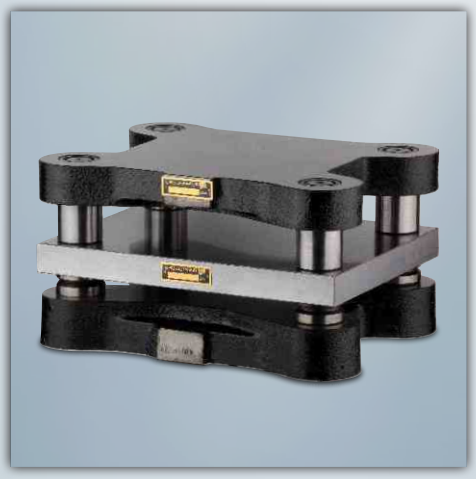
AzcoAras Zanjan

2018 | 2019



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ArasZanjan

ارس‌زنجان
شرکت تولیدی صنعتی
AZCO

ArasZanjan
ARAS ZANJAN COMPANY "AZCO"

شرکت ارس‌زنجان در سال ۱۳۶۸ فعالیت خود را به عنوان اولین تولیدکننده قطعات پیش‌ساخته قالب در ایران آغاز نمود که با استفاده از تکنولوژی و دانش روز دنیا توانست محصولات خود را به بازار عرضه و به‌لحاظ صرفه‌جویی در وقت صنعتگران با استقبال فزاینده‌ای مواجه گردید.

هم‌اکنون این شرکت تولیدکننده محصولات پیش‌ساخته قالب با تنوعی چشم‌گیر می‌باشد که به‌لحاظ کیفیت بالا و قیمت مناسب و جلب رضایت مشتریان سهم عمده‌ای از بازار را به‌خود اختصاص داده است.

این شرکت برای حفظ روند دائمی کیفیت تولیدات خود مبادرت به استقرار نظام مدیریت کیفیت نمود و در سال ۱۳۸۰ موفق به دریافت گواهینامه ISO 9002 گردید و در این زمینه نیز پیشگامان می‌باشد.

با توجه به اینکه سیاست کلی شرکت براساس مشتری‌مداری. استفاده از دانش و تکنولوژی روز دنیا، سعی در تأمین نیاز بازار با کیفیت بالا و قیمت مناسب استوار گردیده، لذا خود را متعهد می‌داند با تکیه بر نیروی انسانی کارآمد و توان بالای سخت‌افزاری و سیستم مدیریت کیفیت نسبت به برآورده کردن خواسته مشتریان همیشه آماده و سفارشات مراز صنعتی را طبق مدارک فنی ارائه شده پذیرا باشد.

AZCO, az the first producer of ready-made mould components in IRAN, started its activities in 1989. by using the up to date technology of the world, AZCO Could represent its products to the market of IRAN for the sake of time saving which confronted with welcome reception of the artisans.

Now, AZCO is a leading manufacturer of the above mentioned products with considerable variegation which resulted to gain an outstanding space for its high quality products with reasonable and competitive prices in the market.

For continuation of its products quality, AZCO attempted to establish the "QMS" (Quality Management System) that succeeded to gain the ISO 9002 in 2001 and became the pioneer on that connection.

AZCO considers its policy on the basis of complying with the clients requirements, using the worlds up to date technology, effort in supplying the markets requirements with superior quality and reasonable prices.

AZCO also relies on its dexterous manpower with their high potentiality in using the modern machinery and hardware to create the products which are successfully confirmed by the quality controls management system after attentive experiments.

AZCO is proud of being ready to comply with the orders of industrial centers, in IRAN and foreign countries, according to the International Standard and providing with the technical documentation.

Product Groups


ArasZanjan

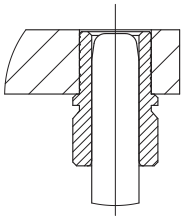
ArasZanjan

DIE SETS

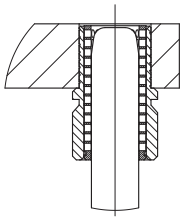

DMC 1035 V eco
DMGECOLINE
DMG
25.622
AZCO
ارس آبجان

Guide System
سیستم راهنما

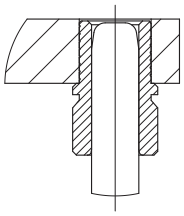
در کفشک‌های چدنی باتوجه به نوع کاربرد آن می‌توان یکی از ۴ سیستم راهنمـای معرفی شـده در این صـفحه را اسـتفاده کرد کـه در کدگـذاری کفشک‌ها نوع سیستم راهنما با /1/، /2/، /3/، و /4/ نشـان داده شده است.



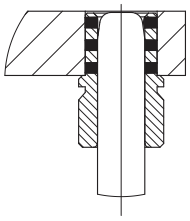
1- Steel Guide Bush
۱- بوش راهنمای فولادی



2- Ball Bearing Duide Bush
۲- بوش راهنمای ساچمه‌ای



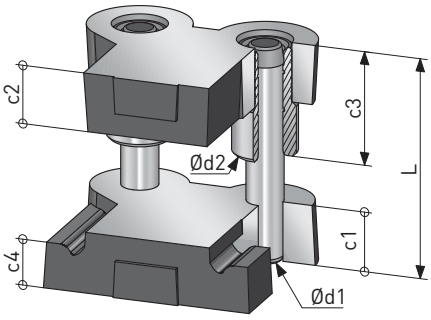
3- Bronze Guide Bush
۳- بوش راهنمای برنزی



4- Bronze Guide Bush with Graphite
۴- بوش راهنمای برنزی همراه با گرافیت

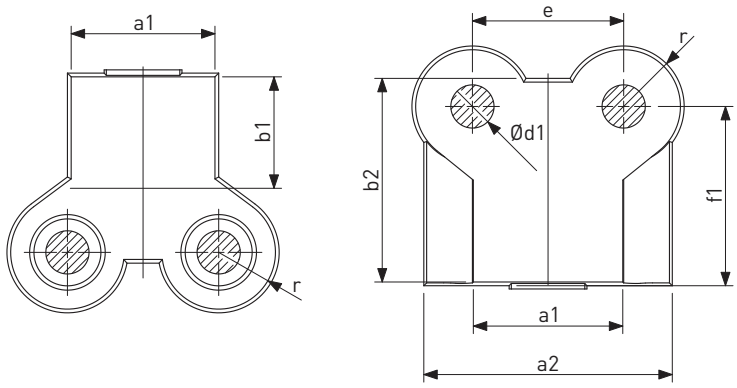
Rectangular Die sets Shape CA1 Cast Iron-Rear Pillars

کفشک سطح کار مستطیل مدل CA1 راهنما عقب (بدون نافی)



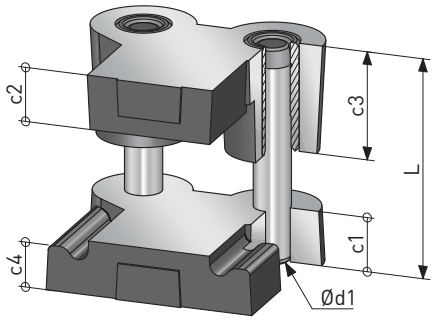
Ordering Code: CA1/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: CA1/70*70/1 Material: Cast Iron Hardness: 160-200 HB

Model	a1*b1	a2	b2	c1±2	c2±2	c3+2	c4	Ød1	Ød2	e	f1±1	L	r
CA1/70*50	70*50	115	85	32	32	60	25	20	36	70	83	120	28
CA1/70*70	70*85		112								103		
CA1/100*60	100*75	145	102	35						100	93		
CA1/100*80	100*90		122								113		
CA1/125*80	125*95	179	130	40	38	75	30	25	42	125	120	140	37
CA1/125*100	125*115		150								140		
CA1/150*100	150*115	204								150			
CA1/160*80	160*100	215	130							160	120		
CA1/160*125	160*135		175	50	45	90		32	50		165	180	
CA1/200*100	200*100	255	150							200	140		



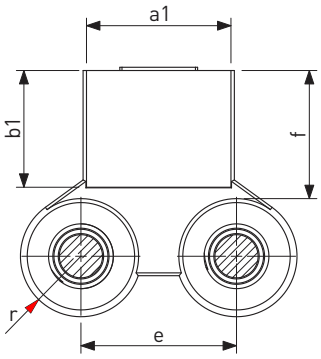
Rectangular Die sets Shape CA Cast Iron-Rear Pillars

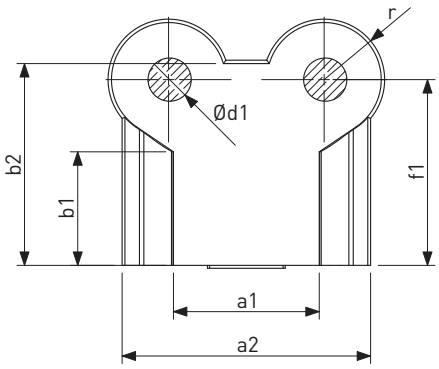
کفشک سطح کار مستطیل مدل CA راهنما عقب



Ordering Code: CA/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: CA/70*70/1 Material: Cast Iron Hardness: 160-200 HB

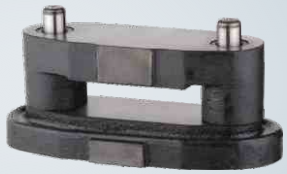
Model	a1*b1	a2	b2	c1±2	c2±2	c3+2	c4	Ød1	e	f	f1±1	L	r
CA/70*70	70*70	115	112	30	25	60	25	20	70	75	103	120	28
CA/100*60	100*60	145	102	35	30				100	65	93		
CA/100*80	100*80		122							85	113		
CA/125*80	125*80	179	130	40	38	75	30	25	125	87	120	140	37
CA/125*100	125*100		150							107	140		
CA/150*100	150*100	204							150				
CA/160*80	160*80	215	130						160	87	120		
CA/160*125	160*125		175	50	40	90		32		132	165	180	
CA/200*100	200*100	255	150						200	107	140		
CA/200*125	200*125		175							132	165		
CA/200*160	200*160		215			100		40		167	205	200	40
CA/250*125	250*125	305	175			90		32	250	132	165	180	37
CA/250*160	250*160		215	55	45	100		40		167	205	220	40
CA/250*200	250*200		260							207	250		45
CA/315*250	315*250	370	312	60	50			45	315	257	302		48

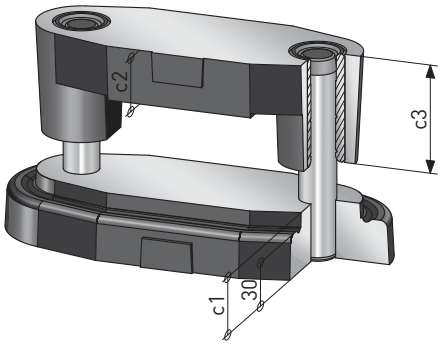




Rectangular Die sets Shape CB Cast Iron-Center Pillars

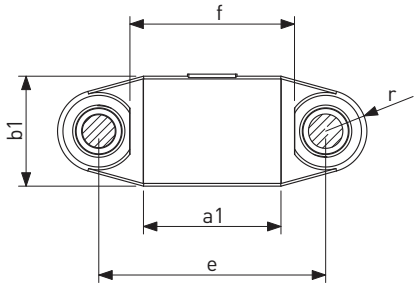
کفشک سطح کار مستطیل مدل CB راهنما وسط

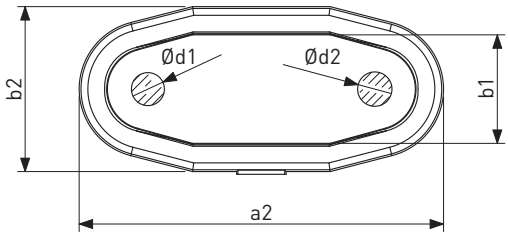




Ordering Code: CB/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: CB/125*80/1 Material: Cast Iron Hardness: 160-200 HB

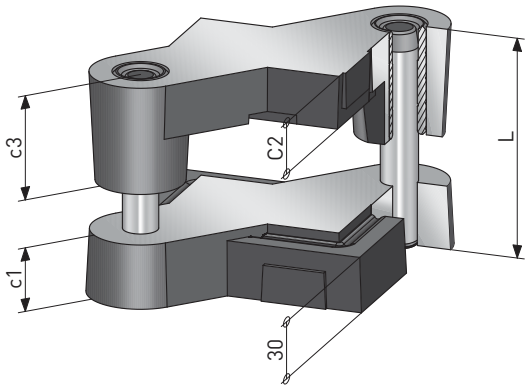
Model	a1*b1	a2	b2	c1±2	c2±2	c3+2	Ød1	Ød2	e	L	r	f
CB/100*80	100*80	265	120	40	38	75	24	25	165	140	30	110
CB/125*80	125*80	290							190			138
CB/125*100	125*100		140									
CB/160*100	160*100	325							225			173
CB/160*125	160*125	354	165	50	40	90	30	32	240	180	37	
CB/200*100	200*100	394	140						280			215
CB/200*125	200*125		165									
CB/200*160	200*160		200									
CB/250*125	250*125	444	165	55	45				330			265
CB/250*160	250*160	456	200						336		40	
CB/250*200	250*200	466	250			100	38	40		220		
CB/315*125	315*125	510	165			90	30	32	395	180	37	335
CB/315*200	315*200	551	250	60	50	100	38	40	411	220	45	
CB/315*250	315*250		300									





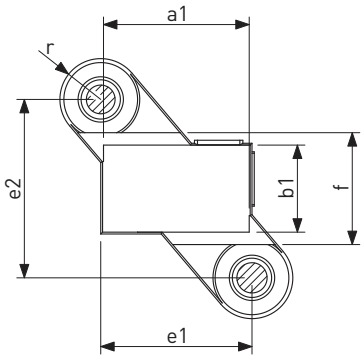
Rectangular Die sets Shape CC Cast Iron-Diagonal Pillars

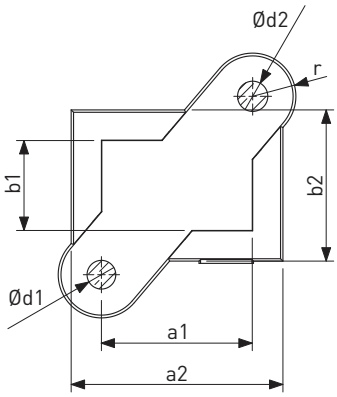
کفشک سطح کار مستطیل مدل CC راهنما قطری



Ordering Code: CC/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: CC/125*80 Material: Cast Iron Hardness: 160-200 HB

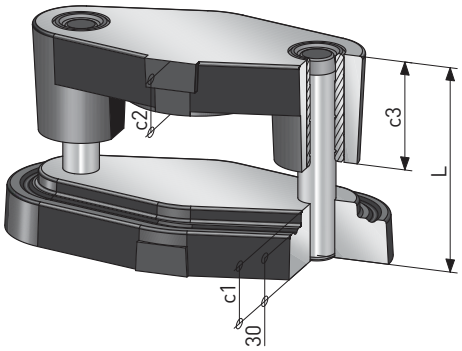
Model	a1*b1	a2	b2	c1±2	c2±2	c3+2	Ød1	Ød2	e1	e2	L	r	f
CC/100*60	100*60	140	100	35	30	60	19	20	100	118	120	27	70
CC/100*80	100*80		120	40	38	75	24	25		144	140	30	90
CC/125*80	125*80	165							125	165			
CC/125*100	125*100		140										110
CC/160*100	160*100	200							160				
CC/160*125	160*125		165	50	40	90	30	32		205	180	37	138
CC/200*100	200*100	240	140						200	180			110
CC/200*125	200*125		165							205			138
CC/200*160	200*160		200							240			174
CC/250*125	250*125	290	165						250	205			138
CC/250*160	250*160		200	55	45					246		40	174
CC/250*200	250*200	300	250			100	38	40		286	220		218
CC/315*125	315*125	355	165			90	30	32	315	204	180	37	138
CC/315*200	315*200	365	250	60	50	100	38	40		302	220	45	218
CC/315*250	315*250		300							346			268





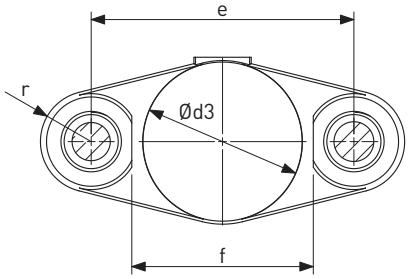
Rectangular Die sets Shape CD Cast Iron-Center Pillars

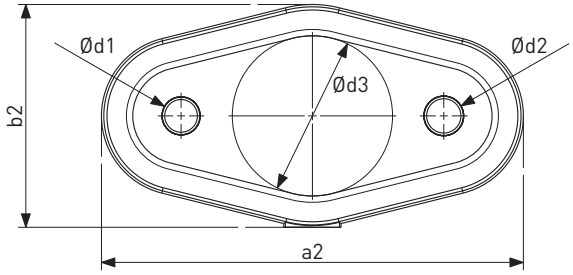
کفشک سطح کار گرد مدل CD
راهنما وسط



Ordering Code: CD/Ød3/1 or 2 or 3 or 4 Ordering Code Example: CD/125 Material: Cast Iron Hardness: 160-200 HB

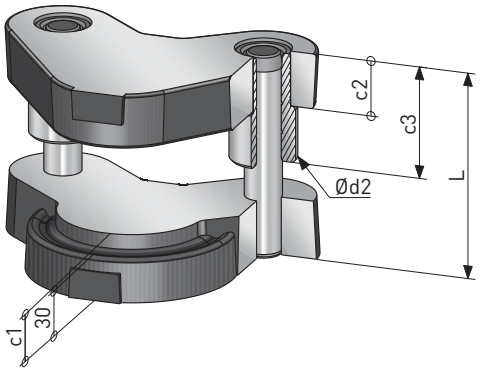
Model	a2	b2	c1±2	c2±2	c3+2	Ød1	Ød2	Ød3	e	L	r	f
CD/100	265	140	40	38	75	24	25	100	165	140	30	110
CD/125	290	165						125	190			135
CD/160	354	200	50	40	90	30	32	160	240	180	37	170
CD/180	380	226						180	260			190
CD/200	400	246						200	280			215
CD/250	466	300	55	45	100	38	40	250	336	220	40	265





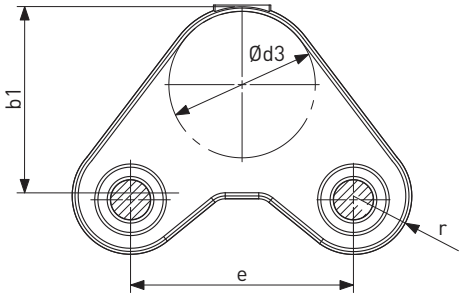
Rectangular Die sets Shape CG Cast Iron-Rear Pillars

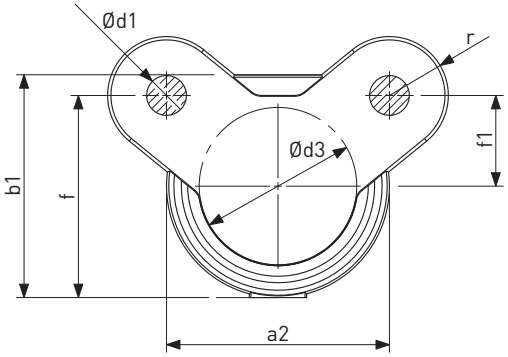
کفشک سطح کار گرد مدل CG راهنما عقب



Ordering Code: CG/Ød3/1 or 2 or 3 or 4 Ordering Code Example: CG/100/1 Material: Cast Iron Hardness: 160-200 HB

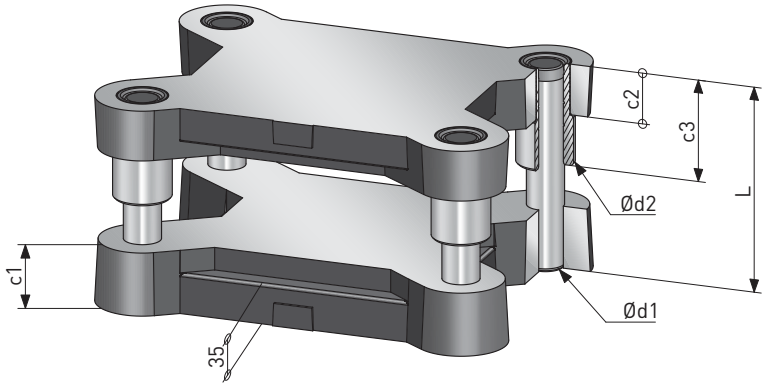
Model	a2	b1	b3	c1±2	c2±2	c3+2	Ød1	Ød2	Ød3	e	f	f1	L	r
CG/100	140	140	120	40	38	75	25	42	100	140	127	57	140	37
CG/125	166	166	145						125	157	146	63		
CG/160	200	200	180	50	45	90	32	50	160	200	185	85	180	42
CG/180	230	230	205	55	50	100	40	60	180	230	205	90	220	48
CG/200	250	250	225						200	250	220	95		50
CG/250	300	300	275						250	300	270	120		





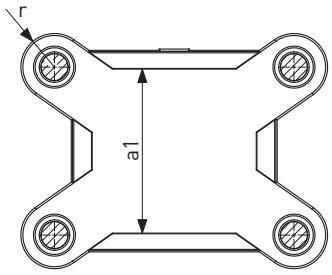
Rectangular Die sets Shape CH Cast Iron-Four Pillars

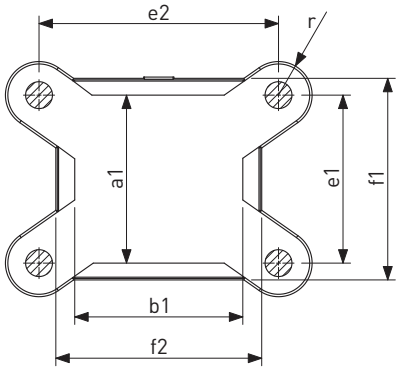
کفشک سطح کار مستطیل مدل CH چهارراهنما



Ordering Code: CH/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: CH/200*200/1 Material: Cast Iron Hardness: 160-200 HB

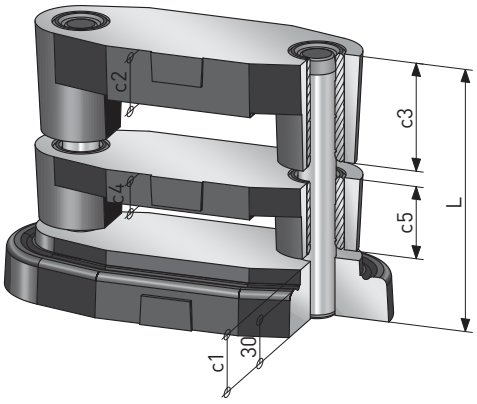
Model	a1*b1	c1±2	c2±2	c3+2	Ød1	Ød2	e1	e2	f1	f2	L	r
CH/200*200	200*200	55	45	90	32	50	200	285	240	245	180	40
CH/250*160	250*160						250	245	290	205		
CH/250*200	250*200							285		245		
CH/375*160	375*160						375	245	420	205		
CH/250*250	250*250						250	335	290	295		
CH/350*200	350*200	60	50				350	290	400	245		43
CH/300*250	300*250						300	340	350	295		
CH/300*300	300*300			100	40	60		390		345	220	
CH/400*250	400*250						400	340	460	295		
CH/400*300	400*300	65	55					395		345		45
CH/350*350	350*350						350	445	400	395		
CH/500*250	500*250						500	345	560	295		
CH/500*300	500*300							395		345		
CH/400*400	400*400						400	495	460	445		
CH/500*400	500*400						500		560			





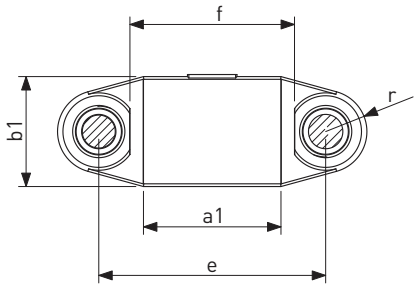
Rectangular Die sets Shape AB Cast Iron-Center Pillars

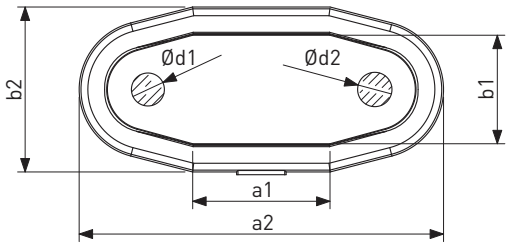
کفشک سه صفحه‌ای سطح کار مستطیل مدل AB -راهنما وسط



Ordering Code: AB/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: AB/160*100/1 Material: Cast Iron Hardness: 160-200 HB

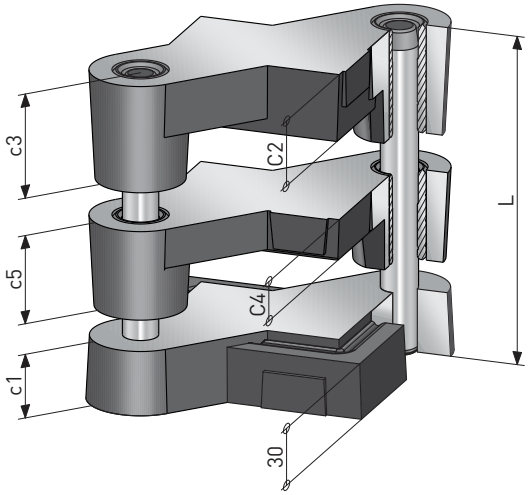
Model	a1*b1	a2	b2±2	c1±2	c2±2	c3±2	c4±2	c5±2	Ød1	Ød2	e	L	r	f
AB/160*100	160*100	325	140	40	38	60	23	50	24	25	225	180	30	173
AB/160*125	160*125	354	165	50	40		27		30	32	240		37	
AB/200*125	200*125	394									280			215
AB/200*160	200*160		200			70						200		
AB/250*160	250*160	456		55	45				38	40	336	220	40	265
AB/250*200	250*200	466	250				32	55						





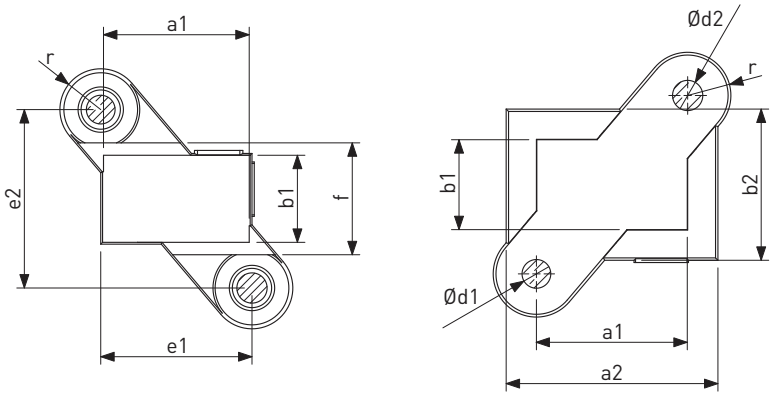
Rectangular Die sets Shape AC Cast Iron-Diagonal Pillars

کفشک سه صفحه‌ای سطح کار مستطیل مدل AC -راهنما قطری



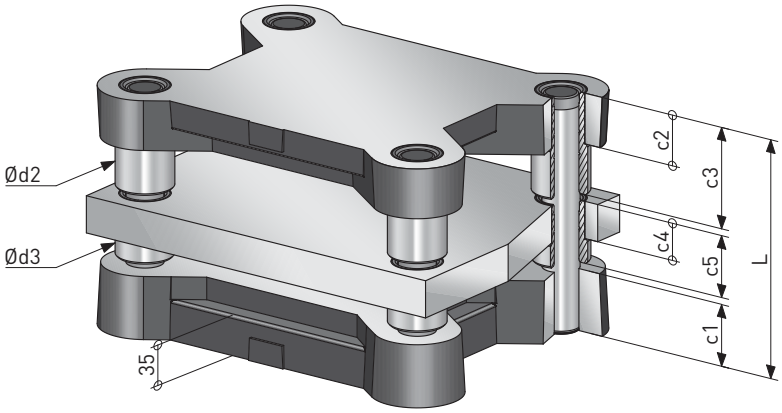
Ordering Code: AC/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: AC/125*100/1 Material: Cast Iron Hardness: 160-200 HB

Model	a1*b1	a2	b2	c1±2	c2±2	c3±2	c4±2	c5±2	Ød1	Ød2	e	e2	L	r	f
AC/125*100	125*100	165	140	40	38	60	23	50	24	25	125	165	180	30	110
AC/160*100	160*100	200									160				
AC/160*125	160*125		165	50	40		27		30	32		205		37	138
AC/200*125	200*125	240									200				
AC/250*160	250*160	290	200	55	45	70			38	40	250	246	220	40	174



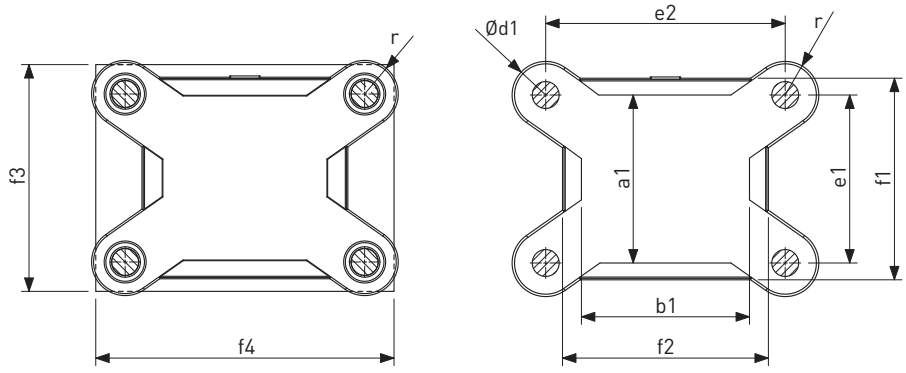
Rectangular Die sets Shape AH Cast Iron-Four Pillars

کفشک سه صفحه‌ای سطح کار مستطیل AH - چهار راهنما



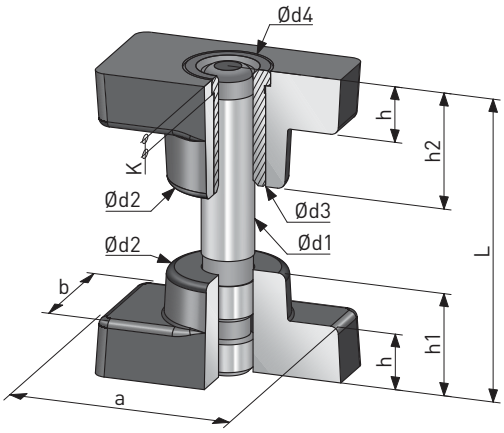
Ordering Code: AH/a1*b1/1 or 2 or 3 or 4 Ordering Code Example: AH/200*200/1 Material: Cast Iron Hardness: 160-200 HB

Model	a1*b1	c1±2	c2±2	c3	c4±2	c5	Ød1	Ød2	Ød3	e1	e2	L	r	f1 +5 0	f2 +5 0	f3	f4
AH/200*200	200*200	55	45	90	33	55	32	50	54	200	285	200	40	250	250	355	270
AH/250*160	250*160									250	245			300	210	315	310
AH/250*200	250*200										285				250	355	320
AH/375*160	375*160									375	245			430	210	315	445
AH/250*250	250*250									250	335			300	300	405	320
AH/350*200	350*200	60	50							350	290	220	43	400	250	360	420
AH/300*250	300*250									300	340			350	300	420	370
AH/300*300	300*300			100			40	60	65		390				350	470	380
AH/400*250	400*250									400	340			470	300	420	480
AH/400*300	400*300	65	55		38	60					395	240	45		350	480	
AH/350*350	350*350									350	445			420	400	530	430
AH/500*250	500*250									500	345			570	300	430	580
AH/500*300	500*300										395				350	480	
AH/400*400	400*400									400	495			470	400	575	480
AH/500*400	500*400									500				570	450		580



Rectangular Mounting Flanges for Guide Pillars and Guide Bushes Without Screw Holes

فلانچ چدنی مستطیل شکل (بدون سوراخ)



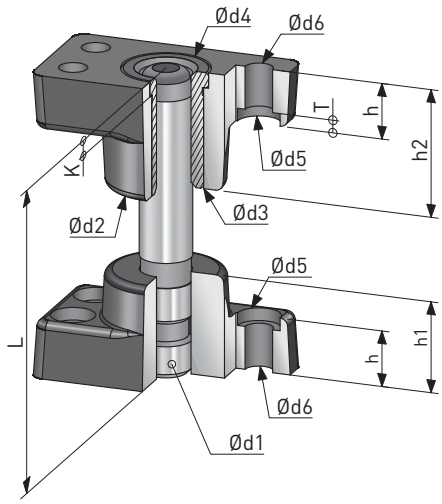
Ordering Code: FL/Ød*L/1 or 2 or 3 or 4 Ordering Code Example: FL/20*120/1 Material: Cast Iron Hardness: 160-200 HB

Model	Ød1	Ød2	Ød3	Ød4	a	b	k	h	h1	h2	L
FL/20	20	50	30	35	90	50	7	22	40	45	120
											150
											180
FL/25	25		35	40							120
											150
											180
FL/30	30	65	44	49	115	65		25	50	56	120
											150
											180
											200
FL/40	40	85	54	59	130	90		30	60	70	150
											180
											200
											220
											250
											300
FL/50	50	96	65	70	160	100		35	65	90	150
											180
											200
											250
											300
FL/60	60	120	75	80	180	120			90	100	200
											220
											250
											280
											300
FL/80	80	140	100	106	225	145	11	40	100	120	220
											250
											280
											300
											350
FL/100	100	180	120	129	270	180			120	150	280
											300
											350
											400

در فلنچ ساچمه‌ای FL/25 از کفی ۳۰ و در فلنچ ساچمه‌ای FL/30 از کفی ۴۰ استفاده می‌شود

Rectangular Mounting Flanges for Guide Pillars and Guide Bushes With Screw Holes

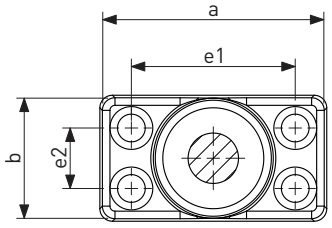
فلانچ چدنی مستطیل شکل (با سوراخ)



Ordering Code: FL1/Ød*L/1 or 2 or 3 or 4 Ordering Code Example: FL1/20*120/1 Material: Cast Iron Hardness: 160-200 HB

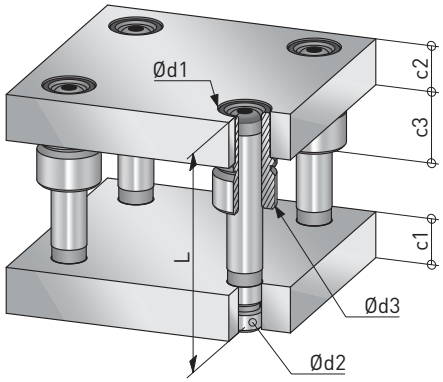
Model	Ød1	Ød2	Ød3	Ød4	Ød5	Ød6	T	a	b	k	h	h1	h2	e1	e2	L
FL1/20	20	50	30	35	17	11	5	90	50	7	22	40	45	65	24	120
																150
																180
FL1/25	25		35	40												120
																150
																180
FL1/30	30	65	44	49				115	65		25	50	56	85	35	120
																150
																180
																200
FL/40	40	85	54	59				130	90		30	60	70	98	48	150
																180
																200
																220
																250
																300
FL1/50	50	96	65	70	19	13	6	160	100		35	65	90	120	55	150
																180
																200
																250
																300
FL1/60	60	120	75	80				180	120			90	100	145	85	200
																220
																250
																280
																300
FL1/80	80	140	100	106			8	225	145	11	40	100	120	175	100	220
																250
																280
																300
																350
FL1/100	100	180	120	129	22	15		270	180			120	150	210	115	280
																300
																350
																400

در فلنچ ساچمه‌ای FL/25 از کفی ۳۰ و در فلنچ ساچمه‌ای FL/30 از کفی ۴۰ استفاده می‌شود



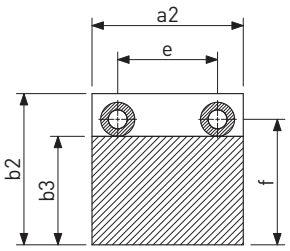
Standard All - Steel Die sets Without Stripper

کفشک فولادی دو صفحه ای

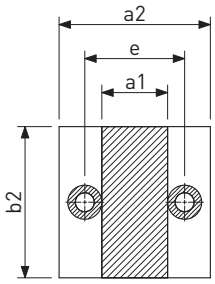


Ordering Code: SA or SB or SC or SH/a2*b2/1 or 2 or 3 or 4 Ordering Code Example: SA/200*100/1 Material: St 37 or St 52

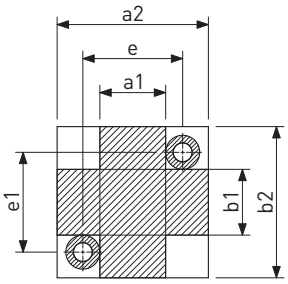
Model (a2*b2)	a1*b2	a2*b1	a2*b3	c1±2	c2±2	c3	Ød1	Ød2	Ød3	L	e	e1	e2	f
200*100	87*100	-	200*43	34	34	38	38	25	45	160	132	-	-	66
200*200	87*200	200*87	200*143									132	137	166
250*160	137*160	250*47	250*103								182	92	97	126
250*200	137*200	250*87	250*143									132	137	166
250*250	120*250	250*120	250*185	38	38	44	45	32	54	180	174	174	179	212
315*200	185*200	315*70	315*135								239	124	129	162
315*250	185*250	315*120	315*185									174	179	212
315*315	185*315	315*185	315*250									239	244	277
400*200	270*200	400*70	400*135								324	124	129	162
400*250	270*250	400*120	400*185									174	179	212
400*315	270*315	400*185	400*250									239	244	277
400*400	270*400	400*270	400*335									324	329	362
500*200	370*200	500*70	500*135								424	124	129	162
500*250	347*250	500*97	500*173	43	43	49	58	40	65	200	412	162	167	206
500*315	347*315	500*162	500*238									227	232	271
500*400	347*400	500*247	500*323									312	317	356
500*500	318*500	500*318	500*409	48	48	54	70	50	80	220	398	398	403	449
630*200	477*200	630*47	630*123	43	43	49	58	40	65	200	542	112	117	156
630*250	477*250	630*97	630*173									162	167	206
630*315	477*315	630*162	630*238									227	232	271
630*400	448*400	630*218	630*309	48	48	54	70	50	80	220	528	298	303	349
630*500	448*500	630*318	630*409									398	403	449
710*315	528*315	710*133	710*224								608	213	218	264
710*400	528*400	710*218	710*309									298	303	349
710*500	528*500	710*318	710*409									398	403	449
710*710	506*710	710*506	710*608	57	57		80	60	90	280	596	596	601	653
800*315	618*315	800*133	800*224	48	48		70	50	80	220	698	213	218	264
800*400	618*400	800*218	800*309									298	303	349
800*500	618*500	800*318	800*409									398	403	449
800*630	618*630	800*448	800*539									528	533	579
800*710	596*710	500*506	800*608	57	57		80	60	90	280	686	596	601	653
800*800	596*800	800*596	800*698									686	691	698
900*400	696*400	900*196	900*298								786	286	291	298
900*500	696*500	900*296	900*398									386	391	443
900*630	696*630	900*426	900*528									516	521	573
900*710	696*710	900*506	900*608									596	601	653
900*800	696*800	900*596	900*698									686	691	743
1000*500	796*500	1000*296	1000*398								886	386	491	443
1000*630	796*630	1000*426	1000*528									516	521	573
1000*710	796*710	1000*506	1000*608									596	601	653



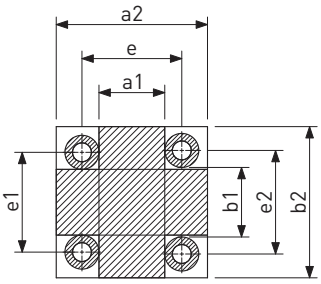
SA



SB



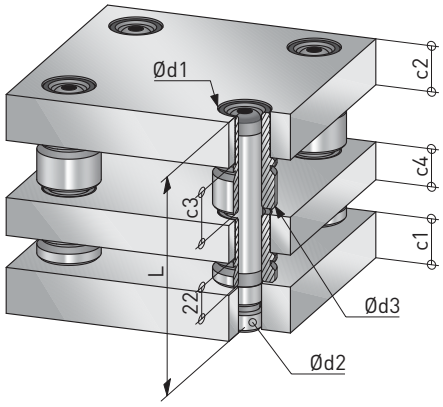
SC



SH

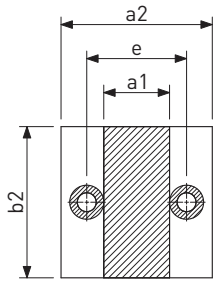
Standard All - Die sets With Stripper

کفشک فولادی سه صفحه‌ای

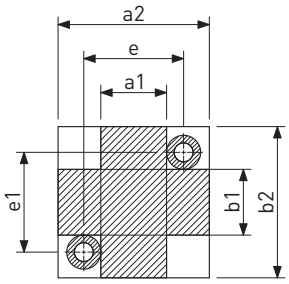


Ordering Code: ASB or ASC or ASH/a2*b2/1 or 2 or 3 or 4 Ordering Code Example: ASH/200*100/1 Material: St 37 or St 52

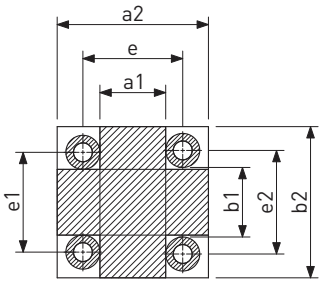
Model (a2*b2)	a1*b2	a2*b1	c1±2	c2±2	c3	c4	Ød1	Ød2	Ød3	L	e	e1	e2
200*100	87*100	-	34	34	38	28	38	25	45	160	132	-	-
200*200	87*200	200*87										132	137
250*160	137*160	250*47									182	92	97
250*200	137*200	250*87										132	137
250*250	120*250	250*120	38	38	44	33	45	32	54	180	174	174	179
315*200	185*200	315*70									239	124	129
315*250	185*250	315*120										174	179
315*315	185*315	315*185										239	244
400*200	270*200	400*70									324	124	129
400*250	270*250	400*120										174	179
400*315	270*315	400*185										239	244
400*400	270*400	400*270										324	329
500*200	370*200	500*70									424	124	129
500*250	347*250	500*97	43	43	49		58	40	65	200	412	162	167
500*315	347*315	500*162										227	232
500*400	347*400	500*247										312	317
500*500	318*500	500*318	48	48	54		70	50	80	220	398	398	403
630*200	477*200	630*47	43	43	49		58	40	65	200	542	112	117
630*250	477*250	630*97										162	167
630*315	477*315	630*162										227	232
630*400	448*400	630*218	48	48	54	38	70	50	80	220	528	298	303
630*500	448*500	630*318										398	403
710*315	528*315	710*133									608	213	218
710*400	528*400	710*218										298	303
710*500	528*500	710*318										398	403
710*710	506*710	710*506	57	57			80	60	90	280	596	596	601
800*315	618*315	800*133	48	48			70	50	80	220	698	213	218
800*400	618*400	800*218										298	303
800*500	618*500	800*318										398	403
800*630	618*630	800*448										528	533
800*710	596*710	500*506	57	57			80	60	90	280	686	596	601
800*800	596*800	800*596										686	691
900*400	696*400	900*196									786	286	291
900*500	696*500	900*296										386	391
900*630	696*630	900*426										516	521
900*710	696*710	900*506										596	601
900*800	696*800	900*596										686	691
1000*500	796*500	1000*296									886	386	403
1000*630	796*630	1000*426										516	521
1000*710	796*710	1000*506										596	601



ASB

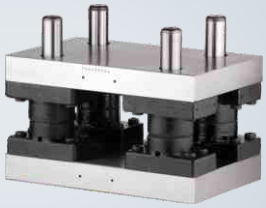


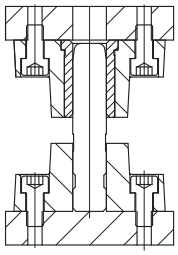
ASC



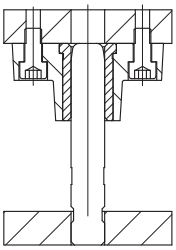
ASH

Steel Die sets
With Cast Iron Flanges
کفشک فولادی مجهز به فلانچ چدنی

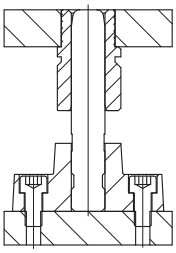




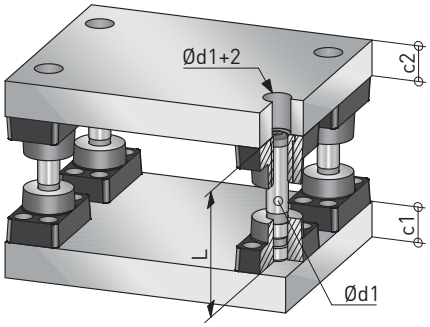
FL



FP



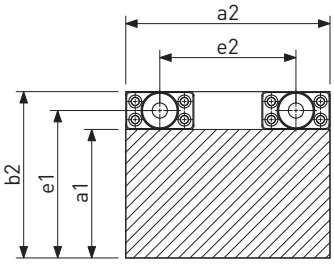
FB



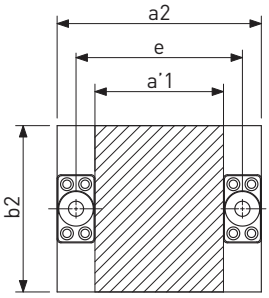
Ordering Code: FSA or FSB or FSC or FSH/a2*b2/FL or FP or Fb1 or 2 or 3 or 4 Ordering Code Example: FSA/200*100/1 Material: St 37 or St 52

Model (a2*b2)	a1*b2	a,1*b2	c1±2	c2±2	Ød1	L	e	e1	e2	e3	e4
200*100	50*200	100*100	34	34	25	150	150	75	110	10	5
200*200	150*200	100*200						175		110	105
250*160	110*250	150*160					200	135	160	70	65
250*200	150*200	150*200						175		110	105
250*250	185*250	120*250	38	38	30	180	185	217.5	135	135	130
315*200	135*315	185*200					250	167.5	200	85	80
315*250	185*315	185*250						217.5		135	130
315*315	250*315	185*315						282.5		200	195
400*200	135*400	270*200					335	167.5	285	85	80
400*250	185*400	270*250						217.5		135	130
400*315	250*400	270*315						282.5		200	195
400*400	335*400	270*400						367.5		285	280
500*200	135*500	370*200					435	167.5	385	85	80
500*250	160*500	220*250	43	43	40	200	410	205	370	120	115
500*315	225*500	220*315						270		185	180
500*400	310*500	220*400						355		270	265
500*500	400*500	300*500	48	48	50	200	400	450	340	340	335
630*200	110*630	450*200	43	43	40	200	540	155	500	70	65
630*250	160*630	450*250						205		120	115
630*315	225*630	450*315						270		185	180
630*400	300*630	430*400	48	48	50	220	530	350	470	240	235
630*500	400*630	430*500						450		340	335
710*315	215*710	510*315					610	265	550	155	150
710*400	300*710	510*400						350		240	235
710*500	400*500	510*500						450		340	335
710*710	590*710	470*710	57	57	60	280	590	650	530	530	525
800*315	215*800	600*315	48	48	50	220	700	265	640	155	150
800*400	300*800	600*400						350		240	235
800*500	400*800	600*500						450		340	335
800*630	530*800	600*630						580		470	465
800*710	590*800	560*710	57	57	60	280	680	650	620	530	525
800*800	680*800	560*800						740		620	615
900*400	280*900	660*400					780	340	720	220	215
900*500	380*900	660*500						440		320	315
900*630	510*900	660*630						570		450	445
900*710	590*900	660*710						650		530	525
900*800	680*900	660*800						740		620	615
1000*500	380*1000	760*500					880	440	820	320	315
1000*630	510*1000	760*630						570		450	445
1000*710	590*1000	760*710						650		530	525

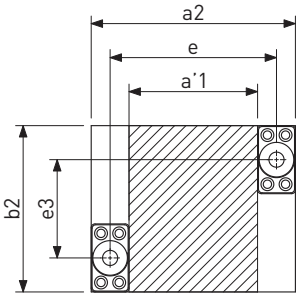
در فلنج ساچمه‌ای FL/25 از کفی ۳۰ و در فلنج ساچمه‌ای FL/30 از کفی ۴۰ استفاده می‌شود



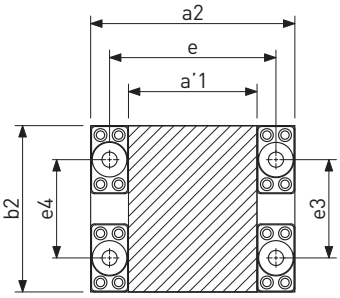
FSA



FSB



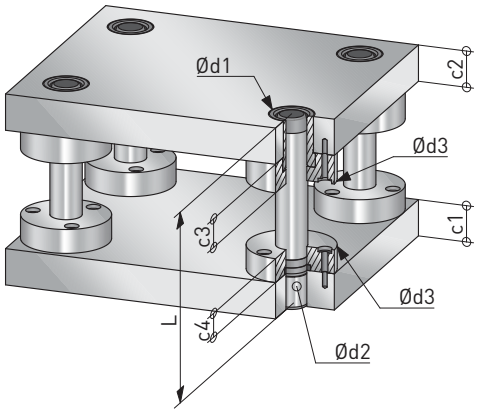
FSC



FSH

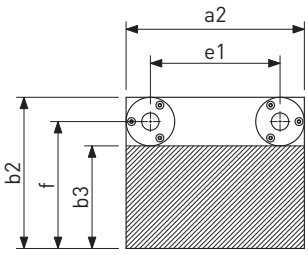
Special Steel Die set, Equipped With Steel Flange

کفشک فولادی خاص
مجهز به فلانچ فولادی

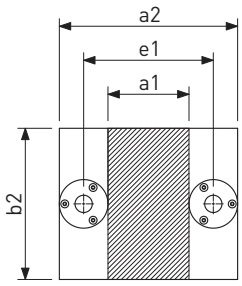


Ordering Code: SSA or SSB or SSC or SSH/a2*b2/1 or 2 or 3 or 4 Ordering Code Example: SSA/400*200/1 Material: St 37 or St 52

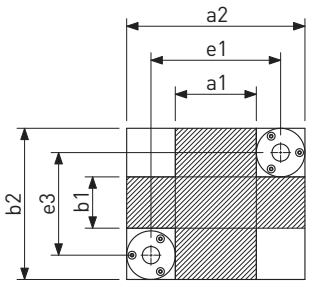
Model (a2*b2)	a2*b1	a2*b3	a1*b2	c1±2	c2±2	c3	c4	Ød1	Ød2	Ød3	L	e1	e2	e3	f
250*250	250*70	250*70	70*250	38	38	30	25	45	32	90	180	160	160	170	205
315*200	315*20	315*110	135*200									225	110	120	155
315*250	315*70	315*160	135*250										160	170	205
315*315	315*135	315*225	135*315										225	235	270
400*200	400*20	400*110	220*200									310	110	120	155
400*250	400*70	400*160	220*250										160	170	205
400*315	400*135	400*225	220*315										225	235	270
400*400	400*220	400*310	220*400										310	320	355
500*200	500*20	500*110	320*200									410	110	120	155
500*250	500*50	500*150	300*250	43	43	35	30	58	40	100	200	400	150	160	200
500*315	500*115	500*215	300*315										215	225	265
500*400	500*200	500*300	500*400										300	310	350
500*500	500*280	500*390	280*500	48	48			70	50	110	220	390	390	400	445
630*200	-	630*100	430*200	43	43			58	40	100	200	530	-	-	150
630*250	630*50	630*150	430*250										150	160	200
630*315	630*115	630*215	430*315										215	225	265
630*400	630*180	630*290	410*400	48	48			70	50	110	220	520	290	300	345
630*500	630*280	630*390	410*500										390	400	445
710*315	710*95	710*205	490*315									600	205	215	260
710*400	710*180	710*290	490*400										290	300	345
710*500	710*280	710*390	490*500										390	400	445
710*710	710*460	710*590	470*70	57	57				60			590	580	590	650
800*315	800*85	800*205	580*315	48	48				50			690	195	205	260
800*400	800*170	800*290	580*400										290	300	345
800*500	800*270	800*390	580*500										390	400	445
800*630	800*400	800*520	580*630										510	520	575
800*710	800*460	800*590	560*710	57	57	40	35	100	60	120	280	680	580	590	650
800*800	800*550	800*680	560*800										670	680	740
900*400	900*150	900*280	660*400									780	270	280	340
900*500	900*250	900*380	660*500										370	380	440
900*630	900*380	900*510	660*630										500	510	570
900*710	900*460	900*590	660*710										580	590	650
900*800	900*550	900*380	660*800										670	680	740
1000*500	1000*250	1000*380	760*500									880	370	380	440
1000*630	1000*380	1000*510	760*630										500	510	570
1000*710	1000*460	1000*590	760*710										580	590	650



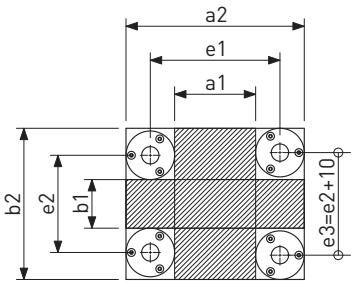
SSA



SSB

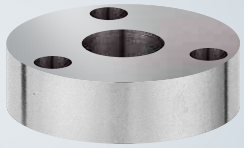


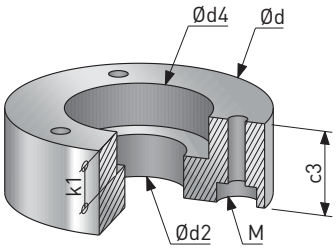
SSC



SSH

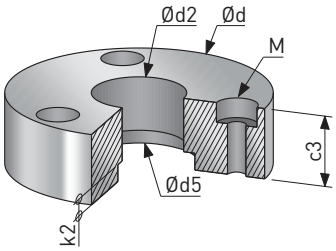
Steel Flange
فلانچ فولادی





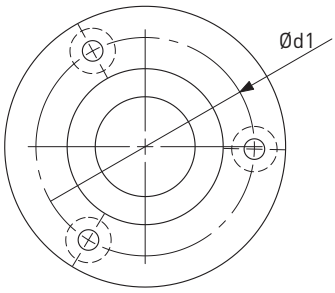
Material: St 37

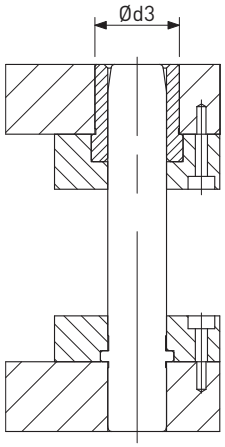
Model	Ød	Ød1	Ød2	Ød3	Ød4	c3	k1	M
GB/NF/32	90	70	32	46	50	30	15	6
GB/NF/40	100	79	40	54	58	35		
GB/NF/50	110	89.5	50	65	69		20	
GB/NF/60	120	99.5	60	75	79	40		



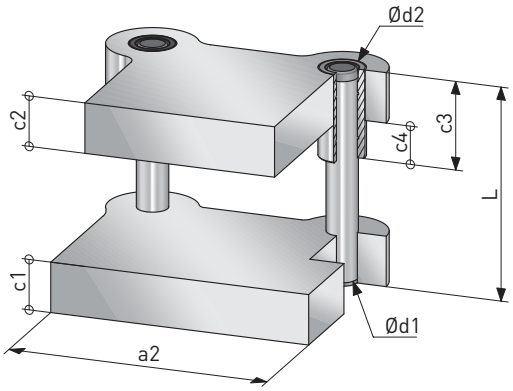
Material: St 37

Model	Ød	Ød1	Ød2	Ød5	c3	k2	M
GP/NF/32	90	70	32	40	25	6	6
GP/NF/40	100	79	40	50	30		
GP/NF/50	110	89.5	50	63			
GP/NF/60	120	99.5	60	80	35		



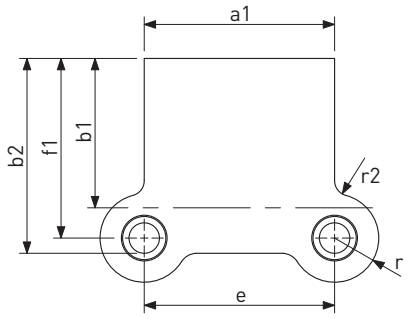


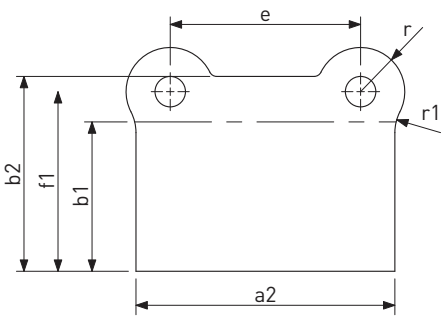
Steel Die set CA1 Model
کفشک فولادی مدل چدنی (اقتصادی)



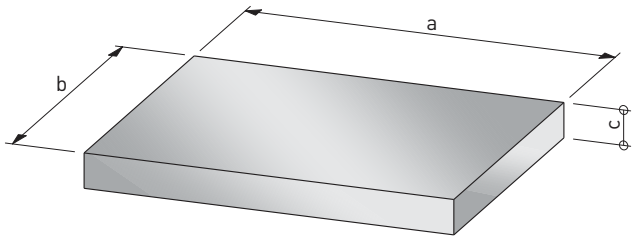
Ordering Code: CA/St/a1*b1/ 1 or 2 or 3 or 4 Ordering Code Example: CA/St/200*100/1 Material: St 37

Model (a2*b2)	a1*b1	a2	b2	c1	c2	c3	c4	Ød1	Ød2	L	e	f1	r	r1	r2
CA/ST/100*80	100*80	145	113	24	24	60	25	20	30	120	100	98	29	20	15
CA/ST/125*100	125*100	170	128	33	33		34			140	125	118		30	
CA/ST/150*100	150*100	200	133			68	35	24	38	160	150	123	35		20
CA/ST/160*125	160*125	210	175								160	165			
CA/ST/200*125	200*125	250	163								200	148			
CA/ST/200*160	200*160		198			70		32	44	200		183			
CA/ST/250*125	250*125	305	175	38	38	80	37				250	165	37	35	25
CA/ST/250*160	250*160		215				32					205			
CA/ST/250*200	250*200		260									250			





Steel Plates
صفحه فولادی



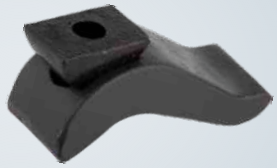
Ordering Code: CA/St/a1*b1/ 1 or 2 or 3 or 4 Ordering Code Example: CA/St/200*100/1 Material: St 37

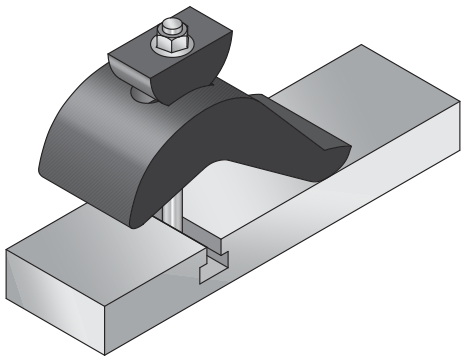
	c±2				
Z (a*b)	34	38	43	48	57
200*100	●				
200*200	●				
250*160	●				
250*200	●				
250*250		●			
315*200		●			
315*250		●			
315*315		●			
400*200		●			
400*250		●			
400*315		●			
400*400		●			
500*200		●			
500*250			●		
500*315			●		
500*400			●		
500*500				●	
630*200			●		
630*250			●		
630*315			●		

	c±2				
Z (a*b)	34	38	43	48	57
630*400				●	
630*500				●	
710*315				●	
710*400				●	
710*500				●	
710*710					●
800*315				●	
800*400				●	
800*500				●	
800*630				●	
800*710					●
800*800					●
900*400					●
900*500					●
900*630					●
900*710					●
900*800					●
1000*500					●
1000*630					●
1000*710					●

CLAMPS

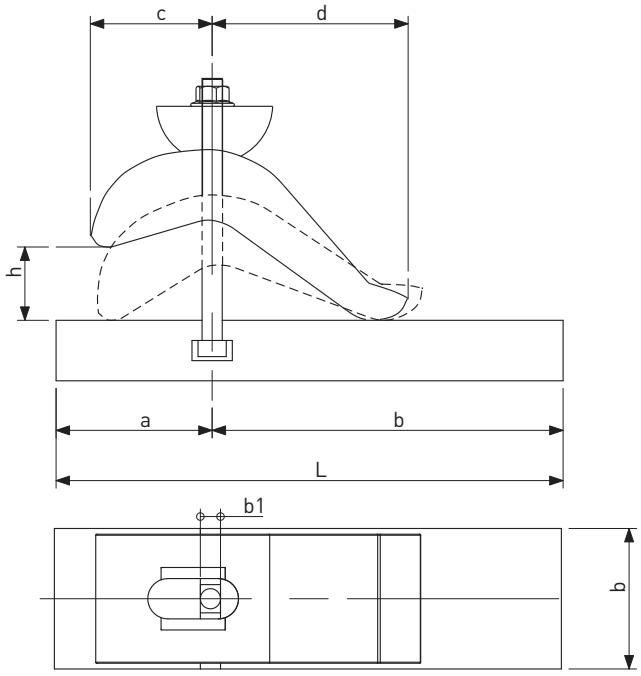
Clamp
کلمپ



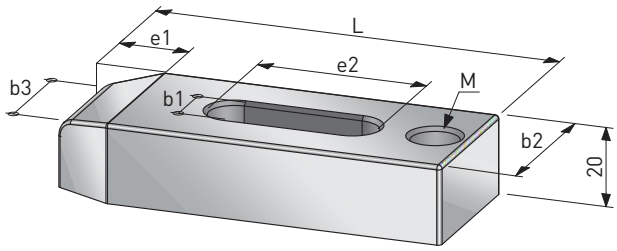


Ordering Code: U.P/L*P Ordering Code Example: U.P/140*50 Material: GGG 60

Model	b1	b	c	d	h	L
U.P/140*50	17	50	55	60	75	140
U.P/175*60	21	60	70	80	85	175



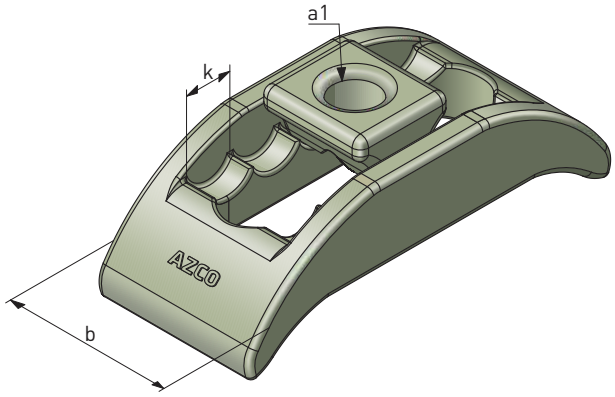
CLAMP
کلمپ



Ordering Code: F.CL/b1 Ordering Code Example: F.CL/14 Material: GGG 60

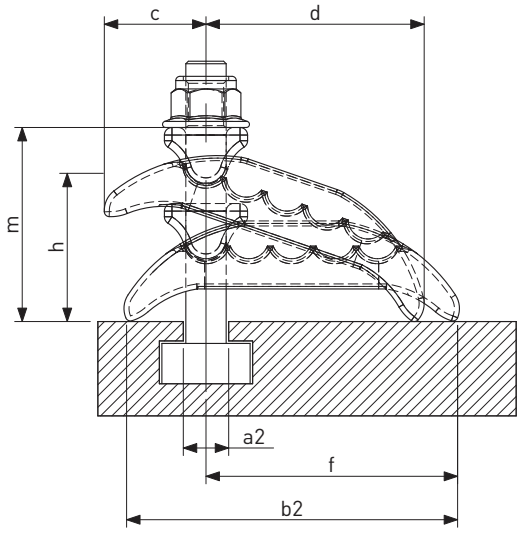
Model	L	b1	b2	b3	a	e1	e2	M
F/CL/14	100	14	40	18	20	21	40	14
F/CL/18	125	18	50	22	25	26	45	16
F/CL/22	160	22	60	26	30	30	60	20
F/CL/26	200	26	70	30		35	80	24
F/CL/28	247	29	80	45	45	62	100	

Clamp, Infitely Variable
روبند قابل تنظیم ارتفاع (فولادی)

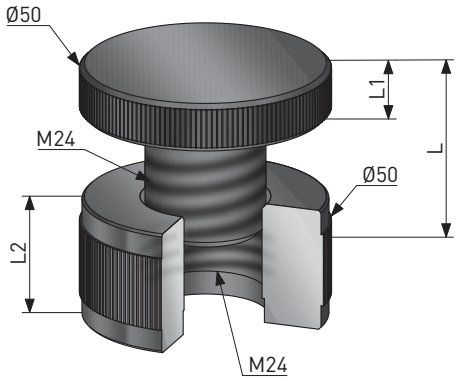


Ordering Code: G.CL/b1/a2 Ordering Code Example: G.CL/38/13 Material: Forged & Heat-Treated Steel

Model	h	a1	a2	b1	b2	c	d	f	k	m	M
G/CL/38/13	0-35	12,14	13	88	38	28	48	68	14	52	12
G/CL/56/18	0-55	16,18	18	130	56	38	101	101	18	80	16
G/CL/66/22	0-65	20,22	22	140	66	46	112	112	20	98	20
G/CL/76/26	0-75	24,28	26	174	76	52	135	135	24	110	24
G/CL/90/32	0-80	36	32	200	90	61	156	156	28	118	30



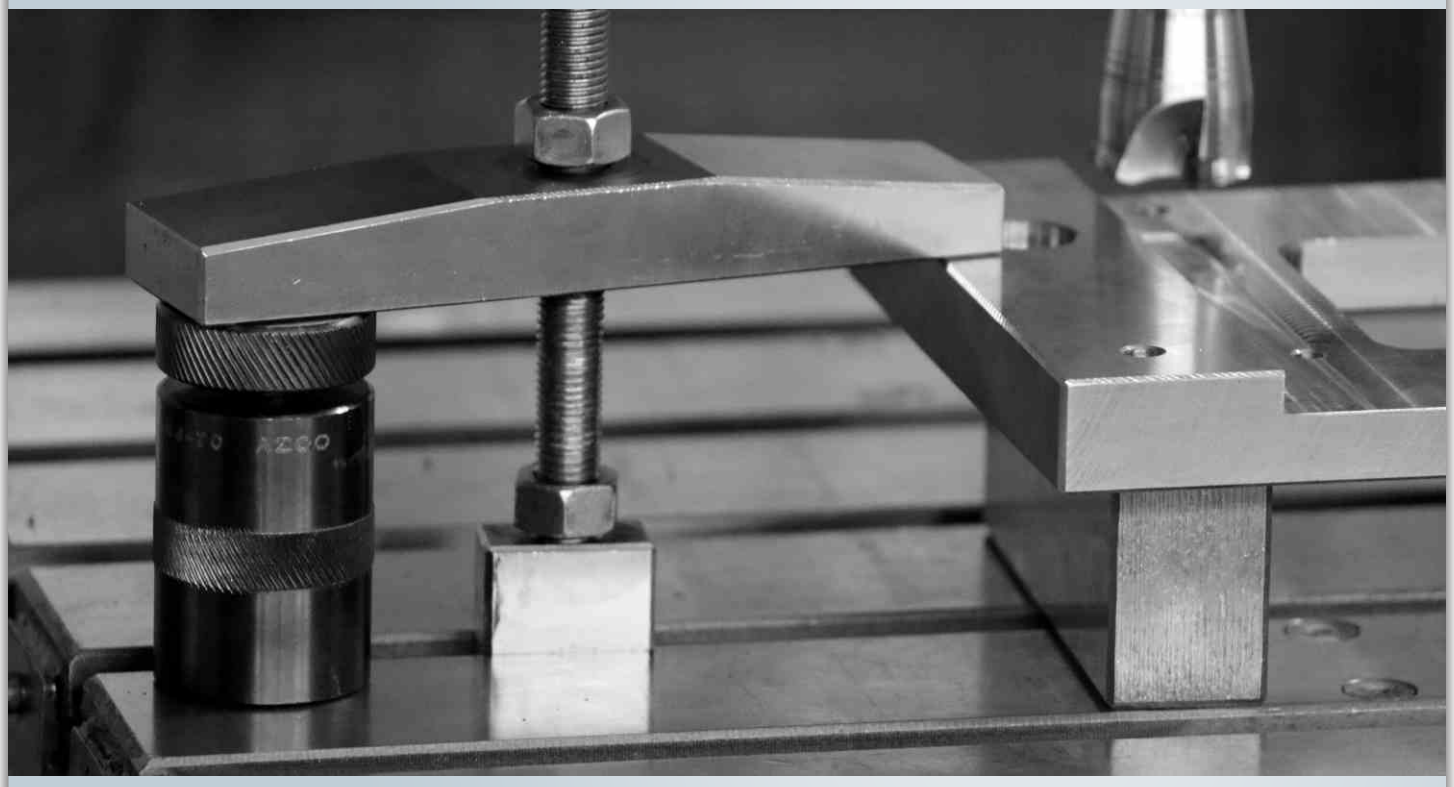
Support, Adjustable
زیر سری



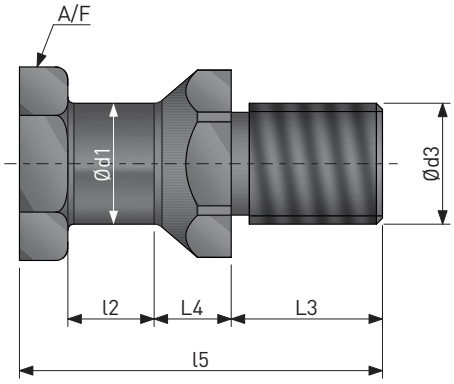
Ordering Code: Sj/L2 Ordering Code Example: Sj/L25

Model	L	L1	L2
Sj/25	35	10	25
Sj/50	65	16	50
Sj/70			70

ArasZanjan



Screw-in Lifter Studs
بارگیر پیچی



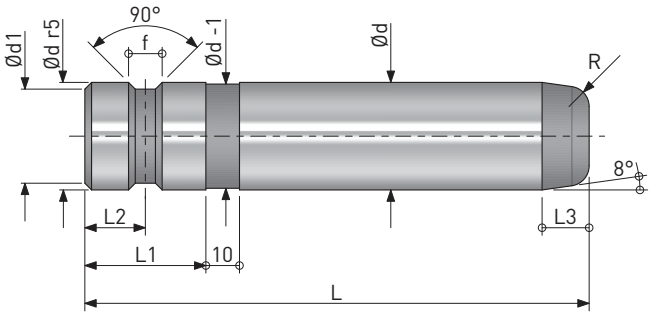
Ordering Code: S/LS Material: St 37

Model	Ød	Ød3	l2	l3	l4	l5	A/F	Lifting Capacity(kg)
S/LS	20	M20	14	25	13	60	32	500

ArasZanjan

GUIDE PILLARS & BUSHES

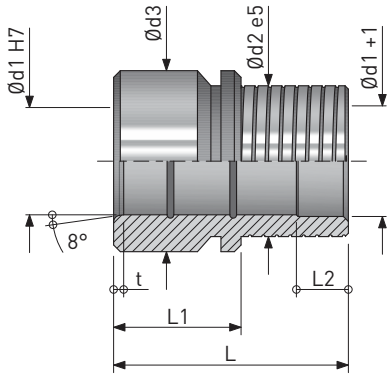
Guide Pillar S Model
میل‌راهنمای مدل S



Ordering Code: GP/S/Ød*L Ordering Code Example: GP/S/20*100 Material: 1.2067, 1.8159 Deep Hardness: 60 + 3 HRC Hardness Penetration Depth: 1 - 1.5 mm

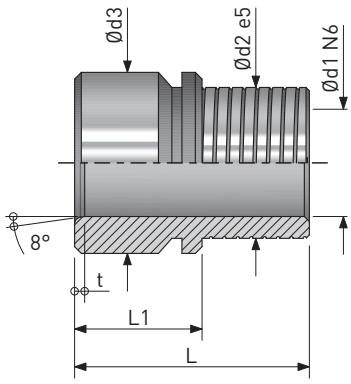
Model	Ød	Ød1	L	L1	L2	L3	f	R
GP/S/20*100	20	16	100	30	15	10	6	4
GP/S/20*120			120					
GP/S/20*140			140					
GP/S/25*120	25	21	120	32	16	11		4.5
GP/S/25*140			140					
GP/S/25*160			160					
GP/S/32*140	32	28	140	36	18	12	8	5
GP/S/32*160			160					
GP/S/32*180			180					
GP/S/40*180	40	36		41	20.5	13		5.5
GP/S/40*200			200					
GP/S/40*220			220					
GP/S/50*160	50	45	160	46	23	14	10	6
GP/S/50*200			200					
GP/S/50*250			250					
GP/S/60*200	60	55	200	90	45	15	12	6.5
GP/S/60*250			250					
GP/S/60*300			300					
GP/S/80*250	80	75	250	120	60	16		7
GP/S/80*300			300					
GP/S/80*350			350					
GP/S/100*300	100	95	300	150	75	17		8
GP/S/100*350			350					
GP/S/100*400			400					

Guide Bush S & S/2 Model
بوش راهنمای مدل S و S/2



Ordering Code: GB/S/Ød1*L Ordering Code Example: GB/S/25*48 Material: 1.2210, 1.7176 Hardness: 60 + 3 HRC

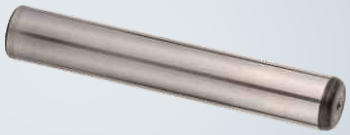
Model	Ød1	Ød2	Ød3	L	L1	L2	L3	L4	t
GB/S/25*48	25	38	45	48	22	-	22	-	3
GB/S/25*70				70	38	15	33	51	
GB/S/32*53	32	45	54	53	22	-	26	-	
GB/S/32*80				80	44	20	38	56	
GB/S/40*53	40	58	65	53	22	-	26	-	4
GB/S/40*90				90	49	20	40	62	
GB/S/50*58	50	70	80	58	22	-	28	-	5
GB/S/50*100				100	54	20	44	68	

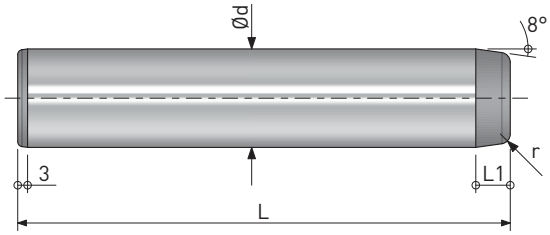


Ordering Code: GB/S/Ød1*L/2 Ordering Code Example: GB/S/31*70/2 Material: 1.2067, 1.2007 Hardness: 62 ± 2 HRC

Model	Ød1	Ød2	Ød3	L	L1	t
GB/S/31*70/2	31	38	45	70	38	3
GB/S/40*80/2	40	52	60	80	44	4
GB/S/48*90/2	48	62	70	90	49	
GB/S/58*100/2	58	70	80	100	54	5

Guide Pillar S2 Model
میل راهنمای مدل S2

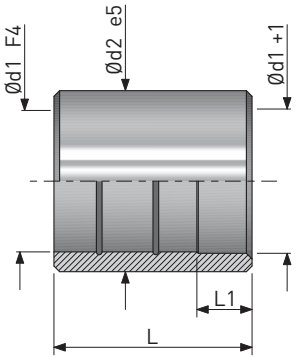




Ordering Code: GP/S2/Ød*L Ordering Code Example: GP/S2/19*120 Material: 1.2067, 1.8159 Surface Hardness: 60 + 3 HRC

Model	Ød	Model	Ød	L	L1	r
GP/S2/19*120	19	GP/S2/20*120	20	120	10.5	4
GP/S2/19*140		GP/S2/20*140		140		
GP/S2/19*160		GP/S2/20*160		160		
GP/S2/19*180		GP/S2/20*180		180		
GP/S2/24*140	24	GP/S2/25*140	25	140	11	4.5
GP/S2/24*160		GP/S2/25*160		160		
GP/S2/24*180		GP/S2/25*180		180		
GP/S2/24*200		GP/S2/25*200		200		
GP/S2/30*180	30	GP/S2/32*180	32	180	12	5
GP/S2/30*200		GP/S2/32*200		200		
GP/S2/30*220		GP/S2/32*220		220		
GP/S2/38*180	38	GP/S2/40*180	40	180	13	5.5
GP/S2/38*200		GP/S2/40*200		200		
GP/S2/38*220		GP/S2/40*220		220		
-	-	GP/S2/50*220	50	220		6

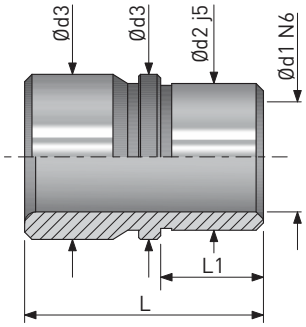
Guide Bush SF Model
بوش راهنمای مدل SF



Ordering Code: GB/SF/Ød1*L Ordering Code Example: GB/SF/20*60 Material: 1.2210, 1.7176 Hardness: 58 + 2 HRC

Model	Ød1	Ød2	L	L1
GB/SF/20*60	20	30	60	15
GB/SF/24*68	24	38	68	
GB/SF/32*70	32	44	70	
GB/SF/32*80	32	44	80	

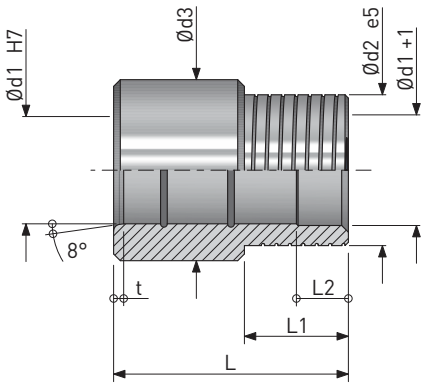
Bush Ball Bearing S2 Model
بوش راهنمای مدلS2



Ordering Code: GB/S2/Ød1*L Ordering Code Example: GB/S2/25*65 Material: 1.2067, 1.2007 Hardness Penetration: 1.5+1 mm Surface Hardness in 60 + 3 HRC

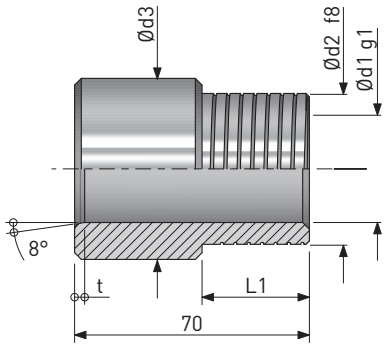
Model	Ød1	Ød2	Ød3	L	L1
GB/S2/25*65	25	35	40	65	28
GB/S2/26*65	26				
GB/S2/30*70	30	40	45	70	34
GB/S2/31*70	31				
GB/S2/38*80	38	50	58	80	36
GB/S2/40*80	40				
GB/S2/46*80	46	60	68		40
GB/S2/48*80	48				
GB/S2/58*100	58	70	80	100	46

Guide Bush G Model
بوش راهنمای مدل G



Ordering Code: GB/G/Ød1*L Ordering Code Example: GB/G/20*60 Material: 1.2210, 1.7176 Hardness: 60 + 3 HRC

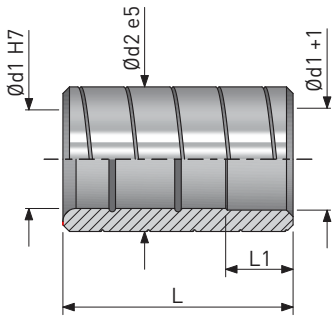
Model	Ød1	Ød2	Ød3	L	L1	L2	t
GB/G/20*60	20	30	35	60	30	15	3
GB/G/25*75	25	38	45	75	36		
GB/G/32*90	32	44	50	90	43	20	
					48		
GB/G/40*100	40	54	60	100			4
					53		



Ordering Code: GB/G/Ød1*L/2 Ordering Code Example: GB/G/26*60/2 Material: 1.2067, 1.2007 Hardness: 62 ± 2 HRC

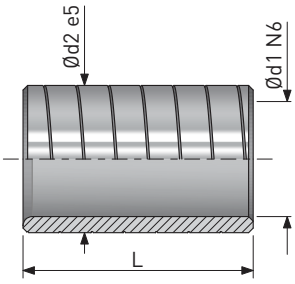
Model	Ød1	Ød2	Ød3	L	L1
GB/G/26*60/2	26	38	45	60	30
GB/G/31*75/2	31	44	50	75	36
GB/G/40*90/2	40	49	55	90	43
					48
GB/G/48*100/2	48	62	70	100	
					53

Guide Bush SE & SE/2 Model
بوش راهنمای مدل SE و SE/2



Ordering Code: GB/SE/Ød1*L Ordering Code Example: GB/SE/19*60 Material: 1.2210, 1.7176 Hardness: 58 + 2 HRC

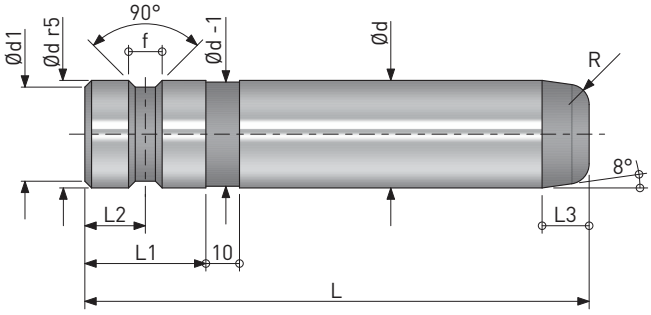
Model	Ød1	Ød2	L	L1
GB/SE/19*60	19	30	60	15
GB/SE/20*60	20			
GB/SE/24*50	24	38	50	-
GB/SE/24*60			60	
GB/SE/24*75			75	15
GB/SE/25*50	25		50	20
GB/SE/25*60			60	
GB/SE/25*75			75	
GB/SE/30*50	30	44	50	
GB/SE/30*60			60	
GB/SE/30*70			70	
GB/SE/30*90			90	
GB/SE/32*50	32		50	
GB/SE/32*60			60	
GB/SE/32*70			70	
GB/SE/32*90			90	
GB/SE/38*50	38	54	50	
GB/SE/38*55			55	
GB/SE/38*70			70	
GB/SE/38*100			100	
GB/SE/40*50	40		50	
GB/SE/40*55			55	
GB/SE/40*70			70	
GB/SE/40*100			100	
GB/SE/45*100	45	60		



Ordering Code: GB/SE/Ød1*L/2 Ordering Code Example: GB/SE/26*60/2 Material: 1.2067, 1.8951 Hardness: 60 + 3 HRC

Model	Ød1	Ød2	L
GB/SE/26*60/2	26	38	60
GB/SE/31*75/2	31	44	75
GB/SE/38*90/2	38	49	90
GB/SE/40*90/2	40		
GB/SE/40*100/2		54	100
GB/SE/46*100/2	46	62	
GB/SE/48*100/2	48		

Guide Pillar FL Model
میل راهنمای مدل FL

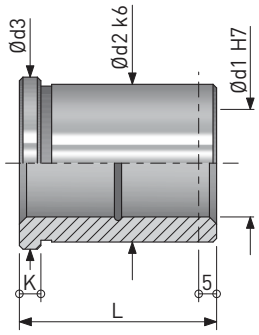


Ordering Code: GP/FL/Ød*L Ordering Code Example: GP/FL/20*120 Material: 1.2067, 1.8159 Deep Hardness: 60 + 3 HRC Hardness Penetration Depth: 1 - 1.5 mm

Model	Ød	Ød1	L	L1	L2	L3	f	R
GP/FL/20*120	20	17	120	38	19	10	6	4
GP/FL/20*150			150					
GP/FL/20*180			180					
GP/FL/25*120	25	22	120			11		4.5
GP/FL/25*150			150					
GP/FL/25*180			180					
GP/FL/30*120	30	26	120	48	24	12	8	5
GP/FL/30*150			150					
GP/FL/30*180			180					
GP/FL/30*200			200					
GP/FL/40*150	40	36	150	58	29	13		5.5
GP/FL/40*180			180					
GP/FL/40*200			200					
GP/FL/40*220			220					
GP/FL/40*250			250					
GP/FL/40*300			300					
GP/FL/50*150	50	45	150	63	31.5	14	10	6
GP/FL/50*180			180					
GP/FL/50*200			200					
GP/FL/50*250			250					
GP/FL/50*300			300					
GP/FL/60*200	60	54	200	88	44	15	12	6.5
GP/FL/60*220			220					
GP/FL/60*250			250					
GP/FL/60*280			280					
GP/FL/60*300			300					
GP/FL/80*220	80	74	220	98	49	16		7
GP/FL/80*250			250					
GP/FL/80*280			280					
GP/FL/80*300			300					
GP/FL/80*350			350					

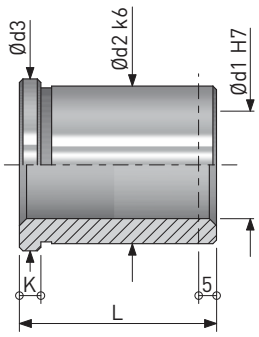
Guide Bush FL&FL/2 Model

بوش مدل FL و FL/2



Ordering Code: GB/FL/Ød1*L Ordering Code Example: GB/FL/20*44 Material: 1.2210, 1.7176 hardness: 57 ± 2 HRC

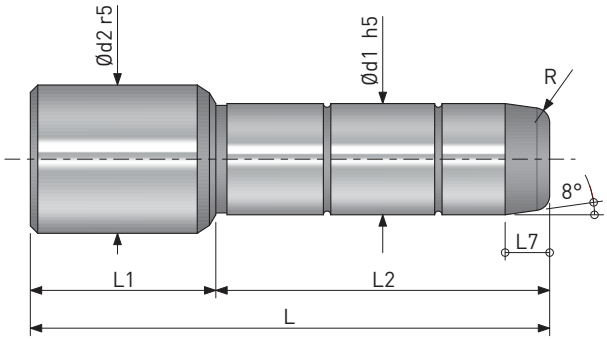
Model	Ød1	Ød2	Ød3	L	K
GB/FL/20*44	20	30	34	44	6
GB/FL/25*44	25	35	39		
GB/FL/30*55	30	44	48	55	
GB/FL/40*69	40	54	58	69	
GB/FL/50*89	50	65	69	89	
GB/FL/60*99	60	75	79	99	
GB/FL/80*119	80	100	105	119	10
GB/FL/100*149	100	120	125	149	10



Ordering Code: GB/FL/Ød1*L/2 Ordering Code Example: GB/FL/26*44/2 Material: 1.2067, 1.8159 Hardness: 62 ± 2 HRC

Model	Ød1	Ød2	Ød3	L	K
GB/FL/26*44/2	26	35	39	44	6
GB/FL/31*44/2	31	44	48		
GB/FL/38*55/2	38	49	53	55	
GB/FL/48*69/2	48	62	66	69	
GB/FL/58*89/2	58	75	79	89	
GB/FL/68*99/2	68	85	89	99	
GB/FL/92*119/2	92	110	115	119	10

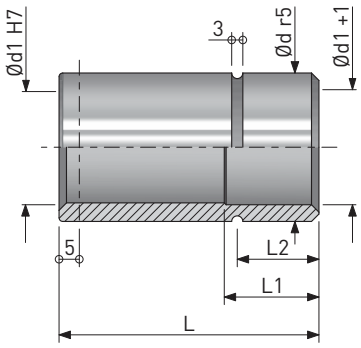
Guide Pillar F Model
میل راهنمای مدل F



Ordering Code: GP/F/Ød1*L Ordering Code Example: GP/F/20*135 Material: 1.2067, 1.8159 Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	L	L1	L2	R	L3
GP/F/20*135	20	30	135	40	95	5	10.5
GP/F/20*150			150		110		
GP/F/20*180			180		140		11
GP/F/25*135	25	35	135		95	6	
GP/F/25*150			150		110		
GP/F/25*180			180		140		
GP/F/30*150	30	40	150	50	100	7	12
GP/F/30*180			180		130		
GP/F/30*200			200		150		
GP/F/35*150	35	50	150		100	8	
GP/F/35*180			180		130		15
GP/F/35*200			200		150		
GP/F/35*220			220		170		
GP/F/40*180	40	55	180	55	125	10	
GP/F/40*200			200		145		
GP/F/40*250			250	75	175		
GP/F/40*300			300		225		

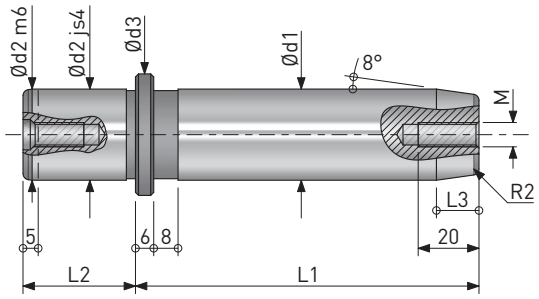
Guide Bush F Model
بوش مدل F



Ordering Code: GB/F/Ød1*L Ordering Code Example: GB/F/20*60 Material: 1.2210, 1.7176 hardness: 58 ± 2 HRC

Model	Ød	Ød1	L	L1	L2
GB/F/20*60	30	20	60	25	22
GB/F/25*60	35	25			
GB/F/30*75	40	30	75	30	26
GB/F/35*80	50	35	80		
GB/F/40*100	55	40	100	40	36

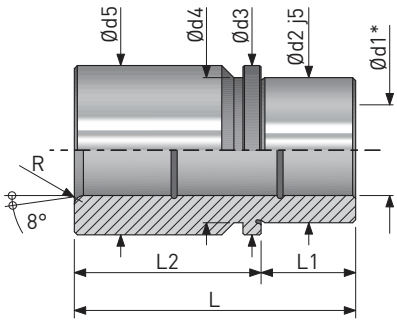
Guide Pillar C Model
میل راهنمای مدل C



Ordering Code: GP/C/Ød1*L1 Ordering Code Example: GP/C/20*100 Material: 1.2067, 1.8159 Hardness penetration depth: 1.5 - 2 mm Surface hardness: 60 + 3 HRC

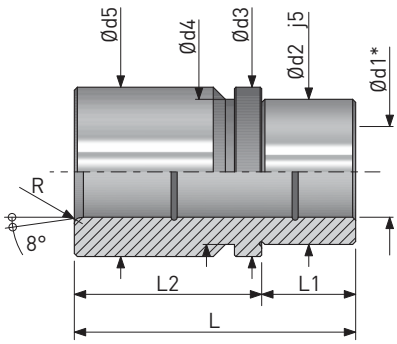
Model	Ød1	Ød2	Ød3	L1	L2	M	L3
GP/C/20*100	20	20	25	100	23	M8	10.5
GP/C/20*112				112			
GP/C/20*125				125			
GP/C/20*140				140			
GP/C/20*160				160			
GP/C/20*180				180			
GP/C/20*200				200			
GP/C/25*100	25	25	32	100	30		11
GP/C/25*112				112			
GP/C/25*125				125			
GP/C/25*140				140			
GP/C/25*160				160			
GP/C/25*180				180			
GP/C/25*200				200			
GP/C/25*224				224			
GP/C/25*250				250			
GP/C/30*112	30	30	40	112	37		12
GP/C/30*125				125			
GP/C/30*140				140			
GP/C/30*160				160			
GP/C/30*180				180			
GP/C/30*200				200			
GP/C/30*224				224			
GP/C/30*250				250			
GP/C/30*280				280			
GP/C/30*315				315			
GP/C/40*125	40	40	50	125			13
GP/C/40*140				140			
GP/C/40*160				160			
GP/C/40*180				180			
GP/C/40*200				200			
GP/C/40*224				224			
GP/C/40*250				250			
GP/C/40*280				280			
GP/C/40*315				315			
GP/C/40*355				355			
GP/C/50*140	50	50	63	140	47		15
GP/C/50*160				160			
GP/C/50*180				180			
GP/C/50*200				200			
GP/C/50*224				224			
GP/C/50*250				250			
GP/C/50*280				280			
GP/C/50*315				315			
GP/C/50*355				355			
GP/C/50*400				400			
GP/C/60*160	60	60	80	160			
GP/C/60*180				180			
GP/C/60*200				200			
GP/C/60*224				224			
GP/C/60*250				250			
GP/C/60*280				280			
GP/C/60*315				315			
GP/C/60*355				355			
GP/C/60*400				400			
GP/C/80*200	80	80	95	200	60	M12	
GP/C/80*224				224			
GP/C/80*250				250			
GP/C/80*280				280			
GP/C/80*315				315			
GP/C/80*255				355			
GP/C/80*400				400			

Guide Bush C Model
بوش راهنمای مدل C



Ordering Code: GB/C/31/Ød1*L Ordering Code Example: GB/C/31/20*59 Material: 1.2067, 1.2007 Deep Hardness: 60 ± 2 HRC

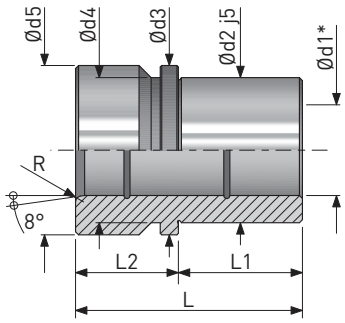
Model	Ød1	Ød2	Ød3	Ød4	Ød5	L	L1	L2	R
GB/C/31/20*59	20	32	40	32	39	59	23	36	3
GB/C/31/25*79	25	40	48	40	46	79		56	
GB/C/31/30*93	30	48	56	48	53	93	30	63	
GB/C/31/40*108	40	58	66	58	63	108	37	71	
GB/C/31/50*127	50	70	80	70	77	127	47	80	
GB/C/31/60*150	60	85	95	85	92	150	60	90	3.5



Ordering Code: GB/C/32/Ød1*L Ordering Code Example: GB/C/32/20*72 Material: 1.2067, 1.2007 Deep Hardness: 60 ± 2 HRC

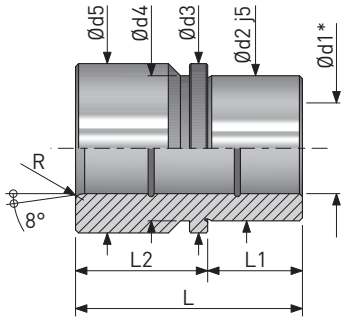
Model	Ød1	Ød2	Ød3	Ød4	Ød5	L	L1	L2	R
GB/C/32/20*72	20	32	40	32	39	72	30	42	3
GB/C/32/25*80	25	40	48	40	46	80		50	
GB/C/32/30*93	30	48	56	48	53	93	37	56	
GB/C/32/40*110	40	58	66	58	63	110	47	63	
GB/C/32/50*131	50	70	80	70	77	131	60	71	3.5

Guide Bush C Model
بوش راهنمای مدل C



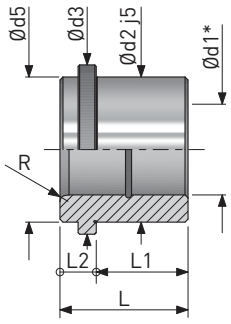
Ordering Code: GB/C/33/Ød1*L Ordering Code Example: GB/C/33/20*55 Material: 1.2067, 1.2007 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	L	L1	L2	R
GB/C/33/20*55	20	32	40	32	39	55	30	25	3
GB/C/33/25*55	25	40	48	40	46				
GB/C/33/30*69	30	48	56	48	53	69	37	32	
GB/C/33/40*79	40	58	66	58	63	79	47		3.5
GB/C/33/50*96	50	70	80	70	77	96	60	36	
GB/C/33/60*96	60	85	95	85	91				



Ordering Code: GB/C/34/Ød1*L Ordering Code Example: GB/C/34/20*43 Material: 1.2067, 1.2007 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	L	L1	L2	R
GB/C/34/20*43	20	32	40	32	39	43	23	20	3
GB/C/34/25*59	25	40	48	40	46	59		36	
GB/C/34/30*75	30	48	56	48	53	75	30	45	
GB/C/34/40*82	40	58	66	58	63	82	37		3.5
GB/C/34/50*97	50	70	80	70	77	97	47	50	
GB/C/34/60*116	60	85	95	85	91	116	60	56	

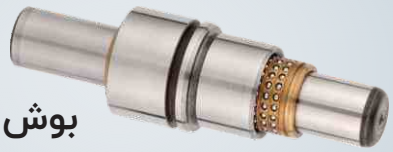


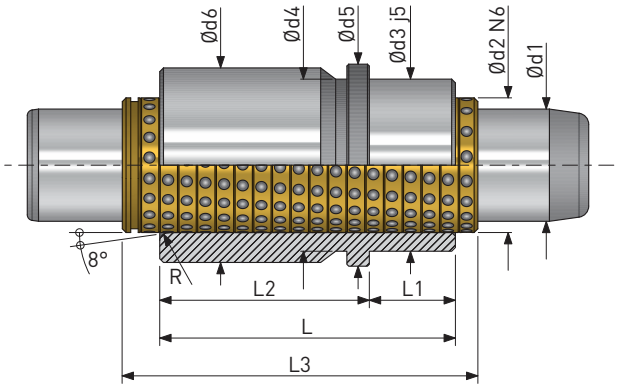
Ordering Code: GB/C/35/Ød1*L Ordering Code Example: GB/C/35/20*35 Material: 1.2067, 1.2007 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	L	L1	L2	R
GB/C/35/20*35	20	32	40	-	32	35	23	12	3
GB/C/35/25*35	25	40	48		40				
GB/C/35/30*42	30	48	56		48	42	30		
GB/C/35/40*52	40	58	66		58	52	37	15	3.5
GB/C/35/50*65	50	70	80		70	65	47	18	
GB/C/35/60*80	60	85	95		85	80	60	20	

Headed Ball Bearing Guide Bushes C Model

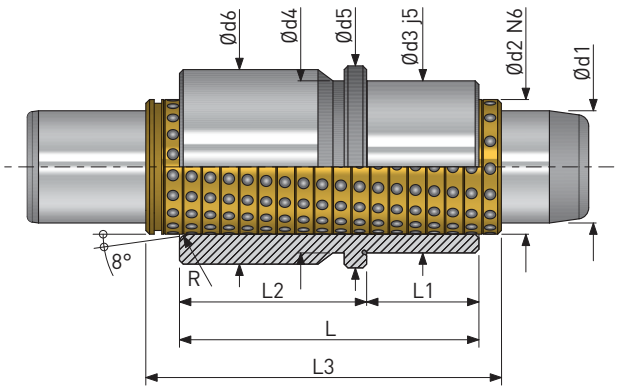
بوش راهنمای مدل C با قفسه ساچمه‌ای





Ordering Code: GB/C/44/Ød2*L Ordering Code Example: GB/C/44/26*59 Material: 1.2067, 1.8159 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	Ød6	L	L1	L2	L3	R
GB/C/44/26*59	20	26	32	32	40	39	59	23	36	71	3
GB/C/44/31*79	25	31	40	40	48	46	79		56	95	
GB/C/44/38*93	30	38	48	48	56	53	93	30	63	120	
GB/C/44/48*108	40	48	58	58	66	63	108	37	71		
GB/C/44/58*127	50	58	70	70	80	77	127	47	80	140	3.5
GB/C/44/68*150	60	68	85	85	95	92	150	60	90	160	
GB/C/44/92*150	80	92	105	105	118	115					

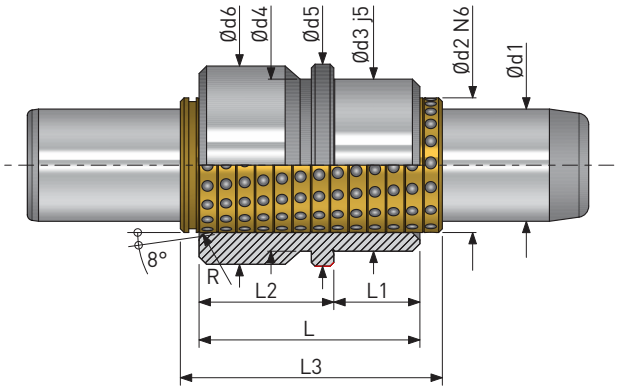


Ordering Code: GB/C/45/Ød2*L Ordering Code Example: GB/C/45/26*59 Material: 1.2067, 1.8159 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	Ød6	L	L1	L2	L3	R
GB/C/45/26*59	20	26	32	32	40	39	59	23	36	71	3
GB/C/45/31*80	25	31	40	40	48	46	80	30	50	95	
GB/C/45/38*93	30	38	48	48	56	53	93	37	56	120	
GB/C/45/48*110	40	48	58	58	66	63	110	47	63	140	3.5
GB/C/45/58*131	50	58	70	70	80	77	131	60	71	160	
GB/C/45/68*131	60	68	85	85	95	92					

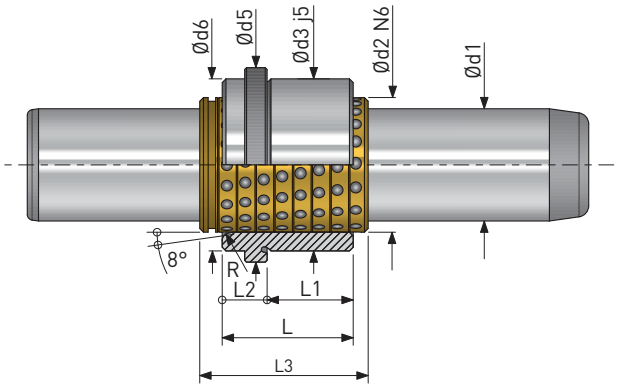
Headed Ball Bearing Guide Bushes C Model

بوش راهنمای مدل C با قفسه ساچمه‌ای



Ordering Code: GB/C/46/Ød2*L Ordering Code Example: GB/C/46/26*43 Material: 1.2067, 1.8159 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	Ød6	L	L1	L2	L3	R
GB/C/46/26*43	20	26	32	32	40	39	43	23	20	56	3
GB/C/46/31*59	25	31	40	40	48	46	59		36	71	
GB/C/46/38*75	30	38	48	48	56	53	75	30	45	95	
GB/C/46/48*82	40	48	58	58	66	63	82	37		105	
GB/C/46/58*97	50	58	70	70	80	77	97	47	50	120	3.5
GB/C/46/68*116	60	68	85	85	95	92	116	60	56		
GB/C/46/92*120	80	92	105	105	118	115	120		60		

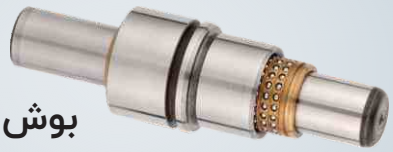


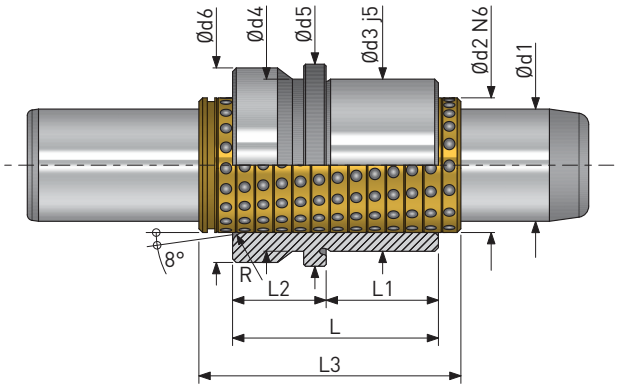
Ordering Code: GB/C/47/Ød2*L Ordering Code Example: GB/C/47/26*35 Material: 1.2067, 1.8159 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	Ød6	L	L1	L2	L3	R
GB/C/47/26*35	20	26	32	-	40	32	35	23	12	45	3
GB/C/47/31*35	25	31	40		48	40					
GB/C/47/38*42	30	38	48		56	48	42	30		56	
GB/C/47/48*52	40	48	58		66	58	52	37	15	63	
GB/C/47/58*65	50	58	70		80	70	65	47	18	80	3.5
GB/C/47/68*80	60	68	85		95	85	80	60	20	95	
GB/C/47/92*80	80	92	105		118	105				120	

Headed Ball Bearing Guide Bushes C Model

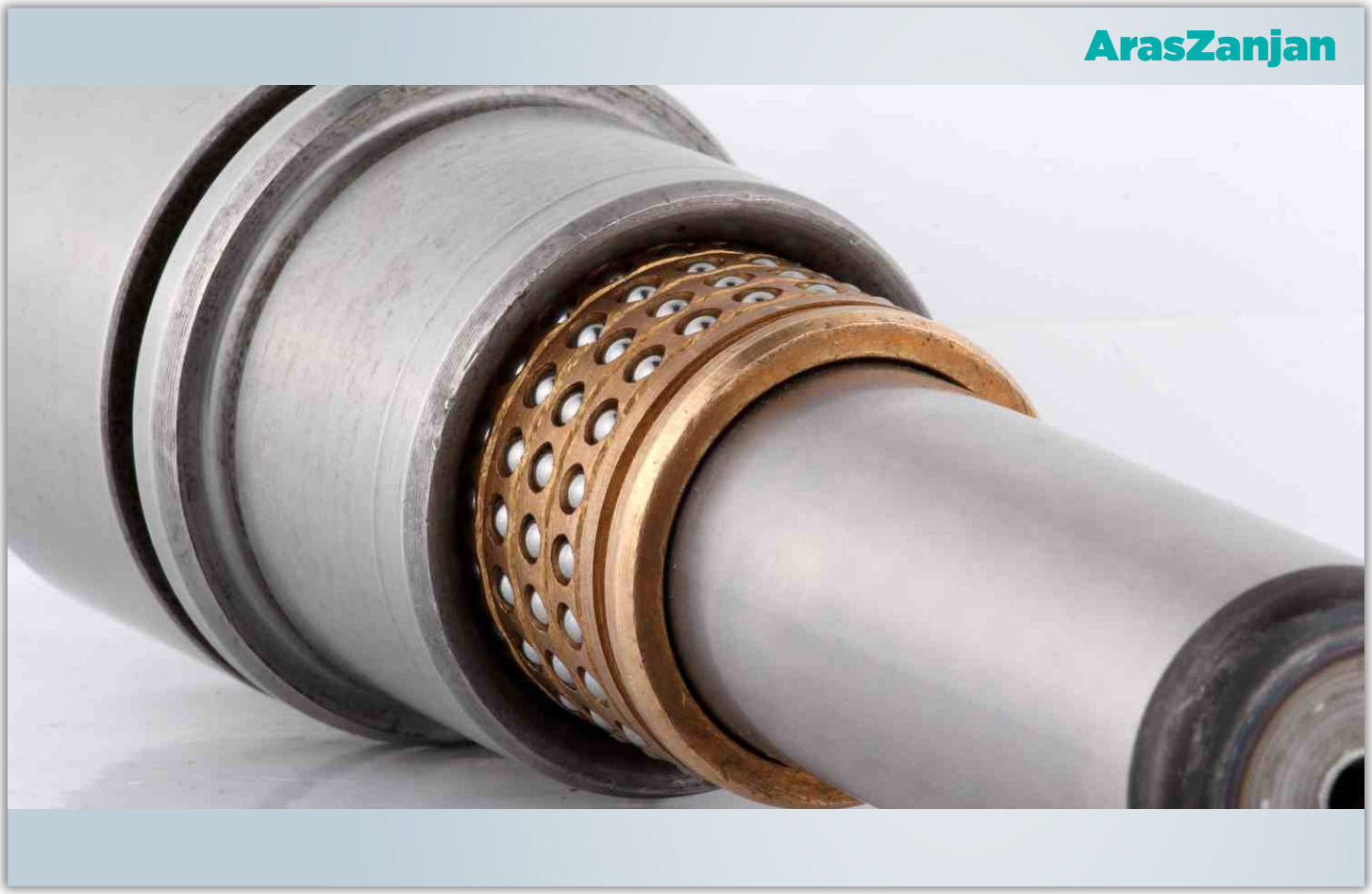
بوش راهنمای مدل C با قفسه ساچمه‌ای





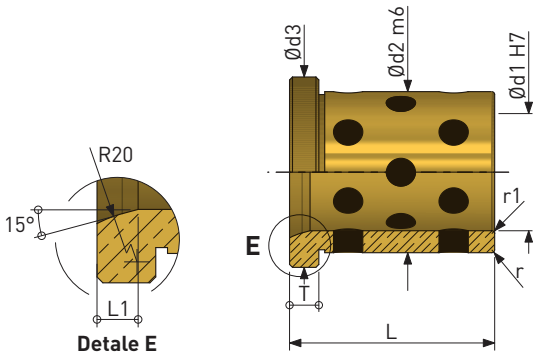
Ordering Code: GB/C/49/Ød2*L Ordering Code Example: GB/C/49/26*55 Material: 1.2067, 1.8159 Deep Hardness: 60 ± 2 HRC

Model	Ød1	Ød2	Ød3	Ød4	Ød5	Ød6	L	L1	L2	L3	R
GB/C/49/26*55	20	26	32	32	40	39	55	30	25	71	3
GB/C/49/31*55	25	31	40	40	48	46					
GB/C/49/38*69	30	38	48	48	56	53	69	37	32	80	
GB/C/49/48*79	40	48	58	58	66	63	79	47		95	
GB/C/49/58*96	50	58	70	70	80	77	96	60	36	120	3.5
GB/C/49/68*96	60	68	85	85	95	92					



Oil less Guide Bush Bronze With Non-Liquid Lubricant

بوش گرافیتی پاشنه‌دار

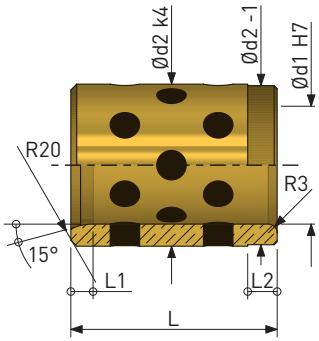


Ordering Code: GB/FW/Ød1*L Ordering Code Example: GB/FW/25*40 Material: Bronze-Manganese Deep Hardness: 180 - 20 HB

Model	Ød1	Ød2	Ød3	L	L1	T	r	r1	R
GB/FW/25*40	25	35	45	40	5	7	1	2	10
GB/FW/30*50	30	40	50	50		10			
GB/FW/40*70	40	55	65	70					20
GB/FW/50*80	50	65	75	80	7		2		
GB/FW/60*90	60	75	85	90	8				
GB/FW/80*100	80	100	110	100	9				
GB/FW/80*140				140					
GB/FW/100*100	100	120	130	100	10				
GB/FW/100*140				140					

Oil less Guide Bush Bronze With Non-Liquid Lubricant

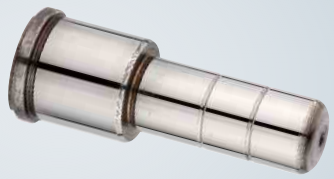
بوش گرافیتی

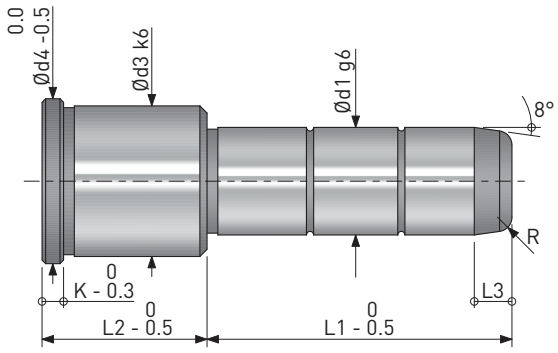


Ordering Code: GB/W/Ød1*L Ordering Code Example: GB/W/25*40 Material: Bronze - Manganese Deep Hardness: 180 - 200 BH

Model	Ød1	Ød2	L	L1	L2
GB/W/25*40	25	40	40	5	10
GB/W/30*50	30	50	50		
GB/W/35*55	35	60	55		15
GB/W/40*60	40		60		
GB/W/50*75	50	70	75	7	
GB/W/60*90	60	80	90	8	20
GB/W/80*120	80	100	120	9	25
GB/W/100*150	100	120	150	10	

Guide Pillar P Model
میل راهنمای مدل P





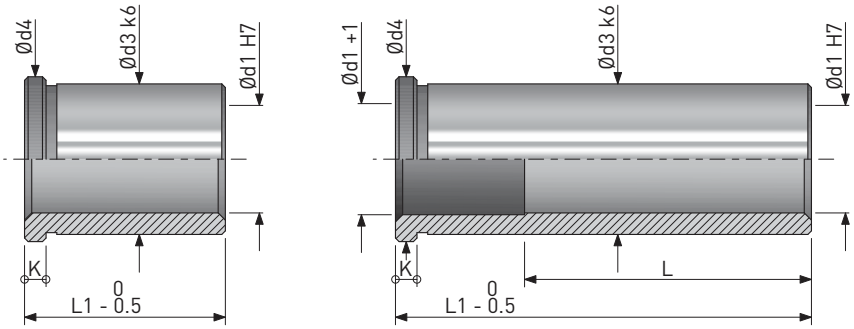
Ordering Code: GP/P/L2/Ød1*L1 Ordering Code Example: GP/P/22/15*21 Material: 1.8159 Surface Hardness: 62 ± 2 HRC

Model	Ød1	R	Model	Ød1	Ød3	Ød4	L1	L2	L3	k
GP/P/22/15*21	15	3.5	GP/P/22/14*21	14	20	24	21	22	10.5	6
GP/P/22/15*26			GP/P/22/14*26				26			
GP/P/22/15*35			GP/P/22/14*35				35			
GP/P/22/15*45			GP/P/22/14*45				45			
GP/P/27/15*26			GP/P/27/14*26				26	27		
GP/P/27/15*35			GP/P/27/14*35				35			
GP/P/27/15*45			GP/P/27/14*45				45			
GP/P/27/15*55			GP/P/27/14*55				55			
GP/P/36/15*35			GP/P/36/14*35				35	36		
GP/P/36/15*45			GP/P/36/14*45				45			
GP/P/36/15*55			GP/P/36/14*55				55			
GP/P/36/15*65			GP/P/36/14*65				65			
GP/P/36/15*75			GP/P/36/14*75				75			
GP/P/46/15*45			GP/P/46/14*45				45	46		
GP/P/46/15*55			GP/P/46/14*55				55			
GP/P/46/15*65			GP/P/46/14*65				65			
GP/P/46/15*75			GP/P/46/14*75				75			
GP/P/22/16*21	16	3.5	-	-	22	26	21	22		
GP/P/22/16*26							26			
GP/P/22/16*35							35			
GP/P/22/16*45							45			
GP/P/27/16*26							26	27		
GP/P/27/16*35							35			
GP/P/27/16*45							45			
GP/P/27/16*55							55			
GP/P/36/16*35							35	36		
GP/P/36/16*45							45			
GP/P/36/16*55							55			
GP/P/36/16*65							65			
GP/P/36/16*75							75			
GP/P/46/16*45							45	46		
GP/P/46/16*55							55			
GP/P/46/16*65							65			
GP/P/46/16*75							75			

Ordering Code: GP/P/L2/Ød1*L1 Ordering Code Example: GP/P/22/15*21 Material: 1.8159 Surface Hardness: 62 ± 2 HRC

Model	Ød1	R	Model	Ød1	Ød3	Ød4	L1	L2	L3	k
GP/P/27/20*26	20	4	GP/P/27/18*26	18	26	30	26	27	10.5	6
GP/P/27/20*35			GP/P/27/18*35				35			
GP/P/27/20*45			GP/P/27/18*45				45			
GP/P/27/20*55			GP/P/27/18*55				55			
GP/P/27/20*65			GP/P/27/18*65				65			
GP/P/27/20*75			GP/P/27/18*75				75			
GP/P/36/20*35			GP/P/36/18*35				35	36		
GP/P/36/20*45			GP/P/36/18*45				45			
GP/P/36/20*55			GP/P/36/18*55				55			
GP/P/36/20*65			GP/P/36/18*65				65			
GP/P/36/20*75			GP/P/36/18*75				75			
GP/P/36/20*95			GP/P/36/18*95				95			
GP/P/46/20*45			GP/P/46/18*45				45	46	10.6	
GP/P/46/20*55			GP/P/46/18*55				55			
GP/P/46/20*65			GP/P/46/18*65				65			
GP/P/46/20*75			GP/P/46/18*75				75			
GP/P/46/20*95			GP/P/46/18*95				95			
GP/P/56/20*55			GP/P/56/18*55				55	56		
GP/P/56/20*65			GP/P/56/18*65				65			
GP/P/56/20*75			GP/P/56/18*75				75			
GP/P/56/20*95			GP/P/56/18*95				95			
GP/P/27/24*26	24	4.5	GP/P/27/22*26	22	30	34	26	27	11	
GP/P/27/24*35			GP/P/27/22*35				35			
GP/P/27/24*45			GP/P/27/22*45				45			
GP/P/27/24*55			GP/P/27/22*55				55			
GP/P/27/24*65			GP/P/27/22*65				65			
GP/P/27/24*75			GP/P/27/22*75				75			
GP/P/36/24*35			GP/P/36/22*35				35	36		
GP/P/36/24*45			GP/P/36/22*45				45			
GP/P/36/24*55			GP/P/36/22*55				55			
GP/P/36/24*65			GP/P/36/22*65				65			
GP/P/36/24*75			GP/P/36/22*75				75			
GP/P/36/24*95			GP/P/36/22*95				95			
GP/P/46/24*45			GP/P/46/22*45				45	46		
GP/P/46/24*55			GP/P/46/22*55				55			
GP/P/46/24*65			GP/P/46/22*65				65			
GP/P/46/24*75			GP/P/46/22*75				75			
GP/P/46/24*95			GP/P/46/22*95				95			
GP/P/56/24*55			GP/P/56/22*55				55	56		
GP/P/56/24*65			GP/P/56/22*65				65			
GP/P/56/24*75			GP/P/56/22*75				75			
GP/P/56/24*95			GP/P/56/22*95				95			
GP/P/46/32*45	32	5	GP/P/46/30*45	30	42	46	45	46	15	
GP/P/46/32*65			GP/P/46/30*65				65			
GP/P/46/32*85			GP/P/46/30*85				85			
GP/P/46/32*105			GP/P/46/30*105				105			
GP/P/46/32*125			GP/P/46/30*125				125			
GP/P/56/32*55			GP/P/56/30*55				55	56		
GP/P/56/32*75			GP/P/56/30*75				75			
GP/P/56/32*95			GP/P/56/30*95				95			
GP/P/56/32*115			GP/P/56/30*115				115			
GP/P/56/32*135			GP/P/56/30*135				135			
GP/P/66/32*75			GP/P/66/30*75				75	66		
GP/P/66/32*95			GP/P/66/30*95				95			
GP/P/66/32*115			GP/P/66/30*115				115			
GP/P/66/32*135			GP/P/66/30*135				135			
GP/P/76/32*75			GP/P/76/30*75				75	76		
GP/P/76/32*95			GP/P/76/30*95				95			
GP/P/76/32*115			GP/P/76/30*115				115			
GP/P/76/32*155			GP/P/76/30*155				155			
GP/P/56/42*75	42		GP/P/56/40*75	40	54	60	75	56		10
GP/P/66/42*75			GP/P/66/40*75					66		
GP/P/76/42*75			GP/P/76/40*75					76		
GP/P/76/42*115			GP/P/76/40*115				115			
GP/P/86/42*75			GP/P/86/40*75				75	86		
GP/P/86/42*135			GP/P/86/40*135				135			
GP/P/96/42*75			GP/P/96/40*75				75	96		
GP/P/96/42*115			GP/P/96/40*115				115			
GP/P/116/42*95			GP/P/116/40*95				95	116		
GP/P/116/42*135			GP/P/116/40*135				135			
GP/P/136/42*135			GP/P/136/40*135					136		
-	-	8	GP/P/96/50*115	50	66	72	115	96		
			GP/P/116/50*135				135	116		
			GP/P/136/50*135					136		
			GP/P/96/60*115	60	80	86	115	96		20
			GP/P/116/60*135				135	116		
			GP/P/136/60*135					136		
			GP/P/156/60*155				155	156		

Guide Bush P Model
بوش راهنمای مدل P

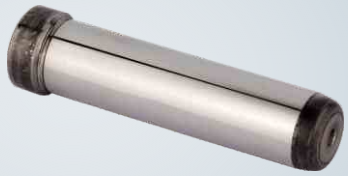


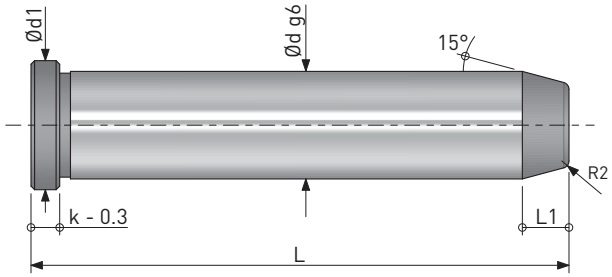
Ordering Code: GB/P/Ød1*L Ordering Code Example: GB/P/15*22 Material: 1.2210, 1.7176 Deep Hardness: 57 ± 2 HRC

Model	Ød1	Model	Ød1	L1	L	Ød3	Ød4	k
GB/P/15*22	15	GB/P/14*22	14	22	22	20	24	6
GB/P/15*27		GB/P/14*27		27	27			
GB/P/15*36		GB/P/14*36		36	36			
GB/P/15*46		GB/P/14*46		46	46			
GB/P/15*56		GB/P/14*56			56			
GB/P/15*66		GB/P/14*66			66			
GB/P/15*76		GB/P/14*76			76			
GB/P/16*22	16	-	-	22	22	22	26	
GB/P/16*27				27	27			
GB/P/16*36				36	36			
GB/P/16*46				46	46			
GB/P/16*56					56			
GB/P/16*66					66			
GB/P/16*76					76			
GB/P/20*27	20	GB/P/18*27	18	27	27	26	30	
GB/P/20*36		GB/P/18*36		36	36			
GB/P/20*46		GB/P/18*46		46	46			
GB/P/20*56		GB/P/18*56			56			
GB/P/20*66		GB/P/18*66			66			
GB/P/20*76		GB/P/18*76			76			
GB/P/20*96		GB/P/18*96			96			
GB/P/24*27	24	GB/P/22*27	22	27	27	30	34	
GB/P/24*36		GB/P/22*36		36	36			
GB/P/24*46		GB/P/22*46		46	46			
GB/P/24*56		GB/P/22*56		56	56			
GB/P/24*66		GB/P/22*66			66			
GB/P/24*76		GB/P/22*76			76			
GB/P/24*96		GB/P/22*96			96			
GB/P/32*46	32	GB/P/30*46	30	46	46	42	46	
GB/P/32*56		GB/P/30*56		56	56			
GB/P/32*66		GB/P/30*66		66	66			
GB/P/32*76		GB/P/30*76		76	76			
GB/P/32*86		GB/P/30*86			86			
GB/P/32*96		GB/P/30*96			96			
GB/P/32*116		GB/P/30*116			116			
GB/P/32*136		GB/P/30*136			136			
GB/P/42*56	42	GB/P/40*56	40	56	56	54	60	10
GB/P/42*66		GB/P/40*66		66	66			
GB/P/42*76		GB/P/40*76		76	76			
GB/P/42*86		GB/P/40*86		86	86			
GB/P/42*96		GB/P/40*96		96	96			
GB/P/42*116		GB/P/40*116		100	116			
GB/P/42*136		GB/P/40*136			136			
-	-	GB/P/50*96	50	96	96	66	72	
		GB/P/50*116		100	116			
		GB/P/50*136			136			
		GB/P/60*96	60	96	96	80	86	20
		GB/P/60*116		116	116			
		GB/P/60*136		136	136			
		GB/P/60*156		156	156			

Guide Pillar TS Model (Angle Pin)

میل‌راهنمای مدل (پین کج) TS

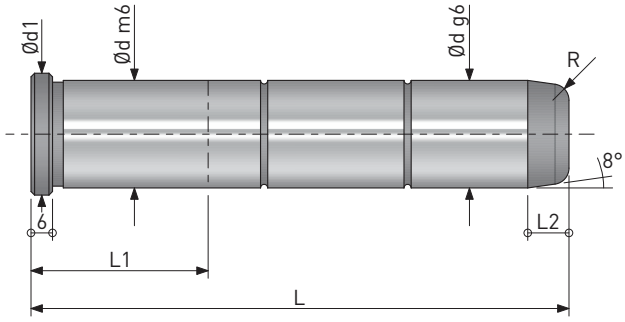




Ordering Code: GP/TS/Ød*L Ordering Code Example: GP/TS/14*100 Material: 1.8159 Surface Hardness: 57 + 3 HRC

Model	Ød	Ød1	L	L1	K
GP/TS/14*100	14	18	100	10	8
GP/TS/14*120			120		
GP/TS/14*140			140		
GP/TS/16*120	16	20	120		
GP/TS/16*140			140		
GP/TS/16*160			160		
GP/TS/18*140	18	22	140		
GP/TS/18*160			160		
GP/TS/18*180			180		
GP/TS/20*140	20	24	140	11	
GP/TS/20*160			160		
GP/TS/20*180			180		
GP/TS/20*200			200		
GP/TS/22*140	22	26	140		15
GP/TS/22*160			160		
GP/TS/22*180			180		
GP/TS/22*200			200		
GP/TS/24*140	24	28	140	12	
GP/TS/24*160			160		
GP/TS/24*180			180		
GP/TS/24*200			200		
GP/TS/30*160	30	36	160	13	
GP/TS/30*180			180		
GP/TS/30*200			200		
GP/TS/30*240			240		

Guide Pillar T Model
میل راهنمای مدل T

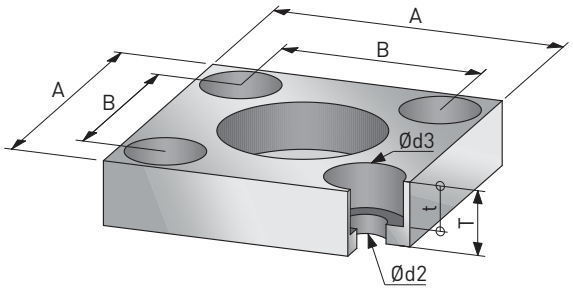


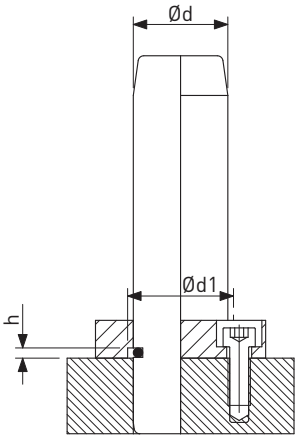
Ordering Code: GP/T/Ød*L Ordering Code Example: GP/T/14*60 Material: 1.8159 Surface Hardness: 57 + 3 HRC

Model	Ød	Ød1	R	L	L1	L2
GP/T/14*60	14	18	3	60	17	10.5
GP/T/14*80				80	22	
GP/T/14*100				100	27	
GP/T/14*120				120	36	
GP/T/14*140				140	46	
GP/T/16*60	16	20		60	17	
GP/T/16*80				80	22	
GP/T/16*100				100	27	
GP/T/16*120				120	36	
GP/T/16*140				140	46	
GP/T/18*60	18	22	4	60	17	
GP/T/18*80				80	22	
GP/T/18*100				100	27	
GP/T/18*120				120	36	
GP/T/18*140				140	46	
GP/T/20*60	20	24		60	17	10.6
GP/T/20*80				80	22	
GP/T/20*100				100	27	
GP/T/20*120				120	36	
GP/T/20*140				140	46	
GP/T/22*60	22	26		60	17	11
GP/T/22*80				80	22	
GP/T/22*100				100	27	
GP/T/22*120				120	36	
GP/T/22*140				140	46	
GP/T/24*80	24	28	4.5	80	22	11.5
GP/T/24*100				100	27	
GP/T/24*120				120	36	
GP/T/24*140				140	46	
GP/T/30*100	30	34	5	100	27	15
GP/T/30*120				120	36	
GP/T/30*140				140	46	
GP/T/30*160				160	56	
GP/T/30*180				180	56	
GP/T/30*200				200	76	

RETAINERS

Square Retainer for Guide Pillars With Fix Rings
نگهدارنده مربع شکل میل

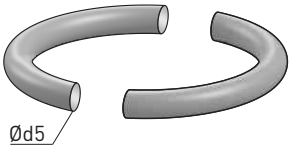


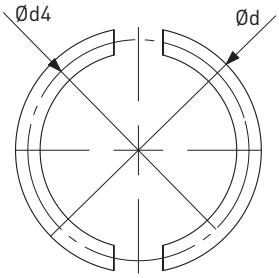


Ordering Code: GP/NP/Ød Ordering Code Example: GP/NP/25 Material: St 37

Model	Ød	Ød1	Ød2	Ød3	A	B	T	h	t
GP/NP/25	25	28	6.6	12	45	31	10	2.7	7
GP/NP/32	32	37			56	36		4.2	
GP/NP/40	40	45			70	50	12		
GP/NP/50	50	55	9	16	80	55	14		9
GP/NP/63	63	70	11	18	100	70	18	6.2	11
GP/NP/80	80	87	14	22	110	80	20		13
GP/NP/100	100	107			140	100			

RING
حلقه تثبیت

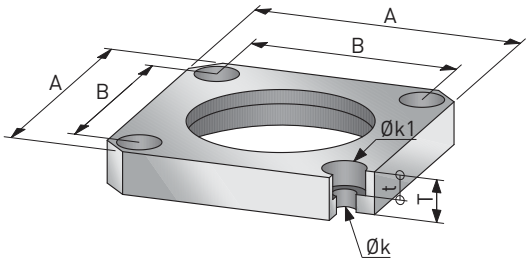


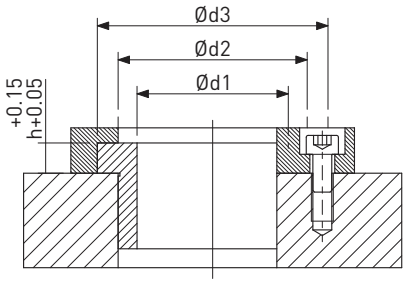


Ordering Code: RNG/Ød Ordering Code Example: RNG/25 Material: ck 75

Model	Ød	Ød4	Ød5
RNG/25	25	22.5	2.5
RNG/32	32	28	4
RNG/40	40	36	
RNG/50	50	46	
RNG/63	63	57	6
RNG/80	80	74	
RNG/100	100	94	

Square Retainer Guide Bush
نگهدارنده مربع شکل بوش

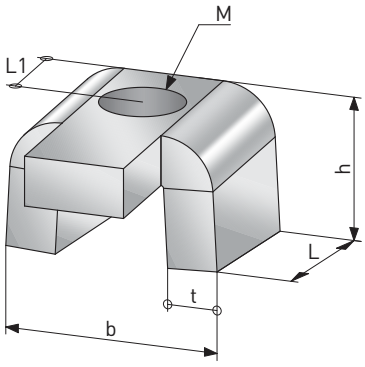


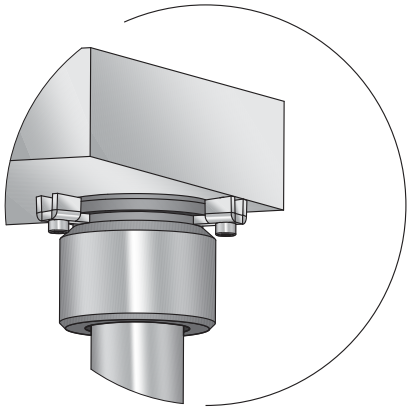


Ordering Code: GB/NS/Ød Ordering Code Example: GB/NS/Ø40 Material: St 37

Model	Ød1	Ød2	Ød3	A	B	T	h	ØK	ØK1	t
GB/NS/40	40	50	61	75	58	12	8	6.6	12	7
GB/NS/50	50	60	72	85	65	16	10	9	16	9
GB/NS/63	63	80	91	100	80		12			
GB/NS/80	80	100	113	117	98	20	16			12

Clamp
کلمپ

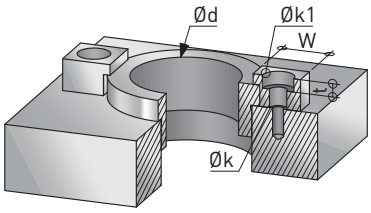


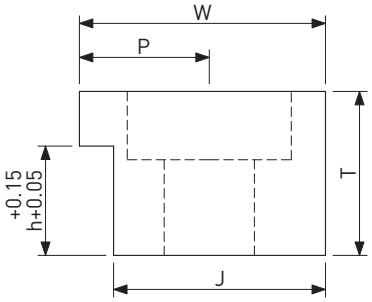


Ordering Code: GB/KL2/16 Material: St 37

Model	L	L1	t	b	h	M
GB/KL2/16	16	5	3	8	9	M4

Retainer Clamp With Screw
نگهدارنده

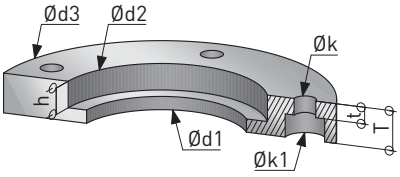


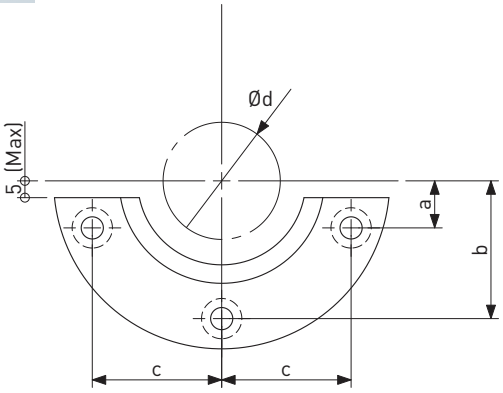


Ordering Code: GB/KL/Ød Ordering Code Example: GB/KL/40 Material: St 37

Model	Ød	W	J	P	T	h	K	K1	t
GB/KL/40	40	18	15.5	9.5	12	8	6.6	12	5
GB/KL/50	50	24	19	14	16	10	9	16	9
GB/KL/63	63	26	21	15	20	12	11	18	10
GB/KL/80	80				25	16			
GB/KL/100	100				32	20			

Circular Retainer
نگهدارنده گرد





Ordering Code: GB/NH/Ød Ordering Code Example: GB/NH/40 Material: St 37

Model	Ød	Ød1	Ød2	Ød3	a	b	C	T	h	K	K1	t
GB/NH/40	40	50	61	100	14	41	38.5	12	8	6.6	12	7
GB/NH/50	50	63	72	125	17	49	46	16	10	9	16	9
GB/NH/63	63	80	91	140		57.5	55	20	12	11	18	11
GB/NH/80	80	100	113	180	20	72	70	25	16	14	22	13
GB/NH/100	100	125	141	200	25	85	81	32	20			

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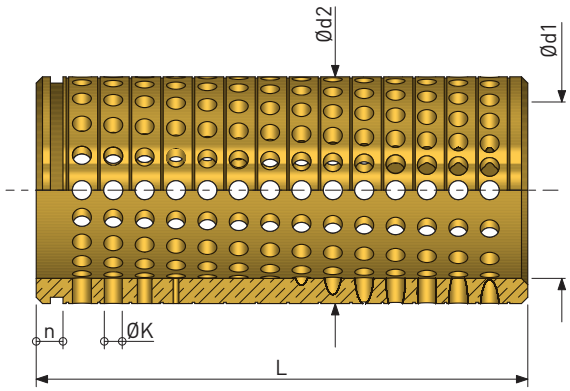
BALL BEARING

Ball Cage
قفسه ساچمه‌ای



Ordering Code: BC/71/Ød1*L Ordering Code Example: BC/71/19*45 Material: Brass

Model	Ød1	Ød2	L	ØK	n
BC/71/19*45	19	25	45	3	2.9
BC/71/19*50			50		
BC/71/19*56			56		
BC/71/19*63			63		
BC/71/19*71			71		
BC/71/19*80			80		
BC/71/19*95			95		
BC/71/20*45	20	26	45		
BC/71/20*50			50		
BC/71/20*56			56		
BC/71/20*63			63		
BC/71/20*71			71		
BC/71/20*80			80		
BC/71/20*95			95		
BC/71/24*40	24	30	40		3.2
BC/71/24*45			45		
BC/71/24*50			50		
BC/71/24*56			56		
BC/71/24*63			63		
BC/71/24*71			71		
BC/71/24*80			80		
BC/71/24*95			95		
BC/71/24*105			105		
BC/71/24*120			120		
BC/71/25*40	25	31	40		
BC/71/25*45			45		
BC/71/25*50			50		
BC/71/25*56			56		
BC/71/25*63			63		
BC/71/25*71			71		
BC/71/25*80			80		
BC/71/25*95			95		
BC/71/25*105			105		
BC/71/25*120			120		
BC/71/30*40	30	38	40	4	3.95
BC/71/30*45			45		
BC/71/30*50			50		
BC/71/30*56			56		
BC/71/30*63			63		
BC/71/30*80			80		
BC/71/30*95			95		
BC/71/30*105			105		
BC/71/30*120			120		
BC/71/32*40	32	40	40		
BC/71/32*45			45		
BC/71/32*50			50		
BC/71/32*56			56		
BC/71/32*63			63		
BC/71/32*80			80		
BC/71/32*95			95		
BC/71/32*105			105		
BC/71/32*120			120		

Model	Ød1	Ød2	L	ØK	n
BC/71/38*45	38	46	45	4	3.95
BC/71/38*50			50		
BC/71/38*56			56		
BC/71/38*63			63		
BC/71/38*80			80		
BC/71/38*95			95		
BC/71/38*105			105		
BC/71/38*120			120		
BC/71/38*140			140		
BC/71/38*160			160		
BC/71/40*45	40	48	45		4.25
BC/71/40*50			50		
BC/71/40*56			56		
BC/71/40*63			63		
BC/71/40*80			80		
BC/71/40*95			95		
BC/71/40*105			105		
BC/71/40*120			120		
BC/71/40*140			140		
BC/71/40*160			160		
BC/71/48*63	48	56	63		
BC/71/48*71			71		
BC/71/48*80			80		
BC/71/48*95			95		
BC/71/48*105			105		
BC/71/48*120			120		
BC/71/48*140			140		
BC/71/48*160			160		
BC/71/50*63	50	58	63		
BC/71/50*71			71		
BC/71/50*80			80		
BC/71/50*95			95		
BC/71/50*105			105		
BC/71/50*120			120		
BC/71/50*140			140		
BC/71/50*160			160		
BC/71/60*95	60	68	95		
BC/71/60*105			105		
BC/71/60*120			120		
BC/71/60*140			140		
BC/71/60*160			160		
BC/71/60*180			180		
BC/71/60*200			200		
BC/71/63*95	63	71	95		
BC/71/63*105			105		
BC/71/63*120			120		
BC/71/63*140			140		
BC/71/63*160			160		
BC/71/63*180			180		
BC/71/63*200			200		
BC/71/80*105	80	92	105	6	6.15
BC/71/80*120			120		
BC/71/80*140			140		
BC/71/80*160			160		
BC/71/80*180			180		
BC/71/80*200			200		

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SPRINGS

Springs
فنرها

Heay Duty Die Springs Iso Specification Series Metric Dimensions Red

Hola Dia (mm)	Rod Dia (mm)	Free Length (mm)	Load 1mm Def (N)	LOAD DEFLECTION TABLE						
				For Optimum Life (15% of Free Length)		For Optimum Life (20% of Free Length)		For Optimum Life (25% of Free Length)		Maximum Deflection
A	B	C		Load (N)	Deflection (mm)	Load (N)	Deflection (mm)	Load (N)	Deflection (mm)	Deflection (mm)
10	5	25	22.1	82.9	3.8	110.5	5.0	138.1	6.3	7.5
		32	17.5	84.0	4.8	12.0	6.4	140.0	8.0	9.6
		38	17.1	97.5	5.7	130.0	7.6	162.5	9.5	11.4
		44	15.0	99.0	6.6	132.0	8.8	165.0	11.0	13.2
		51	12.8	97.9	7.7	130.6	10.2	163.2	12.8	15.3
		64	10.7	102.7	9.6	137.0	12.8	171.2	16.0	19.2
		76	7.5	85.5	1.4	114.0	15.2	142.5	19.0	22.8
		305	2.1	96.1	45.8	128.1	61.0	160.1	76.3	91.5
12.5	6.3	25	42.1	157.9	3.8	210.5	5.0	263.1	6.3	7.5
		32	33.2	159.4	4.8	212.5	6.4	265.6	8.0	9.6
		38	29.3	167.0	5.7	222.7	7.6	278.4	9.5	11.4
		44	24.6	162.4	6.6	216.5	8.8	270.6	11.0	13.2
		51	19.6	149.9	7.7	199.9	10.2	249.9	12.8	15.3
		64	15.0	144.0	9.6	192.0	12.8	240.0	16.0	19.2
		76	13.2	150.5	11.4	200.6	15.2	250.8	19.0	22.8
		89	11.4	152.2	13.4	202.9	17.8	253.7	22.3	26.7
		305	2.8	128.1	45.8	170.8	61.0	213.5	76.3	91.5
16	8	25	75.7	283.9	3.8	378.5	5.0	473.1	6.3	7.5
		32	52.8	253.4	4.8	337.9	6.4	422.4	8.0	9.6
		38	48.5	276.5	5.7	368.6	7.6	460.8	9.5	11.4
		44	42.8	282.5	6.6	376.6	8.8	470.8	11.0	13.2
		51	37.1	283.8	7.7	378.4	10.2	473.0	12.8	15.3
		64	30.3	290.9	9.6	387.8	12.8	484.8	16.0	19.2
		76	25.7	293.0	11.4	390.6	15.2	488.3	19.0	22.8
		89	21.7	289.7	13.4	386.3	17.8	482.8	22.3	26.7
		102	19.3	295.3	15.3	393.7	20.4	492.2	25.5	30.6
		304	7.1	324.8	45.8	433.1	61.0	541.4	76.3	91.5
20	10	25	216.0	810.0	3.8	1080.0	5.0	1350.0	6.3	7.5
		32	168.0	806.4	4.8	1075.2	6.4	1344.0	8.0	9.6
		38	129.0	735.3	5.7	980.4	7.6	1225.5	9.5	11.0
		44	112.0	739.2	6.6	985.6	8.8	1232.0	11.0	13.0
		51	94.0	719.1	7.7	958.8	10.2	1198.5	12.8	15.0
		64	72.1	692.2	9.6	922.9	12.8	1153.6	16.0	19.0
		76	59.7	680.6	11.4	907.4	15.2	1134.3	19.0	23.0
		89	50.5	674.2	13.4	898.9	17.8	1123.6	22.3	27.0
		102	44.2	676.3	15.3	901.7	20.4	1127.1	25.5	31.0
		115	38.4	662.4	17.3	883.2	23.0	1104.0	28.8	35.0
		127	34.1	649.6	19.1	866.1	24.4	1082.7	31.8	38.0
		139	31.0	646.4	20.9	861.8	27.8	1077.3	34.8	42.0
		152	28.2	643.0	22.8	857.3	30.4	1071.6	38.0	46.0
		305	15.0	686.3	45.8	915.0	91.0	1143.8	76.3	91.0
25	12.5	25	375.0	1406.3	3.8	1875.0	5.0	2343.8	6.3	7.5
		32	297.0	1425.6	4.8	1900.8	6.4	2376.0	8.0	9.6
		38	219.0	1248.3	5.7	1664.4	7.6	2080.5	9.5	11.0
		44	187.0	1234.2	6.6	1645.6	8.8	2057.0	11.0	13.0
		51	156.0	1193.4	7.7	1591.2	10.2	1989.0	12.8	15.0
		64	123.0	1180.8	9.6	1574.4	12.8	1968.0	16.0	19.0
		76	99.0	1128.6	11.4	1504.8	15.2	1881.0	19.0	23.0
		89	84.0	1121.4	13.4	1495.2	17.8	1869.0	22.3	27.0
		102	73.0	1116.9	15.3	1489.2	20.4	1861.5	25.5	31.0
		115	65.0	1121.3	17.3	1495.0	23.0	1868.8	28.8	35.0
		127	57.7	1099.2	19.1	1465.6	25.4	1832.0	31.8	38.0
		139	52.7	1098.8	20.9	1465.1	27.8	1831.3	34.8	42.0
		152	47.8	1089.8	22.8	1453.1	30.4	1816.4	38.0	46.0
		178	41.0	1094.7	26.7	1459.6	35.6	1824.5	44.5	53.0
		203	35.8	1090.1	30.5	1453.5	40.6	1816.9	50.8	61.0
		305	22.9	1047.7	45.8	1396.9	61.0	1746.1	76.3	91.0

Heay Duty Die Springs Iso Specification Series Metric Dimensions Red

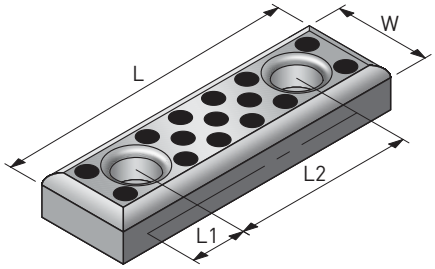
Hola Dia (mm)	Rod Dia (mm)	Free Length (mm)	Load 1mm Def (N)	LOAD DEFLECTION TABLE						
				For Optimum Life (15% of Free Length)		For Optimum Life (20% of Free Length)		For Optimum Life (25% of Free Length)		Maximum Deflection
A	B	C		Load (N)	Deflection (mm)	Load (N)	Deflection (mm)	Load (N)	Deflection (mm)	Deflection (mm)
32	16	38	388.0	2211.6	5.7	2948.8	7.9	3686.0	9.5	11.0
		44	324.0	2138.4	6.6	2851.2	8.8	3564.0	11.0	13.0
		51	272.0	2080.8	7.7	2774.4	10.2	3468.0	12.8	15.0
		64	212.0	2035.2	9.6	2713.6	12.8	3392.0	16.0	19.0
		76	172.0	1960.8	11.4	2614.4	15.2	3268.0	19.0	23.0
		89	141.0	1882.4	13.4	2509.8	17.8	3137.0	22.3	27.0
		102	122.0	1866.6	15.3	2488.8	20.4	3111.0	25.5	31.0
		115	107.0	1845.8	17.3	2461.0	23.0	3076.3	28.8	35.0
		127	93.0	1771.7	19.1	2362.2	25.4	2952.8	31.8	38.0
		139	86.0	1793.1	20.9	2390.8	27.8	2988.5	34.8	42.0
		152	78.0	1778.4	22.8	2371.2	30.4	2964.0	38.0	46.0
		178	67.2	1794.2	26.7	2392.3	35.6	2990.4	44.5	53.0
		203	59.1	1799.6	30.5	2399.5	40.6	2999.3	50.8	61.0
		254	46.4	1767.8	38.1	2357.1	50.8	2946.4	63.5	76.0
		305	38.0	1738.5	45.8	2318.0	61.0	2897.5	76.3	91.0
40	20	51	350.0	2677.5	7.7	3570.0	10.2	4462.5	12.8	15.0
		64	269.0	2582.4	9.6	3443.2	12.8	4304.0	16.0	19.0
		76	219.0	2496.6	11.4	3328.8	15.2	4161.0	19.0	23.0
		89	190.0	2536.5	13.4	3382.0	17.8	4227.5	22.3	27.0
		102	163.0	2493.9	15.3	3325.2	20.4	4156.5	25.5	31.0
		115	142.0	2449.5	17.3	3266.0	23.0	4082.5	28.8	35.0
		127	128.0	2438.4	19.1	3251.2	25.4	4064.0	31.8	38.0
		139	115.0	2397.8	20.9	3194.0	27.8	3996.3	34.8	42.0
		152	105.0	2394.0	22.8	3192.0	30.4	3990.0	38.0	46.0
		178	89.0	2376.3	26.7	3168.4	35.6	3960.5	44.5	53.0
		203	77.0	2344.7	30.5	3126.2	40.6	3907.8	50.8	61.0
		254	61.0	2324.1	38.1	3098.8	50.8	3873.5	63.5	76.0
		305	51.0	2333.3	45.8	3111.0	61.0	3888.8	76.3	91.0
50	25	64	413.0	2964.8	9.6	5286.4	12.8	6608.0	16.0	19.0
		76	339.0	3864.6	11.4	5152.8	15.2	6441.0	19.0	23.0
		89	228.0	3844.8	13.4	5126.4	17.8	6408.0	22.3	27.0
		102	245.0	3748.5	15.3	4998.0	20.4	6247.5	25.5	31.0
		115	215.0	3708.8	17.3	4945.0	23.0	6181.3	28.8	35.0
		127	192.0	3657.6	19.1	4876.8	25.4	6096.0	31.8	38.0
		139	168.0	3502.8	20.9	4670.4	27.8	5838.0	34.8	42.0
		152	154.0	3511.2	22.8	4681.6	30.4	5852.0	38.0	46.0
		178	134.0	3577.8	26.7	4770.4	35.6	5963.0	44.5	53.0
		203	117.0	3562.7	30.5	4750.2	40.6	5937.8	50.8	61.0
		254	89.0	3390.9	38.1	4521.2	50.8	5651.5	63.5	76.0
		305	73.0	3339.8	45.8	4453.0	61.0	5566.3	76.3	91.0

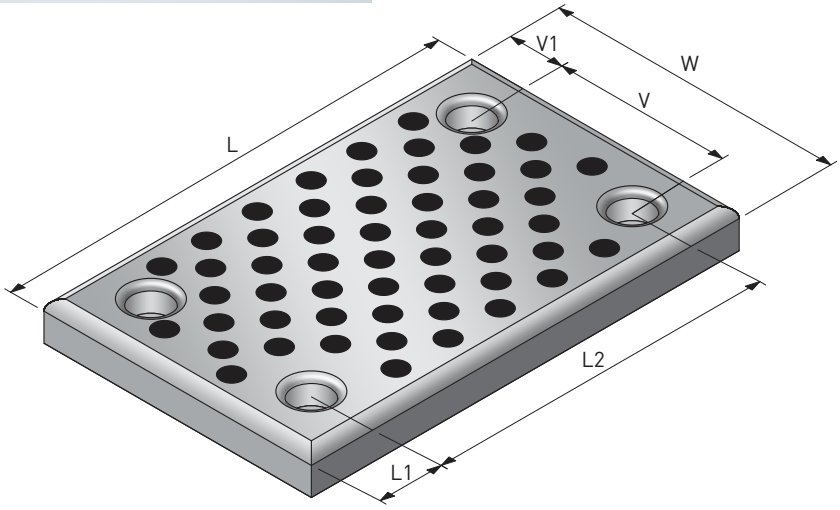
ArasZanjan

SLIDING PADS

Sliding Pads Cast Iron With Non-Liquid Lubricant

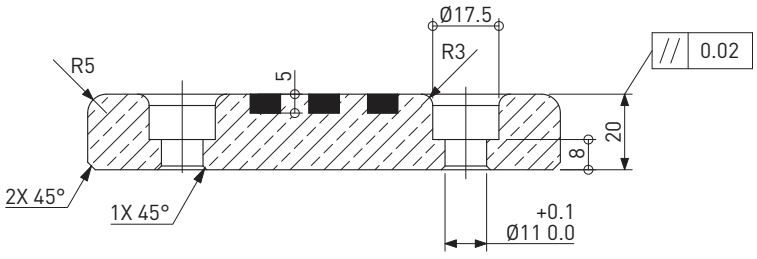
ویر پلیت چدنی





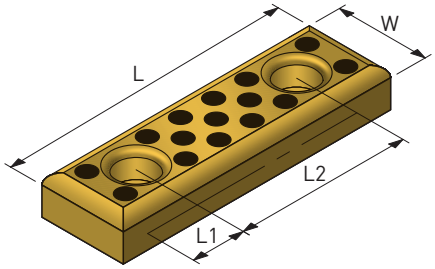
Ordering Code: WP/L*W/1 Ordering Code Example: WP/75*28/1 Hardness: 160-200 HB Material: Cast Iron

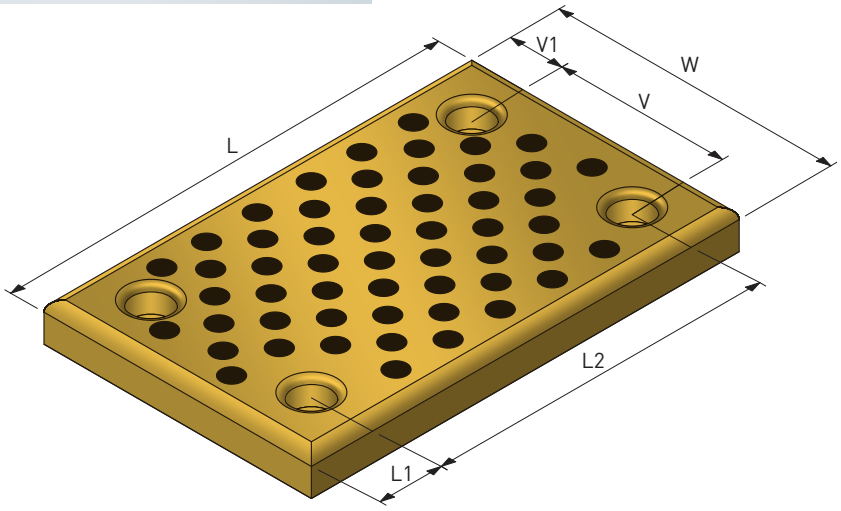
Model	W	L	L1	L2	V	V1
WP/75*28/2	28	75	15	45	-	-
WP/100*28/2		100	25	50		
WP/150*28/2		150		100		
WP/75*38/2	38	75	15	45		
WP/100*38/2		100	25	50		
WP/150*38/2		150		100		
WP/75*48/2	48	75	15	45		
WP/100*48/2		100	25	50		
WP/125*48/2		125		75		
WP/150*48/2		150		100		
WP/200*48/2		200		150		
WP/75*58/2	58	75	15	45		
WP/100*58/2		100	25	50		
WP/150*58/2		150		100		
WP/75*75/2	75	75		25		
WP/100*75/2		100		50		
WP/125*75/2		125		75		
WP/150*75/2		150		100		
WP/200*75/2		200		150		
WP/100*100/2	100	100		50	50	25
WP/125*100/2		125		75		
WP/150*100/2		150		100		
WP/200*100/2		200		150		
WP/250*100/2		250		200		
WP/300*100/2		300	50			37.5
WP/125*125/2	125	125	25	75		
WP/150*125/2		150		100		
WP/200*125/2		200		150		
WP/250*125/2		250		200		
WP/300*125/2		300	50			
WP/350*125/2		350	75			
WP/150*150/2	150	150	25	100	100	25
WP/200*150/2		200		150		
WP/250*150/2		250		200		



Sliding Pads Bronze With Non-Liquid Lubricant

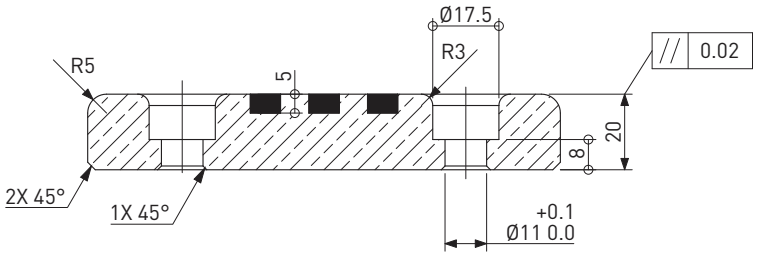
ویر پلیت برنزی





Ordering Code: WP/L*W/2 Ordering Code Example: WP/75*28/1 Hardness: 160-200 HB Material: Bronze

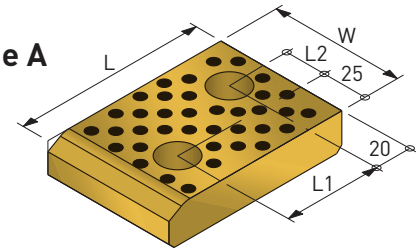
Model	W	L	L1	L2	V	V1
WP/75*28/1	28	75	15	45	-	-
WP/100*28/1		100	25	50		
WP/150*28/1		150		100		
WP/75*38/1	38	75	15	45		
WP/100*38/1		100	25	50		
WP/150*38/1		150		100		
WP/75*48/1	48	75	15	45		
WP/100*48/1		100	25	50		
WP/125*48/1		125		75		
WP/150*48/1		150		100		
WP/200*48/1		200		150		
WP/75*58/1	58	75	15	45		
WP/100*58/1		100	25	50		
WP/150*58/1		150		100		
WP/75*75/1	75	75		25		
WP/100*75/1		100		50		
WP/125*75/1		125		75		
WP/150*75/1		150		100		
WP/200*75/1		200		150		
WP/100*100/1	100	100		50	50	25
WP/125*100/1		125		75		
WP/150*100/1		150		100		
WP/200*100/1		200		150		
WP/250*100/1		250		200		
WP/300*100/1		300	50			37.5
WP/125*125/1	125	125	25	75		
WP/150*125/1		150		100		
WP/200*125/1		200		150		
WP/250*125/1		250		200		
WP/300*125/1		300	50			
WP/350*125/1		350	75			
WP/150*150/1	150	150	25	100	100	25
WP/200*150/1		200		150		
WP/250*150/1		250		200		



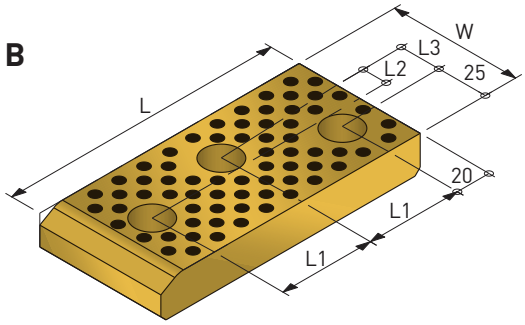
Sliding Pads Bronze With Non-Liquid Lubricant

ویر پلیت برنزی

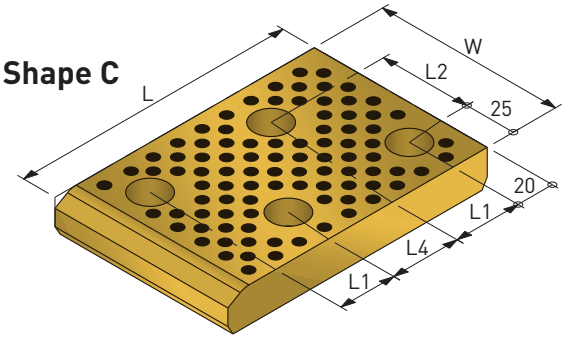
Shape A



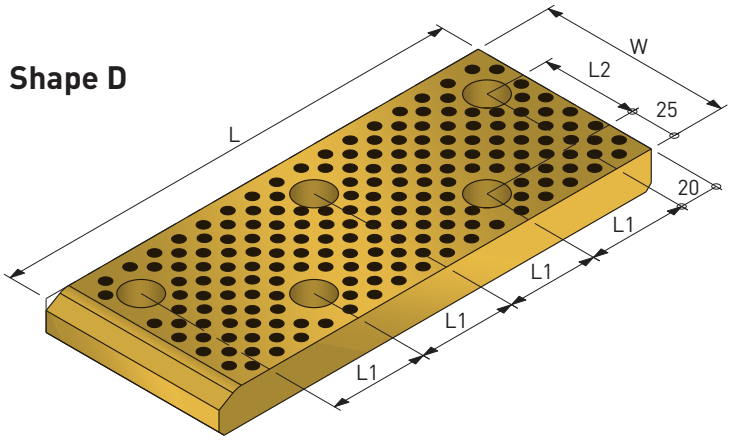
Shape B



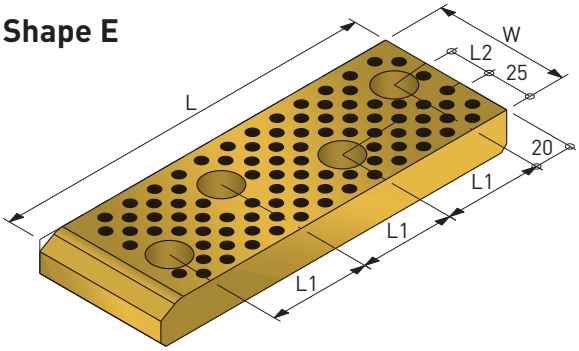
Shape C



Shape D

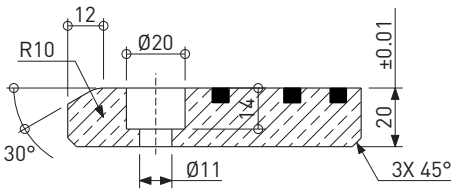


Shape E



Ordering Code: WP/D/74/W*L Ordering Code Example: WP/D/74/100*150 Hardness: 160-200 HB Material: Bronze with non-liquid lubricant

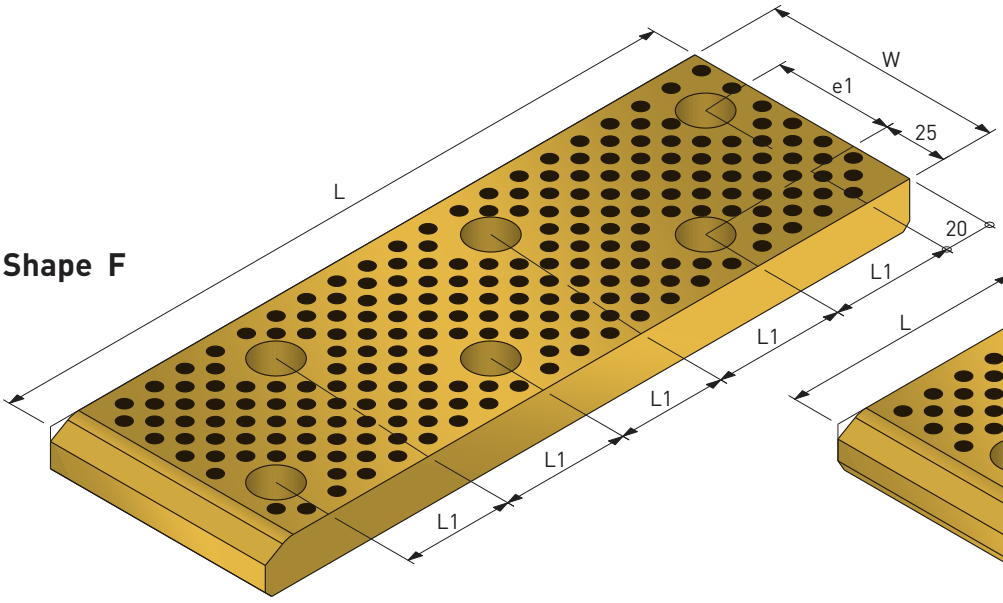
Model	Shape	W	L	L1	L2	L3	L4
WP/D/74/70*100	A	70	100	50	20	-	-
WP/D/74/70*150	B		150	-	10	20	-
WP/D/74/70*200	D		200	-	20	-	-
WP/D/74/100*150	C	100	150	25	50	-	50
WP/D/74/100*200	D		200	50		-	-
WP/D/74/100*250	E		250	-		-	-
WP/D/74/150*200	D	150	200	-	100	-	-
WP/D/74/150*250	E		250	-		-	-



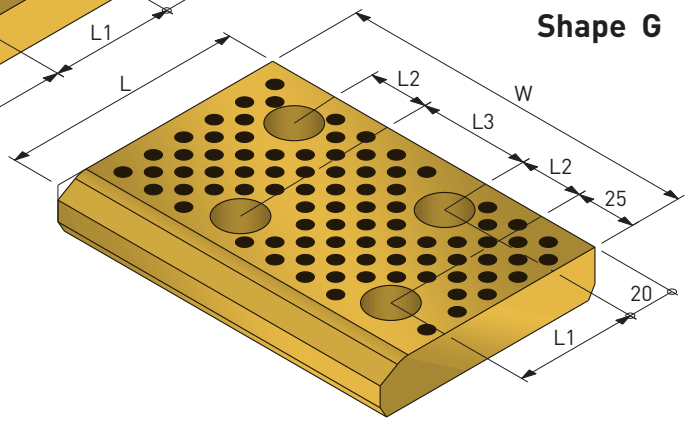
Sliding Pads Bronze With Non-Liquid Lubricant

ویر پلیت برنزی

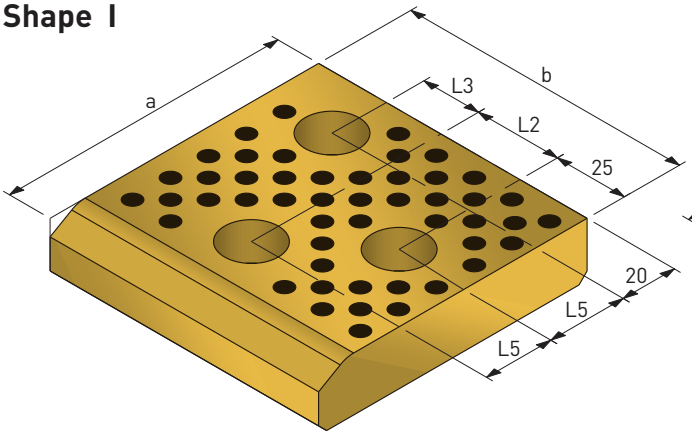
Shape F



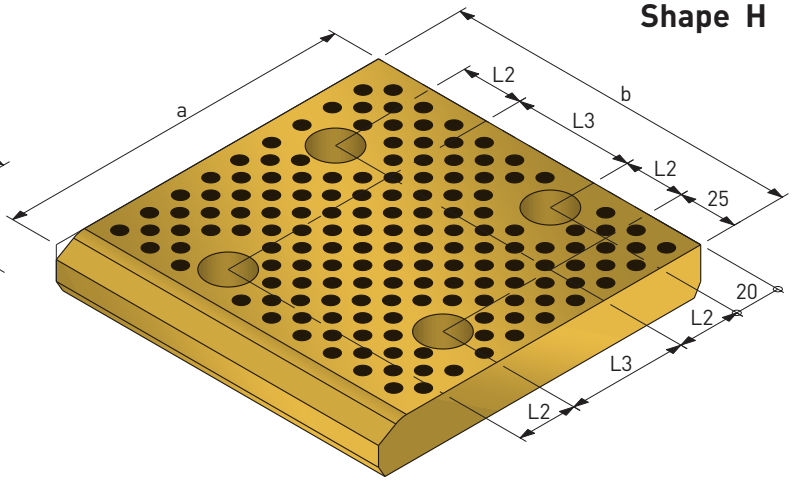
Shape G



Shape I

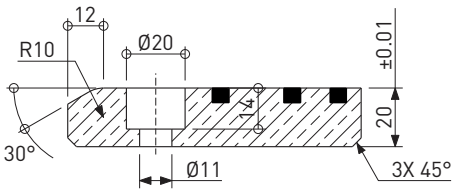


Shape H



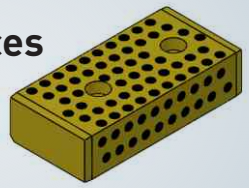
Ordering Code: WP/P/W*L Ordering Code Example: WP/P/150*100 Hardness: 160-200 HB Material: Bronze with non-liquid lubricant

Model	Shape	W	L	L1	L2	L3	L4	L5
WP/P/100*100	I	100	100	-	30	20	-	25
WP/P/100*300	F		300	50	50	-	-	-
WP/P/150*100	G	150	100	-	25	50	50	-
WP/P/150*150	H		150	-			-	-
WP/P/150*300	F		300	50	100	-	-	-
WP/P/200*100	G	200	100	-	c2	50	50	-

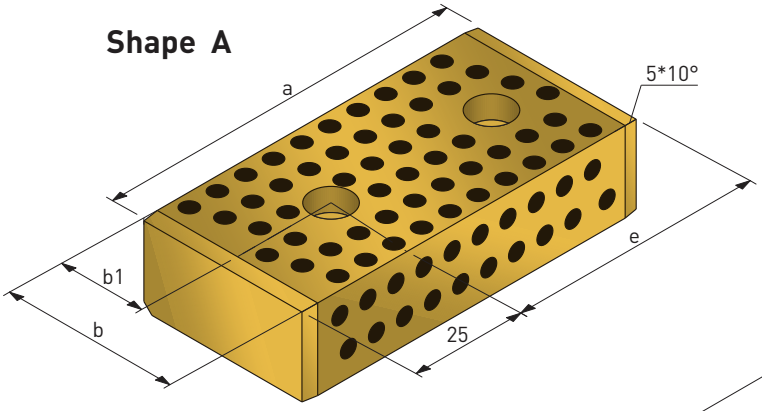


Guide Bars, With Two Sliding Surfaces Bronze With Non-Liquid Lubricant

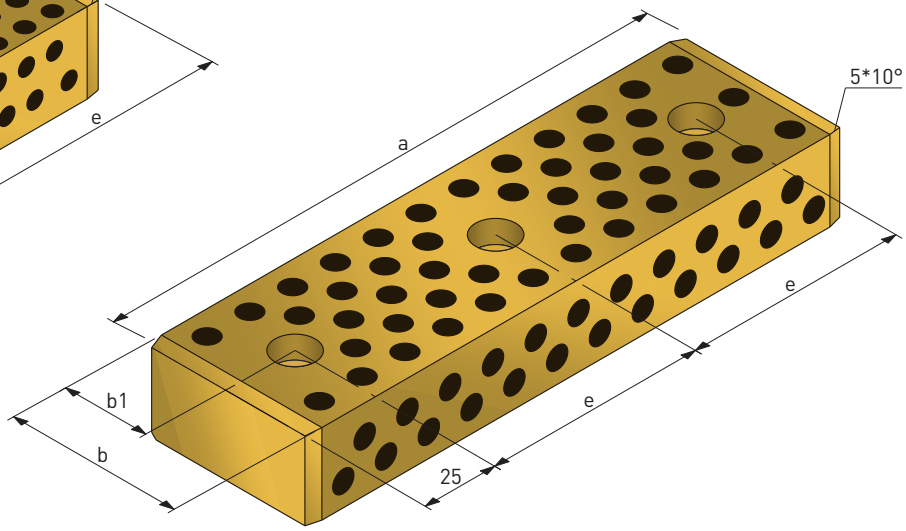
ویر پلیت برنزی



Shape A

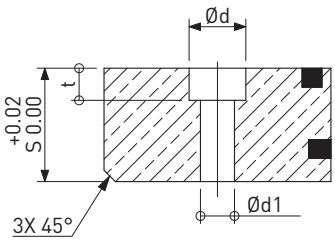


Shape B



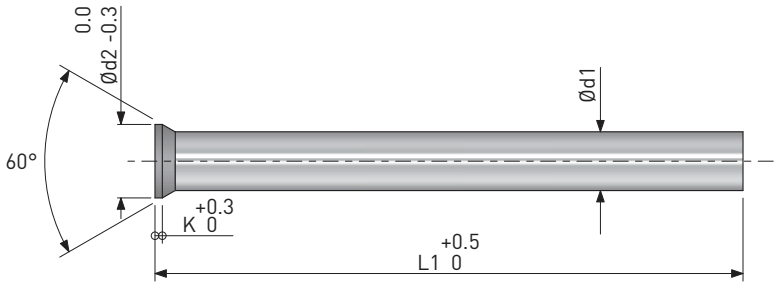
Ordering Code: WP/TS/b*s*a Ordering Code Example: WP/TS/25*12*110 Hardness: 160-200 HB Material: Bronze with non-liquid lubricant

Model	Shape	a	b	s	b1	e	d	d1	t
WP/TS/25*12*110	A	110	25	12	12.5	60	15	9	8.5
WP/TS/25*12*120		120				70			
WP/TS/25*15*110		110		15		60	18	11	10.5
WP/TS/25*15*120		120				70			
WP/TS/60*30*125		125	60	30	30	75	20	13.5	13
WP/TS/60*30*150		150				100			
WP/TS/60*30*160		160				110			
WP/TS/60*30*200	B	200				75			
WP/TS/60*40*125	A	125		40					
WP/TS/60*40*150		150				100			
WP/TS/60*40*160		160				110			
WP/TS/60*40*200	B	200				75			



EJECTOR PIN

Ejector Pin
میل پران



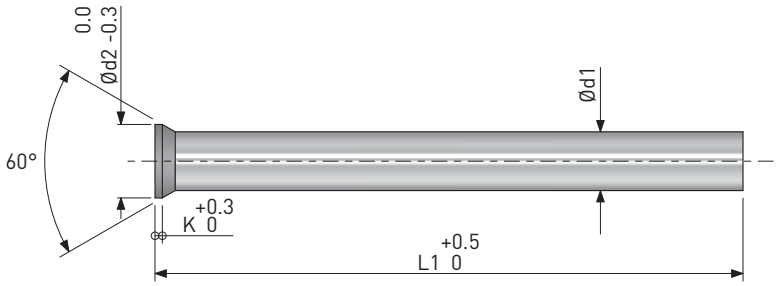
Ordering Code: SP/S/Ød1*L1 Ordering Code Example: SP/S/1*80 Material: ck75 Deep Hardness: 55 + 2 HRC

Model	Ød1	Ød2	L1	K
SP/S/1*80	1	1.8	80	1
SP/S/1*100			100	
SP/S/1*125			125	
SP/S/1.5*80	1.5	2.2	80	
SP/S/1.5*100			100	
SP/S/1.5*125			125	
SP/S/2*80	2	3	80	
SP/S/2*100			100	
SP/S/2*125			125	
SP/S/2*160			160	
SP/S/2.5*80	2.5	3.5	80	
SP/S/2.5*100			100	
SP/S/2.5*125			125	
SP/S/2.5*160			160	
SP/S/2.5*200			200	
SP/S/3*80	3	4.5	80	
SP/S/3*100			100	
SP/S/3*125			125	
SP/S/3*160			160	
SP/S/3*200			200	
SP/S/3.5*80	3.5	5	80	
SP/S/3.5*100			100	
SP/S/3.5*125			125	
SP/S/3.5*160			160	
SP/S/3.5*200			200	
SP/S/4*80	4	5.5	80	
SP/S/4*100			100	
SP/S/4*125			125	
SP/S/4*160			160	
SP/S/4*200			200	
SP/S/4.5*80	4.5	6	80	
SP/S/4.5*100			100	
SP/S/4.5*125			125	
SP/S/4.5*160			160	
SP/S/4.5*200			200	
SP/S/5*80	5	6.5	80	
SP/S/5*100			100	
SP/S/5*125			125	
SP/S/5*160			160	
SP/S/5*200			200	
SP/S/5.5*80	5.5	7	80	
SP/S/5.5*100			100	
SP/S/5.5*125			125	
SP/S/5.5*160			160	
SP/S/5.5*200			200	
SP/S/6*80	6	8	80	
SP/S/6*100			100	
SP/S/6*125			125	
SP/S/6*160			160	
SP/S/6*200			200	
SP/S/6.5*80	6.5	9	80	
SP/S/6.5*100			100	
SP/S/6.5*125			125	
SP/S/6.5*160			160	
SP/S/6.5*200			200	
SP/S/7*80	7		80	
SP/S/7*100			100	

Model	Ød1	Ød2	L1	K
SP/S/7*125	7	9	125	1
SP/S/7*160			160	
SP/S/7*200			200	
SP/S/7.5*80	7.5	10	80	
SP/S/7.5*100			100	
SP/S/7.5*125			125	
SP/S/7.5*160			160	
SP/S/7.5*200			200	
SP/S/8*80	8		80	
SP/S/8*100			100	
SP/S/8*125			125	
SP/S/8*160			160	
SP/S/8*200			200	
SP/S/8*250			250	
SP/S/8*315			315	
SP/S/8.5*80	8.5	11	80	
SP/S/8.5*100			100	
SP/S/8.5*125			125	
SP/S/8.5*160			160	
SP/S/8.5*200			200	
SP/S/8.5*250			250	
SP/S/8.5*315			315	
SP/S/9*80	9		80	
SP/S/9*100			100	
SP/S/9*125			125	
SP/S/9*160			160	
SP/S/9*200			200	
SP/S/9*250			250	
SP/S/9*315			315	
SP/S/9.5*80	9.5	12	80	
SP/S/9.5*100			100	
SP/S/9.5*125			125	
SP/S/9.5*160			160	
SP/S/9.5*200			200	
SP/S/9.5*250			250	
SP/S/9.5*315			315	
SP/S/10*80	10		80	1.5
SP/S/10*100			100	
SP/S/10*125			125	
SP/S/10*160			160	
SP/S/10*200			200	
SP/S/10*250			250	
SP/S/10*315			315	
SP/S/10.5*80	10.5		80	
SP/S/10.5*100			100	
SP/S/10.5*125			125	
SP/S/10.5*160			160	
SP/S/10.5*200			200	
SP/S/10.5*250			250	
SP/S/10.5*315			315	
SP/S/11*80	11	13	80	
SP/S/11*100			100	
SP/S/11*125			125	
SP/S/11*160			160	
SP/S/11*200			200	
SP/S/11*250			250	
SP/S/11*315			315	

Model	Ød1	Ød2	L1	K
SP/S/11.5*80	11.5	13	80	1.5
SP/S/11.5*100			100	
SP/S/11.5*125			125	
SP/S/11.5*160			160	
SP/S/11.5*200			200	
SP/S/11.5*250			250	
SP/S/11.5*315			315	
SP/S/12*80	12	14	80	
SP/S/12*100			100	
SP/S/12*125			125	
SP/S/12*160			160	
SP/S/12*200			200	
SP/S/12*250			250	
SP/S/12*315			315	
SP/S/12.5*80	12.5	15	80	
SP/S/12.5*100			100	
SP/S/12.5*125			125	
SP/S/12.5*160			160	
SP/S/12.5*200			200	
SP/S/12.5*250			250	
SP/S/12.5*315			315	
SP/S/13*80	13		80	
SP/S/13*100			100	
SP/S/13*125			125	
SP/S/13*160			160	
SP/S/13*200			200	
SP/S/13*250			250	
SP/S/13*315			315	
SP/S/14*80	14	16	80	
SP/S/14*100			100	
SP/S/14*125			125	
SP/S/14*160			160	
SP/S/14*200			200	
SP/S/14*250			250	
SP/S/14*315			315	
SP/S/16*80	16	18	80	
SP/S/16*100			100	
SP/S/16*125			125	
SP/S/16*160			160	
SP/S/16*200			200	
SP/S/16*250			250	
SP/S/16*315			315	
SP/S/18*80	18	20	80	
SP/S/18*100			100	
SP/S/18*125			125	
SP/S/18*160			160	
SP/S/18*200			200	
SP/S/18*250			250	
SP/S/18*315			315	
SP/S/20*80	20	22	80	
SP/S/20*100			100	
SP/S/20*125			125	
SP/S/20*160			160	
SP/S/20*200			200	
SP/S/20*250			250	
SP/S/20*315			315	

Punch Pin
سنبه برشی

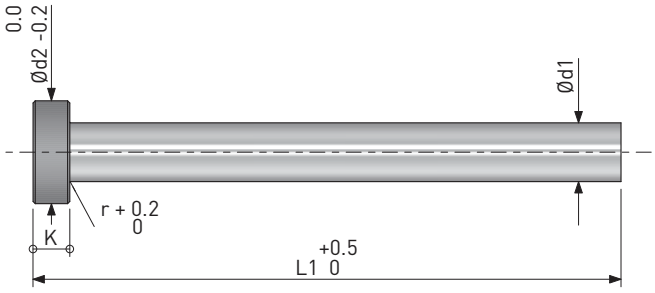


Ordering Code: SB/W/Ød1*L1 Ordering Code Example: SB/W/2*71 Material: 1.2210 Deep Hardness: 58 + 2 HRC

Model	Ød1	Ød2	L1	K
SB/W/2*71	2	3	71	1
SB/W/2*80			80	
SB/W/2.5*71	2.5	3.5	71	
SB/W/2.5*80			80	
SB/W/3*71	3	4.5	71	
SB/W/3*80			80	
SB/W/3.5*71	3.5	5	71	
SB/W/3.5*80			80	
SB/W/4*71	4	5.5	71	
SB/W/4*80			80	
SB/W/4.5*71	4.5	6	71	
SB/W/4.5*80			80	
SB/W/4.5*100			100	
SB/W/5*71	5	6.5	71	
SB/W/5*80			80	
SB/W/5*100			100	
SB/W/5.5*71	5.5	7	71	
SB/W/5.5*80			80	
SB/W/5.5*100			100	
SB/W/6*71	6	8	71	
SB/W/6*80			80	
SB/W/6*100			100	
SB/W/6.5*71	6.5	9	71	
SB/W/6.5*80			80	
SB/W/6.5*100			100	
SB/W/7*71	7		71	
SB/W/7*80			80	
SB/W/7*100			100	
SB/W/7.5*71	7.5	10	71	
SB/W/7.5*80			80	
SB/W/7.5*100			100	
SB/W/8*71	8		71	
SB/W/8*80			80	
SB/W/8*100			100	
SB/W/8.5*71	8.5	11	71	
SB/W/8.5*80			80	
SB/W/8.5*100			100	
SB/W/9*71	9		71	
SB/W/9*80			80	
SB/W/9*100			100	

Model	Ød1	Ød2	L1	K
SB/W/9.5*71	9.5	12	71	1
SB/W/9.5*80			80	
SB/W/9.5*100			100	
SB/W/10*71	10		71	1.5
SB/W/10*80			80	
SB/W/10*100			100	
SB/W/10.5*71	10.5		71	
SB/W/10.5*80			80	
SB/W/10.5*100			100	
SB/W/11*71	11	13	71	
SB/W/11*80			80	
SB/W/11*100			100	
SB/W/11.5*71	11.5		71	
SB/W/11.5*80			80	
SB/W/11.5*100			100	
SB/W/12*71	12	14	71	
SB/W/12*80			80	
SB/W/12*100			100	
SB/W/12.5*71	12.5	15	71	
SB/W/12.5*80			80	
SB/W/12.5*100			100	
SB/W/13*71	13		71	
SB/W/13*80			80	
SB/W/13*100			100	
SB/W/14*71	14	16	71	
SB/W/14*80			80	
SB/W/14*100			100	
SB/W/16*71	16	18	71	
SB/W/16*80			80	
SB/W/16*100			100	
SB/W/18*71	18	20	71	
SB/W/18*80			80	
SB/W/18*100			100	
SB/W/20*71	20	22	71	
SB/W/20*80			80	
SB/W/20*100			100	

Ejector Pin
سر استوانه میل پران



Ordering Code: SG/S/Ød1*L1 Ordering Code Example: SG/S/2*80 Material: ck75 Deep Hardness: 55 + 2 HRC

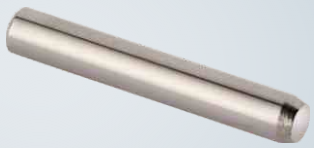
Model	Ød1	Ød2	L1	K
SG/S/2*80	2	4	80	2
SG/S/2*100			100	
SG/S/2*125			125	
SG/S/2*160			160	
SG/S/2*200			200	
SG/S/2*250			250	
SG/S/2.5*80	2.5	5	80	
SG/S/2.5*100			100	
SG/S/2.5*125			125	
SG/S/2.5*160			160	
SG/S/2.5*200			200	
SG/S/2.5*250			250	
SG/S/3*80	3	6	80	3
SG/S/3*100			100	
SG/S/3*125			125	
SG/S/3*160			160	
SG/S/3*200			200	
SG/S/3*250			250	
SG/S/3.5*80	3.5	7	80	
SG/S/3.5*100			100	
SG/S/3.5*125			125	
SG/S/3.5*160			160	
SG/S/3.5*200			200	
SG/S/3.5*250			250	
SG/S/4*80	4	8	80	
SG/S/4*100			100	
SG/S/4*125			125	
SG/S/4*160			160	
SG/S/4*200			200	
SG/S/4*250			250	
SG/S/4.5*80			80	
SG/S/4.5*100	4.5		100	
SG/S/4.5*125			125	
SG/S/4.5*160			160	
SG/S/4.5*200			200	
SG/S/4.5*250			250	
SG/S/5*80	5	10	80	
SG/S/5*100			100	
SG/S/5*125			125	
SG/S/5*160			160	
SG/S/5*200			200	
SG/S/5*250			250	
SG/S/5*315			315	
SG/S/5.5*80	5.5		80	
SG/S/5.5*100			100	
SG/S/5.5*125			125	
SG/S/5.5*160			160	
SG/S/5.5*200			200	
SG/S/5.5*250			250	
SG/S/6*80	6	12	80	5
SG/S/6*100			100	
SG/S/6*125			125	
SG/S/6*160			160	
SG/S/6*200			200	
SG/S/6*250			250	
SG/S/6.5*80	6.5		80	
SG/S/6.5*100			100	

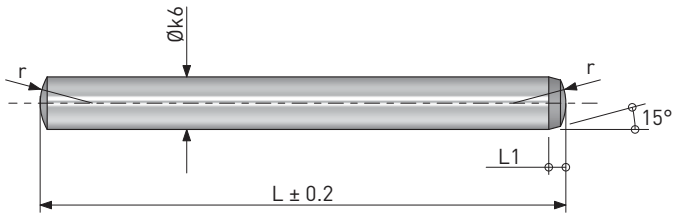
Model	Ød1	Ød2	L1	K
SG/S/6.5*125	6.5	12	125	5
SG/S/6.5*160			160	
SG/S/6.5*200			200	
SG/S/6.5*250			250	
SG/S/7*80	7		80	
SG/S/7*100			100	
SG/S/7*125			125	
SG/S/7*160			160	
SG/S/7*200			200	
SG/S/7*250			250	
SG/S/8*80	8	14	80	
SG/S/8*100			100	
SG/S/8*125			125	
SG/S/8*160			160	
SG/S/8*200			200	
SG/S/8*250			250	
SG/S/8*315			315	
SG/S/8.5*80	8.5		80	
SG/S/8.5*100			100	
SG/S/8.5*125			125	
SG/S/8.5*160			160	
SG/S/8.5*200			200	
SG/S/8.5*250			250	
SG/S/8.5*315			315	
SG/S/8.5*400			400	
SG/S/8.5*500			500	
SG/S/9*80	9		80	
SG/S/9*100			100	
SG/S/9*125			125	
SG/S/9*160			160	
SG/S/9*200			200	
SG/S/9*250			250	
SG/S/9*315			315	
SG/S/9*400			400	
SG/S/9*500			500	
SG/S/10*80	10	16	80	
SG/S/10*100			100	
SG/S/10*125			125	
SG/S/10*160			160	
SG/S/10*200			200	
SG/S/10*250			250	
SG/S/10*315			315	
SG/S/10*400			400	
SG/S/10*500			500	
SG/S/10.5*80	10.5		80	
SG/S/10.5*100			100	
SG/S/10.5*125			125	
SG/S/10.5*160			160	
SG/S/10.5*200			200	
SG/S/10.5*250			250	
SG/S/10.5*315			315	
SG/S/10.5*400			400	
SG/S/10.5*500			500	
SG/S/11*80	11		80	
SG/S/11*100			100	
SG/S/11*125			125	
SG/S/11*160			160	

Model	Ød1	Ød2	L1	K
SG/S/11*200	11	16	200	5
SG/S/11*250			250	
SG/S/11*315			315	
SG/S/11*400			400	
SG/S/11*500			500	
SG/S/12*80	12	20	80	7
SG/S/12*100			100	
SG/S/12*125			125	
SG/S/12*160			160	
SG/S/12*200			200	
SG/S/12*250			250	
SG/S/12*315			315	
SG/S/12*400			400	
SG/S/12*500			500	
SG/S/12.5*80	12.5		80	
SG/S/12.5*100			100	
SG/S/12.5*125			125	
SG/S/12.5*160			160	
SG/S/12.5*200			200	
SG/S/12.5*250			250	
SG/S/12.5*315			315	
SG/S/12.5*400			400	
SG/S/12.5*500			500	
SG/S/14*80	14	22	80	
SG/S/14*100			100	
SG/S/14*125			125	
SG/S/14*160			160	
SG/S/14*200			200	
SG/S/14*250			250	
SG/S/14*315			315	
SG/S/14*400			400	
SG/S/14*500			500	
SG/S/16*80	16		80	
SG/S/16*100			100	
SG/S/16*125			125	
SG/S/16*160			160	
SG/S/16*200			200	
SG/S/16*250			250	
SG/S/16*315			315	
SG/S/16*400			400	
SG/S/16*500			500	
SG/S/16*630			630	
SG/S/18*160	18	24	160	
SG/S/18*200			200	
SG/S/18*250			250	
SG/S/18*315			315	
SG/S/18*400			400	
SG/S/18*500			500	
SG/S/18*630			630	
SG/S/20*160	20	26	160	8
SG/S/20*200			200	
SG/S/20*250			250	
SG/S/20*315			315	
SG/S/20*400			400	
SG/S/20*500			500	
SG/S/20*630			630	

Dowel Pin

پین



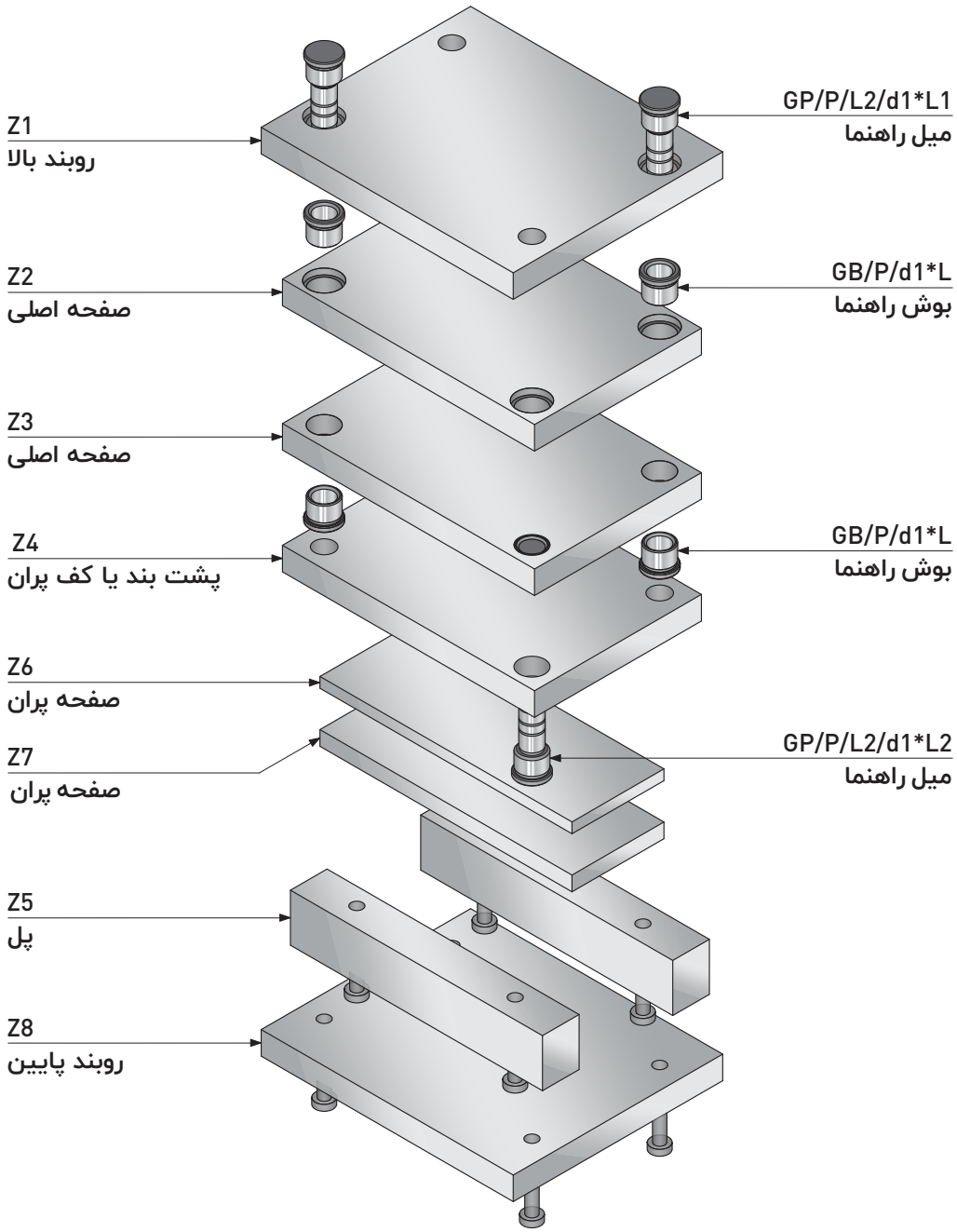


Ordering Code: DP/Ød*L Ordering Code Example: DP/4*30 Material: ck75 Deep Hardness: 56 ± 2 HRC

Model	Ød	L	L1	r
DP/4*30	4	30	1.7	4
DP/4*40		40		
DP/4*50		50		
DP/4*60		60		
DP/6*30	6	30	2.1	6
DP/6*40		40		
DP/6*50		50		
DP/6*60		60		
DP/8*30	8	30	2.6	8
DP/8*40		40		
DP/8*50		50		
DP/8*60		60		
DP/8*70		70		
DP/8*80		80		
DP/10*30	10	30	3	10
DP/10*40		40		
DP/10*50		50		
DP/10*60		60		
DP/10*70		70		
DP/10*80		80		
DP/10*90		90		
DP/10*100		100		
DP/12*40	12	40	3.8	12
DP/12*50		50		
DP/12*60		60		
DP/12*70		70		
DP/12*80		80		
DP/12*90		90		
DP/12*100		100		

ArasZanjan

MOULD BASES

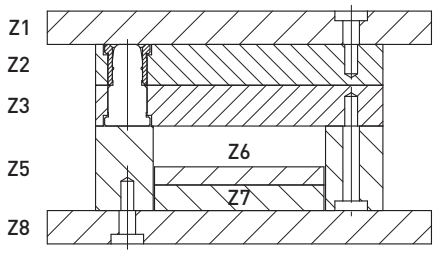


Ordering Code: P/ X*Y / S1*S2*H*K*T*D/ Material / 1 Or 2 Or 3 Or 4 Or 5

ضخامت Z2
ضخامت Z3
ضخامت Z4
ضخامت Z8
ضخامت Z1
ضخامت Z5

/ 1

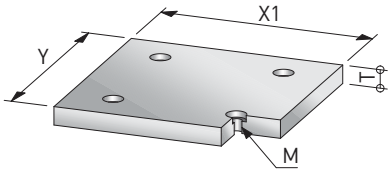
یک صفحه متحرک بدون پشت بند

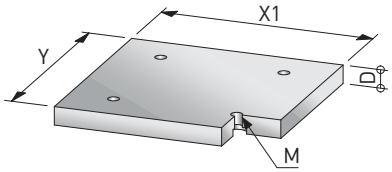


Ordering Code: P/X*Y/S1*S2*K*T*D/ Material / 1

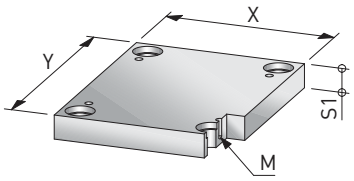
Tolerance Thickness: +0.2

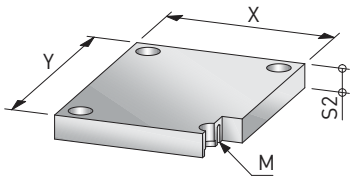
Z1
Z8



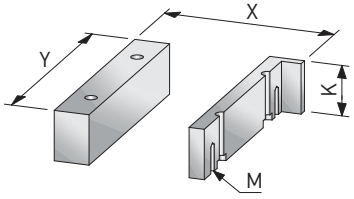


Z2
Z3

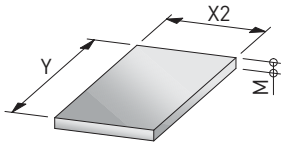




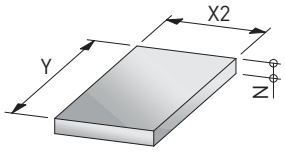
Z5

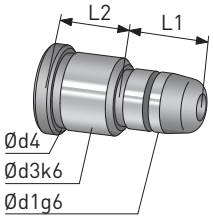


Z6

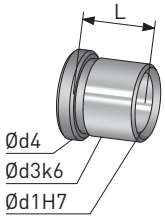


Z7



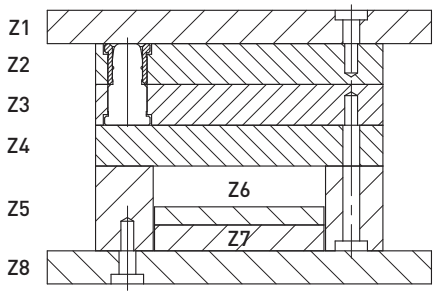


L1 = S1
L2 = S2



L = S1

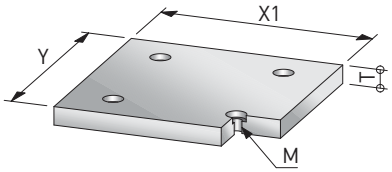
/ 2
یک صفحه متحرک با پشت بند

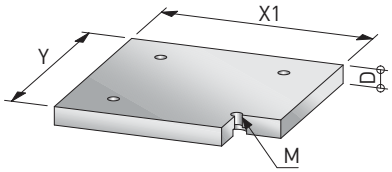


Ordering Code: P/X*Y/S1*S2*H*K*T*D/ Material / 2

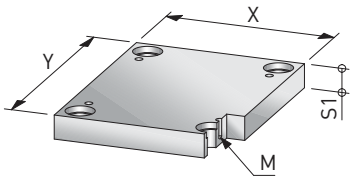
Tolerance Thickness: +0.2

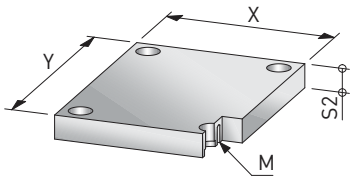
Z1
Z8



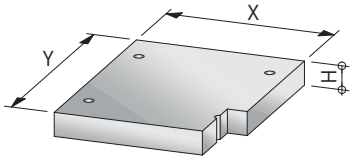


Z2
Z3

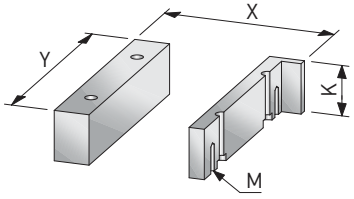




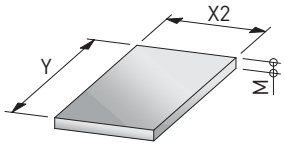
Z4



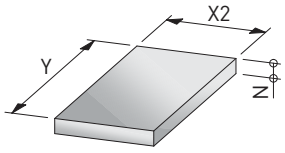
Z5

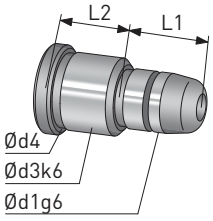


Z6

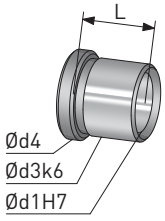


Z7



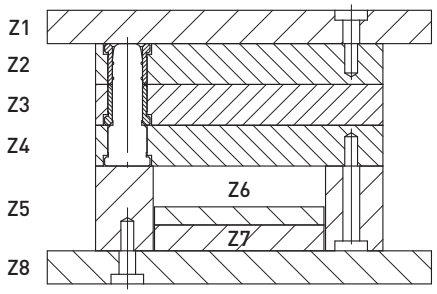


L1 = S1
L2 = S2



L = S1

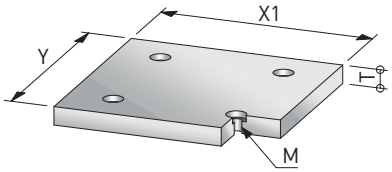
/ 3
یک صفحه متحرک با پشت بند

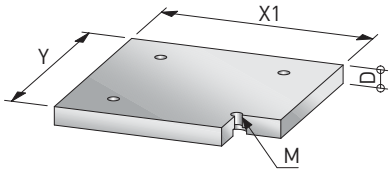


Ordering Code: P/X*Y/S1*S2*H*K*T*D/ Material / 3

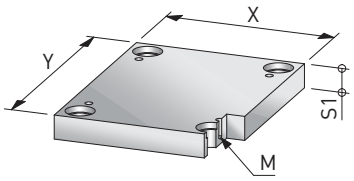
Tolerance Thickness: +0.2

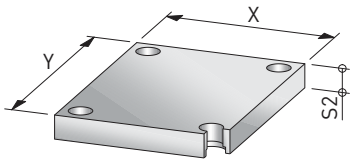
Z1
Z8



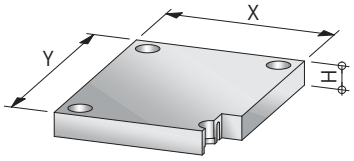


Z2
Z3

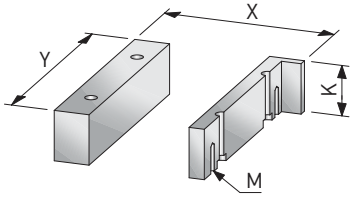




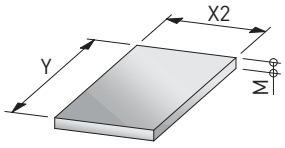
Z4



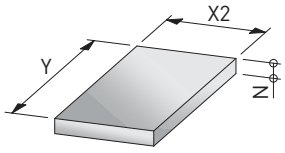
Z5

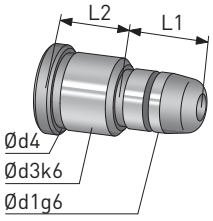


Z6

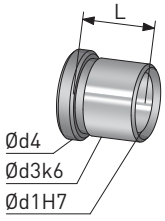


Z7



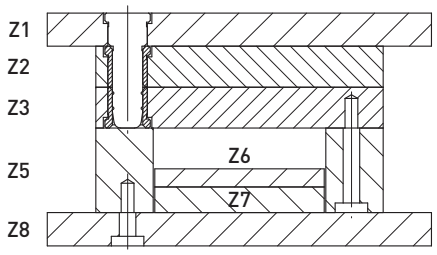


L1 = S1+S2
L2 = H



L = S1
L = S2

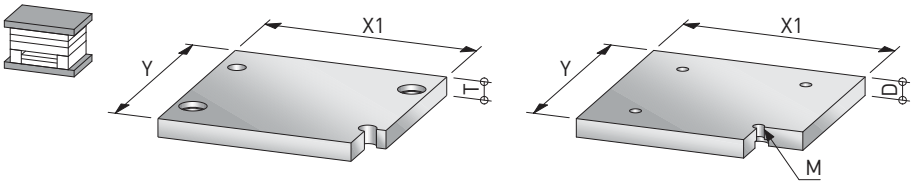
/ 4
راه گاه سوزنی



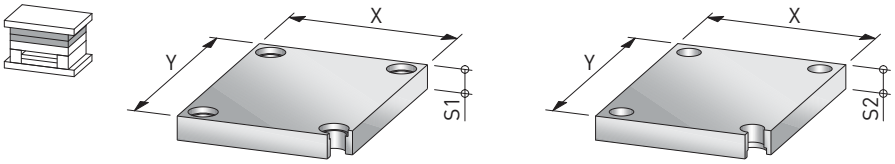
Ordering Code: P/X*Y/S1*S2*K*T*D/ Material / 4

Tolerance Thickness: +0.2

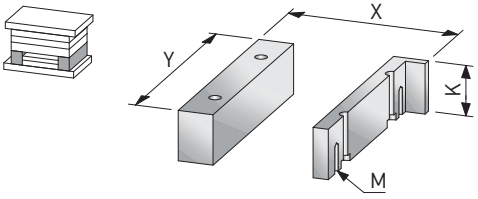
Z1
Z8



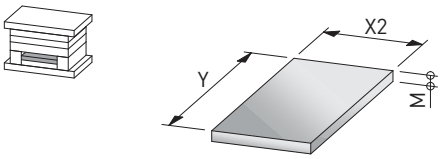
Z2
Z3



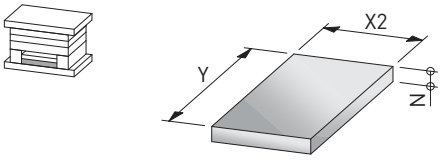
Z5

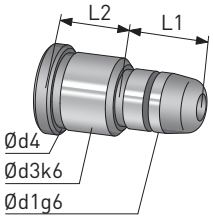


Z6

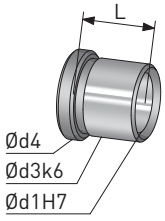


Z7





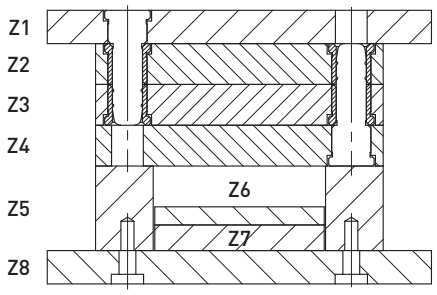
L1 = S1+S2
L2 = H



L = S1
L = S2

/ 5

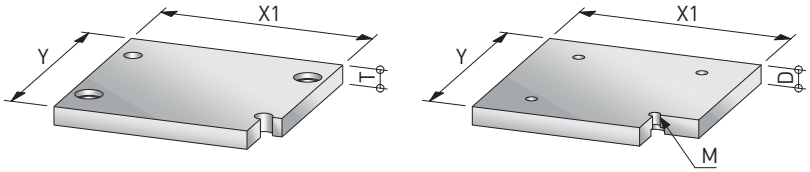
مخلوطی



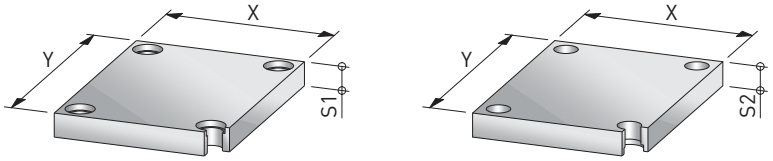
Ordering Code: P/X*Y/S1*S2*H*K*T*D/ Material / 5

Tolerance Thickness: +0.2

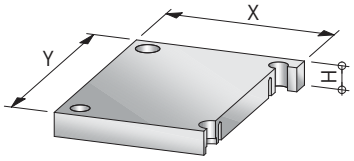
Z1
Z8



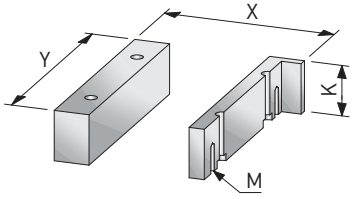
Z2
Z3



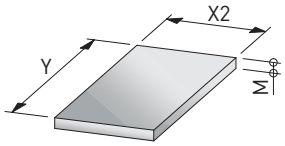
Z4



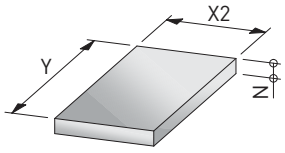
Z5

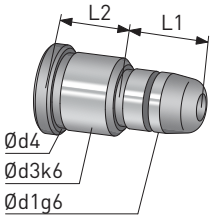


Z6

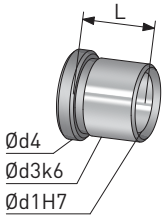


Z7





L1 = S1+S2
L2 = T



L = S1
L = S2

Material No.: 1.2312

Designation

Din: 40 CrMnMoS 86
AFNOR: 40 CMD 8.S
UNI: -
AISI: P20 +S

Indicatory analysis:

C	0.40
Si	0.40
Mn	1.50
Cr	1.90
Mo	0.20
S	0.06

Strength: ~ 1080 N/mm²

Thermal conductivity at 100 °C: 35 $\frac{W}{mK}$

TechnicalTip

- for increased surface quality requirements use material grade 1.2311.

Character: alloyed and pre-toughened **tool steel**, with excellent machinability in the hardened condition because of the Sulphur additive; high dimensional stability

Application: plates for mould tools and dies with increased requirements on strength; high-tensile machine parts

Treatment by

Polishing:
technical polishing possible; for higher surface requirements we recommend 1.2311 or 1.2738
Etching: } not recommended
EDM: } not recommended
Nitriding:
increases the steel's wear resistance

Heat treatment: already pre-toughened, usually no heat treatment required

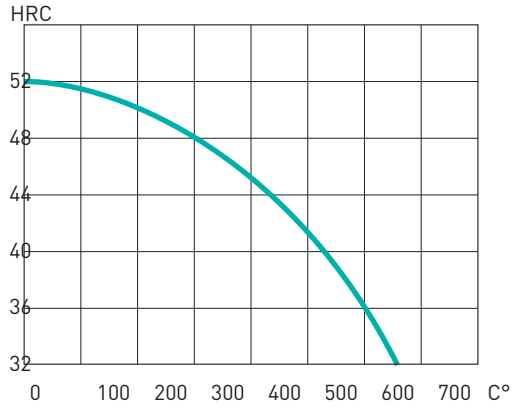
Nitriding:
before nitriding, stress-relief annealing at 580 °C (Meusburger standard) is recommended

Hardening:
840 to 860 °C

Cooling:
to 180 °C/220 °C in oil/hot bath
obtainable hardness: **52 HRC**

Tempering:
slow heating to tempering temperature immediately after hardening; minimum time in furnace: 1 hour per 25 mm part thickness.

Tempering chart:



Material No.: 1.7225

Designation

Din: 42 CrMnMo 4
AFNOR: 42 CD 4
UNI: 42 CrMnMo 4
AISI: 4140

Indicatory analysis:

C	0.42
Si	0.25
Mn	0.75
Cr	<0.035
Mo	1.10
S	0.22

Strength: ~ 720 N/mm²

Tensile strength: heat treated max. 720 N/mm²

Thermal conductivity at 20 °C: 42.6 $\frac{W}{mK}$

Character: alloyed and pre-toughened steel with high resistance and high toughness; universally useable in engineering

Application: machine construction, base plates, axes, gear shafts, gear wheels

Treatment by

Nitriding:	suitable
Welding:	not recommended
EDM:	suitable for EDM
Coating:	suitable

Heat treatment:

Normalizing:
840 to 880 °C afterwards air cooling
some components need tempering afterwards

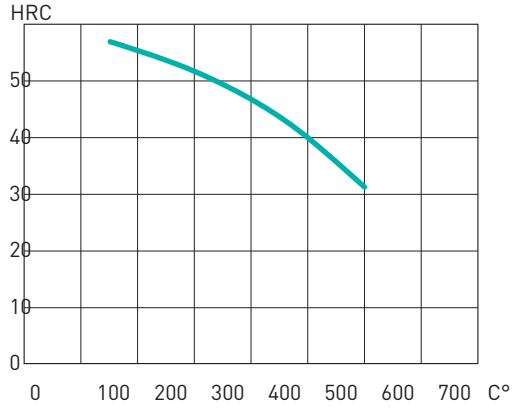
Annealing:
680 to 720 °C, about 2 to 5 hours
slow controlled cooling of 10 to 20 °C per hour to about 600 °C
then further cooling in air. Maximum 217 HB

Toughening:
max. 1.600 N/mm²

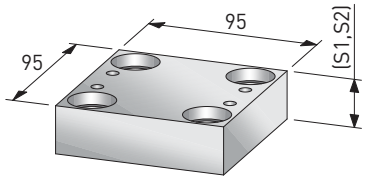
Hardening:
820 to 880 °C
quenching in oil or water
oil hardening for thin and complex,
water hardening for large and simple components
obtainable hardness: 53–61 HRC

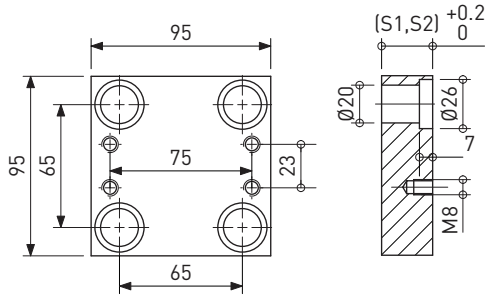
Tempering:
slow heating to temperature (to avoid forming of cracks)
immediately after hardening; at least 60 minutes
cooling in air

Tempering chart:



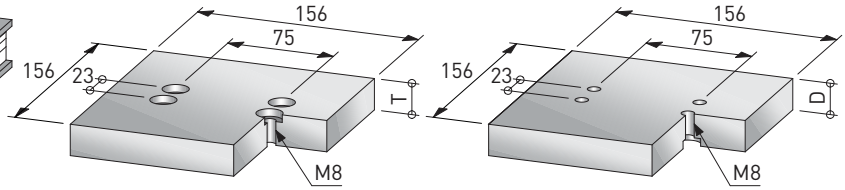
095×095





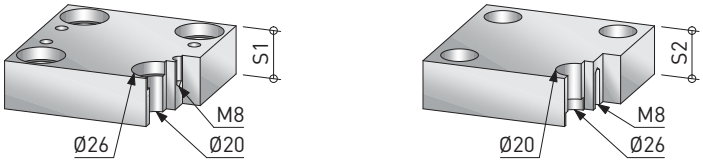
Tolerance Thickness: +0.2

Z1 / Z8



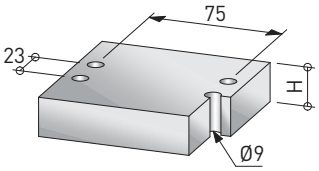
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●

Z2 / Z3



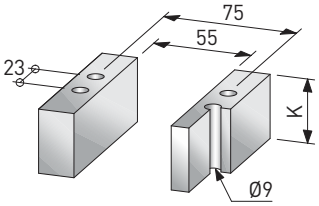
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	22			●	●	●
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



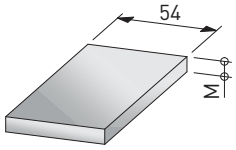
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●

Z5



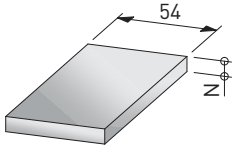
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			
	36	●	●			
	46	●	●			

Z6

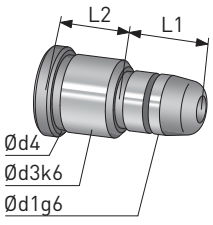


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	8	●	●			

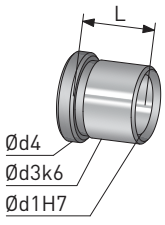
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	8	●	●			

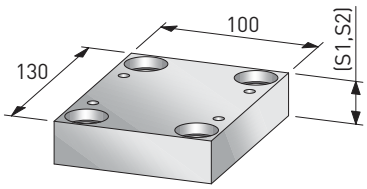


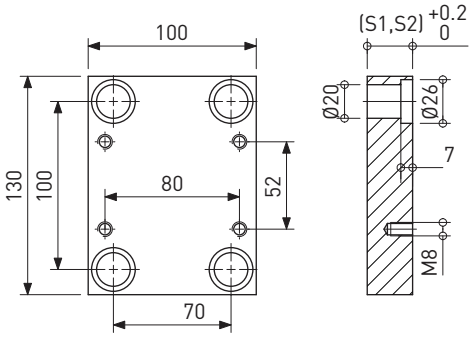
GP/P/L2/d1*L1	GP/P/L2/d1*L1
22/15*21	55
26	46/15*45
35	55
45	
27/15*26	
35	
45	
55	
36/15*35	
45	



GB/P/d1*L
15*22
27
36
46
56

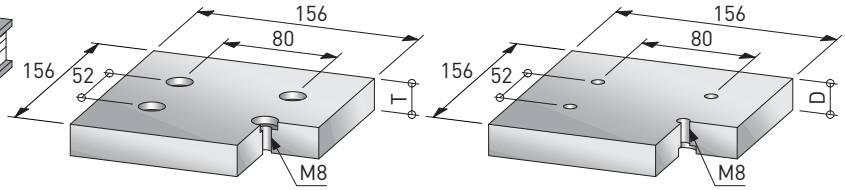
100×130





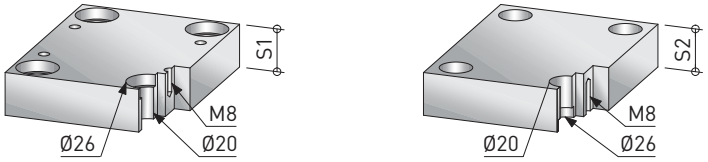
Tolerance Thickness: +0.2

Z1 / Z8



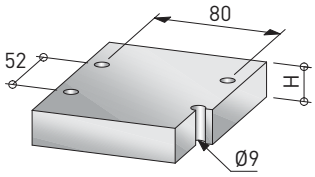
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●

Z2 / Z3



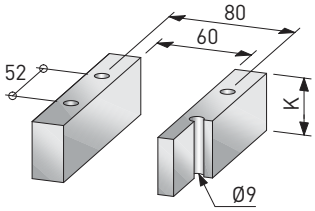
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



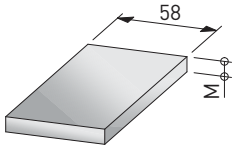
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●

Z5



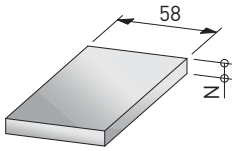
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			
	36	●	●			
	46	●	●			

Z6

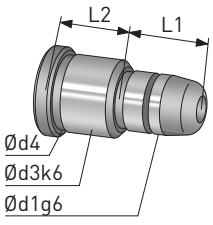


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	8	●	●			

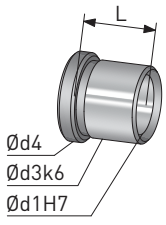
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	8	●	●			

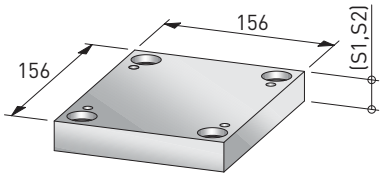


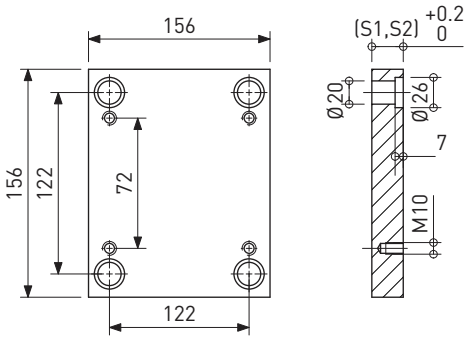
GP/P/L2/d1*L1		
27/15*26		
35		
45		
55		
36/15*35		
45		
55		
46/15*45		
55		



GB/P/d1*L		
15*27		
36		
46		
56		

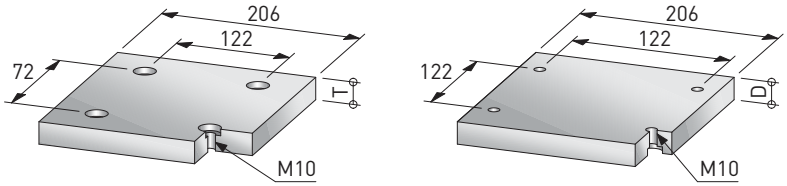
156×156





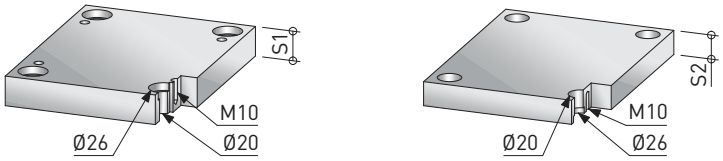
Tolerance Thickness: +0.2

Z1 Z8



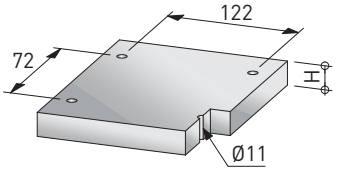
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

Z2 Z3



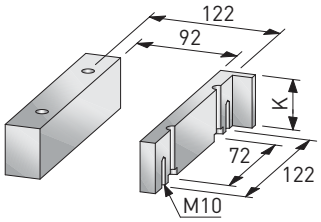
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



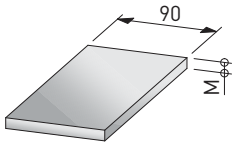
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



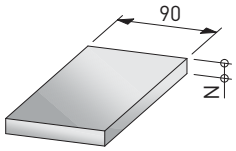
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●			
	56	●	●			
	76	●	●			

Z6

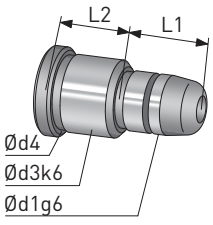


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	9	●	●			

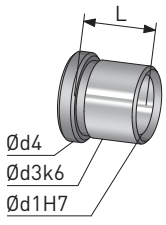
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

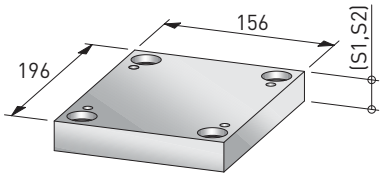


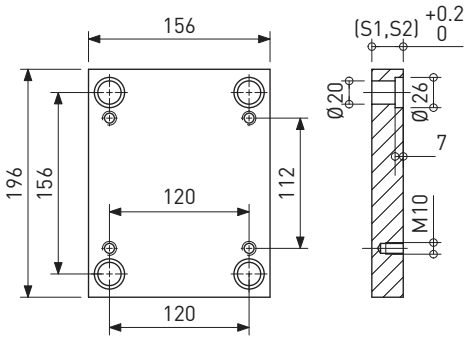
GP/P/L2/d1*L1		
27/15*26		
35		
45		
55		
36/15*35		
45		
55		
46/15*45		
55		



GB/P/d1*L	
15*27	
36	
46	
56	

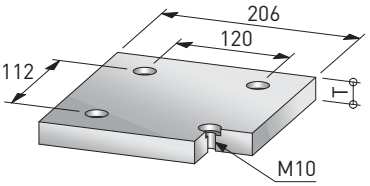
156×196

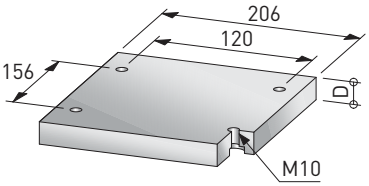




Tolerance Thickness: +0.2

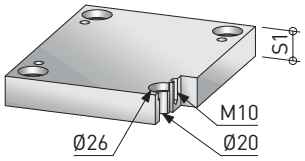
Z1 Z8

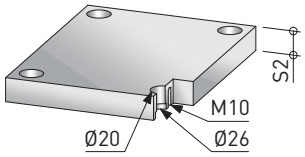




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

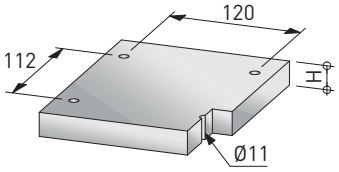
Z2 Z3





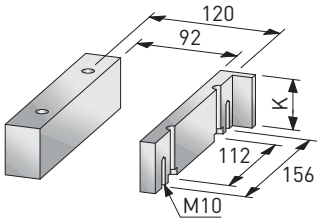
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



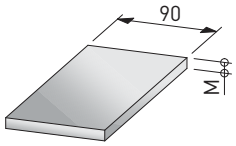
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



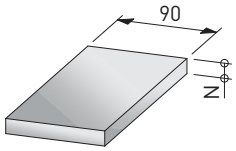
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●			
	56	●	●			
	76	●	●			

Z6

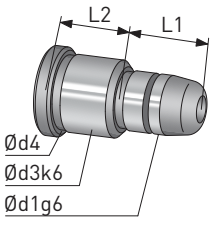


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	9	●	●			

Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			



GP/P/L2/d1*L1		
27/15*26		
35		
45		
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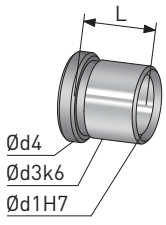
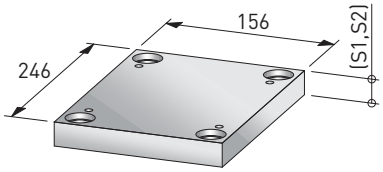
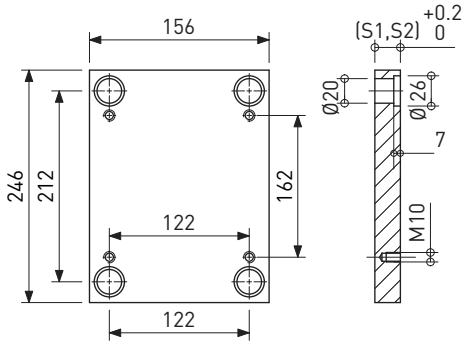
36/15*35		
45		
55		
46/15*45		
55		



GB/P/d1*L	
15*27	
36	
46	
56	

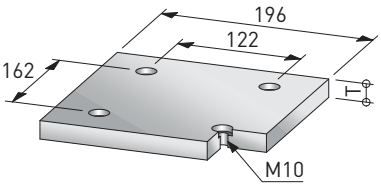
156×246

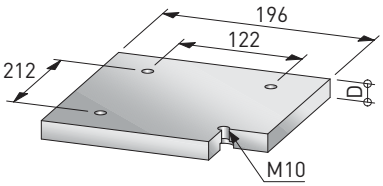




Tolerance Thickness: +0.2

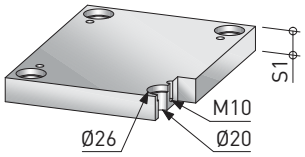
Z1 Z8

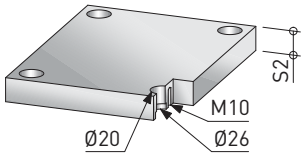




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

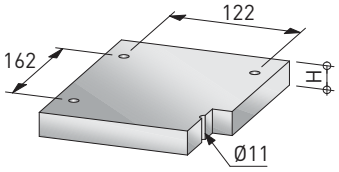
Z2 Z3





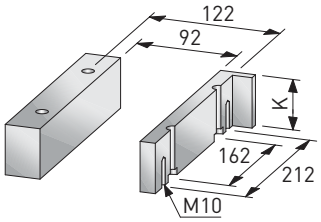
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



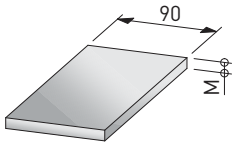
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



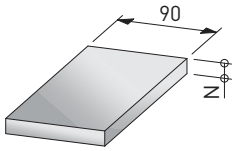
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●			
	56	●	●			
	76	●	●			

Z6

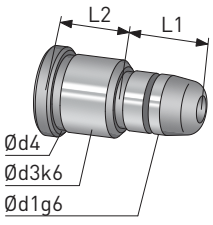


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	9	●	●			

Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			



GP/P/L2/d1*L1		
27/15*26		
35		
45		
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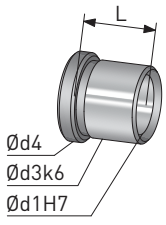
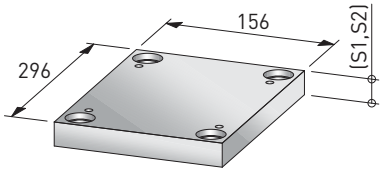
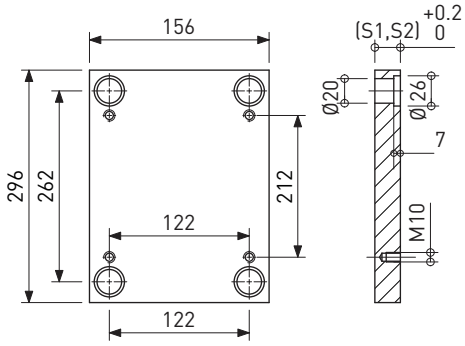
36/15*35		
45		
55		
46/15*45		
55		



GB/P/d1*L	
15*27	
36	
46	
56	

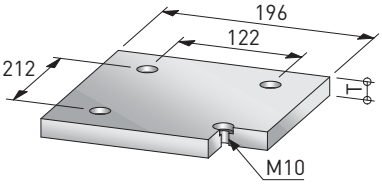
156×296

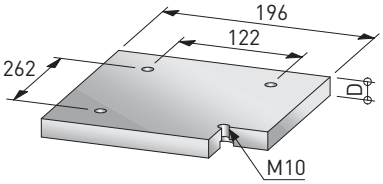




Tolerance Thickness: +0.2

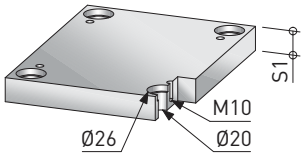
Z1 Z8

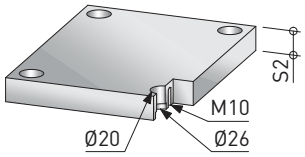




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

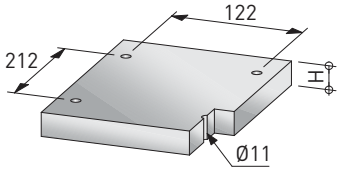
Z2 Z3





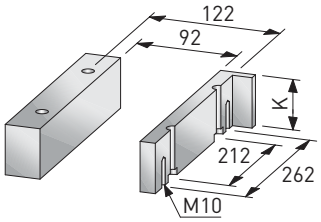
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



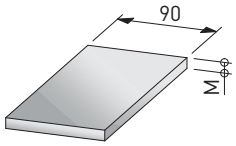
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



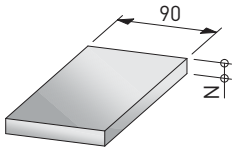
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●			
	56	●	●			
	76	●	●			

Z6

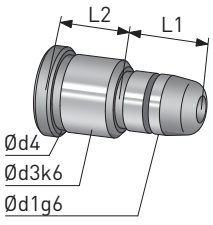


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

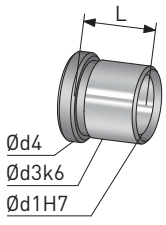
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

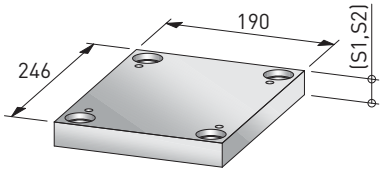


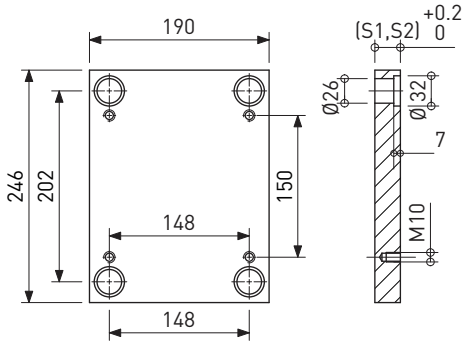
GP/P/L2/d1*L1		
27/15*26		
35		
45		
55		
36/15*35		
45		
55		
46/15*45		
55		



GB/P/d1*L	
15*27	
36	
46	
56	

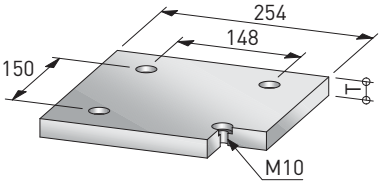
190×246

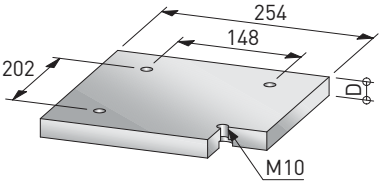




Tolerance Thickness: +0.2

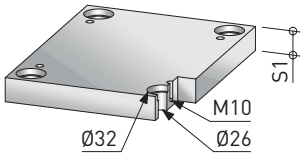
Z1 Z8

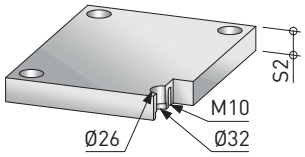




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

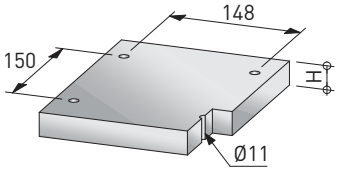
Z2 Z3





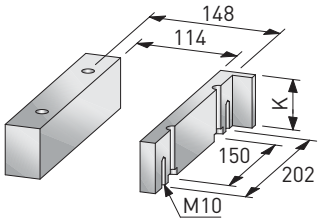
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



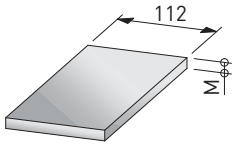
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



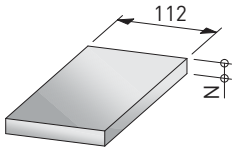
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●			
	56	●	●			
	76	●	●			

Z6

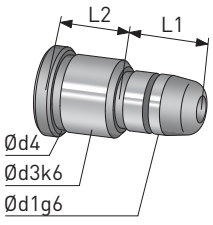


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

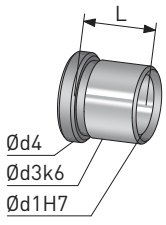
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

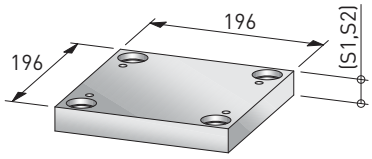


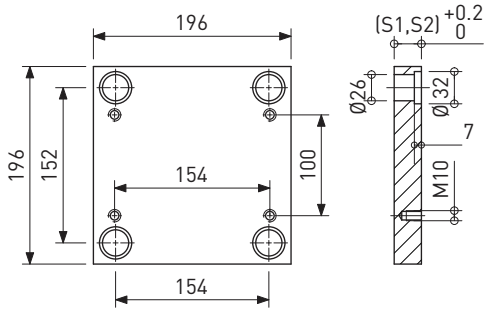
GP/P/L2/d1*L1		
27/20*26		
35		
45		
55		
36/20*35		
45		
55		
46/20*45		
55		
56/20*55		



GB/P/d1*L		
20*27		
36		
46		
56		

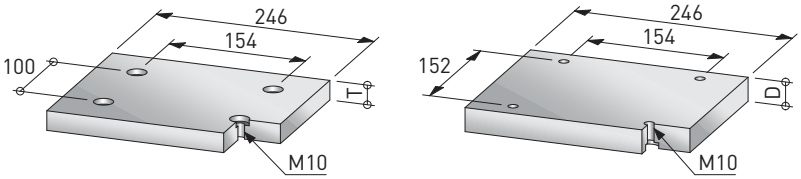
196×196





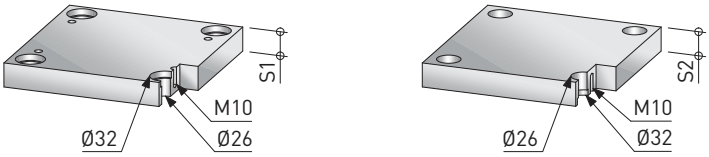
Tolerance Thickness: +0.2

Z1 Z8



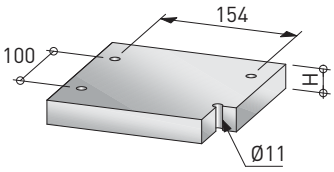
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

Z2 Z3



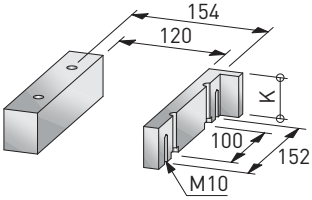
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



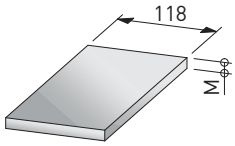
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



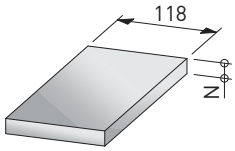
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●			
	56	●	●			
	76	●	●			

Z6

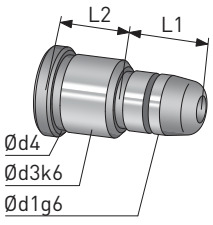


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

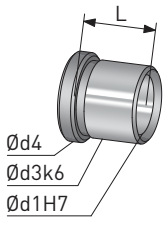
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

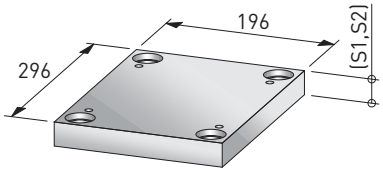


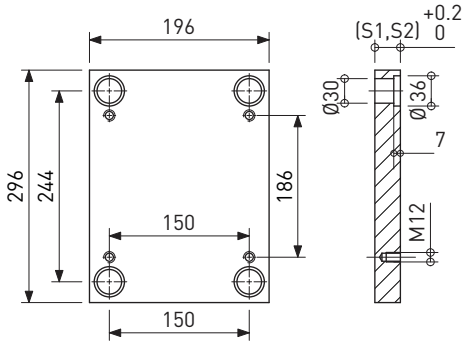
GP/P/L2/d1*L1		
27/20*26		
35		
45		
55		
36/20*35		
45		
55		
46/20*45		
55		
56/20*55		



GB/P/d1*L	
20*27	
36	
46	
56	

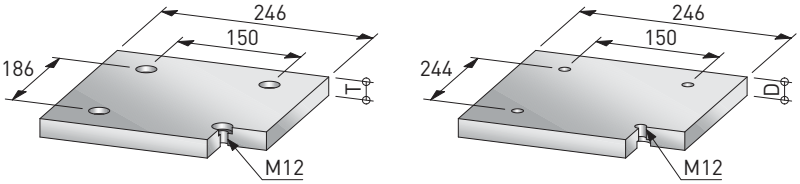
196×296





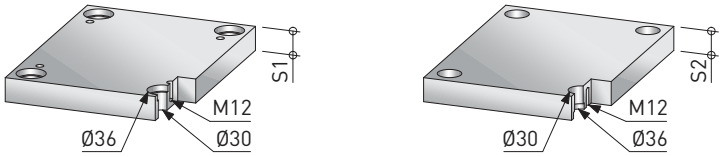
Tolerance Thickness: +0.2

Z1 Z8



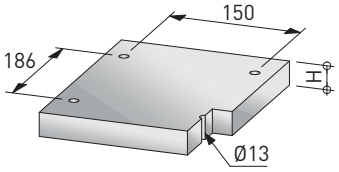
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 Z3



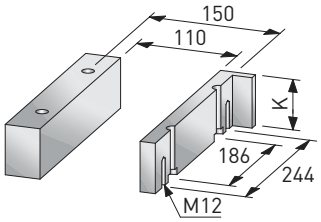
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●

Z4



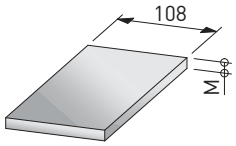
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



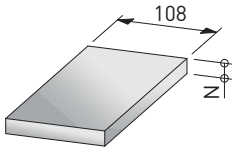
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

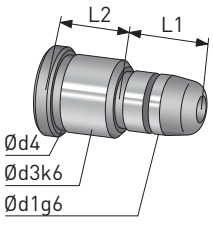


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			



GP/P/L2/d1*L1		
27/22*26		
35		
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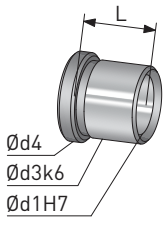
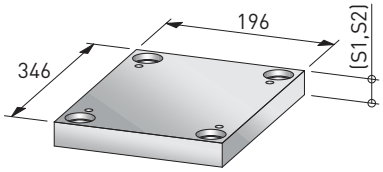
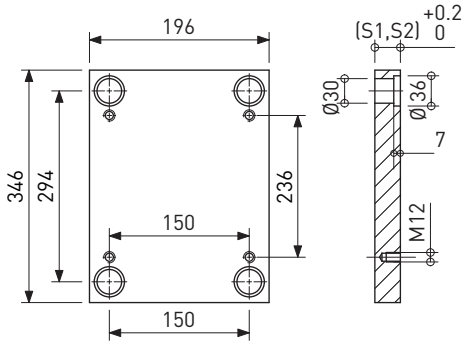
36/22*35		
45		
55		
46/22*45		
55		
56/22*55		



GB/P/d1*L		
22*27		
36		
46		
56		

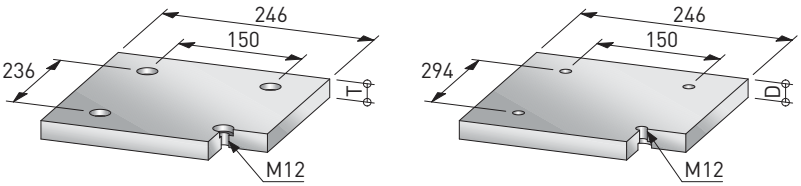
196×346





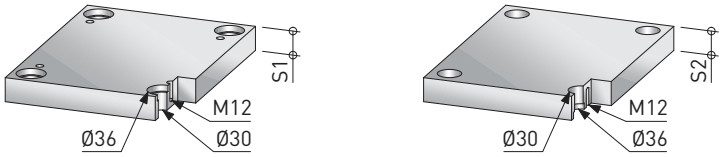
Tolerance Thickness: +0.2

Z1 Z8



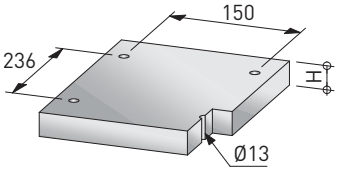
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 Z3



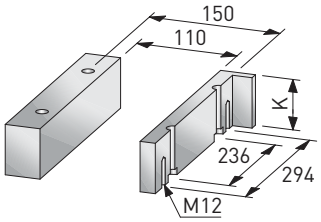
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



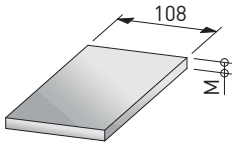
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



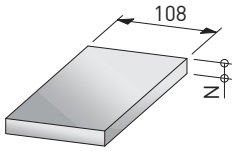
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

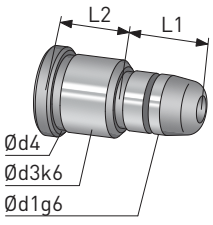


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

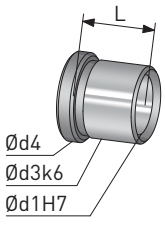
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

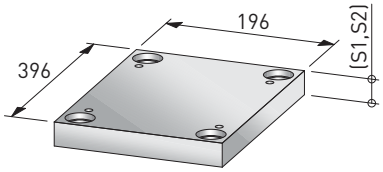


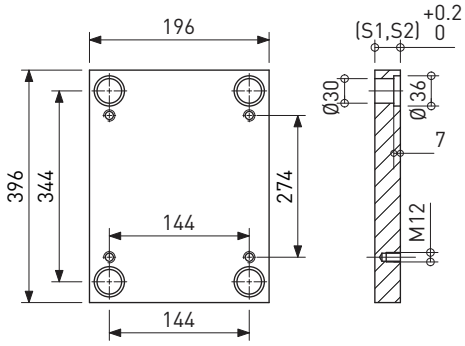
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
86
96

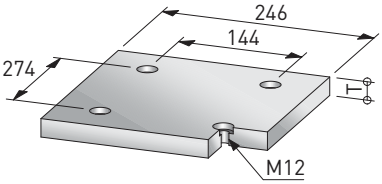
196×396

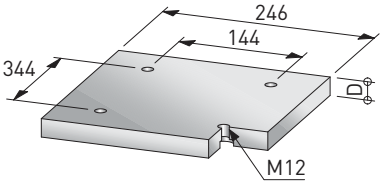




Tolerance Thickness: +0.2

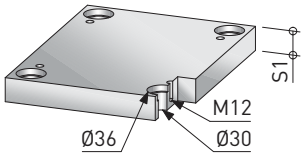
Z1 Z8

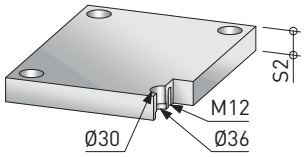




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

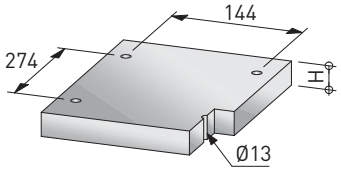
Z2 Z3





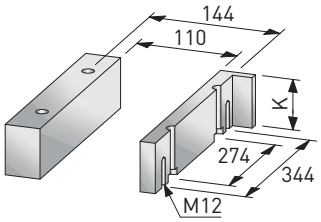
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



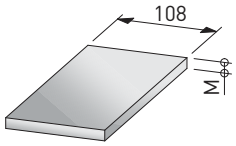
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



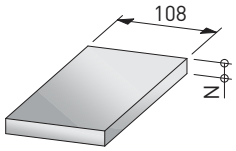
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

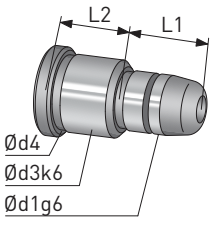


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

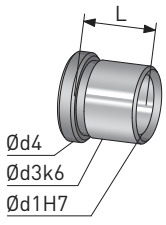
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

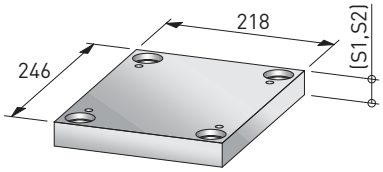


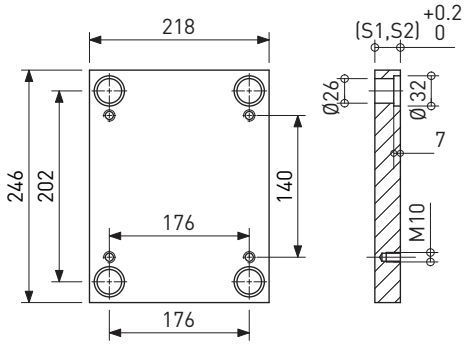
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

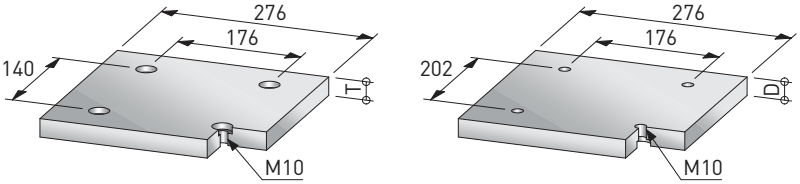
218×246





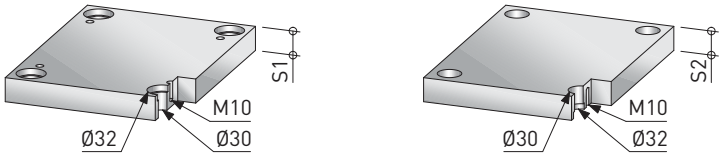
Tolerance Thickness: +0.2

Z1 Z8



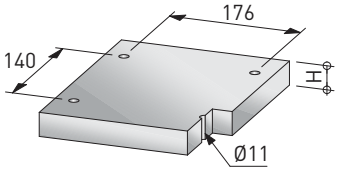
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●	●	●	●
	27	●	●	●	●	●

Z2 Z3



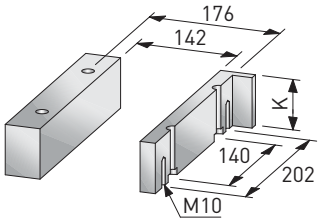
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



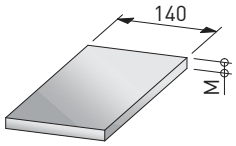
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



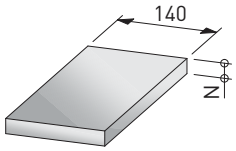
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

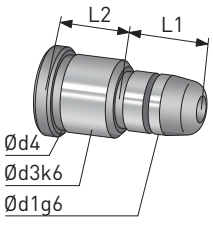


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

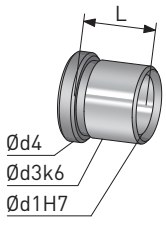
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

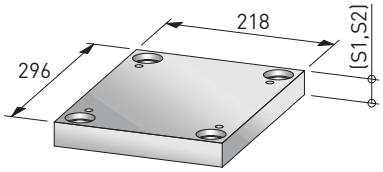


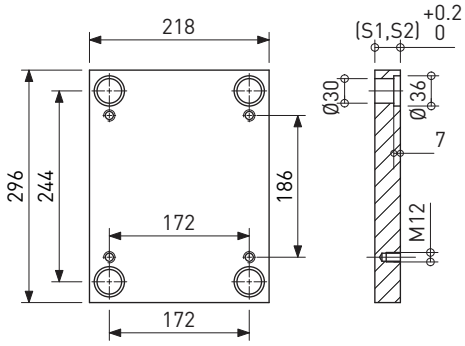
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/20*26	75	95
35	95	
45	46/20*45	
55	55	
65	65	
75	75	
36/20*35	95	
45	56/20*55	
55	65	
65	75	



GB/P/d1*L
20*27
36
46
56
66
76
96

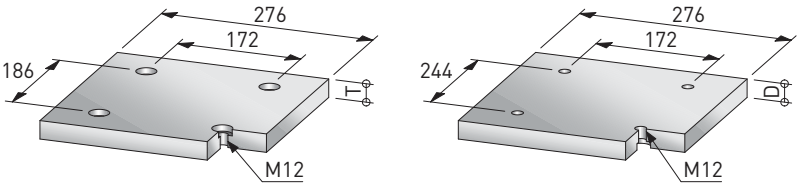
218×296





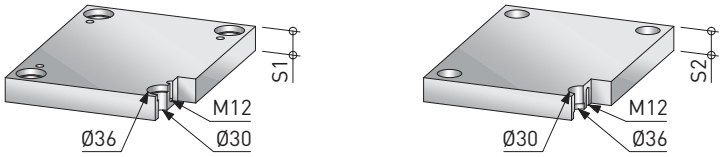
Tolerance Thickness: +0.2

Z1 Z8



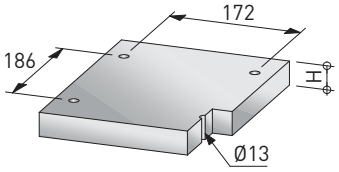
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 Z3



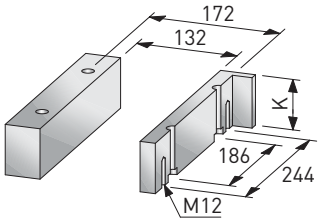
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



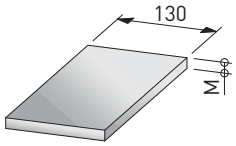
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



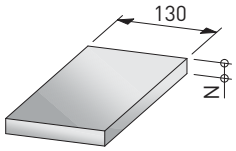
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

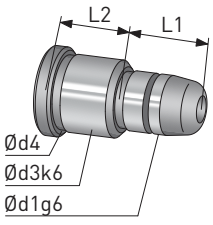


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

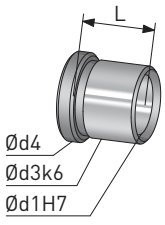
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

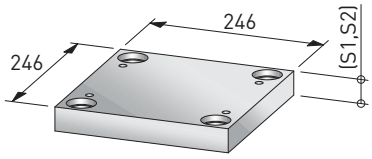


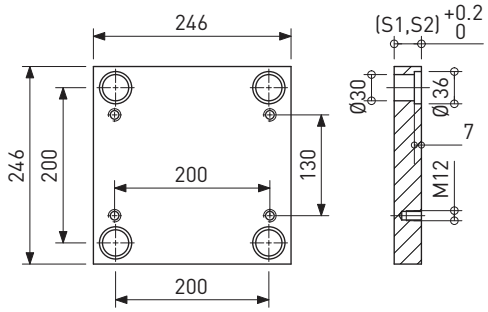
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

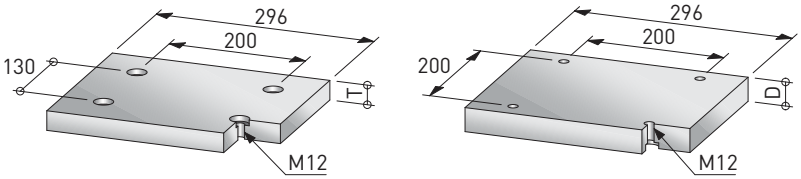
246×246





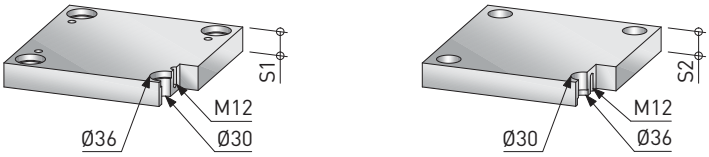
Tolerance Thickness: +0.2

Z1 / Z8



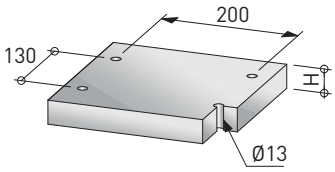
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 / Z3



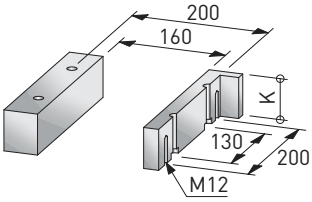
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



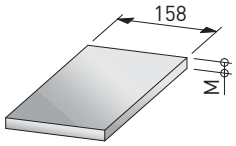
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



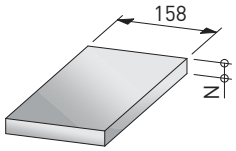
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

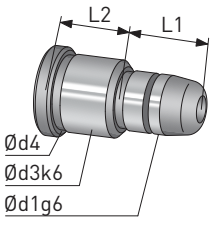


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

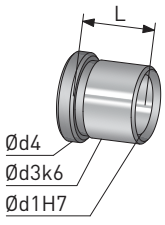
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

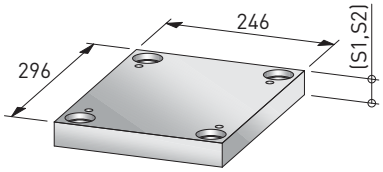


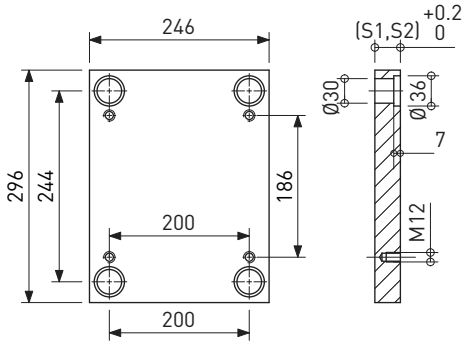
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

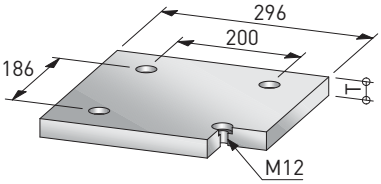
246×296

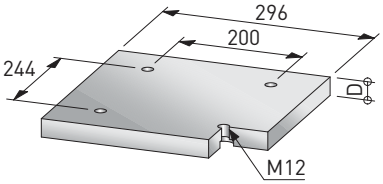




Tolerance Thickness: +0.2

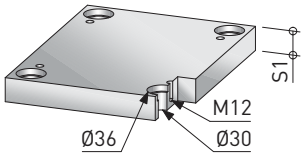
Z1 Z8

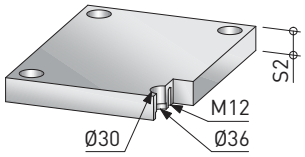




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

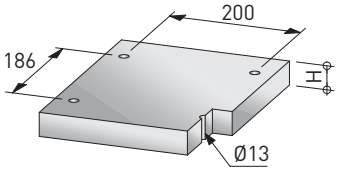
Z2 Z3





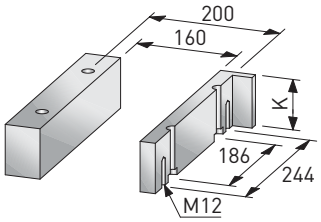
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



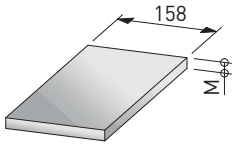
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z5



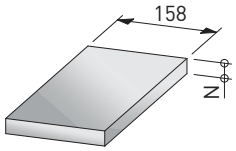
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

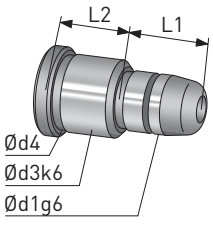


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

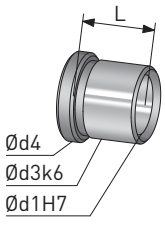
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

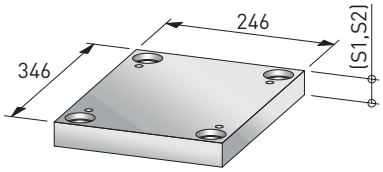


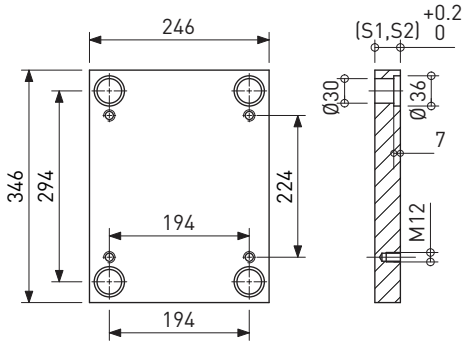
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

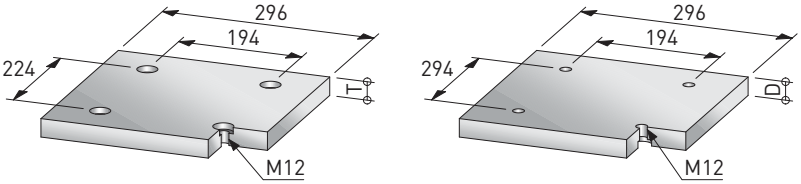
246×346





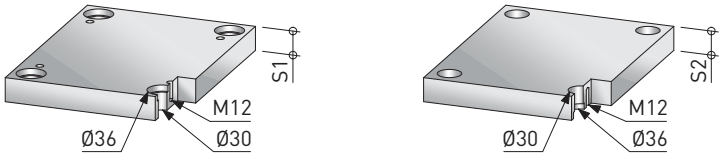
Tolerance Thickness: +0.2

Z1 Z8



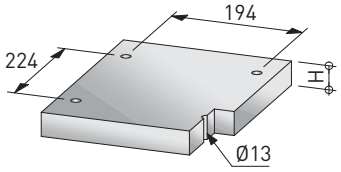
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 Z3



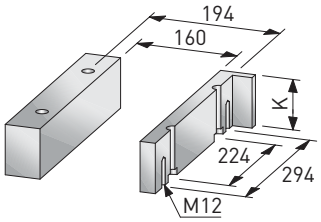
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



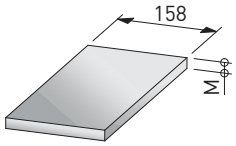
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



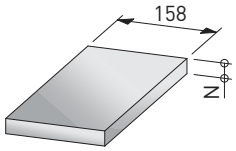
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

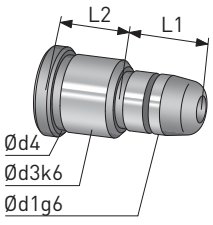


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

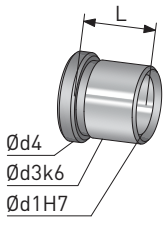
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

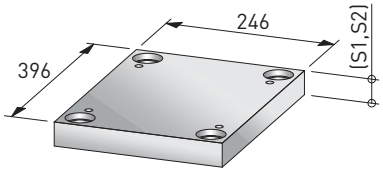


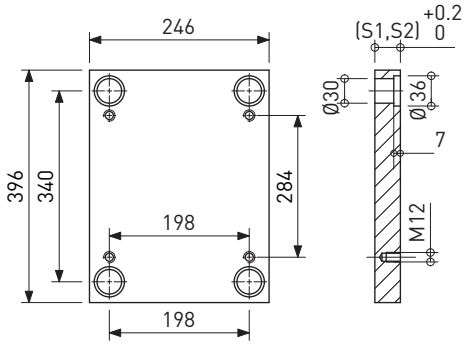
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

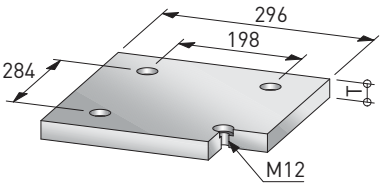
246×396

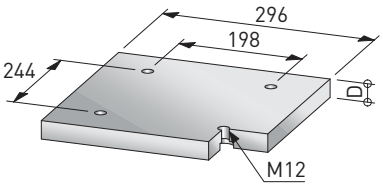




Tolerance Thickness: +0.2

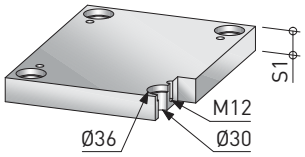
Z1 Z8

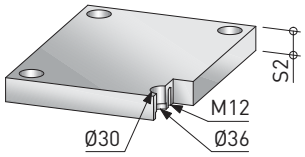




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

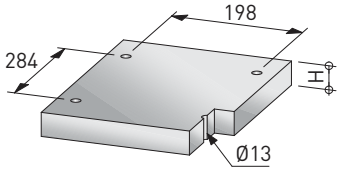
Z2 Z3





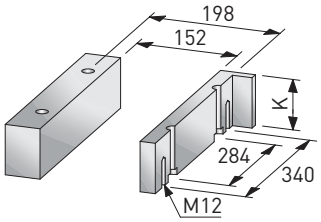
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



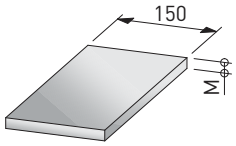
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



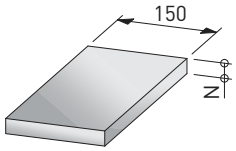
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

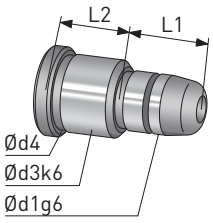


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

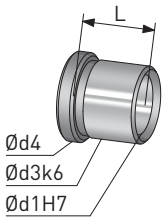
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

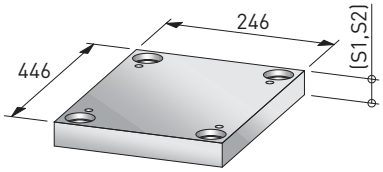


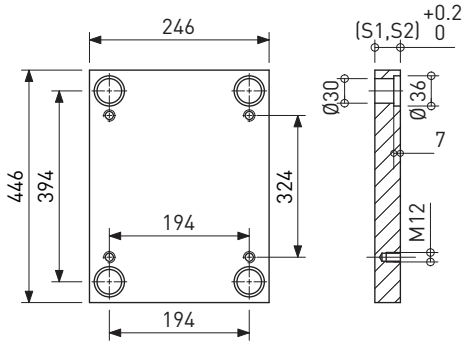
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

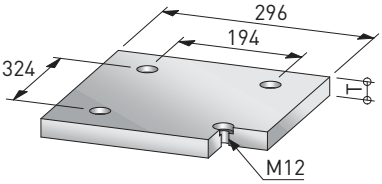
246×446

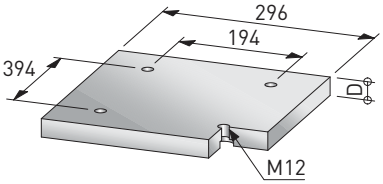




Tolerance Thickness: +0.2

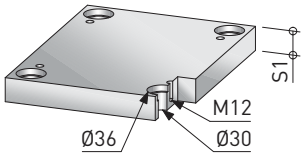
Z1 Z8

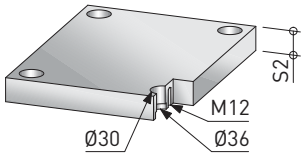




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

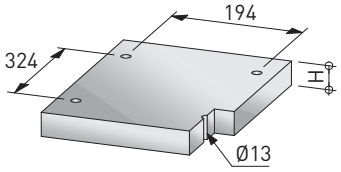
Z2 Z3





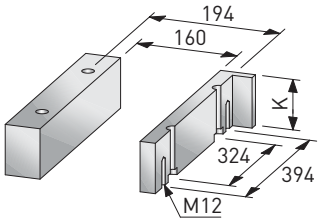
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



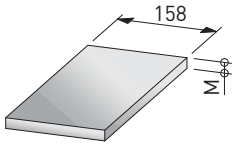
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



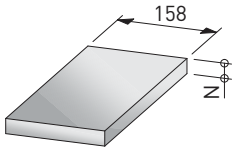
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

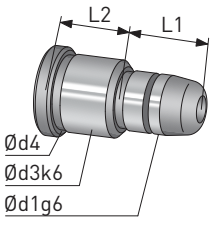


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

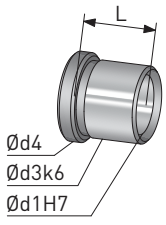
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

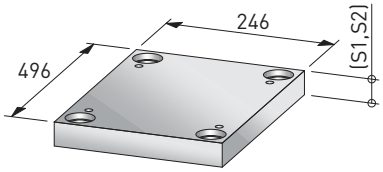


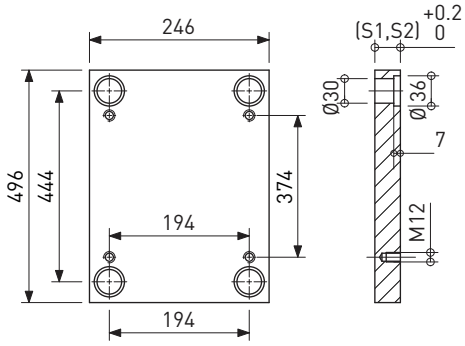
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

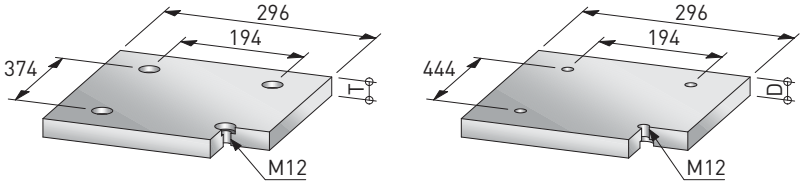
246×496





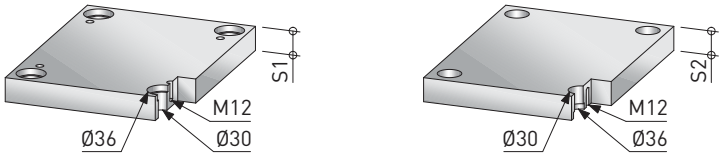
Tolerance Thickness: +0.2

Z1 Z8



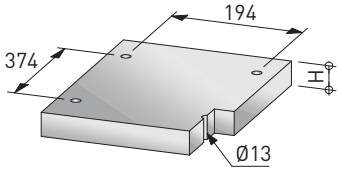
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 Z3



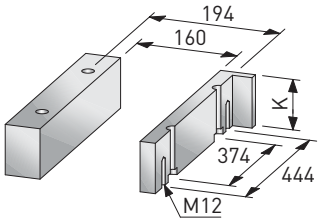
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



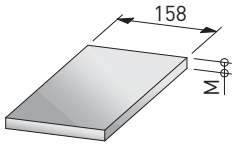
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



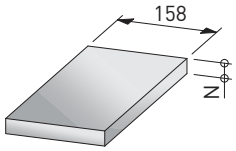
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

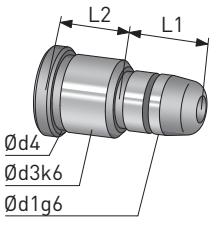


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

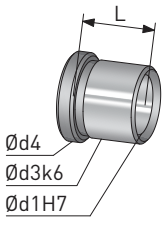
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

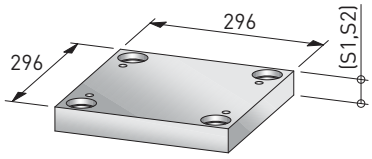


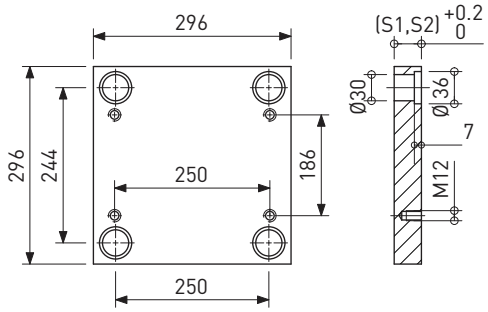
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

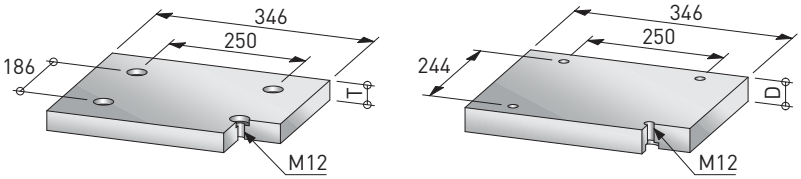
296×296





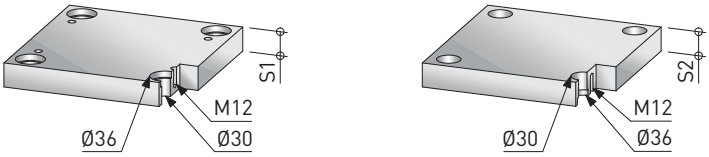
Tolerance Thickness: +0.2

Z1 / Z8



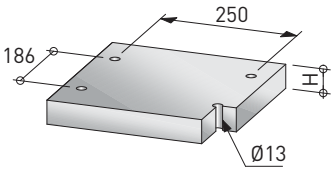
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 / Z3



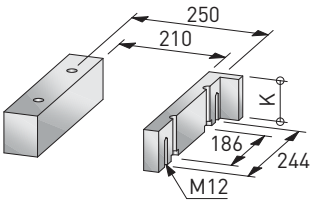
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



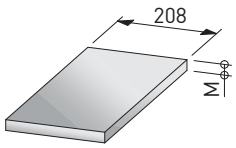
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



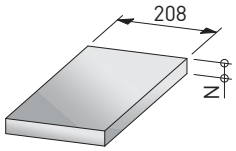
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

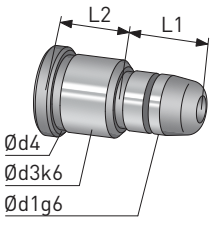


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	12	●	●			

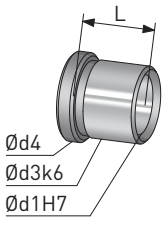
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

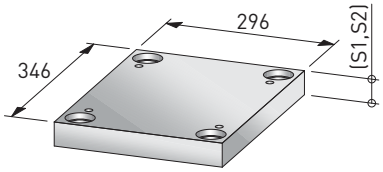


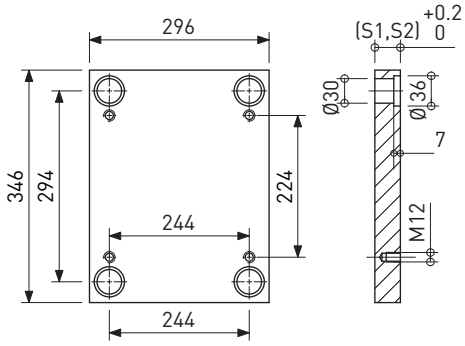
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

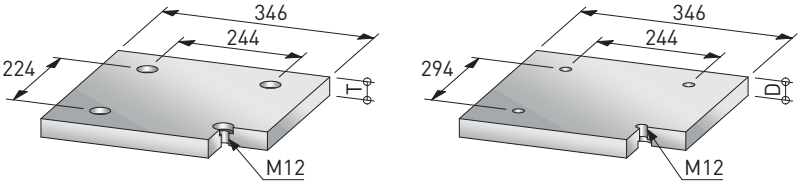
296×346





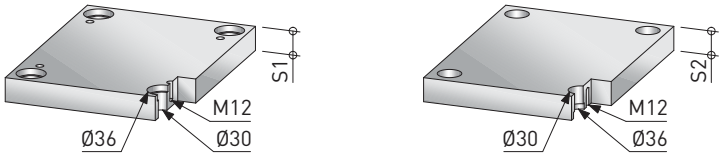
Tolerance Thickness: +0.2

Z1 Z8



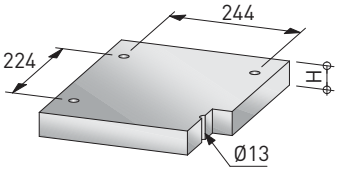
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 Z3



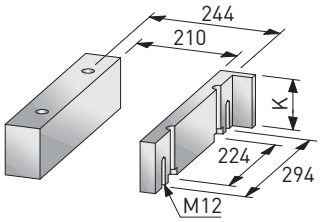
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



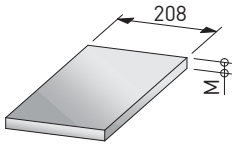
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



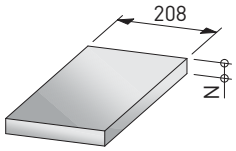
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

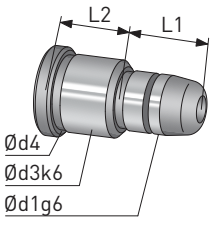


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

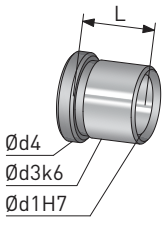
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

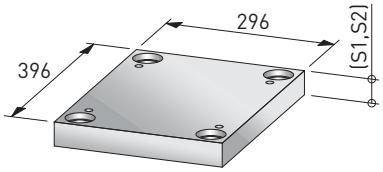


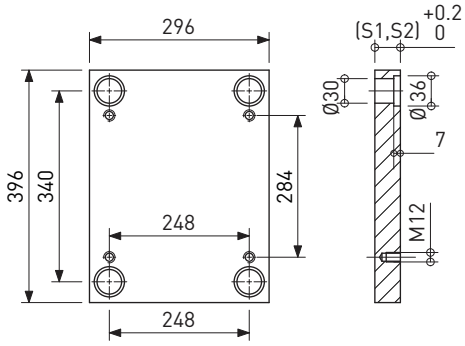
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

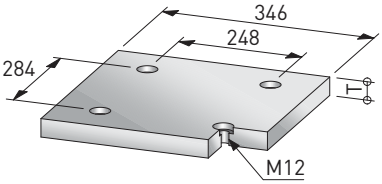
296×396

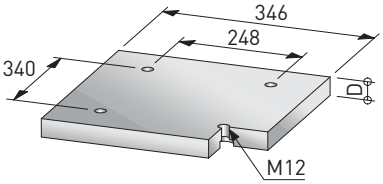




Tolerance Thickness: +0.2

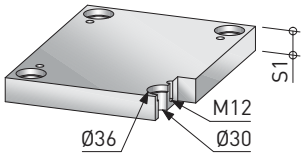
Z1 Z8

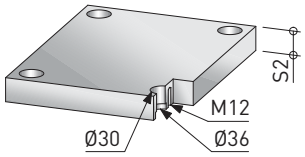




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

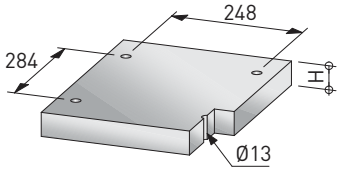
Z2 Z3





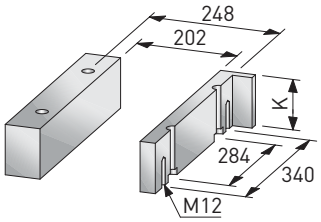
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



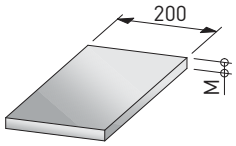
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



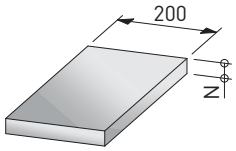
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

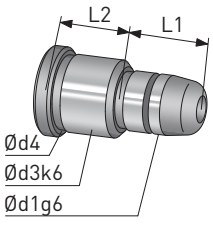


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

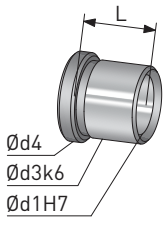
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

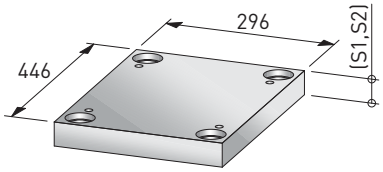


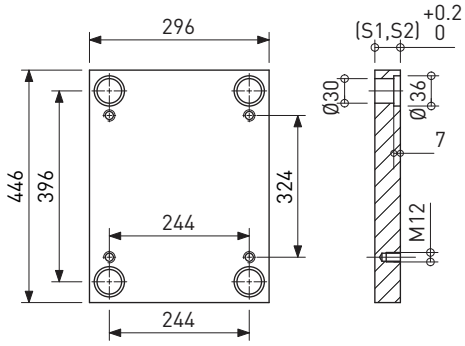
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

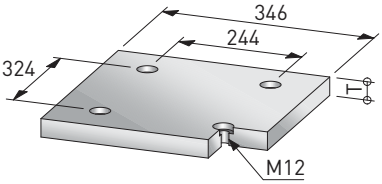
296×446

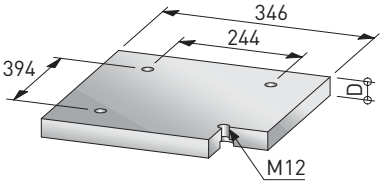




Tolerance Thickness: +0.2

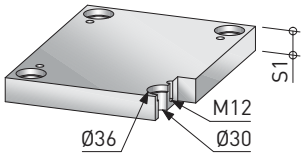
Z1 Z8

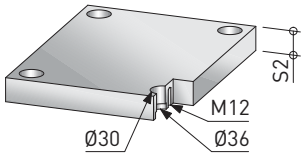




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

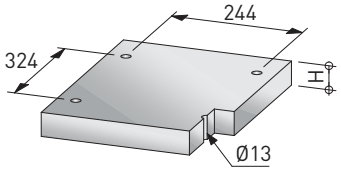
Z2 Z3





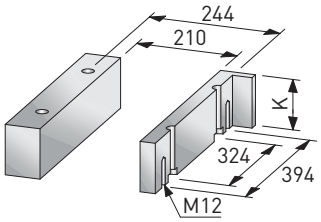
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



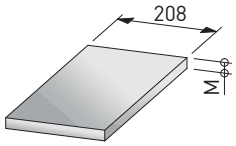
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



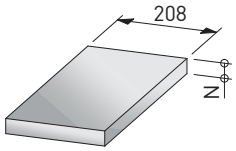
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

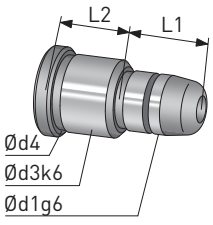


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

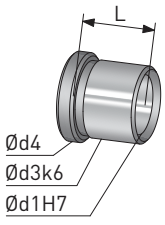
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

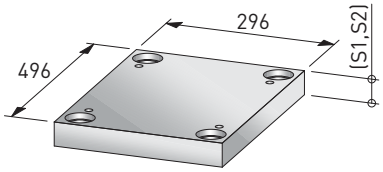


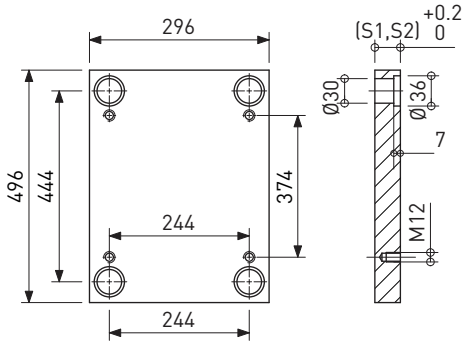
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

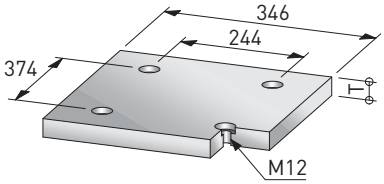
296×496

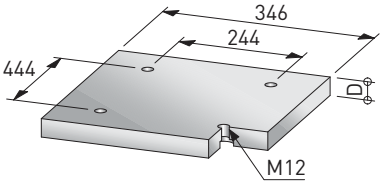




Tolerance Thickness: +0.2

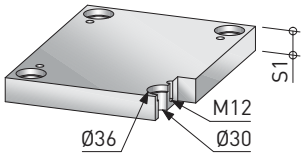
Z1 Z8

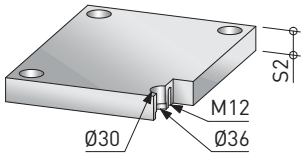




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

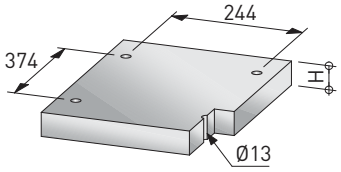
Z2 Z3





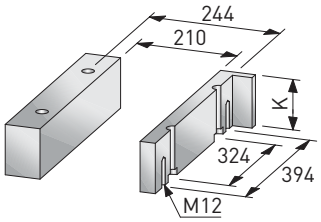
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



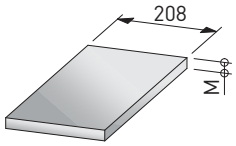
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



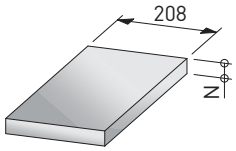
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

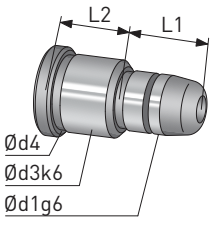


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

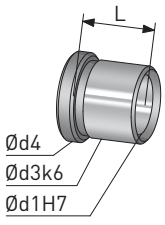
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

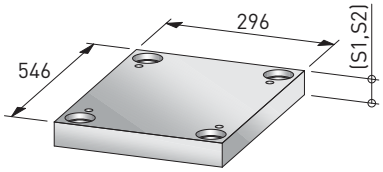


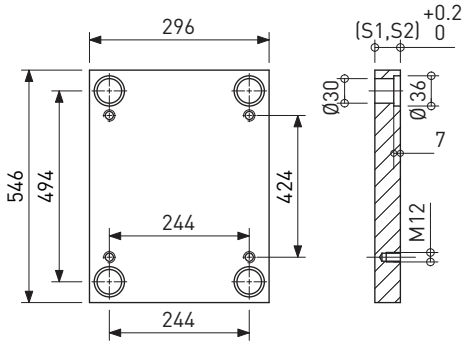
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

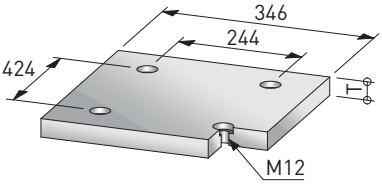
296×546

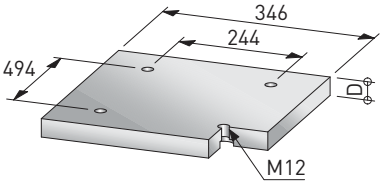




Tolerance Thickness: +0.2

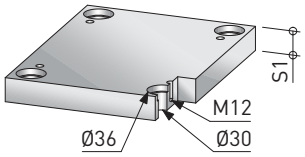
Z1 Z8

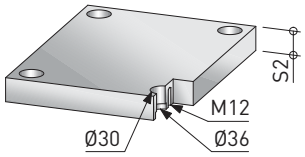




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

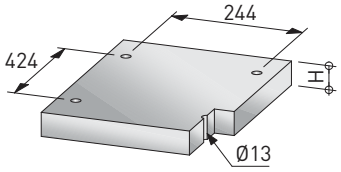
Z2 Z3





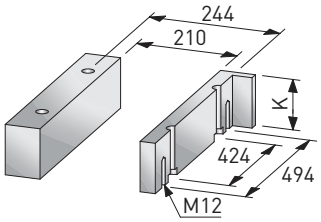
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



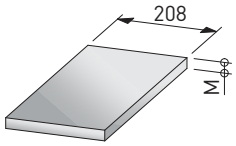
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



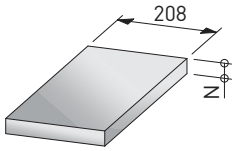
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

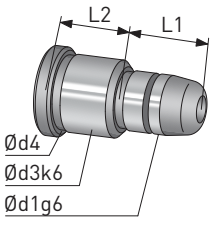


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

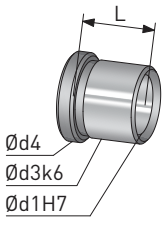
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

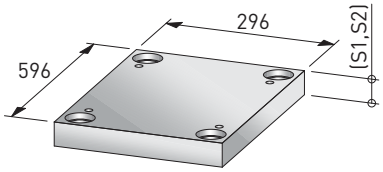


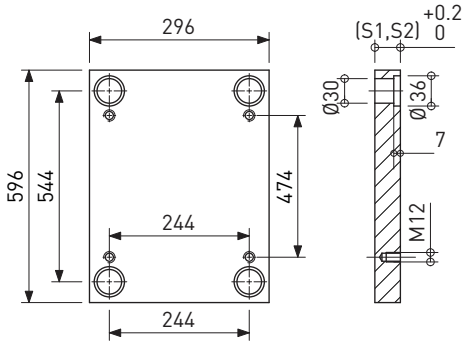
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

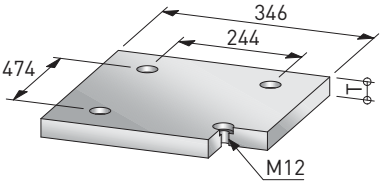
296×596

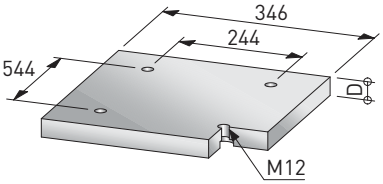




Tolerance Thickness: +0.2

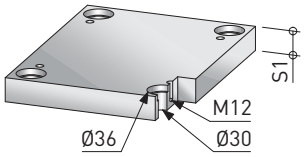
Z1 Z8

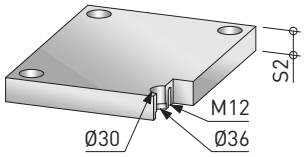




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

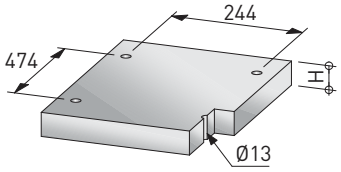
Z2 Z3





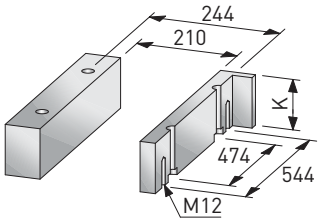
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



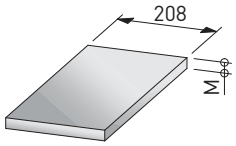
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



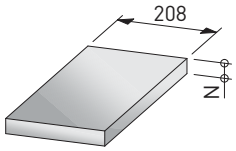
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

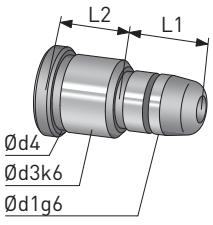


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

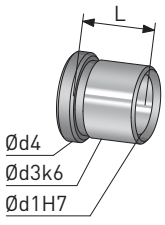
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

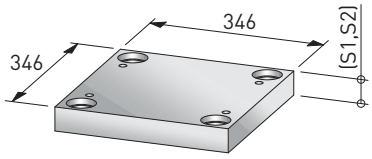


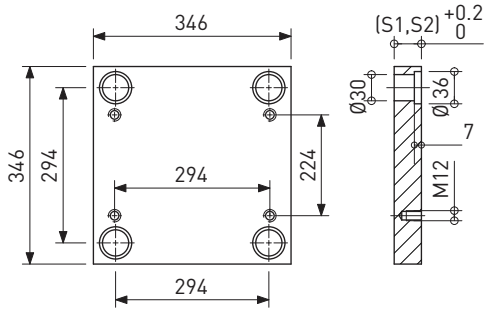
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

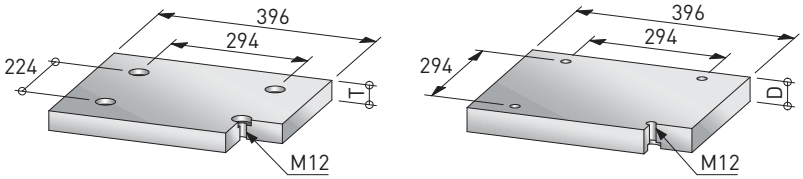
346×346





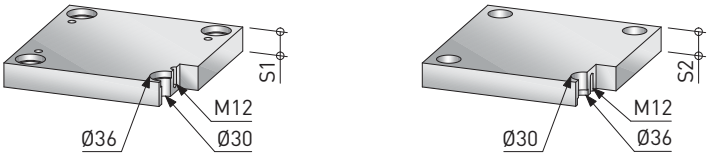
Tolerance Thickness: +0.2

Z1 / Z8



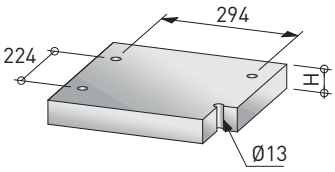
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●	●	●	●
	36	●	●	●	●	●

Z2 / Z3



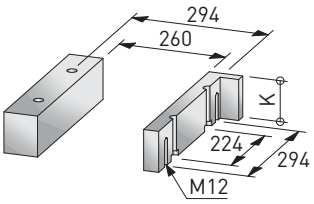
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



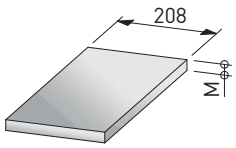
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



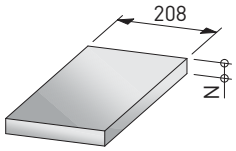
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

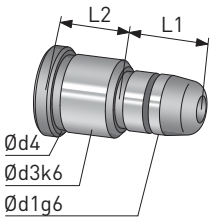


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

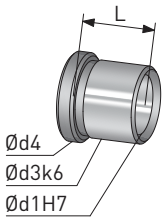
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

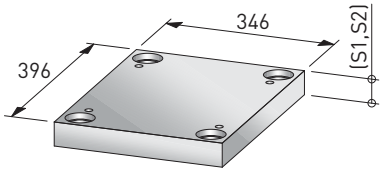


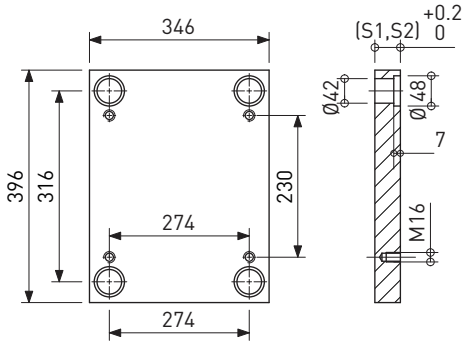
GP/P/L2/d1*L1	GP/P/L2/d1*L1	GP/P/L2/d1*L1
27/22*26	75	95
35	95	
45	46/22*45	
55	55	
65	65	
75	75	
36/22*35	95	
45	56/22*55	
55	65	
65	75	



GB/P/d1*L
22*27
36
46
56
66
76
96

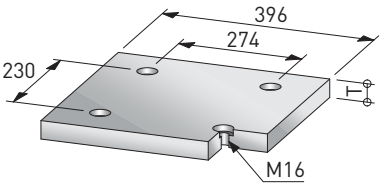
346×396

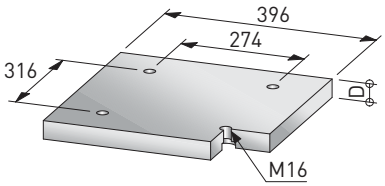




Tolerance Thickness: +0.2

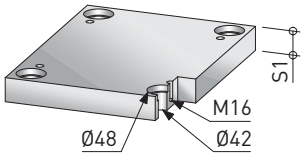
Z1 Z8

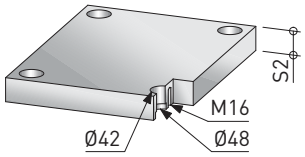




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

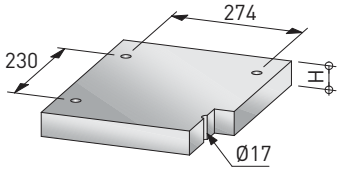
Z2 Z3





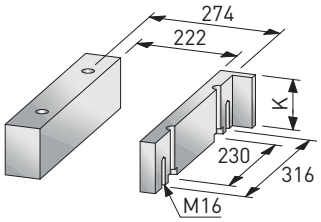
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



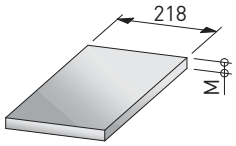
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



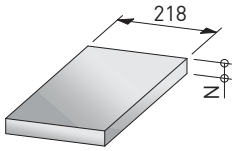
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

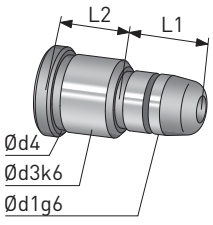


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

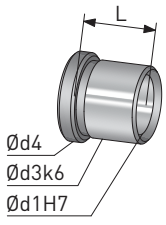
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

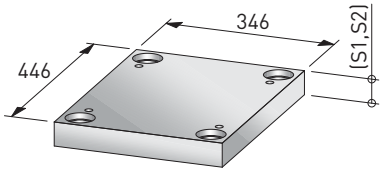


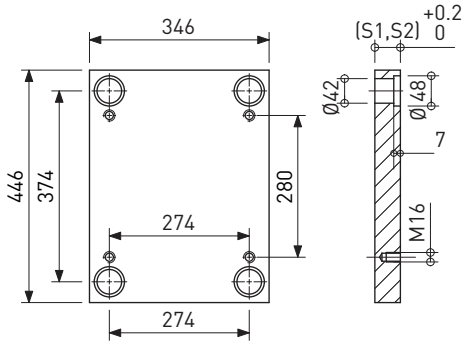
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	95
55	
65	
85	
56/30*55	
75	
95	
66/30*75	
95	
76/30*75	



GB/P/d1*L
30*46
56
66
76
86
96

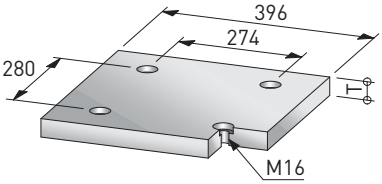
346×446

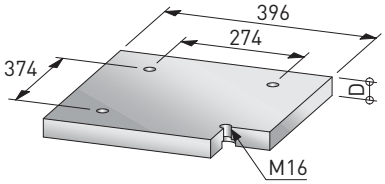




Tolerance Thickness: +0.2

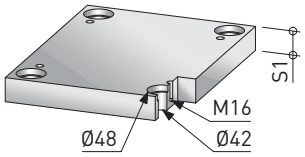
Z1 Z8

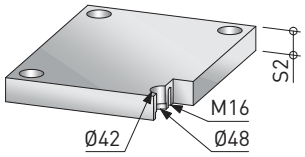




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

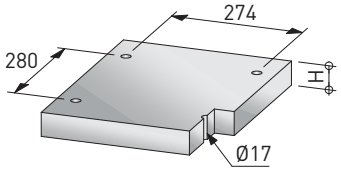
Z2 Z3





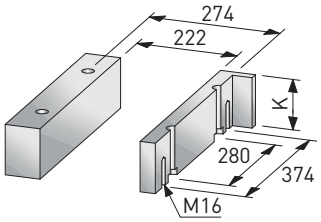
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



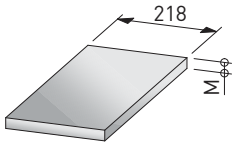
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



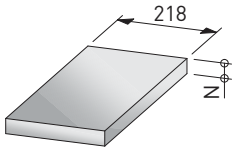
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

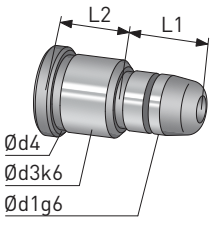


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

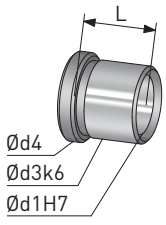
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

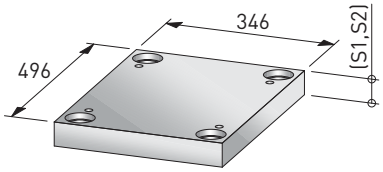


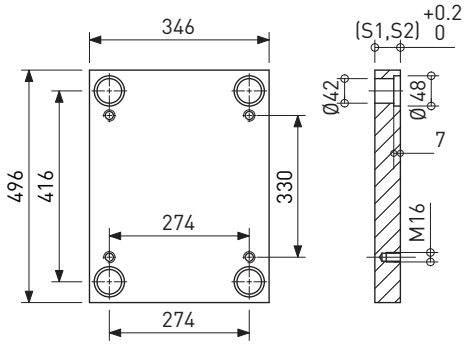
GP/P/L2/d1*L1		
46/30*45		
65		
85		
56/30*55		
75		
95		
66/30*75		
95		
76/30*75		
95		



GB/P/d1*L		
30*46		
56		
66		
76		
86		
96		

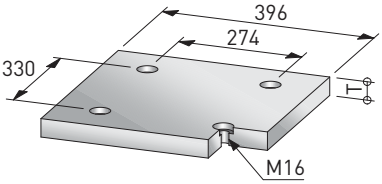
346×496

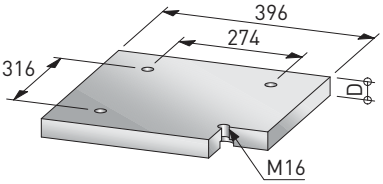




Tolerance Thickness: +0.2

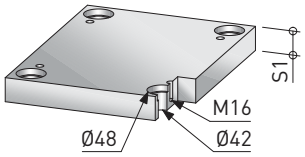
Z1 Z8

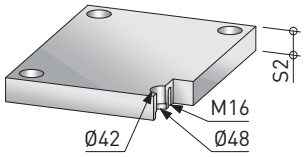




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

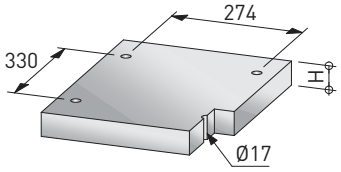
Z2 Z3





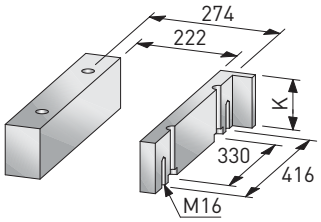
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



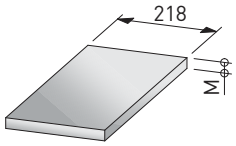
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



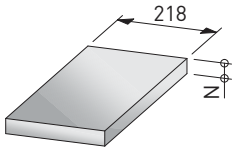
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

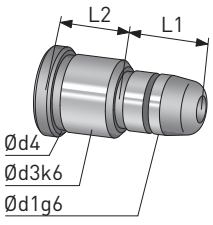


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

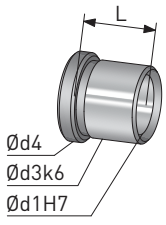
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

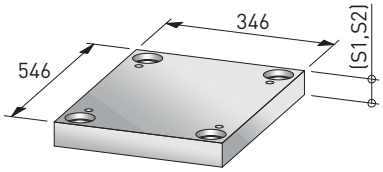


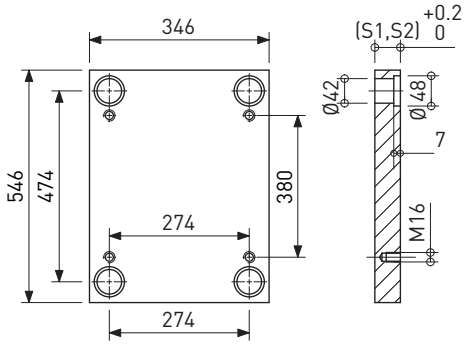
GP/P/L2/d1*L1		
46/30*45		
65		
85		
56/30*55		
75		
95		
66/30*75		
95		
76/30*75		
95		



GB/P/d1*L		
30*46		
56		
66		
76		
86		
96		

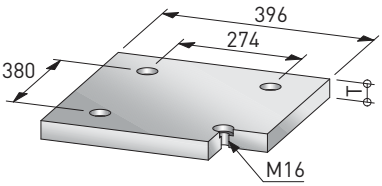
346×546

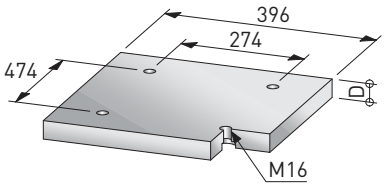




Tolerance Thickness: +0.2

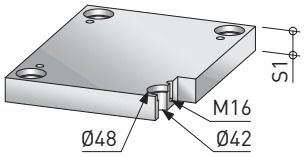
Z1 Z8

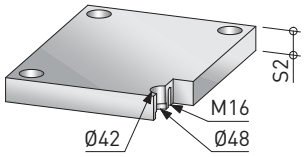




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

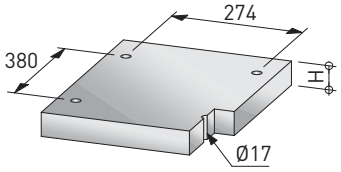
Z2 Z3





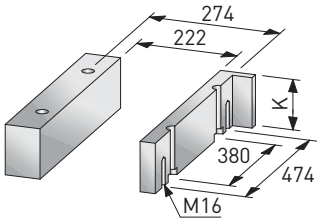
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



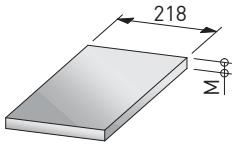
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



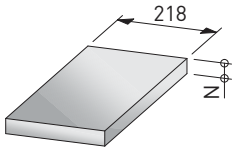
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

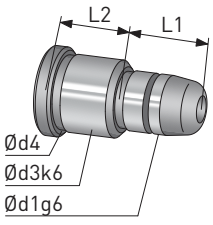


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

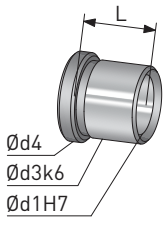
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

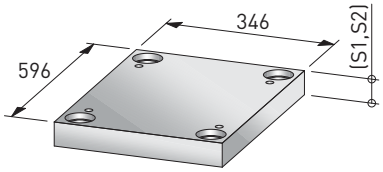


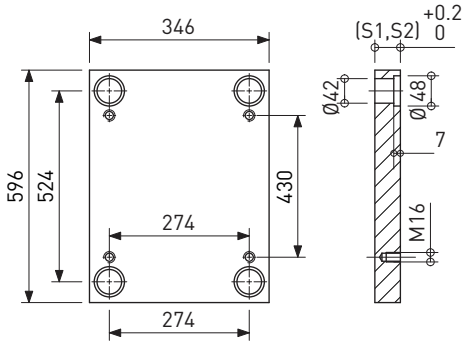
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

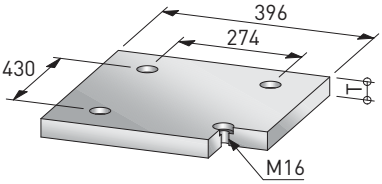
346×596

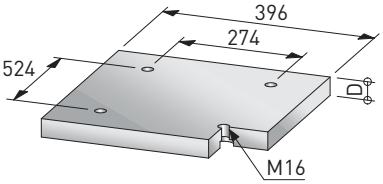




Tolerance Thickness: +0.2

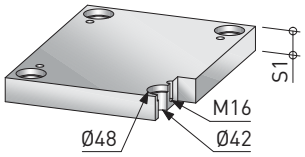
Z1 Z8

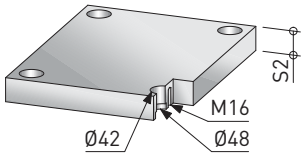




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

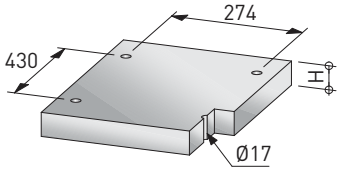
Z2 Z3





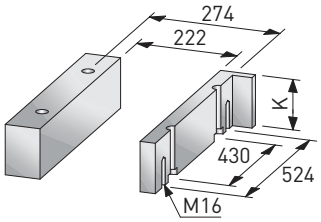
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



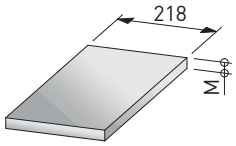
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



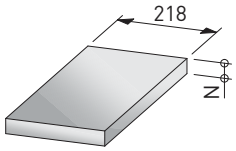
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

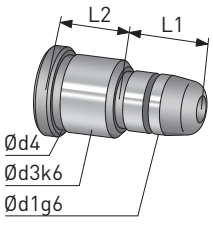


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

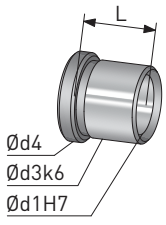
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

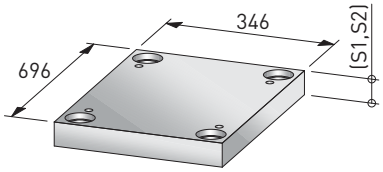


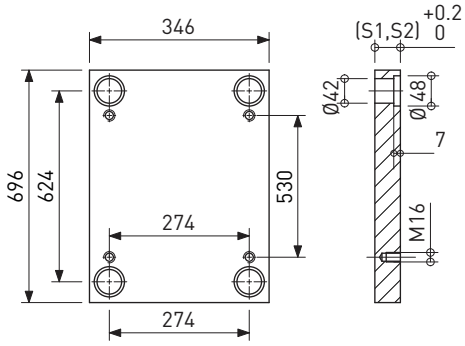
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

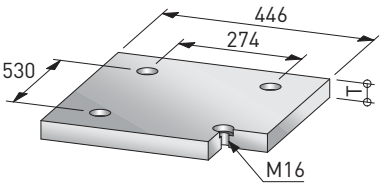
346×696

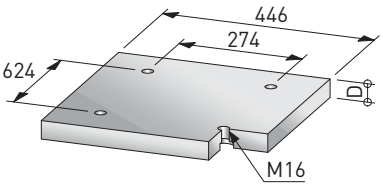




Tolerance Thickness: +0.2

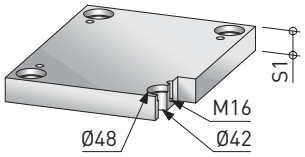
Z1 Z8

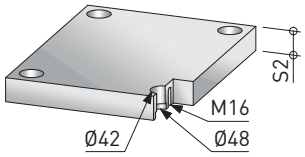




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

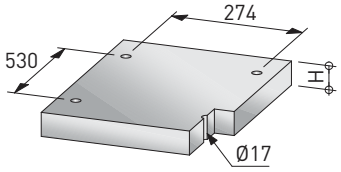
Z2 Z3





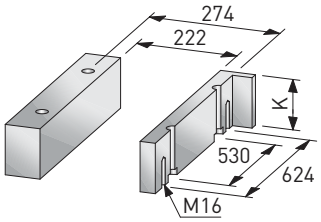
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



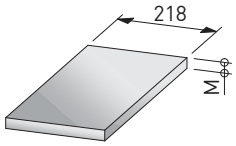
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



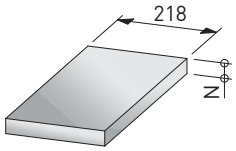
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

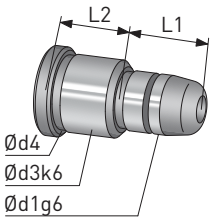


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

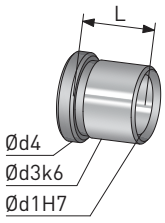
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

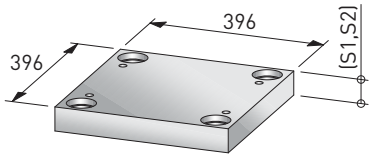


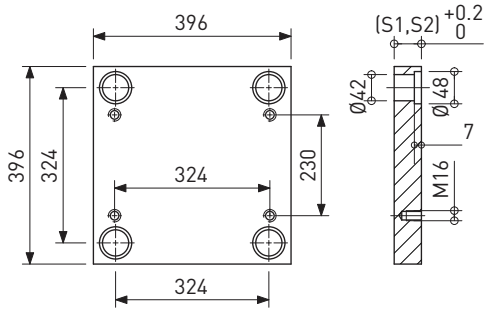
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

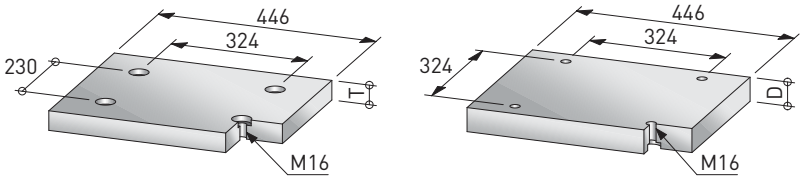
396×396





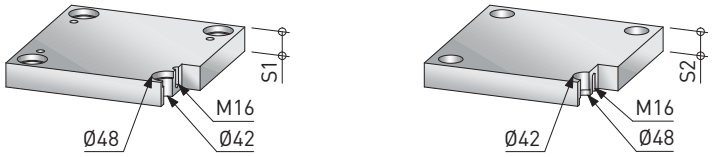
Tolerance Thickness: +0.2

Z1 Z8



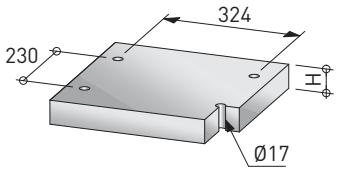
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z2 Z3



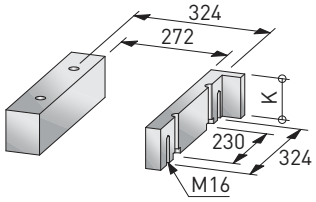
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



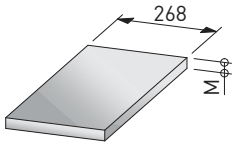
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



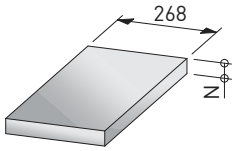
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

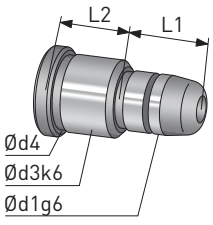


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

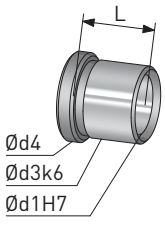
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

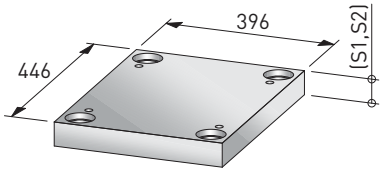


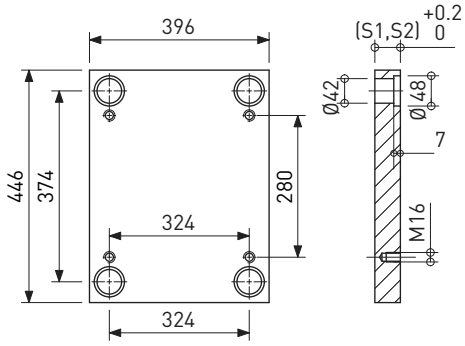
GP/P/L2/d1*L1		
46/30*45		
65		
85		
56/30*55		
75		
95		
66/30*75		
95		
76/30*75		
95		



GB/P/d1*L		
30*46		
56		
66		
76		
86		
96		

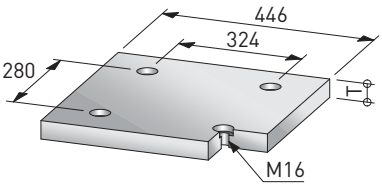
396×446

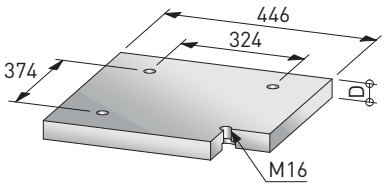




Tolerance Thickness: +0.2

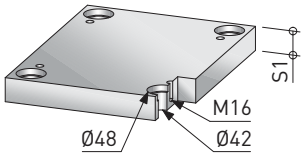
Z1 Z8

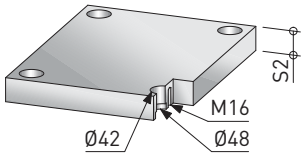




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

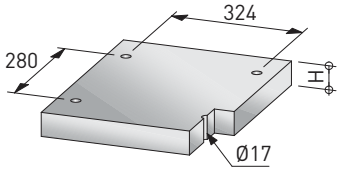
Z2 Z3





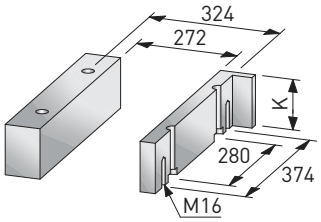
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



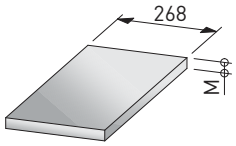
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



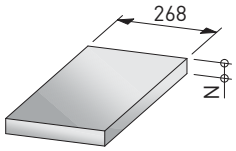
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

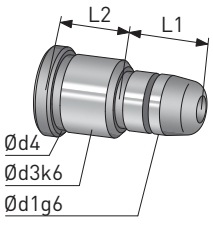


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

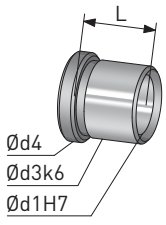
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

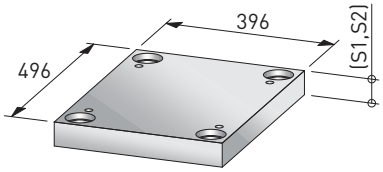


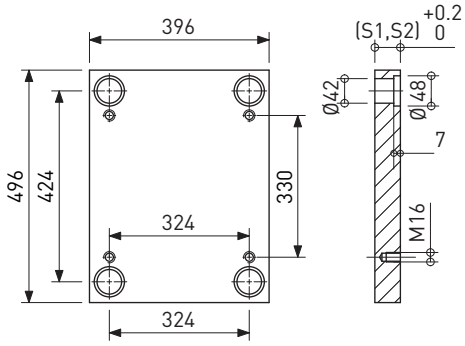
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

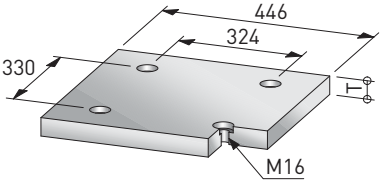
396×496

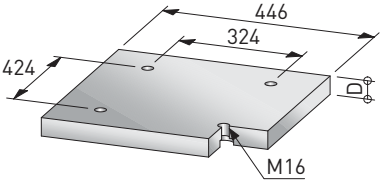




Tolerance Thickness: +0.2

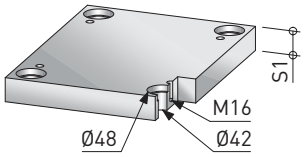
Z1 Z8

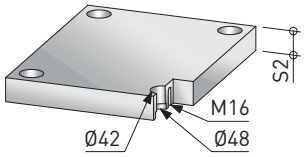




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

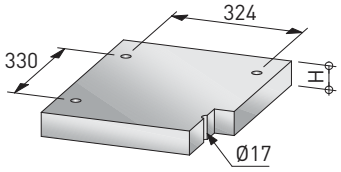
Z2 Z3





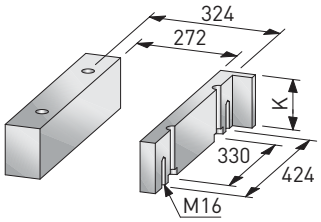
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



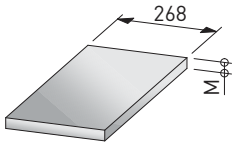
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



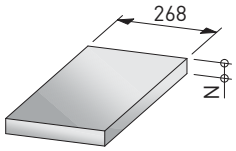
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

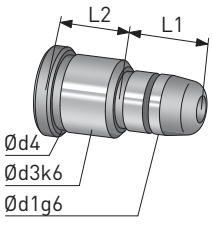


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

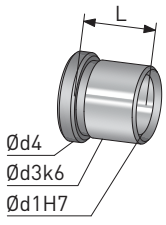
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

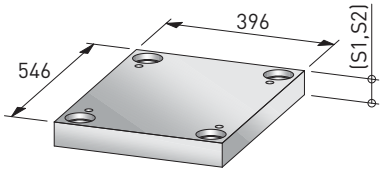


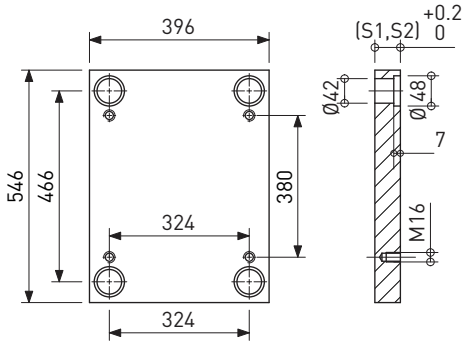
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

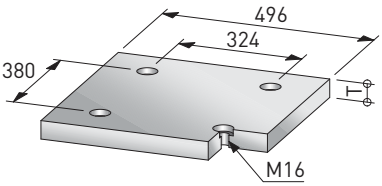
396×546

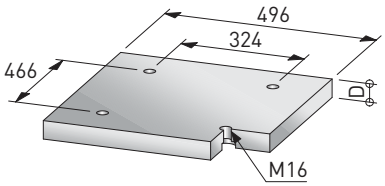




Tolerance Thickness: +0.2

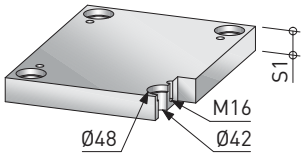
Z1 Z8

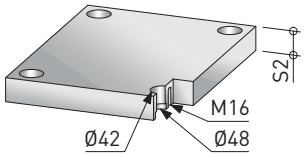




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

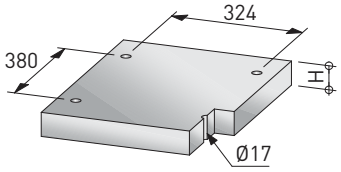
Z2 Z3





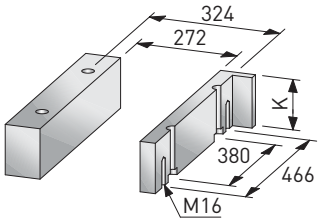
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



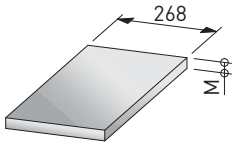
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



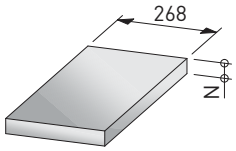
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

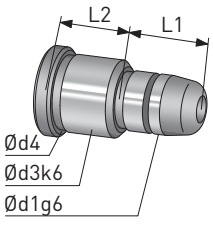


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

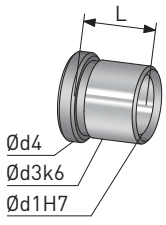
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

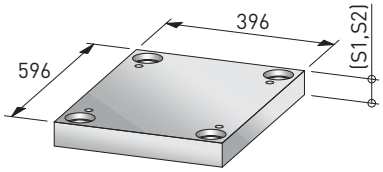


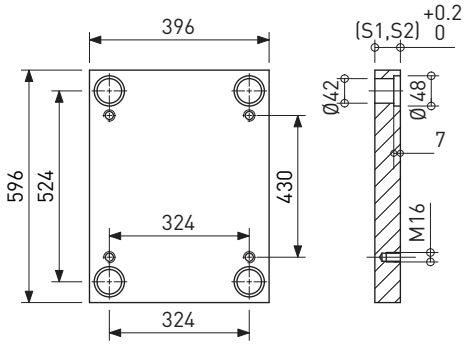
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

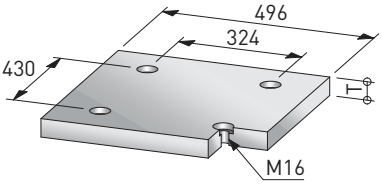
396×596

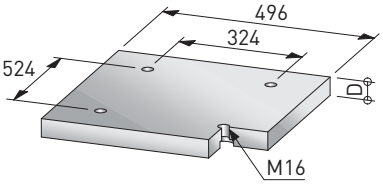




Tolerance Thickness: +0.2

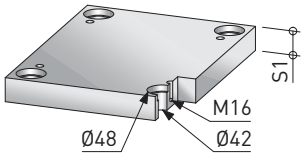
Z1 Z8

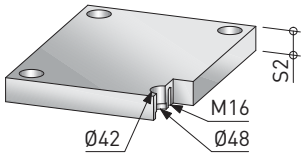




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

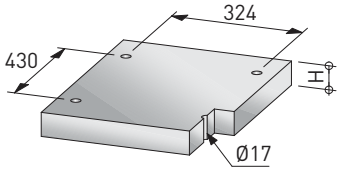
Z2 Z3





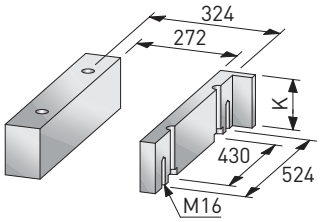
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



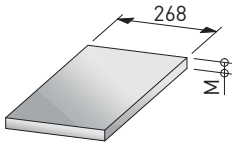
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



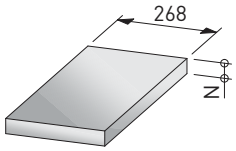
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

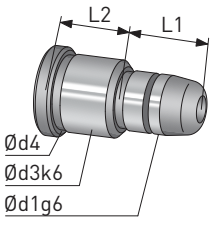


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

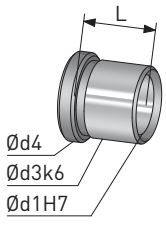
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

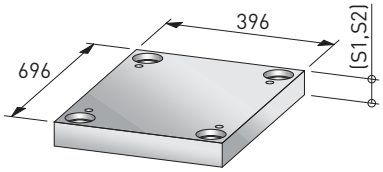


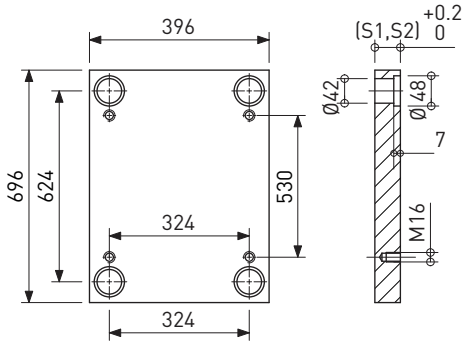
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

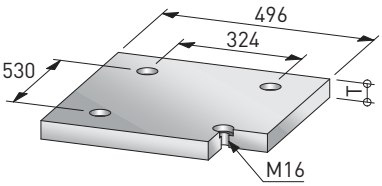
396×696

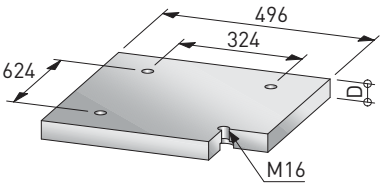




Tolerance Thickness: +0.2

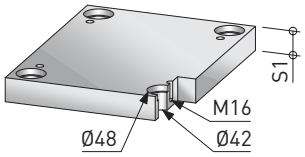
Z1 Z8

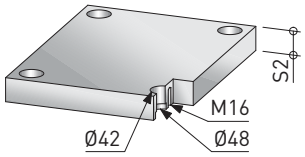




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

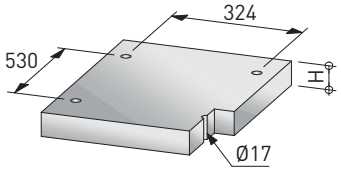
Z2 Z3





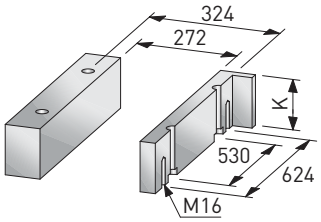
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



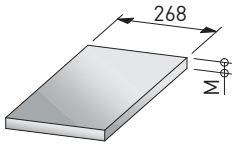
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



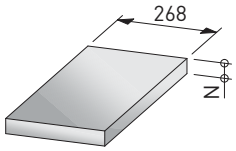
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

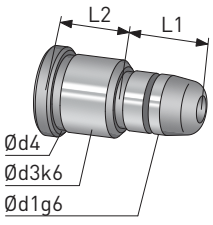


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

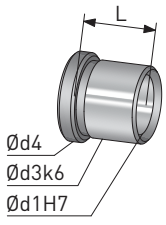
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●			

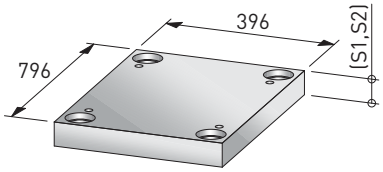


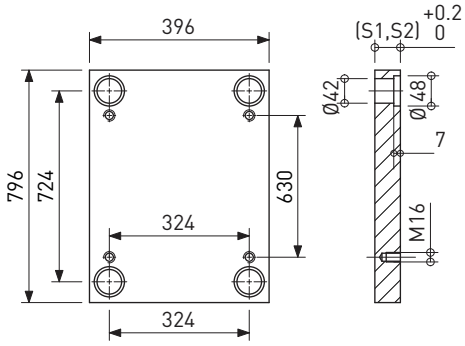
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

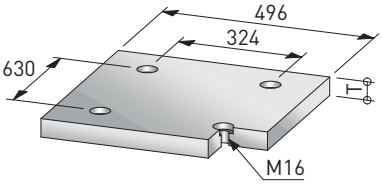
396×796

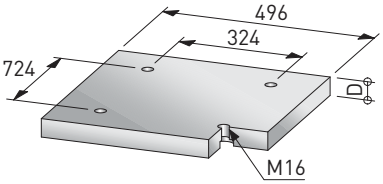




Tolerance Thickness: +0.2

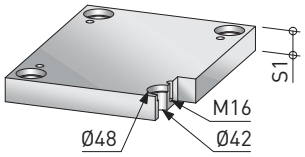
Z1 Z8

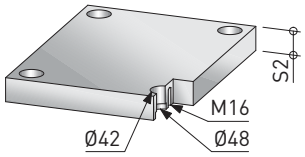




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

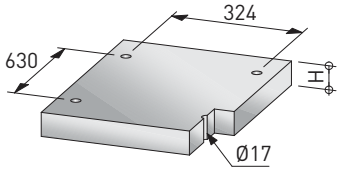
Z2 Z3





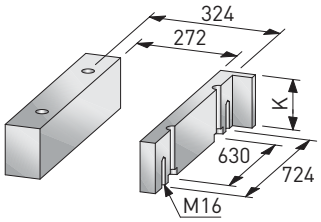
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



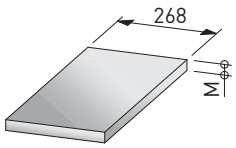
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



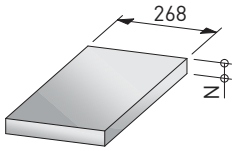
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

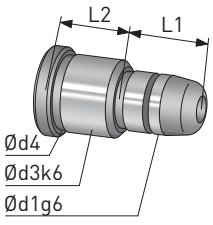


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

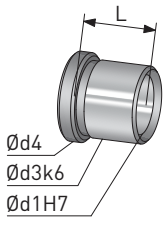
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●			

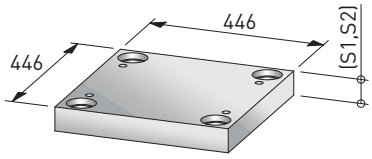


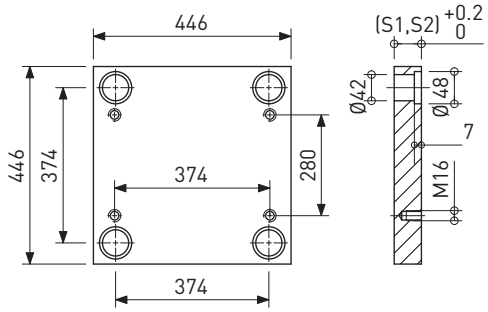
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

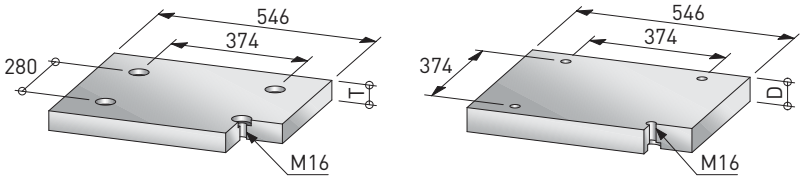
446×446





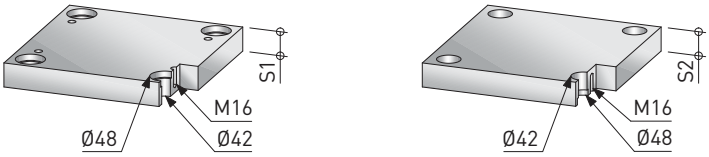
Tolerance Thickness: +0.2

Z1 Z8



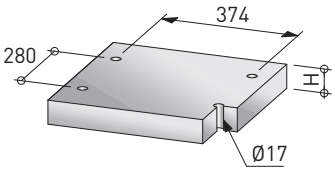
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z2 Z3



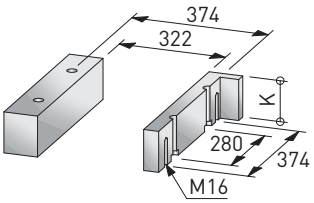
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	27			●	●	●
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●

Z4



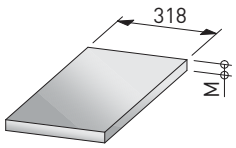
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z5



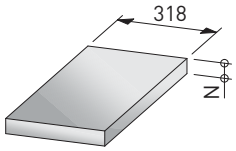
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●			
	76	●	●			
	96	●	●			

Z6

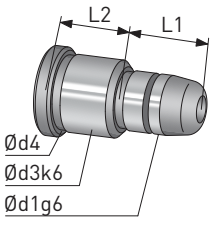


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	17	●	●			

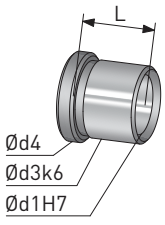
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

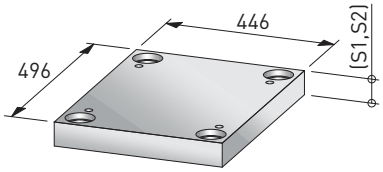


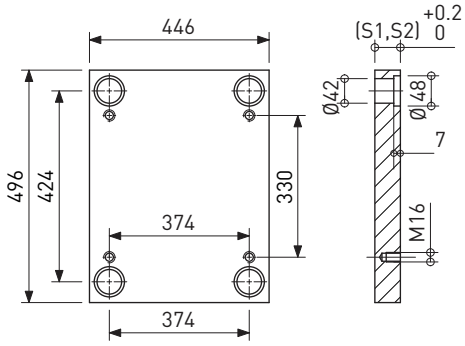
GP/P/L2/d1*L1		
46/30*45		
65		
85		
56/30*55		
75		
95		
66/30*75		
95		
76/30*75		
95		



GB/P/d1*L		
30*46		
56		
66		
76		
86		
96		

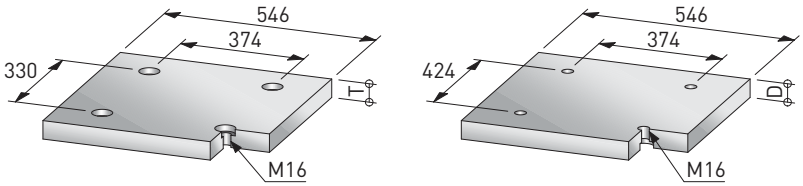
446×496





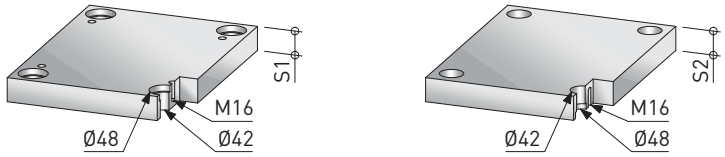
Tolerance Thickness: +0.2

Z1 Z8



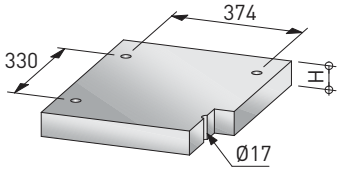
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

Z2 Z3



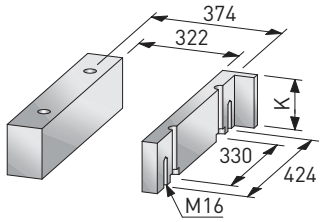
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



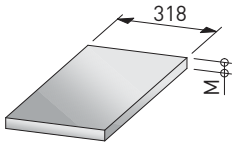
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



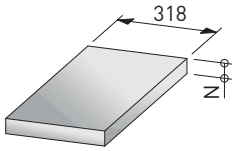
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			

Z6

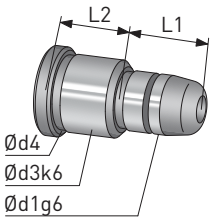


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

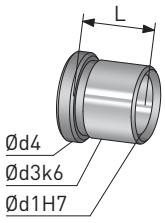
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

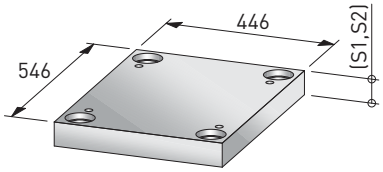


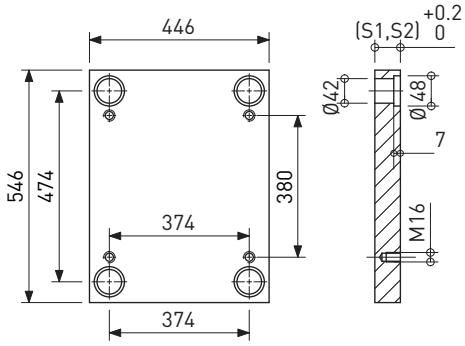
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

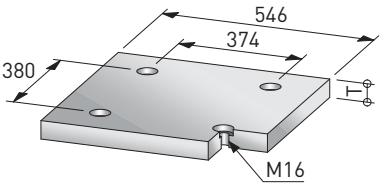
446×546

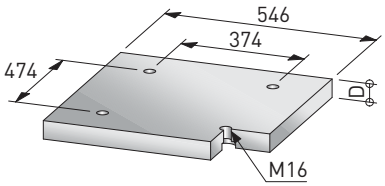




Tolerance Thickness: +0.2

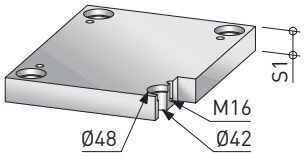
Z1 Z8

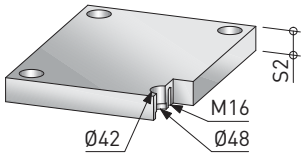




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

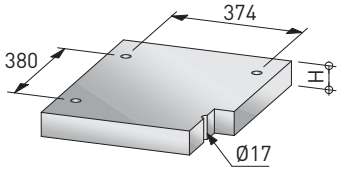
Z2 Z3





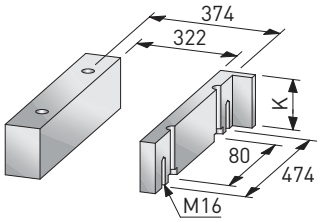
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



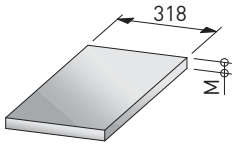
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



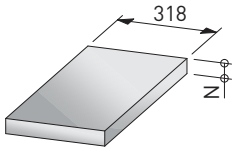
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			
	136	●	●			

Z6

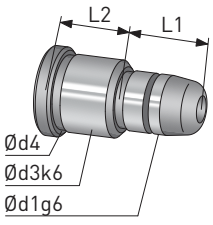


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

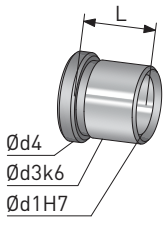
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

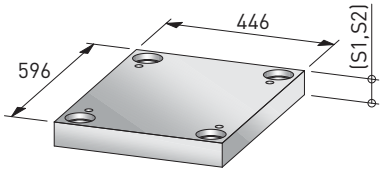


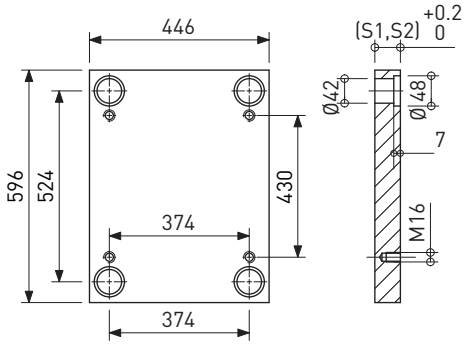
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

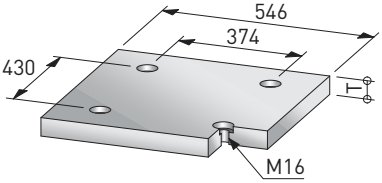
446×596

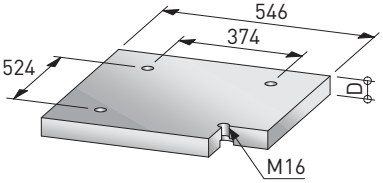




Tolerance Thickness: +0.2

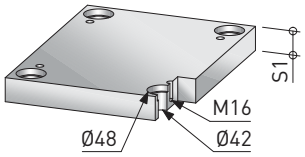
Z1 Z8

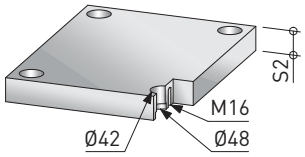




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●	●	●	●
	46	●	●	●	●	●

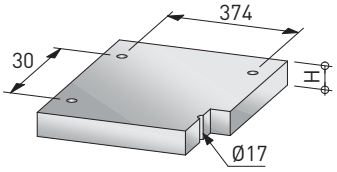
Z2 Z3





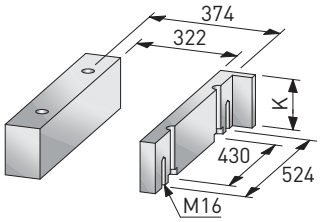
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



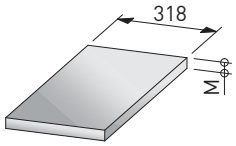
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



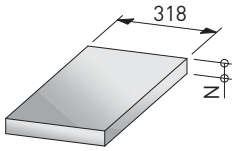
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			
	136	●	●			

Z6

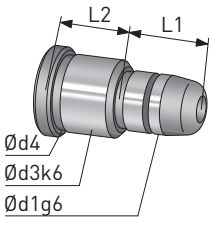


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	22	●	●			

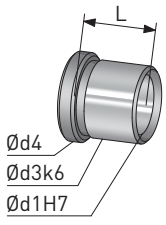
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

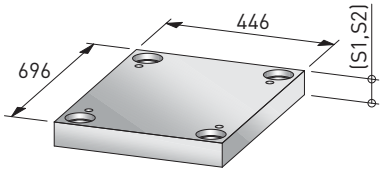


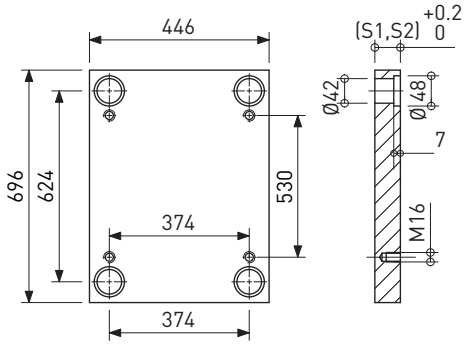
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

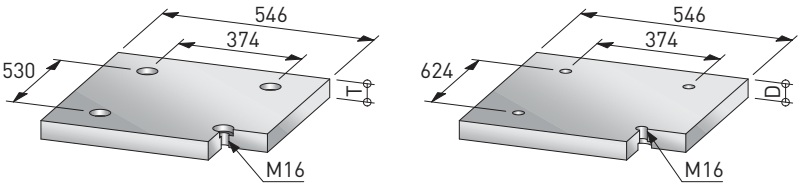
446×696





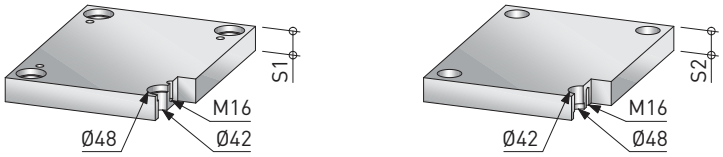
Tolerance Thickness: +0.2

Z1 Z8



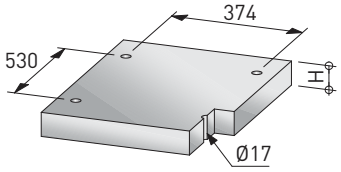
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z2 Z3



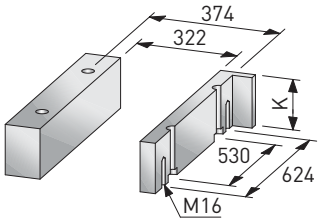
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



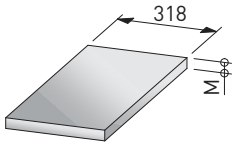
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	56	●	●	●	●	●

Z5



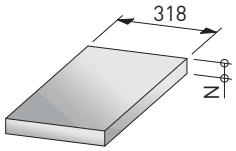
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	76	●	●			
	96	●	●			
	116	●	●			
	136	●	●			

Z6

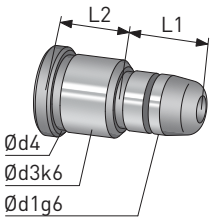


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

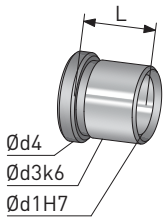
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●			

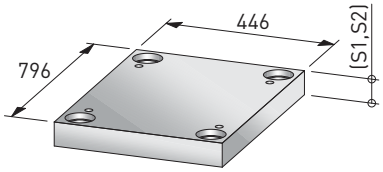


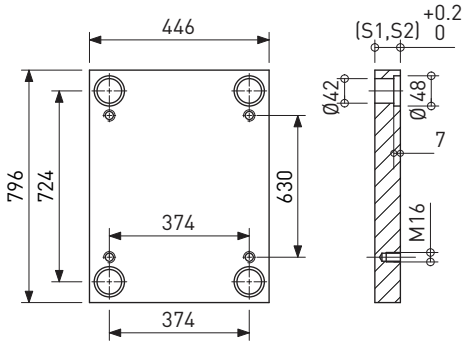
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

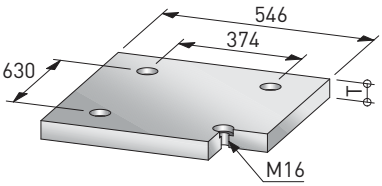
446×796

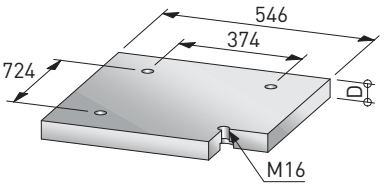




Tolerance Thickness: +0.2

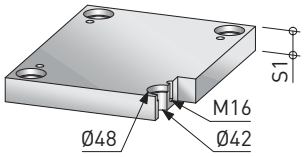
Z1 Z8

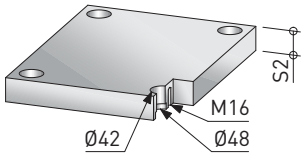




Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

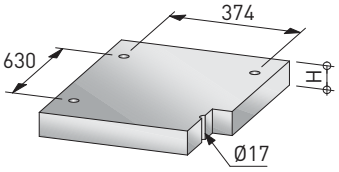
Z2 Z3





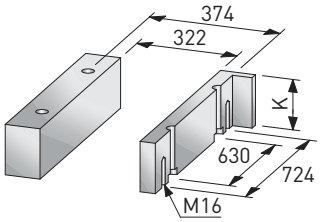
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



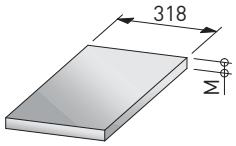
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



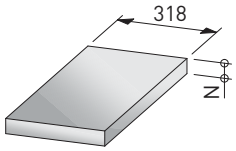
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	96	●	●			
	116	●	●			
	136	●	●			

Z6

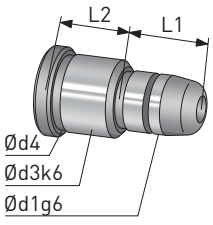


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

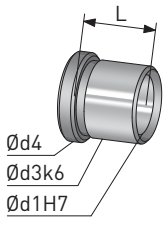
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●			

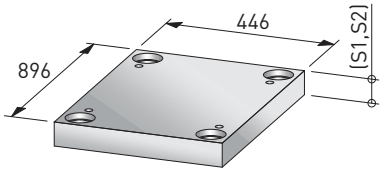


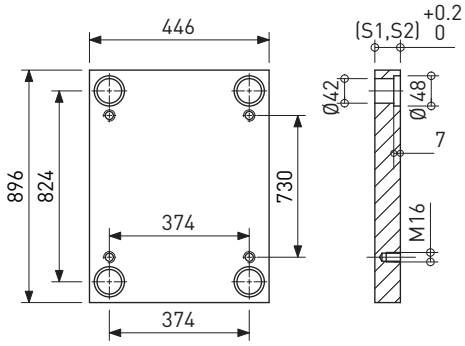
GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

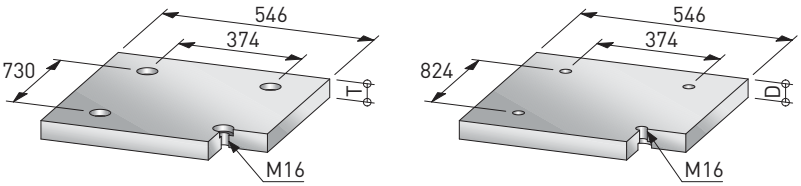
446×896





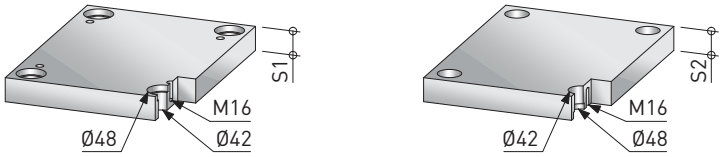
Tolerance Thickness: +0.2

Z1 Z8



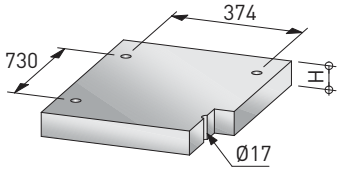
Z1,Z8/Y*X	T,D	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z2 Z3



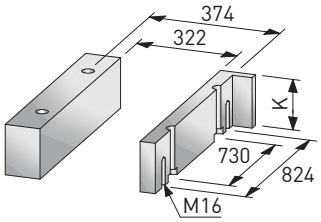
Z2,Z3/Y*X	S1,S2	ST-37	ST-52	1.1730	1.2312	1.7225
	36			●	●	●
	46			●	●	●
	56			●	●	●
	66			●	●	●
	76			●	●	●
	86			●	●	●
	96			●	●	●
	116			●	●	●

Z4



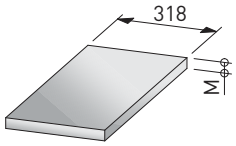
Z4/Y*X	H	ST-37	ST-52	1.1730	1.2312	1.7225
	46	●	●	●	●	●
	56	●	●	●	●	●

Z5



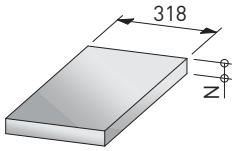
Z5/Y*X	K	ST-37	ST-52	1.1730	1.2312	1.7225
	96	●	●			
	116	●	●			
	136	●	●			

Z6

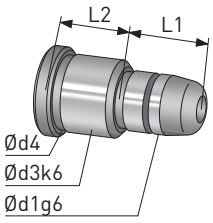


Z6/Y*X	M	ST-37	ST-52	1.1730	1.2312	1.7225
	27	●	●			

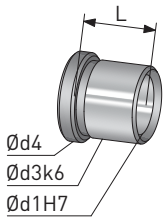
Z7



Z7/Y*X	N	ST-37	ST-52	1.1730	1.2312	1.7225
	36	●	●			



GP/P/L2/d1*L1	GP/P/L2/d1*L1
46/30*45	76/30*75
65	95
85	115
56/30*55	
75	
95	
115	
66/30*75	
95	
115	



GB/P/d1*L
30*46
56
66
76
86
96
116

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