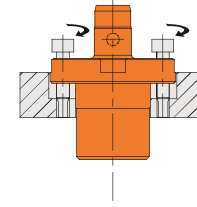
L4SG



L4S



L4SG



## Pnömatik Bağlama Burç

### Pneumatic Clamping Bush

Referans Nr.	D1 g6	h2	d2	h1	D	h	d e7	d1	Lf	d3	M	dp	(g)
1489-18BU	20	7.5	19.6	10.5	36	8	12.1	4.5	3.5	8	M4x0.7	28	57
1489-26BU	25	7	24.6	11	44	9.5	16.1	5.5	4	9.5	M5x0.8	34	97

### Ürün Nr. 1489 Pnömatik Bağlama Burç

- Nikel Kaplama
- Tekrarlama Hassasiyeti  $\pm 10\mu\text{m}$

### Product Nr. 1489 Pneumatic Clamping Bush

- Nickel Coating
- Repeat Accuracy  $\pm 10\mu\text{m}$

